ATTACHMENT 1
SUPPORTING STATEMEN
Review of the New Source Performance Standards for VOC from Air Oxidation Unit Process

TABLES 1, 2, and 3
Annual Respondent Burden and Cost of the Review of the New Source Performance Standards for V

TABLE 4
Summary of Annual Respondent Burden and Cost of the Review of the New Source Performance St

TABLES 5, 6, and 7
Annual Agency Burden and Cost of the Review of the New Source Performance Standards for VOC

TABLE 8
Summary of Annual Agency Burden and Cost of the Review of the New Source Performance Standa

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es in the SOCMI (40 CFR Part 60, Subpart IIIa) (Proposed Rule)

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ards for VOC from Air Oxidation Unit Processes in the SOCMI (40 CFR Part 60, Subpart IIIa) (Prop

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Table 1: Annual Respondent Burden and Cost Year One - Review of the New Source Performan

$101.24

Burden item	(A) Person-hours per occurrence	(B) No. of occurrences per respondent per year	(C) Person-hours per respondent per year (C=AxB)	(D) Respondents per year [a]	(E) Technical hours per year (E=CxD)
1. Applications	N/A				
2. Survey and Studies	N/A				
3. Reporting requirements					
A. Familiarize with regulatory requirements [c]					
New Sources	8	1	1	2	2
Existing Sources	1	1	1	0	0
B. Required activities					
Initial performance test report	60	1	60	2	120
Repeat performance test report [d]	60	1	60	0.40	24
C. Write report					
Notification of construction/modification	2	1	2	2	4.00
Notification of actual startup	1	1	1	2	2.00
Notification of initial/repeat performance test	2	1	2	2.40	4.8
Semiannual report	3	2	6	2	12
Subtotal for Reporting Requirements					
4. Recordkeeping requirements					
Records of operating parameters for control devices	1	12	12	2	24
Records of operating conditions exceeding last performance test	1	8	8	2	16.00
Records of flow events from a relief valve discharge [e]	1	1	1	0	0
Records for bypass lines [e]	1	1	1	0	0
Subtotal for Recordkeeping Requirements					
TOTAL LABOR BURDEN AND COST (rounded) [f]					
TOTAL CAPITAL AND O&M COST (rounded) [f]					
GRAND TOTAL (rounded) [f]					

Assumptions:

[a] We have assumed that there will be 6 new respondents over the three-year period of this ICR. We have assumed that on a year.

[b] This ICR uses the following labor rates for privately-owned sources: $161.34 for managerial, $101.24 for technical, and $
the United States Department of Labor, Bureau of Labor Statistics, May 2021, National Industry-Specific Occupational Em
325000 - Chemical Manufacturing. These rates have been adjusted using a Fringe Benefit Loading Rate of 1.5 and an Over
* Fringe Benefit Loading Rate * Overhead and Profit Rate = Loaded Rate) to account for varying industry wage rates and t
employing workers beyond their wages and benefits, including business expenses associated with hiring, training, and equi

[c] This ICR assumes all existing respondents will have to familiarize with the regulatory requirements each year.

[d] Assume 20 percent of initial performance tests must be repeated due to failure.

[e] We have assumed that no respondents will bypass the control device or have a relief valve discharge to the atmosphere du

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

ce Standards for VOC from Air Oxidation Unit Processes in the SOCMI (40 CFR Part 60, Subp

$161.34 $45.17

(F)	(G)	(H)
Management hours per year (F=Ex0.05)	**Clerical hours per year (G=Ex0.1)**	**Total cost per year ($) [b]**
0.10	0.20	$227.65
0	0	$0.00
6	12	$13,658.88
1.2	2.4	$2,731.78
0.20	0.40	$455.30
0.10	0.20	$227.65
0.2	0.5	$546.36
1	1	$1,365.89
194		**$19,213**
1.2	2.4	$2,731.78
1	2	$1,821.18
0	0	$0.00
0	0	$0.00
46		**$4,553**
240		**$23,800**
		$3,190,000
		$3,210,000

average, there will be 2 new respondents per

$45.17 for clerical labor. These rates are from
ıployment and Wage Estimates for NAICS
'head and Profit Rate of 1.4 (Mean Hourly Rate
he additional overhead business costs of
pping their employees.

