Appendix B-2

MSA Soil Borings

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nl8

Sample Log

Well/Boring MSA - C2829 Project Name and No. PPG Site 107

Site Location Jersey City, NJ Drilling Started 1218 Drilling Completed 1218

Total Depth Drilled 20 feet Hole Diameter 3 inches Sampling Interval 5 feet

Length and Diameter of Sampling Device 5' x 3" Type of Sampling Device Macro Core

Drilling Method Direct Push Drilling Fluid Used -

Drilling Contractor Cascade Driller Cascade Helper -

Prepared By N. Comrie Hammer Weight - Hammer Drop - inches

Sample Depth (feet below land surface) From	To	Sample Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample Description	PID (ppm)
0	5	4.0	0.0-2.0	FILL: SILT, some Sand, vf-m little gravel, f-m, trace	0.0
				debris, p. sorted, moist, grey. Brick + coal/cinders	0.0
			2.0-2.5	SCREENINGS	0.0
			2.5-5.0	SHINGLES	0
					0
					0
					0
					0
					0
5	10	4.5	5.0-5.5	FILL: ROCK	0
			5.5-6.5	WOOD	0
			6.5-6.8	CONCRETE and BRICK FRAGMENTS	0
			6.8-7.0	GRAVEL, f-m, some Sand, f-c, p. sorted, mat, grey 1/4" & COPR nodules*	0
			7.0-9.8	SILT, little concrete - gravel, f-m, p. sorted, rubble	0.0
			9.8-10.0	SAND and Debris, f-c, wet, black; glass fragments	0.0

* COPR nodules 3/8 - 1/8"

40-50% COPR

Shingles and COPR - slightly rounded

Sample Log (Cont.d)

Well/Boring MSA-C2829 Project Name and No. PPG 107

Prepared By N. Comrie

Sample Depth (feet below land surface) From	To	Sample Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample Description	PID (ppm)
10	15	4.5	10.0-11.7	SILT, some Sand, vf-f, poorly sorted, wet, red-brn	0
			11.7-12.0	Black (saturated) COAL - 16 meters	0
					0
			12.0-13.5	SILT, some Sand, vf-vc, little gravel, f-m, trace	0
				debris - wood pieces & fiber board (12')	0
			13.5-13.5	SILT, some Clay, little gravel, f-m, p. sorted, wet, brn	0
			13.5-14.5	SILT, trace Gravel, fine, p. sorted, wet, black, roots	0
			14.5-14.8	SLAG	0
					0
			14.8-15.0	SILT, some Clay, trace gravel, f-m, poorly	0
				sorted, wet, dark brown.	0
				UNDISTURBED	
15	20	5.0	15.0-16.5	CLAY, some Silt, trace Sand, f-m, p. sorted,	0
				moist, drk brn	0
			16.5-18.5	Clay, some Silt, trace Sand, vf-f, p. sorted	0
				moist, grey-blue; mottled.	0
			18.5-19.5	SAND, vf-c, some Gravel, f-m, little silt, p. sorted,	0
				wet, brown.	0
			19.5-20.0	SAND, vf-c, little gravel, f-m, poorly sorted,	0
				moist, red-brown	0

FILL

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Sample Log

PPG Site 107 (12/19/20)

Well/Boring MSA-B2027 Project Name and No. [redacted]

Site Location Jersey City [redacted] Drilling Started 9:30 Drilling Completed 10:05

Total Depth Drilled 15 feet Hole Diameter 3 inches Sampling Interval 5 feet

Length and Diameter of Sampling Device 5', 3" Type of Sampling Device Macro-Core

Drilling Method Direct Push Drilling Fluid Used ~~None~~

Drilling Contractor Cascade ~~Advanced Drilling, Inc.~~ Driller Cascade Helper —

Prepared By J Danzler ~~Christin Cifelli~~ Hammer Weight Not Applicable Hammer Drop N/A inches

Sample Depth (feet below land surface) From	To	Sample Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample Description	PID (ppm)
0'	5'	4.7'		0-0.5' DGA	0.1
				0.5-1' Fill; sand c to f; trace	0.1
				angular gravel; poorly sorted; dry;	0.1
				loose; trace wood fibers; dark brown; no	0.1
				odors	0.1
				1.0-3.75' Fill; shingles; dark gray;	0.1
				3.75-5' Fill; fine to medium sand;	0.1
				trace angular gravel; trace brick; moist;	0.1
				medium loose; grayish brown; poorly	0.1
				sorted; crushed stone at 4'	0.1
5'	10'	4.2'		5-7' crushed concrete; light gray,	0.0
				no odors;	0.0
				7-10' silty sand; f to vf; trace	0.0
				angular gravel; poorly sorted; trace clay	0.0
				at 9'; moist; medium dense; red-brown;	0.0
				dark gray at 7.5' + nodules (7.5'-8'); no odors	

only 1 readings

Sample Log (Cont.d)

PPG 107

Well/Boring: MSA-B2627 Project Name and No.: [redacted]

Prepared By: ~~C. Cifelli~~ J Denzler

Sample Depth (feet below land surface) From	To	Sample Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample Description	PID (ppm)
10'	15'	3.6'		10-11' Fill; sand; VC to f;	0.0
				some angular to sub-rounded gravel	0.0
				throughout; poorly sorted; dry;	0.0
				loose; dark gray; no odors	0.0
				11-13' Silty sand; vf; trace rounded	0.0
				gravel; poorly sorted; moist;	
				dense; brownish gray; crushed stone	
				@ 13.75'.	
				13-15' silty sand, very fine;	
				trace granules; poorly sorted; moist;	
~~15~~	~~20'~~			dense; trace shells; light brown gray;	
				no odors (Native)	

12/9

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Sample Log

Well/Boring MSA-C2627 Project Name and No. PPG Site 107

Site Location Jersey City, NJ Drilling Started 12/9/2020 Drilling Completed 12/9/2020

Total Depth Drilled 20 feet Hole Diameter 3 inches Sampling Interval 5 feet

Length and Diameter of Sampling Device 5' 3" Type of Sampling Device Macro Core

Drilling Method Direct Push Drilling Fluid Used -

Drilling Contractor Cascade Driller Cascade Helper -

Prepared By J Denzler / N Comrie Hammer Weight - Hammer Drop - inches

Sample Depth (feet below land surface) From	To	Sample Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample Description	PID (ppm)
0	5'	4.5'		0'-0.25' DGA	
				0.25'-1.0' FILL; SAND fine to coarse	
				little subangular gravel, poorly sorted	
				dry, loose, dark brown, no odors	
				1.0'-3.5 Shingles, dark gray black, no odors	
				3.5'-5.0' FILL; SAND fine to medium,	
				trace subangular gravel, crushed concrete	
				@ 4', trace crushed brick / trace crushed stone	
				poorly sorted, medium loose, moist, gray-brown, no odors	
				5.0-7.5' SAND medium to very fine,	
5'	10'			little silt, brick @ 5', little subangular gravel	
				poorly sorted, moist, medium dense, gray brown	
				ash and coal @ 7.5'	
				7.5'-10' SILTY SAND very fine, well sorted,	
				moist, dense, red-brown, no odors	

Sample Log (Cont.d)

Well / Boring MSA-02627

Project Name and No. PP16 107

Prepared By JDemzler IN Compliance

From	To	Sample Recovery	Sample Description	PID (ppm)
10'	15'		10'-12.5 SANDy SILT; fine to very fine, well sorted, wet, dense, red brown, no odors	
			12.5'-13.5' SILTY SAND, some subrounded gravel, poorly sorted, wet, dense; brown, no odors	
			13.5-14.0' Crushed stone, white, Quartz	
			14.0-15.0 FILL; slag, trace ash and coal moist, loose, dark gray, no odors	
			15.0'-16.0' FILL; SLAG trace ash, moist, loose dark gray, no odors	
15	20		16.0'-18.0 SILTY CLAY, well sorted (UND) moist gray brown, no odor - UnDisturbed Native materia/	
			18.'-20.0 UnDisturbed Native SILTY SAND, fine to medium well sorted, moist, dense, light gray brown, no odors	

12/9

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Sample Log

PPG Site 107

Well/Boring MSA-BC28 Project Name and No. [redacted]

Site Location Jersey City, NJ [redacted] Drilling Started 8:00 Drilling Completed 8:35

Total Depth Drilled 20 feet Hole Diameter +3 inches Sampling Interval 5 feet

Length and Diameter of Sampling Device 5', 3" Type of Sampling Device Macro-Core

Drilling Method Direct Push [redacted] Drilling Fluid Used None

Drilling Contractor Cascade [redacted] Drilling, Inc. Driller Cascade Helper –

Prepared By J Penzler / N Comrie [redacted] Hammer Weight [redacted] Hammer Drop N/A inches

Sample Depth (feet below land surface) From	To	Sample Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample Description	PID (ppm)
0'	5'	5.0'		0'-1' Fill; VF-M sand, trace angular - sub angular gravel, poorly sorted, loose, dry no odors, dark gray black	0.0
					0.0
					0.0
				1.0-3.2 Shingles - Fill, trace fine gravel black	4.0
					2.5
				3.2-5.0 Fill; fine to medium sand, little crushed stone, dense, moist, crushed red brick throughout grayish brown, no odors, wood fibers	0.8
					0.2
					0.2
					0.0
					0.0
5'	10'	3.7'		5-6.75 FILL; SAND fine to medium, trace sub rounded gravel, poorly sorted moist medium dense, greyish brown	0.0
					0.0
					0.0
				6.75-8.0 Crushed concrete / crushed slag	0.0
					0.0

Sample Log (Cont.d)

PPG Site 107

Well/Boring MSA-BC28 **Project Name and No.** ~~Rentokil Consolidated Laundry Site 30065148~~

Prepared By ~~C. Cifelli~~ J Denzler / N Cowrie

Sample Depth (feet below land surface) From	To	Sample Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample Description	PID (ppm)
5'	10'	3.7'		8.0-9.5 Silty Sand, fine-vfine, micaceous	0.0
				moist, ~~dense~~ med., reddish brown	0.0
				9.5-10' FILL; Coal and Ash, loose, dry, nodules found ~9.5'-10'	0.0
10'	15'	3.5'		10-11 Fill; sand coarse to medium (BRICK 10'-10.5' fill)	0.0
				some fine pebbles; poorly sorted; loose;	0.0
				dry; trace brick; trace ash; no odors;	0.0
				crushed stone	0.0
				11-12 Fill; silty sand; vf to f;	0.0
				plastic; medium dense; moist; dark	0.0
				grayish brown; no odors; ~~12-15 Fill sand, c to f; coal to; moist, loose~~	0.0
15'	20'	5'		12-14 - Fill; sand; c to f; crushed	0.0
				slag/coal throughout; moist; loose;	0.0
				dark gray; no odors	0.0
				14-15 - Sand; f to m; trace granules, brick, slag @ 14.15;	0.0
				poorly sorted; moist; m dense; no odors	
16'	20			~~(UNM) Undisturbed Native material~~	0.0
				15-16 - Fill; slag; poorly sorted;	0.1
				loose; moist; dark gray to black; no	0.0
				odors	0.0
				16-20 - undisturbed native material	0.0

Scanned with CamScanner

12/20

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Sample Log

Well/Boring MSA-BC26 Project Name and No. PPG Site 107

Site Location Jersey City, NJ Drilling Started 0820 Drilling Completed 0910

Total Depth Drilled 20 feet Hole Diameter 3 inches Sampling Interval 5 feet

Length and Diameter of Sampling Device _____ Type of Sampling Device ~~Direct Push~~ Macro Core

Drilling Method Direct Push Drilling Fluid Used _____

Drilling Contractor Cascade Driller _____ Helper _____

Prepared By J Demler Hammer Weight _____ Hammer Drop _____ inches

Sample Depth (feet below land surface) From	To	Sample Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample Description	PID (ppm)
0	5	3 ft		* Refusal met at 3ft - Location Adjusted	NA
0	5	3.8 ft		0 - 0.25' DGA	0.0
				0.25 - 2.0' Sand c to f; little subangular gravel;	0.0
				poorly sorted; dry; loose; dark brown; no odors	0.0
				2.0 - 4.5' Shingles: dark gray, no odors, dense	0.0
				4.5 - 5.0' Sand f to m; trace angular gravel;	0.0
				poorly sorted; moist; medium dense; gray-brown *moisture @ 4.5' - 1/8" - 1/4" ~55	
5	10	2.9 ft		5 - 6.5' Sand f to m; trace gravel; poorly	0.0
				sorted; poorly sorted; medium dense, crushed	0.0
				stone @ 6; no odors; gray-brown	0.0
				6.5 - 7' concrete (crushed)	0.0
				7 - 10' silty sand; vf; well sorted; moist;	0.0
				dense; red-brown; no odors;	
10	15	2.8 ft ~~2.0 ft~~ (10)		10 - 11' Sand & silt; some angular gravel;	0.0
				crushed stone; wet; loose; dark gray; no odors *no grabs suspected - rinsed out	0.0

Sample Log (Cont.d)

Well/Boring MJA-BC26 Project Name and No. PPG Site 107

Prepared By T Denzer

Sample Depth (feet below land surface) From	To	Sample Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample Description	PID (ppm)
10	15	2.8ft		11-13' silty sand; gravel (angular); poorly	0.0
				sorted; wet; m dense; black; no odors;	0.0
				trace fibers	0.0
				13'-15' Sand; vc to m; trace silt; wet; medium loose;	
15	20	2.5ft		poorly sorted, dark gray; crushed stone @ 15'	
				15-16' sand and gravel; trace silt; poorly	0.0
				sorted; wet; loose; dark gray	0.0
				16-18' silty clay/clay-silt; ~~trace gravel~~ well sorted;	0.0
				wet; dense; light gray-brown; no odors;	0.0
				native material	0.0
				18-20' silt; trace f sand; well sorted;	
				moist; dense; light gray-brown; no	
				odors	

1 V2/10

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Sample Log

PPG Site 107

Well/Boring MSA-B2425 Project Name and No. [redacted]

Site Location Jersey City [redacted] New Jersey Drilling Started 1035 Drilling Completed 1115

Total Depth Drilled 20 feet Hole Diameter 3 inches Sampling Interval 5 feet

Length and Diameter of Sampling Device 5', 3" Type of Sampling Device Macro-Core

Drilling Method Direct Push Drilling Fluid Used None

Drilling Contractor Cascade [redacted] Driller Cascade Helper —

Prepared By T Denzler [redacted] Hammer Weight Not Applicable Hammer Drop N/A inches

Sample Depth (feet below land surface) From	To	Sample Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample Description	PID (ppm)
0	5	4.7		0-0.75' DGA *nodules @ 2.75', 3.25', ~10	0.0
				0.75 - 2.75' Sand f to m; trace fine gravel;	0.0
				rocks; poorly sorted; dry; dark brown;	0.0
				no odor; shingles *nodules @ 3.25-3.75, ~41/2"-42"	0.0
				2.75 - 5' Sand f to m; trace angular	0.0
				gravel; brick @ 3.25'; wood @ 4.5'; no odors; poorly sorted; moist; m dense; gray-brown	
5	10	3.9		5-9' Sand f to m; brick at 6.5';	0.0
				trace angular gravel; poorly sorted; no	0.0
				odors; moist; m dense; red-brown *nodules @ 6.0-6.5 ~5	0.0
				9-10' Silty sand vf; well sorted;	0.0
				moist; loose; shells; dense; no	0.0
				odors; light gray-brown	
				10-14' Silty sand; trace clay; well	
10	15	2.6		sorted; moist; dense; light gray-brown;	0.0
				trace granules; no odors	0.0

Sample Log (Cont.d)

PPG Site 107

Well/Boring MA-B2425 Project Name and No. ~~Rentokil Consolidated Laundry Site 30055148~~

Prepared By I. Denzler (TV) ~~C. Cirelli~~ (TV)

Sample Depth (feet below land surface) From	To	Sample Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample Description	PID (ppm)
10	15'	3.0		14-15' silty sand; little angular gravel;	0.0
				poorly sorted; moist; dense;	0.0
				light gray-brown; no odors	0.0
				Native/UND @ 10'	
15	20'	5.0		15-17.25' silt trace sand; trace	0.0
				gravies; poorly sorted; wet;	0.0
				dense; trace gravel; gray-brown;	0.0
				no odors	0.0
				17.25'-20' silt; trace vf sand;	0.0
				very dense; well sorted; moist;	
				no odors; gray-green to light brown;	
				crushed stone @ 19'	

12/10

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Sample Log

Well/Boring MSA-C2425 Project Name and No. PPG Site 107

Site Location Jersey City, NJ Drilling Started 1340 Drilling Completed 1425

Total Depth Drilled _____ feet Hole Diameter 3 inches Sampling Interval 5 feet

Length and Diameter of Sampling Device 5', 3" Type of Sampling Device Macro Core

Drilling Method Direct Push Drilling Fluid Used _____

Drilling Contractor Cascade Driller Cascade Helper -

Prepared By T Denzler Hammer Weight NA Hammer Drop NA inches

Sample Depth (feet below land surface) From	To	Sample Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample Description	PID (ppm)
0	5	4.7		0-0.5' D6A	0.0
				0.5-1.5' Sand c to f; trace silt; trace	0.0
				angular gravel; poorly sorted; dry; loose;	0.0
				dark brown; no odors	0.0
				1.5-3.5' shingles; coarse gravel;	0.0
				black * 3.5-4' ~~suspect~~ 12 nodules 1/8"-1/4"	
5	10	4.5		3.5-5' f sand; crushed stone @	0.0
				4.5'; little angular gravel; trace brick	0.0
				(fill); poorly sorted; dry, no odors * nodule at 5-6 not found	0.0
				5-5.5' concrete (crushed); gray-brown	0.0
				5.5-6.5' Sand f to m; ~~trace of~~ little	0.0
				angular gravel; dry; medium loose;	
10	15	2.7		poorly sorted; gray-brown; brick @	0.0
* description on pg 2				6.5-7.5'	0.0
				7.5-10' silt; trace sand vf; trace subrounded gravel; moist; m dense; trace brick; red-brown;	0.0

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Sample Log

Well/Boring MSA-C2425 (continued) Project Name and No. PPG Site 107

Site Location _____ Drilling Started _____ Drilling Completed _____

Total Depth Drilled _____ feet Hole Diameter _____ inches Sampling Interval _____ feet

Length and Diameter of Sampling Device _____ Type of Sampling Device _____

Drilling Method _____ Drilling Fluid Used _____

Drilling Contractor _____ Driller _____ Helper _____

Prepared By T Renzler Hammer Weight _____ Hammer Drop _____ inches

Sample Depth (feet below land surface) From	To	Sample Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample Description	PID (ppm)
10	15			10-13' Fill (slag + gravel); poorly	0.0
(continued)				sorted; wet; loose; dark gray	0.0
				13-15' silty sand vc to f; little	
				angular gravel; poorly sorted; roots /	
				fibrous material @ 14.5; ash and coal	
				@ 15'; dark gray; slight odor	
15	20	4.5		15-16' gravel and granules; moist /	
				wet; loose; no odors;	0.0
				16-19' UND / native material; silty	0.0
				clay; trace sand; trace pebbles	0.0
				(rounded); poorly sorted, wet;	0.0
				very dense; dark gray	0.0
				19-20' silt; well sorted, moist;	
				very dense; light gray	

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Sample Log

Well/Boring: MSA-BC30 | Project Name and No.: PPG Site 107

Site Location: Jersey City, NJ | Drilling Started: 0950 | Drilling Completed: 1030

Total Depth Drilled: 20 feet | Hole Diameter: 3 inches | Sampling Interval: 5 feet

Length and Diameter of Sampling Device: 5', 3" | Type of Sampling Device: Macro Core

Drilling Method: Direct Push | Drilling Fluid Used: —

Drilling Contractor: Cascade | Driller: Cascade | Helper: —

Prepared By: J Denzler | Hammer Weight: — | Hammer Drop: — inches

Sample Depth (feet below land surface) From	To	Sample Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample Description	PID (ppm)
0	5	4.4		0.0-0.5' DGA	0.6
				0.5-1.0' Sand f to c; some angular gravel; dry; loose; dark brown	0.0
				1.0-2.75' Shingles; dark layers; trace gravel * 2.75-3.25' nodules no clay	0.0
				2.75-5.0' Sand f to m; little angular gravel; crushed stone @ 4.5'; SD	
5	10	4.1		~~5.0-8.0' silt; sand; trace subrounded gravel, poorly sorted;~~ * brick @ 7.0'	0.0
				5.0-8.5' Silty sand; trace subrounded gravel; poorly sorted; moist; medium dense; red-brown	0.0
				8.5-11' Sand c to f; trace silt; some angular gravel; poorly sorted; dark gray brown; wet @ 11'	0.0
10	15	3.3			0.0

Sample Log (Cont.d)

Well/Boring MSA-BC8 Project Name and No. PPG Site 107

Prepared By J Denzler

Sample Depth (feet below land surface) From	To	Sample Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 Inches	Sample Description	PID (ppm)
10	15	*cont.		11-15' Sand and silt; trace	0.0
				subangular gravel; poory sorted;	0.0
				wet; dense; coarse sand + gravel	0.0
				@ 14'; no odors; dark gray	
15	20	2.8		15-20' Native material / UND	0.0
					0.0
					0.0
					0.0
					0.0

12/11

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Sample Log

Well/Boring B2529 Project Name and No. PPG Site 107

Site Location Jersey City, NJ Drilling Started 0800 Drilling Completed 0830

Total Depth Drilled 20 feet Hole Diameter 3 inches Sampling Interval 5 feet

Length and Diameter of Sampling Device 5', 3" Type of Sampling Device Macro Core

Drilling Method Direct Push Drilling Fluid Used —

Drilling Contractor Cascade Driller Cascade Helper —

Prepared By T Demler Hammer Weight — Hammer Drop — inches

Sample Depth (feet below land surface) From	To	Sample Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample Description	PID (ppm)
0	5	4.8		0-0.5' Sand; some angular gravel poorly sorted; moist; loose; gray;	0.0
				fill	0.0
				.5-2' shingles; gray; trace gravel; angular	0.0
					0.0
				2-5' sand f to m; trace angular	
5	10	4.4		gravel; brick @ 5.5'; poorly sorted;	0.0
				moist; loose; no odors	0.0
				5-6.5' Sand medium, crushed	0.0
				asphalt @ 6-6.25'; trace granules + trace angular gravel	0.0
				Rebobles; poorly sorted; moist, medium loose; gray-brown; wood @ 6'	0.0
				6.5-7.5' Sand f to c; trace angular	
10	15	(20) 1.9 2.6		gravel; poorly sorted; moist; loose;	0.0
				dark gray; no odors	0.0
				7.5-6' Silt; trace fine sand; moist; dense; trace clay; light gray-brown	0.0

Sample Log (Cont.d)

Well/Boring B2829 Project Name and No. DPG SIR 107

Prepared By T Dreyer

Sample Depth (feet below land surface) From	To	Sample Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample Description	PID (ppm)
10	15	*cont.		*Looks like ~0.7' of stuff from higher interval	0.0
				10-15' Silt; some clay; well sorted;	0.0
				wet @ 12'; dense; gray-brown; no odors; native UND @ 15'	
15	20	5.0		15' - 18' silt; some clay; well sorted;	0.0
				dense; gray-brown; no odors. UND	0.0
				18 - 20' Silty clay; trace vf sand;	0.0
				trace rounded gravel; poorly sorted;	0.0
				moist; dense; light gray - red	0.0
				brown	

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n/11

Sample Log

Well/Boring MSA-B3031 Project Name and No. PPG Site 107

Site Location Jersey City, NJ Drilling Started 1350 Drilling Completed 1430

Total Depth Drilled _____ feet Hole Diameter 3 inches Sampling Interval 5 feet

Length and Diameter of Sampling Device 5', 3" Type of Sampling Device MacroCore

Drilling Method Direct Push Drilling Fluid Used _____

Drilling Contractor Cascade Driller Cascade Helper —

Prepared By J Denzler Hammer Weight — Hammer Drop — inches

Sample Depth (feet below land surface) From	To	Sample Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample Description	PID (ppm)
0	5	4.7		0-0.5' Sand f to m; trace granules;	0.0
				trace angular gravel; moist; loose; roots;	0.0
				poorly sorted; dark brown	0.0
				0.5-2.5' shingles; trace gravel; dark	0.0
				brown - black *3.75-4' purple concrete	0.0
				2.5-7' sand; f to m; some angular	
5	10	3.5		gravel; trace silt; poorly sorted; moist;	0.0
				medium dense; brick @ 7.5'; crushed	0.0
				stone @ 4'; gray-brown; no odors	0.0
				7-7.5' Sand f to vf; trace subrounded	0.0
				gravel; poorly sorted; trace silt; moist;	0.0
				m dense; red-brown	
10	15	4.9		7.5-9' Silt; trace fine (silty sand);	0.0
				trace granules; poorly sorted; moist;	0.0
				dense; gray brown; no odors	0.0

Sample Log (Cont.d)

Well/Boring: MSA-B3031 Project Name and No.: PPG Site 107

Prepared By: J Pemzler

Sample Depth (feet below land surface) From	To	Sample Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample Description	PID (ppm)
				9-10' Silty sand; trace angular gravel (2")	0.0
				crushed stone; poorly sorted; moist;	0.0
				dense	
15	20	5.0		UND/native starting @ 10'	0.0
				10 - 13' silty sand; trace subrounded	0.0
				gravel; poorly sorted; wet; dense;	0.0
				gray-brown; no odors	0.0
				13 - 18.4' Silt; fine sand / vf;	0.0
				well sorted (20); trace rounded gravel	0.0
				poorly sorted; wet; dense; no	
				odors; gray-brown	
				18.4 - 20' sand vf; trace silt;	
				well sorted; moist; very dense;	
				light gray to red-brown; no	
				odors; coarsening downward	

12/14

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Sample Log

Well/Boring MSA-B2122 Project Name and No. PPG Site 107

Site Location Jersey City, NJ Drilling Started 1400 Drilling Completed 1430

Total Depth Drilled 20 feet Hole Diameter 3 inches Sampling Interval 5 feet

Length and Diameter of Sampling Device 5', 3" Type of Sampling Device Macro Core

Drilling Method Direct Push Drilling Fluid Used -

Drilling Contractor Cascade Driller Cascade Helper -

Prepared By J Denzler Hammer Weight (lbs) - Hammer Drop - inches

Sample Depth From	To	Sample Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample Description	PID (ppm)
0	5	4.9'		0-.5' DGA	0.0
				.5-1' Sand F to C; some angular	0.0
				gravel; poorly sorted; moist;	0.0
				loose (Fill)	0.0
				1-2.75' Shingles (Fill) * nodules @ 2.75-3.25 2 total	0.0
				2.75-5' Sand F to C; subangular	0.0
				gravel; trace brick @ 4'; concrete	0.0
				@ 3.5'; moist; loose; dark gray-	20.0
				brown; no odors (Fill) * nodules @ 3.25-3.75 10 total	0.0
				5-8' Sand F to C; trace angular gravel;	0.0
5	10	4.5'		trace silt; poorly sorted; crushed	0.0
				concrete @ 5.25'; gray-brown	0.0
				(Fill) * nodules @ 6.0-6.5' 10 total 1/8-1/3"	0.0
				8-13.5' Silty sand; trace subangular	0.0
				gravel; trace clay; poorly sorted;	0.0

Sample Log (Cont.d)

Well/Boring: MSA-B2122
Prepared By: J Demler
Project Name and No.: PPG Site 107

Sample Depth (feet below land surface) From	To	Sample Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample Description	PID (ppm)
5	10	cont.		8-13.5' cont. moist; dense; red-	
				Brown; no odors; 24" of sluff	
				(Fill)	
10	15	4.2'		13.5-15' UND; clay; trace silt;	0.0
				well sorted; wet; very dense;	0.0
				light gray-brown	0.0
				15-18.5' UND; silty clay; well	0.0
				sorted; wet; very dense; light	0.0
				gray-brown	
15	20	4.8'		18.5-20' UND; silty sand; some	0.0
				clay; red-brown; no odors	0.0
					0.0
					0.0
					0.0

12/14

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Sample Log

Well/Boring MSA-C2223 Project Name and No. PPG Site 107

Site Location Jersey City, NJ Drilling Started 10:35 Drilling Completed 11:05

Total Depth Drilled 20 feet Hole Diameter 3 inches Sampling Interval 5 feet

Length and Diameter of Sampling Device 5'; 3" Type of Sampling Device MacroCore

Drilling Method Direct Push Drilling Fluid Used -

Drilling Contractor Cascade Driller Cascade Helper -

Prepared By J Denzler Hammer Weight - Hammer Drop - inches

Sample Depth (feet below land surface) From	To	Sample Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample Description	PID (ppm)
0	5	4.6'		0-.5' DGA;	0.0
				0.5-1' Angular gravel; poorly	0.0
				sorted; dark gray (Fill)	0.0
				1-3' Shingles (Fill) *no dupes @ 4-4.5' 18 total ~~DUP 1 total~~	0.0
				3-5' Sand C to F; some angular	0.0
				gravel; poorly sorted; moist;	
5	10	3.8'		medium dense; crushed stone @	0.0
		*resistance/ refusal met		4.5'; gray-brown (Fill) *no dupes @ 4.5-5' 8 total ~~DUP 1 total~~	0.0
		; had to adjust twice		5-6.5' Same as 3-5' (Fill) *no dupes @ 5-5.5' 17 total	0.0
				6.5-10' Silty sand VF; well sorted;	0.0
				moist; dense; brick @ 7.5' (Fill)	0.0
				~9-10' sand/silt VF; trace	
				granules; trace angular gravel;	
				poorly sorted; moist; gray-brown	
				(Fill)	

Sample Log (Cont.d)

Well/Boring MSA-C2223 Project Name and No. PPG Site 107

Prepared By J Denzler

Sample Depth (feet below land surface) From	To	Sample Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample Description	PID (ppm)
10	15	1.5'		10-15' Sand F to M; angular	0.0
		* low recovery		gravel; poorly sorted; loose;	0.0
		due to refusal		brown (Fill)	0.0
				15-16' Sand M to C; subangular	0.0
				gravel; poorly sorted; wet;	0.0
				loose; gray-brown (Fill)	
15	20	4.1'		16-18.5' UND; Silty clay; well	0.0
				sorted; wet; dense; light	0.0
				gray	0.0
				18.5-20' UND; Silty Sand;	0.0
				trace rounded gravel; wet;	0.0
				dense; red-brown; no odors	

12/14

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Sample Log

Well/Boring MSA-B2223 Project Name and No. PPG Site 107

Site Location Jersey City, NJ Drilling Started 9:15 Drilling Completed 9:40

Total Depth Drilled 20 feet Hole Diameter 3 inches Sampling Interval 5 feet

Length and Diameter of Sampling Device 5', 3" Type of Sampling Device Macro Core

Drilling Method Direct Push Drilling Fluid Used -

Drilling Contractor Cascade Driller Cascade Helper -

Prepared By J Denzler Hammer Weight - Hammer Drop - inches

Sample Depth (feet below land surface) From	To	Sample Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample Description	PID (ppm)
0	5	4.5'		0-.5' DGA	0.0
				.5-3' Shingles (Fill) *nodules @ 68 total @ 3-3.5'	0.0
				3-5' Sand F to VC; *trace angular	0.0
				gravel; trace granules; trace brick;	0.0
				poorly sorted; moist; loose; no	0.0
5	10	4.7'		odors; gray-brown (Fill) *nodules @ 4-4.5' 13 total	0.0
				5-5.5' Sand; poorly sorted;	0.0
				trace angular gravel; moist; loose;	0.0
				dark brown (Fill)	0.0
				5.5-6.5' Wood (Fill)	0.0
10	15	3.8'		6.5-7.5' Sand F to M; crushed	0.0
				stone @ 7' + concrete; poorly sorted;	0.0
				dense; gray-brown (Fill)	0.0
				7.5-10' silty sand; trace angular	0.0
				gravel; moist; red-brown (Fill)	0.0

Sample Log (Cont.d)

Well/Boring MSA-B2223 Project Name and No. PP6 Site 107

Prepared By J Demler

Sample Depth (feet below land surface) From	To	Sample Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample Description	PID (ppm)
15	20	3.5'		10-14.5' Silty sand; little angular	0.0
				gravel; poorly sorted; trace clay;	0.0
				dense; red-brown; wet @ 13'	0.0
				(Fill)	0.0
				14.5-15' Silty clay; trace sand;	0.0
				trace angular gravel; dense;	
				moist; gray-brown (Fill)	
				15-16' Silty clay; trace VF sand;	
				trace angular gravel; poorly sorted;	
				wet; dense; light gray *UND	
				@ 16'	
				16-20' UND; clay with silt;	
				well sorted; moist; dense; no	
				odors; light gray-brown	

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Sample Log

Well/Boring: MSA-C3031 | Project Name and No.: PPG Site 107

Site Location: Jersey City, NJ | Drilling Started: 8:10 | Drilling Completed: 8:30

Total Depth Drilled: 20 feet | Hole Diameter: 3 inches | Sampling Interval: 5 feet

Length and Diameter of Sampling Device: 5', 3" | Type of Sampling Device: Macro Core

Drilling Method: Direct Push | Drilling Fluid Used: -

Drilling Contractor: Cascade | Driller: Cascade | Helper: -

Prepared By: J Demeler | Hammer Weight: - | Hammer Drop: - inches

Sample Depth (feet below land surface) From	To	Sample Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample Description	PID (ppm)
0	5	4.6'		0-.5' Sand F to C; trace silt;	0.0
				some angular gravel; poorly sorted;	0.0
				wet; loose; dark gray (Fill)	0.0
				.5-2.25' Shingles (Fill)	0.0
				2.25-5' Sand F to C; trace silt;	0.0
5	10	3.8'		trace angular gravel; trace brick @	0.0
				4'; poorly sorted; moist; no odors;	0.0
				gray-brown (Fill)	0.0
				5-7.5' Same as 2.25-5'; brick @	0.0
				7'; slag @ 6.5'; gray-brown (Fill)	0.0
10	15	1.3'		7.5-10' Silt; F Sand; trace	0.0
		* minimal recovery		subrounded gravel; poorly sorted;	0.0
		due to refusal		moist; medium dense; red-brown	0.0
				(Fill)	0.0
				10-15.5' Sand F to M; slag; wet (Fill)	0.0

Sample Log (Cont.d)

Well/Boring MSA-C3031 Project Name and No. PP6 Site 107

Prepared By J Denzler

Sample Depth (feet below land surface) From	To	Sample Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample Description	PID (ppm)
15	20	4.2'		15.5-16.5' UND; silt; trace clay;	0.0
				well sorted; moist; dense; gray-	0.0
				brown; no odors	0.0
				16.5-19.5' UND; silty sand;	0.0
				some clay; well sorted; moist;	0.0
				dense; light gray to light brown	
				19.5-20' Sand; some silt; trace	
				gravel; poorly sorted; red-brown;	
				UND	

12/15

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Sample Log

Well/Boring MSA-C2122 Project Name and No. PPG Site 107

Site Location Jersey City, NJ Drilling Started 8:00 Drilling Completed 8:30

Total Depth Drilled 20 feet Hole Diameter 3 inches Sampling Interval 5 feet

Length and Diameter of Sampling Device 5', 3" Type of Sampling Device Macro Core

Drilling Method Direct Push Drilling Fluid Used -

Drilling Contractor Cascade Driller Cascade Helper -

Prepared By J Denzler Hammer Weight - Hammer Drop - inches

Sample Depth (feet below land surface) From	To	Sample Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample Description	PID (ppm)
0	5	4.4'		0-.5' DGA	0.0
				.5-1' Sand F to C; angular gravel;	0.0
				poorly sorted; trace silt; dark	0.0
				gray; no odors (Fill)	0.0
				1-3' Shingles (Fill)	0.0
5	10	4.8'		3-5' Sand F to M; trace silt;	0.0
				some angular gravel; poorly sorted;	0.0
				moist; gray-brown; trace brick @	0.0
				4'; slag (Fill)	0.0
				5-7' same as 3-5'; ~4" of sluff;	0.0
10	15	3.0'		slag @ 6.75'	0.0
				7-10' silty sand VF; crushed stone	0.0
				@ 8'; brick @ 8.75'; trace angular	0.0
				gravel; poorly sorted; moist; red-	0.0
				brown (Fill)	0.0

Sample Log (Cont.d)

Well/Boring: MSA-C2122 Project Name and No.: PPG Site 107

Prepared By: J Denzler

Sample Depth (feet below land surface) From	To	Sample Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample Description (* modules @ 12-12.5', 2 total @ 118')	PID (ppm)
15	20	4.0'		10-14' Same as 7-10'; wet @ 13';	0.0
				brick @ 14' (Fill)	0.0
				14-15' Sand VC, angular gravel;	0.0
				slag; wet; dark gray (Fill)	0.0
				15-15.5' Same as above; * UND	0.0
				starts @ 15.5'	
				15.5-18' UND; silty clay; trace	
				fine rounded pebbles; poorly sorted;	
				wet; dense; light gray-brown	
				18-20' UND; silty sand; trace clay;	
				trace subrounded gravel; wet; very	
				dense; red-brown; no odors	

Appendix D

Air Monitoring Reports

Appendix D-1

Weekly Real-Time Data Reports

Weekly Air Monitoring Summary

Client: **PPG Industries**

Location: **Site 107: Fashionland Site - Jersey City, NJ**

This weekly air monitoring report includes both tabular information and written discussions summarizing the ambient air quality data collected in accordance with the Air Monitoring Plan for the above-referenced project and reporting period. The following information is provided in the data summary:

- **Table 1:** Site-Specific Alarm Levels;
- **Table 2:** Weekly Real-Time PM_{10} Data Summary;
- **Table 3:** Weekly Hand-Held Data Summary;
- **Table 4:** Weekly Elevated Readings Summary for PM_{10};
- **Table 5:** Program-to-Date Average Concentrations for Hexavalent Chromium, Total Dust, and Real-Time PM_{10};
- **Figure 1:** Meteorological Data; and
- **Figure 2:** Station Location Map.

This report covers real-time air monitoring from November 30 through December 6, 2020 at the Fashionland Site (Site). Real-time air monitoring is divided into three types of monitoring including; perimeter air monitoring (at the site boundaries), meteorological monitoring, and hand-held monitoring. The air monitoring report details results associated with the site, consisting of 5 stations and periodic hand-held monitoring. See Figure 2 for station locations.

Perimeter air monitoring includes the following:

- Real-time 15-minute average PM_{10} readings at each location during the work day;
- Periodic hand-held readings during remedial activities;
- Time integrated 8-to-10-hour Total Dust and Hexavalent Chromium laboratory sampling;
- Time integrated 24-hour Total Dust and Hexavalent Chromium laboratory sampling; and
- Meteorological measurements of 15-minute average wind speed, relative humidity, and temperature are recorded onsite at Air Monitoring Station 3.

Summary of Real-Time Air Monitoring Results for PM_{10} Concentrations

15-minute Time Weighted Average (TWA) PM_{10} Site action levels are shown in Table 1. The maximum 15 minute TWA PM_{10} readings are shown in Table 2. The maximum hand-held PM_{10} concentrations are shown in Table 3. Elevated readings above the Site alarm levels are presented and explained in Table 4, if applicable.

Summary of the Program-to-Date Integrated Sampling and Real-Time Air Monitoring Results

Integrated sampling results for hexavalent chromium (Cr^{+6}) and total dust are updated when available. Program-to-date average concentrations for integrated Cr^{+6}, total dust, and real-time PM_{10} readings are shown in Table 5.

Summary of Meteorological Monitoring

The time series plots of wind speed, temp, and relative humidity for the report period are shown in Figure 1.

Table 1: Site-Specific Action Levels

Alarm Levels	Alert Level (15 minute TWA)	Action Level (15 minute TWA)
PM_{10}	255 µg/m³	339 µg/m³

Table 2: Weekly Real-Time PM_{10} Data Summary

Maximum 15-Minute PM_{10} TWA (Action Level: 339 µg/m³)				
Date	**AMS 1**	**AMS 2**	**AMS 3**	**AMS 4**
11/30/2020	40.9	120.0	44.3	36.7
12/1/2020	22.3	51.2	28.0	26.6
12/2/2020	6.5	8.4	9.3	13.6
12/3/2020	25.5	38.0	24.6	29.5
12/4/2020	23.9	26.1	27.4	27.1
12/5/2020	27.3	30.4	31.3	30.2
12/6/2020	3.2	6.0	5.3	10.0
Weekly Statistics				
Max	40.9	120.0	44.3	36.7
Average	9.7	12.2	12.7	12.0

Note: Highlighted cells indicate exceedance of the action level.

