CHEMCOATERS

March 31st, 2016

Ethan Chatfield and Ken Ruffatto
US Environmental Protection Agency, Region 5
77 West Jackson Blvd.
Chicago, IL 60604

Re: Response to Request to Provide Information Pursuant to the Clean Air Act
Information Required to Submit to EPA

Appendix B

1. Copies of all stack test reports (copies of appendices are not necessary) and visible emissions readings (Method 9 or 22) that been performed at the Facility.

   Response: No stack tests have been conducted at the Chemcoaters facility.

2. Copies of all performance tests completed on emission sources at the Facility.

   Response: No performance tests have been completed on emission sources at Chemcoaters. Permits are renewed and emission sources inspected annually by the City of Gary Department of Environmental Affairs.

3. All logs for all coatings used at the Facility since January 1, 2011. Such logs shall include the following information:
   a. Name of coating
   b. Volume of coating used each year (gal/yr.)
   c. VOC content of each coating (lbs./gal.)
   d. HAP content of each coating (lbs./gal.)
   e. Name, volume, VOC and HAP content of any thinner added.

   Response: See attached spreadsheets labeled "Coating VOC and HAPS" for above information.

4. Copies of all Material and Safety Data Sheets (MSDS) for each coating and thinner used at the Facility.

   Response: See attached MSDS sheets.

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5. All logs for the infrared furnaces operation. Such logs shall include the operating temperature and hours of operation each month.

   Response: See attached spreadsheet labeled "Coating VOC and HAPS" for the oven operating temperature for each specific coating at Chemcoaters. Also, included is the scheduling log for hours of operation each month.

6. Any and all documents and information regarding Chemcoaters' claim that all hexavalent chromium (CR6+) used during the coating process stays on the metal being coated. Identify all persons with knowledge, information or documents responsive to this question.

   Response: See attached spreadsheet examples which show theoretical coating usage compared to actual coating usage which shows the hazardous compounds applied to the metal strip stay on the metal strip after curing. Also, see attached documentation provided which pertains and supports the above statement.

7. An explanation for the choice of location of the infrared furnace stack on the side of the warehouse and the angle/direction of the stack.

   Response: The location and direction of the stack were based upon the oven manufacturer's recommendation during installation.

Please contact me if you have any questions to any of the information provided in this report.

Sincerely,

Bill Capizzano
Chemcoaters President

Main (219) 977-1929 • (877) 411-2905 • Fax (219) 977-5299

Coating VOC & HAPS **Year:** **2011**

		Gallons	VOC applied #/gal	Hazardous Compounds applied #/gal	Oven Temp. (F)
PPG	Chemform	23681	0.65	0	190
Source 1	Ameriform	405	0.0004	0	160
PPG	Chemfos 2007	2295	0	0.0463	150
Provectus	ChemZinc Type II	2526	0.686	0.1586	290
Provectus	ChemBond Black	767	0.55	0	290
Provectus	ChemBond Silver	1311	0.598	0.1416	290
FerroTech	C5	43	0.22	0.22	290
Provectus	Non Chrome Blue	262	0.239	0	250
Henkel	Bonderite 225W (15% Concentrate)	73	0	2.169	180
EcoGreen	ChemGuard 615	11339	0	0.4373	200
EcoGreen	ChemGuard 315	6349	0	0.0922	200
Oakite	Gardobond 4649/1	310	0	0	180
Provectus	ChemZinc 6	2904	0.686	0.36619	260

Coating VOC & HAPS **Year:** **2012**

		Gallons	VOC applied #/gal	Hazardous Compounds applied #/gal	Oven Temp. (F)
PPG	Chemform	23084	0.65	0	190
Source 1	Ameriform	421	0.0004	0	160
PPG	Chemfos 2007	2187	0	0.0463	150
Provectus	ChemZinc Type II	6156	0.686	0.1586	290
Provectus	ChemBond Black	1151	0.55	0	290
Provectus	ChemBond Silver	1497	0.598	0.1416	290
FerroTech	C5	90	0.22	0.22	290
Provectus	Non Chrome Blue	377	0.239	0	250
Henkel	Bonderite 225W (15% Concentrate)	78	0	2.169	180
EcoGreen	ChemGuard 615	11345	0	0.4373	200
EcoGreen	ChemGuard 315	12105	0	0.0922	200
Henkel	Bonderite 6010 TriChrome (20% Concentrate)	58	0	0	180
Magni	Magni Black	50	0.34	0	290
Magni	Magni White	110	0.45	0	290
Magni	Magni Primer	99	0.78	0	290
Magni	Magni Sandalwood	110	0.6	0	290
Unichem	Aqua Lon 902 Gray	109	0.23	0	290
Unichem	Aqua Lon 902 Black	64	0.56	0	290
Unichem	Aqua Lon 902 Clear	49	0.22	0	290
Provectus	ChemZinc 6	158	0.686	0.36619	260

