ARM Group Inc.
Earth Resource Engineers and Consultants

April 21, 2017

Ms. Barbara Brown
Project Coordinator
Maryland Department of the Environment
1800 Washington Boulevard
Baltimore, MD 21230

Re: Delineation Activities and Proposed
Excavation of Cadmium Impacted Soil
Area A: Parcel A4 – Tradepoint Atlantic
Sparrows Point, Maryland
ARM Project 160443M-2

Dear Ms. Brown:

Subsurface sample A4-013-SB-4 (providing site-wide coverage) had an elevated concentration of cadmium (33,600 mg/kg), which contributed to an unacceptable Hazard Quotient (HQ) of 86 for the baseline Construction Worker risk assessment performed for Parcel A4 (and an elevated HQ of 14 for the Composite Worker). The elevated detection appeared to be isolated to this location, as the next highest detection of cadmium in Parcel A4 was only 11.7 mg/kg. As indicated on **Figure 1**, soil boring A4-013-SB is located in an area of the Site that is proposed to remain unpaved, and no construction activities are planned in this area. The risk assessment provided in the Parcel A4 Phase II Investigation Report (Revision 1), dated January 4, 2017 indicated that the removal of cadmium above 550 mg/kg would be sufficient to reduce the Hazard Index (HI) for the future Construction Worker, the most conservative exposure scenario, to 1 when evaluated for a potential 250-day exposure frequency. This threshold would also ensure that the HQ associated with cadmium is less than 1 for the Composite Worker scenario.

This document provides a summary of the cadmium delineation activities completed to date, and proposes the excavation and off-site disposal of the cadmium impacted material associated with A4-013-SB. Contractors involved in the delineation activities included GSI Mid-Atlantic Inc.

Delineation Procedure and Results

A total of 67 borings were completed between December 8 and December 20, 2016 to delineate the elevated cadmium impacts at location A4-013-SB (**Figure 2**). Following the identification of all utilities in the study area, continuous core soil samples were collected surrounding A4-013-SB at a grid spacing of 10 feet (or less) with a track-mounted Geoprobe® direct push rig. The

initial delineation criterion used in the field was set to a cadmium concentration of 154 mg/kg (equivalent to a HQ of 1 for the Construction Worker) which was specified to be an overly conservative threshold for any subsequent soil removal.

During the initial round of delineation activities (December 8 to December 12, 2016), 48 continuous core soil samples were collected to a depth of up to 10 feet below ground surface (bgs) (or until groundwater was encountered) and screened with a hand-held X-ray fluorescence (XRF) instrument. At each location, confirmatory samples were collected for fixed laboratory analysis from 30% of the XRF screening intervals (selected at random from each boring). All borings completed to a final depth of 7 to 10 feet bgs had three analytical samples collected; all borings completed to a final depth of 4 to 6 feet bgs had two analytical samples collected; and all borings completed to a final depth of 3 feet bgs or less had one analytical sample collected.

Laboratory samples were submitted to Pace Analytical Services, Inc. (PACE) and analyzed for cadmium using USEPA Method 6010C. The laboratory reports for the confirmation samples are included as electronic attachments. (An apparent documentation error in Laboratory Report #30205161 caused samples from boring A4-013UUU-SB to be mislabeled as A4-013SSS-SB.) Sample containers, preservatives, and holding times for the cadmium analysis are listed in the Quality Assurance Project Plan (QAPP) Worksheet 19 & 30 – Sample Containers, Preservation, and Holding Times. After sampling had been concluded at a location, each hole was backfilled with bentonite chips, and down-hole soil sampling equipment was decontaminated in accordance with the procedures and methods referenced in Field SOP Number 016 provided in Appendix A of the QAPP.

During the initial round of delineation activities, the XRF detected cadmium at concentrations of 154 mg/kg or higher in the majority of the delineation borings. Laboratory confirmation samples indicated that only two of the delineation borings (A4-013Q-SB and A4-013HH-SB) had cadmium concentrations above 154 mg/kg (20,100 mg/kg and 317 mg/kg, respectively), whereas, the remaining delineation borings did not contain cadmium above this threshold. It was determined that the concentrations of cadmium identified by the XRF were inconsistent and deemed unreliable. At this point, field screening for cadmium using the XRF ceased, and this method was not used during subsequent delineation activities in Parcel A4. The laboratory analysis of 30% of the screened soil intervals (generally two or three samples per boring) was deemed to be adequate for delineation of the elevated cadmium impacts. The analytical results for the delineation borings are provided in **Table 1**, with exceedances of the delineation criterion highlighted. Although there were three exceedances of the delineation criterion (154 mg/kg), only two samples exceeded the excavation criterion (550 mg/kg).

Following the receipt of analytical results, an additional round of delineation was completed on December 20, 2016. During this phase, an additional 19 borings were completed, with samples

collected for laboratory analysis. The laboratory determined that none of the 19 delineation locations exceeded the delineation criterion of 154 mg/kg.

