



ARM Group LLC

Engineers and Scientists

September 14, 2020

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

Re: Comment Response Letter:
Parcel A7 Phase II Investigation Report
(Revision 1)
Tradepoint Atlantic
Sparrows Point, MD 21219

Dear Ms. Brown:

On behalf of Tradepoint Atlantic (TPA), 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 October 1, 2019 regarding the previous submission of the Phase II Investigation Report (Revision 1 dated July 8, 2019) for Parcel A7 (the Site) of the TPA property located in Sparrows Point, Maryland.

Hard copy replacement pages are provided for incorporation into the Parcel A7 Phase II Investigation Report. Based on the nature of these comments, the report text remains unchanged and a new revision number is not being assigned. One revised attachment (**Appendix E**) is provided as referenced below. The enclosed CD provides a compiled PDF of the entire report with the inserted replacement pages. Responses to specific MDE comments are given below; the original comments are included in italics with responses following.

- 1. MDE's comments on the initial Phase II Report, Rev. 0, dated June 28, 2018, stated that the Department would determine the appropriateness of removing thallium from the risk assessment based on the results of additional delineation. Since these comments were issued, SLRA's have been removed from Phase II reports due to a general agreement regarding the applicability of generic exposure units that were used. However, it can be expected that any future SLRA conducted with A7-008-TP within the development boundary, would rationalize the removal of the elevated thallium detection using the same reasoning as was provided in the initial assessment, that there are only 2 detections out of 44 samples. And, MDE would have the same response to that determination. The level of detected thallium (83.6 ppm), along with the associated elevated lead result*

(6,780 ppm) from the same sample location, warrants delineation to determine if there is a source of these contaminants. It should be noted that the 10,000 mg/kg "action level" for lead is not a hard line that prevents any lower detections from being further investigated.

The Phase II states in Section 3.3 Test Pit Investigation that "some of the berms targeted by this investigation surrounded small pits or larger topographical depressions at the Site, which may have been historically used as waste disposal locations." The source of materials placed in these areas are unknown and may have varied from stockpile to stockpile. A determination that an elevated concentration of lead and/or thallium is isolated cannot be made without further delineation.

A delineation investigation associated with test pit A7-008-TP will be completed as requested. A Delineation Work Plan has been submitted under separate cover (dated September 1, 2020) to detail the proposed lead and thallium delineation. The results of the delineation will be reported outside of the Parcel A7 Phase II Investigation Report.

2. *Appendix [E]: There is no photo of the material excavated during the test pitting at A7-008-TP. There is also not a description of the material observed. This is also true for A7-007-TP. Please provide this detail as was done for the additional test pitting areas.*

No additional photographs are available, but a photograph of the excavated sidewall and loose material at A7-008-TP is provided as Photo #21. A description of the material observed at A7-008-TP is provided in the Photo #21 caption. A description of the material observed at A7-007-TP was absent and has been added to the Photo #19 caption. Hard copy pages for the revised **Appendix E** are provided with this letter to replace the pages in the prior version of the report.

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 II



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



APPENDIX E

Test Pit Photograph Log
Area A: Parcel A7
Sparrows Point, Maryland



Photo 1: View of test pit at A7-001-TP before excavation.
No visible contamination is evident.



Photo 2: View of the soil observed during test pit activities at A7-001-TP.
Soils appear to consist of silty clay. No visible contamination is evident.

Test Pit Photograph Log
Area A: Parcel A7
Sparrows Point, Maryland



Photo 3: View of test pit at A7-001-TP after excavation.
No visible contamination is evident and PID reading equals 3.9.



Photo 4: View of test pit at A7-002-TP before excavation.
No visible contamination is evident.

Test Pit Photograph Log
Area A: Parcel A7
Sparrows Point, Maryland



Photo 5: View of the soil observed during test pit activities at A7-002-TP.
Soils appear to consist of silty clay with gravel. No visible contamination is evident.



Photo 6: View of test pit at A7-002-TP after excavation.
No visible contamination is evident and PID reading equals 4.1.

Test Pit Photograph Log
Area A: Parcel A7
Sparrows Point, Maryland



Photo 7: View of test pit at A7-003-TP before excavation.
No visible contamination is evident.



Photo 8: View of the soil observed during test pit activities at A7-003-TP.
Soils appear to consist of silty clay with gravel. No visible contamination is evident.

Test Pit Photograph Log
Area A: Parcel A7
Sparrows Point, Maryland



Photo 9: View of test pit at A7-003-TP after excavation.
No visible contamination is evident and PID reading equals 2.8.



Photo 10: View of test pit at A7-004-TP before excavation.
No visible contamination is evident.

Test Pit Photograph Log
Area A: Parcel A7
Sparrows Point, Maryland



Photo 11: View of the soil observed during test pit activities at A7-004-TP. Soils appear to consist of gravel. No visible contamination is evident.



Photo 12: View of test pit at A7-004-TP after excavation. No visible contamination is evident and PID reading equals 2.3.

Test Pit Photograph Log
Area A: Parcel A7
Sparrows Point, Maryland



Photo 13: View of test pit at A7-005-TP before excavation.
No visible contamination is evident.



Photo 14: View of test pit at A7-005-TP after excavation. Soils appear to consist of gravel.
No visible contamination is evident and PID reading equals 4.6.

Test Pit Photograph Log
Area A: Parcel A7
Sparrows Point, Maryland



Photo 15: View of test pit at A7-006-TP before excavation.
No visible contamination is evident.



Photo 16: View of the soil observed during test pit activities at A7-006-TP.
Soils appear to consist of sandy silt. No visible contamination is evident.

Test Pit Photograph Log
Area A: Parcel A7
Sparrows Point, Maryland



Photo 17: View of test pit at A7-006-TP after excavation.
No visible contamination is evident and PID reading equals 7.0.



Photo 18: View of test pit at A7-007-TP before excavation.
No visible contamination is evident.

Test Pit Photograph Log
Area A: Parcel A7
Sparrows Point, Maryland



Photo 19: View of test pit at A7-007-TP after excavation. Soils appear to consist of sandy silt. No visible contamination is evident and PID reading equals 7.1.



Photo 20: View of test pit at A7-008-TP before excavation. No visible contamination is evident.

Test Pit Photograph Log
Area A: Parcel A7
Sparrows Point, Maryland



Photo 21: View of test pit at A7-008-TP after excavation. Soils appear to consist of silty clay. No visible contamination is evident and PID reading equals 6.7.



Photo 22: View of test pit at A7-009-TP before excavation. No visible contamination is evident.

Test Pit Photograph Log
Area A: Parcel A7
Sparrows Point, Maryland



Photo 23: View of the soil observed during test pit activities at A7-009-TP. Soils appear to consist of sandy silt. No visible contamination is evident.



Photo 24: View of test pit at A7-009-TP after excavation. No visible contamination is evident and PID reading equals 3.6.

Test Pit Photograph Log
Area A: Parcel A7
Sparrows Point, Maryland



Photo 25: View of test pit at A7-010-TP before excavation.
No visible contamination is evident.



Photo 26: View of the soil observed during test pit activities at A7-010-TP.
Soils appear to consist of sandy silt. No visible contamination is evident.

Test Pit Photograph Log
Area A: Parcel A7
Sparrows Point, Maryland



Photo 27: View of test pit at A7-010-TP after excavation.
No visible contamination is evident and PID reading equals 5.4.