

ICR Summary Information

Hours per Response	348
Number of Respondents	96
Total Estimated Burden Hours	108,000
Total Estimated Costs	\$14,300,000
Annualized Capital O&M	\$608,000
Total Annual Responses	310
Form Number	5900-520

Table 1: Annual Respondent Burden and Cost – NESHAP for Chemical Recovery Combustion

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
1. Applications	N/A			
2. Surveys and studies	N/A			
3. Reporting requirements				
A. Familiarization with the regulatory requirements ^c	1	1	1	96
B. Required activities ^d				
Prepare for initial/periodic performance test	24	1	24	23
Attend initial/periodic performance test	24	2	48	23
Prepare for retest	24	1	24	5
Attend retest	24	2	48	5
C. Create information	See 3B			
D. Gather existing information	See 3B			
E. Write reports				
Notifications				
Notification of construction/reconstruction	2	1	2	1
Notification of actual startup	2	1	2	1
Notification of applicability of standard	2	1	2	1
Notification of compliance status ^{e,f}	80	1	80	1
Notification of performance test/retest ^g	2	1	2	38
Notification of performance evaluation ^g	2	1	2	38
Report of performance test/retest (through CEDRI using ERT) ^g	8	1	8	38
Excess emissions report (through CEDRI) ^h				
Semiannual reports of monitoring exceedances and periods of noncompliance	16	2	32	5
Semiannual reports of no exceedances	8	2	16	91
<i>Subtotal for Reporting Requirements</i>				
4. Recordkeeping requirements				
A. Read instructions	See 3A			
B. Plan activities	See 3B			
C. Implement activities	See 3B			
D. Develop record system ⁱ	40	1	40	1
E. Time to enter information				
Records and documentation of supporting calculations for compliance determinations ^j	8	1	8	38
Record of compliant monitoring parameter ranges	2	1	2	38
Records certifying that an NDCE recovery furnace equipped with a dry ESP system is used to comply with the gaseous organic HAP standard for kraft and soda recovery furnaces ^k	2	1	2	1

Records demonstrating compliance with requirement to maintain proper operation of ESP's AVC ^l	8	2	16	164
Records of failures to meet standards ^m	2	12	24	5
Records of black liquor solids firing rates for recovery furnaces and semichemical combustion units ⁿ	1.5	52	78	96
Records of lime production for lime kilns ^o	1.5	52	78	87
Records of CMS data ^p	0.5	1,050	525	96
F. Time to train personnel				
Initial training ^q	40	1	40	1
Refresher training ^r	16	1	16	96
G. Time to adjust existing ways to comply with previously applicable requirements	17.8	1	17.8	0
H. Time to transmit or disclose information				
Compile data for semiannual periods ^s	96	2	192	96
Enter/verify information for semiannual reports ^t	8	2	16	96
I. Time for audits	N/A			
<i>Subtotal for Recordkeeping Requirements</i>				
TOTAL LABOR BURDEN AND COSTS (rounded) ^u				
TOTAL CAPITAL AND O&M COST (rounded) ^u				
GRAND TOTAL (rounded) ^u				

^a We estimate that the number of existing sources subject to the rule is 96 pulp mills. We also estimate that new equipment subject to the rule over the 3 years of this ICR (two new recovery furnaces, two new SDTs, and one new lime kiln). Based average of 96 pulp mills per year and new source requirements for an average of 1 pulp mills per year.

^b This ICR uses the following labor rates: \$163.17 (\$77.70 + 110%) per hour for Executive, Administrative, and Managerial and \$65.71 (\$31.29 + 110%) per hour for Clerical labor. These rates are from the United States Department of Labor, Bureau of Economic Analysis, "Compensation of Nonfarm, Nonmanufacturing workers by occupational and industry group." The rates are from column 1, "Total compensation." The rates have been increased to include the additional overhead business costs of employing workers beyond their wages and benefits, including business employees.

^c We have assumed that it will take 1 hour each year for existing respondents to refamiliarize themselves with rule requirements.

^d We estimate that it will take the respondent 24 hours to prepare for initial/periodic performance test (e.g., prepare test plan, personnel will attend the test. We estimate that 68 mills will need to conduct a test (the rest of the 96 existing mills are already in compliance). We estimate that 68 mills will need to conduct a test (the rest of the 96 existing mills are already in compliance) will occur once during the 3-year ICR period (68 respondents/3 years = 23). In addition, we estimate that 20% of respondents will fail due to failure.

