

	All facilities		
Number of Existing Facilities	13		
Number of New Facilities	0		
Total	13		

Industry Wages

May 2019 National Industry-Specific Occupational Employment and Wage Estimates
Sectors 31, 32, and 33 - Manufacturing

Category	Occupation Code	Title	2019 Wage
Technical	17-2081	Architecture and Engineering Occupations	48.4
Clerical	43-6014	Office and Administrative Support Occupations	22.65
Managerial	11-9041	Management Occupations	66.36

https://www.bls.gov/oes/current/naics4_3250A1.htm#11-0000

EPA Wages

	Hourly Mean Wage	With Fringe & Overhead
(GS- 12, step 1) - Tech.	30.9	\$49.44
(GS- 13, step 5) - Mgmt.	41.64	\$66.62
(GS-6, step 3) - Cler.	16.72	\$26.75

https://www.opm.gov/policy-data-oversight/pay-leave/salaries-wages/salary-tables/pdf/2019/GS_h.pdf
or <https://www.opm.gov/policy-data-oversight/pay-leave/salaries-wages/>

Loaded Wage
101.64
47.57
139.36

Table 1 - Annual Respondent Burden and Cost of Recordkeeping and Reporting Requirements for the Cyanide Chemicals Manufacturing RTR - Year 1

Burden Item	(A) Respondent Hours per Occurrence (Technical hours)	(B) Non Labor Costs Per Occurrence	(C) Number of Occurrences Per Respondent Per Year	(D) Technical Hours per Respondent Per Year (A X C)	(E) Number of Respondents Per Year	(F) Technical Hours per Year (D X E)	(G) Clerical Hours per Year (F X 0.1)	(H) Management Hours per Year (F X .05)	(I) Total Hours per Year (F + G + H)	(J) Total Labor Costs Per Year	(K) Total Non- Labor Costs Per Year (B x C x E)	(L) Total Number of Responses per Year (C X E)	Footnotes
1. Applications	NA												
2. Surveys and Studies	NA												
3. Reporting Requirements													
A. Read Rule	8	\$0	1	8	13	104	10	5	120	\$11,790	\$0	0	a, b
B. Required Activities													c
1. Wastewater Applicability/Compliance Calculations	0.5	\$0	1	0.5	13	6.5	0	0	7	\$709	\$0	13	d
2. Wastewater sampling - applicability/compliance sampling	0.5	\$50	2	1	13	13	0	1	14	\$1,418	\$1,300	26	e, f
C. Create Information	Inc. in 3B												
D. Gather Information	Inc. in 3E												
E. Report Preparation													c
1. Notification of Compliance Status													
a. Process Wastewater Control Applicability Performance Test/Compliance Demonstration	2	\$0	1	2	13	26	3	1	30	\$2,947	\$0	13	
Reporting Subtotal						150	13	7	170	\$16,864	\$1,300	52	

Table 1 - Annual Respondent Burden and Cost of Recordkeeping and Reporting Requirements for the Cyanide Chemicals Manufacturing RTR - Year 1

Burden Item	(A) Respondent Hours per Occurrence (Technical hours)	(B) Non Labor Costs Per Occurrence	(C) Number of Occurrences Per Respondent Per Year	(D) Technical Hours per Respondent Per Year (A X C)	(E) Number of Respondents Per Year	(F) Technical Hours per Year (D X E)	(G) Clerical Hours per Year (F X 0.1)	(H) Management Hours per Year (F X .05)	(I) Total Hours per Year (F + G + H)	(J) Total Labor Costs Per Year	(K) Total Non- Labor Costs Per Year (B x C x E)	(L) Total Number of Responses per Year (C X E)	Footnotes
4. Recordkeeping Requirements													c
A. Read Instructions	Inc. in 3.A												
B. Implement Activities	NA												
C. Develop Record System	NA												
D. Record information													
1. Process wastewater notification and report records	0.5	\$0	1	1	13	7	1	0	7	\$737	\$0	0	
2. Process wastewater control applicability/compliance records	2	\$0	1	2	13	26	3	1	30	\$2,947	\$0	0	
E. Understand Requirements and Adjust Compliance Plan	20	\$0	1	20	13	260	26	13	299	\$29,475	\$0	0	
F. Time for Audits	NA												
Recordkeeping Subtotal						293	29	15	336	\$33,159	\$0	0	
TOTAL						442	42	22	507	\$50,023	\$1,300	52	

Footnotes:

(a) There are 13 currently operating facilities. We assumed that there would be no new facilities that would commence operations within three years after promulgation of the rule. As such, costs are estimated for 13 facilities. This is a conservative estimate that assumes none of the 13 existing facilities are new facilities subject to the current cyanide chemicals manufacturing MACT..

