

### MANAGEMENT SERVICES DEPARTMENT **Purchasing Division**

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## **ADDENDUM #7** May 9, 2022

TO: **ALL MANDATORY Pre-Bid Meeting Attendees** 

**PROJECT NAME:** Contract 76 B.1-Biological Foul Air Mitigation System-Construction-Rebid

91359-003.0 **BID REFERENCE #:** 

BID DUE/OPENING DATE: May 24, 2022 @ 3:30 p.m. Local Time

The purpose of this addendum is to clarify and/or modify the Bid Items, Drawings and/or Specifications for this project. All work affected is subject to all applicable terms and conditions of the Bidding and Contract Documents.

- 1. NOTE: NEW BID DUE/OPENING DATE/TIME: Tuesday, May 24, 2022 @ 3:30 p.m. Local Time.
- 2. RESPONSE TO QUESTIONS provided by Jones & Henry Engineers, LTD in document dated 5/9/2022 (Addendum #7, Attachment A)

and The Addendum can be viewed downloaded from the City's website at https://www.kalamazoocity.org/bidopportunities.

In order for a bid to be responsive, this addendum must be returned, signed and dated, with your bid. If you have already submitted your bid, acknowledge receipt and acceptance of this addendum by signing in the place provided and returning it to the undersigned and it shall be incorporated in your bid. Please identify your return envelope with the bid reference number and project description.

Sincerely,	
Malla	Eg
Michelle Emig	

Purchasing Division Manager

Ryan Stoughton, Public Services c: Chris Nelson, Public Services James Cornell, Public Services Prevailing Wage File

FIRM:	SIGNED:
NAME: (Type or Print)	DATE:



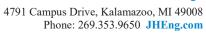
# ADDENDUM #7

## **Attachment A**

5/9/2022 Document Response to Questions

# Contract 76 B.1-Biological Foul Air Mitigation System-Construction-Rebid

91359-003.0





City of Kalamazoo KWRP Biofiltration 017-7725.001 5/9/2022

- 1. Remove Specification Section 03300, Part 4, 4.01 Crystalline Waterproofing Additive
- 2. Cast in Place concrete construction of foul air conveyance duct infrastructure may be used in lieu of Precast Concrete [Box] Culvert construction for the foul air duct culvert, or previous addendum approved shape, in lieu of pre-cast concrete construction. If Cast in Place construction of foul air conveyance duct infrastructure is chosen, then, including but not limited to; the duct shape to accommodate site constraints, both existing and design proposed, and it's ability to convey the basis of design air flow rate at the basis of design headloss; the concrete mix design, including but not limited to, specified add mixtures in Specification Section 02561; the reinforcement design to meet the design loads specified in Specification Section 02561; and equivalent joint water stop design to meet Specification Section 02561 shall be the responsibility of the Contractor to be approved by the Engineer and Owner.
- 3. Add to Specification Section 09900, Part 4, 4.03 the following Biofilter Protective Coatings

#### 4.03 BIOFILTER PROTECTIVE COATINGS

- A. All interior concrete surfaces including slabs, walls, media support structures, plenums, humidification chambers, etc receive a protective coating following concrete curing.
- B. Protective coating shall be highly resistant to Hydrogen Sulfide and Sulfuric Acid.
- C. Protective coating shall be Tnemec 434 Permashield, Carboline Semstone 145, or engineer approved equal. Coatings shall be installed per manufacturers recommendations.
  - Tnemec 434 Permashield shall include Series 201 primer and 125 mils 434 Permashield
  - 2. Carboline Semstone 145 coating system shall include 125 mils Semstone 145 AFCR coating system per manufacturer recommendations.
- D. Concrete surfaces shall be fully cured prior to placement of coating.
- E. Concrete shall be finished offgassing prior to commencing coating operations. Completion of offgassing shall be verified by plastic sheet test.
  - 1. Contractor shall perform a minimum of 3 plastic sheet tests per biofilter section to ensure surface preparation.
- F. Coating manufacturer shall be responsible for approving surface preparation prior to coating.
  - 1. Approval shall be given in writing by an appointed manufacturer's representative.
- G. Protective coatings installation shall be warrantied for a period of not less than 5 years and shall cover failures of the coating material due to material defects and/or installation.



