RESPONSE AND DEVELOPMENT WORK PLAN

AREA B: SUB-PARCEL B1-1
TRADEPOINT ATLANTIC
SPARROWS POINT, MARYLAND

Prepared For:

ENVIROANALYTICS GROUP
1515 Des Peres Road, Suite 300
Saint Louis, Missouri 63131

Prepared By:

ARM GROUP INC.
9175 Guilford Road
Suite 310
Columbia, Maryland 21046

ARM Project No. 160443M-18

Respectfully Submitted,

Melissa A. Replogle, E.I.T.
Staff Engineer

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

Revision 1 – August 30, 2019

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ProUCL Output Tables	Electronic Attachment
Lead Evaluation Spreadsheet	Electronic Attachment

1.0 INTRODUCTION

ARM Group Inc. (ARM), on behalf of EnviroAnalytics Group (EAG), has prepared this Response and Development Work Plan (RADWP) for a portion of the Tradepoint Atlantic property that has been designated as Area B: Sub-Parcel B1-1 (the Site). Tradepoint Atlantic submitted a letter (**Appendix A**) requesting an expedited plan review to achieve construction deadlines for the proposed development on this Site. Parcel B1 is comprised of approximately 217 acres of the approximately 3,100-acre former plant property. Sub-Parcel B1-1 consists of approximately 115 acres located primarily within Parcel B1 and extending into Parcel B4 and Parcel B5, located as shown on **Figure 1**. Outside of the main development area designated as Sub-Parcel B1-1, temporary construction zones (not intended for permanent occupancy) with a total area of approximately 0.5 acres within the construction Limit of Disturbance (LOD) will be utilized to install the facility entrance and subgrade utilities for the project.

The conduct of any environmental assessment and cleanup activities on the Tradepoint Atlantic property, as well as any associated development, is subject to the requirements outlined in the following agreements:

- Administrative Consent Order (ACO) between Tradepoint Atlantic (formerly Sparrows Point Terminal, LLC) and the Maryland Department of the Environment (MDE), effective September 12, 2014; and
- Settlement Agreement and Covenant Not to Sue (SA) between Tradepoint Atlantic (formerly Sparrows Point Terminal, LLC) and the United States Environmental Protection Agency (USEPA), effective November 25, 2014.

Sub-Parcel B1-1 is part of the acreage that was removed (Carveout Area) from inclusion in the Multimedia Consent Decree between Bethlehem Steel Corporation, the USEPA, and the MDE (effective October 8, 1997) as documented in correspondence received from USEPA on September 12, 2014. Based on this agreement, USEPA determined that no further investigation or corrective measures will be required under the terms of the Consent Decree for the Carveout Area. However, the SA reflects that the property within the Carveout Area will remain subject to the USEPA's Resource Conservation and Recovery Act (RCRA) Corrective Action authorities.

An application to enter the full Tradepoint Atlantic property (3,100 acres) into the Maryland Department of the Environment Voluntary Cleanup Program (MDE-VCP) was submitted to the MDE and delivered on June 27, 2014. The property's current and anticipated future use is Tier 3 (Industrial), and plans for the property include demolition and redevelopment over several years.

In consultation with the MDE, Tradepoint Atlantic affirms that it desires to accelerate the assessment, remediation, and redevelopment of certain sub-parcels within the larger site due to current market conditions. To that end, the MDE and Tradepoint Atlantic agree that the Controlled

Hazardous Substance (CHS) Act (Section 7-222 of the Environment Article) and the CHS Response Plan (Code of Maryland Regulations (COMAR) 26.14.02) shall serve as the governing statutory and regulatory authority for completing the development activities on the Sub-Parcel B1-1 and complement the statutory requirements of the VCP (Section 7-501 of the Environment Article). Upon submission of a Site RADWP and completion of any remedial activities for the sub-parcel, the MDE shall issue a No Further Action Letter (NFA) upon a recordation of an Environmental Covenant describing any necessary land use controls for the specific sub-parcel. At such time that all the sub-parcels within the larger parcel have completed remedial activities, Tradepoint Atlantic shall submit to the MDE a request for issuing a Certificate of Completion (COC) as well as all pertinent information concerning completion of remedial activities conducted on the parcel. Once the VCP has completed its review of the submitted information it shall issue a COC for the entire parcel described in Tradepoint Atlantic's VCP application.

Alternatively, Tradepoint Atlantic or other entity may elect to submit an application for a specific sub-parcel and submit it to the VCP for review and acceptance. If the application is received after the cleanup and redevelopment activities described in this RADWP are implemented and a NFA is issued by the MDE pursuant to the CHS Act, the VCP shall prepare a No Further Requirements Determination for the sub-parcel.

