

Table 1: Annual Respondent Burden and Cost – NESHAP for Group IV Polymers and Re

Burden Item	(A) Person-hours per occurrence	(B) Number of occurrences per year	(C) Person-hours per respondent (C=AxB)
1. Applications	N/A		
2. Survey and Studies	N/A		
3. Acquisition, Installation, & Utilization of Tech. & Systems	N/A		
4. Reporting Requirements			
A. Familiarize with regulatory requirements ^c	40	1	40
B. Required activities ^d	6.08	13	79
C. Create information ^d	17.85	99	1,767
D. Gather existing information ^d	2.5	677	1,693
E. Write report			
Notification of compliance status	20	1	20
Notification of storage vessel inspection ^e	5	6	30
Notification of performance tests	10	1	10
Notification of alternative test method ^f	5	1	5
Notification of special compliance requirements ^g	5	1	5
Report of newly constructed/reconstructed source	2	1	2
Operating permit application	40	1	40
Precompliance report ^h	40	1	40
Progress reports for affected sources receiving an extension of compliance ⁱ	4	2	8
Emissions averaging plans ^j	120	1	120
Request for approval for a nominal control efficiency for use in calculating credits for emission averaging ^j	2	1	2
Updates to emissions averaging plan ^k	20	1	20
Semiannual periodic reports ^l	80	2	160
Quarterly periodic reports for facilities using emission averaging and where a respondent did not qualify for semiannual reporting ^l	80	4	320
Semiannual periodic reports (PRD monitoring)	5.5	2	11
Semiannual periodic reports (Equip. leaks)	3	2	6
Semiannual periodic reports (PCCT)	1	2	2
Report of changes to the primary product for a TPPU or process unit ^m	2	1	2
Report for batch process vents ⁿ	2	1	2
Report for PET sources using a dimethyl terephthalate process ^o	2	1	2
Malfunction Reports ^p	8	1	8
Affirmative defense	30	-	-
Subtotal for Reporting Requirements			
5. Recordkeeping Requirements			
A. Familiarize with regulatory requirements	See 4A		
B. Plan activities ^d	See 4B		

C. Implement activities ^d	See 4B		
D. Develop record system	40	1	40
E. Time to enter information ^d			
Plan Activities	See 4B		
Create, Test, Research, Develop	See 4C		
Gather information, Monitor, Inspect	See 4D		
Process, Compile, Review	20	1	20
F. Time to train personnel ^d	5.25	4	21
G. Time to Record and disclose information ^d	17.46	26	454
H. Store, file and maintain records ^d	6.77	35	237
I. Time for audits	N/A		
Subtotal for Recordkeeping Requirements			
TOTAL LABOR BURDEN AND COST (rounded) ^q			
TOTAL CAPITAL AND O&M COST (rounded) ^q			
GRAND TOTAL (rounded) ^q			

Assumptions:

^a We assume there are an average of 27 sources (TPPUs) at 24 facilities subject to the rule and no additional source ICR.

^b This ICR uses the following labor rates for privately-owned sources: \$141.06 for managerial, \$120.27 for technician. Department of Labor, Bureau of Labor Statistics, June 2019, "Table 2. Civilian Workers, by occupational and industry, have been increased by 110 percent to account for the benefit packages available to those employed by private industry."

^c This ICR assumes all existing sources will have to familiarize with the regulatory requirements each year.

^d Since the activities within each burden category (i.e., process vents, equipment leaks, wastewater, heat exchanger, etc.) are based on an average activity time (Column A) to calculate hours per facility (Column C). Therefore, we estimated the total burden for each activity by multiplying the person-hrs per occurrence value in Column A. The burden for these activities are based on the approach used in the ICR. Since the burden for these activities are based on the approach used in the ICR, it is important to note that this is an estimate and is only used to back-calculate Column A.

^e This ICR assumes that each facility will refill storage vessels that have been emptied and degassed 6 times per year.

^f This ICR assumes that 5% of new sources will use alternative test methods.

^g This ICR assumes that 5% of new sources will use special compliance requirements.

^h This ICR assumes that 10% of new sources will have to submit precompliance reports.

ⁱ This ICR assumes that all existing sources are already in compliance; new sources cannot receive compliance extensions.

^j This ICR assumes 10% of existing facilities will elect to use emission averaging and that all existing respondents cannot use emissions averaging. This ICR also assumes no existing facilities will elect to use nominal control after 2015.

^k This ICR assumes 1 facility per year using an emissions averaging plan will make changes requiring an update to the plan.