Table 3: Weekly Hand-Held Data Summary for PM_{10} Concentration

Maximum Instantaneous Hand-Held PM_{10} Concentration			
Date	**PM_{10} (µg/m³)**	**Time**	**Location**
11/30/2020	36	11:00	AMS2
12/1/2020	20	9:00	AMS3
12/2/2020	15	13:00	AMS3
12/3/2020	22	10:00	AMS1
12/4/2020	24	8:00	AMS4

Table 4: Weekly Elevated Readings Summary

Location	Date	Time	Weather Conditions	Elevated Concentration	Explanation
N/A	N/A	N/A	N/A	N/A	N/A

Table 5: Program-to-Date Average Concentrations for Hexavalent Chromium, Total Dust, and Real-Time PM_{10} Summary

Program-to-Date Averages (Cr^{+6} & Total Dust Results from 11/30/20-12/4/20)				
	AMS 1	**AMS 2**	**AMS 3**	**AMS 4**
Cr^{+6} Concentration (ng/m³)	6.1	6.2	2.7	4.7
Total Dust Concentration (µg/m³)	59.3	61.1	26.4	46.1
Real-Time PM_{10} (µg/m³)	9.7	12.2	12.7	12.0

ng/m³ - Nanograms per cubic meter NA - Not Applicable

µg/m³ - Micrograms per cubic meter

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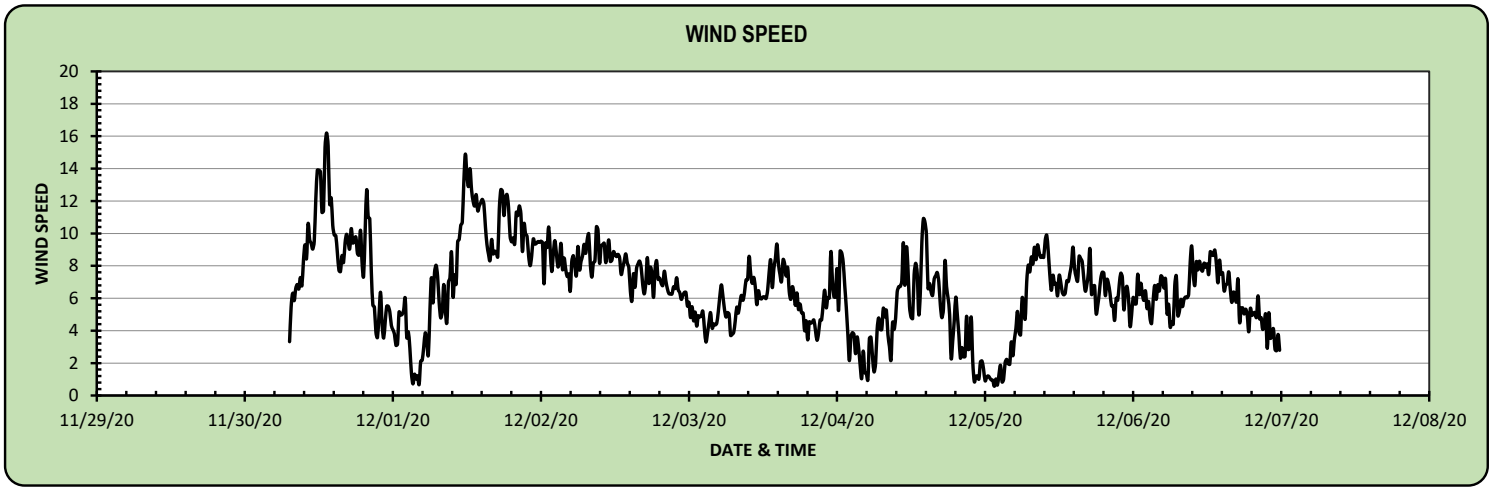
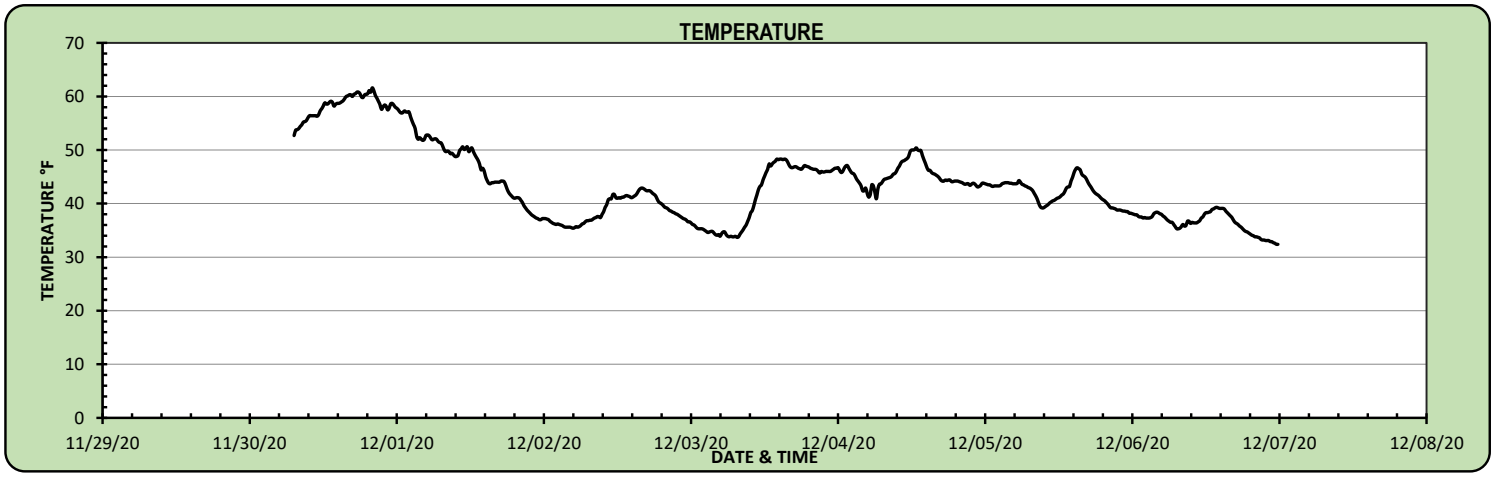
Figure 1: Meteorological Data





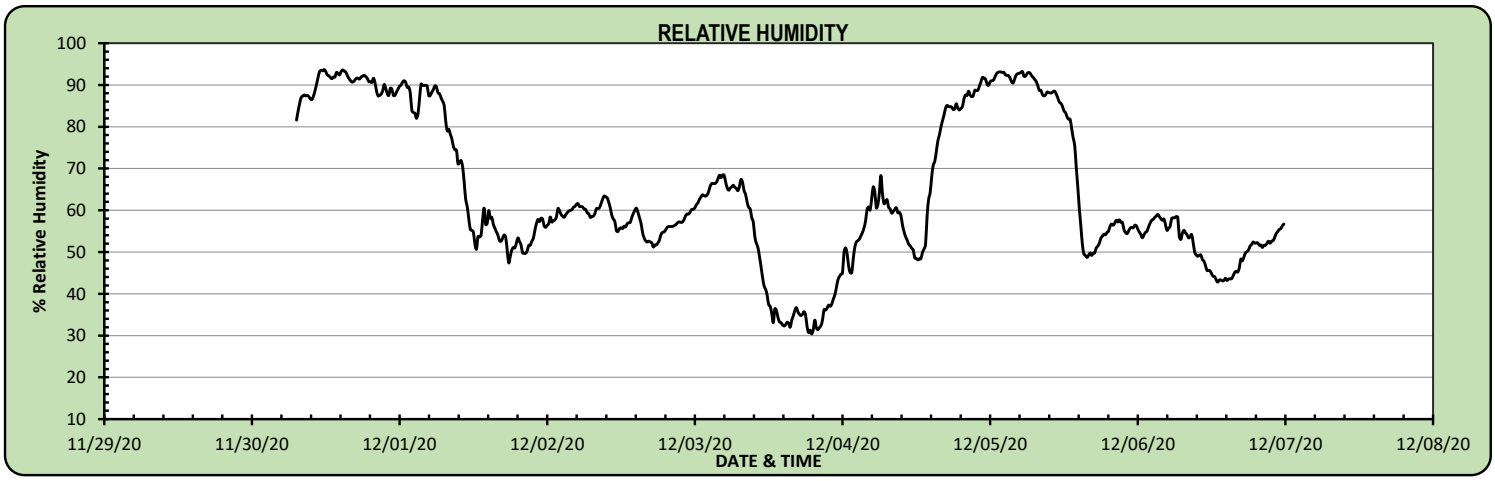


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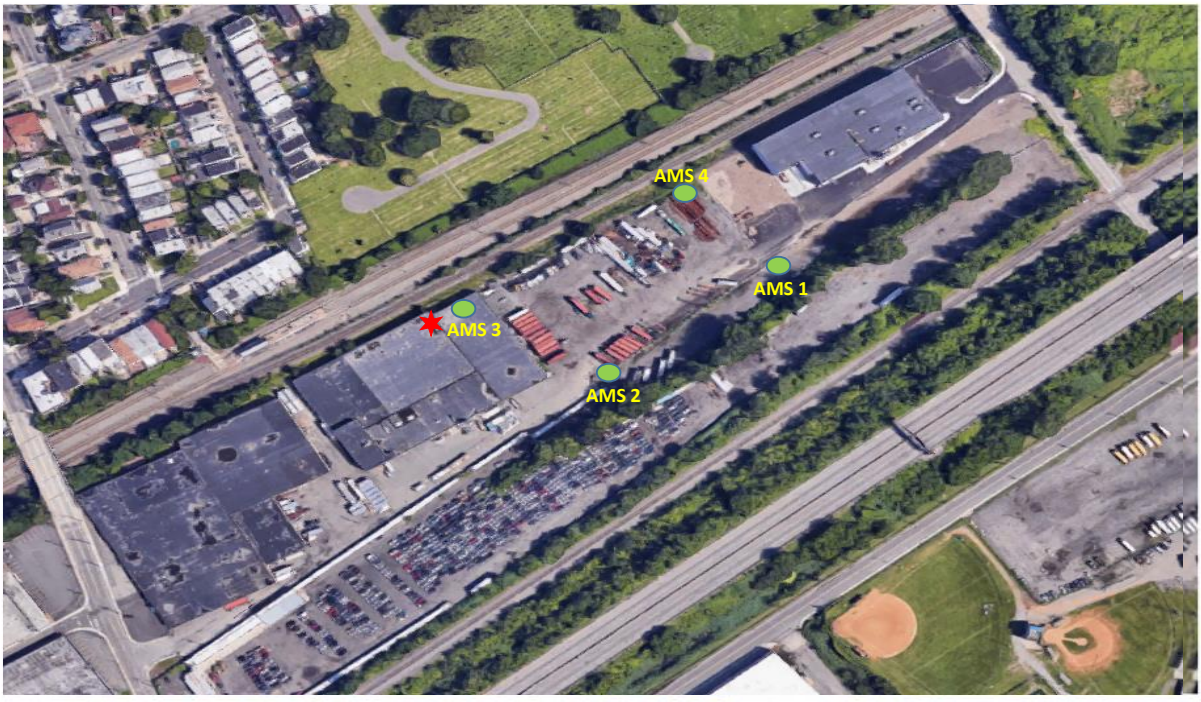
Figure 2: Station Location Map



Weekly Air Monitoring Summary

Client: **PPG Industries**

Location: **Site 107: Fashionland Site - Jersey City, NJ**

This weekly air monitoring report includes both tabular information and written discussions summarizing the ambient air quality data collected in accordance with the Air Monitoring Plan for the above-referenced project and reporting period. The following information is provided in the data summary:

- **Table 1:** Site-Specific Alarm Levels;
- **Table 2:** Weekly Real-Time PM_{10} Data Summary;
- **Table 3:** Weekly Hand-Held Data Summary;
- **Table 4:** Weekly Elevated Readings Summary for PM_{10};
- **Table 5:** Program-to-Date Average Concentrations for Hexavalent Chromium, Total Dust, and Real-Time PM_{10};
- **Figure 1:** Meteorological Data; and
- **Figure 2:** Station Location Map.

This report covers real-time air monitoring from December 7 through December 13, 2020 at the Fashionland Site (Site). Real-time air monitoring is divided into three types of monitoring including; perimeter air monitoring (at the site boundaries), meteorological monitoring, and hand-held monitoring. The air monitoring report details results associated with the site, consisting of 4 stations and periodic hand-held monitoring. See Figure 2 for station locations.

Perimeter air monitoring includes the following:

- Real-time 15-minute average PM_{10} readings at each location during the work day;
- Periodic hand-held readings during remedial activities;
- Time integrated 8-to-10-hour Total Dust and Hexavalent Chromium laboratory sampling;
- Time integrated 24-hour Total Dust and Hexavalent Chromium laboratory sampling; and
- Meteorological measurements of 15-minute average wind speed, relative humidity, and temperature are recorded onsite at Air Monitoring Station 3.

Summary of Real-Time Air Monitoring Results for PM_{10} Concentrations

15-minute Time Weighted Average (TWA) PM_{10} Site action levels are shown in Table 1. The maximum 15 minute TWA PM_{10} readings are shown in Table 2. The maximum hand-held PM_{10} concentrations are shown in Table 3. Elevated readings above the Site alarm levels are presented and explained in Table 4, if applicable.

Summary of the Program-to-Date Integrated Sampling and Real-Time Air Monitoring Results

Integrated sampling results for hexavalent chromium (Cr^{+6}) and total dust are updated when available. Program-to-date average concentrations for integrated Cr^{+6}, total dust, and real-time PM_{10} readings are shown in Table 5.

Summary of Meteorological Monitoring

The time series plots of wind speed, temp, and relative humidity for the report period are shown in Figure 1.

Table 1: Site-Specific Action Levels

Alarm Levels	Alert Level (15 minute TWA)	Action Level (15 minute TWA)
PM_{10}	255 µg/m³	339 µg/m³

Table 2: Weekly Real-Time PM_{10} Data Summary

Maximum 15-Minute PM_{10} TWA (Action Level: 339 µg/m³)				
Date	**AMS 1**	**AMS 2**	**AMS 3**	**AMS 4**
12/7/2020	11.4	13.3	11.8	18.9
12/8/2020	7.6	11.0	7.2	14.9
12/9/2020	49.5	52.9	52.8	60.6
12/10/2020	51.1	54.5	54.3	62.6
12/11/2020	59.7	61.5	67.9	63.0
12/12/2020	144.9	136.3	134.3	116.6
12/13/2020	96.0	93.4	141.4	73.9
Weekly Statistics				
Max	144.9	136.3	141.4	116.6
Average	24.5	26.0	28.1	28.8

Note: Highlighted cells indicate exceedance of the action level.

Table 3: Weekly Hand-Held Data Summary for PM_{10} Concentration

Maximum Instantaneous Hand-Held PM_{10} Concentration			
Date	**PM_{10} (µg/m³)**	**Time**	**Location**
12/7/2020	17	9:00	AMS3
12/8/2020	11	13:00	AMS2
12/9/2020	85	14:00	AMS2
12/10/2020	59	8:00	AMS2
12/11/2020	142	11:00	AMS3

Table 4: Weekly Elevated Readings Summary

Location	Date	Time	Weather Conditions	Elevated Concentration	Explanation
N/A	N/A	N/A	N/A	N/A	N/A

Table 5: Program-to-Date Average Concentrations for Hexavalent Chromium, Total Dust, and Real-Time PM_{10} Summary

Program-to-Date Averages (Cr^{+6} & Total Dust Results from 11/30/20-12/4/20)				
	AMS 1	**AMS 2**	**AMS 3**	**AMS 4**
Cr^{+6} Concentration (ng/m³)	6.1	6.2	2.7	4.7
Total Dust Concentration (µg/m³)	59.3	61.1	26.4	46.1
Real-Time PM_{10} (µg/m³)	17.3	19.3	20.5	20.6

ng/m³ - Nanograms per cubic meter

µg/m³ - Micrograms per cubic meter

NA - Not Applicable

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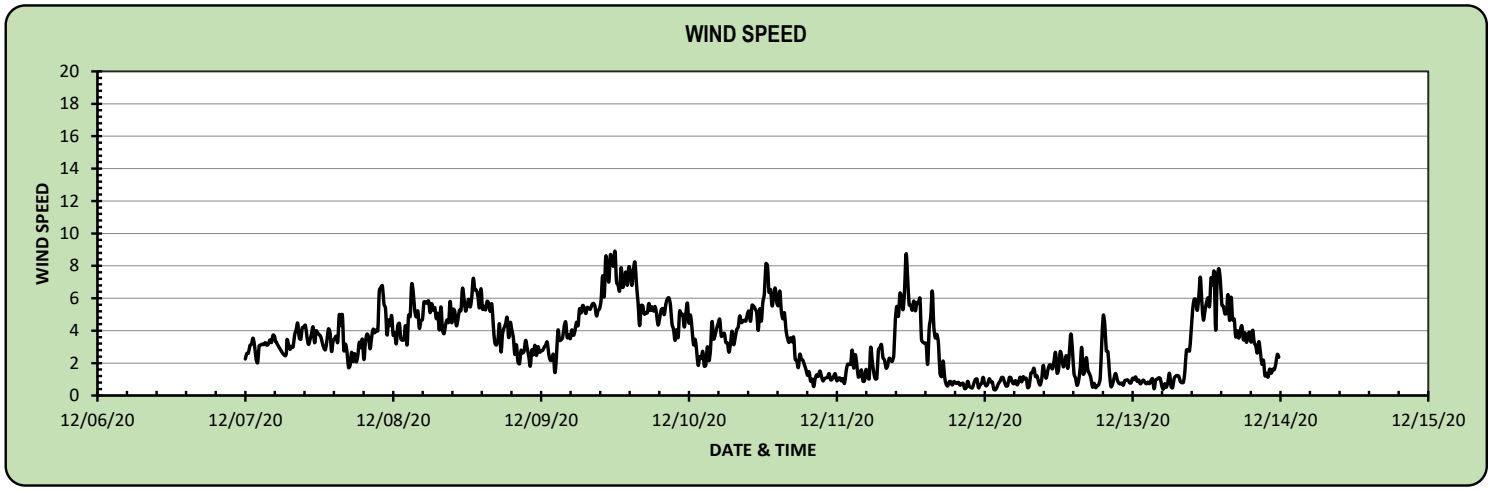
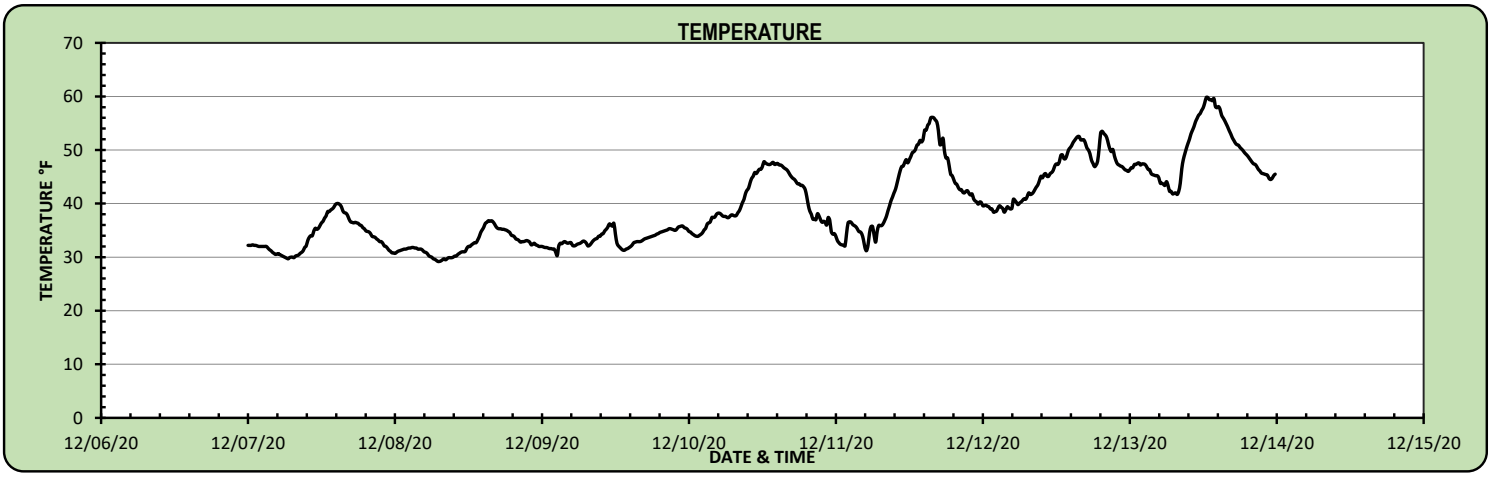
Figure 1: Meteorological Data





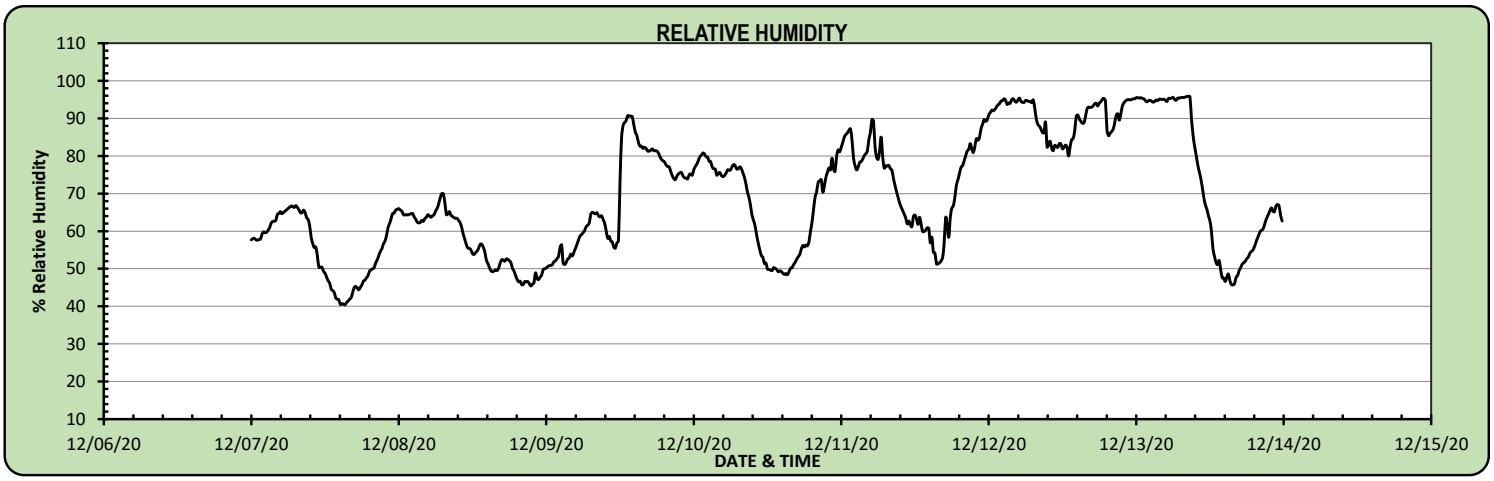


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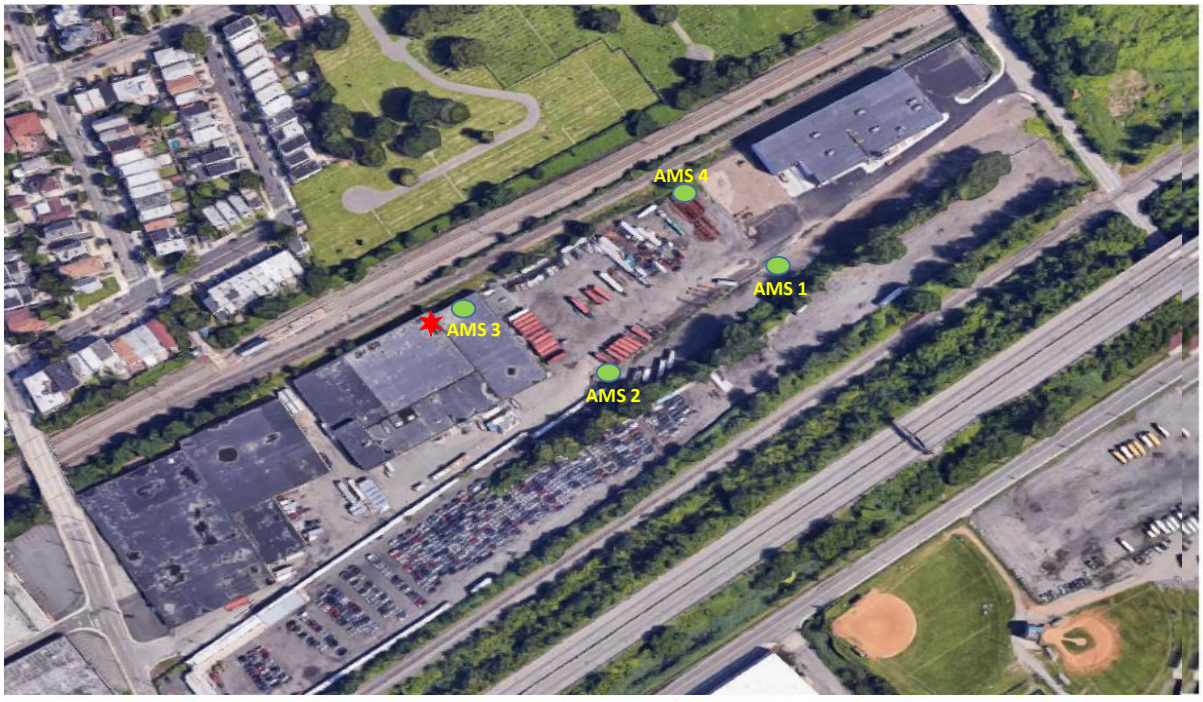
Figure 2: Station Location Map



Weekly Air Monitoring Summary

Client: **PPG Industries**

Location: **Site 107: Fashionland Site - Jersey City, NJ**

This weekly air monitoring report includes both tabular information and written discussions summarizing the ambient air quality data collected in accordance with the Air Monitoring Plan for the above-referenced project and reporting period. The following information is provided in the data summary:

- **Table 1:** Site-Specific Alarm Levels;
- **Table 2:** Weekly Real-Time PM_{10} Data Summary;
- **Table 3:** Weekly Hand-Held Data Summary;
- **Table 4:** Weekly Elevated Readings Summary for PM_{10};
- **Table 5:** Program-to-Date Average Concentrations for Hexavalent Chromium, Total Dust, and Real-Time PM_{10};
- **Figure 1:** Meteorological Data; and
- **Figure 2:** Station Location Map.

This report covers real-time air monitoring from December 14 through December 20, 2020 at the Fashionland Site (Site). Real-time air monitoring is divided into three types of monitoring including; perimeter air monitoring (at the site boundaries), meteorological monitoring, and hand-held monitoring. The air monitoring report details results associated with the site, consisting of 4 stations and periodic hand-held monitoring. See Figure 2 for station locations.

Perimeter air monitoring includes the following:

- Real-time 15-minute average PM_{10} readings at each location during the work day;
- Periodic hand-held readings during remedial activities;
- Time integrated 8-to-10-hour Total Dust and Hexavalent Chromium laboratory sampling;
- Time integrated 24-hour Total Dust and Hexavalent Chromium laboratory sampling; and
- Meteorological measurements of 15-minute average wind speed, relative humidity, and temperature are recorded onsite at Air Monitoring Station 3.

Summary of Real-Time Air Monitoring Results for PM_{10} Concentrations

15-minute Time Weighted Average (TWA) PM_{10} Site action levels are shown in Table 1. The maximum 15 minute TWA PM_{10} readings are shown in Table 2. The maximum hand-held PM_{10} concentrations are shown in Table 3. Elevated readings above the Site alarm levels are presented and explained in Table 4, if applicable.

Summary of the Program-to-Date Integrated Sampling and Real-Time Air Monitoring Results

Integrated sampling results for hexavalent chromium (Cr^{+6}) and total dust are updated when available. Program-to-date average concentrations for integrated Cr^{+6}, total dust, and real-time PM_{10} readings are shown in Table 5.

Summary of Meteorological Monitoring

The time series plots of wind speed, temp, and relative humidity for the report period are shown in Figure 1.

Table 1: Site-Specific Action Levels

Alarm Levels	Alert Level (15 minute TWA)	Action Level (15 minute TWA)
PM_{10}	255 µg/m³	339 µg/m³

Table 2: Weekly Real-Time PM_{10} Data Summary

Maximum 15-Minute PM_{10} TWA (Action Level: 339 µg/m³)				
Date	**AMS 1**	**AMS 2**	**AMS 3**	**AMS 4**
12/14/2020	17.5	31.7	18.9	22.7
12/15/2020	8.7	8.6	9.7	15.2
12/16/2020	22.3	101.8	18.5	141.6
12/17/2020	29.5	55.6	8.0	19.2
12/18/2020	21.1	40.5	21.0	29.3
12/19/2020	40.7	56.5	40.5	42.0
12/20/2020	42.0	60.6	41.5	44.7
Weekly Statistics				
Max	42.0	101.8	41.5	141.6
Average	14.4	27.1	14.0	19.1

Note: Highlighted cells indicate exceedance of the action level.

Table 3: Weekly Hand-Held Data Summary for PM_{10} Concentration

Maximum Instantaneous Hand-Held PM_{10} Concentration			
Date	**PM_{10} (µg/m³)**	**Time**	**Location**
12/14/2020	18	12:00	AMS4
12/15/2020	7	14:00	AMS3
12/16/2020	26	10:00	AMS4
12/17/2020	N/A	N/A	N/A
12/18/2020	7	9:00	AMS3

Note: Site closed on 12/17/20 due to snow. No monitoring conducted.

Table 4: Weekly Elevated Readings Summary

Location	Date	Time	Weather Conditions	Elevated Concentration	Explanation
N/A	N/A	N/A	N/A	N/A	N/A

Table 5: Program-to-Date Average Concentrations for Hexavalent Chromium, Total Dust, and Real-Time PM_{10} Summary

Program-to-Date Averages (Cr^{+6} & Total Dust Results from 11/30/20-12/4/20)				
	AMS 1	**AMS 2**	**AMS 3**	**AMS 4**
Cr^{+6} Concentration (ng/m³)	6.1	6.2	2.7	4.7
Total Dust Concentration (µg/m³)	59.3	61.1	26.4	46.1
Real-Time PM_{10} (µg/m³)	16.3	21.9	18.3	20.1

ng/m³ - Nanograms per cubic meter NA - Not Applicable

µg/m³ - Micrograms per cubic meter

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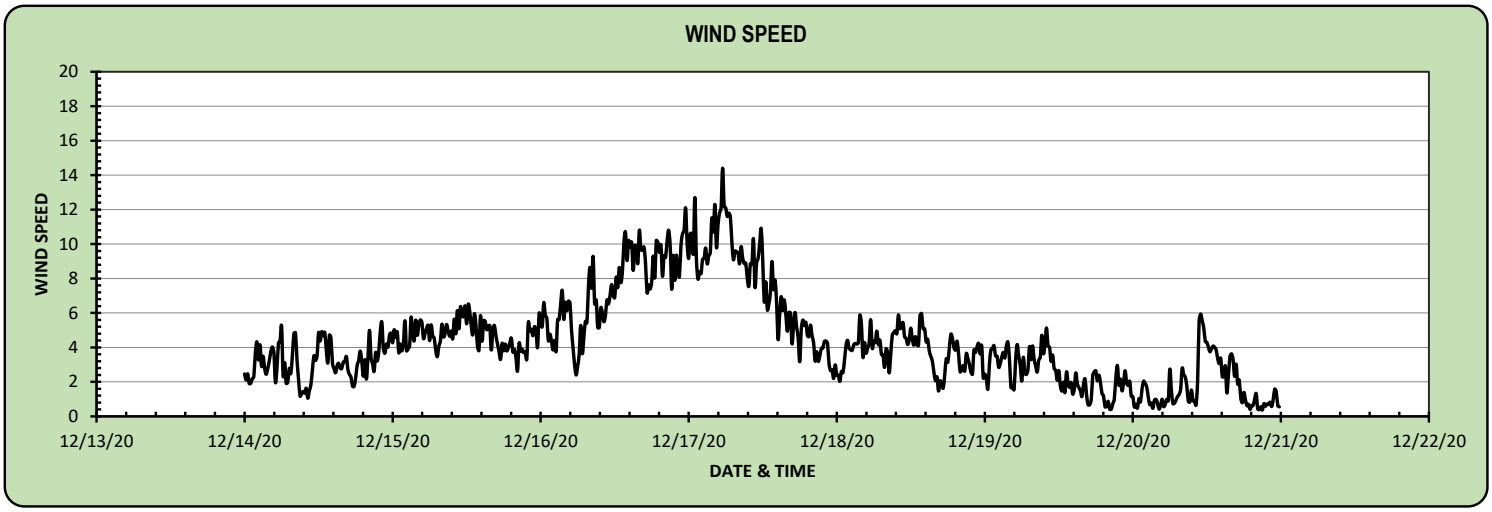
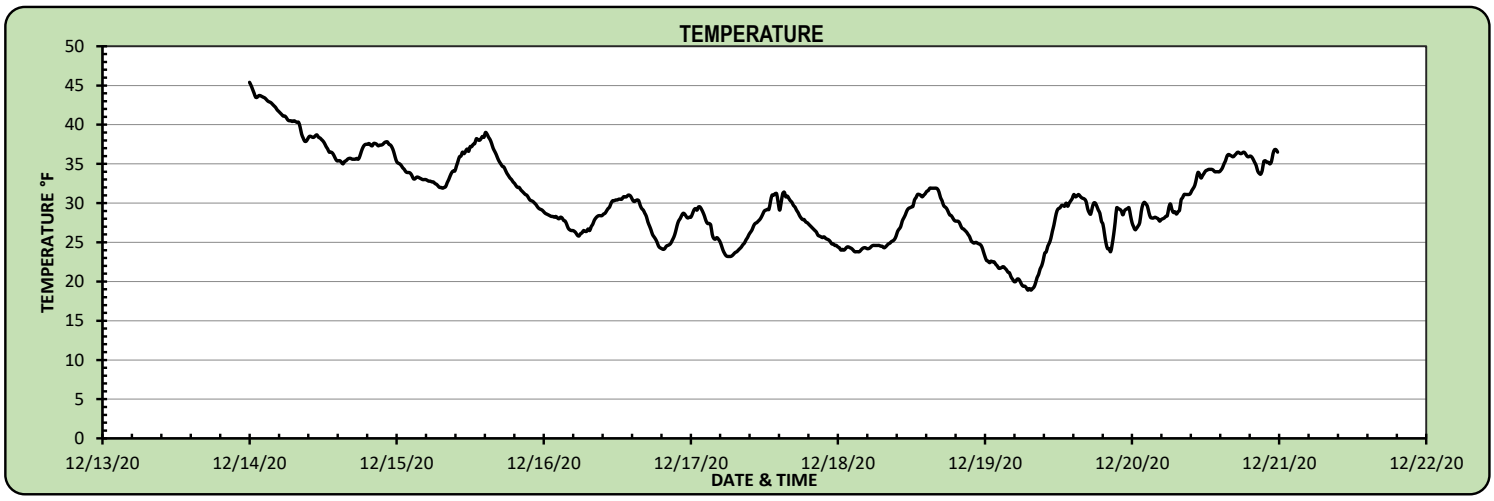
Figure 1: Meteorological Data





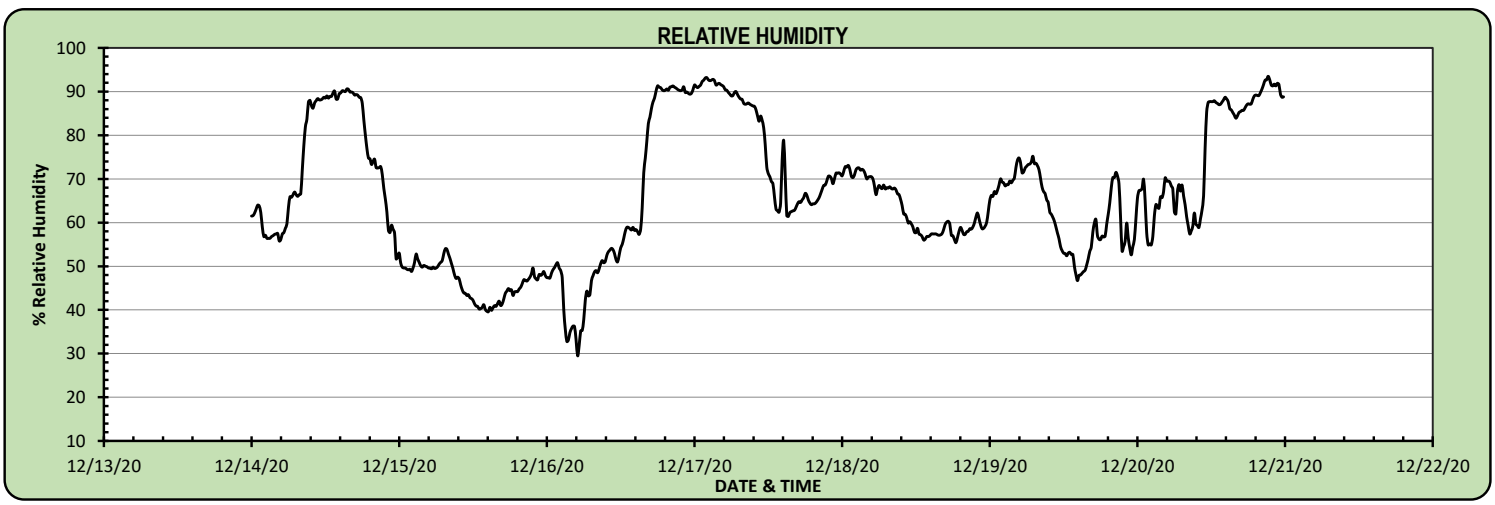


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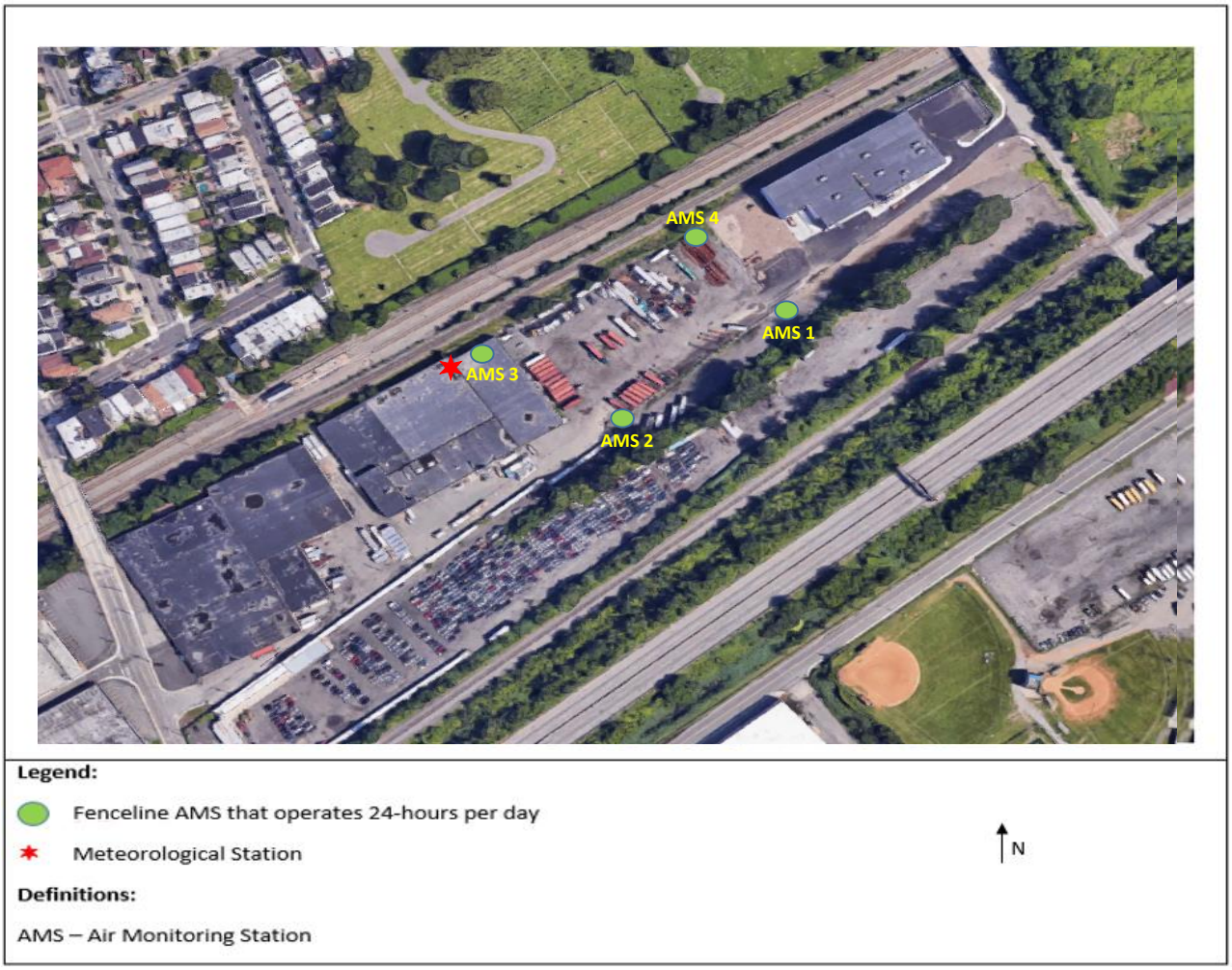
Figure 2: Station Location Map



Weekly Air Monitoring Summary

Client: **PPG Industries**

Location: **Site 107: Fashionland Site - Jersey City, NJ**

This weekly air monitoring report includes both tabular information and written discussions summarizing the ambient air quality data collected in accordance with the Air Monitoring Plan for the above-referenced project and reporting period. The following information is provided in the data summary:

- **Table 1:** Site-Specific Alarm Levels;
- **Table 2:** Weekly Real-Time PM_{10} Data Summary;
- **Table 3:** Weekly Hand-Held Data Summary;
- **Table 4:** Weekly Elevated Readings Summary for PM_{10};
- **Table 5:** Program-to-Date Average Concentrations for Hexavalent Chromium, Total Dust, and Real-Time PM_{10};
- **Figure 1:** Meteorological Data; and
- **Figure 2:** Station Location Map.

This report covers real-time air monitoring from February 8 through February 14, 2021 at the Fashionland Site (Site). Real-time air monitoring is divided into three types of monitoring including; perimeter air monitoring (at the site boundaries), meteorological monitoring, and hand-held monitoring. The air monitoring report details results associated with the site, consisting of 4 stations and periodic hand-held monitoring. See Figure 2 for station locations.

Perimeter air monitoring includes the following:

- Real-time 15-minute average PM_{10} readings at each location during the work day;
- Periodic hand-held readings during remedial activities;
- Time integrated 8-to-10-hour Total Dust and Hexavalent Chromium laboratory sampling;
- Time integrated 24-hour Total Dust and Hexavalent Chromium laboratory sampling; and
- Meteorological measurements of 15-minute average wind speed, relative humidity, and temperature are recorded onsite at Air Monitoring Station 3.

Summary of Real-Time Air Monitoring Results for PM_{10} Concentrations

15-minute Time Weighted Average (TWA) PM_{10} Site action levels are shown in Table 1. The maximum 15 minute TWA PM_{10} readings are shown in Table 2. The maximum hand-held PM_{10} concentrations are shown in Table 3. Elevated readings above the Site alarm levels are presented and explained in Table 4, if applicable.