Two composite samples were collected using material from multiple locations throughout each event and summited for TCLP analysis to facilitate the proper disposal of potentially cadmium impacted soil. The laboratory reports from the TCLP analysis are included as electronic attachments. **Table 2** presents the results of the TCLP analysis. In the first composite sample (collected December 13, 2016), only trichloroethene (TCE) exceeded its TCLP limit, with a detection of 0.623 mg/L in excess of the criterion of 0.5 mg/L. This exceedance indicates that excavated material could potentially require management under hazardous waste regulations; however, final disposal requirements will be dependent on samples taken from the excavation stockpiles. There were no exceedances of the TCLP criteria in the second composite sample (collected December 21, 2016).

Excavation Plan

Cadmium concentrations that exceeded 550 mg/kg were estimated to require excavation from Parcel A4 to provide suitable worker exposure conditions based on the preliminary risk analysis. The laboratory data from delineation activities were incorporated into the risk assessment and confirmed that the removal of material above this threshold would be satisfactory for both future Composite and Construction Worker exposure risk.

Two locations exceeded 550 mg/kg (A4-013-SB and A4-013Q-SB). Excavation boundaries have been proposed to ensure the removal of soil with elevated concentrations of cadmium in the vicinity of A4-013-SB and A4-013Q-SB as shown in **Figure 3**. The excavation of soil will be completed to five feet bgs at location A4-013-SB and to seven feet bgs at location A4-013Q-SB. Once excavation activities have been completed at each location, confirmation soil samples will be collected at a minimum rate of one sample from each sidewall (unless limited by concrete, as applicable), as well as from the bottom of each excavation, to confirm that all soils exceeding 550 mg/kg of cadmium have been removed. The smaller excavation (A4-013-SB) has bottom and total sidewall areas of approximately 50 ft^2 and 140 ft^2, respectively. The larger excavation (A4-013Q-SB) has bottom and total sidewall areas of approximately 50 ft^2 and 200 ft^2, respectively. A total of 22 yd^3 of potentially impacted material are planned to be removed between the two excavations.

Excavated Material Handling and Disposal

Excavated materials will be stockpiled on polyethylene sheeting to protect the ground surface, and multiple straw-bales will be placed around the stockpiles to be used as berms. The stockpiles will be covered at the end of each day with polyethylene sheeting, and will remain

covered when they are not being used in order to minimize dust and prevent run-on/off. A weighted cover system shall be used to keep the covers in place. One composite sample will be collected using materials from multiple locations throughout each stockpile and summited for TCLP analysis to facilitate proper disposal. Non-hazardous materials will be disposed of at the on-site non-hazardous industrial landfill (Greys). Hazardous materials, if any, will be disposed of at an appropriate off-site hazardous landfill and the agencies will be notified.

Dust Monitoring

To limit worker exposure to contaminants borne on dust and windblown particulates, dust control measures will be implemented if dust concentrations exceed 3.0 mg/m³. To ensure that this threshold is not exceeded during the cadmium excavation activities, a real-time dust meter (ThermoElectron Corporation Personal Data RAM 1000AN) will be used to monitor the concentration of dust generated while excavating impacted material, if visible dust is generated in the breathing zone. Dust monitoring will be conducted in accordance with protocols specified in the approved Cold Mill Building Redevelopment Work Plan (Revision 1) dated November 29, 2016. Daily calibration of the real-time dust meter will be conducted in accordance with the QAPP to ensure the accuracy of the equipment. Dust concentrations will be recorded in the field book by field personnel every 15 minutes during intrusive activities, if monitoring is required.

If you have any questions or require additional information please do not hesitate to contact the undersigned at 410-290-7775. Thank you very much.

