Initial Exposure Monitoring (§ 1910.1026(d)(2)(i) and (ii); Contract Cost for an IH Technician to Perform Initial Exposure Monitoring

This table calculates the contract cost for the employer to have an outside industrial hygiene technician perform initial exposure monitoring by collecting personal breathing-zone air samples to characterize full-shift exposure for each job classification in each work area during each shift. To determine the number of new employers that may need to conduct initial monitoring OSHA multiplied the number of existing plants by 5%.

Cost = (INITCONTTIME * CONTCOST * #INIT * %INITADD * (%LEARN + %CONT) * (#PLANTS* 5%))

Variable

*** INITCONTTIME =** Time, in hours, for an outside contractor (industrial hygiene technician) to conduct the initial monitoring.
*** CONTCOST =** Cost per hour for an outside industrial hygiene contractor =$106.73
*** # INIT =** Number of initial exposure measurements initial plus confirmation.
*** % INITADD =** Percent of plants that have not satisified initial monitoring requirement
*** % LEARN =** Percent of plants that will develop in-house monitoring capability
*** % CONT =** Percent of plants that will continue to use an outside contractor for monitoring
*** # PLANTS =** Number of plants represented by the model output * 5% (new employers)

		INITCONTTIME		CONTCOST		# INIT		% INITADD		% LEARN		% CONT		# PLANTS	# PLANTS		Item 13 COSTS
Sector 1. Electroplating																	
Hard Chrome	Large	20	*	$ 106.73	*	2	*	25%	* (	0%	+	100%	) *	930	47	=	$49,648
	Small	12	*	$ 106.73	*	2	*	25%	* (	0%	+	100%	) *	1,751	88	=	$56,062
Job Shop Chrome Plater	Large	12	*	$ 106.73	*	2	*	25%	* (	0%	+	100%	) *	448	22	=	$14,352
	Small	12	*	$ 106.73	*	2	*	25%	* (	0	+	100%	) *	843	42	=	$27,006
Captive Shop Chrome Plater	Large	12	*	$ 106.73	*	2	*	25%	* (	0%	+	100%	) *	508	25	=	$16,252
	Small	12	*	$ 106.73	*	2	*	25%	* (	0	+	100%	) *	955	48	=	$30,591
Job Shop Plater	Large	12	*	$ 106.73	*	2	*	25%	* (	0%	+	100%	) *	448	22	=	$14,352
	Small	12	*	$ 106.73	*	2	*	25%	* (	0	+	100%	) *	843	42	=	$27,006
Captive Shop Plater	Large	12	*	$ 106.73	*	2	*	25%	* (	0%	+	100%	) *	509	25	=	$16,312
	Small	12	*	$ 106.73	*	2	*	25%	* (	0	+	100%	) *	959	48	=	$30,705
Operator	Large	12	*	$ 106.73	*	2	*	25%	* (	0%	+	100%	) *	930	47	=	$29,789
	Small	12	*	$ 106.73	*	2	*	25%	* (	0	+	100%	) *	1,751	88	=	$56,062
Sector 2. Welding		**GENERAL INDUSTRY**															
SMAW	Large	12	*	$ 106.73	*	2	*	25%	* (	0%	+	90%	) *	3,560	178	=	$102,579
	Small	12	*	$ 106.73	*	2	*	25%	* (	0%	+	100%	) *	3,989	199	=	$127,713
GMAW	Large	12	*	$ 106.73	*	2	*	25%	* (	0%	+	90%	) *	2,611	131	=	$75,245
	Small	12	*	$ 106.73	*	2	*	25%	* (	0%	+	100%	) *	2,925	146	=	$93,667
TIG	Large	12	*	$ 106.73	*	2	*	25%	* (	0%	+	90%	) *	791	40	=	$22,792
	Small	12	*	$ 106.73	*	2	*	25%	* (	0%	+	100%	) *	886	44	=	$28,377
SAW	Large	12	*	$ 106.73	*	2	*	25%	* (	0%	+	90%	) *	316	16	=	$9,111
	Small	12	*	$ 106.73	*	2	*	25%	* (	0%	+	100%	) *	354	18	=	$11,338
Plasma Cutting	Large	12	*	$ 106.73	*	2	*	25%	* (	0%	+	90%	) *	79	4	=	$2,271
	Small	12	*	$ 106.73	*	2	*	25%	* (	0%	+	100%	) *	89	4	=	$2,835

		INITCONTTIME		CONTCOST		# INIT		% INITADD		% LEARN		% CONT		# PLANTS	# PLANTS		Item 13 COSTS
Plasma Welding	Large	12	*	$ 106.73	*	2	*	25%	* (	0%	+	90%	) *	79	4	=	$2,271
	Small	12	*	$ 106.73	*	2	*	25%	* (	0%	+	100%	) *	89	4	=	$2,835
Resistance Welding	Large	12	*	$ 106.73	*	2	*	25%	* (	0%	+	90%	) *	475	24	=	$13,681
	Small	12	*	$ 106.73	*	2	*	25%	* (	0%	+	100%	) *	532	27	=	$17,039
MARITIME																	
SMAW	Large	12	*	$ 106.73	*	2	*	75%	* (	0%	+	50%	) *	18	1	=	$841
	Small	12	*	$ 106.73	*	2	*	75%	* (	0%	+	90%	) *	10	0	=	$841
GMAW	Large	12	*	$ 106.73	*	2	*	75%	* (	0%	+	50%	) *	24	1	=	$1,168
	Small	12	*	$ 106.73	*	2	*	75%	* (	0%	+	90%	) *	14	1	=	$1,177
TIG	Large	12	*	$ 106.73	*	2	*	75%	* (	0%	+	50%	) *	6	0	=	$280
	Small	12	*	$ 106.73	*	2	*	75%	* (	0%	+	90%	) *	3	0	=	$252
FCAW	Large	12	*	$ 106.73	*	2	*	75%	* (	0%	+	50%	) *	117	6	=	$5,607
	Small	12	*	$ 106.73	*	2	*	75%	* (	0%	+	90%	) *	66	3	=	$5,719
Plasma Cutting	Large	12	*	$ 106.73	*	2	*	75%	* (	0%	+	50%	) *	4	0	=	$187
	Small	12	*	$ 106.73	*	2	*	75%	* (	0%	+	90%	) *	2	0	=	$168
Plasma Welding	Large	12	*	$ 106.73	*	2	*	75%	* (	0%	+	50%	) *	2	0	=	$93
	Small	12	*	$ 106.73	*	2	*	75%	* (	0%	+	90%	) *	1	0	=	$84
Oxy-fuel Cutting	Large	12	*	$ 106.73	*	2	*	75%	* (	0%	+	50%	) *	4	0	=	$187
	Small	12	*	$ 106.73	*	2	*	75%	* (	0%	+	90%	) *	2	0	=	$168
Air Carbon Arc Cutting	Large	12	*	$ 106.73	*	2	*	75%	* (	0%	+	50%	) *	2	0	=	$93
	Small	12	*	$ 106.73	*	2	*	75%	* (	0%	+	90%	) *	1	0	=	$84
Electric Torch Cutting	Large	12	*	$ 106.73	*	2	*	75%	* (	0%	+	50%	) *	0	0	=	$0
	Small	12	*	$ 106.73	*	2	*	75%	* (	0%	+	90%	) *	0	0	=	$0
Thermal Spray Tungsten Cutting	Large	12	*	$ 106.73	*	2	*	75%	* (	0%	+	50%	) *	0	0	=	$0
	Small	12	*	$ 106.73	*	2	*	75%	* (	0%	+	90%	) *	0	0	=	$0
SAW	Large	12	*	$ 106.73	*	2	*	75%	* (	0%	+	50%	) *	16	1	=	$748
	Small	12	*	$ 106.73	*	2	*	75%	* (	0%	+	90%	) *	9	0	=	$757
CONSTRUCTION																	
SMAW	Large	12	*	$ 106.73	*	2	*	25%	* (	0%	+	95%	) *	202	10	=	$6,155
	Small	12	*	$ 106.73	*	2	*	25%	* (	0%	+	100%	) *	1,620	81	=	$51,864
Plasma Cutting	Large	12	*	$ 106.73	*	2	*	25%	* (	0%	+	95%	) *	3	0	=	$89
	Small	12	*	$ 106.73	*	2	*	25%	* (	0%	+	100%	) *	21	1	=	$685
GMAW	Large	12	*	$ 106.73	*	2	*	25%	* (	0%	+	95%	) *	41	2	=	$1,243
	Small	12	*	$ 106.73	*	2	*	25%	* (	0%	+	100%	) *	324	16	=	$10,373
Brazing	State	12	*	$ 106.73	*	2	*	25%	* (	0%	+	95%	) *	20	1	=	$621
	Local	12	*	$ 106.73	*	2	*	25%	* (	0%	+	100%	) *	162	8	=	$5,202
Metallizing	State	12	*	$ 106.73	*	2	*	25%	* (	0%	+	95%	) *	4	0	=	$118
	Local	12	*	$ 106.73	*	2	*	25%	* (	0%	+	100%	) *	32	2	=	$1,028

		INITCONTTIME		CONTCOST		# INIT		% INITADD		% LEARN		% CONT		# PLANTS	# PLANTS		Item 13 COSTS
GOVERNMENT																	
SMAW	State	12	*	$ 106.73	*	2	*	25%	* (	0%	+	95%	) *	19	1	=	$592
	Local	12	*	$ 106.73	*	2	*	25%	* (	0%	+	100%	) *	594	30	=	$19,032
Plasma Cutting	State	12	*	$ 106.73	*	2	*	25%	* (	0%	+	95%	) *	0	0	=	$0
	Local	12	*	$ 106.73	*	2	*	25%	* (	0%	+	100%	) *	8	0	=	$249
GMAW	State	12	*	$ 106.73	*	2	*	25%	* (	0%	+	95%	) *	4	0	=	$118
	Local	12	*	$ 106.73	*	2	*	25%	* (	0%	+	100%	) *	119	6	=	$3,800
Brazing	State	12	*	$ 106.73	*	2	*	25%	* (	0%	+	95%	) *	2	0	=	$59
	Local	12	*	$ 106.73	*	2	*	25%	* (	0%	+	100%	) *	59	3	=	$1,900
Metallizing	State	12	*	$ 106.73	*	2	*	25%	* (	0%	+	95%	) *	1	0	=	$30
	Local	12	*	$ 106.73	*	2	*	25%	* (	0%	+	100%	) *	12	1	=	$374
Sector 2. Mild Steel Welding	**GENERAL INDUSTRY**																
SMAW	Large	12	*	$ 106.73	*	2	*	25%	* (	0%	+	90%	) *	4,773	239	=	$137,538
	Small	12	*	$ 106.73	*	2	*	25%	* (	0%	+	100%	) *	4,859	243	=	$155,592
GMAW	Large	12	*	$ 106.73	*	2	*	25%	* (	0%	+	90%	) *	3,500	175	=	$100,869
	Small	12	*	$ 106.73	*	2	*	25%	* (	0%	+	100%	) *	3,563	178	=	$114,101
TIG	Large	12	*	$ 106.73	*	2	*	25%	* (	0%	+	90%	) *	1,060	53	=	$30,558
	Small	12	*	$ 106.73	*	2	*	25%	* (	0%	+	100%	) *	1,080	54	=	$34,576
SAW	Large	12	*	$ 106.73	*	2	*	25%	* (	0%	+	90%	) *	424	21	=	$12,223
	Small	12	*	$ 106.73	*	2	*	25%	* (	0%	+	100%	) *	432	22	=	$13,830
Plasma Cutting	Large	12	*	$ 106.73	*	2	*	25%	* (	0%	+	90%	) *	106	5	=	$3,056
	Small	12	*	$ 106.73	*	2	*	25%	* (	0%	+	100%	) *	108	5	=	$3,458
Plasma Welding	Large	12	*	$ 106.73	*	2	*	25%	* (	0%	+	90%	) *	106	5	=	$3,056
	Small	12	*	$ 106.73	*	2	*	25%	* (	0%	+	100%	) *	108	5	=	$3,458
Resistance Welding	Large	12	*	$ 106.73	*	2	*	25%	* (	0%	+	90%	) *	636	32	=	$18,335
	Small	12	*	$ 106.73	*	2	*	25%	* (	0%	+	100%	) *	648	32	=	$20,746
MARITIME																	
SMAW	Large	12	*	$ 106.73	*	2	*	75%	* (	0%	+	50%	) *	37	2	=	$1,776
	Small	12	*	$ 106.73	*	2	*	75%	* (	0%	+	90%	) *	21	1	=	$1,850
GMAW	Large	12	*	$ 106.73	*	2	*	75%	* (	0%	+	50%	) *	54	3	=	$2,570
	Small	12	*	$ 106.73	*	2	*	75%	* (	0%	+	90%	) *	30	2	=	$2,607
TIG	Large	12	*	$ 106.73	*	2	*	75%	* (	0%	+	50%	) *	13	1	=	$607
	Small	12	*	$ 106.73	*	2	*	75%	* (	0%	+	90%	) *	7	0	=	$589
FCAW	Large	12	*	$ 106.73	*	2	*	75%	* (	0%	+	50%	) *	251	13	=	$12,055
	Small	12	*	$ 106.73	*	2	*	75%	* (	0%	+	90%	) *	142	7	=	$12,279
Plasma Cutting	Large	12	*	$ 106.73	*	2	*	75%	* (	0%	+	50%	) *	8	0	=	$374
	Small	12	*	$ 106.73	*	2	*	75%	* (	0%	+	90%	) *	5	0	=	$421

		INITCONTTIME		CONTCOST		# INIT		% INITADD		% LEARN		% CONT		# PLANTS	# PLANTS		Item 13 COSTS
Plasma Welding	Large	12	*	$ 106.73	*	2	*	75%	* (	0%	+	50%	) *	3	0	=	$140
	Small	12	*	$ 106.73	*	2	*	75%	* (	0%	+	90%	) *	2	0	=	$168
Oxy-fuel Cutting	Large	12	*	$ 106.73	*	2	*	75%	* (	0%	+	50%	) *	8	0	=	$374
	Small	12	*	$ 106.73	*	2	*	75%	* (	0%	+	90%	) *	5	0	=	$421
Air Carbon Arc Cutting	Large	12	*	$ 106.73	*	2	*	75%	* (	0%	+	50%	) *	3	0	=	$140
	Small	12	*	$ 106.73	*	2	*	75%	* (	0%	+	90%	) *	2	0	=	$168
Electric Torch Cutting	Large	12	*	$ 106.73	*	2	*	75%	* (	0%	+	50%	) *	1	0	=	$47
	Small	12	*	$ 106.73	*	2	*	75%	* (	0%	+	90%	) *	0	0	=	$0
Thermal Spray Tungsten Cutting	Large	12	*	$ 106.73	*	2	*	75%	* (	0%	+	50%	) *	1	0	=	$47
	Small	12	*	$ 106.73	*	2	*	75%	* (	0%	+	90%	) *	0	0	=	$0
SAW	Large	12	*	$ 106.73	*	2	*	75%	* (	0%	+	50%	) *	33	2	=	$1,589
	Small	12	*	$ 106.73	*	2	*	75%	* (	0%	+	90%	) *	18	1	=	$1,598
CONSTRUCTION																	
SMAW	Large	12	*	$ 106.73	*	2	*	25%	* (	0%	+	95%	) *	304	15	=	$9,233
	Small	12	*	$ 106.73	*	2	*	25%	* (	0%	+	100%	) *	2,293	115	=	$73,420
Plasma Cutting	Large	12	*	$ 106.73	*	2	*	25%	* (	0%	+	95%	) *	4	0	=	$118
	Small	12	*	$ 106.73	*	2	*	25%	* (	0%	+	100%	) *	30	2	=	$966
GMAW	Large	12	*	$ 106.73	*	2	*	25%	* (	0%	+	95%	) *	60	3	=	$1,835
	Small	12	*	$ 106.73	*	2	*	25%	* (	0%	+	100%	) *	458	23	=	$14,671
Brazing	State	12	*	$ 106.73	*	2	*	25%	* (	0%	+	95%	) *	30	2	=	$917
	Local	12	*	$ 106.73	*	2	*	25%	* (	0%	+	100%	) *	230	11	=	$7,351
Metallizing	Large	12	*	$ 106.73	*	2	*	25%	* (	0%	+	95%	) *	6	0	=	$178
	Small	12	*	$ 106.73	*	2	*	25%	* (	0%	+	100%	) *	46	2	=	$1,464
SECTOR 3. PAINTING																	
General Industry (Aerospace)	Large	12	*	$ 106.73	*	2	*	25%	* (	0%	+	25%	) *	50	2	=	$398
	Small	12	*	$ 106.73	*	2	*	25%	* (	0%	+	75%	) *	63	3	=	$1,502
General Industry (Autobody)	Large	12	*	$ 106.73	*	2	*	25%	* (	0%	+	25%	) *	331	17	=	$2,651
	Small	12	*	$ 106.73	*	2	*	25%	* (	0%	+	75%	) *	1,458	73	=	$35,013
General Industry (Coil Coating)	Large	12	*	$ 106.73	*	2	*	25%	* (	0%	+	25%	) *	101	5	=	$810
	Small	12	*	$ 106.73	*	2	*	25%	* (	0%	+	75%	) *	18	1	=	$442
Maritime	Large	12	*	$ 106.73	*	2	*	25%	* (	0%	+	10%	) *	294	15	=	$941
	Small	12	*	$ 106.73	*	2	*	25%	* (	0%	+	90%	) *	508	25	=	$14,643
Construction	Large	12	*	$ 106.73	*	2	*	25%	* (	0%	+	25%	) *	765	38	=	$6,124
	Small	12	*	$ 106.73	*	2	*	25%	* (	0%	+	50%	) *	4,067	203	=	$65,119
Government	State	12	*	$ 106.73	*	2	*	25%	* (	0%	+	25%	) *	16	1	=	$130
	Local	12	*	$ 106.73	*	2	*	25%	* (	0%	+	25%	) *	899	45	=	$7,196

		INITCONTTIME		CONTCOST		# INIT		% INITADD		% LEARN		% CONT		# PLANTS	# PLANTS		Item 13 COSTS
SECTOR 4. Producers of Chromates																	
ALL	Large	12	*	$ 106.73	*	2	*	100%	* (	0%	+	100%	) *	2	0	=	$267
	Small	12	*	$ 106.73	*	2	*	0%	* (	0%	+	0%	) *	0	0	=	$0
SECTOR 5. Chromate Pigment Procedures																	
ALL	Large	20	*	$ 106.73	*	2	*	25%	* (	0%	+	100%	) *	2	0	=	$106
	Small	12	*	$ 106.73	*	2	*	25%	* (	0%	+	100%	) *	1	0	=	$32
SECTOR 6. CCA Producers																	
ALL	Large	12	*	$ 106.73	*	2	*	25%	* (	0%	+	100%	) *	3	0	=	$82
	Small	12	*	$ 106.73	*	2	*	0%	* (	0%	+	0%	) *	0	0	=	$0
SECTOR 7. Chromium Catalyst Producers																	
ALL	Large	28	*	$ 106.73	*	2	*	25%	* (	0%	+	20%	) *	5	0	=	$78
	Small	12	*	$ 106.73	*	2	*	0%	* (	0%	+	0%	) *	0	0	=	$0
SECTOR 8. Paint and Coating Producers																	
ALL	Large	12	*	$ 106.73	*	2	*	25%	* (	0%	+	75%	) *	87	4	=	$2,100
	Small	12	*	$ 106.73	*	2	*	25%	* (	0%	+	75%	) *	137	7	=	$3,299
SECTOR 9. Printing Ink Producers																	
ALL	Large	12	*	$ 106.73	*	2	*	100%	* (	0%	+	90%	) *	3	0	=	$347
	Small	12	*	$ 106.73	*	2	*	100%	* (	0%	+	90%	) *	10	1	=	$1,157
SECTOR 10. Plastic Colorant Producers and Users																	
ALL	Large	12	*	$ 106.73	*	2	*	25%	* (	0	+	100%	) *	86	4	=	$2,755
	Small	12	*	$ 106.73	*	2	*	25%	* (	0	+	100%	) *	42	2	=	$1,347
SECTOR 11. Plating Mixture Producers																	
ALL	Large	12	*	$ 106.73	*	2	*	75%	* (	0%	+	80%	) *	4	0	=	$339
	Small	12	*	$ 106.73	*	2	*	75%	* (	0%	+	75%	) *	3	0	=	$212
SECTOR 13. Chromium Metal Producers																	
ALL	Large	28	*	$ 106.73	*	2	*	100%	* (	0%	+	100%	) *	1	0	=	$299
	Small	12	*	$ 106.73	*	2	*	0%	* (	0%	+	0%	) *	0	0	=	$0
SECTOR 14. Iron and Steel Mills																	
Alloy Stainless Steel	Large	20	*	$ 106.73	*	2	*	75%	* (	0%	+	90%	) *	37	2	=	$5,369
	Small	12	*	$ 106.73	*	2	*	75%	* (	0%	+	90%	) *	12	1	=	$1,033
Carbon Steel	Large	20	*	$ 106.73	*	2	*	75%	* (	0%	+	90%	) *	112	6	=	$16,108
	Small	12	*	$ 106.73	*	2	*	75%	* (	0%	+	90%	) *	35	2	=	$3,039
14.B Forging Industry																	
Reshaping	Large	12	*	$ 106.73	*	2	*	75%	* (	0%	+	90%	) *	37	2	=	$3,161
	Small	12	*	$ 106.73	*	2	*	75%	* (	0%	+	90%	) *	34	2	=	$2,978
SECTOR 15. Iron and Steel Foundries																	
ALL	Large	28	*	$ 106.73	*	2	*	25%	* (	0%	+	90%	) *	178	9	=	$11,984
	Small	12	*	$ 106.73	*	2	*	25%	* (	0%	+	90%	) *	130	6	=	$3,735
SECTOR 17. Chromium Dye Producers																	
ALL	Large	12	*	$ 106.73	*	2	*	25%	* (	0%	+	100%	) *	3	0	=	$95
	Small	12	*	$ 106.73	*	2	*	25%	* (	0%	+	100%	) *	1	0	=	$32

		INITCONTTIME		CONTCOST		# INIT		% INITADD		% LEARN		% CONT		# PLANTS	# PLANTS		Item 13 COSTS
SECTOR 18. Chromium Sulfate Producers																	
ALL	Large	12	*	$ 106.73	*	2	*	0%	* (	0%	+	0%	) *	0	0	=	$0
	Small	12	*	$ 106.73	*	2	*	100%	* (	0%	+	100%	) *	5	0	=	$667
SECTOR 19. Chemical Distributors																	
ALL	Large	12	*	$ 106.73	*	2	*	75%	* (	0%	+	100%	) *	207	10	=	$19,877
	Small	12	*	$ 106.73	*	2	*	75%	* (	0%	+	100%	) *	1,561	78	=	$149,984
SECTOR 20. Textile Dyeing																	
ALL	Large	12	*	$ 106.73	*	2	*	75%	* (	0%	+	90%	) *	347	17	=	$29,956
	Small	12	*	$ 106.73	*	2	*	75%	* (	0%	+	90%	) *	703	35	=	$60,793
SECTOR 21. Colored Glass Producers																	
General Industry	Large	12	*	$ 106.73	*	2	*	75%	* (	0%	+	90%	) *	5	0	=	$469
	Small	12	*	$ 106.73	*	2	*	75%	* (	0%	+	90%	) *	17	1	=	$1,485
Fiber, Flat and Container Glass	Large	12	*	$ 106.73	*	2	*	75%	* (	0%	+	90%	) *	78	4	=	$6,721
	Small	12	*	$ 106.73	*	2	*	75%	* (	0%	+	90%	) *	5	0	=	$391
SECTOR 22. Printing																	
ALL	Large	12	*	$ 106.73	*	2	*	75%	* (	0%	+	90%	) *	92	5	=	$7,938
	Small	12	*	$ 106.73	*	2	*	75%	* (	0%	+	90%	) *	367	18	=	$31,752
SECTOR 24. Chromium Catalyst Users																	
Catalyst Users	Large	12	*	$ 106.73	*	2	*	75%	* (	0%	+	90%	) *	164	8	=	$14,214
	Small	12	*	$ 106.73	*	2	*	0%	* (	0%	+	90%	) *	0	0	=	$0
Chromium Catalyst Service Companies	Large	12	*	$ 106.73	*	2	*	75%	* (	0%	+	90%	) *	21	1	=	$1,831
	Small	12	*	$ 106.73	*	2	*	75%	* (	0%	+	90%	) *	4	0	=	$349
SECTOR 25. Refractory Brick Producers																	
ALL	Large	12	*	$ 106.73	*	2	*	75%	* (	0%	+	90%	) *	6	0	=	$509
	Small	12	*	$ 106.73	*	2	*	75%	* (	0%	+	90%	) *	0	0	=	$0
SECTOR 26. Woodworking																	
General Industry	Large	12	*	$ 106.73	*	2	*	75%	* (	0%	+	100%	) *	175	9	=	$16,778
	Small	12	*	$ 106.73	*	2	*	75%	* (	0%	+	100%	) *	93	5	=	$8,972
Maritime	Large	12	*	$ 106.73	*	2	*	75%	* (	0%	+	100%	) *	38	2	=	$3,694
	Small	12	*	$ 106.73	*	2	*	75%	* (	0%	+	100%	) *	34	2	=	$3,254
Construction	Large	12	*	$ 106.73	*	2	*	75%	* (	0%	+	100%	) *	1,290	64	=	$123,890
	Small	12	*	$ 106.73	*	2	*	75%	* (	0%	+	100%	) *	5,162	258	=	$495,893
Government	State	12	*	$ 106.73	*	2	*	75%	* (	0%	+	100%	) *	16	1	=	$1,560
	Local	12	*	$ 106.73	*	2	*	75%	* (	0%	+	100%	) *	59	3	=	$5,641
SECTOR 27. Solid Waste Incerneration																	
General Industry	Large	20	*	$ 106.73	*	2	*	75%	* (	0%	+	90%	) *	48	2	=	$6,941
	Small	12	*	$ 106.73	*	2	*	75%	* (	0%	+	90%	) *	58	3	=	$4,998
Government	State	12	*	$ 106.73	*	2	*	75%	* (	0%	+	25%	) *	0	0	=	$0
	Local	12	*	$ 106.73	*	2	*	75%	* (	0%	+	90%	) *	29	1	=	$2,499

		INITCONTTIME		CONTCOST		# INIT		% INITADD		% LEARN		% CONT		# PLANTS	# PLANTS		Item 13 COSTS
SECTOR 30. Superalloy Producers and Users																	
ALL	Large	28	*	$ 106.73	*	2	*	75%	* (	0%	+	100%	) *	18	1	=	$3,958
	Small	12	*	$ 106.73	*	2	*	0%	* (	0%	+	0%	) *	0	0	=	$0
SECTOR 31. Construction																	
Industrial Rehabilitation	Large	12	*	$ 106.73	*	2	*	0%	* (	0%	+	100%	*	55	3	=	$0
	Small	12	*	$ 106.73	*	2	*	0%	* (	0%	+	100%	*	196	10	=	$0
	State	12	*	$ 106.73	*	2	*	100%	* (	0%	+	100%	*	16	1	=	$2,049
	Local	12	*	$ 106.73	*	2	*	100%	* (	0%	+	100%	*	74	4	=	$9,446
Hazardous Waste-site Work	Large	12	*	$ 106.73	*	2	*	75%	* (	0%	+	90%	*	44	2	=	$3,764
	Small	12	*	$ 106.73	*	2	*	75%	* (	0%	+	90%	*	143	7	=	$12,369
	State	12	*	$ 106.73	*	2	*	75%	* (	0%	+	90%	*	1	0	=	$77
	Local	12	*	$ 106.73	*	2	*	75%	* (	0%	+	90%	*	201	10	=	$17,362
Refractory Brick Restoration	Large	12	*	$ 106.73	*	2	*	0%	* (	0%	+	90%	*	48	2	=	$0
	Small	12	*	$ 106.73	*	2	*	0%	* (	0%	+	90%	*	148	7	=	$0
												Total		**77,770**	**3,888**		**$3,048,250**

Initial Exposure Monitoring (§ 1910.1026(d)(2)(i) and (ii); Contract Cost for a Laboratory to Conduct Analysis of Initial Exposure Monitoring Air Samples

This table calculates the contract cost for the employer to have a laboratory conduct analysis of air samples collected during initial exposure monitoring. To determine the number of new employers that may need to conduct initial monitoring OSHA multiplied the number of existing plants by 5%.

Cost = (SAMPCOST * JOBCAT * SHIFTS * #SAMPS * #INIT * %INITADD)* #PLANTS

Variables

*** SAMPCOST =** Variable cost per sample = $68
*** JOBCAT =** Number of job categories (covering each work area).
*** SHIFTS =** Number of work shifts
*** #SAMPS =** Number of samples per exposure measurement
***#INIT =** Number of initial exposure measurements required to be satisfied equals 2
%INITADD = Percent of plants that have not satisified initial monitoring requirement
*** #PLANTS =** Number of plants represented by the model output * 5%

			SAMPCOST		JOBCAT		SHIFTS		# SAMPS		# INIT		% INITADD		# PLANTS	# PLANTS		Item 13 COSTS
Sector 1. Electroplating																		
Hard Chrome	Large	(	$68	*	7	*	2	*	3	*	2	*	25%	) *	930	47	=	$66,488
	Small	(	$68	*	7	*	1	*	3	*	2	*	25%	) *	1,751	88	=	$62,566
Job Shop Chrome Plater	Large	(	$68	*	1	*	2	*	3	*	2	*	25%	) *	448	22	=	$4,576
	Small	(	$68	*	1	*	1	*	3	*	2	*	25%	) *	843	42	=	$4,306
Captive Shop Chrome Plater	Large	(	$68	*	1	*	2	*	3	*	2	*	25%	) *	508	25	=	$5,182
	Small	(	$68	*	1	*	1	*	3	*	2	*	25%	) *	955	48	=	$4,877
Job Shop Plater	Large	(	$68	*	1	*	2	*	3	*	2	*	25%	) *	448	22	=	$4,576
	Small	(	$68	*	1	*	1	*	3	*	2	*	25%	) *	843	42	=	$4,306
Captive Shop Plater	Large	(	$68	*	1	*	2	*	3	*	2	*	25%	) *	509	25	=	$5,201
	Small	(	$68	*	1	*	1	*	3	*	2	*	25%	) *	959	48	=	$4,895
Operator	Large	(	$68	*	1	*	2	*	3	*	2	*	25%	) *	930	47	=	$9,498
	Small	(	$68	*	1	*	1	*	3	*	2	*	25%	) *	1,751	88	=	$8,938
Sector 2. Welding	GENERAL INDUSTRY																	
SMAW	Large	(	$68	*	1	*	3	*	2	*	2	*	25%	) *	3,560	178	=	$36,342
	Small	(	$68	*	1	*	1	*	3	*	2	*	25%	) *	3,989	199	=	$20,361
GMAW	Large	(	$68	*	1	*	3	*	2	*	2	*	25%	) *	2,611	131	=	$26,658
	Small	(	$68	*	1	*	1	*	3	*	2	*	25%	) *	2,925	146	=	$14,933
TIG	Large	(	$68	*	1	*	3	*	2	*	2	*	25%	) *	791	40	=	$8,075
	Small	(	$68	*	1	*	1	*	3	*	2	*	25%	) *	886	44	=	$4,524
SAW	Large	(	$68	*	1	*	3	*	2	*	2	*	25%	) *	316	16	=	$3,228
	Small	(	$68	*	1	*	1	*	3	*	2	*	25%	) *	354	18	=	$1,808

Table 2

			SAMPCOST		JOBCAT		SHIFTS		# SAMPS		# INIT		% INITADD		# PLANTS	# PLANTS		Item 13 COSTS
Plasma Cutting	Large	(	$68	*	1	*	3	*	2	*	2	*	25%	) *	79	4	=	$805
	Small	(	$68	*	1	*	1	*	3	*	2	*	25%	) *	89	4	=	$452
Plasma Welding	Large	(	$68	*	1	*	3	*	2	*	2	*	25%	) *	79	4	=	$805
	Small	(	$68	*	1	*	1	*	3	*	2	*	25%	) *	89	4	=	$452
Resistance Welding	Large	(	$68	*	1	*	3	*	2	*	2	*	25%	) *	475	24	=	$4,847
	Small	(	$68	*	1	*	1	*	3	*	2	*	25%	) *	532	27	=	$2,716
MARITIME																		
SMAW	Large	(	$68	*	1	*	3	*	1	*	2	*	75%	) *	18	1	=	$268
	Small	(	$68	*	1	*	2	*	1	*	2	*	75%	) *	10	0	=	$99
GMAW	Large	(	$68	*	1	*	3	*	1	*	2	*	75%	) *	24	1	=	$372
	Small	(	$68	*	1	*	2	*	1	*	2	*	75%	) *	14	1	=	$139
TIG	Large	(	$68	*	1	*	3	*	1	*	2	*	75%	) *	6	0	=	$89
	Small	(	$68	*	1	*	2	*	1	*	2	*	75%	) *	3	0	=	$30
FCAW	Large	(	$68	*	1	*	3	*	1	*	2	*	75%	) *	117	6	=	$1,788
	Small	(	$68	*	1	*	2	*	1	*	2	*	75%	) *	66	3	=	$675
Plasma Cutting	Large	(	$68	*	1	*	3	*	1	*	2	*	75%	) *	4	0	=	$60
	Small	(	$68	*	1	*	2	*	1	*	2	*	75%	) *	2	0	=	$20
Plasma Welding	Large	(	$68	*	1	*	3	*	1	*	2	*	75%	) *	2	0	=	$30
	Small	(	$68	*	1	*	2	*	1	*	2	*	75%	) *	1	0	=	$10
Oxy-fuel Cutting	Large	(	$68	*	1	*	3	*	1	*	2	*	75%	) *	4	0	=	$60
	Small	(	$68	*	1	*	2	*	1	*	2	*	75%	) *	2	0	=	$20
Air Carbon Arc Cutting	Large	(	$68	*	1	*	3	*	1	*	2	*	75%	) *	2	0	=	$30
	Small	(	$68	*	1	*	2	*	1	*	2	*	75%	) *	1	0	=	$10
Electric Torch Cutting	Large	(	$68	*	1	*	3	*	1	*	2	*	75%	) *	0	0	=	$0
	Small	(	$68	*	1	*	2	*	1	*	2	*	75%	) *	0	0	=	$0
Thermal Spray Tungsten Cutting	Large	(	$68	*	1	*	3	*	1	*	2	*	75%	) *	0	0	=	$0
	Small	(	$68	*	1	*	2	*	1	*	2	*	75%	) *	0	0	=	$0
SAW	Large	(	$68	*	1	*	3	*	1	*	2	*	75%	) *	16	1	=	$238
	Small	(	$68	*	1	*	2	*	1	*	2	*	75%	) *	9	0	=	$89
CONSTRUCTION																		
SMAW	Large	(	$68	*	1	*	3	*	1	*	2	*	25%	) *	202	10	=	$1,033
	Small	(	$68	*	1	*	1	*	1	*	2	*	25%	) *	1,620	81	=	$2,756
Plasma Cutting	Large	(	$68	*	1	*	3	*	1	*	2	*	25%	) *	3	0	=	$15
	Small	(	$68	*	1	*	1	*	1	*	2	*	25%	) *	21	1	=	$36

			SAMPCOST		JOBCAT		SHIFTS		# SAMPS		# INIT		% INITADD		# PLANTS	# PLANTS		Item 13 COSTS
GMAW	Large	(	$68	*	1	*	3	*	1	*	2	*	25%	) *	41	2	=	$209
	Small	(	$68	*	1	*	1	*	1	*	2	*	25%	) *	324	16	=	$551
Brazing	State	(	$68	*	1	*	3	*	1	*	2	*	25%	) *	20	1	=	$104
	Local	(	$68	*	1	*	1	*	1	*	2	*	25%	) *	162	8	=	$276
Metallizing	State	(	$68	*	1	*	3	*	1	*	2	*	25%	) *	4	0	=	$20
	Local	(	$68	*	1	*	1	*	1	*	2	*	25%	) *	32	2	=	$55
GOVERNMENT																		
SMAW	State	(	$68	*	1	*	1	*	1	*	2	*	25%	) *	19	1	=	$33
	Local	(	$68	*	1	*	1	*	1	*	2	*	25%	) *	594	30	=	$1,011
Plasma Cutting	State	(	$68	*	1	*	1	*	1	*	2	*	25%	) *	0	0	=	$0
	Local	(	$68	*	1	*	1	*	1	*	2	*	25%	) *	8	0	=	$13
GMAW	State	(	$68	*	1	*	1	*	1	*	2	*	25%	) *	4	0	=	$7
	Local	(	$68	*	1	*	1	*	1	*	2	*	25%	) *	119	6	=	$202
Brazing	State	(	$68	*	1	*	1	*	1	*	2	*	25%	) *	2	0	=	$3
	Local	(	$68	*	1	*	1	*	1	*	2	*	25%	) *	59	3	=	$101
Metallizing	State	(	$68	*	1	*	1	*	1	*	2	*	25%	) *	1	0	=	$2
	Local	(	$68	*	1	*	1	*	1	*	2	*	25%	) *	12	1	=	$20
Sector 2. Mild Steel Welding		GENERAL INDUSTRY																
SMAW	Large	(	$68	*	1	*	3	*	2	*	2	*	25%	) *	4,773	239	=	$48,728
	Small	(	$68	*	1	*	1	*	3	*	2	*	25%	) *	4,859	243	=	$24,806
GMAW	Large	(	$68	*	1	*	3	*	2	*	2	*	25%	) *	3,500	175	=	$35,736
	Small	(	$68	*	1	*	1	*	3	*	2	*	25%	) *	3,563	178	=	$18,191
TIG	Large	(	$68	*	1	*	3	*	2	*	2	*	25%	) *	1,060	53	=	$10,826
	Small	(	$68	*	1	*	1	*	3	*	2	*	25%	) *	1,080	54	=	$5,512
SAW	Large	(	$68	*	1	*	3	*	2	*	2	*	25%	) *	424	21	=	$4,330
	Small	(	$68	*	1	*	1	*	3	*	2	*	25%	) *	432	22	=	$2,205
Plasma Cutting	Large	(	$68	*	1	*	3	*	2	*	2	*	25%	) *	106	5	=	$1,083
	Small	(	$68	*	1	*	1	*	3	*	2	*	25%	) *	108	5	=	$551
Plasma Welding	Large	(	$68	*	1	*	3	*	2	*	2	*	25%	) *	106	5	=	$1,083
	Small	(	$68	*	1	*	1	*	3	*	2	*	25%	) *	108	5	=	$551
Resistance Welding	Large	(	$68	*	1	*	3	*	2	*	2	*	25%	) *	636	32	=	$6,496
	Small	(	$68	*	1	*	1	*	3	*	2	*	25%	) *	648	32	=	$3,307

			SAMPCOST		JOBCAT		SHIFTS		# SAMPS		# INIT		% INITADD		# PLANTS	# PLANTS		Item 13 COSTS
MARITIME																		
SMAW	Large	(	$68	*	1	*	3	*	1	*	2	*	75%	) *	37	2	=	$566
	Small	(	$68	*	1	*	2	*	1	*	2	*	75%	) *	21	1	=	$219
GMAW	Large	(	$68	*	1	*	3	*	1	*	2	*	75%	) *	54	3	=	$819
	Small	(	$68	*	1	*	2	*	1	*	2	*	75%	) *	30	2	=	$308
TIG	Large	(	$68	*	1	*	3	*	1	*	2	*	75%	) *	13	1	=	$194
	Small	(	$68	*	1	*	2	*	1	*	2	*	75%	) *	7	0	=	$70
FCAW	Large	(	$68	*	1	*	3	*	1	*	2	*	75%	) *	251	13	=	$3,844
	Small	(	$68	*	1	*	2	*	1	*	2	*	75%	) *	142	7	=	$1,450
Plasma Cutting	Large	(	$68	*	1	*	3	*	1	*	2	*	75%	) *	8	0	=	$119
	Small	(	$68	*	1	*	2	*	1	*	2	*	75%	) *	5	0	=	$50
Plasma Welding	Large	(	$68	*	1	*	3	*	1	*	2	*	75%	) *	3	0	=	$45
	Small	(	$68	*	1	*	2	*	1	*	2	*	75%	) *	2	0	=	$20
Oxy-fuel Cutting	Large	(	$68	*	1	*	3	*	1	*	2	*	75%	) *	8	0	=	$119
	Small	(	$68	*	1	*	2	*	1	*	2	*	75%	) *	5	0	=	$50
Air Carbon Arc Cutting	Large	(	$68	*	1	*	3	*	1	*	2	*	75%	) *	3	0	=	$45
	Small	(	$68	*	1	*	2	*	1	*	2	*	75%	) *	2	0	=	$20
Electric Torch Cutting	Large	(	$68	*	1	*	3	*	1	*	2	*	75%	) *	1	0	=	$15
	Small	(	$68	*	1	*	2	*	1	*	2	*	75%	) *	0	0	=	$0
Thermal Spray Tungsten Cutting	Large	(	$68	*	1	*	3	*	1	*	2	*	75%	) *	1	0	=	$15
	Small	(	$68	*	1	*	2	*	1	*	2	*	75%	) *	0	0	=	$0
SAW	Large	(	$68	*	1	*	3	*	1	*	2	*	75%	) *	33	2	=	$507
	Small	(	$68	*	1	*	2	*	1	*	2	*	75%	) *	18	1	=	$189
CONSTRUCTION																		
SMAW	Large	(	$68	*	1	*	3	*	1	*	2	*	25%	) *	304	15	=	$1,549
	Small	(	$68	*	1	*	1	*	1	*	2	*	25%	) *	2,293	115	=	$3,902
Plasma Cutting	Large	(	$68	*	1	*	3	*	1	*	2	*	25%	) *	4	0	=	$20
	Small	(	$68	*	1	*	1	*	1	*	2	*	25%	) *	30	2	=	$51
GMAW	Large	(	$68	*	1	*	3	*	1	*	2	*	25%	) *	60	3	=	$308
	Small	(	$68	*	1	*	1	*	1	*	2	*	25%	) *	458	23	=	$780
Brazing	State	(	$68	*	1	*	3	*	1	*	2	*	25%	) *	30	2	=	$154
	Local	(	$68	*	1	*	1	*	1	*	2	*	25%	) *	230	11	=	$391

			SAMPCOST		JOBCAT		SHIFTS		# SAMPS		# INIT		% INITADD		# PLANTS	# PLANTS		Item 13 COSTS
Metallizing	State	(	$68	*	1	*	3	*	1	*	2	*	25%	) *	6	0	=	$30
	Local	(	$68	*	1	*	1	*	1	*	2	*	25%	) *	46	2	=	$78
SECTOR 3. PAINTING - General Industry																		
AEROSPACE	Large	(	$68	*	2	*	3	*	3	*	2	*	25%	) *	50	2	=	$1,521
	Small	(	$68	*	2	*	1	*	3	*	2	*	25%	) *	63	3	=	$639
General Industry (Autobody)	Large	(	$68	*	2	*	1	*	1	*	2	*	25%	) *	331	17	=	$1,127
	Small	(	$68	*	2	*	1	*	1	*	2	*	25%	) *	1,458	73	=	$4,962
General Industry (Coil Coating)	Large	(	$68	*	2	*	2	*	3	*	2	*	25%	) *	101	5	=	$2,066
	Small	(	$68	*	2	*	1	*	3	*	2	*	25%	) *	18	1	=	$188
Maritime	Large	(	$68	*	3	*	3	*	1	*	2	*	25%	) *	294	15	=	$4,501
	Small	(	$68	*	3	*	1	*	1	*	2	*	25%	) *	508	25	=	$2,594
Construction	Large	(	$68	*	3	*	3	*	1	*	2	*	25%	) *	765	38	=	$11,717
	Small	(	$68	*	3	*	1	*	1	*	2	*	25%	) *	4,067	203	=	$20,764
Government	State	(	$68	*	2	*	3	*	1	*	2	*	25%	) *	16	1	=	$166
	Local	(	$68	*	2	*	1	*	1	*	2	*	25%	) *	899	45	=	$3,060
SECTOR 4. Producers of Chromates																		
ALL	Large	(	$68	*	4	*	3	*	3	*	2	*	100%	) *	2	0	=	$510
	Small	(	$68	*	0	*	1	*	3	*	2	*	0%	) *	0	0	=	$0
SECTOR 5. Chromate Pigment Procedures																		
ALL	Large	(	$68	*	9	*	2	*	3	*	2	*	25%	) *	2	0	=	$182
	Small	(	$68	*	1	*	1	*	3	*	2	*	25%	) *	1	0	=	$5
SECTOR 6. CCA Producers																		
ALL	Large	(	$68	*	4	*	3	*	3	*	2	*	25%	) *	3	0	=	$157
	Small	(	$68	*	0	*	3	*	0	*	2	*	0%	) *	0	0	=	$0
SECTOR 7. Chromium Catalyst Producers																		
ALL	Large	(	$68	*	14	*	3	*	3	*	2	*	25%	) *	5	0	=	$1,116
	Small	(	$68	*	0	*	1	*	3	*	2	*	0%	) *	0	0	=	$0
SECTOR 8. Paint and Coating Producers																		
ALL	Large	(	$68	*	4	*	2	*	3	*	2	*	25%	) *	87	4	=	$3,571
	Small	(	$68	*	4	*	2	*	3	*	2	*	25%	) *	137	7	=	$5,611
SECTOR 9. Printing Ink Producers																		
ALL	Large	(	$68	*	5	*	1	*	9	*	2	*	100%	) *	3	0	=	$923
	Small	(	$68	*	3	*	1	*	5	*	2	*	100%	) *	10	1	=	$1,025
SECTOR 10. Plastic Colorant Producers and Users																		
ALL	Large	(	$68	*	4	*	3	*	3	*	2	*	25%	) *	86	4	=	$5,270
	Small	(	$68	*	1	*	1	*	3	*	2	*	25%	) *	42	2	=	$215
SECTOR 11. Plating Mixture Producers																		

			SAMPCOST		JOBCAT		SHIFTS		# SAMPS		# INIT		% INITADD		# PLANTS	# PLANTS		Item 13 COSTS
ALL	Large	(	$68	*	3	*	1	*	3	*	2	*	75%	) *	4	0	=	$203
	Small	(	$68	*	3	*	1	*	3	*	2	*	75%	) *	3	0	=	$135
SECTOR 13. Chromium Metal Producers																		
ALL	Large	(	$68	*	16	*	3	*	3	*	2	*	100%	) *	1	0	=	$980
	Small	(	$68	*	0	*	1	*	1	*	2	*	0%	) *	0	0	=	$0
SECTOR 14. Iron and Steel Mills																		
Alloy and Stainless Steel	Large	(	$68	*	8	*	3	*	3	*	2	*	75%	) *	37	2	=	$13,697
	Small	(	$68	*	4	*	1	*	3	*	2	*	75%	) *	12	1	=	$732
Carbon Steel	Large	(	$68	*	8	*	3	*	3	*	2	*	75%	) *	112	6	=	$41,090
	Small	(	$68	*	4	*	1	*	1	*	2	*	75%	) *	35	2	=	$718
14.B Forging Industry																		
Reshaping	Large	(	$68	*	5	*	1	*	3	*	2	*	75%	) *	37	2	=	$2,800
	Small	(	$68	*	2	*	1	*	3	*	2	*	75%	) *	34	2	=	$1,055
SECTOR 15. Iron and Steel Foundries																		
ALL	Large	(	$68	*	9	*	3	*	5	*	2	*	25%	) *	178	9	=	$40,941
	Small	(	$68	*	5	*	1	*	5	*	2	*	25%	) *	130	6	=	$5,514
SECTOR 17. Chromium Dye Producers																		
ALL	Large	(	$68	*	7	*	1	*	21	*	2	*	25%	) *	3	0	=	$742
	Small	(	$68	*	5	*	1	*	7	*	2	*	25%	) *	1	0	=	$59
SECTOR 18. Chromium Sulfate Producers																		
ALL	Large	(	$68	*	0	*	1	*	3	*	2	*	0%	) *	0	0	=	$0
	Small	(	$68	*	2	*	1	*	3	*	2	*	100%	) *	5	0	=	$213
SECTOR 19. Chemical Distributors																		
ALL	Large	(	$68	*	1	*	1	*	3	*	2	*	75%	) *	207	10	=	$3,169
	Small	(	$68	*	1	*	1	*	3	*	2	*	75%	) *	1,561	78	=	$23,912
SECTOR 20. Textile Dyeing																		
ALL	Large	(	$68	*	3	*	3	*	3	*	2	*	75%	) *	347	17	=	$47,759
	Small	(	$68	*	2	*	1	*	2	*	2	*	75%	) *	703	35	=	$14,359
SECTOR 21. Colored Glass Producers																		
General Industry	Large	(	$68	*	3	*	3	*	12	*	2	*	75%	) *	5	0	=	$2,990
	Small	(	$68	*	2	*	1	*	4	*	2	*	75%	) *	17	1	=	$701
Fiber, Flat and Container Glass	Large	(	$68	*	5	*	1	*	1	*	2	*	75%	) *	78	4	=	$1,984
	Small	(	$68	*	1	*	1	*	1	*	2	*	75%	) *	5	0	=	$23
SECTOR 22. Printing																		
ALL	Large	(	$68	*	3	*	3	*	2	*	2	*	75%	) *	92	5	=	$8,437
	Small	(	$68	*	2	*	1	*	2	*	2	*	75%	) *	367	18	=	$7,499

			SAMPCOST		JOBCAT		SHIFTS		# SAMPS		# INIT		% INITADD		# PLANTS	# PLANTS		Item 13 COSTS
SECTOR 24. Chromium Catalyst Users																		
Catalyst Users	Large	(	$68	*	2	*	3	*	3	*	2	*	75%	) *	164	8	=	$15,108
	Small	(	$68	*	0	*	1	*	3	*	2	*	0%	) *	0	0	=	$0
Chromium Catalyst Service Companies	Large	(	$68	*	0	*	3	*	3	*	2	*	75%	) *	21	1	=	$0
	Small	(	$68	*	0	*	1	*	3	*	2	*	75%	) *	4	0	=	$0
SECTOR 25. Refractory Brick Producers																		
ALL	Large	(	$68	*	9	*	1	*	15	*	2	*	75%	) *	6	0	=	$4,056
	Small	(	$68	*	0	*	1	*	0	*	2	*	75%	) *	0	0	=	$0
SECTOR 26. Woodworking																		
General Industry	Large	(	$68	*	1	*	1	*	2	*	2	*	75%	) *	175	9	=	$1,783
	Small	(	$68	*	1	*	1	*	2	*	2	*	75%	) *	93	5	=	$954
Maritime	Large	(	$68	*	1	*	1	*	1	*	2	*	75%	) *	38	2	=	$196
	Small	(	$68	*	1	*	1	*	1	*	2	*	75%	) *	34	2	=	$173
Construction	Large	(	$68	*	1	*	1	*	1	*	2	*	75%	) *	1,290	64	=	$6,584
	Small	(	$68	*	1	*	1	*	1	*	2	*	75%	) *	5,162	258	=	$26,353
Government	State	(	$68	*	1	*	1	*	1	*	2	*	75%	) *	16	1	=	$83
	Local	(	$68	*	1	*	1	*	1	*	2	*	75%	) *	59	3	=	$300
SECTOR 27. Solid Waste Incerneration																		
General Industry	Large	(	$68	*	6	*	3	*	15	*	2	*	75%	) *	48	2	=	$66,397
	Small	(	$68	*	6	*	1	*	3	*	2	*	75%	) *	58	3	=	$5,312
Government	State	(	$68	*	0	*	3	*	15	*	2	*	75%	) *	0	0	=	$0
	Local	(	$68	*	6	*	1	*	3	*	2	*	75%	) *	29	1	=	$2,656
SECTOR 30. Superalloy Producers and Users																		
ALL	Large	(	$68	*	12	*	3	*	3	*	2	*	75%	) *	18	1	=	$9,735
	Small	(	$68	*	0	*	3	*	3	*	2	*	0%	) *	0	0	=	$0
SECTOR 31. Construction																		
Industrial Rehabilitation	Large	(	$68	*	1	*	1	*	1	*	2	*	0%	) *	55	3	=	$0
	Small	(	$68	*	1	*	1	*	1	*	2	*	0%	) *	196	10	=	$0
	State	(	$68	*	1	*	1	*	1	*	2	*	100%	) *	16	1	=	$109
	Local	(	$68	*	1	*	1	*	1	*	2	*	100%	) *	74	4	=	$502
Hazardous Waste-site Work	Large	(	$68	*	1	*	1	*	1	*	2	*	75%	) *	44	2	=	$222
	Small	(	$68	*	1	*	1	*	1	*	2	*	75%	) *	143	7	=	$730
	State	(	$68	*	1	*	1	*	1	*	2	*	75%	) *	1	0	=	$5
	Local	(	$68	*	1	*	1	*	1	*	2	*	75%	) *	201	11	=	$1,123

Table 2

			SAMPCOST		JOBCAT		SHIFTS		# SAMPS		# INIT		% INITADD			# PLANTS	# PLANTS		Item 13 COSTS
Refractory Brick Restoration	Large	(	$68	*	1	*	1	*	1	*	2	*	0%	)	*	48	2	=	$0
	Small	(	$68	*	1	*	1	*	1	*	2	*	0%	)	*	148	7	=	$0
													Total			**77,770**	**3,889**	**=**	**$935,200**

Semi-Annual Exposure Monitoring (Paragraph (d)(2)(iii)); Employee Time and Cost to Conduct Semi-Annual Exposure Monitoring

This table calculates the burden hours and cost of employee time to conduct semi-annual exposure monitoring. When initial monitoring results equal or exceed the AL and are at or below the PEL, employers must continue to monitor employees at least every 6 months to ensure that exposures remain at or below the PEL.

COST = BURDEN HOURS * NON SUPEWAGE
HOURS = (ADMINTIME * NONSUPWAGE * JOBAL * SHIFTS * #SAMPS * 2 * %NOTSEMI * %ABOVEAL * (%INHOUSE + %LEARN) * #PLANTS)
Variables
*** ADMINTIME = In-house administrative time (e.g., for pump calibration and report writing) per sample, in hours.**
*** NONSUPEWAGE = Non-suppervisory wage rate. $/hr.**
*** JOBAL = Number of job categories exposed at or above the AL**
*** SHIFTS = Number of work shifts.**
*** #SAMPS = Number of samples per exposure measurement**
*** 2 = # times per year (semi-annually)**
*** %NOTSEMI = Percent of plants not performing semi-annual monitoring requirements.**
*** %ABOVEAL = Percent of plants that have an employee in at least one job category at or above the AL.**
*** %INHOUSE = Percent of plants already with in-house monitoring capabilities.**
*** %LEARN = Percent of plants that will develop in-house monitoring capability.**
*** #PLANTS = Number of plants represented by the model input.**

		ADMINTIME	NONSUPEWAGE	JOBAL	SHIFTS	#SAMPS	SEMI-ANNUALLY	%NOTSEMI	%ABOVEAL	%INHOUSE	%LEARN	#PLANTS	Item 12 COST	TOTAL HOURS	RESPONSES
Sector 1. Electroplating															
Hard Chrome	Large	0.50	$ 25.49	1	2	3	2	100%	49.00%	0%	0%	930	$0	0	0
	Small	0.50	$ 25.49	1	1	3	2	100%	49.00%	0%	0%	1,751	$0	0	0
Job Shop Chrome Plater	Large	0.50	$ 25.49	1	2	3	2	100%	11.00%	0%	0%	448	$0	0	
	Small	0.50	$ 25.49	1	1	3	2	100%	11.00%	0%	0	843	$0	0	0
Captive Shop Chrome Plater	Large	0.50	$ 25.49	1	2	3	2	100%	14.00%	0%	0%	508	$0	0	0
	Small	0.50	$ 25.49	1	1	3	2	100%	14.00%	0%	0	955	$0	0	0
Job Shop Plater	Large	0.50	$ 25.49	1	2	3	2	100%	10.00%	0%	0%	448	$0	0	0
	Small	0.50	$ 25.49	1	1	3	2	100%	10.00%	0%	0	843	$0	0	0
Captive Shop Plater	Large	0.50	$ 25.49	1	2	3	2	100%	13.00%	0%	0%	509	$0	0	0
	Small	0.50	$ 25.49	1	1	3	2	100%	13.00%	0%	0	959	$0	0	0
Operator	Large	0.50	$ 25.49	1	2	3	2	100%	16.00%	0%	0%	930	$0	0	0
	Small	0.50	$ 25.49	1	1	3	2	100%	16.00%	0%	0	1,751	$0	0	0
Sector 2. Welding		**General Industry**													
SMAW	Large	0.50	$ 25.10	1	3	2	2	100%	0.92%	10%	0%	3,560	$493	20	39
	Small	1.00	$ 25.10	1	1	3	2	100%	0.92%	0%	0%	3,989	$0	0	0
GMAW	Large	0.50	$ 25.10	1	3	2	2	100%	0.73%	10%	0%	2,611	$287	11	23
	Small	1.00	$ 25.10	1	1	3	2	100%	0.73%	0%	0%	2,925	$0	0	0
TIG	Large	0.50	$ 25.10	1	3	2	2	100%	0.00%	10%	0%	791	$0	0	0
	Small	1.00	$ 25.10	1	1	3	2	100%	0.00%	0%	0%	886	$0	0	0
SAW	Large	0.50	$ 25.10	0	3	2	2	100%	0.00%	10%	0%	316	$0	0	0
	Small	1.00	$ 25.10	0	1	3	2	100%	0.00%	0%	0%	354	$0	0	0
Plasma Cutting	Large	0.50	$ 25.10	1	3	2	2	100%	0.00%	10%	0%	79	$0	0	0
	Small	1.00	$ 25.10	1	1	3	2	100%	0.00%	0%	0%	89	$0	0	0
Plasma Welding	Large	0.50	$ 25.10	1	3	2	2	100%	0.00%	10%	0%	79	$0	0	0
	Small	1.00	$ 25.10	1	1	3	2	100%	0.00%	0%	0%	89	$0	0	0

		ADMINTIME		NONSUPEWAGE		JOBAL		SHIFTS		#SAMPS		SEMI-ANNUALLY		%NOTSEMI		%ABOVEAL		%INHOUSE		%LEARN		#PLANTS		Item 12 COST	TOTAL HOURS	RESPONSES
Resistance Welding	Large	(0.50	*	$ 25.10	*	1	*	3	*	2	*	2	*	100%	*	0.00%	*	(10%	+	0%)	*	475	) =	$0	0	0
	Small	(1.00	*	$ 25.10	*	1	*	1	*	3	*	2	*	100%	*	0.00%	*	(0%	+	0%)	*	532	) =	$0	0	0
MARITIME																										
SMAW	Large	(0.50	*	$ 25.10	*	1	*	3	*	1	*	2	*	100%	*	0.00%	*	(50%	+	0%)	*	18	) =	$0	0	0
	Small	(1.00	*	$ 25.10	*	1	*	2	*	1	*	2	*	100%	*	0.00%	*	(10%	+	0%)	*	10	) =	$0	0	0
GMAW	Large	(0.50	*	$ 25.10	*	1	*	3	*	1	*	2	*	100%	*	0.00%	*	(50%	+	0%)	*	24	) =	$0	0	0
	Small	(1.00	*	$ 25.10	*	1	*	2	*	1	*	2	*	100%	*	0.00%	*	(10%	+	0%)	*	14	) =	$0	0	0
TIG	Large	(0.50	*	$ 25.10	*	1	*	3	*	1	*	2	*	100%	*	0.00%	*	(50%	+	0%)	*	6	) =	$0	0	0
	Small	(1.00	*	$ 25.10	*	1	*	2	*	1	*	2	*	100%	*	0.00%	*	(10%	+	0%)	*	3	) =	$0	0	0
FCAW	Large	(0.50	*	$ 25.10	*	1	*	3	*	1	*	2	*	100%	*	0.00%	*	(50%	+	0%)	*	117	) =	$0	0	0
	Small	(1.00	*	$ 25.10	*	1	*	2	*	1	*	2	*	100%	*	0.00%	*	(10%	+	0%)	*	66	) =	$0	0	0
Plasma Cutting	Large	(0.50	*	$ 25.10	*	1	*	3	*	1	*	2	*	100%	*	0.00%	*	(50%	+	0%)	*	4	) =	$0	0	0
	Small	(1.00	*	$ 25.10	*	1	*	2	*	1	*	2	*	100%	*	0.00%	*	(10%	+	0%)	*	2	) =	$0	0	0
Plasma Welding	Large	(0.50	*	$ 25.10	*	1	*	3	*	1	*	2	*	100%	*	0.00%	*	(50%	+	0%)	*	2	) =	$0	0	0
	Small	(1.00	*	$ 25.10	*	1	*	2	*	1	*	2	*	100%	*	0.00%	*	(10%	+	0%)	*	1	) =	$0	0	0
Oxy-fuel Cutting	Large	(0.50	*	$ 25.10	*	1	*	3	*	1	*	2	*	100%	*	0.00%	*	(50%	+	0%)	*	4	) =	$0	0	0
	Small	(1.00	*	$ 25.10	*	1	*	2	*	1	*	2	*	100%	*	0.00%	*	(10%	+	0%)	*	2	) =	$0	0	0
Air Carbon Arc Cutting	Large	(0.50	*	$ 25.10	*	1	*	3	*	1	*	2	*	100%	*	0.00%	*	(50%	+	0%)	*	2	) =	$0	0	0
	Small	(1.00	*	$ 25.10	*	1	*	2	*	1	*	2	*	100%	*	0.00%	*	(10%	+	0%)	*	1	) =	$0	0	0
Electric Torch Cutting	Large	(0.50	*	$ 25.10	*	0	*	3	*	1	*	2	*	100%	*	0.00%	*	(50%	+	0%)	*	0	) =	$0	0	0
	Small	(1.00	*	$ 25.10	*	0	*	2	*	1	*	2	*	100%	*	0.00%	*	(10%	+	0%)	*	0	) =	$0	0	0
Thermal Spray Tungsten Cutting	Large	(0.50	*	$ 25.10	*	0	*	3	*	1	*	2	*	100%	*	0.00%	*	(50%	+	0%)	*	0	) =	$0	0	0
	Small	(1.00	*	$ 25.10	*	0	*	2	*	1	*	2	*	100%	*	0.00%	*	(10%	+	0%)	*	0	) =	$0	0	0
SAW	Large	(0.50	*	$ 25.10	*	0	*	3	*	1	*	2	*	100%	*	0.00%	*	(50%	+	0%)	*	16	) =	$0	0	0
	Small	(1.00	*	$ 25.10	*	0	*	2	*	1	*	2	*	100%	*	0.00%	*	(10%	+	0%)	*	9	) =	$0	0	0
CONSTRUCTION																										
SMAW	Large	(0.50	*	$ 25.10	*	1	*	3	*	1	*	2	*	100%	*	0.00%	*	(5%	+	0%)	*	202	) =	$0	0	0
	Small	(1.00	*	$ 25.10	*	1	*	1	*	1	*	2	*	100%	*	0.00%	*	(0%	+	0%)	*	1,620	) =	$0	0	0
Plasma Cutting	Large	(0.50	*	$ 25.10	*	0	*	3	*	1	*	2	*	100%	*	0.00%	*	(5%	+	0%)	*	3	) =	$0	0	0
	Small	(1.00	*	$ 25.10	*	1	*	1	*	1	*	2	*	100%	*	0.00%	*	(0%	+	0%)	*	21	) =	$0	0	0
GMAW	Large	(0.50	*	$ 25.10	*	1	*	3	*	1	*	2	*	100%	*	0.00%	*	(5%	+	0%)	*	41	) =	$0	0	0
	Small	(1.00	*	$ 25.10	*	1	*	1	*	1	*	2	*	100%	*	0.00%	*	(0%	+	0%)	*	324	) =	$0	0	0
Brazing	State	(0.50	*	$ 25.10	*	1	*	3	*	1	*	2	*	100%	*	0.00%	*	(5%	+	0%)	*	20	) =	$0	0	0
	Local	(1.00	*	$ 25.10	*	1	*	1	*	1	*	2	*	100%	*	0.00%	*	(0%	+	0%)	*	162	) =	$0	0	0
Metallizing	State	(0.50	*	$ 25.10	*	1	*	3	*	1	*	2	*	100%	*	0.00%	*	(5%	+	0%)	*	4	) =	$0	0	0
	Local	(1.00	*	$ 25.10	*	1	*	1	*	1	*	2	*	100%	*	0.00%	*	(0%	+	0%)	*	32	) =	$0	0	0
GOVERNMENT																										
SMAW	State	(0.50	*	$ 25.10	*	1	*	1	*	1	*	2	*	100%	*	0.00%	*	(5%	+	0%)	*	19	) =	$0	0	0
	Local	(1.00	*	$ 25.10	*	1	*	1	*	1	*	2	*	100%	*	0.00%	*	(0%	+	0%)	*	594	) =	$0	0	0

		ADMINTIME		NONSUPEWAGE		JOBAL		SHIFTS		#SAMPS		SEMI-ANNUALLY		%NOTSEMI		%ABOVEAL		%INHOUSE		%LEARN		#PLANTS		Item 12 COST	TOTAL HOURS	RESPONSES
Plasma Cutting	State	(0.50	*	$ 25.10	*	1	*	1	*	1	*	2	*	100%	*	0.00%	*	(5%	+	0%)	*	0	) =	$0	0	0
	Local	(1.00	*	$ 25.10	*	1	*	1	*	1	*	2	*	100%	*	0.00%	*	(0%	+	0%)	*	8	) =	$0	0	0
GMAW	State	(0.50	*	$ 25.10	*	1	*	1	*	1	*	2	*	100%	*	0.00%	*	(5%	+	0%)	*	4	) =	$0	0	0
	Local	(1.00	*	$ 25.10	*	1	*	1	*	1	*	2	*	100%	*	0.00%	*	(0%	+	0%)	*	119	) =	$0	0	0
Brazing	State	(0.50	*	$ 25.10	*	1	*	1	*	1	*	2	*	100%	*	0.00%	*	(5%	+	0%)	*	2	) =	$0	0	0
	Local	(1.00	*	$ 25.10	*	1	*	1	*	1	*	2	*	100%	*	0.00%	*	(0%	+	0%)	*	59	) =	$0	0	0
Metallizing	State	(0.50	*	$ 25.10	*	1	*	1	*	1	*	2	*	100%	*	0.00%	*	(5%	+	0%)	*	1	) =	$0	0	0
	Local	(1.00	*	$ 25.10	*	1	*	1	*	1	*	2	*	100%	*	0.00%	*	(0%	+	0%)	*	12	) =	$0	0	0
Sector 2. Mild Steel Welding														**GENERAL INDUSTRY**												
SMAW	Large	(0.50	*	$ 25.10	*	0	*	3	*	2	*	2	*	100%	*	0.00%	*	(10%	+	0%)	*	4,773	) =	$0	0	0
	Small	(1.00	*	$ 25.10	*	0	*	1	*	3	*	2	*	100%	*	0.00%	*	(0%	+	0%)	*	4,859	) =	$0	0	0
GMAW	Large	(0.50	*	$ 25.10	*	0	*	3	*	2	*	2	*	100%	*	0.00%	*	(10%	+	0%)	*	3,500	) =	$0	0	0
	Small	(1.00	*	$ 25.10	*	0	*	1	*	3	*	2	*	100%	*	0.00%	*	(0%	+	0%)	*	3,563	) =	$0	0	0
TIG	Large	(0.50	*	$ 25.10	*	0	*	3	*	2	*	2	*	100%	*	0.00%	*	(10%	+	0%)	*	1,060	) =	$0	0	0
	Small	(1.00	*	$ 25.10	*	0	*	1	*	3	*	2	*	100%	*	0.00%	*	(0%	+	0%)	*	1,080	) =	$0	0	0
SAW	Large	(0.50	*	$ 25.10	*	0	*	3	*	2	*	2	*	100%	*	0.00%	*	(10%	+	0%)	*	424	) =	$0	0	0
	Small	(1.00	*	$ 25.10	*	0	*	1	*	3	*	2	*	100%	*	0.00%	*	(0%	+	0%)	*	432	) =	$0	0	0
Plasma Cutting	Large	(0.50	*	$ 25.10	*	0	*	3	*	2	*	2	*	100%	*	0.00%	*	(10%	+	0%)	*	106	) =	$0	0	0
	Small	(1.00	*	$ 25.10	*	0	*	1	*	3	*	2	*	100%	*	0.00%	*	(0%	+	0%)	*	108	) =	$0	0	0
Plasma Welding	Large	(0.50	*	$ 25.10	*	0	*	3	*	2	*	2	*	100%	*	0.00%	*	(10%	+	0%)	*	106	) =	$0	0	0
	Small	(1.00	*	$ 25.10	*	0	*	1	*	3	*	2	*	100%	*	0.00%	*	(0%	+	0%)	*	108	) =	$0	0	0
Resistance Welding	Large	(0.50	*	$ 25.10	*	0	*	3	*	2	*	2	*	100%	*	0.00%	*	(10%	+	0%)	*	636	) =	$0	0	0
	Small	(1.00	*	$ 25.10	*	0	*	1	*	3	*	2	*	100%	*	0.00%	*	(0%	+	0%)	*	648	) =	$0	0	0
														MARITIME												
SMAW	Large	(0.50	*	$ 25.10	*	0	*	3	*	1	*	2	*	100%	*	0.00%	*	(50%	+	0%)	*	37	) =	$0	0	0
	Small	(1.00	*	$ 25.10	*	0	*	2	*	1	*	2	*	100%	*	0.00%	*	(10%	+	0%)	*	21	) =	$0	0	0
GMAW	Large	(0.50	*	$ 25.10	*	0	*	3	*	1	*	2	*	100%	*	0.00%	*	(50%	+	0%)	*	54	) =	$0	0	0
	Small	(1.00	*	$ 25.10	*	0	*	2	*	1	*	2	*	100%	*	0.00%	*	(10%	+	0%)	*	30	) =	$0	0	0
TIG	Large	(0.50	*	$ 25.10	*	0	*	3	*	1	*	2	*	100%	*	0.00%	*	(50%	+	0%)	*	13	) =	$0	0	0
	Small	(1.00	*	$ 25.10	*	0	*	2	*	1	*	2	*	100%	*	0.00%	*	(10%	+	0%)	*	7	) =	$0	0	0
FCAW	Large	(0.50	*	$ 25.10	*	0	*	3	*	1	*	2	*	100%	*	0.00%	*	(50%	+	0%)	*	251	) =	$0	0	0
	Small	(1.00	*	$ 25.10	*	0	*	2	*	1	*	2	*	100%	*	0.00%	*	(10%	+	0%)	*	142	) =	$0	0	0
Plasma Cutting	Large	(0.50	*	$ 25.10	*	0	*	3	*	1	*	2	*	100%	*	0.00%	*	(50%	+	0%)	*	8	) =	$0	0	0
	Small	(1.00	*	$ 25.10	*	0	*	2	*	1	*	2	*	100%	*	0.00%	*	(10%	+	0%)	*	5	) =	$0	0	0
Plasma Welding	Large	(0.50	*	$ 25.10	*	0	*	3	*	1	*	2	*	100%	*	0.00%	*	(50%	+	0%)	*	3	) =	$0	0	0
	Small	(1.00	*	$ 25.10	*	0	*	2	*	1	*	2	*	100%	*	0.00%	*	(10%	+	0%)	*	2	) =	$0	0	0
Oxy-fuel Cutting	Large	(0.50	*	$ 25.10	*	0	*	3	*	1	*	2	*	100%	*	0.00%	*	(50%	+	0%)	*	8	) =	$0	0	0
	Small	(1.00	*	$ 25.10	*	0	*	2	*	1	*	2	*	100%	*	0.00%	*	(10%	+	0%)	*	5	) =	$0	0	0
Air Carbon Arc Cutting	Large	(0.50	*	$ 25.10	*	0	*	3	*	1	*	2	*	100%	*	0.00%	*	(50%	+	0%)	*	3	) =	$0	0	0
	Small	(1.00	*	$ 25.10	*	0	*	2	*	1	*	2	*	100%	*	0.00%	*	(10%	+	0%)	*	2	) =	$0	0	0

		ADMINTIME		NONSUPEWAGE		JOBAL		SHIFTS		#SAWPS		SEMI-ANNUALLY		%NOTSEMI		%ABOVEAL		%INHOUSE		%LEARN		#PLANTS		Item 12 COST	TOTAL HOURS	RESPONSES
Electric Torch Cutting	Large	(0.50	*	$ 25.10	*	0	*	3	*	1	*	2	*	100%	*	0.00%	*	(50%	+	0%	) *	1	) =	$0	0	0
	Small	(1.00	*	$ 25.10	*	0	*	2	*	1	*	2	*	100%	*	0.00%	*	(10%	+	0%	) *	0	) =	$0	0	0
Thermal Spray Tungsten Cutting	Large	(0.50	*	$ 25.10	*	0	*	3	*	1	*	2	*	100%	*	0.00%	*	(50%	+	0%	) *	1	) =	$0	0	0
	Small	(1.00	*	$ 25.10	*	0	*	2	*	1	*	2	*	100%	*	0.00%	*	(10%	+	0%	) *	0	) =	$0	0	0
SAW	Large	(0.50	*	$ 25.10	*	0	*	3	*	1	*	2	*	100%	*	0.00%	*	(50%	+	0%	) *	33	) =	$0	0	0
	Small	(1.00	*	$ 25.10	*	0	*	2	*	1	*	2	*	100%	*	0.00%	*	(10%	+	0%	) *	18	) =	$0	0	0
CONSTRUCTION																										
SMAW	Large	(0.50	*	$ 25.10	*	0	*	3	*	1	*	2	*	100%	*	0.00%	*	(5%	+	0%	) *	304	) =	$0	0	0
	Small	(1.00	*	$ 25.10	*	0	*	1	*	1	*	2	*	100%	*	0.00%	*	(0%	+	0%	) *	2,293	) =	$0	0	0
Plasma Cutting	Large	(0.50	*	$ 25.10	*	0	*	3	*	1	*	2	*	100%	*	0.00%	*	(5%	+	0%	) *	4	) =	$0	0	0
	Small	(1.00	*	$ 25.10	*	0	*	1	*	1	*	2	*	100%	*	0.00%	*	(0%	+	0%	) *	30	) =	$0	0	0
GMAW	Large	(0.50	*	$ 25.10	*	0	*	3	*	1	*	2	*	100%	*	0.00%	*	(5%	+	0%	) *	60	) =	$0	0	0
	Small	(1.00	*	$ 25.10	*	0	*	1	*	1	*	2	*	100%	*	0.00%	*	(0%	+	0%	) *	458	) =	$0	0	0
Brazing	Large	(0.50	*	$ 25.10	*	0	*	3	*	1	*	2	*	100%	*	0.00%	*	(5%	+	0%	) *	30	) =	$0	0	0
	Small	(1.00	*	$ 25.10	*	0	*	1	*	1	*	2	*	100%	*	0.00%	*	(0%	+	0%	) *	230	) =	$0	0	0
Metallizing	Large	(0.50	*	$ 25.10	*	0	*	3	*	1	*	2	*	100%	*	0.00%	*	(5%	+	0%	) *	6	) =	$0	0	0
	Small	(1.00	*	$ 25.10	*	0	*	1	*	1	*	2	*	100%	*	0.00%	*	(0%	+	0%	) *	46	) =	$0	0	0
SECTOR 3. PAINTING																										
AEROSPACE	Large	(0.50	*	$ 31.68	*	1	*	3	*	3	*	2	*	100%	*	28.00%	*	(75%	+	0%	) *	50	) =	$2,974	94	188
	Small	(1.00	*	$ 31.68	*	1	*	1	*	3	*	2	*	100%	*	9.00%	*	(25%	+	0%	) *	63	) =	$268	8	8
General Industry (Autobody)	Large	(0.50	*	$ 31.68	*	1	*	1	*	1	*	2	*	100%	*	5.00%	*	(75%	+	0%	) *	331	) =	$393	12	24.836256
	Small	(1.00	*	$ 31.68	*	1	*	1	*	1	*	2	*	100%	*	5.00%	*	(25%	+	0%	) *	1,458	) =	$1,155	36	36
General Industry (Coil Coating)	Large	(0.50	*	$ 31.68	*	1	*	2	*	3	*	2	*	100%	*	8.00%	*	(75%	+	0%	) *	101	) =	$1,154	36	73
	Small	(1.00	*	$ 31.68	*	1	*	1	*	3	*	2	*	100%	*	8.00%	*	(25%	+	0%	) *	18	) =	$70	2	2
Maritime	Large	(0.50	*	$ 31.68	*	2	*	3	*	1	*	2	*	100%	*	36.00%	*	(90%	+	0%	) *	294	) =	$18,098	571	1143
	Small	(1.00	*	$ 31.68	*	0	*	1	*	1	*	2	*	100%	*	36.00%	*	(10%	+	0%	) *	508	) =	$0	0	0
Construction	Large	(0.50	*	$ 31.68	*	1	*	3	*	1	*	2	*	100%	*	22.00%	*	(75%	+	0%	) *	765	) =	$11,997	379	757
	Small	(1.00	*	$ 31.68	*	1	*	1	*	1	*	2	*	100%	*	22.00%	*	(50%	+	0%	) *	4,067	) =	$28,347	895	895
Government	State	(0.50	*	$ 31.68	*	1	*	3	*	1	*	2	*	100%	*	12.00%	*	(75%	+	0%	) *	16	) =	$139	4	9
	Local	(1.00	*	$ 31.68	*	1	*	1	*	1	*	2	*	100%	*	12.00%	*	(75%	+	0%	) *	899	) =	$5,126	162	162
SECTOR 4. Producers of Chromates																										
ALL	Large	(0.50	*	$ 37.06	*	3	*	3	*	3	*	2	*	100%	*	45.00%	*	(0%	+	0%	) *	2	) =	$0	0	0
	Small	(1.00	*	$ 37.06	*	0	*	1	*	3	*	2	*	100%	*	0.00%	*	(0%	+	0%	) *	0	) =	$0	0	0
SECTOR 5. Chromate Pigment Procedures																										
ALL	Large	(0.50	*	$ 36.12	*	5	*	2	*	3	*	2	*	100%	*	71.00%	*	(0%	+	0%	) *	2	) =	$0	0	0
	Small	(1.00	*	$ 36.12	*	1	*	1	*	3	*	2	*	100%	*	50.00%	*	(0%	+	0%	) *	1	) =	$0	0	0
SECTOR 6. CCA Producers																										
ALL	Large	(0.50	*	$ 30.60	*	1	*	3	*	3	*	2	*	100%	*	33.00%	*	(0%	+	0%	) *	3	) =	$0	0	0
	Small	(1.00	*	$ 30.60	*	0	*	3	*	0	*	2	*	100%	*	0.00%	*	(0%	+	0%	) *	0	) =	$0	0	0

		ADMINTIME		NONSUPEWAGE		JOBAL	SHIFTS	#SAMPS	SEMI-ANNUALLY		%NOTSEMI		%ABOVEAL		%INHOUSE		%LEARN		#PLANTS		Item 12 COST	TOTAL HOURS	RESPONSES
SECTOR 7. Chromium Catalyst Producers																							
ALL	Large	(0.50	*	$ 37.06	*	6	* 3	* 3	* 2	*	100%	*	100.00%	*	(80%	+	0%)	*	5	) =	$8,331	225	449.64706
	Small	(1.00	*	$ 37.06	*	0	* 1	* 3	* 2	*	100%	*	0.00%	*	(0%	+	0%)	*	0	) =	$0	0	0
SECTOR 8. Paint and Coating Producers																							
ALL	Large	(0.50	*	$ 27.60	*	1	* 2	* 3	* 2	*	100%	*	13.00%	*	(25%	+	0%)	*	87	) =	$471	17	34
	Small	(1.00	*	$ 27.60	*	1	* 2	* 3	* 2	*	100%	*	13.00%	*	(25%	+	0%)	*	137	) =	$1,479	54	54
SECTOR 9. Printing Ink Producers																							
ALL	Large	(0.50	*	$ 27.65	*	3	* 1	* 9	* 2	*	100%	*	69.00%	*	(10%	+	0%)	*	3	) =	$155	6	11
	Small	(0.50	*	$ 27.65	*	2	* 1	* 5	* 2	*	100%	*	69.00%	*	(10%	+	0%)	*	10	) =	$192	7	14
SECTOR 10. Plastic Colorant Producers and Users																							
ALL	Large	(0.50	*	$ 30.64	*	2	* 3	* 3	* 2	*	100%	*	51.00%	*	(0	+	0)	*	86	) =	$0	0	0
	Small	(1.00	*	$ 30.64	*	2	* 1	* 3	* 2	*	100%	*	51.00%	*	(0	+	0)	*	42	) =	$0	0	0
SECTOR 11. Plating Mixture Producers																							
ALL	Large	(0.50	*	$ 27.50	*	1	* 1	* 3	* 2	*	100%	*	100.00%	*	(20%	+	0%)	*	4	) =	$73	3	5
	Small	(1.00	*	$ 27.50	*	1	* 1	* 3	* 2	*	100%	*	100.00%	*	(25%	+	0%)	*	3	) =	$122	4	4.4178039
SECTOR 13. Chromium Metal Producers																							
ALL	Large	(0.5	*	$ 37.17	*	2	* 3	* 3	* 2	*	100%	*	100.00%	*	(0%	+	0%)	*	1	) =	$0	0	0
	Small	(1	*	$ 37.17	*	0	* 1	* 1	* 2	*	0%	*	0.00%	*	(0%	+	0%)	*	0	) =	$0	0	0
SECTOR 14. Iron and Steel Mills																							
Alloy and Stainless Steel	Large	(0.50	*	$ 37.17	*	3	* 3	* 3	* 2	*	100%	*	38.00%	*	(10%	+	0%)	*	37	) =	$1,421	38	76
	Small	(1.00	*	$ 37.17	*	1	* 1	* 3	* 2	*	100%	*	38.00%	*	(10%	+	0%)	*	12	) =	$101	3	3
Carbon Steel	Large	(0.50	*	$ 37.17	*	0	* 3	* 3	* 2	*	100%	*	0.00%	*	(10%	+	0%)	*	112	) =	$0	0	0
	Small	(1.00	*	$ 37.17	*	0	* 1	* 1	* 2	*	100%	*	0.00%	*	(10%	+	0%)	*	35	) =	$0	0	0
SECTOR 14B. Forging Industry																							
Reshaping	Large	(0.50	*	$ 37.17	*	4	* 1	* 3	* 2	*	100%	*	63.00%	*	(10%	+	0%)	*	37	) =	$1,028	28	79
	Small	(1.00	*	$ 37.17	*	2	* 1	* 3	* 2	*	100%	*	63.00%	*	(10%	+	0%)	*	34	) =	$968	26	26
SECTOR 15. Iron and Steel Foundries																							
ALL	Large	(0.50	*	$ 27.12	*	6	* 3	* 5	* 2	*	100%	*	100.00%	*	(10%	+	0%)	*	178	) =	$43,504	1,604	3208.0045
	Small	(1.00	*	$ 27.12	*	5	* 1	* 5	* 2	*	100%	*	100.00%	*	(10%	+	0%)	*	130	) =	$17,578	648	648.08173
SECTOR 17. Chromium Dye Producers																							
ALL	Large	(0.50	*	$ 36.12	*	6	* 1	* #	* 2	*	100%	*	38.00%	*	(0%	+	0%)	*	3	) =	$0	0	0
	Small	(1.00	*	$ 36.12	*	6	* 1	* 7	* 2	*	100%	*	38.00%	*	(0%	+	0%)	*	1	) =	$0	0	0
SECTOR 18. Chromium Sulfate Producers																							
ALL	Large	(0.5	*	$ 39.76	*	0	* 1	* 3	* 2	*	100%	*	0.00%	*	(0%	+	0%)	*	0	) =	$0	0	0
	Small	(0.5	*	$ 39.76	*	1	* 1	* 3	* 2	*	100%	*	27.00%	*	(0%	+	0%)	*	5	) =	$0	0	0
SECTOR 19. Chemical Distributors																							
ALL	Large	(0.50	*	$ 28.67	*	0	* 1	* 3	* 2	*	100%	*	0.00%	*	(0%	+	0%)	*	207	) =	$0	0	0
	Small	(0.50	*	$ 28.67	*	0	* 1	* 3	* 2	*	100%	*	0.00%	*	(0%	+	0%)	*	1,561	) =	$0	0	0
SECTOR 20. Textile Dyeing																							
ALL	Large	(0.50	*	$ 19.13	*	0	* 3	* 3	* 2	*	100%	*	0.00%	*	(10%	+	0%)	*	347	) =	$0	0	0
	Small	(0.50	*	$ 19.13	*	0	* 1	* 2	* 2	*	100%	*	0.00%	*	(10%	+	0%)	*	703	) =	$0	0	0

		ADMINTIME		NONSUPEWAGE		JOBAL		SHIFTS		#SAMPS		SEMI-ANNUALLY		%NOTSEMI		%ABOVEAL		%INHOUSE		%LEARN		#PLANTS		Item 12 COST	TOTAL HOURS	RESPONSES
SECTOR 21. Colored Glass Producers																										
General Industry	Large	(0.50	*	$ 27.66	*	1	*	3	*	#	*	2	*	100%	*	25.00%	*	(10%	+	0%)	*	5	) =	$135	5	10
	Small	(1.00	*	$ 27.66	*	0	*	1	*	4	*	2	*	100%	*	0.00%	*	(10%	+	0%)	*	17	) =	$0	0	0
Fiber, Flat, Container Glass	Large	(0.50	*	$ 27.66	*	3	*	1	*	1	*	2	*	100%	*	20.00%	*	(10%	+	0%)	*	78	) =	$129	5	12
	Small	(1.00	*	$ 27.66	*	0	*	1	*	1	*	2	*	100%	*	0.00%	*	(10%	+	0%)	*	5	) =	$0	0	0
SECTOR 22. Printing																										
ALL	Large	(0.5	*	$ 19.97	*	0	*	3	*	2	*	2	*	100%	*	0.00%	*	(10%	+	0%)	*	92	) =	$0	0	0
	Small	(0.5	*	$ 19.97	*	0	*	1	*	2	*	2	*	100%	*	0.00%	*	(10%	+	0%)	*	367	) =	$0	0	0
SECTOR 24. Chromium Catalyst Users																										
Catalyst Users	Large	(0.5	*	$ 31.14	*	2	*	3	*	3	*	2	*	100%	*	9.00%	*	(10%	+	0%)	*	164	) =	$830	27	53
	Small	(1.0	*	$ 31.14	*	0	*	1	*	3	*	2	*	100%	*	0.00%	*	(10%	+	0%)	*	0	) =	$0	0	0
Chromium Catalyst Service Companies	Large	(0.5	*	$ 31.14	*	0	*	3	*	3	*	2	*	100%	*	0.00%	*	(10%	+	0%)	*	21	) =	$0	0	0
	Small	(1.0	*	$ 31.14	*	0	*	1	*	3	*	2	*	100%	*	0.00%	*	(10%	+	0%)	*	4	) =	$0	0	0
SECTOR 25. Refractory Brick Producers																										
ALL	Large	(0.5	*	$ 24.56	*	0	*	1	*	#	*	2	*	100%	*	0.00%	*	(10%	+	0%)	*	6	) =	$0	0	0
	Small	(0.5	*	$ 24.56	*	0	*	1	*	0	*	2	*	100%	*	0.00%	*	(10%	+	0%)	*	0	) =	$0	0	0
SECTOR 26. Woodworking																										
General Industry	Large	(0.50	*	$ 30.76	*	0	*	1	*	2	*	2	*	100%	*	0.00%	*	(0%	+	0%)	*	175	) =	$0	0	0
	Small	(1	*	$ 30.76	*	0	*	1	*	2	*	2	*	100%	*	0.00%	*	(0%	+	0%)	*	93	) =	$0	0	0
Maritime	Large	(0.50	*	$ 30.76	*	0	*	1	*	1	*	2	*	100%	*	0.00%	*	(0%	+	0%)	*	38	) =	$0	0	0
	Small	(1	*	$ 30.76	*	0	*	1	*	1	*	2	*	100%	*	0.00%	*	(0%	+	0%)	*	34	) =	$0	0	0
Construction	Large	(0.50	*	$ 30.76	*	1	*	1	*	1	*	2	*	100%	*	22.00%	*	(0%	+	0%)	*	1,290	) =	$0	0	0
	Small	(1	*	$ 30.76	*	1	*	1	*	1	*	2	*	100%	*	22.00%	*	(0%	+	0%)	*	5,162	) =	$0	0	0
Government	State	(0.50	*	$ 30.76	*	1	*	1	*	1	*	2	*	100%	*	22.00%	*	(0%	+	0%)	*	16	) =	$0	0	0
	Local	(1	*	$ 30.76	*	1	*	1	*	1	*	2	*	100%	*	22.00%	*	(0%	+	0%)	*	59	) =	$0	0	0
SECTOR 27. Solid Waste Incerneration																										
General Industry	Large	(0.50	*	$ 26.09	*	0	*	3	*	#	*	2	*	100%	*	0.00%	*	(10%	+	0%)	*	48	) =	$0	0	0
	Small	(1	*	$ 26.09	*	0	*	1	*	3	*	2	*	100%	*	0.00%	*	(10%	+	0%)	*	58	) =	$0	0	0
Government	State	(0.50	*	$ 26.09	*	0	*	3	*	#	*	2	*	100%	*	0.00%	*	(10%	+	0%)	*	0	) =	$0	0	0
	Local	(1	*	$ 26.09	*	0	*	1	*	3	*	2	*	100%	*	0.00%	*	(10%	+	0%)	*	29	) =	$0	0	0

		ADMINTIME		NONSUPEWAGE		JOBAL		SHIFTS		#SAMPS		SEMI-ANNUALLY		%NOTSEMI		%ABOVEAL		%INHOUSE		%LEARN		#PLANTS		Item 12 COST	TOTAL HOURS	RESPONSES
SECTOR 30. Superalloy Producers and Users																										
ALL	Large	(0.5	*	$ 26.75	*	0	*	3	*	3	*	2	*	100%	*	0.00%	*	(0%	+	0%	) *	18	) =	$0	0	0
	Small	(1	*	$ 26.75	*	0	*	3	*	3	*	2	*	100%	*	0.00%	*	(0%	+	0%	) *	0	) =	$0	0	0
SECTOR 31. Construction Cement Workers																										
Industrial Rehabilitation	Large	(0.5	*	$ 30.79	*	0	*	1	*	1	*	2	*	100%	*	0.00%	*	(0%	+	0%	) *	55	) =	$0	0	0
	Small	(1.0	*	$ 30.79	*	0	*	1	*	1	*	2	*	100%	*	0.00%	*	(0%	+	0%	) *	196	) =	$0	0	0
	State	(0.5	*	$ 30.79	*	0	*	1	*	1	*	2	*	100%	*	0.00%	*	(0%	+	0%	) *	16	) =	$0	0	0
	Local	(1.0	*	$ 30.79	*	0	*	1	*	1	*	2	*	100%	*	0.00%	*	(0%	+	0%	) *	74	) =	$0	0	0
Hazardous Waste-site Work	Large	(0.5	*	$ 30.79	*	0	*	1	*	1	*	2	*	100%	*	0.00%	*	(10%	+	0%	) *	44	) =	$0	0	0
	Small	(1.0	*	$ 30.79	*	0	*	1	*	1	*	2	*	100%	*	0.00%	*	(10%	+	0%	) *	143	) =	$0	0	0
	State	(0.5	*	$ 30.79	*	0	*	1	*	1	*	2	*	100%	*	0.00%	*	(10%	+	0%	) *	1	) =	$0	0	0
	Local	(1.0	*	$ 30.79	*	0	*	1	*	1	*	2	*	100%	*	0.00%	*	(10%	+	0%	) *	201	) =	$0	0	0
Refractory Brick Restoration	Large	(0.5	*	$ 30.79	*	0	*	1	*	1	*	2	*	100%	*	60.00%	*	(10%	+	0%	) *	48	) =	$0	0	0
	Small	(1.0	*	$ 30.79	*	0	*	1	*	1	*	2	*	100%	*	60.00%	*	(10%	+	0%	) *	148	) =	$0	0	0
																				Total		**77,770**		**$147,017**	**4,930**	**8,048**

Semi-Annual Exposure Monitoring (Paragraph (d)(2)(iii)); Contract Cost for an IH Technician to Perform Semi-Annual Exposure Monitoring

This table calculates the contract cost for the employer to have an outside industrial hygiene technician perform semi-annual exposure monitoring.