Summary of the Program-to-Date Integrated Sampling and Real-Time Air Monitoring Results

Integrated sampling results for hexavalent chromium (Cr^{+6}) and total dust are updated when available. Program-to-date average concentrations for integrated Cr^{+6}, total dust, and real-time PM_{10} readings are shown in Table 5.

Summary of Meteorological Monitoring

The time series plots of wind speed, temp, and relative humidity for the report period are shown in Figure 1.

Table 1: Site-Specific Action Levels

Alarm Levels	Alert Level (15 minute TWA)	Action Level (15 minute TWA)
PM_{10}	255 µg/m³	339 µg/m³

Table 2: Weekly Real-Time PM_{10} Data Summary

Maximum 15-Minute PM_{10} TWA (Action Level: 339 µg/m³)				
Date	**AMS 1**	**AMS 2**	**AMS 3**	**AMS 4**
2/8/2021	N/A	N/A	N/A	N/A
2/9/2021	N/A	N/A	N/A	N/A
2/10/2021	N/A	N/A	N/A	N/A
2/11/2021	N/A	N/A	N/A	N/A
2/12/2021	19.6	23.9	31.7	16.3
2/13/2021	24.0	40.0	28.3	22.2
2/14/2021	27.8	49.0	30.5	26.8
Weekly Statistics				
Max	27.8	49.0	31.7	26.8
Average	18.7	29.7	23.4	16.3

Note: Highlighted cells indicate exceedance of the action level. Monitoring resumed on 2/12/2021 to coincide with site activity.

Table 3: Weekly Hand-Held Data Summary for PM_{10} Concentration

Maximum Instantaneous Hand-Held PM_{10} Concentration			
Date	**PM_{10} (µg/m³)**	**Time**	**Location**
2/8/2021	N/A	N/A	N/A
2/9/2021	N/A	N/A	N/A
2/10/2021	N/A	N/A	N/A
2/11/2021	N/A	N/A	N/A
2/12/2021	47	10:00	AMS3

Note: Monitoring resumed on 2/12/2021 to coincide with site activity.

Table 4: Weekly Elevated Readings Summary

Location	Date	Time	Weather Conditions	Elevated Concentration	Explanation
N/A	N/A	N/A	N/A	N/A	N/A

Table 5: Program-to-Date Average Concentrations for Hexavalent Chromium, Total Dust, and Real-Time PM_{10} Summary

Program-to-Date Averages (Cr^{+6} & Total Dust Results from 11/30/20-12/22/20)				
	AMS 1	**AMS 2**	**AMS 3**	**AMS 4**
Cr^{+6} Concentration (ng/m³)	6.0	6.7	2.8	7.1
Total Dust Concentration (µg/m³)	58.9	62.3	24.9	58.4
Real-Time PM_{10} (µg/m³)	19.1	26.0	21.3	22.1

ng/m³ - Nanograms per cubic meter NA - Not Applicable

µg/m³ - Micrograms per cubic meter

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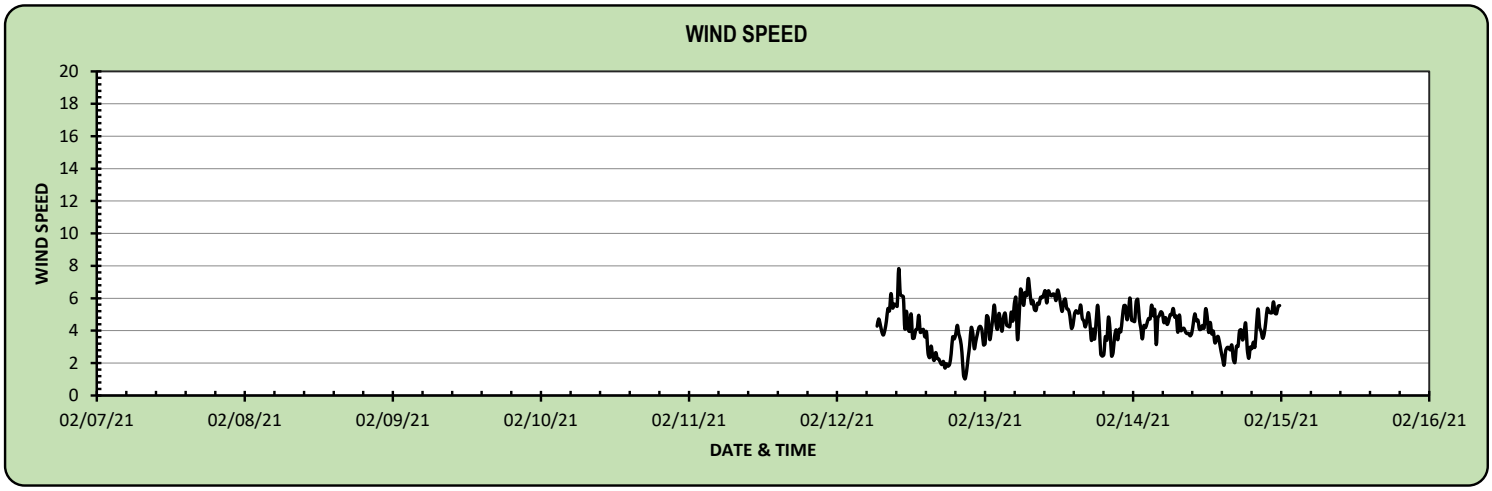
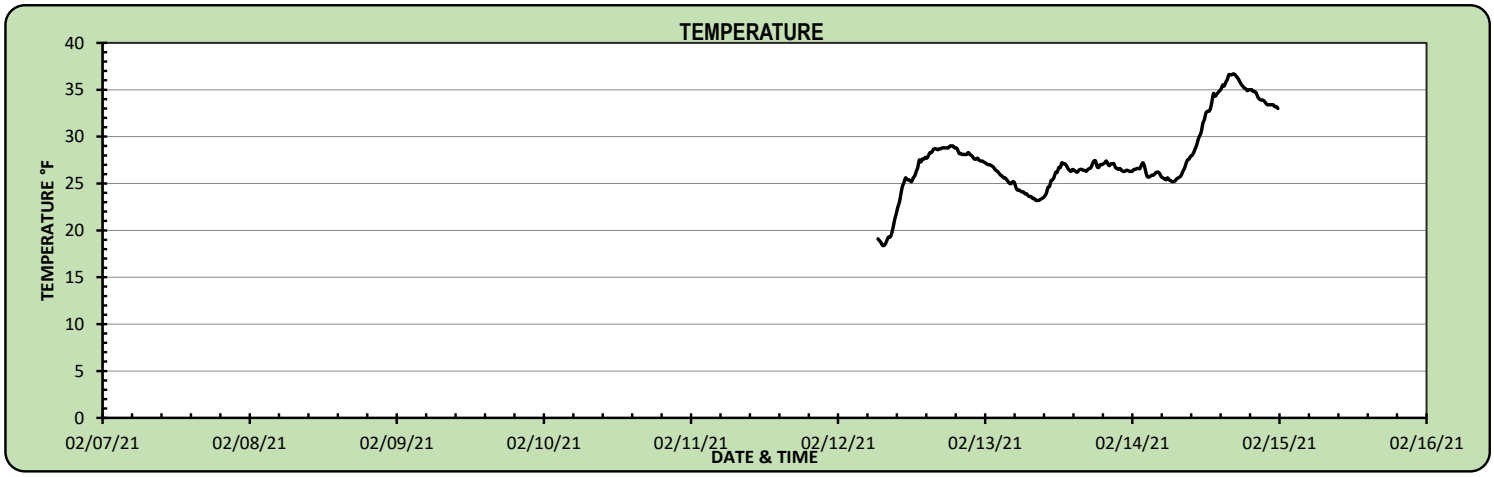
Figure 1: Meteorological Data





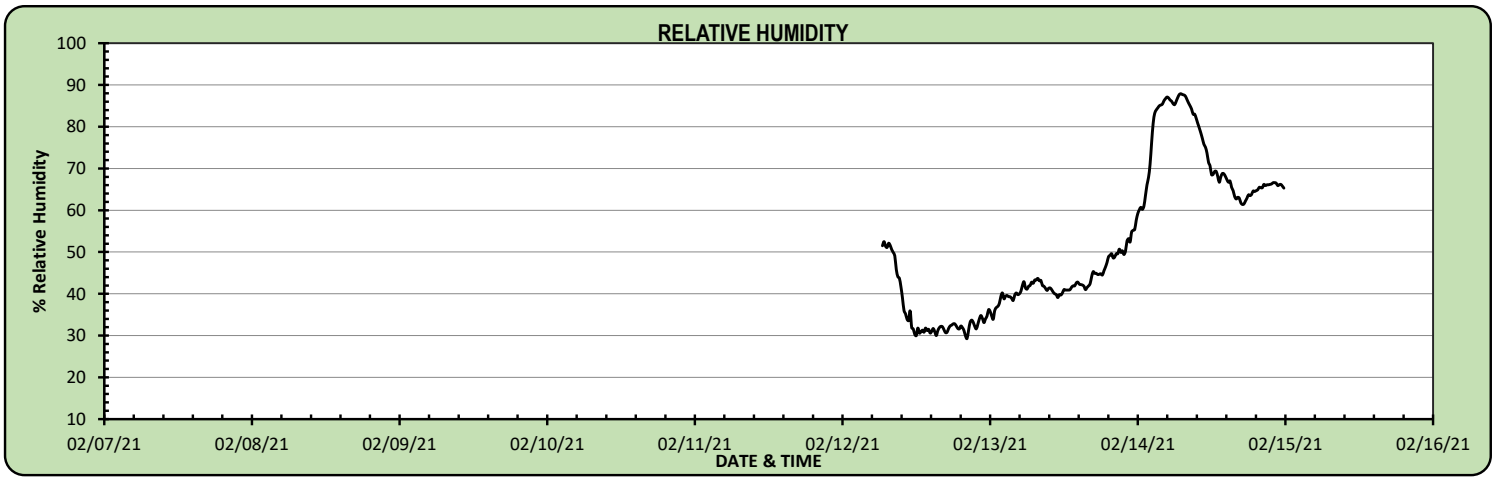


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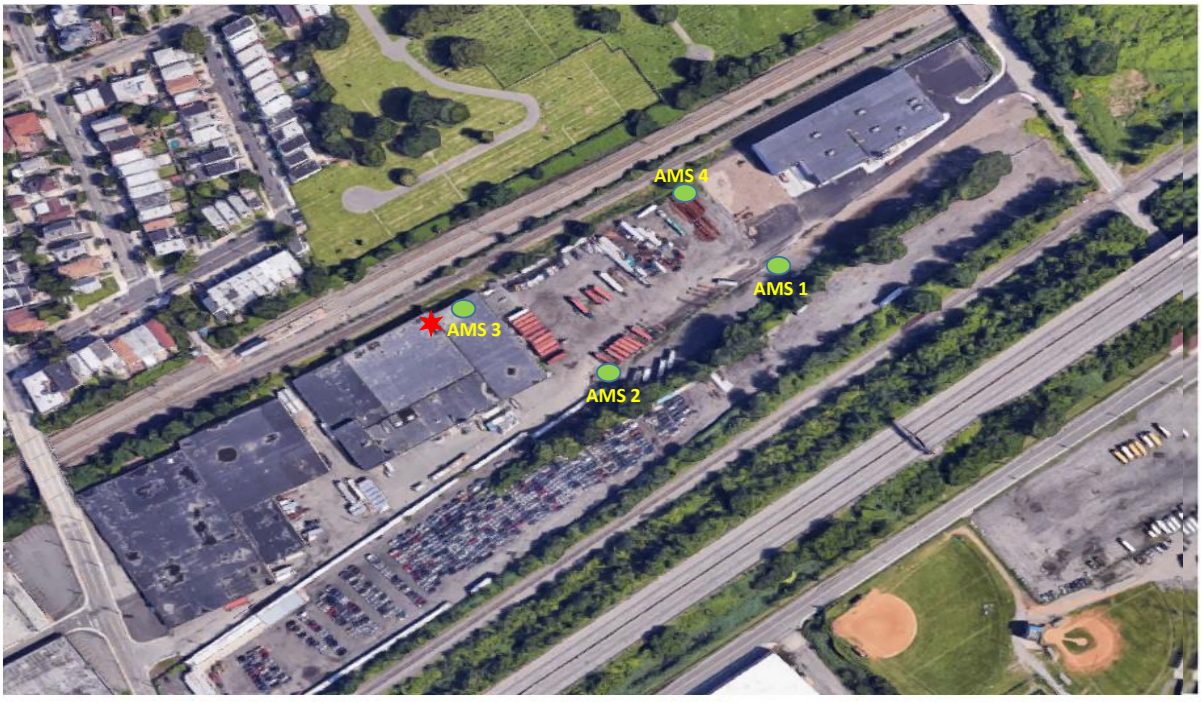
Figure 2: Station Location Map



Weekly Air Monitoring Summary

Client: **PPG Industries**

Location: **Site 107: Fashionland Site - Jersey City, NJ**

This weekly air monitoring report includes both tabular information and written discussions summarizing the ambient air quality data collected in accordance with the Air Monitoring Plan for the above-referenced project and reporting period. The following information is provided in the data summary:

- **Table 1:** Site-Specific Alarm Levels;
- **Table 2:** Weekly Real-Time PM_{10} Data Summary;
- **Table 3:** Weekly Hand-Held Data Summary;
- **Table 4:** Weekly Elevated Readings Summary for PM_{10};
- **Table 5:** Program-to-Date Average Concentrations for Hexavalent Chromium, Total Dust, and Real-Time PM_{10};
- **Figure 1:** Meteorological Data; and
- **Figure 2:** Station Location Map.

This report covers real-time air monitoring from February 15 through February 21, 2021 at the Fashionland Site (Site). Real-time air monitoring is divided into three types of monitoring including; perimeter air monitoring (at the site boundaries), meteorological monitoring, and hand-held monitoring. The air monitoring report details results associated with the site, consisting of 4 stations and periodic hand-held monitoring. See Figure 2 for station locations.

Perimeter air monitoring includes the following:

- Real-time 15-minute average PM_{10} readings at each location during the work day;
- Periodic hand-held readings during remedial activities;
- Time integrated 8-to-10-hour Total Dust and Hexavalent Chromium laboratory sampling;
- Time integrated 24-hour Total Dust and Hexavalent Chromium laboratory sampling; and
- Meteorological measurements of 15-minute average wind speed, relative humidity, and temperature are recorded onsite at Air Monitoring Station 3.

Summary of Real-Time Air Monitoring Results for PM_{10} Concentrations

15-minute Time Weighted Average (TWA) PM_{10} Site action levels are shown in Table 1. The maximum 15 minute TWA PM_{10} readings are shown in Table 2. The maximum hand-held PM_{10} concentrations are shown in Table 3. Elevated readings above the Site alarm levels are presented and explained in Table 4, if applicable.

Summary of the Program-to-Date Integrated Sampling and Real-Time Air Monitoring Results

Integrated sampling results for hexavalent chromium (Cr^{+6}) and total dust are updated when available. Program-to-date average concentrations for integrated Cr^{+6}, total dust, and real-time PM_{10} readings are shown in Table 5.

Summary of Meteorological Monitoring

The time series plots of wind speed, temp, and relative humidity for the report period are shown in Figure 1.

Table 1: Site-Specific Action Levels

Alarm Levels	Alert Level (15 minute TWA)	Action Level (15 minute TWA)
PM_{10}	255 µg/m³	339 µg/m³

Table 2: Weekly Real-Time PM_{10} Data Summary

Maximum 15-Minute PM_{10} TWA (Action Level: 339 µg/m³)				
Date	**AMS 1**	**AMS 2**	**AMS 3**	**AMS 4**
2/15/2021	49.1	68.8	42.2	39.9
2/16/2021	46.8	59.0	33.5	54.0
2/17/2021	N/A	N/A	N/A	N/A
2/18/2021	N/A	N/A	N/A	N/A
2/19/2021	N/A	N/A	N/A	N/A
2/20/2021	N/A	N/A	N/A	N/A
2/21/2021	N/A	N/A	N/A	N/A
Weekly Statistics				
Max	49.1	68.8	42.2	54.0
Average	20.9	42.8	23.7	18.0

Note: Highlighted cells indicate exceedance of the action level. Monitoring discontinued after 2/16/21 due to completion of intrusive activities. Monitoring stations removed on 2/17/21.

Table 3: Weekly Hand-Held Data Summary for PM_{10} Concentration

Maximum Instantaneous Hand-Held PM_{10} Concentration			
Date	**PM_{10} (µg/m³)**	**Time**	**Location**
2/15/2021	33	10:00	AMS4
2/16/2021	29	9:00	AMS3
2/17/2021	N/A	N/A	N/A
2/18/2021	N/A	N/A	N/A
2/19/2021	N/A	N/A	N/A

Note: Monitoring discontinued after 2/17/21 due to completion of intrusive activities. Monitoring stations removed on 2/17/21.

Table 4: Weekly Elevated Readings Summary

Location	Date	Time	Weather Conditions	Elevated Concentration	Explanation
N/A	N/A	N/A	N/A	N/A	N/A

Table 5: Program-to-Date Average Concentrations for Hexavalent Chromium, Total Dust, and Real-Time PM_{10} Summary

Program-to-Date Averages (Cr^{+6} & Total Dust Results from 11/30/20-2/16/21)				
	AMS 1	**AMS 2**	**AMS 3**	**AMS 4**
Cr^{+6} Concentration (ng/m³)	5.8	6.4	2.6	6.7
Total Dust Concentration (µg/m³)	56.9	60.1	23.5	56.8
Real-Time PM_{10} (µg/m³)	19.5	27.7	21.5	21.8

ng/m³ - Nanograms per cubic meter NA - Not Applicable

µg/m³ - Micrograms per cubic meter

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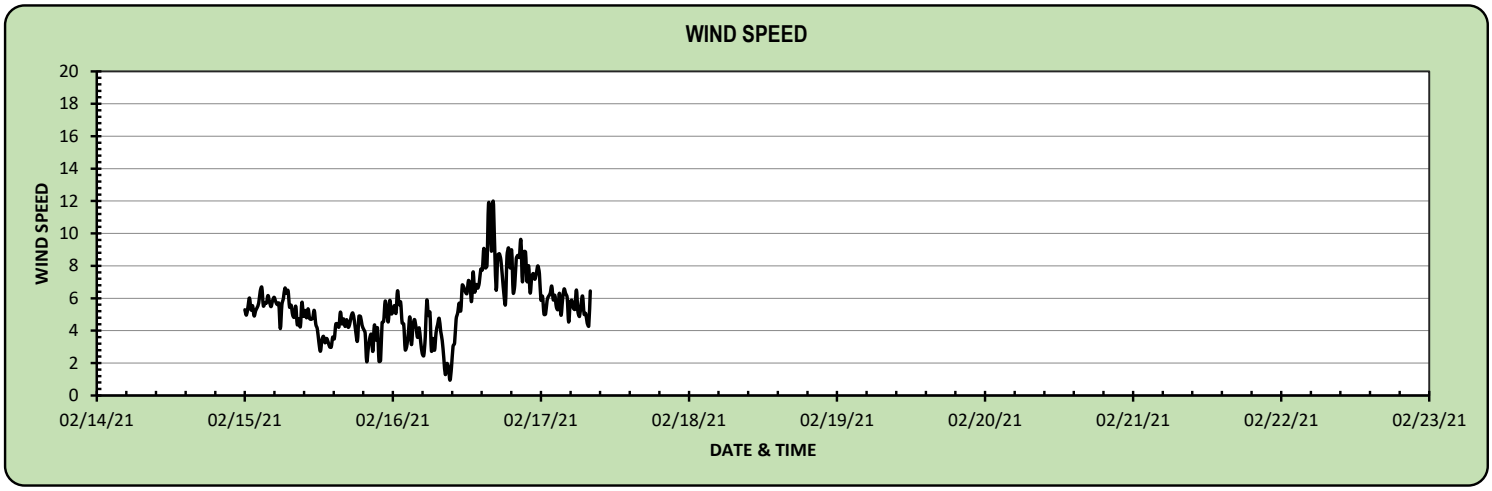
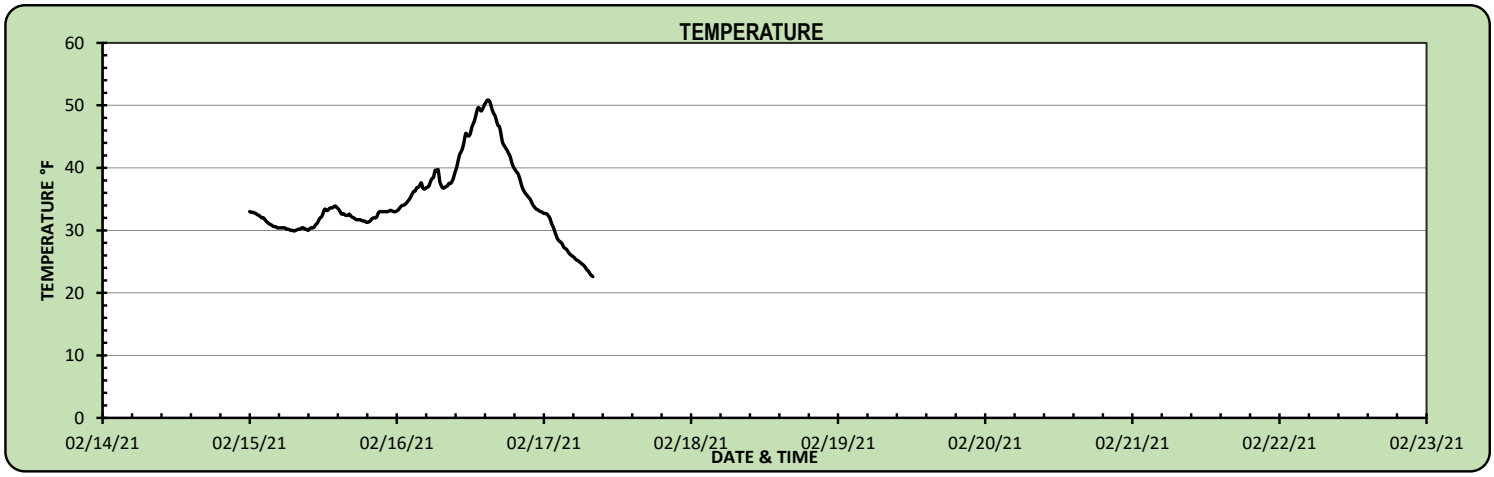
Figure 1: Meteorological Data





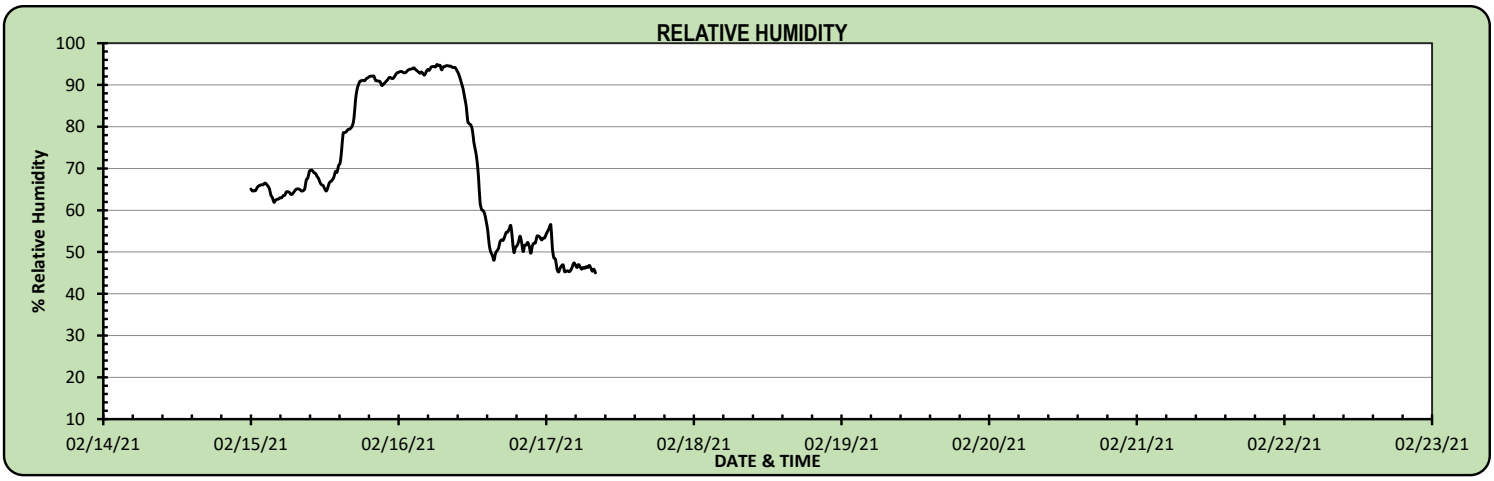


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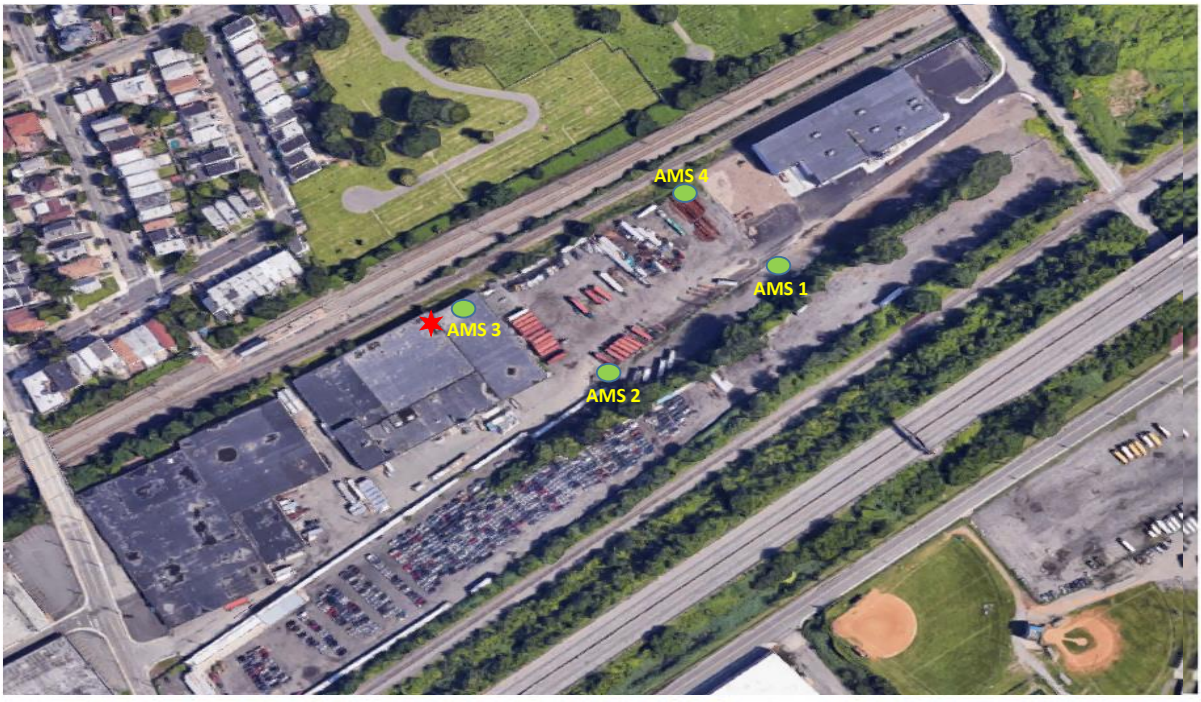
Figure 2: Station Location Map



Appendix D-2

Monthly Analytical Reports

December 2020 & February 2021
Air Quality Report
Site 107, Fashionland

Attached is a technical summary of air quality data for December 2020, including November 30, 2020, and February 2021 at the Site 107 cleanup site submitted by PPG Industries' air monitoring consultant.

This report provides air monitoring information about conditions at the perimeter associated with Site 107 (Fashionland).

Also, this document notes any deviations from the monitoring plan and work schedule caused by factors beyond the control of cleanup contractors, such as inclement weather and malfunctioning equipment.

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Submitted to:
PPG Industries, Inc.
4325 Rosanna Drive
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Submitted by:
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25B Vreeland Road, Suite 101
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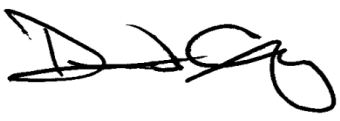
Monthly Air Monitoring Report
Site 107, Fashionland
Jersey City, New Jersey

Reporting Period:
December 2020 & February 2021

Monthly Air Monitoring Report
Site 107, Fashionland
Jersey City, New Jersey

Reporting Period:
December 2020 & February 2021

Prepared By: Carey Wu



Reviewed By: Dave Tomsey
February 25, 2021

Contents

List of Appendices

List of Tables

List of Figures

List of Acronyms

AAC – Acceptable Air Concentration

AMP – Air Monitoring Plan

AMS – Air Monitoring Station

Cr^{+6} – Hexavalent Chromium

FAM – Fixed Air Monitoring

LPM – Liters per Minute

ng/m^3 – Nanograms per Cubic Meter of Air

NJDEP – New Jersey Department of Environmental Protection

PM_{10} – Particulate Matter 10 Microns or less in Diameter

PPG – PPG Industries, Inc.

$\mu g/m^3$ – Micrograms per Cubic Meter of Air

Executive Summary

Air monitoring conducted at Site 107 was completed in accordance with the Site-Specific Air Monitoring Plan (AMP), and included sampling and analysis for 8-hour integrated hexavalent chromium (Cr^{+6}) and total particulates, as well as real-time monitoring for PM_{10} at all air monitoring stations. In addition to the air monitoring conducted in accordance with the AMP, 24-hour Cr^{+6} and total particulate sampling with lab analysis was also conducted at one station. This program is designed to measure various aspects of air quality at the Site to ensure that remedial activities at the Site do not have an adverse effect on Site workers and the surrounding community.

Results of the integrated Cr^{+6} sampling and analysis indicate that program-to-date average airborne Cr^{+6} concentrations are significantly below the Acceptable Air Concentration (AAC) at each of the AMS locations. The results and calculations document continuing compliance with the current AAC set by the New Jersey Department of Environmental Protection (NJDEP), confirm that dust control measures continue to be effective, and indicate that the levels of Cr^{+6} in dust generated at the Site do not represent an emission source of Cr^{+6} sufficient to create potential offsite exposure to Cr^{+6} at or exceeding the AAC.

1.0 Introduction

This monthly air monitoring report update includes both tabular information and written discussions summarizing the ambient air quality data collected in accordance with the Air Monitoring Plan (AMP) at Site 107 (referred herein as Site), in Jersey City, New Jersey.

This monthly report is designed to provide a summary of the air monitoring data collected during the intrusive activities associated with Site 107 through the reporting period. This monthly report includes both monthly and program-to-date summaries of the following:

- Integrated hexavalent chromium analytical results;
- Integrated total particulate analytical results;
- Real-time 15-minute average PM_{10} readings; and
- Meteorological conditions.

Results have been evaluated and compared to the Site-specific Acceptable Air Concentration (AAC) and the Action Levels in accordance with the AMP.

2.0 Air Monitoring

This report summarizes air monitoring at the Site performed during the reporting period, with a focus on data collected during the recent month of activities. No baseline monitoring was conducted for this work as it is a continuation of work completed in 2018 and 2019 at the Site.

Intrusive activities began in the northern portion of the Site on November 30, 2020. Air monitoring stations provided protection during intrusive work from November 30, 2020 through December 22, 2020 and February 12, 2021 through February 16, 2021. The site contains four ground level stations. One station collects Cr^{+6} and total particulate samples for 24 hours during the week and 72 hours over the weekend. **Figure 2-1** provides an overview of the Site and a typical configuration of the AMS for the Site through the end of the reporting period. **Table 2-1** provides an overview of the air monitoring approach.

Air monitoring results to date have confirmed protection of the community, and the overall effectiveness of the program will be evaluated on a continuous basis. Success will ultimately be determined at the end of the remediation program when the average Cr^{+6} concentrations at each AMS location are compared to the AAC. This monthly report has been designed to evaluate the program's effectiveness on a monthly basis and a program-to-date basis. The Cr^{+6} average concentrations measured at each AMS will continually be compared to the site-specific AAC for Cr^{+6} to confirm the effectiveness of the program. Thus, the monthly reports will focus largely on the integrated analytical results collected as part of the Cr^{+6} fence-line air monitoring.

Air monitoring data collected at the Site includes:

- 8-hour integrated Cr^{+6} and total particulate sample collection and associated laboratory analysis;
- 24-hour and 72-hour integrated Cr^{+6} and total particulate samples collection and laboratory analysis; and
- Real-time 15-minute average PM_{10}, readings measured at the perimeter.
- Hand-held readings for PM_{10} measured at the perimeter.

The following sections outline the types of data collected, frequency of collection, and the corresponding locations.

Table 2-1: Air Monitoring Approach

Site	Station	Integrated Air Monitoring	Real-Time Air Monitoring
Site 107	**AMS1, AMS2, AMS3, AMS4**	Integrated 8-hour Cr^{+6} and total particulate sampling and analysis during work days. One 24-hour sample during the week and 72-hour over the weekend.	15-minute average PM_{10} readings measured for a 24-hour period.

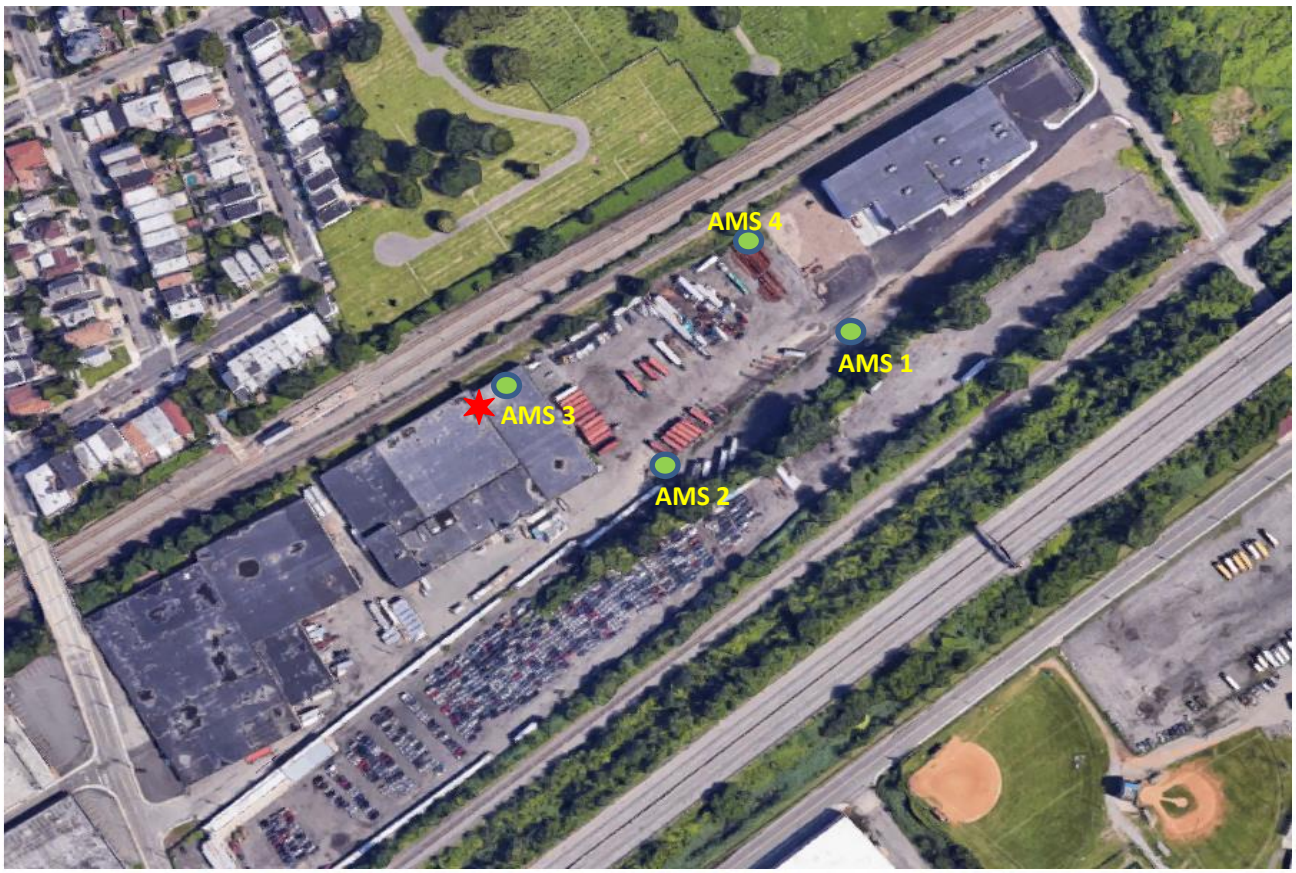
Note: 24-hour and 72-hour Cr^{+6} sampling was conducted at station AMS3 for the reporting period.

2.1 Integrated Air Sampling

Integrated Cr^{+6} and total particulate samples are collected at each of the AMS for an 8-hour-to-10-hour duration each working day (typically Monday – Friday). Samples are collected on a pre-weighed polyvinyl chloride 37mm filter cassette for both Cr^{+6} and total particulate. Sampling pumps operate at or around 2 liters per minute and are calibrated at the beginning and end of each sampling run.

Figure 2-1: Site Overview

11/30/2020 – End of Reporting Period



2.1.1 Integrated Cr^{+6} Sampling

The exposed Cr^{+6} filters are shipped to an American Industrial Hygiene Association Industrial Hygiene Laboratory Accreditation Program-certified analytical laboratory for Cr^{+6} analysis using Modified OSHA ID 215. The sample weights are provided by the laboratory with a laboratory detection limit of 20.0 ng. The sample weights and flow information are utilized to calculate 8-hour to 10-hour integrated Cr^{+6} air concentrations in nanograms per cubic meter of air (ng/m^3). Filter weights reported as non-detect are included in the concentration calculation at one-half the laboratory detection limit for data reporting purposes.

In addition to sampling performed during working hours, 24-hour and 72-hour Cr^{+6} sampling and analysis are also performed at one AMS. These longer duration samples show Cr^{+6} concentrations during overnight and weekend periods. The 24-hour samples are typically collected daily from 7AM to 7AM Monday through Thursday, and a single 72-hour sample is collected from 7AM Friday through 7AM Monday.

2.1.2 Integrated Total Particulate Sampling

The exposed total particulate filters are shipped to an American Industrial Hygiene Association Industrial Hygiene Laboratory Accreditation Program-certified analytical laboratory for total particulate analysis using NIOSH Method 0500. The sample weights are provided by the laboratory with a laboratory detection limit of 100 ug. The sample weights and flow information are utilized to calculate 8-hour-to-10-hour integrated total particulate air concentrations in micrograms per cubic meter of air ($\mu g/m^3$). Filter weights reported as non-detect are included in the concentration calculation at one half the laboratory detection limit for data reporting purposes.

2.2 Real-Time Air Monitoring

Real-time air monitoring is divided into two types of monitoring including: perimeter monitoring and meteorological monitoring. Each monitoring type is described in more detail in the following sections.

2.2.1 Perimeter

Perimeter air monitoring consists of ground level stations at the perimeter of the Site. Perimeter monitoring includes the following:

- Real-time 15-minute average PM_{10} readings at each AMS location. All AMS operate 24 hours during remedial activities, Monday through Sunday.

2.2.2 Meteorological Measurements

Meteorological measurements of 15-minute average wind speed and direction, relative humidity, pressure, and temperature are recorded onsite at station AMS-3, 24-hours a day, seven days a week.

2.3 Hand-held Air Monitoring

Hand-held air monitoring consists of the collection of perimeter PM_{10} readings. Monitoring is described in more detail in the following section.

2.3.1 Perimeter PM_{10} Hand-held Monitoring

Hand-held readings will be taken along the downwind perimeter of the Site periodically each day during remedial activities and logged to be reported weekly. The readings will be collected as instantaneous readings and if levels are elevated, 15-minute averages will be recorded for comparison to adjacent perimeter stations.

3.0 Site-Specific Acceptable Air Concentration and Real-Time Action Levels

Site-specific Acceptable Air Concentration (AAC) and real-time Action Levels have been established for Cr^{+6} and real-time PM_{10} concentrations by NJDEP as part of the approved AMP, in compliance with risk assessment procedures. The AAC and real-time Action Levels have been developed to protect off-site receptors from potential adverse health impacts from Cr^{+6} and particulates over the duration of the intrusive remediation activities.

Real-time monitoring and integrated results are compared against the AAC and the real-time action levels to alert Site management of the potential need to enhance control of emissions and curtail operations to maintain concentrations at levels below the specified criteria. The AAC and real-time action levels for integrated Cr^{+6} concentrations and real-time PM_{10} are outlined in the following sections.

3.1 Integrated Cr^{+6} Acceptable Air Concentration

A Site-specific Cr^{+6} AAC has been established by NJDEP to protect off-site receptors from potential adverse health impacts due to potential exposure to Cr^{+6} in dust. The AAC for Cr^{+6} was developed to represent the maximum allowable average concentration of Cr^{+6} in the air at each AMS over the project duration. The AAC is protective of human health based on a carcinogenic exposure endpoint with a duration more than one calendar year for intrusive remedial activities.

The AAC of 100 ng/m^3 is applicable at the perimeter and represents the maximum allowable average concentration measured over the project duration and was developed to ensure the protection of human health. This AAC is also used to evaluate the effectiveness of dust control. PPG has established an operational goal of achieving a project average hexavalent chromium air concentration of 49 ng/m^3 to the extent practicable using best management practices throughout the duration of intrusive remedial activities at the site.