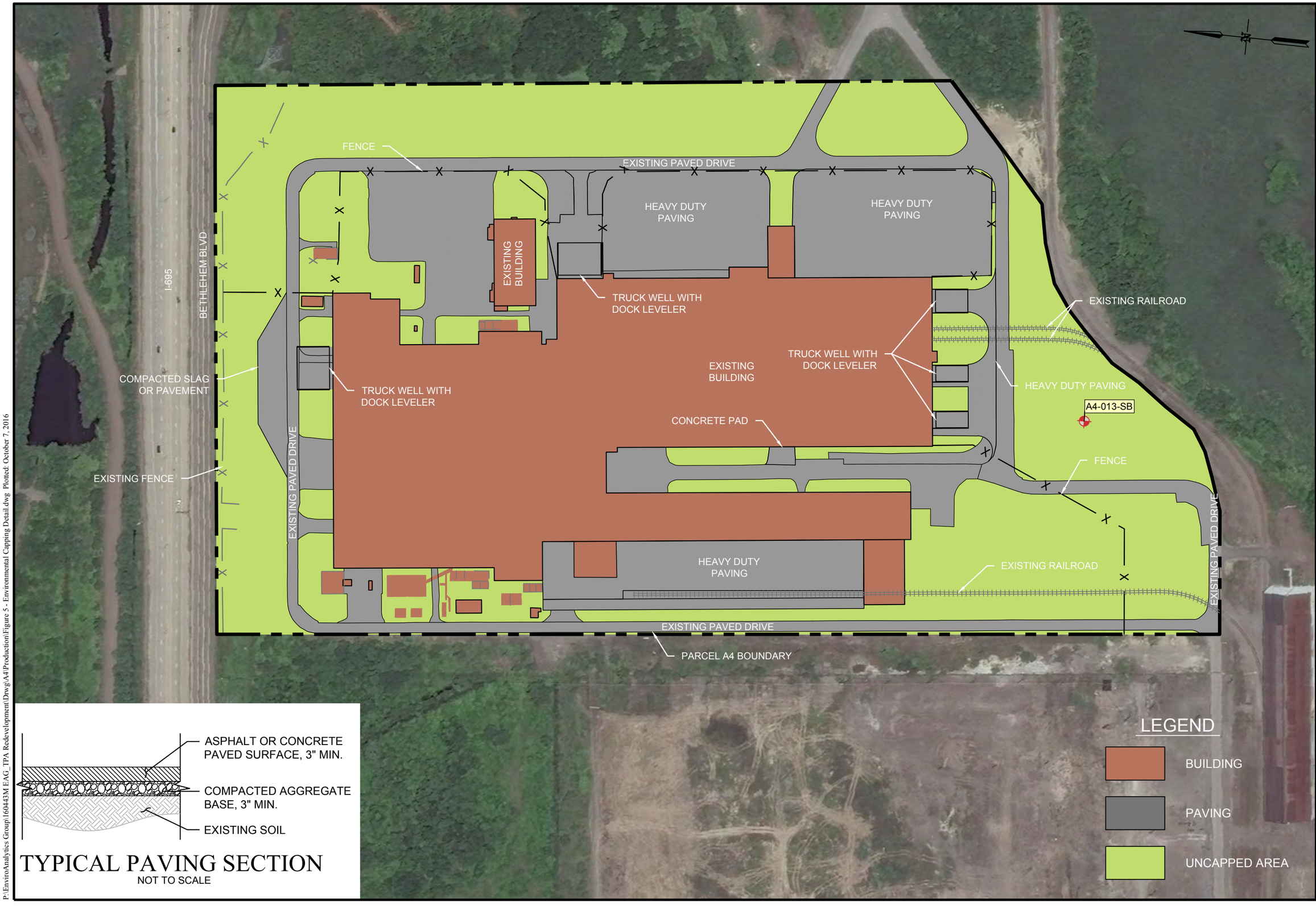
Respectfully Submitted,
ARM Group Inc.

Eric S. Magdar
Senior Geologist

Attachments:

Figure 1 – Environmental Capping Plan and Detail
Figure 2 – Cadmium Delineation Analytical Results
Figure 3 – Proposed Cadmium Excavation
Table 1 – Delineation of Cadmium (Analytical Results)
Table 2 – TCLP Waste Characterization Results
Electronic Attachment – Cadmium Soil Confirmation Sample Laboratory Reports
Electronic Attachment – TCLP Sample Laboratory Reports

FIGURES



P:\EnviroAnalytics Group\160443M EAG_TPA Redevelopment\Drwg\A4\Production\Figure 5 - Environmental Capping Detail.dwg Plotted: October 7, 2016

ARM Group Inc.
Earth Resource Engineers and Consultants
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designed JMA
checked TNP
drawn JMA
scale 1" = 200'
date 10/7/2016
project no. 160443M-2-1