Cost = (SEMICONTTIME * CONTCOST * SEMI-ANNUALLY * %NOTSEMI * %ABOVE AL *%CONT) * #PLANTS)

Variables:

*** SEMICONTTIME =** Time, in hours, for an outside contractor (industrial hygiene technician) to conduct semi-annual monitoring

*** CONTCOST =** Cost per hour for an outside industrial hygiene contractor

*** 2 =** 2 times per year semi-annually

*** %NOTSEMI =** Percent of plants not performing semi-annual monitoring requirements

*** %ABOVEAL =** Percent of plants that have an employee in at least one job category at or above the AL

*** %CONT =** Percent of plants that will continue to use an outside contractor for monitoring

*** #PLANTS =** Number of plants represented by the model input

		SEMICONTTIME	CONTCOST	SEMI - ANNUALLY	% NOTSEMI	% ABOVEAL	% CONT	# PLANTS	Item 13 COST
Sector 1. Electroplating									
Hard Chrome	Large	12	$ 106.73	2	100%	49.00%	100%	930	$1,167,712
	Small	12	$ 106.73	2	100%	49.00%	100%	1,751	$2,197,640
Job Shop Chrome Plater	Large	12	$ 106.73	2	100%	11.00%	100%	448	$126,301
	Small	12	$ 106.73	2	100%	11.00%	100%	843	$237,652
Captive Shop Chrome Plater	Large	12	$ 106.73	2	100%	14.00%	100%	508	$182,019
	Small	12	$ 106.73	2	100%	14.00%	100%	955	$342,625
Job Shop Plater	Large	12	$ 106.73	2	100%	10.00%	100%	448	$114,819
	Small	12	$ 106.73	2	100%	10.00%	100%	843	$216,048
Captive Shop Plater	Large	12	$ 106.73	2	100%	13.00%	100%	509	$169,646
	Small	12	$ 106.73	2	100%	13.00%	100%	959	$319,334
Operator	Large	12	$ 106.73	2	100%	16.00%	100%	930	$381,294
	Small	12	$ 106.73	2	100%	16.00%	100%	1,751	$717,597
Sector 2. Welding			**GENERAL INDUSTRY**						
SMAW	Large	12	$ 106.73	2	100%	0.92%	90%	3,560	$75,498
	Small	12	$ 106.73	2	100%	0.92%	100%	3,989	$93,997
GMAW	Large	12	$ 106.73	2	100%	0.73%	90%	2,611	$43,943
	Small	12	$ 106.73	2	100%	0.73%	100%	2,925	$54,701
TIG	Large	12	$ 106.73	2	100%	0.00%	90%	791	$0
	Small	12	$ 106.73	2	100%	0.00%	100%	886	$0

		SEMICONTTIME		CONTCOST	SEMI - ANNUALLY	% NOTSEMI		% ABOVEAL		% CONT		# PLANTS		Item 13 COST
SAW	Large	(0	* $	106.73	* 2	* 100%	*	0.00%	*	90%	) *	316	=	$0
	Small	(0	* $	106.73	* 2	* 100%	*	0.00%	*	100%	) *	354	=	$0
Plasma Cutting	Large	(12	* $	106.73	* 2	* 100%	*	0.00%	*	90%	) *	79	=	$0
	Small	(12	* $	106.73	* 2	* 100%	*	0.00%	*	100%	) *	89	=	$0
Plasma Welding	Large	(12	* $	106.73	* 2	* 100%	*	0.00%	*	90%	) *	79	=	$0
	Small	(12	* $	106.73	* 2	* 100%	*	0.00%	*	100%	) *	89	=	$0
Resistance Welding	Large	(12	* $	106.73	* 2	* 100%	*	0.00%	*	90%	) *	475	=	$0
	Small	(12	* $	106.73	* 2	* 100%	*	0.00%	*	100%	) *	532	=	$0
MARITIME														
SMAW	Large	(12	* $	106.73	* 2	* 100%	*	0.00%	*	50%	) *	18	=	$0
	Small	(12	* $	106.73	* 2	* 100%	*	0.00%	*	90%	) *	10	=	$0
GMAW	Large	(12	* $	106.73	* 2	* 100%	*	0.00%	*	50%	) *	24	=	$0
	Small	(12	* $	106.73	* 2	* 100%	*	0.00%	*	90%	) *	14	=	$0
TIG	Large	(12	* $	106.73	* 2	* 100%	*	0.00%	*	50%	) *	6	=	$0
	Small	(12	* $	106.73	* 2	* 100%	*	0.00%	*	90%	) *	3	=	$0
FCAW	Large	(12	* $	106.73	* 2	* 100%	*	0.00%	*	50%	) *	117	=	$0
	Small	(0	* $	106.73	* 2	* 100%	*	0.00%	*	90%	) *	66	=	$0
Plasma Cutting	Large	(12	* $	106.73	* 2	* 100%	*	0.00%	*	50%	) *	4	=	$0
	Small	(0	* $	106.73	* 2	* 100%	*	0.00%	*	90%	) *	2	=	$0
Plasma Welding	Large	(12	* $	106.73	* 2	* 100%	*	0.00%	*	50%	) *	2	=	$0
	Small	(12	* $	106.73	* 2	* 100%	*	0.00%	*	90%	) *	1	=	$0
Oxy-fuel Cutting	Large	(12	* $	106.73	* 2	* 100%	*	0.00%	*	50%	) *	4	=	$0
	Small	(12	* $	106.73	* 2	* 100%	*	0.00%	*	90%	) *	2	=	$0
Air Carbon Arc Cutting	Large	(12	* $	106.73	* 2	* 100%	*	0.00%	*	50%	) *	2	=	$0
	Small	(12	* $	106.73	* 2	* 100%	*	0.00%	*	90%	) *	1	=	$0
Electric Torch Cutting	Large	(0	* $	106.73	* 2	* 100%	*	0.00%	*	50%	) *	0	=	$0
	Small	(0	* $	106.73	* 2	* 100%	*	0.00%	*	90%	) *	0	=	$0
Thermal Spray Tungsten Cutting	Large	(0	* $	106.73	* 2	* 100%	*	0.00%	*	50%	) *	0	=	$0
	Small	(0	* $	106.73	* 2	* 100%	*	0.00%	*	90%	) *	0	=	$0

		SEMICONTTIME		CONTCOST	SEMI - ANNUALLY	% NOTSEMI		% ABOVEAL		% CONT		# PLANTS		Item 13 COST
SAW	Large	(0	* $	106.73	* 2	* 100%	*	0.00%	*	50%	) *	16	=	$0
	Small	(0	* $	106.73	* 2	* 100%	*	0.00%	*	90%	) *	9	=	$0
CONSTRUCTION														
SMAW	Large	(12	* $	106.73	* 2	* 100%	*	0.00%	*	95%	) *	202	=	$0
	Small	(12	* $	106.73	* 2	* 100%	*	0.00%	*	100%	) *	1,620	=	$0
Plasma Cutting	Large	(0	* $	106.73	* 2	* 100%	*	0.00%	*	95%	) *	3	=	$0
	Small	(12	* $	106.73	* 2	* 100%	*	0.00%	*	100%	) *	21	=	$0
GMAW	Large	(12	* $	106.73	* 2	* 100%	*	0.00%	*	95%	) *	41	=	$0
	Small	(12	* $	106.73	* 2	* 100%	*	0.00%	*	100%	) *	324	=	$0
Brazing	Large	(12	* $	106.73	* 2	* 100%	*	0.00%	*	95%	) *	20	=	$0
	Small	(12	* $	106.73	* 2	* 100%	*	0.00%	*	100%	) *	162	=	$0
Metallizing	Large	(12	* $	106.73	* 2	* 100%	*	0.00%	*	95%	) *	4	=	$0
	Small	(12	* $	106.73	* 2	* 100%	*	0.00%	*	100%	) *	32	=	$0
GOVERNMENT														
SMAW	State	(12	* $	106.73	* 2	* 100%	*	0.00%	*	95%	) *	19	=	$0
	Local	(12	* $	106.73	* 2	* 100%	*	0.00%	*	100%	) *	594	=	$0
Plasma Cutting	State	(12	* $	106.73	* 2	* 100%	*	0.00%	*	95%	) *	0	=	$0
	Local	(12	* $	106.73	* 2	* 100%	*	0.00%	*	100%	) *	8	=	$0
GMAW	State	(12	* $	106.73	* 2	* 100%	*	0.00%	*	95%	) *	4	=	$0
	Local	(12	* $	106.73	* 2	* 100%	*	0.00%	*	100%	) *	119	=	$0
Brazing	State	(12	* $	106.73	* 2	* 100%	*	0.00%	*	95%	) *	2	=	$0
	Local	(12	* $	106.73	* 2	* 100%	*	0.00%	*	100%	) *	59	=	$0
Metallizing	State	(12	* $	106.73	* 2	* 100%	*	0.00%	*	95%	) *	1	=	$0
	Local	(12	* $	106.73	* 2	* 100%	*	0.00%	*	100%	) *	12	=	$0
Sector 2. Mild Steel Welding						**GENERAL INDUSTRY**									
SMAW	Large	(12	* $	106.73	* 2	* 100%	*	0.00%	*	90%	) *	4,773	=	$0
	Small	(0	* $	106.73	* 2	* 100%	*	0.00%	*	100%	) *	4,859	=	$0
GMAW	Large	(0	* $	106.73	* 2	* 100%	*	0.00%	*	90%	) *	3,500	=	$0
	Small	(0	* $	106.73	* 2	* 100%	*	0.00%	*	100%	) *	3,563	=	$0
TIG	Large	(0	* $	106.73	* 2	* 100%	*	0.00%	*	90%	) *	1,060	=	$0
	Small	(0	* $	106.73	* 2	* 100%	*	0.00%	*	100%	) *	1,080	=	$0

		SEMICONTTIME		CONTCOST		SEMI - ANNUALLY	% NOTSEMI		% ABOVEAL		% CONT		# PLANTS		Item 13 COST
SAW	Large	(0	*	$ 106.73	*	2	* 100%	*	0.00%	*	90%	) *	424	=	$0
	Small	(0	*	$ 106.73	*	2	* 100%	*	0.00%	*	100%	) *	432	=	$0
Plasma Cutting	Large	(0	*	$ 106.73	*	2	* 100%	*	0.00%	*	90%	) *	106	=	$0
	Small	(0	*	$ 106.73	*	2	* 100%	*	0.00%	*	100%	) *	108	=	$0
Plasma Welding	Large	(0	*	$ 106.73	*	2	* 100%	*	0.00%	*	90%	) *	106	=	$0
	Small	(0	*	$ 106.73	*	2	* 100%	*	0.00%	*	100%	) *	108	=	$0
Resistance Welding	Large	(0	*	$ 106.73	*	2	* 100%	*	0.00%	*	90%	) *	636	=	$0
	Small	(0	*	$ 106.73	*	2	* 100%	*	0.00%	*	100%	) *	648	=	$0
MARITIME															
SMAW	Large	(0	*	$ 106.73	*	2	* 100%	*	0.00%	*	50%	) *	37	=	$0
	Small	(0	*	$ 106.73	*	2	* 100%	*	0.00%	*	90%	) *	21	=	$0
GMAW	Large	(0	*	$ 106.73	*	2	* 100%	*	0.00%	*	50%	) *	54	=	$0
	Small	(0	*	$ 106.73	*	2	* 100%	*	0.00%	*	90%	) *	30	=	$0
TIG	Large	(0	*	$ 106.73	*	2	* 100%	*	0.00%	*	50%	) *	13	=	$0
	Small	(0	*	$ 106.73	*	2	* 100%	*	0.00%	*	90%	) *	7	=	$0
FCAW	Large	(0	*	$ 106.73	*	2	* 100%	*	0.00%	*	50%	) *	251	=	$0
	Small	(0	*	$ 106.73	*	2	* 100%	*	0.00%	*	90%	) *	142	=	$0
Plasma Cutting	Large	(0	*	$ 106.73	*	2	* 100%	*	0.00%	*	50%	) *	8	=	$0
	Small	(0	*	$ 106.73	*	2	* 100%	*	0.00%	*	90%	) *	5	=	$0
Plasma Welding	Large	(0	*	$ 106.73	*	2	* 100%	*	0.00%	*	50%	) *	3	=	$0
	Small	(0	*	$ 106.73	*	2	* 100%	*	0.00%	*	90%	) *	2	=	$0
Oxy-fuel Cutting	Large	(0	*	$ 106.73	*	2	* 100%	*	0.00%	*	50%	) *	8	=	$0
	Small	(0	*	$ 106.73	*	2	* 100%	*	0.00%	*	90%	) *	5	=	$0
Air Carbon Arc Cutting	Large	(0	*	$ 106.73	*	2	* 100%	*	0.00%	*	50%	) *	3	=	$0
	Small	(0	*	$ 106.73	*	2	* 100%	*	0.00%	*	90%	) *	2	=	$0
Electric Torch Cutting	Large	(0	*	$ 106.73	*	2	* 100%	*	0.00%	*	50%	) *	1	=	$0
	Small	(0	*	$ 106.73	*	2	* 100%	*	0.00%	*	90%	) *	0	=	$0
Thermal Spray Tungsten Cutting	Large	(0	*	$ 106.73	*	2	* 100%	*	0.00%	*	50%	) *	1	=	$0
	Small	(0	*	$ 106.73	*	2	* 100%	*	0.00%	*	90%	) *	0	=	$0

		SEMICONTTIME		CONTCOST		SEMI - ANNUALLY		% NOTSEMI		% ABOVEAL		% CONT		# PLANTS		Item 13 COST
SAW	Large	(0	*	$ 106.73	*	2	*	100%	*	0.00%	*	50%	) *	33	=	$0
	Small	(0	*	$ 106.73	*	2	*	100%	*	0.00%	*	90%	) *	18	=	$0
CONSTRUCTION																
SMAW	Large	(0	*	$ 106.73	*	2	*	100%	*	0.00%	*	95%	) *	304	=	$0
	Small	(0	*	$ 106.73	*	2	*	100%	*	0.00%	*	100%	) *	2,293	=	$0
Plasma Cutting	Large	(0	*	$ 106.73	*	2	*	100%	*	0.00%	*	95%	) *	4	=	$0
	Small	(0	*	$ 106.73	*	2	*	100%	*	0.00%	*	100%	) *	30	=	$0
GMAW	Large	(0	*	$ 106.73	*	2	*	100%	*	0.00%	*	95%	) *	60	=	$0
	Small	(0	*	$ 106.73	*	2	*	100%	*	0.00%	*	100%	) *	458	=	$0
Brazing	Large	(0	*	$ 106.73	*	2	*	100%	*	0.00%	*	95%	) *	30	=	$0
	Small	(0	*	$ 106.73	*	2	*	100%	*	0.00%	*	100%	) *	230	=	$0
Metallizing	State	(0	*	$ 106.73	*	2	*	100%	*	0.00%	*	95%	) *	6	=	$0
	Local	(0	*	$ 106.73	*	2	*	100%	*	0.00%	*	100%	) *	46	=	$0
SECTOR 3. PAINTING																
AEROSPACE	Large	(12	*	$ 106.73	*	2	*	100%	*	28.00%	*	25%	*	50	=	$8,907
	Small	(12	*	$ 106.73	*	2	*	100%	*	9.00%	*	75%	) *	63	=	$10,815
General Industry (Autobody)	Large	(12	*	$ 106.73	*	2	*	100%	*	5.00%	*	25%	*	331	=	$10,603
	Small	(12	*	$ 106.73	*	2	*	100%	*	5.00%	*	75%	) *	1,458	=	$140,052
General Industry (Coil Coating)	Large	(12	*	$ 106.73	*	2	*	100%	*	8.00%	*	25%	*	101	=	$5,184
	Small	(12	*	$ 106.73	*	2	*	100%	*	8.00%	*	75%	) *	18	=	$2,828
Maritime	Large	(12	*	$ 106.73	*	2	*	100%	*	36.00%	*	10%	*	294	=	$27,101
	Small	(12	*	$ 106.73	*	2	*	100%	*	36.00%	*	90%	) *	508	=	$421,714
Construction	Large	(12	*	$ 106.73	*	2	*	100%	*	22.00%	*	25%	*	765	=	$107,791
	Small	(12	*	$ 106.73	*	2	*	100%	*	22.00%	*	50%	) *	4,067	=	$1,146,094
Government	State	(12	*	$ 106.73	*	2	*	100%	*	12.00%	*	25%	*	16	=	$1,248
	Local	(12	*	$ 106.73	*	2	*	100%	*	12.00%	*	25%	) *	899	=	$69,086
SECTOR 4. Producers of Chromates																
ALL	Large	(12	*	$ 106.73	*	2	*	100%	*	45.00%	*	100%	) *	2	=	$2,400
	Small	(0	*	$ 106.73	*	2	*	100%	*	0.00%	*	0%	) *	0	=	$0

		SEMICONTTIME	CONTCOST	SEMI - ANNUALLY	% NOTSEMI	% ABOVEAL	% CONT	# PLANTS	Item 13 COST
SECTOR 5. Chromate Pigment Procedures									
ALL	Large	(12 *	$ 106.73 *	2 *	100% *	71.00% *	100%) *	2 =	$3,596
	Small	(12 *	$ 106.73 *	2 *	100% *	50.00% *	100%) *	1 =	$1,266
SECTOR 6. CCA Producers									
ALL	Large	(12 *	$ 106.73 *	2 *	100% *	33.00% *	100%) *	3 =	$2,161
	Small	(0 *	$ 106.73 *	2 *	100% *	0.00% *	0%) *	0 =	$0
SECTOR 7. Chromium Catalyst Producers									
ALL	Large	(20 *	$ 106.73 *	2 *	100% *	100% *	20%) *	5 =	$4,444
	Small	(0 *	$ 106.73 *	2 *	100% *	0.00% *	0%) *	0 =	$0
SECTOR 8. Paint and Coating Producers									
ALL	Large	(12 *	$ 106.73 *	2 *	100% *	13.00% *	75%) *	87 =	$21,836
	Small	(12 *	$ 106.73 *	2 *	100% *	13.00% *	75%) *	137 =	$34,314
SECTOR 9. Printing Ink Producers									
ALL	Large	(12 *	$ 106.73 *	2 *	100% *	69.00% *	90%) *	3 =	$4,792
	Small	(12 *	$ 106.73 *	2 *	100% *	69.00% *	90%) *	10 =	$15,972
SECTOR 10. Plastic Colorant Producers and Users									
ALL	Large	(12 *	$ 106.73 *	2 *	100% *	51.00% *	100%) *	86 =	$112,392
	Small	(12 *	$ 106.73 *	2 *	100% *	51.00% *	100%) *	42 =	$54,974
SECTOR 11. Plating Mixture Producers									
ALL	Large	(12 *	$ 106.73 *	2 *	100% *	100% *	80%) *	4 =	$9,053
	Small	(12 *	$ 106.73 *	2 *	100% *	100% *	75%) *	3 =	$5,658
SECTOR 13. Chromium Metal Producers									
ALL	Large	(12 *	$ 106.73 *	2 *	100% *	100% *	100%) *	1 =	$2,562
	Small	(0 *	$ 106.73 *	2 *	0% *	0.00% *	0%) *	0 =	$0
SECTOR 14. Iron and Steel Mills									
Alloy and Stainless Steel	Large	(12 *	$ 106.73 *	2 *	100% *	38.00% *	90%) *	37 =	$32,646
	Small	(12 *	$ 106.73 *	2 *	100% *	38.00% *	90%) *	12 =	$10,471
Carbon Steel	Large	(0 *	$ 106.73 *	2 *	100% *	0.00% *	90%) *	112 =	$0
	Small	(0 *	$ 106.73 *	2 *	100% *	0.00% *	90%) *	35 =	$0
SECTOR 14B. Forging Industry									
Reshaping	Large	(12 *	$ 106.73 *	2 *	100% *	63.00% *	90%) *	37 =	$53,102
	Small	(12 *	$ 106.73 *	2 *	100% *	63.00% *	90%) *	34 =	$50,039

		SEMICONTTIME		CONTCOST		SEMI - ANNUALLY	% NOTSEMI		% ABOVEAL		% CONT		# PLANTS		Item 13 COST
SECTOR 15. Iron and Steel Foundries															
ALL	Large	(20	* $	106.73	* 2	* 100%	* 100%	*	90%	) *	178	=	$684,794		
	Small	(12	* $	106.73	* 2	* 100%	* 100%	*	90%	) *	130	=	$298,819		
SECTOR 17. Chromium Dye Producers															
ALL	Large	(12	* $	106.73	* 2	* 100%	* 38.00%	*	100%	) *	3	=	$2,887		
	Small	(12	* $	106.73	* 2	* 100%	* 38.00%	*	100%	) *	1	=	$962		
SECTOR 18. Chromium Sulfate Producers															
ALL	Large	(0	* $	106.73	* 2	* 100%	* 0.00%	*	0%	) *	0	=	$0		
	Small	(12	* $	106.73	* 2	* 100%	* 27.00%	*	100%	) *	5	=	$3,599		
SECTOR 19. Chemical Distributors															
ALL	Large	(0	* $	106.73	* 2	* 100%	* 0.00%	*	100%	) *	207	=	$0		
	Small	(0	* $	106.73	* 2	* 100%	* 0.00%	*	100%	) *	1,561	=	$0		
SECTOR 20. Textile Dyeing															
ALL	Large	(0	* $	106.73	* 2	* 100%	* 0.00%	*	90%	) *	347	=	$0		
	Small	(0	* $	106.73	* 2	* 100%	* 0.00%	*	90%	) *	703	=	$0		
SECTOR 21. Colored Glass Producers															
General Industry	Large	(12	* $	106.73	* 2	* 100%	* 25.00%	*	90%	) *	5	=	$3,126		
	Small	(0	* $	106.73	* 2	* 100%	* 0.00%	*	90%	) *	17	=	$0		
Fiber, Flat, Container Glass	Large	(12	* $	106.73	* 2	* 100%	* 20.00%	*	90%	) *	78	=	$35,844		
	Small	(12	* $	106.73	* 2	* 100%	* 0.00%	*	90%	) *	5	=	$0		
SECTOR 22. Printing															
ALL	Large	(0	* $	106.73	* 2	* 100%	* 0.00%	*	90%	) *	92	=	$0		
	Small	(0	* $	106.73	* 2	* 100%	* 0.00%	*	90%	) *	367	=	$0		
SECTOR 24. Chromium Catalyst Users															
Catalyst Users	Large	(12	* $	106.73	* 2	* 100%	* 9.00%	*	90%	) *	164	=	$34,115		
	Small	(0	* $	106.73	* 2	* 100%	* 0.00%	*	90%	) *	0	=	$0		
Chromium Catalyst Service Companies	Large	(12	* $	106.73	* 2	* 100%	* 0.00%	*	90%	) *	21	=	$0		
	Small	(12	* $	106.73	* 2	* 100%	* 0.00%	*	90%	) *	4	=	$0		
SECTOR 25. Refractory Brick Producers															
ALL	Large	(0	* $	106.73	* 2	* 100%	* 0.00%	*	90%	) *	6	=	$0		
	Small	(0	* $	106.73	* 2	* 100%	* 0.00%	*	90%	) *	0	=	$0		

		SEMICONTTIME		CONTCOST		SEMI - ANNUALLY		% NOTSEMI		% ABOVEAL		% CONT		# PLANTS		Item 13 COST
SECTOR 26. Woodworking																
General Industry	Large	(0	*	$ 106.73	*	2	*	100%	*	0.00%	*	100%	) *	175	=	$0
	Small	(0	*	$ 106.73	*	2	*	100%	*	0.00%	*	100%	) *	93	=	$0
Maritime	Large	(0	*	$ 106.73	*	2	*	100%	*	0.00%	*	100%	) *	38	=	$0
	Small	(0	*	$ 106.73	*	2	*	100%	*	0.00%	*	100%	) *	34	=	$0
Construction	Large	(12	*	$ 106.73	*	2	*	100%	*	22.00%	*	100%	) *	1,290	=	$726,821
	Small	(12	*	$ 106.73	*	2	*	100%	*	22.00%	*	100%	) *	5,162	=	$2,909,238
Government	State	(12	*	$ 106.73	*	2	*	100%	*	22.00%	*	100%	) *	16	=	$9,154
	Local	(12	*	$ 106.73	*	2	*	100%	*	22.00%	*	100%	) *	59	=	$33,095
SECTOR 27. Solid Waste Incerneration																
General Industry	Large	(0	*	$ 106.73	*	2	*	100%	*	0.00%	*	90%	) *	48	=	$0
	Small	(0	*	$ 106.73	*	2	*	100%	*	0.00%	*	90%	) *	58	=	$0
Government	State	(0	*	$ 106.73	*	2	*	100%	*	0.00%	*	25%	) *	0	=	$0
	Local	(0	*	$ 106.73	*	2	*	100%	*	0.00%	*	90%	) *	29	=	$0
SECTOR 30. Superalloy Producers and Users																
ALL	Large	(0	*	$ 106.73	*	2	*	100%	*	0.00%	*	100%	) *	18	=	$0
	Small	(0	*	$ 106.73	*	2	*	100%	*	0.00%	*	0%	) *	0	=	$0
SECTOR 31. Construction																
Industrial Rehabilitation	Large	(0	*	$ 106.73	*	2	*	100%	*	0.00%	*	100%	) *	55	=	$0
	Small	(0	*	$ 106.73	*	2	*	100%	*	0.00%	*	100%	) *	196	=	$0
	State	(0	*	$ 106.73	*	2	*	100%	*	0.00%	*	100%	) *	16	=	$0
	Local	(0	*	$ 106.73	*	2	*	100%	*	0.00%	*	100%	) *	74	=	$0
Hazardous Waste-site Work	Large	(0	*	$ 106.73	*	2	*	100%	*	0.00%	*	90%	) *	44	=	$0
	Small	(0	*	$ 106.73	*	2	*	100%	*	0.00%	*	90%	) *	143	=	$0
	State	(0	*	$ 106.73	*	2	*	100%	*	0.00%	*	90%	) *	1	=	$0
	Local	(0	*	$ 106.73	*	2	*	100%	*	0.00%	*	90%	) *	201	=	$0
Refractory Brick Restoration	Large	(0	*	$ 106.73	*	2	*	100%	*	60.00%	*	90%	) *	48	=	$0
	Small	(0	*	$ 106.73	*	2	*	100%	*	60.00%	*	90%	) *	148	=	$0
												Total		**77,770**	=	**$13,556,384**

Semi-Annual Exposure Monitoring (Paragraph (d)(2)(iii)); Contract Cost for a Laboratory to Conduct Analysis of Semi-Annual Exposure Monitoring Air Samples

This table calculates the contract cost for the employer to have a laboratory conduct analysis of air samples collected during semi-annual exposure monitoring.

Cost = (SAMPCOST * JOBAL * SHIFTS * #SAMPS * 2 * %NOTSEMI * %ABOVE AL) * #PLANTS

Variables:

*** SAMPCOST =** Variable cost per sample = $68

*** JOBAL =** Number of job categories exposed at or above the AL.

*** SHIFTS =** Number of work shifts.

*** #SAMPS =** Number of samples per exposure measurement.

*** 2 =** 2 times per year (semi-annual).

*** %NOTSEMI =** Percent of plants not performing semi-annual monitoring requirements.

*** %ABOVEAL =** Percent of plants that have an employee in at least one job category at or above the AL.

*** #PLANTS =** Number of plants represented by the model input.

		SAMPCOST		JOBAL		SHIFTS		#SAMPS		SEMI		%NOTSEMI		%ABOVEAL		#PLANTS		Item 13 COST
Sector 1. Electroplating																		
Hard Chrome	Large	($68	*	1	*	2	*	3	*	2	*	100%	*	49%	) *	930	=	$372,335
	Small	($68	*	1	*	1	*	3	*	2	*	100%	*	49%	) *	1,751	=	$350,368
Job Shop Chrome Plater	Large	($68	*	1	*	2	*	3	*	2	*	100%	*	11%	) *	448	=	$40,272
	Small	($68	*	1	*	1	*	3	*	2	*	100%	*	11%	) *	843	=	$37,889
Captive Shop Chrome Plater	Large	($68	*	1	*	2	*	3	*	2	*	100%	*	14%	) *	508	=	$58,038
	Small	($68	*	1	*	1	*	3	*	2	*	100%	*	14%	) *	955	=	$54,624
Job Shop Plater	Large	($68	*	1	*	2	*	3	*	2	*	100%	*	10%	) *	448	=	$36,611
	Small	($68	*	1	*	1	*	3	*	2	*	100%	*	10%	) *	843	=	$34,444
Captive Shop Plater	Large	($68	*	1	*	2	*	3	*	2	*	100%	*	13%	) *	509	=	$54,093
	Small	($68	*	1	*	1	*	3	*	2	*	100%	*	13%	) *	959	=	$50,911
Operator	Large	($68	*	1	*	2	*	3	*	2	*	100%	*	16%	) *	930	=	$121,579
	Small	($68	*	1	*	1	*	3	*	2	*	100%	*	16%	) *	1,751	=	$114,406
Sector 2. Welding		**General Industry**																
SMAW	Large	($68	*	1	*	3	*	2	*	2	*	100%	*	0.92%	) *	3,560	=	$26,748
	Small	($68	*	1	*	1	*	3	*	2	*	100%	*	0.92%	) *	3,989	=	$14,986
GMAW	Large	($68	*	1	*	3	*	2	*	2	*	100%	*	0.73%	) *	2,611	=	$15,568
	Small	($68	*	1	*	1	*	3	*	2	*	100%	*	0.73%	) *	2,925	=	$8,721
TIG	Large	($68	*	1	*	3	*	2	*	2	*	100%	*	0%	) *	791	=	$0
	Small	($68	*	1	*	1	*	3	*	2	*	100	*	0%	) *	886	=	$0

		SAMPCOST		JOBAL		SHIFTS		#SAMPS		SEMI		%NOTSEMI		%ABOVEAL		#PLANTS		Item 13 COST
SAW	Large	($68	*	0	*	3	*	2	*	2	*	100%	*	0%	) *	316	=	$0
	Small	($68	*	0	*	1	*	3	*	2	*	100%	*	0%	) *	354	=	$0
Plasma Cutting	Large	($68	*	1	*	3	*	2	*	2	*	100%	*	0%	) *	79	=	$0
	Small	($68	*	1	*	1	*	3	*	2	*	100%	*	0%	) *	89	=	$0
Plasma Welding	Large	($68	*	1	*	3	*	2	*	2	*	100%	*	0%	) *	79	=	$0
	Small	($68	*	1	*	1	*	3	*	2	*	100%	*	0%	) *	89	=	$0
Resistance Welding	Large	($68	*	1	*	3	*	2	*	2	*	100%	*	0%	) *	475	=	$0
	Small	($68	*	1	*	1	*	3	*	2	*	100%	*	0%	) *	532	=	$0
Maritime																		
SMAW	Large	($68	*	1	*	3	*	1	*	2	*	100%	*	0%	) *	18	=	$0
	Small	($68	*	1	*	2	*	1	*	2	*	100%	*	0%	) *	10	=	$0
GMAW	Large	($68	*	1	*	3	*	1	*	2	*	100%	*	0%	) *	24	=	$0
	Small	($68	*	1	*	2	*	1	*	2	*	100%	*	0%	) *	14	=	$0
TIG	Large	($68	*	1	*	3	*	1	*	2	*	100%	*	0%	) *	6	=	$0
	Small	($68	*	1	*	2	*	1	*	2	*	100%	*	0%	) *	3	=	$0
FCAW	Large	($68	*	1	*	3	*	1	*	2	*	100%	*	0%	) *	117	=	$0
	Small	($68	*	1	*	2	*	1	*	2	*	100%	*	0%	) *	66	=	$0
Plasma Cutting	Large	($68	*	1	*	3	*	1	*	2	*	100%	*	0%	) *	4	=	$0
	Small	($68	*	1	*	2	*	1	*	2	*	100%	*	0%	) *	2	=	$0
Plasma Welding	Large	($68	*	1	*	3	*	1	*	2	*	100%	*	0%	) *	2	=	$0
	Small	($68	*	1	*	2	*	1	*	2	*	100%	*	0%	) *	1	=	$0
Oxy-fuel Cutting	Large	($68	*	1	*	3	*	1	*	2	*	100%	*	0%	) *	4	=	$0
	Small	($68	*	1	*	2	*	1	*	2	*	100%	*	0%	) *	2	=	$0
Air Carbon Arc Cutting	Large	($68	*	1	*	3	*	1	*	2	*	100%	*	0%	) *	2	=	$0
	Small	($68	*	1	*	2	*	1	*	2	*	100%	*	0%	) *	1	=	$0
Electric Torch Cutting	Large	($68	*	0	*	3	*	1	*	2	*	100%	*	0%	) *	0	=	$0
	Small	($68	*	0	*	2	*	1	*	2	*	100%	*	0%	) *	0	=	$0
Thermal Spray Tungsten Cutting	Large	($68	*	0	*	3	*	1	*	2	*	100%	*	0%	) *	0	=	$0
	Small	($68	*	0	*	2	*	1	*	2	*	100%	*	0%	) *	0	=	$0
SAW	Large	($68	*	0	*	3	*	1	*	2	*	100%	*	0%	) *	16	=	$0
	Small	($68	*	0	*	2	*	1	*	2	*	100%	*	0%	) *	9	=	$0

		SAMPCOST		JOBAL		SHIFTS		#SAMPS		SEMI		%NOTSEMI		%ABOVEAL		#PLANTS		Item 13 COST
CONSTRUCTION																		
SMAW	Large	($68	*	1	*	3	*	1	*	2	*	100%	*	0%	) *	202	=	$0
	Small	($68	*	1	*	1	*	1	*	2	*	100%	*	0%	) *	1,620	=	$0
Plasma Cutting	Large	($68	*	0	*	3	*	1	*	2	*	100%	*	0%	) *	3	=	$0
	Small	($68	*	1	*	1	*	1	*	2	*	100%	*	0%	) *	21	=	$0
GMAW	Large	($68	*	1	*	3	*	1	*	2	*	100%	*	0%	) *	41	=	$0
	Small	($68	*	1	*	1	*	1	*	2	*	100%	*	0%	) *	324	=	$0
Brazing	State	($68	*	1	*	3	*	1	*	2	*	100%	*	0%	) *	20	=	$0
	Local	($68	*	1	*	1	*	1	*	2	*	100%	*	0%	) *	162	=	$0
Metallizing	State	($68	*	1	*	3	*	1	*	2	*	100%	*	0%	) *	4	=	$0
	Local	($68	*	1	*	1	*	1	*	2	*	100%	*	0%	) *	32	=	$0
GOVERNMENT																		
SMAW	State	($68	*	1	*	1	*	1	*	2	*	100%	*	0%	) *	19	=	$0
	Local	($68	*	1	*	1	*	1	*	2	*	100%	*	0%	) *	594	=	$0
Plasma Cutting	State	($68	*	1	*	1	*	1	*	2	*	100%	*	0%	) *	0	=	$0
	Local	($68	*	1	*	1	*	1	*	2	*	100%	*	0%	) *	8	=	$0
GMAW	State	($68	*	1	*	1	*	1	*	2	*	100%	*	0%	) *	4	=	$0
	Local	($68	*	1	*	1	*	1	*	2	*	100%	*	0%	) *	119	=	$0
Brazing	State	($68	*	1	*	1	*	1	*	2	*	100%	*	0%	) *	2	=	$0
	Local	($68	*	1	*	1	*	1	*	2	*	100%	*	0%	) *	59	=	$0
Metallizing	State	($68	*	1	*	1	*	1	*	2	*	100%	*	0%	) *	1	=	$0
	Local	($68	*	1	*	1	*	1	*	2	*	100%	*	0%	) *	12	=	$0
Sector 2. Mild Steel Welding		**GENERAL INDUSTRY**																
SMAW	Large	($68	*	0	*	3	*	2	*	2	*	100%	*	0%	) *	4,773	=	$0
	Small	($68	*	0	*	1	*	3	*	2	*	100%	*	0%	) *	4,859	=	$0
GMAW	Large	($68	*	0	*	3	*	2	*	2	*	100%	*	0%	) *	3,500	=	$0
	Small	($68	*	0	*	1	*	3	*	2	*	100%	*	0%	) *	3,563	=	$0
TIG	Large	($68	*	0	*	3	*	2	*	2	*	100%	*	0%	) *	1,060	=	$0
	Small	($68	*	0	*	1	*	3	*	2	*	100	*	0%	) *	1,080	=	$0
SAW	Large	($68	*	0	*	3	*	2	*	2	*	100%	*	0%	) *	424	=	$0
	Small	($68	*	0	*	1	*	3	*	2	*	100%	*	0%	) *	432	=	$0

		SAMPCOST		JOBAL		SHIFTS		#SAMPS		SEMI		%NOTSEMI		%ABOVEAL		#PLANTS		Item 13 COST
Plasma Cutting	Large	($68	*	0	*	3	*	2	*	2	*	100%	*	0%	) *	106	=	$0
	Small	($68	*	0	*	1	*	3	*	2	*	100%	*	0%	) *	108	=	$0
Plasma Welding	Large	($68	*	0	*	3	*	2	*	2	*	100%	*	0%	) *	106	=	$0
	Small	($68	*	0	*	1	*	3	*	2	*	100%	*	0%	) *	108	=	$0
Resistance Welding	Large	($68	*	0	*	3	*	2	*	2	*	100%	*	0%	) *	636	=	$0
	Small	($68	*	0	*	1	*	3	*	2	*	100%	*	0%	) *	648	=	$0
Maritime																		
SMAW	Large	($68	*	0	*	3	*	1	*	2	*	100%	*	0%	) *	37	=	$0
	Small	($68	*	0	*	2	*	1	*	2	*	100%	*	0%	) *	21	=	$0
GMAW	Large	($68	*	0	*	3	*	1	*	2	*	100%	*	0%	) *	54	=	$0
	Small	($68	*	0	*	2	*	1	*	2	*	100%	*	0%	) *	30	=	$0
TIG	Large	($68	*	0	*	3	*	1	*	2	*	100%	*	0%	) *	13	=	$0
	Small	($68	*	0	*	2	*	1	*	2	*	100%	*	0%	) *	7	=	$0
FCAW	Large	($68	*	0	*	3	*	1	*	2	*	100%	*	0%	) *	251	=	$0
	Small	($68	*	0	*	2	*	1	*	2	*	100%	*	0%	) *	142	=	$0
Plasma Cutting	Large	($68	*	0	*	3	*	1	*	2	*	100%	*	0%	) *	8	=	$0
	Small	($68	*	0	*	2	*	1	*	2	*	100%	*	0%	) *	5	=	$0
Plasma Welding	Large	($68	*	0	*	3	*	1	*	2	*	100%	*	0%	) *	3	=	$0
	Small	($68	*	0	*	2	*	1	*	2	*	100%	*	0%	) *	2	=	$0
Oxy-fuel Cutting	Large	($68	*	0	*	3	*	1	*	2	*	100%	*	0%	) *	8	=	$0
	Small	($68	*	0	*	2	*	1	*	2	*	100%	*	0%	) *	5	=	$0
Air Carbon Arc Cutting	Large	($68	*	0	*	3	*	1	*	2	*	100%	*	0%	) *	3	=	$0
	Small	($68	*	0	*	2	*	1	*	2	*	100%	*	0%	) *	2	=	$0
Electric Torch Cutting	Large	($68	*	0	*	3	*	1	*	2	*	100%	*	0%	) *	1	=	$0
	Small	($68	*	0	*	2	*	1	*	2	*	100%	*	0%	) *	0	=	$0
Thermal Spray Tungsten Cutting	Large	($68	*	0	*	3	*	1	*	2	*	100%	*	0%	) *	1	=	$0
	Small	($68	*	0	*	2	*	1	*	2	*	100%	*	0%	) *	0	=	$0
SAW	Large	($68	*	0	*	3	*	1	*	2	*	100%	*	0%	) *	33	=	$0
	Small	($68	*	0	*	2	*	1	*	2	*	100%	*	0%	) *	18	=	$0

		SAMPCOST		JOBAL		SHIFTS		#SAMPS		SEMI		%NOTSEMI		%ABOVEAL		#PLANTS		Item 13 COST
CONSTRUCTION																		
SMAW	Large	($68	*	0	*	3	*	1	*	2	*	100%	*	0%	) *	304	=	$0
	Small	($68	*	0	*	1	*	1	*	2	*	100%	*	0%	) *	2,293	=	$0
Plasma Cutting	Large	($68	*	0	*	3	*	1	*	2	*	100%	*	0%	) *	4	=	$0
	Small	($68	*	0	*	1	*	1	*	2	*	100%	*	0%	) *	30	=	$0
GMAW	Large	($68	*	0	*	3	*	1	*	2	*	100%	*	0%	) *	60	=	$0
	Small	($68	*	0	*	1	*	1	*	2	*	100%	*	0%	) *	458	=	$0
Brazing	Large	($68	*	0	*	3	*	1	*	2	*	100%	*	0%	) *	30	=	$0
	Small	($68	*	0	*	1	*	1	*	2	*	100%	*	0%	) *	230	=	$0
Metallizing	Large	($68	*	0	*	3	*	1	*	2	*	100%	*	0%	) *	6	=	$0
	Small	($68	*	0	*	1	*	1	*	2	*	100%	*	0%	) *	46	=	$0
SECTOR 3. PAINTING																		
AEROSPACE	Large	($68	*	1	*	3	*	3	*	2	*	100%	*	28%	) *	50	=	$17,040
	Small	($68	*	1	*	1	*	3	*	2	*	100%	*	9%	) *	63	=	$2,299
General Industry (Autobody)	Large	($68	*	1	*	1	*	1	*	2	*	100%	*	5%	) *	331	=	$2,254
	Small	($68	*	1	*	1	*	1	*	2	*	100%	*	5%	) *	1,458	=	$9,924
General Industry (Coil Coating)	Large	($68	*	1	*	2	*	3	*	2	*	100%	*	8%	) *	101	=	$6,612
	Small	($68	*	1	*	1	*	3	*	2	*	100%	*	8%	) *	18	=	$601
Maritime	Large	($68	*	2	*	3	*	1	*	2	*	100%	*	36%	) *	294	=	$86,414
	Small	($68	*	0	*	1	*	1	*	2	*	100%	*	36%	) *	508	=	$0
Construction	Large	($68	*	1	*	3	*	1	*	2	*	100%	*	22%	) *	765	=	$68,740
	Small	($68	*	1	*	1	*	1	*	2	*	100%	*	22%	) *	4,067	=	$121,814
Government	State	($68	*	1	*	3	*	1	*	2	*	100%	*	12%	) *	16	=	$796
	Local	($68	*	1	*	1	*	1	*	2	*	100%	*	12%	) *	899	=	$14,686
SECTOR 4. Producers of Chromates																		
ALL	Large	($68	*	3	*	3	*	3	*	2	*	100%	*	45%	) *	2	=	$3,443
	Small	($68	*	0	*	1	*	3	*	2	*	100%	*	0%	) *	0	=	$0
SECTOR 5. Chromate Pigment Procedures																		
ALL	Large	($68	*	5	*	2	*	3	*	2	*	100%	*	71%	) *	2	=	$5,733
	Small	($68	*	1	*	1	*	3	*	2	*	100%	*	50%	) *	1	=	$202

		SAMPCOST		JOBAL		SHIFTS		#SAMPS		SEMI		%NOTSEMI		%ABOVEAL		#PLANTS		Item 13 COST
SECTOR 6. CCA Producers																		
ALL	Large	($68	*	1	*	3	*	3	*	2	*	100%	*	33%	) *	3	=	$1,034
	Small	($68	*	0	*	3	*	0	*	2	*	100%	*	0%	) *	0	=	$0
SECTOR 7. Chromium Catalyst Producers																		
ALL	Large	($68	*	6	*	3	*	3	*	2	*	100%	*	100%	) *	5	=	$38,256
	Small	($68	*	0	*	1	*	3	*	2	*	100%	*	0%	) *	0	=	$0
SECTOR 8. Paint and Coating Producers																		
ALL	Large	($68	*	1	*	2	*	3	*	2	*	100%	*	13%	) *	87	=	$9,284
	Small	($68	*	1	*	2	*	3	*	2	*	100%	*	13%	) *	137	=	$14,588
SECTOR 9. Printing Ink Producers																		
ALL	Large	($68	*	3	*	1	*	9	*	2	*	100%	*	69%	) *	3	=	$7,639
	Small	($68	*	2	*	1	*	5	*	2	*	100%	*	69%	) *	10	=	$9,431
SECTOR 10. Plastic Colorant Producers and Users																		
ALL	Large	($68	*	2	*	3	*	3	*	2	*	100%	*	51%	) *	86	=	$107,511
	Small	($68	*	2	*	1	*	3	*	2	*	100%	*	51%	) *	42	=	$17,529
SECTOR 11. Plating Mixture Producers																		
ALL	Large	($68	*	1	*	1	*	3	*	2	*	100%	*	100%	) *	4	=	$1,804
	Small	($68	*	1	*	1	*	3	*	2	*	100%	*	100%	) *	3	=	$1,203
SECTOR 13. Chromium Metal Producers																		
ALL	Large	($68	*	2	*	3	*	3	*	2	*	100%	*	100%	) *	1	=	$2,450
	Small	($68	*	0	*	1	*	1	*	2	*	0%	*	0%	) *	0	=	$0
SECTOR 14. Iron and Steel Mills																		
Alloy Stainless Steel	Large	($68	*	3	*	3	*	3	*	2	*	100%	*	38%	) *	37	=	$52,047
	Small	($68	*	1	*	1	*	3	*	2	*	100%	*	38%	) *	12	=	$1,855
Carbon Steel	Large	($68	*	0	*	3	*	3	*	2	*	100%	*	0%	) *	112	=	$0
	Small	($68	*	0	*	1	*	1	*	2	*	100%	*	0%	) *	35	=	$0
14B. Forging Industry																		
Forging Industry	Large	($68	*	4	*	1	*	3	*	2	*	100%	*	63%	) *	37	=	$37,627
	Small	($68	*	2	*	1	*	3	*	2	*	100%	*	63%	) *	34	=	$17,728
SECTOR 15. Iron and Steel Foundries																		
ALL	Large	($68	*	6	*	3	*	5	*	2	*	100%	*	100%	) *	178	=	$2,183,523
	Small	($68	*	5	*	1	*	5	*	2	*	100%	*	100%	) *	130	=	$441,116

		SAMPCOST		JOBAL		SHIFTS		#SAMPS		SEMI		%NOTSEMI		%ABOVEAL		#PLANTS		Item 13 COST
SECTOR 17. Chromium Dye Producers																		
ALL	Large	($68	*	6	*	1	*	21	*	2	*	100%	*	38%	) *	3	=	$19,331
	Small	($68	*	6	*	1	*	7	*	2	*	100%	*	38%	) *	1	=	$2,148
SECTOR 18. Chromium Sulfate Producers																		
ALL	Large	($68	*	0	*	1	*	3	*	2	*	100%	*	0%	) *	0	=	$0
	Small	($68	*	1	*	1	*	3	*	2	*	100%	*	27%	) *	5	=	$574
SECTOR 19. Chemical Distributors																		
ALL	Large	($68	*	0	*	1	*	3	*	2	*	100%	*	0%	) *	207	=	$0
	Small	($68	*	0	*	1	*	3	*	2	*	100%	*	0%	) *	1,561	=	$0
SECTOR 20. Textile Dyeing																		
ALL	Large	($68	*	0	*	3	*	3	*	2	*	100%	*	0%	) *	347	=	$0
	Small	($68	*	0	*	1	*	2	*	2	*	100%	*	0%	) *	703	=	$0
SECTOR 21. Colored Glass Producers																		
General Industry	Large	($68	*	1	*	3	*	12	*	2	*	100%	*	25%	) *	5	=	$6,645
	Small	($68	*	0	*	1	*	4	*	2	*	100%	*	0%	) *	17	=	$0
Fiber, Flat, and Container Glass	Large	($68	*	3	*	1	*	1	*	2	*	100%	*	20%	) *	78	=	$6,350
	Small	($68	*	0	*	1	*	1	*	2	*	100%	*	0%	) *	5	=	$0
SECTOR 22. Printing																		
ALL	Large	($68	*	0	*	3	*	2	*	2	*	100%	*	0%	) *	92	=	$0
	Small	($68	*	0	*	1	*	2	*	2	*	100%	*	0%	) *	367	=	$0
SECTOR 24. Chromium Catalyst Users																		
Catalyst User	Large	($68	*	2	*	3	*	3	*	2	*	100%	*	9%	) *	164	=	$36,259
	Small	($68	*	0	*	1	*	3	*	2	*	100%	*	0%	) *	0	=	$0
Chromium Catalyst Service Companies	Large	($68	*	0	*	3	*	3	*	2	*	100%	*	0%	) *	21	=	$0
	Small	($68	*	0	*	1	*	3	*	2	*	100%	*	0%	) *	4	=	$0
SECTOR 25. Refractory Brick Producers																		
ALL	Large	($68	*	0	*	1	*	15	*	2	*	100%	*	0%	) *	6	=	$0
	Small	($68	*	0	*	1	*	0	*	2	*	100%	*	0%	) *	0	=	$0
SECTOR 26. Woodworking																		
General Industry	Large	($68	*	0	*	1	*	2	*	2	*	100%	*	0%	) *	175	=	$0
	Small	($68	*	0	*	1	*	2	*	2	*	100%	*	0%	) *	93	=	$0
Maritime	Large	($68	*	0	*	1	*	1	*	2	*	100%	*	0%	) *	38	=	$0
	Small	($68	*	0	*	1	*	1	*	2	*	100%	*	0%	) *	34	=	$0

		SAMPCOST		JOBAL		SHIFTS		#SAMPS		SEMI		%NOTSEMI		%ABOVEAL		#PLANTS		Item 13 COST
Construction	Large	($68	*	1	*	1	*	1	*	2	*	100%	*	22%	) *	1,290	=	$38,626
	Small	($68	*	1	*	1	*	1	*	2	*	100%	*	22%	) *	5,162	=	$154,606
Government	State	($68	*	1	*	1	*	1	*	2	*	100%	*	22%	) *	16	=	$486
	Local	($68	*	1	*	1	*	1	*	2	*	100%	*	22%	) *	59	=	$1,759
SECTOR 27. Solid Waste Incerneration										2								
General Industry	Large	($68	*	0	*	3	*	15	*	2	*	100%	*	0%	) *	48	=	$0
	Small	($68	*	0	*	1	*	3	*	2	*	100%	*	0%	) *	58	=	$0
Government	State	($68	*	0	*	3	*	15	*	2	*	100%	*	0%	) *	0	=	$0
	Local	($68	*	0	*	1	*	3	*	2	*	100%	*	0%	) *	29	=	$0
SECTOR 30. Superalloy Producers and Users										2								
ALL	Large	($68	*	0	*	3	*	3	*	2	*	100%	*	0%	) *	18	=	$0
	Small	($68	*	0	*	3	*	3	*	2	*	100%	*	0%	) *	0	=	$0
SECTOR 31. Construction																		
Industrial Rehabilitation	Large	($68	*	0	*	1	*	1	*	2	*	100%	*	0%	) *	55	=	$0
	Small	($68	*	0	*	1	*	1	*	2	*	100%	*	0%	) *	196	=	$0
	State	($68	*	0	*	1	*	1	*	2	*	100%	*	0%	) *	16	=	$0
	Local	($68	*	0	*	1	*	1	*	2	*	100%	*	0%	) *	74	=	$0
Hazardous Waste-site Work	Large	($68	*	0	*	1	*	1	*	2	*	100%	*	0%	) *	44	=	$0
	Small	($68	*	0	*	1	*	1	*	2	*	100%	*	0%	) *	143	=	$0
	State	($68	*	0	*	1	*	1	*	2	*	100%	*	0%	) *	1	=	$0
	Local	($68	*	0	*	1	*	1	*	2	*	100%	*	0%	) *	201	=	$0
Refractory Brick Restoration	Large	($68	*	0	*	1	*	1	*	2	*	100%	*	60%	) *	48	=	$0
	Small	($68	*	0	*	1	*	1	*	2	*	100%	*	60%	) *	148	=	$0
														TOTAL		**77,770**		**$4,943,561**

Quarterly Exposure Monitoring (Paragraph (d)(2)(iv)); Employee Time and Cost to Conduct Quarterly Exposure Monitoring

When initial monitoring results exceed the PEL, periodic monitoring every three months allows the employer to maintain an accurate profile of employee exposures. If the employer installs or upgrades controls, quarterly monitoring will demonstrate whether the controls are working properly.

HOURS = (ADMINTIME * JOBPEL * SHIFTS * #SAMPS * 4* %NOTQUART * %ABOVEPEL * (%INHOUSE + %LEARN)) * #PLANTS

COST = (NONSUPEWAGE * BURDEN HOURS)

Variable

***ADMINTIME =** In-house administrative time
*** NONSUPEWAGE =** Non-supervisory wage rate, $/hr
*** JOBPEL =** Number of job categories exposed above the PEL
*** SHIFTS =** Number of work shifts.
*** #SAMPS =** Number of samples per exposure measurement.
***4 =** Four times per year (Quarterly).
*** %NOTQUART =** Percent of plants not performing quarterly monitoring requirements.
*** %ABOVEPEL =** Percent of plants that have an employee in at least one job category above the PEL.
*** %INHOUSE =** Percent of plantsalready with in-house monitoring capabilities.
*** %LEARN =** Percent of plants that will develop in house monitoring capability.
*** #PLANTS =** Number of plants represented by the model output.

		ADMINTIME	NONSUPEWAGE	JOBPEL	SHIFTS	# SAMPS		% NOTQUART	% ABOVEPEL		% INHOUSE	% LEARN	# PLANTS		Item 12 COSTS		TOTAL HOURS	RESPONSES
Sector 1. Electroplating																		
Hard Chrome	Large	(0.50	* $ 25.49	* 0	* 2	* 3	* 4 *	*	0%	* (0%	+ 0	)) *	930	=	$0	=	0	0
	Small	(0.50	* $ 25.49	* 0	* 1	* 3	* 4 *	100% *	0%	* (0%	+ 0%	)) *	1,751	=	$0	=	0	0
Job Shop Chrome Plater	Large	(0.50	* $ 25.49	* 0	* 2	* 3	* 4 *	100% *	0%	* (0%	+ 0%	)) *	448	=	$0	=	0	0
	Small	(0.50	* $ 25.49	* 0	* 1	* 3	* 4 *	100% *	0%	* (0%	+ 0%	)) *	843	=	$0	=	0	0
Captive Shop Chrome Plater	Large	(0.50	* $ 25.49	* 0	* 2	* 3	* 4 *	100% *	0%	* (0%	+ 0%	)) *	508	=	$0	=	0	0
	Small	(0.50	* $ 25.49	* 0	* 1	* 3	* 4 *	100% *	0%	* (0%	+ 0%	)) *	955	=	$0	=	0	0
Job Shop Plater	Large	(0.50	* $ 25.49	* 0	* 2	* 3	* 4 *	100% *	0%	* (0%	+ 0%	)) *	448	=	$0	=	0	0
	Small	(0.50	* $ 25.49	* 0	* 1	* 3	* 4 *	100% *	0%	* (0%	+ 0%	)) *	843	=	$0	=	0	0
Captive Shop Plater	Large	(0.50	* $ 25.49	* 0	* 2	* 3	* 4 *	100% *	0%	* (0%	+ 0%	)) *	509	=	$0	=	0	0
	Small	(0.50	* $ 25.49	* 0	* 1	* 3	* 4 *	100% *	0%	* (0%	+ 0%	)) *	959	=	$0	=	0	0
Operator	Large	(0.50	* $ 25.49	* 0	* 2	* 3	* 4 *	100% *	0%	* (0%	+ 0%	)) *	930	=	$0	=	0	0
	Small	(0.50	* $ 25.49	* 1	* 1	* 3	* 4 *	100% *	0%	* (0%	+ 0%	)) *	1,751	=	$0	=	0	0
Sector 2. Welding		GENERAL INDUSTRY																
SMAW	Large	(0.50	* $ 25.10	* 1	* 3	* 2	* 4 *	100% *	4.85%	* (10%	+ 0%	)) *	3,560	=	$130,519	=	5,200	414
	Small	(1.00	* $ 25.10	* 1	* 1	* 3	* 4 *	100% *	4.84%	* (0%	+ 0%	)) *	3,989	=	$0	=	0	0
GMAW	Large	(0.50	* $ 25.10	* 1	* 3	* 2	* 4 *	100% *	0.37%	* (10	+ 0%	)) *	2,611	=	$730,387	=	29,099	2,180
	Small	(1.00	* $ 25.10	* 1	* 1	* 3	* 4 *	100% *	0.38%	* (0%	+ 0%	)) *	2,925	=	$0	=	0	0
TIG	Large	(0.50	* $ 25.10	* 1	* 3	* 2	* 4 *	100% *	0%	* (10%	+ 0%	)) *	791	=	$0	=	0	0
	Small	(1.00	* $ 25.10	* 1	* 1	* 3	* 4 *	100% *	0%	* (0%	+ 0%	)) *	886	=	$0	=	0	0
SAW	Large	(0.50	* $ 25.10	* 0	* 3	* 2	* 4 *	100% *	0%	* (10%	+ 0%	)) *	316	=	$0	=	0	0
	Small	(1.00	* $ 25.10	* 0	* 1	* 3	* 4 *	100% *	0%	* (0%	+ 0%	)) *	354	=	$0	=	0	0
Plasma Cutting	Large	(0.50	* $ 25.10	* 1	* 3	* 2	* 4 *	100% *	0%	* (10%	+ 0%	)) *	79	=	$0	=	0	0
	Small	(1.00	* $ 25.10	* 1	* 1	* 3	* 4 *	100% *	0%	* (0%	+ 0%	)) *	89	=	$0	=	0	0

		ADMINTIME		NONSUPEWAGE		JOBPEL		SHIFTS		# SAMPS		% NOTQUART		% ABOVEPEL		% INHOUSE		% LEARN		# PLANTS		Item 12 COSTS		TOTAL HOURS	RESPONSES
Plasma Welding	Large	(0.50	* $	25.10	* 1	* 3	* 2	* 4	* 100%	* 0%	* (10%	+ 0%	)) *	79	=	$0	=	0	0
	Small	(1.00	* $	25.10	* 1	* 1	* 3	* 4	* 100%	* 0%	* (0%	+ 0%	)) *	89	=	$0	=	0	0
Resistance Welding	Large	(0.50	* $	25.10	* 1	* 3	* 2	* 4	* 100%	* 0%	* (10%	+ 0%	)) *	475	=	$0	=	0	0
	Small	(1.00	* $	25.10	* 1	* 1	* 3	* 4	* 100%	* 0%	* (0%	+ 0%	)) *	532	=	$0	=	0	0
MARITIME																									
SMAW	Large	(0.50	* $	25.10	* 1	* 3	* 1	* 4	* 100%	* 0%	* (50%	+ 0%	)) *	18	=	$0	=	0	0
	Small	(1.00	* $	25.10	* 1	* 2	* 1	* 4	* 100%	* 0%	* (10%	+ 0%	)) *	10	=	$0	=	0	0
GMAW	Large	(0.50	* $	25.10	* 1	* 3	* 1	* 4	* 100%	* 0%	* (50%	+ 0%	)) *	24	=	$0	=	0	0
	Small	(1.00	* $	25.10	* 1	* 2	* 1	* 4	* 100%	* 0%	* (10%	+ 0%	)) *	14	=	$0	=	0	0
TIG	Large	(0.50	* $	25.10	* 1	* 3	* 1	* 4	* 100%	* 0%	* (50%	+ 0%	)) *	6	=	$0	=	0	0
	Small	(1.00	* $	25.10	* 1	* 2	* 1	* 4	* 100%	* 0%	* (10%	+ 0%	)) *	3	=	$0	=	0	0
FCAW	Large	(0.50	* $	25.10	* 1	* 3	* 1	* 4	* 100%	* 0%	* (50%	+ 0%	)) *	117	=	$0	=	0	0
	Small	(1.00	* $	25.10	* 1	* 2	* 1	* 4	* 100%	* 0%	* (10%	+ 0%	)) *	66	=	$0	=	0	0
Plasma Cutting	Large	(0.50	* $	25.10	* 1	* 3	* 1	* 4	* 100%	* 0%	* (50%	+ 0%	)) *	4	=	$0	=	0	0
	Small	(1.00	* $	25.10	* 1	* 2	* 1	* 4	* 100%	* 0%	* (10%	+ 0%	)) *	2	=	$0	=	0	0
Plasma Welding	Large	(0.50	* $	25.10	* 1	* 3	* 1	* 4	* 100%	* 0%	* (50%	+ 0%	)) *	2	=	$0	=	0	0
	Small	(1.00	* $	25.10	* 1	* 2	* 1	* 4	* 100%	* 0%	* (10%	+ 0%	)) *	1	=	$0	=	0	0
Oxy-fuel Cutting	Large	(0.50	* $	25.10	* 1	* 3	* 1	* 4	* 100%	* 0%	* (50%	+ 0%	)) *	4	=	$0	=	0	0
	Small	(1.00	* $	25.10	* 1	* 2	* 1	* 4	* 100%	* 0%	* (10%	+ 0%	)) *	2	=	$0	=	0	0
Air Carbon Arc Cutting	Large	(0.50	* $	25.10	* 1	* 3	* 1	* 4	* 100%	* 0%	* (50%	+ 0%	)) *	2	=	$0	=	0	0
	Small	(1.00	* $	25.10	* 1	* 2	* 1	* 4	* 100%	* 0%	* (10%	+ 0%	)) *	1	=	$0	=	0	0
Electric Torch Cutting	Large	(0.50	* $	25.10	* 0	* 3	* 1	* 4	* 100%	* 0%	* (50%	+ 0%	)) *	0	=	$0	=	0	0
	Small	(1.00	* $	25.10	* 0	* 2	* 1	* 4	* 100%	* 0%	* (10%	+ 0%	)) *	0	=	$0	=	0	0
Thermal Spray Tungsten Cutting	Large	(0.50	* $	25.10	* 0	* 3	* 1	* 4	* 100%	* 0%	* (50%	+ 0%	)) *	0	=	$0	=	0	0
	Small	(1.00	* $	25.10	* 0	* 2	* 1	* 4	* 100%	* 0%	* (10%	+ 0%	)) *	0	=	$0	=	0	0
SAW	Large	(0.50	* $	25.10	* 0	* 3	* 1	* 4	* 100%	* 0%	* (50%	+ 0%	)) *	16	=	$0	=	0	0
	Small	(1.00	* $	25.10	* 1	* 2	* 1	* 4	* 100%	* 0%	* (10%	+ 0%	)) *	9	=	$0	=	0	0
CONSTRUCTION																									
SMAW	Large	(0.50	* $	25.10	* 1	* 3	* 1	* 4	* 100%	* 0%	* (5%	+ 0%	)) *	202	=	$0	=	0	0
	Small	(1.00	* $	25.10	* 1	* 1	* 1	* 4	* 100%	* 0%	* (0%	+ 0%	)) *	1,620	=	$0	=	0	0
Plasma Cutting	Large	(0.50	* $	25.10	* 0	* 3	* 1	* 4	* 100%	* 0%	* (5%	+ 0%	)) *	3	=	$0	=	0	0
	Small	(1.00	* $	25.10	* 1	* 1	* 1	* 4	* 100%	* 0%	* (0%	+ 0%	)) *	21	=	$0	=	0	0
GMAW	Large	(0.50	* $	25.10	* 0	* 3	* 1	* 4	* 100%	* 0%	* (5%	+ 0%	)) *	41	=	$0	=	0	0
	Small	(1.00	* $	25.10	* 1	* 1	* 1	* 4	* 100%	* 0%	* (0%	+ 0%	)) *	324	=	$0	=	0	0
Brazing	State	(0.50	* $	25.10	* 1	* 3	* 1	* 4	* 100%	* 0%	* (5%	+ 0%	)) *	20	=	$0	=	0	0
	Local	(1.00	* $	25.10	* 1	* 1	* 1	* 4	* 100%	* 0%	* (0%	+ 0%	)) *	162	=	$0	=	0	0
Metallizing	State	(0.50	* $	25.10	* 1	* 3	* 1	* 4	* 100%	* 0%	* (5%	+ 0%	)) *	4	=	$0	=	0	0
	Local	(1.00	* $	25.10	* 1	* 1	* 1	* 4	* 100%	* 0%	* (0%	+ 0%	)) *	32	=	$0	=	0	0

		ADMINTIME	NONSUPEWAGE	JOBPEL	SHIFTS	# SAMPS	% NOTQUART	% ABOVEPEL	% INHOUSE	% LEARN	# PLANTS	Item 12 COSTS	TOTAL HOURS	RESPONSES
GOVERNMENT														
SMAW	State	(0.50 * $	25.10 * 1 * 1 * 1 * 4 * 100% *	0%	* (5% + 0%)) *	19	=	$0	=	0	0			
	Local	(1.00 * $	25.10 * 1 * 1 * 1 * 4 * 100% *	0%	* (0% + 0%)) *	594	=	$0	=	0	0			
Plasma Cutting	State	(0.50 * $	25.10 * 1 * 1 * 1 * 4 * 100% *	0%	* (5% + 0%)) *	0	=	$0	=	0	0			
	Local	(1.00 * $	25.10 * 1 * 1 * 1 * 4 * 100% *	0%	* (0% + 0%)) *	8	=	$0	=	0	0			
GMAW	State	(0.50 * $	25.10 * 1 * 1 * 1 * 4 * 100% *	0%	* (5% + 0%)) *	4	=	$0	=	0	0			
	Local	(1.00 * $	25.10 * 1 * 1 * 1 * 4 * 100% *	0%	* (0% + 0%)) *	119	=	$0	=	0	0			
Brazing	State	(0.50 * $	25.10 * 1 * 1 * 1 * 4 * 100% *	0%	* (5% + 0%)) *	2	=	$0	=	0	0			
	Local	(1.00 * $	25.10 * 1 * 1 * 1 * 4 * 100% *	0%	* (0% + 0%)) *	59	=	$0	=	0	0			
Metallizing	State	(0.50 * $	25.10 * 1 * 1 * 1 * 4 * 100% *	0%	* (5% + 0%)) *	1	=	$0	=	0	0			
	Local	(1.00 * $	25.10 * 1 * 1 * 1 * 4 * 100% *	0%	* (0% + 0%)) *	12	=	$0	=	0	0			
Sector 2. Mild Steel Welding							General Industry							
SMAW	Large	(0.50 * $	25.10 * 1 * 3 * 2 * 4 * 100% *	0%	* (10% + 0%)) *	4,773	=	$0	=	0	0			
	Small	(1.00 * $	25.10 * 1 * 1 * 3 * 4 * 100% *	0%	* (0% + 0%)) *	4,859	=	$0	=	0	0			
GMAW	Large	(0.50 * $	25.10 * 1 * 3 * 2 * 4 * 100% *	0%	* (10% + 0%)) *	3,500	=	$0	=	0	0			
	Small	(1.00 * $	25.10 * 1 * 1 * 3 * 4 * 100% *	0%	* (0% + 0%)) *	3,563	=	$0	=	0	0			
TIG	Large	(0.50 * $	25.10 * 1 * 3 * 2 * 4 * 100% *	0%	* (10% + 0%)) *	1,060	=	$0	=	0	0			
	Small	(1.00 * $	25.10 * 1 * 1 * 3 * 4 * 100% *	0%	* (0% + 0%)) *	1,080	=	$0	=	0	0			
SAW	Large	(0.50 * $	25.10 * 0 * 3 * 2 * 4 * 100% *	0%	* (10% + 0%)) *	424	=	$0	=	0	0			
	Small	(1.00 * $	25.10 * 0 * 1 * 3 * 4 * 100% *	0%	* (0% + 0%)) *	432	=	$0	=	0	0			
Plasma Cutting	Large	(0.50 * $	25.10 * 1 * 3 * 2 * 4 * 100% *	0%	* (10% + 0%)) *	106	=	$0	=	0	0			
	Small	(1.00 * $	25.10 * 1 * 1 * 3 * 4 * 100% *	0%	* (0% + 0%)) *	108	=	$0	=	0	0			
Plasma Welding	Large	(0.50 * $	25.10 * 1 * 3 * 2 * 4 * 100% *	0%	* (10% + 0%)) *	106	=	$0	=	0	0			
	Small	(1.00 * $	25.10 * 1 * 1 * 3 * 4 * 100% *	0%	* (0% + 0%)) *	108	=	$0	=	0	0			
Resistance Welding	Large	(0.50 * $	25.10 * 1 * 3 * 2 * 4 * 100% *	0%	* (10% + 0%)) *	636	=	$0	=	0	0			
	Small	(1.00 * $	25.10 * 1 * 1 * 3 * 4 * 100% *	0%	* (0% + 0%)) *	648	=	$0	=	0	0			
MARITIME														
SMAW	Large	(0.50 * $	25.10 * 0 * 3 * 1 * 4 * 100% *	0%	* (50% + 0%)) *	37	=	$0	=	0	0			
	Small	(1.00 * $	25.10 * 0 * 2 * 1 * 4 * 100% *	0%	* (10% + 0%)) *	21	=	$0	=	0	0			
GMAW	Large	(0.50 * $	25.10 * 0 * 3 * 1 * 4 * 100% *	0%	* (50% + 0%)) *	54	=	$0	=	0	0			
	Small	(1.00 * $	25.10 * 0 * 2 * 1 * 4 * 100% *	0%	* (10% + 0%)) *	30	=	$0	=	0	0			
TIG	Large	(0.50 * $	25.10 * 0 * 3 * 1 * 4 * 100% *	0%	* (50% + 0%)) *	13	=	$0	=	0	0			
	Small	(1.00 * $	25.10 * 0 * 2 * 1 * 4 * 100% *	0%	* (10% + 0%)) *	7	=	$0	=	0	0			
FCAW	Large	(0.50 * $	25.10 * 0 * 3 * 1 * 4 * 100% *	0%	* (50% + 0%)) *	251	=	$0	=	0	0			
	Small	(1.00 * $	25.10 * 0 * 2 * 1 * 4 * 100% *	0%	* (10% + 0%)) *	142	=	$0	=	0	0			
Plasma Cutting	Large	(0.50 * $	25.10 * 0 * 3 * 1 * 4 * 100% *	0%	* (50% + 0%)) *	8	=	$0	=	0	0			
	Small	(1.00 * $	25.10 * 0 * 2 * 1 * 4 * 100% *	0%	* (10% + 0%)) *	5	=	$0	=	0	0			
Plasma Welding	Large	(0.50 * $	25.10 * 0 * 3 * 1 * 4 * 100% *	0%	* (50% + 0%)) *	3	=	$0	=	0	0			
	Small	(1.00 * $	25.10 * 0 * 2 * 1 * 4 * 100% *	0%	* (10% + 0%)) *	2	=	$0	=	0	0			

		ADMINTIME	NONSUPEWAGE	JOBPEL	SHIFTS	# SAMPS		% NOTQUART	% ABOVEPEL		% INHOUSE	% LEARN	# PLANTS		Item 12 COSTS	TOTAL HOURS	RESPONSES
Oxy-fuel Cutting	Large	(0.50 *	$ 25.10 *	0 *	3 *	1 *	4 *	100% *	0%	*(	50% +	0%	)) * 8	=	$0	0	0
	Small	(1.00 *	$ 25.10 *	0 *	2 *	1 *	4 *	100% *	0%	*(	10% +	0%	)) * 5	=	$0	0	0
Air Carbon Arc Cutting	Large	(0.50 *	$ 25.10 *	0 *	3 *	1 *	4 *	100% *	0%	*(	50% +	0%	)) * 3	=	$0	0	0
	Small	(1.00 *	$ 25.10 *	0 *	2 *	1 *	4 *	100% *	0%	*(	10% +	0%	)) * 2	=	$0	0	0
Electric Torch Cutting	Large	(0.50 *	$ 25.10 *	0 *	3 *	1 *	4 *	100% *	0%	*(	50% +	0%	)) * 1	=	$0	0	0
	Small	(1.00 *	$ 25.10 *	0 *	2 *	1 *	4 *	100% *	0%	*(	10% +	0%	)) * 0	=	$0	0	0
Thermal Spray Tungsten Cutting	Large	(0.50 *	$ 25.10 *	0 *	3 *	1 *	4 *	100% *	0%	*(	50% +	0%	)) * 1	=	$0	0	0
	Small	(1.00 *	$ 25.10 *	0 *	2 *	1 *	4 *	100% *	0%	*(	10% +	0%	)) * 0	=	$0	0	0
SAW	Large	(0.50 *	$ 25.10 *	0 *	3 *	1 *	4 *	100% *	0%	*(	50% +	0%	)) * 33	=	$0	0	0
	Small	(1.00 *	$ 25.10 *	0 *	2 *	1 *	4 *	100% *	0%	*(	10% +	0%	)) * 18	=	$0	0	0
CONSTRUCTION																	
SMAW	Large	(0.50 *	$ 25.10 *	0 *	3 *	1 *	4 *	100% *	0%	*(	5% +	0%	)) * 304	=	$0	0	0
	Small	(1.00 *	$ 25.10 *	0 *	1 *	1 *	4 *	100% *	0%	*(	0% +	0%	)) * 2,293	=	$0	0	0
Plasma Cutting	Large	(0.50 *	$ 25.10 *	0 *	3 *	1 *	4 *	100% *	0%	*(	5% +	0%	)) * 4	=	$0	0	0
	Small	(1.00 *	$ 25.10 *	0 *	1 *	1 *	4 *	100% *	0%	*(	0% +	0%	)) * 30	=	$0	0	0
GMAW	Large	(0.50 *	$ 25.10 *	0 *	3 *	1 *	4 *	100% *	0%	*(	5% +	0%	)) * 60	=	$0	0	0
	Small	(1.00 *	$ 25.10 *	0 *	1 *	1 *	4 *	100% *	0%	*(	0% +	0%	)) * 458	=	$0	0	0
Brazing	State	(0.50 *	$ 25.10 *	0 *	3 *	1 *	4 *	100% *	0%	*(	5% +	0%	)) * 30	=	$0	0	0
	Local	(1.00 *	$ 25.10 *	0 *	1 *	1 *	4 *	100% *	0%	*(	0% +	0%	)) * 230	=	$0	0	0
Metallizing	State	(0.50 *	$ 25.10 *	0 *	3 *	1 *	4 *	100% *	0%	*(	5% +	0%	)) * 6	=	$0	0	0
	Local	(1.00 *	$ 25.10 *	0 *	1 *	1 *	4 *	100% *	0%	*(	0% +	0%	)) * 46	=	$0	0	0
SECTOR 3. PAINTING																	
AEROSPACE	Large	(0.50 *	$ 31.68 *	1 *	3 *	3 *	4 *	100% *	28%	*(	75% +	0%	)) * 50	=	$188,424	5,948	390
	Small	(1.00 *	$ 31.68 *	1 *	1 *	3 *	4 *	100% *	9%	*(	25% +	0%	)) * 63	=	$16,948	535	17
AUTOBODY	Large	(0.50 *	$ 31.68 *	0 *	1 *	1 *	4 *	100% *	5%	*	75% +	0%	* 331	=	$0	0	50
	Small	(1.00 *	$ 31.68 *	2 *	1 *	1 *	4 *	100% *	5%	*	25% +	0%	* 1,458	=	$146,312	4,619	146
COIL COATING	Large	(0.50 *	$ 31.68 *	0 *	2 *	3 *	4 *	100% *	8%	*	75% +	0%	* 101	=	$0	0	150
	Small	(1.00 *	$ 31.68 *	0 *	1 *	3 *	4 *	100% *	8%	*	25% +	0%	* 18	=	$0	0	0
MARITIME	Large	(0.50 *	$ 31.68 *	1 *	3 *	1 *	4 *	100% *	36%	*	90% +	0%	* 294	=	$573,329	18,098	1,143
	Small	(1.00 *	$ 31.68 *	1 *	1 *	1 *	4 *	100% *	36%	*	10% +	0%	* 508	=	$73,427	2,318	73
CONSTRUCTION	Large	(0.50 *	$ 31.68 *	1 *	3 *	1 *	4 *	100% *	22%	*	75% +	0%	* 765	=	$760,110	23,995	2,056
	Small	(1.00 *	$ 31.68 *	1 *	1 *	1 *	4 *	100% *	22%	*	50% +	0%	* 4,067	=	$1,795,985	56,694	1,790
GOVERNMENT	Large	(0.50 *	$ 31.68 *	1 *	3 *	1 *	4 *	100% *	12%	*	75% +	0%	* 16	=	$8,802	278	18
	Small	(1.00 *	$ 31.68 *	1 *	1 *	1 *	4 *	100% *	12%	*	75% +	0%	* 899	=	$324,784	10,253	324
SECTOR 4. Producers of Chromates																	
ALL	Large	(0.50 *	$ 37.06 *	0 *	3 *	3 *	4 *	100% *	0%	*(	0% +	0%	)) * 2	=	$0	0	0
	Small	(1.00 *	$ 37.06 *	0 *	1 *	3 *	4 *	100% *	0%	*(	0% +	0%	)) * 0	=	$0	0	0
SECTOR 5. Chromate Pigment Procedures																	
ALL	Large	(0.50 *	$ 36.12 *	1 *	2 *	3 *	4 *	100% *	77%	*(	0% +	0%	)) * 2	=	$0	0	0
	Small	(1.00 *	$ 36.12 *	0 *	1 *	3 *	4 *	100% *	0%	*(	0% +	0%	)) * 1	=	$0	0	0