To ensure ongoing compliance with the AAC, shorter duration rolling averages are utilized to provide for the early and regular assessment of performance trends and, if necessary, allow for responsive corrective measures to be implemented to ensure that emissions of Cr^{+6} are maintained well below the AAC over the duration of the project, and are minimized to the greatest extent practicable. These shorter duration average concentrations metrics include: program-to-

date, 90-day, 60-day, and 15-day running averages where the average Cr^{+6} concentration over the previous 90-day, 60-day, and 15-day periods are calculated for each sample day. Sampling days are considered days where routine sampling was conducted (typically Monday – Friday). The shorter-term average concentrations are compared against the list of metrics provided in Table 3-1 which also depicts respective response actions.

Table 3-1: Running Cr^{+6} Metrics

Metric Observation	Response Action
15-day[1] Cr^{+6} average concentration greater than or equal to 100 ng/m3	External meeting to review levels, evaluate activities each day when elevated concentrations were observed, and trigger corrective action if required.
60-day[1] Cr^{+6} average concentration greater than or equal to 90 ng/m3	
90-day[1] Cr^{+6} average concentration greater than or equal to 81 ng/m3	
[1] Refers to days on which samples were collected, not necessarily calendar days	

3.2 Real-Time Alert and Action Levels

Real-time Alert and Action Levels were designed to monitor and assist in control of Site emissions to ensure protection of human health, and represent an important aspect of the remedial program at the Site. The real-time Alert and Action Levels used on Site are shown in Table 3-2.

Table 3-2: Site-specific Alert and Action Levels

Parameter	Alert Level (15-min TWA)	Action Level (15-min TWA)
PM_{10}	235 µg/m^3	339 µg/m^3

4.0 Air Sampling and Monitoring Results

Results of air sampling and monitoring conducted between November 30, 2020 and February 16, 2021 are summarized herein. The following sections present both tabular and written discussions of the air sampling and monitoring results for the reporting period including:

- Monthly integrated and real-time results;
- Program-to-date integrated and real-time statistics;
- Evaluation of program success versus the Site-specific AAC and action levels;
- Meteorological results; and
- Hand-held monitoring results

Air sampling and monitoring results are presented in detail in the Appendices of this report. Appendix A includes summary of the air sampling and monitoring results for the reporting period. Appendix B includes program-to-date statistics and monthly comparison of results.

4.1 Integrated Air Sampling Results

Results of the integrated Cr^{+6} and total particulate sampling and analysis are presented in the following sections.

4.1.1 Cr^{+6} Sampling Results

Results of the Cr^{+6} sampling from the reporting period and a program-to-date evaluation are discussed in the following sections.

Reporting Period

Individual integrated 8-hour Cr^{+6} concentrations measured during the reporting period are presented in Table A-1. If an individual sample result exceeds 80% of the project duration AAC, additional evaluation and review of relevant Site conditions and activities were performed to potentially modify procedures if necessary to reduce the potential for increasing Cr^{+6} concentration trends. Any elevated concentration data during the reporting period are listed and discussed in Table A-5.

Program-to-date

Sampling and analytical statistics for integrated 8-hour Cr^{+6} results are shown in Table B-1 and include various program-to-date metrics relative to Cr^{+6} analytical data. Monthly average 8-hour Cr^{+6} concentration results are shown in Table B-2 for each AMS location.

Table 4-1: Short-Term Average 8-hour Integrated Cr^{+6} Metrics

Running Cr^{+6} Metrics[1]		Site 107			
	Metric (ng/m^3)	**AMS-1 ng/m^3**	**AMS-2 ng/m^3**	**AMS-3 ng/m^3**	**AMS-4 ng/m^3**
15-day[2]	**100**	5.8	6.4	2.6	6.7
60-day[2]	**90**	N/A	N/A	N/A	N/A
90-day[2]	**81**	N/A	N/A	N/A	N/A
PTD[3]	**73**	5.8	6.4	2.6	6.7

ng/m^3 – nanograms per cubic meter
N/A – Not available due to insufficient amount of sampling days to calculate the metric.

1. Running Cr^{+6} metrics are utilized to provide for the early and regular assessment of performance trends and, if necessary, allow for responsive corrective measures to be implemented ensuring that emissions of Cr^{+6} are maintained well below the AAC over the duration of the project, and are minimized to the greatest extent practicable. The running Cr^{+6} metrics are designed to evaluate the program success on short duration intervals (monthly) and do not represent the long-term (program) ending success.
2. Running Cr^{+6} metrics are valid on the last day in the report period and include the previous 15, 60, or 90-days of sample results.
3. Program-to-date - Air monitoring conducted from November 30, 2020 through the end of the reporting period.

4.1.2 Total Particulate Sampling Results

Results of the 8-hour integrated total particulate sampling and analysis from the reporting period and program-to-date results are discussed in the following sections.

Reporting Period

Individual integrated 8-hour total particulate concentrations measured at each station during the reporting period are presented in Table A-2.

Program-to-date

Sampling and analytical statistics for integrated total particulate are shown in Table B-3 and include various metrics relative to total particulate analytical data. Monthly average total particulate concentration results are shown in Table B-4 for each AMS.

4.1.3 Integrated Air Sampling Results Summary

There have been 19 sample days between November 30th and the end of the reporting period for stations AMS-1 through AMS-4. The results of the sample analysis are summarized in the following sections.

Air Monitoring

The program through this reporting period shows the 8-hour Cr^{+6} average concentrations, based upon lab analytical results at each AMS, were less than 6.74% of the AAC, demonstrating that the dust control measures continue to be effective.

4.2 Real-Time Air Monitoring Results

Real-time air monitoring for PM_{10} is conducted during all remedial activities. The results of the real-time air monitoring are presented in the following sections.

4.2.1 PM_{10} Monitoring Results

Results of the real-time PM_{10} sampling for the reporting period and the start of intrusive activities are discussed in the following sections.

Reporting Period

Real-time 15-minute PM_{10} averages measured during the reporting period are presented in Figure A-1. Real-time 15-minute PM_{10} averages were compared directly to the PM_{10} Action Level (339

µg/m^3) and averages greater than the action level are subject to additional evaluation. If applicable, elevated PM_{10} averages are listed and discussed in Table A-5.

Program-to-date

Real-time monthly PM_{10} averages are shown in Table B-5 for each AMS. Dust readings measured during the reporting period are similar to those during the baseline period (when no intrusive activities were occurring). This indicates that dust control measures during intrusive activities have been effective.

4.3 Meteorological Monitoring Results

Time series plots for wind speed, temperature, and relative humidity for the reporting period are shown in Figure A-2 through Figure A-4, respectively. A wind-rose for the month displaying the primary wind directions is shown in Figure A-5.

4.4 Hand-held Monitoring Results

Maximum hand-held monitoring results during the reporting period are displayed in Table A-3. Readings were compared directly to the 15-Minute TWA Action Level (339 ug/m^3) and averages greater than the action level are subject to additional evaluation. If applicable, elevated averages are listed and discussed in Table A-5.

4.5 Site Activities

Activities which occurred on the site during the months of December and February included:

- Excavation and side wall sampling of soils and chromium-impacted soils;
- Stock piling soils from excavations.

4.6 Site Map(s)

Site maps during the reporting period are documented and included in Figure A-6.

5.0 Conclusions

Results of the December 2020 & February 2021 reporting period for the Site 107 air sampling and monitoring program indicate that the average Cr^{+6} concentrations for each AMS are well below the site safety goal of 49 ng/m^3 and below the AAC of 100 ng/m^3. The Cr^{+6} concentrations and the percent Cr^{+6} in dust samples through this period demonstrate that the dust control measures continue to be effective at maintaining concentrations of Cr^{+6} in airborne dust at the Site well below the AAC. These results indicate that dust generated at the Site contains very small percentages of Cr^{+6} and does not represent an emission source of Cr^{+6} sufficient to create potential offsite exposure to Cr^{+6} at or exceeding the AAC.

Appendix A

Monthly Results Summaries

- Integrated 8-hour Cr^{+6} Concentrations
- Integrated 8-hour Total Particulate Concentrations
- Real-time PM^{10} Readings
- Hand-held Readings
- Meteorological Data
- Site Map

Table A- 1: Daily Integrated 8-hour Cr^{+6} Sampling Results

Date of Sample	AMS 1	AMS 2	AMS 3	AMS 4
Monday, November 30, 2020	12.0	12.0	12.0	
Tuesday, December 1, 2020	4.7	4.7	1.8	4.7
Wednesday, December 2, 2020	4.8	4.9	1.8	4.9
Thursday, December 3, 2020	4.4	4.7	1.8	4.6
Friday, December 4, 2020	4.5	4.6	0.6	4.6
Saturday, December 5, 2020			0.6	
Sunday, December 6, 2020			0.6	
Monday, December 7, 2020	5.5	4.7	1.7	4.6
Tuesday, December 8, 2020	4.3	4.9	1.8	4.9
Wednesday, December 9, 2020	4.8	4.9	1.8	5.0
Thursday, December 10, 2020	4.9	4.9	5.6	5.0
Friday, December 11, 2020	4.8	11.0	2.9	5.0
Saturday, December 12, 2020			2.9	
Sunday, December 13, 2020			2.9	
Monday, December 14, 2020	4.8	5.0	1.8	5.0
Tuesday, December 15, 2020	5.5	5.5	1.7	5.5
Wednesday, December 16, 2020	9.5	9.5	2.1	28.0
Thursday, December 17, 2020			2.1	
Friday, December 18, 2020	7.0	9.5	1.5	9.5
Saturday, December 19, 2020			1.5	
Sunday, December 20, 2020			1.5	
Monday, December 21, 2020	4.3	4.5	1.8	4.5
Tuesday, December 22, 2020	10.5	11.5	12.5	11.0
Temporary Shutdown				
Friday, February 12, 2021	4.8	5.0	1.2	5.0
Saturday, February 13, 2021			1.2	
Sunday, February 14, 2021			1.2	
Monday, February 15, 2021	4.6	4.8	1.8	4.8
Tuesday, February 16, 2021	4.8	5.0	1.7	5.0

Results in nanograms per cubic meter. Highlighted cells indicate a detectable level of Cr^{+6}. All other values are below the laboratory method detection limit (MDL).
Values below the MDL are shown in the table at one-half the MDL for data reporting purposes. This established practice is consistent with PPG's Site 114 reporting of non-detects by AECOM.
No sample collected at AMS 4 on 11/30/20 due to equipment failure. Monitoring discontinued after 12/22/20 during site shut down and resumed on 02/12/21. Monitoring discontinued after completion of intrusive activities on 02/16/21.

Table A- 2: Daily Integrated 8-hour Total Particulate Sampling Results

Date of Sample	AMS 1	AMS 2	AMS 3	AMS 4
Monday, November 30, 2020	115.0	120.0	115.0	
Tuesday, December 1, 2020	46.0	46.0	17.5	46.0
Wednesday, December 2, 2020	47.5	48.0	17.5	48.5
Thursday, December 3, 2020	43.5	46.0	17.0	44.5
Friday, December 4, 2020	44.5	45.5	6.0	45.5
Saturday, December 5, 2020			6.0	
Sunday, December 6, 2020			6.0	
Monday, December 7, 2020	55.0	45.0	16.5	44.0
Tuesday, December 8, 2020	41.5	48.0	17.5	47.5
Wednesday, December 9, 2020	46.5	47.0	17.5	48.5
Thursday, December 10, 2020	47.0	48.0	17.5	50.0
Friday, December 11, 2020	47.0	49.0	24.0	48.5
Saturday, December 12, 2020			24.0	
Sunday, December 13, 2020			24.0	
Monday, December 14, 2020	47.5	50.0	17.5	49.0
Tuesday, December 15, 2020	50.0	55.0	17.0	55.0
Wednesday, December 16, 2020	95.0	95.0	8.6	100.0
Thursday, December 17, 2020			8.6	
Friday, December 18, 2020	70.0	95.0	19.0	95.0
Saturday, December 19, 2020			19.0	
Sunday, December 20, 2020			19.0	
Monday, December 21, 2020	42.0	44.5	17.5	44.5
Tuesday, December 22, 2020	105.0	115.0	120.0	110.0
Temporary Shutdown				
Friday, February 12, 2021	47.0	49.0	17.0	50.0
Saturday, February 13, 2021			17.0	
Sunday, February 14, 2021			17.0	
Monday, February 15, 2021	45.0	47.0	17.0	46.5
Tuesday, February 16, 2021	46.5	49.0	16.5	49.0

Results in micrograms per cubic meter. Highlighted cells indicate a detectable level of total particulate. All other values are below the laboratory method detection limit (MDL).
Values below the MDL are shown in the table at one-half the MDL for data reporting purposes. This established practice is consistent with PPG's Site 114 reporting of non-detects by AECOM.
No sample collected at AMS 4 on 11/30/20 due to equipment failure. Monitoring discontinued after 12/22/20 during site shut down and resumed on 02/12/21. Monitoring discontinued after completion of intrusive activities on 02/16/21.

Figure A- 1: Real-Time 15-minute average PM_{10} Monitoring Results

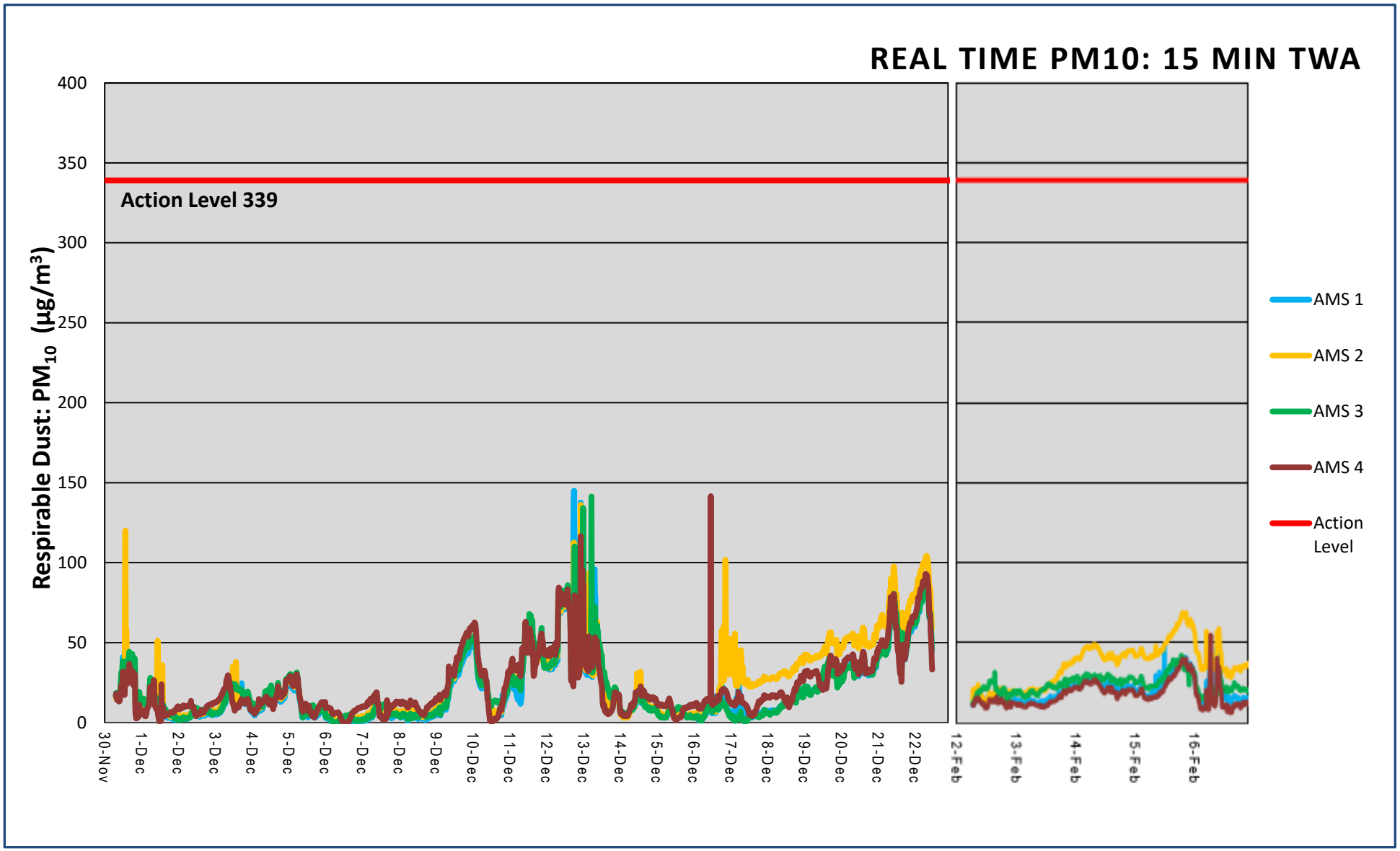


Table A-3: Daily Maximum Hand-held Monitoring Instantaneous Results

Date	PM10 (µg/m^3)	Time	Location
Monday, November 30, 2020	36	11:00	AMS2
Tuesday, December 1, 2020	20	9:00	AMS3
Wednesday, December 2, 2020	15	13:00	AMS3
Thursday, December 3, 2020	22	10:00	AMS1
Friday, December 4, 2020	24	8:00	AMS4
Saturday, December 5, 2020	N/A	N/A	N/A
Sunday, December 6, 2020	N/A	N/A	N/A
Monday, December 7, 2020	17	9:00	AMS3
Tuesday, December 8, 2020	11	13:00	AMS2
Wednesday, December 9, 2020	85	14:00	AMS2
Thursday, December 10, 2020	59	8:00	AMS2
Friday, December 11, 2020	142	11:00	AMS3
Saturday, December 12, 2020	N/A	N/A	N/A
Sunday, December 13, 2020	N/A	N/A	N/A
Monday, December 14, 2020	18	12:00	AMS4
Tuesday, December 15, 2020	7	14:00	AMS3
Wednesday, December 16, 2020	26	10:00	AMS4
Thursday, December 17, 2020	N/A	N/A	N/A
Friday, December 18, 2020	7	9:00	AMS3
Saturday, December 19, 2020	N/A	N/A	N/A
Sunday, December 20, 2020	N/A	N/A	N/A
Monday, December 21, 2020	141	11:00	AMS2
Tuesday, December 22, 2020	116	8:00	AMS3
Temporary Shutdown			
Friday, February 12, 2021	47	10:00	AMS3
Saturday, February 13, 2021	N/A	N/A	N/A
Sunday, February 14, 2021	N/A	N/A	N/A
Monday, February 15, 2021	33	10:00	AMS4
Tuesday, February 16, 2021	29	9:00	AMS3

Note: Blank cells are days where no hand-held monitoring occurred. Monitoring discontinued after 12/22/20 during site shut down and resumed on 02/12/21. Monitoring discontinued after completion of intrusive activities on 02/16/21.

Table A- 5: Elevated Concentration Summary

Parameter	Date	Time	Location	Wind Conditions	Elevated Concentration	Explanation
N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A

PM_{10} – Respirable Particulate Matter measured in micrograms per cubic meter ($\mu g/m^3$)

ng/m^3 – nanograms per cubic meter

$\mu g/m^3$ – micrograms per cubic meter

NA – Not Applicable

ND –No Data

Figure A-2: Wind Speed

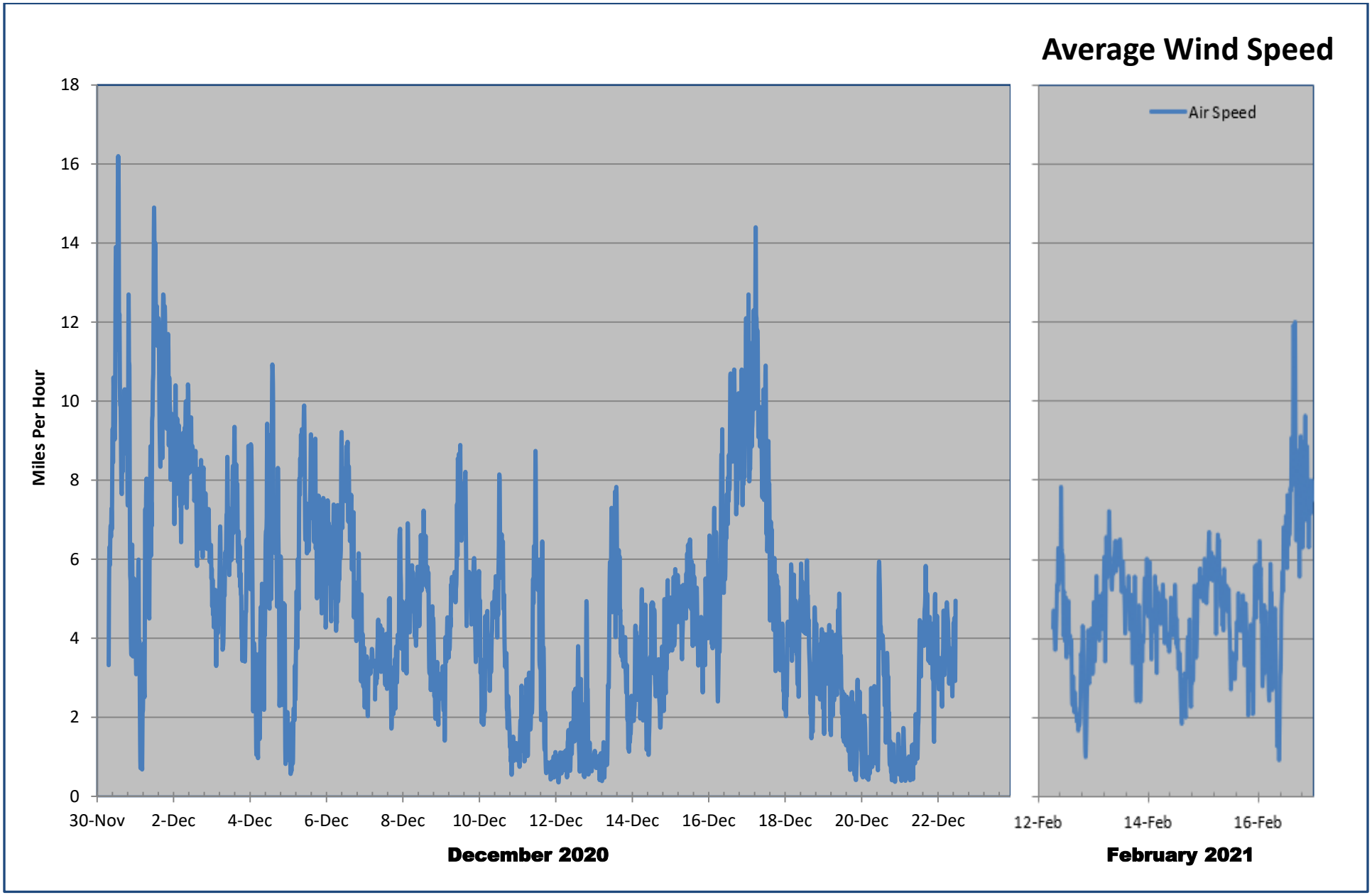


Figure A-3: Temperature

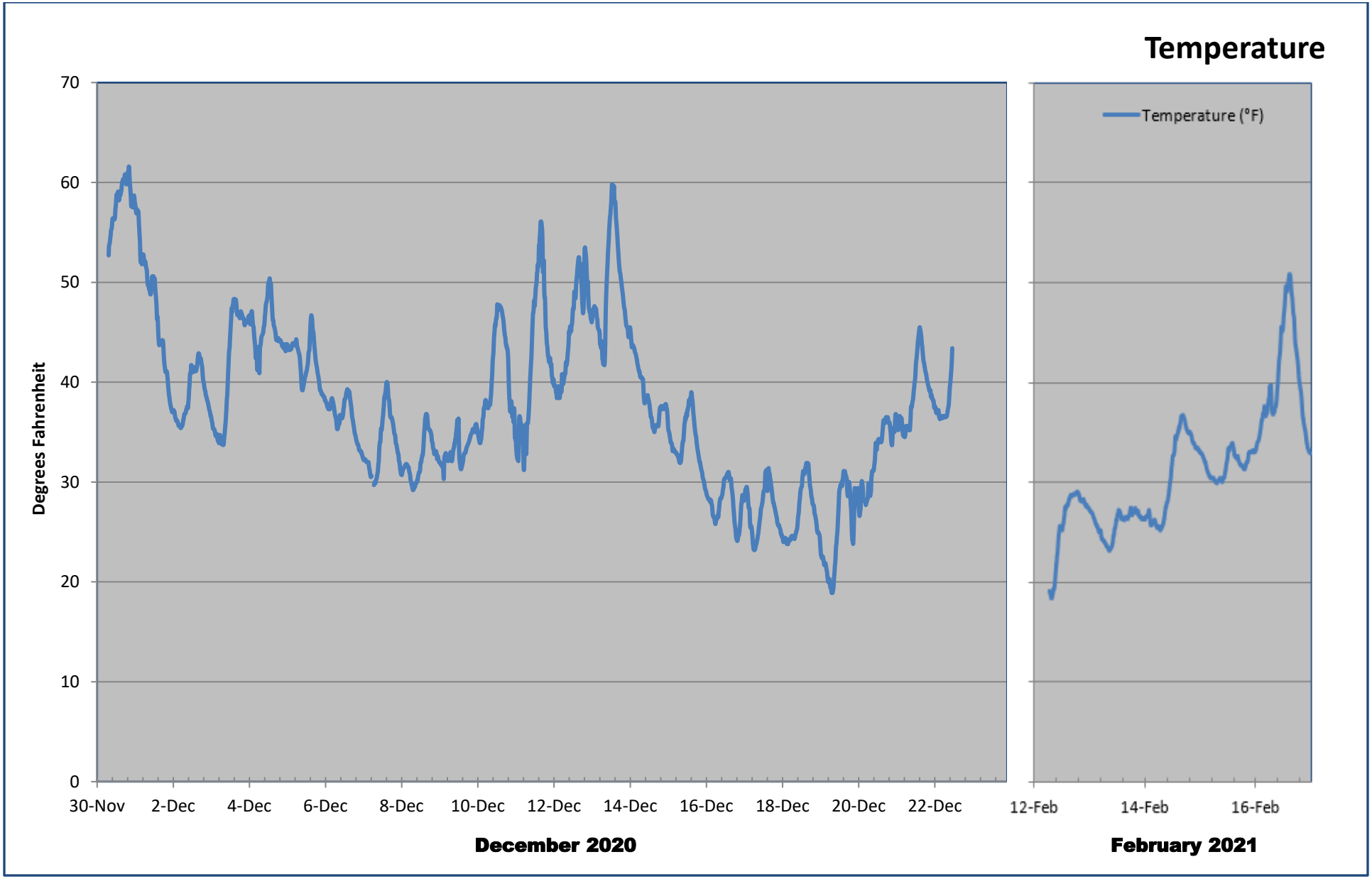


Figure A-4: Relative Humidity

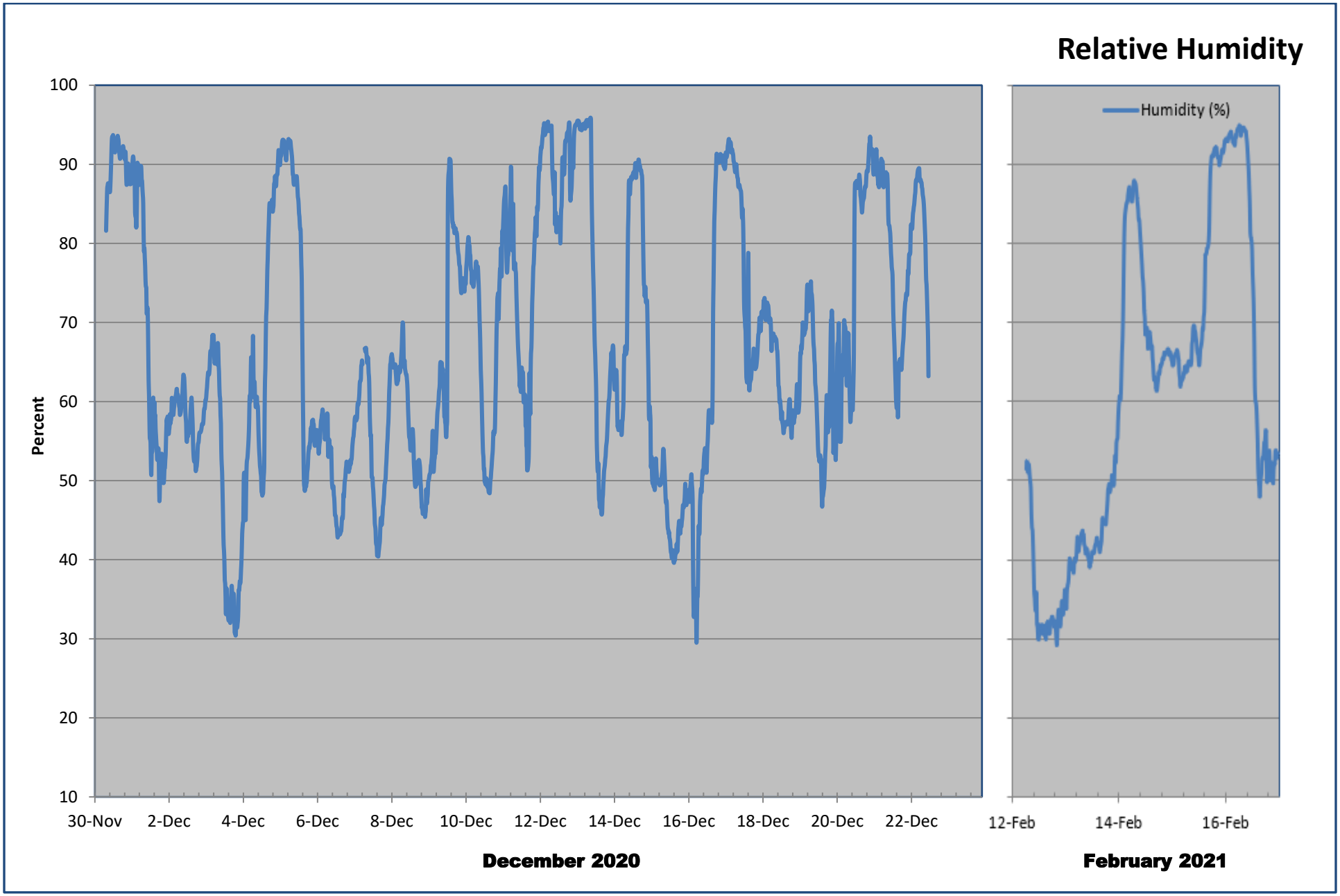


Figure A-5: Monthly Wind-Rose

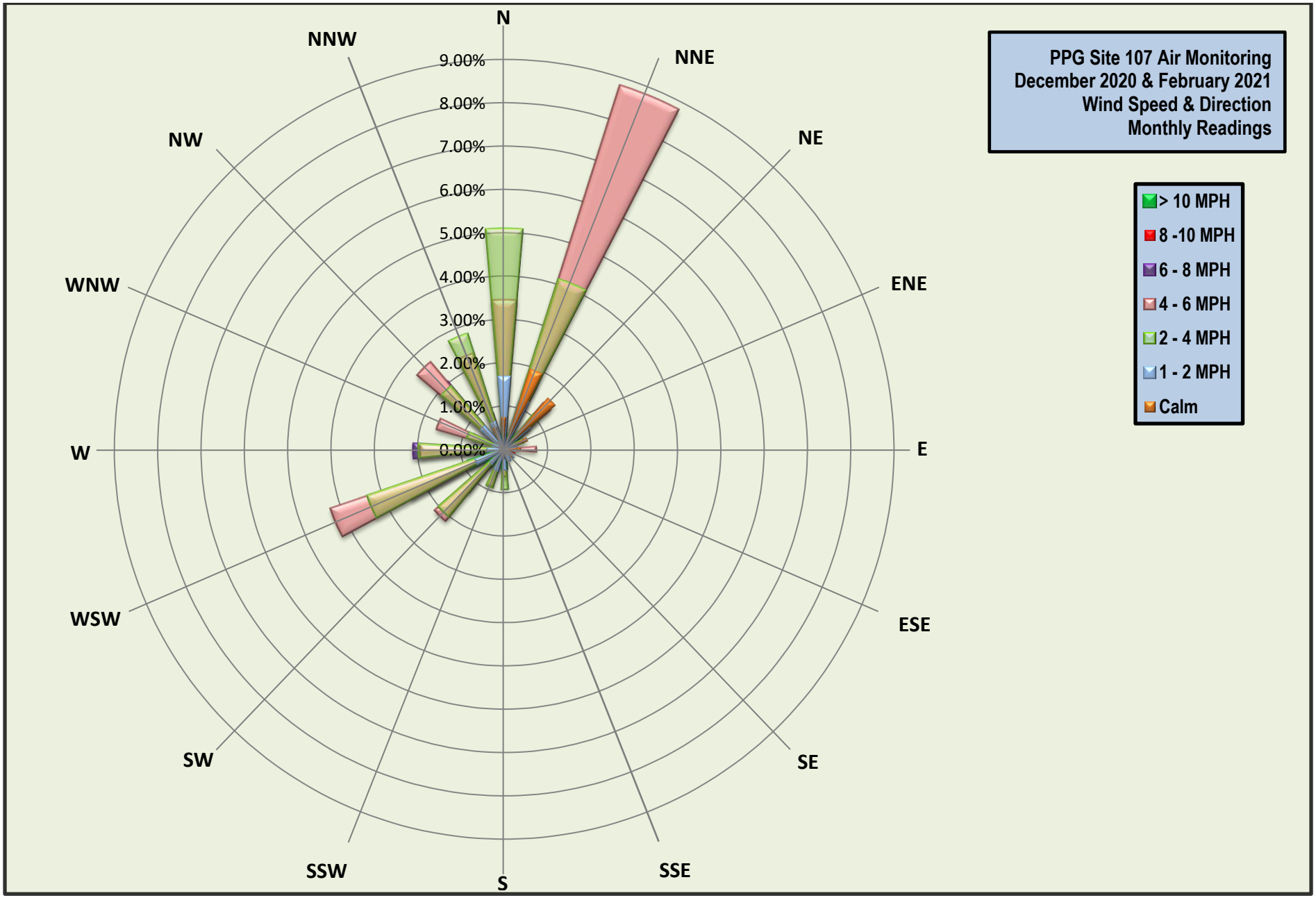
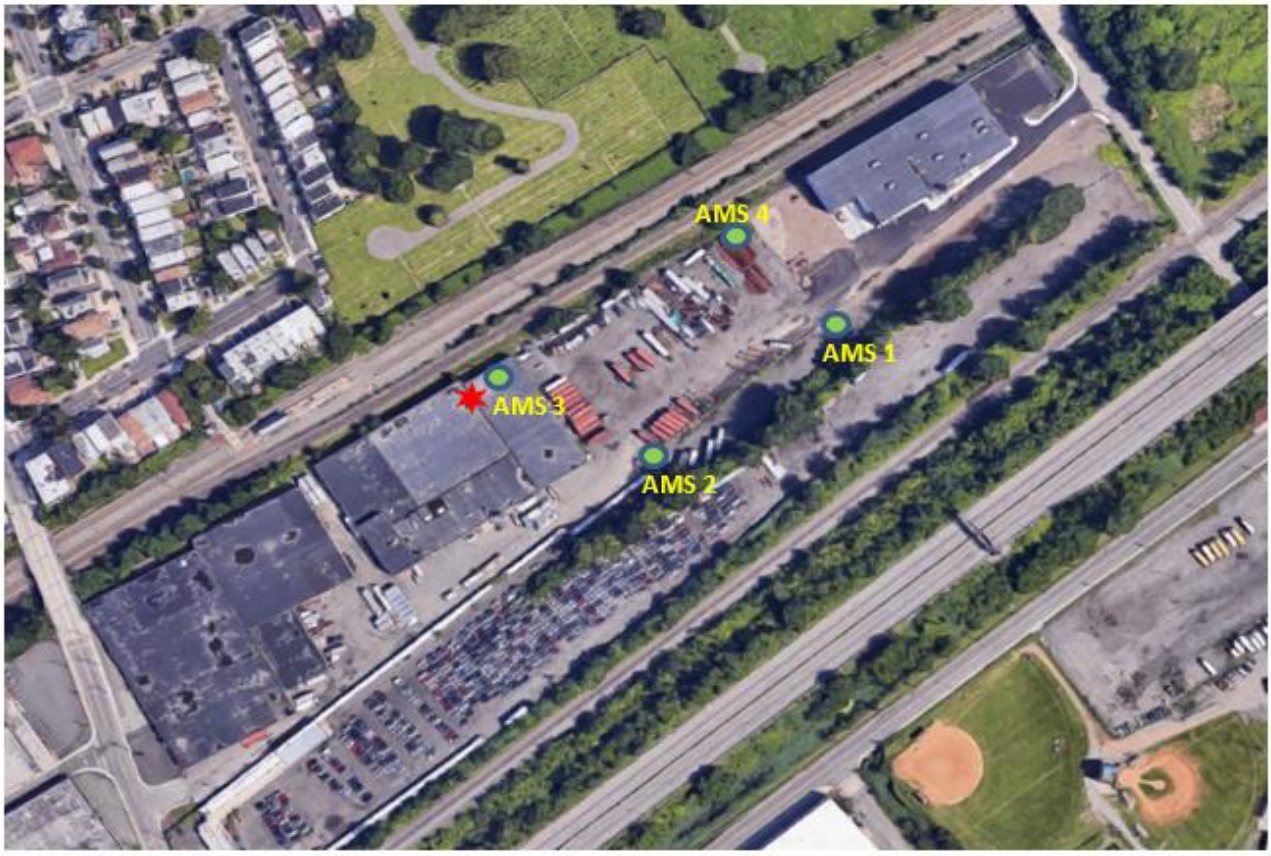


Figure A–6: Site Maps Site 107

(11.30.20 – End of Reporting Period)



Appendix B

Program-to-date Result Summaries

- Integrated 8-hour Cr^{+6} Concentration Summaries
- Integrated 8-hour Total Particulate Concentration Summaries
- Real-time PM^{10} Concentrations Summaries

Table B- 1: Program-to-date Integrated 8-hour Cr^{+6} Sampling Results Statistics

Statistics[1]	Site 107			
	AMS 1	AMS 2	AMS 3	AMS 4
Total Number of Samples[1]	19	19	19	18
Rate of Data Collection	100%	100%	100%	100%
Number of Detected Samples[2]	0	1	5	1
% of Cr^{+6} Samples Greater than MDL	0.0%	5.3%	26.3%	5.5%
Number of Samples Above AAC	0	0	0	0
Average % Cr^{+6} in Dust[3]	0.010%	0.011%	0.012%	0.011%
Maximum % Cr^{+6} in Dust[3]	0.011%	0.022%	0.032%	0.028%

Results in ng/m^3 – nanograms per cubic meter

[1] Total number of samples collected since November 30, 2020. Variations in the number of samples collected are specifically identified in Table A-1 within the report month of the variation. In general variations are caused by sampler malfunctions, site activities, weather conditions, etc.

[2] Total number of sample results since November 30, 2020, reported above the laboratory reporting limit.

[3] The program-to-date average and maximum percent Cr^{+6} in dust was calculated using all the integrated Total Particulate and Cr^{+6} sample results collected since November 30, 2020.

Table B- 2: Monthly Average Integrated 8-hour Cr^{+6} Sampling Results

Statistics	Site 107			
	AMS 1	AMS 2	AMS3	AMS 4
November '20	12.0	12.0	12.0	N/A
December '20	5.6	6.3	2.4	7.1
February '21	4.7	4.9	1.4	4.9
Program to Date	5.8	6.4	2.6	6.7
All readings in ng/m^3 – nanograms per cubic meter				

Table B- 3: Program-to-date Integrated Total Particulate 8-hour Sampling Results Statistics

Statistics	Site 107			
	AMS 1	AMS 2	AMS 3	AMS 4
Total Number of Samples[1]	19	19	19	18
Rate of Data Collection	100%	100%	100%	100%
Number of DetectedSamples[2]	0	0	3	0
% Detection	0.0%	0.0%	15.8%	0.0%

Results in ng/m^3 – nanograms per cubic meter

[1] Total number of samples collected since November 30, 2020. Variations in the number of samples collected are specifically identified in Table A-1 within the report month of the variation. In general variations are caused by sampler malfunctions, site activities, weather conditions, etc.

[2] Total number of sample results since November 30, 2020, reported above the laboratory reporting limit.

Table B- 4: Monthly Average Integrated 8-hour Total Particulate Sampling Results

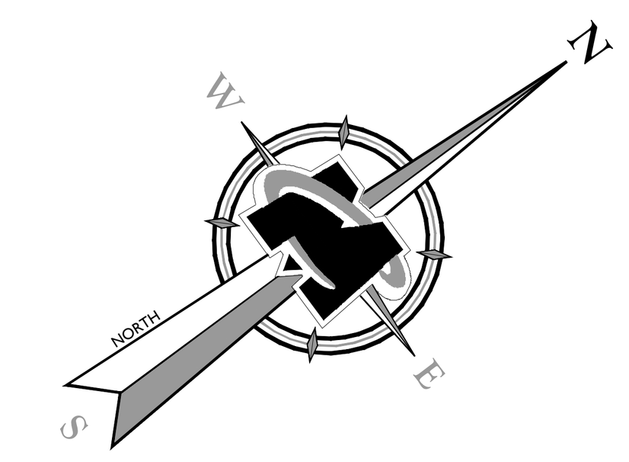
Statistics	Site 107			
	AMS 1	AMS 2	AMS 3	AMS 4
November '20	115.0	120.0	115.0	N/A
December '20	55.2	58.5	20.8	58.4
February '21	46.2	48.3	16.9	48.5
Program to Date	56.9	60.1	23.5	56.8
All readings in µg/m^3 – micrograms per cubic meter				

Table B- 5: Monthly Average Real-Time PM_{10} Monitoring Results

Statistics	Site 107			
	AMS 1	AMS 2	AMS 3	AMS 4
November '20	23.3	26.3	27.0	19.8
December '20	19.0	25.5	20.9	23.0
February '21	21.2	37.2	23.5	17.1
Program to Date	19.5	27.7	21.5	21.8
All readings in µg/m^3 – micrograms per cubic meter				

Appendix F

As-Built Diagrams



LEGEND

- POST EXCAVATION MAJOR CONTOUR
- POST EXCAVATION MINOR CONTOUR

GENERAL NOTES

1. THE SOLE PURPOSE OF THIS PLAN IS TO SHOW POST EXCAVATION CONDITIONS & ELEVATIONS WITHIN THE MSA AREA AT THE PROJECT SITE.
2. MSA AREA POST EXCAVATION LOCATIONS AND ELEVATIONS WERE OBTAINED BY MASER CONSULTING P.A. & ENTACT, LLC. BETWEEN 6/18/18 & 9/27/19
3. HORIZONTAL DATUM NAD 1983, VERTICAL DATUM NAVD '88.