If Tradepoint Atlantic or other entity has not carried out cleanup and redevelopment activities described in the RADWP, the cleanup and redevelopment activities may be conducted under the oversight authority of either the VCP or the CHS Act, so long as those activities comport with this RADWP.

The Sub-Parcel B1-1 consists of approximately 115 acres currently slated for development and occupancy as a parking complex (**Figure 2**). The parking complex will include two above grade processing buildings totaling approximately 73,000 square feet and 88,000 square feet, respectively, and associated access roads and intersections. Development activities will generally include utility installations, grading, and hot mix asphalt (HMA) paving. Subsequent site-use would involve large-scale parking and vehicle work in the processing buildings. Outside of the main development area, temporary construction zones with a total area of approximately 0.5 acres will be utilized to install the facility entrance and subgrade utilities for the project. The temporary utility work outside of the boundary of the Site is not intended to be the basis for the issuance of a NFA or a COC, although the scope of construction is covered by this RADWP.

This RADWP provides a Site description and history; summary of environmental conditions identified by the Phase I Environmental Site Assessment (ESA); summary of relevant findings and environmental conditions identified by the Parcel B1 Phase II Investigation, Parcel B4 Phase II Investigation, Parcel B5 Phase II Investigation, Parcel B17 Phase II Investigation, and Area B Groundwater Investigation; a human health Screening Level Risk Assessment (SLRA) conducted for the identified conditions; and any necessary engineering and/or institutional controls to

facilitate the planned Sub-Parcel B1-1 development and address the impacts and potential human health exposures. These controls include work practices and applicable protocols that are submitted for approval to support the development and use of the Site. Engineering/institutional controls approved and installed for this RADWP shall be described in closure certification documentation submitted to the MDE demonstrating that exposure pathways on the Site are addressed in a manner that protects public health and the environment. The remaining acreage of Parcel B1 and the surrounding parcels will be addressed in future work associated with completion of the obligations of the ACO and associated VCP requirements. This work will include assessments of risk and, if necessary, RADWPs to address unacceptable risks associated with future land use.

2.0 SITE DESCRIPTION AND HISTORY

2.1 SITE DESCRIPTION

Parcel B1 includes an area of 217 acres as shown on **Figure 1**. The Sub-Parcel B1-1 Development Area consists of 115 acres intended for occupancy in the central portion of Parcel B1 and northern portions of Parcel B4 and Parcel B5. The development will include a parking complex and two processing buildings totaling approximately 161,000 square feet (**Figure 2**). Outside of the main development area designated as Sub-Parcel B1-1, temporary construction zones (not intended for permanent occupancy) with a total area of approximately 0.5 acres within the construction LOD will be utilized to install the facility entrance and subgrade utilities for the project. The Site is currently zoned Manufacturing Heavy-Industrial Major (MH-IM), and is not occupied. All historical buildings have been demolished, and the Site has been cleared of all significant vegetation. There is no groundwater use on-site or within the surrounding Tradepoint Atlantic property.

Parcel B1 is at an average elevation of approximately 12 feet above mean sea level (amsl). Elevations in the sub-parcel appear to be fairly consistent between 10 feet amsl and 14 feet amsl with several small stockpiles at slightly increased elevations. According to Figure B-2 of the Stormwater Pollution Prevention Plan (SWPPP) Revision 6 dated February 22, 2018, stormwater from the majority of the Site appears to flow to the north and west toward National Pollution Discharge Elimination System (NPDES) Outfalls 013 and 014/024 (Humphrey Creek Wastewater Treatment Plant; HCWWTP) to the surface waters of Bear Creek. Stormwater from the far southeastern corner of the Site is diverted to the southeast through permitted NPDES Outfall 001 (Pennwood Canal) to the surface waters of Old Road Bay.

2.2 SITE HISTORY

From the late 1800s until 2012, the production and manufacturing of steel was conducted at Sparrows Point. Iron and steel production operations and processes at Sparrows Point included raw material handling, coke production, sinter production, iron production, steel production, and semi-finished and finished product preparation. In 1970, Sparrows Point was the largest steel facility in the United States, producing hot and cold rolled sheets, coated materials, pipes, plates, and rod and wire. The steel making operations at the facility ceased in fall 2012.

The proposed Sub-Parcel B1-1 Development Area occupies the central portion of Parcel B1 and northern portions of Parcel B4 and Parcel B5. These areas of the Tradepoint Atlantic property were formerly occupied by portions of the main steel making area and various support facilities. The area of Parcel B1 occupied by the Site included a large section of the Primary Rolling Mills Area. The small area of Parcel B5 in the southeastern corner of the Site was formerly occupied by the Open Hearth Furnace Area (which also extended into the southern portion of Parcel B1 and

eastern portion of Parcel B4). Both of these areas contained multiple iron and steel industrial work processes including material heating furnaces, soaking pits, descaling operations, storage yards (Mould Yard), and rolling and coiling operations. The portion of Parcel B4 covered by this RADWP was formerly occupied by storage yards/buildings and repair shops. More information regarding the specific historical activities conducted in each area can be found in the agency-approved Phase II Investigation Work Plans for Parcel B1 (Revision 3 dated March 3, 2016), Parcel B4 (Revision 1 dated July 8, 2016), and Parcel B5 (Revision 1 dated December 3, 2015).