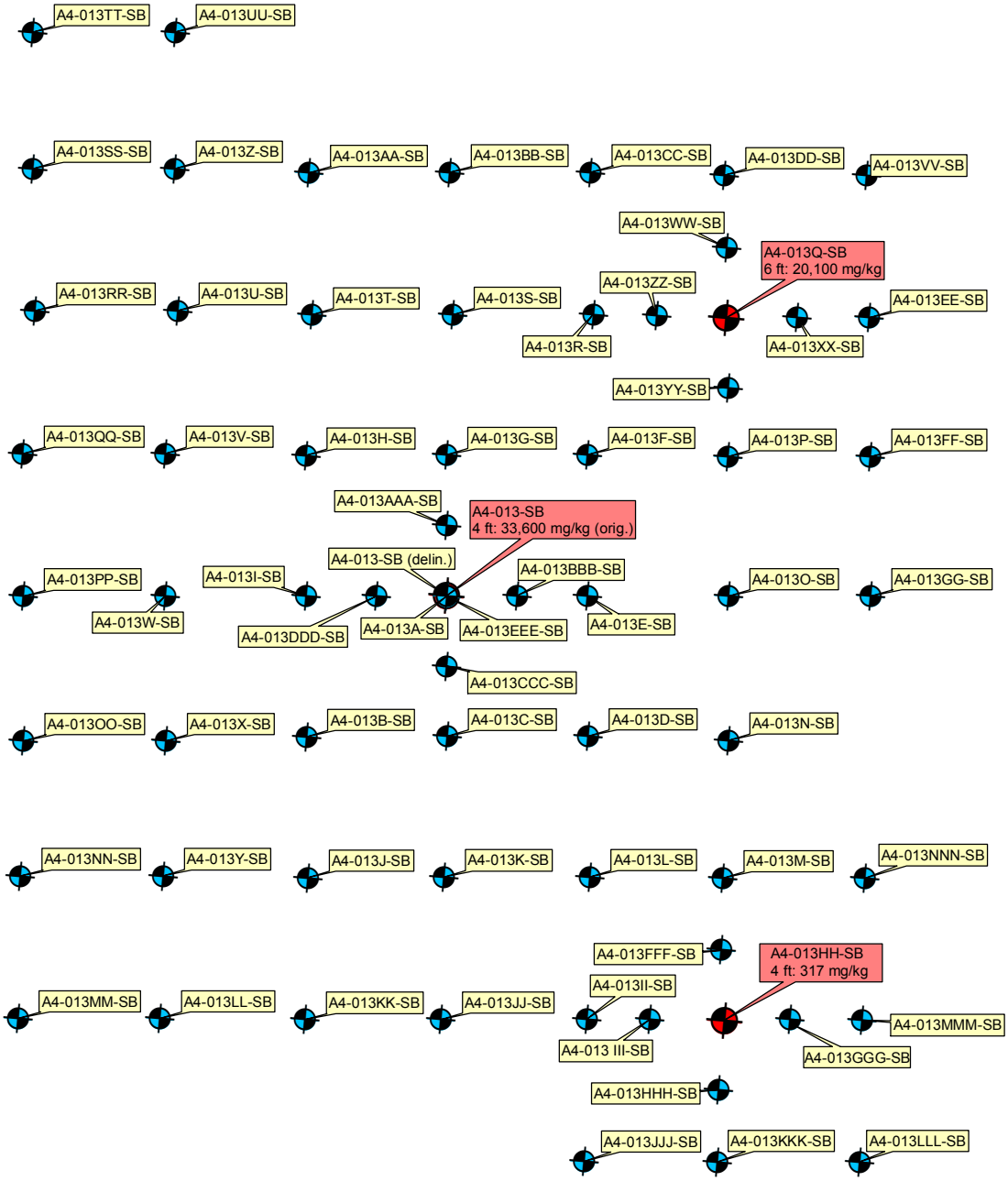
0 200 400
SCALE IN FEET

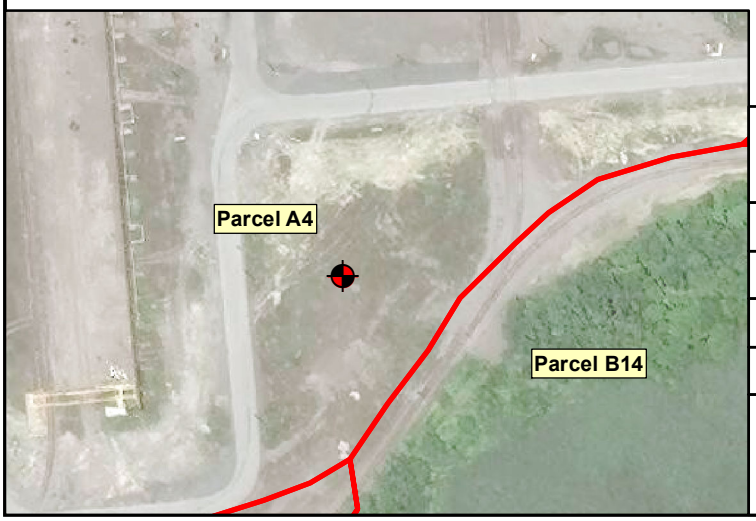
drawing title
ENVIRONMENTAL CAPPING PLAN AND DETAIL