^e With the exception of the notification of compliance status, we estimate that it will take the respondent 2 hours once per year to submit data through the EPA's CEDRI.

^f We estimate that it will take the respondent 80 hours once in the initial year to prepare the notification of compliance status.

^g Hard copy report of performance test/retest is included in capital/startup costs. Submittal of performance test/retest data takes 8 hours for 38 mills (see respondent calculation in footnote f of Table 2).

^h We estimate that 5% of respondents (5% x 96 respondents = 5) will each take 16 hours two times per year to complete retests and submit them through the EPA's CEDRI. We estimate that 95% of respondents (95% x 96 respondents = 91) will each take 16 hours to complete retests and submit them through the EPA's CEDRI.

- ⁱ We estimate that it will take one respondent 40 hours to develop a record system to comply with monitoring requirements.
- ^j We estimate that it will take the respondent 8 hours (1 day) each year to enter records and documentation of supporting compliance record of compliant monitoring parameter ranges. We estimate that 38 mills (see footnote g) will enter this information (including 164 recovery furnaces and lime kilns).
- ^k We estimate that 2 existing mills will install new recovery furnaces over 3 years, for an average of 1 mill with new recovery furnaces (0.67, or 1, rounded). Based on current industry trends, the new furnaces are expected to be a non-direct contact evaporator. We estimate that it will take the respondent 2 hours to record this information.
- ^l We estimate that it will take 8 hours per semiannual period each year to keep records demonstrating compliance with the 164 recovery furnace and lime kiln ESPs.
- ^m We estimate that 5% of respondents (5% x 104 respondents = 5) will fail to meet standards each year. We estimate that each respondent will keep records of failures to meet the standards.
- ⁿ We estimate 96 existing kraft, soda, and stand-alone semichemical pulp mills have recovery furnaces or other chemical recovery furnaces. We estimate that each respondent will take 1.5 hours 52 times per year to keep these records.
- ^o We estimate 87 existing kraft and soda pulp mills have lime kilns that will need to keep records of lime production rate. We estimate that each respondent will take 1.5 hours 52 times per year to keep these records.
- ^p We estimate that each respondent will take 0.5 hours 1,050 times per year to record wet scrubber and regenerative thermal oxidizer records.
- ^q We estimate that it will take the respondent 40 hours (1 week) once per year for initial training of personnel with new software.
- ^r We estimate that it will take each respondent 16 hours to provide refresher training each year for personnel at all 96 existing mills.
- ^s We estimate that each respondent will take 96 hours per semiannual period to compile data for all 96 mills.
- ^t We estimate that each respondent will take 8 hours two times per year to verify information for reports for all 96 mills.
- ^u Totals have been rounded to 3 significant figures. Figures may not add exactly due to rounding.

Sources at Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mills (40 CFR Part 6

(E) Technical person hr/yr (E=CxD)	(F) Management person hr/yr (Ex0.05)	(G) Clerical person hr/yr (Ex0.1)	(H) Total Cost Per year ^b
96	4.8	9.6	\$13,920.91
552	27.6	55.2	\$80,045.24
1,104	55.2	110.4	\$160,090.49
120	6	12	\$17,401.14
240	12	24	\$34,802.28
2	0.10	0.20	\$290.02
2	0.10	0.20	\$290.02
2	0.10	0.20	\$290.02
80	4.00	8.00	\$11,600.76
76	3.8	7.6	\$11,020.72
76	3.8	7.6	\$11,020.72
304	15.2	30.4	\$44,082.89
160	8	16	\$23,201.52
1,456	72.8	145.6	\$211,133.83
4,911			\$619,191
40	2	4.00	\$5,800.38
304	17	30.4	\$44,376.59
76	4.3	7.6	\$11,102.31
2.0	0.07	0.2	\$285.12

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

Hours per Response	
108000	# hours
310	# responses
348	hr/resp

2,624	146	262.4	\$382,919.84
120	6	12	\$17,401.14
7,488	406	748.8	\$1,090,987.31
6,786	382	678.6	\$991,001.83
50,400	2,809	5040	\$7,355,634.93
40	2	4.00	\$5,800.38
1,536	86	153.6	\$224,235.76
0	144	0	\$23,496.48
			\$0.00
18,432	1,027	1843.2	\$2,690,013.22
1,536	86	153.60	\$224,235.76
103,440			\$13,067,291
108,000			\$13,700,000
			\$608,000
			\$14,300,000

t will be installed at three existing pulp mills and become
on these estimates, over the 3 years of this ICR, there will be an

al labor; \$130.28 (\$62.04 + 110%) per hour for Technical labor,
eau of Labor Statistics, September 2022, "Table 2. Civilian
reased by 110 percent to account for varying industry wage
; expenses associated with hiring, training, and equipping their

ments.