		ADMINTIME	NONSUPEWAGE	JOBPEL	SHIFTS	# SAMPS	% NOTQUART	% ABOVEPEL	% INHOUSE	% LEARN	# PLANTS	Item 12 COSTS	TOTAL HOURS	RESPONSES
SECTOR 6. CCA Producers														
ALL	Large	(0.50 * $	30.60 *	0 *	3 *	3 *	4 * 100% *	0%	*(0% +	0%)) *	3	= $0	0	0
	Small	(1.00 * $	30.60 *	0 *	3 *	0 *	4 * 100% *	0%	*(0% +	0%)) *	0	= $0	0	0
SECTOR 7. Chromium Catalyst Producers														
ALL	Large	(0.50 * $	37.06 *	0 *	3 *	3 *	4 * 100% *	0%	*(80% +	0%)) *	5	= $0	0	0
	Small	(1.00 * $	37.06 *	0 *	1 *	3 *	4 * 100% *	0%	*(0% +	0%)) *	0	= $0	0	0
SECTOR 8. Paint and Coating Producers														
ALL	Large	(0.50 * $	27.60 *	0 *	2 *	3 *	4 * 100% *	0%	*(25% +	75%)) *	87	= $0	0	0
	Small	(1.00 * $	27.60 *	0 *	2 *	3 *	4 * 100% *	0%	*(25% +	75%)) *	137	= $0	0	0
SECTOR 9. Printing Ink Producers														
ALL	Large	(0.50 * $	27.65 *	0 *	1 *	9 *	4 * 100% *	0%	*(10% +	0%)) *	3	= $0	0	0
	Small	(0.50 * $	27.65 *	0 *	1 *	5 *	4 * 100% *	0%	*(10% +	0%)) *	10	= $0	0	0
SECTOR 10. Plastic Colorant Producers and Users														
ALL	Large	(0.50 * $	30.64 *	3 *	3 *	3 *	4 * 100% *	36%	*(0% +	0%)) *	86	= $0	0	0
	Small	(1.00 * $	30.64 *	5 *	1 *	3 *	4 * 100% *	36%	*(0% +	0%)) *	42	= $0	0	0
SECTOR 11. Plating Mixture Producers														
ALL	Large	(0.50 * $	27.50 *	0 *	1 *	3 *	4 * 100% *	0%	*(20% +	0%)) *	4	= $0	0	0
	Small	(1.00 * $	27.50 *	0 *	1 *	3 *	4 * 100% *	0%	*(25% +	0%)) *	3	= $0	0	0
SECTOR 13. Chromium Metal Producers														
ALL	Large	(0.50 * $	37.17 *	0 *	3 *	3 *	4 * 100% *	0%	*(0% +	0%)) *	1	= $0	0	0
	Small	(1.00 * $	37.17 *	0 *	1 *	1 *	4 * 0% *	0%	*(0% +	0%)) *	0	= $0	0	0
SECTOR 14. Iron and Steel Mills														
Alloy and Stainless Steel	Large	(0.50 * $	37.17 *	0 *	3 *	3 *	4 * 100% *	0%	*(10% +	0%)) *	37	= $0	0	0
	Small	(1.00 * $	37.17 *	0 *	1 *	3 *	4 * 100% *	0%	*(10% +	0%)) *	12	= $0	0	0
Carbon Steel	Large	(0.50 * $	37.17 *	0 *	3 *	3 *	4 * 100% *	0%	*(10% +	0%)) *	112	= $0	0	0
	Small	(1.00 * $	37.17 *	0 *	1 *	1 *	4 * 100% *	0%	*(10% +	0%)) *	35	= $0	0	0
SECTOR 14B. Forging Industry														
Reshaping	Large	(0.50 * $	37.17 *	0 *	1 *	3 *	4 * 100% *	63%	*(10% +	0%)) *	37	= $0	0	28
	Small	(1.00 * $	37.17 *	0 *	1 *	3 *	4 * 100% *	63%	*(10% +	0%)) *	34	= $0	0	0
SECTOR 15. Iron and Steel Foundries														
ALL	Large	(0.50 * $	27.12 *	0 *	3 *	5 *	4 * 100% *	0%	*(10% +	0%)) *	178	= $0	0	0
	Small	(1 * $	27.12 *	0 *	1 *	5 *	4 * 100% *	0%	*(10% +	0%)) *	130	= $0	0	0
SECTOR 17. Chromium Dye Producers														
ALL	Large	(0.50 * $	36.12 *	7 *	1 *	21 *	4 * 100% *	62%	*(0% +	0%)) *	3	= $0	0	0
	Small	(1 * $	36.12 *	5 *	1 *	7 *	4 * 100% *	62%	*(0% +	0%)) *	1	= $0	0	0
SECTOR 18. Chromium Sulfate Producers														
ALL	Large	(0.50 * $	39.76 *	0 *	1 *	3 *	4 * 100% *	0%	*(0% +	0%)) *	0	= $0	0	0
	Small	(0.50 * $	39.76 *	0 *	1 *	3 *	4 * 100% *	0%	*(0% +	0%)) *	5	= $0	0	0
SECTOR 19. Chemical Distributors														
ALL	Large	(0.50 * $	28.67 *	0 *	1 *	3 *	4 * 100% *	0%	*(0% +	0%)) *	207	= $0	0	0
	Small	(0.50 * $	28.67 *	0 *	1 *	3 *	4 * 100% *	0%	*(0% +	0%)) *	1,561	= $0	0	0

		ADMINTIME	NONSUPEWAGE	JOBPEL	SHIFTS	# SAMPS	% NOTQUART	% ABOVEPEL	% INHOUSE	% LEARN	# PLANTS	Item 12 COSTS	TOTAL HOURS	RESPONSES
SECTOR 20. Textile Dyeing														
ALL	Large	(0.50 * $	19.13 *	0 *	3 *	3 *	4 * 100% *	0%	*(10% +	0%)) *	347	= $0	0	0
	Small	(0.50 * $	19.13 *	0 *	1 *	2 *	4 * 100% *	0%	*(10% +	0%)) *	703	= $0	0	0
SECTOR 21. Colored Glass Producers														
ALL	Large	(0.50 * $	27.66 *	0 *	3 *	12 *	4 * 100% *	0%	*(10% +	0%)) *	5	= $0	0	0
	Small	(1.00 * $	27.66 *	0 *	1 *	4 *	4 * 100% *	0%	*(10% +	0%)) *	17	= $0	0	0
Fiber, Flat, Container Glass	Large	(0.50 * $	27.66 *	1 *	1 *	1 *	4 * 100% *	20%	*(10% +	0%)) *	78	= $2,379	86	6
	Small	(1.00 * $	27.66 *	1 *	1 *	1 *	4 * 100% *	0%	*(10% +	0%)) *	5	= $0	0	0
SECTOR 22. Printing														
ALL	Large	(0.50 * $	19.97 *	0 *	3 *	2 *	4 * 100% *	0%	*(10% +	0%)) *	92	= $0	0	0
	Small	(0.50 * $	19.97 *	0 *	1 *	2 *	4 * 100% *	0%	*(10% +	0%)) *	367	= $0	0	0
SECTOR 24. Chromium Catalyst Users														
Catalyst Users	Large	(0.50 * $	31.14 *	0 *	3 *	3 *	4 * 100% *	0%	*(10% +	0%)) *	164	= $0	0	0
	Small	(1.00 * $	31.14 *	0 *	1 *	3 *	4 * 100% *	0%	*(10% +	0%)) *	0	= $0	0	0
Chromium Catalyst Service Companies	Large	(0.50 * $	31.14 *	0 *	3 *	3 *	4 * 100% *	0%	*(10% +	0%)) *	21	= $0	0	0
	Small	(1.00 * $	31.14 *	0 *	1 *	3 *	4 * 100% *	0%	*(10% +	0%)) *	4	= $0	0	0
SECTOR 25. Refractory Brick Producers														
ALL	Large	(0.50 * $	24.56 *	0 *	1 *	15 *	4 * 100% *	0%	*(10% +	0%)) *	6	= $0	0	0
	Small	(0.50 * $	24.56 *	0 *	1 *	0 *	4 * 100% *	0%	*(10% +	0%)) *	0	= $0	0	0
SECTOR 26. Woodworking														
General Industry	Large	(0.50 * $	30.76 *	0 *	1 *	2 *	4 * 100% *	0%	*(0% +	0%)) *	175	= $0	0	0
	Small	(1.00 * $	30.76 *	0 *	1 *	2 *	4 * 100% *	0%	*(0% +	0%)) *	93	= $0	0	0
Maritime	Large	(0.50 * $	30.76 *	0 *	1 *	1 *	4 * 100% *	0%	*(0% +	0%)) *	38	= $0	0	0
	Small	(1.00 * $	30.76 *	0 *	1 *	1 *	4 * 100% *	0%	*(0% +	0%)) *	34	= $0	0	0
Construction	Large	(0.50 * $	30.76 *	0 *	1 *	1 *	4 * 100% *	22%	*(0% +	0%)) *	1,290	= $0	0	0
	Small	(1.00 * $	30.76 *	0 *	1 *	1 *	4 * 100% *	22%	*(0% +	0%)) *	5,162	= $0	0	0
Government	STATE	(0.50 * $	30.76 *	0 *	1 *	1 *	4 * 100% *	22%	*(0% +	0%)) *	16	= $0	0	0
	LOCAL	(1.00 * $	30.76 *	0 *	1 *	1 *	4 * 100% *	22%	*(0% +	0%)) *	59	= $0	0	0
SECTOR 27. Solid Waste Inceneration														
GENERAL INDUSTRY	Large	(0.50	$ 26.09 *	0 *	3 *	15 *	4 * 100% *	0%	*(10% *	0%)) *	48	= $0	0	0
	Small	(1.00	$ 26.09 *	0 *	1 *	3 *	4 * 100% *	0%	*(10% *	0%)) *	58	= $0	0	0
GOVERNMENT	STATE	(0.50	$ 26.09 *	0 *	3 *	15 *	4 * 100% *	0%	*(10% *	0%)) *	0	= $0	0	0
	LOCAL	(1.00	$ 26.09 *	0 *	1 *	3 *	4 * 100% *	0%	*(10% *	0%)) *	29	= $0	0	0
SECTOR 30. Superalloy Producers and Users														
ALL	Large	(0.50 * $	26.75 *	0 *	3 *	3 *	4 * 100% *	0%	*(0% +	0%)) *	18	= $0	0	0
	Small	(1.00 * $	26.75 *	0 *	3 *	3 *	4 * 100% *	0%	*(0% +	0%)) *	0	= $0	0	0
SECTOR 31. Construction														
Industrial Rehabilitation	Large	(0.50 * $	30.79 *	0 *	1 *	1 *	4 * 100% *	0%	*(0% +	0%)) *	55	= $0	0	0
	Small	(1.00 * $	30.79 *	0 *	1 *	1 *	4 * 100% *	0%	*(0% +	0%)) *	196	= $0	0	0
	State	(0.50 * $	30.79 *	0 *	1 *	1 *	4 * 100% *	0%	*(0% +	0%)) *	16	= $0	0	0
	Local	(1.00 * $	30.79 *	0 *	1 *	1 *	4 * 100% *	0%	*(0% +	0%)) *	74	= $0	0	0

		ADMINTIME		NONSUPEWAGE		JOBPEL		SHIFTS		# SAMPS		% NOTQUART		% ABOVEPEL		% INHOUSE		% LEARN		# PLANTS		Item 12 COSTS		TOTAL HOURS	RESPONSES
Hazardous Waste-site Work	Large	(0.50	*	$ 30.79	*	0	*	1	*	1	* 4 *	100%	*	0%	* (	10%	+	0%	)) *	44	=	$0	=	0	0
	Small	(1.00	*	$ 30.79	*	0	*	1	*	1	* 4 *	100%	*	0%	* (	10%	+	0%	)) *	143	=	$0	=	0	0
	State	(0.50	*	$ 30.79	*	0	*	1	*	1	* 4 *	100%	*	0%	* (	10%	+	0%	)) *	1	=	$0	=	0	0
	Local	(1.00	*	$ 30.79	*	0	*	1	*	1	* 4 *	100%	*	0%	* (	10%	+	0%	)) *	201	=	$0	=	0	0
Refractory Brick Restoration	Large	(0.50	*	$ 30.79	*	0	*	1	*	1	* 4 *	100%	*	60%	* (	10%	+	0%	)) *	48	=	$0	=	0	12
	Small	(1.00	*	$ 30.79	*	0	*	1	*	1	* 4 *	100%	*	60%	* (	10%	+	0%	)) *	148	=	$0	=	0	0
																		Total		**77,770**		**$4,751,407**		**157,122**	**8,795**

Quarterly Exposure Monitoring (Paragraph (d)(2)(iv)); Contract Cost for an IH Technician to Perform Quarterly Exposure Monitoring

This table calculates the contract cost for the employer to have an outside industrial hygiene technician perform quarterly exposure monitoring.

COST = (QUARTCONTTIME*CONTCOST*4*%NOTQUART*%ABOVEPEL*%CONT) * #PLANTS

Variable

*** QUARTCONTTIME =** Time, in hours, for an outside contractor (industrial hygiene technician) to conduct quarterly-annual monitoring

*** CONTCOST =** Cost per hour for an outside industrial hygiene contractor

*** 4 =** 4 times per year (quarterly)

*** %NOTQUART =** Percent of plants not performing quarterly monitoring requirements

***%ABOVEPEL=** Percent of plants that have an employee in at least one job category above the PEL

%CONT= Percent of plants that will continue to use an outside contractor for monitoring

#PLANTS= Number of plants represented by the model output

	QUARTCONTTIME	CONTCOST	QUARTERLY	%NOTQUART	*%ABOVEPEL	%CONT	PLANTS	Item 13 COSTS
Sector 1. Electroplating								
Hard Chrome	0	$ 106.73	4	100%	0.00%	100%	930	$0
	0	$ 106.73	4	100%	0.00%	100%	1,751	$0
Job Shop Chrome Plater	0	$ 106.73	4	100%	0.00%	100%	448	$0
	12	$ 106.73	4	100%	0.00%	100%	843	$0
Captive Shop Chrome	0	$ 106.73	4	100%	0.00%	100%	508	$0
	0	$ 106.73	4	100%	0.00%	100%	955	$0
Job Shop Plater	0	$ 106.73	4	100%	0.00%	100%	448	$0
	12	$ 106.73	4	100%	0.00%	100%	843	$0
Captive Shop Plater	0	$ 106.73	4	100%	0.00%	100%	509	$0
	0	$ 106.73	4	100%	0.00%	100%	959	$0
Operator	0	$ 106.73	4	100%	0.00%	100%	930	$0
	12	$ 106.73	4	100%	0.00%	100%	1,751	$0
Sector 2. Welding								
SMAW	12	$ 106.73	4	100%	4.85%	90%	3,560	$796,011
	12	$ 106.73	4	100%	4.84%	100%	3,989	$989,012
GMAW	12	$ 106.73	4	100%	0.37%	90%	2,611	$44,545
	12	$ 106.73	4	100%	0.38%	100%	2,925	$56,949

	QUARTCONTTIME		CONTCOST		QUARTERLY		%NOTQUART		**%ABOVEPEL		%CONT		PLANTS		Item 13 COSTS
TIG	(12	*	$ 106.73	*	4	*	100%	* (	0.00%	*	90%	) *	791	=	$0
	(12	*	$ 106.73	*	4	*	100%	* (	0.00%	*	100%	) *	886	=	$0
SAW	(0	*	$ 106.73	*	4	*	100%	* (	0.00%	*	90%	) *	316	=	$0
	(0	*	$ 106.73	*	4	*	100%	* (	0.00%	*	100%	) *	354	=	$0
Plasma Cutting	(12	*	$ 106.73	*	4	*	100%	* (	0.00%	*	90%	) *	79	=	$0
	(12	*	$ 106.73	*	4	*	100%	* (	0.00%	*	100%	) *	89	=	$0
Plasma Welding	(12	*	$ 106.73	*	4	*	100%	* (	0.00%	*	90%	) *	79	=	$0
	(12	*	$ 106.73	*	4	*	100%	* (	0.00%	*	100%	) *	89	=	$0
Resistance Welding	(12	*	$ 106.73	*	4	*	100%	* (	0.00%	*	90%	) *	475	=	$0
	(12	*	$ 106.73	*	4	*	100%	* (	0.00%	*	100%	) *	532	=	$0
MARITIME															
SMAW	(12	*	$ 106.73	*	4	*	100%	* (	0.00%	*	50%	) *	18	=	$0
	(12	*	$ 106.73	*	4	*	100%	* (	0.00%	*	90%	) *	10	=	$0
GMAW	(12	*	$ 106.73	*	4	*	100%	* (	0.00%	*	50%	) *	24	=	$0
	(12	*	$ 106.73	*	4	*	100%	* (	0.00%	*	90%	) *	14	=	$0
TIG	(12	*	$ 106.73	*	4	*	100%	* (	0.00%	*	50%	) *	6	=	$0
	(12	*	$ 106.73	*	4	*	100%	* (	0.00%	*	90%	) *	3	=	$0
FCAW	(12	*	$ 106.73	*	4	*	100%	* (	0.00%	*	50%	) *	117	=	$0
	(12	*	$ 106.73	*	4	*	100%	* (	0.00%	*	90%	) *	66	=	$0
Plasma Cutting	(12	*	$ 106.73	*	4	*	100%	* (	0.00%	*	50%	) *	4	=	$0
	(12	*	$ 106.73	*	4	*	100%	* (	0.00%	*	90%	) *	2	=	$0
Plasma Welding	(12	*	$ 106.73	*	4	*	100%	* (	0.00%	*	50%	) *	2	=	$0
	(12	*	$ 106.73	*	4	*	100%	* (	0.00%	*	90%	) *	1	=	$0
Oxy-fuel Cutting	(12	*	$ 106.73	*	4	*	100%	* (	0.00%	*	50%	) *	4	=	$0
	(12	*	$ 106.73	*	4	*	100%	* (	0.00%	*	90%	) *	2	=	$0
Air Carbon Arc Cutting	(12	*	$ 106.73	*	4	*	100%	* (	0.00%	*	50%	) *	2	=	$0
	(12	*	$ 106.73	*	4	*	100%	* (	0.00%	*	90%	) *	1	=	$0
Electric Torch Cutting	(0	*	$ 106.73	*	4	*	100%	* (	0.00%	*	50%	) *	0	=	$0
	(0	*	$ 106.73	*	4	*	100%	* (	0.00%	*	90%	) *	0	=	$0

		QUARTCONTTIME		CONTCOST		QUARTERLY		%NOTQUART		*%ABOVEPEL		%CONT		PLANTS		Item 13 COSTS
Thermal Spray Tungsten Cutting	(	0	*	$ 106.73	*	4	*	100%	* (	0.00%	*	50%	) *	0	=	$0
	(	0	*	$ 106.73	*	4	*	100%	* (	0.00%	*	90%	) *	0	=	$0
SAW	(	0	*	$ 106.73	*	4	*	100%	* (	0.00%	*	50%	) *	16	=	$0
	(	0	*	$ 106.73	*	4	*	100%	* (	0.00%	*	90%	) *	9	=	$0
CONSTRUCTION																
SMAW	(	12	*	$ 106.73	*	4	*	100%	* (	0.00%	*	95%	) *	202	=	$0
	(	12	*	$ 106.73	*	4	*	100%	* (	0.00%	*	100%	) *	1,620	=	$0
Plasma Cutting	(	0	*	$ 106.73	*	4	*	100%	* (	0.00%	*	95%	) *	3	=	$0
	(	12	*	$ 106.73	*	4	*	100%	* (	0.00%	*	100%	) *	21	=	$0
GMAW	(	0	*	$ 106.73	*	4	*	100%	* (	0.00%	*	95%	) *	41	=	$0
	(	12	*	$ 106.73	*	4	*	100%	* (	0.00%	*	100%	) *	324	=	$0
Brazing	(	12	*	$ 106.73	*	4	*	100%	* (	0.00%	*	95%	) *	20	=	$0
	(	12	*	$ 106.73	*	4	*	100%	* (	0.00%	*	100%	) *	162	=	$0
Metallizing	(	12	*	$ 106.73	*	4	*	100%	* (	0.00%	*	95%	) *	4	=	$0
	(	12	*	$ 106.73	*	4	*	100%	* (	0.00%	*	100%	) *	32	=	$0
GOVERNMENT																
SMAW	(	12	*	$ 106.73	*	4	*	100%	* (	0.00%	*	95%	) *	19	=	$0
	(	12	*	$ 106.73	*	4	*	100%	* (	0.00%	*	100%	) *	594	=	$0
Plasma Cutting	(	12	*	$ 106.73	*	4	*	100%	* (	0.00%	*	95%	) *	0	=	$0
	(	12	*	$ 106.73	*	4	*	100%	* (	0.00%	*	100%	) *	8	=	$0
GMAW	(	12	*	$ 106.73	*	4	*	100%	* (	0.00%	*	95%	) *	4	=	$0
	(	12	*	$ 106.73	*	4	*	100%	* (	0.00%	*	100%	) *	119	=	$0
Brazing	(	12	*	$ 106.73	*	4	*	100%	* (	0.00%	*	95%	) *	2	=	$0
	(	12	*	$ 106.73	*	4	*	100%	* (	0.00%	*	100%	) *	59	=	$0
Metallizing	(	12	*	$ 106.73	*	4	*	100%	* (	0.00%	*	95%	) *	1	=	$0
	(	12	*	$ 106.73	*	4	*	100%	* (	0.00%	*	100%	) *	12	=	$0
Sector 2. Mild Steel Welding																
SMAW	(	12	*	$ 106.73	*	4	*	100%	* (	0.00%	*	90%	) *	4,773	=	$0
	(	12	*	$ 106.73	*	4	*	100%	* (	0.00%	*	100%	) *	4,859	=	$0
GMAW	(	12	*	$ 106.73	*	4	*	100%	* (	0.00%	*	90%	) *	3,500	=	$0
	(	12	*	$ 106.73	*	4	*	100%	* (	0.00%	*	100%	) *	3,563	=	$0

	QUARTCONTTIME		CONTCOST		QUARTERLY		%NOTQUART		**%ABOVEPEL		%CONT		PLANTS		Item 13 COSTS
TIG	(12	*	$ 106.73	*	4	*	100%	* (	0.00%	*	90%	) *	1,060	=	$0
	(12	*	$ 106.73	*	4	*	100%	* (	0.00%	*	100%	) *	1,080	=	$0
SAW	(0	*	$ 106.73	*	4	*	100%	* (	0.00%	*	90%	) *	424	=	$0
	(0	*	$ 106.73	*	4	*	100%	* (	0.00%	*	100%	) *	432	=	$0
Plasma Cutting	(0	*	$ 106.73	*	4	*	100%	* (	0.00%	*	90%	) *	106	=	$0
	(0	*	$ 106.73	*	4	*	100%	* (	0.00%	*	100%	) *	108	=	$0
Plasma Welding	(0	*	$ 106.73	*	4	*	100%	* (	0.00%	*	90%	) *	106	=	$0
	(0	*	$ 106.73	*	4	*	100%	* (	0.00%	*	100%	) *	108	=	$0
Resistance Welding	(0	*	$ 106.73	*	4	*	100%	* (	0.00%	*	90%	) *	636	=	$0
	(0	*	$ 106.73	*	4	*	100%	* (	0.00%	*	100%	) *	648	=	$0
MARITIME															
SMAW	(12	*	$ 106.73	*	4	*	100%	* (	0.00%	*	50%	) *	37	=	$0
	(12	*	$ 106.73	*	4	*	100%	* (	0.00%	*	90%	) *	21	=	$0
GMAW	(12	*	$ 106.73	*	4	*	100%	* (	0.00%	*	50%	) *	54	=	$0
	(12	*	$ 106.73	*	4	*	100%	* (	0.00%	*	90%	) *	30	=	$0
TIG	(0	*	$ 106.73	*	4	*	100%	* (	0.00%	*	50%	) *	13	=	$0
	(0	*	$ 106.73	*	4	*	100%	* (	0.00%	*	90%	) *	7	=	$0
FCAW	(0	*	$ 106.73	*	4	*	100%	* (	0.00%	*	50%	) *	251	=	$0
	(0	*	$ 106.73	*	4	*	100%	* (	0.00%	*	90%	) *	142	=	$0
Plasma Cutting	(0.00	*	$ 106.73	*	4	*	100%	* (	0.00%	*	50%	) *	8	=	$0
	(0.00	*	$ 106.73	*	4	*	100%	* (	0.00%	*	90%	) *	5	=	$0
Plasma Welding	(0.00	*	$ 106.73	*	4	*	100%	* (	0.00%	*	50%	) *	3	=	$0
	(0.00	*	$ 106.73	*	4	*	100%	* (	0.00%	*	90%	) *	2	=	$0
Oxy-fuel Cutting	(0.00	*	$ 106.73	*	4	*	100%	* (	0.00%	*	50%	) *	8	=	$0
	(0.00	*	$ 106.73	*	4	*	100%	* (	0.00%	*	90%	) *	5	=	$0
Air Carbon Arc Cutting	(0.00	*	$ 106.73	*	4	*	100%	* (	0.00%	*	50%	) *	3	=	$0
	(0.00	*	$ 106.73	*	4	*	100%	* (	0.00%	*	90%	) *	2	=	$0
Electric Torch Cutting	(0.00	*	$ 106.73	*	4	*	100%	* (	0.00%	*	50%	) *	1	=	$0
	(0.00	*	$ 106.73	*	4	*	100%	* (	0.00%	*	90%	) *	0	=	$0

	QUARTCONTTIME		CONTCOST		QUARTERLY		%NOTQUART		*%ABOVEPEL		%CONT		PLANTS		Item 13 COSTS
Thermal Spray Tungsten Cutting	(0.00	*	$ 106.73	*	4	*	100%	* (	0.00%	*	50%	) *	1	=	$0
	(0.00	*	$ 106.73	*	4	*	100%	* (	0.00%	*	90%	) *	0	=	$0
SAW	(0.00	*	$ 106.73	*	4	*	100%	* (	0.00%	*	50%	) *	33	=	$0
	(0.00	*	$ 106.73	*	4	*	100%	* (	0.00%	*	90%	) *	18	=	$0
CONSTRUCTION															
SMAW	(0.00	*	$ 106.73	*	4	*	100%	* (	0.00%	*	95%	) *	304	=	$0
	(12.00	*	$ 106.73	*	4	*	100%	* (	0.00%	*	100%	) *	2,293	=	$0
Plasma Cutting	(0.00	*	$ 106.73	*	4	*	100%	* (	0.00%	*	95%	) *	4	=	$0
	(0.00	*	$ 106.73	*	4	*	100%	* (	0.00%	*	100%	) *	30	=	$0
GMAW	(0.00	*	$ 106.73	*	4	*	100%	* (	0.00%	*	95%	) *	60	=	$0
	(0.00	*	$ 106.73	*	4	*	100%	* (	0.00%	*	100%	) *	458	=	$0
Brazing	(0.00	*	$ 106.73	*	4	*	100%	* (	0.00%	*	95%	) *	30	=	$0
	(0.00	*	$ 106.73	*	4	*	100%	* (	0.00%	*	100%	) *	230	=	$0
Metallizing	(0.00	*	$ 106.73	*	4	*	100%	* (	0.00%	*	95%	) *	6	=	$0
	(12.00	*	$ 106.73	*	4	*	100%	* (	0.00%	*	100%	) *	46	=	$0
SECTOR 3. PAINTING															
AEROSPACE	(12.00	*	$ 106.73	*	4	*	100%	* (	28.00%	*	25%	) *	50	=	$17,814
	(12.00	*	$ 106.73	*	4	*	100%	* (	9.00%	*	75%	) *	63	=	$21,631
AUTOBODY	(12.00	*	$ 106.73	*	4	*	100%	* (	5.00%	*	25%	) *	331	=	$21,207
	(12.00	*	$ 106.73	*	4	*	100%	* (	5.00%	*	75%	) *	1,458	=	$280,104
MARITIME	(12.00	*	$ 106.73	*	4	*	100%	* (	36.00%	*	10%	) *	101	=	$18,662
	(12.00	*	$ 106.73	*	4	*	100%	* (	36.00%	*	90%	) *	18	=	$30,538
COIL COATING	(12.00	*	$ 106.73	*	4	*	100%	* (	8.00%	*	25%	) *	294	=	$30,112
	(12.00	*	$ 106.73	*	4	*	100%	* (	8.00%	*	75%	) *	508	=	$156,190
CONSTRUCTION	(12.00	*	$ 106.73	*	4	*	100%	* (	22.00%	*	25%	) *	765	=	$215,582
	(12.00	*	$ 106.73	*	4	*	100%	* (	22.00%	*	50%	) *	4,067	=	$2,292,189
GOVERNMENT	(12.00	*	$ 106.73	*	4	*	100%	* (	12.00%	*	25%	) *	16	=	$2,497
	(12.00	*	$ 106.73	*	4	*	100%	* (	12.00%	*	25%	) *	899	=	$138,173
SECTOR 4. Producers of Chromates															
ALL	(0.00	*	$ 106.73	*	4	*	100%	* (	0.00%	*	100%	) *	2	=	$0
	(0.00	*	$ 106.73	*	4	*	100%	* (	0.00%	*	0%	) *	0	=	$0
SECTOR 5. Chromate Pigment Procedures															

	QUARTCONTTIME		CONTCOST		QUARTERLY		%NOTQUART		%%ABOVEPEL		%CONT		PLANTS		Item 13 COSTS
ALL	(12.00	*	$ 106.73	*	4	*	100%	* (	77.00%	*	100%	) *	2	=	$7,800
	(12.00	*	$ 106.73	*	4	*	100%	* (	0.00%	*	100%	) *	1	=	$0
SECTOR 6. CCA Producers															
ALL	(12.00	*	$ 106.73	*	4	*	100%	* (	0.00%	*	100%	) *	3	=	$0
	(12.00	*	$ 106.73	*	4	*	100%	* (	0.00%	*	0%	) *	0	=	$0
SECTOR 7. Chromium Catalyst Producers															
ALL	(12.00	*	$ 106.73	*	4	*	100%	* (	0.00%	*	20%	) *	5	=	$0
	(12.00	*	$ 106.73	*	4	*	100%	* (	0.00%	*	0%	) *	0	=	$0
SECTOR 8. Paint and Coating Producers															
ALL	(12.00	*	$ 106.73	*	4	*	100%	* (	0.00%	*	75%	) *	87	=	$0
	(12.00	*	$ 106.73	*	4	*	100%	* (	0.00%	*	75%	) *	137	=	$0
SECTOR 9. Printing Ink Producers															
ALL	(0.00	*	$ 106.73	*	4	*	100%	* (	0.00%	*	90%	) *	3	=	$0
	(0.00	*	$ 106.73	*	4	*	100%	* (	0.00%	*	90%	) *	10	=	$0
SECTOR 10. Plastic Colorant Producers and Users															
ALL	(12.00	*	$ 106.73	*	4	*	100%	* (	36.00%	*	100%	) *	86	=	$158,671
	(12.00	*	$ 106.73	*	4	*	100%	* (	36.00%	*	100%	) *	42	=	$77,611
SECTOR 11. Plating Mixture Producers															
ALL	(12.00	*	$ 106.73	*	4	*	100%	* (	0.00%	*	80%	) *	4	=	$0
	(12.00	*	$ 106.73	*	4	*	100%	* (	0.00%	*	75%	) *	3	=	$0
SECTOR 13. Chromium Metal Producers															
ALL	(12.00	*	$ 106.73	*	4	*	100%	* (	0.00%	*	100%	) *	1	=	$0
	(12.00	*	$ 106.73	*	4	*	0%	* (	0.00%	*	0%	) *	0	=	$0
SECTOR 14. Iron and Steel Mills															
ALLOY AND STAINLESS STEEL	(0.00	*	$ 106.73	*	4	*	100%	* (	0.00%	*	90%	) *	37	=	$0
	(0.00	*	$ 106.73	*	4	*	100%	* (	0.00%	*	90%	) *	12	=	$0
CARBON STEEL	(0.00	*	$ 106.73	*	4	*	100%	* (	0.00%	*	90%	) *	112	=	$0
	(0.00	*	$ 106.73	*	4	*	100%	* (	0.00%	*	90%	) *	35	=	$0
SECTOR 14B. FORGING INDUSTRY															
RESHAPING	(0.00	*	$ 106.73	*	4	*	100%	* (	63.00%	*	90%	) *	37	=	$0
	(0.00	*	$ 106.73	*	4	*	100%	* (	63.00%	*	90%	) *	34	=	$0

	QUARTCONTTIME	CONTCOST	QUARTERLY	%NOTQUART	*%ABOVEPEL	%CONT	PLANTS	Item 13 COSTS
SECTOR 15. Iron and Steel Foundries								
ALL	(0.00	* $ 106.73 *	4 *	100% * (	0.00% *	90%	) * 178	= $0
	(0.00	* $ 106.73 *	4 *	100% * (	0.00% *	90%	) * 130	= $0
SECTOR 17. Chromium Dye Producers								
ALL	(12.00	* $ 106.73 *	4 *	100% * (	62.00% *	100%	) * 3	= $9,421
	(12.00	* $ 106.73 *	4 *	100% * (	62.00% *	100%	) * 1	= $3,140
SECTOR 18. Chromium Sulfate Producers								
ALL	(12.00	* $ 106.73 *	4 *	100% * (	0.00% *	0%	) * 0	= $0
	(12.00	* $ 106.73 *	4 *	100% * (	0.00% *	100%	) * 5	= $0
SECTOR 19. Chemical Distributors								
ALL	(12.00	* $ 106.73 *	4 *	100% * (	0.00% *	100%	) * 207	= $0
	(12.00	* $ 106.73 *	4 *	100% * (	0.00% *	100%	) * 1,561	= $0
SECTOR 20. Textile Dyeing								
ALL	(0.00	* $ 106.73 *	4 *	100% * (	0.00% *	90%	) * 347	= $0
	(0.00	* $ 106.73 *	4 *	100% * (	0.00% *	90%	) * 703	= $0
SECTOR 21. Colored Glass Producers								
General Industry	(0.00	* $ 106.73 *	4 *	100% * (	0.00% *	90%	) * 5	= $0
	(0.00	* $ 106.73 *	4 *	100% * (	0.00% *	90%	) * 17	= $0
Fiber, Flat and Container Glass	(12.00	* $ 106.73 *	4 *	100% * (	20.00% *	90%	) * 78	= $71,689
	(12.00	* $ 106.73 *	4 *	100% * (	0.00% *	90%	) * 5	= $0
SECTOR 22. Printing								
ALL	(0.00	* $ 106.73 *	4 *	100% * (	0.00% *	90%	) * 92	= $0
	(0.00	* $ 106.73 *	4 *	100% * (	0.00% *	90%	) * 367	= $0
SECTOR 24. Chromium Catalyst Users								
CATALYST USER	(12.00	* $ 106.73 *	4 *	100% * (	0.00% *	90%	) * 164	= $0
	(12.00	* $ 106.73 *	4 *	100% * (	0.00% *	90%	) * 0	= $0
CATALYST SERVICE COMPANIES	(12.00	* $ 106.73 *	4 *	100% * (	0.00% *	90%	) * 21	= $0
	(12.00	* $ 106.73 *	4 *	100% * (	0.00% *	90%	) * 4	= $0
SECTOR 25. Refractory Brick Producers								
ALL	(0.00	* $ 106.73 *	4 *	100% * (	0.00% *	90%	) * 6	= $0
	(0.00	* $ 106.73 *	4 *	100% * (	0.00% *	90%	) * 0	= $0
SECTOR 26. Woodworking								
ALL	(0.00	* $ 106.73 *	4 *	100% * (	0.00% *	100%	) * 175	= $0
	(0.00	* $ 106.73 *	4 *	100% * (	0.00% *	100%	) * 93	= $0

	QUARTCONTTIME		CONTCOST		QUARTERLY		%NOTQUART		*%ABOVEPEL		%CONT		PLANTS		Item 13 COSTS
MARITIME	(0.00	*	$ 106.73	*	4	*	100%	* (	0.00%	*	100%	) *	38	=	$0
	(0.00	*	$ 106.73	*	4	*	100%	* (	0.00%	*	100%	) *	34	=	$0
CONSTRUCTION	(0.00	*	$ 106.73	*	4	*	100%	* (	22.00%	*	100%	) *	1,290	=	$0
	(0.00	*	$ 106.73	*	4	*	100%	* (	22.00%	*	100%	) *	5,162	=	$0
GOVERNMENT	(0.00	*	$ 106.73	*	4	*	100%	* (	22.00%	*	100%	) *	16	=	$0
	(0.00	*	$ 106.73	*	4	*	100%	* (	22.00%	*	100%	) *	59	=	$0
SECTOR 27. Solid Waste Incerneration															
GENERAL INDUSTRY	(0.00	*	$ 106.73	*	4	*	100%	* (	0.00%	*	90%	) *	48	=	$0
	(0.00	*	$ 106.73	*	4	*	100%	* (	0.00%	*	90%	) *	58	=	$0
GOVERNMENT	(0.00	*	$ 106.73	*	4	*	100%	* (	0.00%	*	25%	) *	0	=	$0
	(0.00	*	$ 106.73	*	4	*	100%	* (	0.00%	*	90%	) *	29	=	$0
SECTOR 30. Superalloy Producers and Users															
ALL	(0.00	*	$ 106.73	*	4	*	100%	* (	0.00%	*	100%	) *	18	=	$0
	(0.00	*	$ 106.73	*	4	*	100%	* (	0.00%	*	0%	) *	0	=	$0
SECTOR 31. Construction															
Industrial Rehabilitation	(0.00	*	$ 106.73	*	4	*	100%	* (	0.00%	*	100%	) *	55	=	$0
	(0.00	*	$ 106.73	*	4	*	100%	* (	0.00%	*	100%	) *	196	=	$0
	(0.00	*	$ 106.73	*	4	*	100%	* (	0.00%	*	100%	) *	16	=	$0
	(0.00	*	$ 106.73	*	4	*	100%	* (	0.00%	*	100%	) *	74	=	$0
Hazardous Waste-site Work	(0.00	*	$ 106.73	*	4	*	100%	* (	0.00%	*	90%	) *	44	=	$0
	(0.00	*	$ 106.73	*	4	*	100%	* (	0.00%	*	90%	) *	143	=	$0
	(0.00	*	$ 106.73	*	4	*	100%	* (	0.00%	*	90%	) *	1	=	$0
	(0.00	*	$ 106.73	*	4	*	100%	* (	0.00%	*	90%	) *	201	=	$0
Refractory Brick Restoration	(0.00	*	$ 106.73	*	4	*	100%	* (	60.00%	*	90%	) *	48	=	$0
	(0.00	*	$ 106.73	*	4	*	100%	* (	60.00%	*	90%	) *	148	=	$0
Total													**77,770**		**$5,439,545**

Quarterly Exposure Monitoring (Paragraph (d)(2)(iv)); Contract Cost for a Laboratory to Conduct Analysis of Quarterly Exposure Monitoring

This table calculates the contract cost for the employer to have a laboratory conduct analysis of air samples collected during quarterly exposure monitoring.

Cost = (SAMPCOST * JOBPEL * SHIFTS * #SAMPS * 4 * %NOTQUART * %ABOVEPEL) * #PLANTS

Variables

- *** SAMPCOST =** Variable cost per sample
- *** JOBPEL =** Number of job categories exposed above the PEL
- *** SHIFTS =** Number of work shifts
- *** #SAMPS =** Number of samples per exposure measurement
- ***4 =** four times per year (quarterly)
- *** %NOTQUART =** Percent of plants not performing quarterly monitoring requirements
- *** %ABOVEPEL =** Percent of plants that have an employee in at least one job category above the PEL
- *** #PLANTS =** Number of plants represented by the model output

		SAMPCOST		JOBPEL		SHIFTS		#SAMPS		QUARTERLY		%NOTQUART		%ABOVEPEL		#PLANTS		Item 13 COST
Sector 1. Electroplating																		
Hard Chrome	Large	($68	*	0	*	2	*	3	*	4	*	100%	*	0.00%	) *	930	=	$0
	Small	($68	*	0	*	1	*	3	*	4	*	100%	*	0.00%	) *	1,751	=	$0
Job Shop Chrome Plater	Large	($68	*	0	*	2	*	3	*	4	*	100%	*	0.00%	) *	448	=	$0
	Small	($68	*	0	*	1	*	3	*	4	*	100%	*	0.00%	) *	843	=	$0
Captive Shop Chrome Plater	Large	($68	*	0	*	2	*	3	*	4	*	100%	*	0.00%	) *	508	=	$0
	Small	($68	*	0	*	1	*	3	*	4	*	100%	*	0.00%	) *	955	=	$0
Job Shop Plater	Large	($68	*	0	*	2	*	3	*	4	*	100%	*	0.00%	) *	448	=	$0
	Small	($68	*	0	*	1	*	3	*	4	*	100%	*	0.00%	) *	843	=	$0
Captive Shop Plater	Large	($68	*	0	*	2	*	3	*	4	*	100%	*	0.00%	) *	509	=	$0
	Small	($68	*	0	*	1	*	3	*	4	*	100%	*	0.00%	) *	959	=	$0
Operator	Large	($68	*	0	*	2	*	3	*	4	*	100%	*	0.00%	) *	930	=	$0
	Small	($68	*	1	*	1	*	3	*	4	*	100%	*	0.00%	) *	1,751	=	$0
Sector 2. Welding		GENERAL INDUSTRY																
SMAW	Large	($68	*	1	*	3	*	2	*	4	*	100%	*	4.85%	) *	3,560	=	$282,016
	Small	($68	*	1	*	1	*	3	*	4	*	100%	*	4.84%	) *	3,989	=	$157,677
GMAW	Large	($68	*	1	*	3	*	2	*	4	*	100%	*	0.37%	) *	2,611	=	$15,782
	Small	($68	*	1	*	1	*	3	*	4	*	100%	*	0.38%	) *	2,925	=	$9,079
TIG	Large	($68	*	1	*	3	*	2	*	4	*	100%	*	0.00%	) *	791	=	$0
	Small	($68	*	1	*	1	*	3	*	4	*	100%	*	0.00%	) *	886	=	$0
SAW	Large	($68	*	0	*	3	*	2	*	4	*	100%	*	0.00%	) *	316	=	$0
	Small	($68	*	0	*	1	*	3	*	4	*	100%	*	0.00%	) *	354	=	$0
Plasma Cutting	Large	($68	*	1	*	3	*	2	*	4	*	100%	*	0.00%	) *	79	=	$0
	Small	($68	*	1	*	1	*	3	*	4	*	100%	*	0.00%	) *	89	=	$0

		SAMPCOST		JOBPEL		SHIFTS		#SAMPS		QUARTERLY		%NOTQUART		%ABOVEPEL		#PLANTS		Item 13 COST
Plasma Welding	Large	($68	*	1	*	3	*	2	*	4	*	100%	*	0.00%	) *	79	=	$0
	Small	($68	*	1	*	1	*	3	*	4	*	100%	*	0.00%	) *	89	=	$0
Resistance Welding	Large	($68	*	1	*	3	*	2	*	4	*	100%	*	0.00%	) *	475	=	$0
	Small	($68	*	1	*	1	*	3	*	4	*	100%	*	0.00%	) *	532	=	$0
MARITIME																		
SMAW	Large	($68	*	1	*	3	*	1	*	4	*	100%	*	0.00%	) *	18	=	$0
	Small	($68	*	1	*	2	*	1	*	4	*	100%	*	0.00%	) *	10	=	$0
GMAW	Large	($68	*	1	*	3	*	1	*	4	*	100%	*	0.00%	) *	24	=	$0
	Small	($68	*	1	*	2	*	1	*	4	*	100%	*	0.00%	) *	14	=	$0
TIG	Large	($68	*	1	*	3	*	1	*	4	*	100%	*	0.00%	) *	6	=	$0
	Small	($68	*	1	*	2	*	1	*	4	*	100%	*	0.00%	) *	3	=	$0
FCAW	Large	($68	*	1	*	3	*	1	*	4	*	100%	*	0.00%	) *	117	=	$0
	Small	($68	*	1	*	2	*	1	*	4	*	100%	*	0.00%	) *	66	=	$0
Plasma Cutting	Large	($68	*	1	*	3	*	1	*	4	*	100%	*	0.00%	) *	4	=	$0
	Small	($68	*	1	*	2	*	1	*	4	*	100%	*	0.00%	) *	2	=	$0
Plasma Welding	Large	($68	*	1	*	3	*	1	*	4	*	100%	*	0.00%	) *	2	=	$0
	Small	($68	*	1	*	2	*	1	*	4	*	100%	*	0.00%	) *	1	=	$0
Oxy-fuel Cutting	Large	($68	*	1	*	3	*	1	*	4	*	100%	*	0.00%	) *	4	=	$0
	Small	($68	*	1	*	2	*	1	*	4	*	100%	*	0.00%	) *	2	=	$0
Air Carbon Arc Cutting	Large	($68	*	1	*	3	*	1	*	4	*	100%	*	0.00%	) *	2	=	$0
	Small	($68	*	1	*	2	*	1	*	4	*	100%	*	0.00%	) *	1	=	$0
Electric Torch Cutting	Large	($68	*	0	*	3	*	1	*	4	*	100%	*	0.00%	) *	0	=	$0
	Small	($68	*	0	*	2	*	1	*	4	*	100%	*	0.00%	) *	0	=	$0
Thermal Spray Tungsten Cutting	Large	($68	*	0	*	3	*	1	*	4	*	100%	*	0.00%	) *	0	=	$0
	Small	($68	*	0	*	2	*	1	*	4	*	100%	*	0.00%	) *	0	=	$0
SAW	Large	($68	*	0	*	3	*	1	*	4	*	100%	*	0.00%	) *	16	=	$0
	Small	($68	*	0	*	2	*	1	*	4	*	100%	*	0.00%	) *	9	=	$0
CONSTRUCTION																		
SMAW	Large	($68	*	1	*	3	*	1	*	4	*	100%	*	0.00%	) *	202	=	$0
	Small	($68	*	1	*	1	*	1	*	4	*	100%	*	0.00%	) *	1,620	=	$0
Plasma Cutting	Large	($68	*	0	*	3	*	1	*	4	*	100%	*	0.00%	) *	3	=	$0
	Small	($68	*	1	*	1	*	1	*	4	*	100%	*	0.00%	) *	21	=	$0
GMAW	Large	($68	*	0	*	3	*	1	*	4	*	100%	*	0.00%	) *	41	=	$0
	Small	($68	*	1	*	1	*	1	*	4	*	100%	*	0.00%	) *	324	=	$0

		SAMPCOST		JOBPEL		SHIFTS		#SAMPS		QUARTERLY		%NOTQUART		%ABOVEPEL		#PLANTS		Item 13 COST
Brazing	State	($68	*	1	*	3	*	1	*	4	*	100%	*	0.00%	) *	20	=	$0
	Local	($68	*	1	*	1	*	1	*	4	*	100%	*	0.00%	) *	162	=	$0
Metallizing	State	($68	*	1	*	3	*	1	*	4	*	100%	*	0.00%	) *	4	=	$0
	Local	($68	*	1	*	1	*	1	*	4	*	100%	*	0.00%	) *	32	=	$0
GOVERNMENT																		
SMAW	Large	($68	*	1	*	1	*	1	*	4	*	100%	*	0.00%	) *	19	=	$0
	Small	($68	*	1	*	1	*	1	*	4	*	100%	*	0.00%	) *	594	=	$0
Plasma Cutting	Large	($68	*	1	*	1	*	1	*	4	*	100%	*	0.00%	) *	0	=	$0
	Small	($68	*	1	*	1	*	1	*	4	*	100%	*	0.00%	) *	8	=	$0
GMAW	Large	($68	*	1	*	1	*	1	*	4	*	100%	*	0.00%	) *	4	=	$0
	Small	($68	*	1	*	1	*	1	*	4	*	100%	*	0.00%	) *	119	=	$0
Brazing	State	($68	*	1	*	1	*	1	*	4	*	100%	*	0.00%	) *	2	=	$0
	Local	($68	*	1	*	1	*	1	*	4	*	100%	*	0.00%	) *	59	=	$0
Metallizing	State	($68	*	1	*	1	*	1	*	4	*	100%	*	0.00%	) *	1	=	$0
	Local	($68	*	1	*	1	*	1	*	4	*	100%	*	0.00%	) *	12	=	$0
Sector 2. Mild Steel Welding																		
SMAW	Large	($68	*	1	*	3	*	2	*	4	*	100%	*	0.00%	) *	4,773	=	$0
	Small	($68	*	1	*	1	*	3	*	4	*	100%	*	0.00%	) *	4,859	=	$0
GMAW	Large	($68	*	1	*	3	*	2	*	4	*	100%	*	0.00%	) *	3,500	=	$0
	Small	($68	*	1	*	1	*	3	*	4	*	100%	*	0.00%	) *	3,563	=	$0
TIG	Large	($68	*	1	*	3	*	2	*	4	*	100%	*	0.00%	) *	1,060	=	$0
	Small	($68	*	1	*	1	*	3	*	4	*	100%	*	0.00%	) *	1,080	=	$0
SAW	Large	($68	*	1	*	3	*	2	*	4	*	100%	*	0.00%	) *	424	=	$0
	Small	($68	*	1	*	1	*	3	*	4	*	100%	*	0.00%	) *	432	=	$0
Plasma Cutting	Large	($68	*	1	*	3	*	2	*	4	*	100%	*	0.00%	) *	106	=	$0
	Small	($68	*	1	*	1	*	3	*	4	*	100%	*	0.00%	) *	108	=	$0
Plasma Welding	Large	($68	*	1	*	3	*	2	*	4	*	100%	*	0.00%	) *	106	=	$0
	Small	($68	*	1	*	1	*	3	*	4	*	100%	*	0.00%	) *	108	=	$0
Resistance Welding	Large	($68	*	1	*	3	*	2	*	4	*	100%	*	0.00%	) *	636	=	$0
	Small	($68	*	1	*	1	*	3	*	4	*	100%	*	0.00%	) *	648	=	$0
MARITIME																		
SMAW	Large	($68	*	0	*	3	*	1	*	4	*	100%	*	0.00%	) *	37	=	$0
	Small	($68	*	0	*	2	*	1	*	4	*	100%	*	0.00%	) *	21	=	$0
GMAW	Large	($68	*	0	*	3	*	1	*	4	*	100%	*	0.00%	) *	54	=	$0
	Small	($68	*	0	*	2	*	1	*	4	*	100%	*	0.00%	) *	30	=	$0

		SAMPCOST		JOBPEL		SHIFTS		#SAMPS		QUARTERLY		%NOTQUART		%ABOVEPEL		#PLANTS		Item 13 COST
TIG	Large	($68	*	0	*	3	*	1	*	4	*	100%	*	0.00%	) *	13	=	$0
	Small	($68	*	0	*	2	*	1	*	4	*	100%	*	0.00%	) *	7	=	$0
FCAW	Large	($68	*	0	*	3	*	1	*	4	*	100%	*	0.00%	) *	251	=	$0
	Small	($68	*	0	*	2	*	1	*	4	*	100%	*	0.00%	) *	142	=	$0
Plasma Cutting	Large	($68	*	0	*	3	*	1	*	4	*	100%	*	0.00%	) *	8	=	$0
	Small	($68	*	0	*	2	*	1	*	4	*	100%	*	0.00%	) *	5	=	$0
Plasma Welding	Large	($68	*	0	*	3	*	1	*	4	*	100%	*	0.00%	) *	3	=	$0
	Small	($68	*	0	*	2	*	1	*	4	*	100%	*	0.00%	) *	2	=	$0
Oxy-fuel Cutting	Large	($68	*	0	*	3	*	1	*	4	*	100%	*	0.00%	) *	8	=	$0
	Small	($68	*	0	*	2	*	1	*	4	*	100%	*	0.00%	) *	5	=	$0
Air Carbon Arc Cutting	Large	($68	*	0	*	3	*	1	*	4	*	100%	*	0.00%	) *	3	=	$0
	Small	($68	*	0	*	2	*	1	*	4	*	100%	*	0.00%	) *	2	=	$0
Electric Torch Cutting	Large	($68	*	0	*	3	*	1	*	4	*	100%	*	0.00%	) *	1	=	$0
	Small	($68	*	0	*	2	*	1	*	4	*	100%	*	0.00%	) *	0	=	$0
Thermal Spray Tungsten Cutting	Large	($68	*	0	*	3	*	1	*	4	*	100%	*	0.00%	) *	1	=	$0
	Small	($68	*	0	*	2	*	1	*	4	*	100%	*	0.00%	) *	0	=	$0
SAW	Large	($68	*	0	*	3	*	1	*	4	*	100%	*	0.00%	) *	33	=	$0
	Small	($68	*	0	*	2	*	1	*	4	*	100%	*	0.00%	) *	18	=	$0
CONSTRUCTION																		
SMAW	Large	($68	*	0	*	3	*	1	*	4	*	100%	*	0.00%	) *	304	=	$0
	Small	($68	*	0	*	1	*	1	*	4	*	100%	*	0.00%	) *	2,293	=	$0
Plasma Cutting	Large	($68	*	0	*	3	*	1	*	4	*	100%	*	0.00%	) *	4	=	$0
	Small	($68	*	0	*	1	*	1	*	4	*	100%	*	0.00%	) *	30	=	$0
GMAW	Large	($68	*	0	*	3	*	1	*	4	*	100%	*	0.00%	) *	60	=	$0
	Small	($68	*	0	*	1	*	1	*	4	*	100%	*	0.00%	) *	458	=	$0
Brazing	Large	($68	*	0	*	3	*	1	*	4	*	100%	*	0.00%	) *	30	=	$0
	Small	($68	*	0	*	1	*	1	*	4	*	100%	*	0.00%	) *	230	=	$0
Metallizing	Large	($68	*	0	*	3	*	1	*	4	*	100%	*	0.00%	) *	6	=	$0
	Small	($68	*	0	*	1	*	1	*	4	*	100%	*	0.00%	) *	46	=	$0
SECTOR 3. PAINTING																		
AEROSPACE	Large	($68	*	1	*	3	*	3	*	4	*	100%	*	28.00%	) *	50	=	$34,080
	Small	($68	*	1	*	1	*	3	*	4	*	100%	*	9.00%	) *	63	=	$4,598
AUTOBODY	Large	($68	*	0	*	1	*	1	*	4	*	100%	*	5.00%	) *	331	=	$0
	Small	($68	*	2	*	1	*	1	*	4	*	100%	*	5.00%	) *	1,458	=	$39,695

		SAMPCOST		JOBPEL		SHIFTS		#SAMPS		QUARTERLY		%NOTQUART		%ABOVEPEL		#PLANTS		Item 13 COST
COIL COATING	Large	($68	*	0	*	2	*	3	*	4	*	100%	*	8.00%	) *	101	=	$0
	Small	($68	*	0	*	1	*	3	*	4	*	100%	*	8.00%	) *	18	=	$0
MARITIME	Large	($68	*	1	*	3	*	1	*	4	*	100%	*	36.00%	) *	294	=	$86,414
	Small	($68	*	1	*	1	*	1	*	4	*	100%	*	36.00%	) *	508	=	$49,803
CONSTRUCTION	Large	($68	*	1	*	3	*	1	*	4	*	100%	*	22.00%	) *	765	=	$137,480
	Small	($68	*	1	*	1	*	1	*	4	*	100%	*	22.00%	) *	4,067	=	$243,628
GOVERNMENT	Large	($68	*	1	*	3	*	1	*	4	*	100%	*	12.00%	) *	16	=	$1,592
	Small	($68	*	1	*	1	*	1	*	4	*	100%	*	12.00%	) *	899	=	$29,372
SECTOR 4. Producers of Chromates																		
ALL	Large	($68	*	0	*	3	*	3	*	4	*	100%	*	0.00%	) *	2	=	$0
	Small	($68	*	0	*	1	*	3	*	4	*	100%	*	0.00%	) *	0	=	$0
SECTOR 5. Chromate Pigment Procedures																		
ALL	Large	($68	*	1	*	2	*	3	*	4	*	100%	*	77.00%	) *	2	=	$2,487
	Small	($68	*	0	*	1	*	3	*	4	*	100%	*	0.00%	) *	1	=	$0
SECTOR 6. CCA Producers																		
ALL	Large	($68	*	0	*	3	*	3	*	4	*	100%	*	0.00%	) *	3	=	$0
	Small	($68	*	0	*	3	*	0	*	4	*	100%	*	0.00%	) *	0	=	$0
SECTOR 7. Chromium Catalyst Producers																		
ALL	Large	($68	*	0	*	3	*	3	*	4	*	100%	*	0.00%	) *	5	=	$0
	Small	($68	*	0	*	1	*	3	*	4	*	100%	*	0.00%	) *	0	=	$0
SECTOR 8. Paint and Coating Producers																		
ALL	Large	($68	*	0	*	2	*	3	*	4	*	100%	*	0.00%	) *	87	=	$0
	Small	($68	*	0	*	2	*	3	*	4	*	100%	*	0.00%	) *	137	=	$0
SECTOR 9. Printing Ink Producers																		
ALL	Large	($60	*	0	*	1	*	9	*	4	*	100%	*	0.00%	) *	3	=	$0
	Small	($60	*	0	*	1	*	5	*	4	*	100%	*	0.00%	) *	10	=	$0
SECTOR 10. Plastic Colorant Producers and Users																		
ALL	Large	($68	*	3	*	3	*	3	*	4	*	100%	*	36.00%	) *	86	=	$227,671
	Small	($68	*	5	*	1	*	3	*	4	*	100%	*	36.00%	) *	42	=	$61,867
SECTOR 11. Plating Mixture Producers																		
ALL	Large	($68	*	0	*	1	*	3	*	4	*	100%	*	0.00%	) *	4	=	$0
	Small	($68	*	0	*	1	*	3	*	4	*	100%	*	0.00%	) *	3	=	$0
SECTOR 13. Chromium Metal Producers																		
ALL	Large	($68	*	0	*	3	*	3	*	4	*	100%	*	0.00%	) *	1	=	$0
	Small	($68	*	0	*	1	*	1	*	4	*	0%	*	0.00%	) *	0	=	$0
SECTOR 14. Iron and Steel Mills																		
ALLOY AND STAINLESS STEEL	Large	($68	*	0	*	3	*	3	*	4	*	100%	*	0.00%	) *	37	=	$0
	Small	($68	*	0	*	1	*	3	*	4	*	100%	*	0.00%	) *	12	=	$0

		SAMPCOST		JOBPEL		SHIFTS		#SAMPS		QUARTERLY		%NOTQUART		%ABOVEPEL		#PLANTS		Item 13 COST
CARBON STEEL	Large	($68	*	0	*	3	*	3	*	4	*	100%	*	0.00%	) *	112	=	$0
	Small	($68	*	0	*	1	*	1	*	4	*	100%	*	0.00%	) *	35	=	$0
14b. FORGING INDUSTRY																		
Reshaping	Large	($68	*	0	*	1	*	3	*	4	*	100%	*	63.00%	) *	37	=	$0
	Small	($68	*	0	*	1	*	3	*	4	*	100%	*	63.00%	) *	34	=	$0
SECTOR 15. Iron and Steel Foundries																		
ALL	Large	($68	*	0	*	3	*	5	*	4	*	100%	*	0.00%	) *	178	=	$0
	Small	($68	*	0	*	1	*	5	*	4	*	100%	*	0.00%	) *	130	=	$0
SECTOR 17. Chromium Dye Producers																		
ALL	Large	($68	*	7	*	1	*	21	*	4	*	100%	*	62.00%	) *	3	=	$73,595
	Small	($68	*	5	*	1	*	7	*	4	*	100%	*	62.00%	) *	1	=	$5,841
SECTOR 18. Chromium Sulfate Producers																		
ALL	Large	($68	*	0	*	1	*	3	*	4	*	100%	*	0.00%	) *	0	=	$0
	Small	($68	*	0	*	1	*	3	*	4	*	100%	*	0.00%	) *	5	=	$0
SECTOR 19. Chemical Distributors																		
ALL	Large	($68	*	0	*	1	*	3	*	4	*	100%	*	0.00%	) *	207	=	$0
	Small	($68	*	0	*	1	*	3	*	4	*	100%	*	0.00%	) *	1,561	=	$0
SECTOR 20. Textile Dyeing																		
ALL	Large	($68	*	0	*	3	*	3	*	4	*	100%	*	0.00%	) *	347	=	$0
	Small	($68	*	0	*	1	*	2	*	4	*	100%	*	0.00%	) *	703	=	$0
SECTOR 21. Colored Glass Producers																		
General Industry	Large	($68	*	0	*	3	*	12	*	4	*	100%	*	0.00%	) *	5	=	$0
	Small	($68	*	0	*	1	*	4	*	4	*	100%	*	0.00%	) *	17	=	$0
Fiber, Flat and Container Glass	Large	($68	*	1	*	1	*	1	*	4	*	100%	*	20.00%	) *	78	=	$4,233
	Small	($68	*	1	*	1	*	1	*	4	*	100%	*	0.00%	) *	5	=	$0
SECTOR 22. Printing																		
ALL	Large	($68	*	0	*	3	*	2	*	4	*	100%	*	0.00%	) *	92	=	$0
	Small	($68	*	0	*	1	*	2	*	4	*	100%	*	0.00%	) *	367	=	$0
SECTOR 24. Chromium Catalyst Users																		
Chromium Users	Large	($68	*	0	*	3	*	3	*	4	*	100%	*	0.00%	) *	164	=	$0
	Small	($68	*	0	*	1	*	3	*	4	*	100%	*	0.00%	) *	0	=	$0
Chromium Catalyst Service Companies	Large	($68	*	0	*	3	*	3	*	4	*	100%	*	0.00%	) *	21	=	$0
	Small	($68	*	0	*	1	*	3	*	4	*	100%	*	0.00%	) *	4	=	$0
SECTOR 25. Refractory Brick Producers																		
ALL	Large	($68	*	0	*	1	*	15	*	4	*	100%	*	0.00%	) *	6	=	$0
	Small	($68	*	0	*	1	*	0	*	4	*	100%	*	0.00%	) *	0	=	$0

		SAMPCOST		JOBPEL		SHIFTS		#SAMPS		QUARTERLY		%NOTQUART		%ABOVEPEL		#PLANTS		Item 13 COST
SECTOR 26. Woodworking																		
General Industry	Large	($68	*	0	*	1	*	2	*	4	*	100%	*	0.00%	) *	175	=	$0
	Small	($68	*	0	*	1	*	2	*	4	*	100%	*	0.00%	) *	93	=	$0
Maritime	Large	($68	*	0	*	1	*	1	*	4	*	100%	*	0.00%	) *	38	=	$0
	Small	($68	*	0	*	1	*	1	*	4	*	100%	*	0.00%	) *	34	=	$0
Construction	Large	($68	*	0	*	1	*	1	*	4	*	22%	*	0.00%	) *	1,290	=	$0
	Small	($68	*	0	*	1	*	1	*	4	*	22%	*	0.00%	) *	5,162	=	$0
Government	State	($68	*	0	*	1	*	1	*	4	*	22%	*	0.00%	) *	16	=	$0
	Local	($68	*	0	*	1	*	1	*	4	*	22%	*	0.00%	) *	59	=	$0
SECTOR 27. Solid Waste Incerneration																		
GENERAL INDUSTRY	Large	($68	*	0	*	3	*	15	*	4	*	100%	*	0.00%	) *	48	=	$0
	Small	($68	*	0	*	1	*	3	*	4	*	100%	*	0.00%	) *	58	=	$0
GOVERNMENT	Large	($68	*	0	*	3	*	15	*	4	*	100%	*	0.00%	) *	0	=	$0
	Small	($68	*	0	*	1	*	3	*	4	*	100%	*	0.00%	) *	29	=	$0
SECTOR 30. Superalloy Producers and Users																		
ALL	Large	($68	*	0	*	3	*	3	*	4	*	100%	*	0.00%	) *	18	=	$0
	Small	($68	*	0	*	3	*	3	*	4	*	100%	*	0.00%	) *	0	=	$0
SECTOR 31. Construction																		
Industrial Rehabilitation	Large	($68	*	0	*	1	*	1	*	4	*	100%	*	0.00%	) *	55	=	$0
	Small	($68	*	0	*	1	*	1	*	4	*	100%	*	0.00%	) *	196	=	$0
	State	($68	*	0	*	1	*	1	*	4	*	100%	*	0.00%	) *	16	=	$0
	Local	($68	*	0	*	1	*	1	*	4	*	100%	*	0.00%	) *	74	=	$0
Hazardous Waste-site Work	Large	($68	*	0	*	1	*	1	*	4	*	100%	*	0.00%	) *	44	=	$0
	Small	($68	*	0	*	1	*	1	*	4	*	100%	*	0.00%	) *	143	=	$0
	State	($68	*	0	*	1	*	1	*	4	*	100%	*	0.00%	) *	1	=	$0
	Local	($68	*	0	*	1	*	1	*	4	*	100%	*	0.00%	) *	201	=	$0
Refractory Brick Restoration	Large	($68	*	0	*	1	*	1	*	4	*	100%	*	60.00%	) *	48	=	$0
	Small	($68	*	0	*	1	*	1	*	4	*	100%	*	60.00%	) *	148	=	$0
Total																**77,770**		**$1,466,910**

Employer Time and Cost to Notify Employees of Quarterly Monitoring Results

HOURS = ((NOTETIME * JOBPEL * SHIFTS * # SAMPS * 4) * %NOTQUART * %ABOVEPEL) * #PLANTS
COST = (SUPWAGE) * BURDEN HOURS

ASSUMPTIONS:
* SUPWAGE = Supervisory wage rate, $/hr.
* NOTETIME = Time, in hours, to notify an employee of the exposure monitoring results
* JOBPEL = Number of job categories exposed above the PEL
* SHIFTS = Number of work shifts
* #SAMPS = Number of samples per exposure measurement
* 4 = 4 times per year (quarterly)
* %NOTQUART = Percent of plants not performing quarterly monitoring requirements
* %ABOVEPEL = Percent of plants that have an employee in at least one job category above the PEL
* #PLANTS = Number of plants represented by the model input

		NOTETIME		JOBPEL		SHIFTS		#SAMPS		4		%NOTQUART		%ABOVEPEL		#PLANTS	Hours	SUPWAGE	Item 12 Cost	Responses
Sector 1. Electroplating																				
Hard Chrome	Large	0.25	*	0	*	2	*	3	*	4	*	100%	*	0.00%	*	930	0	$ 34.98	$0	0
	Small	0.25	*	0	*	1	*	3	*	4	*	100%	*	0.00%	*	1,751	0	$ 34.98	$0	0
Job Shop Chrome Plater	Large	0.25	*	0	*	2	*	3	*	4	*	100%	*	0.00%	*	448	0	$ 34.98	$0	0
	Small	0.25	*	0	*	1	*	3	*	4	*	100%	*	0.00%	*	843	0	$ 34.98	$0	0
Captive Shop Chrome Plater	Large	0.25	*	0	*	2	*	3	*	4	*	100%	*	0.00%	*	508	0	$ 34.98	$0	0
	Small	0.25	*	0	*	1	*	3	*	4	*	100%	*	0.00%	*	955	0	$ 34.98	$0	0
Job Shop Plater	Large	0.25	*	0	*	2	*	3	*	4	*	100%	*	0.00%	*	448	0	$ 34.98	$0	0
	Small	0.25	*	0	*	1	*	3	*	4	*	100%	*	0.00%	*	843	0	$ 34.98	$0	0
Captive Shop Plater	Large	0.25	*	0	*	2	*	3	*	4	*	100%	*	0.00%	*	509	0	$ 34.98	$0	0
	Small	0.25	*	0	*	1	*	3	*	4	*	100%	*	0.00%	*	959	0	$ 34.98	$0	0
Operator	Large	0.25	*	0	*	2	*	3	*	4	*	100%	*	0.00%	*	930	0	$ 34.98	$0	0
	Small	0.25	*	0	*	1	*	3	*	4	*	100%	*	0.00%	*	1,751	0	$ 34.98	$0	0
Sector 2. Welding																				
SMAW	Large	0.25	*	1	*	3	*	2	*	4	*	100%	*	4.85%	*	3,560	1,036	$ 34.43	$35,669	4143
	Small	0.25	*	1	*	1	*	3	*	4	*	100%	*	4.84%	*	3,989	579	$ 34.43	$19,943	2317
GMAW	Large	0.25	*	1	*	3	*	2	*	4	*	100%	*	0.37%	*	2,611	58	$ 34.43	$1,996	232
	Small	0.25	*	1	*	1	*	3	*	4	*	100%	*	0.38%	*	2,925	33	$ 34.43	$1,148	133
TIG	Large	0.25	*	1	*	3	*	2	*	4	*	100%	*	0.00%	*	791	0	$ 34.43	$0	0
	Small	0.25	*	1	*	1	*	3	*	4	*	100%	*	0.00%	*	886	0	$ 34.43	$0	0
SAW	Large	0.25	*	0	*	3	*	2	*	4	*	100%	*	0.00%	*	316	0	$ 34.43	$0	0
	Small	0.25	*	0	*	1	*	3	*	4	*	100%	*	0.00%	*	354	0	$ 34.43	$0	0
Plasma Cutting	Large	0.25	*	1	*	3	*	2	*	4	*	100%	*	0.00%	*	79	0	$ 34.43	$0	0
	Small	0.25	*	1	*	1	*	3	*	4	*	100%	*	0.00%	*	89	0	$ 34.43	$0	0
Plasma Welding	Large	0.25	*	1	*	3	*	2	*	4	*	100%	*	0.00%	*	79	0	$ 34.43	$0	0
	Small	0.25	*	1	*	1	*	3	*	4	*	100%	*	0.00%	*	89	0	$ 34.43	$0	0

		NOTETIME		JOBPEL		SHIFTS		#SAMPS		4		%NOTQUART		%ABOVEPEL		#PLANTS	Hours	SUPWAGE	Item 12 Cost	Responses
Resistance Welding	Large	0.25	*	1	*	3	*	2	*	4	*	100%	*	0.00%	*	475	0	$ 34.43	$0	0
	Small	0.25	*	1	*	1	*	3	*	4	*	100%	*	0.00%	*	532	0	$ 34.43	$0	0
MARITIME																				
SMAW	Large	0.25	*	1	*	1	*	1	*	4	*	100%	*	0.00%	*	18	0	$ 34.43	$0	0
	Small	0.25	*	1	*	1	*	1	*	4	*	100%	*	0.00%	*	10	0	$ 34.43	$0	0
GMAW	Large	0.25	*	1	*	1	*	1	*	4	*	100%	*	0.00%	*	24	0	$ 34.43	$0	0
	Small	0.25	*	1	*	1	*	1	*	4	*	100%	*	0.00%	*	14	0	$ 34.43	$0	0
TIG	Large	0.25	*	1	*	1	*	1	*	4	*	100%	*	0.00%	*	6	0	$ 34.43	$0	0
	Small	0.25	*	1	*	1	*	1	*	4	*	100%	*	0.00%	*	3	0	$ 34.43	$0	0
FCAW	Large	0.25	*	1	*	1	*	1	*	4	*	100%	*	0.00%	*	117	0	$ 34.43	$0	0
	Small	0.25	*	1	*	1	*	1	*	4	*	100%	*	0.00%	*	66	0	$ 34.43	$0	0
Plasma Cutting	Large	0.25	*	1	*	1	*	1	*	4	*	100%	*	0.00%	*	4	0	$ 34.43	$0	0
	Small	0.25	*	1	*	1	*	1	*	4	*	100%	*	0.00%	*	2	0	$ 34.43	$0	0
Plasma Welding	Large	0.25	*	1	*	1	*	1	*	4	*	100%	*	0.00%	*	2	0	$ 34.43	$0	0
	Small	0.25	*	1	*	1	*	1	*	4	*	100%	*	0.00%	*	1	0	$ 34.43	$0	0
Oxy-fuel Cutting	Large	0.25	*	1	*	1	*	1	*	4	*	100%	*	0.00%	*	4	0	$ 34.43	$0	0
	Small	0.25	*	1	*	1	*	1	*	4	*	100%	*	0.00%	*	2	0	$ 34.43	$0	0
Air Carbon Arc Cutting	Large	0.25	*	1	*	1	*	1	*	4	*	100%	*	0.00%	*	2	0	$ 34.43	$0	0
	Small	0.25	*	1	*	1	*	1	*	4	*	100%	*	0.00%	*	1	0	$ 34.43	$0	0
Electric Torch Cutting	Large	0.25	*	0	*	1	*	1	*	4	*	100%	*	0.00%	*	0	0	$ 34.43	$0	0
	Small	0.25	*	0	*	1	*	1	*	4	*	100%	*	0.00%	*	0	0	$ 34.43	$0	0
Thermal Spray Tungsten Cutting	Large	0.25	*	0	*	1	*	1	*	4	*	100%	*	0.00%	*	0	0	$ 34.43	$0	0
	Small	0.25	*	0	*	1	*	1	*	4	*	100%	*	0.00%	*	0	0	$ 34.43	$0	0
SAW	Large	0.25	*	0	*	1	*	1	*	4	*	100%	*	0.00%	*	16	0	$ 34.43	$0	0
	Small	0.25	*	0	*	1	*	1	*	4	*	100%	*	0.00%	*	9	0	$ 34.43	$0	0
CONSTRUCTION																				
SMAW	Large	0.25	*	1	*	3	*	1	*	4	*	100%	*	0.00%	*	202	0	$ 34.43	$0	0
	Small	0.25	*	1	*	1	*	1	*	4	*	100%	*	0.00%	*	1,620	0	$ 34.43	$0	0
Plasma Cutting	Large	0.25	*	0	*	3	*	1	*	4	*	100%	*	0.00%	*	3	0	$ 34.43	$0	0
	Small	0.25	*	1	*	1	*	1	*	4	*	100%	*	0.00%	*	21	0	$ 34.43	$0	0
GMAW	Large	0.25	*	0	*	3	*	1	*	4	*	100%	*	0.00%	*	41	0	$ 34.43	$0	0
	Small	0.25	*	1	*	1	*	1	*	4	*	100%	*	0.00%	*	324	0	$ 34.43	$0	0
Brazing	State	0.25	*	1	*	3	*	1	*	4	*	100%	*	0.00%	*	20	0	$ 34.43	$0	0
	Local	0.25	*	1	*	1	*	1	*	4	*	100%	*	0.00%	*	162	0	$ 34.43	$0	0
Metallizing	State	0.25	*	1	*	3	*	1	*	4	*	100%	*	0.00%	*	4	0	$ 34.43	$0	0
	Local	0.25	*	1	*	1	*	1	*	4	*	100%	*	0.00%	*	32	0	$ 34.43	$0	0

		NOTETIME		JOBPEL		SHIFTS		#SAMPS		4	%NOTQUART		%ABOVEPEL		#PLANTS	Hours	SUPWAGE	Item 12 Cost	Responses
GOVERNMENT																			
SMAW	Large	0.25	*	1	*	1	*	1	*	4	100%	*	0.00%	*	19	0	$ 34.43	$0	0
	Small	0.25	*	1	*	1	*	1	*	4	100%	*	0.00%	*	594	0	$ 34.43	$0	0
Plasma Cutting	Large	0.25	*	0	*	1	*	1	*	4	100%	*	0.00%	*	0	0	$ 34.43	$0	0
	Small	0.25	*	1	*	1	*	1	*	4	100%	*	0.00%	*	8	0	$ 34.43	$0	0
GMAW	Large	0.25	*	1	*	1	*	1	*	4	100%	*	0.00%	*	4	0	$ 34.43	$0	0
	Small	0.25	*	1	*	1	*	1	*	4	100%	*	0.00%	*	119	0	$ 34.43	$0	0
Brazing	State	0.25	*	1	*	1	*	1	*	4	100%	*	0.00%	*	2	0	$ 34.43	$0	0
	Local	0.25	*	1	*	1	*	1	*	4	100%	*	0.00%	*	59	0	$ 34.43	$0	0
Metallizing	State	0.25	*	1	*	1	*	1	*	4	100%	*	0.00%	*	1	0	$ 34.43	$0	0
	Local	0.25	*	1	*	1	*	1	*	4	100%	*	0.00%	*	12	0	$ 34.43	$0	0
2A. Mild Steel Welding																			
SMAW	Large	0.25	*	0	*	1	*	1	*	4	100%	*	0.00%	*	4,773	0	$ 34.43	$0	0
	Small	0.25	*	1	*	1	*	1	*	4	100%	*	0.00%	*	4,859	0	$ 34.43		0
GMAW	Large	0.25	*	1	*	1	*	1	*	4	100%	*	0.00%	*	3,500	0	$ 34.43	$0	0
	Small	0.25	*	1	*	1	*	1	*	4	100%	*	0.00%	*	3,563	0	$ 34.43	$0	0
TIG	Large	0.25	*	1	*	1	*	1	*	4	100%	*	0.00%	*	1,060	0	$ 34.43	$0	0
	Small	0.25	*	1	*	1	*	1	*	4	100%	*	0.00%	*	1,080	0	$ 34.43	$0	0
SAW	Large	0.25	*	1	*	1	*	1	*	4	100%	*	0.00%	*	424	0	$ 34.43	$0	0
	Small	0.25	*	1	*	1	*	1	*	4	100%	*	0.00%	*	432	0	$ 34.43	$0	0
Plasma Cutting	Large	0.25	*	0	*	1	*	1	*	4	100%	*	0.00%	*	106	0	$ 34.43	$0	0
	Small	0.25	*	1	*	1	*	1	*	4	100%	*	0.00%	*	108	0	$ 34.43	$0	0
Plasma Welding	Large	0.25	*	1	*	1	*	1	*	4	100%	*	0.00%	*	106	0	$ 34.43	$0	0
	Small	0.25	*	1	*	1	*	1	*	4	100%	*	0.00%	*	108	0	$ 34.43	$0	0
Resistance Welding	Large	0.25	*	1	*	1	*	1	*	4	100%	*	0.00%	*	636	0	$ 34.43	$0	0
	Small	0.25	*	1	*	1	*	1	*	4	100%	*	0.00%	*	648	0	$ 34.43	$0	0
MARITIME																			
SMAW	Large	0.25	*	0	*	3	*	1	*	4	100%	*	0.00%	*	37	0	$ 34.43	$0	0
	Small	0.25	*	0	*	2	*	1	*	4	100%	*	0.00%	*	21	0	$ 34.43	$0	0
GMAW	Large	0.25	*	0	*	3	*	1	*	4	100%	*	0.00%	*	54	0	$ 34.43	$0	0
	Small	0.25	*	0	*	2	*	1	*	4	100%	*	0.00%	*	30	0	$ 34.43	$0	0
TIG	Large	0.25	*	0	*	3	*	1	*	4	100%	*	0.00%	*	13	0	$ 34.43	$0	0
	Small	0.25	*	0	*	2	*	1	*	4	100%	*	0.00%	*	7	0	$ 34.43	$0	0
FCAW	Large	0.25	*	0	*	3	*	1	*	4	100%	*	0.00%	*	251	0	$ 34.43	$0	0
	Small	0.25	*	0	*	2	*	1	*	4	100%	*	0.00%	*	142	0	$ 34.43	$0	0