(b) This is a one-time cost incurred only in year 1.

(c) Assumes all facilities will read the rule and perform one-time activities (i.e., determine/calculate process wastewater control applicability/compliance) in year 1.

(d) Includes labor hour costs to gather data and do calculations to determine process wastewater control applicability. Assumes that owners and operators have the necessary information to perform analyses readily-available for HAP other than free cyanide wastewater stream concentration (burden associated with obtaining sampling concentration for free cyanide assumed under 3.B.2.

(e) Assumes a one time nonlabor cost (in the first year) of \$50 to sample wastewater stream for free cyanide to determine applicability to wastewater process requirements for existing sources. It is assumed that each existing facility will incur this cost.

(f) Assumes a one time nonlabor cost (in the first year) of \$50 to sample wastewater stream for free cyanide to determine compliance with concentration limit compliance options under the wastewater stream process requirements for existing sources.

Table 2 - Annual Respondent Burden and Cost of Recordkeeping and Reporting Requirements for the Cyanide Chemicals Manufacturing RTR - Year 2

Burden Item	(A) Respondent Hours per Occurrence (Technical hours)	(B) Non Labor Costs Per Occurrence	(C) Number of Occurrences Per Respondent Per Year	(D) Technical Hours per Respondent Per Year (A X C)	(E) Number of Respondents Per Year	(F) Technical Hours per Year (D X E)	(G) Clerical Hours per Year (F X 0.1)	(H) Management Hours per Year (F X .05)	(I) Total Hours per Year (F + G + H)	(J) Total Labor Costs Per Year	(K) Total Non- Labor Costs Per Year (B x C x E)	(L) Total Number of Responses per Year (C X E)	Footnotes
1. Applications	NA												
2. Surveys and Studies	NA												
3. Reporting Requirements													
A. Read Rule	8	\$0	0	0	0	0	0	0	0	\$0	\$0	0	a, b
B. Required Activities													c
1. Wastewater Control Applicability Calculations/Data	0.5	\$0	0	13	0	0	0	0	0	\$0	\$0	0	d
2. Wastewater sampling - applicability/compliance sampling	0.5	\$50		13	0	0	0	0	0	\$0	\$0	0	e,f
C. Create Information	Inc. in 3B												
D. Gather Information	Inc. in 3E												
E. Report Preparation of Compliance Status													c
Control Applicability Performance Test/Compliance Demonstration	2	\$0	0	0	0	0	0	0	0	\$0	\$0	0	
Reporting Subtotal						0	0	0	0	\$0	\$0	0	

Table 2 - Annual Respondent Burden and Cost of Recordkeeping and Reporting Requirements for the Cyanide Chemicals Manufacturing RTR - Year 2

Burden Item	(A) Respondent Hours per Occurrence (Technical hours)	(B) Non Labor Costs Per Occurrence	(C) Number of Occurrences Per Respondent Per Year	(D) Technical Hours per Respondent Per Year (A X C)	(E) Number of Respondents Per Year	(F) Technical Hours per Year (D X E)	(G) Clerical Hours per Year (F X 0.1)	(H) Management Hours per Year (F X .05)	(I) Total Hours per Year (F + G + H)	(J) Total Labor Costs Per Year	(K) Total Non- Labor Costs Per Year (B x C x E)	(L) Total Number of Responses per Year (C X E)	Footnotes
4. Recordkeeping Requirements													c
A. Read Instructions	Inc. in 3.A												
B. Implement Activities	NA												
C. Develop Record System	NA												
D. Record information													
1. Process wastewater notification and report records	0.25	\$0	1	0	0	0	0	0	0	\$0	\$0	0	
2. Process wastewater control applicability records	2	\$0	1	2	0	0	0	0	0	\$0	\$0	0	
E. Understand Requirements and Adjust Compliance Plan	20	\$0	1	20	0	0	0	0	0	\$0	\$0	0	
F. Time for Audits	NA												
Recordkeeping Subtotal						0	0	0	0	\$0	\$0	0	
TOTAL						0	0	0	0	\$0	\$0	0	

