

### ICR Summary Information

Hours per Response	71
Number of Respondents	34
Total Estimated Burden Hours	29,400
Total Estimated Costs	\$15,100,000
Annualized Capital O&M	\$11,400,000
Form Number	Not Applicable

**Table 1: Annual Respondent Burden and Cost – NESHAP for Ethylene and Spandex (40 CFR P**

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 <sup>a</sup>
1. Applications	N/A			
2. Survey and Studies	N/A			
3. Reporting Requirements				
A. Familiarization with Regulatory Requirements <sup>c</sup>	1	1	1	34
B. Required Activities				
1. Initial Performance Tests <sup>d,e</sup>	57	1	57	0
2. Repeat of Performance Tests <sup>d,e</sup>	57	0.1	5.7	0
3. Startup, Shutdown and Malfunction Plan <sup>f</sup>	10	1	10	3
C. Create Information	See 3.B			
D. Gather Existing Information	See 3.B			
E. Report Preparation				
1. Initial Notification of Applicability <sup>d</sup>	2	1	2	0
2. Notification of Construction/Reconstruction <sup>d</sup>	2	1	2	0
3. Notification of Anticipated startup <sup>d</sup>	2	1	2	0
4. Notification of Actual Startup <sup>d</sup>	2	1	2	0
5. Notification of Performance Test Dates <sup>d</sup>	2	1.1	2.2	0
6. Notification of Operating Parameter Value and Rationale Selection <sup>d</sup>	2	1	2	0
7. Notification of Compliance Status <sup>d</sup>	2	1	2	0
8. Report of Initial Performance Test Results <sup>d</sup>	8	1.1	8.8	0
9. Reporting Results of Continuous Monitoring System Performance Report and Summary Report	See 3.B			
10. Periodic and Semiannual Reports <sup>f</sup>	8	2	16	3
11. Excess Emissions and Continuous Monitoring System Performance Report and Summary Report <sup>g</sup>	8	2	16	34
12. Immediate Startup, Shutdown, Malfunction Reports <sup>h,f</sup>	4	1	4	0.15
13. Request for Waiver of Reporting and Recordkeeping	4	1	4	0
F. Report Preparation - Ethylene <sup>i</sup>				
1. Notification of Compliance Status				
a. Flares	5	1	5	31
b. PRDs	15	1	15	21
2. Periodic and Semiannual Reports				
a. Flares	5	2	10	31
b. PRDs	10	2	20	21
c. Decoking Operations	4	2	8	31

d. Maintenance Vents	4	2	8	31
e. Bypass Lines <sup>j</sup>	4	2	8	0
f. HEX El Paso Method	3	2	6	31
3. Submit Flare Management Plan <sup>d, k</sup>	2	1	2	0
<b>Reporting Subtotal</b>				
4. Recordkeeping Requirements				
A. Familiarization with Regulatory Requirements	See 3.A			
B. Plan Activities	See 3.B			
C. Implement Activities	See 3.B			
D. Develop Record System	N/A			
E. Time to Enter Information				
1. Records of SS&M <sup>f</sup>	1.5	52	78	3
2. Records of CMS	1	365	365	34
3. Collect and compile data	24	2	48	34
4. Enter / verify information for semiannual reports	16	2	32	34
F. Time to Enter Information - Ethylene <sup>i</sup>				
1. Daily Flame Impingement Inspection	0.083	365	30	31
2. Decoking Control Measures	2	10	20	31
3. Flares	0.4	365	146	31
4. PRDs	10	1	10	21
5. HEX El Paso Method	0	1	0	31
6. Maintenance Vents	25	1	25	31
7. Bypass Lines <sup>j</sup>	0	1	0	0
8. Flare Management Plan <sup>k</sup>	75	3	225	0
9. Degassing	3	1	3	2
G. Train Personnel <sup>i</sup>	20	1	20	31
H. Audits	N/A			
<b>Subtotal for Recordkeeping Requirements</b>				
<b>Total Labor Burden and Costs (rounded) <sup>l</sup></b>				
<b>Total Capital and O&amp;M Cost (rounded) <sup>l</sup></b>				
<b>GRAND TOTAL (rounded) <sup>l</sup></b>				