		NOTETIME		JOBPEL		SHIFTS		#SAMPS		4	%NOTQUART		%ABOVEPEL		#PLANTS	Hours	SUPWAGE	Item 12 Cost	Responses
Plasma Cutting	Large	0.25	*	0	*	3	*	1	*	4	100%	*	0.00%	*	8	0	$ 34.43	$0	0
	Small	0.25	*	0	*	2	*	1	*	4	100%	*	0.00%	*	5	0	$ 34.43	$0	0
Plasma Welding	Large	0.25	*	0	*	3	*	1	*	4	100%	*	0.00%	*	3	0	$ 34.43	$0	0
	Small	0.25	*	0	*	2	*	1	*	4	100%	*	0.00%	*	2	0	$ 34.43	$0	0
Oxy-fuel Cutting	Large	0.25	*	0	*	3	*	1	*	4	100%	*	0.00%	*	8	0	$ 34.43	$0	0
	Small	0.25	*	0	*	2	*	1	*	4	100%	*	0.00%	*	5	0	$ 34.43	$0	0
Air Carbon Arc Cutting	Large	0.25	*	0	*	3	*	1	*	4	100%	*	0.00%	*	3	0	$ 34.43	$0	0
	Small	0.25	*	0	*	2	*	1	*	4	100%	*	0.00%	*	2	0	$ 34.43	$0	0
Electric Torch Cutting	Large	0.25	*	0	*	3	*	1	*	4	100%	*	0.00%	*	1	0	$ 34.43	$0	0
	Small	0.25	*	0	*	2	*	1	*	4	100%	*	0.00%	*	0	0	$ 34.43	$0	0
Thermal Spray Tungsten Cutting	Large	0.25	*	0	*	3	*	1	*	4	100%	*	0.00%	*	1	0	$ 34.43	$0	0
	Small	0.25	*	0	*	2	*	1	*	4	100%	*	0.00%	*	0	0	$ 34.43	$0	0
SAW	Large	0.25	*	0	*	3	*	1	*	4	100%	*	0.00%	*	33	0	$ 34.43	$0	0
	Small	0.25	*	0	*	2	*	1	*	4	100%	*	0.00%	*	18	0	$ 34.43	$0	0
CONSTRUCTION																			
SMAW	Large	0.25	*	0	*	3	*	1	*	4	100%	*	0.00%	*	304	0	$ 34.43	$0	0
	Small	0.25	*	0	*	2	*	1	*	4	100%	*	0.00%	*	2,293	0	$ 34.43	$0	0
Plasma Cutting	Large	0.25	*	0	*	3	*	1	*	4	100%	*	0.00%	*	4	0	$ 34.43	$0	0
	Small	0.25	*	0	*	2	*	1	*	4	100%	*	0.00%	*	30	0	$ 34.43	$0	0
GMAW	Large	0.25	*	0	*	3	*	1	*	4	100%	*	0.00%	*	60	0	$ 34.43	$0	0
	Small	0.25	*	0	*	2	*	1	*	4	100%	*	0.00%	*	458	0	$ 34.43	$0	0
Brazing	State	0.25	*	0	*	3	*	1	*	4	100%	*	0.00%	*	30	0	$ 34.43	$0	0
	Local	0.25	*	0	*	2	*	1	*	4	100%	*	0.00%	*	230	0	$ 34.43	$0	0
Metallizing	State	0.25	*	0	*	3	*	1	*	4	100%	*	0.00%	*	6	0	$ 34.43	$0	0
	Local	0.25	*	0	*	2	*	1	*	4	100%	*	0.00%	*	46	0	$ 34.43	$0	0
Sector 3. Painting																			
AEROSPACE	Large	0.25	*	1	*	3	*	3	*	4	100%	*	28.00%	*	50	125	$ 43.34	$5,425	501
	Small	0.25	*	1	*	1	*	3	*	4	100%	*	9.00%	*	63	17	$ 43.34	$732	68
AUTOBODY	Large	0.25	*	1	*	3	*	3	*	4	100%	*	5.00%	*	331	149	$ 43.34	$6,459	596
	Small	0.25	*	1	*	1	*	3	*	4	100%	*	5.00%	*	1,458	219	$ 43.34	$9,479	875
COIL COATING	Large	0.25	*	1	*	3	*	3	*	4	100%	*	8.00%	*	101	73	$ 43.34	$3,158	291
	Small	0.25	*	1	*	1	*	3	*	4	100%	*	8.00%	*	18	4	$ 43.34	$191	18
MARITIME	Large	0.25	*	1	*	3	*	3	*	4	100%	*	36.00%	*	294	952	$ 43.34	$41,269	3809
	Small	0.25	*	1	*	1	*	3	*	4	100%	*	36.00%	*	508	549	$ 43.34	$23,784	2195
CONSTRUCTION	Large	0.25	*	1	*	3	*	3	*	4	100%	*	22.00%	*	765	1,515	$ 43.34	$65,656	6060
	Small	0.25	*	1	*	1	*	3	*	4	100%	*	22.00%	*	4,067	2,685	$ 43.34	$116,349	10738

		NOTETIME	JOBPEL	SHIFTS	#SAMPS	4	%NOTQUART	%ABOVEPEL	#PLANTS	Hours	SUPWAGE	Item 12 Cost	Responses
GOVERNMENT	Large	0.25 *	1 *	3 *	3 *	4 *	100% *	12.00% *	16	18	$ 43.34	$760	70
	Small	0.25 *	1 *	1 *	3 *	4 *	100% *	12.00% *	899	324	$ 43.34	$14,027	1295
Sector 4. Producers of Chromates													
ALL	Large	0.25 *	0 *	3 *	3 *	4 *	100% *	0.00% *	2	0	$ 50.86	$0	0
	Small	0.25 *	0 *	1 *	3 *	4 *	100% *	0.00% *	0	0	$ 50.86	$0	0
Sector 5. Chromate Pigment Procedures													
ALL	Large	0.25 *	1 *	2 *	3 *	4 *	100% *	77.00% *	2	9	$ 49.57	$453	37
	Small	0.25 *	0 *	1 *	3 *	4 *	100% *	0.00% *	1	0	$ 49.57	$0	0
Sector 6. CCA Producers													
ALL	Large	0.25 *	0 *	3 *	3 *	4 *	100% *	0.00% *	3	0	$ 41.98	$0	0
	Small	0.25 *	0 *	3 *	0 *	4 *	100% *	0.00% *	0	0	$ 41.98	$0	0
Sector 7. Chromium Catalyst Producers													
ALL	Large	0.25 *	0 *	3 *	3 *	4 *	100% *	0.00% *	5	0	$ 50.86	$0	0
	Small	0.25 *	0 *	1 *	3 *	4 *	100% *	0.00% *	0	0	$ 50.86	$0	0
Sector 8. Paint and Coating Producers													
ALL	Large	0.25 *	0 *	2 *	3 *	4 *	100% *	0.00% *	87	0	$ 37.87	$0	0
	Small	0.25 *	0 *	2 *	3 *	4 *	100% *	0.00% *	137	0	$ 37.87	$0	0
Sector 9. Printing Ink Producers													
ALL	Large	0.25 *	0 *	1 *	9 *	4 *	100% *	0.00% *	3	0	$ 37.94	$0	0
	Small	0.25 *	0 *	1 *	5 *	4 *	100% *	0.00% *	10	0	$ 37.94	$0	0
Sector 10. Plastic Colorant Producers and Users													
ALL	Large	0.25 *	3 *	3 *	3 *	4 *	100% *	36.00% *	86	836	$ 42.04	$35,151	3345
	Small	0.25 *	5 *	1 *	3 *	4 *	100% *	36.00% *	42	227	$ 42.04	$9,552	909
Sector 11. Plating Mixture Producers													
ALL	Large	0.25 *	0 *	1 *	3 *	4 *	100% *	0.00% *	4	0	$ 37.72	$0	0
	Small	0.25 *	0 *	1 *	3 *	4 *	100% *	0.00% *	3	0	$ 37.72	$0	0
Sector 13. Chromium Metal Producers													
ALL	Large	0.25 *	0 *	3 *	3 *	4 *	100% *	0.00% *	1	0	$ 51.02	$0	0
	Small	0.25 *	0 *	1 *	1 *	4 *	0% *	0.00% *	0	0	$ 51.02	$0	0
Sector 14. Iron and Steel Mills													
ALLOY AND STAINLESS STEEL	Large	0.25 *	0 *	3 *	3 *	4 *	100% *	0.00% *	37	0	$ 51.02	$0	0
	Small	0.25 *	0 *	1 *	3 *	4 *	100% *	0.00% *	12	0	$ 51.02	$0	0
CARBON STEEL	Large	0.25 *	3 *	3 *	3 *	4 *	100% *	38.00% *	112	1,147	$ 51.02	$58,523	4588
	Small	0.25 *	1 *	1 *	3 *	4 *	100% *	38.00% *	35	40	$ 51.02	$2,045	160
14B. Forging Industry													
FORGING INDUSTRY	Large	0.25 *	3 *	3 *	3 *	4 *	100% *	38.00% *	37	375	$ 51.02	$19,140	1500
	Small	0.25 *	1 *	1 *	3 *	4 *	100% *	38.00% *	34	39	$ 51.02	$2,004	157

		NOTETIME		JOBPEL		SHIFTS		#SAMPS		4	%NOTQUART		%ABOVEPEL		#PLANTS	Hours	SUPWAGE	Item 12 Cost	Responses
Sector 15. Iron and Steel Foundries																			
ALL	Large	0.25	*	0	*	3	*	5	*	4	100%	*	0.00%	*	178	0	$ 37.21	$0	0
	Small	0.25	*	0	*	1	*	5	*	4	100%	*	0.00%	*	130	0	$ 37.21	$0	0
Sector 17. Chromium Dye Producers																			
ALL	Large	0.25	*	7	*	1	*	21	*	4	100%	*	62.00%	*	3	270	$ 49.57	$13,398	1081
	Small	0.25	*	5	*	1	*	7	*	4	100%	*	62.00%	*	1	21	$ 49.57	$1,063	86
Sector 18. Chromium Sulfate Producers																			
ALL	Large	0.25	*	0	*	1	*	3	*	4	100%	*	0.00%	*	0	0	$ 54.55	$0	0
	Small	0.25	*	0	*	1	*	3	*	4	100%	*	0.00%	*	5	0	$ 54.55	$0	0
Sector 19. Chemical Distributers																			
ALL	Large	0.25	*	0	*	1	*	3	*	4	100%	*	0.00%	*	207	0	$ 39.35	$0	0
	Small	0.25	*	0	*	1	*	3	*	4	100%	*	0.00%	*	1,561	0	$ 39.35	$0	0
Sector 20. Textile Dyeing																			
ALL	Large	0.25	*	0	*	3	*	3	*	4	100%	*	0.00%	*	347	0	$ 26.25	$0	0
	Small	0.25	*	0	*	1	*	2	*	4	100%	*	0.00%	*	703	0	$ 26.25	$0	0
Sector 21. Colored Glass Producers																			
ALL	Large	0.25	*	0	*	3	*	12	*	4	25%	*	0.00%	*	5	0	$ 37.96	$0	0
	Small	0.25	*	0	*	1	*	4	*	4	0%	*	0.00%	*	17	0	$ 37.96	$0	0
Fiber, Flat, and Container Glass	Large	0.25	*	1	*	3	*	1	*	4	25%	*	0.00%	*	78	0	$ 37.96	$0	0
	Small	0.25	*	0	*	1	*	1	*	4	0%	*	0.00%	*	5	0	$ 37.96	$0	0
Sector 22. Printing																			
ALL	Large	0.25	*	0	*	3	*	2	*	4	100%	*	0.00%	*	92	0	$ 27.39	$0	0
	Small	0.25	*	0	*	1	*	2	*	4	100%	*	0.00%	*	367	0	$ 27.39	$0	0
Sector 24. Chromium Catalyst Users																			
Catalyst Users	Large	0.25	*	0	*	3	*	3	*	4	100%	*	13.00%	*	164	0	$ 42.72	$0	0
	Small	0.25	*	0	*	1	*	3	*	4	100%	*	0.00%	*	0	0	$ 42.72	$0	0
Catalyst Companies	Large	0.25	*	2	*	3	*	3	*	4	100%	*	13.00%	*	21	50	$ 42.72	$2,118	198
	Small	0.25	*	0	*	1	*	3	*	4	100%	*	0.00%	*	4	0	$ 42.72	$0	0
Sector 25. Refractory Brick Producers																			
ALL	Large	0.25	*	0	*	1	*	15	*	4	100%	*	0.00%	*	6	0	$ 33.72	$0	0
	Small	0.25	*	0	*	1	*	0	*	4	100%	*	0.00%	*	0	0	$ 33.72	$0	0
Sector 26. Woodworking																			
General Industry	Large	0.25	*	0	*	1	*	2	*	4	100%	*	0.00%	*	175	0	$ 30.34	$0	0
	Small	0.25	*	0	*	1	*	2	*	4	100%	*	0.00%	*	93	0	$ 30.34	$0	0
Maritime	Large	0.25	*	0	*	1	*	2	*	4	100%	*	0.00%	*	38	0	$ 30.34	$0	0
	Small	0.25	*	0	*	1	*	2	*	4	100%	*	0.00%	*	34	0	$ 30.34	$0	0
Construction	Large	0.25	*	1	*	1	*	2	*	4	100%	*	0.00%	*	1,290	0	$ 30.34	$0	0
	Small	0.25	*	1	*	1	*	2	*	4	100%	*	0.00%	*	5,162	0	$ 30.34	$0	0

		NOTETIME		JOBPEL		SHIFTS		#SAMPS		4		%NOTQUART		%ABOVEPEL		#PLANTS	Hours	SUPWAGE	Item 12 Cost	Responses
Government	Large	0.25	*	1	*	1	*	2	*	4	*	100%	*	0.00%	*	16	0	$ 30.34	$0	0
	Small	0.25	*	1	*	1	*	2	*	4	*	100%	*	0.00%	*	59	0	$ 30.34	$0	0
Sector 27. Solid Waste Incerneration																				
General Industry	Large	0.25	*	0	*	3	*	15	*	4	*	100%	*	0.00%	*	48	0	$ 35.80	$0	0
	Small	0.25	*	0	*	1	*	3	*	4	*	100%	*	0.00%	*	58	0	$ 35.80	$0	0
Government	State	0.25	*	0	*	3	*	15	*	4	*	100%	*	0.00%	*	0	0	$ 35.80	$0	0
	Local	0.25	*	0	*	1	*	3	*	4	*	100%	*	0.00%	*	29	0	$ 35.80	$0	0
Sector 30. Superalloy Producers and Users																				
ALL	Large	0.25	*	0	*	3	*	3	*	4	*	100%	*	0.00%	*	18	0	$ 36.71	$0	0
	Small	0.25	*	0	*	3	*	3	*	4	*	100%	*	0.00%	*	0	0	$ 36.71	$0	0
Sector 31. Construction																				
Industrial Rehabilitation	Large	0.25	*	0	*	1	*	3	*	4	*	100%	*	0.00%	*	55	0	$ 42.25	$0	0
	Small	0.25	*	0	*	1	*	2	*	4	*	100%	*	0.00%	*	196	0	$ 42.25	$0	0
	State	0.25	*	0	*	1	*	2	*	4	*	100%	*	0.00%	*	16	0	$ 42.25	$0	0
	Local	0.25	*	0	*	1	*	3	*	4	*	100%	*	0.00%	*	74	0	$ 42.25	$0	0
Hazardous Waste-site Work	Large	0.25	*	0	*	1	*	1	*	4	*	100%	*	0.00%	*	44	0	$ 42.25	$0	0
	Small	0.25	*	0	*	1	*	1	*	4	*	100%	*	0.00%	*	143	0	$ 42.25	$0	0
	State	0.25	*	0	*	1	*	1	*	4	*	100%	*	0.00%	*	1	0	$ 42.25	$0	0
	Local	0.25	*	0	*	1	*	1	*	4	*	100%	*	0.00%	*	201	0	$ 42.25	$0	0
Refractory Brick Restoration	Large	0.25	*	1	*	1	*	1	*	4	*	100%	*	60.00%	*	48	29	$ 42.25	$1,216	115
	Small	0.25	*	1	*	1	*	1	*	4	*	100%	*	60.00%	*	148	89	$ 42.25	$3,739	354
														Total		**77,770**	**11,468**		**$494,447**	**45,870**

Employer Time and Cost to Notify Employees of Initial Monitoring Results

Hours = (NOTETIME * JOBCAT * SHIFTS * #SAMPS * #INIT * %INITADD * #PLANTS)
Cost = BURDEN HOURS * NONSUPWAGE

*** NOTETIME = Time, in hours, to notifiy an employee of the exposure monitoring results by posting .25 hours (15 minutes).**
NONSUPWAGE = Non-supervisory wage rate, $/hr.
*** JOBCAT** = Number of job categories (covering each work area)
*** SHIFTS** = Number of work shifts
*** #SAMPS** = Number of samples per exposure measurement
*** #INIT** = Equals two, reflecting that initial monitoring will have to be conducted twice — with readings below the action level in order for the requirement of semi-annual monitoring to be waived.
*** %INITADD** = Percent of plants that have not satisified initial monitoring requirement
*** #PLANTS** * 5% = Number of plants represented by the model output * 5%

		NOTETIME		NONSUPEWAGE		JOBCAT		SHIFTS		# SAMPS		# INIT		% INITADD		# PLANTS	#PLANTS * 5%		Item 12 COSTS	HOURS	RESPONSES
Sector 1. Electroplating																					
Hard Chrome	Large	(0.25	*	$ 25.49	*	7	*	2	*	3	*	2	*	25%	*	930	47	=	$6,226	244	977
	Small	(0.25	*	$ 25.49	*	7	*	1	*	3	*	2	*	25%	*	1,751	88	=	$5,858	230	919
Job Shop Chrome Plater	Large	(0.25	*	$ 25.49	*	1	*	2	*	3	*	2	*	25%	*	448	22	=	$429	17	67
	Small	(0.25	*	$ 25.49	*	1	*	1	*	3	*	2	*	25%	*	843	42	=	$403	16	63
Captive Shop Chrome Plater	Large	(0.25	*	$ 25.49	*	1	*	2	*	3	*	2	*	25%	*	508	25	=	$485	19	76
	Small	(0.25	*	$ 25.49	*	1	*	1	*	3	*	2	*	25%	*	955	48	=	$457	18	72
Job Shop Plater	Large	(0.25	*	$ 25.49	*	1	*	2	*	3	*	2	*	25%	*	448	22	=	$429	17	67
	Small	(0.25	*	$ 25.49	*	1	*	1	*	3	*	2	*	25%	*	843	42	=	$403	16	63
Captive Shop Plater	Large	(0.25	*	$ 25.49	*	1	*	2	*	3	*	2	*	25%	*	509	25	=	$487	19	76
	Small	(0.25	*	$ 25.49	*	1	*	1	*	3	*	2	*	25%	*	959	48	=	$458	18	72
Operator	Large	(0.25	*	$ 25.49	*	1	*	2	*	3	*	2	*	25%	*	930	47	=	$889	35	140
	Small	(0.25	*	$ 25.49	*	1	*	1	*	3	*	2	*	25%	*	1,751	88	=	$837	33	131
Sector 2. Welding		**GENERAL INDUSTRY**																			
SMAW	Large	(0.25	*	$ 25.10	*	1	*	3	*	2	*	2	*	25%	*	3,560	178	=	$3,350	133	534
	Small	(0.25	*	$ 25.10	*	1	*	1	*	3	*	2	*	25%	*	3,989	199	=	$1,877	75	299
GMAW	Large	(0.25	*	$ 25.10	*	1	*	3	*	2	*	2	*	25%	*	2,611	131	=	$2,458	98	392
	Small	(0.25	*	$ 25.10	*	1	*	1	*	3	*	2	*	25%	*	2,925	146	=	$1,377	55	219
TIG	Large	(0.25	*	$ 25.10	*	1	*	3	*	2	*	2	*	25%	*	791	40	=	$744	30	119
	Small	(0.25	*	$ 25.10	*	1	*	1	*	3	*	2	*	25%	*	886	44	=	$417	17	66
SAW	Large	(0.25	*	$ 25.10	*	1	*	3	*	2	*	2	*	25%	*	316	16	=	$298	12	47
	Small	(0.25	*	$ 25.10	*	1	*	1	*	3	*	2	*	25%	*	354	18	=	$167	7	27
Plasma Cutting	Large	(0.25	*	$ 25.10	*	1	*	3	*	2	*	2	*	25%	*	79	4	=	$74	3	12
	Small	(0.25	*	$ 25.10	*	1	*	1	*	3	*	2	*	25%	*	89	4	=	$42	2	7
Plasma Welding	Large	(0.25	*	$ 25.10	*	1	*	3	*	2	*	2	*	25%	*	79	4	=	$74	3	12
	Small	(0.25	*	$ 25.10	*	1	*	1	*	3	*	2	*	25%	*	89	4	=	$42	2	7
Resistance Welding	Large	(0.25	*	$ 25.10	*	1	*	3	*	2	*	2	*	25%	*	475	24	=	$447	18	71
	Small	(0.25	*	$ 25.10	*	1	*	1	*	3	*	2	*	25%	*	532	27	=	$250	10	40

		NOTETIME		NONSUPEWAGE	JOBCAT	SHIFTS	# SAMPS	# INIT	% INITADD	# PLANTS	#PLANTS * 5%		Item 12 COSTS	HOURS	RESPONSES
MARITIME															
SMAW	Large	(0.25	* $	25.10	1 *	3 *	1 *	2 *	75% *	18	1	=	$25	1	4
	Small	(0.25	* $	25.10	1 *	2 *	1 *	2 *	75% *	10	0	=	$9	0	1
GMAW	Large	(0.25	* $	25.10	1 *	3 *	1 *	2 *	75% *	24	1	=	$34	1	5
	Small	(0.25	* $	25.10	1 *	2 *	1 *	2 *	75% *	14	1	=	$13	1	2
TIG	Large	(0.25	* $	25.10	1 *	3 *	1 *	2 *	75% *	6	0	=	$8	0	1
	Small	(0.25	* $	25.10	1 *	2 *	1 *	2 *	75% *	3	0	=	$3	0	0
FCAW	Large	(0.25	* $	25.10	1 *	3 *	1 *	2 *	75% *	117	6	=	$165	7	26
	Small	(0.25	* $	25.10	1 *	2 *	1 *	2 *	75% *	66	3	=	$62	2	10
Plasma Cutting	Large	(0.25	* $	25.10	1 *	3 *	1 *	2 *	75% *	4	0	=	$5	0	1
	Small	(0.25	* $	25.10	1 *	2 *	1 *	2 *	75% *	2	0	=	$2	0	0
Plasma Welding	Large	(0.25	* $	25.10	1 *	3 *	1 *	2 *	75% *	2	0	=	$3	0	0
	Small	(0.25	* $	25.10	1 *	2 *	1 *	2 *	75% *	1	0	=	$1	0	0
Oxy-fuel Cutting	Large	(0.25	* $	25.10	1 *	3 *	1 *	2 *	75% *	4	0	=	$5	0	1
	Small	(0.25	* $	25.10	1 *	2 *	1 *	2 *	75% *	2	0	=	$2	0	0
Air Carbon Arc Cutting	Large	(0.25	* $	25.10	1 *	3 *	1 *	2 *	75% *	2	0	=	$3	0	0
	Small	(0.25	* $	25.10	1 *	2 *	1 *	2 *	75% *	1	0	=	$1	0	0
Electric Torch Cutting	Large	(0.25	* $	25.10	1 *	3 *	1 *	2 *	75% *	0	0	=	$0	0	0
	Small	(0.25	* $	25.10	1 *	2 *	1 *	2 *	75% *	0	0	=	$0	0	0
Thermal Spray Tungsten Cutting	Large	(0.25	* $	25.10	1 *	3 *	1 *	2 *	75% *	0	0	=	$0	0	0
	Small	(0.25	* $	25.10	1 *	2 *	1 *	2 *	75% *	0	0	=	$0	0	0
SAW	Large	(0.25	* $	25.10	1 *	3 *	1 *	2 *	75% *	16	1	=	$22	1	4
	Small	(0.25	* $	25.10	1 *	2 *	1 *	2 *	75% *	9	0	=	$8	0	1
CONSTRUCTION															
SMAW	Large	(0.25	* $	25.10	1 *	3 *	1 *	2 *	25% *	202	10	=	$95	4	15
	Small	(0.25	* $	25.10	1 *	1 *	1 *	2 *	25% *	1,620	81	=	$254	10	40
Plasma Cutting	Large	(0.25	* $	25.10	1 *	3 *	1 *	2 *	25% *	3	0	=	$1	0	0
	Small	(0.25	* $	25.10	1 *	1 *	1 *	2 *	25% *	21	1	=	$3	0	1
GMAW	Large	(0.25	* $	25.10	1 *	3 *	1 *	2 *	25% *	41	2	=	$19	1	3
	Small	(0.25	* $	25.10	1 *	1 *	1 *	2 *	25% *	324	16	=	$51	2	8
Brazing	Large	(0.25	* $	25.10	1 *	3 *	1 *	2 *	25% *	20	1	=	$10	0	2
	Small	(0.25	* $	25.10	1 *	1 *	1 *	2 *	25% *	162	8	=	$25	1	4
Metallizing	Large	(0.25	* $	25.10	1 *	3 *	1 *	2 *	25% *	4	0	=	$2	0	0
	Small	(0.25	* $	25.10	1 *	1 *	1 *	2 *	25% *	32	2	=	$5	0	1
GOVERNMENT															
SMAW	State	(0.25	* $	25.10	1 *	1 *	1 *	2 *	25% *	19	1	=	$3	0	0
	Local	(0.25	* $	25.10	1 *	1 *	1 *	2 *	25% *	594	30	=	$93	4	15

		NOTETIME		NONSUPEWAGE	JOBCAT		SHIFTS		# SAMPS		# INIT		% INITADD		# PLANTS	#PLANTS * 5%		Item 12 COSTS	HOURS	RESPONSES
Plasma Cutting	State	(0.25	* $	25.10	1	*	1	*	1	*	2	*	25%	*	0	0	=	$0	0	0
	Local	(0.25	* $	25.10	1	*	1	*	1	*	2	*	25%	*	8	0	=	$1	0	0
GMAW	State	(0.25	* $	25.10	1	*	1	*	1	*	2	*	25%	*	4	0	=	$1	0	0
	Local	(0.25	* $	25.10	1	*	1	*	1	*	2	*	25%	*	119	6	=	$19	1	3
Brazing	State	(0.25	* $	25.10	1	*	1	*	1	*	2	*	25%	*	2	0	=	$0	0	0
	Local	(0.25	* $	25.10	1	*	1	*	1	*	2	*	25%	*	59	3	=	$9	0	1
Metallizing	State	(0.25	* $	25.10	1	*	1	*	1	*	2	*	25%	*	1	0	=	$0	0	0
	Local	(0.25	* $	25.10	1	*	1	*	1	*	2	*	25%	*	12	1	=	$2	0	0
Sector 2. Mild Steel Welding				**GENERAL INDUSTRY**																
SMAW	Large	(0.25	* $	25.10	1	*	3	*	2	*	2	*	25%	*	4,773	239	=	$4,492	179	716
	Small	(0.25	* $	25.10	1	*	1	*	3	*	2	*	25%	*	4,859	243	=	$2,287	91	364
GMAW	Large	(0.25	* $	25.10	1	*	3	*	2	*	2	*	25%	*	3,500	175	=	$3,295	131	525
	Small	(0.25	* $	25.10	1	*	1	*	3	*	2	*	25%	*	3,563	178	=	$1,677	67	267
TIG	Large	(0.25	* $	25.10	1	*	3	*	2	*	2	*	25%	*	1,060	53	=	$998	40	159
	Small	(0.25	* $	25.10	1	*	1	*	3	*	2	*	25%	*	1,080	54	=	$508	20	81
SAW	Large	(0.25	* $	25.10	1	*	3	*	2	*	2	*	25%	*	424	21	=	$399	16	64
	Small	(0.25	* $	25.10	1	*	1	*	3	*	2	*	25%	*	432	22	=	$203	8	32
Plasma Cutting	Large	(0.25	* $	25.10	1	*	3	*	2	*	2	*	25%	*	106	5	=	$100	4	16
	Small	(0.25	* $	25.10	1	*	1	*	3	*	2	*	25%	*	108	5	=	$51	2	8
Plasma Welding	Large	(0.25	* $	25.10	1	*	3	*	2	*	2	*	25%	*	106	5	=	$100	4	16
	Small	(0.25	* $	25.10	1	*	1	*	3	*	2	*	25%	*	108	5	=	$51	2	8
Resistance Welding	Large	(0.25	* $	25.10	1	*	3	*	2	*	2	*	25%	*	636	32	=	$599	24	95
	Small	(0.25	* $	25.10	1	*	1	*	3	*	2	*	25%	*	648	32	=	$305	12	49
													MARITIME							
SMAW	Large	(0.25	* $	25.10	1	*	3	*	1	*	2	*	75%	*	37	2	=	$52	2	8
	Small	(0.25	* $	25.10	1	*	2	*	1	*	2	*	75%	*	21	1	=	$20	1	3
GMAW	Large	(0.25	* $	25.10	1	*	3	*	1	*	2	*	75%	*	54	3	=	$76	3	12
	Small	(0.25	* $	25.10	1	*	2	*	1	*	2	*	75%	*	30	2	=	$28	1	5
TIG	Large	(0.25	* $	25.10	1	*	3	*	1	*	2	*	75%	*	13	1	=	$18	1	3
	Small	(0.25	* $	25.10	1	*	2	*	1	*	2	*	75%	*	7	0	=	$6	0	1
FCAW	Large	(0.25	* $	25.10	1	*	3	*	1	*	2	*	75%	*	251	13	=	$354	14	56
	Small	(0.25	* $	25.10	1	*	2	*	1	*	2	*	75%	*	142	7	=	$134	5	21
Plasma Cutting	Large	(0.25	* $	25.10	1	*	3	*	1	*	2	*	75%	*	8	0	=	$11	0	2
	Small	(0.25	* $	25.10	1	*	2	*	1	*	2	*	75%	*	5	0	=	$5	0	1
Plasma Welding	Large	(0.25	* $	25.10	1	*	3	*	1	*	2	*	75%	*	3	0	=	$4	0	1
	Small	(0.25	* $	25.10	1	*	2	*	1	*	2	*	75%	*	2	0	=	$2	0	0
Oxy-fuel Cutting	Large	(0.25	* $	25.10	1	*	3	*	1	*	2	*	75%	*	8	0	=	$11	0	2
	Small	(0.25	* $	25.10	1	*	2	*	1	*	2	*	75%	*	5	0	=	$5	0	1

		NOTETIME		NONSUPEWAGE	JOBCAT		SHIFTS		# SAMPS		# INIT		% INITADD		# PLANTS	#PLANTS * 5%		Item 12 COSTS	HOURS	RESPONSES
Air Carbon Arc Cutting	Large	(0.25	* $	25.10	1	*	3	*	1	*	2	*	75%	*	3	0	=	$4	0	1
	Small	(0.25	* $	25.10	1	*	2	*	1	*	2	*	75%	*	2	0	=	$2	0	0
Electric Torch Cutting	Large	(0.25	* $	25.10	1	*	3	*	1	*	2	*	75%	*	1	0	=	$1	0	0
	Small	(0.25	* $	25.10	1	*	2	*	1	*	2	*	75%	*	0	0	=	$0	0	0
Thermal Spray Tungsten Cutting	Large	(0.25	* $	25.10	1	*	3	*	1	*	2	*	75%	*	1	0	=	$1	0	0
	Small	(0.25	* $	25.10	1	*	2	*	1	*	2	*	75%	*	0	0	=	$0	0	0
SAW	Large	(0.25	* $	25.10	1	*	3	*	1	*	2	*	75%	*	33	2	=	$47	2	7
	Small	(0.25	* $	25.10	1	*	2	*	1	*	2	*	75%	*	18	1	=	$17	1	3
CONSTRUCTION																				
SMAW	Large	(0.25	* $	25.10	1	*	3	*	1	*	2	*	25%	*	304	15	=	$143	6	23
	Small	(0.25	* $	25.10	1	*	1	*	1	*	2	*	25%	*	2,293	115	=	$360	14	57
Plasma Cutting	Large	(0.25	* $	25.10	1	*	3	*	1	*	2	*	25%	*	4	0	=	$2	0	0
	Small	(0.25	* $	25.10	1	*	1	*	1	*	2	*	25%	*	30	2	=	$5	0	1
GMAW	Large	(0.25	* $	25.10	1	*	3	*	1	*	2	*	25%	*	60	3	=	$28	1	5
	Small	(0.25	* $	25.10	1	*	1	*	1	*	2	*	25%	*	458	23	=	$72	3	11
Brazing	Large	(0.25	* $	25.10	1	*	3	*	1	*	2	*	25%	*	30	2	=	$14	1	2
	Small	(0.25	* $	25.10	1	*	1	*	1	*	2	*	25%	*	230	11	=	$36	1	6
Metallizing	Large	(0.25	* $	25.10	1	*	3	*	1	*	2	*	25%	*	6	0	=	$3	0	0
	Small	(0.25	* $	25.10	1	*	1	*	1	*	2	*	25%	*	46	2	=	$7	0	1
SECTOR 3. PAINTING																				
General Industry (Aerospace)	Large	(0.25	* $	31.68	2	*	3	*	3	*	2	*	25%	*	50	2	=	$177	6	22
	Small	(0.25	* $	31.68	1	*	1	*	3	*	2	*	25%	*	63	3	=	$37	1	5
General Industry (Autobody)	Large	(0.25	* $	31.68	2	*	2	*	3	*	2	*	25%	*	331	17	=	$787	25	99
	Small	(0.25	* $	31.68	2	*	1	*	3	*	2	*	25%	*	1,458	73	=	$1,732	55	219
General Industry (Coil Coating)	Large	(0.25	* $	31.68	2	*	2	*	3	*	2	*	25%	*	101	5	=	$240	8	30
	Small	(0.25	* $	31.68	2	*	1	*	3	*	2	*	25%	*	18	1	=	$22	1	3
Maritime	Large	(0.25	* $	31.68	3	*	3	*	1	*	2	*	25%	*	294	15	=	$524	17	66
	Small	(0.25	* $	31.68	3	*	1	*	1	*	2	*	25%	*	508	25	=	$302	10	38
Construction	Large	(0.25	* $	31.68	3	*	3	*	1	*	2	*	25%	*	765	38	=	$1,363	43	172
	Small	(0.25	* $	31.68	3	*	1	*	1	*	2	*	25%	*	4,067	203	=	$2,416	76	305
Government	State	(0.25	* $	31.68	2	*	3	*	1	*	2	*	25%	*	16	1	=	$19	1	2
	Local	(0.25	* $	31.68	2	*	1	*	1	*	2	*	25%	*	899	45	=	$356	11	45
SECTOR 4. Producers of Chromates																				
ALL	Large	(0.25	* $	37.06	4	*	3	*	3	*	2	*	100%	*	2	0	=	$69	2	7
	Small	(0.25	* $	37.06	0	*	1	*	3	*	2	*	0%	*	0	0	=	$0	0	0
SECTOR 5. Chromate Pigment Procedures																				
ALL	Large	(0.25	* $	36.12	9	*	2	*	3	*	2	*	25%	*	2	0	=	$24	1	3
	Small	(0.25	* $	36.12	1	*	1	*	3	*	2	*	25%	*	1	0	=	$1	0	0
SECTOR 6. CCA Producers																				

		NOTETIME		NONSUPEWAGE	JOBCAT		SHIFTS		# SAMPS		# INIT		% INITADD		# PLANTS	#PLANTS * 5%		Item 12 COSTS	HOURS	RESPONSES
ALL	Large	(0.25	* $	30.60	4	*	3	*	3	*	2	*	25%	*	3	0	=	$18	1	2
	Small	(0.25	* $	30.60	0	*	3	*	0	*	2	*	0%	*	0	0	=	$0	0	0
SECTOR 7. Chromium Catalyst Producers																				
ALL	Large	(0.25	* $	37.06	14	*	3	*	3	*	2	*	25%	*	5	0	=	$152	4	16
	Small	(0.25	* $	37.06	0	*	1	*	3	*	2	*	0%	*	0	0	=	$0	0	0
SECTOR 8. Paint and Coating Producers																				
ALL	Large	(0.25	* $	27.60	4	*	2	*	3	*	2	*	25%	*	87	4	=	$362	13	52
	Small	(0.25	* $	27.60	4	*	2	*	3	*	2	*	25%	*	137	7	=	$569	21	82
SECTOR 9. Printing Ink Producers																				
ALL	Large	(0.25	* $	27.65	5	*	1	*	9	*	2	*	100%	*	3	0	=	$94	3	14
	Small	(0.25	* $	27.65	3	*	1	*	5	*	2	*	100%	*	10	1	=	$104	4	15
SECTOR 10. Plastic Colorant Producers and Users																				
ALL	Large	(0.25	* $	30.64	4	*	3	*	3	*	2	*	25%	*	86	4	=	$593	19	77
	Small	(0.25	* $	30.64	1	*	1	*	3	*	2	*	25%	*	42	2	=	$24	1	3
SECTOR 11. Plating Mixture Producers																				
ALL	Large	(0.25	* $	27.50	3	*	1	*	3	*	2	*	75%	*	4	0	=	$21	1	3
	Small	(0.25	* $	27.50	3	*	1	*	3	*	2	*	75%	*	3	0	=	$14	0	2
SECTOR 13. Chromium Metal Producers																				
ALL	Large	(0.25	* $	37.17	16	*	3	*	3	*	2	*	100%	*	1	0	=	$134	4	14
	Small	(0.25	* $	37.17	0	*	1	*	1	*	2	*	0%	*	0	0	=	$0	0	0
SECTOR 14. Iron and Steel Mills																				
Alloy Stainless Steel	Large	(0.25	* $	37.17	8	*	3	*	3	*	2	*	75%	*	37	2	=	$1,870	50	201
	Small	(0.25	* $	37.17	4	*	1	*	3	*	2	*	75%	*	12	1	=	$100	3	11
Carbon Steel	Large	(0.25	* $	37.17	8	*	3	*	3	*	2	*	75%	*	112	6	=	$5,610	151	604
	Small	(0.25	* $	37.17	4	*	1	*	3	*	2	*	75%	*	35	2	=	$294	8	32
14.B Forging																				
Forging Industry	Large	(0.25	* $	37.17	5	*	1	*	3	*	2	*	75%	*	37	2	=	$382	10	41
	Small	(0.25	* $	37.17	2	*	1	*	1	*	2	*	75%	*	34	2	=	$48	1	5
SECTOR 15. Iron and Steel Foundries																				
ALL	Large	(0.25	* $	27.12	9	*	3	*	5	*	2	*	25%	*	178	9	=	$4,079	150	602
	Small	(0.25	* $	27.12	5	*	1	*	5	*	2	*	25%	*	130	6	=	$549	20	81
SECTOR 17. Chromium Dye Producers																				
ALL	Large	(0.25	* $	36.12	7	*	1	*	21	*	2	*	25%	*	3	0	=	$98	3	11
	Small	(0.25	* $	36.12	5	*	1	*	7	*	2	*	25%	*	1	0	=	$8	0	1
SECTOR 18. Chromium Sulfate Producers																				
ALL	Large	(0.25	* $	39.76	0	*	1	*	3	*	2	*	0%	*	0	0	=	$0	0	0
	Small	(0.25	* $	39.76	2	*	1	*	3	*	2	*	100%	*	5	0	=	$31	1	3
SECTOR 19. Chemical Distributors																				
ALL	Large	(0.25	* $	28.67	1	*	1	*	3	*	2	*	75%	*	207	10	=	$334	12	47
	Small	(0.25	* $	28.67	1	*	1	*	3	*	2	*	75%	*	1,561	78	=	$2,518	88	351

		NOTETIME		NONSUPEWAGE	JOBCAT		SHIFTS		# SAMPS		# INIT		% INITADD		# PLANTS	#PLANTS * 5%		Item 12 COSTS	HOURS	RESPONSES
SECTOR 20. Textile Dyeing																				
ALL	Large	(0.25	* $	19.13	3	*	3	*	3	*	2	*	75%	*	347	17	=	$3,355	175	702
	Small	(0.25	* $	19.13	2	*	1	*	2	*	2	*	75%	*	703	35	=	$1,009	53	211
SECTOR 21. Colored Glass Producers																				
General Industry	Large	(0.25	* $	27.66	3	*	3	*	12	*	2	*	75%	*	5	0	=	$304	11	44
	Small	(0.25	* $	27.66	2	*	1	*	4	*	2	*	75%	*	17	1	=	$71	3	10
Fiber, Flat and Container Glass	Large	(0.25	* $	27.66	3	*	3	*	12	*	2	*	75%	*	78	4	=	$4,354	157	630
	Small	(0.25	* $	27.66	2	*	1	*	4	*	2	*	75%	*	5	0	=	$19	1	3
SECTOR 22. Printing																				
ALL	Large	(0.25	* $	19.97	3	*	3	*	2	*	2	*	75%	*	92	5	=	$619	31	124
	Small	(0.25	* $	19.97	2	*	1	*	2	*	2	*	75%	*	367	18	=	$550	28	110
SECTOR 24. Chromium Catalyst Users																				
Catalyst Users	Large	(0.25	* $	31.14	2	*	3	*	3	*	2	*	75%	*	164	8	=	$1,728	55	222
	Small	(0.25	* $	31.14	0	*	1	*	3	*	2	*	0%	*	0	0	=	$0	0	0
Chromium Catalyst Service Companies	Large	(0.25	* $	31.14	2	*	3	*	3	*	2	*	75%	*	21	1	=	$223	7	29
	Small	(0.25	* $	31.14	0	*	1	*	3	*	2	*	0%	*	4	0	=	$0	0	0
SECTOR 25. Refractory Brick Producers																				
ALL	Large	(0.25	* $	24.56	9	*	1	*	15	*	2	*	75%	*	6	0	=	$366	15	60
	Small	(0.25	* $	24.56	0	*	1	*	0	*	2	*	75%	*	0	0	=	$0	0	0
SECTOR 26. Woodworking																				
General Industry	Large	(0.25	* $	22.11	1	*	1	*	1	*	2	*	75%	*	175	9	=	$72	3	13
	Small	(0.25	* $	22.11	1	*	1	*	1	*	2	*	75%	*	93	5	=	$39	2	7
Maritime	Large	(0.25	* $	22.11	1	*	1	*	1	*	2	*	75%	*	38	2	=	$16	1	3
	Small	(0.25	* $	22.11	1	*	1	*	1	*	2	*	75%	*	34	2	=	$14	1	3
Construction	Large	(0.25	* $	30.76	1	*	1	*	1	*	2	*	75%	*	1,290	64	=	$744	24	97
	Small	(0.25	* $	22.11	1	*	1	*	1	*	2	*	75%	*	5,162	258	=	$2,141	97	387
Government	State	(0.25	* $	30.76	1	*	1	*	1	*	2	*	75%	*	16	1	=	$9	0	1
	Local	(0.25	* $	22.11	1	*	1	*	1	*	2	*	75%	*	59	3	=	$24	1	4
SECTOR 27. Solid Waste Incerneration																				
General Industry	Large	(0.25	* $	26.09	6	*	3	*	15	*	2	*	75%	*	48	2	=	$6,362	244	975
	Small	(0.25	* $	26.09	6	*	1	*	3	*	2	*	75%	*	58	3	=	$509	20	78
Government	State	(0.25	* $	26.09	0	*	3	*	15	*	2	*	75%	*	0	0	=	$0	0	0
	Local	(0.25	* $	26.09	6	*	1	*	3	*	2	*	75%	*	29	1	=	$254	10	39
SECTOR 30. Superalloy Producers and Users																				
ALL	Large	(0.25	* $	26.75	12	*	3	*	3	*	2	*	75%	*	18	1	=	$957	36	143
	Small	(0.25	* $	26.75	0	*	3	*	3	*	2	*	0%	*	0	0	=	$0	0	0

		NOTETIME		NONSUPEWAGE	JOBCAT		SHIFTS		# SAMPS		# INIT		% INITADD		# PLANTS	#PLANTS * 5%		Item 12 COSTS	HOURS	RESPONSES
SECTOR 31. Construction - Cement Workers																				
Industrial rehabilitation	Large	(0.25	*	$ 30.79	4	*	1	*	3	*	2	*	75%	*	55	3	=	$382	12	50
	Small	(0.25	*	$ 30.79	4	*	1	*	2	*	2	*	75%	*	196	10	=	$907	29	118
	State	(0.25	*	$ 30.79	1	*	1	*	1	*	2	*	100%	*	16	1	=	$12	0	2
	Local	(0.25	*	$ 30.79	1	*	1	*	1	*	2	*	100%	*	74	4	=	$57	2	7
Hazardous Waste site Work	Large	(0.25	*	$ 30.79	1	*	1	*	1	*	2	*	75%	*	44	2	=	$25	1	3
	Small	(0.25	*	$ 30.79	1	*	1	*	1	*	2	*	75%	*	143	7	=	$83	3	11
	State	(0.25	*	$ 30.79	1	*	1	*	1	*	2	*	75%	*	1	0	=	$1	0	0
	Local	(0.25	*	$ 30.79	1	*	1	*	1	*	2	*	75%	*	201	10	=	$116	4	15
Refractory Brick Restoration	Large	(0.25	*	$ 30.79	1	*	1	*	1	*	2	*	0%	*	48	2	=	$0	0	0
	Small	(0.25	*	$ 30.79	1	*	1	*	1	*	2	*	0%	*	148	7	=	$0	0	0
Cement Workers	Large	(0.25	*	$ 30.79	4	*	1	*	3	*	2	*	75%	*	9,592	480	=	$66,441	2158	8633
	Small	(0.25	*	$ 30.79	4	*	1	*	2	*	2	*	75%	*	76,673	3,834	=	$354,072	11501	46004
	State	(0.25	*	$ 30.79	4	*	1	*	3	*	2	*	75%	*	23	1	=	$160	5	21
	Local	(0.25	*	$ 30.79	4	*	1	*	2	*	2	*	75%	*	616	31	=	$2,844	92	369
SECTOR 32. Pre-Cast Concrete Products																				
ALL	Large	(0.25	*	$ 26.42	7	*	1	*	11	*	2	*	75%	*	1,330	66	=	$50,715	1920	7678
	Small	(0.25	*	$ 26.42	5	*	1	*	6	*	2	*	75%	*	2,187	109	=	$32,504	1230	4921
SECTOR 32A. Ready Mix Concrete																				
ALL	Large	(0.25	*	$ 26.42	7	*	1	*	11	*	2	*	75%	*	1,994	100	=	$76,073	2879	11517
	Small	(0.25	*	$ 26.42	5	*	1	*	6	*	2	*	75%	*	4,653	233	=	$69,157	2618	10470
Total															**174,838**	**8,742**		**$749,837**	**26,091**	**104,365**

Employer Time and Cost to Notify Employees of Semi-Annual Monitoring Results

COST = BURDEN HOURS * NON SUPEWAGE
HOURS = (NOTETIME * NONSUPWAGE * JOBAL * SHIFTS * #SAMPS * 2 * %NOTSEMI * %ABOVEAL * #PLANTS)
Variables

* NOTETIME = Time, in hours, to notifiy an employee of the exposure monitoring results by posting .25 hours (15 mintues).

* NONSUPEWAGE = Non-supervisory wage rate. $/hr.
* JOBAL = Number of job categories exposed at or above the AL
* SHIFTS = Number of work shifts.
* #SAMPS = Number of samples per exposure measurement
* 2 = # times per year (semi-annually)
* %NOTSEMI = Percent of plants not performing semi-annual monitoring requirements.
* %ABOVEAL = Percent of plants that have an employee in at least one job category above the AL.

		NOTETIME	NONSUPEWAGE	JOBAL	SHIFTS	#SAMPS	SEMI-ANNUALLY	%NOTSEMI	%ABOVEAL	#PLANTS	ITEM 12 COST	TOTAL HOURS	RESPONSES
Sector 1. Electroplating													
Hard Chrome	Large	0.25	$ 25.49	1	2	3	2	100%	49.00%	930	$34,863	1,368	5470
	Small	0.25	$ 25.49	1	1	3	2	100%	49.00%	1,751	$32,806	1,287	5148
Job Shop Chrome Plater	Large	0.25	$ 25.49	1	2	3	2	100%	11.00%	448	$3,771	148	592
	Small	0.25	$ 25.49	1	1	3	2	100%	11.00%	843	$3,548	139	557
Captive Shop Chrome Plater	Large	0.25	$ 25.49	1	2	3	2	100%	14.00%	508	$5,434	213	853
	Small	0.25	$ 25.49	1	1	3	2	100%	14.00%	955	$5,115	201	803
Job Shop Plater	Large	0.25	$ 25.49	1	2	3	2	100%	10.00%	448	$3,428	134	538
	Small	0.25	$ 25.49	1	1	3	2	100%	10.00%	843	$3,225	127	506
Captive Shop Plater	Large	0.25	$ 25.49	1	2	3	2	100%	13.00%	509	$5,065	199	795
	Small	0.25	$ 25.49	1	1	3	2	100%	13.00%	959	$4,767	187	748
Operator	Large	0.25	$ 25.49	1	2	3	2	100%	16.00%	930	$11,384	447	1786
	Small	0.25	$ 25.49	1	1	3	2	100%	16.00%	1,751	$10,712	420	1681
Sector 2. Welding		**General Industry**											
SMAW	Large	0.25	$ 25.10	1	3	2	2	100%	0.92%	3,560	$2,466	98	393
	Small	0.25	$ 25.10	1	1	3	2	100%	0.92%	3,989	$1,382	55	220
GMAW	Large	0.25	$ 25.10	1	3	2	2	100%	0.73%	2,611	$1,435	57	229
	Small	0.25	$ 25.10	1	1	3	2	100%	0.73%	2,925	$804	32	128
TIG	Large	0.25	$ 25.10	1	3	2	2	100%	0.00%	791	$0	0	0
	Small	0.25	$ 25.10	1	1	3	2	100%	0.00%	886	$0	0	0
SAW	Large	0.25	$ 25.10	0	3	2	2	100%	0.00%	316	$0	0	0
	Small	0.25	$ 25.10	0	1	3	2	100%	0.00%	354	$0	0	0
Plasma Cutting	Large	0.25	$ 25.10	1	3	2	2	100%	0.00%	79	$0	0	0
	Small	0.25	$ 25.10	1	1	3	2	100%	0.00%	89	$0	0	0

		NOTETIME		NONSUPEWAGE		JOBAL		SHIFTS		#SAMPS		SEMI-ANNUALLY		%NOTSEMI		%ABOVEAL		#PLANTS		ITEM 12 COST	TOTAL HOURS	RESPONSES
Plasma Welding	Large	(0.25	* $	25.10	*	1	*	3	*	2	*	2	*	100%	*	0.00%	*	79	) =	$0	0	0
	Small	(0.25	* $	25.10	*	1	*	1	*	3	*	2	*	100%	*	0.00%	*	89	) =	$0	0	0
Resistance Welding	Large	(0.25	* $	25.10	*	1	*	3	*	2	*	2	*	100%	*	0.00%	*	475	) =	$0	0	0
	Small	(0.25	* $	25.10	*	1	*	1	*	3	*	2	*	100%	*	0.00%	*	532	) =	$0	0	0
MARITIME																						
SMAW	Large	(0.25	* $	25.10	*	1	*	3	*	1	*	2	*	100%	*	0.00%	*	18	) =	$0	0	0
	Small	(0.25	* $	25.10	*	1	*	2	*	1	*	2	*	100%	*	0.00%	*	10	) =	$0	0	0
GMAW	Large	(0.25	* $	25.10	*	1	*	3	*	1	*	2	*	100%	*	0.00%	*	24	) =	$0	0	0
	Small	(0.25	* $	25.10	*	1	*	2	*	1	*	2	*	100%	*	0.00%	*	14	) =	$0	0	0
TIG	Large	(0.25	* $	25.10	*	1	*	3	*	1	*	2	*	100%	*	0.00%	*	6	) =	$0	0	0
	Small	(0.25	* $	25.10	*	1	*	2	*	1	*	2	*	100%	*	0.00%	*	3	) =	$0	0	0
FCAW	Large	(0.25	* $	25.10	*	1	*	3	*	1	*	2	*	100%	*	0.00%	*	117	) =	$0	0	0
	Small	(0.25	* $	25.10	*	1	*	2	*	1	*	2	*	100%	*	0.00%	*	66	) =	$0	0	0
Plasma Cutting	Large	(0.25	* $	25.10	*	1	*	3	*	1	*	2	*	100%	*	0.00%	*	4	) =	$0	0	0
	Small	(0.25	* $	25.10	*	1	*	2	*	1	*	2	*	100%	*	0.00%	*	2	) =	$0	0	0
Plasma Welding	Large	(0.25	* $	25.10	*	1	*	3	*	1	*	2	*	100%	*	0.00%	*	2	) =	$0	0	0
	Small	(0.25	* $	25.10	*	1	*	2	*	1	*	2	*	100%	*	0.00%	*	1	) =	$0	0	0
Oxy-fuel Cutting	Large	(0.25	* $	25.10	*	1	*	3	*	1	*	2	*	100%	*	0.00%	*	4	) =	$0	0	0
	Small	(0.25	* $	25.10	*	1	*	2	*	1	*	2	*	100%	*	0.00%	*	2	) =	$0	0	0
Air Carbon Arc Cutting	Large	(0.25	* $	25.10	*	1	*	3	*	1	*	2	*	100%	*	0.00%	*	2	) =	$0	0	0
	Small	(0.25	* $	25.10	*	1	*	2	*	1	*	2	*	100%	*	0.00%	*	1	) =	$0	0	0
Electric Torch Cutting	Large	(0.25	* $	25.10	*	0	*	3	*	1	*	2	*	100%	*	0.00%	*	0	) =	$0	0	0
	Small	(0.25	* $	25.10	*	0	*	2	*	1	*	2	*	100%	*	0.00%	*	0	) =	$0	0	0
Thermal Spray Tungsten Cutting	Large	(0.25	* $	25.10	*	0	*	3	*	1	*	2	*	100%	*	0.00%	*	0	) =	$0	0	0
	Small	(0.25	* $	25.10	*	0	*	2	*	1	*	2	*	100%	*	0.00%	*	0	) =	$0	0	0
SAW	Large	(0.25	* $	25.10	*	0	*	3	*	1	*	2	*	100%	*	0.00%	*	16	) =	$0	0	0
	Small	(0.25	* $	25.10	*	0	*	2	*	1	*	2	*	100%	*	0.00%	*	9	) =	$0	0	0
CONSTRUCTION																						
SMAW	Large	(0.25	* $	25.10	*	1	*	3	*	1	*	2	*	100%	*	0.00%	*	202	) =	$0	0	0
	Small	(0.25	* $	25.10	*	1	*	1	*	1	*	2	*	100%	*	0.00%	*	1,620	) =	$0	0	0
Plasma Cutting	Large	(0.25	* $	25.10	*	0	*	3	*	1	*	2	*	100%	*	0.00%	*	3	) =	$0	0	0
	Small	(0.25	* $	25.10	*	1	*	1	*	1	*	2	*	100%	*	0.00%	*	21	) =	$0	0	0

		NOTETIME	NONSUPEWAGE	JOBAL	SHIFTS	#SAMPS	SEMI-ANNUALLY	%NOTSEMI	%ABOVEAL	#PLANTS	ITEM 12 COST	TOTAL HOURS	RESPONSES
GMAW	Large	(0.25	* $ 25.10	* 1	* 3	* 1	* 2	* 100%	* 0.00%	* 41	) = $0	0	0
	Small	(0.25	* $ 25.10	* 1	* 1	* 1	* 2	* 100%	* 0.00%	* 324	) = $0	0	0
Brazing	State	(0.25	* $ 25.10	* 1	* 3	* 1	* 2	* 100%	* 0.00%	* 20	) = $0	0	0
	Local	(0.25	* $ 25.10	* 1	* 1	* 1	* 2	* 100%	* 0.00%	* 162	) = $0	0	0
Metallizing	State	(0.25	* $ 25.10	* 1	* 3	* 1	* 2	* 100%	* 0.00%	* 4	) = $0	0	0
	Local	(0.25	* $ 25.10	* 1	* 1	* 1	* 2	* 100%	* 0.00%	* 32	) = $0	0	0
GOVERNMENT													
SMAW	State	(0.25	* $ 25.10	* 1	* 1	* 1	* 2	* 100%	* 0.00%	* 19	) = $0	0	0
	Local	(0.25	* $ 25.10	* 1	* 1	* 1	* 2	* 100%	* 0.00%	* 594	) = $0	0	0
Plasma Cutting	State	(0.25	* $ 25.10	* 1	* 1	* 1	* 2	* 100%	* 0.00%	* 0	) = $0	0	0
	Local	(0.25	* $ 25.10	* 1	* 1	* 1	* 2	* 100%	* 0.00%	* 8	) = $0	0	0
GMAW	State	(0.25	* $ 25.10	* 1	* 1	* 1	* 2	* 100%	* 0.00%	* 4	) = $0	0	0
	Local	(0.25	* $ 25.10	* 1	* 1	* 1	* 2	* 100%	* 0.00%	* 119	) = $0	0	0
Brazing	State	(0.25	* $ 25.10	* 1	* 1	* 1	* 2	* 100%	* 0.00%	* 2	) = $0	0	0
	Local	(0.25	* $ 25.10	* 1	* 1	* 1	* 2	* 100%	* 0.00%	* 59	) = $0	0	0
Metallizing	State	(0.25	* $ 25.10	* 1	* 1	* 1	* 2	* 100%	* 0.00%	* 1	) = $0	0	0
	Local	(0.25	* $ 25.10	* 1	* 1	* 1	* 2	* 100%	* 0.00%	* 12	) = $0	0	0
Sector 2. Mild Steel Welding				**GENERAL INDUSTRY**									
SMAW	Large	(0.25	* $ 25.10	* 0	* 3	* 2	* 2	* 100%	* 0.00%	* 4,773	) = $0	0	0
	Small	(0.25	* $ 25.10	* 0	* 1	* 3	* 2	* 100%	* 0.00%	* 4,859	) = $0	0	0
GMAW	Large	(0.25	* $ 25.10	* 0	* 3	* 2	* 2	* 100%	* 0.00%	* 3,500	) = $0	0	0
	Small	(0.25	* $ 25.10	* 0	* 1	* 3	* 2	* 100%	* 0.00%	* 3,563	) = $0	0	0
TIG	Large	(0.25	* $ 25.10	* 0	* 3	* 2	* 2	* 100%	* 0.00%	* 1,060	) = $0	0	0
	Small	(0.25	* $ 25.10	* 0	* 1	* 3	* 2	* 100%	* 0.00%	* 1,080	) = $0	0	0
SAW	Large	(0.25	* $ 25.10	* 0	* 3	* 2	* 2	* 100%	* 0.00%	* 424	) = $0	0	0
	Small	(0.25	* $ 25.10	* 0	* 1	* 3	* 2	* 100%	* 0.00%	* 432	) = $0	0	0
Plasma Cutting	Large	(0.25	* $ 25.10	* 0	* 3	* 2	* 2	* 100%	* 0.00%	* 106	) = $0	0	0
	Small	(0.25	* $ 25.10	* 0	* 1	* 3	* 2	* 100%	* 0.00%	* 108	) = $0	0	0
Plasma Welding	Large	(0.25	* $ 25.10	* 0	* 3	* 2	* 2	* 100%	* 0.00%	* 106	) = $0	0	0
	Small	(0.25	* $ 25.10	* 0	* 1	* 3	* 2	* 100%	* 0.00%	* 108	) = $0	0	0
Resistance Welding	Large	(0.25	* $ 25.10	* 0	* 3	* 2	* 2	* 100%	* 0.00%	* 636	) = $0	0	0
	Small	(0.25	* $ 25.10	* 0	* 1	* 3	* 2	* 100%	* 0.00%	* 648	) = $0	0	0

		NOTETIME	NONSUPEWAGE	JOBAL	SHIFTS	#SAMPS	SEMI-ANNUALLY	%NOTSEMI	%ABOVEAL	#PLANTS	ITEM 12 COST	TOTAL HOURS	RESPONSES
MARITIME													
SMAW	Large	(0.25	* $ 25.10	* 0	* 3	* 1	* 2	* 100%	* 0.00%	* 37	) = $0	0	0
	Small	(0.25	* $ 25.10	* 0	* 2	* 1	* 2	* 100%	* 0.00%	* 21	) = $0	0	0
GMAW	Large	(0.25	* $ 25.10	* 0	* 3	* 1	* 2	* 100%	* 0.00%	* 54	) = $0	0	0
	Small	(0.25	* $ 25.10	* 0	* 2	* 1	* 2	* 100%	* 0.00%	* 30	) = $0	0	0
TIG	Large	(0.25	* $ 25.10	* 0	* 3	* 1	* 2	* 100%	* 0.00%	* 13	) = $0	0	0
	Small	(0.25	* $ 25.10	* 0	* 2	* 1	* 2	* 100%	* 0.00%	* 7	) = $0	0	0
FCAW	Large	(0.25	* $ 25.10	* 0	* 3	* 1	* 2	* 100%	* 0.00%	* 251	) = $0	0	0
	Small	(0.25	* $ 25.10	* 0	* 2	* 1	* 2	* 100%	* 0.00%	* 142	) = $0	0	0
Plasma Cutting	Large	(0.25	* $ 25.10	* 0	* 3	* 1	* 2	* 100%	* 0.00%	* 8	) = $0	0	0
	Small	(0.25	* $ 25.10	* 0	* 2	* 1	* 2	* 100%	* 0.00%	* 5	) = $0	0	0
Plasma Welding	Large	(0.25	* $ 25.10	* 0	* 3	* 1	* 2	* 100%	* 0.00%	* 3	) = $0	0	0
	Small	(0.25	* $ 25.10	* 0	* 2	* 1	* 2	* 100%	* 0.00%	* 2	) = $0	0	0
Oxy-fuel Cutting	Large	(0.25	* $ 25.10	* 0	* 3	* 1	* 2	* 100%	* 0.00%	* 8	) = $0	0	0
	Small	(0.25	* $ 25.10	* 0	* 2	* 1	* 2	* 100%	* 0.00%	* 5	) = $0	0	0
Air Carbon Arc Cutting	Large	(0.25	* $ 25.10	* 0	* 3	* 1	* 2	* 100%	* 0.00%	* 3	) = $0	0	0
	Small	(0.25	* $ 25.10	* 0	* 2	* 1	* 2	* 100%	* 0.00%	* 2	) = $0	0	0
Electric Torch Cutting	Large	(0.25	* $ 25.10	* 0	* 3	* 1	* 2	* 100%	* 0.00%	* 1	) = $0	0	0
	Small	(0.25	* $ 25.10	* 0	* 2	* 1	* 2	* 100%	* 0.00%	* 0	) = $0	0	0
Thermal Spray Tungsten Cutting	Large	(0.25	* $ 25.10	* 0	* 3	* 1	* 2	* 100%	* 0.00%	* 1	) = $0	0	0
	Small	(0.25	* $ 25.10	* 0	* 2	* 1	* 2	* 100%	* 0.00%	* 0	) = $0	0	0
SAW	Large	(0.25	* $ 25.10	* 0	* 3	* 1	* 2	* 100%	* 0.00%	* 33	) = $0	0	0
	Small	(0.25	* $ 25.10	* 0	* 2	* 1	* 2	* 100%	* 0.00%	* 18	) = $0	0	0
CONSTRUCTION													
SMAW	Large	(0.25	* $ 25.10	* 0	* 3	* 1	* 2	* 100%	* 0.00%	* 304	) = $0	0	0
	Small	(0.25	* $ 25.10	* 0	* 1	* 1	* 2	* 100%	* 0.00%	* 2,293	) = $0	0	0
Plasma Cutting	Large	(0.25	* $ 25.10	* 0	* 3	* 1	* 2	* 100%	* 0.00%	* 4	) = $0	0	0
	Small	(0.25	* $ 25.10	* 0	* 1	* 1	* 2	* 100%	* 0.00%	* 30	) = $0	0	0
GMAW	Large	(0.25	* $ 25.10	* 0	* 3	* 1	* 2	* 100%	* 0.00%	* 60	) = $0	0	0
	Small	(0.25	* $ 25.10	* 0	* 1	* 1	* 2	* 100%	* 0.00%	* 458	) = $0	0	0
Brazing	Large	(0.25	* $ 25.10	* 0	* 3	* 1	* 2	* 100%	* 0.00%	* 30	) = $0	0	0
	Small	(0.25	* $ 25.10	* 0	* 1	* 1	* 2	* 100%	* 0.00%	* 230	) = $0	0	0

		NOTETIME	NONSUPEWAGE	JOBAL	SHIFTS	#SAMPS	SEMI-ANNUALLY	%NOTSEMI	%ABOVEAL	#PLANTS	ITEM 12 COST	TOTAL HOURS	RESPONSES
Metallizing	Large	(0.25 * $	25.10 *	0 *	3 *	1 *	2 *	100% *	0.00% *	6) =	$0	0	0
	Small	(0.25 * $	25.10 *	0 *	1 *	1 *	2 *	100% *	0.00% *	46) =	$0	0	0
SECTOR 3. PAINTING													
AEROSPACE	Large	(0.25 * $	31.68 *	1 *	3 *	3 *	2 *	100% *	28.00% *	50) =	$1,983	63	250
	Small	(0.25 * $	31.68 *	1 *	1 *	3 *	2 *	100% *	9.00% *	63) =	$268	8	34
General Industry (Autobody)	Large	(0.25 * $	31.68 *	1 *	1 *	1 *	2 *	100% *	5.00% *	331) =	$262	8	33
	Small	(0.25 * $	31.68 *	1 *	1 *	1 *	2 *	100% *	5.00% *	1,458) =	$1,155	36	146
General Industry (Coil Coating)	Large	(0.25 * $	31.68 *	1 *	2 *	3 *	2 *	100% *	8.00% *	101) =	$769	24	97
	Small	(0.25 * $	31.68 *	1 *	1 *	3 *	2 *	100% *	8.00% *	18) =	$70	2	9
Maritime	Large	(0.25 * $	31.68 *	2 *	3 *	1 *	2 *	100% *	36.00% *	294) =	$10,055	317	1270
	Small	(0.25 * $	31.68 *	0 *	1 *	1 *	2 *	100% *	36.00% *	508) =	$0	0	0
Construction	Large	(0.25 * $	31.68 *	1 *	3 *	1 *	2 *	100% *	22.00% *	765) =	$7,998	252	1010
	Small	(0.25 * $	31.68 *	1 *	1 *	1 *	2 *	100% *	22.00% *	4,067) =	$14,174	447	1790
Government	State	(0.25 * $	31.68 *	1 *	3 *	1 *	2 *	100% *	12.00% *	16) =	$93	3	12
	Local	(0.25 * $	31.68 *	1 *	1 *	1 *	2 *	100% *	12.00% *	899) =	$1,709	54	216
SECTOR 4. Producers of Chromates													
ALL	Large	(0.25 * $	37.06 *	3 *	3 *	3 *	2 *	100% *	45.00% *	2) =	$469	13	51
	Small	(0.25 * $	37.06 *	0 *	1 *	3 *	2 *	100% *	0.00% *	0) =	$0	0	0
SECTOR 5. Chromate Pigment Procedures													
ALL	Large	(0.25 * $	36.12 *	5 *	2 *	3 *	2 *	100% *	71.00% *	2) =	$761	21	84
	Small	(0.25 * $	36.12 *	1 *	1 *	3 *	2 *	100% *	50.00% *	1) =	$27	1	3
SECTOR 6. CCA Producers													
ALL	Large	(0.25 * $	30.60 *	1 *	3 *	3 *	2 *	100% *	33.00% *	3) =	$116	4	15
	Small	(0.25 * $	30.60 *	0 *	3 *	0 *	2 *	100% *	0.00% *	0) =	$0	0	0
SECTOR 7. Chromium Catalyst Producers													
ALL	Large	(0.25 * $	37.06 *	6 *	3 *	3 *	2 *	100% *	100.00% *	5) =	$5,207	141	562
	Small	(0.25 * $	37.06 *	0 *	1 *	3 *	2 *	100% *	0.00% *	0) =	$0	0	0
SECTOR 8. Paint and Coating Producers													
ALL	Large	(0.25 * $	27.60 *	1 *	2 *	3 *	2 *	100% *	13.00% *	87) =	$941	34	136
	Small	(0.25 * $	27.60 *	1 *	2 *	3 *	2 *	100% *	13.00% *	137) =	$1,479	54	214
SECTOR 9. Printing Ink Producers													
ALL	Large	(0.25 * $	27.65 *	3 *	1 *	9 *	2 *	100% *	69.00% *	3) =	$776	28	112
	Small	(0.25 * $	27.65 *	2 *	1 *	5 *	2 *	100% *	69.00% *	10) =	$958	35	139
SECTOR 10. Plastic Colorant Producers and Users													
ALL	Large	(0.25 * $	30.64 *	2 *	3 *	3 *	2 *	100% *	51.00% *	86) =	$12,101	395	1580
	Small	(0.25 * $	30.64 *	2 *	1 *	3 *	2 *	100% *	51.00% *	42) =	$1,973	64	258
SECTOR 11. Plating Mixture Producers													

		NOTETIME		NONSUPEWAGE		JOBAL	SHIFTS	#SAMPS	SEMI-ANNUALLY		%NOTSEMI		%ABOVEAL		#PLANTS		ITEM 12 COST	TOTAL HOURS	RESPONSES
ALL	Large	(0.25	* $	27.50	* 1	* 1	* 3	* 2	*	100%	*	100.00%	*	4	) =	$182	7	27
	Small	(0.25	* $	27.50	* 1	* 1	* 3	* 2	*	100%	*	100.00%	*	3	) =	$122	4	18
SECTOR 13. Chromium Metal Producers																			
ALL	Large	(0.25	* $	37.17	* 2	* 3	* 3	* 2	*	100%	*	100.00%	*	1	) =	$335	9	36
	Small	(0.25	* $	37.17	* 0	* 1	* 1	* 2	*	0%	*	0.00%	*	0	) =	$0	0	0
SECTOR 14. Iron and Steel Mills																			
Alloy and Stainless Steel	Large	(0.25	* $	37.17	* 3	* 3	* 3	* 2	*	100%	*	38.00%	*	37	) =	$7,107	191	765
	Small	(0.25	* $	37.17	* 1	* 1	* 3	* 2	*	100%	*	38.00%	*	12	) =	$253	7	27
Carbon Steel	Large	(0.25	* $	37.17	* 0	* 3	* 3	* 2	*	100%	*	0.00%	*	112	) =	$0	0	0
	Small	(0.25	* $	37.17	* 0	* 1	* 1	* 2	*	100%	*	0.00%	*	35	) =	$0	0	0
SECTOR 14B. Forging Industry																			
Reshaping	Large	(0.25	* $	37.17	* 4	* 1	* 3	* 2	*	100%	*	63.00%	*	37	) =	$5,138	138	553
	Small	(0.25	* $	37.17	* 2	* 1	* 3	* 2	*	100%	*	63.00%	*	34	) =	$2,421	65	260
SECTOR 15. Iron and Steel Foundries																			
ALL	Large	(0.25	* $	27.12	* 6	* 3	* 5	* 2	*	100%	*	100.00%	*	178	) =	$217,522	8,020	32080
	Small	(0.25	* $	27.12	* 5	* 1	* 5	* 2	*	100%	*	100.00%	*	130	) =	$43,944	1,620	6481
SECTOR 17. Chromium Dye Producers																			
ALL	Large	(0.25	* $	36.12	* 6	* 1	* 21	* 2	*	100%	*	38.00%	*	3	) =	$2,564	71	284
	Small	(0.25	* $	36.12	* 6	* 1	* 7	* 2	*	100%	*	38.00%	*	1	) =	$285	8	32
SECTOR 18. Chromium Sulfate Producers																			
ALL	Large	(0.25	* $	39.76	* 0	* 1	* 3	* 2	*	100%	*	0.00%	*	0	) =	$0	0	0
	Small	(0.25	* $	39.76	* 1	* 1	* 3	* 2	*	100%	*	27.00%	*	5	) =	$84	2	8
SECTOR 19. Chemical Distributors																			
ALL	Large	(0.25	* $	28.67	* 0	* 1	* 3	* 2	*	100%	*	0.00%	*	207	) =	$0	0	0
	Small	(0.25	* $	28.67	* 0	* 1	* 3	* 2	*	100%	*	0.00%	*	1,561	) =	$0	0	0
SECTOR 20. Textile Dyeing																			
ALL	Large	(0.25	* $	19.13	* 0	* 3	* 3	* 2	*	100%	*	0.00%	*	347	) =	$0	0	0
	Small	(0.25	* $	19.13	* 0	* 1	* 2	* 2	*	100%	*	0.00%	*	703	) =	$0	0	0
SECTOR 21. Colored Glass Producers																			
General Industry	Large	(0.25	* $	27.66	* 1	* 3	* 12	* 2	*	100%	*	25.00%	*	5	) =	$675	24	98
	Small	(0.25	* $	27.66	* 0	* 1	* 4	* 2	*	100%	*	0.00%	*	17	) =	$0	0	0

		NOTETIME	NONSUPEWAGE	JOBAL	SHIFTS	#SAMPS	SEMI-ANNUALLY	%NOTSEMI	%ABOVEAL	#PLANTS	ITEM 12 COST	TOTAL HOURS	RESPONSES
Fiber, Flat, Container Glass	Large	(0.25 *	$ 27.66 *	3 *	1 *	1 *	2 *	100% *	20.00% *	78) =	$645	23	93
	Small	(0.25 *	$ 27.66 *	0 *	1 *	1 *	2 *	100% *	0.00% *	5) =	$0	0	0
SECTOR 22. Printing													
ALL	Large	(0.25 *	$ 19.97 *	0 *	3 *	2 *	2 *	100% *	0.00% *	92) =	$0	0	0
	Small	(0.25 *	$ 19.97 *	0 *	1 *	2 *	2 *	100% *	0.00% *	367) =	$0	0	0
SECTOR 24. Chromium Catalyst Users													
Catalyst Users	Large	(0.25 *	$ 31.14 *	2 *	3 *	3 *	2 *	100% *	9.00% *	164) =	$4,148	133	533
	Small	(0.25 *	$ 31.14 *	0 *	1 *	3 *	2 *	100% *	0.00% *	0) =	$0	0	0
Chromium Catalyst Service Companies	Large	(0.25 *	$ 31.14 *	0 *	3 *	3 *	2 *	100% *	0.00% *	21) =	$0	0	0
	Small	(0.25 *	$ 31.14 *	0 *	1 *	3 *	2 *	100% *	0.00% *	4) =	$0	0	0
SECTOR 25. Refractory Brick Producers													
ALL	Large	(0.25 *	$ 24.56 *	0 *	1 *	15 *	2 *	100% *	0.00% *	6) =	$0	0	0
	Small	(0.25 *	$ 24.56 *	0 *	1 *	0 *	2 *	100% *	0.00% *	0) =	$0	0	0
SECTOR 26. Woodworking													
General Industry	Large	(0.25 *	$ 30.76 *	0 *	1 *	2 *	2 *	100% *	0.00% *	175) =	$0	0	0
	Small	(0.25 *	$ 30.76 *	0 *	1 *	2 *	2 *	100% *	0.00% *	93) =	$0	0	0
Maritime	Large	(0.25 *	$ 30.76 *	0 *	1 *	1 *	2 *	100% *	0.00% *	38) =	$0	0	0
	Small	(0.25 *	$ 30.76 *	0 *	1 *	1 *	2 *	100% *	0.00% *	34) =	$0	0	0
Construction	Large	(0.25 *	$ 30.76 *	1 *	1 *	1 *	2 *	100% *	22.00% *	1,290) =	$4,364	142	567
	Small	(0.25 *	$ 30.76 *	1 *	1 *	1 *	2 *	100% *	22.00% *	5,162) =	$17,469	568	2271
Government	State	(0.25 *	$ 30.76 *	1 *	1 *	1 *	2 *	100% *	22.00% *	16) =	$55	2	7
	Local	(0.25 *	$ 30.76 *	1 *	1 *	1 *	2 *	100% *	22.00% *	59) =	$199	6	26
SECTOR 27. Solid Waste Incerneration													
General Industry	Large	(0.25 *	$ 26.09 *	0 *	3 *	15 *	2 *	100% *	0.00% *	48) =	$0	0	0
	Small	(0.25 *	$ 26.09 *	0 *	1 *	3 *	2 *	100% *	0.00% *	58) =	$0	0	0
Government	State	(0.25 *	$ 26.09 *	0 *	3 *	15 *	2 *	100% *	0.00% *	0) =	$0	0	0
	Local	(0.25 *	$ 26.09 *	0 *	1 *	3 *	2 *	100% *	0.00% *	29) =	$0	0	0

		NOTETIME	NONSUPEWAGE	JOBAL	SHIFTS	#SAMPS	SEMI-ANNUALLY	%NOTSEMI	%ABOVEAL	#PLANTS	ITEM 12 COST	TOTAL HOURS	RESPONSES
SECTOR 30. Superalloy Producers and Users													
ALL	Large	(0.25	* $ 26.75	* 0	* 3	* 3	* 2	* 100%	* 0.00%	* 18	) = $0	0	0
	Small	(0.25	* $ 26.75	* 0	* 3	* 3	* 2	* 100%	* 0.00%	* 0	) = $0	0	0
SECTOR 31. Construction Cement Workers													
Industrial Rehabilitation	Large	(0.25	* $ 30.79	* 0	* 1	* 1	* 2	* 100%	* 0.00%	* 55	) = $0	0	0
	Small	(0.25	* $ 30.79	* 0	* 1	* 1	* 2	* 100%	* 0.00%	* 196	) = $0	0	0
	State	(0.25	* $ 30.79	* 0	* 1	* 1	* 2	* 100%	* 0.00%	* 16	) = $0	0	0
	Local	(0.25	* $ 30.79	* 0	* 1	* 1	* 2	* 100%	* 0.00%	* 74	) = $0	0	0
Hazardous Waste-site Work	Large	(0.25	* $ 30.79	* 0	* 1	* 1	* 2	* 100%	* 0.00%	* 44	) = $0	0	0
	Small	(0.25	* $ 30.79	* 0	* 1	* 1	* 2	* 100%	* 0.00%	* 143	) = $0	0	0
	State	(0.25	* $ 30.79	* 0	* 1	* 1	* 2	* 100%	* 0.00%	* 1	) = $0	0	0
	Local	(0.25	* $ 30.79	* 0	* 1	* 1	* 2	* 100%	* 0.00%	* 201	) = $0	0	0
Refractory Brick Restoration	Large	(0.25	* $ 30.79	* 0	* 1	* 1	* 2	* 100%	* 60.00%	* 48	) = $0	0	0
	Small	(0.25	* $ 30.79	* 0	* 1	* 1	* 2	* 100%	* 60.00%	* 148	) = $0	0	0
										77,770	**$466,191**	**16,790**	**67,160**

Respiratory-Protection Program: Qualitative Fit Testing for Respirator Use (§§ 1910.1026(g)(2), 1915.1026(f)(2), and 1926.1126(f)(2)); Employee and Industrial Hygiene Technician Time and Cost to Conduct Qualitative Fit Testing

This table calculates the burden hours and cost of employee and industrial hygienist time to conduct fit-testing. The time, in hours, for an employee to be qualitative fit-tested is multiplied by the number of employees that require fit -testing and by the nonsupervisory wage rate.

