

Table 1: Annual Respondent Burden and Cost for NESHAP for Chromium Emissions from Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks (40 CF

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	\$112.98	\$149.35	\$54.81	Total Labor Costs per Year ^b
					(E) Technical Hours per Year (E=C x D)	(F) Management Hours per Year (F= E x 0.05)	(G) Clerical Hours per Year (G= E x 0.1)	
1. APPLICATIONS	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2. SURVEY AND STUDIES	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
3. ACQUISITION, INSTALLATION, AND UTILIZATION OF TECHNOLOGY AND SYSTEMS	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4. REPORTING REQUIREMENTS								
A. Familiarization with Regulatory Requirements	1	1	1	1,343	1343	67.15	134.3	\$169,121.98
B. Required Activities								
Performance test ^c					-----See 4E-----			
Monitoring of operations equipment ^d					-----See 5E-----			
C. Create Information					-----See 4B and 5E-----			
D. Gather Existing Information					-----See 4B and 5E-----			N/A
E. Write Report ^{e,e}								
Notification of compliance status	2	1	2	0	0	0	0	\$0
Notification of actual startup	2	1	2	0	0	0	0	\$0
Notification of construction / reconstruction	2	1	2	0	0	0	0	\$0
Notification of performance test	2	1	2	0	0	0	0	\$0
Performance test report	4	1	4	0	0	0	0	\$0
Operation and maintenance plan	10	1	10	0	0	0	0	\$0
Annual compliance status reports for area sources ^{f,g}	4	1	4	1,033.04	4,132.16	206.61	413.22	\$520,356.71
Semiannual reports of exceedances for area sources ^g	8	2	16	258.26	4,132.16	206.61	413.22	\$520,356.71
Semiannual compliance status reports for major sources ^h	8	2	16	0	0	0	0	\$0
Quarterly compliance status reports for major sources ^h	8	2	16	0	0	0	0	\$0
Request to reduce report frequency ^g	2	1	2	129.13	258.26	12.91	25.83	\$32,522.29
Subtotal for Reporting Requirements						11,345		\$1,242,358
5. RECORDKEEPING REQUIREMENTS								
A. Familiarization of Regulatory Requirements					-----See 4A-----			
B. Plan Activities					-----See 4B-----			
C. Implement Activities					-----See 4B-----			
D. Develop Record System	40	1	40	0	0	0	0	\$0
E. Time to Enter and Transmit Information								
Records of monitoring:								
- Composite mesh pad/packed scrubber ⁱ	0.5	250	125	639.49	79,936.13	3,996.81	7,993.61	\$10,066,236.32
- Wetting agents (normal schedule) ^{jk}	0.25	1000	250	465.57	116,393.63	5,819.68	11,639.36	\$14,657,274.61
- Wetting agents (reduced frequency schedule) ^{jk}	0.25	100	25	51.73	1,293.26	64.66	129.33	\$162,858.61
- Foam Blankets (normal schedule) ^l	0.25	4000	1000	0	0	0	0	\$0
- Foam Blankets (reduced frequency schedule) ^l	0.25	500	125	0	0	0	0	\$0
- Excess emissions					-----See 4E-----			
Records of operations: ^m								
- Operation and maintenance	1	4	4	639.49	2557.96	127.90	255.80	\$322,119.56
- Cumulative rectifier capacity					-----See 4E-----			
- Records of trivalent chromium bath purchases ⁿ	0.5	12	6	51.70	310.20	15.51	31.02	\$39,063.02
F. Time to train personnel	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
G. Time for Audits	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Subtotal for Recordkeeping Requirements						230,565		\$25,247,552
TOTAL LABOR BURDEN AND COST (rounded)^o						242,000		\$26,500,000
TOTAL CAPITAL/O&M COST (rounded)^o								\$20,400,000
GRAND TOTAL (rounded)^o								\$46,900,000

^a There are an estimated total of 1,343 chromium electroplating and anodizing operations nationwide. Of this total, approximately 652 are hard chromium electroplating operations, 517 are decorative chromium electroplating operations, and 174 are chromium anodizing operations. No net growth is predicted for this industry. It is expected that new tanks will only be added to replace or expand existing capacity. The ongoing monitoring, reporting, and recordkeeping for new tanks is the same as that for existing tanks.