project title
SPARROWS POINT AREA A
ENVIROANALYTICS GROUP

SPARROWS POINT
BALTIMORE COUNTY, MARYLAND

Figure
1





Parcel A4 Cadmium Delineation
Analytical Results

February 24, 2017

Figure 2

EnviroAnalytics Group

ARM Project 160443M-2

Tradepoint Atlantic

Baltimore County, MD

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N

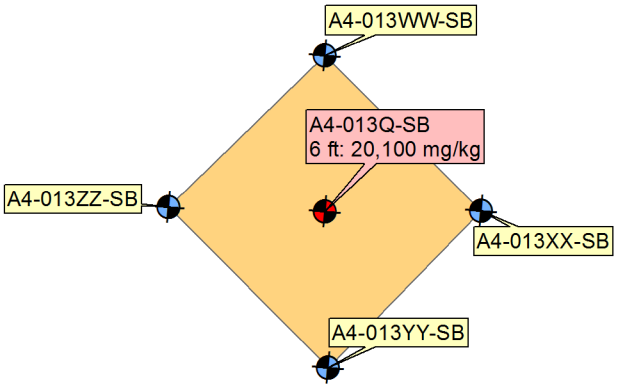
0 3.75 7.5 15

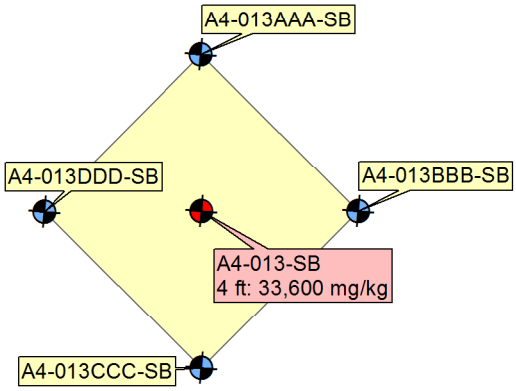
Feet

Below Delineation Criteria

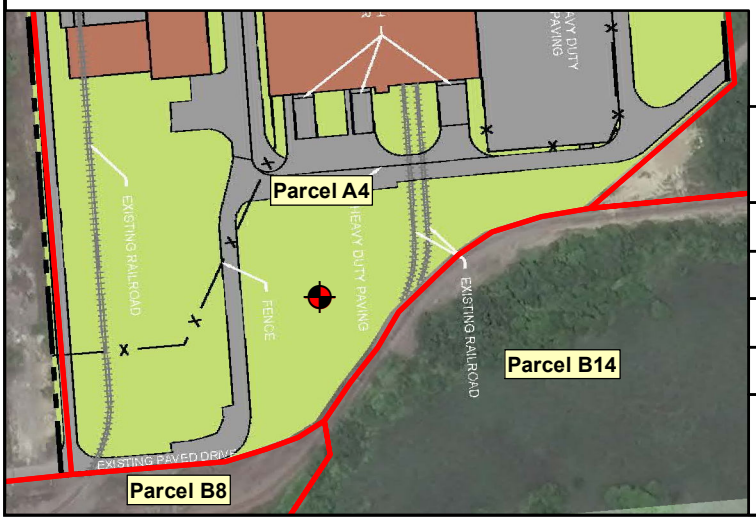
Above Delineation Criteria

Cadmium Criteria
Results > 154 mg/kg





Sample Location	Northing	Easting
A4-013-SB	570659.6327	1458543.942
A4-013BBB-SB	570660.0802	1458548.922
A4-013DDD-SB	570659.1852	1458538.962
A4-013CCC-SB	570654.6528	1458544.39
A4-013AAA-SB	570664.6126	1458543.495
A4-013Q-SB	570681.0757	1458562.032
A4-013ZZ-SB	570680.7964	1458557.056
A4-013YY-SB	570676.1234	1458562.576
A4-013EEE-SB	570659.6101	1458543.96
A4-013WW-SB	570686.0379	1458561.599
A4-013XX-SB	570681.5426	1458566.991



Parcel A4 Proposed Cadmium Excavation

February 24, 2017

Figure 3

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ARM Project 160443M-2

Tradepoint Atlantic

Baltimore County, MD

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0 1.75 3.5 7
Feet

- Above Excavation Criteria
- Below Excavation Criteria
- Excavation Depth: 5 ft.
- Excavation Depth: 7 ft.

Cadmium Criteria
Results > 550 mg/kg

TABLES

Table 1
Delineation of Cadmium in Soil (A4-013-SB)
Parcel A4
Tradepoint Atlantic
Sparrows Point, Maryland

Boring ID	A4-013-SB		A4-013-SB		A4-013A-SB		A4-013B-SB		A4-013C-SB		A4-013D-SB	
Sample Date	11/5/2016		12/8/2016		12/8/2016		12/8/2016		12/8/2016		12/8/2016	
Depth (ft)	Result (mg/kg)	Flag	Result (mg/kg)	Flag	Result (mg/kg)	Flag	Result (mg/kg)	Flag	Result (mg/kg)	Flag	Result (mg/kg)	Flag
1	1.4	B					1.2	J				
2									1.3		22	
3					72.3				7.5			
4	33,600		0.51	J			0.72	J			4	
5			101						11.9			
6					13.7						11.8	
7					0.77	J						
8												
9												
10												

Red highlighted cells indicate soil cadmium exceedance of delineation criterion (154 mg/kg)
Grey cells indicate that analytical data is not available (collected/analyzed) at this depth
U: This analyte was not detected in the sample. The numeric value represents the sample quantitation/detection limit
J: The positive result reported for this analyte is a quantitative estimate
B: This analyte was not detected substantially above the level of the associated method blank/preparation or field blank

Table 1
Delineation of Cadmium in Soil (A4-013-SB)
Parcel A4
Tradepoint Atlantic
Sparrows Point, Maryland

