Increase:Updated labo

122.2 153.55 61.51

Table 1: Annual Respondent Burden and Cost – NESHAP for Polyvinyl Chloride and Copolymers Production Area Sources (40 CFR Part 63, Subpart DDDDDD) (Renewal)

Burden Item	(A) Respondent Hours per Occurrence	(B) Number of Occurrences Per Respondent Per Year	(C) Hours Per Respondent Per Year (C=A x B)	(D) Number of Respondents Per Year [a]	(E) Technical Hours Per Year (C x D)	(F) Management Hours Per Year (E x 0.05)	(G) Clerical Hours Per Year (E x 0.1)	(H) Total Labor Costs Per Year [b]
1. Applications	N/A							
2. Surveys and Studies	N/A							
3. Reporting Requirements								
A. Familiarization with Regulatory Requirements								
New sources [c,d,j]	320	1	320	0	0	0	0	$0
Existing sources [e]	8	1	8	3	24	1.2	2.4	$3,264.68
B. Required Activities								
1) Initial performance test, sampling, and report								
a) Process Vents[c,f]	120	1	120	0	0	0	0	$0
b) Resins[c,g]	36	1	36	0	0	0	0	$0
c) wastewater[c,h]	8	1	8	0	0	0	0	$0
d) uncontrolled wastewater[h]	40	1	40	0	0	0	0	$0
e) heat exchangers[i]	8	1	8	0	0	0	0	$0
f) equipment leaks[j]	850	1	850	0	0	0	0	$0
2) Periodic performance test, sampling, and report								
a) Process Vents[f]	17.1	350	5,985	3	17,955	897.75	1,795.50	$2,442,391.72
b) Resins[g]	36	362	13,032	3	39,096	1,955	3,910	$5,318,170.24
c) wastewater[h]	8	12	96	3	288	14.4	28.8	$39,176.21
d) uncontrolled wastewater[h]	40	1	40	3	120	6	12	$16,323.42
e) heat exchangers[i]	8	12	96	3	288	14.4	28.8	$39,176.21
f) equipment leaks[j]	43	12	510	3	1,530	76.5	153	$208,123.61
3) Establish operating parameters and monitoring plan								
a) Process Vents[c,d,f]	8	1	8	0	0	0	0	$0
4) Continuous parameter monitoring								
a) Initial capital costs (PRD Electronic Monitor)[c,k]	524	1	524	0	0	0	0	$0
b) Annualized PRD Electronic Monitor Review [k]	10	1	10	3	30	1.5	3	$4,080.86
5) Other requirements								
a) equipment openings, initial measurement [m]	1.5	1	1.5	0	0	0	0	$0
b) equipment openings, daily measurement [m]	1.5	350	525	3	1,575	78.75	157.5	$214,244.89
c) gasholders [p]	1	1	1	1	1	0	0	$136
d) storage vessels [q]	2	1	2	3	6	0	1	$816
e) bypasses, initial requirement [m]	40	1	40	0	0	0	0	$0
f) bypasses, ongoing inspection [m,o]	2	12	24	3	72	3.6	7	$9,794.05
C. Create Information	See 3.B							
D. Gather Information	See 3.E							
E. Report Preparation								
1) Initial Notification[c,d]	5	1	5	0	0	0	0	$0
2) Batch precompliance report[c,d]	5	1	5	0	0	0	0	$0
3) Notification of performance test with test plan[c,d]	10	1	10	0	0	0	0	$0
4) Notification of compliance status[c,d]	20	1	20	0	0	0	0	$0
5) Compliance report[d]	40	2	80	3	240	12	24	$32,646.84
6) Notice of inspection[d]	5	1	5	3	15	0.75	1.5	$2,040.43
Reporting Subtotal						***70,426***		***$8,330,385.34***
4. Recordkeeping Requirements								
A. Familiarization with Regulatory Requirements	See 3.A							
B. Implement Activities	N/A							
C. Develop Record System	N/A							
D. Record Information								
1) Records of process vent requirements[d]	10	12	120	3	360	18	36	$48,970.26
2) Records of resin stripper requirements[d]	10	12	120	3	360	18	36	$48,970.26
3) Records of wastewater requirements[d]	10	12	120	3	360	18	36	$48,970.26
4) Records of storage vessel requirements[d]	10	12	120	3	360	18	36	$48,970.26
5) Records of equipment leak requirements[d]	10	12	120	3	360	18	36	$48,970.26
6) Records of heat exchanger requirements[d]	10	12	120	3	360	18	36	$48,970.26
7) Records of other emission sources requirements	10	12	120	3	360	18	36	$48,970.26
E. Personnel Training	See 3.B							
F. Time for Audits	N/A							
Recordkeeping Subtotal						***2,898***		***$342,791.82***
TOTAL LABOR BURDEN AND COSTS (rounded):[a]						**73,300**		**$8,670,000**
TOTAL CAPITAL AND O&M COSTS (rounded): [a]								**$1,000,000**
GRAND TOTAL (rounded): [a]								**$9,670,000**

[a] Assumes that, over the next three years, approximately 3 respondents per year will be subject to the standard, and no additional respondents per year will become subject to the standard.