ıring the three-year period of this ICR.

part IIIa) (Proposed Rule)

Table 2: Annual Respondent Burden and Cost Year Two - Review of the New Source Perfo

$101.24

Burden item	(A) Person-hours per occurrence	(B) No. of occurrences per respondent per year	(C) Person-hours per respondent per year (C=AxB)	(D) Respondents per year [a]	(E) Technical hours per year (E=CxD)
1. Applications	N/A				
2. Survey and Studies	N/A				
3. Reporting requirements					
A. Familiarize with regulatory requirements [c]					
New Sources	8	1	1	2	2
Existing Sources	1	1	1	2	2
B. Required activities					
Initial performance test report	60	1	60	2	120
Repeat performance test report [d]	60	1	60	0.40	24
C. Write report					
Notification of construction/modification	2	1	2	2	4
Notification of actual startup	1	1	1	2	2
Notification of initial/repeat performance test	2	1	2	2.40	4.8
Semiannual report	3	2	6	4	24
Subtotal for Reporting Requirements					
4. Recordkeeping requirements					
Records of operating parameters for control devices	1	12	12	2	24
Records of operating conditions exceeding last performance test	1	8	8	4	32
Records of flow events from a relief valve discharge [e]	1	1	1	0	0
Records for bypass lines [e]	1	1	1	0	0
Subtotal for Recordkeeping Requirements					
TOTAL LABOR BURDEN AND COST (rounded) [f]					
TOTAL CAPITAL AND O&M COST (rounded) [f]					
GRAND TOTAL (rounded) [f]					

Assumptions:

[a] We have assumed that there will be 6 new respondents over the three-year period of this ICR. We have assumed th per year.

[b] This ICR uses the following labor rates for privately-owned sources: $161.34 for managerial, $101.24 for technical from the United States Department of Labor, Bureau of Labor Statistics, May 2021, National Industry-Specific Occu NAICS 325000 - Chemical Manufacturing. These rates have been adjusted using a Fringe Benefit Loading Rate of 1 Hourly Rate * Fringe Benefit Loading Rate * Overhead and Profit Rate = Loaded Rate) to account for varying indus business costs of employing workers beyond their wages and benefits, including business expenses associated with h

[c] This ICR assumes all existing respondents will have to familiarize with the regulatory requirements each year.

[d] Assume 20 percent of initial performance tests must be repeated due to failure.

[e] We have assumed that no respondents will bypass the control device or have a relief valve discharge to the atmosph

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

rmance Standards for VOC from Air Oxidation Unit Processes in the SOCMI (40 CFR Part 60,

$161.34 $45.17

(F)	(G)	(H)
Management hours per year (F=Ex0.05)	**Clerical hours per year (G=Ex0.1)**	**Total cost per year ($) [b]**
0.10	0.20	$227.65
0.10	0.20	$227.65
6	12	$13,658.88
1.2	2.4	$2,731.78
0.20	0.40	$455.30
0.10	0.20	$227.65
0.2	0.5	$546.36
1	2	$2,731.78
210		**$20,807**
1.2	2.4	$2,731.78
2	3	$3,642.37
0	0	$0.00
0	0	$0.00
64		**$6,374**
275		**$27,200**
		$3,800,000
		$3,830,000

ıat on average, there will be 2 new respondents

, and $45.17 for clerical labor. These rates are
ıpational Employment and Wage Estimates for
.5 and an Overhead and Profit Rate of 1.4 (Mean
try wage rates and the additional overhead
ıiring, training, and equipping their employees.

ıere during the three-year period of this ICR.

, Subpart IIIa) (Proposed Rule)

Table 3: Annual Respondent Burden and Cost Year Three - Review of the New Source Perf

$101.24

Burden item	(A) Person-hours per occurrence	(B) No. of occurrences per respondent per year	(C) Person-hours per respondent per year (C=AxB)	(D) Respondents per year [a]	(E) Technical hours per year (E=CxD)
1. Applications	N/A				
2. Survey and Studies	N/A				
3. Reporting requirements					
A. Familiarize with regulatory requirements [c]					
New Sources	8	1	1	2	2.00
Existing Sources	1	1	1	4	4.00
B. Required activities					
Initial performance test report	60	1	60	2	120
Repeat performance test report [d]	60	1	60	0.40	24
C. Write report					
Notification of construction/modification	2	1	2	2	4.00
Notification of actual startup	1	1	1	2	2.00
Notification of initial/repeat performance test	2	1	2	2.40	4.8
Semiannual report	3	2	6	6	36
Subtotal for Reporting Requirements					
4. Recordkeeping requirements					
Records of operating parameters for control devices	1	12	12	2	24
Records of operating conditions exceeding last performance test	1	8	8	6	48
Records of flow events from a relief valve discharge [e]	1	1	1	0	0
Records for bypass lines [e]	1	1	1	0	0
Subtotal for Recordkeeping Requirements					
TOTAL LABOR BURDEN AND COST (rounded) [f]					
TOTAL CAPITAL AND O&M COST (rounded) [f]					
GRAND TOTAL (rounded) [f]					

Assumptions:

[a] We have assumed that there will be 6 new respondents over the three-year period of this ICR. We have assumed th per year.