Boring ID	A4-013E-SB		A4-013F-SB		A4-013G-SB		A4-013H-SB		A4-013I-SB		A4-013J-SB	
Sample Date	12/8/2016		12/8/2016		12/8/2016		12/8/2016		12/8/2016		12/8/2016	
Depth (ft)	Result (mg/kg)	Flag	Result (mg/kg)	Flag	Result (mg/kg)	Flag	Result (mg/kg)	Flag	Result (mg/kg)	Flag	Result (mg/kg)	Flag
1			1.2	J			1.3	JB				
2					4						4.3	
3	6.3								13.2			
4					4.5		3.3		0.59	JB	10.1	
5			46.9						0.98	J		
6	6.8				2.3		3.9					
7	8.3											
8			61									
9												
10												

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Parcel A4
Tradepoint Atlantic
Sparrows Point, Maryland

Boring ID	A4-013K-SB		A4-013L-SB		A4-013M-SB		A4-013N-SB		A4-013O-SB		A4-013P-SB	
Sample Date	12/8/2016		12/9/2016		12/9/2016		12/9/2016		12/9/2016		12/9/2016	
Depth (ft)	Result (mg/kg)	Flag	Result (mg/kg)	Flag	Result (mg/kg)	Flag	Result (mg/kg)	Flag	Result (mg/kg)	Flag	Result (mg/kg)	Flag
1			1.1	J					0.41	J		
2					1.1	J	0.64	J				
3	0.83	J	4.3				0.92	J	0.83	J		
4											8.1	
5	6.2				49.5		4.9				6.1	
6			7.1						8.9			
7					5.8						1.7	
8												
9												
10												

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Table 1
Delineation of Cadmium in Soil (A4-013-SB)
Parcel A4
Tradepoint Atlantic
Sparrows Point, Maryland

Boring ID	A4-013Q-SB		A4-013R-SB		A4-013S-SB		A4-013T-SB		A4-013U-SB		A4-013V-SB	
Sample Date	12/9/2016		12/9/2016		12/9/2016		12/9/2016		12/9/2016		12/9/2016	
Depth (ft)	Result (mg/kg)	Flag	Result (mg/kg)	Flag	Result (mg/kg)	Flag	Result (mg/kg)	Flag	Result (mg/kg)	Flag	Result (mg/kg)	Flag
1	1	J					0.74	JB			5	
2			2.6				5		12.4			
3					54.5				14.9		8	
4	15.5											
5			1.8		0.86	JB					0.85	J
6	20,100		1	J	16				36.2			
7							39.3					
8												
9												
10												

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Parcel A4
Tradepoint Atlantic
Sparrows Point, Maryland

Boring ID	A4-013W-SB		A4-013X-SB		A4-013Y-SB		A4-013Z-SB		A4-013AA-SB		A4-013BB-SB	
Sample Date	12/9/2016		12/9/2016		12/9/2016		12/9/2016		12/9/2016		12/9/2016	
Depth (ft)	Result (mg/kg)	Flag	Result (mg/kg)	Flag	Result (mg/kg)	Flag	Result (mg/kg)	Flag	Result (mg/kg)	Flag	Result (mg/kg)	Flag
1							6.1		2.9			
2			2.7									
3	3										4.7	
4					51		35.7					
5									37.9			
6	13.8		5.7		1.3							
7					4.1						2.8	
8									9.8		1.6	
9												
10												

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Parcel A4
Tradepoint Atlantic
Sparrows Point, Maryland

Boring ID	A4-013CC-SB		A4-013DD-SB		A4-013EE-SB		A4-013FF-SB		A4-013GG-SB		A4-013HH-SB	
Sample Date	12/9/2016		12/12/2016		12/12/2016		12/12/2016		12/12/2016		12/12/2016	
Depth (ft)	Result (mg/kg)	Flag	Result (mg/kg)	Flag	Result (mg/kg)	Flag	Result (mg/kg)	Flag	Result (mg/kg)	Flag	Result (mg/kg)	Flag
1	1.2	J	1.5	B			1.4	B				
2					2.9				0.53			
3			1.4	B							0.84	JB
4	3.9				1.8		9.1				317	
5									3.9			
6	1.2	JB	81.7						6.2			
7					1.5	B					4.8	
8							12.7					
9												
10												

Red highlighted cells indicate soil cadmium exceedance of delineation criterion (154 mg/kg)
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Parcel A4
Tradepoint Atlantic
Sparrows Point, Maryland

Boring ID	A4-013II-SB		A4-013JJ-SB		A4-013KK-SB		A4-013LL-SB		A4-013MM-SB		A4-013NN-SB	
Sample Date	12/12/2016		12/12/2016		12/12/2016		12/12/2016		12/12/2016		12/12/2016	
Depth (ft)	Result (mg/kg)	Flag	Result (mg/kg)	Flag	Result (mg/kg)	Flag	Result (mg/kg)	Flag	Result (mg/kg)	Flag	Result (mg/kg)	Flag
1			1.1	JB	0.85	JB			1.7	B		
2	1.4	B					8.7				0.94	JB
3					8							
4	4		14.2						1.1	JB		
5							27					
6											14.7	
7					5.9							
8												
9											6.2	
10												

