ARM Group LLC
Engineers and Scientists

April 30, 2020

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

Re: Comment Response Letter:
Phase II Investigation Work Plan (Revision 0)
Area B: Parcel B9
Tradepoint Atlantic
Sparrows Point, MD 21219

Dear Ms. Brown:

On behalf of EnviroAnalytics Group, LLC (EAG), ARM Group LLC (ARM) is pleased to provide the following responses to comments provided by the Maryland Department of the Environment (MDE) via email on April 15, 2020 regarding the previous submission of the Phase II Investigation Work Plan (Revision 0 dated March 25, 2020) for Parcel B9 of the Tradepoint Atlantic property located in Sparrows Point, Maryland. This letter provides responses to the MDE's comments and demonstrates that the requested changes to the sampling plan have been made in a satisfactory manner. Based on the minor nature of the comments, the Parcel B9 Phase II Investigation Work Plan itself will not be updated in full, but this Comment Response Letter serves the purpose of documenting the pertinent updates. An amended sampling plan figure and an updated sampling plan table are included with this letter as referenced below. Responses to specific MDE comments are given below; the original comments are included in italics with responses following.

1. *Deeper PCB sampling in the vicinity of the former transformers and nearby areas should be conducted (4 to 5 foot depth) to ensure that PCB contamination was not inadvertently buried during grading and demolition activities for the Pennwood Power Plant and surrounding structures.*

   The locations targeting the substation and transformers to the north of the Pennwood Power Plant (B9-007-SB through B9-011-SB) will have an additional soil sample collected from the intermediate (4 to 5 foot or field adjusted) sample interval to be analyzed for PCBs. An additional soil sample will be collected from the deepest (10 foot) sample interval if groundwater has not been encountered, and will be held for analysis of PCBs in accordance with standard procedures. The deepest soil sample will be released for PCBs analysis, if

required, based on the results of the overlying intermediate soil sample. It should be noted that no soil samples will be collected from a depth that is below the water table. The five locations targeting the substation and transformers are identified for the specified PCB sample collection on the attached **Figure 1**, and a revised sampling plan table is provided as **Attachment 1**.

2. *Add asbestos sampling to the shallow 0 to 1 foot sample locations surrounding the former Pennwood Power Plant.*

   The previous version of the Work Plan specified that the locations directly targeting the Pennwood Power Plant (B9-012-SB through B9-014-SB) would be analyzed for asbestos in the shallow (0 to 1 foot) sample interval. In addition, the surrounding locations B9-005-SB through B9-011-SB, and B9-017-SB and B9-018-SB will also be analyzed for asbestos in the shallow sample interval in accordance with this comment. These locations are identified for asbestos analysis on the attached **Figure 1**, and a revised sampling plan table is provided as **Attachment 1**.