[b] This ICR uses the following labor rates for privately-owned sources: $161.34 for managerial, $101.24 for technical from the United States Department of Labor, Bureau of Labor Statistics, May 2021, National Industry-Specific Occu NAICS 325000 - Chemical Manufacturing. These rates have been adjusted using a Fringe Benefit Loading Rate of 1 Hourly Rate * Fringe Benefit Loading Rate * Overhead and Profit Rate = Loaded Rate) to account for varying indus business costs of employing workers beyond their wages and benefits, including business expenses associated with h

[c] This ICR assumes all existing respondents will have to familiarize with the regulatory requirements each year.

[d] Assume 20 percent of initial performance tests must be repeated due to failure.

[e] We have assumed that no respondents will bypass the control device or have a relief valve discharge to the atmosph

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

formance Standards for VOC from Air Oxidation Unit Processes in the SOCMI (40 CFR Part 6

$161.34 $45.17

(F)	(G)	(H)
Management hours per year (F=Ex0.05)	**Clerical hours per year (G=Ex0.1)**	**Total cost per year ($) [b]**
0.10	0.20	$227.65
0.20	0.40	$455.30
6	12	$13,658.88
1.2	2.4	$2,731.78
0.20	0.40	$455.30
0.10	0.20	$227.65
0.2	0.5	$546.36
2	4	$4,097.66
226		**$22,401**
1.2	2.4	$2,731.78
2	5	$5,463.55
0	0	$0.00
0	0	$0.00
83		**$8,195**
309		**$30,600**
		$4,410,000
		$4,440,000

ıat on average, there will be 2 new respondents

, and $45.17 for clerical labor. These rates are
ıpational Employment and Wage Estimates for
.5 and an Overhead and Profit Rate of 1.4 (Mean
try wage rates and the additional overhead
ıiring, training, and equipping their employees.

ıere during the three-year period of this ICR.

0, Subpart IIIa) (Proposed Rule)

Table 4 - Summary of Annual Respondent Burden and Cost - Review of the New Source Perforn

Year	Total Labor Hours	Labor Costs	Non-Labor (Capital/Startup and O&M) Costs
1	240	$23,800	$3,186,011
2	275	$27,200	$3,796,516
3	309	$30,600	$4,407,022
Total (rounded)	**824**	**$81,600**	**$11,400,000**
Average (rounded)	**275**	**$27,200**	**$3,800,000**

ıance Standards for VOC from Air Oxidation Unit Processes in the SOCMI (40 CFR Part 60, Su

Total Costs
$3,209,811
$3,823,716
$4,440,000
$11,500,000
$3,820,000

ıbpart IIIa) (Proposed Rule)

Table 5: Average Annual EPA Burden and Cost Year One - Review of the New Source Perfo

Burden item	(A) Person-hours per occurrence	(B) No. of occurrences per respondent per year	(C) Person-hours per respondent per year (C=AxB)	(D) Respondents per year [a]
Report review: New plant				
Notification of construction/ modification	2	1	2	2
Notification of actual startup	2	1	2	2
Notification of initial/repeat performance test	2	1	2	2.4
Initial performance test	8	1	8	2
Repeat performance test [c]	8	1	8	0.4
Semiannual report	2	2	4	2
TOTAL (rounded) [d]				

Assumptions:

[a] We have assumed that there will be 6 new respondents over the three-year period of this ICR. We have assumed that year.

[b] This ICR uses the following labor rates: $69.04 for managerial, $51.23 for technical, and $27.73 for clerical labor. Management (OPM), 2021 General Schedule, which excludes locality rates of pay. The rates have been increased by 6 available to government employees.

[c] Assume 20 percent of initial performance tests must be repeated due to failure.