Red highlighted cells indicate soil cadmium exceedance of delineation criterion (154 mg/kg)
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Table 1
Delineation of Cadmium in Soil (A4-013-SB)
Parcel A4
Tradepoint Atlantic
Sparrows Point, Maryland

Boring ID	A4-013OO-SB		A4-013PP-SB		A4-013QQ-SB		A4-013RR-SB		A4-013SS-SB		A4-013TT-SB	
Sample Date	12/12/2016		12/12/2016		12/12/2016		12/12/2016		12/12/2016		12/12/2016	
Depth (ft)	Result (mg/kg)	Flag	Result (mg/kg)	Flag	Result (mg/kg)	Flag	Result (mg/kg)	Flag	Result (mg/kg)	Flag	Result (mg/kg)	Flag
1							10.7					
2			50.5						10.4			
3	10.1		1.7	B							8.4	
4	9.8											
5					52.3		69.4		52.6			
6					25.8							
7	0.54	JB			38.6						139	
8			7.9				28.9					
9									2.1		2	
10												

Red highlighted cells indicate soil cadmium exceedance of delineation criterion (154 mg/kg)
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Table 1
Delineation of Cadmium in Soil (A4-013-SB)
Parcel A4
Tradepoint Atlantic
Sparrows Point, Maryland

Boring ID	A4-013UU-SB		A4-013VV-SB		A4-013WW-SB		A4-013XX-SB		A4-013YY-SB		A4-013ZZ-SB	
Sample Date	12/12/2016		12/20/2016		12/20/2016		12/20/2016		12/20/2016		12/20/2016	
Depth (ft)	Result (mg/kg)	Flag	Result (mg/kg)	Flag	Result (mg/kg)	Flag	Result (mg/kg)	Flag	Result (mg/kg)	Flag	Result (mg/kg)	Flag
1	4.6		0.2	JB	3.9		0.69	JB	1.4	JB	1.5	B
2	5.5											
3	28.5		3.6						1.2	U		
4												
5			6.4		1.8	U	2.3		21.6		3.2	
6												
7							1.4	U				
8					1.2	U					0.73	JB
9												
10												

Red highlighted cells indicate soil cadmium exceedance of delineation criterion (154 mg/kg)
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Table 1
Delineation of Cadmium in Soil (A4-013-SB)
Parcel A4
Tradepoint Atlantic
Sparrows Point, Maryland

Boring ID	A4-013AAA-SB-1		A4-013BBB-SB		A4-013CCC-SB		A4-013DDD-SB		A4-013EEE-SB		A4-013FFF-SB	
Sample Date	12/20/2016		12/20/2016		12/20/2016		12/20/2016		12/20/2016		12/20/2016	
Depth (ft)	Results (mg/kg)	Flag	Results (mg/kg)	Flag	Result (mg/kg)	Flag	Results (mg/kg)	Flag	Results (mg/kg)	Flag	Results (mg/kg)	Flag
1	0.71	JB	1	JB	1.4		0.54	J	0.37	J	1.2	U
2												
3					11.1							
4												
5	1.2	U	48.5		1	J	0.26	J	0.44	J	2.8	
6												
7			9				7				9.1	
8	2.2								1	J		
9												
10												

Red highlighted cells indicate soil cadmium exceedance of delineation criterion (154 mg/kg)
Grey cells indicate that analytical data is not available (collected/analyzed) at this depth
U: This analyte was not detected in the sample. The numeric value represents the sample quantitation/detection limit
J: The positive result reported for this analyte is a quantitative estimate
B: This analyte was not detected substantially above the level of the associated method blank/preparation or field blank

Table 1
Delineation of Cadmium in Soil (A4-013-SB)
Parcel A4
Tradepoint Atlantic
Sparrows Point, Maryland

Boring ID	A4-013GGG-SB		A4-013HHH-SB		A4-013III-SB		A4-013JJJ-SB	
Sample Date	12/20/2016		12/20/2016		12/20/2016		12/20/2016	
Depth (ft)	Results (mg/kg)	Flag	Results (mg/kg)	Flag	Results (mg/kg)	Flag	Results (mg/kg)	Flag
1	0.33	J	2.2		0.56	JB	0.99	JB
2								
3			1.2	U				
4								
5	1.3	U	1.4	U	3.7		0.85	JB
6								
7					2.9		99.1	
8	56.7							
9								
10								

Red highlighted cells indicate soil cadmium exceedance of delineation criterion (154 mg/kg)
Grey cells indicate that analytical data is not available (collected/analyzed) at this depth
U: This analyte was not detected in the sample. The numeric value represents the sample quantitation/detection limit
J: The positive result reported for this analyte is a quantitative estimate
B: This analyte was not detected substantially above the level of the associated method blank/preparation or field blank

Table 1
Delineation of Cadmium in Soil (A4-013-SB)
Parcel A4
Tradepoint Atlantic
Sparrows Point, Maryland