REFERENCES

1. PLANS ENTITLED, "PROPOSED DEMOLITION AND EXCAVATION, PPG SITE 107, FASHIONLAND, 18 CHAPEL AVENUE, JERSEY CITY, NEW JERSEY" PREPARED BY ARCADIS U.S., INC., DATED SEPTEMBER, 2017.
2. PLANS ENTITLED, "FINAL AS-BUILT SURVEY, PPG SITE 107, FASHIONLAND, 18 CHAPEL AVENUE, JERSEY CITY, HUDSON COUNTY, NEW JERSEY" PREPARED BY MASER CONSULTING, P.A., LAST REVISED 3/26/21.
3. PLANS ENTITLED, "POST EXCAVATION SURVEY, PPG SITE 107, FASHIONLAND, 18 CHAPEL AVENUE, JERSEY CITY, HUDSON COUNTY, NEW JERSEY" PREPARED BY MASER CONSULTING, P.A., LAST REVISED 3/10/21.

20 0 20 40

SCALE : 1" = 20'

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- Lehigh Valley, PA
- Exton, PA
- Philadelphia, PA
- Pittsburgh, PA
- Tampa, FL
- Orlando, FL
- Miami, FL
- Sterling, VA
- Norfolk, VA
- Albuquerque, NM
- Charlotte, NC

State of N.J. Certificate of Authorization: 24GA27986500

REV	DATE	DRAWN BY	DESCRIPTION
1	7/21/21	DMS	GENERAL REVISIONS PER ARCADIS REQUEST 7/15/21

R. THOMAS HUGG
NEW JERSEY PROFESSIONAL
LAND SURVEYOR - LICENSE NUMBER: GS36737

POST EXCAVATION SURVEY

FOR

ENTACT, LLC

MSA AREA
PPG SITE 107
FASHIONLAND
18 CHAPEL AVENUE

JERSEY CITY
HUDSON COUNTY
NEW JERSEY

EGG HARBOR OFFICE
500 Scarborough Drive,
Suite 108
Egg Harbor, NJ 08234

Phone: 609.390.1927
Fax: 609.390.0040

SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	5/14/21	DMS	RTH

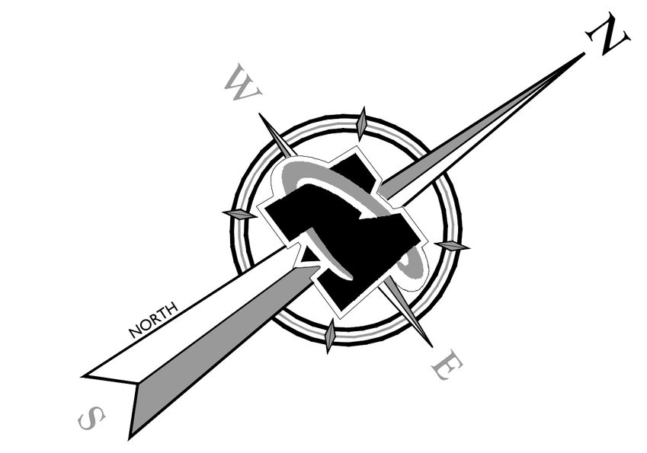
PROJECT NUMBER:	DRAWING NAME:
17007872A	V-POST-EX

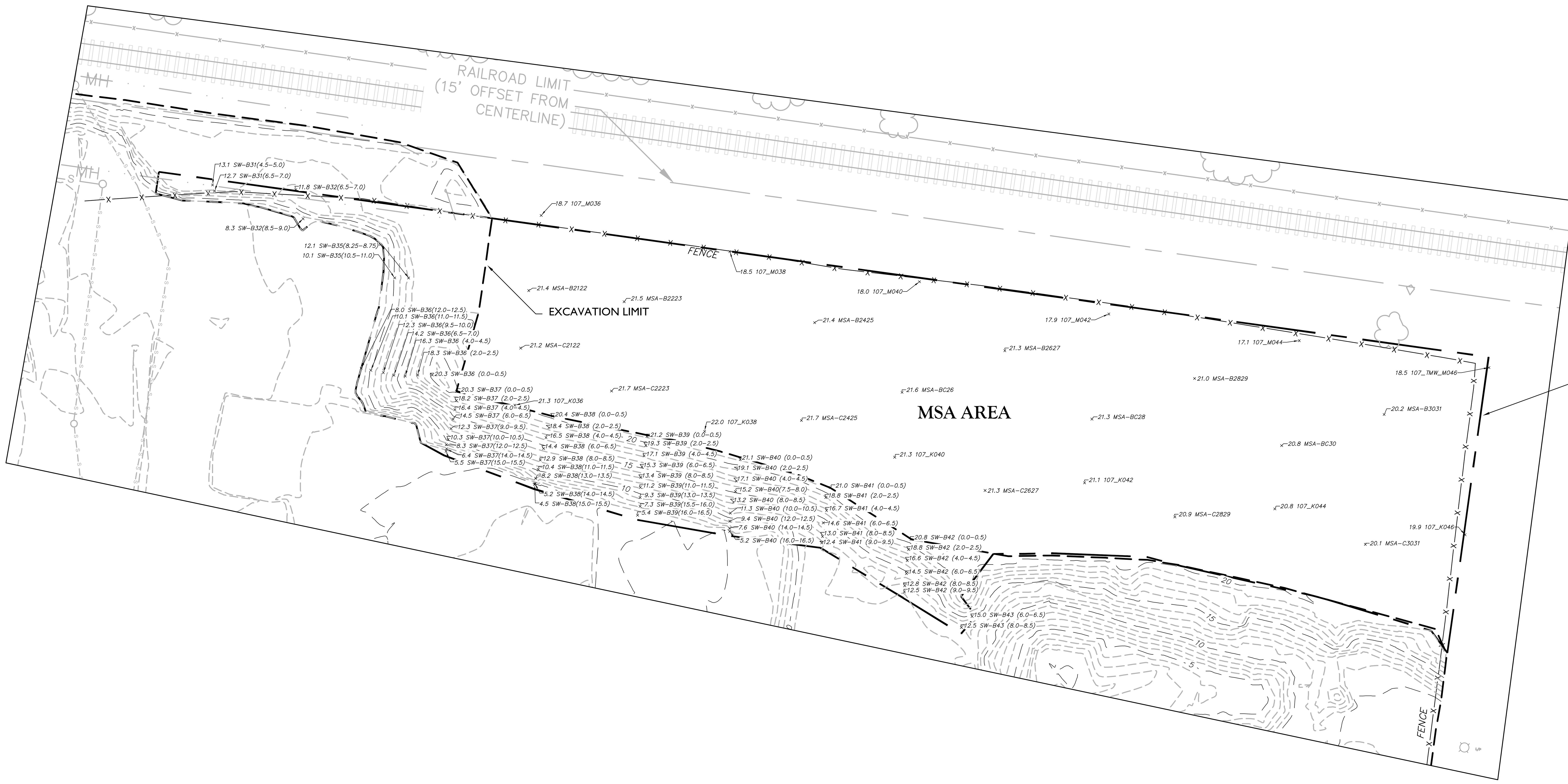
SHEET TITLE:

POST EXCAVATION SURVEY

SHEET NUMBER:

01 of 01





LEGEND

- POST EXCAVATION MAJOR CONTOUR
- POST EXCAVATION MINOR CONTOUR
- FINAL AS-BUILT MAJOR CONTOUR
- FINAL AS-BUILT MINOR CONTOUR

GENERAL NOTES

1. THE SOLE PURPOSE OF THIS PLAN IS TO SHOW POST EXCAVATION SAMPLE LOCATIONS & ELEVATIONS WITHIN THE MSA AREA AT THE PROJECT SITE.
2. POST EXCAVATION SAMPLE LOCATIONS AND ELEVATIONS WERE OBTAINED BY MASER CONSULTING P.A. BETWEEN 11/30/20 AND 12/16/20.
3. HORIZONTAL DATUM NAD 1983, VERTICAL DATUM NAVD '88.

REFERENCES

1. PLANS ENTITLED, "PROPOSED DEMOLITION AND EXCAVATION, PPG SITE 107, FASHIONLAND, 18 CHAPEL AVENUE, JERSEY CITY, NEW JERSEY" PREPARED BY ARCADIS U.S., INC., DATED SEPTEMBER, 2017.
2. PLANS ENTITLED, "FINAL AS-BUILT SURVEY, PPG SITE 107, FASHIONLAND, 18 CHAPEL AVENUE, JERSEY CITY, HUDSON COUNTY, NEW JERSEY" PREPARED BY MASER CONSULTING, P.A., LAST REVISED 3/26/21.
3. PLANS ENTITLED, "POST EXCAVATION SURVEY, PPG SITE 107, FASHIONLAND, 18 CHAPEL AVENUE, JERSEY CITY, HUDSON COUNTY, NEW JERSEY" PREPARED BY MASER CONSULTING, P.A., LAST REVISED 3/10/21.

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SCALE : 1" = 20'

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- Charlotte, NC

State of N.J. Certificate of Authorization: 24GA27986500

REV	DATE	DRAWN BY	DESCRIPTION
1	7/21/21	DMS	GENERAL REVISIONS PER ARCADIS REQUEST 7/15/21

R. THOMAS HUGG
NEW JERSEY PROFESSIONAL
LAND SURVEYOR - LICENSE NUMBER: GS36737

POST EXCAVATION SAMPLE SURVEY

FOR

ENTACT, LLC

MSA AREA
PPG SITE 107
FASHIONLAND
18 CHAPEL AVENUE

JERSEY CITY
HUDSON COUNTY
NEW JERSEY

EGG HARBOR OFFICE
500 Scarborough Drive,
Suite 108
Egg Harbor, NJ 08234

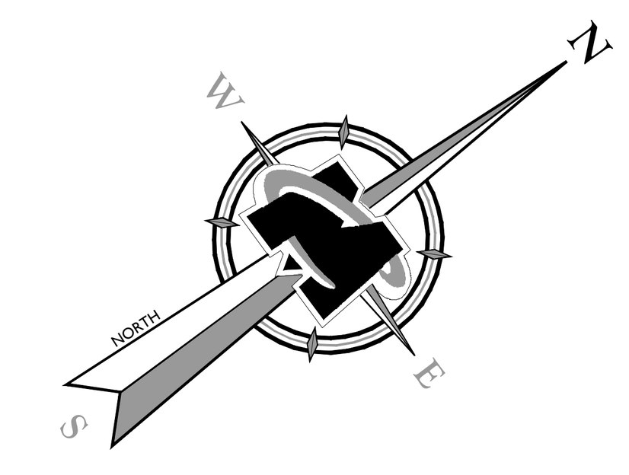
Phone: 609.390.1927
Fax: 609.390.0040

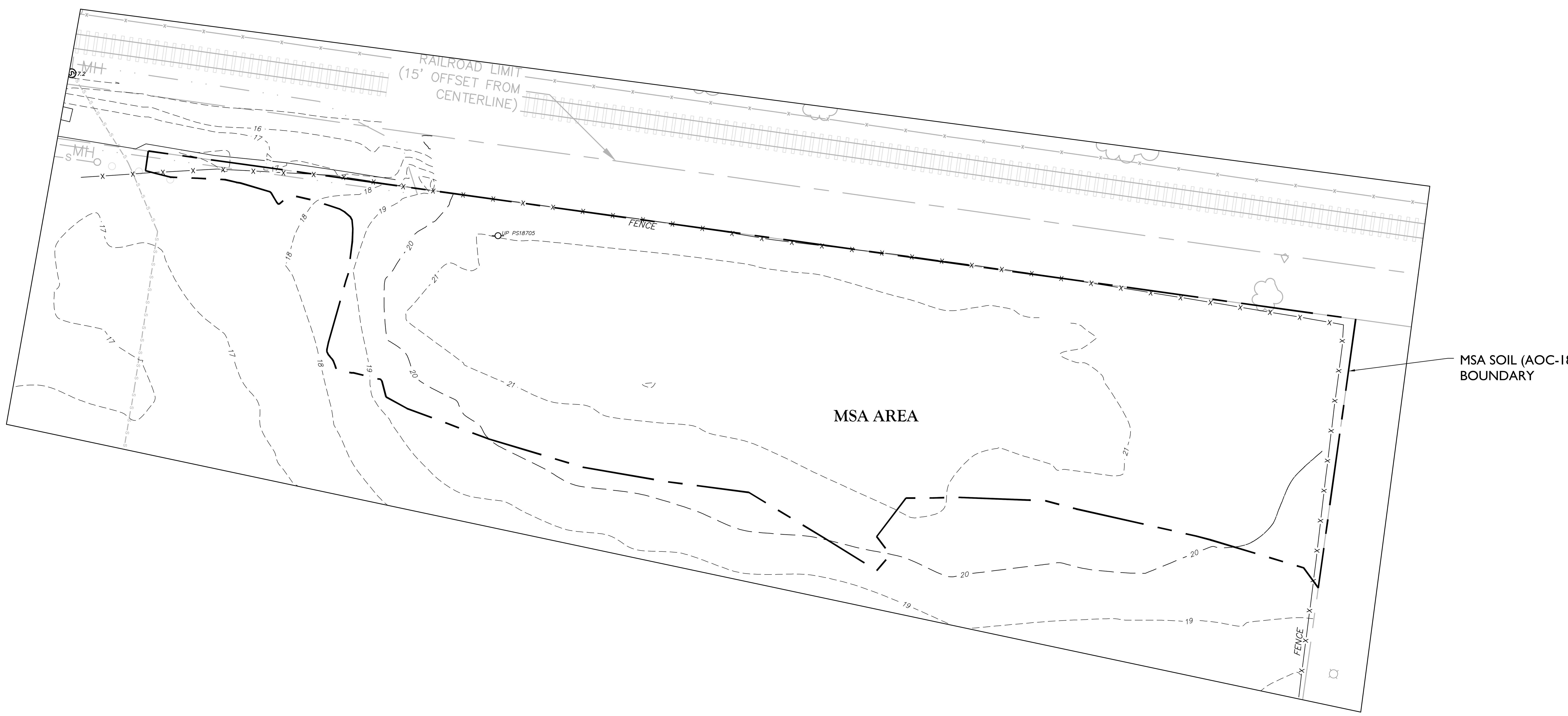
SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	5/14/21	DMS	RTH

PROJECT NUMBER: 17007872A

DRAWING NAME: V-POST-EX

SHEET TITLE: POST EXCAVATION SAMPLE SURVEY





LEGEND

FINAL AS-BUILT MAJOR CONTOUR

FINAL AS-BUILT MINOR CONTOUR

GENERAL NOTES

1. THE SOLE PURPOSE OF THIS PLAN IS TO SHOW THE INTREM AS-BUILT LOCATIONS & ELEVATIONS WITHIN THE MSA AREA OF THE PROJECT SITE.
2. MSA INTREM AS-BUILT LOCATIONS AND ELEVATIONS WERE OBTAINED BY MASER CONSULTING P.A. ON 10/19/19 & 03/10/21.
3. HORIZONTAL DATUM NAD 1983, VERTICAL DATUM NAVD '88.

REFERENCES

1. PLANS ENTITLED, "PROPOSED DEMOLITION AND EXCAVATION, PPG SITE 107, FASHIONLAND, 18 CHAPEL AVENUE, JERSEY CITY, NEW JERSEY" PREPARED BY ARCADIS U.S., INC., DATED SEPTEMBER, 2017.
2. PLANS ENTITLED, "FINAL AS-BUILT SURVEY, PPG SITE 107, FASHIONLAND, 18 CHAPEL AVENUE, JERSEY CITY, HUDSON COUNTY, NEW JERSEY" PREPARED BY MASER CONSULTING, P.A., LAST REVISED 3/26/21.
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SCALE : 1" = 20'

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State of N.J. Certificate of Authorization: 24GA27986500

REV	DATE	DRAWN BY	DESCRIPTION
1	7/21/21	DMS	GENERAL REVISIONS ARCADIS REQUEST 7/15/21

R. THOMAS HUGG
NEW JERSEY PROFESSIONAL
LAND SURVEYOR - LICENSE NUMBER: GS36737

FINAL AS-BUILT SURVEY

FOR

ENTACT, LLC

MSA AREA
PPG SITE 107
FASHIONLAND
18 CHAPEL AVENUE

JERSEY CITY
HUDSON COUNTY
NEW JERSEY

EGG HARBOR OFFICE
500 Scarborough Drive,
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SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	5/14/21	DMS	RTH

PROJECT NUMBER:	DRAWING NAME:
17007872A	V-FNL-ASBT

SHEET TITLE:

FINAL AS-BUILT TOPOGRAPHIC SURVEY

SHEET NUMBER:

01 of 01

Appendix G

Non-Hazardous Waste Disposal Documentation

Appendix G. Non-Hazardous Waste Disposal Documentation
Site 107, AOC 1B. Material Staging Area, Garfield Avenue Group
PPG Jersey City, New Jersey

This appendix includes bills of lading (BOLs) for non-hazardous wastes which were removed during implementation of the remedial action for the Material Staging Area Soil (MSA; AOC-1B) at the Hudson County Chrome (HCC) Site 107, Jersey City, New Jersey. As such, BOLs are identified based on waste stream and organized by disposal facility (**Table 1**):

Table 1. Non-Hazardous Waste BOLs Generated for HCC Site 107 MSA

Profile Number / Approval Number	Profile Name	Treatment, Storage, Disposal Facility	Dates	Loads	Volume
Soil and Concrete					
WTS #42761, & WTS #43503	Non-Hazardous Soil, & Non-Hazardous Soils, Sand and Gravel	Cumberland County Improvement Authority, Deerfield Township, New Jersey	February 15, 2021 – February 16, 2021	10	250 tons
Water					
Not Applicable	Non-Regulated Material (groundwater)	Site 137 (Passaic Valley Sewerage Commission Sewer Use #31630035), Jersey City, New Jersey	February 12, 2021	2	9,000 gallons
Miscellaneous					
Customer #PPG234	Non-RCRA solids, D.O.T. Non-regulated (creosote timbers)	Clean Earth of New Jersey, Inc., Kearny, New Jersey	February 18, 2021	1	~ 20 tons

Appendix G-1

Soil Profile and BOLs

- Non-hazardous soils were disposed of at Cumberland County Improvement Authority. Bills of lading are identified by the date material was transported off-site to Cumberland County Improvement Authority.

Beneficial Soil Solutions, Inc.
12170 Mount Albert Rd.
Ellicott City, Maryland 21042
Phone: 410. 531. 3205
Fax: 410. 531. 2028

Beneficial Re-Use #:
Date:
P.O. Number:

SOIL / PRODUCT APPROVAL CONTRACT FORM

Customer/Agent: WTS Inc.
Address: 435 N 2nd Street, Lewiston, NY 14092
Contact: Adam Thomas
Phone: 716-754-5400 Fax: 716-754-8001 Cell: 716-425-7445 E-mail: athomas@wtsonline.com
Generator: PPG Industries, Inc.
Address: 440 College Park Drive, Monroeville, PA 15145
Contact: Jody Overmyer Phone: 724-325-5070
Job Site: Site 107 Type of Operations: Excavation / Remediation
Address: 18 Chapel Avenue, Jersey City NJ
Contact: Jody Overmyer Phone: 724-325-5070 Cell: 412-235-8881
Contaminant and Source: Chromium Tons/Yards: 20-40,000
Lab Name SGS - Dayton NJ Sample ID #'s See Attached

NON-HAZARDOUS SOIL/PRODUCT CERTIFICATION, TERMS & CONDITIONS

Customer/Agent hereby acknowledges that Generator's information is true and accurate to the best of its knowledge, and that the landfill cover product/material is legally and lawfully owned by Generator until such time that Beneficial Soil Solutions, Inc. ("BSS") is paid in full for its services rendered, in accordance with the terms of this agreement (including the terms set forth on the letter agreement entitled Quote for Services, a copy of which is attached hereto and incorporated hereby). Customer/Agent covenants and agrees that no original bills of lading or certified weight tickets will be issued until payment is received in full by BSS. Customer/Agent and Generator each acknowledge that their utilization of BSS services is for commercial purposes/activities and not for personal, household or family purposes/activities. Each of Customer/Agent, Generator and BSS hereby: (i) acknowledge that this agreement shall be interpreted under the laws of the State of Maryland; (ii) waive their rights to a trial by jury concerning disputes arising hereunder; and (iii) consent to the jurisdiction of the courts located in Montgomery County, Maryland.

Generator, under penalty of law, does hereby certify that the product/material to be submitted for reuse/recycling/disposal to BSS is not a listed hazardous waste, nor does it contain a listed hazardous waste, nor does it exhibit any of the characteristics of a hazardous waste as defined in 40 CFR 261.

Generator also acknowledges that it has undertaken due diligence in determining the Non-Hazardous status of the said product/material, as defined in 40 CFR 261. Should, at any time after delivery, the product/material delivered for reuse/recycling/disposal be found to be nonconforming to the above, it shall be the responsibility of Generator to remove such product/material from the product/material's present location within five (5) days of notification (notification is to be verbal followed by written notification, overnight receipted). It is Generator's responsibility to abide by all Federal, State and Local regulations associated with the removal of its product/material. If the product/material is not removed within the specified time period, said disposal shall be arranged by a BSS representative and billed to Generator on a cost plus basis. Furthermore, Generator shall be responsible for any and all costs for decontamination and transportation incurred that are related to Generator's product/material and any and all liability for such nonconforming product/material shall revert to Generator.

In the event that any such product/material does not meet the above certification and conditions, or if any additional contaminants are contained and/or found nonconforming, then the Customer/Agent and Generator agree, jointly and severally, to indemnify, defend and hold BSS and its transferees harmless from and against any storage, transportation, treatment or other costs (including reasonable and court costs) that BSS and/or its transferees may incur as a result thereof, provided that in such event the Customer/Agent and Generator will be promptly notified of such breach of warranty and will be given reasonable opportunity to cure or mitigate the same. Customer/Agent and Generator hereby authorize any Clerk of any Court of Record in the State of Maryland to enter judgment by confession against each such party, jointly and severally, in favor of BSS for the full amount of the indebtedness due hereunder, including all costs and including reasonable due hereunder, and waives summons and other process and does further consent to the immediate execution of said judgment.

Generator acknowledges that all soils will be used as daily cover for a subtitle "D" landfill or beneficially reused at an authorized facility.

Customer/Agent (Company Name): Adam Thomas (WTS) Signature: _____ Title: Project Mgr Date: 4/16/18

Generator (Company Name): Jody Overmyer (PPG) Signature: _____ Title: Remediation Pr Date: 4/17/18

Beneficial Soil Solutions, Inc. Signature: _____ Rick O'Brien President

WTS # 42761

Generator Information

Generator EPA ID#:	NJD986609311	SIC/NAICS:	531390
Generator:	PPG Industries, Inc.	Main Number:	(724) 325-5070
Mailing Address:	440 College Park Drive	City, State, Zip:	Monroeville, PA 15146
Site Address:	900 Garfield Avenue (Site 133 West and 137B)	City, State, Zip:	Jersey City, NJ 07305
Contact Name & Title:	Jody Overmyer- Project Manager		
Phone:	(724) 325-5070	E-mail Address:	overmyer@ppg.com

Billing Information

Business Contact:	WTS, Inc.		
Billing Address:	435 North 2nd Street, Lewiston NY 14092		
Phone Number:	(716) 754-5400	Technical Contact:	Martin Gregg
Fax Number:	(716) 754-8001	Technical Contact Phone:	(716) 870-6773
Business Contact Email:	mverde@wtsonline.com	Technical Contact Email:	mgregg@wtsonline.com

TSDF Information

TSDF EPA ID#:	N/A		
Facility:	Cumberland County Improvement Authority	Technology:	Subtitle D Landfill
Site Address:	169 JESSE BRIDGE ROAD		MILLVILLE, NJ 08332
	Address		City, State, Zip
Contact Name & Title:	JAMES ROCCO		
Phone:	(856) 825-3700 x 131	E-mail Address:	Jrocco@ccia-net.com
Comments:			

Physical Properties

Waste Name:	Non-Hazardous Soil WTS# 42761 (MHG)				
Physical State:	Liquid % 100	Solid %	Semi-solid/Sludge %	Compressed Gas %	
Flash Point >200	Specific Gravity ~1.0	BTU/lb 0	pH 7-9		
Viscosity High	Color Varies	Odor None	Appearance Soil	Layering None	
Process generating waste:	Demolition/excavation of remedial site.				
Basis of Knowledge:	MSDS ✔ Analytical Data ✔ Generator Knowledge				

Chemical Composition

Chemical Constituent(s)	%, ppm Range
Small Stones (<6" diameter)	0-5%
Soil	95-100%
Chromium (TCLP)	<5.0 mg/L
Characterization based on lab reports: JB54861, jb54861a, JB55242, jb55242a,	
JB55242AR, JB55242T, JB55345, jb55345a, jb55345r, JB55734, jb55734a,	
JB55734R, JB55734T, JB55868, jb55868a, jb55868r	

Shipping Information

DOT Shipping Name:	US DOT Non-Regulated Material (Soil)				
DOT Hazard Class:	None	UN/NA	N/A	Packing Group:	N/A
Additional Description:				RQ:	
Packaging:	✔ Bulk Solid	Bulk Liquid	Drum	Tote	Other Type / Size
Volume:	To Be Determined				
Frequency:	Per Week	Month	✔ Year	1 Time	Other Frequency

EPA Waste Numbers: None

State Waste Codes: None

Disclaimer and Signature

I hereby certify that all the information submitted in this and any attached documents is correct to the best of my knowledge. I further certify that any samples submitted are representative of the actual material being evaluated

Authorized Signature:	Jody Overmyer	Date:	8/6/2018
Name (Print)	Jody Overmyer	Title:	Project Manager

WTS # 43503

Generator Information

Generator EPA ID#:	NJR000076158	SIC/NAICS:	N/A
Generator:	PPG Industries Inc.	Main Number:	412-492-5200
Mailing Address:	440 College Park Drive	City, State, Zip:	Monroeville PA 15148
Site Address:	18 CHAPEL AVE & 20 LINDEN AVE E	City, State, Zip:	Jersey City, NJ 07305
Contact Name & Title:	Jody Overmyer		
Phone:	(724) 325-5070	E-mail Address:	overmyer@ppg.com

Billing Information

Business Contact:	Jody Overmyer		
Billing Address:	via ARIBA Supplier Network		
Phone Number:	( )	Technical Contact:	Jody Overmyer
Fax Number:	( )	Technical Contact Phone:	(724) 325-5070
Business Contact Email:		Technical Contact Email:	overmyer@ppg.com

TSDF Information

TSDF EPA ID#:	N/A		
Facility:	Cumberland County Improvement Authority (CCIA)	Technology:	Beneficial Reuse
Site Address:	169 Jesses Bridge Road		Deerfield Township, NJ 08352
	Address		City, State, Zip
Contact Name & Title:	Rick O'Brien		
Phone:	(410) 531-3205	E-mail Address:	rick@beneficalsoilssolution.com
Comments:			

Physical Properties

Waste Name:	Non-Hazardous Soils , Sand, Gravel, (MHG)				
Physical State:	Liquid % 100	Solid %	Semi-solid/Sludge %	Compressed Gas %	
Flash Point n/a	Specific Gravity	BTU/lb n/a	pH 6-10		
Viscosity n/a	Color soils	Odor soils	Appearance soils	Layering n/a	
Process generating waste:	Excavation during Remediation				
Basis of Knowledge:	MSDS ✔ Analytical Data	Generator Knowledge	WC(20190215)-E17		

Chemical Composition

Chemical Constituent(s)	%, ppm Range
Soil,Sand, Gravel	95-100%
Debris to be less than 6 inches	
No liners, plastic, rebar, wire mesh, wood or artificial debris allowed.	

Shipping Information

DOT Shipping Name:	Non Regulated Soil,Sand, Gravel				
DOT Hazard Class:	N/a	UN/NA	n/a	Packing Group:	n/a
Additional Description:				RQ:	
Packaging:	✔ Bulk Solid	Bulk Liquid	Drum	Tote	Other Type / Size
Volume:	est 2,000 tons				
Frequency:	Per Week	Month	Year	1 Time ✔ Other	Frequency Per project.
EPA Waste Numbers:	n/a				
State Waste Codes:	n/a				

Disclaimer and Signature

I hereby certify that all the information submitted in this and any attached documents is correct to the best of my knowledge. I further certify that any samples submitted are representative of the actual material being evaluated

Authorized Signature:	Jody Overmyer	Date:	2/25/2019
Name (Print)	Jody Overmyer	Title:	Remediation Project Engineer

SHIPPING DOCUMENT

Beneficial Soil Solutions, Inc. 12170 Mount Albert Rd Ellicott City, MD 21042 410. 531. 3205

BILL OF LADING #
DATE: 20210215 - 001
Re-Use # 040218

GENERATOR/SITE INFORMATION

NAME: PPG Industries

ADDRESS: PPG Site 107
18 Chapel Avenue
Jersey City NJ 07305

Contact: Rich Fehrberg Phone: 732-233-4552

TRANSPORTER INFORMATION

NAME: J&D Trucking

ADDRESS: 3526 NW Boulevard
Vineland, NJ 08360

Phone: 856. 691. 5145

Driver Site Signature Release: C Manley

Truck# 3 TAG# AT901H

DESTINATION INFORMATION

NAME: Cumberland County Improvement Auth. *Driver responsible for Compliance with DOT and Weight Laws*

ADDRESS: 169 Jesses Bridge Road
Deerfield Township, NJ 08313

SCALE HOUSE PHONE: 856.825.3700 ext.2200

GENERATOR STATEMENT

I am the authorized agent of the Generator for the materials offered on this Acceptance Ticket for transportation and recycling, and by my signature below, certify that the materials described below are non-hazardous as previously described in Beneficial Soil Solutions Inc.'s (BSSI) approval form. Their approval process has resulted in the issuance of the above referenced BSSI.

Printed Name: Christin Cifelli on behalf of PPG

Signature: Christin Cifelli

Date: 02/15/2021

TRANSPORTER STATEMENT

I hereby certify that the materials represented by this bill of lading were loaded at the above Generator address and will be delivered to the destination listed above without incident and/or tampering of any kind.

Printed Name: C. MANLEY

Signature: C Manley

Date: 2/15/21

MATERIAL DESCRIPTION: SOIL

Received by:

Printed Name:

Signature:

Date:

Gross weight: 72900

Tare weight: 26520

46380

Net weight: 23.19

SHIPPING DOCUMENT

Beneficial Soil Solutions, Inc. 12170 Mount Albert Rd Ellicott City, MD 21042 410. 531. 3205

BILL OF LADING # 20210215-002
DATE: 20210215-002
Re-Use # 040218

GENERATOR/SITE INFORMATION

NAME: PPG Industries

ADDRESS: PPG Site 107
18 Chapel Avenue
Jersey City NJ 07305

Contact: Rich Feinberg Phone: 732-233-4552

TRANSPORTER INFORMATION

NAME: J&D Trucking

ADDRESS: 3526 NW Boulevard
Vineland, NJ 08360

Phone: 856. 691. 5145

Driver Site Signature Release:

DESTINATION INFORMATION

Truck# 22 IAG# AT500H

NAME: Cumberland County Improvement Auth.

Driver responsible for Compliance with DOT and Weight Laws

ADDRESS: 169 Jesses Bridge Road
Deerfield Township, NJ 08332

SCALE HOUSE PHONE: 856.825.3700 ext.2200

GENERATOR STATEMENT

I am the authorized agent of the Generator for the materials offered on this Acceptance Ticket for transportation and recycling, and by my signature below, certify that the materials described below are non-hazardous as previously described in Beneficial Soil Solutions Inc.(BSSI) approval form. Their approval process has resulted in the issuance of the above referenced BSSI.

Printed Name: Christin Citelli on behalf of PPG

Signature:

Date: 02/15/2021

TRANSPORTER STATEMENT

I hereby certify that the materials represented by this bill of lading were loaded at the above Generator address and will be delivered to the destination listed above without incident and/or tampering of any kind.

Printed Name:

Signature:

Date: 2/15/21

MATERIAL DESCRIPTION SOIL

Received by:

Printed Name:

Signature:

Date:

Gross weight: 72460

Tare weight: 26540

45920

Net weight: 22.96

SHIPPING DOCUMENT

Beneficial Soil Solutions, Inc. 12170 Mount Albert Rd Ellicott City, MD 21042 410. 531. 3205

BILL OF LADING # 20210215-003
DATE 02/15/2021
Re-Use # 040218

GENERATOR/SITE INFORMATION

NAME: PPG Industries

ADDRESS: PPG Site 107
18 Chapel Avenue
Jersey City NJ 07305

Contact: Rich Feinberg Phone: 732-233-4552

TRANSPORTER INFORMATION

NAME: J&D Trucking

ADDRESS: 3526 NW Boulevard
Vineland NJ 08360

Phone: 856. 691. 5245

Driver Site Signature Release:

Truck# 16 TAG# AU7541D

DESTINATION INFORMATION

NAME: Cumberland County Improvement Auth. *Driver responsible for Compliance with DOT and Weight Laws*

ADDRESS: 169 Jesses Bridge Road
Deerfield Township, NJ 08352

SCALE HOUSE PHONE: 856.825.3700 ext.2200

GENERATOR STATEMENT

I am the authorized agent of the Generator for the materials offered on this Acceptance Ticket for transportation and recycling, and by my signature below, certify that the materials described below are non-hazardous as previously described in Beneficial Soil Solutions Inc.(BSSI) approval form. Their approval process has resulted in the issuance of the above referenced BSSI.

Printed Name: Christin Cifelli on behalf of PPG

Signature:

Date: 02/15/2021

TRANSPORTER STATEMENT

I hereby certify that the materials represented by this bill of lading were loaded at the above Generator address and will be delivered to the destination listed above without incident and/or tampering of any kind.

Printed Name: Ronald Bea

Signature:

Date: 2-16-2021

MATERIAL DESCRIPTION SOIL

Received by:

Printed Name:

Signature:

Date:

Gross weight: 74800

Tare weight: 26660

48140

Net weight: 24.07

SHIPPING DOCUMENT

Beneficial Soil Solutions, Inc. 12170 Mount Albert Rd Ellicott City, MD 21042 410. 531. 3205

BILL OF LADING # 20210215-004
DATE: 02/15/2021
Re-Use # 040218

GENERATOR/SITE INFORMATION

NAME: PPG Industries
PPG Site 107
ADDRESS: 18 Chapel Avenue
Jersey City NJ 07305
Contact: Rich Feinberg Phone: 732-233-4552

TRANSPORTER INFORMATION

NAME: J&D Trucking
ADDRESS: 3526 NW Boulevard
Vineland, NJ 08360
Phone: 856. 691. 5145

Driver Site Signature Release:

Truck# #1 TAG# AU219V

Driver responsible for Compliance with DOT and Weight Laws

DESTINATION INFORMATION

NAME: Cumberland County Improvement Auth.

ADDRESS: 169 Jesses Bridge Road
Deerfield Township, NJ 08352

SCALE HOUSE PHONE: 856.825.3700 ext.2200

GENERATOR STATEMENT

I am the authorized agent of the Generator for the materials offered on this Acceptance Ticket for transportation and recycling, and by my signature below, certify that the materials described below are non-hazardous as previously described in Beneficial Soil Solutions Inc.(BSSI) approval form. Their approval process has resulted in the issuance of the above referenced BSSI.

Printed Name: Christin Citelli on behalf of PPG

Signature:

Date: 02/15/2021

TRANSPORTER STATEMENT

I hereby certify that the materials represented by this bill of lading were loaded at the above Generator address and will be delivered to the destination listed above without incident and/or tampering of any kind.

Printed Name: Mike Stiteler

Signature:

Date: 2-15-21

MATERIAL DESCRIPTION SOIL

Received by:

Printed Name:

Signature:

Date:

Gross weight: 71600

Tare weight: 26100

45500

Net weight: 22.75

SHIPPING DOCUMENT

Beneficial Soil Solutions, Inc. 12170 Mount Albert Rd Ellicott City, MD 21042 410. 531. 3205

BILL OF LADING # 20210215-005
DATE: 02/15/2021
Re-Use # 040218

GENERATOR/SITE INFORMATION

NAME: PPG Industries

ADDRESS: PPG Site 107
18 Chapel Avenue
Jersey City NJ 07305

Contact: Rich Feinberg Phone: 732-233-4552

TRANSPORTER INFORMATION

NAME: J&D Trucking

ADDRESS: 9526 NW Boulevard
Vineland, NJ 08360

Phone: 856. 691. 5145

Driver Site Signature Release: C. Gray

Truck# 15 TAG# AU753D

DESTINATION INFORMATION

NAME: Cumberland County Improvement Auth.

Driver responsible for Compliance with DOT and Weight Laws

ADDRESS: 169 Jesses Bridge Road
Deerfield Township, NJ 08332

SCALE HOUSE PHONE: 856.825.3700 ext.2200

GENERATOR STATEMENT

I am the authorized agent of the Generator for the materials offered on this Acceptance Ticket for transportation and recycling, and by my signature below, certify that the materials described below are non-hazardous as previously described in Beneficial Soil Solutions Inc.(BSSI) approval form. Their approval process has resulted in the issuance of the above referenced 6681.

Printed Name: Christin Citelli on behalf of PPG

Signature: C Citelli

Date: 02/15/2021

TRANSPORTER STATEMENT

I hereby certify that the materials represented by this bill of lading were loaded at the above Generator address and will be delivered to the destination listed above without incident and/or tampering of any kind.

Printed Name: Claud Gray

Signature: Claud Gray

Date: 2/15/21

MATERIAL DESCRIPTION: SOIL

Received by:

Printed Name:

Signature:

Date:

Gross weight: 79900

Tare weight: 26420

53480

Net weight: 26.74

26.74

SHIPPING DOCUMENT

Beneficial Soil Solutions, Inc. 12170 Mount Albert Rd. Ellicott City, MD 21042 410. 531. 3205

WTS# ~~CW508244~~ (RM)
42499

BILL OF LADING #: 20210215-006
DATE: 02/15/2021
Re-Use #: ~~050218~~ (RM)
040218

GENERATOR/SITE INFORMATION

NAME: ~~Garfield Avenue Group~~ PPG Industries (RM)

ADDRESS: ~~900 Garfield Avenue~~ PPG - Site 107
~~Halstead Properties~~ 18 chapel Avenue
Jersey City, NJ 07305

Contact: Rich Feinberg Phone: 732.233.4552

TRANSPORTER INFORMATION

NAME: J&D Trucking

ADDRESS: 3526 NW Boulevard
Vineland, NJ 08360
Phone: 856. 691. 5145

Driver Site Signature Release: [signature]

Truck# 5 TAG# AT902H

DESTINATION INFORMATION

NAME: Cumberland County Improvement Authority *Driver responsible for Compliance with DOT and Weight Laws*

ADDRESS: 169 Jesses Bridge Road
Deerfield Township, NJ 08352

SCALE HOUSE PHONE: 856. 691. 9550 ext. 4103

GENERATOR STATEMENT

I am the authorized agent of the Generator for the materials offered on this Acceptance Ticket for transportation and re-use, and by my signature below, certify that the materials described below are non-hazardous as previously described in Beneficial Soil Solutions Inc.(BSSI) approval form. Their approval process has resulted in the issuance of the above referenced BSSI approval number.

Printed Name: Christin Cifelli
Signature: [signature]
Date: 02/15/2021

On behalf of PPG

TRANSPORTER STATEMENT

I hereby certify that the materials represented by this bill of lading were loaded at the above Generator address and will be delivered to the destination listed above without incident and/or tampering of any kind.

Printed Name: Frank DeMaio
Signature: [signature]
Date: 2/15/2021

MATERIAL DESCRIPTION **Soil**

Received by:

Printed Name:

Signature:

Date:

Gross weight: 75440
Tare weight: 26420
49020
Net weight: 24.51

SHIPPING DOCUMENT

Beneficial Soil Solutions, Inc. 12170 Mount Albert Rd Elkcott City, MD 21042 410. 531. 3205

BILL OF LADING # 20210215-007
DATE: 02/15/2021
Re-Use # 040218

GENERATOR/SITE INFORMATION

NAME: PPG Industries
ADDRESS: PPG Site 107
18 Chapel Ave
Jersey City NJ 07305
Contact: Rich Fenberg Phone: 732-233-4552

TRANSPORTER INFORMATION

NAME: J&D Trucking
ADDRESS: 3526 NW Boulevard
Vineland, NJ 08360
Phone: 856. 691. 3145
Driver Site Signature Release: [signature]
Truck# 22 TAG# AT9001

DESTINATION INFORMATION

NAME: Cumberland County Improvement Auth.

Driver responsible for Compliance with DOT and Weight Laws

ADDRESS: 169 Jesse Bridge Road
Deerfield Township, NJ 08352

SCALE HOUSE PHONE: 856.825.3700 ext 2200

GENERATOR STATEMENT

I am the authorized agent of the Generator for the materials offered on this Acceptance Ticket for transportation and recycling, and by my signature below, certify that the materials described below are non-hazardous as previously described in Beneficial Soil Solutions Inc's(BSSI) approval form. Their approval process has resulted in the issuance of the above referenced BSSI.

Printed Name: Christin Cifelli on behalf of PPG
Signature: [signature] Date: 02/15/2021

TRANSPORTER STATEMENT

I hereby certify that the materials represented by this bill of lading were loaded at the above Generator address and will be delivered to the destination listed above without incident and/or tampering of any kind.