3.0 ENVIRONMENTAL SITE ASSESSMENT RESULTS

3.1 PHASE I ENVIRONMENTAL SITE ASSESSMENT RESULTS

A Phase I ESA was completed by Weaver Boos Consultants for the entire Sparrows Point property on May 19, 2014. Weaver Boos completed site visits of Sparrows Point from February 19 through 21, 2014, for the purpose of characterizing current conditions at the former steel plant. The Phase I ESA identified particular features across the Tradepoint Atlantic property which presented potential risks to the environment. These Recognized Environmental Conditions (RECs) included buildings and process areas where releases of hazardous substances and/or petroleum products potentially may have occurred. The Phase I ESA also relied upon findings identified during a previous visual site inspection (VSI) conducted as part of the RCRA Facility Assessment (RFA) prepared by A.T. Kearney, Inc. dated August 1993, for the purpose of identifying Solid Waste Management Units (SWMUs) and Areas of Concern (AOCs) on the property. This 1991 VSI is regularly cited in the Description of Current Conditions (DCC) Report prepared by Rust Environment and Infrastructure, dated January 1998 (included with Weaver Boos' Phase I ESA).

Weaver Boos' distinction of a REC or Non-REC was based upon the findings of the DCC Report (which was prepared when the features remained on-site in 1998) or on observations of the general area during their site visit. Weaver Boos made the determination to identify a feature as a REC based on historical information, observations during the site visit, and prior knowledge and experience with similar facilities. The following RECs were identified within, or in close proximity to, the Sub-Parcel B1-1 boundary:

Waste Oil Stabilization/Packing Area (REC 9A, Finding 233):
REC 9A consisted of a concrete pad, a soil/gravel area, and 28 dumpsters. The unit received drums of waste oil from around the property. The waste oil was typically contaminated with soil, speedy dry, and grease. Upon arrival, the drums were transported to the dumpsters and emptied. The oil within the dumpsters was then mixed with lime and/or soil to stabilize it. The concrete pad was described as severely cracked and stained in the RFA Report.

Rolling Mills Impoundment (REC 9B, Finding 238):
REC 9B was recognized in the DCC report from a 1952 aerial photograph. Weaver Boos observed this area to be vacant during the site visit, but speculated that hazardous substances and/or petroleum products may have been present in the impoundment based on experience and historical source information.

Relevant SWMUs and AOCs were also identified as located on Figure 3-1 from the DCC Report. This figure generally shows the SWMUs, AOCs, and main facility areas within the property boundaries. There were no AOCs identified within the Sub-Parcel B1-1 boundary. The following SWMUs were identified within the Sub-Parcel B1-1 boundary:

RCRA Regulated Storage Area (SWMU 193):
SWMU 193 was identified as containing drums of chromic acid, mercury, and antimony trichloride during the 1991 VSI. The RCRA Regulated Storage Area was located inside the former Skelp Mill building. This facility may have been the only RCRA permitted unit at the Bethlehem Steel Corporation property.

Rolling Mill Scale Pit (SWMU 92):
The DCC Report recognizes the Rolling Mill Scale Pit located on the southwestern side of the Plate Mill. This unit consisted of a concrete pit which managed mill scale. The pit was designated as a unit managing non-hazardous waste, and no known releases were recorded.

3.2 PHASE II INVESTIGATION RESULTS – SUB-PARCEL B1-1

Phase II Investigations specific to soil and groundwater conditions were performed for the areas surrounding Sub-Parcel B1-1 in accordance with the requirements outlined in the ACO as further described in the following agency-approved Phase II Investigation Work Plans:

- Area B: Parcel B1 (Revision 3) dated March 3, 2016.
- Area B: Parcel B4 (Revision 1) dated July 8, 2016.
- Area B: Parcel B5 (Revision 1) dated December 3, 2015.
- Area B: Parcel B17 (Revision 1) dated July 10, 2017.
- Area B Groundwater Investigation (Revision 3) dated October 6, 2015.