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

rmance Standards for VOC from Air Oxidation Unit Processes in the SOCMI (40 CFR Part (

$51.23 $69.04 $27.73

(E)	(F)	(G)	(H)
Technical hours per year (E=CxD)	**Management hours per year (F=Ex0.05)**	**Clerical hours per year (G=Ex0.1)**	**Total cost per year ($)** [b]
4	0.2	0.4	$229.82
4	0.2	0.4	$229.82
4.8	0.24	0.48	$275.78
16	0.8	1.6	$919.28
3.2	0.2	0.3	$183.86
8	0.4	0.8	$459.64
46			**$2,300**

t on average, there will be 2 new respondents per

These rates are from the Office of Personnel
0 percent to account for the benefit packages

60, Subpart IIIa) (Proposed Rule)

Table 6: Average Annual EPA Burden and Cost Year Two - Review of the New Source Perfo

Burden item	(A) Person-hours per occurrence	(B) No. of occurrences per respondent per year	(C) Person-hours per respondent per year (C=AxB)	(D) Respondents per year [a]
Report review: New plant				
Notification of construction/ modification	2	1	2	2
Notification of actual startup	2	1	2	2
Notification of initial/repeat performance test	2	1	2	2.4
Initial performance test	8	1	8	2
Repeat performance test [c]	8	1	8	0.4
Semiannual report	2	2	4	4
TOTAL (rounded) [d]				

Assumptions:

[a] We have assumed that there will be 6 new respondents over the three-year period of this ICR. We have assumed tha year.

[b] This ICR uses the following labor rates: $69.04 for managerial, $51.23 for technical, and $27.73 for clerical labor. Management (OPM), 2021 General Schedule, which excludes locality rates of pay. The rates have been increased by 6 available to government employees.

[c] Assume 20 percent of initial performance tests must be repeated due to failure.

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

rmance Standards for VOC from Air Oxidation Unit Processes in the SOCMI (40 CFR Part

$51.23 $69.04 $27.73

(E)	(F)	(G)	(H)
Technical hours per year (E=CxD)	**Management hours per year (F=Ex0.05)**	**Clerical hours per year (G=Ex0.1)**	**Total cost per year ($)** [b]
4	0.2	0.4	$229.82
4	0.2	0.4	$229.82
4.8	0.24	0.48	$275.78
16	0.8	1.6	$919.28
3.2	0.2	0.3	$183.86
16	0.8	1.6	$919.28
55			**$2,760**

t on average, there will be 2 new respondents per

These rates are from the Office of Personnel
0 percent to account for the benefit packages

60, Subpart IIIa) (Proposed Rule)

Table 7: Average Annual EPA Burden and Cost Year Three - Review of the New Source Perf

Burden item	(A) Person-hours per occurrence	(B) No. of occurrences per respondent per year	(C) Person-hours per respondent per year (C=AxB)	(D) Respondents per year [a]
Report review: New plant				
Notification of construction/ modification	2	1	2	2
Notification of actual startup	2	1	2	2
Notification of initial/repeat performance test	2	1	2	2.4
Initial performance test	8	1	8	2
Repeat performance test [c]	8	1	8	0.4
Semiannual report	2	2	4	6
TOTAL (rounded) [d]				

Assumptions:

[a] We have assumed that there will be 6 new respondents over the three-year period of this ICR. We have assumed that year.

[b] This ICR uses the following labor rates: $69.04 for managerial, $51.23 for technical, and $27.73 for clerical labor. Management (OPM), 2021 General Schedule, which excludes locality rates of pay. The rates have been increased by 6 available to government employees.

[c] Assume 20 percent of initial performance tests must be repeated due to failure.

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

formance Standards for VOC from Air Oxidation Unit Processes in the SOCMI (40 CFR Par

$51.23 $69.04 $27.73

(E)	(F)	(G)	(H)
Technical hours per year (E=CxD)	**Management hours per year (F=Ex0.05)**	**Clerical hours per year (G=Ex0.1)**	**Total cost per year ($)** [b]
4	0.2	0.4	$229.82
4	0.2	0.4	$229.82
4.8	0.24	0.48	$275.78
16	0.8	1.6	$919.28
3.2	0.2	0.3	$183.86
24	1.2	2.4	$1,378.92
64			**$3,220**

t on average, there will be 2 new respondents per

These rates are from the Office of Personnel
0 percent to account for the benefit packages

t 60, Subpart IIIa) (Proposed Rule)

Table 8: Summary of Average Annual EPA Burden and Cost - Review of the New Source Performanc

Year	Total Hours	Labor Costs	Non-Labor Costs	Total Costs
1	46	$2,300	$0	$2,300
2	55	$2,760	$0	$2,760
3	64	$3,220	$0	$3,220
Total (Rounded)	165	$8,280	$0	$8,280
Average (Rounded)	55	$2,760	$0	$2,760

e Standards for VOC from Air Oxidation Unit Processes in the SOCMI (40 CFR Part 60, Subpart IIIa)