#### Assumptions:

<sup>a</sup> We assume that there are 34 existing respondents, consisting of 31 sources manufacturing ethylene, and 3 sources manufacturing carbon black and facilities manufacturing cyanide. Previous renewals included facilities manufacturing carbon black and facilities manufacturing cyanide (OMB Number 2060-0738, EPA ICR Number 2677.02) was finalized on November 19, 2021 (86 FR 66096) and an RTR (OMB Number 2060-0739, EPA ICR Number 2678.02) was finalized on November 19, 2021 (86 FR 66096). Therefore, the burden for these requirements is based on the 34 existing respondents.

<sup>b</sup> This ICR uses the following labor rates: Managerial \$163.17 (\$77.70 + 110%); Technical \$130.28 (\$62.04 + 110%); and United States Department of Labor, Bureau of Labor Statistics, September 2022, "Table 2. Civilian Workers, by occupational compensation." The rates have been increased by 110 percent to account for the benefit packages available to those employees.

<sup>c</sup> EPA assumes that all sources will re-familiarize with the regulatory requirements each year.

<sup>d</sup> This is a one time cost that applies to new facilities manufacturing ethylene.

<sup>e</sup> We assume that the rate of failed performance tests is 10%.

<sup>f</sup> The final RTR for Ethylene Production (85 FR 40386) removed SSM requirements for ethylene facilities. SSM requirements for ethylene facilities are shown in Rows F.2.a through F.2.f.

- <sup>g</sup> All sources subject to Subpart YY file these reports. For Spandex sources, this also includes the periodic startup, shutdown, and restart reports.
- <sup>h</sup> We assume that only 5% ( $3 \times 0.05 = 1.5$ ) respondents per year will need to submit an immediate SSM report. Ethylene flare sources are taken from Year 3 of the Ethylene Production RTR.
- <sup>i</sup> This ICR incorporates the requirements of the RTR for Ethylene Production sources (85 *FR* 40386) promulgated on July 1, 2010. Ethylene flare sources are taken from Year 3 of the Ethylene Production RTR.
- <sup>j</sup> The final RTR for Ethylene Production (85 *FR* 40386) assumed that bypass lines were not used during the 3-year period.
- <sup>k</sup> As new ethylene production sources are constructed, they will prepare and submit a flare management plan to EPA for review and approval.
- <sup>l</sup> Totals have been rounded to 3 significant figures. Figures may not add exactly due to rounding.

**Part 63, Subpart YY) (Renewal)**

(E) Technical person- hours per year (E=CxD)	(F) Management person hours per year (Ex0.05)	(G) Clerical person hours per year (Ex0.1)	(H) Cost, \$ <sup>b</sup>
34	1.7	3.4	\$4,930.32
0	0	0	\$0
0	0	0	\$0
30	1.5	3	\$4,350.29
0	0	0	\$0
0	0	0.0	\$0
0	0	0	\$0
0	0	0	\$0
0	0	0	\$0
0	0	0	\$0
0	0	0	\$0
0	0	0	\$0
0	0	0	\$0
48	2.4	4.8	\$6,960.46
544	27.2	54.4	\$78,885.17
0.6	0.03	0.06	\$87.01
0	0	0	\$0
155	7.75	15.5	\$22,476.47
315	15.75	31.5	\$45,677.99
310	15.5	31	\$44,952.95
420	21	42	\$60,903.99
248	12.4	24.8	\$35,962.36