Coating VOC & HAPS **Year:** **2013**

		Gallons	VOC applied #/gal	Hazardous Compounds applied #/gal	Oven Temp. (F)
PPG	Chemform	19598	0.65	0	190
Source 1	Ameriform	360	0.0004	0	160
PPG	Chemfos 2007	1509	0	0.0463	150
Provectus	ChemZinc Type II	1502	0.686	0.1586	290
Provectus	ChemBond Black	757	0.55	0	290
Provectus	ChemBond Silver	739	0.598	0.1416	290
FerroTech	C5	45	0.22	0.22	290
Provectus	Non Chrome Blue	455	0.239	0	250
Henkel	Bonderite 225W (15% Concentrate)	50	0	2.169	180
EcoGreen	ChemGuard 615	11766	0	0.4373	200
EcoGreen	ChemGuard 315	15368	0	0.0922	200
EcoGreen	ChemGuard 315D	780	0	0.0922	200
Provectus	ChemZinc Dark Gray	116	0.464	0	290
Henkel	Bonderite 6010 TriChrome (20% Concentrate)	10	0	0	180
Provectus	ChemZinc 6	158	0.686	0.36619	260

Coating VOC & HAPS **Year:** **2014**

		Gallons	VOC applied #/gal	Hazardous Compounds applied #/gal	Oven Temp. (F)
PPG	Chemform	24691	0.65	0	190
Source 1	Ameriform	343	0.0004	0	160
PPG	Chemfos 2007	1644	0	0.0463	150
Provectus	ChemZinc Type II	1917	0.686	0.1586	290
Provectus	ChemBond Black	979	0.55	0	290
Provectus	ChemBond Silver	219	0.598	0.1416	290
FerroTech	C5	142	0.22	0.22	290
Provectus	Non Chrome Blue	186	0.239	0	250
Henkel	Bonderite 225W (15% Concentrate)	41	0	2.169	180
EcoGreen	ChemGuard 615	11065	0	0.4373	200
EcoGreen	ChemGuard 315	15326	0	0.0922	200
EcoGreen	ChemGuard 315D	1245	0	0.0922	200
EcoGreen	ChemGuard 320LL	2150	0.13	0.0918	200
Provectus	ChemZinc Dark Gray	185	0.464	0	290
Henkel	Bonderite 6010 TriChrome (20% Concentrate)	10	0	0	180
Henkel	Bonderite 3000B	33	0	0.08512	180
Provectus	ChemZinc Tan	20	0.686	0	290

Coating VOC & HAPS **Year:** **2015**

		Gallons	VOC applied #/gal	Hazardous Compounds applied #/gal	Oven Temp. (F)
PPG	Chemform	27245	0.65	0	190
Source 1	Ameriform	441	0.0004	0	160
PPG	Chemfos 2007	1025	0	0.0463	150
Provectus	ChemZinc Type II	1486	0.686	0.1586	290
Provectus	ChemBond Black	854	0.55	0	290
Provectus	Non Chrome Blue	235	0.239	0	250
Henkel	Bonderite 225W (15% Concentrate)	68	0	2.169	180
EcoGreen	ChemGuard 615	8125	0	0.4373	200
EcoGreen	ChemGuard 315	5827	0	0.0922	200
EcoGreen	ChemGuard 315D	1034	0	0.0922	200
EcoGreen	ChemGuard 320LL	8615	0.13	0.0918	200
Provectus	ChemZinc Dark Gray	39	0.464	0	290
Henkel	Bonderite 6010 TriChrome (20% Concentrate)	5	0	0	180
Henkel	Bonderite 3000B	20	0	0.08512	180
Oakite	Gardolene D6811	18	0	0.2422	180
Provectus	Purlin Red Oxide	168	0.68	0	290
Provectus	ChemZinc Brown	260	0.66	0.115	290
Oakite	OkemCoat F1	65	0	1.785	180

	2011	2012	2013	2014	2015
1402W	2	0	1.5	0	0
Ameriform	43.5	45.5	36.5	24	29.75
Arcanum	0	0	0	0	44.5
B6010	22	27	10	3.5	6
C5	4.5	32	1.5	1.25	
CB Blk./CB Blk.	0	67	46.25	48.25	31.75
CB Blk/CZ Type II	46.75	0	0	0	0
CB Silver	31	25.5	13.25	5.25	0
CG 300 - All	245.75	454	444.25	495	405
CG 600 - All	269	204	192.75	180.75	0
Chem Treat	97.75	98.25	63.5	87	128.25
Chemform - All	1190.25	1204.25	1013.75	1103.25	1204.75
Chemphos	216.25	258.75	151.75	162	128
CZ Brown	0	0	0	0	7.25
CZ Dark Gray	0	0	0	2.5	2.5
CZ Tan	0	0	0	1.25	0
CZ Type II	93	61.75	54.25	67.25	46.25
CZ Type VI	166.75	0	0	0	0
Gadolene 6811	0	0	0	0	2
GardoBond 4649	41.75	0	0	0	0
Granocoat 342	0	3.75	0	0	0
Henekel 5460	0	0	0	0	1
Henkel 3000B	0	0	0	3	0
Non-Chrome Blue	13.5	16	20.25	7.25	7.25
White/Sandelwood	5	19.25	0	0	0
	2488.75	**2517**	**2049.5**	**2191.5**	**2044.25**