COST = BURDEN HOURS * NONSUPEWAGE

*ASSUMPTIONS:

* QLFITTIME = Time, in hours, for an employee to be qualitative fit-tested
* QLFITTECH = Time, in hours, for a technician to conduct one qualitative fit test
* QLFITEMP - Number of employees requiring annual qualitative fit-testing
* 1-%FITBASE (%FITBASE is the percent of plants conducting annual respirator fit-testing in the baseline)
* NONSUPEWAGE = Non-Supervisory wage rate
* #PLANTS = Number of plants represented by the model input

		QLFITTIME		QLFITTECH		QLFITEMP		1-%FITBASE		#PLANTS		BURDEN HOURS		NONSUPEWAGE		Item 12 COST	RESPONSES
Sector 1. Electroplating																	
ALL	Large	(0.25	+	0.25)	*	5,447	*	71%	*	1	) =	1,934	*	$ 25.49	=	$49,294	3,867
	Small	(0.25	+	0.25)	*	1,188	*	97%	*	1	) =	576	*	$ 25.49	=	$14,683	1,152
Sector 2. Welding																	
GENERAL INDUSTRY	Large	(0.25	+	0.25)	*	2,874	*	81%	*	1	) =	1,164	*	$ 25.10	=	$29,213	2,328
	Small	(0.25	+	0.25)	*	2,101	*	98%	*	1	) =	1,030	*	$ 25.10	=	$25,844	2,059
MARITIME	Large	(0.25	+	0.25)	*	2,345	*	55%	*	1	) =	645	*	$ 25.10	=	$16,190	1,290
	Small	(0.25	+	0.25)	*	55	*	95%	*	1	) =	26	*	$ 25.10	=	$661	53
CONSTRUCTION	Large	(0.25	+	0.25)	*	3,247	*	88%	*	1	) =	1,429	*	$ 25.10		$35,863	2,858
	Small	(0.25	+	0.25)	*	2,511	*	99%	*	1	) =	1,243	*	$ 25.10	*	$31,196	2,486
GOVERNMENT	State	(0.25	+	0.25)	*	15	*	88%	*	1	) =	6	*	$ 25.10	*	$161	13
	Local	(0.25	+	0.25)	*	74	*	99%	*	1	) =	37	*	$ 25.10	*	$919	73
Sector 2A. Mild Steel Welding																	
GENERAL INDUSTRY	Large	(0.25	+	0.25)	*	696	*	81%	*	1	) =	282	*	$ 25.10	=	$7,071	563
	Small	(0.25	+	0.25)	*	2,101	*	98%	*	1	) =	1,030	*	$ 25.10	=	$25,844	2,059
MARITIME	Large	(0.25	+	0.25)	*	17	*	55%	*	1	) =	5	*	$ 25.10	=	$114	9
	Small	(0.25	+	0.25)	*	0	*	95%	*	1	) =	0	*	$ 25.10	=	$0	0
CONSTRUCTION	Large	(0.25	+	0.25)	*	662	*	88%		1	)	291		$ 25.10		$7,317	583
	Small	(0.25	+	0.25)	*	533	*	99%	*	1	) =	264		$ 25.10	=	$6,624	528
GOVERNMENT	State	(0.25	+	0.25)	*	15	*	88%	*	1	) =	6		$ 25.10	=	$161	13
	Local	(0.25	+	0.25)	*	74	*	99%	*	1	) =	37		$ 25.10	=	$919	73
SECTOR 3. Painting																	
GENERAL INDUSTRY (AEROSPACE)	Large	(0.25	+	0.25)	*	46	*	81%	*	50	) =	925	*	$ 31.68	=	$29,311	1,851
	Small	(0.25	+	0.25)	*	0	*	98%	*	63	) =	4	*	$ 31.68	=	$125	8

		QLFITTIME		QLFITTECH		QLFITEMP		1-%FITBASE		#PLANTS		BURDEN HOURS		NONSUPEWAGE	Item 12 COST	RESPONSES
GENERAL INDUSTRY (AUTO BODY REPAIR)	Large	(0.25	+	0.25)	*	1	*	81%	*	331	) =	123	* $	31.68	= $3,908	247
	Small	(0.25	+	0.25)	*	0	*	98%	*	1,458	) =	151	* $	31.68	= $4,788	302
COIL COATING	Large	(0.25	+	0.25)	*	2	*	81%	*	101	) =	75	* $	31.68	= $2,388	151
	Small	(0.25	+	0.25)	*	1	*	98%	*	18	) =	8	* $	31.68	= $263	17
MARITIME	Large	(0.25	+	0.25)	*	3	*	55.00%	*	294	) =	235	* $	31.68	= $7,430	469
	Small	(0.25	+	0.25)	*	1	*	95%	*	508	) =	243	* $	31.68	= $7,700	486
CONSTRUCTION	Large	(0.25	+	0.25)	*	471	*	0%	*	1	) =	0	* $	31.68	= $0	0
	Small	(0.25	+	0.25)	*	593	*	0%	*	1	) =	0	* $	31.68	= $0	0
	State	(0.25	+	0.25)	*	43	*	0%	*	1	) =	0	* $	31.68	= $0	0
	Local	(0.25	+	0.25)	*	186	*	0%	*	1	) =	0	* $	31.68	= $0	0
SECTOR 4. Producers of Chromates																
ALL	Large	(0.25	+	0.25)	*	7	*	37%	*	2	) =	3	* $	37.06	= $104	6
	Small	(0.25	+	0.25)	*	0	*	93%	*	0	) =	0	* $	37.06	= $0	0
SECTOR 5. Chromate Pigment Procedures																
ALL	Large	(0.25	+	0.25)	*	9	*	37%	*	2	) =	3	* $	36.12	= $118	7
	Small	(0.25	+	0.25)	*	1	*	93%	*	1	) =	0	* $	36.12	= $16	1
SECTOR 6. CCA Producers																
ALL	Large	(0.25	+	0.25)	*	2	*	37%	*	3	) =	1	* $	30.60	= $25	2
	Small	(0.25	+	0.25)	*	0	*	93%	*	0	) =	0	* $	30.60	= $0	0
SECTOR 7. Chromium Catalyst Producers																
ALL	Large	(0.25	+	0.25)	*	12	*	37%	*	5	) =	12	* $	37.06	= $446	24
	Small	(0.25	+	0.25)	*	0	*	93%	*	0	) =	0	* $	37.06	= $0	0
SECTOR 8. Paint and Coating Producers																
ALL	Large	(0.25	+	0.25)	*	1	*	37%	*	87	) =	17	* $	27.60	= $465	34
	Small	(0.25	+	0.25)	*	0	*	93%	*	137	) =	0	* $	27.60	= $0	0
SECTOR 9. Printing Ink Producers																
ALL	Large	(0.25	+	0.25)	*	12	*	37%	*	3	) =	7	* $	27.65	= $186	13
	Small	(0.25	+	0.25)	*	3	*	93%	*	10	) =	14	* $	27.65	= $389	28
SECTOR 10. Plastic Colorant Producers and Users																
ALL	Large	(0.25	+	0.25)	*	361	*	54%	*	1	) =	97	* $	30.64	= $2,986	195
	Small	(0.25	+	0.25)	*	36	*	95%	*	1	) =	17	* $	30.64	= $531	35
SECTOR 11. Plating Mixture Producers																
ALL	Large	(0.25	+	0.25)	*	3	*	37%	*	4	) =	2	* $	27.50	= $67	5
	Small	(0.25	+	0.25)	*	1	*	93%	*	3	) =	1	* $	27.50	= $38	3

		QLFITTIME		QLFITTECH		QLFITEMP		1-%FITBASE		#PLANTS		BURDEN HOURS		NONSUPEWAGE		Item 12 COST	RESPONSES
SECTOR 13. Chromium Metal Producers																	
ALL	Large	(0.25	+	0.25)	*	8	*	56%	*	1	) =	2	* $	37.17	=	$83	4
	Small	(0.25	+	0.25)	*	0	*	95%	*	0	) =	0	* $	37.17	=	$0	0
SECTOR 14. Iron and Steel Mills																	
ALL	Large	(0.25	+	0.25)	*	30	*	56%	*	37	) =	308	* $	37.17	=	$11,454	616
	Small	(0.25	+	0.25)	*	1	*	95%	*	12	) =	8	* $	37.17	=	$297	16
CARBON STEEL	Large	(0.25	+	0.25)	*	1	*	56%	*	112	) =	22	* $	37.17	=	$818	44
	Small	(0.25	+	0.25)	*	1	*	95%	*	35	) =	23	* $	37.17	=	$873	47
14b. FORGING INDUSTRY																	
RESHAPING INDUSTRY	Large	(0.25	+	0.25)	*	3	*	56%	*	37	) =	29	* $	37.17	=	$1,070	58
	Small	(0.25	+	0.25)	*	1	*	95%	*	34	) =	12	* $	37.17	=	$428	23
SECTOR 15. Iron and Steel Foundries																	
ALL	Large	(0.25	+	0.25)	*	19	*	56%	*	178	) =	943	* $	27.12	=	$25,584	1,887
	Small	(0.25	+	0.25)	*	5	*	95%	*	130	) =	277	* $	27.12	=	$7,515	554
SECTOR 17. Chromium Dye Producers																	
ALL	Large	(0.25	+	0.25)	*	32	*	37%	*	3	) =	17	* $	36.12	=	$627	35
	Small	(0.25	+	0.25)	*	7	*	93%	*	1	) =	3	* $	36.12	=	$115	6
SECTOR 18. Chromium Sulfate Producers																	
ALL	Large	(0.25	+	0.25)	*	0	*	37%	*	0	) =	0	* $	39.76	=	$0	0
	Small	(0.25	+	0.25)	*	0	*	93%	*	5	) =	0	* $	39.76	=	$0	0
SECTOR 19. Chemical Distributors																	
ALL	Large	(0.25	+	0.25)	*	0	*	92%	*	207	) =	0	* $	28.67	=	$0	0
	Small	(0.25	+	0.25)	*	0	*	99%	*	1,561	) =	0	* $	28.67	=	$0	0
SECTOR 20. Textile Dyeing																	
ALL	Large	(0.25	+	0.25)	*	0	*	89%	*	347	) =	0	* $	19.13	=	$0	0
	Small	(0.25	+	0.25)	*	0	*	99%	*	703	) =	0	* $	19.13	=	$0	0
SECTOR 21. Colored Glass Producers																	
ALL	Large	(0.25	+	0.25)	*	1	*	76%	*	5	) =	2	* $	27.66	=	$52	4
	Small	(0.25	+	0.25)	*	0	*	97%	*	17	) =	0	* $	27.66	=	$0	0
FIBER, FLAT, AND CONTAINER GLASS	Large	(0.25	+	0.25)	*	8	*	76%	*	78	) =	240	* $	27.66	=	$6,647	481
	Small	(0.25	+	0.25)	*	2	*	97%	*	5	) =	4	* $	27.66	=	$110	8
SECTOR 22. Printing																	
ALL	Large	(0.25	+	0.25)	*	0	*	98%	*	92	) =	0	* $	19.97	=	$0	0
	Small	(0.25	+	0.25)	*	0	*	99.70%	*	367	) =	0	* $	19.97	=	$0	0
SECTOR 24. Chromium Catalyst Users																	
Chromium Catalyst Users	Large	(0.25	+	0.25)	*	1	*	67%	*	1	) =	0	* $	31.14	=	$11	1
	Small	(0.25	+	0.25)	*	0	*	97%	*	0	) =	0	* $	31.14	=	$0	0

		QLFITTIME		QLFITTECH		QLFITEMP		1-%FITBASE		#PLANTS		BURDEN HOURS		NONSUPEWAGE		Item 12 COST	RESPONSES
Catalyst Service Companies	Large	(0.25	+	0.25)	*	0	*	0%	*	1	) =	0	* $	31.14	=	$0	0
	Small	(0.25	+	0.25)	*	0	*	0%	*	1	) =	0	* $	31.14	=	$0	0
SECTOR 25. Refractory Brick Producers																	
ALL	Large	(0.25	+	0.25)	*	0	*	76%	*	6	) =	0	* $	24.56	=	$0	0
	Small	(0.25	+	0.25)	*	0	*	97%	*	0	) =	0	* $	24.56	=	$0	0
SECTOR 26. Woodworking																	
GENERAL INDUSTRY	Large	(0.25	+	0.25)	*	0	*	94%	*	1	) =	0	* $	30.76	=	$0	0
	Small	(0.25	+	0.25)	*	0	*	99%	*	1	) =	0	* $	30.76	=	$0	0
MARITIME	Large	(0.25	+	0.25)	*	0	*	55%		38	) =	0	* $	30.76	=	$0	
	Small	(0.25	+	0.25)	*	0	*	95%		34	) =	0	* $	30.76	=	$0	
CONSTRUCTION	Large	(0.25	+	0.25)	*	0	*	88%		1	) =	0	* $	30.76	=	$0	0
	Small	(0.25	+	0.25)	*	0	*	99%	*	1	) =	0	* $	30.76	=	$0	0
GOVERNMENT	State	(0.25	+	0.25)	*	0	*	88%	*	1	) =	0	* $	30.76	=	$0	0
	Local	(0.25	+	0.25)	*	0	*	88%	*	1	) =	0	* $	30.76	=	$0	0
SECTOR 27. Solid Waste Incineration																	
ALL	Large	(0.25	+	0.25)	*	6	*	59%	*	48	) =	87	* $	26.09	=	$2,273	174
	Small	(0.25	+	0.25)	*	1	*	96%	*	58	) =	24	* $	26.09	=	$634	49
GOVERNMENT	State	(0.25	+	0.25)	*	0	*	59%	*	0	) =	0	* $	26.09	=	$0	
	Local	(0.25	+	0.25)	*	0	*	96%	*	29	) =	0	* $	26.09	=	$0	0
SECTOR 30. Superalloy Producers and Users																	
ALL	Large	(0.25	+	0.25)	*	0	*	56%	*	18	) =	0	* $	26.75	=	$0	0
	Small	(0.25	+	0.25)	*	0	*	95%	*	0	) =	0	* $	26.75	=	$0	0
SECTOR 31. Construction																	
INDUSTRIAL REHABILITATION AND MAINTENANCE	Large	(0.25	+	0.25)	*	0	*	88%	*	55	) =	0	* $	30.79	=	$0	0
	Small	(0.25	+	0.25)	*	0	*	99%	*	196	) =	0	* $	30.79	=	$0	0
	State	(0.25	+	0.25)	*	0	*	88%	*	16	) =	0	* $	30.79	=	$0	0
	Local	(0.25	+	0.25)	*	0	*	88%	*	74	) =	0	* $	30.79	=	$0	0
HAZARDOUS WASTE-SITE WORK	Large	(0.25	+	0.25)	*	0	*	88%	*	1	) =	0	* $	30.79	=	$0	0
	Small	(0.25	+	0.25)	*	0	*	99%	*	1	) =	0	* $	30.79	=	$0	0
	State	(0.25	+	0.25)	*	0	*	88%	*	1	) =	0	* $	30.79	=	$0	0
	Local	(0.25	+	0.25)	*	0	*	88%	*	1	) =	0	* $	30.79	=	$0	0
REFRACTORY BRICK RESTORATION	Large	(0.25	+	0.25)	*	0	*	88%	*	48	) =	0	* $	30.79	=	$0	0
	Small	(0.25	+	0.25)	*	0	*	99%	*	148	) =	0	* $	30.79	=	$0	0
								Total		**7,853**		**13,947**				**$371,946**	**27,894**

Respiratory-Protection Program: Cost of Materials for Qualitative Fit Testing

This table calculates the contract cost of the materials used for qualitative fit-testing by multiplying the number of employees who require qualitative fit-testing by the cost of materials per fit-test.

COST = ((QLFITMTRLS * QLFITEMP) * 1-%FITBASE * #PLANTS)

* QLFITMTRLS = Cost of materials per qualitative fit-testing
* QLFITEMP - Number of employees requiring annual qualitative fit-testing
* 1-%FITBASE (%FITBASE is the percent of plants conducting annual respirator fit-testing in the baseline)
* #PLANTS = Number of plants represented by the model input

Variables		QLFITMTRLS		QLFITEMP		1-%FITBASE		#PLANTS		Item 13 Cost
Sector 1. Electroplating										
ALL	Large	($ 0.08	*	5,447	) *	71%	*	1	= $	307
	Small	($ 0.08	*	1,188	) *	97%	*	1	= $	91
Sector 2. Welding										
GENERAL INDUSTRY	Large	($ 0.08	*	2,874	) *	81%	*	1	= $	185
	Small	($ 0.08	*	2,101	) *	98%	*	1	= $	164
MARITIME	Large	($ 0.08	*	2,345	) *	55%	*	1	= $	102
	Small	($ 0.08	*	55	) *	95%	*	1	= $	4
CONSTRUCTION	Large	($ 0.08	*	3,247	) *	88%	*	1	= $	227
	Small	($ 0.08	*	2,511	) *	99%	*	1	= $	197
GOVERNMENT	State	($ 0.08		15	) *	88%	*	1	= $	1
	Local	($ 0.08		74	) *	99%	*	1	= $	6
Sector 2A. Mild Steel Welding										
GENERAL INDUSTRY	Large	($ 0.08	*	696	) *	81%	*	1	= $	45
	Small	($ 0.08	*	2,101	) *	98%	*	1	= $	164
MARITIME	Large	($ 0.08	*	17	) *	55%	*	1	= $	1
	Small	($ 0.08	*	0	) *	95%	*	1	=	0
CONSTRUCTION	Large	($ 0.08	*	662	) *	88%	*	1	= $	46
	Small	($ 0.08	*	533	) *	99%	*	1	= $	42
GOVERNMENT	State	($ 0.08	*	15	*	88%	*	1	= $	1
	Local	($ 0.08	*	74	*	99%	*	1	= $	6
SECTOR 3. PAINTING										
GENERAL INDUSTRY (AEROSPACE)	Large	($ 0.08	*	46	) *	81%	*	50	= $	147
	Small	($ 0.08	*	0	) *	98%	*	63	= $	1
GENERAL INDUSTRY (AUTO BODY REPAIR)	Large	($ 0.08	*	1	) *	81%	*	331	= $	20
	Small	($ 0.08	*	0	) *	98%	*	1,458	= $	24

Variables		QLFITMTRLS		QLFITEMP		1-%FITBASE		#PLANTS		Item 13 Cost
COIL COATING	Large	($ 0.08	*	2	) *	81%	*	101	=	$ 12
	Small	($ 0.08	*	1	) *	98%	*	18	=	$ 1
MARITIME	Large	($ 0.08	*	1	) *	55.00%	*	294	=	$ 13
	Small	($ 0.08	*	0	) *	95%	*	508	=	$ 13
CONSTRUCTION	Large	($ 0.08	*	471	) *	0.00%	*	1	=	0
	Small	($ 0.08	*	593	) *	0.00%	*	1	=	0
	State	($ 0.08	*	43	) *	0.00%	*	1	=	0
	Local	($ 0.08	*	186	) *	0.00%	*	1	=	0
SECTOR 4. Producers of Chromates										
ALL	Large	($ 0.08	*	7	) *	37%	*	2	=	$ 0.45
	Small	($ 0.08	*	0	) *	93%	*	0	=	0
SECTOR 5. Chromate Pigment Procedures										
ALL	Large	($ 0.08	*	9	) *	37%	*	2	=	$ 1
	Small	($ 0.08	*	1	) *	93%	*	1	=	$ 0
SECTOR 6. CCA Producers										
ALL	Large	($ 0.08	*	4	) *	37%	*	3	=	$ 0.32
	Small	($ 0.08	*	0	) *	93%	*	0	=	0
SECTOR 7. Chromium Catalyst Producers										
ALL	Large	($ 0.08	*	12	) *	37%	*	5	=	$ 2
	Small	($ 0.08	*	0	) *	93%	*	0	=	0
SECTOR 8. Paint and Coating Producers										
ALL	Large	($ 0.08	*	1	) *	37%	*	87	=	$ 3
	Small	($ 0.08	*	0	) *	93%	*	137	=	0
SECTOR 9. Printing Ink Producers										
ALL	Large	($ 0.08	*	12	) *	37%	*	3	=	$ 1
	Small	($ 0.08	*	3	) *	93%	*	10	=	$ 2
SECTOR 10. Plastic Colorant Producers and Users										
ALL	Large	($ 0.08	*	361	) *	54%	*	1	=	$ 15
	Small	($ 0.08	*	36	) *	95%	*	1	=	$ 3
SECTOR 11. Plating Mixture Producers										
ALL	Large	($ 0.08	*	3	) *	37%	*	4	=	$ 0.39
	Small	($ 0.08	*	1	) *	93%	*	3	=	$ 0.22

Variables		QLFITMTRLS		QLFITEMP		1-%FITBASE		#PLANTS		Item 13 Cost
SECTOR 13. Chromium Metal Producers										
ALL	Large	($ 0.08	*	8	) *	56%	*	1	= $	0.36
	Small	($ 0.08	*	0	) *	95%	*	0	=	0
SECTOR 14. Iron and Steel Mills										
ALLOY AND STAINLESS STEEL	Large	($ 0.08	*	30	) *	56%	*	37	= $	49
	Small	($ 0.08	*	1	) *	95%	*	12	= $	1
Carbon Steel	Large	($ 0.08	*	1	) *	56%	*	112	= $	3
	Small	($ 0.08	*	1	) *	95%	*	35	= $	4
14b. FORGING INDUSTRY										
RESHAPING INDUSTRY	Large	($ 0.08	*	3	) *	56%	*	37	= $	5
	Small	($ 0.08	*	1	) *	95%	*	34	= $	2
SECTOR 15. Iron and Steel Foundries										
ALL	Large	($ 0.08	*	19	) *	56%	*	178	= $	150
	Small	($ 0.08	*	5	) *	95%	*	130	= $	44
SECTOR 17. Chromium Dye Producers										
ALL	Large	($ 0.08	*	32	) *	37%	*	3	= $	3
	Small	($ 0.08	*	7	) *	93%	*	1	= $	0.51
SECTOR 18. Chromium Sulfate Producers										
ALL	Large	($ 0.08	*	0	) *	37%	*	0	=	0
	Small	($ 0.08	*	1	) *	93%	*	5	= $	0.40
SECTOR 19. Chemical Distributors										
ALL	Large	($ 0.08	*	0	) *	92%	*	207	=	0
	Small	($ 0.08	*	0	) *	99%	*	1,561	=	0
SECTOR 20. Textile Dyeing										
ALL	Large	($ 0.08	*	0	) *	89%	*	347	=	0
	Small	($ 0.08	*	0	) *	99%	*	703	=	0
SECTOR 21. Colored Glass Producers										
ALL	Large	($ 0.08	*	1	) *	76%	*	5	= $	0.30
	Small	($ 0.08	*	0	) *	97%	*	17	=	0
Fiber, Flat and Container Glass	Large	($ 0.08	*	8	) *	76%	*	78	= $	38.17
	Small	($ 0.08	*	2	) *	97%	*	5	= $	1
SECTOR 22. Printing										
ALL	Large	($ 0.08	*	0	) *	98%	*	92	=	0
	Small	($ 0.08	*	0	) *	99.70%	*	367	=	0

Variables		QLFITMTRLS		QLFITEMP		1-%FITBASE		#PLANTS		Item 13 Cost
SECTOR 24. Chromium Catalyst Users										
CHROMIUM CATALYST USERS	Large	($ 0.08	*	1	) *	67%	*	1	=	$ 0.05
	Small	($ 0.08	*	0	) *	97%	*	0	=	0
CHROMIUM CATALYST COMPANIES	Large	($ 0.08	*	1	) *	67%	*	1	=	$ 0.05
	Small	($ 0.08	*	0	) *	97%	*	1	=	0
SECTOR 25. Refractory Brick Producers										
ALL	Large	($ 0.08	*	0	) *	76%	*	6	=	0
	Small	($ 0.08	*	0	) *	97%	*	0	=	0
SECTOR 26. Woodworking										
GENERAL INDUSTRY	Large	($ 0.08	*	0	) *	94%	*	1	=	0
	Small	($ 0.08	*	0	) *	99%	*	1	=	0
MARITIME	Large	($ 0.08	*	0	) *	55%	*	38	=	0
	Small	($ 0.08	*	0	) *	95%	*	34	=	0
CONSTRUCTION	Large	($ 0.08	*	0	) *	88%	*	1	=	0
	Small	($ 0.08	*	0	) *	99%	*	1	=	0
GOVERNMENT	State	($ 0.08	*	0	) *	88%	*	1	=	0
	Local	($ 0.08	*	0	) *	88%	*	1	=	0
SECTOR 27. Solid Waste Incineration										
ALL	Large	($ 0.08	*	6	) *	59%	*	48	=	$ 14
	Small	($ 0.08	*	1	) *	96%	*	58	=	$ 4
GOVERNMENT	State	($ 0.08	*	0	) *	59%	*	0	=	0
	Local	($ 0.08	*	0	) *	96%	*	29	=	0
SECTOR 30. Superalloy Producers and Users										
ALL	Large	($ 0.08	+	0	) *	56%	*	18	=	0
	Small	($ 0.08	+	0	) *	95%	*	0	=	0
SECTOR 31. Construction										
INDUSTRIAL REHABILITATION AND MAINTENANCE	Large	($ 0.08	*	0	) *	88%	*	55	=	0
	Small	($ 0.08	*	0	) *	99%	*	196	=	0
	State	($ 0.08	*	0	) *	88%	*	16	=	0
	Local	($ 0.08	*	0	) *	88%	*	74	=	0
HAZARDOUS WASTE-SITE WORK	Large	($ 0.08	*	0	) *	88%	*	1	=	0
	Small	($ 0.08	*	0	) *	99%	*	1	=	0
	State	($ 0.08	*	0	) *	88%	*	1	=	0
	Local	($ 0.08	*	0	) *	88%	*	1	=	0

Table 11

Variables		QLFITMTRLS		QLFITEMP		1-%FITBASE		#PLANTS		Item 13 Cost
REFRACTORY BRICK RESTORATION	Large	($ 0.08	*	0	) *	88%	*	48	=	0
	Small	($ 0.08	*	0	) *	99%	*	148	=	0
						Total		**7,853**	**$**	**2,166**

Respirator Protection Program: Quantitative Fit Testing for Respirator Use (§§ 1910.1026(g)(2), 1915.1026(f)(2), and 1926.1126(f)(2)); Employee Time and Cost to Conduct Quantitative Fit Testing

This table calculates the burden hour and cost of employee time to be fit-tested. The time, in hours, for an employee to be quantitative fit-tested is multiplied by the number of employees that require fit -testing and by the nonsupervisory wage rate.

BURDEN HOURS = (QNFITTIME + QNFITTEMP) * 1-%FITBASE * #PLANTS
COST = BURDEN HOURS * NONSUPWAGE

* QNFITTIME = Time, in hours, for an employee to be quantitative fit-tested
* QNFITTEMP = Number of employees requiring annual quantitative fit-testing
* 1-%FITBASE (%FITBASE is the percent of plants conducting annual respirator fit-testing in the baseline)
* #PLANTS = Number of plants represented by the model input
* NONSUPEWAGE = Non-Supervisory wage rate

			QNFITTIME		QNFITEMP			1-%FITBASE		#PLANTS			BURDEN HOURS		NONSUPEWAGE		Item 12 COST	Responses
Sector 1. Electroplating																		
ALL	Large	(	0.5	*	0	)	*	71%	*	1	)	=	0	*	$ 25.49	=	$0	0
	Small	(	0.5	*	0	)	*	97%	*	1	)	=	0	*	$ 25.49	=	$0	0
Sector 2. Welding																		
GENERAL INDUSTRY	Large	(	0.5	*	0	)	*	81%	*	1	)	=	0	*	$ 25.10	=	$0	0
	Small	(	0.5	*	0	)	*	98%	*	1	)	=	0	*	$ 25.10	=	$0	0
MARITIME	Large	(	0.5	*	0	)	*	55%	*	1	)	=	0	*	$ 25.10	=	$0	0
	Small	(	0.5	*	0	)	*	95%	*	1	)	=	0	*	$ 25.10	=	$0	0
CONSTRUCTION	Large	(	0.5	*	0	)	*	88%		1	)	=	0	*	$ 25.10	=	$0	0
	Small	(	0.5	*	0	)	*	99%		1	)	=	0	*	$ 25.10	=	$0	0
GOVERNMENT	State	(	0.5	*	0	)	*	88%		1	)	=	0	*	$ 25.10	=	$0	0
	Local	(	0.5	*	0	)	*	99%		1	)	=	0	*	$ 25.10	=	$0	0
Sector 2. Mild Steel Welding																		
GENERAL INDUSTRY	Large	(	0.5	*	0	)	*	81%	*	1	)	=	0	*	$ 25.10	=	$0	0
	Small	(	0.5	*	0	)	*	98%	*	1	)	=	0	*	$ 25.10	=	$0	0
MARITIME	Large	(	0.5	*	0	)	*	55%		1	)	=	0	*	$ 25.10	=	$0	0
	Small	(	0.5	*	0	)	*	95%		1	)	=	0	*	$ 25.10	=	$0	0
CONSTRUCTION	Large	(	0.5	*	0	)	*	82%		1	)	=	0	*	$ 25.10	=	$0	0
	Small	(	0.5	*	0	)	*	99%		1	)	=	0	*	$ 25.10	=	$0	0
SECTOR 3. PAINTING																		
GENERAL INDUSTRY AEROSPACE	Large	(	0.5	*	0	)	*	81%	*	50	)	=	0	*	$ 31.68	=	$0	0
	Small	(	0.5	*	0	)	*	98%	*	63	)	=	0	*	$ 31.68	=	$0	0
GENERAL INDUSTRY AUTOBODY REPAIR	Large	(	0.5	*	0	)	*	81%	*	331	)	=	0	*	$ 31.68	=	$0	0
	Small	(	0.5	*	0	)	*	98%	*	1,458	)	=	0	*	$ 31.68	=	$0	0
COIL COATING	Large	(	0.5	*	0	)	*	81%	*	101	)	=	0	*	$ 31.68	=	$0	0
	Small	(	0.5	*	0	)	*	98%	*	18	)	=	0	*	$ 31.68	=	$0	0
MARITIME	Large	(	0.5	*	0	)	*	55.00%		294	)	=	0	*	$ 31.68	=	$0	0
	Small	(	0.5	*	0	)	*	95%		508	)	=	0	*	$ 31.68	=	$0	0

			QNFITTIME		QNFITEMP		1-%FITBASE		#PLANTS		BURDEN HOURS		NONSUPEWAGE		Item 12 COST	Responses
CONSTRUCTION	Large	(	0.5	*	0	) *	0%		1	) =	0	* $ 31.68	=		$0	0
	Small	(	0.5	*	0	) *	0%		1	) =	0	* $ 31.68	=		$0	0
GOVERNMENT	State	(	0.5	*	0	) *	0%		1	) =	0	* $ 31.68	=		$0	0
	Local	(	0.5	*	0	) *	0%		1	) =	0	* $ 31.68	=		$0	0
SECTOR 4. Producers of Chromates																
ALL	Large	(	0.5	*	0	) *	37%	*	2	) =	0	* $ 37.06	=		$0	0
	Small	(	0.5	*	0	) *	93%	*	0	) =	0	* $ 37.06	=		$0	0
SECTOR 5. Chromate Pigment Procedures																
ALL	Large	(	0.5	*	0	) *	37%	*	2	) =	0	* $ 36.12	=		$0	0
	Small	(	0.5	*	0	) *	93%	*	1	) =	0	* $ 36.12	=		$0	0
SECTOR 6. CCA Producers																
ALL	Large	(	0.5	*	0	) *	37%	*	3	) =	0	* $ 30.60	=		$0	0
	Small	(	0.5	*	0	) *	93%	*	0	) =	0	* $ 30.60	=		$0	0
SECTOR 7. Chromium Catalyst Producers																
ALL	Large	(	0.5	*	0	) *	37%	*	5	) =	0	* $ 37.06	=		$0	0
	Small	(	0.5	*	0	) *	93%	*	0	) =	0	* $ 37.06	=		$0	0
SECTOR 8. Paint and Coating Producers																
ALL	Large	(	0.5	*	0	) *	37%	*	87	) =	0	* $ 27.60	=		$0	0
	Small	(	0.5	*	0	) *	93%	*	137	) =	0	* $ 27.60	=		$0	0
SECTOR 9. Printing Ink Producers																
ALL	Large	(	0.5	*	0	) *	37%	*	3	) =	0	* $ 27.65	=		$0	0
	Small	(	0.5	*	0	) *	93%	*	10	) =	0	* $ 27.65	=		$0	0
SECTOR 10. Plastic Colorant Producers and Users				*												
ALL	Large	(	0.5	*	0	) *	54%	*	1	) =	0	* $ 30.64	=		$0	0
	Small	(	0.5	*	0	) *	95%	*	1	) =	0	* $ 30.64	=		$0	0
SECTOR 11. Plating Mixture Producers																
ALL	Large	(	0.5	*	0	) *	37%	*	4	) =	0	* $ 27.50	=		$0	0
	Small	(	0.5	*	0	) *	93%	*	3	) =	0	* $ 27.50	=		$0	0
SECTOR 13. Chromium Metal Producers																
ALL	Large	(	0.5	*	0	) *	56%	*	1	) =	0	* $ 37.17	=		$0	0
	Small	(	0.5	*	0	) *	95%	*	0	) =	0	* $ 37.17	=		$0	0
SECTOR 14. Iron and Steel Mills																
ALLOY AND STAINLESS STEEL	Large	(	0.5	*	0	) *	56%	*	37	) =	0	* $ 37.17	=		$0	0
	Small	(	0.5	*	0	) *	95%	*	12	) =	0	* $ 37.17	=		$0	0
CARBON STEEL	Large	(	0.5	*	0	) *	56%	*	112	) =	0	* $ 37.17	=		$0	0
	Small	(	0.5	*	0	) *	95%	*	35	) =	0	* $ 37.17	=		$0	0
14b. FORGING INDUSTRY																
RESHAPING INDUSTRY	Large	(	0.5	*	0	) *	56%	*	37	) =	0	* $ 37.17	=		$0	0
	Small	(	0.5	*	0	) *	95%	*	34	) =	0	* $ 37.17	=		$0	0

		QNFITTIME		QNFITEMP		1-%FITBASE		#PLANTS		BURDEN HOURS		NONSUPEWAGE		Item 12 COST	Responses
SECTOR 15. Iron and Steel Foundries															
ALL	Large	(0.5	*	0	) *	56%	*	178	) =	0	*	$ 27.12	=	$0	0
	Small	(0.5	*	0	) *	95%	*	130	) =	0	*	$ 27.12	=	$0	0
SECTOR 17. Chromium Dye Producers															
ALL	Large	(0.5	*	0	) *	37%	*	3	) =	0	*	$ 36.12	=	$0	0
	Small	(0.5	*	0	) *	93%	*	1	) =	0	*	$ 36.12	=	$0	0
SECTOR 18. Chromium Sulfate Producers															
ALL	Large	(0.5	*	0	) *	37%	*	0	) =	0	*	$ 39.76	=	$0	0
	Small	(0.5	*	0	) *	93%	*	5	) =	0	*	$ 39.76	=	$0	0
SECTOR 19. Chemical Distributors															
ALL	Large	(0.5	*	0	) *	92%	*	207	) =	0	*	$ 28.67	=	$0	0
	Small	(0.5	*	0	) *	99%	*	1,561	) =	0	*	$ 28.67	=	$0	0
SECTOR 20. Textile Dyeing															
ALL	Large	(0.5	*	0	) *	89%	*	347	) =	0	*	$ 19.13	=	$0	0
	Small	(0.5	*	0	) *	99%	*	703	) =	0	*	$ 19.13	=	$0	0
SECTOR 21. Colored Glass Producers															
ALL	Large	(0.5	*	0	) *	76%	*	5	) =	0	*	$ 27.66	=	$0	0
	Small	(0.5	*	0	) *	97%	*	17	) =	0	*	$ 27.66	=	$0	0
Carbon, Flat, and Container Glass	Large	(0.5	*	0	) *	76%	*	78	) =	0	*	$ 27.66	=	$0	0
	Small	(0.5	*	0	) *	97%	*	5	) =	0	*	$ 27.66	=	$0	0
SECTOR 22. Printing															
ALL	Large	(0.5	*	0	) *	98%	*	92	) =	0	*	$ 19.97	=	$0	0
	Small	(0.5	*	0	) *	99.70%	*	367	) =	0	*	$ 19.97	=	$0	0
SECTOR 24. Chromium Catalyst Users															
Chromium Catalyst Users	Large	(0.5	*	0	) *	67%	*	1	) =	0	*	$ 31.14	=	$0	0
	Small	(0.5	*	0	) *	97%	*	0	) =	0	*	$ 31.14	=	$0	0
Chromium Catalyst Companies	Large	(0.5	*	109	) *	67%	*	1	) =	36	*	$ 31.14	=	$1,137	73
	Small	(0.5	*	10	) *	97%	*	1	) =	5	*	$ 31.14	=	$152	10
SECTOR 25. Refractory Brick Producers															
ALL	Large	(0.5	*	0	) *	76%	*	6	) =	0	*	$ 24.56	=	$0	0
	Small	(0.5	*	0	) *	97%	*	0	) =	0	*	$ 24.56	=	$0	0
SECTOR 26. Woodworking															
GENERAL INDUSTRY	Large	(0.5	*	0	) *	94%	*	1	) =	0	*	$ 30.76	=	$0	0
	Small	(0.5	*	0	) *	99%	*	1	) =	0	*	$ 30.76	=	$0	0
MARITIME	Large	(0.5	*	0	) *	55%	*	38	) =	0	*	$ 30.76	=	$0	0
	Small	(0.5	*	0	) *	95%	*	34	) =	0	*	$ 30.76	=	$0	0
CONSTRUCTION	Large	(0.5	*	0	) *	88%	*	1	) =	0	*	$ 30.76	=	$0	0
	Small	(0.5	*	0	) *	99%	*	1	) =	0	*	$ 30.76	=	$0	0

			QNFITTIME		QNFITEMP			1-%FITBASE		#PLANTS		BURDEN HOURS		NONSUPEWAGE		Item 12 COST	Responses
GOVERNMENT	State	(	0.5	*	0	)	*	88%	*	1	) =	0	*	$ 30.76	=	$0	0
	Local	(	0.5	*	0	)	*	88%	*	1	) =	0	*	$ 30.76	=	$0	0
SECTOR 27. Solid Waste Incineration																	
ALL	Large	(	0.5	*	0	)	*	59%	*	48	) =	0	*	$ 26.09	=	$0	0
	Small	(	0.5	*	0	)	*	96%	*	58	) =	0	*	$ 26.09	=	$0	0
GOVERNMENT	State	(	0.5	*	0	)	*	59%	*	0	) =	0	*	$ 26.09	=	$0	0
	Local	(	0.5	*	0	)	*	96%	*	29	) =	0	*	$ 26.09	=	$0	0
SECTOR 30. Superalloy Producers and Users																	
ALL	Large	(	0.5	*	0	)	*	56%	*	18	) =	0	*	$ 26.75	=	$0	0
	Small	(	0.5	*	0	)	*	95%	*	0	) =	0	*	$ 26.75	=	$0	0
SECTOR 31. Construction																	
INDUSTRIAL REHABILITATION AND MAINTENANCE	Large	(	0.5	*	0	)	*	88%	*	55	) =	0	*	$ 30.79	=	$0	0
	Small	(	0.5	*	0	)	*	99%	*	196	) =	0	*	$ 30.79	=	$0	0
	State	(	0.5	*	0	)	*	88%	*	16	) =	0	*	$ 30.79	=	$0	0
	Local	(	0.5	*	0	)	*	88%	*	74	) =	0	*	$ 30.79	=	$0	0
HAZARDOUS WASTE-SITE WORK	Large	(	0.5	*	0	)	*	88%	*	1	) =	0	*	$ 30.79	=	$0	0
	Small	(	0.5	*	0	)	*	99%	*	1	) =	0	*	$ 30.79	=	$0	0
	State	(	0.5	*	0	)	*	88%	*	1	) =	0	*	$ 30.79	=	$0	0
	Local	(	0.5	*	0	)	*	88%	*	1	) =	0	*	$ 30.79	=	$0	0
REFRACTORY BRICK RESTORATION	Large	(	0.5	*	0	)	*	88%	*	48	) =	0	*	$ 30.79	=	$0	0
	Small	(	0.5	*	0	)	*	99%	*	148	) =	0	*	$ 30.79	=	$0	0
								Total		**7,851**		**41**				**$1,289**	**83**

Respiratory Protection Program: Contract Cost for an Industrial Hygienist to Conduct Quantitative Fit Testing for Respirators

This table calculates the contract cost for the industrial hygiene technician to conduct quantitative fit-testing.

COST = ((QNFITCOST * QNFITEMP) * 1-%FITBASE * #PLANTS)

* QNFITCOST = $34.00 hourly cost for a industrial hygiene technician * # of hours
* QNFITTEMP = # Employees requiring annual quantitative fit-test
* 1-%FITBASE = Percent of plants not conducting fit-testing (%FITBASE is the percent of plants conducting annual respirator fit-testing in the baseline)
* #PLANTS = Number of plants represented by the model input

Variables			QNFITCOST			QNFITEMP			1-%FITBASE			#PLANTS			Item 13 COST
Sector 1. Electroplating															
ALL	Large	(	$0	0	*	0	*		71%	*		1	) =	$	-
	Small	(	$0	0	*	0	*		97%	*		1	) =	$	-
Sector 2. Welding															
GENERAL INDUSTRY	Large	(	$68	2	*	0	*		81%	*		1	) =	$	-
	Small	(	$68	2	*	0	*		98%	*		1	) =	$	-
MARITIME	Large	(	$0	0	*	0	*		55%	*		1	) =	$	-
	Small	(	$0	0	*	0	*		95%	*		1	) =	$	-
CONSTRUCTION	Large	(	$0	0	*	0	*		88%	*		1	) =	$	-
	Small	(	$0	0	*	0	*		99%	*		1	) =	$	-
GOVERNMENT	State	(	$0	0	*	0	*		88%	*		1	) =	$	-
	Local	(	$0	0	*	0	*		99%	*		1	) =	$	-
Sector 2. Mild Steel Welding															
GENERAL INDUSTRY	Large	(	$68	2	*	0	*		81%	*		1	) =	$	-
	Small	(	$68	2	*	0	*		98%	*		1	) =	$	-
MARITIME	Large	(	$0	0	*	0	*		81%	*		1	) =	$	-
	Small	(	$0	0	*	0	*		98%	*		1	) =	$	-
CONSTRUCTION	Large	(	$0	0	*	0	*		81%	*		1	) =	$	-
	Small	(	$0	0	*	0	*		98%	*		1	) =	$	-
SECTOR 3. PAINTING															
GENERAL INDUSTRY AEROSPACE	Large	(	$0	0	*	0	*		81%	*		50	) =	$	-
	Small	(	$0	0	*	0	*		98%	*		63	) =	$	-
GENERAL INDUSTRY AUTOBODY	Large	(	$0	0	*	0	*		81%	*		331	) =	$	-
	Small	(	$0	0	*	0	*		98%	*		1,458	) =	$	-
COIL COATING	Large	(	$0	0	*	0	*		81%	*		101	) =	$	-
	Small	(	$0	0	*	0	*		98%	*		18	) =	$	-
MARITIME	Large	(	$0	0	*	0	*		55.00%	*		294	) =	$	-
	Small	(	$0	0	*	0	*		95%	*		508	) =	$	-
CONSTRUCTION	Large	(	$0	0	*	0	*		0%	*		1	) =	$	-
	Small	(	$0	0	*	0	*		0%	*		1	) =	$	-

Variables			QNFITCOST		QNFITEMP		1-%FITBASE		#PLANTS			Item 13 COST
GOVERNMENT	State	(	$0	0 *	0	*	0%	*	1	) =	$	-
	Local	(	$0	0 *	0	*	0%	*	1	) =	$	-
SECTOR 4. Producers of Chromates												
ALL	Large	(	$0	0 *	0	*	37%	*	2	) =	$	-
	Small	(	$0	0 *	0	*	93%	*	0	) =	$	-
SECTOR 5. Chromate Pigment Procedures												
ALL	Large	(	$0	0 *	0	*	37%	*	2	) =	$	-
	Small	(	$0	0 *	0	*	93%	*	1	) =	$	-
SECTOR 6. CCA Producers												
ALL	Large	(	$0	0 *	0	*	37%	*	3	) =	$	-
	Small	(	$0	0 *	0	*	93%	*	0	) =	$	-
SECTOR 7. Chromium Catalyst Producers												
ALL	Large	(	$0	0 *	0	*	37%	*	5	) =	$	-
	Small	(	$0	0 *	0	*	93%	*	0	) =	$	-
SECTOR 8. Paint and Coating Producers												
ALL	Large	(	$0	0 *	0	*	37%	*	87	) =	$	-
	Small	(	$0	0 *	0	*	93%	*	137	) =	$	-
SECTOR 9. Printing Ink Producers												
ALL	Large	(	$0	0 *	0	*	37%	*	3	) =	$	-
	Small	(	$0	0 *	0	*	93%	*	10	) =	$	-
SECTOR 10. Plastic Colorant Producers and Users												
ALL	Large	(	$0	0 *	0	*	54%	*	1	) =	$	-
	Small	(	$0	0 *	0	*	95%	*	1	) =	$	-
SECTOR 11. Plating Mixture Producers												
ALL	Large	(	$0	0 *	0	*	37%	*	4	) =	$	-
	Small	(	$0	0 *	0	*	93%	*	3	) =	$	-
SECTOR 13. Chromium Metal Producers												
ALL	Large	(	$0	0 *	0	*	56%	*	1	) =	$	-
	Small	(	$0	0 *	0	*	95%	*	0	) =	$	-
SECTOR 14. Iron and Steel Mills												
ALL	Large	(	$0	0 *	0	*	56%	*	37	) =	$	-
	Small	(	$0	0 *	0	*	95%	*	12	) =	$	-
CARBON STEEL	Large	(	$0	0 *	0	*	56%	*	112	) =	$	-
	Small	(	$0	0 *	0	*	95%	*	35	) =	$	-
14b. RESHAPING INDUSTRY												
RESHAPING	Large	(	$0	0 *	0	*	56%	*	37	) =	$	-
	Small	(	$0	0 *	0	*	95%	*	34	) =	$	-
SECTOR 15. Iron and Steel Foundries												
ALL	Large	(	$0	0 *	0	*	56%	*	178	) =	$	-
	Small	(	$0	0 *	0	*	95%	*	130	) =	$	-

Variables		QNFITCOST		QNFITEMP	1-%FITBASE	#PLANTS	Item 13 COST
SECTOR 17. Chromium Dye Producers							
ALL	Large	($0	0 *	0 *	37% *	3) =	$ -
	Small	($0	0 *	0 *	93% *	1) =	$ -
SECTOR 18. Chromium Sulfate Producers							
ALL	Large	($0	0 *	0 *	37% *	0) =	$ -
	Small	($0	0 *	0 *	93% *	5) =	$ -
SECTOR 19. Chemical Distributors							
ALL	Large	($0	0 *	0 *	92% *	207) =	$ -
	Small	($0	0 *	0 *	99% *	1,561) =	$ -
SECTOR 20. Textile Dyeing							
ALL	Large	($0	0 *	0 *	89% *	347) =	$ -
	Small	($0	0 *	0 *	99% *	703) =	$ -
SECTOR 21. Colored Glass Producers							
ALL	Large	($0	0 *	0 *	76% *	5) =	$ -
	Small	($0	0 *	0 *	97% *	17) =	$ -
Carbon, Flat, and Container Glass	Large	($0	0 *	0 *	76% *	78) =	$ -
	Small	($0	0 *	0 *	97% *	5) =	$ -
SECTOR 22. Printing							
ALL	Large	($0	0 *	0 *	98% *	92) =	$ -
	Small	($0	0 *	0 *	99.70% *	367) =	$ -
SECTOR 24. Chromium Catalyst Users							
Chromium Catalyst Users	Large	($0	0 *	0 *	67% *	1) =	$ -
	Small	($0	0 *	0 *	97% *	0) =	$ -
Chromium Catalyst Companies	Large	($123	4 *	30 *	100% *	1) =	$ 3,676
	Small	($11	0 *	30 *	100% *	1) =	$ 340
SECTOR 25. Refractory Brick Producers							
ALL	Large	($0	0 *	0 *	76% *	6) =	$ -
	Small	($0	0 *	0 *	97% *	0) =	$ -
SECTOR 26. Woodworking							
GENERAL INDUSTRY	Large	($0	0 *	0 *	94% *	1) =	$ -
	Small	($0	0 *	0 *	99% *	1) =	$ -
MARITIME	Large	($0	0 *	0 *	55% *	38) =	$ -
	Small	($0	0 *	0 *	95% *	34) =	$ -
CONSTRUCTION	Large	($0	0 *	0 *	88% *	1) =	$ -
	Small	($0	0 *	0 *	99% *	1) =	$ -
	State	($0	0 *	0	88%	1) =	$ -
	Local	($0	0 *	0	88%	1) =	$ -
SECTOR 27. Solid Waste Incineration							
ALL	Large	$0	0 *	0 *	59% *	48) =	$ -
	Small	($0	0 *	0 *	96% *	58) =	$ -

Variables			QNFITCOST			QNFITEMP		1-%FITBASE		#PLANTS			Item 13 COST
GOVERNMENT	State	(	$0	0	*	0		59%		0	) =	$	-
	Local	(	$0	0	*	0		96%		29	) =	$	-
SECTOR 30. Superalloy Producers and Users													
ALL	Large	(	$0	0	*	0	*	56%	*	18	) =	$	-
	Small	(	$0	0	*	0	*	95%	*	0	) =	$	-
SECTOR 31. Construction													
INDUSTRIAL REHABILITATION AND MAINTENANCE	Large	(	$0	0	*	0	*	88%	*	55	) =	$	-
	Small	(	$0	0	*	0	*	99%	*	196	) =	$	-
	State	(	$0	0	*	0	*	88%	*	16	) =	$	-
	Local	(	$0	0	*	0	*	88%	*	74	) =	$	-
HAZARDOUS WASTE-SITE WORK	Large	(	$0	0	*	0	*	88%	*	1	) =	$	-
	Small	(	$0	0	*	0	*	99%	*	1	) =	$	-
	State	(	$0	0	*	0	*	88%	*	1	) =	$	-
	Local	(	$0	0	*	0	*	88%	*	1	) =	$	-
REFRACTORY BRICK RESTORATION AND MAINTENANCE	Large	(	$0	0	*	0	*	88%	*	48	) =	$	-
	Small	(	$0	0	*	0	*	99%	*	148	) =	$	-
								Total		**7,851**		**$**	**4,016**

Respiratory-Protection Program: Medical Questionnaire for Respirator Use (§§ 1910.1026(g)(2), 1915.1026(f)(2), and 1926.1126(f)(2)); Employee Time and Cost to Complete the Medical Questionnaire for Respirator Use

This table calculates the burden hours and cost of employee time to complete a medical questionnaire. The hours and cost is determined by the number of employees who are at or above the action level and at or below the PEL by the time it takes to fill our the medical questionnaire and by non-supervisory wage rate.

Hours = (EMPAL * MEDHISTTIME * 1-%FITBASE * #PLANTS)
Cost = Hours x NONSUPEWAGE

Variables:
* EMPAL = Number of employees who wear respirators who are at or above the AL and at or below the PEL in the model plant
* MEDHISTTIME = Employee time to complete medical history questionnaire
* 1-%FITBASE = Percent of plants not conducting annual respirator fit-test
* #PLANTS = Number of plants represented by the model output
* NONSUPEWAGE = Non-Supervisory wage rate

Variables		EMPAL	MEDHISTTIME	1-%FITBASE	#PLANTS	Hours	NONSUPEWAGE	Item 12 COST	RESPONSES
Sector 1. Electroplating									
ALL	Large	5,447	0.17	71%	1	657.44	$ 25.49	$ 16,760	3,867
	Small	1,188	0.17	97%	1	195.82	$ 25.49	$ 4,992	1,152
Sector 2. Welding									
GENERAL INDUSTRY	Large	0	0.17	81%	1	0.00	$ 25.10	0	0
	Small	0	0.17	98%	1	0.00	$ 25.10	0	0
MARITIME	Large	2,345	0.17	55%	1	219.30	$ 25.10	$ 5,505	1,290
	Small	55	0.17	95%	1	8.96	$ 25.10	$ 225	53
CONSTRUCTION	Large	3,247	0.17	88%	1	485.80	$ 25.10	$ 12,194	2,858
	Small	2,511	0.17	99%	1	422.58	$ 25.10	$ 10,607	2,486
GOVERNMENT	State	15	0.17	88%	1	2.18	$ 25.10	$ 55	13
	Local	74	0.17	99%	1	12.44	$ 25.10	$ 312	73
Sector 2. Mild Steel Welding									
GENERAL INDUSTRY	Large	0	0.17	55%	1	0.00	$ 25.10	0	0
	Small	0	0.17	95%	1	0.00	$ 25.10	0	0
MARITIME	Large	17	0.17	88%	1	2.47	$ 25.10	$ 62	15
	Small	0	0.17	99%	1	0.00	$ 25.10	0	0
CONSTRUCTION	Large	662	0.17	88%	1	99.11	$ 25.10	$ 2,488	583
	Small	533	0.17	99%	1	89.72	$ 25.10	$ 2,252	528
SECTOR 3. PAINTING									
GENERAL INDUSTRY AEROSPACE	Large	32	0.17	81%	50	220.21	$ 31.68	$ 6,976	1,295
	Small	0	0.17	98%	63	0.00	$ 31.68	0	0
GENERAL INDUSTRY AUTOBODY REPAIR	Large	1	0.17	81%	331	41.95	$ 31.68	$ 1,329	247
	Small	0	0.17	98%	1,458	0.00	$ 31.68	0	0
COIL COATING	Large	2	0.17	81%	101	25.63	$ 31.68	$ 812	151
	Small	1	0.17	98%	18	2.82	$ 31.68	$ 89	17

Variables		EMPAL	MEDHISTTIME	1-%FITBASE	#PLANTS	Hours	NONSUPEWAGE	Item 12 COST	RESPONSES
MARITIME	Large	(1 *	0.17 *	55.00% *	294) =	25.16 *	$ 31.68 =	$ 797	148
	Small	(1 *	0.17 *	95% *	508) =	82.06 *	$ 31.68 =	2599.584	483
CONSTRUCTION	Large	(471 *	0.17 *	0% *	1) =	0.00 *	$ 31.68 =	0	0
	Small	(593 *	0.17 *	0% *	1) =	0.00 *	$ 31.68 =	0	0
GOVERNMENT	State	(43 *	0.17 *	0% *	1) =	0.00 *	$ 31.68 =	0	0
	Local	(186 *	0.17 *	0% *	1) =	0.00 *	$ 31.68 =	0	0
SECTOR 4. Producers of Chromates									
ALL	Large	(7 *	0.17 *	37% *	2) =	0.95 *	$ 37.06 =	$ 35	6
	Small	(0 *	0.17 *	93% *	0) =	0.00 *	$ 37.06 =	0	0
SECTOR 5. Chromate Pigment Procedures									
ALL	Large	(6 *	0.17 *	37% *	2) =	0.00 *	$ 36.12 =	0	5
	Small	(1 *	0.17 *	93% *	1) =	0.00 *	$ 36.12 =	0	1
SECTOR 6. CCA Producers									
ALL	Large	(2 *	0.17 *	37% *	3) =	0.00 *	$ 30.60 =	0	2
	Small	(0 *	0.17 *	93% *	0) =	0.00 *	$ 30.60 =	0	0
SECTOR 7. Chromium Catalyst Producers									
ALL	Large	(12 *	0.17 *	37% *	5) =	4.09 *	$ 37.06 =	$ 152	24
	Small	(0 *	0.17 *	93% *	0) =	0.00 *	$ 37.06 =	0	0
SECTOR 8. Paint and Coating Producers									
ALL	Large	(1 *	0.17 *	37% *	87) =	5.72 *	$ 27.60 =	$ 158	34
	Small	(0 *	0.17 *	93% *	137) =	0.00 *	$ 27.60 =	0	0
SECTOR 9. Printing Ink Producers									
ALL	Large	(12 *	0.17 *	37% *	3) =	2.28 *	$ 27.65 =	$ 63	13
	Small	(3 *	0.17 *	93% *	10) =	4.78 *	$ 27.65 =	$ 132	28
SECTOR 10. Plastic Colorant Producers and Users									
ALL	Large	(361 *	0.17 *	54% *	1) =	33.14 *	$ 30.64 =	$ 1,015	195
	Small	(36 *	0.17 *	95% *	1) =	5.89 *	$ 30.64 =	$ 180	35
SECTOR 11. Plating Mixture Producers									
ALL	Large	(2 *	0.17 *	37% *	4) =	0.61 *	$ 27.50 =	$ 17	4
	Small	(1 *	0.17 *	93% *	3) =	0.34 *	$ 27.50 =	$ 9	2
SECTOR 13. Chromium Metal Producers									
ALL	Large	(8 *	0.17 *	56% *	1) =	0.76 *	$ 37.17 =	$ 28	4
	Small	(0 *	0.17 *	95% *	0) =	0.00 *	$ 37.17 =	0	0
SECTOR 14. Iron and Steel Mills									
ALL	Large	(30 *	0.17 *	56% *	37) =	104.76 *	$ 37.17 =	$ 3,894	616
	Small	(1 *	0.17 *	95% *	12) =	2.71 *	$ 37.17 =	$ 101	16
CARBON STEEL	Large	(1 *	0.17 *	56% *	112) =	7.48 *	$ 37.17 =	$ 278	44
	Small	(1 *	0.17 *	95% *	35) =	7.98 *	$ 37.17 =	$ 297	47
14b. RESHAPING									
RESHAPING	Large	(3 *	0.17 *	56% *	37) =	9.79 *	$ 37.17 =	$ 364	58
	Small	(1 *	0.17 *	95% *	34) =	3.91 *	$ 37.17 =	$ 145	23

Variables		EMPAL	MEDHISTTIME	1-%FITBASE	#PLANTS	Hours	NONSUPEWAGE	Item 12 COST	RESPONSES
SECTOR 15. Iron and Steel Foundries									
ALL	Large	(19 * 0.17 *	56% *	178) =		320.71 *	$ 27.12 =	$ 8,698	1,887
	Small	(5 * 0.17 *	95% *	130) =		94.21 *	$ 27.12 =	$ 2,555	554
SECTOR 17. Chromium Dye Producers									
ALL	Large	(32 * 0.17 *	37% *	3) =		5.90 *	$ 36.12 =	$ 213	35
	Small	(7 * 0.17 *	93% *	1) =		1.08 *	$ 36.12 =	$ 39	6
SECTOR 18. Chromium Sulfate Producers									
ALL	Large	(0 * 0.17 *	37% *	0) =		0.00 *	$ 39.76 =	0	0
	Small	(1 * 0.17 *	93% *	5) =		0.86 *	$ 39.76 =	$ 34	5
SECTOR 19. Chemical Distributors									
ALL	Large	(0 * 0.17 *	92% *	207) =		0.00 *	$ 28.67 =	0	0
	Small	(0 * 0.17 *	99% *	1,561) =		0.00 *	$ 28.67 =	0	0
SECTOR 20. Textile Dyeing									
ALL	Large	(0 * 0.17 *	89% *	347) =		0.00 *	$ 19.13 =	0	0
	Small	(0 * 0.17 *	99% *	703) =		0.00 *	$ 19.13 =	0	0
SECTOR 21. Colored Glass Producers									
ALL	Large	(1 * 0.17 *	76% *	5) =		0.63 *	$ 27.66 =	$ 18	4
	Small	(0 * 0.17 *	97% *	17) =		0.00 *	$ 27.66 =	0	0
FIBER, FLAT, CONTAINER GLASS	Large	(6 * 0.17 *	76% *	78) =		63.55 *	$ 27.66 =	$ 1,758	374
	Small	(1 * 0.17 *	97% *	5) =		0.67 *	$ 27.66 =	$ 19	4
SECTOR 22. Printing									
ALL	Large	(0 * 0.17 *	98% *	92) =		0.00 *	$ 19.97 =	0	0
	Small	(0 * 0.17 *	99.70% *	367) =		0.00 *	$ 19.97 =	0	0
SECTOR 24. Chromium Catalyst Users									
ALL	Large	(1 * 0.17 *	67% *	1) =		0.11 *	$ 31.14 =	$ 4	1
	Small	(0 * 0.17 *	97% *	0) =		0.00 *	$ 31.14 =	0	0
Chromium Catalyst Companies	Large	(109 * 0.17 *	0% *	1) =		0.00 *	$ 31.14 =	0	0
	Small	(0 * 0.17 *	0% *	1) =		0.00 *	$ 31.14 =	0	0
SECTOR 25. Refractory Brick Producers									
ALL	Large	(0 * 0.17 *	76% *	6) =		0.00 *	$ 24.56 =	0	0
	Small	(0 * 0.17 *	97% *	0) =		0.00 *	$ 24.56 =	0	0
SECTOR 26. Woodworking									
GENERAL INDUSTRY	Large	(0 * 0.17 *	94% *	1) =		0.00 *	$ 30.76 =	0	0
	Small	(0 * 0.17 *	99% *	1) =		0.00 *	$ 30.76 =	0	0
MARITIME	Large	(0 * 0.17 *	55% *	38) =		*	$ 30.76 =	0	0
	Small	(0 * 0.17 *	95% *	34) =		0.00 *	$ 30.76 =	0	0
CONSTRUCTION	Large	(0 * 0.17 *	88% *	1) =		0.00 *	$ 30.76 =	0	0
	Small	(0 * 0.17 *	99% *	1) =		0.00 *	$ 30.76 =	0	0
GOVERNMENT	State	(0 * 0.17 *	88% *	1) =		0.00 *	$ 30.76 =	0	0
	Local	(0 * 0.17 *	88% *	1) =		0.00 *	$ 30.76 =	0	0

Variables		EMPAL		MEDHISTTIME		1-%FITBASE		#PLANTS		Hours		NONSUPEWAGE		Item 12 COST	RESPONSES
SECTOR 27. Solid Waste Incineration															
ALL	Large	(0	*	0.17	*	59%	*	48	) =	0.00	*	$ 26.09	=	0	0
	Small	(0	*	0.17	*	96%	*	58	) =	0.00	*	$ 26.09	=	0	0
GOVERNMENT	State	(0	*	0.17	*	59%	*	0	) =	0.00	*	$ 26.09		0	0
	Local	(0	*	0.17	*	96%	*	29	) =	0.00	*	$ 26.09		0	0
SECTOR 30. Superalloy Producers and Users															
ALL	Large	(0	*	0.17	*	56%	*	18	) =	0.00	*	$ 26.75	=	0	0
	Small	(0	*	0.17	*	95%	*	0	) =	0.00	*	$ 26.75	=	0	0
SECTOR 31. Construction															
INDUSTRIAL REHABILITATION AND MAINTENANCE	Large	(0	*	0.17	*	88%	*	55	) =	0.00	*	$ 30.79	=	0	0
	Small	(0	*	0.17	*	99%	*	196	) =	0.00	*	$ 30.79	=	0	0
	State	(0	*	0.17	*	88%	*	16	) =	0.00	*	$ 30.79	=	0	0
	Local	(0	*	0.17	*	88%	*	74	) =	0.00	*	$ 30.79	=	0	0
HAZARDOUS WASTE-SITE WORK	Large	(0	*	0.17	*	88%	*	1	) =	0.00	*	$ 30.79	=	0	0
	Small	(0	*	0.17	*	99%	*	1	) =	0.00	*	$ 30.79	=	0	0
	State	(0	*	0.17	*	88%	*	1	) =	0.00	*	$ 30.79	=	0	0
	Local	(0	*	0.17	*	88%	*	1	) =	0.00	*	$ 30.79	=	0	0
REFRACTORY BRICK RESTORATION	Large	(0	*	0.17	*	88%	*	48	) =	0.00	*	$ 30.79	=	0	0
	Small	(0	*	0.17	*	99%	*	148	) =	0.00	*	$ 30.79	=	0	0
Total								**7,851**		**3,277**				**$ 88,261**	**19,281**

Respiratory Protection Program: Medical Questionnaire for Respirator Use (§§ 1910.1026(g)(2), 1915.1026(f)(2), and 1926.1126(f)(2)); Contract Cost for a PLHCP to Review the Medical Questionnaire for Respirator Use

This table calculates the contract cost of the medical questionnaire and review by the licensed physician.

COST = (EMPAL * MEDHISTCOST * 1-%FITBASE * #PLANTS)

* EMPAL = Number of employees who wear respirators who are at or above the AL and at or below the PEL in the model plant
* MEDHISTCOST = Cost of medical history questionnaire to be reviewed by a PLHCP.
* 1-%FITBASE = Percent of plants not conducting annual respirator fit-test
* #PLANTS = Number of plants represented by the model output

Variables		EMPAL	MEDHISTCOST	1-%FITBASE	#PLANTS	Item 13 COST
Sector 1. Electroplating						
ALL	Large	(5,447 *	$ 40.31 *	71% *	1) =	$ 155,873.17
	Small	(1,188 *	$ 40.31 *	97% *	1) =	$ 46,428.29
Sector 2. Welding						
GENERAL INDUSTRY	Large	(0 *	$ 40.31 *	81% *	1) =	$ -
	Small	(0 *	$ 40.31 *	98% *	1) =	$ -
MARITIME	Large	(2,345 *	$ 40.31 *	55% *	1) =	$ 51,995.14
	Small	(55 *	$ 40.31 *	95% *	1) =	$ 2,123.25
CONSTRUCTION	Large	(3,247 *	$ 40.31 *	88% *	1) =	$ 115,178.61
	Small	(2,511 *	$ 40.31 *	99% *	1) =	$ 100,190.38
GOVERNMENT	State	(15 *	$ 40.31 *	88% *	1) =	$ 517.58
	Local	(74 *	$ 40.31 *	99% *	1) =	$ 2,950.20
Sector 2. Mild Steel Welding						
GENERAL INDUSTRY	Large	(0 *	$ 40.31 *	81% *	1) =	$ -
	Small	(0 *	$ 40.31 *	98% *	1) =	$ -
MARITIME	Large	(17 *	$ 40.31 *	55% *	1) =	$ 366.62
	Small	(0 *	$ 40.31 *	95% *	1) =	$ -
CONSTRUCTION	Large	(662 *	$ 40.31 *	88% *	1) =	$ 23,498.09
	Small	(533 *	$ 40.31 *	99% *	1) =	$ 21,272.50
SECTOR 3. PAINTING						
GENERAL INDUSTRY (AEROSPACE)	Large	(32 *	$ 40.31 *	81% *	50) =	$ 52,210.56
	Small	(0 *	$ 40.31 *	98% *	63) =	$ -
GENERAL INDUSTRY (AUTOBODY REPAIR)	Large	(1 *	$ 40.31 *	81% *	331) =	$ 9,944.87
	Small	(0 *	$ 40.31 *	98% *	1,458) =	$ -
GENERAL INDUSTRY (COIL COATING)	Large	(2 *	$ 40.31 *	81% *	101) =	$ 6,077.42
	Small	(1 *	$ 40.31 *	98% *	18) =	$ 668.45
MARITIME	Large	(1 *	$ 40.31 *	55.00% *	294) =	$ 6,514.91
	Small	(1	$ 40.31 *	95% *	508) =	$ 19,456.17

Variables		EMPAL		MEDHISTCOST		1-%FITBASE		#PLANTS		Item 13 COST
CONSTRUCTION	Large	(471	* $	40.31	*	0%	*	1	) = $	-
	Small	(593	* $	40.31	*	0%	*	1	) = $	-
GOVERNMENT	State	(43	* $	40.31	*	0%	*	1	) = $	-
	Local	(186	* $	40.31	*	0%	*	1	) = $	-
SECTOR 4. Producers of Chromates										
ALL	Large	(7	* $	40.31	*	37%	*	2	) = $	226.19
	Small	(0	* $	40.31	*	93%	*	0	) = $	-
SECTOR 5. Chromate Pigment Procedures										
ALL	Large	(6	* $	40.31	*	37%	*	2	) = $	184.15
	Small	(1	* $	40.31	*	93%	*	1	) = $	38.57
SECTOR 6. CCA Producers										
ALL	Large	(2	* $	40.31	*	37%	*	3	) = $	64.99
	Small	(0	* $	40.31	*	93%	*	0	) = $	-
SECTOR 7. Chromium Catalyst Producers									$	-
ALL	Large	(12	* $	40.31	*	37%	*	5	) = $	969.38
	Small	(0	* $	40.31	*	93%	*	0	) = $	-
SECTOR 8. Paint and Coating Producers										
ALL	Large	(1	* $	40.31	*	37%	*	87	) = $	1,357.14
	Small	(0	* $	40.31	*	93%	*	137	) = $	-
SECTOR 9. Printing Ink Producers										
ALL	Large	(12	* $	40.31	*	37%	*	3	) = $	541.26
	Small	(3	* $	40.31	*	93%	*	10	) = $	1,133.73
SECTOR 10. Plastic Colorant Producers and Users										
ALL	Large	(361	* $	40.31	*	54%	*	1	) = $	7,856.30
	Small	(36	* $	40.31	*	95%	*	1	) = $	1,396.45
SECTOR 11. Plating Mixture Producers										
ALL	Large	(2	* $	40.31	*	37%	*	4	) = $	145.53
	Small	(1	* $	40.31	*	93%	*	3	) = $	81.29
SECTOR 13. Chromium Metal Producers										
ALL	Large	(8	* $	40.31	*	56%	*	1	) = $	180.57
	Small	(0	* $	40.31	*	95%	*	0	) = $	-
SECTOR 14. Iron and Steel Mills										
Alloy and Stainless Steel	Large	(30	* $	40.31	*	56%	*	37	) = $	24,838.26
	Small	(1	* $	40.31	*	95%	*	12	) = $	643.59
Carbon Steel	Large	(1	* $	40.31	*	56%	*	112	) = $	1,774.16
	Small	(1	* $	40.31	*	95%	*	35	) = $	1,892.92
14b. RESHAPING INDUSTRY										
Reshaping Industry	Large	(3	* $	40.31	*	56%	*	37	) = $	2,320.92
	Small	(1	* $	40.31	*	95%	*	34	) = $	927.53

Variables		EMPAL		MEDHISTCOST		1-%FITBASE		#PLANTS		Item 13 COST
SECTOR 15. Iron and Steel Foundries										
ALL	Large	(19	*	$ 40.31	*	56%	*	178	) =	$ 76,038.56
	Small	(5	*	$ 40.31	*	95%	*	130	) =	$ 22,336.62
SECTOR 17. Chromium Dye Producers										
ALL	Large	(32	*	$ 40.31	*	37%	*	3	) =	$ 1,399.31
	Small	(7	*	$ 40.31	*	93%	*	1	) =	$ 256.46
SECTOR 18. Chromium Sulfate Producers										
ALL	Large	(0	*	$ 40.31	*	37%	*	0	) =	$ -
	Small	(1	*	$ 40.31	*	93%	*	5	) =	$ 203.05
SECTOR 19. Chemical Distributors										
ALL	Large	(0	*	$ 40.31	*	92%	*	207	) =	$ -
	Small	(0	*	$ 40.31	*	99%	*	1,561	) =	$ -
SECTOR 20. Textile Dyeing										
ALL	Large	(0	*	$ 40.31	*	89%	*	347	) =	$ -
	Small	(0	*	$ 40.31	*	99%	*	703	) =	$ -
SECTOR 21. Colored Glass Producers										
ALL	Large	(1	*	$ 40.31	*	76%	*	5	) =	$ 150.18
	Small	(0	*	$ 40.31	*	97%	*	17	) =	$ -
FIBER, FLAT AND CONTAINER GLASS	Large	(6	*	$ 40.31	*	76%	*	78	) =	$ 15,068.24
	Small	(1	*	$ 40.31	*	97%	*	5	) =	$ 159.73
SECTOR 22. Printing										
ALL	Large	(0	*	$ 40.31	*	98%	*	92	) =	$ -
	Small	(0	*	$ 40.31	*	99.70%	*	367	) =	$ -
SECTOR 24. Chromium Catalyst Users										
ALL	Large	(1	*	$ 40.31	*	67%	*	1	) =	$ 27.24
	Small	(0	*	$ 40.31	*	97%	*	0	) =	$ -
Chromium Catalyst Companies	Large	(109		$ 40.31	*	0%	*	1	) =	$ -
	Small	(0		$ 40.31	*	0%	*	1	) =	$ -
SECTOR 25. Refractory Brick Producers										
ALL	Large	(0	*	$ 40.31	*	76%	*	6	) =	$ -
	Small	(0	*	$ 40.31	*	97%	*	0	) =	$ -
SECTOR 26. Woodworking										
GENERAL INDUSTRY	Large	(0	*	$ 40.31	*	94%	*	1	) =	$ -
	Small	(0	*	$ 40.31	*	99%	*	1	) =	$ -
MARITIME	Large	(0	*	$ 40.31	*	55%	*	38	) =	$ -
	Small	(0	*	$ 40.31	*	95%	*	34	) =	$ -
CONSTRUCTION	Large	(0	*	$ 40.31	*	88%	*	1	) =	$ -
	Small	(0	*	$ 40.31	*	99%	*	1	) =	$ -

Variables			EMPAL		MEDHISTCOST		1-%FITBASE		#PLANTS		Item 13 COST
Government	State	(	0	* $	40.31	*	88%	*	1	) = $	-
	Local	(	0	* $	40.31	*	88%	*	1	) = $	-
SECTOR 27. Solid Waste Incineration											
ALL	Large	(	0	$	40.31		59%		48	$	-
	Small	(	0	* $	40.31	*	96%	*	58	) = $	-
Government	State	(	0	$	40.31		59%		0	$	-
	Local	(	0	$	40.31		96%		29	$	-
SECTOR 30. Superalloy Producers and Users											
ALL	Large	(	0	* $	40.31	*	56%	*	18	) = $	-
	Small	(	0	* $	40.31	*	95%	*	0	) = $	-
SECTOR 31. Construction											
INDUSTRIAL REHABILITATION AND MAINTENANCE	Large	(	0	* $	40.31	*	88%	*	55	) = $	-
	Small	(	0	* $	40.31	*	99%	*	196	) = $	-
	State	(	0	* $	40.31	*	88%	*	16	) = $	-
	Local	(	0	* $	40.31	*	88%	*	74	) = $	-
HAZARDOUS WASTE-SITE WORK	Large	(	0	* $	40.31	*	88%	*	1	) = $	-
	Small	(	0	* $	40.31	*	99%	*	1	) = $	-
	State	(	0	* $	40.31	*	88%	*	1	) = $	-
	Local	(	0	* $	40.31	*	88%	*	1	) = $	-
REFRACTORY BRICK RESTORATION	Large	(	0	* $	40.31	*	88%	*	48	) = $	-
	Small	(	0	* $	40.31	*	99%	*	148	) = $	-
							Total		**7,851**	**$**	**777,479**

Respiratory Protection Program: Follow-up Medical Examination for Respirator Use (§§ 1910.1026(g)(2), 1915.1026(f)(2), and 1926.1126(f)(2)); Employee Time and Cost to Complete the Medical Examination for Respirator Use

This table calculates the burden hour and cost estimate for employees that "fail" the medical history questionnaire. It is estimated that 23% (EMPMEDXAM) will not pass the medial questionnaire

BURDEN HOURS = (EMPAL * RESPEXAMTIME * %EMPMEDEXAM * 1-%FITBASE * PLANTS)
COST = BURDEN HOURS * NONSUPEWAGE

* EMPAL = Number of employees who wear respirators who are at or above the AL and at or below the PEL in the model plant
* RESPEXAMTIME = Employee time, in hours, for medical exam for respirator use
* %EMPMEDEXAM = Percent of employees that will require a medical exam for respirator use
* 1-%FITBASE = Percent of plants not conducting annual respirator fit-test
* #PLANTS = Number of plants represented by the model output
* NONSUPEWAGE = Non-Supervisory wage rate
* %EMPMEDEXAM = Percent of employees who "fail" an initial medical exam

		EMPAL		RESPEXAMTIME		%EMPMEDEXAM		1-%FITBASE		#PLANTS		HOURS		NONSUPEWAGE	Item 12 COST	Responses
Sector 1. Electroplating																
ALL	Large	(5,447	*	3	*	23%	*	71%	*	1	=	2668.42	*	$ 25.49	$ 68,025.07	889
	Small	(1,188	*	3	*	23%	*	97%	*	1	=	794.81	*	$ 21.43	$ 17,032.84	265
Sector 2. Welding																
GENERAL INDUSTRY	Large	(0	*	3	*	23%	*	81%	*	1	=	0.00	*	$ 21.10	$ -	0
	Small	(0	*	3	*	23%	*	98%	*	1	=	0.00	*	$ 21.10	$ -	0
MARITIME	Large	(2,345	*	3	*	23%	*	55%	*	1		890.11	*	$ 21.10	$ 18,781.38	297
	Small	(55	*	3	*	23%	*	95%	*	1	=	36.35	*	$ 21.10	$ 766.95	12
CONSTRUCTION	Large	(3,247	*	3	*	23%	*	88%	*	1	=	1971.76	*	$ 21.10	$ 41,604.14	657
	Small	(2,511	*	3	*	23%	*	99%	*	1	=	1715.17	*	$ 21.10	$ 36,190.18	572
GOVERNMENT	State	(15	*	3	*	23%	*	88%	*	1	=	8.86	*	$ 21.10	$ 186.96	3
	Local	(74	*	3	*	23%	*	99%	*	1	=	50.50	*	$ 21.10	$ 1,065.65	17
Sector 2. Mild Steel Welding																
GENERAL INDUSTRY	Large	(0	*	3	*	23%	*	81%	*	1	=	0.00	*	$ 21.10	$ -	0
	Small	(0	*	3	*	23%	*	98%	*	1	=	0.00	*	$ 21.10	$ -	0
MARITIME	Large	(17	*	3	*	23%	*	55%	*	1		6.28	*	$ 21.10	$ 132.43	2
	Small	(0	*	3	*	23%	*	95%	*	1	=	0.00	*	$ 21.10	$ -	0
CONSTRUCTION	Large	(662	*	3	*	23%	*	88%	*	1	=	402.27	*	$ 21.10	$ 8,487.84	134
	Small	(533	*	3	*	23%	*	99%	*	1	=	364.17	*	$ 21.10	$ 7,683.93	121
SECTOR 3. PAINTING																
GENERAL INDUSTRY (AEROSPACE)	Large	(32	*	3	*	23%	*	81%	*	50	=	893.80	*	26.63	$ 23,801.91	298
	Small	(0	*	3	*	23%	*	98%	*	63	=	0.00	*	26.63	$ -	0
GENERAL INDUSTRY (AUTOBODY REPAIR)	Large	(1	*	3	*	23%	*	81%	*	331	=	170.25	*	26.63	$ 4,533.70	57
	Small	(0	*	3	*	23%	*	98%	*	1,458	=	0.00	*	26.63	$ -	0
GENERAL INDUSTRY (COIL COATING)	Large	(2	*	3	*	23%	*	81%	*	101	=	104.04	*	26.63	$ 2,770.59	35
	Small	(1	*	3	*	23%	*	98%	*	18	=	11.44	*	26.63	$ 304.73	4

			EMPAL		RESPEXAMTIME		%EMPMEDEXAM		1-%FITBASE		#PLANTS		HOURS		NONSUPEWAGE		Item 12 COST	Responses
MARITIME	Large	(	1	*	3	*	23%	*	55.00%	*	294	=	102.11	*	26.63	$	2,719.17	34
	Small	(	1	*	3	*	23%	*	95%	*	508	=	333.07	*	26.63	$	8,869.74	111
CONSTRUCTION	Large	(	471	*	3	*	23%	*	0%	*	1	=	0.00	*	26.63	$	-	0
	Small	(	593	*	3	*	23%	*	0%	*	1	=	0.00	*	26.63	$	-	0
GOVERNMENT	State	(	43		3		23%		0%		1		0.00		26.63	$	-	0
	Local	(	186		3		23%		0%		1		0.00		26.63	$	-	0
SECTOR 4. Producers of Chromates																		
ALL	Large	(	7	*	3	*	23%	*	37%	*	2	=	3.87	*	31.15	$	120.62	1
	Small	(	0	*	3	*	23%	*	93%	*	0	=	0.00	*	31.15	$	-	0
SECTOR 5. Chromate Pigment Procedures																		
ALL	Large	(	6	*	3	*	23%	*	37%	*	2	=	3.15	*	30.36	$	95.71	1
	Small	(	1	*	3	*	23%	*	93%	*	1	=	0.66	*	30.36	$	20.05	0
SECTOR 6. CCA Producers																		
ALL	Large	(	2	*	3	*	23%	*	37%	*	3	=	1.11	*	25.72	$	28.62	0
	Small	(	0	*	3	*	23%	*	93%	*	0	=	0.00	*	25.72	$	-	0
SECTOR 7. Chromium Catalyst Producers																		
ALL	Large	(	12	*	3	*	23%	*	37%	*	5	=	16.60	*	31.15	$	516.94	6
	Small	(	0	*	3	*	23%	*	93%	*	0	=	0.00	*	31.15	$	-	0
SECTOR 8. Paint and Coating Producers																		
ALL	Large	(	1	*	3	*	23%	*	37%	*	87	=	23.23	*	23.20	$	539.01	8
	Small	(	0	*	3	*	23%	*	93%	*	137	=	0.00	*	23.20	$	-	0
SECTOR 9. Printing Ink Producers																		
ALL	Large	(	12	*	3	*	23%	*	37%	*	3	=	9.27	*	23.24	$	215.34	3
	Small	(	3	*	3	*	23%	*	93%	*	10	=	19.41	*	23.24	$	451.05	6
SECTOR 10. Plastic Colorant Producers and Users																		
ALL	Large	(	361	*	3	*	23%	*	54%	*	1	=	134.49	*	25.76	$	3,464.55	45
	Small	(	36	*	3	*	23%	*	95%	*	1	=	23.91	*	25.76	$	615.82	8
SECTOR 11. Plating Mixture Producers																		
ALL	Large	(	2	*	3	*	23%	*	37%	*	4	=	2.49	*	23.12	$	57.60	1
	Small	(	1	*	3	*	23%	*	93%	*	3	=	1.39	*	23.12	$	32.17	0
SECTOR 13. Chromium Metal Producers													0.00					
ALL	Large	(	8	*	3	*	23%	*	56%	*	1	=	3.09	*	31.25	$	96.60	1
	Small	(	0	*	3	*	23%	*	95%	*	0	=	0.00	*	31.25	$	-	0
SECTOR 14. Iron and Steel Mills																		
Alloy and Stainless Steel	Large	(	30	*	3	*	23%	*	56%	*	37	=	425.21	*	31.25	$	13,287.81	142
	Small	(	1	*	3	*	23%	*	95%	*	12	=	11.02	*	31.25	$	344.30	4
Carbon Steel	Large	(	1	*	3	*	23%	*	56%	*	112	=	30.37	*	31.25	$	949.13	10
	Small	(	1	*	3	*	23%	*	95%	*	35	=	32.41	*	31.25	$	1,012.66	11

		EMPAL	RESPEXAMTIME	%EMPMEDEXAM	1-%FITBASE	#PLANTS	HOURS	NONSUPEWAGE	Item 12 COST	Responses
SECTOR 14B. Forging Industry										
RESHAPING INDUSTRY	Large	(3 *	3 *	23% *	56% *	37 =	39.73 *	31.25	$ 1,241.63	13
	Small	(1 *	3 *	23% *	95% *	34 =	15.88 *	31.25	$ 496.20	5
SECTOR 15. Iron and Steel Foundries										
ALL	Large	(19 *	3 *	23% *	56% *	178 =	1301.72 *	22.8	$ 29,679.12	434
	Small	(5 *	3 *	23% *	95% *	130 =	382.38 *	22.8	$ 8,718.36	127
SECTOR 17. Chromium Dye Producers										
ALL	Large	(32 *	3 *	23% *	37% *	3 =	23.95 *	30.36	$ 727.27	8
	Small	(7 *	3 *	23% *	93% *	1 =	4.39 *	30.36	$ 133.29	1
SECTOR 18. Chromium Sulfate Producers										
ALL	Large	(0 *	3 *	23% *	37% *	0 =	0.00 *	33.42	$ -	0
	Small	(1 *	3 *	23% *	93% *	5 =	3.48 *	33.42	$ 116.17	1
SECTOR 19. Chemical Distributors										
ALL	Large	(0 *	3 *	23% *	92% *	207 =	0.00 *	24.1	$ -	0
	Small	(0 *	3 *	23% *	99% *	1,561 =	0.00 *	24.1	$ -	0
SECTOR 20. Textile Dyeing										
ALL	Large	(0 *	3 *	23% *	89% *	347 =	0.00 *	16.08	$ -	0
	Small	(0 *	3 *	23% *	99% *	703 =	0.00 *	16.08	$ -	0
SECTOR 21. Colored Glass Producers										
ALL	Large	(1 *	3 *	23% *	76% *	5 =	2.57 *	23.25	$ 59.78	1
	Small	(0 *	3 *	23% *	97% *	17 =	0.00 *	23.25	$ -	0
Fiber, Flat and Container Glass	Large	(6 *	3 *	23% *	76% *	78 =	257.96 *	23.25	$ 5,997.47	86
	Small	(1 *	3 *	23% *	97% *	5 =	2.73 *	23.25	$ 63.58	1
SECTOR 22. Printing										
ALL	Large	(0 *	3 *	23% *	98% *	92 =	0.00 *	16.79	$ -	0
	Small	(0 *	3 *	23% *	99.70% *	367 =	0.00 *	16.79	$ -	0
SECTOR 24. Chromium Catalyst Users										
ALL	Large	(1 *	3 *	23% *	67% *	1 =	0.47 *	26.18	$ 12.21	0
	Small	(0 *	3 *	23% *	0% *	0 =	0.00 *	26.18	$ -	0
Chromium Catalyst Companies	Large	(109 *	3 *	23% *	0% *	1 =	0.00 *	26.18	$ -	0
	Small	(0 *	3 *	23% *	97% *	1 =	0.00 *	26.18	$ -	0
SECTOR 25. Refractory Brick Producers										
ALL	Large	(0 *	3 *	23% *	76% *	6 =	0.00 *	20.65	$ -	0
	Small	(0 *	3 *	23% *	97% *	0 =	0.00 *	20.65	$ -	0
SECTOR 26. Woodworking										
GENERAL INDUSTRY	Large	(0 *	3 *	23% *	94% *	1 =	0.00 *	18.59	$ -	0
	Small	(0 *	3 *	23% *	99% *	1 =	0.00 *	18.59	$ -	0
MARITIME	Large	(0 *	3 *	23% *	55% *	38 =	0.00 *	18.59	$ -	0
	Small	(0 *	3 *	23% *	95% *	34 =	0.00 *	18.59	$ -	0

		EMPAL		RESPEXAMTIME		%EMPMEDEXAM		1-%FITBASE		#PLANTS		HOURS		NONSUPEWAGE		Item 12 COST	Responses
CONSTRUCTION	Large	(0	*	3	*	23%	*	88%	*	1	=	0.00	*	18.59	$	-	0
	Small	(0	*	3	*	23%	*	99%	*	1	=	0.00	*	18.59	$	-	0
GOVERNMENT	State	(0	*	3	*	23%	*	88%	*	1	=	0.00	*	18.59	$	-	0
	Local	(0	*	3	*	23%	*	88%	*	1	=	0.00	*	18.59	$	-	0
SECTOR 27. Solid Waste Incineration																	
ALL	Large	(0	*	3	*	23%	*	59%	*	48	=	0.00	*	21.93	$	-	0
	Small	(0	*	3	*	23%	*	96%	*	58	=	0.00	*	21.93	$	-	0
GOVERNMENT	State	(0	*	3	*	23%	*	59%	*	0	=	0.00	*	21.93	$	-	0
	Local	(0	*	3	*	23%	*	96%	*	29	=	0.00	*	21.93	$	-	0
SECTOR 30. Superalloy Producers and Users																	
ALL	Large	(0	*	3	*	23%	*	56%	*	18	=	0.00	*	22.49	$	-	0
	Small	(0	*	3	*	23%	*	95%	*	0	=	0.00	*	22.49	$	-	0
SECTOR 31. Construction																	
INDUSTRIAL REHABILITATION AND MAINTENANCE	Large	(0	*	3	*	23%	*	88%	*	55	=	0.00		25.88	$	-	0
	Small	(0	*	3	*	23%	*	99%	*	196	=	0.00		25.88	$	-	0
	State	(0	*	3	*	23%	*	88%	*	16	=	0.00		25.88	$	-	0
	Local	(0	*	3	*	23%	*	88%	*	74	=	0.00		25.88	$	-	0
HAZARDOUS WASTE-SITE WORK	Large	(0	*	3	*	23%	*	88%	*	1	=	0.00	*	25.88	$	-	0
	Small	(0	*	3	*	23%	*	99%	*	1	=	0.00	*	25.88	$	-	0
	State	(0	*	3	*	23%	*	88%	*	1	=	0.00	*	25.88	$	-	0
	Local	(0	*	3	*	23%	*	88%	*	1	=	0.00	*	25.88	$	-	0
REFRACTORY BRICK RESTORATION	Large	(0	*	3	*	23%	*	88%	*	48	=	0.00	*	25.88	$	-	0
	Small	(0	*	3	*	23%	*	99%	*	148	=	0.00	*	25.88	$	-	0
								Total		**7,851**		**13,300**			**$**	**312,050**	**4,433**

Respiratory Protection Program: Follow-up Medical Examination for Respirator Use; Contract Cost for a PLHCP to Conduct the Medical Examination for Respirator Use

Employers must use a PLHCP to conduct the follow-up medical examination. The follow-up medical examination allows PLHCPs to obtain additional information that may be useful in arriving at a final medical recommendation regarding respirator use.