All soil and groundwater samples were collected and analyzed in accordance with agency-approved protocols during these Phase II Investigations, the specific details of which can be reviewed in each agency-approved Work Plan. Each Phase II Investigation was developed to target specific features which represented a potential release of hazardous substances and/or petroleum products to the environment, including RECs, SWMUs, and AOCs as well as numerous other targets defined from former operations that would have the potential for environmental contamination. Samples were also collected at site-wide locations to ensure full coverage of each investigation area. The full analytical results and conclusions of each investigation have been presented to the agencies in the following Phase II Investigation Reports:

- Area B: Parcel B1 (Revision 1) dated August 7, 2019.
- Area B: Parcel B4 (Revision 1) dated August 7, 2019.
- Area B: Parcel B5 (Revision 3) dated July 8, 2019.
- Area B: Parcel B17 (Revision 1) dated August 7, 2019.
- Area B Groundwater Investigation (Revision 0) dated September 30, 2016.

This RADWP summarizes the relevant soil and groundwater findings from these Phase II Investigations with respect to the proposed development of Sub-Parcel B1-1.

3.2.1 Soil Investigation Findings

Based on the scope of development for Sub-Parcel B1-1 (115 acres), 270 soil samples collected from 131 soil borings during the various Phase II Investigations listed in the preceding section were selected for a representative evaluation of Sub-Parcel B1-1. The 131 boring locations are shown on **Figure 3**, and the samples obtained from these borings provided relevant analytical data for discussion of on-site conditions.

Soil samples collected during the various Phase II Investigations were analyzed for the USEPA Target Compound List (TCL) semi-volatile organic compounds (SVOCs), TCL volatile organic compounds (VOCs), total petroleum hydrocarbon (TPH) diesel range organics (DRO) and gasoline range organics (GRO), Oil & Grease, USEPA Target Analyte List (TAL) metals, hexavalent chromium, and/or cyanide based on the parcel-specific sampling plans for Parcels B1, B4, and B5. Shallow soil samples (0 to 1 foot bgs) were also analyzed for polychlorinated biphenyls (PCBs). The specific requirements for parameter analyses have varied over time and can be reviewed in each agency-approved Work Plan. The laboratory Certificates of Analysis (including Chains of Custody) and relevant Data Validation Reports (50+% validated soil data) are included as electronic attachments. The Data Validation Reports contain qualifier keys for the flags assigned to individual results in the attached summary tables.

Soil sample results relevant for the Sub-Parcel B1-1 Development Area were screened against the Project Action Limits (PALs) established in the property-wide Quality Assurance Project Plan (QAPP) dated April 5, 2016, or based on other direct agency guidance (e.g., TPH/Oil & Grease). **Table 1** and **Table 2** provide a summary of the detected organic compounds and inorganics in the soil samples collected from the 131 soil borings that are most relevant for evaluating soil conditions at the Site. **Figure S1** through **Figure S4** present summaries of the soil sample results that exceeded the PALs among these 131 soil borings. The PALs for relevant polynuclear aromatic hydrocarbons (PAHs) have been adjusted upward based on revised toxicity data published in the USEPA Regional Screening Level (RSL) Composite Worker Soil Table. PAL exceedances in the Phase II Investigation soil samples relevant for the proposed development project were limited to six inorganics (arsenic, manganese, lead, cobalt, vanadium, and hexavalent chromium), seven SVOCs (benz[a]anthracene, benzo[a]pyrene, benzo[b]fluoranthene, benzo[k]fluoranthene, dibenz[a,h]anthracene, indeno[1,2,3-c,d]pyrene, and naphthalene), Aroclor 1254 and Aroclor 1260 (as well as total PCBs), and TPH-DRO.

An additional 18 soil borings outside the development area were included as secondary locations to evaluate the potential presence of non-aqueous phase liquid (NAPL) in close proximity to the Site. These 18 soil borings are highlighted on **Figure 3**. The purpose of these additional soil borings was to provide a conservative screening for the potential presence of NAPL at the Site,

which could be indicated through the presence of free product, sheen, or elevated concentrations of TPH-DRO/GRO and/or Oil & Grease. These 18 soil borings have been included solely for NAPL screening purposes, and the analytical data obtained from these borings is not included in the SLRA or the main detection summary tables (**Table 1** and **Table 2**) because a sufficient soil dataset is already available within the Site boundary. **Appendix B** provides summary tables for the organic compounds and inorganics detected in the 18 soil borings that were completed within the conservative NAPL screening buffer. These analytical detections are provided for reference.

Three samples evaluated in this RADWP exceeded the PAL for TPH-DRO (6,200 mg/kg); B1-172-SB-4, B5-099-SB-4.5, and B5-161-SB-4. Potential evidence of NAPL was also observed at several soil boring locations. These findings and supplemental activities that were completed at select locations are further discussed in Section 3.2.3. Contingency measures to address the potential presence of NAPL which could be encountered during construction are addressed in subsequent sections of this RADWP.