Printed Name: ED Cox
Signature: [signature]
Date: 2/10/21

MATERIAL DESCRIPTION: SOIL

Received by:
Printed Name:
Signature:
Date:

Gross weight: 78840
Tare weight: 26540
52300
Net weight: 26.15

SHIPPING DOCUMENT

Beneficial Soil Solutions, Inc. 12170 Mount Albert Rd Ellicott City, MD 21042 410. 331. 3205

BILL OF LADING # 20210215-008
DATE: 02/15/2021
Re-Use # 040218

GENERATOR/SITE INFORMATION

NAME: PPG Industries
ADDRESS: PPG Site 107
18 Chapel Ave
Jersey City NJ 07305
Contact: Rich Flenberg Phone: 732-233-4552

TRANSPORTER INFORMATION

NAME: J&D Trucking
ADDRESS: 5526 NW Boulevard
Vineland, NJ 08360
Phone: 856. 691. 5145

Driver Site Signature Release: Cal.
Truck# 3 TAG# AT901H

DESTINATION INFORMATION

NAME: Cumberland County Improvement Auth.

Driver responsible for Compliance with DOT and Weight Laws

ADDRESS: 169 Jesses Bridge Road
Deerfield Township, NJ 08352

SCALE HOUSE PHONE: 856.825.3700 ext 2200

GENERATOR STATEMENT

I am the authorized agent of the Generator for the materials offered on this Acceptance Ticket for transportation and recycling, and by my signature below, certify that the materials described below are non-hazardous as previously described in Beneficial Soil Solutions Inc.(BSSI) approval form. Said approval process has resulted in the issuance of the above referenced BSSI.

Printed Name: Christin Cifelli on behalf of PPG
Signature: Christin Cifelli
Date: 02/15/21

TRANSPORTER STATEMENT

I hereby certify that the materials represented by this bill of lading were loaded at the above Generator address and will be delivered to the destination listed above without incident and/or tampering of any kind.

Printed Name: C. MANLEY
Signature: Cal.
Date: 2/15/21

MATERIAL DESCRIPTION: SOIL

Received by:
Printed Name:
Signature:
Date:

Gross weight: 78880
Tare weight: 26520
52360
Net weight: 26.18

SHIPPING DOCUMENT

Beneficial Soil Solutions, Inc. 12170 Mount Albert Rd. Ellicott City, MD 21042 410. 531. 3205

WTS# ~~CW508244~~ 42499 (AV)

BILL OF LADING #: 20210216-001
DATE: 02/16/2021
Re-Use #: ~~050218~~ (AV) 040218

GENERATOR/SITE INFORMATION

NAME: ~~Garfield Avenue Group~~ (AV) PPG INDUSTRIES

ADDRESS: ~~900 Garfield Avenue~~ PPG SITE 107
~~Halstead Properties~~ 18 CHAPEL AVE.
Jersey City, NJ 07305

Contact: Rich Feinberg Phone: 732.233.4552

TRANSPORTER INFORMATION

NAME: J&D Trucking

ADDRESS: 3526 NW Boulevard
Vineland,NJ 08360
Phone: 856. 691. 5145

Driver Site Signature Release: [signature]

DESTINATION INFORMATION

Truck# 3 TAG# AT901H

NAME: Cumberland County Improvement Authority *Driver responsible for Compliance with DOT and Weight Laws*

ADDRESS: 169 Jesses Bridge Road
Deerfield Township, NJ 08352

* LAST LOAD CLEAN UP

SCALE HOUSE PHONE: 856. 691. 9550 ext. 4103

GENERATOR STATEMENT

I am the authorized agent of the Generator for the materials offered on this Acceptance Ticket for transportation and re-use, and by my signature below, certify that the materials described below are non-hazardous as previously described in Beneficial Soil Solutions Inc.(BSSI) approval form. Their approval process has resulted in the issuance of the above referenced BSSI approval number.

Printed Name: Christin Cifelli
Signature: [signature]
Date: 02/16/2021

On behalf of PPG

TRANSPORTER STATEMENT

I hereby certify that the materials represented by this bill of lading were loaded at the above Generator address and will be delivered to the destination listed above without incident and/or tampering of any kind.

Printed Name: C. MANLEY
Signature: [signature]
Date: 2/16/21

MATERIAL DESCRIPTION **Soil**

Received by:

Printed Name:

Signature:

Date:

Gross weight: 78440
Tare weight: 26520
51920
Net weight: 25.96

SHIPPING DOCUMENT

Beneficial Soil Solutions, Inc. 12170 Mount Albert Rd. Ellicott City, MD 21042 410. 531. 3205

WTS# ~~CW508244~~ (RH)
42499

BILL OF LADING #: 20210216-002
DATE: 02/16/2021
Re-Use #: ~~050218~~ (RH)
010218

GENERATOR/SITE INFORMATION

NAME: ~~Garfield Avenue Group~~ (RH) PPG Industries

ADDRESS: ~~900 Garfield Avenue~~ PPG - Site 107
~~Halstead Properties~~ 18 Chapel Avenue
Jersey City, NJ 07305

TRANSPORTER INFORMATION

NAME: J&D Trucking

ADDRESS: 3526 NW Boulevard
Vineland, NJ 08360
Phone: 856. 691. 5145

Contact: Rich Feinberg Phone: 732.233.4552 Driver Site Signature Release:

DESTINATION INFORMATION

Truck# 19 TAG# AT899H

NAME: Cumberland County Improvement Authority *Driver responsible for Compliance with DOT and Weight Laws*

ADDRESS: 169 Jesses Bridge Road
Deerfield Township, NJ 08352

SCALE HOUSE PHONE: 856. 691. 9550 ext. 4103

GENERATOR STATEMENT

I am the authorized agent of the Generator for the materials offered on this Acceptance Ticket for transportation and re-use, and by my signature below, certify that the materials described below are non-hazardous as previously described in Beneficial Soil Solutions Inc.(BSSI) approval form. Their approval process has resulted in the issuance of the above referenced BSSI approval number.

Printed Name: Christin Cifelli Signature: Cifelli Date: 02/16/2021

On behalf of PPG

TRANSPORTER STATEMENT

I hereby certify that the materials represented by this bill of lading were loaded at the above Generator address and will be delivered to the destination listed above without incident and/or tampering of any kind.

Printed Name: Mary Masters Signature: Date: 2.16.21

MATERIAL DESCRIPTION **Soil**

Received by:

Printed Name:

Signature:

Date: 27.05

Gross weight: 80 600

Tare weight: 26500
54100

Net weight: 27.05

Appendix G-2

Groundwater BOLs

- No profile was required for Site 137 as disposal was in accordance with Passaic Valley Sewer Sewer Commission Use Permit No. 3160035.

FREEHOLD CARTAGE INC.

P.O. BOX 5010 • FREEHOLD, NJ 07728-5010
(732) 462-1001 • FAX (732) 308-0924

BILL OF LADING

FCI EPA ID NO. NJD054126164

M 417973

350 Pigeon Point Road
New Castle, DE 19720
Phone: (302) 658-2005
Fax: (302) 658-6229

520 Beechcraft St.
Bartow, FL 33830
Phone: (863) 533-4599
Fax: (863) 533-1613

5533 Dunham Road
Maple Heights, OH 44137
Phone: (330) 835-3473
Fax: (330) 835-3732

108 Monahan Avenue
Dunmore, PA 18512
Phone: (570) 342-7232
Fax: (570) 342-7367

132 Myrtle Beach Hwy.
Sumter, SC 29153
Phone: (803) 773-2611
Fax: (803) 773-2942

SHIPPER NAME/ADDRESS	PHONE (AREA CODE)	TRACTOR	TRAILER	APPOINTMENT TIME
PPG Site 107 BAYONNE, NJ 07002		961	254	07 : 00

FCI REP. LOADING (PRINT)	PROCEDURE	EQUIP. SPOTTED	EQUIP. REMOVED	TIME AT SHIPPER (MILITARY TIME ONLY)
TURCOTTE, RON	VA			11 : 15 (ARRIVAL TIME) 11 : 45 (DEPARTURE TIME)

COMMENTS OR DELAYS AT SHIPPER

EQUIPMENT USED

DESCRIPTION OF DELIVERY

MANIFEST / DOCUMENT NO.

(X) HM		PROPER U.S. D.O.T. SHIPPING NAME	U.S. D.O.T. HAZARDOUS CLASS	NA/UN/NO.	PACKING GROUP	NO. CONT.	CONT. TYPE	NET QUANTITY	UNIT MEASURE	WASTE NO.	FORM
	1	Waste Non Haz Liquid	NA	NA	NA	01	TT	6000	G	-	-
	2										
	3										

SPECIAL HANDLING INSTRUCTIONS INCLUDING CONTAINER EXEMPTION NUMBER.

SHIPPER'S CERTIFICATION: This is to certify that the above named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation, U.S. EPA and the State. The materials described above were consigned to the Transporter named. The consignee can and will accept the shipment and has a valid permit to do so if required. I certify that the foregoing is true and correct to the best of my knowledge.

Payment to the contractor for waste removal does not constitute payment to the carrier and if the contractor does not pay the carrier, the shipper is obligated to pay the agreed rate offered to the contractor.

PLEASE PRINT NAME/TITLE	SHIPPER'S SIGNATURE	DATE LOADED
Christine Fifelli/Staff Geologist on behalf of PPG	X _____ I HAVE READ THE ABOVE AND UNDERSTAND AND AGREE TO ALL OF ITS CONTENT.	02 / 16 / 21 (MO. / DAY / YR.)

CONSIGNEE NAME/ADDRESS	PHONE (AREA CODE)	TRACTOR	TRAILER	APPOINTMENT TIME
PPG INDUSTRIES SITE 114, GARFIELD AVE JERSEY CITY, NJ 07302	412-482-6612	961	254	11 : 00

FCI REP. UNLOADING (PRINT)	PROCEDURE	EQUIP. SPOTTED	EQUIP. REMOVED	TIME AT CONSIGNEE (MILITARY TIME ONLY)
TURCOTTE, RON	Del			12 : 30 (ARRIVAL TIME) 13 : 30 (DEPARTURE TIME)

COMMENTS OR DELAYS AT CONSIGNEE

EQUIPMENT USED

PLEASE PRINT NAME/TITLE	CONSIGNEE SIGNATURE	DATE UNLOADED
Project Mgr on Behalf of PPG	X _____	02 / 12 / 21 (MO. / DAY / YR.)

AR H-0257
CT CT-HW-307
DE DE-HW-203
DE-SW-203
IL UPW-0190713-OH
MA MA-294
MD HWH-167
2001-OPV-2335
ME ME-HWT-47
ME-WOT-47
MI UPW-0190713-OH
MN UPW-0190713-OH
MO H-1490
ND WH-429
NH TNH-0047
NJ S-2265
15939
NY NJ-113
OH UPW-0190713-OH
OK UPW-0190713-OH
ONTARIO, CANADA A 840943
PA PA-AH-0067
QUEBEC, CANADA QC-6ML-047
RI RI-535
TX 40705
WI 11602
WV UPW-0190713-OH

White - FCI Original
Yellow - FCI Billing
Blue - FCI Office/Customer
Green - Retained by TSDF
Gold - Retained by Generator

FREEHOLD CARTAGE INC.

P.O. BOX 5010 • FREEHOLD, NJ 07728-5010
(732) 462-1001 • FAX (732) 308-0924

BILL OF LADING

FCI EPA ID NO. NJD054126164

M 417972

FCI

350 Pigeon Point Road
New Castle, DE 19720
Phone: (302) 658-2005
Fax: (302) 658-6229

520 Beechcraft St.
Bartow, FL 33830
Phone: (863) 533-4599
Fax: (863) 533-1613

5533 Dunham Road
Maple Heights, OH 44137
Phone: (330) 835-3473
Fax: (330) 835-3732

108 Monahan Avenue
Dunmore, PA 18512
Phone: (570) 342-7232
Fax: (570) 342-7367

132 Myrtle Beach Hwy.
Sumter, SC 29153
Phone: (803) 773-2611
Fax: (803) 773-2942

SHIPPER NAME/ADDRESS	PHONE (AREA CODE)	TRACTOR	TRAILER	APPOINTMENT TIME
PPG Site 107 BAYONNE, NJ 07002		961	254	07 : 00

FCI REP. LOADING (PRINT)	PROCEDURE	EQUIP. SPOTTED	EQUIP. REMOVED	TIME AT SHIPPER (MILITARY TIME ONLY)	EQUIPMENT USED
TURCOTTE, RON	KAC			5 : 01 (ARRIVAL TIME) — 5 : 45 (DEPARTURE TIME)	

COMMENTS OR DELAYS AT SHIPPER

DELIVERY

MANIFEST / DOCUMENT NO.

(X) HM		PROPER U.S. D.O.T. SHIPPING NAME	U.S. D.O.T. HAZARDOUS CLASS	NA/UN/NO.	PACKING GROUP	NO. CONT.	CONT. TYPE	NET QUANTITY	UNIT MEASURE	WASTE NO.	FORM
	1	Waste Liquid	AM	NA	NA01	1	TT	3000	Lb	—	—
	2										
	3										

SPECIAL HANDLING INSTRUCTIONS INCLUDING CONTAINER EXEMPTION NUMBER.

SHIPPER'S CERTIFICATION: This is to certify that the above named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation, U.S. EPA and the State. The materials described above were consigned to the Transporter named. The consignee can and will accept the shipment and has a valid permit to do so if required. I certify that the foregoing is true and correct to the best of my knowledge.

Payment to the contractor for waste removal does not constitute payment to the carrier and if the contractor does not pay the carrier, the shipper is obligated to pay the agreed rate offered to the contractor.

PLEASE PRINT NAME/TITLE	SHIPPER'S SIGNATURE	DATE LOADED
Christa Ellis/Staff Geologist on behalf of PPG	X _____ I HAVE READ THE ABOVE AND UNDERSTAND AND AGREE TO ALL OF ITS CONTENT.	12 / 16 / 20 (MO. / DAY / YR.)

CONSIGNEE NAME/ADDRESS	PHONE (AREA CODE)	TRACTOR	TRAILER	APPOINTMENT TIME
PPG INDUSTRIES SITE 114, GARFIELD AVE JERSEY CITY, NJ 07302	732-482-6612	961	254	13 : 30

FCI REP. UNLOADING (PRINT)	PROCEDURE	EQUIP. SPOTTED	EQUIP. REMOVED	TIME AT CONSIGNEE (MILITARY TIME ONLY)	EQUIPMENT USED
TURCOTTE, RON	Del			10 : 27 (ARRIVAL TIME) — : (DEPARTURE TIME)	

COMMENTS OR DELAYS AT CONSIGNEE

PLEASE PRINT NAME/TITLE	CONSIGNEE SIGNATURE	DATE UNLOADED
James McLaughlin Project Mgr on behalf of PPG	X _____	12 / 12 / 21 (MO. / DAY / YR.)

AR H-0257
CT CT-HW-307
DE DE-HW-203
DE-SW-203
IL UPW-0190713-OH
MA MA-294
MD HWH-167
2001-OPV-2335
ME ME-HWT-47
ME-WOT-47
MI UPW-0190713-OH
MN UPW-0190713-OH
MO H-1490
ND WH-429
NH TNH-0047
NJ S-2265
15939
NY NJ-113
OH UPW-0190713-OH
OK UPW-0190713-OH
ONTARIO, CANADA A 840943
PA PA-AH-0067
QUEBEC, CANADA QC-6ML-047
RI RI-535
TX 40705
WI 11602
WV UPW-0190713-OH

White - FCI Original
Yellow - FCI Billing
Blue - FCI Office/Customer
Green - Retained by TSDF
Gold - Retained by Generator

M 417972

Appendix G-3

Miscellaneous Material Profile and BOLs

- Creosote timbers were disposed of at Clean Earth of New Jersey, Inc. Bill of lading is identified by the date material was transported off-site to Clean Earth of New Jersey, Inc.

Clean Earth of North Jersey, Inc.

115 Jacobus Avenue, Kearny, NJ 07032 (973) 344-4004

OFFICIAL USE ONLY

Approval Code D) _____ B) _____

Generic Code D) _____ B) _____

Customer # PPG234

LSR # _____

Master WPS ☐ Yes ☐ No

Technical Rep. Initials RM

Approval Date _____

Broker Name (if applicable) _____

NON-HAZARDOUS WASTE PROFILE SHEET

A. GENERATOR INFORMATION

Generator's Name PPG Industries

Mailing Address 440 College Park Drive, Monroeville, PA 15146

Waste Pickup Address 18 Chapel Ave. Jersey City, NJ 07305

Tech Contact Jody Overmyer Phone 724-325-5070

Process Generating Waste Site Remediation

Common Name of Waste NonHazardous Creosote TImbers

B. PHYSICAL/CHEMICAL CHARACTERISTIC

Physical State

- ☒ Solid
- ☐ **Liquid**
- ☐ Powder
- ☐ Semi-Solid
- ☐ Single Phase
- ☐ Bi-Layered
- ☐ Multi-Layered
- ☐ Gas/Aerosol

Flash Point (F/CC Liquids)

- ☐ <100
- ☐ ≥100 ≤140
- ☐ >140 ≤200
- ☒ >200

Ignitability (Solids)

- ☐ Yes ☒ No

Odor

☒ None ☐ Mild ☐ Strong

Describe very faint creosote fragrance

Corrosivity (pH)

- ☐ ≤2.0
- ☐ 2.01 - 5.0
- ☒ 5.01 - 9.0
- ☐ 9.01 - 12.49
- ☐ ≥12.50

_____ Exact pH

Reactivity (PPM)

Total Cyanides	_____	☑ None
Amenable Cyanides	_____	☑ None
Reactive Sulfides	_____	☐ None
Water Reactive	☐ Yes	☒ No
Air Reactive	☐ Yes	☒ No
Shock Sensitive	☐ Yes	☒ No
Generates Toxic fumes when mixed with Water, Acid or Base	☐ Yes	☒ No

Color/Visual Description

brown/black creosote wodden timber

C. CHEMICAL COMPOSITION

	Range Min.-Max.	
Creosote TImbers sized to less than 5 feet	90- 100	%
Soil	<10%	%
Rock masonry debris < 3'x3'x3'	<2%	%
		%
		%
See Data sets L1905961, PPG SITE 107 WC SAMPLES 2.14.19 E17		%
TOTAL	100	%

Please note: the total in the Range Min.-Max. column must equal 100%.

D. HAZARDOUS CHARACTERISTICS

- ☐ Radioactive
- ☐ Infectious
- ☐ Toxic
- ☐ Explosive
- ☐ Pyrophoric
- ☐ Oxidizer
- ☒ None of the above
- ☐ Compressed Gas
- ☐ Flammable Solid
- ☐ Organic Peroxide
- ☐ Shock Sensitive
- ☐ Reactive Metals

E. SHIPPING INFORMATION

- ☐ Bulk Liquid
- ☒ Bulk Solid
- ☐ Bulk Sludge
- ☐ Totes
- ☐ Other Describe _____
- ☐ Drums (Steel)
- ☐ Drums (Poly)

via rolloff

Quantity 50 tons Per event

7/19/2013

F. *OSH/SARA 313 REQUIREMENTS*

1. Health Hazard ☐ Immediate (Acute) Hazard ☐ Delayed (Chronic) Hazard ☒ None
2. Identify what chemicals and chemical categories as defined in 40 CFR Part 372 as well as the concentration in the waste stream.

3. Identify any OSHA (29 CFR Part 1910 Subpart Z) Toxic and Hazardous Substances in the waste stream. List substance and %.
none

G. *SHIPPING INFORMATION*

Is this a US DOT Hazardous Material? ☐ Yes ☒ No

Proper DOT shipping name Non Regulated Material

Hazard Class n/a UN/NA # n/a Packing Group n/a RQ n/a

H. *WASTE DESCRIPTION*

Is this a US EPA Hazardous Waste? ☐ Yes ☒ No

Is this waste a treatment residue from a previously listed or characteristic hazardous waste? ☐ Yes ☒ No

If yes, explain

Is this waste a hazardous waste as defined by any state or local regulations? ☐ Yes ☒ No

If yes, explain

Does this waste contain any PCBs? ☐ Yes ☒ No If yes, indicate level TSCA Regulated? ☐ Yes ☐ No

Does this waste contain any Herbicides, Pesticides, Dioxin or Residue thereof? ☐ Yes ☒ No

Benzene NESHAP Applicability: Is this waste stream subject to management under National Emission Standards for Benzene Waste Operations as provided in 40 CFR Part 61?

☐ Yes ☒ No If yes, Benzene concentration

Are there any special handling instructions for the disposal of this waste? ☒ Yes ☐ No

If yes, specify Final disposal to be Republic Conestogal LF. CoD requested.

I. *SPECIAL HANDLING COMMENTS*

J. *OFFICIAL USE ONLY*

Approval Committee

Env

Ops

Tech

K. *WARRANTY*

I hereby warrant that the material transferred to Clean Earth of North Jersey (CENJ) for treatment, storage and/or disposal is not a hazardous or TSCA regulated waste nor is it contaminated with any hazardous waste or toxic substances and hereby agree to indemnify and hold Clean Earth of North Jersey (CENJ) harmless from any costs, damages or other liabilities resulting from breach of this warranty or any other terms and conditions of this Waste Material Profile Sheet.

The information on this Waste Material Profile Sheet may have been prepared by other individuals. By signing below, I certify that all information, including any attached information, is complete and is an accurate representation of the waste and its known or suspected hazards.

3/12/2019	Jody Overmyer	Remediation Project Engineer	
Date	Printed Name	Title	Generator Signature

Waste Profile CBU Sheet
Addendum

Generator Name PPG Industries

Address 40 College Park Drive, Monroeville, PA 15146

18 Chapel Ave. Jersey City, NJ 07305

Nonhazardous Creosote Timbers

Customer Name PPG Industries

Approval Number

Does your waste stream contain any of the below constituents? [x] Yes [ ] No

If yes, indicate either less than the listed value or state the actual level in the appropriate column.

Constituent	PPMW*	Less Than	Actual Level
Arsenic	4,000	X	
Cadmium	4,000	X	
Chromium +6	21,400	X	
Lead	80,000	X	
Mercury	80	X	
Beryllium	800	X	
Nickel	80,000	X	
Benzene	400	X	
Chlorobenzene	400	X	
Cumene	960	X	
Ethylene Glycol	56,000	X	
Methanol	4,800	X	
Methylene Chloride	880	X	
Methyl Ethyl Ketone	800	X	
Methyl Isobutyl Ketone	1,360	X	
Phenol	1,360	X	
Tetrachloroethylene	400	X	
Toluene	560	X	
Trichloroethylene	480	X	
Xylene	1,200	X	

*mg/Kg

Certification

I certify that the information provided to Clean Earth of North Jersey is complete and is an accurate representation of the waste.

Generator's Name Print Jody Overmyer

Signature

7/19/2013

Please print or type. (Form designed for use on elite (12-pitch)typewriter.)

NON-HAZARDOUS WASTE MANIFEST	1. Generator ID Number: NJR000076158	2. Page 1 of: 1	3. Emergency Response Phone: 412-434-4515	4. Manifest Tracking Number: 2219213

GENERATOR

5. Generator's Name and Mailing Address: PPG Insustries, 440 College Park Drive, Monroeville, PA 15146
Generator's Phone: 724-326-5070

Generator's Site Address (if different than mailing address): PPG Insustries, 18 Chapel Ave, Jersey City, NJ 07305

6. Transporter 1 Company Name: IWT Transport Inc — U.S. EPA ID Number: NJR986628162

7. Transporter 2 Company Name — U.S. EPA ID Number:

8. Designated Facility Name and Site Address: Clean Earth of North Jersey, Inc., 105 Jacobus Ave., Kearny NJ 07032 — U.S. EPA ID Number: NJD991291105
Facility's Phone: 9733444004

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
	1. Non-RCRA solids, D.O.T. Non-regulated	1	CM	20	T	ID27
	2.					
	3.					
	4.					

13. Special Handling Instructions and Additional Information

(1) 1930B0337 - Non hazardous creosote timber

Order#: 2219213 - Note:

14. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Generator's/Offeror's Printed/Typed Name: X Christian Lifelli on behalf of PPG — Signature — Month: 2 Day: 18 Year: 21

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit: _____
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Jason Sykes — Signature — Month: 2 Day: 18 Year: 21

Transporter 2 Printed/Typed Name — Signature — Month: Day: Year:

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Rec'd 11040

Manifest Reference Number:

17b. Alternate Facility (or Generator) — U.S. EPA ID Number

Received Pending Manifest Review/Quality Control Date

Facility's Phone:

17c. Signature of Alternate Facility (or Generator) — Month: Day: Year:

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name — Signature — Month: Day: Year:

ITEM# WM550 To Reorder Call - Pro's Choice Printing, Inc. 1-888-801-1515 www.proschoiceprinting.com

1-DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

3-2019

Appendix H

Licensed Quarry Material Documentation

Appendix H. Licensed Quarry Material Documentation
Site 107, AOC 1B. Material Staging Area, Garfield Avenue Group
PPG Jersey City, New Jersey

This appendix includes a list of load reports for licensed quarry material that was used to backfill and restore the Material Staging Area (MSA; AOC-1B) at the Hudson County Chrome (HCC) Site 107, Jersey City, New Jersey. As such, load reports are identified based on licensed quarry facility (**Table 1**):

Table 1. Imported Licensed Quarry Material and DGA for HCC Site 107 MSA

Material Type	Licensed Quarry	Dates	Loads	Volume
Licensed Quarry Material	Tilcon, 625 Mount Hope Road, Wharton, New Jersey (Mount Hope)	February 15, 2021	6	148.99 tons
Licensed Quarry Material	Tilcon, Broad Street, Pompton Lakes, New Jersey (Pompton Lakes)	February 16, 2021	2	51.69 tons

The licensed quarry material placed was certified by Tilcon, the licensed quarry (certification included in this Appendix), as from a virgin source. Per the 2015 Fill Material Guidance for SRP Sites (NJDEP, 2015), “Whenever licensed quarry/mine material, certified as such by the quarry/mine operator, is delivered to a property undergoing remediation, the investigator may rely on the certification for the purpose of issuing a remedial action outcome (RAO) without sampling the delivered licensed quarry/mine material.”

Appendix H-1

Licensed Quarry Material – Load Reports

- Load reports are identified by the date material was transported to the Site from Tilcon (Mount Hope or Pompton Lakes Licensed Quarry).

Mount Hope Licensed Quarry Material - Load Report
Site 107, 18 Chapel Avenue,
Jersey City, New Jersey

Load	Date	Ticket	Net Weight (Tons)	Total Volume (Tons)
1	2/15/2021	41864365	24.65	24.65
2	2/15/2021	41864366	25.46	50.11
3	2/15/2021	41864376	24.83	74.94
4	2/15/2021	41864379	24.63	99.57
5	2/15/2021	41864381	24.63	124.20
6	2/15/2021	41864392	24.79	148.99

Pompton Lakes Licensed Quarry Material - Load Report
Site 107, 18 Chapel Avenue,
Jersey City, New Jersey

Load	Date	Ticket	Net Weight (Tons)	Total Volume (Tons)
1	2/16/2021	42551367	25.95	25.95
2	2/16/2021	42551368	25.74	51.69

Appendix H-2

Licensed Quarry Material - Information and Analytical Data Report

- Licensed quarry material collected by Tilcon from the Mount Hope quarry (reports included in this Appendix) exceeded the DIGWSSL for manganese. Manganese is a naturally occurring and the applicable Groundwater Quality Standards are based on secondary considerations (primarily aesthetic considerations such as taste, odor, and appearance) and not health considerations; as such, the exceedances do not need to be addressed for the impact to groundwater pathway.
- Licensed quarry material collected by Tilcon from the Pompton Lakes quarry (reports included in this Appendix) exceeded the DIGWSSLs for manganese. Manganese is naturally occurring and the applicable Groundwater Quality Standards are based on secondary considerations (primarily aesthetic considerations such as taste, odor, and appearance) and not health considerations; as such, the exceedance does not need to be addressed for the impact to groundwater pathway.

COMPACTION TEST REPORT

Test specification: ASTM D 1557-12 Method B Modified

Elev/ Depth	Classification		Nat. Moist.	Sp.G.	LL	PI	% > 3/8 in.	% < No.200
	USCS	AASHTO						
	SP-SM	A-1-b		2.75	NV	NP	0.0	11.8

TEST RESULTS	MATERIAL DESCRIPTION
Maximum dry density = 131.6 pcf Optimum moisture = 8.5 %	Light Gray poorly graded sand with silt

Project No. 889 **Client:** CHEMTECH

Project: K4541 - PPG Site 107

○ **Sample Number:** 107-SCREENINGS-PL001

Remarks:
SG Assumed
8-30-19

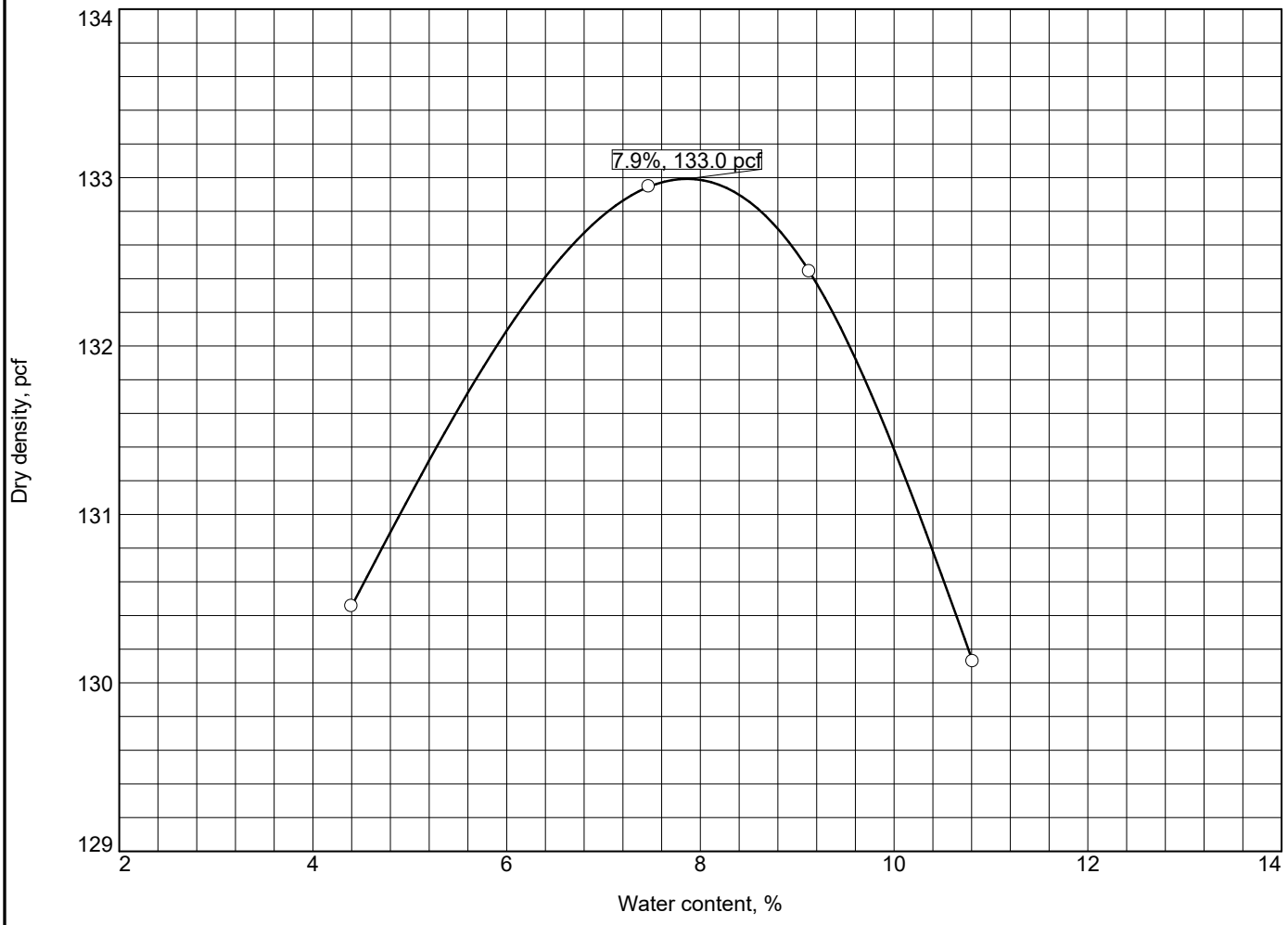
RSA Geolab

Union, New Jersey

Figure

Tested By: MF **Checked By:** KP

COMPACTION TEST REPORT



Test specification: ASTM D 1557-12 Method B Modified

Elev/ Depth	Classification		Nat. Moist.	Sp.G.	LL	PI	% > 3/8 in.	% < No.200
	USCS	AASHTO						
	SP-SM	A-1-b		2.75	NV	NP	0.0	11.6

TEST RESULTS	MATERIAL DESCRIPTION
Maximum dry density = 133.0 pcf Optimum moisture = 7.9 %	Light Gray poorly graded sand with silt

Project No. 889 **Client:** CHEMTECH

Project: K4541 - PPG Site 107

○ **Sample Number:** 107-SCREENINGS-MH001

Remarks:
SG Assumed
8-30-19

RSA Geolab

Union, New Jersey

Figure

Tested By: BP **Checked By:** KP

TILCON NEW YORK INC.

PHONE: 973-366-7741 9 ENTIN ROAD, PARSIPPANY , New Jersey 07054

2021 Clean Fill Material Certification- *NJ Locations Only*

Tilcon NY Inc. New Jersey Division confirms to the best of our knowledge that the aggregates produced at the locations below are virgin stone products, contain no hazards or contamination prior to shipment of materials and conform to section 901 of the *2007 New Jersey Department of Transportation Standard Specifications for Road and Bridge Construction*, The material is identified on the job with Tilcon NJ delivery tickets. The quarries are listed in the Quality List (QPL) of the NJDOT website

http://www.state.nj.us/transportation/eng/materials/qualified/QPLDB.shtm

Pompton Lakes Quarry- Granite Gneiss, 84 Borough of Pompton Lakes, Passaic County Blocks No(s) 5105, 5105 - Lot(s) 84, 14.2.Pompton Lakes quarry contains NJDOT approved crushed stone and certified fill products.

Mt. Hope Quarry- Granite Gneiss, 625 Mt Hope Road, Wharton Borough, Morris County NJ, Block No 20001 Lot(s) No(s) 5.01, 5.02, 7; Block No 70001 Lot No 2; Block No 20101 Lot No 6. Mt Hope quarry contains NJDOT approved crushed stone, washed products and certified fill products.

Tilcon NY Inc. has had Pompton Lakes and Mt Hope quarries analyzed under the EPA Target Compound List as required by the LSRP program- *NJDEP Residential Direct Contact Soil Remediation Standards/Clean Fill Criteria*. A copy of the report is available upon request. To the best of our knowledge, the materials produced at the above quarries comply with Section 7 of the Fill Material Guidance for SRP Sites.

Riverdale Quarry- Granite Gneiss, 125 Hamburg Turnpike, Riverdale, Morris County NJ, Block No9s0 25, 26, 27, 29 Lot No 3. Riverdale Quarry NJDOT approved crushed stone, washed products and certified fill materials.

Oxford Quarry- Granite Gneiss and Limestone , Quarry and Mt Pisgah Avenue, White Township , Warren County Block 32- Lots 15,16 Block 33- Lots 22,23 Block 34 Lots 19,20 Block 25- Lots 3,5,9,90.1 NJDOT approved crushed stone ,washed products and certified materials .

S & S ENVIRONMENTAL SCIENCES, INC.

Environmental Engineering, Testing and Consultation

98 Sand Park Road, Cedar Grove, NJ 07009
Tel (973) 857-7188 Fax (973) 239-8380

Kamil Sor, Ph.D.
Orhun Sor, P.E.
Atilla Sencar, P.E.

Client:	Tilcon New York, Inc.				
Project:	Mount Hope, NJ (NJDEP-SRS)				
Subject:	Laboratory Analysis of Aggregate Sample (Quarry Fines)-NJ				
Job No.:	07E34	**Report Number:**	20-E-64	**Date:**	5/21/2020

We present herewith the laboratory test results of an aggregate sample delivered to our laboratory (identified as Quarry Fines) on April 28, 2020. The sample was collected by a representative of Tilcon NY, on the same day.

As requested, the aggregate sample was analyzed for the U.S. EPA Target Compound List (TCL)+30/Target Analyte List (TAL) parameters, Extractable Petroleum Hydrocarbons (EPH), pH, and Hexavalent Chromium. The analyses were performed by Integrated Analytical Laboratories, LLC (IAL) (NJDEP Lab ID No. 14751). The copies of the IAL/S&S sample chain-of-custody forms, the preliminary IAL laboratory summary report and NJDEP-SRS comparison tables are attached.

Review of the laboratory data and comparison of the sample test results to the NJDEP Residential Direct Contact Soil Remediation Standards (RDCSRS) indicated that the aggregate sample **meet** the **NJDEP-RDCSRS**.

If there are any questions or if we can be of further assistance in this matter, please contact us.

Very truly yours,
S & S ENVIRONMENTAL SCIENCES, INC.

Kamil Sor, Ph.D.
President

KS/ag
Attachments:
(1) Sample Chain-of-Custody Forms, Laboratory Summary Reports, and NJDEP-SRS Comparison Tables

cc: (1) Client Steve O'Reilly
email: soreilly@tilconny.com

S&S ENVIRONMENTAL SCIENCES, INC.

Environmental Engineering, Testing and Consultation

98 Sand Park Rad, Cedar Grove, NJ 07009
Tel (973) 857-7188 Fax (973) 239-6380

NJDEP Lab Certification No. 07073

SAMPLE CHAIN OF CUSTODY

CLIENT:	TILCON	DATE:	4-28-20
ADDRESS:		SSES JOB NO.	
CONTACT:		TEL. #:	
PROJECT:	Mt Hope, NT	PROJECT LAB ID #:	20-049

SAMPLE NUMBER	SAMPLING DATE	SAMPLING TIME	SAMPLE TYPE	NO. OF BOTTLES	ANALYSES REQUESTED
20-049	4-28-20	900	Grab		NY-NJ Client

Comments:

PRESERVATIVE	
Cooled at 4°C?	✓
HCl	
HNO_3	
H_2SO_4	
NaOH	
$Na_2S_2O_3$	
Other	

pH Meter No.:_____	Reading	T°C	Time	Analyst
pH				
pH Dup.				

Sampled By: S.O.

RELINQUISHED BY:	RECEIVED BY:	DATE AND TIME:
		4-28-20 11:15

Integrated Analytical Labs
273 Franklin Road
Randolph, NJ 07869

Chain of Custody Record

Contact Us: 973-361-4252
Fax: 973-989-5288
Web: www.lalonline.com

Customer Information	Reporting Information
Company: S<S	REPORT TO:
Address:	Address:
	Attn: Sol
Telephone #: 973-239-6001	FAX #
Fax #:	INVOICE TO:
Project Manager: P.L	Address:
EMAIL Address:	
Project Name: Mount Hope	Attn:
Project Location (State): NJ	PO # 20-049
Bottle Order #:	Quote #
☐ "Report to"/"Invoice To" same as above	
Sampled by: S.O.	

COMPLETED BY IAL:
____ Field Sampling ____ Equipment Rental

Sample Matrix

DW - Drinking Water	OI - Oil
WW - Waste Water	S - Soil
GW - Groundwater	SED - Sediment
SW - Surface Water	SOL - Solid (specify)
LIQ - Liquid (specify)	SL - Sludge
M - Multiphasic	W - Wipe

SAMPLE INFORMATION

Client ID	Depth (ft only)	Sampling Date	Sampling Time	Matrix	# containers	IAL #
20-049		4.28.20	9:00	SOIL	5	1

****Rush TAT Charge**

24 hr - 100%...
48 hr - 75%....
72 hr - 50%....
96 hr - 35%....
5 day - 25%....
6-9 day - 10%

Deliverables

NJ, CT, PA	NY
☐ Results Only (Level I)	☐ ASP Category A
☑ Reduced (Level II/III)	☐ ASP Category B*
☐ Regulatory/ Full* (Level IV)	

EDDs

☐ NJ SRP
☐ NYSDEC EQuIS
☐ lab approved custom EDD
☐ NO EDD REQ'D

Concentrations Expected:

Low Med High

Known Hazard: ☐ YES ☐ NO

Describe:

Turn-Around Time (TAT)

Standard (10 business days) Verbal

Rush/date needed (only if pre-approved)**

Hard Copy: Std 3 week — Other - call for price

Petroleum Hydrocarbons - Selection is REQUIRED

☐ NJ EPH-DRO - Category 1
☐ NJ EPH-C40 - Category 2
☐ NJ EPH-Fractionated - Cat 2
☐ CT ETPH
☐ DRO-8015

TAT for PHC, if other than 2 weeks:

Regulatory Requirement

New Jersey	New York
☐ GWQS	☐ AWQS (TOGS Table 1)
☑ IGW	☐ GWEL (TOGS Table 5)
☑ SRS	☐ Part 375-6.8(a) - Unrestricted
☐ Ecological	☐ Part 375-6.8(b) - Restricted
☐ DW	☑ CP-51 Table 2 or 3 selection required)
☐ SPLP	Other States / Criteria
	☐ Pennsylvania Act 2
	☐ CT RCSA 22a-133k1-k3
	☐ TSCA PCBs
	OTHER Regulatory Requirements - specify in comments

ANALYTICAL PARAMETERS (please note if contingent)

TAL ITCL +30 (x)	EPH	PH	Cr 6+	Sample Specific Notes:
✓	✓	✓	✓	

Samples previously analyzed by IAL? YES / NO

Preservative Code: 1 = None, 2 = HCl, 3 = HNO3, 4 = MeOH, 5 = NaOH, 6 = H2SO4, 7 = Other

Container Code: A = Amber Glass, B = Plastic, C = Vial, D = Glass, E = EnCore, T = Terracore

Preservative (use code):
Container Type (use code):

Please print legibly and fill out completely. Samples cannot be processed and the turnaround time (TAT) will not start until any ambiguities have been resolved. TAT starts the following day if samples rec'd at lab ≥ 5PM. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY IAL'S TERMS & CONDITIONS (found on rear of pink copy).