## Page 2

4. Add to Specification Section 09900, Part 4, 4.04 the following Coating Schedule:

### 4.04 COATING SCHEDULE

A. The following coating schedules is not guaranteed to be complete. The coating systems manufacturers are listed in no particular order, any of the four listed systems, or equal may be used.

	Wastewater					
		Carboline	Tnemec	AkzoNobel (International, Devoe, Glidden Professional)	PPG	
A.	Ferrous metals, except gal	lvanized or stainless steel, submer	rged or partially submerged in wa	stewater or non-submerged expos	ed to splash or spill, including all	
	tank mechanisms and tanl	k mechanism support structures;	clips, beams, and walkway suppor	rts; pipes, valves, sluice gates, scun	n baffles, and weirs:	
	Surface Preparation:	SSPC-SP 10 (NACE 2) Near	SSPC-SP 10 (NACE 2) Near	SSPC-SP 10 (NACE 2) Near	SSPC-SP 10 (NACE 2) Near	
		White Blast Cleaning with a	White Blast Cleaning with a	White Blast Cleaning with a	White Blast Cleaning with a	
		1.5-2.0 mil Profile	2.0 mil Profile	1.5-2.0 mils Profile	1.5-2.0 mils Profile	
	Primer:	1 coat, Carboguard 890	1 coat, N140 Pota-Pox Plus	N/A	1 coat PPG Amerlock2/400 4.0-	
		(4.0-6.0 mils DFT)	(DFT 3.0-5.0 mils).		6.0 mils DFT	
	Field Finish:	2 coats, Bitumastic 300m (8.0-	2 coats, 46H-413 HB Tneme-	N/A	2 coats PPG Amercoat 78HB	
		16.0 DFT per coat)	Tar, (DFT 8.0-10.0 mils per		applied to a DFT 8.0-10.0 mils	
			coat).		DFT per coat	
B.	Concrete walls, columns, b	peams, etc. in contact with potabl	e water or water being treated fo	or potable use:		
	Surface Preparation:	SSPC-SP 13 (NACE 6)	SSPC-SP 13 (NACE 6) Remove	SSPC-SP 13 (NACE 6) Remove	SSPC-SP 13 (NACE 6) Remove	
		Remove surface contaminates	surface contaminates per	surface contaminates per	surface contaminates per	
		per ASTM D4258 (Concrete).	ASTM D4258 (Concrete).	ASTM D4258 (Concrete).	ASTM D4258 (Concrete).	
		Abrade precast concrete, if	Abrade precast concrete, if	Abrade precast concrete, if	Abrade precast concrete, if	
		recommended by coating	recommended by coating	recommended by coating	recommended by coating	
		manufacturer, per ASTM	manufacturer, per ASTM	manufacturer, per ASTM	manufacturer, per ASTM	
		D4259. ASTM D4263 (plastic	D4259. ASTM D4263 (plastic	D4259. ASTM D4263 (plastic	D4259. ASTM D4263 (plastic	
		sheet test method) to ensure	sheet test method) to ensure	sheet test method) to ensure	sheet test method) to ensure	
		concrete is moisture free. If	concrete is moisture free. If	concrete is moisture free. If	concrete is moisture free. If	
		moisture is detected, retest	moisture is detected, retest	moisture is detected, retest	moisture is detected, retest	
		until dry	until dry	until dry	until dry	