3.2.2 Groundwater Investigation Findings

Groundwater conditions were investigated in accordance with the separate Area B Groundwater Investigation Work Plan. During this groundwater investigation, 15 shallow permanent wells were sampled within a reasonable proximity to Sub-Parcel B1-1. In addition, two samples were obtained from temporary groundwater sample collection points (B17-014-PZ and B17-019-PZ) slightly to the west of the proposed development area during the Parcel B17 Phase II Investigation. The 17 shallow groundwater points which provided relevant analytical data for the proposed development project are shown on **Figure 4**. Groundwater conditions below the Site are not a significant concern because there is no use of groundwater on the Tradepoint Atlantic property; however, groundwater may be encountered in the sub-parcel during some construction tasks.

The shallow groundwater samples were analyzed for TCL-SVOCs, TCL-VOCs, TAL-dissolved/total metals, TPH-DRO/GRO, Oil & Grease, hexavalent chromium, total/available cyanide, and/or PCBs based on the project-specific sampling plans. The specific requirements for parameter analyses have varied over time and can be reviewed in each agency-approved Work Plan. The laboratory Certificates of Analysis (including Chains of Custody) and relevant Data Validation Reports (50+% validated groundwater data) are included as electronic attachments. The Data Validation Reports contain qualifier keys for the flags assigned to individual results in the attached summary tables.

The Phase II Investigation groundwater results relevant for the Sub-Parcel B1-1 Development Area were screened against the PALs established in the property-wide QAPP dated April 5, 2016, or based on other direct agency guidance (e.g., TPH/Oil & Grease). **Table 3** and **Table 4** provide a summary of the detected organic compounds and inorganics in the groundwater samples submitted for laboratory analysis, and **Figure GW1** through **Figure GW4** present summaries of the groundwater results that exceeded the PALs. The tables and figures include all locations and

analytical data collected during the preceding Phase II Investigations that are relevant for the proposed development project. Similar to the evaluation of soil data, the PALs for relevant PAHs have been adjusted upward based on revised toxicity data published in the USEPA RSL Resident Tapwater Table. PAL exceedances in the Phase II Investigation groundwater samples collected in the vicinity of the proposed development project consisted of one VOCs (chloroform), three SVOCs (1,4-dioxane, benz[a]anthracene, and naphthalene), TPH-DRO, total cyanide, and four total/dissolved metals (hexavalent chromium, cobalt, manganese, and thallium). For simplicity, the inorganic PAL exceedances shown on **Figure GW4** do not include duplicate exceedances of total/dissolved metals. If both total and dissolved concentrations exceeded the PAL, the value for the total metals is displayed on the figure.

While concentrations of the listed constituents did exceed the aqueous PALs specified in the QAPP, none of the detected levels were significantly elevated and there were no concerns related to potential vapor intrusion (VI) risks. Total cyanide had been previously identified as a potential VI risk in the Area B Groundwater Phase II Investigation Report, but the screening level for cyanide has since been adjusted upward by the USEPA, eliminating this concern. Each groundwater collection point was also inspected for evidence of NAPL using an oil-water interface probe prior to sampling. None of the temporary groundwater sample collection points or permanent wells relevant for the proposed development project showed evidence of NAPL during these checks. If groundwater is encountered during development, it will be managed to prevent exposures in accordance with the dewatering requirements outlined in Section 5.2.

3.2.3 Identification of Locations of Potential Concern

As noted above, there were no concerns related to potential VI risks with respect to the proposed future use of the Site, and none of the monitoring wells or temporary groundwater sample collection points included in the preceding groundwater investigations exhibited evidence of NAPL. Lead, PCBs, and TPH/Oil & Grease in soil are subject to special requirements as designated by the agencies. The soil data relevant for this evaluation of Sub-Parcel B1-1 were evaluated to determine the presence of any locations of potential concern including: lead concentrations above 10,000 mg/kg, PCB concentrations above 50 mg/kg, TPH/Oil & Grease concentrations above 6,200 mg/kg, and/or evidence of NAPL.

There were no concentrations of total PCBs detected in soil above 50 mg/kg at the Site; therefore, PCBs are not contaminants of concern. There were three soil borings with samples exhibiting notable concentrations of lead, including B1-005-SB, B1-091-SB, and B1-132-SB. Several soil borings had visual observations of NAPL (free product or sheen) and/or elevated concentrations of TPH-DRO, including B5-098-SB, B5-099-SB, B5-161-SB, B1-172-SB, and B1-178-SB. Temporary NAPL screening piezometers were installed at each location (with the exception of B1-178-SB) to investigate the potential presence and mobility of NAPL in groundwater at these locations. The soil boring logs and piezometer construction logs from these five locations with

potential NAPL impacts are included within **Appendix C**. **Figure 5** provides a summary of all soil borings that were identified by this screening evaluation as locations of potential concern at the Site, each of which is further discussed below. All of the identified locations are positioned in areas of the Site that will be paved during development for future large-scale vehicle parking.