[b] Labor rates are $153.55 for managerial, $122.20 for technical, and $61.51 for clerical. These rates from the United States Department of Labor, Bureau of Labor Statistics, March 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 percent to account for the benefit packages available to those employed by private industry.

[c] Costs apply only to newly-applicable sources.

[d] Cost incurred by a facility regardless of the number of affected units at the plant. Per VI's comments, this is performed monthly. We have assumed 10 hours per month for each process listed.

[e] There are 3 area sources in the affected source category.

[f] It is assumed that performance testing for process vents will take 120 hours per occurrence initially. The initial compliance and operating procedure development for continuous compliance and will take 8 hours. The daily monitoring of parameters will take on avg 17.1 hr per facility per day over 350 day/yr.

[g] Per VI's previous comments, it is assumed that performance testing for resins will take 4 hours per sample for 9 samples per facility, initially and daily (350 days per year). Pursuant to 40 CFR 63.11142(f)(16) and 63.11960(d)(2), we have increased the number of occurrences from 350 to 362 to account for 12 monthly samples.

[h] Estimated 1 uncontrolled stream and 1 wastewater stripper per facility. 1 wastewater stripper outlet is expected to require monthly testing; 5 uncontrolled stream will require annual testing (per facility). It will take 4 hours per sample for 2 samples per stream.

[i] It is assumed that performance testing on heat exchangers will take 4 hours per sample for 2 samples per facility, initially and monthly.

[j] For Equipment leaks, we estimate approx 10,000 components per facility and 5 minutes per component, plus additional time calibration of analytical device for a total of 850 hr per facility. For continuous monitoring, we assume 1 hr is required per component for leak repair, if detected. It was assumed that overall continuous compliace of leak monitoring will take 5% of the time with initial monitoring per month.

[k] The Annualized PRD Electronic Monitor Review hours have been updated to include hours for corrective action for dishcarges and hours for replacement analysis. Per VI's comments, corrective action for discharge from a PRD would take 24 hours, and less than one PRD discharge event occurs per year in the entire industry. The number of hours for a discharge event is estimated to be 24/13 = 1.8 (rounded to 2) hours per facility. Per VI's comments, analysis for replacement of PRD monitors is estimated to take 24 hours per facility. Because the lifetime of a PRD monitor is expected to be 7 years, we do not expect the replacement alaysis to occur annually, and we have assumed that this occurs once every 3 years (24 hrs/3 years = 8 hours per year).

[l] Because the rule requirements have not changed for existing respondents, we assume it will take 8 hours per respondent to read and understand the rule requirements (1 hr for 8 employees). We assume minimal time is needed each year to refamiliarize with rule requirements for existing employees. We assume that new employees will need 320 hours to familiarize with rule requirements (40 hours for 8 employees).

Record Keeping and Reporting Burden by Emission Point

Note: This table is used to caluclate the record keeping and reporting burden by emission point for the PVC NESHAP. The costs presented in the table below represent costs not otherwise included in the PVC NESHAP Impact estimate (i.e., testing and monitoring costs are already included in the PVC NESHAP impacts estimate, therefore, they are not included in the table below). The costs presented in the table below should be added to the previously calculated PVC Impacts to obtain an impacts estimate which includes record keeping and reporting.

Record Keeping and Reporting Burden By Emission Point					
Emission Point	Initial Cost ($)	Initial Notes	Annual Cost ($/yr)		
			Yr 1	Yr 2	Yr 3
Resins	#REF!	a,b,d	#REF!	#REF!	$5,372,095.82
Process Vents	#REF!	a,b,c,d	#REF!	#REF!	$2,496,317.30
Wastewater	#REF!	a,b,d	#REF!	#REF!	$109,425.21
Equipment Leaks	#REF!	a,b,d	#REF!	#REF!	$266,130.04
Storage Vessels	#REF!	a,d	#REF!	#REF!	$53,925.58
Heat Exchange Systems	#REF!	a,b,d	#REF!	#REF!	$93,101.79
Other Sources	#REF!	a,d	#REF!	#REF!	$53,925.58
Total	**#REF!**		**#REF!**	**#REF!**	**$8,444,921.34**

a Labor/Non Labor Costs to "Read/Understand Rule Requirements" divided by 7 emission points
b Initial Performance Test/Sampling/Report
c Establishment of operating parameters and monitoring plan
d Report preparation for item 3.E.1-6 divided by 7 emission points
e Periodic sampling/testing/and monitoring (not applicable for process vents in year 1)
f Years 2 and 3 include items 3.E.5 and 3.E.6 divided by 7 emission points
g In year 2 and 3, recordkeeping items under 4.D are included
h includes annual labor cost for PRD monitoring system