	Wastewater					
		Carboline	Tnemec	AkzoNobel (International, Devoe, Glidden Professional)	PPG	
	Filler:	Fill bugholes with Carboguard 501/510	215 Surfacing Epoxy or 218 MortarClad	Fill bugholes with Devran 133/Cabo-Sil M-5 (DFT up to 80.0 mils)	PPG Amercoat 114A	
	Primer:	1 coat, Carboguard 61 (DFT 4.0-6.0 mils)	1 coat, N140 Pota-Pox Plus (DFT 4.0-6.0 mils).	1 coat, Bar-Rust 233 H (DFT 4.0-6.0 mils)	PPG Amerlock 2 4.0-6.0mils DFT	
	Final:	2 coats, Carboguard 61 (DFT 4.0-6.0 mils per coat)	1 coat, N140 Pota-Pox Plus (DFT 4.0-6.0 mils)	1 coat, Bar-Rust 233 H (DFT 4.0-6.0 mils)	2 coats PPG Amerlock 2 4.0-6.0 mils DFT per coat	
C.		rous metal surfaces, not submerg	ed:			
1	1. Subject to splash or spills o					
	Surface Preparation:	SSPC-SP 6 (NACE 3) Commercial Blast Cleaning, surface profile 1.5-2.0 mils	SSPC-SP 6 (NACE 3) Commercial Blast Cleaning, surface profile 1.5- 2.0 mils	SSPC-SP 6 (NACE 3) Commercial Blast Cleaning, surface profile 1.5-2.0 mils	SSPC-SP 6 (NACE 3) Commercial Blast Cleaning, surface profile 1.5-2.0 mils	
	Primer:	1 coat, Carbozinc 859 (3.0-5.0 mils DFT)	1 coat, 90-97 Tneme-Zinc, (DFT 2.5-3.5 mils).	1 coat, CathaCoat 313 (DFT 2.0- 4.0 mils)	1 coat PPG Amercoat 68MCZ 2.0-4.0 mils DFT	
	Intermediate:	1 coat, Carboguard 60 (4.0-6.0 mils DFT)	1 coat, 27 Typoxy, (DFT 2.5- 4.0 mils).	1 coat, Devran 224HS (DFT 4.0- 8.0 mils)	1 coat PPG Amercoat 370 4.0- 6.0 mils DFT	
	Final:	1 coat, Carbothane 134HG (2.0-2.5 mils DFT)	1 coat, 72/73 Endura-Shield (DFT 2.5-5.0 mils).	1 coat, Devthane 359 (DFT 3.0-5.0 mils)	1 coat PPG Amercoat 450H 3.0- 5.0 mils DFT	
D.	Interior wall surfaces of ma	asonry block construction and pred	cast concrete walls and ceiling su	rfaces:		
1	<ol> <li>Concrete Masonry Block (C</li> </ol>	CMU and AMU)				
	Surface Preparation:	SSPC-SP 13 (NACE 6) Remove surface contaminates per ASTM D4258 (Concrete), and ASTM D4261 (Block). Masonry shall be moisture free.	SSPC-SP 13 (NACE 6) Remove surface contaminates per ASTM D4258 (Concrete), and ASTM D4261 (Block). Masonry shall be moisture free.	SSPC-SP 13 (NACE 6) Remove surface contaminates per ASTM D4258 (Concrete), and ASTM D4261 (Block). Masonry shall be moisture free.	SSPC-SP 13 (NACE 6) Remove surface contaminates per ASTM D4258 (Concrete), and ASTM D4261 (Block). Masonry shall be moisture free.	
	Sealer/Surfacer:	1 coat, Sanitile 100 (5.0-20.0 mils DFT) depending on porosity must be pin hole free prior to applying	1 coat, 130 Envirofill (DFT 10.0-15.0 mils).	1 coat, Tru-Glaze-WB 4015 (DFT 9.0-11.0 mils)	1 coat PPG Amerlock 400BF 10- 20 mils DFT	