Boring ID	A4-013KKK-SB		A4-013LLL-SB		A4-013MMM-SB		A4-013NNN-SB	
Sample Date	12/20/2016		12/20/2016		12/20/2016		12/20/2016	
Depth (ft)	Results (mg/kg)	Flag	Results (mg/kg)	Flag	Results (mg/kg)	Flag	Results (mg/kg)	Flag
1	0.62	JB	1.2	U	1.3	U	0.26	JB
2								
3								
4								
5	0.38	JB	0.54	J	1.3	U	0.35	JB
6								
7			0.39	J	0.19	JB		
8	0.21	JB						
9							2.8	
10								

Red highlighted cells indicate soil cadmium exceedance of delineation criterion (154 mg/kg)
Grey cells indicate that analytical data is not available (collected/analyzed) at this depth
U: This analyte was not detected in the sample. The numeric value represents the sample quantitation/detection limit
J: The positive result reported for this analyte is a quantitative estimate
B: This analyte was not detected substantially above the level of the associated method blank/preparation or field blank

TABLE 2
TCLP RESULTS FOR SOLID IDW

Sample ID	Parameter	Result (mg/L)	Laboratory Flag	TCLP Limit (mg/L)	TCLP Exceedance	Laboratory LOQ (mg/L)
A4 Cad. Waste (12/13/16)	1,1-Dichloroethene	0.05	U	0.7	no	0.05
	1,2-Dichloroethane	0.05	U	0.5	no	0.05
	1,4-Dichlorobenzene	0.5	U	7.5	no	0.5
	2,4,5-Trichlorophenol	5	U	400	no	5
	2,4,6-Trichlorophenol	0.1	U	2	no	0.1
	2,4-Dinitrotoluene	0.1	U	0.13	no	0.1
	2-Butanone (MEK)	5	U	200	no	5
	2-Methylphenol	2	U	200	no	2
	3&4-Methylphenol(m&p Cresol)	2	U	200	no	2
	Arsenic	0.05	U	5	no	0.05
	Barium	0.46	JB	100	no	1
	Benzene	0.05	U	0.5	no	0.05
	Cadmium	0.0034	J	1	no	0.05
	Carbon tetrachloride	0.05	U	0.5	no	0.05
	Chlorobenzene	1	U	100	no	1
	Chloroform	0.5	U	6	no	0.5
	Chromium	0.05	U	5	no	0.05
	Hexachlorobenzene	0.1	U	0.13	no	0.1
	Hexachloroethane	0.5	U	3	no	0.5
	Lead	0.028	J	5	no	0.05
	Mercury	0.001	U	0.2	no	0.001
	Nitrobenzene	0.1	U	2	no	0.1
	Pentachlorophenol	5	U	100	no	5
	Selenium	0.1	U	1	no	0.1
	Silver	0.05	U	5	no	0.05
	Tetrachloroethene	0.05	U	0.7	no	0.05
	Trichloroethene	0.623		0.5	YES	0.05
	Vinyl chloride	0.05	U	0.2	no	0.05
A4 Cadmium Waste (12/21/16)	1,1-Dichloroethene	0.05	U	0.7	no	0.05
	1,2-Dichloroethane	0.05	U	0.5	no	0.05
	1,4-Dichlorobenzene	0.5	U	7.5	no	0.5
	2,4,5-Trichlorophenol	5	U	400	no	5
	2,4,6-Trichlorophenol	0.1	U	2	no	0.1
	2,4-Dinitrotoluene	0.1	U	0.13	no	0.1
	2-Butanone (MEK)	5	U	200	no	5
	2-Methylphenol	2	U	200	no	2
	3&4-Methylphenol(m&p Cresol)	2	U	200	no	2
	Arsenic	0.05	U	5	no	0.05
	Barium	0.24	J	100	no	1
	Benzene	0.05	U	0.5	no	0.05
	Cadmium	0.0024	J	1	no	0.05
	Carbon tetrachloride	0.05	U	0.5	no	0.05
	Chlorobenzene	1	U	100	no	1
	Chloroform	0.5	U	6	no	0.5
	Chromium	0.05	U	5	no	0.05
	Hexachlorobenzene	0.1	U	0.13	no	0.1
	Hexachloroethane	0.5	U	3	no	0.5
	Lead	0.25	U	5	no	0.25
	Mercury	0.001	U	0.2	no	0.001
	Nitrobenzene	0.1	U	2	no	0.1
	Pentachlorophenol	5	U	100	no	5
	Selenium	0.0079	J	1	no	0.1
	Silver	0.05	U	5	no	0.05
	Tetrachloroethene	0.05	U	0.7	no	0.05
	Trichloroethene	0.05	U	0.5	no	0.05
	Vinyl chloride	0.05	U	0.2	no	0.05

U: The analyte was not detected in the sample. The numeric value represents the sample LOQ.
J: The positive result for this analyte is a quantitative estimate below the laboratory LOQ.
B: The compound/analyte was not detected substantially above the level of the associated method blank/preparation or field blank.
TCLP = Toxicity characteristic leaching procedure
LOQ = Limit of Quantitation