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CG 320			Sq. Ft of surface:	Chrome Readings Portaspec	Total coating wt. lab factor Av.		53-56 ave lab
gals used: 230					54.5		
	0.017	26550	70857.57	5.1	277.95		
Total mg	0.017	30490	81372.78	4	218		
210460598.4	0.017	47860	127730.44	4	218		
	0.017	27170	72512.25	3.5	190.75		
	0.022	27050	55784.72	3.3	179.85		
	0.017	33220	88658.70	2.5	136.25		
	0.022	32460	66941.66	2.7	147.15		
	0.022	42150	86925.17	2.5	136.25		
9.12#/gal	0.022	53180	109672.14	2.6	141.7		
	0.017	49640	132480.97	2.9	158.05		
	0.022	27810	57352.05	3.1	168.95		
	0.0232	31840	62266.68	2.9	158.05		
	0.022	27920	57578.90	2.7	147.15		
	0.022	28980	59764.92	2.6	141.7		
	0.022	53930	111218.85	2.5	136.25		
		Tons	Sq. ft.				
Totals:		270.125	1241117.79			54	
	Thickness	gals/ton	mg/sqft	Cr wt.	mg/sqft	Factor	
Averages:	0.02008	0.851	169.57	3.13	170.40	line	
		At	22.10%				

-0.83%

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CG 615			Sq. Ft of surface:	Chrome Readings Portaspec	Total coating wt. lab factor Av.	31-37 ave lab
gals used: 455					34	
	0.0278	47973	78292.96	12.7	431.8	
Total mg	0.0278	47752	77932.29	12.3	418.2	
497595524.8	0.0278	44115	71996.62	12.9	438.6	
	0.0278	48061	78436.58	14.5	493	
	0.0265	53374	91380.71	12.7	431.8	
	0.0264	54190	93129.20	13.6	462.4	
	0.0264	53859	92560.35	11.8	401.2	
	0.0264	46606	80095.58	16.1	547.4	
	0.0264	44622	76685.94	16	544	
	0.0273	43607	72470.99	15.6	530.4	
	0.0273	43541	72361.31	15.9	540.6	
9.597#/gal	0.0273	43629	72507.55	15.2	516.8	

		Tons	Sq. ft.			
Totals:		285.6645	957850.09			37
	Thickness	gals/ton	mg/sqft	Cr wt.	mg/sqft	Factor
Averages:	0.0271	1.593	519.49	14.11	479.68	line
		At	25.10%			

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CZ Gray Type II

gals used:
120

9.898#/gal

			630-940 mg/sqft 785 mg/sqft	Sqft/Gals	gals
		Sq. Ft of surface:			
			Mean Ave Target Coating Wt. (mils)		
0.044	45827	47254.09	0.28	2915.00	16.21
0.044	45827	47254.09	0.28	2915.00	16.21
0.044	45827	47254.09	0.28	2915.00	16.21
0.033	44618	61343.25	0.28	2915.00	21.04
0.033	44618	61343.25	0.28	2915.00	21.04
0.033	44618	61343.25	0.28	2915.00	21.04
	Tons	Sq. ft.			Averages:
Totals:	135.6675	325792.03			112

Henkel Excellence is our Passion

To: Bill Krippes, Bill Capizzano
cc:
From: Bill Fristad
Subject: Cr(VI) in Henkel Products
Date: April 4, 2016 WEF02116

Chemcoaters, 700 Chase St., Gary IN, uses the following Henkel surface treatment products that contain hexavalent chromium (Cr(VI)):

Bonderite M-CR 1402W
Bonderite M-PA 225W

Bonderite M-CR 1402W is an aqueous product containing chromium(III) chromate (7.5%). The Cr(VI) content is 2.3% due to the chromate anion. The Cr(VI) in this product is non-volatile and the product is applied by a roll-coater. Roll-coaters do not produce any aerosol or fine liquid particles that could exit the building in an exhaust stack. Roll-coaters transfer effectively 100% of the liquid product to the metal coil being processed.

Bonderite M-PA 225W is also an aqueous product containing chromium(III) chromate (17%). The Cr(VI) content is 5.2% contained in the chromate anion. The Cr(VI) in this product is non-volatile and the product is applied by a roll-coater. Roll-coaters do not produce any aerosol or fine liquid particles that could exit the building in an exhaust stack. Roll-coaters transfer effectively 100% of the liquid product to the metal coil being processed.

During the drying of these aqueous solutions on a metal coil, no volatilization of Cr(VI) would be expected as the chromate salts are non-volatile.

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