Notable Detections of Lead

During the Parcel B1 Phase II Investigation, soil borings B1-005-SB, B1-091-SB, and B1-132-SB exhibited elevated concentrations of lead above the required delineation criterion of 10,000 mg/kg in their respective intermediate depth soil samples (B1-005-SB-8 with a concentration of 16,200 mg/kg, B1-091-SB-5 with a concentration of 15,000 mg/kg, and B1-132-SB-5 with a concentration of 10,600 mg/kg). These elevated samples are plotted in relation to the proposed development plan on **Figure 5**. Delineation of lead has been completed at each of the identified locations in accordance with the Work Plan for Delineation/Characterization of Lead Impacted Soil dated February 15, 2018. None of the lead results obtained during the delineation investigation were comparable to the initial elevated results and did not exceed the delineation criterion of 10,000 mg/kg. Following review of the delineation results (presented within the Interim Submittal dated June 26, 2018), the agencies have agreed that no further action is warranted with respect to these lead impacts. The lead delineation results have since been formally presented within the Supplemental Investigation Report dated December 20, 2018, which was approved by the MDE on January 17, 2019.

Notable Detections of TPH-DRO and/or NAPL

Soil borings with elevated concentrations of TPH-DRO and/or visual observations of NAPL in the soil cores (free product or sheen) have been identified on **Figure 5** and are evaluated herein. A temporary NAPL screening piezometer was installed at each identified location (with the exception of B1-178-SB) to investigate the potential presence and mobility of NAPL in groundwater. The soil boring logs and piezometer construction logs for these locations have been included as **Appendix C**. Each location is further discussed in its respective Phase II Investigation Report, but the specific findings at each location can be summarized as follows:

- Soil boring B1-172-SB exhibited sheen to light product and accompanying odors in the soil core. The intermediate sample interval had a detected concentration of TPH-DRO at 8,000 mg/kg (above the PAL of 6,200 mg/kg). Due to these observations, a temporary piezometer was installed at this location. Based on 0-hour, 48-hour, and 30-day gauging measurements, NAPL was not detected at this location and no additional action is proposed in this area.

- Soil boring B1-178-SB had visible evidence of NAPL in the soil core from 2 to 3.5 feet bgs. The boring was terminated at 3.5 feet bgs due to equipment refusal. In lieu of installing a piezometer, a test pit was completed to investigate the extent of NAPL impacts

in the vicinity of this boring, as described in the Test Pitting Completion Letter for B1-178-SB dated September 5, 2018. During the test pitting, there were no observations of free NAPL, however, petroleum impacted building materials mixed with soil were noted within the test pit. Upon completion, a waste soil composite sample was analyzed for TCLP-VOCs, TCLP-SVOCs, TCLP-Metals, and PCBs. The waste characterization data indicated that the excavated materials were not hazardous and did not contain concentrations of total PCBs in excess of 50 mg/kg. Based on the response actions which were already completed, no additional action is proposed in this area.

- Soil borings B5-098-SB and B5-099-SB had visual observations of NAPL in the soil cores, and B5-099-SB also exhibited an elevated concentration of TPH-DRO of 7,780 mg/kg in the intermediate sample collected from 3.5 to 4.5 feet bgs. Due to these observations, a temporary piezometer was installed at each location. NAPL was later detected in the piezometer installed at B5-098-SB, and additional soil borings and piezometers were installed in the area during a subsequent delineation investigation. The delineation results from this area are summarized on **Figure 6** with respect to the proposed development plan and utilities. Because the NAPL mass appeared to extend to the alignment of a proposed stormwater utility, the area containing potentially mobile NAPL was addressed via a remedial excavation. Excavation activities were completed in accordance with the Response Action Work Plan dated February 27, 2019. The Response Action Work Plan provided a complete description of the delineation activities and subsequent findings in this area. A Response Action Completion Report dated July 12, 2019 has since been submitted following the successful implementation of the remedial excavation. A detailed summary of the response activities completed in the vicinity of soil boring B5-098-SB (including supplemental figures and a photograph log) is provided in **Appendix L** for reference. No additional action is proposed in this area.