^l This ICR assumes that 5% of the 27 sources (TPPUs) will not qualify for semiannual reports and will be required to submit quarterly reports. (24 respondents x (0.10) = 2.4). (1.35 + 2.4 = 3.75, rounded to 4) The remaining 23 sources will all submit semiannual reports.

^m This ICR assumes that 10% of sources will have changes to their primary product. (27 sources x 0.10 = 2.7, rounded to 3)

ⁿ This ICR assumes that 10% of sources will make changes to batch process vents. (27 sources x 0.10 = 2.7, rounded to 3)

^o This ICR assumes that 10% of PET sources will make changes to a dimethyl terephthalate process. There is a total of 16.5 sources, rounded to 2)

^p This ICR assumes that 10% of sources will have to submit malfunction reports. (27 sources x 0.10 = 2.7, rounded to 3)

^q Totals have been rounded to 3 significant figures. Figures may not add exactly due to rounding.

sins (40 CFR Part 63, Subpart JJJ) (Renewal)

(D) Respondents per year ^a	(E) Technical person- hours (E=CxD)	(F) Managemen t person- hours (F=Ex0.05)	(G) Clerical person- hours (G=Ex0.1)	(H) Total Cost ^b (\$)
24	960	48	96	\$127,862.40
27	2,134	107	213	\$284,238.12
27	47,713	2,386	4,771	\$6,354,901.13
27	45,698	2,285	4,570	\$6,086,450.03
				\$0
0	0	0	0	\$0
24	720	36	72	\$95,896.80
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
1	20	1	2	\$2,663.80
23	3,680	184	368	\$490,139.20
4	1,280	64	128	\$170,483.20
27	297	15	30	\$39,557.43
1	6	0.3	0.6	\$799.14
1	2	0.1	0.2	\$266.38
3	6	0.3	0.6	\$799.14
3	6	0.3	0.6	\$799.14
2	4	0.2	0.4	\$532.76
3	24	1.2	2.4	\$3,196.56
0	0	0	0	\$0
	117,932			\$13,658,585

Labor Rates	
Management	\$141.06
Technical	\$120.27
Clerical	\$58.67

0	0	0	0	\$0
27	540	27	54	\$71,922.60
27	567	28	57	\$75,518.73
27	12,258	613	1,226	\$1,632,643.02
27	6,399	320	640	\$852,282.81
		22,729		\$2,632,367
		141,000		\$16,300,000
				\$7,430,000
				\$23,700,000

responses hr/response
218 647

es per year will become subject to the rule during the three-year period of this

al, and \$58.67 for clerical labor. These rates are from the United States
stry group.” The rates are from column 1, “Total compensation.” The rates
istry.

s, and equipment leaks) can vary significantly, it is too inaccurate to assume
ours per facility and the number activities per year (Column B) to back-
ch used in the HON (Subparts F, G, H, and I). Since so much variability

ar.

ensions.

were expected to be in compliance as of the 2014 final rule. New facilities
submitting the initial emissions averaging plan.

o the emissions averaging plan.

to submit quarterly reports. (27 TPPUs x 0.05 = 1.35) In addition, 10% of
. Therefore we estimate quarterly reports will be submitted for 4 sources.

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al of 15 PET facilities subject to the rule. (15 facilities x 1.1 sources/facility x

l to 3)

<- Changed these from 34 to 27, and from :

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31 to 24.

Table 2: Average Annual EPA Burden – NESHAP for Group IV Polymers and Resins (40 CFR Part

Activity	(A) EPA person- hours per occurrence	(B) Number of occurrences per year	(C) EPA Person- hours per plant (C=AxB)	(D) Plants per year ^a
Activity				
1. Performance Tests: Initial	40	1	40	0
2. Performance Tests: Repeat ^c	40	1	40	0
Reports Review:				
1. Initial ^d	2	1	2	0
2. Implementation plan, pre-compliance report or permit ^d	20	1	20	0
3. Compliance status ^d	40	1	40	0
4. Review equipment leak monitoring ^d	7	1	7	27
5. Report of construction/reconstruction ^d	2	1	2	0
6. Notification of performance test ^d	2	1	2	0
7. Notification of storage vessel inspection ^e	2	6	12	24
8. Review updates to emission averaging plan ^f	5	1	5	1
9. Review report of changes to the primary product for a TPPU or process unit ^g	2	1	2	3
10. Review report for batch process vents ^h	2	1	2	3
11. Review report for PET sources using dimethyl terephthalate process ⁱ	2	1	2	2
12. Review of test results ^d	8	1	8	0
13. Review malfunction reports ^j	2	1	2	3
14. Review semiannual periodic reports ^{d,k}	3	2	6	23
15. Review of quarterly periodic reports ^{d,k}	4	4	16	4
TOTAL (rounded) ^e				

Assumptions:

^a We assume there are an average of 27 sources at 24 facilities subject to the rule and no additional sources per year period of this ICR.