Labor Rates	
Management	\$163.17
Technical	\$130.28
Clerical	\$65.71

248	12.4	24.8	\$35,962.36
0	0	0	\$0
186	9.3	18.6	\$26,971.77
0	0.0	0	\$0
<b>2919</b>			<b>\$368,121</b>
234	11.7	23.4	\$33,932
12410	620.5	1241	\$1,799,568
1632	81.6	163.2	\$236,656
1088	54.4	108.8	\$157,770
939.145	47.0	93.9145	\$136,185
620	31.0	62	\$89,906
4526	226.3	452.6	\$656,313
210	10.5	21	\$30,452
0	0	0	\$0
775	39	77.5	\$112,382
0	0	0	\$0
0	0	0	\$0
6	0	0.6	\$870
620	31	62	\$89,906
<b>26,519</b>			<b>\$3,343,940</b>
<b>29,400</b>			<b>\$3,710,000</b>
			<b>\$11,400,000</b>
			<b>\$15,100,000</b>

71 hr/respons

facturing spandex. We assume no additional respondents will be added, however, an RTR amendment for carbon black production and an amendment for cyanide production (OMB Number 2060-0040) is not included in this renewal.

1 Clerical \$65.71 (\$31.29 + 110%). These rates are from the "Total Federal and industry group." The rates are from column 1, "Total cost of labor supplied by private industry."

Costs remain for the 3 spandex facilities. The Periodic and

vn and malfunction report.

activities are not required to submit SSM reports.

7 6, 2020. Values for the number of respondents in each

, so no bypass line periodic reports would be submitted.

review.





**Table 2: Average Annual EPA Burden and Cost – NESHAP for Ethylene and Spandex (40 C**

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 <sup>a</sup>
1. Initial Performance Tests				
A. New or Modified Facility <sup>c</sup>	5	1	5	0
B. Repeat of Performance Tests <sup>c</sup>	5	0.1	0.5	0
2. Excess Emissions - Enforcement Activities				
3. Report Review				
A. Notification of Applicability <sup>c</sup>	2	1	2	0
B. Notification of Construction/Reconstruction <sup>c</sup>	2	1	2	0
C. Notification of Anticipated Startup <sup>c</sup>	2	1	2	0
D. Notification of Actual Startup <sup>c</sup>	2	1	2	0
E. Request for Extension of Compliance <sup>c</sup>	2	1	2	0
F. Notification of Special Compliance Requirements <sup>c</sup>	2	1	2	0
G. Notification of Performance Test Dates <sup>c</sup>	2	1.1	2.2	0
H. Notification of Operating Parameter Value and Rationale Selection <sup>c</sup>	2	1	2	0
I. Notification of Compliance Status <sup>c</sup>	2	1	2	0
J. Review Report of Initial Performance Test <sup>c</sup>	5	1.1	5.5	0
K. Review Reporting Results of Continuous Monitoring System Performance Report and Summary Report	Included in Review of Performance Test Report			
L. Review Periodic & Semiannual Reports	5	2	10	3
M. Review Excess Emission Report and Continuous Monitoring System Performance Report and Summary Report <sup>d</sup>	20	2	40	34
N. Review Immediate Startup, Shutdown, Malfunction Report <sup>e</sup>	8	1	8	0.15
O. Review Request for Waiver of Reporting and Recordkeeping	2	1	2	0
4. Report Review - Ethylene <sup>f</sup>				
A. Review notification of compliance status				
1. Flares	5	1	5	31
2. PRDs	5	1	5	21
B. Review compliance reports				
1. Flares	2	2	4	31
2. PRDs	2	2	4	21
3. Decoking Operations	2	2	4	31
4. Maintenance Vents	2	2	4	31

5. HEX El Paso Method	2	2	4	31
C. Review flare management plan <sup>g</sup>	5	2	10	0
5. Prepare annual summary report	10	1	10	1
<b>TOTAL (rounded) <sup>h</sup></b>				

**Assumptions:**

<sup>a</sup> We assume that there are 34 existing respondents, consisting of 31 sources manufacturing ethylene, and 3 sources that will be subject to the rule. Previous renewals included facilities manufacturing carbon black and facilities manufacturing ethylene production (OMB Number 2060-0738, EPA ICR Number 2677.02) was finalized on November 19, 2021 (86 FR 66096) and facilities manufacturing ethylene production (OMB Number 2060-0739, EPA ICR Number 2678.02) was finalized on November 19, 2021 (86 FR 66096). Therefore, the

<sup>b</sup> This cost is based on the average hourly labor rate as follows: Managerial \$73.46 (GS-13, Step 5, \$45.91 + 60%); Technical \$29.50 (GS-6, Step 3, \$18.44 + 60%). This ICR assumes that Managerial hours are 5 percent of Technical hours, and are from the Office of Personnel Management (OPM), 2023 General Schedule, which excludes locality, rates of pay, and benefit packages available to government employees.