- Soil boring B5-161-SB did not have physical observations of NAPL in the soil core (although strong odors were noted) but exhibited an elevated concentration of TPH-DRO of 17,900 mg/kg in the intermediate sample collected from 3 to 4 feet bgs. Due to the elevated analytical detection, a temporary piezometer was installed at this location. NAPL was not detected in the piezometer during the 0-hour, 48-hour, and 30-day gauging measurements. Additional delineation work in the vicinity of B5-161-SB was coordinated with the MDE under the Test Pitting Work Plan for B5-161-SB (Revision 1) dated May 8, 2019. Test pits were subsequently completed surrounding B5-161-SB to identify any grossly contaminated material (i.e., NAPL). During implementation, grossly contaminated material was not identified using field screening methods. As specified in the Work Plan, a series of analytical soil confirmation samples were collected from the test pit sidewalls. The soil confirmation sampling data are provided in **Table 5**. Analytical samples were also collected from the temporary piezometer B5-161-PZ, and these supplemental groundwater sampling data are provided in **Table 6**. **Figure 7** provides the soil and

groundwater results that exceeded the applicable PALs among these samples, including PAL exceedances at the original soil boring B5-161-SB. The soil and groundwater analytical reports for these supplemental samples are included with the electronic attachments. The data from the soil confirmation samples have been incorporated into the risk assessment for Sub-Parcel B1-1 (Section 3.3). The detailed findings from the supplemental field activities at B5-161-SB are reported within the Test Pitting Completion Letter dated July 12, 2019. A detailed summary of the test pitting and sampling activities completed in the vicinity of soil boring B5-161-SB (including supplemental figures and a photograph log) is provided in **Appendix L** for reference. No additional action is proposed in this area.

3.3 HUMAN HEALTH SCREENING LEVEL RISK ASSESSMENT

3.3.1 Analysis Process

A human health Screening Level Risk Assessment (SLRA) has been completed based on the analytical data obtained from the characterization of surface and subsurface soils in Sub-Parcel B1-1. This includes the soil data obtained during the preceding Phase II Investigations (discussed in Section 3.2.1) as well as the soil confirmation sampling data that was collected following the test pitting activities surrounding location B5-161-SB. It should be noted that processed slag aggregate sourced from the Tradepoint Atlantic property will be used as the primary fill material and pavement subbase for this project; therefore, regardless of the findings of the Composite Worker baseline assessment, Sub-Parcel B1-1 will be subject to surface engineering controls (i.e., capping) unless separate approvals are received from the MDE following appropriate laboratory testing of the slag aggregate. The SLRA was conducted to further evaluate the existing soil conditions prior to the placement of the processed slag aggregate in support of the design of any additional response measures.

A supplemental delineation investigation was completed for three locations within the Site boundary, as described in Section 3.2.3. Lead was delineated in soils surrounding B1-005-SB, B1-091-SB, and B1-132-SB due to the elevated concentrations of lead which were identified above the required delineation criterion of 10,000 mg/kg at these locations. The complete findings of the supplemental delineation investigation have been provided to the agencies under separate cover. At each location, the soil results obtained during the delineation investigation were significantly lower than the original results obtained during the Parcel B1 Phase II Investigation, and no lead concentrations exceeded 10,000 mg/kg. Therefore, as a conservatism, the initial elevated lead results have been included in the SLRA, and the delineation results (which were significantly lower) have been excluded.

The SLRA included the following evaluation process:

Identification of Exposure Units (EUs): The Composite Worker SLRA was evaluated using three Exposure Units (EU1, EU2, and EU3) with areas of 50.5 acres, 32.3 acres, and 32.3 acres, respectively. The Construction Worker SLRA was evaluated using the same three EUs with a slight modification to EU1. EU1 is slightly larger for the Construction Worker evaluation (51.0 acres) versus the Composite Worker evaluation (50.5 acres) due to the inclusion of the facility entrance and external utilities (0.5 acres). This Construction Worker EU has been designated as EU1-EXP to recognize the slightly larger area. The boundaries of EU2 and EU3 are identical for the Composite Worker and Construction Worker evaluation. The SLRA EUs for the Composite Worker (EU1, EU2, and EU3) and Construction Worker (EU1-EXP, EU2, and EU3) are shown in relation to the proposed development area and the 131 applicable Phase II Investigation soil borings on **Figure 8**.

Identification of Constituents of Potential Concern (COPCs): For the project-specific SLRA, compounds that were present at concentrations at or above the USEPA RSLs set at a target cancer risk of 1E-6 or target non-cancer Hazard Quotient (HQ) of 0.1 were identified as COPCs to be included in the SLRA. A COPC screening analysis is provided in **Table 7** to identify compounds above the relevant screening levels.

All aroclor mixtures (e.g., Aroclor 1242, Aroclor 1260) are taken into account for the reported concentrations of total PCBs. The total PCBs concentrations are used to evaluate the carcinogenic risk associated with PCBs. Aroclor 1254, which is included in the total PCBs summation for the carcinogenic risk estimate, is also evaluated separately for systemic toxicity (i.e., non-cancer hazard).

The results for thallium were eliminated from the risk assessment because this compound was very infrequently detected in the dataset for Sub-Parcel B1-1. Thallium was only detected in 0.8% of the samples analyzed for this compound (2 samples out of 247). If the detection frequency of a COPC is less than 5% in a dataset with a minimum of 20 samples, the COPC can be eliminated from the risk assessment assuming the detections are not extremely high (based on agency discretion). A single detection that is extremely high could require delineation rather than elimination. In this case it is reasonable to remove thallium from the risk assessment based on the relatively low detections. All remaining COPCs identified in **Table 7** have been retained for the risk assessment.