IAL Rev 1/2019

Special Instructions/QC Requirements & Comments:
1) Inc SRS Parameters NY-NJ Cleanup

Carrier (check one):
☐ IAL Courier
☐ Client Courier
☐ FedEx/UPS***
***Tracking #:

Relinquished by (Signature and Company)	Date	Time	Received by (Signature and Company)	Date	Time
	4/27/20	1415		4/27/20	1415

FOR LAB USE ONLY
SDG #: 2898
Cooler Temp: 6 °C

LAB COPIES - WHITE & YELLOW; CLIENT COPY - PINK

Certification IDs: TNI (TNI01284); CT (PH-0699); NJ (14751); NY (11402); PA (68-00773).

SAMPLE RECEIPT VERIFICATION

CASE NO: E 20 **02898** CLIENT: STS

COOLER TEMPERATURE: 2° - 6°C: ✓ (See Chain of Custody)

Comments

COC: (COMPLETE) / INCOMPLETE

KEY

✓ = YES/NA

✗ = NO

VOA received: ~~X~~ 250 Encore ☐ IGW - Methanol

(check one) ☒ Terra Core ☐ No Preservative

✓	Bottles Intact
✓	no-Missing Bottles
✓	no-Extra Bottles
✓	Sufficient Sample Volume
✓	no-headspace/bubbles in VOs
✓	Labels intact/correct
✓	pH Check (exclude VOs)[1]
✓	Correct bottles/preservative
✓	Sufficient Holding/Prep Time[1]
☐	Multiphasic Sample
☐	Sample to be Subcontracted
✓	**Chain of Custody is Clear**

[1] All samples with "Analyze Immediately" holding times will be analyzed by this laboratory past the holding time. This includes but is not limited to the following tests: pH, Temperature, Free Residual Chlorine, Total Residual Chlorine, Dissolved Oxygen, Sulfite.

ADDITIONAL COMMENTS:

SAMPLE(S) VERIFIED BY: INITIAL AP DATE 4/28/20

CORRECTIVE ACTION REQUIRED: **YES** ☐ (SEE BELOW) **NO** ✓

If COC is **NOT** clear, ***STOP*** until you get client to authorize/clarify work.

CLIENT NOTIFIED: YES ☐ Date/ Time: _____ NO ☐

PROJECT CONTACT:

SUBCONTRACTED LAB:

DATE SHIPPED:

ADDITIONAL COMMENTS:

VERIFIED/TAKEN BY: INITIAL KJ DATE 4/29/20

REV 10/2019

777 New Durham Rd., Edison, NJ 08817

208555

CLIENT & PROJECT

Name: Integrated Analytical Laboratories LLC	
Address: 273 Franklin Road	
Randolph, NJ 07869	
Telephone #: 973-361-4252	
Fax #: 973-989-5288	
Project Name: E20-02898	
Project Location (State): NJ	
Project Manager:	
Reference ID#: PO#	

REPORTING & BILLING

Contact: Thomas Malanga	
Fax #:	
EMail to: tmalanga@ialonline.com	
Report to: Thomas Malanga	
Address:	
Invoice to: Thomas Malanga	
Address:	

Turnaround Time	Report Format
Verbal/Fax	Reduced / Level III
24 hr* 48 hr* 72 hr* 1 wk* 2 wk Other: 6 Business Days	
Hard Copy	Special Requirements
72 hr* 1 wk* 2 wk* 3 wk Other:	
*Prior to sample arrival, Lab notification is required.	

Preservative
1 = HCL; 2 = NaOH; 3 = HNO_3
4 = H_2SO_4; 5= MeOH; 6 = Other

ANALYTICAL PARAMETERS / PRESERVATIVES

SAMPLE INFORMATION

Sample ID	Sample Depth (in Feet)	Sampling Date	Sampling Time	Matrix	# of Containers	Total Cyanide (9012B)	1 2 3 4 5 6	1 2 3 4 5 6	1 2 3 4 5 6	1 2 3 4 5 6	1 2 3 4 5 6	1 2 3 4 5 6	1 2 3 4 5 6	1 2 3 4 5 6	1 2 3 4 5 6	1 2 3 4 5 6	1 2 3 4 5 6	1 2 3 4 5 6	1 2 3 4 5 6
E20-02898-001		4/28/20	09:00	Soil	1	Run													

460-208555 Chain of Custody

Please print legibly and fill out completely. Samples cannot be processed and the turnaround time will not start until any ambiguities have been resolved.

COOLER TEMP. °C

Concentrations Expected LOW MED HIGH

Known Hazard: yes no
Describe:

Note:

EMAIL CONFIRMATION REQUIRED

CUSTODY LOG

Signature/Company	Date	Time	Signature/Company
Relinquished by:	5/7/20	1136	Received by: 8/20 11:26
Relinquished by:			Received by:
Relinquished by:			Received by:

Lab Case #

PAGE: OF

CDC (001-001)

REV Feb 2013

4.9° IR11 Pres

Page 35 of 37

05/12/2020

SUMMARY REPORT
Client: S & S Environmental
Project: MOUNT HOPE
Lab Case No.: E20-02898

	Lab ID:	02898-001	
	Client ID:	20-049	
	Matrix:	Soil	
	Sampled Date	4/28/20	
PARAMETER(Units)	Conc	Q	MDL
Volatiles (Units)		*(mg/Kg)*	
Dichlorodifluoromethane	ND		0.000419
Chloromethane	ND		0.00046
Vinyl chloride	ND		0.000458
Bromomethane	ND		0.000646
Chloroethane	ND		0.000514
Trichlorofluoromethane	ND		0.000434
Acrolein	ND		0.00524
1,1-Dichloroethene	ND		0.000441
Acetone	ND		0.00276
Carbon disulfide	ND		0.000273
Methylene chloride	ND		0.0021
Acrylonitrile	ND		0.00464
tert-Butyl alcohol (TBA)	ND		0.0011
trans-1,2-Dichloroethene	ND		0.000432
Methyl tert-butyl ether (MTBE)	ND		0.000321
1,1-Dichloroethane	ND		0.000394
cis-1,2-Dichloroethene	ND		0.000374
2-Butanone (MEK)	ND		0.00103
Bromochloromethane	ND		0.000314
Chloroform	ND		0.000608
1,1,1-Trichloroethane	ND		0.000306
Carbon tetrachloride	ND		0.000298
1,2-Dichloroethane (EDC)	ND		0.000409
Benzene	ND		0.000234
Trichloroethene	ND		0.000315
1,2-Dichloropropane	ND		0.000253
1,4-Dioxane	ND		0.039
Bromodichloromethane	ND		0.000216
cis-1,3-Dichloropropene	ND		0.000232
4-Methyl-2-pentanone (MIBK)	ND		0.000793
Toluene	ND		0.000247
trans-1,3-Dichloropropene	ND		0.00028
1,1,2-Trichloroethane	ND		0.000332
Tetrachloroethene	ND		0.000404
2-Hexanone	ND		0.00166
Dibromochloromethane	ND		0.000297
1,2-Dibromoethane (EDB)	ND		0.000214
Chlorobenzene	ND		0.000246
Ethylbenzene	ND		0.000298
Total Xylenes	ND		0.00116
Styrene	ND		0.00036
Bromoform	ND		0.000375
Isopropylbenzene	ND		0.000367
1,1,2,2-Tetrachloroethane	ND		0.000473
n-Propylbenzene	ND		0.0003

ND = Analyzed for but Not Detected at the MDL
Continued on next page.

SUMMARY REPORT
Client: S & S Environmental
Project: MOUNT HOPE
Lab Case No.: E20-02898

	Lab ID:	02898-001	
	Client ID:	20-049	
	Matrix:	Soil	
	Sampled Date	4/28/20	
PARAMETER(Units)	Conc	Q	MDL
Volatiles (Units)		*(mg/Kg)*	
1,3,5-Trimethylbenzene	ND		0.000488
tert-Butylbenzene	ND		0.000345
1,2,4-Trimethylbenzene	ND		0.000558
sec-Butylbenzene	ND		0.000359
1,3-Dichlorobenzene	ND		0.000319
4-Isopropyltoluene	ND		0.000415
1,4-Dichlorobenzene	ND		0.000319
n-Butylbenzene	ND		0.000446
1,2-Dichlorobenzene	ND		0.0003
1,2-Dibromo-3-chloropropane	ND		0.000596
1,2,4-Trichlorobenzene	ND		0.000423
1,2,3-Trichlorobenzene	ND		0.000427
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.000477
Methyl acetate	ND		0.000332
Cyclohexane	ND		0.000491
Methylcyclohexane	ND		0.000314
1,3-Dichloropropene (cis- and trans-)	ND		0.00028
TOTAL TIC's:	ND		
Semivolatiles (Units)		*(mg/Kg)*	
N-Nitrosodimethylamine	ND		0.028
Benzaldehyde	ND		0.027
Phenol	ND		0.032
Aniline	ND		0.021
Bis(2-chloroethyl) ether	ND		0.026
2-Chlorophenol	ND		0.026
Benzyl alcohol	ND		0.032
2-Methylphenol	ND		0.020
2,2'-Oxybis(1-Chloropropane)	ND		0.032
4-Methylphenol **	ND		0.023
N-Nitrosodi-n-propylamine	ND		0.023
Acetophenone	ND		0.028
Hexachloroethane	ND		0.027
Nitrobenzene	ND		0.022
Isophorone	ND		0.024
2-Nitrophenol	ND		0.030
2,4-Dimethylphenol	ND		0.020
Bis(2-chloroethoxy) methane	ND		0.027
Benzoic acid	ND		0.028
2,4-Dichlorophenol	ND		0.026
Naphthalene	ND		0.026
4-Chloroaniline	ND		0.023
Hexachlorobutadiene	ND		0.021
Caprolactam	ND		0.025

ND = Analyzed for but Not Detected at the MDL
Continued on next page.

SUMMARY REPORT
Client: S & S Environmental
Project: MOUNT HOPE
Lab Case No.: E20-02898

	Lab ID:	02898-001	
	Client ID:	20-049	
	Matrix:	Soil	
	Sampled Date	4/28/20	
PARAMETER(Units)	Conc	Q	MDL
Semivolatiles (Units)		*(mg/Kg)*	
4-Chloro-3-methylphenol	ND		0.023
2-Methylnaphthalene	ND		0.021
Hexachlorocyclopentadiene	ND		0.028
2,4,6-Trichlorophenol	ND		0.026
2,4,5-Trichlorophenol	ND		0.028
1,1'-Biphenyl	ND		0.028
2-Chloronaphthalene	ND		0.025
2-Nitroaniline	ND		0.025
Dimethyl phthalate	ND		0.024
2,6-Dinitrotoluene	ND		0.032
Acenaphthylene	ND		0.026
3-Nitroaniline	ND		0.025
Acenaphthene	ND		0.027
2,4-Dinitrophenol	ND		0.031
4-Nitrophenol	ND		0.030
2,4-Dinitrotoluene	ND		0.029
Dibenzofuran	ND		0.025
Diethyl phthalate	ND		0.020
Fluorene	ND		0.028
4-Chlorophenyl phenyl ether	ND		0.027
4-Nitroaniline	ND		0.021
1,2,4,5-Tetrachlorobenzene	ND		0.023
2,3,4,6-Tetrachlorophenol	ND		0.028
4,6-Dinitro-2-methylphenol	ND		0.032
N-Nitrosodiphenylamine	ND		0.031
1,2-Diphenylhydrazine	ND		0.032
4-Bromophenyl phenyl ether	ND		0.023
Hexachlorobenzene	ND		0.023
Atrazine	ND		0.025
Pentachlorophenol	ND		0.022
Phenanthrene	ND		0.031
Anthracene	ND		0.032
Carbazole	ND		0.029
Di-n-butyl phthalate	ND		0.028
Fluoranthene	ND		0.032
Benzidine	ND		0.025
Pyrene	ND		0.030
Butyl benzyl phthalate	ND		0.031
3,3'-Dichlorobenzidine	ND		0.029
Benzo[a]anthracene	ND		0.020
Chrysene	ND		0.031
Bis(2-ethylhexyl) phthalate	ND		0.030
Di-n-octyl phthalate	ND		0.031
Benzo[b]fluoranthene	ND		0.032
Benzo[k]fluoranthene	ND		0.028

ND = Analyzed for but Not Detected at the MDL

Continued on next page.

SUMMARY REPORT
Client: S & S Environmental
Project: MOUNT HOPE
Lab Case No.: E20-02898

	Lab ID:	02898-001	
	Client ID:	20-049	
	Matrix:	Soil	
	Sampled Date	4/28/20	
PARAMETER(Units)	Conc	Q	MDL
Semivolatiles (Units)		*(mg/Kg)*	
Benzo[a]pyrene	ND		0.029
Indeno[1,2,3-cd]pyrene	ND		0.032
Dibenz[a,h]anthracene	ND		0.030
Benzo[g,h,i]perylene	ND		0.032
Dinitrotoluene (2,4- and 2,6-)	ND		0.032
TOTAL TIC's:	ND		
PCB's (Units)		*(mg/Kg)*	
Aroclor-1016	ND		0.00131
Aroclor-1221	ND		0.00131
Aroclor-1232	ND		0.00131
Aroclor-1242	ND		0.00131
Aroclor-1248	ND		0.00131
Aroclor-1254	ND		0.00131
Aroclor-1260	ND		0.00131
Aroclor-1262	ND		0.00131
Aroclor-1268	ND		0.00131
PCBs	ND		0.00131
Pesticides (Units)		*(mg/Kg)*	
alpha-BHC	ND		0.000327
beta-BHC	ND		0.000327
gamma-BHC (Lindane)	ND		0.000327
delta-BHC	ND		0.000327
Heptachlor	ND		0.000327
Aldrin	ND		0.000327
Heptachlor epoxide	ND		0.000327
Endosulfan I	ND		0.000327
4,4'-DDE	ND		0.000327
Dieldrin	ND		0.000327
Endrin	ND		0.000327
Endosulfan II	ND		0.000327
4,4'-DDD	ND		0.000327
Endrin aldehyde	ND		0.000327
Endosulfan sulfate	ND		0.000327
4,4'-DDT	ND		0.000327
Endrin ketone	ND		0.000327
Methoxychlor	ND		0.000327
alpha-Chlordane	ND		0.000327
gamma-Chlordane	ND		0.000327
Toxaphene	ND		0.00392
Endosulfan (I and II)	ND		0.000327
Chlordane (alpha and gamma)	ND		0.000327

ND = Analyzed for but Not Detected at the MDL

SUMMARY REPORT
Client: S & S Environmental
Project: MOUNT HOPE
Lab Case No.: E20-02898

	Lab ID:	02898-001	
	Client ID:	20-049	
	Matrix:	Soil	
	Sampled Date	4/28/20	
PARAMETER(Units)	Conc	Q	MDL
Herbicides (Units)	*(mg/Kg)*		
Dalapon	ND		0.0066
Dicamba	ND		0.0066
2,4-D	ND		0.0066
2,4,5-TP (Silvex)	ND		0.0066
2,4,5-T	ND		0.0066
2,4-DB	ND		0.0066
Dinoseb	ND		0.0066
NJ-EPH-C40 (Units)	*(mg/Kg)*		
C9-C40	ND		19.5
Alcohols (Units)	*(mg/Kg)*		
Methanol	ND		1.91
Metals (Units)	*(mg/Kg)*		
Aluminum	2040		2.08
Antimony	0.360	J	0.208
Arsenic	1.14		0.156
Barium	8.52		0.260
Beryllium	0.674		0.156
Cadmium	ND		0.313
Calcium	3740		15.6
Chromium	3.72		0.260
Cobalt	3.70		0.156
Copper	9.66		0.365
Iron	9670		15.6
Lead	2.02		0.260
Magnesium	2260		15.6
Manganese	65.7		0.365
Mercury	ND		0.010
Nickel	4.31		0.365
Potassium	1240		20.8
Selenium	4.01		1.56
Silver	ND		0.313
Sodium	161		20.8
Thallium	0.455	J	0.260
Vanadium	7.69		0.260
Zinc	10.6		1.04

ND = Analyzed for but Not Detected at the MDL
J = Concentration detected at a value below the RL and above the MDL for target compounds. For non-target compounds (i.e. TICs), qualifier indicates estimated concentrations.

SUMMARY REPORT
Client: S & S Environmental
Project: MOUNT HOPE
Lab Case No.: E20-02898

Lab ID:	**02898-001**		
Client ID:	**20-049**		
Matrix:	**Soil**		
Sampled Date	**4/28/20**		
PARAMETER(Units)	Conc	Q	MDL
General Analytical (Units)			
Hexavalent Chromium(mg/Kg)	ND		0.379
pH/Corrosivity(SU)	8.47		NA
Trivalent (III) Chromium(mg/Kg)	3.72		0.379
Subcontracted Data (Units)	***(mg/Kg)***		
	*		*

ND = Analyzed for but Not Detected at the MDL

*Subcontracted Results for Total Cyanide (9012B) by Test America -Edison are available in the Subcontracted Report section

TestAmerica Laboratories, Inc.

Eurofins TestAmerica, Edison

SUMMARY OF ANALYTICAL RESULTS: 460-208555-1

Job Description: E20-02898

For:

Integrated Analytical Laboratories LLC

PO BOX 8026

Parsippany, New Jersey 07054

Client ID	NJ_SRS7_26D_Tbl1A	NJ_SRS7_26D_Tbl1B	NJDEP	E20-02898-001		
Lab Sample ID	Residential	Non-Residential	IGW Screening	460-208555-1		
Sampling Date	Sept_2017	Sept_2017	Nov_2013	04/28/2020 09:00:00		
Matrix				Soil		
				Result	Q	MDL
SOIL BY 9012B						
Cyanide, Total (mg/kg)	47	680	20	0.12	U F1	0.12

F1 : MS and/or MSD recovery exceeds control limits.

U : Indicates the analyte was analyzed for but not detected.

Lab Contact:
Jill Miller
Senior Project Manager
(484)685-0871

S S Environmental
Project Name: MOUNT HOPE
IAL SDG No:E20-02898

Sample #:		NJDEP SOIL REMEDIATION			20-049			
Field ID:		STANDARDS						
Lab ID:		Residential	Non-Res	Default IGW	02898-001			
Date Sampled:		SRS	SRS	Screening	04/28/2020			
Depth(ft):				Level				
	CAS	(mg/Kg)	(mg/Kg)	(mg/Kg)				
Volatiles (mg/Kg)					Conc	Q	RL	MDL
Dichlorodifluoromethane	75-71-8	490	230000	39	ND		0.00108	0.000419
Chloromethane	74-87-3	4	12	NS	ND		0.00108	0.00046
Vinyl chloride	75-01-4	0.7	2	0.005	ND		0.00108	0.000458
Bromomethane	74-83-9	25	59	0.04	ND		0.00108	0.000646
Chloroethane	75-00-3	220	1100	NS	ND		0.00108	0.000514
Trichlorofluoromethane	75-69-4	23000	340000	34	ND		0.00108	0.000434
Acrolein	107-02-8	0.5	1	0.5	ND		0.022	0.00524
1,1-Dichloroethene	75-35-4	11	150	0.008	ND		0.00108	0.000441
Acetone	67-64-1	70000	NS	19	ND		0.011	0.00276
Carbon disulfide	75-15-0	7800	110000	6	ND		0.00108	0.000273
Methylene chloride	75-09-2	46	230	0.01	ND		0.00216	0.0021
Acrylonitrile	107-13-1	0.9	3	0.5	ND		0.022	0.00464
tert-Butyl alcohol (TBA)	75-65-0	1400	11000	0.3	ND		0.00432	0.0011
trans-1,2-Dichloroethene	156-60-5	300	720	0.6	ND		0.00108	0.000432
Methyl tert-butyl ether (MTBE)	1634-04-4	110	320	0.2	ND		0.00108	0.000321
1,1-Dichloroethane	75-34-3	8	24	0.2	ND		0.00108	0.000394
cis-1,2-Dichloroethene	156-59-2	230	560	0.3	ND		0.00108	0.000374
2-Butanone (MEK)	78-93-3	3100	44000	0.9	ND		0.00432	0.00103
Bromochloromethane	74-97-5	NS	NS	NS	ND		0.00108	0.000314
Chloroform	67-66-3	0.6	2	0.4	ND		0.00108	0.000608
1,1,1-Trichloroethane	71-55-6	160000	NS	0.3	ND		0.00108	0.000306
Carbon tetrachloride	56-23-5	2	4	0.005	ND		0.00108	0.000298
1,2-Dichloroethane (EDC)	107-06-2	0.9	3	0.005	ND		0.00108	0.000409
Benzene	71-43-2	2	5	0.005	ND		0.00108	0.000234
Trichloroethene	79-01-6	3	10	0.01	ND		0.00108	0.000315
1,2-Dichloropropane	78-87-5	2	5	0.005	ND		0.00108	0.000253
1,4-Dioxane	123-91-1	NS	NS	NS	ND		0.216	0.039
Bromodichloromethane	75-27-4	1	3	0.005	ND		0.00108	0.000216
cis-1,3-Dichloropropene	10061-01-5	NS	NS	NS	ND		0.00108	0.000232
4-Methyl-2-pentanone (MIBK)	108-10-1	NS	NS	NS	ND		0.00216	0.000793
Toluene	108-88-3	6300	91000	7	ND		0.00108	0.000247
trans-1,3-Dichloropropene	10061-02-6	NS	NS	NS	ND		0.00108	0.00028
1,1,2-Trichloroethane	79-00-5	2	6	0.02	ND		0.00108	0.000332
Tetrachloroethene	127-18-4	43	1500	0.005	ND		0.00108	0.000404
2-Hexanone	591-78-6	NS	NS	NS	ND		0.00216	0.00166
Dibromochloromethane	124-48-1	3	8	0.005	ND		0.00108	0.000297
1,2-Dibromoethane (EDB)	106-93-4	0.008	0.04	0.005	ND		0.00108	0.000214
Chlorobenzene	108-90-7	510	7400	0.6	ND		0.00108	0.000246

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EDD created on 5/13/20

Ethylbenzene	100-41-4	7800	110000	13	ND	0.00108	0.000298	
Total Xylenes	1330-20-7	12000	170000	19	ND	0.00216	0.00116	
Styrene	100-42-5	90	260	3	ND	0.00108	0.00036	
Bromoform	75-25-2	81	280	0.03	ND	0.00108	0.000375	
Isopropylbenzene	98-82-8	NS	NS	NS	ND	0.00108	0.000367	
1,1,2,2-Tetrachloroethane	79-34-5	1	3	0.007	ND	0.00108	0.000473	
n-Propylbenzene	103-65-1	NS	NS	NS	ND	0.00108	0.0003	
1,3,5-Trimethylbenzene	108-67-8	NS	NS	NS	ND	0.00108	0.000488	
tert-Butylbenzene	98-06-6	NS	NS	NS	ND	0.00108	0.000345	
1,2,4-Trimethylbenzene	95-63-6	NS	NS	NS	ND	0.00108	0.000558	
sec-Butylbenzene	135-98-8	NS	NS	NS	ND	0.00108	0.000359	
1,3-Dichlorobenzene	541-73-1	5300	59000	19	ND	0.00108	0.000319	
4-Isopropyltoluene	99-87-6	NS	NS	NS	ND	0.00108	0.000415	
1,4-Dichlorobenzene	106-46-7	5	13	2	ND	0.00108	0.000319	
n-Butylbenzene	104-51-8	NS	NS	NS	ND	0.00108	0.000446	
1,2-Dichlorobenzene	95-50-1	5300	59000	17	ND	0.00108	0.0003	
1,2-Dibromo-3-chloropropane	96-12-8	0.08	0.2	0.005	ND	0.00108	0.000596	
1,2,4-Trichlorobenzene	120-82-1	73	820	0.7	ND	0.00108	0.000423	
1,2,3-Trichlorobenzene	87-61-6	NS	NS	NS	ND	0.00108	0.000427	
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	NS	NS	NS	ND	0.00108	0.000477	
Methyl acetate	79-20-9	78000	NS	22	ND	0.00216	0.000332	
Cyclohexane	110-82-7	NS	NS	NS	ND	0.00108	0.000491	
Methylcyclohexane	108-87-2	NS	NS	NS	ND	0.00108	0.000314	
1,3-Dichloropropene (cis- and trans-)	542-75-6	2	7	0.005	ND	0.00108	0.00028	
TOTAL TIC's:		NS	NS	NS	ND		NA	

S S Environmental
Project Name: MOUNT HOPE
IAL SDG No:E20-02898

Semivolatiles (mg/Kg)					Conc	Q	RL	MDL
N-Nitrosodimethylamine	62-75-9	0.7	0.7	0.7	ND		0.033	0.028
Benzaldehyde	100-52-7	6100	68000	NS	ND		0.033	0.027
Phenol	108-95-2	18000	210000	8	ND		0.033	0.032
Aniline	62-53-3	NS	NS	NS	ND		0.033	0.021
Bis(2-chloroethyl) ether	111-44-4	0.4	2	0.2	ND		0.033	0.026
2-Chlorophenol	95-57-8	310	2200	0.8	ND		0.033	0.026
Benzyl alcohol	100-51-6	NS	NS	NS	ND		0.033	0.032
2-Methylphenol	95-48-7	310	3400	NS	ND		0.033	0.020
2,2'-Oxybis(1-Chloropropane)	108-60-1	23	67	5	ND		0.033	0.032
4-Methylphenol **	106-44-5	31	340	NS	ND		0.033	0.023
N-Nitrosodi-n-propylamine	621-64-7	0.2	0.3	0.2	ND		0.033	0.023
Acetophenone	98-86-2	2	5	3	ND		0.033	0.028
Hexachloroethane	67-72-1	12	48	0.2	ND		0.033	0.027
Nitrobenzene	98-95-3	5	14	0.2	ND		0.033	0.022
Isophorone	78-59-1	510	2000	0.2	ND		0.033	0.024
2-Nitrophenol	88-75-5	NS	NS	NS	ND		0.033	0.030
2,4-Dimethylphenol	105-67-9	1200	14000	1	ND		0.033	0.020
Bis(2-chloroethoxy) methane	111-91-1	NS	NS	NS	ND		0.033	0.027
Benzoic acid	65-85-0	NS	NS	NS	ND		0.328	0.028
2,4-Dichlorophenol	120-83-2	180	2100	0.2	ND		0.033	0.026
Naphthalene	91-20-3	6	17	25	ND		0.033	0.026
4-Chloroaniline	106-47-8	NS	NS	NS	ND		0.033	0.023
Hexachlorobutadiene	87-68-3	6	25	0.9	ND		0.033	0.021
Caprolactam	105-60-2	31000	340000	12	ND		0.033	0.025
4-Chloro-3-methylphenol	59-50-7	NS	NS	NS	ND		0.033	0.023
2-Methylnaphthalene	91-57-6	230	2400	8	ND		0.033	0.021
Hexachlorocyclopentadiene	77-47-4	45	110	320	ND		0.033	0.028
2,4,6-Trichlorophenol	88-06-2	19	74	0.2	ND		0.033	0.026
2,4,5-Trichlorophenol	95-95-4	6100	68000	68	ND		0.033	0.028
1,1'-Biphenyl	92-52-4	61	240	140	ND		0.033	0.028
2-Chloronaphthalene	91-58-7	NS	NS	NS	ND		0.033	0.025
2-Nitroaniline	88-74-4	39	23000	NS	ND		0.033	0.025
Dimethyl phthalate	131-11-3	NS	NS	NS	ND		0.033	0.024
2,6-Dinitrotoluene	606-20-2	0.7	3	NS	ND		0.033	0.032
Acenaphthylene	208-96-8	NS	300000	NS	ND		0.033	0.026
3-Nitroaniline	99-09-2	NS	NS	NS	ND		0.033	0.025
Acenaphthene	83-32-9	3400	37000	110	ND		0.033	0.027
2,4-Dinitrophenol	51-28-5	120	1400	0.3	ND		0.033	0.031
4-Nitrophenol	100-02-7	NS	NS	NS	ND		0.033	0.030
2,4-Dinitrotoluene	121-14-2	0.7	3	NS	ND		0.033	0.029
Dibenzofuran	132-64-9	NS	NS	NS	ND		0.033	0.025
Diethyl phthalate	84-66-2	49000	550000	88	ND		0.033	0.020
Fluorene	86-73-7	2300	24000	170	ND		0.033	0.028
4-Chlorophenyl phenyl ether	7005-72-3	NS	NS	NS	ND		0.033	0.027
4-Nitroaniline	100-01-6	NS	NS	NS	ND		0.033	0.021

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S S Environmental
Project Name: MOUNT HOPE
IAL SDG No:E20-02898

1,2,4,5-Tetrachlorobenzene	95-94-3	NS	NS	NS	ND		0.033	0.023
2,3,4,6-Tetrachlorophenol	58-90-2	NS	NS	NS	ND		0.033	0.028
4,6-Dinitro-2-methylphenol	534-52-1	6	68	0.3	ND		0.033	0.032
N-Nitrosodiphenylamine	86-30-6	99	390	0.4	ND		0.033	0.031
1,2-Diphenylhydrazine	122-66-7	0.7	2	0.7	ND		0.033	0.032
4-Bromophenyl phenyl ether	101-55-3	NS	NS	NS	ND		0.033	0.023
Hexachlorobenzene	118-74-1	0.3	1	0.2	ND		0.033	0.023
Atrazine	1912-24-9	210	2400	0.2	ND		0.033	0.025
Pentachlorophenol	87-86-5	0.9	3	0.3	ND		0.033	0.022
Phenanthrene	85-01-8	NS	300000	NS	ND		0.033	0.031
Anthracene	120-12-7	17000	30000	2400	ND		0.033	0.032
Carbazole	86-74-8	24	96	NS	ND		0.033	0.029
Di-n-butyl phthalate	84-74-2	6100	68000	760	ND		0.033	0.028
Fluoranthene	206-44-0	2300	24000	1300	ND		0.033	0.032
Benzidine	92-87-5	0.7	0.7	0.7	ND		0.033	0.025
Pyrene	129-00-0	1700	18000	840	ND		0.033	0.030
Butyl benzyl phthalate	85-68-7	1200	14000	230	ND		0.033	0.031
3,3'-Dichlorobenzidine	91-94-1	1	4	0.2	ND		0.033	0.029
Benzo[a]anthracene	56-55-3	5	17	0.8	ND		0.033	0.020
Chrysene	218-01-9	450	1700	80	ND		0.033	0.031
Bis(2-ethylhexyl) phthalate	117-81-7	35	140	1200	ND		0.033	0.030
Di-n-octyl phthalate	117-84-0	2400	27000	3300	ND		0.033	0.031
Benzo[b]fluoranthene	205-99-2	5	17	2	ND		0.033	0.032
Benzo[k]fluoranthene	207-08-9	45	170	25	ND		0.033	0.028
Benzo[a]pyrene	50-32-8	0.5	2	0.2	ND		0.033	0.029
Indeno[1,2,3-cd]pyrene	193-39-5	5	17	7	ND		0.033	0.032
Dibenz[a,h]anthracene	53-70-3	0.5	2	0.8	ND		0.033	0.030
Benzo[g,h,i]perylene	191-24-2	380000	30000	NS	ND		0.033	0.032
Dinitrotoluene (2,4- and 2,6-)	25321-14-6	0.7	3	0.2	ND		0.033	0.032
TOTAL TIC's:		NS	NS	NS	ND			NA

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S S Environmental
Project Name: MOUNT HOPE
IAL SDG No:E20-02898

PCB's (mg/Kg)					Conc	Q	RL	MDL
Aroclor-1016	12674-11-2	NS	NS	NS	ND		0.00327	0.00131
Aroclor-1221	11104-28-2	NS	NS	NS	ND		0.00327	0.00131
Aroclor-1232	11141-16-5	NS	NS	NS	ND		0.00327	0.00131
Aroclor-1242	53469-21-9	NS	NS	NS	ND		0.00327	0.00131
Aroclor-1248	12672-29-6	NS	NS	NS	ND		0.00327	0.00131
Aroclor-1254	11097-69-1	NS	NS	NS	ND		0.00327	0.00131
Aroclor-1260	11096-82-5	NS	NS	NS	ND		0.00327	0.00131
Aroclor-1262	37324-23-5	NS	NS	NS	ND		0.00327	0.00131
Aroclor-1268	11100-14-4	NS	NS	NS	ND		0.00327	0.00131
PCBs	1336-36-3	0.2	1	0.2	ND		0.00327	0.00131

Standards are based upon published regulatory information.
Users are encouraged to consult appropriate regulatory sources for current values and updates.
IAL assumes no responsibility for the accuracy of these values.

EDD created on 5/13/20

S S Environmental
Project Name: MOUNT HOPE
IAL SDG No:E20-02898

Pesticides (mg/Kg)					Conc	Q	RL	MDL
alpha-BHC	319-84-6	0.1	0.5	0.002	ND		0.000654	0.000327
beta-BHC	319-85-7	0.4	2	0.002	ND		0.000654	0.000327
gamma-BHC (Lindane)	58-89-9	0.4	2	0.002	ND		0.000654	0.000327
delta-BHC	319-86-8	NS	NS	NS	ND		0.000654	0.000327
Heptachlor	76-44-8	0.1	0.7	0.5	ND		0.000654	0.000327
Aldrin	309-00-2	0.04	0.2	0.2	ND		0.000654	0.000327
Heptachlor epoxide	1024-57-3	0.07	0.3	0.01	ND		0.000654	0.000327
Endosulfan I	959-98-8	NS	NS	NS	ND		0.000654	0.000327
4,4'-DDE	72-55-9	2	9	18	ND		0.000654	0.000327
Dieldrin	60-57-1	0.04	0.2	0.003	ND		0.000654	0.000327
Endrin	72-20-8	23	340	1	ND		0.000654	0.000327
Endosulfan II	33213-65-9	NS	NS	NS	ND		0.000654	0.000327
4,4'-DDD	72-54-8	3	13	4	ND		0.000654	0.000327
Endrin aldehyde	7421-93-4	NS	NS	NS	ND		0.000654	0.000327
Endosulfan sulfate	1031-07-8	470	6800	2	ND		0.000654	0.000327
4,4'-DDT	50-29-3	2	8	11	ND		0.000654	0.000327
Endrin ketone	53494-70-5	NS	NS	NS	ND		0.000654	0.000327
Methoxychlor	72-43-5	390	5700	160	ND		0.000654	0.000327
alpha-Chlordane	5103-71-9	NS	NS	NS	ND		0.000654	0.000327
gamma-Chlordane	5103-74-2	NS	NS	NS	ND		0.000654	0.000327
Toxaphene	8001-35-2	0.6	3	0.3	ND		0.00818	0.00392
Endosulfan (I and II)	115-29-7	470	6800	4	ND		0.000654	0.000327
Chlordane (alpha and gamma)	57-74-9	0.2	1	0.05	ND		0.000654	0.000327

Standards are based upon published regulatory information.
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EDD created on 5/13/20

S S Environmental
Project Name: MOUNT HOPE
IAL SDG No:E20-02898

NJ-EPH-C40 (mg/Kg)					Conc	Q	RL	MDL	
C9-C40	IALC9C40	NS	NS	NS	ND		48.7	19.5	

Standards are based upon published regulatory information.
Users are encouraged to consult appropriate regulatory sources for current values and updates.
IAL assumes no responsibility for the accuracy of these values.

EDD created on 5/13/20

S S Environmental
Project Name: MOUNT HOPE
IAL SDG No:E20-02898

Metals (mg/Kg)					Conc	Q	RL	MDL
Aluminum	7429-90-5	78000	NS	6000	2040		5.21	2.08
Antimony	7440-36-0	31	450	6	0.360	J	0.521	0.208
Arsenic	7440-38-2	19	19	19	1.14		0.521	0.156
Barium	7440-39-3	16000	59000	2100	8.52		0.521	0.260
Beryllium	7440-41-7	16	140	0.7	0.674		0.521	0.156
Cadmium	7440-43-9	78	78	2	ND		0.521	0.313
Calcium	7440-70-2	NS	NS	NS	3740		52.1	15.6
Chromium	7440-47-3	NS	NS	NS	3.72		0.521	0.260
Cobalt	7440-48-4	1600	590	90	3.70		0.521	0.156
Copper	7440-50-8	3100	45000	11000	9.66		0.521	0.365
Iron	7439-89-6	NS	NS	NS	9670		52.1	15.6
Lead	7439-92-1	400	800	90	2.02		0.521	0.260
Magnesium	7439-95-4	NS	NS	NS	2260		52.1	15.6
Manganese	7439-96-5	11000	5900	65	65.7		0.521	0.365
Mercury	7439-97-6	23	65	0.1	ND		0.025	0.010
Nickel	7440-02-0	1600	23000	48	4.31		0.521	0.365
Potassium	7440-09-7'	NS	NS	NS	1240		52.1	20.8
Selenium	7782-49-2	390	5700	11	4.01		3.65	1.56
Silver	7440-22-4	390	5700	1	ND		0.521	0.313
Sodium	7440-23-5	NS	NS	NS	161		52.1	20.8
Thallium	7440-28-0	withdrawn	withdrawn	3	0.455	J	0.521	0.260
Vanadium	7440-62-2	78	1100	NS	7.69		0.521	0.260
Zinc	7440-66-6	23000	110000	930	10.6		5.21	1.04

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EDD created on 5/13/20

S S Environmental
Project Name: MOUNT HOPE
IAL SDG No:E20-02898

General Analytical					Conc	Q	RL	MDL	
Hexavalent Chromium-mg/Kg	18540-29-9	240	20	NS	ND		1.00	0.379	
pH/Corrosivity-SU	SRP 6	NS	NS	NS	8.47		NA	NA	
Trivalent (III) Chromium-mg/Kg	16065-83-1	120000	NS	NS	3.72		1.00	0.379	

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EDD created on 5/13/20

S S Environmental
Project Name: MOUNT HOPE
IAL SDG No:E20-02898

Subcontracted Data					Conc	Q	RL	MDL	
		NS	NS	NS	?		?	NA	
NJDEP Soil Remediation Standards: Remediation Standards N.J.A.C. 7:26D, May 2012; Amended Sept 2017									
BOLD Conc	Indicates a concentration that exceeds applicable criteria.								
BOLD RL	Indicates RL that exceeds applicable criteria.								
BOLD MDL	Indicates MDL that exceeds applicable criteria.								
NS = No Standard Available									
~ = Sample not analyzed for									
ND = Analyzed for but Not Detected at the MDL									
J = Concentration detected at a value below the RL and above the MDL for target compounds. For non-target compounds (i.e. TICs), qualifier indicates estimated concentrations.									
? = Results not available									
Subcontracted Results for Total Cyanide (9012B) by Test America -Edison are available in the Subcontracted Report section									

Standards are based upon published regulatory information.
Users are encouraged to consult appropriate regulatory sources for current values and updates.
IAL assumes no responsibility for the accuracy of these values.

EDD created on 5/13/20

S & S ENVIRONMENTAL SCIENCES, INC.

Environmental Engineering, Testing and Consultation

98 Sand Park Road, Cedar Grove, NJ 07009
Tel (973) 857-7188 Fax (973) 239-8380

Kamil Sor, Ph.D.
Orhun Sor, P.E.
Atilla Sencar, P.E.

Client:	Tilcon New York, Inc.				
Project:	Pompton Lakes, NJ (NJDEP-SRS)				
Subject:	Laboratory Analysis of Aggregate Sample (Quarry Fines)				
Job No.:	06E41	**Report Number:**	20-E-62	**Date:**	5/21/2020

We present herewith the laboratory test results of an aggregate sample (identified as Quarry Fines) delivered to our laboratory on April 28, 2020. The sample was collected by a representative of Tilcon NY, on the same day.

As requested, the aggregate sample was analyzed for the U.S. EPA Target Compound List (TCL)+30/Target Analyte List (TAL) parameters, Extractable Petroleum Hydrocarbons (EPH), pH, and Hexavalent Chromium. The analyses were performed by Integrated Analytical Laboratories, LLC (IAL) (NJDEP Lab ID No. 14751). The copies of the IAL/S&S sample chain-of-custody forms, the preliminary IAL laboratory summary report and NJDEP-SRS comparison tables are attached.

Review of the laboratory data and comparison of the sample test results to the NJDEP Residential Direct Contact Soil Remediation Standards (RDCSRS) indicated that the aggregate sample **meet** the **NJDEP-RDCSRS**.

If there are any questions or if we can be of further assistance in this matter, please contact us.

Very truly yours
S & S ENVIRONMENTAL SCIENCES, INC.

Kamil Sor, Ph.D.
President

KS/ag
Attachments:
(1) Sample Chain-of-Custody Forms, Laboratory Summary Reports, and NJDEP-SRS Comparison Tables

cc: (1) Client Steve O'Reilly
email: soreilly@tilconny.com

S&S ENVIRONMENTAL SCIENCES, INC.

Environmental Engineering, Testing and Consultation

98 Sand Park Rad, Cedar Grove, NJ 07009
Tel (973) 857-7188 Fax (973) 239-8380

NJDEP Lab Certification No. 07073

SAMPLE CHAIN OF CUSTODY

CLIENT:	TILCON	DATE:	4-28-20
ADDRESS:		SSES JOB NO.	
CONTACT:		TEL. #:	
PROJECT:	Pompton Lakes, NJ	PROJECT LAB ID #:	20-048

SAMPLE NUMBER	SAMPLING DATE	SAMPLING TIME	SAMPLE TYPE	NO. OF BOTTLES	ANALYSES REQUESTED
20-048	4-28-20	10:05	Grab		NY-NJ Clean #11

Comments:

PRESERVATIVE	
Cooled at 4°C?	✓
HCl	
HNO_3	
H_2SO_4	
NaOH	
$Na_2S_2O_3$	
Other	

pH Meter No.:_____	Reading	T°C	Time	Analyst
pH				
pH Dup.				