<sup>c</sup> This is a one time cost that applies to new facilities manufacturing ethylene.

<sup>d</sup> All sources subject to Subpart YY file these reports. For Spandex sources, this also includes the periodic startup, shutdown, and maintenance reports.

<sup>e</sup> We assume that only 5% (3 spandex x 0.05 = 1.55) respondents per year will need to submit an immediate SSM report.

<sup>f</sup> This ICR incorporates the requirements of the RTR for Ethylene Production sources (85 FR 40386) promulgated or amended on August 1, 2020. The requirements for other categories are taken from Year 3 of the Ethylene Production RTR.

<sup>g</sup> As new ethylene production sources are constructed, they will prepare and submit a flare management plan to EPA.

<sup>h</sup> Totals have been rounded to 3 significant figures. Figures may not add exactly due to rounding.

**3FR Part 63, Subpart YY) (Renewal)**

(E) Technical person- hours per year (E=CxD)	(F) Management person hours per year (Ex0.05)	(G) Clerical person hours per year (Ex0.1)	(H) Cost, \$ <sup>b</sup>
0	0	0	\$0
0	0	0	\$0
0	0	0	\$0
0	0.0	0	\$0
0	0	0	\$0
0	0	0	\$0
0	0	0	\$0
0	0	0	\$0
0	0	0	\$0
0	0	0	\$0
0	0	0	\$0
0	0	0	\$0
0	0	0	\$0
0	0	0	\$0
30	2	3	\$1,834
1,360	68	136	\$83,141
1	0	0.12	\$73
0	0	0	\$0
155	8	15.5	\$9,476
105	5	10.5	\$6,419
124	6	12.4	\$7,580
84	4	8.4	\$5,135
124	6	12.4	\$7,580
124	6	12.4	\$7,580

Labor Rates	
Management	\$73.46
Technical	\$54.51
Clerical	\$29.50

124	6	12.4	\$7,580
0	0	0	\$0
10	1	1	\$611
<b>2,580</b>			<b>\$137,000</b>

manufacturing spandex. We assume no additional respondents  
ing cyanide, however, an RTR amendment for carbon black  
96) and an RTR amendment for cyanide production (OMB  
e burden for these requirements is not included in this renewal.

Technical \$54.51 (GS-12, Step 1, \$34.07 + 60%); and Clerical  
Clerical hours are 10 percent of Technical hours. These rates  
The rates have been increased by 60 percent to account for the

utdown and malfunction report.

port. Ethylene facilities are not required to submit SSM reports.

1 July 6, 2020. Values for the number of respondents in each

for review.

<b>Capital/Startup vs. Operation and Maintenance</b>			
<b>(A)</b>	<b>(B)</b>	<b>(C)</b>	<b>(D)</b>
<b>Source Category w/ Continuous Monitoring Device</b>	<b>Capital/Startup Cost for One Respondent</b>	<b>Number of New Respondents</b>	<b>Total Capital/Startup Cost, (B X C)</b>
Spandex CMS	\$0	0	\$0
Ethylene Flare Monitors	\$1,979,094	0	\$0
Ethylene PRD Monitors	\$62,959	0	\$0
Ethylene Heat Exchangers - El Paso Method	\$6,022	0	\$0
<b>Totals (rounded) <sup>b</sup></b>			<b>\$0</b>

<sup>a</sup> a Ethylene Production facilities have additional capital and O&M costs as a result of the Ethylene production being averaged out over the three-year period of this ICR. The Ethylene RTR assumed that 31 facilities would

<sup>b</sup> Totals have been rounded to 3 significant digits. Figures may not add exactly due to rounding.