^b This ICR uses the following labor rates: \$66.62 for managerial, \$49.44 for technical, and \$26.75 for clerical labor Management (OPM), 2019 General Schedule, which excludes locality rates of pay. The rates have been increased by available to government employees.

^c This ICR assumes 20% of sources will have to repeat performance tests.

^d The burden for these activities are based on similar requirements in the HON (Subparts F, G, H, and I). The HON

1. Initial represents the EPA review of all initial reports received.

2. Implementation plan or permit represents the EPA review of all implementation plans, or permit applications if s

3. Compliance status represents compliance status verification by the EPA for the portions of the standard which a

4. Review equipment leak monitoring represents the review and screening of periodic reports received as a result o

5. Report of construction/reconstruction represents the EPA review of this notification from new sources.

6. Notification of performance test represents the EPA review of this notification from new sources.

7. Review of test results represents the EPA review of performance test results for new sources.

8. Review periodic reports represents the EPA review of periodic reports.

^e This ICR assumes that each facility will refill storage vessels that have been emptied and degassed 6 times per year

^f This ICR assumes 1 facility per year using an emissions averaging plan will make changes requiring an update to the plan to include review of front-end or back-end operations limits.

^g This ICR assumes that 10% of sources will have changes to their primary product.

^h This ICR assumes that 10% of sources will make changes to batch process vents.

ⁱ This ICR assumes that 10% of PET sources will make changes to a dimethyl terephthalate process. There is a total of 1.1 sources/facility x 10% = 1.65 sources, rounded to 2)

^j This ICR assumes that 10% of sources will have to submit malfunction reports.

^k This ICR assumes that 5% of the 27 sources (TPPUs) will not qualify for semiannual reports and will be required to submit quarterly reports. In addition, 10% of the 24 facilities using emissions averaging are required to submit quarterly reports. (24 sources x 10% = 2.4 sources, rounded to 2) reports will be submitted for 4 sources. (1.35 + 2.4 = 3.75, rounded to 4) The remaining 23 sources will all submit semiannual reports.

^l Totals have been rounded to 3 significant figures. Figures may not add exactly due to rounding.

t 63, Subpart JJJ) (Renewal)

(E) Technical person- hours (E=CxD)	(F) Managem ent person- hours (F=Ex0.05)	(G) Clerical person- hours (G=Ex0.1)	(H) Total Cost ^b (\$)
0	0	0	\$0
0	0	0	\$0
0	0	0	\$0
0	0	0	\$0
0	0	0	\$0
189	9	19	\$10,479.29
0	0	0	\$0
0	0	0	\$0
288	14	29	\$15,968.45
5	0.25	0.5	\$277.23
6	0.3	0.6	\$332.68
6	0.3	0.6	\$332.68
4	0.2	0.4	\$221.78
0	0	0	\$0
6	0.3	0.6	\$332.68
138	6.9	14	\$7,651.55
64	3	6	\$3,548.54
810			\$39,100

Labor Rates	
Management	\$66.62
Technical	\$49.44
Clerical	\$26.75

will become subject to the rule during the three-year

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

describes these activities as follows:

submitted in lieu of an implementation plan.
 source must comply with before the compliance date.

f the equipment leaks standard.

1.

ne emissions averaging plan. This activity may also

of 15 PET facilities subject to the rule. (15 facilities x

o submit quarterly reports. (27 TPPUs x 0.05 = 1.35)
nts x (0.10) = 2.4). Therefore we estimate quarterly
miannual reports.

Capital/Startup vs. Operation and Maintenance (O&M) Costs				
(A)	(B)	(C)	(D)	(E)
Burden	Capital/Startup Cost for One Respondent	Number of New Respondents	Total Capital/Startup Cost, (B X C)	Annual O&M Costs for One Respondent ^a
Electronic indicators for PRD ^a	\$15,930	0	\$0	\$0
Monitoring equipment for process vents and wastewater ^b	\$25,000	0	\$0	\$275,000
Monitoring equipment for equipment leaks ^b	\$1,400	0	\$0	\$0
Total (rounded) ^c			\$0	