Sampled By: S. O.

RELINQUISHED BY:	RECEIVED BY:	DATE AND TIME:
		4-28-20 11:10

Integrated Analytical Labs
273 Franklin Road
Randolph, NJ 07869

Chain of Custody Record

Contact Us: 973-361-4252
Fax: 973-989-5288
Web: www.ialonline.com

Customer Information	Reporting Information
Company: SES	REPORT TO:
Address:	Address:
	Same
Telephone #: 973-239-6001	Attn:
Fax #:	FAX #
Project Manager: P.IC	INVOICE TO;
EMAIL Address:	Address:
Project Name: Pompton Lakes	
Project Location (State): NJ	Attn:
Bottle Order #:	PO # 20-048
☑ "Report to"/"Invoice To" same as above	Quote #
Sampled by: S.O.	Sample Matrix

Sample Matrix

DW - Drinking Water; WW - Waste Water; GW - Groundwater; SW - Surface Water; LIQ - Liquid (specify); M - Multiphasic; OI - Oil; S - Soil; SED - Sediment; SOL - Solid (specify); SL - Sludge; W - Wipe

COMPLETED BY IAL:

____ Field Sampling ____ Equipment Rental

SAMPLE INFORMATION

Client ID	Depth (ft only)	Sampling Date	Sampling Time	Matrix	# containers	IAL #	TAL/TCL +30 (X)	EPH	PH	C6+
20-048		4-22-20	10:05	So.)	5	1	✓	✓	✓	✓

Rush TAT Charge: 24 hr - 100%... 48 hr - 75%.... 72 hr - 50%.... 96 hr - 35%.... 5 day - 25%.... 6-9 day - 10%

Deliverables

NJ, CT, PA: ☐ Results Only (Level I) ☑ Reduced (Level II/III) ☐ Regulatory/ Full* (Level IV)

NY: ☐ ASP Category A ☐ ASP Category B*

EDDs

☐ NJ SRP ☐ NYSDEC EQuIS ☐ lab approved custom EDD ☐ NO EDD REQ'D

Concentrations Expected:

Low Med High

Known Hazard: ☐ YES ☐ NO

Describe:

Turn-Around Time (TAT)

Standard (10 business days) Verbal

Rush/date needed (only if pre-approved)**

Hard Copy: Std 3 week — Other - call for price

Petroleum Hydrocarbons - Selection is REQUIRED

☐ NJ EPH-DRO - Category 1 — TAT for PHC, if other than 2 weeks:

☐ NJ EPH-C40 - Category 2 ☐ CT ETPH

☐ NJ EPH-Fractionated - Cat 2 ☐ DRO-8015

Regulatory Requirement

New Jersey	New York
☐ GWQS	☐ AWQS (TOGS Table 1)
☑ NSW	☐ GWEL (TOGS Table 5)
☐ SRS	☐ Part 375-6.8(a) - Unrestricted
☐ Ecological	☑ Part 375-6.8(b) - Restricted
☐ DW	☑ CP-51 Table 2 or 3 selection required)
☐ SPLP	Other States / Criteria
	☐ Pennsylvania Act 2
	☐ CT RCSA 22a-133k1-k3
	☐ TSCA PCBs

OTHER Regulatory Requirements - specify in comments

Sample Specific Notes:

ANALYTICAL PARAMETERS (please note if contingent)

Samples previously analyzed by IAL? YES / NO

Preservative Code: 1 = None; 2 = HCl; 3 = HNO3; 4 = MeOH; 5 = NaOH; 6 = H2SO4; 7 = Other

Container Code: A = Amber Glass; B = Plastic; C = Vial; D = Glass; E = EnCore; T = Terracore

Preservative (use code):

Container Type (use code):

Special Instructions/QC Requirements & Comments:

(X) 4nc SRS Parameters NY-NJ Cleanup II

Please print legibly and fill out completely. Samples cannot be processed and the turnaround time (TAT) will not start until any ambiguities have been resolved. TAT starts the following day if samples rec'd at lab ≥ 5PM. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY IAL'S TERMS & CONDITIONS (found on rear of pink copy).

IAL Rev 1/2019

Carrier (check one): ☐ IAL Courier ☐ Client Courier ☐ FedEx/UPS***

***Tracking #:

Relinquished by (Signature and Company)	Date	Time	Received by (Signature and Company)	Date	Time
	4/22/20	1415		4/23/20	1416

FOR LAB USE ONLY

SDG #: 2897

Cooler Temp: 6 °C

LAB COPIES - WHITE & YELLOW; CLIENT COPY - PINK

Certification IDs: TNI (TNI01284); CT (PH-0699); NJ (14751); NY (11402); PA (68-00773).

PAGE: 1 of 1

SAMPLE RECEIPT VERIFICATION

CASE NO: E 20 02897 CLIENT: 575

COOLER TEMPERATURE: 2° - 6°C: ✓ (See Chain of Custody)

COC: (COMPLETE) / INCOMPLETE

Comments

KEY

✓ = YES/NA

✗ = NO

VOA received: ☒ Encore 250 ☐ IGW - Methanol

(check one) ☐ Terra Core ☐ No Preservative

✓	Bottles Intact	
✓	no-Missing Bottles	
✓	no-Extra Bottles	
✓	Sufficient Sample Volume	
✓	no-headspace/bubbles in VOs	
✓	Labels intact/correct	
✓	pH Check (exclude VOs)[1]	
✓	Correct bottles/preservative	
✓	Sufficient Holding/Prep Time[1]	
☐	Multiphasic Sample	
☐	Sample to be Subcontracted	
✓	**Chain of Custody is Clear**	

[1] All samples with "Analyze Immediately" holding times will be analyzed by this laboratory past the holding time. This includes but is not limited to the following tests: pH, Temperature, Free Residual Chlorine, Total Residual Chlorine, Dissolved Oxygen, Sulfite.

ADDITIONAL COMMENTS:

SAMPLE(S) VERIFIED BY: INITIAL AP DATE 4/28/20

CORRECTIVE ACTION REQUIRED: **YES** ☐ (SEE BELOW) **NO** ☒ N

If COC is **NOT** clear, ***STOP*** until you get client to authorize/clarify work.

CLIENT NOTIFIED: YES ☐ Date/ Time: _____ NO ☐

PROJECT CONTACT:

SUBCONTRACTED LAB:

DATE SHIPPED:

ADDITIONAL COMMENTS:

VERIFIED/TAKEN BY: INITIAL mf DATE 4/29/20

REV 10/2019

777 New Durham Rd., Edison, NJ 08817

208556

CLIENT & PROJECT

Name: Integrated Analytical Laboratories LLC	
Address: 273 Franklin Road	
Randolph, NJ 07869	
Telephone #: 973-361-4252	
Fax #: 973-989-5288	
Project Name: E20-02897	
Project Location (State): NJ	
Project Manager:	
Reference ID#: PO#	

REPORTING & BILLING

Contact: Thomas Malanga	
Fax #:	
EMail to: tmalanga@ialonline.com	
Report to: Thomas Malanga	
Address:	
Invoice to: Thomas Malanga	
Address:	

Turnaround Time						Report Format
Verbal/Fax						Reduced / Level III
24 hr*	48 hr*	72 hr*	1 wk*	2 wk	Other: 6 Business Days	
Hard Copy						Special Requirements
72 hr*	1 wk*	2 wk*	3 wk		Other:	
*Prior to sample arrival, Lab notification is required.						

Preservative
1 = HCL; 2 = NaOH; 3 = HNO_3
4 = H_2SO_4; 5= MeOH; 6 = Other

ANALYTICAL PARAMETERS / PRESERVATIVES

SAMPLE INFORMATION

Sample ID	Sample Depth (in Feet)	Sampling Date	Sampling Time	Matrix	# of Containers	Total Cyanide (9012B)	1 2 3 4 5 6	1 2 3 4 5 6	1 2 3 4 5 6	1 2 3 4 5 6	1 2 3 4 5 6	1 2 3 4 5 6	1 2 3 4 5 6	1 2 3 4 5 6	1 2 3 4 5 6	1 2 3 4 5 6	1 2 3 4 5 6	1 2 3 4 5 6	1 2 3 4 5 6
E20-02897-001		4/28/20	10:05	Soil	1	Run													

460-208556 Chain of Custody

Please print legibly and fill out completely. Samples cannot be processed and the turnaround time will not start until any ambiguities have been resolved.

COOLER TEMP: °C

Concentrations Expected: LOW MED HIGH

Known Hazard: yes no

Describe:

Note:

EMAIL CONFIRMATION REQUIRED

CUSTODY LOG

Signature/Company	Date	Time	Signature/Company
Relinquished by:	5/7/20	1136	Received by: 5/8/20 1136
Relinquished by:			Received by:
Relinquished by:			Received by:

Lab Case #

PAGE: OF

4.9°C IR#1 NoCS

05/14/2020

CoC (001-0011)

REV Feb 2013

SUMMARY REPORT
Client: S & S Environmental
Project: POMPTON LAKES
Lab Case No.: E20-02897

	Lab ID:	02897-001	
	Client ID:	20-048	
	Matrix:	Soil	
	Sampled Date	4/28/20	
PARAMETER(Units)	Conc	Q	MDL
Volatiles (Units)		*(mg/Kg)*	
Dichlorodifluoromethane	ND		0.000369
Chloromethane	ND		0.000405
Vinyl chloride	ND		0.000403
Bromomethane	ND		0.000568
Chloroethane	ND		0.000452
Trichlorofluoromethane	ND		0.000382
Acrolein	ND		0.00461
1,1-Dichloroethene	ND		0.000388
Acetone	ND		0.00242
Carbon disulfide	0.00198		0.00024
Methylene chloride	ND		0.00184
Acrylonitrile	ND		0.00408
tert-Butyl alcohol (TBA)	ND		0.000968
trans-1,2-Dichloroethene	ND		0.00038
Methyl tert-butyl ether (MTBE)	ND		0.000282
1,1-Dichloroethane	ND		0.000347
cis-1,2-Dichloroethene	ND		0.000329
2-Butanone (MEK)	ND		0.000903
Bromochloromethane	ND		0.000276
Chloroform	ND		0.000535
1,1,1-Trichloroethane	ND		0.000269
Carbon tetrachloride	ND		0.000262
1,2-Dichloroethane (EDC)	ND		0.00036
Benzene	ND		0.000206
Trichloroethene	ND		0.000277
1,2-Dichloropropane	ND		0.000222
1,4-Dioxane	ND		0.035
Bromodichloromethane	ND		0.00019
cis-1,3-Dichloropropene	ND		0.000204
4-Methyl-2-pentanone (MIBK)	ND		0.000697
Toluene	ND		0.000218
trans-1,3-Dichloropropene	ND		0.000246
1,1,2-Trichloroethane	ND		0.000292
Tetrachloroethene	ND		0.000355
2-Hexanone	ND		0.00146
Dibromochloromethane	ND		0.000261
1,2-Dibromoethane (EDB)	ND		0.000188
Chlorobenzene	ND		0.000217
Ethylbenzene	ND		0.000262
Total Xylenes	ND		0.00102
Styrene	ND		0.000316
Bromoform	ND		0.00033
Isopropylbenzene	ND		0.000323
1,1,2,2-Tetrachloroethane	ND		0.000416
n-Propylbenzene	ND		0.000264

ND = Analyzed for but Not Detected at the MDL
Continued on next page.

SUMMARY REPORT
Client: S & S Environmental
Project: POMPTON LAKES
Lab Case No.: E20-02897

	Lab ID:	02897-001	
	Client ID:	20-048	
	Matrix:	Soil	
	Sampled Date	4/28/20	
PARAMETER(Units)	Conc	Q	MDL
Volatiles (Units)		*(mg/Kg)*	
1,3,5-Trimethylbenzene	ND		0.000429
tert-Butylbenzene	ND		0.000303
1,2,4-Trimethylbenzene	ND		0.000491
sec-Butylbenzene	ND		0.000315
1,3-Dichlorobenzene	ND		0.00028
4-Isopropyltoluene	ND		0.000365
1,4-Dichlorobenzene	ND		0.00028
n-Butylbenzene	ND		0.000392
1,2-Dichlorobenzene	ND		0.000264
1,2-Dibromo-3-chloropropane	ND		0.000524
1,2,4-Trichlorobenzene	ND		0.000372
1,2,3-Trichlorobenzene	ND		0.000375
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.00042
Methyl acetate	ND		0.000292
Cyclohexane	ND		0.000432
Methylcyclohexane	ND		0.000276
1,3-Dichloropropene (cis- and trans-)	ND		0.000246
TOTAL TIC's:	ND		
Semivolatiles (Units)		*(mg/Kg)*	
N-Nitrosodimethylamine	ND		0.028
Benzaldehyde	ND		0.026
Phenol	ND		0.032
Aniline	ND		0.021
Bis(2-chloroethyl) ether	ND		0.026
2-Chlorophenol	ND		0.026
Benzyl alcohol	ND		0.031
2-Methylphenol	ND		0.019
2,2'-Oxybis(1-Chloropropane)	ND		0.031
4-Methylphenol **	ND		0.023
N-Nitrosodi-n-propylamine	ND		0.023
Acetophenone	ND		0.027
Hexachloroethane	ND		0.026
Nitrobenzene	ND		0.021
Isophorone	ND		0.024
2-Nitrophenol	ND		0.030
2,4-Dimethylphenol	ND		0.019
Bis(2-chloroethoxy) methane	ND		0.026
Benzoic acid	ND		0.027
2,4-Dichlorophenol	ND		0.026
Naphthalene	ND		0.026
4-Chloroaniline	ND		0.023
Hexachlorobutadiene	ND		0.021
Caprolactam	ND		0.025

ND = Analyzed for but Not Detected at the MDL

Continued on next page.

SUMMARY REPORT
Client: S & S Environmental
Project: POMPTON LAKES
Lab Case No.: E20-02897

	Lab ID:	02897-001	
	Client ID:	20-048	
	Matrix:	Soil	
	Sampled Date	4/28/20	
PARAMETER(Units)	Conc	Q	MDL
Semivolatiles (Units)		*(mg/Kg)*	
4-Chloro-3-methylphenol	ND		0.022
2-Methylnaphthalene	ND		0.021
Hexachlorocyclopentadiene	ND		0.028
2,4,6-Trichlorophenol	ND		0.026
2,4,5-Trichlorophenol	ND		0.028
1,1'-Biphenyl	ND		0.027
2-Chloronaphthalene	ND		0.025
2-Nitroaniline	ND		0.025
Dimethyl phthalate	ND		0.024
2,6-Dinitrotoluene	ND		0.031
Acenaphthylene	ND		0.026
3-Nitroaniline	ND		0.024
Acenaphthene	ND		0.027
2,4-Dinitrophenol	ND		0.031
4-Nitrophenol	ND		0.030
2,4-Dinitrotoluene	ND		0.029
Dibenzofuran	ND		0.024
Diethyl phthalate	ND		0.019
Fluorene	ND		0.028
4-Chlorophenyl phenyl ether	ND		0.027
4-Nitroaniline	ND		0.020
1,2,4,5-Tetrachlorobenzene	ND		0.023
2,3,4,6-Tetrachlorophenol	ND		0.028
4,6-Dinitro-2-methylphenol	ND		0.031
N-Nitrosodiphenylamine	ND		0.031
1,2-Diphenylhydrazine	ND		0.032
4-Bromophenyl phenyl ether	ND		0.023
Hexachlorobenzene	ND		0.023
Atrazine	ND		0.025
Pentachlorophenol	ND		0.022
Phenanthrene	ND		0.031
Anthracene	ND		0.032
Carbazole	ND		0.029
Di-n-butyl phthalate	ND		0.027
Fluoranthene	ND		0.031
Benzidine	ND		0.025
Pyrene	ND		0.029
Butyl benzyl phthalate	ND		0.030
3,3'-Dichlorobenzidine	ND		0.029
Benzo[a]anthracene	ND		0.019
Chrysene	ND		0.030
Bis(2-ethylhexyl) phthalate	ND		0.029
Di-n-octyl phthalate	ND		0.030
Benzo[b]fluoranthene	ND		0.031
Benzo[k]fluoranthene	ND		0.027

ND = Analyzed for but Not Detected at the MDL
Continued on next page.

SUMMARY REPORT
Client: S & S Environmental
Project: POMPTON LAKES
Lab Case No.: E20-02897

	Lab ID:	**02897-001**	
	Client ID:	**20-048**	
	Matrix:	**Soil**	
	Sampled Date	**4/28/20**	
PARAMETER(Units)	Conc	Q	MDL
Semivolatiles (Units)		***(mg/Kg)***	
Benzo[a]pyrene	ND		0.028
Indeno[1,2,3-cd]pyrene	ND		0.031
Dibenz[a,h]anthracene	ND		0.030
Benzo[g,h,i]perylene	ND		0.031
Dinitrotoluene (2,4- and 2,6-)	ND		0.031
TOTAL TIC's:	ND		
PCB's (Units)		***(mg/Kg)***	
Aroclor-1016	ND		0.00132
Aroclor-1221	ND		0.00132
Aroclor-1232	ND		0.00132
Aroclor-1242	ND		0.00132
Aroclor-1248	ND		0.00132
Aroclor-1254	ND		0.00132
Aroclor-1260	ND		0.00132
Aroclor-1262	ND		0.00132
Aroclor-1268	ND		0.00132
PCBs	ND		0.00132
Pesticides (Units)		***(mg/Kg)***	
alpha-BHC	ND		0.000329
beta-BHC	ND		0.000329
gamma-BHC (Lindane)	ND		0.000329
delta-BHC	ND		0.000329
Heptachlor	ND		0.000329
Aldrin	ND		0.000329
Heptachlor epoxide	ND		0.000329
Endosulfan I	ND		0.000329
4,4'-DDE	ND		0.000329
Dieldrin	ND		0.000329
Endrin	ND		0.000329
Endosulfan II	ND		0.000329
4,4'-DDD	ND		0.000329
Endrin aldehyde	ND		0.000329
Endosulfan sulfate	ND		0.000329
4,4'-DDT	ND		0.000329
Endrin ketone	ND		0.000329
Methoxychlor	ND		0.000329
alpha-Chlordane	ND		0.000329
gamma-Chlordane	ND		0.000329
Toxaphene	ND		0.00395
Endosulfan (I and II)	ND		0.000329
Chlordane (alpha and gamma)	ND		0.000329

ND = Analyzed for but Not Detected at the MDL

SUMMARY REPORT
Client: S & S Environmental
Project: POMPTON LAKES
Lab Case No.: E20-02897

	Lab ID:	02897-001		
	Client ID:	20-048		
	Matrix:	Soil		
	Sampled Date	4/28/20		
PARAMETER(Units)		Conc	Q	MDL
Herbicides (Units)		*(mg/Kg)*		
Dalapon		ND		0.00658
Dicamba		ND		0.00658
2,4-D		ND		0.00658
2,4,5-TP (Silvex)		ND		0.00658
2,4,5-T		ND		0.00658
2,4-DB		ND		0.00658
Dinoseb		ND		0.00658
NJ-EPH-C40 (Units)		*(mg/Kg)*		
C9-C40		21.1	J	19.9
Alcohols (Units)		*(mg/Kg)*		
Methanol		ND		1.97
Metals (Units)		*(mg/Kg)*		
Aluminum		4640		2.17
Antimony		ND		0.217
Arsenic		0.687		0.163
Barium		41.1		0.272
Beryllium		0.316	J	0.163
Cadmium		ND		0.326
Calcium		3920		16.3
Chromium		16.3		0.272
Cobalt		8.86		0.163
Copper		50.4		0.380
Iron		13500		16.3
Lead		3.21		0.272
Magnesium		4030		16.3
Manganese		94.9		0.380
Mercury		ND		0.013
Nickel		23.0		0.380
Potassium		3050		21.7
Selenium		3.37	J	1.63
Silver		ND		0.326
Sodium		116		21.7
Thallium		ND		0.272
Vanadium		23.6		0.272
Zinc		19.4		1.09

ND = Analyzed for but Not Detected at the MDL
J = Concentration detected at a value below the RL and above the MDL for target compounds. For non-target compounds (i.e. TICs), qualifier indicates estimated concentrations.

SUMMARY REPORT
Client: S & S Environmental
Project: POMPTON LAKES
Lab Case No.: E20-02897

	Lab ID:	**02897-001**	
	Client ID:	**20-048**	
	Matrix:	**Soil**	
	Sampled Date	**4/28/20**	
PARAMETER(Units)	Conc	Q	MDL
General Analytical (Units)			
Hexavalent Chromium(mg/Kg)	ND		0.380
pH/Corrosivity(SU)	8.38		NA
Trivalent (III) Chromium(mg/Kg)	16.3		0.380
Subcontracted Data (Units)	***(mg/Kg)***		
	*		*

ND = Analyzed for but Not Detected at the MDL

*Subcontracted Results for Total Cyanide (9012B) by Test America - Edison are available in the Subcontracted Report section

TestAmerica Laboratories, Inc.

Eurofins TestAmerica, Edison

SUMMARY OF ANALYTICAL RESULTS: 460-208556-1

Job Description: E20-02897

For:

Integrated Analytical Laboratories LLC

PO BOX 8026

Parsippany, New Jersey 07054

Client ID	NJ_SRS7_26D_Tbl1A	NJ_SRS7_26D_Tbl1B	NJDEP	E20-02897-001		
Lab Sample ID	Residential	Non-Residential	IGW Screening	460-208556-1		
Sampling Date	Sept_2017	Sept_2017	Nov_2013	04/28/2020 10:05:00		
Matrix				Soil		
				Result	Q	MDL
SOIL BY 9012B						
Cyanide, Total (mg/kg)	47	680	20	0.12	U	0.12

U : Indicates the analyte was analyzed for but not detected.

Lab Contact:
Jill Miller
Senior Project Manager
(484)685-0871

S S Environmental
Project Name: POMPTON LAKES
IAL SDG No:E20-02897

Sample #:		NJDEP SOIL REMEDIATION			20-048			
Field ID:		STANDARDS						
Lab ID:		Residential	Non-Res	Default IGW	02897-001			
Date Sampled:		SRS	SRS	Screening	04/28/2020			
Depth(ft):				Level				
	CAS	(mg/Kg)	(mg/Kg)	(mg/Kg)				
Volatiles (mg/Kg)					Conc	Q	RL	MDL
Dichlorodifluoromethane	75-71-8	490	230000	39	ND		0.00095	0.000369
Chloromethane	74-87-3	4	12	NS	ND		0.00095	0.000405
Vinyl chloride	75-01-4	0.7	2	0.005	ND		0.00095	0.000403
Bromomethane	74-83-9	25	59	0.04	ND		0.00095	0.000568
Chloroethane	75-00-3	220	1100	NS	ND		0.00095	0.000452
Trichlorofluoromethane	75-69-4	23000	340000	34	ND		0.00095	0.000382
Acrolein	107-02-8	0.5	1	0.5	ND		0.019	0.00461
1,1-Dichloroethene	75-35-4	11	150	0.008	ND		0.00095	0.000388
Acetone	67-64-1	70000	NS	19	ND		0.0095	0.00242
Carbon disulfide	75-15-0	7800	110000	6	0.00198		0.00095	0.00024
Methylene chloride	75-09-2	46	230	0.01	ND		0.0019	0.00184
Acrylonitrile	107-13-1	0.9	3	0.5	ND		0.019	0.00408
tert-Butyl alcohol (TBA)	75-65-0	1400	11000	0.3	ND		0.0038	0.000968
trans-1,2-Dichloroethene	156-60-5	300	720	0.6	ND		0.00095	0.00038
Methyl tert-butyl ether (MTBE)	1634-04-4	110	320	0.2	ND		0.00095	0.000282
1,1-Dichloroethane	75-34-3	8	24	0.2	ND		0.00095	0.000347
cis-1,2-Dichloroethene	156-59-2	230	560	0.3	ND		0.00095	0.000329
2-Butanone (MEK)	78-93-3	3100	44000	0.9	ND		0.0038	0.000903
Bromochloromethane	74-97-5	NS	NS	NS	ND		0.00095	0.000276
Chloroform	67-66-3	0.6	2	0.4	ND		0.00095	0.000535
1,1,1-Trichloroethane	71-55-6	160000	NS	0.3	ND		0.00095	0.000269
Carbon tetrachloride	56-23-5	2	4	0.005	ND		0.00095	0.000262
1,2-Dichloroethane (EDC)	107-06-2	0.9	3	0.005	ND		0.00095	0.00036
Benzene	71-43-2	2	5	0.005	ND		0.00095	0.000206
Trichloroethene	79-01-6	3	10	0.01	ND		0.00095	0.000277
1,2-Dichloropropane	78-87-5	2	5	0.005	ND		0.00095	0.000222
1,4-Dioxane	123-91-1	NS	NS	NS	ND		0.190	0.035
Bromodichloromethane	75-27-4	1	3	0.005	ND		0.00095	0.00019
cis-1,3-Dichloropropene	10061-01-5	NS	NS	NS	ND		0.00095	0.000204
4-Methyl-2-pentanone (MIBK)	108-10-1	NS	NS	NS	ND		0.0019	0.000697
Toluene	108-88-3	6300	91000	7	ND		0.00095	0.000218
trans-1,3-Dichloropropene	10061-02-6	NS	NS	NS	ND		0.00095	0.000246
1,1,2-Trichloroethane	79-00-5	2	6	0.02	ND		0.00095	0.000292
Tetrachloroethene	127-18-4	43	1500	0.005	ND		0.00095	0.000355
2-Hexanone	591-78-6	NS	NS	NS	ND		0.0019	0.00146
Dibromochloromethane	124-48-1	3	8	0.005	ND		0.00095	0.000261
1,2-Dibromoethane (EDB)	106-93-4	0.008	0.04	0.005	ND		0.00095	0.000188
Chlorobenzene	108-90-7	510	7400	0.6	ND		0.00095	0.000217

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EDD created on 5/13/20

S S Environmental
Project Name: POMPTON LAKES
IAL SDG No:E20-02897

Ethylbenzene	100-41-4	7800	110000	13	ND		0.00095	0.000262
Total Xylenes	1330-20-7	12000	170000	19	ND		0.0019	0.00102
Styrene	100-42-5	90	260	3	ND		0.00095	0.000316
Bromoform	75-25-2	81	280	0.03	ND		0.00095	0.00033
Isopropylbenzene	98-82-8	NS	NS	NS	ND		0.00095	0.000323
1,1,2,2-Tetrachloroethane	79-34-5	1	3	0.007	ND		0.00095	0.000416
n-Propylbenzene	103-65-1	NS	NS	NS	ND		0.00095	0.000264
1,3,5-Trimethylbenzene	108-67-8	NS	NS	NS	ND		0.00095	0.000429
tert-Butylbenzene	98-06-6	NS	NS	NS	ND		0.00095	0.000303
1,2,4-Trimethylbenzene	95-63-6	NS	NS	NS	ND		0.00095	0.000491
sec-Butylbenzene	135-98-8	NS	NS	NS	ND		0.00095	0.000315
1,3-Dichlorobenzene	541-73-1	5300	59000	19	ND		0.00095	0.00028
4-Isopropyltoluene	99-87-6	NS	NS	NS	ND		0.00095	0.000365
1,4-Dichlorobenzene	106-46-7	5	13	2	ND		0.00095	0.00028
n-Butylbenzene	104-51-8	NS	NS	NS	ND		0.00095	0.000392
1,2-Dichlorobenzene	95-50-1	5300	59000	17	ND		0.00095	0.000264
1,2-Dibromo-3-chloropropane	96-12-8	0.08	0.2	0.005	ND		0.00095	0.000524
1,2,4-Trichlorobenzene	120-82-1	73	820	0.7	ND		0.00095	0.000372
1,2,3-Trichlorobenzene	87-61-6	NS	NS	NS	ND		0.00095	0.000375
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	NS	NS	NS	ND		0.00095	0.00042
Methyl acetate	79-20-9	78000	NS	22	ND		0.0019	0.000292
Cyclohexane	110-82-7	NS	NS	NS	ND		0.00095	0.000432
Methylcyclohexane	108-87-2	NS	NS	NS	ND		0.00095	0.000276
1,3-Dichloropropene (cis- and trans-)	542-75-6	2	7	0.005	ND		0.00095	0.000246
TOTAL TIC's:		NS	NS	NS	ND			NA

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EDD created on 5/13/20

S S Environmental
Project Name: POMPTON LAKES
IAL SDG No:E20-02897

Semivolatiles (mg/Kg)					Conc	Q	RL	MDL
N-Nitrosodimethylamine	62-75-9	0.7	0.7	0.7	ND		0.032	0.028
Benzaldehyde	100-52-7	6100	68000	NS	ND		0.032	0.026
Phenol	108-95-2	18000	210000	8	ND		0.032	0.032
Aniline	62-53-3	NS	NS	NS	ND		0.032	0.021
Bis(2-chloroethyl) ether	111-44-4	0.4	2	0.2	ND		0.032	0.026
2-Chlorophenol	95-57-8	310	2200	0.8	ND		0.032	0.026
Benzyl alcohol	100-51-6	NS	NS	NS	ND		0.032	0.031
2-Methylphenol	95-48-7	310	3400	NS	ND		0.032	0.019
2,2'-Oxybis(1-Chloropropane)	108-60-1	23	67	5	ND		0.032	0.031
4-Methylphenol **	106-44-5	31	340	NS	ND		0.032	0.023
N-Nitrosodi-n-propylamine	621-64-7	0.2	0.3	0.2	ND		0.032	0.023
Acetophenone	98-86-2	2	5	3	ND		0.032	0.027
Hexachloroethane	67-72-1	12	48	0.2	ND		0.032	0.026
Nitrobenzene	98-95-3	5	14	0.2	ND		0.032	0.021
Isophorone	78-59-1	510	2000	0.2	ND		0.032	0.024
2-Nitrophenol	88-75-5	NS	NS	NS	ND		0.032	0.030
2,4-Dimethylphenol	105-67-9	1200	14000	1	ND		0.032	0.019
Bis(2-chloroethoxy) methane	111-91-1	NS	NS	NS	ND		0.032	0.026
Benzoic acid	65-85-0	NS	NS	NS	ND		0.322	0.027
2,4-Dichlorophenol	120-83-2	180	2100	0.2	ND		0.032	0.026
Naphthalene	91-20-3	6	17	25	ND		0.032	0.026
4-Chloroaniline	106-47-8	NS	NS	NS	ND		0.032	0.023
Hexachlorobutadiene	87-68-3	6	25	0.9	ND		0.032	0.021
Caprolactam	105-60-2	31000	340000	12	ND		0.032	0.025
4-Chloro-3-methylphenol	59-50-7	NS	NS	NS	ND		0.032	0.022
2-Methylnaphthalene	91-57-6	230	2400	8	ND		0.032	0.021
Hexachlorocyclopentadiene	77-47-4	45	110	320	ND		0.032	0.028
2,4,6-Trichlorophenol	88-06-2	19	74	0.2	ND		0.032	0.026
2,4,5-Trichlorophenol	95-95-4	6100	68000	68	ND		0.032	0.028
1,1'-Biphenyl	92-52-4	61	240	140	ND		0.032	0.027
2-Chloronaphthalene	91-58-7	NS	NS	NS	ND		0.032	0.025
2-Nitroaniline	88-74-4	39	23000	NS	ND		0.032	0.025
Dimethyl phthalate	131-11-3	NS	NS	NS	ND		0.032	0.024
2,6-Dinitrotoluene	606-20-2	0.7	3	NS	ND		0.032	0.031
Acenaphthylene	208-96-8	NS	300000	NS	ND		0.032	0.026
3-Nitroaniline	99-09-2	NS	NS	NS	ND		0.032	0.024
Acenaphthene	83-32-9	3400	37000	110	ND		0.032	0.027
2,4-Dinitrophenol	51-28-5	120	1400	0.3	ND		0.032	0.031
4-Nitrophenol	100-02-7	NS	NS	NS	ND		0.032	0.030
2,4-Dinitrotoluene	121-14-2	0.7	3	NS	ND		0.032	0.029
Dibenzofuran	132-64-9	NS	NS	NS	ND		0.032	0.024
Diethyl phthalate	84-66-2	49000	550000	88	ND		0.032	0.019
Fluorene	86-73-7	2300	24000	170	ND		0.032	0.028
4-Chlorophenyl phenyl ether	7005-72-3	NS	NS	NS	ND		0.032	0.027
4-Nitroaniline	100-01-6	NS	NS	NS	ND		0.032	0.020

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S S Environmental
Project Name: POMPTON LAKES
IAL SDG No:E20-02897

1,2,4,5-Tetrachlorobenzene	95-94-3	NS	NS	NS	ND		0.032	0.023
2,3,4,6-Tetrachlorophenol	58-90-2	NS	NS	NS	ND		0.032	0.028
4,6-Dinitro-2-methylphenol	534-52-1	6	68	0.3	ND		0.032	0.031
N-Nitrosodiphenylamine	86-30-6	99	390	0.4	ND		0.032	0.031
1,2-Diphenylhydrazine	122-66-7	0.7	2	0.7	ND		0.032	0.032
4-Bromophenyl phenyl ether	101-55-3	NS	NS	NS	ND		0.032	0.023
Hexachlorobenzene	118-74-1	0.3	1	0.2	ND		0.032	0.023
Atrazine	1912-24-9	210	2400	0.2	ND		0.032	0.025
Pentachlorophenol	87-86-5	0.9	3	0.3	ND		0.032	0.022
Phenanthrene	85-01-8	NS	300000	NS	ND		0.032	0.031
Anthracene	120-12-7	17000	30000	2400	ND		0.032	0.032
Carbazole	86-74-8	24	96	NS	ND		0.032	0.029
Di-n-butyl phthalate	84-74-2	6100	68000	760	ND		0.032	0.027
Fluoranthene	206-44-0	2300	24000	1300	ND		0.032	0.031
Benzidine	92-87-5	0.7	0.7	0.7	ND		0.032	0.025
Pyrene	129-00-0	1700	18000	840	ND		0.032	0.029
Butyl benzyl phthalate	85-68-7	1200	14000	230	ND		0.032	0.030
3,3'-Dichlorobenzidine	91-94-1	1	4	0.2	ND		0.032	0.029
Benzo[a]anthracene	56-55-3	5	17	0.8	ND		0.032	0.019
Chrysene	218-01-9	450	1700	80	ND		0.032	0.030
Bis(2-ethylhexyl) phthalate	117-81-7	35	140	1200	ND		0.032	0.029
Di-n-octyl phthalate	117-84-0	2400	27000	3300	ND		0.032	0.030
Benzo[b]fluoranthene	205-99-2	5	17	2	ND		0.032	0.031
Benzo[k]fluoranthene	207-08-9	45	170	25	ND		0.032	0.027
Benzo[a]pyrene	50-32-8	0.5	2	0.2	ND		0.032	0.028
Indeno[1,2,3-cd]pyrene	193-39-5	5	17	7	ND		0.032	0.031
Dibenz[a,h]anthracene	53-70-3	0.5	2	0.8	ND		0.032	0.030
Benzo[g,h,i]perylene	191-24-2	380000	30000	NS	ND		0.032	0.031
Dinitrotoluene (2,4- and 2,6-)	25321-14-6	0.7	3	0.2	ND		0.032	0.031
TOTAL TIC's:		NS	NS	NS	ND			NA

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EDD created on 5/13/20

S S Environmental
Project Name: POMPTON LAKES
IAL SDG No:E20-02897

PCB's (mg/Kg)					Conc	Q	RL	MDL	
Aroclor-1016	12674-11-2	NS	NS	NS	ND		0.00329	0.00132	
Aroclor-1221	11104-28-2	NS	NS	NS	ND		0.00329	0.00132	
Aroclor-1232	11141-16-5	NS	NS	NS	ND		0.00329	0.00132	
Aroclor-1242	53469-21-9	NS	NS	NS	ND		0.00329	0.00132	
Aroclor-1248	12672-29-6	NS	NS	NS	ND		0.00329	0.00132	
Aroclor-1254	11097-69-1	NS	NS	NS	ND		0.00329	0.00132	
Aroclor-1260	11096-82-5	NS	NS	NS	ND		0.00329	0.00132	
Aroclor-1262	37324-23-5	NS	NS	NS	ND		0.00329	0.00132	
Aroclor-1268	11100-14-4	NS	NS	NS	ND		0.00329	0.00132	
PCBs	1336-36-3	0.2	1	0.2	ND		0.00329	0.00132	

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EDD created on 5/13/20

S S Environmental
Project Name: POMPTON LAKES
IAL SDG No:E20-02897

Pesticides (mg/Kg)					Conc	Q	RL	MDL
alpha-BHC	319-84-6	0.1	0.5	0.002	ND		0.000658	0.000329
beta-BHC	319-85-7	0.4	2	0.002	ND		0.000658	0.000329
gamma-BHC (Lindane)	58-89-9	0.4	2	0.002	ND		0.000658	0.000329
delta-BHC	319-86-8	NS	NS	NS	ND		0.000658	0.000329
Heptachlor	76-44-8	0.1	0.7	0.5	ND		0.000658	0.000329
Aldrin	309-00-2	0.04	0.2	0.2	ND		0.000658	0.000329
Heptachlor epoxide	1024-57-3	0.07	0.3	0.01	ND		0.000658	0.000329
Endosulfan I	959-98-8	NS	NS	NS	ND		0.000658	0.000329
4,4'-DDE	72-55-9	2	9	18	ND		0.000658	0.000329
Dieldrin	60-57-1	0.04	0.2	0.003	ND		0.000658	0.000329
Endrin	72-20-8	23	340	1	ND		0.000658	0.000329
Endosulfan II	33213-65-9	NS	NS	NS	ND		0.000658	0.000329
4,4'-DDD	72-54-8	3	13	4	ND		0.000658	0.000329
Endrin aldehyde	7421-93-4	NS	NS	NS	ND		0.000658	0.000329
Endosulfan sulfate	1031-07-8	470	6800	2	ND		0.000658	0.000329
4,4'-DDT	50-29-3	2	8	11	ND		0.000658	0.000329
Endrin ketone	53494-70-5	NS	NS	NS	ND		0.000658	0.000329
Methoxychlor	72-43-5	390	5700	160	ND		0.000658	0.000329
alpha-Chlordane	5103-71-9	NS	NS	NS	ND		0.000658	0.000329
gamma-Chlordane	5103-74-2	NS	NS	NS	ND		0.000658	0.000329
Toxaphene	8001-35-2	0.6	3	0.3	ND		0.00823	0.00395
Endosulfan (I and II)	115-29-7	470	6800	4	ND		0.000658	0.000329
Chlordane (alpha and gamma)	57-74-9	0.2	1	0.05	ND		0.000658	0.000329

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S S Environmental
Project Name: POMPTON LAKES
IAL SDG No:E20-02897

NJ-EPH-C40 (mg/Kg)					Conc	Q	RL	MDL	
C9-C40	IALC9C40	NS	NS	NS	21.1	J	49.9	19.9	

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S S Environmental
Project Name: POMPTON LAKES
IAL SDG No:E20-02897

Metals (mg/Kg)					Conc	Q	RL	MDL
Aluminum	7429-90-5	78000	NS	6000	4640		5.43	2.17
Antimony	7440-36-0	31	450	6	ND		0.543	0.217
Arsenic	7440-38-2	19	19	19	0.687		0.543	0.163
Barium	7440-39-3	16000	59000	2100	41.1		0.543	0.272
Beryllium	7440-41-7	16	140	0.7	0.316	J	0.543	0.163
Cadmium	7440-43-9	78	78	2	ND		0.543	0.326
Calcium	7440-70-2	NS	NS	NS	3920		54.3	16.3
Chromium	7440-47-3	NS	NS	NS	16.3		0.543	0.272
Cobalt	7440-48-4	1600	590	90	8.86		0.543	0.163
Copper	7440-50-8	3100	45000	11000	50.4		0.543	0.380
Iron	7439-89-6	NS	NS	NS	13500		54.3	16.3
Lead	7439-92-1	400	800	90	3.21		0.543	0.272
Magnesium	7439-95-4	NS	NS	NS	4030		54.3	16.3
Manganese	7439-96-5	11000	5900	65	**94.9**		0.543	0.380
Mercury	7439-97-6	23	65	0.1	ND		0.031	0.013
Nickel	7440-02-0	1600	23000	48	23.0		0.543	0.380
Potassium	7440-09-7'	NS	NS	NS	3050		54.3	21.7
Selenium	7782-49-2	390	5700	11	3.37	J	3.80	1.63
Silver	7440-22-4	390	5700	1	ND		0.543	0.326
Sodium	7440-23-5	NS	NS	NS	116		54.3	21.7
Thallium	7440-28-0	withdrawn	withdrawn	3	ND		0.543	0.272
Vanadium	7440-62-2	78	1100	NS	23.6		0.543	0.272
Zinc	7440-66-6	23000	110000	930	19.4		5.43	1.09

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General Analytical					Conc	Q	RL	MDL	
Hexavalent Chromium-mg/Kg	18540-29-9	240	20	NS	ND		1.00	0.380	
pH/Corrosivity-SU	SRP 6	NS	NS	NS	8.38		NA	NA	
Trivalent (III) Chromium-mg/Kg	16065-83-1	120000	NS	NS	16.3		1.00	0.380	

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IAL SDG No:E20-02897

Subcontracted Data					Conc	Q	RL	MDL	
		NS	NS	NS	?		?	NA	
NJDEP Soil Remediation Standards: Remediation Standards N.J.A.C. 7:26D, May 2012; Amended Sept 2017									
BOLD Conc	Indicates a concentration that exceeds applicable criteria.								
BOLD RL	Indicates RL that exceeds applicable criteria.								
BOLD MDL	Indicates MDL that exceeds applicable criteria.								
NS = No Standard Available									
~ = Sample not analyzed for									
ND = Analyzed for but Not Detected at the MDL									
J = Concentration detected at a value below the RL and above the MDL for target compounds. For non-target compounds (i.e. TICs), qualifier indicates estimated concentrations.									
? = Results not available									
Subcontracted Results for Total Cyanide (9012B) by Test America -Edison are available in the Subcontracted Report section									