Pre-Cast Concrete Surface Preparation:	Carboline 2 coats, Carboguard 60 (DFT 4.0-6.0 mils per coat)  SSPC-SP 13 (NACE 6)	Tnemec  2 coats, N69 H.B. Epoxoline II (DFT 4.0-6.0 mils per coat).	AkzoNobel (International, Devoe, Glidden Professional) 2 coat, Devran 224HS (DFT 4.0- 6.0 mils per coat)	PPG 2 coats 95-245 PPG DTR Epoxy 4.0-6.0 mils DFT per coat
Pre-Cast Concrete	2 coats, Carboguard 60 (DFT 4.0-6.0 mils per coat) SSPC-SP 13 (NACE 6)	(DFT 4.0-6.0 mils per coat).	2 coat, Devran 224HS (DFT 4.0-	
	SSPC-SP 13 (NACE 6)		6.0 mils per coat)	L /L N-6 () mile DET per cost
	, ,			4.0-0.0 IIIIIS DET PEI COAL
urface Preparation:	, ,		CCDC CD 42 (NA CE C) D 42 EQ	CCDC CD 42 (NA CE C) D
iller:	Remove surface contaminates per ASTM D4258 (Concrete). Abrade precast concrete, if recommended by coating manufacturer, per ASTM D4259. ASTM D4263 (plastic sheet test method) to ensure concrete is moisture free. If moisture is detected, retest until dry.  Fill bug holes with Carboguard	SSPC-SP 13 (NACE 6) Remove surface contaminates per ASTM D4258 (Concrete). Abrade precast concrete, if recommended by coating manufacturer, per ASTM D4259. ASTM D4263 (plastic sheet test method) to ensure concrete is moisture free. If moisture is detected, retest until dry.  Fill bug holes with 215	SSPC-SP 13 (NACE 6) D4258 (Concrete). Abrade precast concrete, if recommended by coating manufacturer, per ASTM D4259. ASTM D4263 (plastic sheet test method) to ensure concrete is moisture free. If moisture is detected, retest until dry.  Fill bug holes with Devfil 145	SSPC-SP 13 (NACE 6) Remove surface contaminates per ASTM D4258 (Concrete). Abrade precast concrete, if recommended by coating manufacturer, per ASTM D4259. ASTM D4263 (plastic sheet test method) to ensure concrete is moisture free. If moisture is detected, retest until dry.
	•	MortarClad	,	
inish:	2 coats, Carboguard 60 (DFT 4.0-6.0 mils per coat)	2 coats, N69 H.B. Epoxoline II (DFT 4.0-6.0 mils per coat).	2 coats, Devran 224HS (DFT 4.0-6.0 mils per coat)	2 coats 95-245 PPG DTR Epoxy 4.0-6.0 mils DFT per coat
nterior concrete walls, colu	mns, beams, and ceilings; concre	te curbs; concrete bases for mach	ninery and equipment; etc.:	
furface Preparation:	SSPC-SP 13 (NACE 6) Remove surface contaminates per ASTM D4258 (Concrete). Abrade precast concrete, if recommended by coating manufacturer, per ASTM D4259. ASTM D4263 (plastic sheet test method) to ensure	SSPC-SP 13 (NACE 6) Remove surface contaminates per ASTM D4258 (Concrete). Abrade precast concrete, if recommended by coating manufacturer, per ASTM D4259. ASTM D4263 (plastic sheet test method) to ensure	SSPC-SP 13 (NACE 6) Remove surface contaminates per ASTM D4258 (Concrete). Abrade precast concrete, if recommended by coating manufacturer, per ASTM D4259. ASTM D4263 (plastic sheet test method) to ensure	SSPC-SP 13 (NACE 6) Remove surface contaminates per ASTM D4258 (Concrete). Abrade precast concrete, if recommended by coating manufacturer, per ASTM D4259. ASTM D4263 (plastic sheet test method) to ensure concrete is moisture free. If
r	inish: nterior concrete walls, colu	Abrade precast concrete, if recommended by coating manufacturer, per ASTM D4259.  ASTM D4263 (plastic sheet test method) to ensure concrete is moisture free. If moisture is detected, retest until dry.  Fill bug holes with Carboguard 501/510  Fill bug holes with Carboguard 501/510  Interior concrete walls, columns, beams, and ceilings; concreturface Preparation:  SSPC-SP 13 (NACE 6) Remove surface contaminates per ASTM D4258 (Concrete).  Abrade precast concrete, if recommended by coating manufacturer, per ASTM D4259. ASTM D4263 (plastic	Abrade precast concrete, if recommended by coating manufacturer, per ASTM D4259.  ASTM D4263 (plastic sheet test method) to ensure concrete is moisture free. If moisture is detected, retest until dry.  Fill bug holes with Carboguard 501/510  Fill bug holes with Carboguard 60 (DFT 4.0-6.0 mils per coat)  Interior concrete walls, columns, beams, and ceilings; concrete curbs; concrete bases for mach curface Preparation:  SSPC-SP 13 (NACE 6) Remove surface contaminates per ASTM D4258 (Concrete).  Abrade precast concrete, if recommended by coating manufacturer, per ASTM D4259. ASTM D4263 (plastic sheet test method) to ensure  Abrade precast concrete, if recommended by coating manufacturer, per ASTM D4259. ASTM D4263 (plastic sheet test method) to ensure	Abrade precast concrete, if recommended by coating manufacturer, per ASTM D4259.  ASTM D4263 (plastic sheet test method) to ensure concrete is moisture free. If moisture is detected, retest until dry.  Fill bug holes with Carboguard 501/510 Surfacing epoxy or 218 MortarClad Surface Preparation:  SSPC-SP 13 (NACE 6) Remove surface contaminates per ASTM D4258 (Concrete).  Abrade precast concrete, if recommended by coating manufacturer, per ASTM D4263 (plastic sheet test method) to ensure concrete is moisture free. If moisture is detected, retest until dry.  Fill bug holes with Carboguard 501/510 Surfacing epoxy or 218 MortarClad Surface Preparation:  SSPC-SP 13 (NACE 6) Remove surface contaminates per ASTM D4258 (Concrete).  Abrade precast concrete, if recommended by coating manufacturer, per ASTM D4259. ASTM D4263 (plastic sheet test method) to ensure sheet test method) to e