m) and 24 hours to attend the test. We also estimate 2 plant
ady required under existing state rules to conduct tests); this
nts (20% x 23 respondents = ~5) will repeat performance test

year to complete the notifications and submit selected ones

us and submit it through the EPA's CEDRI.

hrough the EPA's CEDRI in ERT format is estimated to require

ports of monitoring exceedances and periods of noncompliance
ake 8 hours two times per year to write reports of no

5.

calculation for compliance determinations and 2 hours to enter a
cludes initial test and retest, for mills required to retest).

ery furnaces per year over the ICR period (2 mills/3 years=
(NDCE) recovery furnace equipped with a dry ESP system.

requirement to maintain proper operation of the ESP AVC for

each respondent will take 2 hours 12 times per year to keep

recovery combustion units that will need to keep records of

We estimate that each respondent will take 1.5 hours 52 times

al oxidizer (RTO) parameters at all existing 96 mills.

ources (3 new respondents/3 years) = 1).

ing mills.

3, Subpart MM) (Renewal)

Table 2: Average Annual EPA Burden and Cost – NESHAP for Chemical Recovery Combusti

Activity	(A) EPA person- hours per occurrence	(B) No. of occurrenc es per plant per year	(C) EPA person- hours per plant per year (C=AxB)	(D) Plants per year ^a	(E) Technical person hr/yr (E=CxD)
1. Attend initial/periodic performance test ^c	24	1	24	3.2	76.8
2. Attend retest ^{c,d}	24	1	24	0.6	14.4
3. Report review					
Notification of construction/reconstruction ^e	2	1	2	1	2.00
Notification of actual startup ^e	2	1	2	1	2.00
Notification of applicability of standard ^e	2	1	2	1	2.00
Notification of initial/periodic performance test ^f	2	1	2	38	76
Notification of performance evaluation ^f	2	1	2	38	76
Review of notification of compliance status ^e	4	1	4	1	4.00
Review of excess emissions report					
Semiannual reports of monitoring exceedances and periods of noncompliance ^g	8	2	16	5	80
Semiannual reports of no exceedances ^h	2	2	4	91	364
Subtotal for Burden and Cost - Salary					
Travel Expenses for Tests Attended ⁱ					
TOTAL ANNUAL BURDEN AND COST ^j					

^a We estimate that the number of existing sources subject to the rule is 96 pulp mills. We also estimate that new equipment pulp mills and become subject to the rule over the 3 years of this ICR (two new recovery furnaces, two new SDTs, and o estimates, over the 3 years of this ICR, there will be an average of 96 pulp mills per year -and new source requirements f

^b The cost is based on the following labor rate which incorporates a 1.6 benefits multiplication factor to account for gove rates of \$73.46 (GS-13, Step 5, \$45.91 + 60%), Technical rate of \$54.51 (GS-12, Step 1, \$34.07 + 60%), and Clerical rat 60%). These rates are from the Office of Personnel Management (OPM), 2023 General Schedule, which excludes locali increased by 60 percent to account for the benefit packages available to government employees.

^c Assume EPA will attend tests at 3.2 plants per year. We estimate that it will take EPA personnel 24 hours once per yea performance tests at 10% of plants ($0.10 \times 96/3 \text{ years} = 3.2$), assuming 96 existing plants will test.

^d Assume EPA will attend retests at 0.6 plants per year. We estimate that 20% of respondents will repeat performance te will attend 10% of retests ($0.20 \times 0.10 \times 96/3 \text{ years} = 0.64$), assuming 96 existing plants and 1 new plant will test.

^e We estimate that it will take EPA personnel 2 hours once per year to complete review of the initial notifications (const applicability of standard) and 4 hours once per year to review the notification of compliance status for new process units = 1).

^f We estimate that it will take EPA personnel 2 hours once per year to complete review of the initial and periodic notific performance evaluation. We estimate that 38 mills will submit notifications of initial/periodic performance test/retest an ICR period (test: $96 \text{ existing respondents}/3 \text{ years} = 32$; retest: $20\% \times 35 = 6$; total: $32 + 6 = 38$).

^g We estimate that it will take EPA personnel 8 hours two times per year to review the monitoring exceedances and peri emissions report for 5% of respondents ($5\% \times 96 = \sim 5$).