COST = (EMPAL * RESPEXAMCOST * %EMPMEDEXAM * 1-%FITBASE * #PLANTS)
* EMPAL = Number of employees who wear respirators for more than 5 hours/week and who are at or above the AL and at or below the PEL in the model plant
* RESPEXAMCOST = Cost for medical exam for respirator use
* %EMPMEDEXAM = Percent of employees that will require a medical exam for respirator use
* 1-%FITBASE = Percent of plants not conducting annual respirator fit-test
* #PLANTS = Number of plants represented by the model output

		EMPAL		RESPEXAMCOST		%EMPMEDEXAM		1-%FITBASE		#PLANTS	Item 13 Cost
Sector 1. Electroplating											
ALL	Large	5,447	*	$ 120.91	*	23%	*	71%	*	1	$ 107,542.40
	Small	1,188	*	$ 120.91	*	23%	*	97%	*	1	$ 32,032.51
Sector 2. Welding											
GENERAL INDUSTRY	Large	0	*	$ 120.91	*	23%	*	81%	*	1	$ -
	Small	0	*	$ 120.91	*	23%	*	98%	*	1	$ -
MARITIME	Large	2,345	*	$ 120.91	*	23%	*	55%	*	1	$ 35,873.28
	Small	55	*	$ 120.91	*	23%	*	95%	*	1	$ 1,464.91
CONSTRUCTION	Large	3,247	*	$ 120.91	*	23%	*	88%	*	1	$ 79,465.79
	Small	2,511	*	$ 120.91	*	23%	*	99%	*	1	$ 69,124.88
GOVERNMENT	State	15	*	$ 120.91	*	23%	*	88%	*	1	$ 357.10
	Local	74	*	$ 120.91	*	23%	*	99%	*	1	$ 2,035.45
Sector 2. Mild Steel Welding											
GENERAL INDUSTRY	Large	0	*	$ 120.91	*	23%	*	81%	*	1	$ -
	Small	0	*	$ 120.91	*	23%	*	98%	*	1	$ -
MARITIME	Large	17	*	$ 120.91	*	23%	*	55%	*	1	$ 252.94
	Small	0	*	$ 120.91	*	23%	*	95%	*	1	$ -
CONSTRUCTION	Large	662	*	$ 120.91	*	23%	*	88%	*	1	$ 16,212.16
	Small	533	*	$ 120.91	*	23%	*	99%	*	1	$ 14,676.65
SECTOR 3. PAINTING											
GENERAL INDUSTRY AEROSPACE	Large	46	*	$ 120.91	*	23%	*	81%	*	50	$ 51,459.87
	Small	0	*	$ 120.91	*	23%	*	98%	*	63	$ -

		EMPAL		RESPEXAMCOST		%EMPMEDEXAM		1-%FITBASE		#PLANTS	Item 13 Cost
GENERAL INDUSTRY AUTOBODY	Large	1	*	$ 120.91	*	23%	*	81%	*	331	$ 6,861.32
	Small	0	*	$ 120.91	*	23%	*	98%	*	1,458	$ -
COIL COATINGS	Large	2	*	$ 120.91	*	23%	*	81%	*	101	$ 4,193.03
	Small	1	*	$ 120.91	*	23%	*	98%	*	18	$ 461.19
MARITIME	Large	1	*	$ 120.91	*	23%	*	55.00%	*	294	$ 4,115.20
	Small	1	*	$ 120.91	*	23%	*	95%	*	508	$ 13,423.50
CONSTRUCTION	Large	471	*	$ 120.91	*	23%	*	0%	*	1	$ -
	Small	593	*	$ 120.91	*	23%	*	0%	*	1	$ -
GOVERNMENT	State	43	*	$ 120.91	*	23%	*	0%	*	1	$ -
	Local	186	*	$ 120.91	*	23%	*	0%	*	1	$ -
SECTOR 4. Producers of Chromates											$ -
ALL	Large	7	*	$ 120.91	*	23%	*	37%	*	2	$ 156.06
	Small	0	*	$ 120.91	*	23%	*	93%	*	0	$ -
SECTOR 5. Chromate Pigment Procedures											
ALL	Large	6	*	$ 120.91	*	23%	*	37%	*	2	$ 127.05
	Small	1	*	$ 120.91	*	23%	*	93%	*	1	$ 26.61
SECTOR 6. CCA Producers											$ -
ALL	Large	2	*	$ 120.91	*	23%	*	37%	*	3	$ 44.84
	Small	0	*	$ 120.91	*	23%	*	93%	*	0	$ -
SECTOR 7. Chromium Catalyst Producers											
ALL	Large	12	*	$ 120.91	*	23%	*	37%	*	5	$ 668.81
	Small	0	*	$ 120.91	*	23%	*	93%	*	0	$ -
SECTOR 8. Paint and Coating Producers											
ALL	Large	1	*	$ 120.91	*	23%	*	37%	*	87	$ 936.34
	Small	0	*	$ 120.91	*	23%	*	93%	*	137	$ -
SECTOR 9. Printing Ink Producers											
ALL	Large	12	*	$ 120.91	*	23%	*	37%	*	3	$ 373.44
	Small	3	*	$ 120.91	*	23%	*	93%	*	10	$ 782.20
SECTOR 10. Plastic Colorant Producers and Users											
ALL	Large	361	*	$ 120.91	*	23%	*	54%	*	1	$ 5,420.34
	Small	36	*	$ 120.91	*	23%	*	95%	*	1	$ 963.46

		EMPAL		RESPEXAMCOST		%EMPMEDEXAM		1-%FITBASE		#PLANTS		Item 13 Cost
SECTOR 11. Plating Mixture Producers												
ALL	Large	2	*	$ 120.91	*	23%	*	37%	*	4	$	100.41
	Small	1	*	$ 120.91	*	23%	*	93%	*	3	$	56.08
SECTOR 13. Chromium Metal Producers											$	-
ALL	Large	8	*	$ 120.91	*	23%	*	56%	*	1	$	124.58
	Small	0	*	$ 120.91	*	23%	*	95%	*	0	$	-
SECTOR 14. Iron and Steel Mills												
Alloy and Stainless Steel	Large	30	*	$ 120.91	*	23%	*	56%	*	37	$	17,136.79
	Small	1	*	$ 120.91	*	23%	*	95%	*	12	$	444.04
Carbon Steel	Large	1	*	$ 120.91	*	23%	*	56%	*	112	$	1,224.06
	Small	1	*	$ 120.91	*	23%	*	95%	*	35	$	1,305.99
SECTOR 14B. Forging Industry												
Reshaping Industry	Large	3	*	$ 120.91	*	23%	*	56%	*	37	$	1,601.28
	Small	1	*	$ 120.91	*	23%	*	95%	*	34	$	639.94
SECTOR 15. Iron and Steel Foundries												
ALL	Large	19	*	$ 120.91	*	23%	*	56%	*	178	$	52,461.69
	Small	5	*	$ 120.91	*	23%	*	95%	*	130	$	15,410.82
SECTOR 17. Chromium Dye Producers												
ALL	Large	32	*	$ 120.91	*	23%	*	37%	*	3	$	965.43
	Small	7	*	$ 120.91	*	23%	*	93%	*	1	$	176.94
SECTOR 18. Chromium Sulfate Producers												
ALL	Large	0	*	$ 120.91	*	23%	*	37%	*	0	$	-
	Small	1	*	$ 120.91	*	23%	*	93%	*	5	$	140.09
SECTOR 19. Chemical Distributors												
ALL	Large	0	*	$ 120.91	*	23%	*	92%	*	207	$	-
	Small	0	*	$ 120.91	*	23%	*	99%	*	1,561	$	-
SECTOR 20. Textile Dyeing												
ALL	Large	0	*	$ 120.91	*	23%	*	89%	*	347	$	-
	Small	0	*	$ 120.91	*	23%	*	99%	*	703	$	-
SECTOR 21. Colored Glass Producers												
ALL	Large	1	*	$ 120.91	*	23%	*	76%	*	5	$	103.62
	Small	0	*	$ 120.91	*	23%	*	97%	*	17	$	-
Fiber, Flat and Container	Large	6	*	$ 120.91	*	23%	*	76%	*	78	$	10,396.11
	small	1	*	$ 120.91	*	23%	*	97%	*	5	$	110.21

		EMPAL		RESPEXAMCOST		%EMPMEDEXAM		1-%FITBASE		#PLANTS	Item 13 Cost
SECTOR 22. Printing											$ -
ALL	Large	0	*	$ 120.91	*	23%	*	98%	*	92	$ -
	Small	0	*	$ 120.91	*	23%	*	99.70%	*	367	$ -
SECTOR 24. Chromium Catalyst Users											$ -
Chromium Catalyst Users	Large	1	*	$ 120.91	*	23%	*	67%	*	1	$ 18.79
	Small	0	*	$ 120.91	*	23%	*	0%	*	0	$ -
Chromium Catalyst Companies	Large	109	*	$ 120.91	*	23%	*	0%	*	1	$ -
	Small	0	*	$ 120.91	*	23%	*	0%	*	1	$ -
SECTOR 25. Refractory Brick Producers											
ALL	Large	0	*	$ 120.91	*	23%	*	76%	*	6	$ -
	Small	0	*	$ 120.91	*	23%	*	97%	*	0	$ -
SECTOR 26. Woodworking											
GENERAL INDUSTRY	Large	0	*	$ 120.91	*	23%	*	94%	*	1	$ -
	Small	0	*	$ 120.91	*	23%	*	99%	*	1	$ -
MARITIME	Large	0	*	$ 120.91	*	23%	*	55%	*	38	$ -
	Small	0	*	$ 120.91	*	23%	*	95%	*	34	$ -
CONSTRUCTION	Large	0	*	$ 120.91	*	23%	*	88%	*	1	$ -
	Small	0	*	$ 120.91	*	23%	*	99%	*	1	$ -
Government	State	0	*	$ 120.91	*	23%	*	88%	*	1	$ -
	Local	0	*	$ 120.91	*	23%	*	88%	*	1	$ -
SECTOR 27. Solid Waste Incineration											$ -
ALL	Large	0	*	$ 120.91	*	23%	*	59%	*	48	$ -
	Small	0	*	$ 120.91	*	23%	*	96%	*	58	$ -
Government	State	0	*	$ 120.91	*	23%	*	59%	*	0	$ -
	Local	0	*	$ 120.91	*	23%	*	96%	*	29	$ -
SECTOR 30. Superalloy Producers and Users											
ALL	Large	0	*	$ 120.91	*	23%	*	56%	*	18	$ -
	Small	0	*	$ 120.91	*	23%	*	95%	*	0	$ -
SECTOR 31. Construction											
INDUSTRIAL REHABILITATION AND MAINTENANCE	Large	0	*	$ 120.91	*	23%	*	88%	*	55	$ -
	Small	0	*	$ 120.91	*	23%	*	99%	*	196	$ -
	State	0	*	$ 120.91	*	23%	*	88%	*	16	$ -
	Local	0	*	$ 120.91	*	23%	*	88%	*	74	$ -

Table 17

		EMPAL		RESPEXAMCOST		%EMPMEDEXAM		1-%FITBASE		#PLANTS	Item 13 Cost
HAZARDOUS WASTE-SITE WORK	Large	0	*	$ 120.91	*	23%	*	88%	*	1	$ -
	Small	0	*	$ 120.91	*	23%	*	99%	*	1	$ -
	State	0	*	$ 120.91	*	23%	*	88%	*	1	$ -
	Local	0	*	$ 120.91	*	23%	*	88%	*	1	$ -
REFRACTORY BRICK RESTORATION	Large	0	*	$ 120.91	*	23%	*	88%	*	48	$ -
	Small	0	*	$ 120.91	*	23%	*	99%	*	148	$ -
Total		**18,109**								**7,851**	**$ 551,468**

Protective Work Clothing and Equipment, Removal and Storage (§§1910.1026(h)(2)(iv), 1915.1026(g)(2)(iv), and 1926.1126(g)(2)(iv)); Contract Cost to Obtain Cr(VI) Hazard-Warning Labels for Bags or Containers Used to Store Cr(VI)-Contaminated Protective Clothing or Equipment

This table calculates the contract cost for purchasing appropriate labels for glove disposal containers. OSHA estimates that 5% of the containers will need new or replacement labels. The number of replacement gloves used throughout the year is divided by 1,602. The factor of 1,602 is the estimated number of gloves that can fit into a thirty-gallon garbage bag.

Cost = GLOVERPL/1,602 * 5%*$0.32 *#PLANTS

GLOVEREPL = The number of glove replacements per year
NOGLOVESCONT = The number of gloves that can fit into a thirty-gallon container.
5% of containers need new or replacement labels.
COST = The cost of a label
#PLANTS = Number of model plants
COST = The cost of a label

Variables		GLOVEREPL		NOGLOVESCONT	5% of containers need labels	COST	#PLANTS		Item 13 Cost
Sector 1. Electroplating									
ALL	Large	54,888,821	/	1,602	1713.13	$0.36	1	=	$622
	Small	11,970,179	/	1,602	373.60	$0.36	1	=	$136
Sector 2. Welding									
GENERAL INDUSTRY	Large	0	/	1,602	0.00	$0.36	7,911	=	$0
	Small	0	/	1,602	0.00	$0.36	8,864	=	$0
MARITIME	Large	0	/	1,602	0.00	$0.36	191	=	$0
	Small	0	/	1,602	0.00	$0.36	108	=	$0
CONSTRUCTION	Large	0	/	1,602	0.00	$0.36	269	=	$0
	Small	0	/	1,602	0.00	$0.36	2,160	=	$0
GOVERNMENT	State	0	/	1,602	0.00	$0.36	25	=	$0
	Local	0	/	1,602	0.00	$0.36	793	=	$0
Sector 2A. Mild Steel Welding									
GENERAL INDUSTRY	Large	0	/	1,602	0.00	$0.36	10,607	=	$0
	Small	0	/	1,602	0.00	$0.36	10,797	=	$0
MARITIME	Large	0	/	1,602	0.00	$0.36	412	=	$0
	Small	0	/	1,602	0.00	$0.36	233	=	$0
CONSTRUCTION	Large	0	/	1,602	0.00	$0.36	405	=	$0
	Small	0	/	1,602	0.00	$0.36	3,058	=	$0
SECTOR 3. Painting									
GENERAL INDUSTRY									
AEROSPACE	Large	125,000	/	1,602	3.90	$0.36	50	=	$70
	Small	1,000	/	1,602	0.03	$0.36	63	=	$1

Variables		GLOVEREPL		NOGLOVESCONT	5% of containers need labels	COST	#PLANTS		Item 13 Cost
AUTO BODY	Large	61,000	/	1,602	1.90	$0.36	331	=	$229
	Small	5,000	/	1,602	0.16	$0.36	1,458	=	$83
COIL COATING	Large	14,000	/	1,602	0.44	$0.36	101	=	$16
	Small	3,000	/	1,602	0.09	$0.36	18	=	$1
MARITIME	Large	5,000	/	1,602	0.16	$0.36	294	=	$17
	Small	2,000	/	1,602	0.06	$0.36	508	=	$12
CONSTRUCTION	Large	14,000	/	1,602	0.44	$0.36	765	=	$121
	Small	3,000	/	1,602	0.09	$0.36	4,067	=	$138
GOVERNMENT	State	5,000	/	1,602	0.16	$0.36	16	=	$1
	Local	59,000	/	1,602	1.84	$0.36	899	=	$601
SECTOR 4. Producers of Chromates									
ALL	Large	75,000	/	1,602	2.34	$0.36	2	=	$2
	Small	0	/	1,602	0.00	$0.36	0	=	$0
SECTOR 5. Chromate Pigment Procedures									
ALL	Large	24,000	/	1,602	0.75	$0.36	2	=	$1
	Small	3,000	/	1,602	0.09	$0.36	1	=	$0
SECTOR 6. CCA Producers									
ALL	Large	8,760	/	1,602	0.27	$0.36	3	=	$0
	Small	0	/	1,602	0.00	$0.36	0	=	$0
SECTOR 7. Chromium Catalyst Producers									
ALL	Large	57,000	/	1,602	1.78	$0.36	5	=	$3
	Small	0	/	1,602	0.00	$0.36	0	=	$0
SECTOR 8. Paint and Coating Producers									
ALL	Large	12,000	/	1,602	0.37	$0.36	87	=	$12
	Small	6,000	/	1,602	0.19	$0.36	137	=	$9
SECTOR 9. Printing Ink Producers									
ALL	Large	24,000	/	1,602	0.75	$0.36	3	=	$1
	Small	480	/	1,602	0.01	$0.36	10	=	$0
SECTOR 10. Plastic Colorant Producers and Users									
ALL	Large	583	/	1,602	0.02	$0.36	86	=	$1
	Small	120	/	1,602	0.00	$0.36	42	=	$0
SECTOR 11. Plating Mixture Producers									
ALL	Large	14,400	/	1,602	0.45	$0.36	4	=	$1
	Small	2,880	/	1,602	0.09	$0.36	3	=	$0
SECTOR 13. Chromium Metal Producers									
ALL	Large	0	/	1,602	0.00	$0.36	1	=	$0
	Small	0	/	1,602	0.00	$0.36	0	=	$0
SECTOR 14. Iron and Steel Mills									
GENERAL INDUSTRY	Large	0	/	1,602	0.00	$0.36	37	=	$0
	Small	0	/	1,602	0.00	$0.36	12	=	$0

Variables		GLOVEREPL		NOGLOVESCONT	5% of containers need labels	COST	#PLANTS		Item 13 Cost
CARBON STEEL	Large	0	/	1,602	0.00	$0.36	0	=	$0
	Small	0	/	1,602	0.00	$0.36	0	=	$0
SECTOR 14b. Alloy Stainless Steel Forging Industry									
RESHAPING INDUSTRY	Large	0	/	1,602	0.00	$0.36	37	=	$0
	Small	0	/	1,602	0.00	$0.36	34	=	$0
SECTOR 15. Iron and Steel Foundries									
ALL	Large	0	/	1,602	0.00	$0.36	178	=	$0
	Small	0	/	1,602	0.00	$0.36	130	=	$0
SECTOR 17. Chromium Dye Producers									
ALL	Large	3,840	/	1,602	0.12	$0.36	3	=	$0
	Small	840	/	1,602	0.03	$0.36	1	=	$0
SECTOR 18. Chromium Sulfate Producers									
ALL	Large	0	/	1,602	0.00	$0.36	0	=	$0
	Small	2,000	/	1,602	0.06	$0.36	5	=	$0
SECTOR 19. Chemical Distributors									
ALL	Large	0	/	1,602	0.00	$0.36	207	=	$0
	Small	0	/	1,602	0.00	$0.36	1,561	=	$0
SECTOR 20. Textile Dyeing									
ALL	Large	7,580	/	1,602	0.24	$0.36	347	=	$30
	Small	240	/	1,602	0.01	$0.36	703	=	$2
SECTOR 21. Colored Glass Producers									
ALL	Large	1,000	/	1,602	0.03	$0.36	5	=	$0
	Small	0	/	1,602	0.00	$0.36	17	=	$0
FIBER, FLAT, AND CONTAINER GLASS	Large	0	/	1,602	0.00	$0.36	0	=	$0
	Small	0	/	1,602	0.00	$0.36	0	=	$0
SECTOR 22. Printing									
ALL	Large	5,460	/	1,602	0.17	$0.36	92	=	$6
	Small	360	/	1,602	0.01	$0.36	367	=	$1
SECTOR 24. Chromium Catalyst Users									
Chromium Catalyst Users	Large	2,000	/	1,602	0.06	$0.36	164	=	$4
	Small	0	/	1,602	0.00	$0.36	0	=	$0
Catalyst Service Companies	Large	30,000	/	1,602	0.94	$0.36	21	=	$7
	Small	15,000	/	1,602	0.47	$0.36	4	=	$1
SECTOR 25. Refractory Brick Producers									
ALL	Large	11,000	/	1,602	0.34	$0.36	6	=	$1
	Small	0	/	1,602	0.00	$0.36	0	=	$0
SECTOR 26. Woodworking									
GENERAL INDUSTRY	Large	0	/	1,602	0.00	$0.36	175	=	$0
	Small	0	/	1,602	0.00	$0.36	93	=	$0
MARITIME	Large	0	/	1,602	0.00	$0.36	38	=	$0
	Small	0	/	1,602	0.00	$0.36	34	=	$0

Variables		GLOVEREPL		NOGLOVESCONT	5% of containers need labels	COST	#PLANTS		Item 13 Cost
CONSTRUCTION	Large	2,000	/	1,602	0.06	$0.36	1,290	=	$29
	Small	1,000	/	1,602	0.03	$0.36	5,162	=	$58
GOVERNMENT	State	1,000	/	1,602	0.03	$0.36	16	=	$0
	Local	1,000	/	1,602	0.03	$0.36	59	=	$1
SECTOR 27. Solid Waste Incineration									
ALL	Large	20,000	/	1,602	0.62	$0.36	48	=	$11
	Small	3,000	/	1,602	0.09	$0.36	58	=	$2
GOVERNMENT	State	20,000	/	1,602	0.62	$0.36	0	=	$0
	Local	3,000	/	1,602	0.09	$0.36	29	=	$1
SECTOR 30. Superalloy Producers and Users									
ALL	Large	0	/	1,602	0.00	$0.36	18	=	$0
	Small	0	/	1,602	0.00	$0.36	0	=	$0
SECTOR 31. Construction									
INDUSTRIAL REHABILITATION AND MAINTENANCE	Large	0	/	1,602	0.00	$0.36	0	=	$0
	Small	0	/	1,602	0.00	$0.36	0	=	$0
	State	0	/	1,602	0.00	$0.36	0	=	$0
	Local	0	/	1,602	0.00	$0.36	0	=	$0
HAZARDOUS WASTE-SITE WORK	Large	14,000	/	1,602	0.44	$0.36	44	=	$7
	Small	3,000	/	1,602	0.09	$0.36	143		$5
	State	2,000	/	1,602	0.06	$0.36	1		$0
	Local	3,000	/	1,602	0.09	$0.36	201	=	$7
REFRACTORY BRICK RESTORATION	Large	14,000	/	1,602	0.44	$0.36	48	=	$8
	Small	1,000	/	1,602	0.03	$0.36	148	=	$2
						Total	**66,329**		**$2,258**

Protective Work Clothing and Equipment, Removal and Storage (§§1910.1026(h)(2)(iv), 1915.1026(g)(2)(iv), and 1926.1126(g)(2)(iv)); Clerical Time and Cost to Affix Cr(VI) Hazard-Warning Labels for Bags or Containers Used to Store Cr(VI)-Contaminated Protective Clothing or Equipment

OSHA assumes that it will take 1 minute of clerical employee time to obtain and affix Cr(VI) hazard-warning labels to glove disposal containers. OSHA assumes the number of labels will be the same as the number of containers needing labels, as calculated in Table 18.

5% of containers need new or replacement labels = see Table 18
* HCLWAGE = Highest clerical wage rate (overestimation)
* AFFIX = 1 minute for a clerical worker to obtain and affix label
#PLANTS = Number of model plants
COST = The cost to obtain and affix the label

Variables	5% of containers need labels		#PLANTS		AFFIX		Burden Hours		HCLWage		Item 12 Cost	Responses
Sector 1. Electroplating												
ALL	1713.13	*	1	*	0.02	=	34.26	*	$28.36	=	$971.69	1713.13
	373.60	*	1	*	0.02	=	7.47	*	$28.36	=	$211.91	373.60
Sector 2. Welding												
GENERAL INDUSTRY	0.00	*	7,911	*	0.02	=	0.00	*	$28.36	=	$0.00	0.00
	0.00	*	8,864	*	0.02	=	0.00	*	$28.36	=	$0.00	0.00
MARITIME	0.00	*	191	*	0.02	=	0.00	*	$28.36	=	$0.00	0.00
	0.00	*	108	*	0.02	=	0.00	*	$28.36	=	$0.00	0.00
	0.00	*	269	*	0.02	=	0.00	*	$28.36	=	$0.00	0.00
CONSTRUCTION	0.00	*	2,160	*	0.02	=	0.00	*	$28.36	=	$0.00	0.00
GOVERNMENT	0.00	*	25	*	0.02	=	0.00	*	$28.36	=	$0.00	0.00
	0.00	*	793	*	0.02	=	0.00	*	$28.36	=	$0.00	0.00
Sector 2A. Mild Steel Welding												
GENERAL INDUSTRY	0.00	*	10,607	*	0.02	=	0.00	*	$28.36	=	$0.00	0.00
	0.00	*	10,797	*	0.02	=	0.00	*	$28.36	=	$0.00	0.00
MARITIME	0.00	*	412	*	0.02	=	0.00	*	$28.36	=	$0.00	0.00
	0.00	*	233	*	0.02	=	0.00	*	$28.36	=	$0.00	0.00
	0.00	*	405	*	0.02	=	0.00	*	$28.36	=	$0.00	0.00
CONSTRUCTION	0.00	*	3,058	*	0.02	=	0.00	*	$28.36	=	$0.00	0.00
SECTOR 3. Painting												
GENERAL INDUSTRY												
AEROSPACE	3.90	*	50	*	0.02	=	3.88	*	$28.36	=	$109.92	193.79
	0.03	*	63	*	0.02	=	0.04	*	$28.36	=	$1.11	1.95
AUTO BODY	1.90	*	331	*	0.02	=	12.61	*	$28.36	=	$357.60	630.47
	0.16	*	1,458	*	0.02	=	4.55	*	$28.36	=	$129.05	227.52
COIL COATING	0.44	*	101	*	0.02	=	0.88	*	$28.36	=	$25.08	44.21
	0.09	*	18	*	0.02	=	0.03	*	$28.36	=	$0.98	1.72
MARITIME	0.16	*	294	*	0.02	=	0.92	*	$28.36	=	$26.01	45.86
	0.06	*	508	*	0.02	=	0.63	*	$28.36	=	$17.99	31.72
CONSTRUCTION	0.44	*	765	*	0.02	=	6.69	*	$28.36	=	$189.62	334.31
	0.09	*	4,067	*	0.02	=	7.62	*	$28.36	=	$216.02	380.85

Variables	5% of containers need labels		#PLANTS		AFFIX		Burden Hours		HCLWage		Item 12 Cost	Responses
GOVERNMENT	0.16	*	16	*	0.02	=	0.05	*	$28.36	=	$1.44	2.53
	1.84	*	899	*	0.02	=	33.11	*	$28.36	=	$938.99	1655.48
SECTOR 4. Producers of Chromates												
ALL	2.34	*	2	*	0.02	=	0.10	*	$28.36	=	$2.76	4.87
	0.00	*	0	*	0.02	=	0.00	*	$28.36	=	$0.00	0.00
SECTOR 5. Chromate Pigment Procedures												
ALL	0.75	*	2	*	0.02	=	0.03	*	$28.36	=	$0.84	1.48
	0.09	*	1	*	0.02	=	0.00	*	$28.36	=	$0.05	0.09
SECTOR 6. CCA Producers												
ALL	0.27	*	3	*	0.02	=	0.01	*	$28.36	=	$0.40	0.70
	0.00	*	0	*	0.02	=	0.00	*	$28.36	=	$0.00	0.00
SECTOR 7. Chromium Catalyst Producers												
ALL	1.78	*	5	*	0.02	=	0.19	*	$28.36	=	$5.25	9.26
	0.00	*	0	*	0.02	=	0.00	*	$28.36	=	$0.00	0.00
SECTOR 8. Paint and Coating Producers												
ALL	0.37	*	87	*	0.02	=	0.65	*	$28.36	=	$18.57	32.75
	0.19	*	137	*	0.02	=	0.51	*	$28.36	=	$14.59	25.73
SECTOR 9. Printing Ink Producers												
ALL	0.75	*	3	*	0.02	=	0.05	*	$28.36	=	$1.28	2.26
	0.01	*	10	*	0.02	=	0.00	*	$28.36	=	$0.09	0.15
SECTOR 10. Plastic Colorant Producers and Users												
ALL	0.02	*	86	*	0.02	=	0.03	*	$28.36	=	$0.89	1.57
	0.00	*	42	*	0.02	=	0.00	*	$28.36	=	$0.09	0.16
SECTOR 11. Plating Mixture Producers												
ALL	0.45	*	4	*	0.02	=	0.04	*	$28.36	=	$1.13	1.99
	0.09	*	3	*	0.02	=	0.01	*	$28.36	=	$0.15	0.26
SECTOR 13. Chromium Metal Producers												
ALL	0.00	*	1	*	0.02	=	0.00	*	$28.36	=	$0.00	0.00
	0.00	*	0	*	0.02	=	0.00	*	$28.36	=	$0.00	0.00
SECTOR 14. Iron and Steel Mills												
GENERAL INDUSTRY	0.00	*	37	*	0.02	=	0.00	*	$28.36	=	$0.00	0.00
	0.00	*	12	*	0.02	=	0.00	*	$28.36	=	$0.00	0.00
CARBON STEEL	0.00	*	0	*	0.02	=	0.00	*	$28.36	=	$0.00	0.00
	0.00	*	0	*	0.02	=	0.00	*	$28.36	=	$0.00	0.00
SECTOR 14b. Alloy Stainless Steel Forging Industry												
RESHAPING INDUSTRY	0.00	*	37	*	0.02	=	0.00	*	$28.36	=	$0.00	0.00
	0.00	*	34	*	0.02	=	0.00	*	$28.36	=	$0.00	0.00
SECTOR 15. Iron and Steel Foundries												
ALL	0.00	*	178	*	0.02	=	0.00	*	$28.36	=	$0.00	0.00
	0.00	*	130	*	0.02	=	0.00	*	$28.36	=	$0.00	0.00
SECTOR 17. Chromium Dye Producers												
ALL	0.12	*	3	*	0.02	=	0.01	*	$28.36	=	$0.20	0.36
	0.03	*	1	*	0.02	=	0.00	*	$28.36	=	$0.01	0.03

Variables	5% of containers need labels		#PLANTS		AFFIX		Burden Hours		HCLWage		Item 12 Cost	Responses
SECTOR 18. Chromium Sulfate Producers												
ALL	0.00	*	0	*	0.02	=	0.00	*	$28.36	=	$0.00	0.00
	0.06	*	5	*	0.02	=	0.01	*	$28.36	=	$0.18	0.32
SECTOR 19. Chemical Distributors												
ALL	0.00	*	207	*	0.02	=	0.00	*	$28.36	=	$0.00	0.00
	0.00	*	1,561	*	0.02	=	0.00	*	$28.36	=	$0.00	0.00
SECTOR 20. Textile Dyeing												
ALL	0.24	*	347	*	0.02	=	1.64	*	$28.36	=	$46.50	81.97
	0.01	*	703	*	0.02	=	0.11	*	$28.36	=	$2.99	5.27
SECTOR 21. Colored Glass Producers												
ALL	0.03	*	5	*	0.02	=	0.00	*	$28.36	=	$0.10	0.17
	0.00	*	17	*	0.02	=	0.00	*	$28.36	=	$0.00	0.00
FIBER, FLAT, AND CONTAINER GLASS	0.00	*	0	*	0.02	=	0.00	*	$28.36	=	$0.00	0.00
	0.00	*	0	*	0.02	=	0.00	*	$28.36	=	$0.00	0.00
SECTOR 22. Printing												
ALL	0.17	*	92	*	0.02	=	0.31	*	$28.36	=	$8.87	15.65
	0.01	*	367	*	0.02	=	0.08	*	$28.36	=	$2.34	4.13
SECTOR 24. Chromium Catalyst Users												
Chromium Catalyst Users	0.06	*	164	*	0.02	=	0.21	*	$28.36	=	$5.82	10.26
	0.00	*	0	*	0.02	=	0.00	*	$28.36	=	$0.00	0.00
Catalyst Service Companies	0.94	*	21	*	0.02	=	0.40	*	$28.36	=	$11.25	19.83
	0.47	*	4	*	0.02	=	0.04	*	$28.36	=	$1.07	1.89
SECTOR 25. Refractory Brick Producers												
ALL	0.34	*	6	*	0.02	=	0.04	*	$28.36	=	$1.15	2.02
	0.00	*	0	*	0.02	=	0.00	*	$28.36	=	$0.00	0.00
SECTOR 26. Woodworking												
GENERAL INDUSTRY	0.00	*	175	*	0.02	=	0.00	*	$28.36	=	$0.00	0.00
	0.00	*	93	*	0.02	=	0.00	*	$28.36	=	$0.00	0.00
MARITIME	0.00	*	38	*	0.02	=	0.00	*	$28.36	=	$0.00	0.00
	0.00	*	34	*	0.02	=	0.00	*	$28.36	=	$0.00	0.00
CONSTRUCTION	0.06	*	1,290	*	0.02	=	1.61	*	$28.36	=	$45.66	80.51
	0.03	*	5,162	*	0.02	=	3.22	*	$28.36	=	$91.39	161.12
GOVERNMENT	0.03	*	16	*	0.02	=	0.01	*	$28.36	=	$0.29	0.51
	0.03	*	59	*	0.02	=	0.04	*	$28.36	=	$1.04	1.83
SECTOR 27. Solid Waste Incineration												
ALL	0.62	*	48	*	0.02	=	0.60	*	$28.36	=	$17.06	30.07
	0.09	*	58	*	0.02	=	0.11	*	$28.36	=	$3.07	5.41
GOVERNMENT	0.62	*	0	*	0.02	=	0.00	*	$28.36	=	$0.00	0.00
	0.09	*	29	*	0.02	=	0.05	*	$28.36	=	$1.54	2.71
SECTOR 30. Superalloy Producers and Users												
ALL	0.00	*	18	*	0.02	=	0.00	*	$28.36	=	$0.00	0.00
	0.00	*	0	*	0.02	=	0.00	*	$28.36	=	$0.00	0.00

Variables	5% of containers need labels		#PLANTS		AFFIX		Burden Hours		HCLWage		Item 12 Cost	Responses
SECTOR 31. Construction												
INDUSTRIAL REHABILITATION AND MAINTENANCE	0.00	*	0	*	0.02	=	0.00	*	$28.36	=	$0.00	0.00
	0.00	*	0	*	0.02	=	0.00	*	$28.36	=	$0.00	0.00
	0.00	*	0	*	0.02	=	0.00	*	$28.36	=	$0.00	0.00
	0.00	*	0	*	0.02	=	0.00	*	$28.36	=	$0.00	0.00
HAZARDOUS WASTE-SITE WORK	0.44	*	44	*	0.02	=	0.38	*	$28.36	=	$10.79	19.03
	0.09	*	143	*	0.02		0.27	*	$28.36		$7.60	13.40
	0.06	*	1	*	0.02		0.00	*	$28.36		$0.03	0.06
	0.09	*	201	*	0.02	=	0.38	*	$28.36	=	$10.67	18.80
REFRACTORY BRICK RESTORATION	0.44	*	48	*	0.02	=	0.42	*	$28.36	=	$11.89	20.97
	0.03	*	148	*	0.02	=	0.09	*	$28.36	=	$2.61	4.60
Total			**66,329**				**124.39**				**$3,527.60**	**6219.32**

Protective Work Clothing and Equipment, Cleaning and Replacement (§§ 1910.1026(h)(3)(iii), 1915.1026(g)(3)(iii), and 1926.1126(g)(3)(iii))

Employer Time and Cost to Inform Laundry Contractor About Cr(VI)-Contaminated Protective Clothing or Equipment

The laundering company will be informed of the presence of hexavalent chromium in the laundry at the commencement of the laundering agreement. Laundering facilities typically collect dirty uniforms for cleaning. It is estimated that the laundering facility will assume the cost burden for labeling the contaminated laundry and include the cost in their laundering fee. For purposes of calculating burden hours, OSHA assumes that it will take a maximum of five minutes to notify the laundry, and that 25% of the plants will need to annually notify or reinform the laundry.

Hours = #PLANTS * NOTTIME
Cost = Hours * SUPEWAGE
#PLANTS = Number of plants represented by the model plant * 25% need to notify or reinform.
NOTIME = Time to notify the laundry.
SUPEWAGE = Supervisory Wage Rate

		#PLANTS	# of PLANTS *25%		NOTIME		BURDEN HOURS		SUPWAGE		Item 12 Cost	RESPONSES
Sector 1. Electroplating												
ALL	Large	1	0.25	*	0.08	=	0.02	*	$ 34.98	=	$ 0.70	1
	Small	1	0.25	*	0.08	=	0.02	*	$ 34.98	=	$ 0.70	1
Sector 2. Welding												
GENERAL INDUSTRY	Large	7,911	1977.8	*	0.08	=	158.22	*	$ 34.43	=	$ 5,448.31	7,911
	Small	8,864	2216.1	*	0.08	=	177.29	*	$ 34.43	=	$ 6,104.90	8,864
MARITIME	Large	191	47.669	*	0.08	=	3.81	*	$ 34.43	=	$ 131.32	191
	Small	108	26.996	*	0.08	=	2.16	*	$ 34.43	=	$ 74.37	108
CONSTRUCTION	Large	269	67.368	*	0.08	=	5.39	*	$ 34.43	=	$ 185.59	269
	Small	2,160	539.92	*	0.08	=	43.19	*	$ 34.43	=	$ 1,487.36	2,160
GOVERNMENT	State	25	6.3234	*	0.08	=	0.51	*	$ 34.43	=	$ 17.42	25
	Local	793	198.21	*	0.08	=	15.86	*	$ 34.43	=	$ 546.04	793
Sector 2A. Mild Steel Welding												
GENERAL INDUSTRY	Large	10,607	2651.7	*	0.08	=	212.13	*	$ 34.43	=	$ 7,304.84	10,607
	Small	10,797	2699.4	*	0.08	=	215.95	*	$ 34.43	=	$ 7,436.15	10,797
MARITIME	Large	412	102.88	*	0.08	=	8.23	*	$ 34.43	=	$ 283.40	412
	Small	233	58.37	*	0.08	=	4.67	*	$ 34.43	=	$ 160.80	233
CONSTRUCTION	Large	405	101.17	*	0.08	=	8.09	*	$ 34.43	=	$ 278.71	405
	Small	3,058	764.4	*	0.08	=	61.15	*	$ 34.43	=	$ 2,105.76	3,058
SECTOR 3. Painting												
GENERAL INDUSTRY												
AEROSPACE	Large	50	12.418	*	0.08	=	0.99	*	$ 43.34	=	$ 43.06	50
	Small	63	15.638	*	0.08	=	1.25	*	$ 43.34	=	$ 54.22	63
AUTO BODY	Large	331	82.788	*	0.08	=	6.62	*	$ 43.34	=	$ 287.05	331
	Small	1,458	364.5	*	0.08	=	29.16	*	$ 43.34	=	$ 1,263.80	1,458
COIL COATING	Large	101	25.296	*	0.08	=	2.02	*	$ 43.34	=	$ 87.71	101
	Small	18	4.5993	*	0.08	=	0.37	*	$ 43.34	=	$ 15.95	18
MARITIME	Large	294	73.472	*	0.08	=	5.88	*	$ 43.34	=	$ 254.75	294
	Small	508	127.03	*	0.08	=	10.16	*	$ 43.34	=	$ 440.45	508
CONSTRUCTION	Large	765	191.27	*	0.08	=	15.30	*	$ 43.34	=	$ 663.19	765
	Small	4,067	1016.9	*	0.08	=	81.35	*	$ 43.34	=	$ 3,525.73	4,067
GOVERNMENT	State	16	4.0608	*	0.08	=	0.32	*	$ 43.34	=	$ 14.08	16
	Local	899	224.75	*	0.08	=	17.98	*	$ 43.34	=	$ 779.28	899
SECTOR 4. Producers of Chromates												
ALL	Large	2	0.5204	*	0.08	=	0.04	*	$ 50.86	=	$ 2.12	2
	Small	0	0	*	0.08	=	0.00	*	$ 50.86	=	$ -	0
SECTOR 5. Chromate Pigment Procedures												
ALL	Large	2	0.4943	*	0.08	=	0.04	*	$ 49.57	=	$ 1.96	2
	Small	1	0.2472	*	0.08	=	0.02	*	$ 49.57	=	$ 0.98	1

SECTOR 6. CCA Producers														
ALL	Large	3	0.6392	*	0.08	=	0.05	*	$	41.98	=	$	2.15	3
	Small	0	0	*	0.08	=	0.00	*	$	41.98	=	$	-	0
SECTOR 7. Chromium Catalyst Producers														
ALL	Large	5	1.3011	*	0.08	=	0.10	*	$	50.86	=	$	5.29	5
	Small	0	0	*	0.08	=	0.00	*	$	50.86	=	$	-	0
SECTOR 8. Paint and Coating Producers														
ALL	Large	87	21.858	*	0.08	=	1.75	*	$	37.87	=	$	66.23	87
	Small	137	34.348	*	0.08	=	2.75	*	$	37.87	=	$	104.07	137
SECTOR 9. Printing Ink Producers														
ALL	Large	3	0.7531	*	0.08	=	0.06	*	$	37.94	=	$	2.29	3
	Small	10	2.5102	*	0.08	=	0.20	*	$	37.94	=	$	7.62	10
SECTOR 10. Plastic Colorant Producers and Users														
ALL	Large	86	21.508	*	0.08	=	1.72	*	$	42.04	=	$	72.33	86
	Small	42	10.52	*	0.08	=	0.84	*	$	42.04	=	$	35.38	42
SECTOR 11. Plating Mixture Producers														
ALL	Large	4	1.1045	*	0.08	=	0.09	*	$	37.72	=	$	3.33	4
	Small	3	0.7363	*	0.08	=	0.06	*	$	37.72	=	$	2.22	3
SECTOR 13. Chromium Metal Producers														
ALL	Large	1	0.25	*	0.08	=	0.02	*	$	51.02	=	$	1.02	1
	Small	0	0	*	0.08	=	0.00	*	$	51.02	=	$	-	0
SECTOR 14. Iron and Steel Mills														
GENERAL INDUSTRY	Large	37	9.3161	*	0.08	=	0.75	*	$	51.02	=	$	38.03	37
	Small	12	2.9882	*	0.08	=	0.24	*	$	51.02	=	$	12.20	12
CARBON STEEL	Large	0	0	*	0.08	=	0.00	*	$	51.02	=	$	-	0
	Small	0	0	*	0.08	=	0.00	*	$	51.02	=	$	-	0
SECTOR 14b. Alloy Stainless Steel Forging Industry														
RESHAPING INDUSTRY	Large	37	9.1404	*	0.08	=	0.73	*	$	51.02	=	$	37.31	37
	Small	34	8.613	*	0.08	=	0.69	*	$	51.02	=	$	35.16	34
SECTOR 15. Iron and Steel Foundries														
ALL	Large	178	44.556	*	0.08	=	3.56	*	$	37.21	=	$	132.63	178
	Small	130	32.404	*	0.08	=	2.59	*	$	37.21	=	$	96.46	130
SECTOR 17. Chromium Dye Producers														
ALL	Large	3	0.7415	*	0.08	=	0.06	*	$	49.57	=	$	2.94	3
	Small	1	0.2472	*	0.08	=	0.02	*	$	49.57	=	$	0.98	1
SECTOR 18. Chromium Sulfate Producers														
ALL	Large	0	0	*	0.08	=	0.00	*	$	54.55	=	$	-	0
	Small	5	1.3011	*	0.08	=	0.10	*	$	54.55	=	$	5.68	5
SECTOR 19. Chemical Distributors														
ALL	Large	207	51.732	*	0.08	=	4.14	*	$	39.35	=	$	162.87	207
	Small	1,561	390.34	*	0.08	=	31.23	*	$	39.35	=	$	1,228.93	1,561
SECTOR 20. Textile Dyeing														
ALL	Large	347	86.625	*	0.08	=	6.93	*	$	26.25	=	$	181.92	347
	Small	703	175.8	*	0.08	=	14.06	*	$	26.25	=	$	369.20	703
SECTOR 21. Colored Glass Producers														
ALL	Large	5	1.3559	*	0.08	=	0.11	*	$	37.96	=	$	4.12	5
	Small	17	4.2937	*	0.08	=	0.34	*	$	37.96	=	$	13.04	17
FIBER, FLAT, AND CONTAINER GLASS	Large	0	0	*	0.08	=	0.00	*	$	37.96	=	$	-	0
	Small	0	0	*	0.08	=	0.00	*	$	37.96	=	$	-	0
SECTOR 22. Printing														
ALL	Large	92	22.954	*	0.08	=	1.84	*	$	27.39	=	$	50.30	92
	Small	367	91.817	*	0.08	=	7.35	*	$	27.39	=	$	201.22	367
SECTOR 24. Chromium Catalyst Users														
Chromium Catalyst Users	Large	164	41.104	*	0.08	=	3.29	*	$	42.72	=	$	140.49	164
	Small	0	0	*	0.08	=	0.00	*	$	42.72	=	$	-	0
Catalyst Service Companies	Large	21	5.2957	*	0.08	=	0.42	*	$	42.72	=	$	18.10	21
	Small	4	1.0087	*	0.08	=	0.08	*	$	42.72	=	$	3.45	4
SECTOR 25. Refractory Brick Producers														
ALL	Large	6	1.4714	*	0.08	=	0.12	*	$	33.72	=	$	3.97	6
	Small	0	0	*	0.08	=	0.00	*	$	33.72	=	$	-	0
SECTOR 26. Woodworking														

GENERAL INDUSTRY	Large	175	43.666	*	0.08	=	3.49	*	$	42.20	=	$	147.41	175
	Small	93	23.351	*	0.08	=	1.87	*	$	42.20	=	$	78.83	93
MARITIME	Large	38	9.6131	*	0.08	=	0.77	*	$	42.20	=	$	32.45	38
	Small	34	8.4687	*	0.08	=	0.68	*	$	42.20	=	$	28.59	34
CONSTRUCTION	Large	1,290	322.43	*	0.08	=	25.79	*	$	42.20	=	$	1,088.49	1,290
	Small	5,162	1290.6	*	0.08	=	103.25	*	$	42.20	=	$	4,356.89	5,162
GOVERNMENT	State	16	4.0608	*	0.08	=	0.32	*	$	42.20	=	$	13.71	16
	Local	59	14.682	*	0.08	=	1.17	*	$	42.20	=	$	49.56	59
SECTOR 27. Solid Waste Incineration														
ALL	Large	48	12.043	*	0.08	=	0.96	*	$	35.80	=	$	34.49	48
	Small	58	14.452	*	0.08	=	1.16	*	$	35.80	=	$	41.39	58
GOVERNMENT	State	0	0	*	0.08	=	0.00	*	$	35.80	=	$	-	0
	Local	29	7.2259	*	0.08	=	0.58	*	$	35.80	=	$	20.69	29
SECTOR 30. Superalloy Producers and Users														
ALL	Large	18	4.4143	*	0.08	=	0.35	*	$	36.71	=	$	12.96	18
	Small	0	0	*	0.08	=	0.00	*	$	36.71	=	$	-	0
SECTOR 31. Construction														
INDUSTRIAL REHABILITATION AND MAINTENANCE	Large	0	0	*	0.08	=	0.00	*	$	42.27	=	$	-	0
	Small	0	0	*	0.08	=	0.00	*	$	42.27	=	$	-	0
	State	0	0	*	0.08	=	0.00	*	$	42.27	=	$	-	0
	Local	0	0	*	0.08	=	0.00	*	$	42.27	=	$	-	0
HAZARDOUS WASTE-SITE WORK	Large	44	10.885	*	0.08	=	0.87	*	$	42.27	=	$	36.81	44
	Small	143	35.767	*	0.08	=	2.86	*	$	42.27	=	$	120.94	143
	State	1	0.2222	*	0.08	=	0.02	*	$	42.27		$	0.75	1
	Local	201	50.207		0.08	=	4.02		$	42.27			$170	201
REFRACTORY BRICK RESTORATION	Large	48	11.996	*	0.08	=	0.96	*	$	42.27	=	$	40.57	48
	Small	148	36.877	*	0.08	=	2.95	*	$	42.27	=	$	124.70	148
Total			**16,582**				**1,327**						**$48,440.60**	**66,329**

Initial Medical Examination (§§ 1910.1026(k)(1)(i)(A), (k)(3)(i), and (k)(3)(ii); 1915.1026(i)(1)(i)(A), (i)(3)(i), and (i)(3)(ii); and 1926.1126(i)(1)(i)(A), (i)(3)(i), and (i)(3)(ii))

Employee Time and Cost to Complete the Initial Medical Examination

This table calculates the burden hours and costs of employee time to complete the initial medical examinations for those employees who are potentially exposed to airborne hexavalent chromium at or above the action level or who show "signs or symptoms" of exposure to hexavalent chromium before the implementation of engineering controls. For purposes of estimating the ICR costs, the Agency assumes that: all initial monitoring is completed, existing employers will experience a 5% turnover of potentially exposed employees with initial medical examinations, and new employers will have no employees requiring an initial medical examination.

Hours = POTEXEMP*MEDEXAMTIME * #PLANTS
Cost = POTEXEMP* MEDEXAMTIME *NONSUPWAGE * #PLANTS

* POTEXEMP * 5% = Total number of potentially exposed employees at or above the AL and workers with "signs and symptoms" before the implementation of engineering controls.
* MEDEXAMTIME = Employee time, in hours, for a medical examination.
*NONSUPEWAGE - Non-supervisory wage rate
* #PLANTS = Number of Plants

Variables		POTEXEMP	POTEXEMP * 5%		MEDEXAMTIME		#PLANTS		Hours		NONSUPEWAGE	Item 12 Cost	RESPONSES
Sector 1. Electroplating													
ALL	Large	6	0.2783	*	3	*	1,885	=	1,574	*	$25.49	$40,128	10,494
	Small	1	0.0464	*	3	*	3,547	=	494	*	$25.49	$12,583	3,291
Sector 2. Welding													
General Industry	Large	2	0.0973	*	3	*	7,911	=	2,309	*	$25.10	$57,952	15,392
	Small	0	0	*	3	*	8,864	=	0	*	$25.10	$0	0
Maritime	Large	18	0.9242	*	3	*	191	=	529	*	$25.10	$13,269	3,524
	Small	1	0.0486	*	3	*	108	=	16	*	$25.10	$396	105
Construction	Large	50	2.4807	*	3	*	269	=	2,005	*	$25.10	$50,337	13,370
	Small	5	0.2432	*	3	*	2,160	=	1,576	*	$25.10	$39,551	10,505
GOVERNMENT	Local	2	0.0973	*	3	*	25	=	7	*	$25.10	$185	49
	State	0	0	*	3	*	793	=	0	*	$25.10	$0	0
Sector 2. Mild Steel Welding													
General Industry	Large	1	0.0486	*	3	*	10,607	=	1,548	*	$25.10	$38,849	10,319
	Small	0	0	*	3	*	10,797	=	0	*	$25.10	$0	0
Maritime	Large	0	0	*	3	*	412	=	0	*	$25.10	$0	0
	Small	1	0.0486	*	3	*	233	=	34	*	$25.10	$855	227
Construction	Large	18	0.9242	*	3	*	405	=	1,122	*	$25.10	$28,163	7,480
	Small	2	0.0973	*	3	*	3,058	=	892	*	$25.10	$22,398	5,949
SECTOR 3. PAINTING		**GENERAL INDUSTRY**											
AEROSPACE	Large	47	2.3456	*	3	*	50	=	350	*	$31.68	$11,073	2,330
	Small	1	0.046	*	3	*	63	=	9	*	$31.68	$273	58
Autobody	Large	12	0.5979	*	3	*	331	=	594	*	$31.68	$18,817	3,960
	Small	1	0.046	*	3	*	1,458	=	201	*	$31.68	$6,373	1,341
Coil Coating	Large	2	0.092	*	3	*	101	=	28	*	$31.68	$885	186
	Small	1	0.046	*	3	*	18	=	3	*	$31.68	$80	17
Maritime	Large	3	0.1373	*	3	*	294	=	121	*	$31.68	$3,836	807
	Small	1	0.0458	*	3	*	508	=	70	*	$31.68	$2,211	465

Variables		POTEXEMP	POTEXEMP * 5%		MEDEXAMTIME		#PLANTS		Hours		NONSUPEWAGE	Item 12 Cost	RESPONSES
Construction	Large	2	0.1087	*	3	*	765	=	249	*	$31.68	$7,902	1,663
	Small	1	0.0362	*	3	*	4,067	=	442	*	$31.68	$14,003	2,947
Government	Local	9	0.4373	*	3	*	16	=	21	*	$31.68	$675	142
	State	1	0.0312	*	3	*	899	=	84	*	$31.68	$2,669	562
SECTOR 4. Producers of Chromates													
ALL	Large	7	0.3643	*	3	*	2	=	2	*	$37.06	$84	15
	Small	0	0	*	3	*	0	=	0	*	$37.06	$0	0
SECTOR 5. Chromate Pigment Procedures													
ALL	Large	25	1.249	*	3	*	2	=	7	*	$36.12	$268	49
	Small	3	0.1561	*	3	*	1	=	0	*	$36.12	$17	3
SECTOR 6. CCA Producers													
ALL	Large	3	0.1278	*	3	*	3	=	1	*	$30.60	$30	7
	Small	0	0	*	3	*	0	=	0	*	$30.60	$0	0
SECTOR 7. Chromium Catalyst Producers													
ALL	Large	27	1.3531	*	3	*	5	=	21	*	$37.06	$783	141
	Small	0	0	*	3	*	0	=	0	*	$37.06	$0	0
SECTOR 8. Paint and Coating Producers													
ALL	Large	5	0.2602	*	3	*	87	=	68	*	$27.60	$1,884	455
	Small	2	0.1041	*	3	*	137	=	43	*	$27.60	$1,184	286
SECTOR 9. Printing Ink Producers													
ALL	Large	0	0	*	3	*	3	=	0	*	$27.65	$0	0
	Small	0	0	*	3	*	10	=	0	*	$27.65	$0	0
SECTOR 10. Plastic Colorant Producers and Users													
ALL	Large	0	0	*	3	*	86	=	0	*	$30.64	$0	0
	Small	0	0	*	3	*	42	=	0	*	$30.64	$0	0
SECTOR 11. Plating Mixture Producers													
ALL	Large	2	0.1104	*	3	*	4	=	1	*	$27.50	$40	10
	Small	1	0.0736	*	3	*	3	=	1	*	$27.50	$18	4
SECTOR 13. Chromium Metal Producers													
ALL	Large	13	0.65	*	3	*	1	=	2	*	$37.17	$72	13
	Small	0	0	*	3	*	0	=	0	*	$37.17	$0	0
SECTOR 14. Iron and Steel Mills													
Alloy Stainless Steel	Large	40	2.0039	*	3	*	37	=	224	*	$37.17	$8,328	1,493
	Small	1	0.0703	*	3	*	12	=	3	*	$37.17	$94	17
Carbon Steel	Large	10	0.4922	*	3	*	112	=	165	*	$37.17	$6,136	1,100
	Small	1	0.0703	*	3	*	35	=	7	*	$37.17	$276	49
14B. Alloy Stainless Steel Forging Industry													
Reshaping	Large	3	0.1406	*	3	*	37	=	15	*	$37.17	$573	103
	Small	0	0	*	3	*	34	=	0	*	$37.17	$0	0
SECTOR 15. Iron and Steel Foundries													
ALL	Large	27	1.3502	*	3	*	178	=	722	*	$27.12	$19,579	4,813
	Small	5	0.27	*	3	*	130	=	105	*	$27.12	$2,848	700
SECTOR 17. Chromium Dye Producers													
ALL	Large	0	0	*	3	*	3	=	0	*	$36.12	$0	0
	Small	0	0	*	3	*	1	=	0	*	$36.12	$0	0

Variables		POTEXEMP	POTEXEMP * 5%		MEDEXAMTIME		#PLANTS		Hours		NONSUPEWAGE	Item 12 Cost	RESPONSES
SECTOR 18. Chromium Sulfate Producers													
ALL	Large	0	0	*	3	*	0	=	0	*	$39.76	$0	0
	Small	3	0.1561	*	3	*	5	=	2	*	$39.76	$97	16
SECTOR 19. Chemical Distributors													
ALL	Large	0	0	*	3	*	207	=	0	*	$28.67	$0	0
	Small	0	0	*	3	*	1,561	=	0	*	$28.67	$0	0
SECTOR 20. Textile Dyeing													
ALL	Large	0	0	*	3	*	347	=	0	*	$19.13	$0	0
	Small	0	0	*	3	*	703	=	0	*	$19.13	$0	0
SECTOR 21. Colored Glass Producers													
ALL	Large	1	0.0452	*	3	*	5	=	1	*	$27.66	$20	5
	Small	0	0	*	3	*	17	=	0	*	$27.66	$0	0
Fiber, Flat and Container Glass	Large	10	0.4972	*	3	*	78	=	116	*	$27.66	$3,207	773
	Small	2	0.0904	*	3	*	5	=	1	*	$27.66	$34	8
SECTOR 22. Printing													
ALL	Large	0	0	*	3	*	92	=	0	*	$19.97	$0	0
	Small	0	0	*	3	*	367	=	0	*	$19.97	$0	0
SECTOR 24. Chromium Catalyst Users													
Catalyst Users	Large	1	0.0504	*	3	*	164	=	25	*	$31.14	$775	166
	Small	0	0	*	3	*	0	=	0	*	$31.14	$0	0
Chromium Catalyst Service Companies	Large	10	0.5043	*	3	*	21	=	32	*	$31.14	$998	
	Small	5	0.2522	*	3	*	4	=	3	*	$31.14	$95	20
SECTOR 25. Refractory Brick Producers													
ALL	Large	0	0	*	3	*	6	=	0	*	$24.56	$0	0
	Small	0	0	*	3	*	0	=	0	*	$24.56	$0	0
SECTOR 26. Woodworking													
General Industry	Large	1	0.0467	*	3	*	175	=	24	*	$30.76	$753	163
	Small	0	0	*	3	*	93	=	0	*	$30.76	$0	0
Maritime	Large	0	0	*	3	*	38	=	0	*	$30.76	$0	0
	Small	0	0	*	3	*	34	=	0	*	$30.76	$0	0
Construction	Large	3	0.1299	*	3	*	1,290	=	503	*	$30.76	$15,465	3,351
	Small	1	0.0433	*	3	*	5,162	=	671	*	$30.76	$20,633	4,472
Government	State	1	0.0312	*	3	*	16	=	2	*	$30.76	$47	10
	Local	1	0.0312	*	3	*	59	=	6	*	$30.76	$169	37
SECTOR 27. Solid Waste Incineration													
ALL	Large	0	0	*	3	*	48	=	0	*	$26.09	$0	0
	Small	0	0	*	3	*	58	=	0	*	$26.09	$0	0
Government	State	0	0	*	3	*	0	=	0	*	$26.09	$0	0
	Local	0	0	*	3	*	29	=	0	*	$26.09	$0	0
SECTOR 30. Superalloy Producers and Users													
ALL	Large	2	0.0981	*	3	*	18	=	5	*	$26.75	$139	35
	Small	0	0	*	3	*	0	=	0	*	$26.75	$0	0

Variables		POTEXEMP	POTEXEMP * 5%		MEDEXAMTIME		#PLANTS		Hours		NONSUPEWAGE	Item 12 Cost	RESPONSES
SECTOR 31. Construction													
Industrial Rehabilitation & Maintenance	Large	0	0	*	3	*	55	=	0	*	$30.79	$0	0
	Small	0	0	*	3	*	196	=	0	*	$30.79	$0	0
	State Gov't	0	0	*	3	*	16	=	0	*	$30.79	$0	0
	Local Gov't	0	0	*	3	*	74	=	0	*	$30.79	$0	0
Hazardous Waste Site Work	Large	0	0	*	3	*	44	=	0	*	$30.79	$0	0
	Small	0	0	*	3	*	143	=	0	*	$30.79	$0	0
	State Gov't	0	0	*	3	*	1	=	0	*	$30.79	$0	0
	Local Gov't	0	0	*	3	*	201	=	0	*	$30.79	$0	0
Refractory Brick Restoration	Large	9	0.4443	*	3	*	48	=	64	*	$30.79	$1,969	426
	Small	1	0.0444	*	3	*	148	=	20	*	$30.79	$605	131
Total							**72,329**		**17,140**			**$460,684**	**114,055**

Initial Medical Examination (§§ 1910.1026(k)(1)(i)(A), (k)(3)(i), and (k)(3)(ii); 1915.1026(i)(1)(i)(A), (i)(3)(i), and (i)(3)(ii); and 1926.1126(i)(1)(i)(A), (i)(3)(i), and (i)(3)(ii))

Contract Cost for a PLHCP to Conduct the Initial Medical Examination

This table calculates the cost for a contractor PLHCP to conduct initial medical examinations.

COST = POTEXEMP * MEDEXAMCOST * # PLANTS
* POTEXEMP = Total number of potentially exposed employees at or above the AL and workers with "signs and symptoms" before the implementation of engineering controls * 5%
*MEDEXAMCOST = Cost of medical exam
* #PLANTS = Number of Plants

Variables		POTEXEMP	POTEXEMP*5%		MEDEXAMCOST		#PLANTS		COST
Sector 1. Electroplating									
All	Large	6	0.2783	*	$142	*	1,885	=	$74,404
	Small	1	0.0464	*	$142	*	3,547	=	$23,331
Sector 2. Welding									
General Industry	Large	2	0.0973	*	$142	*	7,911	=	$109,132
	Small	0	0.0000	*	$142	*	8,864	=	$0
Maritime	Large	18	0.9242	*	$142	*	191	=	$24,988
	Small	1	0.0486	*	$142	*	108	=	$745
Construction	Large	50	2.4807	*	$142	*	269	=	$94,792
	Small	5	0.2432	*	$142	*	2,160	=	$74,481
Government	State	2	0.0973	*	$142	*	25	=	$349
	Local	0	0.0000	*	$142	*	793	=	$0
Sector 2. Mild Steel Welding									
General Industry	Large	1	0.0486	*	$142	*	10,607	=	$73,159
	Small	0	0.0000	*	$142	*	10,797	=	$0
Maritime	Large	0	0.0000	*	$142	*	412	=	$0
	Small	1	0.0486	*	$142	*	233	=	$1,610
Construction	Large	18	0.9242	*	$142	*	405	=	$53,036
	Small	2	0.0973	*	$142	*	3,058	=	$42,179
SECTOR 3. PAINTING	**General Industry**								
AEROSPACE	Large	47	2.3456	*	$142	*	50	=	$16,522
	Small	1	0.0460	*	$142	*	63	=	$408
Auto Body	Large	2	0.0920	*	$142	*	331	=	$4,319
	Small	1	0.0460	*	$142	*	1,458	=	$9,509
Coil Coating	Large	2	0.0920	*	$142	*	101	=	$1,320
	Small	1	0.0460	*	$142	*	18	=	$120

Variables		POTEXEMP	POTEXEMP*5%		MEDEXAMCOST		#PLANTS		COST
Maritime	Large	3	0.1373	*	$142	*	294	=	$5,723
	Small	1	0.0458	*	$142	*	508	=	$3,298
Construction	Large	2	0.1087	*	$142	*	765	=	$11,791
	Small	1	0.0362	*	$142	*	4,067	=	$20,894
Government	State	9	0.4373	*	$142	*	16	=	$1,007
	Local	1	0.0312	*	$142	*	899	=	$3,982
SECTOR 4. Producers of Chromates									
ALL	Large	7	0.3643	*	$142	*	2	=	$108
	Small	0	0.0000	*	$142	*	0	=	$0
SECTOR 5. Chromate Pigment Procedures									
ALL	Large	25	1.2490	*	$142	*	2	=	$350
	Small	3	0.1561	*	$142	*	1	=	$22
SECTOR 6. CCA Producers									
ALL	Large	3	0.1278	*	$142	*	3	=	$46
	Small	0	0.0000	*	$142	*	0	=	$0
SECTOR 7. Chromium Catalyst Producers									
ALL	Large	27	1.3531	*	$142	*	5	=	$999
	Small	0	0.0000	*	$142	*	0	=	$0
SECTOR 8. Paint and Coating Producers									
ALL	Large	5	0.2602	*	$142	*	87	=	$3,226
	Small	2	0.1041	*	$142	*	137	=	$2,028
SECTOR 9. Printing Ink Producers									
ALL	Large	0	0.0000	*	$142	*	3	=	$0
	Small	0	0.0000	*	$142	*	10	=	$0
SECTOR 10. Plastic Colorant Producers and Users									
ALL	Large	0	0.0000	*	$142	*	86	=	$0
	Small	0	0.0000	*	$142	*	42	=	$0
SECTOR 11. Plating Mixture Producers									
ALL	Large	2	0.1104	*	$142	*	4	=	$69
	Small	1	0.0736	*	$142	*	3	=	$31
SECTOR 13. Chromium Metal Producers									
ALL	Large	13	0.6500	*	$142	*	1	=	$92
	Small	0	0.0000	*	$142	*	0	=	$0
SECTOR 14. Iron and Steel Mills									
General Industry	Large	40	2.0039	*	$142	*	37	=	$10,589
	Small	1	0.0703	*	$142	*	12	=	$119

Variables		POTEXEMP	POTEXEMP*5%		MEDEXAMCOST		#PLANTS		COST
Carbon Steel	Large	10	0.4922	*	$142	*	112	=	$7,802
	Small	1	0.0703	*	$142	*	35	=	$351
SECTOR 14B. Forging Industry									
Reshaping	Large	3	0.1406	*	$142	*	37	=	$729
	Small	0	0.0000	*	$142	*	34	=	$0
SECTOR 15. Iron and Steel Foundries									
ALL	Large	27	1.3502	*	$142	*	178	=	$34,122
	Small	5	0.2700	*	$142	*	130	=	$4,963
SECTOR 17. Chromium Dye Producers									
ALL	Large	0	0.0000	*	$142	*	3	=	$0
	Small	0	0.0000	*	$142	*	1	=	$0
SECTOR 18. Chromium Sulfate Producers									
ALL	Large	0	0.0000	*	$142	*	0	=	$0
	Small	3	0.1561	*	$142	*	5	=	$115
SECTOR 19. Chemical Distributors									
ALL	Large	0	0.0000	*	$142	*	207	=	$0
	Small	0	0.0000	*	$142	*	1,561	=	$0
SECTOR 20. Textile Dyeing									
ALL	Large	0	0.0000	*	$142	*	347	=	$0
	Small	0	0.0000	*	$142	*	703	=	$0
SECTOR 21. Colored Glass Producers									
General Industry	Large	1	0.0452	*	$142	*	5	=	$35
	Small	0	0.0000	*	$142	*	17	=	$0
Fiber, Flat and Container Glass	Large	10	0.4972	*	$142	*	78	=	$5,481
	Small	2	0.0904	*	$142	*	5	=	$58
SECTOR 22. Printing									
ALL	Large	0	0.0000	*	$142	*	92	=	$0
	Small	0	0.0000	*	$142	*	367	=	$0
SECTOR 24. Chromium Catalyst Users									
General Industry	Large	1	0.0504	*	$142	*	164	=	$1,176
	Small	0	0.0000	*	$142	*	0	=	$0

Variables		POTEXEMP	POTEXEMP*5%		MEDEXAMCOST		#PLANTS		COST
Chromium Service Companies	Large	10	0.5043	*	$142	*	21	=	$1,515
	Small	5	0.2522	*	$142	*	4	=	$144
SECTOR 25. Refractory Brick Producers									
ALL	Large	0	0.0000	*	$142	*	6	=	$0
	Small	0	0.0000	*	$142	*	0	=	$0
SECTOR 26. Woodworking									
General Industry	Large	1	0.0467	*	$142	*	175	=	$1,157
	Small	0	0.0000	*	$142	*	93	=	$0
Maritime	Large	0	0.0000	*	$142	*	38	=	$0
	Small	0	0.0000	*	$142	*	34	=	$0
Construction	Large	3	0.1299	*	$142	*	1,290	=	$23,762
	Small	1	0.0433	*	$142	*	5,162	=	$31,703
Government	State	1	0.0312	*	$142	*	16	=	$72
	Local	1	0.0312	*	$142	*	59	=	$260
SECTOR 27. Solid Waste Incineration									
ALL	Large	0	0.0000	*	$142	*	48	=	$0
	Small	0	0.0000	*	$142	*	58	=	$0
Government	State	1	0.0438	*	$142	*	0	=	$0
	Local	0	0.0000	*	$142	*	29	=	$0
SECTOR 30. Superalloy Producers and Users									
ALL	Large	2	0.0981	*	$142	*	18	=	$246
	Small	0	0.0000	*	$142	*	0	=	$0
SECTOR 31. Construction									
Industrial Rehabilitation & Maintenance	Large	0	0.0000	*	$142	*	55	=	$0
	Small	0	0.0000	*	$142	*	196	=	$0
	State	0	0.0000	*	$142	*	16	=	$0
	Local	0	0.0000	*	$142	*	74	=	$0
Hazardous Waste Site Work	Large	0	0.0000	*	$142	*	44	=	$0
	Small	0	0.0000	*	$142	*	143	=	$0
	State	0	0.0000	*	$142	*	1	=	$0
	Local	0	0.0000	*	$142	*	201	=	$0
Refractory Brick Restoration	Large	9	0.4443	*	$142	*	48	=	$3,023
	Small	1	0.0444	*	$142	*	148	=	$929
					Total		**72,329**		**$786,420**

Annual Medical Examination (§§ 1910.1026(k)(2)(ii), (k)(3)(i), and (k)(3)(ii); 1915.1026(i)(2)(ii), (i)(3)(i), and (i)(3)(ii); and 1926.1126(i)(2)(ii), (i)(3)(i), and (i)(3)(ii))

Employee Time and Cost to Complete the Annual Medical Examination

This table calculates the burden hours and costs associated with employee time to complete the annual medical examination in the year after the initial medical examination is completed. These hours and costs are for existing emplyoees who are potentially exposed at or above the action level or who show "signs and symptoms" of exposure. The Agency assumes that a varying percentage of existing plants will have employees who will complete these exams; these percentages are specific to each sector and plant size (large or small). Employees who work for employers who conduct annual examinations, %BASEMED, will incur a incremental medical exam time of 3 hours. Employees who are not working for employers providing annual medical examinations (1-%BASEMED) will incur three hours for a full limited medical exam.

COST = (LIMEMPAL + MEDEXAMADDERM)*(LIMPARTIME * %BASEMED)+(LIMFULLTIME*(1-%BASEMED))*PLANTS
Hours= Burden Hours x NONSUPEWAGE
* LIMEMPAL = Number of employees requiring a limited medical exam b/c at or > AL after the implementation of engineering controls.
* MEDEXAMADDERM = Number of employees above the AL requiring a limited medical exam b/c of dermal "signs and symptoms" after the implementation of engineering controls.
LIMPARTIME = Incremental employee time, in hours, for a partial limited exam
%BASEMED = Percentage of employers who are providing annual medical examinations
LIMITFULLTIME = Employee time, in hours, for a full limited medical exam
*1-%BASEMED = Percentage of plants that are not providing annual medical examinations.
* #PLANTS = Number of Plants

Variables		LIMEMPAL		MEDEXAMADDERM		LIMPARTIME		%BASEMED		LIMPFULLTIME		1-%BASEMED		#PLANTS	Hours	NONSUPEWAGE	Cost	Responses
Sector 1. Electroplating																		
All	Large	(3	+	0.000000	) * ((3	*	100.00%	) + (	3.00	* (1	-	100.00%	)) *	1,885 =	15,741	$25.49	$401,282	5,247
	Small	(0	+	0.000000	) * ((3	*	100.00%	) + (	3.00	* (1	-	100.00%	)) *	3,547 =	0	$25.49	$0	0
Sector 2. Welding																		
General Industry	Large	(0	+	0.000000	) * ((3	*	5.00%	) + (	3.00	* (1	-	5.00%	)) *	7,911 =	0	$25.10	$0	0
	Small	(0	+	0.000000	) * ((3	*	0.00%	) + (	3.00	* (1	-	0.00%	)) *	8,864 =	0	$25.10	$0	0
Maritime	Large	(14	+	2.918484	) * ((3	*	5.00%	) + (	3.00	* (1	-	5.00%	)) *	191 =	9,460	$25.10	$237,451	3,153
	Small	(1	+	0.000000	) * ((3	*	0.00%	) + (	3.00	* (1	-	0.00%	)) *	108 =	315	$25.10	$7,910	105
Construction	Large	(26	+	2.918484	) * ((3	*	5.00%	) + (	3.00	* (1	-	5.00%	)) *	269 =	23,594	$25.10	$592,202	7,865
	Small	(3	+	0.000000	) * ((3	*	0.00%	) + (	3.00	* (1	-	0.00%	)) *	2,160 =	18,909	$25.10	$474,617	6,303
Government	State	(0	+	0.000000	) * ((3	*	5.00%	) + (	3.00	* (1	-	5.00%	)) *	25 =	0	$25.10	$0	0
	Local	(0	+	0.000000	) * ((3	*	0.00%	) + (	3.00	* (1	-	0.00%	)) *	793 =	0	$25.10	$0	0
Sector 2. Mild Steel Welding																		
General Industry	Large	(0	+	0.000000	) * ((3	*	5.00%	) + (	3.00	* (1	-	5.00%	)) *	10,607 =	0	$25.10	$0	0
	Small	(0	+	0.000000	) * ((3	*	0.00%	) + (	3.00	* (1	-	0.00%	)) *	10,797 =	0	$25.10	$0	0
Maritime	Large	(0	+	0.000000	) * ((3	*	5.00%	) + (	3.00	* (1	-	5.00%	)) *	412 =	0	$25.10	$0	0
	Small	(0	+	0.000000	) * ((3	*	0.00%	) + (	3.00	* (1	-	0.00%	)) *	233 =	0	$25.10	$0	0
Construction	Large	(10	+	0.000000	) * ((3	*	5.00%	) + (	3.00	* (1	-	5.00%	)) *	405 =	11,811	$25.10	$296,457	3,937
	Small	(1	+	0.000000	) * ((3	*	0.00%	) + (	3.00	* (1	-	0.00%	)) *	3,058 =	8,924	$25.10	$223,982	2,975
SECTOR 3. PAINTING																		
AEROSPACE	Large	(46	+	0.000000	) * ((3	*	80.00%	) + (	3.00	* (1	-	80.00%	)) *	50 =	6,854	$31.68	$217,117	2,285
	Small	(0	+	0.000000	) * ((3	*	50.00%	) + (	3.00	* (1	-	50.00%	)) *	63 =	0	$31.68	$0	0
Auto Body	Large	(1	+	0.000000	) * ((3	*	80.00%	) + (	3.00	* (1	-	80.00%	)) *	331 =	914	$31.68	$28,949	305
	Small	(0	+	0.000000	) * ((3	*	50.00%	) + (	3.00	* (1	-	50.00%	)) *	1,458 =	0	$31.68	$0	0
Coil Coating	Large	(2	+	0.000000	) * ((3	*	80.00%	) + (	3.00	* (1	-	80.00%	)) *	101 =	558	$31.68	$17,691	186
	Small	(1	+	0.000000	) * ((3	*	50.00%	) + (	3.00	* (1	-	50.00%	)) *	18 =	51	$31.68	$1,608	17
Maritime	Large	(2	+	0.000000	) * ((3	*	100.00%	) + (	3.00	* (1	-	100.00%	)) *	294 =	0	$31.68	$0	538
	Small	(1	+	0.000000	) * ((3	*	50.00%	) + (	3.00	* (1	-	50.00%	)) *	508 =	1,396	$31.68	$44,211	465
Construction	Large	(2	+	0.000000	) * ((3	*	100.00%	) + (	3.00	* (1	-	100.00%	)) *	765 =	4,989	$31.68	$158,041	1,663
	Small	(0	+	0.000000	) * ((3	*	100.00%	) + (	3.00	* (1	-	100.00%	)) *	4,067 =	0	$31.68	$0	0
Government	State	(0	+	0.000000	) * ((3	*	100.00%	) + (	3.00	* (1	-	100.00%	)) *	16 =	0	$31.68	$0	0
	Local	(9	+	0.000000	) * ((3	*	100.00%	) + (	3.00	* (1	-	100.00%	)) *	899 =	23,589	$31.68	$747,276	7,863
SECTOR 4. Producers of Chromates																		
ALL	Large	(7	+	0.000000	) * ((3	*	50.00%	) + (	3.00	* (1	-	50.00%	)) *	2 =	46	$37.06	$1,686	15
	Small	(0	+	0.000000	) * ((3	*	0.00%	) + (	3.00	* (1	-	0.00%	)) *	0 =	0	$37.06	$0	0

Variables		LIMEMPAL		MEDEXAMADDERM		LIMPARTIME		%BASEMED		LIMPFULLTIME		1-%BASEMED		#PLANTS		Hours	NONSUPEWAGE	Cost	Responses
SECTOR 5. Chromate Pigment Procedures																			
ALL	Large	(9	+	0.000000	) * ((3	*	100.00%	) + (	3.00 * (1	-	100.00%	)) *	2	=	56	$36.12	$2,007	19
	Small	(1	+	0.000000	) * ((3	*	100.00%	) + (	3.00 * (1	-	100.00%	)) *	1	=	3	$36.12	$111	1
SECTOR 6. CCA Producers																			
ALL	Large	(2	+	0.000000	) * ((3	*	100.00%	) + (	3.00 * (1	-	100.00%	)) *	3	=	13	$30.60	$400	4
	Small	(0	+	0.000000	) * ((3	*	0.00%	) + (	3.00 * (1	-	0.00%	)) *	0	=	0	$30.60	$0	0
SECTOR 7. Chromium Catalyst Producers																			
ALL	Large	(12	+	0.000000	) * ((3	*	100.00%	) + (	3.00 * (1	-	100.00%	)) *	5	=	195	$37.06	$7,226	65
	Small	(0	+	0.000000	) * ((3	*	100.00%	) + (	3.00 * (1	-	100.00%	)) *	0	=	0	$37.06	$0	0
SECTOR 8. Paint and Coating Producers																			
ALL	Large	(1	+	0.000000	) * ((3	*	100.00%	) + (	3.00 * (1	-	100.00%	)) *	87	=	273	$27.60	$7,535	91
	Small	(0	+	0.000000	) * ((3	*	100.00%	) + (	3.00 * (1	-	100.00%	)) *	137	=	0	$27.60	$0	0
SECTOR 9. Printing Ink Producers																			
ALL	Large	(0	+	0.000000	) * ((3	*	80.00%	) + (	3.00 * (1	-	80.00%	)) *	3	=	0	$27.65	$0	0
	Small	(0	+	0.000000	) * ((3	*	10.00%	) + (	3.00 * (1	-	10.00%	)) *	10	=	0	$27.65	$0	0
SECTOR 10. Plastic Colorant Producers and Users																			
ALL	Large	(0	+	0.000000	) * ((3	*	100.00%	) + (	3.00 * (1	-	100.00%	)) *	86	=	0	$30.64	$0	0
	Small	(0	+	0.000000	) * ((3	*	100.00%	) + (	3.00 * (1	-	100.00%	)) *	42	=	0	$30.64	$0	0
SECTOR 11. Plating Mixture Producers																			
ALL	Large	(2	+	0.000000	) * ((3	*	50.00%	) + (	3.00 * (1	-	50.00%	)) *	4	=	29	$27.50	$805	10
	Small	(1	+	0.000000	) * ((3	*	30.00%	) + (	3.00 * (1	-	30.00%	)) *	3	=	7	$27.50	$179	2
SECTOR 13. Chromium Metal Producers																			
ALL	Large	(8	+	0.000000	) * ((3	*	100.00%	) + (	3.00 * (1	-	100.00%	)) *	1	=	24	$37.17	$892	8
	Small	(0	+	0.000000	) * ((3	*	0.00%	) + (	3.00 * (1	-	0.00%	)) *	0	=	0	$37.17	$0	0
SECTOR 14. Iron and Steel Mills																			
General Industry	Large	(30	+	0.006497	) * ((3	*	50.00%	) + (	3.00 * (1	-	50.00%	)) *	37	=	3,302	$37.17	$122,751	1,101
	Small	(1	+	0.000309	) * ((3	*	30.00%	) + (	3.00 * (1	-	30.00%	)) *	12	=	50	$37.17	$1,875	17
Carbon Steel	Large	(1	+	0.000155	) * ((3	*	50.00%	) + (	3.00 * (1	-	50.00%	)) *	112	=	236	$37.17	$8,768	79
	Small	(1	+	0.000309	) * ((3	*	30.00%	) + (	3.00 * (1	-	30.00%	)) *	35	=	148	$37.17	$5,514	49
SECTOR 14B. Forging Industry																			
Reshaping	Large	(0	+	0.000619	) * ((3	*	50.00%	) + (	3.00 * (1	-	50.00%	)) *	37	=	0	$37.17	$3	0
	Small	(0	+	0.000155	) * ((3	*	30.00%	) + (	3.00 * (1	-	30.00%	)) *	34	=	0	$37.17	$1	0
SECTOR 15. Iron and Steel Foundries																			
ALL	Large	(19	+	0.000000	) * ((3	*	80.00%	) + (	3.00 * (1	-	80.00%	)) *	178	=	10,106	$27.12	$274,112	3,369
	Small	(5	+	0.000000	) * ((3	*	10.00%	) + (	3.00 * (1	-	10.00%	)) *	130	=	1,750	$27.12	$47,465	583
SECTOR 17. Chromium Dye Producers																			
ALL	Large	(0	+	0.000000	) * ((3	*	100.00%	) + (	3.00 * (1	-	100.00%	)) *	3	=	0	$36.12	$0	0
	Small	(0	+	0.000000	) * ((3	*	100.00%	) + (	3.00 * (1	-	100.00%	)) *	1	=	0	$36.12	$0	0
SECTOR 18. Chromium Sulfate Producers																			
ALL	Large	(0	+	0.000000	) * ((3	*	100.00%	) + (	3.00 * (1	-	100.00%	)) *	0	=	0	$39.76	$0	0
	Small	(1	+	0.000000	) * ((3	*	100.00%	) + (	3.00 * (1	-	100.00%	)) *	5	=	16	$39.76	$646	5
SECTOR 19. Chemical Distributors																			
ALL	Large	(0	+	0.000000	) * ((3	*	0.00%	) + (	3.00 * (1	-	0.00%	)) *	207	=	0	$28.67	$0	0
	Small	(0	+	0.000000	) * ((3	*	0.00%	) + (	3.00 * (1	-	0.00%	)) *	1,561	=	0	$28.67	$0	0
SECTOR 20. Textile Dyeing																			
ALL	Large	(0	+	0.000000	) * ((3	*	80.00%	) + (	3.00 * (1	-	80.00%	)) *	347	=	0	$19.13	$0	0
	Small	(0	+	0.000000	) * ((3	*	10.00%	) + (	3.00 * (1	-	10.00%	)) *	703	=	0	$19.13	$0	0
SECTOR 21. Colored Glass Producers																			
General Industry	Large	(1	+	0.000000	) * ((3	*	80.00%	) + (	3.00 * (1	-	80.00%	)) *	5	=	15	$27.66	$407	5
	Small	(0	+	0.000000	) * ((3	*	10.00%	) + (	3.00 * (1	-	10.00%	)) *	17	=	0	$27.66	$0	0
Fiber, Flat and Container Glass	Large	(8	+	0.000000	) * ((3	*	80.00%	) + (	3.00 * (1	-	80.00%	)) *	78	=	1,897	$27.66	$52,476	632
	Small	(2	+	0.000000	) * ((3	*	10.00%	) + (	3.00 * (1	-	10.00%	)) *	5	=	25	$27.66	$678	8

Variables		LIMEMPAL		MEDEXAMADDERM		LIMPARTIME		%BASEMED		LIMPFULLTIME		1-%BASEMED		#PLANTS	Hours	NONSUPEWAGE	Cost	Responses
SECTOR 22. Printing																		
ALL	Large	(0	+	0.000000	) * ((3	*	80.00%	) + (	3.00 * (1	-	80.00%	)) *	92 =	0	$19.97	$0	0
	Small	(0	+	0.000000	) * ((3	*	10.00%	) + (	3.00 * (1	-	10.00%	)) *	367 =	0	$19.97	$0	0
SECTOR 24. Chromium Catalyst Users																		
General Industry	Large	(0	+	0.000000	) * ((3	*	80.00%	) + (	3.00 * (1	-	80.00%	)) *	164 =	0	$31.14	$0	0
	Small	(0	+	0.000000	) * ((3	*	80.00%	) + (	3.00 * (1	-	80.00%	)) *	0 =	0	$31.14	$0	0
Chromium Service Companies	Large	(5	+	0.000000	) * ((3	*	80.00%	) + (	3.00 * (1	-	80.00%	)) *	21 =	321	$31.14	$9,982	107
	Small	(3	+	0.000000	) * ((3	*	30.00%	) + (	3.00 * (1	-	30.00%	)) *	4 =	37	$31.14	$1,141	12
SECTOR 25. Refractory Brick Producers																		
ALL	Large	(0	+	0.000000	) * ((3	*	80.00%	) + (	3.00 * (1	-	80.00%	)) *	6 =	0	$24.56	$0	0
	Small	(0	+	0.000000	) * ((3	*	10.00%	) + (	3.00 * (1	-	10.00%	)) *	0 =	0	$24.56	$0	0
SECTOR 26. Woodworking																		
General Industry	Large	(0	+	0.000000	) * ((3	*	25.00%	) + (	3.00 * (1	-	25.00%	)) *	175 =	0	$30.76	$0	0
	Small	(0	+	0.000000	) * ((3	*	0.00%	) + (	3.00 * (1	-	0.00%	)) *	93 =	0	$30.76	$0	0
Maritime	Large	(0	+	0.000000	) * ((3	*	25.00%	) + (	3.00 * (1	-	25.00%	)) *	38 =	0	$30.76	$0	0
	Small	(0	+	0.000000	) * ((3	*	0.00%	) + (	3.00 * (1	-	0.00%	)) *	34 =	0	$30.76	$0	0
Construction	Large	(1	+	0.000000	) * ((3	*	50.00%	) + (	3.00 * (1	-	50.00%	)) *	1,290 =	3,351	$30.76	$103,097	1,117
	Small	(1	+	0.000000	) * ((3	*	50.00%	) + (	3.00 * (1	-	50.00%	)) *	5,162 =	13,415	$30.76	$412,664	4,472
Government	State	(1	+	0.000000	) * ((3	*	50.00%	) + (	3.00 * (1	-	50.00%	)) *	16 =	30	$30.76	$937	10
	Local	(1	+	0.000000	) * ((3	*	50.00%	) + (	3.00 * (1	-	50.00%	)) *	59 =	110	$30.76	$3,386	37
SECTOR 27. Solid Waste Incineration																		
ALL	Large	(0	+	0.000000	) * ((3	*	50.00%	) + (	3.00 * (1	-	50.00%	)) *	48 =	0	$26.09	$0	0
	Small	(0	+	0.000000	) * ((3	*	30.00%	) + (	3.00 * (1	-	30.00%	)) *	58 =	0	$26.09	$0	0
Government	State	(1	+	0.000000	) * ((3	*	50.00%	) + (	3.00 * (1	-	50.00%	)) *	0 =	0	$26.09	$0	0
	Local	(0	+	0.000000	) * ((3	*	30.00%	) + (	3.00 * (1	-	30.00%	)) *	29 =	0	$26.09	$0	0
SECTOR 30. Superalloy Producers and Users																		
ALL	Large	(2	+	0.000000	) * ((3	*	50.00%	) + (	3.00 * (1	-	50.00%	)) *	18 =	104	$26.75	$2,780	35
	Small	(0	+	0.000000	) * ((3	*	30.00%	) + (	3.00 * (1	-	30.00%	)) *	0 =	0	$26.72	$0	0
SECTOR 31. Construction																		
Industrial Rehabilitation & Maintenance	Large	(0	+	0.000000	) * ((3	*	50.00%	) + (	3.00 * (1	-	50.00%	)) *	55 =	0	$30.79	$0	0
	Small	(0	+	0.000000	) * ((3	*	50.00%	) + (	3.00 * (1	-	50.00%	)) *	196 =	0	$30.79	$0	0
	State	(0	+	0.000000	) * ((3	*	50.00%	) + (	3.00 * (1	-	50.00%	)) *	16 =	0	$30.79	$0	0
	Local	(0	+	0.000000	) * ((3	*	50.00%	) + (	3.00 * (1	-	50.00%	)) *	74 =	0	$30.79	$0	0
Hazardous Waste Site Work	Large	(0	+	0.000000	) * ((3	*	50.00%	) + (	3.00 * (1	-	50.00%	)) *	44 =	0	$30.79	$0	0
	Small	(0	+	0.000000	) * ((3	*	50.00%	) + (	3.00 * (1	-	50.00%	)) *	143 =	0	$30.79	$0	0
	State	(0	+	0.000000	) * ((3	*	50.00%	) + (	3.00 * (1	-	50.00%	)) *	1 =	0	$30.79	$0	0
	Local	(0	+	0.000000	) * ((3	*	50.00%	) + (	3.00 * (1	-	50.00%	)) *	201 =	0	$30.79	$0	0
Refractory Brick Restoration	Large	(1	+	0.000000	) * ((3	*	50.00%	) + (	3.00 * (1	-	50.00%	)) *	48 =	128	$30.79	$3,938	43
	Small	(1	+	0.000000	) * ((3	*	50.00%	) + (	3.00 * (1	-	50.00%	)) *	148 =	393	$30.79	$12,106	131
Total														**72,329**	**163,184**		**$4,534,363**	**54,933**

Annual Medical Examination (§§ 1910.1026(k)(2)(ii), (k)(3)(i), and (k)(3)(ii); 1915.1026(i)(2)(ii), (i)(3)(i), and (i)(3)(ii); and 1926.1126(i)(2)(ii), (i)(3)(i), and (i)(3)(ii))

Contract Cost for a PLHCP to Conduct the Medical Examination

This table calculates the cost for a contractor PLHCP to conduct the annual medical examination. Employers who were providing annual examinations (%BASEMED) will incur a partial medical exam cost per employee. Employers who were NOT providing annual medical examinations (1-%BASEMED) will incur the full cost of a medical exam per employee.

