



ARM Group Inc.

Earth Resource Engineers and Consultants

October 19, 2016

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

Re: Parcel A2 Phase II Investigation (Revision 1)
Response to MDE/USEPA Comments
Tradepoint Atlantic
Sparrows Point, MD 21219
ARM Project No. 150298M-1

Dear Ms. Brown:

On behalf of EnviroAnalytics Group, LLC (EAG), ARM Group Inc. (ARM) is pleased to provide the following responses to comments received from the Maryland Department of the Environment (MDE) and the United States Environmental Protection Agency (USEPA) in an email dated October 5, 2016. The MDE and USEPA provided comments on the previously submitted Parcel A2 Phase II Investigation Report (Revision 0) for Parcel A2 of the Tradepoint Atlantic property located in Sparrows Point, Maryland. This comment response letter documents the updates made between the previous submission (Revision 0 dated June 10, 2016) and current version (Revision 1 dated October 19, 2016) included in this submission. Responses to specific comments are provided below.

Responses to Comments Received on October 5, 2016:

1. *Section 3.1.2, The last paragraph discusses soil gas sampling requirements compared to the acreage of buildings. Revise to correctly compare to the square footage (e.g., as shown in Figure 5).*

The last paragraph has been revised to reflect the 293,295 square foot Reservoir Rd Warehouse and the 56,458 square foot DACS Building (page 7).

2. *Sections 4.1.1 and 4.2.1, Soil and groundwater sampling TPH-DRO and TPH-GRO was not done on this parcel. MDE and EPA acknowledge this deviation, however, a brief summary regarding this issue should be added to the Phase II Report:*

The approved Phase II Investigation Work Plan – Area A: Parcel A2, dated September 15, 2015, specified analysis for Oil & Grease, Methods 9071B (soil) and 1664A (groundwater), rather than TPH DRO and GRO. The Oil & Grease methods were specified at the time as being more conservative, because they are suitable for identifying non-petroleum hydrocarbon impacts, as well as detecting petroleum. This rationale was added to the discussion of the selected analytical suite on pages 8 and 9.

3. *Section 6.0, At this time, the Agencies agree with the report conclusions.*

The attached Phase II report has been revised to include the SLRA. This did not change the conclusions of the report. A Response and Development Work Plan has been prepared based on the conclusions of this report.

4. *We understand that the buildings on-site have been leased for occupancy and this was confirmed by a TPA representative during a monthly meeting on September 28, 2016. Also at this meeting, MDE discussed the need to understand site access related to this occupancy and how it might be restricted for non-building areas on this site until a SLRA is conducted and future access/use can be defined. Provide plans for restricting site access to the buildings only.*

This revised Phase II includes a SLRA that indicates that there is no need to restrict access to any area of the property. The estimates of human health risk for the composite worker exposed to surface soil were 1E-5 for cancer risk and the maximum non-cancer hazard for an individual target organ was 0.9. As such, no remedial action or restriction is necessary to protect commercial workers. The risk ratio for construction worker exposure to sub-surface soil indicated the cancer risk to be less than 1E-5. The maximum non-cancer hazard index to an individual target organ was 9, solely due to manganese. This hazard can be addressed through health and safety plans and work practices to protect workers during construction.

5. *Confirm whether the temporary piezometers installed as part of this Phase II Investigation are still on-site.*

These temporary piezometers were properly abandoned on February 2, 2016.

6. *The Agencies understand that there will be revisions to various sections of this report in accordance with Agency guidance provided in September 2016 regarding the SLRA process.*

A new section was added to the report (Section 6.0) to present the SLRA prepared in accordance with Agency guidance. This section included several additional tables, and **Appendix P** (ProUCL reports) was also added as an additional electronic attachment.



The results of the SLRA were incorporated into the findings and conclusions. Based on the results of the risk assessment, the assumptions of the building occupancy assessment (Section 3.2) were also updated to indicate that soil and groundwater conditions are not pathways of concern.

In addition to the revisions discussed above, a screening of the groundwater data against USEPA vapor intrusion screening levels was added in Section 4.2.3 on page 14.

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

Respectfully submitted,
ARM Group Inc.



Eric S. Magdar
Senior Geologist



T. Neil Peters, P.E.
Vice President