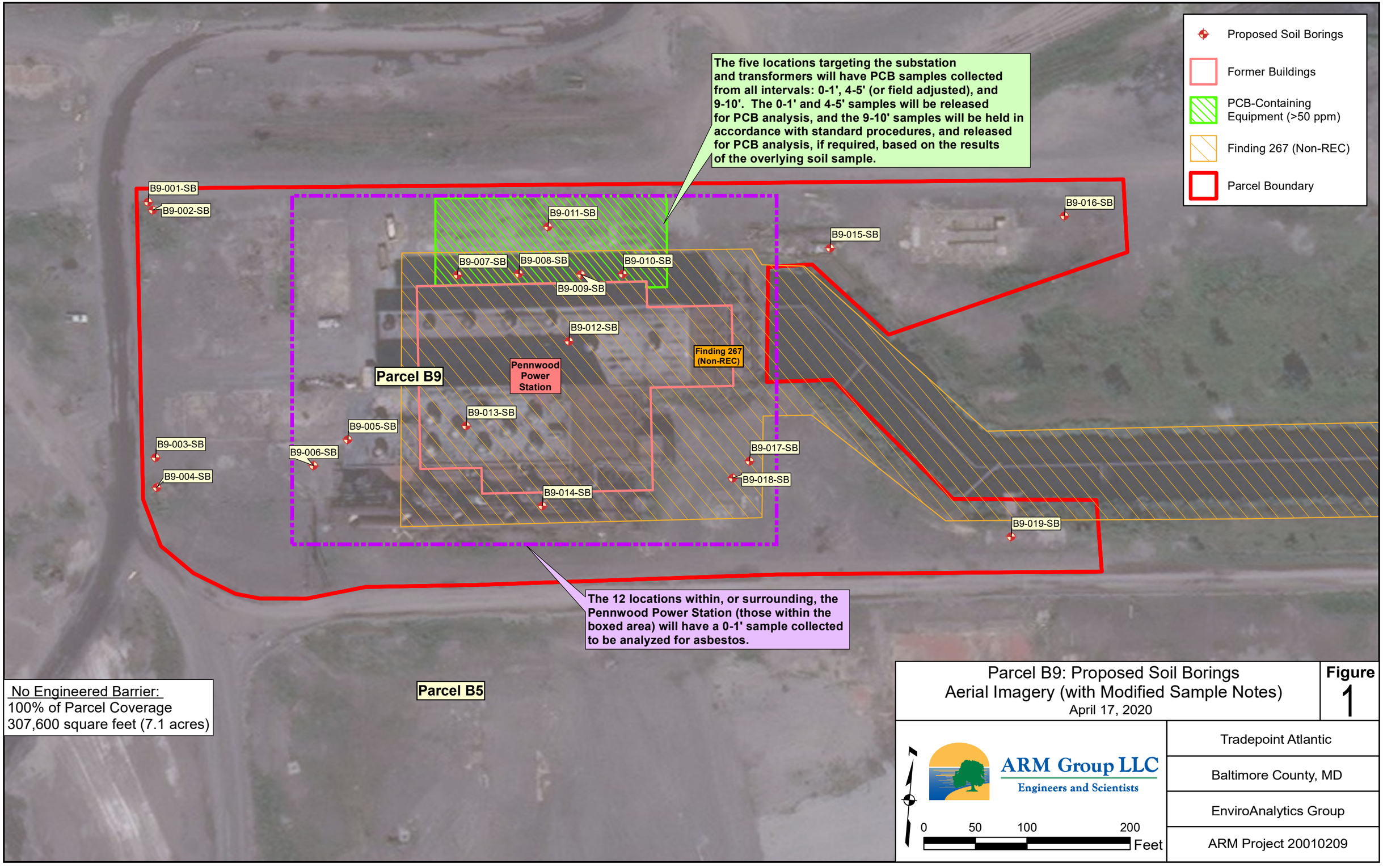
If you have any questions, or if we can provide any additional information at this time, please do not hesitate to contact ARM Group LLC at 410-290-7775.

Respectfully Submitted,
ARM Group LLC

Taylor R. Smith, P.E.
Project Engineer

T. Neil Peters, P.E.
Senior Vice President

FIGURES



Parcel B9: Proposed Soil Borings
Aerial Imagery (with Modified Sample Notes)
April 17, 2020

Figure 1

ARM Group LLC
Engineers and Scientists

Tradepoint Atlantic

Baltimore County, MD

EnviroAnalytics Group

ARM Project 20010209

ATTACHMENT 1

Parcel B9 Sampling Plan Summary
Former Sparrows Point Steel Mill
Sparrows Point, Maryland