COST = (LIMEMPAL + MEDEXAMADDERM)*((PARTFULLCOST*%BASEMED)+(LIMFULLCOST *(1-%BASEMED))*PLANTS

* LIMEMPAL = Number of employees requiring a limited medical exam b/c at or > AL after the implementation of engineering controls.
* MEDEXAMADDERM = Number of employees at or above the AL requiring a limited medical exam b/c of dermal "signs and symptoms" after the implementation of engineering controls.

PARTFULLCOST = The cost of a partial medical exam for employers who are providing annual medical examinations.

%BASEMED = Percentage of employers who are providing annual medical examinations

LIMITFULLCOST = The cost of a medical examination for employers who are not providing annual medical examinations

*1-%BASEMED = Percentage of plants that are not providing annual medical examinations.

* #PLANTS = Number of Plants

Variables		LIMEMPAL		MEDEXAMADDERM		LIMPPARTCOST		%BASEMED		LIMFULLCOST		1-%BASEMED		#PLANTS		COST
Sector 1. Electroplating																
All	Large	(3	+	0.000000)	* ((	120.92	*	100.00%	) + (	$142	* (1 -	100.00%	)) *	1,885	=	$ 634,456
	Small	(0	+	0.000000)	* ((	120.92	*	100.00%	) + (	$142	* (1 -	100.00%	)) *	3,547	=	$ -
Sector 2. Welding																
General Industry	Large	(0	+	0.000000)	* ((	120.92	*	5.00%	) + (	$142	* (1 -	5.00%	)) *	7,911	=	$ -
	Small	(0	+	0.000000)	* ((	120.92	*	0.00%	) + (	$142	* (1 -	0.00%	)) *	8,864	=	$ -
Maritime	Large	(14	+	2.918484)	* ((	120.92	*	5.00%	) + (	$142	* (1 -	5.00%	)) *	191	=	$ 443,863
	Small	(1	+	0.000000)	* ((	120.92	*	0.00%	) + (	$142	* (1 -	0.00%	)) *	108	=	$ 14,896
Construction	Large	(26	+	2.918484)	* ((	120.92	*	5.00%	) + (	$142	* (1 -	5.00%	)) *	269	=	$ 1,106,993
	Small	(3	+	0.000000)	* ((	120.92	*	0.00%	) + (	$142	* (1 -	0.00%	)) *	2,160	=	$ 893,774
Government	State	(0	+	0.000000)	* ((	120.92	*	5.00%	) + (	$142	* (1 -	5.00%	)) *	25	=	$ -
	Local	(0	+	0.000000)	* ((	120.92	*	0.00%	) + (	$142	* (1 -	0.00%	)) *	793	=	$ -
Sector 2. Mild Steel Welding																
General Industry	Large	(0	+	0.000000)	* ((	120.92	*	5.00%	) + (	$142	* (1 -	5.00%	)) *	10,607	=	$ -
	Small	(0	+	0.000000)	* ((	120.92	*	0.00%	) + (	$142	* (1 -	0.00%	)) *	10,797	=	$ -
Maritime	Large	(0	+	0.000000)	* ((	120.92	*	5.00%	) + (	$142	* (1 -	5.00%	)) *	412	=	$ -
	Small	(0	+	0.000000)	* ((	120.92	*	0.00%	) + (	$142	* (1 -	0.00%	)) *	233	=	$ -
Construction	Large	(10	+	0.000000)	* ((	120.92	*	5.00%	) + (	$142	* (1 -	5.00%	)) *	405	=	$ 554,162
	Small	(1	+	0.000000)	* ((	120.92	*	0.00%	) + (	$142	* (1 -	0.00%	)) *	3,058	=	$ 421,792
SECTOR 3. PAINTING						**General Industry**										
AEROSPACE	Large	(46	+	0.000000)	* ((	120.92	*	80.00%	) + (	$142	* (1 -	80.00%	)) *	50	=	$ 285,789
	Small	(0	+	0.000000)	* ((	120.92	*	50.00%	) + (	$142	* (1 -	50.00%	)) *	63	=	$ -
Auto Body	Large	(1	+	0.000000)	* ((	120.92	*	80.00%	) + (	$142	* (1 -	80.00%	)) *	331	=	$ 38,105
	Small	(0	+	0.000000)	* ((	120.92	*	50.00%	) + (	$142	* (1 -	50.00%	)) *	1,458	=	$ -
Coil Coating	Large	(2	+	0.000000)	* ((	120.92	*	80.00%	) + (	$142	* (1 -	80.00%	)) *	101	=	$ 23,287
	Small	(1	+	0.000000)	* ((	120.92	*	50.00%	) + (	$142	* (1 -	50.00%	)) *	18	=	$ 2,223
Maritime	Large	(2	+	0.000000)	* ((	120.92	*	100.00%	) + (	$142	* (1 -	100.00%	)) *	294	=	$ 65,069
	Small	(1	+	0.000000)	* ((	120.92	*	50.00%	) + (	$142	* (1 -	50.00%	)) *	508	=	$ 61,109
Construction	Large	(2	+	0.000000)	* ((	120.92	*	100.00%	) + (	$121	* (1 -	100.00%	)) *	765	=	$ 201,081
	Small	(0	+	0.000000)	* ((	120.92	*	100.00%	) + (	$121	* (1 -	100.00%	)) *	4,067	=	$ -
Government	State	(0	+	0.000000)	* ((	120.92	*	100.00%	) + (	$121	* (1 -	100.00%	)) *	16	=	$ -
	Local	(9	+	0.000000)	* ((	120.92	*	100.00%	) + (	$121	* (1 -	100.00%	)) *	899	=	$ 950,787
SECTOR 4. Producers of Chromates																
ALL	Large	(7	+	0.000000)	* ((	120.92	*	50.00%	) + (	$142	* (1 -	50.00%	)) *	2	=	$ 1,992
	Small	(0	+	0.000000)	* ((	120.92	*	0.00%	) + (	$142	* (1 -	0.00%	)) *	0	=	$ -

Variables		LIMEMPAL		MEDEXAMADDERM		LIMPPARTCOST		%BASEMED		LIMFULLCOST		1-%BASEMED		#PLANTS		COST
SECTOR 5. Chromate Pigment Procedures																
ALL	Large	(9	+	0.000000)	* ((	120.92	*	100.00%	) + (	$142	* (1 -	100.00%))	*	2	=	$ 2,240
	Small	(1	+	0.000000)	* ((	120.92	*	100.00%	) + (	$142	* (1 -	100.00%))	*	1	=	$ 124
SECTOR 6. CCA Producers																
ALL	Large	(2	+	0.000000)	* ((	120.92	*	100.00%	) + (	$142	* (1 -	100.00%))	*	3	=	$ 527
	Small	(0	+	0.000000)	* ((	120.92	*	0.00%	) + (	$142	* (1 -	0.00%))	*	0	=	$ -
SECTOR 7. Chromium Catalyst Producers																
ALL	Large	(12	+	0.000000)	* ((	120.92	*	100.00%	) + (	$142	* (1 -	100.00%))	*	5	=	$ 7,860
	Small	(0	+	0.000000)	* ((	120.92	*	100.00%	) + (	$142	* (1 -	100.00%))	*	0	=	$ -
SECTOR 8. Paint and Coating Producers																
ALL	Large	(1	+	0.000000)	* ((	120.92	*	100.00%	) + (	$142	* (1 -	100.00%))	*	87	=	$ 11,004
	Small	(0	+	0.000000)	* ((	120.92	*	100.00%	) + (	$142	* (1 -	100.00%))	*	137	=	$ -
SECTOR 9. Printing Ink Producers																
ALL	Large	(0	+	0.000000)	* ((	120.92	*	80.00%	) + (	$142	* (1 -	80.00%))	*	3	=	$ -
	Small	(0	+	0.000000)	* ((	120.92	*	10.00%	) + (	$142	* (1 -	10.00%))	*	10	=	$ -
SECTOR 10. Plastic Colorant Producers and Users																
ALL	Large	(0	+	0.000000)	* ((	120.92	*	100.00%	) + (	$142	* (1 -	100.00%))	*	86	=	$ -
	Small	(0	+	0.000000)	* ((	120.92	*	100.00%	) + (	$142	* (1 -	100.00%))	*	42	=	$ -
SECTOR 11. Plating Mixture Producers																
ALL	Large	(2	+	0.000000)	* ((	120.92	*	50.00%	) + (	$142	* (1 -	50.00%))	*	4	=	$ 1,282
	Small	(1	+	0.000000)	* ((	120.92	*	30.00%	) + (	$142	* (1 -	30.00%))	*	3	=	$ 294
SECTOR 13. Chromium Metal Producers																
ALL	Large	(8	+	0.000000)	* ((	120.92	*	100.00%	) + (	$142	* (1 -	100.00%))	*	1	=	$ 967
	Small	(0	+	0.000000)	* ((	120.92	*	0.00%	) + (	$142	* (1 -	0.00%))	*	0	=	$ -
SECTOR 14. Iron and Steel Mills																
General Industry	Large	(30	+	0.006497)	* ((	120.92	*	50.00%	) + (	$142	* (1 -	50.00%))	*	37	=	$ 144,585
	Small	(1	+	0.000309)	* ((	120.92	*	30.00%	) + (	$142	* (1 -	30.00%))	*	12	=	$ 2,279
Carbon Steel	Large	(1	+	0.000155)	* ((	120.92	*	50.00%	) + (	$142	* (1 -	50.00%))	*	112	=	$ 10,327
	Small	(1	+	0.000309)	* ((	120.92	*	30.00%	) + (	$142	* (1 -	30.00%))	*	35	=	$ 6,702
SECTOR 14B. Forging Industry																
Reshaping	Large	(0	+	0.000619)	* ((	120.92	*	50.00%	) + (	$142	* (1 -	50.00%))	*	37	=	$ 3
	Small	(0	+	0.000155)	* ((	120.92	*	30.00%	) + (	$142	* (1 -	30.00%))	*	34	=	$ 1
SECTOR 15. Iron and Steel Foundries																
ALL	Large	(19	+	0.000000)	* ((	120.92	*	80.00%	) + (	$142	* (1 -	80.00%))	*	178	=	$ 421,421
	Small	(5	+	0.000000)	* ((	120.92	*	10.00%	) + (	$142	* (1 -	10.00%))	*	130	=	$ 81,501
SECTOR 17. Chromium Dye Producers																
ALL	Large	(0	+	0.000000)	* ((	120.92	*	100.00%	) + (	$142	* (1 -	100.00%))	*	3	=	$ -
	Small	(0	+	0.000000)	* ((	120.92	*	100.00%	) + (	$142	* (1 -	100.00%))	*	1	=	$ -
SECTOR 18. Chromium Sulfate Producers																
ALL	Large	(0	+	0.000000)	* ((	120.92	*	100.00%	) + (	$142	* (1 -	100.00%))	*	0	=	$ -
	Small	(1	+	0.000000)	* ((	120.92	*	100.00%	) + (	$142	* (1 -	100.00%))	*	5	=	$ 655
SECTOR 19. Chemical Distributors																
ALL	Large	(0	+	0.000000)	* ((	120.92	*	0.00%	) + (	$142	* (1 -	0.00%))	*	207	=	$ -
	Small	(0	+	0.000000)	* ((	120.92	*	0.00%	) + (	$142	* (1 -	0.00%))	*	1,561	=	$ -
SECTOR 20. Textile Dyeing																
ALL	Large	(0	+	0.000000)	* ((	120.92	*	80.00%	) + (	$142	* (1 -	80.00%))	*	347	=	$ -
	Small	(0	+	0.000000)	* ((	120.92	*	10.00%	) + (	$142	* (1 -	10.00%))	*	703	=	$ -
SECTOR 21. Colored Glass Producers																
General Industry	Large	(1	+	0.000000)	* ((	120.92	*	80.00%	) + (	$142	* (1 -	80.00%))	*	5	=	$ 613
	Small	(0	+	0.000000)	* ((	120.92	*	10.00%	) + (	$142	* (1 -	10.00%))	*	17	=	$ -

Variables		LIMEMPAL		MEDEXAMADDERM		LIMPPARTCOST		%BASEMED		LIMFULLCOST		1-%BASEMED		#PLANTS		COST
Fiber, Flat and Container Glass	Large	(8 +	0.000000)	* ((	120.92	*	80.00%	) + (	$142	* (1 -	80.00%	)) *	78	=	$	79,116
	Small	(2 +	0.000000)	* ((	120.92	*	10.00%	) + (	$142	* (1 -	10.00%	)) *	5	=	$	1,142
SECTOR 22. Printing																
ALL	Large	(0 +	0.000000)	* ((	120.92	*	80.00%	) + (	$142	* (1 -	80.00%	)) *	92	=	$	-
	Small	(0 +	0.000000)	* ((	120.92	*	10.00%	) + (	$142	* (1 -	10.00%	)) *	367	=	$	-
SECTOR 24. Chromium Catalyst Users																
General Industry	Large	(0 +	0.000000)	* ((	120.92	*	80.00%	) + (	$142	* (1 -	80.00%	)) *	164	=	$	-
	Small	(0 +	0.000000)	* ((	120.92	*	80.00%	) + (	$142	* (1 -	80.00%	)) *	0	=	$	-
Chromium Service Companies	Large	(5 +	0.000000)	* ((	120.92	*	80.00%	) + (	$142	* (1 -	80.00%	)) *	21	=	$	13,364
	Small	(3 +	0.000000)	* ((	120.92	*	30.00%	) + (	$142	* (1 -	30.00%	)) *	4	=	$	1,655
SECTOR 25. Refractory Brick Producers																
ALL	Large	(0 +	0.000000)	* ((	120.92	*	80.00%	) + (	$142	* (1 -	80.00%	)) *	6	=	$	-
	Small	(0 +	0.000000)	* ((	120.92	*	10.00%	) + (	$142	* (1 -	10.00%	)) *	0	=	$	-
SECTOR 26. Woodworking																
General Industry	Large	(0 +	0.000000)	* ((	120.92	*	25.00%	) + (	$142	* (1 -	25.00%	)) *	175	=	$	-
	Small	(0 +	0.000000)	* ((	120.92	*	0.00%	) + (	$142	* (1 -	0.00%	)) *	93	=	$	-
Maritime	Large	(0 +	0.000000)	* ((	120.92	*	25.00%	) + (	$142	* (1 -	25.00%	)) *	38	=	$	-
	Small	(0 +	0.000000)	* ((	120.92	*	0.00%	) + (	$142	* (1 -	0.00%	)) *	34	=	$	-
Construction	Large	(1 +	0.000000)	* ((	120.92	*	50.00%	) + (	$142	* (1 -	50.00%	)) *	1,290	=	$	146,745
	Small	(1 +	0.000000)	* ((	120.92	*	50.00%	) + (	$142	* (1 -	50.00%	)) *	5,162	=	$	587,375
Government	State	(1 +	0.000000)	* ((	120.92	*	50.00%	) + (	$142	* (1 -	50.00%	)) *	16	=	$	1,333
	Local	(1 +	0.000000)	* ((	120.92	*	50.00%	) + (	$142	* (1 -	50.00%	)) *	59	=	$	4,819
SECTOR 27. Solid Waste Incineration																
ALL	Large	(0 +	0.000000)	* ((	120.92	*	50.00%	) + (	$142	* (1 -	50.00%	)) *	48	=	$	-
	Small	(0 +	0.000000)	* ((	120.92	*	30.00%	) + (	$142	* (1 -	30.00%	)) *	58	=	$	-
Government	State	(1 +	0.000000)	* ((	120.92	*	50.00%	) + (	$142	* (1 -	50.00%	)) *	0	=	$	-
	Local	(0 +	0.000000)	* ((	120.92	*	30.00%	) + (	$142	* (1 -	30.00%	)) *	29	=	$	-
SECTOR 30. Superalloy Producers and Users																
ALL	Large	(2 +	0.000000)	* ((	120.92	*	50.00%	) + (	$142	* (1 -	50.00%	)) *	18	=	$	4,551
	Small	(0 +	0.000000)	* ((	120.92	*	30.00%	) + (	$142	* (1 -	30.00%	)) *	0	=	$	-
SECTOR 31. Construction																
Industrial Rehabilitation & Maintenance	Large	(0 +	0.000000)	* ((	120.92	*	50.00%	) + (	$142	* (1 -	50.00%	)) *	55	=	$	-
	Small	(0 +	0.000000)	* ((	120.92	*	50.00%	) + (	$142	* (1 -	50.00%	)) *	196	=	$	-
	State	(0 +	0.000000)	* ((	120.92	*	50.00%	) + (	$142	* (1 -	50.00%	)) *	16	=	$	-
	Local	(0 +	0.000000)	* ((	120.92	*	50.00%	) + (	$142	* (1 -	50.00%	)) *	74	=	$	-
Hazardous Waste Site Work	Large	(0 +	0.000000)	* ((	120.92	*	50.00%	) + (	$142	* (1 -	50.00%	)) *	44	=	$	-
	Small	(0 +	0.000000)	* ((	120.92	*	50.00%	) + (	$142	* (1 -	50.00%	)) *	143	=	$	-
	State	(0 +	0.000000)	* ((	120.92	*	50.00%	) + (	$142	* (1 -	50.00%	)) *	1	=	$	-
	Local	(0 +	0.000000)	* ((	120.92	*	50.00%	) + (	$142	* (1 -	50.00%	)) *	201	=	$	-
Refractory Brick Restoration	Large	(1 +	0.000000)	* ((	120.92	*	50.00%	) + (	$142	* (1 -	50.00%	)) *	48	=	$	5,601
	Small	(1 +	0.000000)	* ((	120.92	*	50.00%	) + (	$142	* (1 -	50.00%	)) *	148	=	$	17,218
												Total	**72,329**		**$**	**7,254,681**

Initial Medical Examination with Additional Tests (§§1910.1026(k)(1)(i)(B) and (k)(3)(i)-(k)(3)(iii); 1915.1026(i)(1)(i)(B) and (i)(3)(i)-(i)(3)(iii); and 1926.1126(i)(1)(i)(B) and (i)(3)(i)-(i)(3)(iii))

Employee Time and Cost for Complete Initial Medical Examination with Additional Tests

The burden hour and cost equation is for the employee time to receive additional tests after the employee is found to have abnormal initial medical exam results. The Agency assumes that .5% of employees potentially exposed employees at or above the AL and workers with "signs and symptoms" will be found to have abnormal exam results and will receive additional testing.

BURDEN HOURS = POTEXEMP * 5% * %PREVABN * MEDEXAMADDAL * #PLANTS
COST = Burden Hours * NONSUPWAGE

* POTEXEMP * 5% = Total number of employees potentially exposed at or above the AL and workers with "signs and symptoms" before the implementation of engineering controls.
* %PREVABN = Percent of previously exposed employees who will be found to have abnormal exam results.
*MEDEXAMADDAL = Employee time for medical examination with additional testing
#PLANTS = Number of Plants
NONSUPEWAGE = Nonsupervisory wage rate.

Variables		POTEXEMP * 5%		%PREVABN		MEDEXAMADDAL		#PLANTS		Hours		NONSUPEWAGE	Cost	Responses
Sector 1. Electroplating														
All	Large	0.2783	*	0.50%	*	4	*	1,885	=	10	*	$25.49	$268	3
	Small	0.0464	*	0.50%	*	4	*	3,547	=	3	*	$25.49	$84	1
Sector 2. Welding														
General Industry	Large	0.0973	*	0.50%	*	4	*	7,911	=	15	*	$25.10	$386	4
	Small	0.0000	*	0.50%	*	4	*	8,864	=	0	*	$25.10	$0	0
Maritime	Large	0.9242	*	0.50%	*	4	*	191	=	4	*	$25.10	$88	1
	Small	0.0486	*	0.50%	*	4	*	108	=	0	*	$25.10	$3	0
Construction	Large	2.4807	*	0.50%	*	4	*	269	=	13	*	$25.10	$336	3
	Small	0.2432	*	0.50%	*	4	*	2,160	=	11	*	$25.10	$264	3
Government	State	0.0973	*	0.50%	*	4	*	25	=	0	*	$25.10	$1	0
	Local	0.0000	*	0.50%	*	4	*	793	=	0	*	$25.10	$0	0
Sector 2. Mild Steel Welding														
General Industry	Large	0.0486	*	0.50%	*	4	*	10,607	=	10	*	$25.10	$259	3
	Small	0.0000	*	0.50%	*	4	*	10,797	=	0	*	$25.10	$0	0
Maritime	Large	0.0000	*	0.50%	*	4	*	412	=	0	*	$25.10	$0	0
	Small	0.0486	*	0.50%	*	4	*	233	=	0	*	$25.10	$6	0
Construction	Large	0.9242	*	0.50%	*	4	*	405	=	7		$25.10	$188	2
	Small	0.0973	*	0.50%	*	4	*	3,058	=	6		$25.10	$149	1
SECTOR 3. PAINTING														
General Industry AEROSPACE	Large	2.3456	*	0.50%	*	4	*	50	=	2	*	$31.68	$74	1
	Small	0.0460	*	0.50%	*	4	*	63	=	0	*	$31.68	$2	0

Variables		POTEXEMP * 5%		%PREVABN		MEDEXAMADDAL		#PLANTS		Hours		NONSUPEWAGE	Cost	Responses
AUTOBODY REPAIR	Large	0.0920	*	0.50%	*	4	*	331	=	1	*	$31.68	$19	0
	Small	0.0460	*	0.50%	*	4	*	1,458	=	1	*	$31.68	$42	0
COIL COATING	Large	0.0920	*	0.50%	*	4	*	101	=	0	*	$31.68	$6	0
	Small	0.0460	*	0.50%	*	4	*	18	=	0	*	$31.68	$1	0
Maritime	Large	0.1373	*	0.50%	*	4	*	294	=	1	*	$31.68	$26	0
	Small	0.0458	*	0.50%	*	4	*	508	=	0	*	$31.68	$15	0
Construction	Large	0.1087	*	0.50%	*	4	*	765	=	2	*	$31.68	$53	0
	Small	0.0362	*	0.50%	*	4	*	4,067	=	3	*	$31.68	$93	1
Government	State	0.4373	*	0.50%	*	4	*	16	=	0	*	$31.68	$5	0
	Local	0.0312	*	0.50%	*	4	*	899	=	1	*	$31.68	$18	0
SECTOR 4. Producers of Chromates														
All	Large	0.3643	*	0.50%	*	4	*	2	=	0	*	$37.06	$1	0
	Small	0.0000	*	0.50%	*	4	*	0	=	0	*	$37.06	$0	0
SECTOR 5. Chromate Pigment Procedures														
All	Large	1.2490	*	0.50%	*	4	*	2	=	0	*	$36.12	$2	0
	Small	0.1561	*	0.50%	*	4	*	1	=	0	*	$36.12	$0	0
SECTOR 6. CCA Producers														
All	Large	0.1278	*	0.50%	*	4	*	3	=	0	*	$30.60	$0	0
	Small	0.0000	*	0.50%	*	4	*	0	=	0	*	$30.60	$0	0
SECTOR 7. Chromium Catalyst Producers														
All	Large	1.3531	*	0.50%	*	4	*	5	=	0	*	$37.06	$5	0
	Small	0.0000	*	0.50%	*	4	*	0	=	0	*	$37.06	$0	0
SECTOR 8. Paint and Coating Producers														
All	Large	0.2602	*	0.50%	*	4	*	87	=	0	*	$27.60	$13	0
	Small	0.1041	*	0.50%	*	4	*	137	=	0	*	$27.60	$8	0
SECTOR 9. Printing Ink Producers														
All	Large	0.0000	*	0.50%	*	4	*	3	=	0	*	$27.65	$0	0
	Small	0.0000	*	0.50%	*	4	*	10	=	0	*	$27.65	$0	0
SECTOR 10. Plastic Colorant Producers and Users														
All	Large	0.0000	*	0.50%	*	4	*	86	=	0	*	$30.64	$0	0
	Small	0.0000	*	0.50%	*	4	*	42	=	0	*	$30.64	$0	0
SECTOR 11. Plating Mixture Producers														
All	Large	0.1104	*	0.50%	*	4	*	4	=	0	*	$27.50	$0	0
	Small	0.0736	*	0.50%	*	4	*	3	=	0	*	$27.50	$0	0
SECTOR 13. Chromium Metal Producers														
All	Large	0.6500	*	0.50%	*	4	*	1	=	0	*	$37.17	$0	0
	Small	0.0000	*	0.50%	*	4	*	0	=	0	*	$37.17	$0	0

Variables		POTEXEMP * 5%		%PREVABN		MEDEXAMADDAL		#PLANTS		Hours	NONSUPEWAGE	Cost	Responses
SECTOR 14. Iron and Steel Mills													0
All	Large	2.0039	*	0.50%	*	4	*	37	=	1 *	$37.17	$56	0
	Small	0.0703	*	0.50%	*	4	*	12	=	0 *	$37.17	$1	0
Carbon Steel	Large	0.4922	*	0.50%	*	4	*	112	=	1 *	$37.17	$41	0
	Small	0.0703	*	0.50%	*	4	*	35	=	0 *	$37.17	$2	0
14B.													
Reshaping Industry	Large	0.1406	*	0.50%	*	4	*	37	=	0 *	$37.17	$4	0
	Small	0.0000	*	0.50%	*	4	*	34	=	0 *	$37.17	$0	0
SECTOR 15. Iron and Steel Foundries													
All	Large	1.3502	*	0.50%	*	4	*	178	=	5 *	$27.12	$131	1
	Small	0.2700	*	0.50%	*	4	*	130	=	1 *	$27.12	$19	0
SECTOR 17. Chromium Dye Producers													
All	Large	0.0000	*	0.50%	*	4	*	3	=	0 *	$36.12	$0	0
	Small	0.0000	*	0.50%	*	4	*	1	=	0 *	$36.12	$0	0
SECTOR 18. Chromium Sulfate Producers													
All	Large	0.0000	*	0.50%	*	4	*	0	=	0 *	$39.76	$0	0
	Small	0.1561	*	0.50%	*	4	*	5	=	0 *	$39.76	$1	0
SECTOR 19. Chemical Distributors													
All	Large	0.0000	*	0.50%	*	4	*	207	=	0 *	$28.67	$0	0
	Small	0.0000	*	0.50%	*	4	*	1,561	=	0 *	$28.67	$0	0
SECTOR 20. Textile Dyeing													
All	Large	0.0000	*	0.50%	*	4	*	347	=	0 *	$19.13	$0	0
	Small	0.0000	*	0.50%	*	4	*	703	=	0 *	$19.13	$0	0
SECTOR 21. Colored Glass Producers													
All	Large	0.0452	*	0.50%	*	4	*	5	=	0 *	$27.66	$0	0
	Small	0.0000	*	0.50%	*	4	*	17	=	0 *	$27.66	$0	0
Fiber, Flat and Container Glass	Large	0.4972	*	0.50%	*	4	*	78	=	1 *	$27.66	$21	0
	Small	0.0904	*	0.50%	*	4	*	5	=	0 *	$27.66	$0	0
SECTOR 22. Printing													
All	Large	0.0000	*	0.50%	*	4	*	92	=	0 *	$19.97	$0	0
	Small	0.0000	*	0.50%	*	4	*	367	=	0 *	$19.97	$0	0
SECTOR 24. Chromium Catalyst Users													
All	Large	0.0504	*	0.50%	*	4	*	164	=	0 *	$31.14	$5	0
	Small	0.0000	*	0.50%	*	4	*	0	=	0 *	$31.14	$0	0
Catalyst Service Companies	Large	0.5043	*	0.50%	*	4	*	21	=	0 *	$31.14	$7	0
	Small	0.2522	*	0.50%	*	4	*	4	=	0 *	$31.14	$1	0

Variables		POTEXEMP * 5%		%PREVABN		MEDEXAMADDAL		#PLANTS		Hours		NONSUPEWAGE	Cost	Responses
SECTOR 25. Refractory Brick Producers														
All	Large	0.0000	*	0.50%	*	4	*	6	=	0	*	$24.56	$0	0
	Small	0.0000	*	0.50%	*	4	*	0	=	0	*	$24.56	$0	0
SECTOR 26. Woodworking														
General Industry	Large	0.0467	*	0.50%	*	4	*	175	=	0	*	$30.76	$5	0
	Small	0.0000	*	0.50%	*	4	*	93	=	0	*	$30.76	$0	0
Maritime	Large	0.0000	*	0.50%	*	4	*	38	=	0	*	$30.76	$0	0
	Small	0.0000	*	0.50%	*	4	*	34	=	0	*	$30.76	$0	0
Construction	Large	0.1299	*	0.50%	*	4	*	1,290	=	3	*	$30.76	$103	1
	Small	0.0433	*	0.50%	*	4	*	5,162	=	4	*	$30.76	$138	1
Government	Local	0.0312	*	0.50%	*	4	*	16	=	0	*	$30.76	$0	0
	State	0.0312	*	0.50%	*	4	*	59	=	0	*	$30.76	$1	0
SECTOR 27. Solid Waste Incineration														
ALL	Large	0.0000	*	0.50%	*	4	*	48	=	0	*	$30.76	$0	0
	Small	0.0000	*	0.50%	*	4	*	58	=	0	*	$30.76	$0	0
Government	Local	0.0438	*	0.50%	*	4	*	0	=	0	*	$26.09	$0	0
	State	0.0000	*	0.50%	*	4	*	29	=	0	*	$26.09	$0	0
SECTOR 30. Superalloy Producers and Users														
ALL	Large	0.0981	*	0.50%	*	4	*	18	=	0	*	$26.75	$0	0
	Small	0.0000	*	0.50%	*	4	*	0	=	0	*	$26.75	$0	0
SECTOR 31. Construction														
Industrial Rehabilitation & Maintenance	Large	0.0000	*	0.50%	*	4	*	55	=	0	*	$30.79	$0	0
	Small	0.0000	*	0.50%	*	4	*	196	=	0	*	$30.79	$0	0
	State Gov't	0.0000	*	0.50%	*	4	*	16	=	0	*	$30.79	$0	0
	Local Gov't	0.0000	*	0.50%	*	4	*	74	=	0	*	$30.79	$0	0
Hazardous Waste Site Work	Large	0.0000	*	0.50%	*	4	*	44	=	0	*	$30.79	$0	0
	Small	0.0000	*	0.50%	*	4	*	143	=	0	*	$30.79	$0	0
	State Gov't	0.0000	*	0.50%	*	4	*	1	=	0	*	$30.79	$0	0
	Local Gov't	0.0000	*	0.50%	*	4	*	201	=	0	*	$30.79	$0	0
Refractory Brick Restoration & Maintenance	Large	0.4443	*	0.50%	*	4	*	48	=	0	*	$30.79	$13	0
	Small	0.0444	*	0.50%	*	4	*	148	=	0	*	$30.79	$4	0
				Total				**72,329**		**111**			**$2,964**	**28**

Initial Medical Examination with Additional Tests (§§1910.1026(k)(1)(i)(B) and (k)(3)(i)-(k)(3)(iii); 1915.1026(i)(1)(i)(B) and (i)(3)(i)-(i)(3)(iii); and 1926.1126(i)(1)(i)(B) and (i)(3)(i)-(i)(3)(iii))

Contract Cost for a PLHCP to Conduct the Initial Medical Examination with Additional Tests

This table calculates the cost for a contractor PLHCP to conduct additional medical testing for those employees who have abnormal annual medical examination results.

* POTEXEMP * 5% = Total number of new potentially exposed employees at or above the AL and workers with "signs and symptoms" before the implementation of engineering controls.
* %PREVABN = Percent of previously exposed employees who will be found to have abnormal exam results.
*MEDCOSTADD = Cost for medical examination with additional testing
#PLANTS = Number of Plants

		POTEXEMP * 5%		%PREVABN		MEDCOSTADD		#PLANTS		Cost
Sector 1. Electroplating										
All	Large	0.2783	*	0.50%	*	$241.82	*	1,885	=	$634
	Small	0.0464	*	0.50%	*	$241.82	*	3,547	=	$199
Sector 2. Welding										
General Industry	Large	0.0973	*	0.50%	*	$241.82	*	7,911	=	$931
	Small	0.0000	*	0.50%	*	$241.82	*	8,864	=	$0
Maritime	Large	0.9242	*	0.50%	*	$241.82	*	191	=	$213
	Small	0.0486	*	0.50%	*	$241.82	*	108	=	$6
Construction	Large	2.4807	*	0.50%	*	$241.82	*	269	=	$808
	Small	0.2432	*	0.50%	*	$241.82	*	2,160	=	$635
Government	State	0.0973	*	0.50%	*	$241.82	*	25	=	$3
	Local	0.0000	*	0.50%	*	$241.82	*	793	=	$0
Sector 2. Mild Steel Welding										
General Industry	Large	0.0486	*	0.50%	*	$241.82	*	10,607	=	$624
	Small	0.0000	*	0.50%	*	$241.82	*	10,797	=	$0
Maritime	Large	0.0000	*	0.50%	*	$241.82	*	412	=	$0
	Small	0.0486	*	0.50%	*	$241.82	*	233	=	$14
Construction	Large	0.9242	*	0.50%	*	$241.82	*	405	=	$452
	Small	0.0973	*	0.50%	*	$241.82	*	3,058	=	$360
SECTOR 3. PAINTING										
General Industry AEROSPACE	Large	2.3456	*	0.50%	*	$241.82	*	50	=	$141
	Small	0.0460	*	0.50%	*	$241.82	*	63	=	$3
General Industry AUTOBODY	Large	0.0920	*	0.50%	*	$241.82	*	331	=	$37
	Small	0.0460	*	0.50%	*	$241.82	*	1,458	=	$81
COIL COATING	Large	0.0920	*	0.50%	*	$241.82	*	101	=	$11
	Small	0.0460	*	0.50%	*	$241.82	*	18	=	$1

		POTEXEMP * 5%		%PREVABN		MEDCOSTADD		#PLANTS		Cost
Maritime	Large	0.1373	*	0.50%	*	$241.82	*	294	=	$49
	Small	0.0458	*	0.50%	*	$241.82	*	508	=	$28
Construction	Large	0.1087	*	0.50%	*	$241.82	*	765	=	$101
	Small	0.0362	*	0.50%	*	$241.82	*	4,067	=	$178
Governments	State	0.4373	*	0.50%	*	$241.82	*	16	=	$9
	Local	0.0312	*	0.50%	*	$241.82	*	899	=	$34
SECTOR 4. Producers of Chromates										
ALL	Large	0.3643	*	0.50%	*	$241.82	*	2	=	$1
	Small	0.0000	*	0.50%	*	$241.82	*	0	=	$0
SECTOR 5. Chromate Pigment Procedures										
ALL	Large	1.2490	*	0.50%	*	$241.82	*	2	=	$3
	Small	0.1561	*	0.50%	*	$241.82	*	1	=	$0
SECTOR 6. CCA Producers										
ALL	Large	0.1278	*	0.50%	*	$241.82	*	3	=	$0
	Small	0.0000	*	0.50%	*	$241.82	*	0	=	$0
SECTOR 7. Chromium Catalyst Producers										
ALL	Large	1.3531	*	0.50%	*	$241.82	*	5	=	$9
	Small	0.0000	*	0.50%	*	$241.82	*	0	=	$0
SECTOR 8. Paint and Coating Producers										
ALL	Large	0.2602	*	0.50%	*	$241.82	*	87	=	$28
	Small	0.1041	*	0.50%	*	$241.82	*	137	=	$17
SECTOR 9. Printing Ink Producers										
ALL	Large	0.0000	*	0.50%	*	$241.82	*	3	=	$0
	Small	0.0000	*	0.50%	*	$241.82	*	10	=	$0
SECTOR 10. Plastic Colorant Producers and Users										
ALL	Large	0.0000	*	0.50%	*	$241.82	*	86	=	$0
	Small	0.0000	*	0.50%	*	$241.82	*	42	=	$0
SECTOR 11. Plating Mixture Producers										
ALL	Large	0.1104	*	0.50%	*	$241.82	*	4	=	$1
	Small	0.0736	*	0.50%	*	$241.82	*	3	=	$0
SECTOR 13. Chromium Metal Producers										
ALL	Large	0.6500	*	0.50%	*	$241.82	*	1	=	$1
	Small	0.0000	*	0.50%	*	$241.82	*	0	=	$0
SECTOR 14. Iron and Steel Mills										
ALL	Large	2.0039	*	0.50%	*	$241.82	*	37	=	$90
	Small	0.0703	*	0.50%	*	$241.82	*	12	=	$1

		POTEXEMP * 5%		%PREVABN		MEDCOSTADD		#PLANTS		Cost
Carbon Steel	Large	0.4922	*	0.50%	*	$241.82	*	112	=	$67
	Small	0.0703	*	0.50%	*	$241.82	*	35	=	$3
SECTOR 14B. Forging Industry										
ALL	Large	0.1406	*	0.50%	*	$241.82	*	37	=	$6
	Small	0.0000	*	0.50%	*	$241.82	*	34	=	$0
SECTOR 15. Iron and Steel Foundries										
ALL	Large	1.3502	*	0.50%	*	$241.82	*	178	=	$291
	Small	0.2700	*	0.50%	*	$241.82	*	130	=	$42
SECTOR 17. Chromium Dye Producers										
ALL	Large	0.0000	*	0.50%	*	$241.82	*	3	=	$0
	Small	0.0000	*	0.50%	*	$241.82	*	1	=	$0
SECTOR 18. Chromium Sulfate Producers										
ALL	Large	0.0000	*	0.50%	*	$241.82	*	0	=	$0
	Small	0.1561	*	0.50%	*	$241.82	*	5	=	$1
SECTOR 19. Chemical Distributors										
ALL	Large	0.0000	*	0.50%	*	$241.82	*	207	=	$0
	Small	0.0000	*	0.50%	*	$241.82	*	1,561	=	$0
SECTOR 20. Textile Dyeing										
ALL	Large	0.0000	*	0.50%	*	$241.82	*	347	=	$0
	Small	0.0000	*	0.50%	*	$241.82	*	703	=	$0
SECTOR 21. Colored Glass Producers										
ALL	Large	0.0452	*	0.50%	*	$241.82	*	5	=	$0
	Small	0.0000	*	0.50%	*	$241.82	*	17	=	$0
Fiber, Flat, Container Glass	Large	0.4972	*	0.50%	*	$241.82	*	78	=	$47
	Small	0.0904	*	0.50%	*	$241.82	*	5	=	$0
SECTOR 22. Printing										
ALL	Large	0.0000	*	0.50%	*	$241.82	*	92	=	$0
	Small	0.0000	*	0.50%	*	$241.82	*	367	=	$0
SECTOR 24. Chromium Catalyst Users										
ALL	Large	0.0504	*	0.50%	*	$241.82	*	164	=	$10
	Small	0.0000	*	0.50%	*	$241.82	*	0	=	$0
Chromium Catalyst Companies	Large	0.5043	*	0.50%	*	$241.82	*	21	=	$13
	Small	0.2522	*	0.50%	*	$241.82	*	4	=	$1
SECTOR 25. Refractory Brick Producers										
ALL	Large	0.0000	*	0.50%	*	$241.82	*	6	=	$0
	Small	0.0000	*	0.50%	*	$241.82	*	0	=	$0

		POTEXEMP * 5%		%PREVABN		MEDCOSTADD		#PLANTS		Cost
SECTOR 26. Woodworking										
General Industry	Large	0.0467	*	0.50%	*	$241.82	*	175	=	$10
	Small	0.0000	*	0.50%	*	$241.82	*	93	=	$0
Maritime	Large	0.0000	*	0.50%	*	$241.82	*	38	=	$0
	Small	0.0000	*	0.50%	*	$241.82	*	34	=	$0
Construction	Large	0.1299	*	0.50%	*	$241.82	*	1,290	=	$203
	Small	0.0433	*	0.50%	*	$241.82	*	5,162	=	$270
Government	State	0.0312	*	0.50%	*	$241.82	*	16	=	$1
	Local	0.0312	*	0.50%	*	$241.82	*	59	=	$2
SECTOR 27. Solid Waste Incineration										
ALL	Large	0.0000	*	0.50%	*	$241.82	*	48	=	$0
	Small	0.0000	*	0.50%	*	$241.82	*	58	=	$0
Government	State	0.0438	*	0.50%	*	$241.82	*	0	=	$0
	Local	0.0000	*	0.50%	*	$241.82	*	29	=	$0
SECTOR 30. Superalloy Producers and Users										
ALL	Large	0.0981	*	0.50%	*	$241.82	*	18	=	$2
	Small	0.0000	*	0.50%	*	$241.82	*	0	=	$0
SECTOR 31. Construction										
Industrial Rehabilitation & Maintenance	Large	0.0000	*	0.50%	*	$241.82	*	55	=	$0
	Small	0.0000	*	0.50%	*	$241.82	*	196	=	$0
	State Gov't	0.0000	*	0.50%	*	$241.82	*	16	=	$0
	Local Gov't	0.0000	*	0.50%	*	$241.82	*	74	=	$0
Hazardous Waste Site Work	Large	0.0000	*	0.50%	*	$241.82	*	44	=	$0
	Small	0.0000	*	0.50%	*	$241.82	*	143	=	$0
	State Gov't	0.0000	*	0.50%	*	$241.82	*	1	=	$0
	Local Gov't	0.0000	*	0.50%	*	$241.82	*	201	=	$0
Refractory Brick Restoration & Maintenance	Large	0.4443	*	0.50%	*	$241.82	*	48	=	$26
	Small	0.0444	*	0.50%	*	$241.82	*	148	=	$8
						Total		**72,329**		**$6,706**

Annual Medical Examination with Additional Tests (1910.1026(k)(2)(ii) and (k)(3)(i)-(k)(3)(iii) and (i)(3)(i)-(i)(3)(iii); and 1926.1126(i)(2)(ii) and (i)(3)(i)-(i)(3)(iii))

Employee Time and Cost to Complete the Annual Medical Examination with Additional Tests

This table calculates the burden hours and costs for the time it takes an employee to receive additional tests after the employee is found to have abnormal annual medical exam test results.

Hours = (LIMEMPAL + MEDEXAMADDERM) * %ALABN * ADDMEDTIME * #PLANTS
Cost =Hours *NONSUPWAGE

* LIMEMPAL = Number of employees requiring a limited medical exam b/c at or > AL after implementation of engineering controls.
* MEDEXAMADDERM = Number of employees at or above the AL requiring a limited medical exam b/c of dermal "signs and symptoms" after the implementation of engineering controls.
*%ALABN = Percent of employees exposed at or above the action level 30 days per year (and therefore requiring a limited or comprehensive medical exam who will be found to have abnormal results)
*ADDMEDTIME = Three hours for an employee to receive additional testing after exam tests are abnormal.
*NONSUPEWAGE - Non-supervisory wage rate
* #PLANTS = Number of Plants

Variables		LIMEMPAL		MEDEXAMADDERM		%ALABN		ADDMEDTIME		#PLANTS		Hours		NONSUPEWAGE	Cost	RESPONSES
Sector 1. Electroplating																
ALL	Large	(3	+	0.00000	) *	0.50%	*	3	*	1,885	=	79	*	$25.49	$2,006	26
	Small	(0	+	0.00000	) *	0.50%	*	3	*	3,547	=	0	*	$21.43	$0	0
Sector 2. Welding																
General Industry	Large	(0	+	0.00000	) *	0.50%	*	3	*	7,911	=	0	*	$25.10	$0	0
	Small	(0	+	0.00000	) *	0.50%	*	3	*	8,864	=	0	*	$21.43	$0	0
Maritime	Large	(14	+	2.91848	) *	0.50%	*	3	*	191	=	47	*	$25.10	$1,187	16
	Small	(1	+	0.00000	) *	0.50%	*	3	*	108	=	2	*	$22.43	$35	1
Construction	Large	(26	+	2.91848	) *	0.50%	*	3	*	269	=	118	*	$25.10	$2,961	39
	Small	(3	+	0.00000	) *	0.50%	*	3	*	2,160	=	95	*	$23.43	$2,215	32
GOVERNMENT	Local	(0	+	0.00000	) *	0.50%	*	3	*	25	=	0	*	$25.10	$0	0
	State	(0	+	0.00000	) *	0.50%	*	3	*	793	=	0	*	$24.43	$0	0
Sector 2. Mild Steel Welding																
General Industry	Large	(0	+	0.00000	) *	0.50%	*	3	*	10,607	=	0	*	$25.10	$0	0
	Small	(0	+	0.00000	) *	0.50%	*	3	*	10,797	=	0	*	$24.43	$0	0
Maritime	Large	(0	+	0.00000	) *	0.50%	*	3	*	412	=	0	*	$25.10	$0	0
	Small	(0	+	0.00000	) *	0.50%	*	3	*	233	=	0	*	$25.43	$0	0
Construction	Large	(10	+	0.00000	) *	0.50%	*	3	*	405	=	59	*	$25.10	$1,482	20
	Small	(1	+	0.00000	) *	0.50%	*	3	*	3,058	=	45	*	$26.43	$1,179	15
SECTOR 3. PAINTING						**GENERAL INDUSTRY**									
AEROSPACE	Large	(46	+	0.00000	) *	0.50%	*	3	*	50	=	34	*	$31.68	$1,086	11
	Small	(0	+	0.00000	) *	0.50%	*	3	*	63	=	0	*	$26.43	$0	0
Autobody	Large	(1	+	0.00000	) *	0.50%	*	3	*	331	=	5	*	$31.68	$145	2
	Small	(0	+	0.00000	) *	0.50%	*	3	*	1,458	=	0	*	$27.43	$0	0
Coil Coating	Large	(2	+	0.00000	) *	0.50%	*	3	*	101	=	3	*	$31.68	$88	1
	Small	(1	+	0.00000	) *	0.50%	*	3	*	18	=	0	*	$28.43	$7	0

Maritime	Large	(2 + 0.00000) *	0.50% *	3 *	294 =	8 *	$31.68	$256	3
	Small	(1 + 0.00000) *	0.50% *	3 *	508 =	7 *	$29.43	$205	2
Construction	Large	(2 + 0.00000) *	0.50% *	3 *	765 =	25 *	$31.68	$790	8
	Small	(0 + 0.00000) *	0.50% *	3 *	4,067 =	0 *	$30.43	$0	0
Government	Local	(0 + 0.00000) *	0.50% *	3 *	16 =	0 *	$31.68	$0	0
	State	(9 + 0.00000) *	0.50% *	3 *	899 =	118 *	$31.43	$3,707	39
SECTOR 4. Producers of Chromates									
ALL	Large	(7 + 0.00000) *	0.50% *	3 *	2 =	0 *	$37.06	$8	0
	Small	(0 + 0.00000) *	0.50% *	3 *	0 =	0 *	$31.43	$0	0
SECTOR 5. Chromate Pigment Procedures									
ALL	Large	(9 + 0.00000) *	0.50% *	3 *	2 =	0 *	$36.12	$10	0
	Small	(1 + 0.00000) *	0.50% *	3 *	1 =	0 *	$31.43	$0	0
SECTOR 6. CCA Producers									
ALL	Large	(2 + 0.00000) *	0.50% *	3 *	3 =	0 *	$30.60	$2	0
	Small	(0 + 0.00000) *	0.50% *	3 *	0 =	0 *	$31.43	$0	0
SECTOR 7. Chromium Catalyst Producers									
ALL	Large	(12 + 0.00000) *	0.50% *	3 *	5 =	1 *	$37.06	$36	0
	Small	(0 + 0.00000) *	0.50% *	3 *	0 =	0 *	$31.43	$0	0
SECTOR 8. Paint and Coating Producers									
ALL	Large	(1 + 0.00378) *	0.50% *	3 *	87 =	1 *	$27.60	$38	0
	Small	(0 + 0.00000) *	0.50% *	3 *	137 =	0 *	$31.43	$0	0
SECTOR 9. Printing Ink Producers									
ALL	Large	(0 + 0.00000) *	0.50% *	3 *	3 =	0 *	$27.65	$0	0
	Small	(0 + 0.00000) *	0.50% *	3 *	10 =	0 *	$31.43	$0	0
SECTOR 10. Plastic Colorant Producers and Users									
ALL	Large	(0 + 0.00000) *	0.50% *	3 *	86 =	0 *	$30.64	$0	0
	Small	(0 + 0.00000) *	0.50% *	3 *	42 =	0 *	$31.43	$0	0
SECTOR 11. Plating Mixture Producers									
ALL	Large	(2 + 0.00000) *	0.50% *	3 *	4 =	0 *	$27.50	$4	0
	Small	(1 + 0.00000) *	0.50% *	3 *	3 =	0 *	$31.43	$1	0
SECTOR 13. Chromium Metal Producers									
ALL	Large	(8 + 0.00000) *	0.50% *	3 *	1 =	0 *	$37.17	$4	0
	Small	(0 + 0.00000) *	0.50% *	3 *	0 =	0 *	$31.43	$0	0
SECTOR 14. Iron and Steel Mills									
Alloy Stainless Steel	Large	(30 + 0.00650) *	0.50% *	3 *	37 =	17 *	$37.17	$614	6
	Small	(1 + 0.00031) *	0.50% *	3 *	12 =	0 *	$31.43	$8	0
Carbon Steel	Large	(1 + 0.00015) *	0.50% *	3 *	112 =	1 *	$37.17	$44	0
	Small	(1 + 0.00031) *	0.50% *	3 *	35 =	1 *	$31.43	$23	0
14B. Alloy Stainless Steel Forging Industry									
Reshaping	Large	(0 + 0.00062) *	0.50% *	3 *	37 =	0 *	$37.17	$0	0
	Small	(0 + 0.00015) *	0.50% *	3 *	34 =	0 *	$31.43	$0	0
SECTOR 15. Iron and Steel Foundries									
ALL	Large	(19 + 0.00000) *	0.50% *	3 *	178 =	51 *	$27.12	$1,371	17
	Small	(5 + 0.00000) *	0.50% *	3 *	130 =	9 *	$31.43	$275	3
SECTOR 17. Chromium Dye Producers									
ALL	Large	(0 + 0.00000) *	0.50% *	3 *	3 =	0 *	$36.12	$0	0
	Small	(0 + 0.00000) *	0.50% *	3 *	1 =	0 *	$31.43	$0	0

Table 26

SECTOR 18. Chromium Sulfate Producers										
ALL	Large	(0 +	0.00000) *	0.50% *	3 *	0 =	0 *	$39.76	$0	0
	Small	(1 +	0.00000) *	0.50% *	3 *	5 =	0 *	$31.43	$3	0
SECTOR 19. Chemical Distributors										
ALL	Large	(0 +	0.00000) *	0.50% *	3 *	207 =	0 *	$28.67	$0	0
	Small	(0 +	0.00000) *	0.50% *	3 *	1,561 =	0 *	$31.43	$0	0
SECTOR 20. Textile Dyeing										
ALL	Large	(0 +	0.00000) *	0.50% *	3 *	347 =	0 *	$19.13	$0	0
	Small	(0 +	0.00000) *	0.50% *	3 *	703 =	0 *	$31.43	$0	0
SECTOR 21. Colored Glass Producers										
ALL	Large	(1 +	0.00000) *	0.50% *	3 *	5 =	0 *	$27.66	$2	0
	Small	(0 +	0.00000) *	0.50% *	3 *	17 =	0 *	$31.43	$0	0
Fiber, Flat and Container Glass	Large	(8 +	0.00000) *	0.50% *	3 *	78 =	9 *	$27.66	$262	3
	Small	(2 +	0.00000) *	0.50% *	3 *	5 =	0 *	$31.43	$4	0
SECTOR 22. Printing										
ALL	Large	(0 +	0.00000) *	0.50% *	3 *	92 =	0 *	$19.97	$0	0
	Small	(0 +	0.00000) *	0.50% *	3 *	367 =	0 *	$31.43	$0	0
SECTOR 24. Chromium Catalyst Users										
Catalyst Users	Large	(0 +	0.00000) *	0.50% *	3 *	164 =	0 *	$31.14	$0	0
	Small	(0 +	0.00000) *	0.50% *	3 *	0 =	0 *	$31.43	$0	0
Chromium Catalyst Service Companies	Large	(5 +	0.00000) *	0.50% *	3 *	21 =	2 *	$31.14	$50	1
	Small	(3 +	0.00000) *	0.50% *	3 *	4 =	0 *	$31.43	$6	0
SECTOR 25. Refractory Brick Producers										
ALL	Large	(0 +	0.00000) *	0.50% *	3 *	6 =	0 *	$24.56	$0	0
	Small	(0 +	0.00000) *	0.50% *	3 *	0 =	0 *	$31.43	$0	0
SECTOR 26. Woodworking										
General Industry	Large	(0 +	0.00000) *	0.50% *	3 *	175 =	0 *	$30.76	$0	0
	Small	(0 +	0.00000) *	0.50% *	3 *	93 =	0 *	$31.43	$0	0
Maritime	Large	(0 +	0.00000) *	0.50% *	3 *	38 =	0 *	$30.76	$0	0
	Small	(0 +	0.00000) *	0.50% *	3 *	34 =	0 *	$31.43	$0	0
Construction	Large	(1 +	0.00000) *	0.50% *	3 *	1,290 =	17 *	$30.76	$515	6
	Small	(1 +	0.00000) *	0.50% *	3 *	5,162 =	67 *	$31.43	$2,108	22
Government	State	(1 +	0.00000) *	0.50% *	3 *	16 =	0 *	$30.76	$5	0
	Local	(1 +	0.00000) *	0.50% *	3 *	59 =	1 *	$31.43	$17	0
SECTOR 27. Solid Waste Incineration										
ALL	Large	(0 +	0.00000) *	0.50% *	3 *	48 =	0 *	$26.09	$0	0
	Small	(0 +	0.00000) *	0.50% *	3 *	58 =	0 *	$31.43	$0	0
Government	State	(0 +	0.00000) *	0.50% *	3 *	0 =	0 *	$26.09	$0	0
	Local	(0 +	0.00000) *	0.50% *	3 *	29 =	0 *	$32.43	$0	0
SECTOR 30. Superalloy Producers and Users										
ALL	Large	(4 +	0.00000) *	0.50% *	3 *	18 =	1 *	$26.75	$28	0
	Small	(0 +	0.00000) *	0.50% *	3 *	0 =	0 *	$32.43	$0	0
SECTOR 31. Construction										
Industrial Rehabilitation & Maintenance	Large	(0 +	0.00000) *	0.50% *	3 *	55 =	0 *	$30.79	$0	0
	Small	(0 +	0.00000) *	0.50% *	3 *	196 =	0 *	$32.43	$0	0
	State Go	(0 +	0.00000) *	0.50% *	3 *	16 =	0 *	$30.79	$0	0
	Local Go	(0 +	0.00000) *	0.50% *	3 *	74 =	0 *	$33.43	$0	0

Hazardous Waste Site Work	Large	(	0	+	0.00000	) *	0.50%	*	3	*	44	=	0	*	$30.79	$0	0
	Small	(	0	+	0.00000	) *	0.50%	*	3	*	143	=	0	*	$34.43	$0	0
	State Go	(	0	+	0.00000	) *	0.50%	*	3	*	1	=	0	*	$30.79	$0	0
	Local Go	(	0	+	0.00000	) *	0.50%	*	3	*	201	=	0	*	$35.43	$0	0
Refractory Brick Restoration	Large	(	1	+	0.00000	) *	0.50%	*	3	*	48	=	1	*	$30.79	$20	0
	Small	(	1	+	0.00000	) *	0.50%	*	3	*	148	=	2	*	$36.43	$72	1
TOTALS											**72,329**		**825**			**$22,881**	**275**

Annual Medical Examination with Additional Tests (§§ 1910.1026(k)(2)(ii) and (k)(3)(i)-(k)(3)(iii); 1915.1026(i)(2)(ii) and (i)(3)(i)-(i)(3)(iii); and 1926.1126(i)(2)(ii) and (i)(3)(i)-(i)(3)(ii))

Contract Cost for a PLHCP to Conduct the Annual Medical Examination with Additional Tests

This table calculates the cost for a contractor PLHCP to conduct additional medical testing for those employees who have abnormal annual medical examination results. Abnormal results will require additional medical testing "as deemed appropriate by the physician."

COST = (LIMEMPAL + MEDEXAMADDERM) * %ALABN * MEDCOSTADD* #PLANTS

* LIMEMPAL = Number of employees requiring a limited medical exam b/c at or > AL after implementation of engineering controls.
* MEDEXAMADDERM = Number of employees at or above the AL requiring a limited medical exam b/c of dermal "signs and symptoms" after the implementation of engineering controls.
*%ALABN = Percent of employees exposed at or above the action level 30 days per year (and therefore requiring a limited or comprehensive medical exam who will be found to have abnormal results
#PLANTS = Number of Plants

Variables		LIMEMPAL	MEDEXAMADDERM	%ALABN	MEDCOSTADD	#PLANTS	Cost
Sector 1. Electroplating							
All	Large	(3 +	0) *	0.50%) *	$241.82 *	1,885 =	$6,344
	Small	(0 +	0) *	0.50%) *	$241.82 *	3,547 =	$0
Sector 2. Welding							
General Industry	Large	(0 +	0) *	0.50%) *	$241.82 *	7,911 =	$0
	Small	(0 +	0) *	0.50%) *	$241.82 *	8,864 =	$0
Maritime	Large	(14 +	0) *	0.50%) *	$241.82 *	191 =	$3,140
	Small	(1 +	0) *	0.50%) *	$241.82 *	108 =	$127
Construction	Large	(26 +	3) *	0.50%) *	$241.82 *	269 =	$9,509
	Small	(3 +	0) *	0.50%) *	$241.82 *	2,160 =	$7,621
Government	State	(0 +	0) *	0.50%) *	$241.82 *	25 =	$0
	Local	(0 +	0) *	0.50%) *	$241.82 *	793 =	$0
Sector 2. Mild Steel Welding							
General Industry	Large	(0 +	0) *	0.50%) *	$241.82 *	10,607 =	$0
	Small	(0 +	0) *	0.50%) *	$241.82 *	10,797 =	$0
Maritime	Large	(0 +	0) *	0.50%) *	$241.82 *	412 =	$0
	Small	(0 +	0) *	0.50%) *	$241.82 *	233 =	$0
Construction	Large	(10 +	0) *	0.50%) *	$241.82 *	405 =	$4,760
	Small	(1 +	0) *	0.50%) *	$241.82 *	3,058 =	$3,597
SECTOR 3. PAINTING							
General Industry AEROSPACE	Large	(46 +	0) *	0.50%) *	$241.82 *	50 =	$2,762
	Small	(0 +	0) *	0.50%) *	$241.82 *	63 =	$0
General Industry AUTOBODY	Large	(1 +	0) *	0.50%) *	$241.82 *	331 =	$368
	Small	(0 +	0) *	0.50%) *	$241.82 *	1,458 =	$0
COIL COATING	Large	(2 +	0) *	0.50%) *	$241.82 *	101 =	$225
	Small	(1 +	0) *	0.50%) *	$241.82 *	18 =	$20
Maritime	Large	(2 +	0) *	0.50%) *	$241.82 *	294 =	$651
	Small	(1 +	0) *	0.50%) *	$241.82 *	508 =	$562
Construction	Large	(2 +	0) *	0.50%) *	$241.82 *	765 =	$2,011
	Small	(0 +	0) *	0.50%) *	$241.82 *	4,067 =	$0
Governments	State	(0 +	0) *	0.50%) *	$241.82 *	16 =	$0
	Local	(9 +	0) *	0.50%) *	$241.82 *	899 =	$9,507

Variables		LIMEMPAL		MEDEXAMADDERM		%ALABN		MEDCOSTADD		#PLANTS		Cost
SECTOR 4. Producers of Chromates												
ALL	Large	(7	+	0)	*	0.50%)	*	$241.82	*	2	=	$18
	Small	(0	+	0)	*	0.50%)	*	$241.82	*	0	=	$0
SECTOR 5. Chromate Pigment Procedures												
ALL	Large	(9	+	0)	*	0.50%)	*	$241.82	*	2	=	$22
	Small	(1	+	0)	*	0.50%)	*	$241.82	*	1	=	$1
SECTOR 6. CCA Producers												
ALL	Large	(2	+	0)	*	0.50%)	*	$241.82	*	3	=	$5
	Small	(0	+	0)	*	0.50%)	*	$241.82	*	0	=	$0
SECTOR 7. Chromium Catalyst Producers												
ALL	Large	(12	+	0)	*	0.50%)	*	$241.82	*	5	=	$79
	Small	(0	+	0)	*	0.50%)	*	$241.82	*	0	=	$0
SECTOR 8. Paint and Coating Producers												
ALL	Large	(1	+	0.00378)	*	0.50%)	*	$241.82	*	87	=	$110
	Small	(0	+	0)	*	0.50%)	*	$241.82	*	137	=	$0
SECTOR 9. Printing Ink Producers												
ALL	Large	(0	+	0)	*	0.50%)	*	$241.82	*	3	=	$0
	Small	(0	+	0)	*	0.50%)	*	$241.82	*	10	=	$0
SECTOR 10. Plastic Colorant Producers and Users												
ALL	Large	(0	+	0)	*	0.50%)	*	$241.82	*	86	=	$0
	Small	(0	+	0)	*	0.50%)	*	$241.82	*	42	=	$0
SECTOR 11. Plating Mixture Producers												
ALL	Large	(2	+	0)	*	0.50%)	*	$241.82	*	4	=	$12
	Small	(1	+	0)	*	0.50%)	*	$241.82	*	3	=	$3
SECTOR 13. Chromium Metal Producers												
ALL	Large	(8	+	0)	*	0.50%)	*	$241.82	*	1	=	$10
	Small	(0	+	0)	*	0.50%)	*	$241.82	*	0	=	$0
SECTOR 14. Iron and Steel Mills												
ALL	Large	(30	+	0.00650)	*	0.50%)	*	$241.82	*	37	=	$1,331
	Small	(1	+	0.00031)	*	0.50%)	*	$241.82	*	12	=	$20
Carbon Steel	Large	(1	+	0.00015)	*	0.50%)	*	$241.82	*	112	=	$95
	Small	(1	+	0.00031)	*	0.50%)	*	$241.82	*	35	=	$60
SECTOR 14B. Forging Industry												
ALL	Large	(0	+	0.00062)	*	0.50%)	*	$241.82	*	37	=	$0
	Small	(0	+	0.00015)	*	0.50%)	*	$241.82	*	34	=	$0
SECTOR 15. Iron and Steel Foundries												
ALL	Large	(19	+	0)	*	0.50%)	*	$241.82	*	178	=	$4,073
	Small	(5	+	0)	*	0.50%)	*	$241.82	*	130	=	$705
SECTOR 17. Chromium Dye Producers												
ALL	Large	(0	+	0)	*	0.50%)	*	$241.82	*	3	=	$0
	Small	(0	+	0)	*	0.50%)	*	$241.82	*	1	=	$0
SECTOR 18. Chromium Sulfate Producers												
ALL	Large	(0	+	0)	*	0.50%)	*	$241.82	*	0	=	$0
	Small	(1	+	0)	*	0.50%)	*	$241.82	*	5	=	$7
SECTOR 19. Chemical Distributors												
ALL	Large	(0	+	0)	*	0.50%)	*	$241.82	*	207	=	$0
	Small	(0	+	0)	*	0.50%)	*	$241.82	*	1,561	=	$0

Variables		LIMEMPAL	MEDEXAMADDERM	%ALABN	MEDCOSTADD	#PLANTS	Cost
SECTOR 20. Textile Dyeing							
ALL	Large	(0 +	0) *	0.50%) *	$241.82 *	347 =	$0
	Small	(0 +	0) *	0.50%) *	$241.82 *	703 =	$0
SECTOR 21. Colored Glass Producers							
ALL	Large	(1 +	0) *	0.50%) *	$241.82 *	5 =	$6
	Small	(0 +	0) *	0.50%) *	$241.82 *	17 =	$0
Fiber, Flat, Container Glass	Large	(8 +	0) *	0.50%) *	$241.82 *	78 =	$765
	Small	(2 +	0) *	0.50%) *	$241.82 *	5 =	$10
SECTOR 22. Printing							
ALL	Large	(0 +	0) *	0.50%) *	$241.82 *	92 =	$0
	Small	(0 +	0) *	0.50%) *	$241.82 *	367 =	$0
SECTOR 24. Chromium Catalyst Users							
ALL	Large	(0 +	0) *	0.50%) *	$241.82 *	164 =	$0
	Small	(0 +	0) *	0.50%) *	$241.82 *	0 =	$0
Chromium Catalyst Companies	Large	(5 +	0) *	0.50%) *	$241.82 *	21 =	$129
	Small	(3 +	0) *	0.50%) *	$241.82 *	4 =	$15
SECTOR 25. Refractory Brick Producers							
ALL	Large	(0 +	0) *	0.50%) *	$241.82 *	6 =	$0
	Small	(0 +	0) *	0.50%) *	$241.82 *	0 =	$0
SECTOR 26. Woodworking							
General Industry	Large	(0 +	0) *	0.50%) *	$241.82 *	175 =	$0
	Small	(0 +	0) *	0.50%) *	$241.82 *	93 =	$0
Maritime	Large	(0 +	0) *	0.50%) *	$241.82 *	38 =	$0
	Small	(0 +	0) *	0.50%) *	$241.82 *	34 =	$0
Construction	Large	(1 +	0) *	0.50%) *	$241.82 *	1,290 =	$1,351
	Small	(1 +	0) *	0.50%) *	$241.82 *	5,162 =	$5,407
Government	State	(1 +	0) *	0.50%) *	$241.82 *	16 =	$12
	Local	(1 +	0) *	0.50%) *	$241.82 *	59 =	$44
SECTOR 27. Solid Waste Incineration							
ALL	Large	(0 +	0) *	0.50%) *	$241.82 *	48 =	$0
	Small	(0 +	0) *	0.50%) *	$241.82 *	58 =	$0
Government	State	(1 +	1) *	0.50%) *	$241.82 *	0 =	$0
	Local	(0 +	0) *	0.50%) *	$241.82 *	29 =	$0
SECTOR 30. Superalloy Producers and Users							
ALL	Large	(2 +	2) *	0.50%) *	$241.82 *	18 =	$84
	Small	(0 +	0) *	0.50%) *	$241.82 *	0 =	$0
SECTOR 31. Construction							
Industrial Rehabilitation & Maintenance	Large	(0 +	0) *	0.50%) *	$241.82 *	55 =	$0
	Small	(0 +	0) *	0.50%) *	$241.82 *	196 =	$0
	State Gov't	(0 +	0) *	0.50%) *	$241.82 *	16 =	$0
	Local Gov't	(0 +	0) *	0.50%) *	$241.82 *	74 =	$0
Hazardous Waste Site Work	Large	(0 +	0) *	0.50%) *	$241.82 *	44 =	$0
	Small	) 0 +	0) *	0.50%) *	$241.82 *	143 =	$0
	State Gov't	(0 +	0) *	0.50%) *	$241.82 *	1 =	$0
	Local Gov't	(0 +	0) *	0.50%) *	$241.82 *	201 =	$0

Variables			LIMEMPAL		MEDEXAMADDERM			%ALABN			MEDCOSTADD		#PLANTS		Cost
Refractory Brick Restoration & Maintenance	Large	(	1	+	0	)	*	0.50%	)	*	$241.82	*	48	=	$52
	Small	(	1	+	0	)	*	0.50%	)	*	$241.82	*	148	=	$0
Total													**72,329**		**$65,631**

Medical Examination After Initial Assignment (§§1910.1026(k)(2)(i), (k)(3)(i), and (k)(3)(ii);1915.1026(i)(2)(i), (i)(3)(i), and (i)(3)(ii); and 1926.1126(i)(2)(i), (i)(3)(i), and (i)(3)(ii))

Employee Time and Cost to Complete the Medical Examination After Initial Assignment

This table calculates the burden hours and cost for those employees who are newly assigned to operations that involve exposure at or above the action level to receive medical examinations. It is estimated that the employee will be provided a comprehensive medical examination.

Hours = (LIMEMPAL + MEDEXAMADDERM)*TURNOVER*COMPFULLTIME * (1-%BASEMED) * #PLANTS
Cost =Hours *NONSUPWAGE

* LIMEMPAL = Number of employees requiring a limited medical exam b/c at or > AL after implementation of engineering controls.

* MEDEXAMADDERM = Number of employees at or above the AL requiring a limited medical exam b/c of dermal "signs and symptoms" after the implementation of engineering controls.