^a Based on costs from the 2014 final rule, the total capital cost for the electronic indicators for PRDs across all facilities is (ICR No. 2457.02). This cost has been annualized by multiplying the capital recovery factor by the capital cost. The capital interest rate of 7 percent and an assumed equipment life of 10 years. (Capital cost per monitoring system = $\$3,814,120 \times (0.07 / (1 - 0.07^{10})) = \$15,930/\text{monitoring system}$. The operation and maintenance (O&M) costs expected from operating the electronic indicators are:

^b Capital and O&M costs for process vents, wastewater, and equipment leaks are based on estimates for similar requirements (Subparts H and I). The HON uses the following assumptions:

1. Subpart G

-Total Capital/Startup Cost of Monitoring Equipment: The cost to purchase monitoring equipment is approximately \$20-30K for wastewater operations, or an average of \$25K with a 10-year life expectancy and a 7 percent depreciation rate, or \$2,225 per year for transfer racks and storage tanks. Only new sources need to buy monitoring equipment.

-Total Cost of Operation and Maintenance of Monitoring Equipment: The cost to industry associated with the operation and maintenance of monitoring equipment is approximately \$100-500K per year (capital/startup depreciation not included) for reactor process vents and wastewater operations, and \$50-100K per year (capital/startup depreciation not included) for distillation unit process vents. The average O&M cost is assumed to be the average of the two ranges. Operation and maintenance incur for both new and existing sources.

2. Subpart H

-Total Capital/Startup Cost of Monitoring Equipment: Only new sources will buy an organic volatile analyzer. Estimate is \$7,000 with a 5-year expected life. The equipment is not capitalized, so no discount rate applies. The average annual cost is \$1,400/yr.

-Total Cost of Operation and Maintenance of Monitoring Equipment: The operation of the monitors is included in the monitoring equipment costs. Maintenance costs on these units is incidental; therefore, no maintenance or operation costs are incurred.

3. The HON does not estimate any capital or O&M costs for Subparts F and I.

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

	Number of Respondents		
	Respondents That Submit Reports		Respondents That Do Not Submit Any Reports
	(A)	(B)	(C)
Year	Number of New Respondents ^a	Number of Existing Respondents	Number of Existing Respondents that keep records but do not submit reports
1	0	24	0
2	0	24	0
3	0	24	0
Average	0	24	0

Total Annual Responses				
(A)	(B)	(C)	(D)	(E)
Information Collection Activity	Number of Respondents	Number of Responses	Number of Existing Respondents That Keep Records But Do Not Submit Reports	Total Annual Responses E=(BxC)+D
Notification of compliance status	0	1	0	0
Notification of storage vessel inspection	24	6	0	144
Notification of performance tests	0	1	0	0
Notification of alternative test method	0	1	0	0
Notification of special compliance requirements	0	1	0	0
Pre-compliance report	0	1	0	0
Progress reports for affected sources receiving an extension of compliance	0	2	0	0
Emissions averaging plans	0	1	0	0
Request for approval for a nominal control efficiency for use in calculating credits for emission averaging	0	1	0	0
Updates to emissions averaging plan	1	1	0	1
Report of changes to the primary product for a TPPU or process unit	3	1	0	3
Report of newly constructed/reconstructed source	0	1	0	0
Operating permit application	0	1	0	0
Report for batch process vents	3	1	0	3
Report for PET sources using a dimethyl terephthalate process	2	1	0	2
Malfunction Reports	3	1	0	3
Semiannual reports ^a	23	2	0	46
Quarterly periodic reports for facilities using emission averaging and where a respondent did not qualify for semiannual reporting	4	4	0	16
Total (rounded) ^b				218

^a There are 27 affected sources (PRD) monitored at 24 facilities. For the 23 sources qualifying for semiannual reports, this information will be included in the required periodic report and is not considered a separate response. For the 4 sources required to submit quarterly reports, we assume this information will be submitted quarterly as a separate report.

^b Totals have been rounded to 3 significant figures. Figures may not add exactly due to rounding.

(F)	(G)
Number of Respondents with O&M	Total O&M, (ExF)
0	\$0
27	\$7,425,000
0	\$0
	\$7,430,000

\$7,430,000

s estimated to be \$3,814,120 (see
 d recovery factor is based on an
 0.142 / 34 monitoring system =
 ors is assumed to be minimal.

ents in the HON (Subparts F, G,

30K for process vents and
 per year. There are no associated

nd maintenance (O&M) is
 erations. The cost associated
 rocess vents. There are no
 ges, or \$275,000 per year.

the average cost of a monitor is
 t is, therefore, \$7,000/5, or

onitoring equipment costs.

(D)	(E)
Number of Existing Respondents That Are Also New Respondents	Number of Respondents (E=A+B+C-D)
0	24
0	24
0	24
0	24