Annual Notes
e,f,g
e,f,g
e,f,g
e,f,g,h
e,f,g
e,f,g
e,f,g

2021 51.23 69.04 27.73

Table 2: Average Annual EPA Burden and Cost – NESHAP for Polyvinyl Chloride and Copolymers Production Area Sources (40 CFR Part 63, Subp

Burden Item	(A) EPA person-hours per occurrence	(B) No. of occurrences per plant per year	(C) EPA person-hours per plant per year (C=AxB)	(D) Plants Per Year [a]	(E) Technical person-hours per year (E=CxD)	(F) Management person-hours per year (Ex0.05)	(G) Clerical person-hours per year (Ex0.10)	(H) EPA Cost Per Year [b]
1. Applications	not applicable							
2. Familiarize with Rule Requirements	16	0	0	0	0	0	0	$0
3. Required Activities								
A. Observe initial performance tests[c]	48	0	0	0	0	0	0	$0
B. Excess emissions -- Enforcement Activities[d]	24	0	0	0	0	0	0	$0
C. Create Information	not applicable							
D. Gather Information	not applicable							
E. Report Reviews								
1) Review initial notification	3	0	0	0	0	0	0	$0
2) Review batch precompliance report	5	0	0	0	0	0	0	$0
3) Review notification of performance test	10	0	0	0	0	0	0	$0
4) Review notification of compliance status	40	0	0	0	0	0	0	$0
5) Review compliance report	20	2	40	3	120	6	12	$6,894.60
6) Review notice of inspection	3	1	3	3	9	0.45	0.9	$517.10
F. Prepare annual summary report[e]	4	1	4	3	12	0.6	1.2	$689.46
TOTAL (rounded) [f]					**162**			**$8,100**

[a] Assumes that, over the next three years, approximately 3 respondents per year will be subject to the standard, and no additional respondents per year will become subject to the standard.

[b] Labor rates are $69.04 for managerial (GS-13, Step 5, $43.15 + 60%), $51.23 for technical (GS-12, Step 1, $32.02 + 60%), and $27.73 for clerical (GS-6, Step 3, $17.33 + 60%). These rates are from the Office of Personnel Management (OPM), 2021 General Schedule, which excludes locality rates of pay. The rates have been increased by 60 percent to account for the benefit packages available to government employees.

[c] Assumes EPA personnel attend 20 percent of the initial process vent stack tests.

[d] Assumes no emissions exceedances.

[e] Assumes four hours per state to write annual summary report.

	Capita
(A)	(B)
Continuous Monitoring Device	Capital/Startup Cost for One Respondent
PRD Electronic Monitor[3]	$375,000
VC Ambient monitoring [6]	
Gas holders	$5,000
Process Vent Testing	$43,198
Resin Sampling and Monitoring[1]	$1,803
Resin: Non-VC TOHAP testing[4]	$1,950
Wastewater Testing[2]	$491
Wastewater Testing: Non-VC TOHAP testing	$650
Uncontrolled Wastewater testing[7]	$0
Uncontrolled Wastewater testing: Non-VC TOHAP testing [5]	$3,250
Equipment Leak Testing	$177,360

[1] Per VI's comments, monthly maintenance and service of a lab GC costs $600 per unit.

[2] Monthly testing ($491 x 12 months = $5,892 per year)

[3] The capital cost of a PRD monitor is $15,000 per device, and it is assumed that 25 devices per facilit

[4] The costs of Non-VC TOHAP testing is $650 per sample, and three samples per facility.

[5] The costs of Non-VC TOHAP testing is assumed to be $650 per sample. Per VI's comments there ar

[6] Per VI's comments, assume an average of 3 GC monitors per facility with an annual cost of $45,000

[7]Per VI's comments, there are 5 uncontrolled wastewater streams and 2 cooling tower streams per sou

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

ıl/Startup vs. Operation and Maintenance (O&M) Costs

(C)	(D)	(E)	(F)
Number of New Respondents	Total Capital/Startup Cost, (B X C)	Annual O&M Costs for One Respondent	Number of Respondents with O&M
Continuous Parameter Monitoring			
0	$0	$31,772	3
		$135,000	3
0	$0		
Periodic Testing			
0	$0	$99,080	3
0	$0	$7,200	3
0	$0	$23,400	3
0	$0	$5,892	3
0	$0	$7,800	3
0	$0	$3,437	3
0	$0	$4,550	3
0	$0	$16,105	3
Total[8]			
	$0		

ty require indicators.

e 5 uncontrolled wastewater streams and 2 cooling water streams per source sampled annually. $650 x 7 = $4,550
per monitor for vinyl chloride. The average annual O&M cost per facility is $135,000.
rce sampled annually. Using a cost of $491 per sample x 7 samples = $3,437

(G)	
Total O&M,	
(E X F)	
$95,316	
$405,000	
$297,240	
$21,600	
$70,200	
$17,676	
$23,400	
$10,311	
$13,650	
$48,315	
$1,000,000	