Table 1 - Soil Sampling Summary

Source Area/ Description	REC/ SWMU/ AOC	Figure or Drawing of Reference	Rationale	Number of Locations	Sample Locations	Boring Depth	Sample Depth	Analytical Parameters: Soil Samples
Drip Leg #52 / Slurry Overflow Pit	N/A	5516, Drip Legs Drawing	Coke oven gas condensate was removed from the gas pipelines at drip legs located throughout the distribution system. The condensate was typically discharged to drums, although it is possible some spilled out of the drums and onto the ground. Drip Leg #52 is co-located with a historical Slurry Overflow Pit. Investigate historical impacts related to the drip leg and/or pit (potential leaks or releases).	2	B9-001 and B9-002	Total depth of 20 feet or groundwater.	0-1', 4-5', 9-10' bgs. 4-5' interval may be adjusted in the field based on observations or field screening.	VOC^, SVOC, Metals, DRO/GRO, O&G, PCBs (0-1')
Drip Leg #63	N/A	Drip Legs Drawing	Coke oven gas condensate was removed from the gas pipelines at drip legs located throughout the distribution system. The condensate was typically discharged to drums, although it is possible some spilled out of the drums and onto the ground. Investigate historical impacts related to the drip leg (potential leaks or releases).	2	B9-003 and B9-004	Total depth of 20 feet or groundwater.	0-1', 4-5', 9-10' bgs. 4-5' interval may be adjusted in the field based on observations or field screening.	VOC^, SVOC, Metals, DRO/GRO, O&G, PCBs (0-1')
Recycled Oil Tank	N/A	5116, Aerial Images	Investigate historical impacts related to the Recycled Oil Tank (potential leaks or releases).	2	B9-005 and B9-006	Total depth of 20 feet or groundwater.	0-1', 4-5', 9-10' bgs. 4-5' interval may be adjusted in the field based on observations or field screening.	VOC^, SVOC, Metals, DRO/GRO, O&G, PCBs (0-1'), **Asbestos (0-1')**
Substation / Transformers (PCB-Equipment)	N/A	5516, PCB Location Map	Investigate historical impacts related to the recently-demolished Substation and Transformers identified as potential PCB-containing equipment to the north of the former Pennwood Power Plant (potential leaks or releases).	5	B9-007 through B9-011	Total depth of 20 feet or groundwater.	0-1', 4-5', 9-10' bgs. 4-5' interval may be adjusted in the field based on observations or field screening.	VOC^, SVOC, Metals, DRO/GRO, O&G, **PCBs (all depths), Asbestos (0-1')**

Parcel B9 Sampling Plan Summary
Former Sparrows Point Steel Mill
Sparrows Point, Maryland

Table 1 - Soil Sampling Summary

Source Area/ Description	REC/ SWMU/ AOC	Figure or Drawing of Reference	Rationale	Number of Locations	Sample Locations	Boring Depth	Sample Depth	Analytical Parameters: Soil Samples
Pennwood Power Plant	N/A	DCC Figure, Aerial Images	Investigate potential impacts related to the recently demolished Pennwood Power Plant (potential leaks or releases).	3	B9-012 through B9-014	Total depth of 20 feet or groundwater.	0-1', 4-5', 9-10' bgs. 4-5' interval may be adjusted in the field based on observations or field screening.	VOC^, SVOC, Metals, DRO/GRO, O&G, PCBs (0-1'), **Asbestos (0-1')**
Demineralizer Process	N/A	5117, Aerial Images	Investigate historical impacts related to the Demineralizer Process (potential leaks or releases). The process involves mineral removal prior to steam generation.	2	B9-015 and B9-016	Total depth of 20 feet or groundwater.	0-1', 4-5', 9-10' bgs. 4-5' interval may be adjusted in the field based on observations or field screening.	VOC^, SVOC, Metals, DRO/GRO, O&G, PCBs (0-1')
Fuel Dept. Storage Building	N/A	5017	Investigate historical impacts related to the Fuel Dept. Storage Building (potential leaks or releases).	2	B9-017 and B9-018	Total depth of 20 feet or groundwater.	0-1', 4-5', 9-10' bgs. 4-5' interval may be adjusted in the field based on observations or field screening.	VOC^, SVOC, Metals, DRO/GRO, O&G, PCBs (0-1'), **Asbestos (0-1')**
Parcel B9 Site Coverage	N/A	N/A	Investigate potential impacts related to any historical activities which may have occurred in the southeast portion of the Site (potential leaks or releases).	1	B9-019	Total depth of 20 feet or groundwater.	0-1', 4-5', 9-10' bgs. 4-5' interval may be adjusted in the field based on observations or field screening.	VOC^, SVOC, Metals, DRO/GRO, O&G, PCBs (0-1')
			Total:	19				

Soil Borings Sampling Density Requirements (from **Worksheet 17 - Sampling Design and Rationale**)
No Engineered Barrier (1-15 acres): 1 boring per acre with no less than 3 borings.
Engineered Barrier (N/A)
No Engineered Barrier (7.1 acres) = **8 borings required, 19 proposed**

VOCs - Volatile Organic Compounds (Target Compound List)
^VOCs are only collected if the PID reading exceeds 10 ppm
SVOCs - Semivolatile Organic Compounds (Target Compound List)
Metals - (Target Analyte List plus Hexavalent Chromium and Cyanide)
O&G - Oil and Grease
DRO/GRO - Diesel Range Organics/Gasoline Range Organics
PCBs - Polychlorinated Biphenyls
bgs - Below Ground Surface