			Wastewater		
		Carboline	Tnemec	AkzoNobel (International, Devoe, Glidden Professional)	PPG
		moisture is detected, retest	moisture is detected, retest	moisture is detected, retest	moisture is detected, retest
	Filler:	until dry.  Fill bugholes with Carboguard 501/510	until dry.  Fill bugholes with 215  Surfacing Epoxy or 218  MortarClad	until dry. Fill bug holes with Devfil 145 (16.0-22.0 mils DFT)	until dry. PPG Amercoat 114A
	Primer:	1 coat, Carboguard 60 (DFT 4.0-6.0 mils)	1 coat, 27 Typoxy (DFT 2.5-4.0 mils).	1 coat, Devran 224HS (DFT 4.0- 8.0 mils)	1 coat 95-245 PPG DTR Epoxy 4.0-6.0 mils DFT
	Final:	2 coats, Carboguard 60 (DFT 4.0-6.0 mils)	2 coats, N69 H.B. Epoxoline II (DFT 4.0-6.0 mils).	2 coats, Devran 224 HS (DFT 4.0-6.0 mils per coat)	2 coats95-245 PPG DTR Epoxy 4.0-6.0 mils DFT per coat
F.	_	ferrous metal surfaces of items such ays, and hangers; walkway platform			
	Surface Preparation:	SSPC-SP 6 (NACE 3) Commercial Blast Cleaning, surface profile 1.5-2.0 mils.	SSPC-SP 6 (NACE 3) Commercial Blast Cleaning, surface profile 1.5-2.0 mils.	SSPC-SP 6 (NACE 3) Commercial Blast Cleaning, surface profile 1.5 to 2.0 mils.	SSPC-SP 6 (NACE 3) Commercial Blast Cleaning, surface profile 1.5 to 2.0 mils.
	Primer:	1 coat, Carboguard 60 (DFT 4.0-6.0 mils)	1 coat, 27 Typoxy (DFT 2.0-4.0 mils).	1 coat, Devran 201H (DFT 2.0- 3.0 mils)	1 coat 95-245 PPG DTR Epoxy 4.0-6.0 mils DFT
	Finish:	2 coats, Carboguard 60 (DFT 4.0-6.0 mils per coat)	2 coats, N69 H.B. Epoxoline II, or equal (DFT 4.0-6.0 mils per coat).	2 coats, Devran 224 HS (DFT 4.0-6.0 mils per coat)	2 coats 95-245 PPG DTR Epoxy 4.0-6.0 mils DFT per coat
G.		f all chemical pipe supporting trays doors, ductwork, hoppers, walkways			
	Surface Preparation:	SSPC-SP 6 (NACE 3) Commercial Blast Cleaning, surface profile 1.5-2.0 mils.	SSPC-SP 6 (NACE 3) Commercial Blast Cleaning, surface profile 1.5-2.0 mils.	SSPC-SP 6 (NACE 3) Commercial Blast Cleaning, surface profile 1.5-2.0 mils.	SSPC-SP 6 (NACE 3) Commercial Blast Cleaning, surface profile 1.5-2.0 mils.
	Primer:	1 coat, Carboguard 60 (4.0-6.0 mils DFT)	1 coat, 27 Typoxy, or equal (DFT 2.0-4.0 mils).	1 coat, Devran 201H (DFT 2.0- 3.0 mils)	1 coat 97-245 PPG DTR Epoxy 4.0-6.0 mils DFT
	Finish:	2 coats, Carboguard 890 (4.0-6.0 mils DFT)	2 coats, N69 H.B. Epoxoline II (DFT 4.0-6.0 mils per coat).	2 coats, Devran 224 HS (DFT 4.0-6.0 mils per coat)	2 coats 95-245 PPG DTR Epoxy 4.0-6.0 mils DFT per coat