*COMPFULLTIME = Four hours for an employee to receive a comprehensive medical examination
*NONSUPEWAGE - Non-supervisory wage rate
(1-%BASEMED) = Percentage of plants that are not providing annual medical examinations.
* #PLANTS = Number of Plants

Variables		LIMEMPAL		MEDEXAMADDERM		TURNOVER		COMPFULLTIME		1-%BASEMED		#PLANTS		Hours		NONSUPEWAGE	Cost	RESPONSES
Sector 1. Electroplating																		
ALL	Large	(3	+	0.00000	) *	26.16%	*	4	* (1	- 100.00%	) *	1,885	=	0	*	$25.49	$0	0
	Small	(0	+	0.00000	) *	26.16%	*	4	* (1	- 100.00%	*	3,547	=	0	*	$25.49	$0	
Sector 2. Welding																		
General Industry	Large	(0	+	0.00000	) *	27.24%	*	4	* (1	- 5.00%	*	7,911	=	0	*	$25.10	$0	0
	Small	(0	+	0.00000	) *	27.24%	*	4	* (1	- 0.00%	*	8,864	=	0	*	$25.10	$0	0
Maritime	Large	(14	+	2.91848	) *	27.24%	*	4	* (1	- 5.00%	*	191	=	3,264	*	$25.10	$81,930	816
	Small	(1	+	0.00000	) *	27.24%	*	4	* (1	- 0.00%	*	108	=	114	*	$25.10	$2,873	29
Construction	Large	(26	+	2.91848	) *	27.24%	*	4	* (1	- 5.00%	*	269	=	8,141	*	$25.10	$204,333	2,035
	Small	(3	+	0.00000	) *	27.24%	*	4	* (1	- 0.00%	*	2,160	=	6,868	*	$25.10	$172,381	1,717
GOVERNMENT	Local	(0	+	0.00000	) *	27.24%	*	4	* (1	- 5.00%	*	25	=	0	*	$25.10	$0	0
	State	(0	+	0.00000	) *	27.24%	*	4	* (1	- 0.00%	*	793	=	0	*	$25.10	$0	0
Sector 2. Mild Steel Welding																		
General Industry	Large	(0	+	0.00000	) *	27.24%	*	4	* (1	- 5.00%	*	10,607	=	0	*	$25.10	$0	0
	Small	(0	+	0.00000	) *	27.24%	*	4	* (1	- 0.00%	*	10,797	=	0	*	$25.10	$0	0
Maritime	Large	(0	+	0.00000	) *	27.24%	*	4	* (1	- 5.00%	*	412	=	0	*	$25.10	$0	0
	Small	(0	+	0.00000	) *	27.24%	*	4	* (1	- 0.00%	*	233	=	0	*	$25.10	$0	0
Construction	Large	(10	+	0.00000	) *	27.24%	*	4	* (1	- 5.00%	*	405	=	4,075	*	$25.10	$102,290	1,072
	Small	(1	+	0.00000	) *	27.24%	*	4	* (1	- 0.00%	*	3,058	=	3,241	*	$25.10	$81,350	810
SECTOR 3. PAINTING																		
AEROSPACE	Large	(46	+	0.00000	) *	27.24%	*	4	* (1	- 80.00%	*	50	=	498	*	$31.68	$15,771	124
	Small	(0	+	0.00000	) *	27.24%	*	4	* (1	- 50.00%	*	63	=	0	*	$31.68	$0	0
Autobody	Large	(1	+	0.00000	) *	27.24%	*	4	* (1	- 80.00%	*	331	=	66	*	$31.68	$2,103	17
	Small	(0	+	0.00000	) *	27.24%	*	4	* (1	- 50.00%	*	1,458	=	0	*	$31.68	$0	0
Coil Coating	Large	(2	+	0.00000	) *	27.24%	*	4	* (1	- 80.00%	*	101	=	41	*	$31.68	$1,285	10
	Small	(1	+	0.00000	) *	27.24%	*	4	* (1	- 50.00%	*	18	=	9	*	$31.68	$292	2
Maritime	Large	(2	+	0.00000	) *	27.24%	*	4	* (1	- 100.00%	*	294	=	0	*	$31.68	$0	0
	Small	(1	+	0.00000	) *	27.24%	*	4	* (1	- 50.00%	*	508	=	253	*	$31.68	$8,029	63
Construction	Large	(2	+	0.00000	) *	27.24%	*	4	* (1	- 100.00%	*	765	=	0	*	$31.68	$0	0
	Small	(0	+	0.00000	) *	27.24%	*	4	* (1	- 100.00%	*	4,067	=	0	*	$31.68	$0	0
Government	Local	(0	+	0.00000	) *	27.24%	*	4	* (1	- 100.00%	*	16	=	0	*	$31.68	$0	0
	State	(9	+	0.00000	) *	27.24%	*	4	* (1	- 100.00%	*	899	=	0	*	$31.68	$0	0
SECTOR 4. Producers of Chromates																		
ALL	Large	(7	+	0.00000	) *	29.16%	*	4	* (1	- 50.00%	*	2	=	9	*	$37.06	$328	2
	Small	(0	+	0.00000	) *	29.16%	*	4	* (1	- 0.00%	*	0	=	0	*	$37.06	$0	0

Variables		LIMEMPAL		MEDEXAMADDERN		TURNOVER		COMPFULLTIME		1-%BASEMED		#PLANTS		Hours		NONSUPEWAGE	Cost	RESPONSES
SECTOR 5. Chromate Pigment Procedures																		
ALL	Large	(9	+	0.00000	) *	29.16%	*	4	* (	1 - 100.00%	*	2 =		0	*	$36.12	$0	0
	Small	(1	+	0.00000	) *	29.16%	*	4	* (	1 - 100.00%	*	1 =		0	*	$36.12	$0	0
SECTOR 6. CCA Producers																		
ALL	Large	(2	+	0.00000	) *	29.16%	*	4	* (	1 - 100.00%	*	3 =		0	*	$30.60	$0	0
	Small	(0	+	0.00000	) *	29.16%	*	4	* (	1 - 0.00%	*	0 =		0	*	$30.60	$0	0
SECTOR 7. Chromium Catalyst Producers																		
ALL	Large	(12	+	0.00000	) *	29.16%	*	4	* (	1 - 100.00%	*	5 =		0	*	$37.06	$0	0
	Small	(0	+	0.00000	) *	29.16%	*	4	* (	1 - 100.00%	*	0 =		0	*	$37.06	$0	0
SECTOR 8. Paint and Coating Producers																		
ALL	Large	(1	+	0.00378	) *	29.16%	*	4	* (	1 - 100.00%	*	87 =		0	*	$27.60	$0	0
	Small	(0	+	0.00000	) *	29.16%	*	4	* (	1 - 100.00%	*	137 =		0	*	$27.60	$0	0
SECTOR 9. Printing Ink Producers																		
ALL	Large	(0	+	0.00000	) *	29.16%	*	4	* (	1 - 80.00%	*	3 =		0	*	$27.65	$0	0
	Small	(0	+	0.00000	) *	29.16%	*	4	* (	1 - 10.00%	*	10 =		0	*	$27.65	$0	0
SECTOR 10. Plastic Colorant Producers and Users																		
ALL	Large	(0	+	0.00000	) *	29.16%	*	4	* (	1 - 100.00%	*	86 =		0	*	$30.64	$0	0
	Small	(0	+	0.00000	) *	29.16%	*	4	* (	1 - 100.00%	*	42 =		0	*	$30.64	$0	0
SECTOR 11. Plating Mixture Producers																		
ALL	Large	(2	+	0.00000	) *	29.16%	*	4	* (	1 - 50.00%	*	4 =		6	*	$27.50	$157	1
	Small	(1	+	0.00000	) *	29.16%	*	4	* (	1 - 30.00%	*	3 =		2	*	$27.50	$49	0
SECTOR 13. Chromium Metal Producers																		
ALL	Large	(8	+	0.00000	) *	26.16%	*	4	* (	1 - 100.00%	*	1 =		0	*	$37.17	$0	0
	Small	(0	+	0.00000	) *	26.16%	*	4	* (	1 - 0.00%	*	0 =		0	*	$37.17	$0	0
SECTOR 14. Iron and Steel Mills																		
Alloy Stainless Steel	Large	(30	+	0.00650	) *	26.16%	*	4	* (	1 - 50.00%	*	37 =		576	*	$37.17	$21,408	144
	Small	(1	+	0.00031	) *	26.16%	*	4	* (	1 - 30.00%	*	12 =		12	*	$37.17	$458	3
Carbon Steel	Large	(1	+	0.00015	) *	26.16%	*	4	* (	1 - 50.00%	*	112 =		41	*	$37.17	$1,529	10
	Small	(1	+	0.00031	) *	26.16%	*	4	* (	1 - 30.00%	*	35 =		36	*	$37.17	$1,346	9
14B. Alloy Stainless Steel Forging Industry																		
Reshaping	Large	(0	+	0.00062	) *	26.16%	*	4	* (	1 - 50.00%	*	37 =		0	*	$37.17	$0	0
	Small	(0	+	0.00015	) *	26.16%	*	4	* (	1 - 30.00%	*	34 =		0	*	$37.17	$0	0
SECTOR 15. Iron and Steel Foundries																		
ALL	Large	(19	+	0.00000	) *	26.16%	*	4	* (	1 - 80.00%	*	178 =		705	*	$27.12	$19,122	176
	Small	(5	+	0.00000	) *	26.16%	*	4	* (	1 - 10.00%	*	130 =		549	*	$27.12	$14,900	137
SECTOR 17. Chromium Dye Producers																		
ALL	Large	(0	+	0.00000	) *	29.16%	*	4	* (	1 - 100.00%	*	3 =		0	*	$36.12	$0	0
	Small	(0	+	0.00000	) *	29.16%	*	4	* (	1 - 100.00%	*	1 =		0	*	$36.12	$0	0
SECTOR 18. Chromium Sulfate Producers																		
ALL	Large	(0	+	0.00000	) *	29.16%	*	4	* (	1 - 100.00%	*	0 =		0	*	$39.76	$0	0
	Small	(1	+	0.00000	) *	29.16%	*	4	* (	1 - 100.00%	*	5 =		0	*	$39.76	$0	0
SECTOR 19. Chemical Distributors																		
ALL	Large	(0	+	0.00000	) *	26.64%	*	4	* (	1 - 0.00%	*	207 =		0	*	$28.67	$0	0
	Small	(0	+	0.00000	) *	26.64%	*	4	* (	1 - 0.00%	*	1,561 =		0	*	$28.67	$0	0
SECTOR 20. Textile Dyeing																		
ALL	Large	(0	+	0.00000	) *	29.16%	*	4	* (	1 - 80.00%	*	347 =		0	*	$19.13	$0	0
	Small	(0	+	0.00000	) *	29.16%	*	4	* (	1 - 10.00%	*	703 =		0	*	$19.13	$0	0
SECTOR 21. Colored Glass Producers																		
ALL	Large	(1	+	0.00000	) *	29.16%	*	4	* (	1 - 80.00%	*	5 =		1	*	$27.66	$32	0
	Small	(0	+	0.00000	) *	29.16%	*	4	* (	1 - 10.00%	*	17 =		0	*	$27.66	$0	0
Fiber, Flat and Container Glass	Large	(8	+	0.00000	) *	29.16%	*	4	* (	1 - 80.00%	*	78 =		148	*	$27.66	$4,081	37
	Small	(2	+	0.00000	) *	29.16%	*	4	* (	1 - 10.00%	*	5 =		9	*	$27.66	$237	2

Variables		LIMEMPAL		MEDEXAMADDERN		TURNOVER		COMPFULLTIME		1-%BASEMED		#PLANTS		Hours		NONSUPEWAGE	Cost	RESPONSES
SECTOR 22. Printing																		
ALL	Large	(0	+	0.00000	) *	29.16%	*	4	* (	1 - 80.00%	*	92	=	0	*	$19.97	$0	0
	Small	(0	+	0.00000	) *	29.16%	*	4	* (	1 - 10.00%	*	367	=	0	*	$19.97	$0	0
SECTOR 24. Chromium Catalyst Users																		
Catalyst Users	Large	(0	+	0.00000	) *	26.16%	*	4	* (	1 - 80.00%	*	164	=	0	*	$31.14	$0	0
	Small	(0	+	0.00000	) *	26.16%	*	4	* (	1 - 80.00%	*	0	=	0	*	$31.14	$0	0
Chromium Catalyst Service Companies	Large	(5	+	0.00000	) *	26.16%	*	4	* (	1 - 80.00%	*	21	=	22	*	$31.14	$696	6
	Small	(3	+	0.00000	) *	26.16%	*	4	* (	1 - 80.00%	*	4	=	3	*	$31.14	$80	1
SECTOR 25. Refractory Brick Producers																		
ALL	Large	(0	+	0.00000	) *	26.16%	*	4	* (	1 - 80.00%	*	6	=	0	*	$24.56	$0	0
	Small	(0	+	0.00000	) *	26.16%	*	4	* (	1 - 10.00%	*	0	=	0	*	$24.56	$0	0
SECTOR 26. Woodworking																		
General Industry	Large	(0	+	0.00000	) *	26.16%	*	4	* (	1 - 25.00%	*	175	=	0	*	$30.76	$0	0
	Small	(0	+	0.00000	) *	26.16%	*	4	* (	1 - 0.00%	*	93	=	0	*	$30.76	$0	0
Maritime	Large	(0	+	0.00000	) *	26.16%	*	4	* (	1 - 25.00%	*	38	=	0	*	$30.76	$0	0
	Small	(0	+	0.00000	) *	26.16%	*	4	* (	1 - 0.00%	*	34	=	0	*	$30.76	$0	0
Construction	Large	(1	+	0.00000	) *	26.16%	*	4	* (	1 - 50.00%	*	1,290	=	584	*	$30.76	$17,980	146
	Small	(1	+	0.00000	) *	26.16%	*	4	* (	1 - 50.00%	*	5,162	=	2,339	*	$30.76	$71,969	585
Government	State	(1	+	0.00000	) *	26.16%	*	4	* (	1 - 50.00%	*	16	=	5	*	$30.76	$163	1
	Local	(1	+	0.00000	) *	26.16%	*	4	* (	1 - 50.00%	*	59	=	19	*	$30.76	$591	5
SECTOR 27. Solid Waste Incineration																		
ALL	Large	(0	+	0.00000	) *	46.92%	*	4	* (	1 - 50.00%	*	48	=	0	*	$26.09	$0	0
	Small	(0	+	0.00000	) *	46.92%	*	4	* (	1 - 30.00%	*	58	=	0	*	$26.09	$0	0
Government	State	(0	+	0.00000	) *	46.92%	*	4	* (	1 - 50.00%	*	0	=	0	*	$26.09	$0	0
	Local	(0	+	0.00000	) *	46.92%	*	4	* (	1 - 30.00%	*	29	=	0	*	$26.09	$0	0
SECTOR 30. Superalloy Producers and Users																		
ALL	Large	(4	+	0.00000	) *	26.16%	*	4	* (	1 - 50.00%	*	18	=	36	*	$26.75	$970	9
	Small	(0	+	0.00000	) *	26.16%	*	4	* (	1 - 30.00%	*	0	=	0	*	$26.75	$0	0
SECTOR 31. Construction																		
Industrial Rehabilitation & Maintenance	Large	(0	+	0.00000	) *	67.80%	*	4	* (	1 - 50.00%	*	55	=	0	*	$30.79	$0	0
	Small	(0	+	0.00000	) *	67.80%	*	4	* (	1 - 50.00%	*	196	=	0	*	$30.79	$0	0
	State Gov't	(0	+	0.00000	) *	67.80%	*	4	* (	1 - 50.00%	*	16	=	0	*	$30.79	$0	0
	Local Gov't	(0	+	0.00000	) *	67.80%	*	4	* (	1 - 50.00%	*	74	=	0	*	$30.79	$0	0
Hazardous Waste Site Work	Large	(0	+	0.00000	) *	67.80%	*	4	* (	1 - 50.00%	*	44	=	0	*	$30.79	$0	0
	Small	(0	+	0.00000	) *	67.80%	*	4	* (	1 - 50.00%	*	143	=	0	*	$30.79	$0	0
	State Gov't	(0	+	0.00000	) *	67.80%	*	4	* (	1 - 50.00%	*	1	=	0	*	$30.79	$0	0
	Local Gov't	(0	+	0.00000	) *	67.80%	*	4	* (	1 - 50.00%	*	201	=	0	*	$30.79	$0	0
Refractory Brick Restoration	Large	(1	+	0.00000	) *	67.80%	*	4	* (	1 - 50.00%	*	48	=	58	*	$30.79	$1,780	14
	Small	(1	+	0.00000	) *	67.80%	*	4	* (	1 - 50.00%	*	148	=	178	*	$30.79	$5,472	44
TOTAL												**72,329**		**31,910**			**$835,984**	**8,031**

Medical Examination After Initial Assignment (§§1910.1026(k)(2)(i), (k)(3)(i), and (k)(3)(ii);1915.1026(i)(2)(i), (i)(3)(i), and (i)(3)(ii); and 1926.1126(i)(2)(i), (i)(3)(i), and (i)(3)(ii))

Contract Cost for a PLHCP to Conduct the Medical Examination After Initial Assignment

This table calculates the cost for a contractor PLHCP to conduct medical examinations to employees newly assigned to operations that involve exposure at or above the action level.

Hours = (LIMEMPAL + MEDEXAMADDERM)*TURNOVER*COMPFULLCOST *(1-%BASEMED)*#PLANTS
Cost =Hours *NONSUPWAGE

* LIMEMPAL = Number of employees requiring a limited medical exam b/c at or > AL after implementation of engineering controls
* MEDEXAMADDERM = Number of employees at or above the AL requiring a limited medical exam b/c of dermal "signs and symptoms" after the implementation of engineering controls.

*COMPFULLCOST = Cost for an employer to administer a comprehensive medical examination
1-%BASEMED = Percentage of establishments that do not have annual medical surveillance for their employees in the baseline.
* #PLANTS = Number of Plants

Variables			LIMEMPAL		MEDEXAMADDERM		TURNOVER	COMPFULLCOST		1 -%BASEMED		#PLANTS	Cost
Sector 1. Electroplating													
ALL	Large	(	3	+	0.00000	) *	26.16% *	$454.63	* (	1 - 100.00%	) *	1,885 =	$0
	Small	(	0	+	0.00000	) *	26.16% *	$454.63	*	1 - 100.00%	*	3,547 =	$0
Sector 2. Welding													
General Industry	Large	(	0	+	0.00000	) *	27.24% *	$454.63	*	1 - 5.00%	*	7,911 =	$0
	Small	(	0	+	0.00000	) *	27.24% *	$454.63	*	1 - 0.00%	*	8,864 =	$0
Maritime	Large	(	14	+	2.91848	) *	27.24% *	$454.63	*	1 - 5.00%	*	191 =	$370,991
	Small	(	1	+	0.00000	) *	27.24% *	$454.63	*	1 - 0.00%	*	108 =	$13,009
Construction	Large	(	26	+	2.91848	) *	27.24% *	$454.63	*	1 - 5.00%	*	269 =	$925,251
	Small	(	3	+	0.00000	) *	27.24% *	$454.63	*	1 - 0.00%	*	2,160 =	$780,565
GOVERNMENT	Local	(	0	+	0.00000	) *	27.24% *	$454.63	*	1 - 5.00%	*	25 =	$0
	State	(	0	+	0.00000	) *	27.24% *	$454.63	*	1 - 0.00%	*	793 =	$0
Sector 2. Mild Steel Welding													
General Industry	Large	(	0	+	0.00000	) *	27.24% *	$454.63	*	1 - 5.00%	*	10,607 =	$0
	Small	(	0	+	0.00000	) *	27.24% *	$454.63	*	1 - 0.00%	*	10,797 =	$0
Maritime	Large	(	0	+	0.00000	) *	27.24% *	$454.63	*	1 - 5.00%	*	412 =	$0
	Small	(	0	+	0.00000	) *	27.24% *	$454.63	*	1 - 0.00%	*	233 =	$0
Construction	Large	(	10	+	0.00000	) *	27.24% *	$454.63	*	1 - 5.00%	*	405 =	$463,182
	Small	(	1	+	0.00000	) *	27.24% *	$454.63	*	1 - 0.00%	*	3,058 =	$368,366
SECTOR 3. PAINTING													
AEROSPACE	Large	(	46	+	0.00000	) *	27.24% *	$454.63	*	1 - 80.00%	*	50 =	$56,585
	Small	(	0	+	0.00000	) *	27.24% *	$454.63	*	1 - 50.00%	*	63 =	$0
Autobody	Large	(	1	+	0.00000	) *	27.24% *	$454.63	*	1 - 80.00%	*	331 =	$7,545
	Small	(	0	+	0.00000	) *	27.24% *	$454.63	*	1 - 50.00%	*	1,458 =	$0
Coil Coating	Large	(	2	+	0.00000	) *	27.24% *	$454.63	*	1 - 80.00%	*	101 =	$4,611
	Small	(	1	+	0.00000	) *	27.24% *	$454.63	*	1 - 50.00%	*	18 =	$1,048
Maritime	Large	(	2	+	0.00000	) *	27.24% *	$454.63	*	1 - 100.00%	*	294 =	$0
	Small	(	1	+	0.00000	) *	27.24% *	$454.63	*	1 - 50.00%	*	508 =	$28,805
Construction	Large	(	2	+	0.00000	) *	27.24% *	$454.63	*	1 - 100.00%	*	765 =	$0
	Small	(	0	+	0.00000	) *	27.24% *	$454.63	*	1 - 100.00%	*	4,067 =	$0
Government	Local	(	0	+	0.00000	) *	27.24% *	$454.63	*	1 - 100.00%	*	16 =	$0
	State	(	9	+	0.00000	) *	27.24% *	$454.63	*	1 - 100.00%	*	899 =	$0

Variables			LIMEMPAL		MEDEXAMADDERM		TURNOVER		COMPFULLCOST		1 -%BASEMED		#PLANTS		Cost
SECTOR 4. Producers of Chromates															
ALL	Large	(	7	+	0.00000	) *	29.16%	*	$454.63	*	1 - 50.00%	*	2	=	$1,005
	Small	(	0	+	0.00000	) *	29.16%	*	$454.63	*	1 - 0.00%	*	0	=	$0
SECTOR 5. Chromate Pigment Procedures															
ALL	Large	(	9	+	0.00000	) *	29.16%	*	$454.63	*	1 - 100.00%	*	2	=	$0
	Small	(	1	+	0.00000	) *	29.16%	*	$454.63	*	1 - 100.00%	*	1	=	$0
SECTOR 6. CCA Producers															
ALL	Large	(	2	+	0.00000	) *	29.16%	*	$454.63	*	1 - 100.00%	*	3	=	$0
	Small	(	0	+	0.00000	) *	29.16%	*	$454.63	*	1 - 0.00%	*	0	=	$0
SECTOR 7. Chromium Catalyst Producers															
ALL	Large	(	12	+	0.00000	) *	29.16%	*	$454.63	*	1 - 100.00%	*	5	=	$0
	Small	(	0	+	0.00000	) *	29.16%	*	$454.63	*	1 - 100.00%	*	0	=	$0
SECTOR 8. Paint and Coating Producers															
ALL	Large	(	1	+	0.00378	) *	29.16%	*	$454.63	*	1 - 100.00%	*	87	=	$0
	Small	(	0	+	0.00000	) *	29.16%	*	$454.63	*	1 - 100.00%	*	137	=	$0
SECTOR 9. Printing Ink Producers															
ALL	Large	(	0	+	0.00000	) *	29.16%	*	$454.63	*	1 - 80.00%	*	3	=	$0
	Small	(	0	+	0.00000	) *	29.16%	*	$454.63	*	1 - 10.00%	*	10	=	$0
SECTOR 10. Plastic Colorant Producers and Users															
ALL	Large	(	0	+	0.00000	) *	29.16%	*	$454.63	*	1 - 100.00%	*	86	=	$0
	Small	(	0	+	0.00000	) *	29.16%	*	$454.63	*	1 - 100.00%	*	42	=	$0
SECTOR 11. Plating Mixture Producers															
ALL	Large	(	2	+	0.00000	) *	0	*	$454.63	*	1 - 50.00%	*	4	=	$647
	Small	(	1	+	0.00000	) *	0	*	$454.63	*	1 - 30.00%	*	3	=	$201
SECTOR 13. Chromium Metal Producers															
ALL	Large	(	8	+	0.00000	) *	26.16%	*	$454.63	*	1 - 100.00%	*	1	=	$0
	Small	(	0	+	0.00000	) *	26.16%	*	$454.63	*	1 - 0.00%	*	0	=	$0
SECTOR 14. Iron and Steel Mills															
Alloy Stainless Steel	Large	(	30	+	0.00650	) *	26.16%	*	$454.63	*	1 - 50.00%	*	37	=	$65,452
	Small	(	1	+	0.00031	) *	26.16%	*	$454.63	*	1 - 30.00%	*	12	=	$1,400
Carbon Steel	Large	(	1	+	0.00015	) *	26.16%	*	$454.63	*	1 - 50.00%	*	112	=	$4,675
	Small	(	1	+	0.00031	) *	26.16%	*	$454.63	*	1 - 30.00%	*	35	=	$4,117
14B. Alloy Stainless Steel Forging Industry															
Reshaping	Large	(	0	+	0.00062	) *	26.16%	*	$454.63	*	1 - 50.00%	*	37	=	$1
	Small	(	0	+	0.00015	) *	26.16%	*	$454.63	*	1 - 30.00%	*	34	=	$0
SECTOR 15. Iron and Steel Foundries															
ALL	Large	(	19	+	0.00000	) *	26.16%	*	$454.63	*	1 - 80.00%	*	178	=	$80,131
	Small	(	5	+	0.00000	) *	26.16%	*	$454.63	*	1 - 10.00%	*	130	=	$62,440
SECTOR 17. Chromium Dye Producers															
ALL	Large	(	0	+	0.00000	) *	29.16%	*	$454.63	*	1 - 100.00%	*	3	=	$0
	Small	(	0	+	0.00000	) *	29.16%	*	$454.63	*	1 - 100.00%	*	1	=	$0
SECTOR 18. Chromium Sulfate Producers															
ALL	Large	(	0	+	0.00000	) *	29.16%	*	$454.63	*	1 - 100.00%	*	0	=	$0
	Small	(	1	+	0.00000	) *	29.16%	*	$454.63	*	1 - 100.00%	*	5	=	$0
SECTOR 19. Chemical Distributors															
ALL	Large	(	0	+	0.00000	) *	26.64%	*	$454.63	*	1 - 0.00%	*	207	=	$0
	Small	(	0	+	0.00000	) *	26.64%	*	$454.63	*	1 - 0.00%	*	1,561	=	$0

Variables			LIMEMPAL		MEDEXAMADDERM		TURNOVER		COMPFULLCOST		1 -%BASEMED		#PLANTS		Cost
SECTOR 20. Textile Dyeing															
ALL	Large	(	0	+	0.00000	) *	29.16%	*	$454.63	*	1 - 80.00%	*	347	=	$0
	Small	(	0	+	0.00000	) *	29.16%	*	$454.63	*	1 - 10.00%	*	703	=	$0
SECTOR 21. Colored Glass Producers															
ALL	Large	(	1	+	0.00000	) *	29.16%	*	$454.63	*	1 - 80.00%	*	5	=	$130
	Small	(	0	+	0.00000	) *	29.16%	*	$454.63	*	1 - 10.00%	*	17	=	$0
Fiber, Flat and Container Glass	Large	(	8	+	0.00000	) *	29.16%	*	$454.63	*	1 - 80.00%	*	78	=	$16,769
	Small	(	2	+	0.00000	) *	29.16%	*	$454.63	*	1 - 10.00%	*	5	=	$975
SECTOR 22. Printing															
ALL	Large	(	0	+	0.00000	) *	29.16%	*	$454.63	*	1 - 80.00%	*	92	=	$0
	Small	(	0	+	0.00000	) *	29.16%	*	$454.63	*	1 - 10.00%	*	367	=	$0
SECTOR 24. Chromium Catalyst Users															
Catalyst Users	Large	(	0	+	0.00000	) *	26.16%	*	$454.63	*	1 - 80.00%	*	164	=	$0
	Small	(	0	+	0.00000	) *	26.16%	*	$454.63	*	1 - 80.00%	*	0	=	$0
Chromium Catalyst Service Companies	Large	(	5	+	0.00000	) *	26.16%	*	$454.63	*	1 - 80.00%	*	21	=	$2,541
	Small	(	3	+	0.00000	) *	26.16%	*	$454.63	*	1 - 80.00%	*	4	=	$290
SECTOR 25. Refractory Brick Producers															
ALL	Large	(	0	+	0.00000	) *	26.16%	*	$454.63	*	1 - 80.00%	*	6	=	$0
	Small	(	0	+	0.00000	) *	26.16%	*	$454.63	*	1 - 10.00%	*	0	=	$0
SECTOR 26. Woodworking															
General Industry	Large	(	0	+	0.00000	) *	26.16%	*	$454.63	*	1 - 25.00%	*	175	=	$0
	Small	(	0	+	0.00000	) *	26.16%	*	$454.63	*	1 - 0.00%	*	93	=	$0
Maritime	Large	(	0	+	0.00000	) *	26.16%	*	$454.63	*	1 - 25.00%	*	38	=	$0
	Small	(	0	+	0.00000	) *	26.16%	*	$454.63	*	1 - 0.00%	*	34	=	$0
Construction	Large	(	1	+	0.00000	) *	26.16%	*	$454.63	*	1 - 50.00%	*	1,290	=	$66,430
	Small	(	1	+	0.00000	) *	26.16%	*	$454.63	*	1 - 50.00%	*	5,162	=	$265,900
Government	State	(	1	+	0.00000	) *	26.16%	*	$454.63	*	1 - 50.00%	*	16	=	$603
	Local	(	1	+	0.00000	) *	26.16%	*	$454.63	*	1 - 50.00%	*	59	=	$2,182
SECTOR 27. Solid Waste Incineration															
ALL	Large	(	0	+	0.00000	) *	46.92%	*	$454.63	*	1 - 50.00%	*	48	=	$0
	Small	(	0	+	0.00000	) *	46.92%	*	$454.63	*	1 - 30.00%	*	58	=	$0
Government	State	(	0	+	0.00000	) *	46.92%	*	$454.63	*	1 - 50.00%	*	0	=	$0
	Local	(	0	+	0.00000	) *	46.92%	*	$454.63	*	1 - 30.00%	*	29	=	$0
SECTOR 30. Superalloy Producers and Users															
ALL	Large	(	4	+	0.00000	) *	26.16%	*	$454.63	*	1 - 50.00%	*	18	=	$4,120
	Small	(	0	+	0.00000	) *	26.16%	*	$454.63	*	1 - 30.00%	*	0	=	$0
SECTOR 31. Construction															
Industrial Rehabilitation & Maintenance	Large	(	0	+	0.00000	) *	67.80%	*	$454.63	*	1 - 50.00%	*	55	=	$0
	Small	(	0	+	0.00000	) *	67.80%	*	$454.63	*	1 - 50.00%	*	196	=	$0
	State Gov't	(	0	+	0.00000	) *	67.80%	*	$454.63	*	1 - 50.00%	*	16	=	$0
	Local Gov't	(	0	+	0.00000	) *	67.80%	*	$454.63	*	1 - 50.00%	*	74	=	$0
Hazardous Waste Site Work	Large	(	0	+	0.00000	) *	67.80%	*	$454.63	*	1 - 50.00%	*	44	=	$0
	Small	(	0	+	0.00000	) *	67.80%	*	$454.63	*	1 - 50.00%	*	143	=	$0
	State Gov't	(	0	+	0.00000	) *	67.80%	*	$454.63	*	1 - 50.00%	*	1	=	$0
	Local Gov't	(	0	+	0.00000	) *	67.80%	*	$454.63	*	1 - 50.00%	*	201	=	$0
Refractory Brick Restoration	Large	(	1	+	0.00000	) *	67.80%	*	$454.63	*	1 - 50.00%	*	48	=	$6,572
	Small	(	1	+	0.00000	) *	67.80%	*	$454.63	*	1 - 50.00%	*	148	=	$20,202

Table 29

Variables			LIMEMPAL		MEDEXAMADDERM		TURNOVER	COMPFULLCOST		1 -%BASEMED			#PLANTS		Cost
										TOTAL			72,329		$3,626,744

Medical Examination at the Termination of Employment (§§ 1910.1026(k)(2)(vi) and (k)(3)(i)-(k)(3)(iii); 1915.1026(i)(2)(vi) and (i)(3)(i)-(i)(3)(iii); and 1926.1126(i)(2)(vi) and (i)(3)(i)-(i)(3)(ii))

Employee Time and Cost to Complete the Medical Examination at the Termination of Employment

Employees receive a comprehensive medical examination at the termination of employment. For employers who are providing annual medical testing (%BASEMED) the additional employee time will be 3 hours (COMPARTTIME). For employers who are not providing annual medical testing (1-%BASEMED) the time for a full comprehensive examination is 4 hours (COMPFULLTIME). The employee turnover rate is divided by two, because medical examinations must be provided at the termination of employment ". . . unless the last examination . . . was less then six months prior to the date of determination. It is estimated that half of the employee turnover occurs at the beginning of the year and the other half occurs a the end of the year. Therefore, based on this estimation at any time during the year, it has been greater then six months since their last medical examination for half of the employees that are leaving, and therefore, these employees require a medical examination.

Burden hours = (LIMEMPAL + MEDEXAMADDERM)*(TURNOVER/2)* ((COMPARTTIME*%BASEMED)+(COMPFULLTIME*(1-%BASEMED)))*#PLANTS
Cost = Burden hours x NONSUPEWAGE
* LIMEMPAL = Number of employees requiring a limited medical exam b/c at or > AL after the implementation of engineering controls.
* MEDEXAMADDERM = Number of employees at or above the AL requiring a limited medical exam b/c of dermal "signs and symptoms" after the implementation of engineering controls.
COMPARTTIME= The time an employee takes for a comprehensive exam when employed by employers already providing annual medical testing in the baseline.
%BASEMED = Percentage of employers who are providing annual medical examinations
COMPFULLTIME = The time an employee takes for a comprehensive exam when employed by employers who were not providing any annual medical testing in the baseline.
*1-%BASEMED = Percentage of plants that are not providing annual medical examinations.
* #PLANTS = Number of Plants
NONSUPEWAGE = Non-supervisory Wage Rate

Variables		LIMEMPAL	MEDEXAMADDERM	TURNOVER	Divide 2	COMPPARTTIME	%BASEMED	COMPFULLTIME	1-%BASEMED	#PLANTS	Hours	NONSUPEWAGE	Cost	Responses
Sector 1. Electroplating														
All	Large	3	0.000000	26.16%	2	3	100.00%	4	100.00%	1,885	2,059	$25.49	$52,487.70	686
	Small	0	0.000000	26.16%	2	3	100.00%	4	100.00%	3,547		$25.49	$0.00	0
Sector 2. Welding														
General Industry	Large	0	0.000000	27.24%	2	3	5.00%	4	5.00%	7,911	0	$25.10	$0.00	0
	Small	0	0.000000	27.24%	2	3	0.00%	4	0.00%	8,864	0	$25.10	$0.00	0
Maritime	Large	14	2.918484	27.24%	2	3	5.00%	4	5.00%	191	1,632	$25.10	$40,973.52	429
	Small	1	0.000000	27.24%	2	3	0.00%	4	0.00%	108	57	$25.10	$1,436.51	14
Construction	Large	26	2.918484	67.80%	2	3	5.00%	4	5.00%	269	10,133	$25.10	$254,328.83	2,666
	Small	3	0.000000	67.80%	2	3	0.00%	4	0.00%	2,160	8,547	$25.10	$214,526.81	2,137
Government	State	0	0.000000	67.80%	2	3	5.00%	4	5.00%	25	0	$25.10	$0.00	0
	Local	0	0.000000	67.80%	2	3	0.00%	4	0.00%	793	0	$25.10	$0.00	0
Sector 2. Mild Steel Welding														
General Industry	Large	0	0.000000	27.74%	2	3	5.00%	4	5.00%	10,607	0	$25.10	$0.00	0
	Small	0	0.000000	27.74%	2	3	0.00%	4	0.00%	10,797	0	$25.10	$0.00	0
Maritime	Large	0	0.000000	27.74%	2	3	5.00%	4	5.00%	412	0	$25.10	$0.00	0
	Small	0	0.000000	27.74%	2	3	0.00%	4	0.00%	233	0	$25.10	$0.00	0
Construction	Large	10	0.000000	67.80%	2	3	5.00%	4	5.00%	405	5,072	$25.10	$127,311.21	1,335
	Small	1	0.000000	67.80%	2	3	0.00%	4	0.00%	3,058	4,033	$25.10	$101,239.90	1,008
SECTOR 3. PAINTING							**General Industry**							
AEROSPACE	Large	46	0.000000	27.74%	2	3	80.00%	4	80.00%	50	269	$31.68	$8,515.44	317
	Small	0	0.000000	27.74%	2	3	50.00%	4	50.00%	63	0	$31.68	$0.00	0
Auto Body	Large	1	0.000000	27.74%	2	3	80.00%	4	80.00%	331	34	$31.68	$1,080.43	42
	Small	0	0.000000	27.74%	2	3	50.00%	4	50.00%	1,458	0	$31.68	$0.00	0
Coil Coating	Large	2	0.000000	27.74%	2	3	80.00%	4	80.00%	101	21	$31.68	$673.73	26
	Small	1	0.000000	27.74%	2	3	50.00%	4	50.00%	18	5	$31.68	$154.77	2
Maritime	Large	2	0.000000	27.74%	2	3	100.00%	4	100.00%	294	1	$31.68	$24.14	75
	Small	1	0.000000	27.74%	2	3	50.00%	4	50.00%	508	129	$31.68	$4,094.04	65
Construction	Large	2	0.000000	67.80%	2	3	100.00%	4	100.00%	765	2	$31.68	$70.03	564
	Small	0	0.000000	67.80%	2	3	100.00%	4	100.00%	4,067	0	$31.68	$0.00	0
Government	State	0	0.000000	67.80%	2	3	100.00%	4	100.00%	16	0	$31.68	$0.00	0
	Local	9	0.000000	67.80%	2	3	100.00%	4	100.00%	899	9	$31.68	$281.78	2,666
SECTOR 4. Producers of Chromates														
ALL	Large	7	0.000000	29.16%	2	3	50.00%	4	50.00%	2	6	$37.06	$222.93	2
	Small	0	0.000000	29.16%	2	3	0.00%	4	0.00%	0	0	$37.00	$0.00	0
SECTOR 5. Chromate Pigment Procedures														
ALL	Large	9	0.000000	29.16%	2	3	100.00%	4	100.00%	2	4	$36.12	$147.98	3
	Small	1	0.000000	29.16%	2	3	100.00%	4	100.00%	1	0	$36.12	$16.44	0
SECTOR 6. CCA Producers														
ALL	Large	2	0.000000	29.16%	2	3	100.00%	4	100.00%	3	1	$30.60	$22.81	1
	Small	0	0.000000	29.16%	2	3	0.00%	4	0.00%	0	0	$30.60	$0.00	0
SECTOR 7. Chromium Catalyst Producers														
ALL	Large	12	0.000000	29.16%	2	3	100.00%	4	100.00%	5	5	$37.06	$202.44	9
	Small	0	0.000000	29.16%	2	3	100.00%	4	100.00%	0	0	$37.06	$0.00	0
SECTOR 8. Paint and Coating Producers														
ALL	Large	1	0.000000	29.16%	2	3	100.00%	4	100.00%	87	0	$27.60	$12.56	13
	Small	0	0.000000	29.16%	2	3	100.00%	4	100.00%	137	0	$27.60	$0.00	0

SECTOR 9. Printing Ink Producers										
ALL	Large	(0 +	0.000000) * (	29.16% / 2) * ((3 *	80.00%) + (4 * (1 -	80.00%)) *	3 =	0	$27.65	$0.00	0
	Small	(0 +	0.000000) * (	29.16% / 2) * ((3 *	10.00%) + (4 * (1 -	10.00%)) *	10 =	0	$27.65	$0.00	0
SECTOR 10. Plastic Colorant Producers and Users										
ALL	Large	(0 +	0.000000) * (	29.16% / 2) * ((3 *	100.00%) + (4 * (1 -	100.00%)) *	86 =	0	$30.64	$0.00	0
	Small	(0 +	0.000000) * (	29.16% / 2) * ((3 *	100.00%) + (4 * (1 -	100.00%)) *	42 =	0	$30.64	$0.00	0
SECTOR 11. Plating Mixture Producers										
ALL	Large	(2 +	0.000000) * (	29.16% / 2) * ((3 *	50.00%) + (4 * (1 -	50.00%)) *	4 =	3	$27.50	$91.55	1
	Small	(1 +	0.000000) * (	29.16% / 2) * ((3 *	30.00%) + (4 * (1 -	30.00%)) *	3 =	1	$27.50	$27.01	0
SECTOR 13. Chromium Metal Producers										
ALL	Large	(8 +	0.000000) * (	26.16% / 2) * ((3 *	100.00%) + (4 * (1 -	100.00%)) *	1 =	0	$37.17	$0.00	1
	Small	(0 +	0.000000) * (	26.16% / 2) * ((3 *	0.00%) + (4 * (1 -	0.00%)) *	0 =	0	$37.17	$0.00	0
SECTOR 14. Iron and Steel Mills										
General Industry	Large	(30 +	0.006497) * (	26.16% / 2) * ((3 *	50.00%) + (4 * (1 -	50.00%)) *	37 =	294	$37.17	$10,919.35	144
	Small	(1 +	0.000309) * (	26.16% / 2) * ((3 *	30.00%) + (4 * (1 -	30.00%)) *	12 =	6	$37.17	$235.04	2
Carbon Steel	Large	(1 +	0.000155) * (	26.16% / 2) * ((3 *	50.00%) + (4 * (1 -	50.00%)) *	112 =	21	$37.17	$769.69	10
	Small	(1 +	0.000309) * (	26.16% / 2) * ((3 *	30.00%) + (4 * (1 -	30.00%)) *	35 =	18	$37.17	$679.36	6
SECTOR 14B. Forging Industry										
Reshaping	Large	(0 +	0.000619) * (	26.16% / 2) * ((3 *	50.00%) + (4 * (1 -	50.00%)) *	37 =	0	$37.17	$0.22	0
	Small	(0 +	0.000155) * (	26.16% / 2) * ((3 *	30.00%) + (4 * (1 -	30.00%)) *	34 =	0	$37.17	$0.07	0
SECTOR 15. Iron and Steel Foundries										
ALL	Large	(19 +	0.000000) * (	26.16% / 2) * ((3 *	80.00%) + (4 * (1 -	80.00%)) *	178 =	358	$27.12	$9,721.97	441
	Small	(5 +	0.000000) * (	26.16% / 2) * ((3 *	10.00%) + (4 * (1 -	10.00%)) *	130 =	275	$27.12	$7,454.95	76
SECTOR 17. Chromium Dye Producers										
ALL	Large	(0 +	0.000000) * (	29.16% / 2) * ((3 *	100.00%) + (4 * (1 -	100.00%)) *	3 =	0	$36.12	$0.00	0
	Small	(0 +	0.000000) * (	29.16% / 2) * ((3 *	100.00%) + (4 * (1 -	100.00%)) *	1 =	0	$36.12	$0.00	0
SECTOR 18. Chromium Sulfate Producers										
ALL	Large	(0 +	0.000000) * (	29.16% / 2) * ((3 *	100.00%) + (4 * (1 -	100.00%)) *	0 =	0	$39.76	$0.00	0
	Small	(1 +	0.000000) * (	29.16% / 2) * ((3 *	100.00%) + (4 * (1 -	100.00%)) *	5 =	0	$39.76	$18.10	1
SECTOR 19. Chemical Distributors										
ALL	Large	(0 +	0.000000) * (	26.64% / 2) * ((3 *	0.00%) + (4 * (1 -	0.00%)) *	207 =	0	$28.67	$0.00	0
	Small	(0 +	0.000000) * (	26.64% / 2) * ((3 *	0.00%) + (4 * (1 -	0.00%)) *	1,561 =	0	$28.67	$0.00	0
SECTOR 20. Textile Dyeing										
ALL	Large	(0 +	0.000000) * (	29.16% / 2) * ((3 *	80.00%) + (4 * (1 -	80.00%)) *	347 =	0	$19.13	$0.00	0
	Small	(0 +	0.000000) * (	29.16% / 2) * ((3 *	10.00%) + (4 * (1 -	10.00%)) *	703 =	0	$19.13	$0.00	0
SECTOR 21. Colored Glass Producers										
General Industry	Large	(1 +	0.000000) * (	29.16% / 2) * ((3 *	80.00%) + (4 * (1 -	80.00%)) *	5 =	1	$27.66	$24.56	1
	Small	(0 +	0.000000) * (	29.16% / 2) * ((3 *	10.00%) + (4 * (1 -	10.00%)) *	17 =	0	$27.66	$0.00	0
Fiber, Flat and Container Glass	Large	(8 +	0.000000) * (	29.16% / 2) * ((3 *	80.00%) + (4 * (1 -	80.00%)) *	78 =	77	$27.66	$2,119.02	92
	Small	(2 +	0.000000) * (	29.16% / 2) * ((3 *	10.00%) + (4 * (1 -	10.00%)) *	5 =	4	$27.66	$120.81	1
SECTOR 22. Printing										
ALL	Large	(0 +	0.000000) * (	29.16% / 2) * ((3 *	80.00%) + (4 * (1 -	80.00%)) *	92 =	0	$19.97	$0.00	0
	Small	(0 +	0.000000) * (	29.16% / 2) * ((3 *	10.00%) + (4 * (1 -	10.00%)) *	367 =	0	$19.97	$0.00	0
SECTOR 24. Chromium Catalyst Users										
General Industry	Large	(0 +	0.000000) * (	26.16% / 2) * ((3 *	80.00%) + (4 * (1 -	80.00%)) *	164 =	0	$31.14	$0.00	0
	Small	(0 +	0.000000) * (	26.16% / 2) * ((3 *	80.00%) + (4 * (1 -	80.00%)) *	0 =	0	$31.14	$0.00	0
Chromium Service Companies	Large	(5 +	0.000000) * (	26.16% / 2) * ((3 *	80.00%) + (4 * (1 -	80.00%)) *	21 =	13	$31.14	$397.46	14
	Small	(3 +	0.000000) * (	26.16% / 2) * ((3 *	30.00%) + (4 * (1 -	30.00%)) *	4 =	5	$31.14	$150.36	2
SECTOR 25. Refractory Brick Producers										
ALL	Large	(0 +	0.000000) * (	26.16% / 2) * ((3 *	80.00%) + (4 * (1 -	80.00%)) *	6 =	0	$24.56	$0.00	0
	Small	(0 +	0.000000) * (	26.16% / 2) * ((3 *	10.00%) + (4 * (1 -	10.00%)) *	0 =	0	$24.56	$0.00	0
SECTOR 26. Woodworking										
General Industry	Large	(0 +	0.000000) * (	26.16% / 2) * ((3 *	25.00%) + (4 * (1 -	25.00%)) *	175 =	0	$30.76	$0.00	0
	Small	(0 +	0.000000) * (	26.16% / 2) * ((3 *	0.00%) + (4 * (1 -	0.00%)) *	93 =	0	$30.76	$0.00	0
Maritime	Large	(0 +	0.000000) * (	26.16% / 2) * ((3 *	25.00%) + (4 * (1 -	25.00%)) *	38 =	0	$30.76	$0.00	0
	Small	(0 +	0.000000) * (	26.16% / 2) * ((3 *	0.00%) + (4 * (1 -	0.00%)) *	34 =	0	$30.76	$0.00	0
Construction	Large	(1 +	0.000000) * (	67.80% / 2) * ((3 *	50.00%) + (4 * (1 -	50.00%)) *	1,290 =	758	$30.76	$23,313.44	379
	Small	(1 +	0.000000) * (	67.80% / 2) * ((3 *	50.00%) + (4 * (1 -	50.00%)) *	5,162 =	3,032	$30.76	$93,275.71	1,516
Government	State	(1 +	0.000000) * (	67.80% / 2) * ((3 *	50.00%) + (4 * (1 -	50.00%)) *	16 =	7	$30.76	$221.43	3
	Local	(1 +	0.000000) * (	67.80% / 2) * ((3 *	50.00%) + (4 * (1 -	50.00%)) *	59 =	25	$30.76	$774.99	12
SECTOR 27. Solid Waste Incineration										
ALL	Large	(0 +	0.000000) * (	46.92% / 2) * ((3 *	50.00%) + (4 * (1 -	50.00%)) *	48 =	0	$26.09	$0.00	0
	Small	(0 +	0.000000) * (	46.92% / 2) * ((3 *	30.00%) + (4 * (1 -	30.00%)) *	58 =	0	$26.09	$0.00	0
Government	State	(1 +	0.000000) * (	46.92% / 2) * ((3 *	50.00%) + (4 * (1 -	50.00%)) *	0 =	0	$26.09	$8.04	0
	Local	(0 +	0.000000) * (	46.92% / 2) * ((3 *	30.00%) + (4 * (1 -	30.00%)) *	29 =	0	$26.09	$0.00	0
SECTOR 30. Superalloy Producers and Users										
ALL	Large	(2 +	0.000000) * (	26.16% / 2) * ((3 *	50.00%) + (4 * (1 -	50.00%)) *	18 =	9	$26.75	$252.75	5
	Small	(0 +	0.000000) * (	26.16% / 2) * ((3 *	30.00%) + (4 * (1 -	30.00%)) *	0 =	0	$26.75	$0.00	0

SECTOR 31. Construction							
Industrial Rehabilitation & Maintenance	Large	(0 + 0.000000) * (67.80% / 2) * ((3 * 50.00%) + (4 * (1 - 50.00%)) *	55 =	0	$30.79	$0.00	0
	Small	(0 + 0.000000) * (67.80% / 2) * ((3 * 50.00%) + (4 * (1 - 50.00%)) *	196 =	0	$30.79	$0.00	0
	State Gov't	(0 + 0.000000) * (67.80% / 2) * ((3 * 50.00%) + (4 * (1 - 50.00%)) *	16 =	0	$30.79	$0.00	0
	Local Gov't	(0 + 0.000000) * (67.80% / 2) * ((3 * 50.00%) + (4 * (1 - 50.00%)) *	74 =	0	$30.79	$0.00	0
Hazardous Waste Site Work	Large	(0 + 0.000000) * (67.80% / 2) * ((3 * 50.00%) + (4 * (1 - 50.00%)) *	44 =	0	$30.79	$0.00	0
	Small	(0 + 0.000000) * (67.80% / 2) * ((3 * 50.00%) + (4 * (1 - 50.00%)) *	143 =	0	$30.79	$0.00	0
	State Gov't	(0 + 0.000000) * (67.80% / 2) * ((3 * 50.00%) + (4 * (1 - 50.00%)) *	1 =	0	$30.79	$0.00	0
	Local Gov't	(0 + 0.000000) * (67.80% / 2) * ((3 * 50.00%) + (4 * (1 - 50.00%)) *	201 =	0	$30.79	$0.00	0
Refractory Brick Restoration	Large	(1 + 0.000000) * (67.80% / 2) * ((3 * 50.00%) + (4 * (1 - 50.00%)) *	48 =	29	$30.79	$903.94	14
	Small	(1 + 0.000000) * (67.80% / 2) * ((3 * 50.00%) + (4 * (1 - 50.00%)) *	148 =	89	$30.79	$2,749.93	44
		Total	**72,329**	**37,048**		**$962,053.77**	**14,827**

Medical Examination at the Termination of Employment (§§ 1910.1026(k)(2)(vi) and (k)(3)(i)-(k)(3)(iii); 1915.1026(i)(2)(vi) and (i)(3)(i)-(i)(3)(iii); and 1926.1126(i)(2)(vi) and (i)(3)(i)-(i)(3)(ii))

Contract Cost for a PLHCP to Conduct the Medical Examination at the Termination of Employment

Employees receive a comprehensive medical examination at the termination of employment. For employers who are providing annual medical testing (%BASEMED) the additional cost will be $227.00 (COMPARTCOST). For employers who are not providing annual medical testing (1-%BASEMED) the cost for a full comprehensive examination will be $454.00 (COMPFULLCOST). The employee turnover rate is divided by two, because medical examinations must be provided at the termination of employment ". . . unless the last examination . . . was less then six months prior to the date of determination. It is estimated that half of the employee turnover occurs at the begining of the year and the other half occurs a the end of the year. Therefore, based on this estimation at any time during the year, it has been greater then six months since their last medical examination for half of the employees that are leaving, and therefore, these employees require a medical examination.

COST = (LIMEMPAL + MEDEXAMADDDERM)*(TURNOVER/2)* ((COMPARTCOST*%BASEMED)+(COMPFULLCOST*(1-%BASEMED)))*#PLANTS

* LIMEMPAL = Number of employees requiring a limited medical exam b/c at or > AL after the implementation of engineering controls.
* MEDEXAMADDERM = Number of employees at or above the AL requiring a limited medical exam b/c of dermal "signs and symptoms" after the implementation of engineering controls.

TURNOVER/2 = Represents the frequency of termination exams.
COMPARTCOST= The cost of a comprehensive exam for those employers already providing annual medical testing in the baseline
%BASEMED = Percentage of employers who are providing annual medical examinations
COMPFULLCOST = The cost of a comprehensive exam for those employers who were not providing any annual medical testing in the baseline.
*1-%BASEMED = Percentage of plants that are not providing annual medical examinations.
* #PLANTS = Number of Plants

Variables		LIMEMPAL	MEDEXAMADDERM	TURNOVER Divide 2	COMPPARTCOST	%BASEMED	COMPFULLCOST	1-%BASEMED	#PLANTS	COST
Sector 1. Electroplating										
All	Large	3	0.000000	26.16%	$227	100.00%	$454	100.00%	1,885	$ 155,712.17
	Small	0	0.000000	26.16%	$227	100.00%	$454	100.00%	3,547	$ -
Sector 2. Welding										
General Industry	Large	0	0.000000	27.24%	$227	5.00%	$454	5.00%	7,911	$ -
	Small	0	0.000000	27.24%	$227	0.00%	$454	0.00%	8,864	$ -
Maritime	Large	14	2.918484	27.24%	$227	5.00%	$454	5.00%	191	$ 185,169.42
	Small	1	0.000000	27.24%	$227	0.00%	$454	0.00%	108	$ 6,492.38
Construction	Large	26	2.918484	67.80%	$227	5.00%	$454	5.00%	269	$ 1,149,397.80
	Small	3	0.000000	67.80%	$227	0.00%	$454	0.00%	2,160	$ 969,566.39
Government	State	0	0.000000	67.80%	$227	5.00%	$454	5.00%	25	$ -
	Local	0	0.000000	67.80%	$227	0.00%	$454	0.00%	793	$ -
Sector 2. Mild Steel Welding										
General Industry	Large	0	0.000000	27.74%	$227	5.00%	$454	5.00%	10,607	$ -
	Small	0	0.000000	27.74%	$227	0.00%	$454	0.00%	10,797	$ -
Maritime	Large	0	0.000000	27.74%	$227	5.00%	$454	5.00%	412	$ -
	Small	0	0.000000	27.74%	$227	0.00%	$454	0.00%	233	$ -
Construction	Large	10	0.000000	67.80%	$227	5.00%	$454	5.00%	405	$ 575,371.70
	Small	1	0.000000	67.80%	$227	0.00%	$454	0.00%	3,058	$ 457,559.64
SECTOR 3. PAINTING				General Industry						
AEROSPACE	Large	46	0.000000	27.74%	$227	80.00%	$454	80.00%	50	$ 29,915.07
	Small	0	0.000000	27.74%	$227	50.00%	$454	50.00%	63	$ -
Auto Body	Large	1	0.000000	27.74%	$227	80.00%	$454	80.00%	331	$ 3,857.45
	Small	0	0.000000	27.74%	$227	50.00%	$454	50.00%	1,458	$ -
Coil Coating	Large	2	0.000000	27.74%	$227	80.00%	$454	80.00%	101	$ 2,389.49
	Small	1	0.000000	27.74%	$227	50.00%	$454	50.00%	18	$ 547.01
Maritime	Large	2	0.000000	27.74%	$227	100.00%	$454	100.00%	294	$ 57.62
	Small	1	0.000000	27.74%	$227	50.00%	$454	50.00%	508	$ 14,653.66
Construction	Large	2	0.000000	67.80%	$227	100.00%	$454	100.00%	765	$ 167.18
	Small	0	0.000000	67.80%	$227	100.00%	$454	100.00%	4,067	$ -
Government	State	0	0.000000	67.80%	$227	100.00%	$454	100.00%	16	$ -
	Local	9	0.000000	67.80%	$227	100.00%	$454	100.00%	899	$ 672.72
SECTOR 4. Producers of Chromates										
ALL	Large	7	0.000000	29.16%	$227	50.00%	$454	50.00%	2	$ 622.23
	Small	0	0.000000	29.16%	$227	0.00%	$454	0.00%	0	$ -
SECTOR 5. Chromate Pigment Procedures										
ALL	Large	9	0.000000	29.16%	$227	100.00%	$454	100.00%	2	$ 309.88
	Small	1	0.000000	29.16%	$227	100.00%	$454	100.00%	1	$ 34.43

Variables		LIMEMPAL	MEDEXAMADDERM	TURNOVER	Divide 2	COMPPARTCOST	%BASEMED	COMPFULLCOST	1-%BASEMED	#PLANTS	COST
SECTOR 6. CCA Producers											
ALL	Large	(2 +	0.000000) * (	29.16%	2) * ((	$227	* 100.00%) + (	$454 * (1 -	100.00%)) *	3 =	$ 56.39
	Small	(0 +	0.000000) * (	29.16%	2) * ((	$227	* 0.00%) + (	$454 * (1 -	0.00%)) *	0 =	$ -
SECTOR 7. Chromium Catalyst Producers											
ALL	Large	(12 +	0.000000) * (	29.16%	/ 2) * ((	$227	* 100.00%) + (	$454 * (1 -	100.00%)) *	5 =	$ 413.17
	Small	(0 +	0.000000) * (	29.16%	/ 2) * ((	$227	* 100.00%) + (	$454 * (1 -	100.00%)) *	0 =	$ -
SECTOR 8. Paint and Coating Producers											
ALL	Large	(1 +	0.000000) * (	29.16%	/ 2) * ((	$227	* 100.00%) + (	$454 * (1 -	100.00%)) *	87 =	$ 34.43
	Small	(0 +	0.000000) * (	29.16%	/ 2) * ((	$227	* 100.00%) + (	$454 * (1 -	100.00%)) *	137 =	$ -
SECTOR 9. Printing Ink Producers											
ALL	Large	(0 +	0.000000) * (	29.16%	/ 2) * ((	$227	* 80.00%) + (	$454 * (1 -	80.00%)) *	3 =	$ -
	Small	(0 +	0.000000) * (	29.16%	/ 2) * ((	$227	* 10.00%) + (	$454 * (1 -	10.00%)) *	10 =	$ -
SECTOR 10. Plastic Colorant Producers and Users											
ALL	Large	(0 +	0.000000) * (	29.16%	/ 2) * ((	$227	* 100.00%) + (	$454 * (1 -	100.00%)) *	86 =	$ -
	Small	(0 +	0.000000) * (	29.16%	/ 2) * ((	$227	* 100.00%) + (	$454 * (1 -	100.00%)) *	42 =	$ -
SECTOR 11. Plating Mixture Producers											29.16
ALL	Large	(2 +	0.000000) * (	29.16%	/ 2) * ((	$227	* 50.00%) + (	$454 * (1 -	50.00%)) *	4 =	$ 359.34
	Small	(1 +	0.000000) * (	29.16%	/ 2) * ((	$227	* 30.00%) + (	$454 * (1 -	30.00%)) *	3 =	$ 107.74
SECTOR 13. Chromium Metal Producers											
ALL	Large	(8 +	0.000000) * (	26.16%	/ 2) * ((	$227	* 100.00%) + (	$454 * (1 -	100.00%)) *	1 =	$ -
	Small	(0 +	0.000000) * (	26.16%	/ 2) * ((	$227	* 0.00%) + (	$454 * (1 -	0.00%)) *	0 =	$ -
SECTOR 14. Iron and Steel Mills											
General Industry	Large	(30 +	0.006497) * (	26.16%	/ 2) * ((	$227	* 50.00%) + (	$454 * (1 -	50.00%)) *	37 =	$ 33,102.41
	Small	(1 +	0.000309) * (	26.16%	/ 2) * ((	$227	* 30.00%) + (	$454 * (1 -	30.00%)) *	12 =	$ 711.00
Carbon Steel	Large	(1 +	0.000155) * (	26.16%	/ 2) * ((	$227	* 50.00%) + (	$454 * (1 -	50.00%)) *	112 =	$ 2,343.59
	Small	(1 +	0.000309) * (	26.16%	/ 2) * ((	$227	* 30.00%) + (	$454 * (1 -	30.00%)) *	35 =	$ 2,066.87
SECTOR 14B. Forging Industry											
Reshaping	Large	(0 +	0.000619) * (	26.16%	/ 2) * ((	$227	* 50.00%) + (	$454 * (1 -	50.00%)) *	37 =	$ 0.68
	Small	(0 +	0.000155) * (	26.16%	/ 2) * ((	$227	* 30.00%) + (	$454 * (1 -	30.00%)) *	34 =	$ 0.22
SECTOR 15. Iron and Steel Foundries											
ALL	Large	(19 +	0.000000) * (	26.16%	/ 2) * ((	$227	* 80.00%) + (	$454 * (1 -	80.00%)) *	178 =	$ 40,438.48
	Small	(5 +	0.000000) * (	26.16%	/ 2) * ((	$227	* 10.00%) + (	$454 * (1 -	10.00%)) *	130 =	$ 31,174.18
SECTOR 17. Chromium Dye Producers											
ALL	Large	(0 +	0.000000) * (	29.16%	/ 2) * ((	$227	* 100.00%) + (	$454 * (1 -	100.00%)) *	3 =	$ -
	Small	(0 +	0.000000) * (	29.16%	/ 2) * ((	$227	* 100.00%) + (	$454 * (1 -	100.00%)) *	1 =	$ -
SECTOR 18. Chromium Sulfate Producers											
ALL	Large	(0 +	0.000000) * (	29.16%	/ 2) * ((	$227	* 100.00%) + (	$454 * (1 -	100.00%)) *	0 =	$ -
	Small	(1 +	0.000000) * (	29.16%	/ 2) * ((	$227	* 100.00%) + (	$454 * (1 -	100.00%)) *	5 =	$ 34.43
SECTOR 19. Chemical Distributors											
ALL	Large	(0 +	0.000000) * (	26.64%	/ 2) * ((	$227	* 0.00%) + (	$454 * (1 -	0.00%)) *	207 =	$ -
	Small	(0 +	0.000000) * (	26.64%	/ 2) * ((	$227	* 0.00%) + (	$454 * (1 -	0.00%)) *	1,561 =	$ -
SECTOR 20. Textile Dyeing											
ALL	Large	(0 +	0.000000) * (	29.16%	/ 2) * ((	$227	* 80.00%) + (	$454 * (1 -	80.00%)) *	347 =	$ -
	Small	(0 +	0.000000) * (	29.16%	/ 2) * ((	$227	* 10.00%) + (	$454 * (1 -	10.00%)) *	703 =	$ -
SECTOR 21. Colored Glass Producers											
General Industry	Large	(1 +	0.000000) * (	29.16%	/ 2) * ((	$227	* 80.00%) + (	$454 * (1 -	80.00%)) *	5 =	$ 88.79
	Small	(0 +	0.000000) * (	29.16%	/ 2) * ((	$227	* 10.00%) + (	$454 * (1 -	10.00%)) *	17 =	$ -
Fiber, Flat and Container Glass	Large	(8 +	0.000000) * (	29.16%	/ 2) * ((	$227	* 80.00%) + (	$454 * (1 -	80.00%)) *	78 =	$ 8,583.76
	Small	(2 +	0.000000) * (	29.16%	/ 2) * ((	$227	* 10.00%) + (	$454 * (1 -	10.00%)) *	5 =	$ 492.52
SECTOR 22. Printing											
ALL	Large	(0 +	0.000000) * (	29.16%	/ 2) * ((	$227	* 80.00%) + (	$454 * (1 -	80.00%)) *	92 =	$ -
	Small	(0 +	0.000000) * (	29.16%	/ 2) * ((	$227	* 10.00%) + (	$454 * (1 -	10.00%)) *	367 =	$ -
SECTOR 24. Chromium Catalyst Users											
General Industry	Large	(0 +	0.000000) * (	26.16%	/ 2) * ((	$227	* 80.00%) + (	$454 * (1 -	80.00%)) *	164 =	$ -
	Small	(0 +	0.000000) * (	26.16%	/ 2) * ((	$227	* 80.00%) + (	$454 * (1 -	80.00%)) *	0 =	$ -
Chromium Service Companies	Large	(5 +	0.000000) * (	26.16%	/ 2) * ((	$227	* 80.00%) + (	$454 * (1 -	80.00%)) *	21 =	$ 1,387.92
	Small	(3 +	0.000000) * (	26.16%	/ 2) * ((	$227	* 30.00%) + (	$454 * (1 -	30.00%)) *	4 =	$ 534.21

Variables		LIMEMPAL		MEDEXAMADDERM		TURNOVER	Divide 2		COMPPARTCOST		%BASEMED		COMPFULLCOST		1-%BASEMED		#PLANTS		COST
SECTOR 25. Refractory Brick Producers																			
ALL	Large	(0	+	0.000000	) * (	26.16%	/ 2	) * ((	$227	*	80.00%	) + (	$454	* (1	-	80.00%	)) *	6	= $ -
	Small	(0	+	0.000000	) * (	26.16%	/ 2	) * ((	$227	*	10.00%	) + (	$454	* (1	-	10.00%	)) *	0	= $ -
SECTOR 26. Woodworking																			
General Industry	Large	(0	+	0.000000	) * (	26.16%	/ 2	) * ((	$227	*	25.00%	) + (	$454	* (1	-	25.00%	)) *	175	= $ -
	Small	(0	+	0.000000	) * (	26.16%	/ 2	) * ((	$227	*	0.00%	) + (	$454	* (1	-	0.00%	)) *	93	= $ -
Maritime	Large	(0	+	0.000000	) * (	26.16%	/ 2	) * ((	$227	*	25.00%	) + (	$454	* (1	-	25.00%	)) *	38	= $ -
	Small	(0	+	0.000000	) * (	26.16%	/ 2	) * ((	$227	*	0.00%	) + (	$454	* (1	-	0.00%	)) *	34	= $ -
Construction	Large	(1	+	0.000000	) * (	67.80%	/ 2	) * ((	$227	*	50.00%	) + (	$454	* (1	-	50.00%	)) *	1,290	= $ 85,955.20
	Small	(1	+	0.000000	) * (	67.80%	/ 2	) * ((	$227	*	50.00%	) + (	$454	* (1	-	50.00%	)) *	5,162	= $ 343,951.69
Government	State	(1	+	0.000000	) * (	67.80%	/ 2	) * ((	$227	*	50.00%	) + (	$454	* (1	-	50.00%	)) *	16	= $ 804.54
	Local	(1	+	0.000000	) * (	67.80%	/ 2	) * ((	$227	*	50.00%	) + (	$454	* (1	-	50.00%	)) *	59	= $ 2,845.89
SECTOR 27. Solid Waste Incineration																			
ALL	Large	(0	+	0.000000	) * (	46.92%	/ 2	) * ((	$227	*	50.00%	) + (	$454	* (1	-	50.00%	)) *	48	= $ -
	Small	(0	+	0.000000	) * (	46.92%	/ 2	) * ((	$227	*	30.00%	) + (	$454	* (1	-	30.00%	)) *	58	= $ -
Government	State	(1	+	0.000000	) * (	46.92%	/ 2	) * ((	$227	*	50.00%	) + (	$454	* (1	-	50.00%	)) *	0	= $ 23.31
	Local	(0	+	0.000000	) * (	46.92%	/ 2	) * ((	$227	*	30.00%	) + (	$454	* (1	-	30.00%	)) *	29	= $ -
SECTOR 30. Superalloy Producers and Users																			
ALL	Large	(2	+	0.000000	) * (	26.16%	/ 2	) * ((	$227	*	50.00%	) + (	$454	* (1	-	50.00%	)) *	18	= $ 1,057.15
	Small	(0	+	0.000000	) * (	26.16%	/ 2	) * ((	$227	*	30.00%	) + (	$454	* (1	-	30.00%	)) *	0	= $ -
SECTOR 31. Construction																			
Industrial Rehabilitation & Maintenance	Large	(0	+	0.000000	) * (	67.80%	/ 2	) * ((	$227	*	50.00%	) + (	$454	* (1	-	50.00%	)) *	55	= $ -
	Small	(0	+	0.000000	) * (	67.80%	/ 2	) * ((	$227	*	50.00%	) + (	$454	* (1	-	50.00%	)) *	196	= $ -
	State Gov't	(0	+	0.000000	) * (	67.80%	/ 2	) * ((	$227	*	50.00%	) + (	$454	* (1	-	50.00%	)) *	16	= $ -
	Local Gov't	(0	+	0.000000	) * (	67.80%	/ 2	) * ((	$227	*	50.00%	) + (	$454	* (1	-	50.00%	)) *	74	= $ -
Hazardous Waste Site Work	Large	(0	+	0.000000	) * (	67.80%	/ 2	) * ((	$227	*	50.00%	) + (	$454	* (1	-	50.00%	)) *	44	= $ -
	Small	(0	+	0.000000	) * (	67.80%	/ 2	) * ((	$227	*	50.00%	) + (	$454	* (1	-	50.00%	)) *	143	= $ -
	State Gov't	(0	+	0.000000	) * (	67.80%	/ 2	) * ((	$227	*	50.00%	) + (	$454	* (1	-	50.00%	)) *	1	= $ -
	Local Gov't	(0	+	0.000000	) * (	67.80%	/ 2	) * ((	$227	*	50.00%	) + (	$454	* (1	-	50.00%	)) *	201	= $ -
Refractory Brick Restoration	Large	(1	+	0.000000	) * (	67.80%	/ 2	) * ((	$227	*	50.00%	) + (	$454	* (1	-	50.00%	)) *	48	= $ 3,313.76
	Small	(1	+	0.000000	) * (	67.80%	/ 2	) * ((	$227	*	50.00%	) + (	$454	* (1	-	50.00%	)) *	148	= $ 10,115.87
																Total		**72,329**	**$ 4,122,494**

Information Provided to the PLHCP (§§ 1910.1026(k)(4), 1915.1026(i)(4), and 1926.1126(i)(4)); Clerical Time and Cost to Provide Information to the PLHCP

This table estimates the burden hours and costs for employers to update required information in worker records and provide the information to the PLHCP. OSHA assumes that it will take 5 minutes for a clerical worker to update the worker record and provide this information. The Agency reduced the time for this requirement from 1 hour to 5 minutes because, after the first year of medical surveillance, employers will not need to establish files.

Hours = POTEXEMP * MEDRECORD * PLANTS
COST = BURDEN HOURS * CLWAGE

* POTEXEMP = Total number of potentially exposed employees at or above the AL and workers with "signs and symptoms" before the implementation of engineering controls.
* MEDRECORD = Clerical time per employee, in hours, to maintain detailed medical records and provide to the PLHCP (.08 hour)
* CLWAGE = Clerical wage. $/hr.
* #PLANTS = Number of plants represented by the model

		POTEXEMP		MEDRECORD		#PLANTS		Hours		CLWAGE		Cost	Responses
Sector 1. Electroplating													
All	Large	6	*	0.08	*	1,885	=	840	*	$18.19	=	$15,268.39	10494.052
	Small	1	*	0.08	*	3,547	=	263	*	$18.19	=	$4,787.65	3290.5807
Sector 2. Welding													0
General Industry	Large	2	*	0.08	*	7,911	=	1,231	*	$17.90	=	$22,047.48	15392.153
	Small	0	*	0.08	*	8,864	=	0	*	$17.90	=	$0.00	0
Maritime	Large	18	*	0.08	*	191	=	282	*	$17.90	=	$5,048.25	3524.3716
	Small	1	*	0.08	*	108	=	8	*	$17.90	=	$150.47	105.04974
Construction	Large	50	*	0.08	*	269	=	1,070	*	$17.90	=	$19,150.56	13369.709
	Small	5	*	0.08	*	2,160	=	840	*	$17.90	=	$15,047.16	10504.974
Government	State	2	*	0.08	*	25	=	4	*	$17.90	=	$70.49	49.212493
	Local	0	*	0.08	*	793	=	0	*	$17.90	=	$0.00	0
Sector 2. Mild Steel Welding													0
General Industry	Large	1	*	0.08	*	10,607	=	825	*	$17.90	=	$14,780.11	10318.535
	Small	0	*	0.08	*	10,797	=	0	*	$17.90	=	$0.00	0
Maritme	Large	0	*	0.08	*	412	=	0	*	$17.90	=	$0.00	0
	Small	1	*	0.08	*	233	=	18	*	$17.90	=	$325.34	227.13458
Construction	Large	18	*	0.08	*	405	=	598	*	$17.90	=	$10,714.66	7480.2989
	Small	2	*	0.08	*	3,058	=	476	*	$17.90	=	$8,521.30	5949.0332
SECTOR 3. PAINTING		**GENERAL INDUSTRY**											
Aerospace	Large	47	*	0.08	*	50	=	186	*	$22.51	=	$4,196.98	2330.2829
	Small	1	*	0.08	*	63	=	5	*	$22.51	=	$103.63	57.53785
Auto Body	Large	12	*	0.08	*	331	=	317	*	$17.90	=	$5,672.18	3959.9579
	Small	1	*	0.08	*	1,458	=	107	*	$17.90	=	$1,921.03	1341.1396
Coil Coating	Large	2	*	0.08	*	101	=	15	*	$17.90	=	$266.64	186.15187
	Small	1	*	0.08	*	18	=	1	*	$17.90	=	$24.24	16.922897
Maritime	Large	3	*	0.08	*	294	=	65	*	$22.51	=	$1,453.79	807.18704
	Small	1	*	0.08	*	508	=	37	*	$22.51	=	$837.86	465.20125
Construction	Large	2	*	0.08	*	765	=	133	*	$22.51	=	$2,995.10	1662.9645
	Small	1	*	0.08	*	4,067	=	236	*	$22.51	=	$5,307.61	2946.9326
Government	State	9	*	0.08	*	16	=	11	*	$17.90	=	$203.50	142.07178
	Local	1	*	0.08	*	899	=	45	*	$17.90	=	$804.50	561.65191
SECTOR 4. Producers of Chromates													
All	Large	7	*	0.08	*	2	=	1	*	$26.43	=	$32.07	15.167153
	Small	0	*	0.08	*	0	=	0	*	$26.43	=	$0.00	0

		POTEXEMP		MEDRECORD		#PLANTS		Hours		CLWAGE		Cost	Responses
SECTOR 5. Chromate Pigment Procedures													
All	Large	25	*	0.08	*	2	=	4	*	$26.43	=	$104.43	49.393048
	Small	3	*	0.08	*	1	=	0	*	$26.43	=	$6.53	3.0870655
SECTOR 6. CCA Producers													
All	Large	3	*	0.08	*	3	=	1	*	$21.81	=	$11.41	6.5373192
	Small	0	*	0.08	*	0	=	0	*	$21.81	=	$0.00	0
SECTOR 7. Chromium Catalyst Producers													
All	Large	27	*	0.08	*	5	=	11	*	$26.43	=	$297.77	140.83785
	Small	0	*	0.08	*	0	=	0	*	$26.43	=	$0.00	0
SECTOR 8. Paint and Coating Producers													
All	Large	5	*	0.08	*	87	=	36	*	$19.69	=	$716.80	455.01458
	Small	2	*	0.08	*	137	=	23	*	$19.69	=	$450.56	286.00916
SECTOR 9. Printing Ink Producers													
All	Large	0	*	0.08	*	3	=	0	*	$19.72	=	$0.00	0
	Small	0	*	0.08	*	10	=	0	*	$19.72	=	$0.00	0
SECTOR 10. Plastic Colorant Producers and Users													
All	Large	0	*	0.08	*	86	=	0	*	$21.84	=	$0.00	0
	Small	0	*	0.08	*	42	=	0	*	$21.84	=	$0.00	0
SECTOR 11. Plating Mixture Producers													
All	Large	2	*	0.08	*	4	=	1	*	$19.61	=	$15.31	9.7584957
	Small	1	*	0.08	*	3	=	0	*	$19.61	=	$6.80	4.3371092
SECTOR 13. Chromium Metal Producers													
All	Large	13	*	0.08	*	1		1	*	$26.51		$27.57	13
	Small	0	*	0.08	*	0		0	*	$26.51		$0.00	0
SECTOR 14. Iron and Steel Mills													
All	Large	40	*	0.08	*	37	=	119	*	$26.51	=	$3,167.36	1493.4539
	Small	1	*	0.08	*	12	=	1	*	$26.51	=	$35.65	16.808154
Carbon Steel	Large	10	*	0.08	*	112	=	88	*	$26.51	=	$2,333.85	1100.4397
	Small	1	*	0.08	*	35	=	4	*	$26.51	=	$104.84	49.435747
SECTOR 14B. Forging Industry													
All	Large	3	*	0.08	*	37	=	8	*	$26.51	=	$218.08	102.82635
	Small	0	*	0.08	*	34	=	0	*	$26.51	=	$0.00	0
SECTOR 15. Iron and Steel Foundries													
All	Large	27	*	0.08	*	178	=	385	*	$19.34	=	$7,445.72	4812.6137
	Small	5	*	0.08	*	130	=	56	*	$19.34	=	$1,083.01	700.01654
SECTOR 17. Chromium Dye Producers													
All	Large	0	*	0.08	*	3	=	0	*	$25.76	=	$0.00	0
	Small	0	*	0.08	*	1	=	0	*	$25.76	=	$0.00	0
SECTOR 18. Chromium Sulfate Producers													0
All	Large	0	*	0.08	*	0	=	0	*	$28.36	=	$0.00	0
	Small	3	*	0.08	*	5	=	1	*	$28.36	=	$36.86	16.250521
SECTOR 19. Chemical Distributors													
All	Large	0	*	0.08	*	207	=	0	*	$20.44	=	$0.00	0
	Small	0	*	0.08	*	1,561	=	0	*	$20.44	=	$0.00	0
SECTOR 20. Textile Dyeing													
All	Large	0	*	0.08	*	347	=	0	*	$13.64	=	$0.00	0
	Small	0	*	0.08	*	703	=	0	*	$13.64	=	$0.00	0

		POTEXEMP		MEDRECORD		#PLANTS		Hours		CLWAGE		Cost	Responses
SECTOR 21. Colored Glass Producers													
All	Large	1	*	0.08	*	5	=	0	*	$14.24	=	$5.58	4.9027183
	Small	0	*	0.08	*	17	=	0	*	$14.24	=	$0.00	0
Fiber, Flat, and Container Glass	Large	10	*	0.08	*	78	=	62	*	$14.24	=	$880.40	772.99525
	Small	2	*	0.08	*	5	=	1	*	$14.24	=	$9.31	8.1711971
SECTOR 22. Printing													
All	Large	0	*	0.08	*	92	=	0	*	$14.24	=	$0.00	0
	Small	0	*	0.08	*	367	=	0	*	$14.24	=	$0.00	0
SECTOR 24. Chromium Catalyst Users													
All	Large	1	*	0.08	*	164	=	13	*	$22.21	=	$294.65	165.84795
	Small	0	*	0.08	*	0	=	0	*	$21.97	=	$0.00	0
Chromium Catalyst Companies	Large	10	*	0.08	*	21	=	17	*	$21.97	=	$375.59	213.66914
	Small	5	*	0.08	*	4	=	2	*	$21.97	=	$35.77	20.349442
SECTOR 25. Refractory Brick Producers													
All	Large	0	*	0.08	*	6	=	0	*	$17.53	=	$0.00	0
	Small	0	*	0.08	*	0	=	0	*	$17.53	=	$0.00	0
SECTOR 26. Woodworking													
General Industry	Large	1	*	0.08	*	175	=	13	*	$21.93	=	$286.16	163.14101
	Small	0	*	0.08	*	93	=	0	*	$21.93	=	$0.00	0
Maritime	Large	0	*	0.08	*	38	=	0	*	$21.93	=	$0.00	0
	Small	0	*	0.08	*	34	=	0	*	$21.93	=	$0.00	0
Construction	Large	3	*	0.08	*	1,290	=	268	*	$21.93	=	$5,878.44	3351.3807
	Small	1	*	0.08	*	5,162	=	358	*	$21.93	=	$7,843.19	4471.5086
Government	State	1	*	0.08	*	16	=	1	*	$21.93	=	$17.80	10.147984
	Local	1	*	0.08	*	59	=	3	*	$21.93	=	$64.35	36.688867
SECTOR 27. Solid Waste Incineration													
All	Large	0	*	0.08	*	48	=	0	*	$18.73	=	$0.00	0
	Small	0	*	0.08	*	58	=	0	*	$18.73	=	$0.00	0
Government	State	0	*	0.08	*	0	=	0	*	$21.93	=	$0.00	0
	Local	0	*	0.08	*	29	=	0	*	$21.93	=	$0.00	0
SECTOR 30. Superalloy Producers and Users													
All	Large	2	*	0.08	*	18	=	3	*	$19.08	=	$52.88	34.641633
	Small	0	*	0.08	*	0	=	0	*	$19.08	=	$0.00	0
SECTOR 31. Construction													
Industrial Rehabilitation & Maintenance	Large	0	*	0.08	*	55	=	0	*	$21.96	=	$0.00	0
	Small	0	*	0.08	*	196	=	0	*	$21.96	=	$0.00	0
	State Gov't	0	*	0.08	*	16	=	0	*	$21.96	=	$0.00	0
	Local Gov't	0	*	0.08	*	74	=	0	*	$21.96	=	$0.00	0
Hazardous Waste Site Work	Large	0	*	0.08	*	44	=	0	*	$21.96	=	$0.00	0
	Small	0	*	0.08	*	143	=	0	*	$21.96	=	$0.00	0
	State Gov't	0	*	0.08	*	1	=	0	*	$21.96	=	$0.00	0
	Local Gov't	0	*	0.08	*	201	=	0	*	$21.96	=	$0.00	0
Refractory Brick Restoration	Large	9	*	0.08	*	48	=	34	*	$21.96	=	$749.13	426.40096
	Small	1	*	0.08	*	148	=	10	*	$21.96	=	$230.29	131.07881
Total						**72,329**		**9,142**				**172,517**	**114,269**

Clerical Time and Cost to Provide the PLHCP's Written Medical Opinion to Employee and to Establish and Maintain Record for Air Monitoring Data and Medical Surveillance

The Standard requires that employers maintain exposure and medical surveillance records. As part of the medical record, employers must maintain a copy of the PLHCP's written opinion. OSHA assumes that the 5 minutes for recordkeeping includes the time it takes for employers to provide a copy of the PLHCP's written opinion to the employee.

HOURS = RECTIME * EMPEXP * #PLANTS
COST = Hours x CLWAGE
RECTIME = Time, 0.08 hour per record for exposed workers
EMPEXP = Exposed employees to chromium or employees exposed dermally
#PLANTS = Number of Plants
CLWAGE = Clerical wage Rate

		RECTIME		EMPEXP		#PLANTS		HOURS	CLWAGE		COST	Responses
Sector 1. Electroplating												
ALL	Large	0.08	*	14	*	1,885	=	2,099	$18.19	$	38,171	26,235
	Small	0.08	*	3	*	3,547	=	790	$18.19	$	14,363	9,872
Sector 2. Welding												
ALL	Large	0.08	*	3	*	11,423	=	2,667	$17.90	$	47,752	33,338
	Small	0.08	*	3	*	14,088	=	3,289	$17.90	$	58,895	41,117
Sector 2B. Mild Steel Welding												
	Large	0.08	*	4	*	11,742		3,655	$17.90	$	65,448	45,692
	Small	0.08	*	1	*	11,967		931	$17.90	$	16,676	11,642
SECTOR 3. PAINTING												
ALL	Large	0.08	*	44	*	1,557	=	5,537	$22.51	$	124,656	69,213
	Small	0.08	*	2	*	7,013	=	848	$22.51	$	19,091	10,600
SECTOR 4. Producers of Chromates												
ALL	Large	0.08	*	78	*	2	=	13	$26.43	$	344	163
	Small	0.08	*	0	*	0	=	0	$26.43	$	-	0
SECTOR 5. Chromate Pigment Procedures												
ALL	Large	0.08	*	25	*	2	=	4	$26.43	$	104	49
	Small	0.08	*	3	*	1	=	0	$26.43	$	7	3
SECTOR 6. CCA Producers												
ALL	Large	0.08	*	8	*	3	=	2	$21.81	$	34	20
	Small	0.08	*	0	*	0	=	0	$21.81		0	0
SECTOR 7. Chromium Catalyst Producers												
ALL	Large	0.08	*	66	*	5	=	27	$26.43	$	722	341
	Small	0.08	*	0	*	0	=	0	$26.43		0	0

		RECTIME		EMPEXP		#PLANTS		HOURS	CLWAGE		COST	Responses
SECTOR 8. Paint and Coating Producers												
ALL	Large	0.08	*	19	*	87	=	131	$19.69	$	2,580	1,638
	Small	0.08	*	8	*	137	=	92	$19.69	$	1,802	1,144
SECTOR 9. Printing Ink Producers												
ALL	Large	0.08	*	20	*	3	=	5	$19.72	$	95	60
	Small	0.08	*	20	*	10	=	16	$19.72	$	318	202
SECTOR 10. Plastic Colorant Producers and Users												
ALL	Large	0.08	*	6	*	86	=	39	$21.84	$	844	483
	Small	0.08	*	1	*	42	=	3	$21.84	$	69	39
SECTOR 11. Plating Mixture Producers												
ALL	Large	0.08	*	13	*	4	=	4	$19.61	$	87	55
	Small	0.08	*	3	*	3	=	1	$19.61	$	14	9
SECTOR 13. Chromium Metal Producers												
ALL	Large	0.08	*	47	*	1	=	4	$26.51	$	100	47
	Small	0.08	*	0	*	0	=	0	$26.51	$	-	0
SECTOR 14. Iron and Steel Mills												
ALL	Large	0.08	*	46	*	2,124	=	7,885	$26.51	$	209,046	98,568
	Small	0.08	*	3	*	24	=	5	$26.51	$	143	67
SECTOR 15. Iron and Steel Foundries												
ALL	Large	0.08	*	115	*	178	=	1,643	$19.34	$	31,768	20,534
	Small	0.08	*	115	*	130	=	1,195	$19.34	$	23,104	14,934
SECTOR 17. Chromium Dye Producers												
ALL	Large	0.08	*	32	*	3	=	8	$25.76	$	193	94
	Small	0.08	*	7	*	1	=	1	$25.76	$	14	7
SECTOR 18. Chromium Sulfate Producers												
ALL	Large	0.08	*	0	*	0	=	0	$28.36	$	-	0
	Small	0.08	*	2	*	5	=	1	$28.36	$	25	11
SECTOR 19. Chemical Distributors												
ALL	Large	0.08	*	0	*	207	=	0	$20.44	$	-	
	Small	0.08	*	0	*	1,561	=	0	$20.44	$	-	0
SECTOR 20. Textile Dyeing												
ALL	Large	0.08	*	58	*	347	=	1,618	$13.64	$	22,065	20,224
	Small	0.08	*	2	*	703	=	104	$13.64	$	1,422	1,303

		RECTIME		EMPEXP		#PLANTS		HOURS	CLWAGE		COST	Responses
SECTOR 21. Colored Glass Producers												
ALL	Large	0.08	*	5	*	83	=	30	$14.24	$	428	376
	Small	0.08	*	1	*	22	=	2	$14.24	$	22	20
SECTOR 22. Printing												
ALL	Large	0.08	*	43	*	92	=	317	$14.24	$	4,513	3,962
	Small	0.08	*	3	*	0	=	0	$14.24	$	-	0
SECTOR 24. Chromium Catalyst Users												
ALL	Large	0.08	*	30	*	164	=	398	$22.21	$	8,839	4,975
	Small	0.08	*	15	*	0	=	0	$22.21	$	-	
Catalyst Service Companies	Large	0.08	*	1	*	21		2	$22.21	$	38	21
	Small	0.08	*	0	*	0		0	$22.21	$	-	0
SECTOR 25. Refractory Brick Producers												
ALL	Large	0.08	*	12	*	6	=	6	$17.53	$	97	69
	Small	0.08	*	0	*	0	=	0	$17.53	$	-	
SECTOR 26. Woodworking												
ALL	Large	0.08	*	0	*	1,519	=	0	$21.93	$	-	0
	Small	0.08	*	0	*	5,348	=	0	$21.93	$	-	0
SECTOR 27. Solid Waste Incarnation												
ALL	Large	0.08	*	0	*	48	=	0	$18.61	$	-	0
	Small	0.08	*	1	*	87	=	6	$18.61	$	113	76
SECTOR 30. Superalloy Producers and Users												
ALL	Large	0.08	*	38	*	18	=	54	$19.08	$	1,031	676
	Small	0.08	*	0	*	0	=	0	$19.08	$	-	
SECTOR 31. Construction												
Industrial Rehabilitation & Maintenance	Large	0.08	*	21		55		94	$21.96	$	2,064	1,175
	Small	0.08	*	1		196		14	$21.96	$	307	175
	State Gov't	0.08	*	1		16		1	$21.96	$	25	14
	Local Gov't	0.08		1		74		5	$21.96	$	115	66
Hazardous Waste Site Work	Large	0.08	*	12		44		43	$21.96	$	952	542
	Small	0.08	*	3		143		31	$21.96	$	670	381
	State Gov't	0.08	*	2		1		0	$21.96	$	3	2
	Local Gov't	0.08	*	3		201		43	$21.96	$	941	535
Refractory Brick Restoration & Maintenance	Large	0.08	*	12		48		48	$21.96	$	1,049	597
	Small	0.08	*	1		148		10	$21.96	$	230	131

Table 33

		RECTIME		EMPEXP		#PLANTS		HOURS	CLWAGE	COST	Responses
				TOTAL		77,227		33,720		$ 701,388	421,495

Access to Records

The employer must provide, upon request, information to OSHA during the context of a compliance inspection. Providing access to such materials should require no more than 5 minutes of supervisor time.

Number of total facilities covered by the Standard = 77,770
Inspection Rate (1.4%)
Number of Inspection = 77,770 *1.4%= 1,089
Highest Supervisory Wage Rate = $54.55

				Burden Hours				Cost
1,089	*	0.08	(supervisor hrs.)=	**87**	*	$54.55	=	$4,746.00