**(O&M) Costs**

(E)	(F)	(G)
Annual O&M Costs for One Respondent	Number of Respondents with O&M <sup>a</sup>	Total O&M, (E X F)
\$12,059	3	\$36,178
\$359,960	31	\$11,158,752
\$8,486	21	\$178,201
\$1,232	31	\$38,186
		<b>\$11,400,000</b>

\$11,400,000

on RTR (85 FR 40386) promulgated on July 6, 2020. These costs have  
have flares and heat exchangers, while 21 facilities would have PRDs.

2020 CEPCI

2022 CEPCI

596.2

816

<b>Number of Respondents</b>				
	<b>Respondents That Submit Reports</b>		<b>Respondents That Do Not Submit Any Reports</b>	
	<b>(A)</b>	<b>(B)</b>	<b>(C)</b>	<b>(D)</b>
<b>Year</b>	<b>Number of New Respondents <sup>a</sup></b>	<b>Number of Existing Respondents</b>	<b>Number of Existing Respondents that keep records but do not submit reports</b>	<b>Number of Existing Respondents That Are Also New Respondents</b>
1	0	34	0	0
2	0	34	0	0
3	0	34	0	0
Average	0	34	0	0

<sup>a</sup> New respondents include sources with constructed and reconstructed affected facilities. We assume that there are 34 existing sources consisting of 31 sources manufacturing ethylene, and 3 sources manufacturing spandex. We assume no additional sources will be added under the rule. Previous renewals included facilities manufacturing carbon black and facilities manufacturing cyanide, however, the rule for carbon black production (OMB Number 2060-0738, EPA ICR Number 2677.02) was finalized on November 19, 2021 (86 FR 61112) and the rule for cyanide production (OMB Number 2060-0739, EPA ICR Number 2678.02) was finalized on November 19, 2021 (86 FR 61112). Therefore, the burden for these requirements is not included in this renewal.



<b>(E)</b>
<b>Number of Respondents (E=A+B+C-D)</b>
34
34
34
<b>34</b>

ting respondents,  
 ents will be subject to  
 in RTR amendment for  
 FR 66096) and an RTR  
 ), 2021 (86 FR 66096).

<b>Total Annual Responses</b>				
(A)	(B)	(C)	(D)	(E)
Information Collection Activity	Number of Respondents <sup>a</sup>	Number of Responses	Number of Existing Respondents That Keep Records But Do Not Submit Reports	Total Annual Responses E=(BxC)+D
Initial Notification of Applicability	0	1	0	0
Notification of Construction/Reconstruction	0	1	0	0
Notification of Anticipated startup	0	1	0	0
Notification of Actual Startup	0	1	0	0
Notification of Performance Test Dates	0	1.1	0	0
Notification of Operating Parameter Value and Rationale Selection	0	1	0	0
Notification of Compliance Status	0	1	0	0
Report of Initial Performance Test Results	0	1.1	0	0
Periodic and Semiannual Reports: Spandex <del>Excess Emissions and Continuous Monitoring</del>	3	2	0	6
System Performance Report and Summary Report	34	2	0	68
Immediate Startup, Shutdown, Malfunction Reports	0.15	1	0	0.15
Notification of Compliance Status: Ethylene: Flares	31	1	0	31
Notification of Compliance Status: Ethylene: PRDs	21	1	0	21
Periodic and Semiannual Reports: Ethylene: Flares	31	2	0	62
Periodic and Semiannual Reports: Ethylene: PRDs	21	2	0	42
Periodic and Semiannual Reports: Ethylene: Decoking Operations	31	2	0	62
Periodic and Semiannual Reports: Ethylene: Maintenance Vents	31	2	0	62
Periodic and Semiannual Reports: Ethylene: HEX El Paso Method	31	2	0	62
Submit Flare Management Plan	0	1	0	0
			<b>Total</b>	<b>416</b>