	Carboline	Tnemec	AkzoNobel (International, Devoe, Glidden Professional)	PPG
1. Aluminum and Copper:	CCDC CD 4.6 . D . L O'' DL .	CCDC CD 4C D	CCDC CD 4C D L OWDL .	CCDC CD 4 C D
Surface Preparation:	SSPC-SP 16 - Brush-Off Blast	SSPC-SP 16 - Brush-Off Blast	SSPC-SP 16 - Brush-Off Blast	SSPC-SP 16 - Brush-Off Blast
	Cleaning of Coated and	Cleaning of Coated and	Cleaning of Coated and	Cleaning of Coated and
	Uncoated Galvanized Steel,	Uncoated Galvanized Steel,	Uncoated Galvanized Steel,	Uncoated Galvanized Steel,
	Stainless Steels, and Non-	Stainless Steels, and Non-	Stainless Steels, and Non-	Stainless Steels, and Non-
	Ferrous Metals	Ferrous Metals	Ferrous Metals	Ferrous Metals
Primer:	N/A	1 coat, 27 Typoxy, or equal (DFT 2.0-4.0 mils).	1 coat, Devran 201H (DFT 2.0-3.0 mills)	N/A
Finish:	2 coats, Carboguard 60	1 coat, N69 H.B. Epoxoline II	1 coat, Devran 224 HS (DFT 4.0-	2 coats 95-245 PPG DTR Epc
	(DFT 4.0-6.0 mils per coat)	(DFT 4.0-6.0 mils per coat).	6.0 mils)	4.0-6.0 mils DFT per coat
2. Galvanized Metal:		•	•	
Surface Preparation:	SSPC SP 16 "Brush-off Blast	SSPC SP 16 "Brush-off Blast	SSPC SP 16 "Brush-off Blast	SSPC SP 16 "Brush-off Blast
	Cleaning of Coated and	Cleaning of Coated and	Cleaning of Coated and	Cleaning of Coated and
	Uncoated Galvanized Steel,	Uncoated Galvanized Steel,	Uncoated Galvanized Steel,	Uncoated Galvanized Steel,
	Stainless Steels, and Non-	Stainless Steels, and Non-	Stainless Steels, and Non-	Stainless Steels, and Non-
	ferrous Metals	ferrous Metals	ferrous Metals	ferrous Metals
Primer:	None	1 coat, 27 Typoxy, or equal (DFT 2.0-4.0 mils).	1 coat, Devran 201H (DFT 2.0- 3.0 mills)	None
Finish:	2 coats, Carboguard 60	1 coat, N69 H.B. Epoxoline II	1 coat, Devran 224HS (DFT 4.0-	2 coats 95-245 PPG DTR Epo
	(DFT 4.0-6.0 mils per coat)	(DFT 4.0-6.0 mils per coat).	6.0 mils)	4.0-6.0 mils DFT
3. FRP, PVC, CPVC, and Oth	1		,	
Surface Preparation:	Scuff sand to uniformly	Scuff sand to uniformly	Scuff sand to uniformly	Scuff sand to uniformly
	roughen surface	roughen surface	roughen surface	roughen surface
Primer:	None	1 coat, 27 Typoxy, or equal (DFT 2.0-4.0 mils).	1 coat, Devran 201H (DFT 2.0- 3.0 mills)	None
Finish:	2 coats, Carboguard 60	1 coat, N69 H.B. Epoxoline	1 coat, Devran 224 HS (DFT 4.0-	2 coats 95-245 PPG DTR Epc
	(DFT 4.0-6.0 mils per coat)	(DFT 4.0-6.0 mils per coat).	6.0 mils)	4.0-6.0 mils DFT per coat