^h We estimate that it will take EPA personnel 2 hours two times per year to review the no exceedances report for 95% of

ⁱ We estimate that it will take EPA personnel 1 day per plant plus time for travel, at \$50 per diem per day, and \$400 transportation. Assuming an average of 4.3 tests/retests each year (3.2 tests + 0.6 retests = 3.8)(see footnotes c and d), the annual cost for tests/retests*(\$400+\$50) = \$1,710).

^j Sum of labor and expenses. Total has been rounded to 3 significant figures. Figure may not add exactly due to rounding.

on Sources at Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mills (40 CFR Part

(F) Managem ent person hr/yr (Ex0.05)	(G) Clerical person hr/yr (Ex0.1)	(H) Cost, \$ ^b
3.84	7.68	\$4,695.18
0.72	1.44	\$880.35
0.10	0.20	\$122.27
0.10	0.20	\$122.27
0.10	0.20	\$122.27
3.8	7.6	\$4,646.28
3.8	7.6	\$4,646.28
0.20	0.40	\$244.54
4	8	\$4,890.82
18.2	36.4	\$22,253.21
802		\$42,623
		\$1,710
		\$44,300

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

ent will be installed at three existing
me new lime kiln). Based on these
or an average of 1 pulp mills per year.

rnment overhead expenses. Managerial
te of \$29.50 (GS-6, Step 3, \$18.44 +
ty, rates of pay. The rates have been

r to attend initial and periodic

st due to failure and that EPA personnel

ruction/reconstruction, actual startup,
(3 mills with new process units/3 years

ations of performance test/retest and
d performance evaluation over the 3-year

ods of noncompliance in the excess

f respondents (95% x 96 = 91.2).

isportation expense per round trip.
r travel expenses is \$1,890 (3.8

g.

63, Subpart MM) (Renewal)

Capital/Startup vs. Operation and Maintenance (O&M)			
(A)	(B)	(C)	(D)
Continuous Monitoring Device	Capital/Startup Cost for One Respondent	Number of New Respondents ^a	Total Capital/Startup Cost, (B X C)
Continuous Monitoring Device:			
Continuous opacity monitoring system (COMS)	\$41,000	0	0
Continuous parameter monitoring system (CPMS)	\$0	0	0
Performance tests: ^{a,b}			
Method 5 for PM	\$2,439	234	\$570,726
Method 25A for THC	\$3,414	5	\$17,070
Method 308 for methanol	\$3,414	6	\$20,484
Retests	--	--	\$0
Total			\$608,000

Assumptions:

^a We estimate that 20% of respondents will repeat the performance test due to failure. Estimate assumes 96 existing facilities which require THC testing.

^b Annualized capital costs were estimated assuming a 5-year payment period at 7% interest for initial performance tests.

O&M) Costs

(E)	(F)	(G)
Annual O&M Costs for One Respondent	Number of Respondents with O&M ^b	Total O&M, (E X F)
\$8,000	0	\$0
\$0	0	\$0
\$0	0	\$0
\$0	0	\$0
\$0	0	\$0
--	--	\$0
		\$0

\$608,000

ilities with 234 sources, and 6 new sources at 3 existing facilities, 5 of

ts (with a capital recovery factor of 0.244).

Total Annual Responses				
(A)	(B)	(C)	(D)	(E)
Information Collection Activity	Number of Respondents ^a	Number of Responses	Number of Existing Respondents That Keep Records But Do Not Submit Reports	Total Annual Responses E=(BxC)+D
Notification of construction/reconstruction	1	1	0	1
Notification of actual startup	1	1	0	1
Notification of applicability of standard	1	1	0	1
Notification of performance test/ retest	38	1	0	38
Notification of performance evaluation	38	1	0	38
Notification of compliance status	1	1	0	1
Report of performance test/retest	38	1	0	38
Semiannual report of monitoring exceedances and periods of noncompliance	5	2	0	10
Semiannual report of no exceedances	91	2	0	182
			Total	310

Number of Respondents				
	Respondents That Submit Reports		Respondents That Do Not Submit Any Reports	
	(A)	(B)	(C)	(D)
Year	Number of New Respondents ^a	Number of Existing Respondents	Number of Existing Respondents that keep records but do not submit reports	Number of Existing Respondents That Are Also New Respondents
1	1	96	0	1
2	1	96	0	1
3	1	96	0	1
Average	1	96	0	0

^a New respondents include sources with constructed, reconstructed, and modified affected facilities.

(E)
Number of Respondents (E=A+B+C-D)
96
96
96
96