^b This ICR uses the following labor rates: \$149.35 per hour for Executive, Administrative, and Managerial labor; \$112.98 per hour for Technical labor, and \$54.81 per hour for Clerical labor. These rates are from the United States Department of Labor, Bureau of Labor Statistics, June 2017 "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 Sources are required to conduct performance tests using Methods 306 or 306A of Appendix A, or the California Air Resources Board (CARB) Method 425 or SCAQMD Method 205.1, as an alternative, Method 306B, and alternate methods if the method has been validated using Method 301 of Appendix A.

^d Sources are required to follow work practice standards at composite-mesh-pad (CMP) systems, packed-bed scrubbers (PBS), PBS/CMP systems, fiber-bed mist eliminators, and other air pollution control devices not listed in the rule, as well as monitoring operational parameters (i.e., pressure drop for composite mesh pad systems and fiber bed mist eliminators; pressure drop and velocity pressure for packed bed scrubbers, surface tension for wetting agents, thickness of the foam for foam blanket fume suppressants, or the appropriate parameter for an alternative control option) and monitoring equipment.

^e Since there are no new respondents estimated, these requirements do not apply.

^f All sources, except decorative chromium electroplating plants using trivalent chromium bath (1,343 - 51.7 = 1,291.3), are required to submit compliance status reports. Area sources are required to submit an annual compliance status report and major sources a semiannual compliance status report.

^g If excess emissions occur at the plant, sources are required to submit reports on a more frequent basis (i.e., semiannually for area sources and quarterly for major sources) until the regulatory agency has approved the source request to reduce frequency of ongoing compliance status reports. We have assumed that 80 percent of the sources ($0.80 \times 1,291.3 = 1,033.04$) will have no excess emissions and 20 percent of the sources ($0.20 \times 1,291.3 = 258.26$) will have excess emissions. We have also assumed that half of the area sources submitting semiannual reports due to excess emissions ($0.5 \times 258 = 129.13$) will request the regulatory agency to approve a reduction in frequency for ongoing compliance status reports (i.e., back to annual reporting).

^h We have assumed that all sources are area sources.

ⁱ We have assumed that the monitoring required for composite mesh pad/packed bed scrubbers occurs once per day, five days a week, 50 weeks per year for all plants with add-on control devices. The number of facilities with add-on control devices is estimated to be 639.49 based on the assumption that 84 percent of hard chromium electroplating facilities (84% of 652 = 547.68), 13 percent of the decorative chromium electroplating that use hexavalent chromium bath (13% of 465.3 = 60.49) and 18 percent of chromium anodizing facilities (18% of 174 = 31.32) will use add-on control devices.

^j We have assumed that 85 percent of decorative chromium electroplating plants that use hexavalent chromium bath (85% of 465.3 = 395.51) and 70 percent of chromium anodizing plants (70% of 174 = 121.8) will use wetting agents for a total of 517.31 sources.

^k We have assumed that area sources using wetting agents will be required to monitor once every four hours for two 8-hour shifts (a 16-hour day), five days a week, 50 weeks per year per operating schedule if the source is on a regular monitoring schedule. If the source is on a reduced monitoring schedule, it will be required to monitor once every 40 hours for 16-hour day, five days a week, 50 weeks per year per operating schedule. We have assumed that 90 percent of the sources (90% of 517.31 = 465.57) will be on a normal schedule and 10 percent of the sources (10% of 517.31 = 51.73) are on a reduced schedule.

^l We have assumed that sources will not elect to use foam blankets because the rule requires them to do compliance testing. If sources elect to use foam blankets, the reduced monitoring schedule will require them to monitor once every 8 hours, per 16-hour day, five days a week, 50 weeks per year per operating schedule. If the source is on a normal monitoring schedule it will be required to monitor once every hour, per 16-hour day, five days a week, 50 weeks per year per operating schedule.

^m We have assumed that all facilities with add-on control devices (639.49) would be required to have an approved Operation and Maintenance Plan for their operations.

ⁿ We have assumed that 10 percent of the decorative chromium electroplating plants (10% of 517 = 51.7) use trivalent chromium baths and 90 percent use hexavalent chromium baths (90% of 517 = 465.3).