	Wastewater					
		Carboline	Tnemec	AkzoNobel (International, Devoe, Glidden Professional)	PPG	
	Surface Preparation:	SSPC SP 16 "Brush-off Blast Cleaning of Coated and Uncoated Galvanized Steel, Stainless Steels, and Non- ferrous Metals	SSPC SP 16 "Brush-off Blast Cleaning of Coated and Uncoated Galvanized Steel, Stainless Steels, and Non- ferrous Metals	SSPC SP 16 "Brush-off Blast Cleaning of Coated and Uncoated Galvanized Steel, Stainless Steels, and Non- ferrous Metals	SSPC SP 16 "Brush-off Blast Cleaning of Coated and Uncoated Galvanized Steel, Stainless Steels, and Non- ferrous Metals	
	Surface Preparation: FRP and Other Plastics:	Scuff sand to roughen surface				
	Primer:	1 coat, Carboguard 60 (4.0-6.0 mils DFT)	1 coat, 27 Typoxy, or equal (DFT 2.0-3.0 mils).	1 coat Devran 201H (DFT 2.0- 3.0 mils)	1 coat PPG Amercoat 370 4.0- 6.0 mils DFT	
	Finish:	2 coats, Carbethane 134 HG (DFT 4.0-6.0 mils per coat)	1 coat, 72/73 Endura-Shield (DFT 2.0-4.0 mils).	1 coat, Devthane 359 (DFT 2.0-4.0 mils)	1 coat PPG Amercoat 450 H3.0- 5.0 mils DFT	
J.	Exterior wall surfaces of ma	asonry block construction (Not pre	eviously Coated):			
	Not Used					
K.	Interior and exterior wood	surfaces such as soffits and trim:				
	Surface Preparation:	Surface must be clean and dry. Sand rough areas and fill knots and voids	Surface must be clean and dry. Sand rough areas and fill knots and voids	Surface must be clean and dry. Sand rough areas and fill knots and voids	Surface must be clean and dry. Sand rough areas and fill knots and voids	
	Primer:	1 coat, Sanitile 120 (DFT 2.0-3.0 mils)	1 coat, 10-99W Tnemec Primer (DFT 2.0-3.0 mils)	Exterior: 1 coat, Hydrosealer 6001 (DFT 1.4-1.7 mils); Interior: 1 coat, Gripper 3210 (DFT 1.8-2.1 mils)	1 coat, PPG Pro Block 17- 931Int/Ext Latex Primer Sealer. DFT 1.8-2.2 mils	
	Finish:	2 coats, Carbocrylic 3359 (DFT 2.0-3.0 mils DFT per coat)	2 coats, 1028/1029 Enduratone (DFT 2.0-3.0 mils per coat)	2 coats, Lifemaster Oil Semi- Gloss 1506 Lifemaster Oil Semi- Gloss (DFT 2.0-3.0 mils per coat)	2 coats, PPG Acrylic Metal Finish 7-374, (DFT 1.5-2.0 mils per coat) or 2 coats PPG 90-474 Pitt Tech DTM Acrylic Satin (2.0-4.0 mils per coat)	
L.	Plaster or drywall finished	walls and ceilings:				
	Not Used					
M.	Exposed pipe insulation					

	Wastewater						
		Carboline	Tnemec	AkzoNobel (International, Devoe, Glidden Professional)	PPG		
	Surface Preparation:	Surface must be clean and dry, no contamination.	Surface must be clean and dry, no contamination.	Surface must be clean and dry, no contamination.	Surface must be clean and dry, no contamination.		
	Finish:	2 coats, Carbocrylic 3359 (DFT 2.0-3.0 mils per coat)	2 coats, 6 Tneme-Cryl (DFT 2.0-3.0 mils)	2 coats, Devflex 4020 PF (DFT 2.0-3.0 mils per coat)	2 coat, PPG Acrylic Metal Finish 7-374, (DFT 1.5-2.0 mils per coat) or 2 coats PPG 90-474 Pitt Tech DTM Acrylic Satin (2.0-4.0 mils per coat)		
N.	Stained finish carpentry:						
	Not Used						

**END OF SECTION**