Footnotes:

- (a) There are 13 currently operating facilities. We assumed that there would be no new facilities that would commence operations within three years after promulgation of the rule. As such, costs are estimated for 13 facilities. This is a conservative estimate that assumes none of the 13 existing facilities are new facilities subject to the current cyanide chemicals manufacturing MACT.
- (b) This is a one-time cost incurred only in year 1.
- (c) Assumes all facilities will read the rule and perform one-time activities (i.e., determine/calculate process wastewater control applicability/compliance) in year 1.
- (d) Includes labor hour costs to gather data and do calculations to determine process wastewater control applicability. Assumes that owners and operators have the necessary information to perform analyses readily-available for HAP other than free cyanide wastewater stream concentration (burden associated with obtaining sampling concentration for free cyanide assumed under 3.B.2).

**Table 3 - Annual Respondent Burden and Cost of Recordkeeping and Reporting Requirements for the Cyanide Chemicals Manufacturing RTR -
Year 3**

Table 4 - Summary of Annual Respondent Burden and Cost of Recordkeeping and Reporting Requirements for the Cyanide Chemicals Manufacturing RTR

Year	Technical Hours	Clerical Hours	Management Hours	Total Labor Hours	Labor Costs	Non Labor (Annualized Capital/Startup and O&M) Costs	Total Costs
1	442	42	22	507	\$50,023	\$1,300	\$51,323
2	0	0	0	0	\$0	\$0	\$0
3	0	0	0	0	\$0	\$0	\$0
Total	442	42	22	507	\$50,023	\$1,300	\$51,323
Average	147	14	7	169	\$16,674	\$433	\$17,108
Year	Number of Respondents	Number of Responses	Reporting Hours	Recordkeeping Hours	Total Hours	Hours per Response	Hours Per Respondent
1	13	52	170	336	507	10	39
2	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0
Total	13	52	170	336	507	10	39
Average	4	17	57	112	169	3	13

Table 5 - Annual Agency Burden and Cost of Recordkeeping and Reporting Requirements for the Cyanide Chemicals Manufacturing RTR - Year 1

Burden Item	(A) Number of Occurrences Per Year	(B) Technical Hours Per Occurrence	(C) Tech Hours Per Year (C=A x B)	(D) Management Hours Per Year (D = C x 0.05)	(E) Clerical Hours Per Year (E = C x 0.1)	(F) Total Hours Per Year (C+D+E)	(G) Total Cost Per Year	Footnotes
1. Applications	not applicable							
2. Read and Understand Rule Requirements	6	8	48	2	5	55	\$2,661	a
3. Required Activities								
C. Create Information	not applicable							
D. Gather Information	not applicable							
E. Report Reviews								
1. Review notification of compliance status								
a. Process Wastewater Control	2	5	10	1	1	12	\$554	
2. Review compliance reports								
a. Process Wastewater Control Applicability Testing/Calculations	4	2	8	0	1	9	\$444	
F. Prepare annual summary report	1	4	4	0	0	5	\$222	
TOTAL			70	4	7	81	\$3,881	

Footnotes:

a Number of occurrences is the number of states and EPA Regions with affected sources (4 states + 2 EPA regions = 6 respondents).

**Table 6 - Annual Agency Burden and Cost of Recordkeeping and Reporting Requirements for the Cyanide Chemicals Manufacturing RTR -
Year 2**

Table 7 - Annual Agency Burden and Cost of Recordkeeping and Reporting Requirements for the Cyanide Chemicals Manufacturing RTR - Year 3

	(A)	(B)	(C)	(D)	(E)	(F)	(G)	
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Table 8 - Summary of Annual Agency Burden and Cost of Recordkeeping and Reporting Requirements for the Cyanide Chemicals Manufacturing RTR

Year	Technical Hours	Management Hours	Clerical Hours	Total Hours	Labor Costs	Non Labor Costs	Total Costs
1	70	4	7	81	\$3,881	\$0	\$3,881
2	0	0	0	0	\$0	\$0	\$0
3	0	0	0	0	\$0	\$0	\$0
Total	70	4	7	81	\$3,881	\$0	\$3,881
Average	23	1	2	27	\$1,294	\$0	\$1,294