Table 2: Annual Agency Burden and Cost for NESHAP for Chromium Emissions from Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks (40 CFR part 63, subpart N) (Renewal)

Burden Item	(A) EPA Hours per Occurrence (Technical hours)	(B) Number of Occurrences per Plant per Year	(C) EPA Hours per Year (C=A x B)	(D) Plants per Year ^a	\$48.08		\$64.80		\$26.02	
					(E) Technical Hours per Year (E=C x D)	(F) Management Hours per Year (F= E x 0.05)	(G) Clerical Hours per Year (G= E x 0.1)	Costs per Year ^b		
Notification of Compliance Status ^c	2	1	2	0	0	0	0	0		\$0
Notification of Actual Startup	2	1	2	0	0	0	0	0		\$0
Notification of construction/ reconstruction	2	1	2	0	0	0	0	0		\$0
Operation and maintenance plan ^d	2	1	2	0	0	0	0	0		\$0
Notification of Performance Test ^e	2	1	2	0	0	0	0	0		\$0
Reports of Performance Test results ^e	2	1	2	0	0	0	0	0		\$0
Report Review-										
Plant records of fume suppressant use ^e (2012 amendment)	2	1	2	26.00	52.00	2.60	5.20			\$2,803.94
Annual compliance status reports for area sources ^{f, g}	2	1	2	1033.04	2066.08	103.30	206.61			\$111,407.17
Semiannual reports of exceedances for area sources ^{f, g}	2	2	4	258.26	1033.04	51.65	103.30			\$55,703.58
Semiannual compliance status reports for major sources ^h	2	1	2	0	0	0	0			\$0
Quarterly compliance status reports for major sources	2	1	2	0	0	0	0			\$0
Request to reduce report frequency ^g	2	1	2	129.13	258.26	12.91	25.83			\$13,925.90
TOTAL (rounded)						3,920				\$184,000

Assumptions:

^a There are an estimated total of 1,770 chromium electroplating and anodizing operations nationwide. Of this total, approximately 652 are hard chromium electroplating operations, 517 are decorative chromium electroplating operations, and 174 are chromium anodizing operations. No net growth is predicted for this industry. It is expected that new tanks will only be added to replace or expand existing capacity. The ongoing monitoring, reporting, and recordkeeping for new tanks is the same as that for existing tanks.

^b This cost is based on the following hourly labor rates: \$64.80 for Managerial (GS-13, Step 5, \$40.50 + 60%), \$48.08 for Technical (GS-12, Step 1, \$48.08 + 30.05%) and \$26.02 Clerical (GS-6, Step 3, \$16.26 + 60%). These rates are from the Office of Personnel Management (OPM) "2017 General Schedule" which excludes locality rates of pay. The rates have been increased by 60% to account for the benefit packages available to government employees.

^c Since there are no new respondents estimated, these requirements do not apply.

^d There will be no periodic burden for the regulatory agency associated with this requirement although we have assumed that all facilities with add-on control devices (639) would be required to have an approved Operation and Maintenance Plan for its operations.

^e Assumes Agency will review records of 5% of the 540 plants that use fume suppressants (540 x 0.05 = 26) to confirm that non-PFOS fume suppressants are being used.

^f All sources, except decorative chromium electroplating plants using trivalent chromium bath (1,343 - 51.7 = 1,291.3), are required to submit compliance status reports. Area sources are required to submit an annual compliance status report and major sources a semiannual compliance status report.

^g If excess emissions occur at the plant, sources are required to submit reports on a more frequent basis (i.e., semiannually for area sources and quarterly for major sources) until the regulatory agency has approved the source request to reduce frequency of ongoing compliance status reports. We have assumed that 80 percent of the sources (0.80 x 1,291.3 = 1,033.04) will have no excess emissions and 20 percent of the sources (0.20 x 1,291.3 = 258.26) will have excess emissions. We have also assumed that half of the area sources submitting semiannual reports due to excess emissions (0.5 x 258 = 129.13) will request the regulatory agency to approve a reduction in frequency for ongoing compliance status reports (i.e., back to annual reporting).

^h We have assumed that all sources are area sources.

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

Respondent Type	Number of Respondents
Total	1343
hard chromium electroplating	652
decorative chromium electroplating	517
decorative chromium electroplating plants using hexavalent chromium baths	465.3
decorative chromium electroplating plants using trivalent chromium baths	51.7
chromium anodizing operations	174