(Proposed Rule)

Capital/Startup vs. Operation and Mainten		
(A)	(B)	(C)
Continuous Monitoring Device [a]	Capital/Startup Cost for One Respondent	Number of New Respondents [a, b]
Flare monitoring requirements	$3,752,223	0.63
Maintenance vent requirements	N/A	N/A
Non-flare control of vent streams	$39,277	0.74
Carbon cannisters	$26,500	0.21
H2 Analyzer	$46,274	0.11
Calorimeter	$134,967	0.11
Flare Gas Flow Monitor	$565,578	0.11
Steam Controls/Flow Monitor	$879,215	0.11
Avg. NG Cost per Flare to Meet NHVcz	$0	0.11
Steam Cost Savings per Flare to Meet NHVcz	$0	0.11
Total [c]		

[a] Costs are shown in 2021 $. Respondent counts and monitoring and control requirements are based on the me
(B) review for the SOCMI air oxidation unit processes, distillation operations, and reactor processes NSPS sub

[b] Number of respondents is based on 19 new sources becoming subject to 40 CFR Part 60, Subparts IIIa, NNN
of the 19 will be subject to Subpart IIIa and have adjusted the respondent counts for capital/startup costs by a f
O&M estimates for sources subject to IIIa (approximately 2 new sources per year for the three-year period of t
approximately 0.3158 (6/19 = 0.3158) to apportion the costs to the 6 sources that will be subject to Subpart III
separately under EPA ICR Numbers 2757.01 and 2759.01.

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

ance (O&M) Costs			
(D)	(E)	(F)	(G)
Total Capital/Startup Cost, (B X C) [a]	Annual O&M Costs for One Respondent	Number of Respondents with O&M [a, b]	Total O&M, (E X F) [a]
$2,369,825	$789,173	1.89	$1,495,275
N/A	$455	5.68	$2,588
$28,941	$98,429	2.21	$217,580
$5,579	$2,500	0.63	$1,579
$4,871	$29,581	0.32	$9,341
$14,207	$37,115	0.32	$11,721
$59,535	$97,733	0.32	$30,863
$92,549	$150,221	0.32	$47,438
$0	$110,031	0.32	$34,747
$0	-$62,117.19	0.32	-$19,615.95
$2,580,000			**$1,830,000**

morandum from Eastern Research Group, Inc. to EPA titled "CAA 111(b)(1)
parts III, NNN, and RRR," March 2023, EPA-HQ-OAR-2022-0730.

a, or RRRa during the three-year period of this ICR. We have assumed that 6
actor of approximately 0.1053 (2/19 = 0.1053) to apportion the capital and
his ICR). We have adjusted the annual O&M costs by a factor of
a. The burden and costs for Subparts NNNa and RRRa are accounted for

Summary of Total Annual Responses

(A)	(B)	(C)
Information Collection Activity	**Number of Respondents [1]**	**Number of Responses**
Initial performance test report	2	1
Repeat performance test report	0.4	1
Notification of construction/modification	2	1
Notification of actual startup	2	1
Notification of initial/repeat performance test	2	1
Semiannual report	4	2

[1] Assumes no existing respondents and a total of 6 new respondents will become subject to the stand
respondents per year. Assumes two new respondents per year will submit initial notifications and ini
year will submit semiannual reports.

(D)	(E)
Number of Existing Respondents That Keep Records But Do Not Submit Reports	**Total Annual Responses E=(BxC)+D**
0	2
0	0.4
0	2
0	2
0	2.4
0	8
Subtotal (rounded)	**17**

lard during the three-year period of this ICR, two new
tial test reports and an overall average of four respondents per

			Number of Respondents
	Respondents That Submit Reports		Respondents That Do Not Submit Any Reports
	(A)	(B)	(C)
Year	Number of New Respondents [1]	Number of Existing Respondents	Number of Existing Respondents that keep records but do not submit reports
1	2	0	0
2	2	2	0
3	2	4	0
Average	2	2	

[1] We have assumed that there will be 6 new respondents over the three-year period of this ICR. We have assumed th

(D)	(E)
Number of Existing Respondents That Are Also New Respondents	Number of Respondents (E=A+B+C-D)
0	2
0	4
0	6
	4

ıat on average, there will be 2 new respondents per year.