Exposure Point Concentrations (EPCs): The COPC soil datasets for each EU were divided into surface (0 to 1 foot), subsurface (>1 foot), and pooled depths for estimation of potential EPCs. Thus, there are three soil datasets associated with each EU. A statistical analysis was performed for each COPC dataset using the ProUCL software (version 5.0) developed by the USEPA to determine representative reasonable maximum exposure (RME) values for the EPC for each constituent. The RME value is typically the 95% Upper

Confidence Limit (UCL) of the mean. For lead, the arithmetic mean for each depth was calculated for comparison to the Adult Lead Model (ALM)-based values, and any individual results exceeding 10,000 mg/kg would be delineated for possible excavation and removal (if applicable). For PCBs, all results equaling or exceeding 50 mg/kg would be delineated for excavation and removal (if applicable).

Risk Ratios: The surface soil EPCs, subsurface soil EPCs, and pooled soil EPCs were compared to the USEPA RSLs for the Composite Worker and to site-specific Soil Screening Levels (SSLs) for the Construction Worker based on equations derived in the USEPA Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites (OSWER 9355.4-24, December 2002). Risk ratios were calculated with a cancer risk of 1E-6 and a non-cancer HQ of 1. The risk ratios for the carcinogens were summed to develop a screening level estimate of the baseline cumulative cancer risk. The risk ratios for the non-carcinogens were segregated and summed by target organ to develop a screening level estimate of the baseline cumulative non-cancer hazard.

For the Construction Worker, site-specific risk-based evaluations were completed for a range of potential exposure frequencies to determine the maximum exposure frequency for each EU that would result in risk ratios equivalent to a cumulative cancer risk of 1E-5 or Hazard Index (HI) of 1 for the individual target organs. This analysis indicated that the allowable exposure frequencies before additional worker protections or more detailed job safety evaluations might be needed are 100 days, 90 days, and 1.5 days for EU1-EXP, EU2, and EU3, respectively.

There is no potential for human exposure to groundwater for a Composite Worker since groundwater is not used on the Tradepoint Atlantic property (and is not proposed to be utilized). In the event that construction/excavation leads to a potential Construction Worker exposure to groundwater during development, health and safety plans and management procedures shall be followed to limit exposure risk.

Assessment of Lead: For lead, the arithmetic mean concentrations for surface soils, subsurface soils, and pooled soils for each EU were compared to the applicable RSL (800 mg/kg) as an initial screening. If the mean concentrations for the EU were below the applicable RSL, the EU was identified as requiring no further action for lead. If a mean concentration exceeded the RSL, the mean values were compared to calculated ALM values (ALM Version dated 6/21/2009 updated with the 5/17/2017 OLEM Directive) with inputs of 1.8 for the geometric standard deviation and a blood baseline lead level of 0.6 ug/dL. The ALM calculation generates a soil lead concentration of 2,518 mg/kg, which is the most conservative (i.e., lowest) concentration which would yield a probability of 5% of a blood lead concentration of 10 ug/dL. If the arithmetic mean concentrations for the EU were below 2,518 mg/kg, the EU was identified as requiring no further action for lead.

The lead averages and ALM screening levels are presented for surface, subsurface, and pooled soils in **Table 8**. For lead, any results equaling or exceeding 10,000 mg/kg would warrant additional delineation for possible excavation and removal (if applicable).

Assessment of TPH-DRO/GRO and Oil & Grease: EPCs were not calculated for TPH-DRO/GRO or Oil & Grease. Instead, the individual results were compared to the PAL set to a HQ of 1 (6,200 mg/kg). Three soil samples exceeded the PAL for TPH-DRO: B1-172-SB-4 (8,000 mg/kg), B5-099-SB-4.5 (7,780 mg/kg), and B5-161-SB-4 (17,900 mg/kg). Potential evidence of NAPL was also observed at several soil boring locations. These findings are further discussed in Section 3.2.3. The soil borings with physical evidence of NAPL or elevated TPH-DRO concentrations are plotted with respect to the proposed development plan (including utilities) on **Figure 5** and **Figure 6**. Contingency measures to address the potential presence of NAPL which could be encountered during construction are addressed in subsequent sections of this RADWP.

Risk Characterization Approach: Generally, if the baseline risk ratio for each non-carcinogenic COPC or cumulative target organ does not exceed 1 (with the exception of lead), and the sum of the risk ratios for the carcinogenic COPCs does not exceed a cumulative cancer risk of 1E-5, then a no further action determination will be recommended. If the baseline estimate of cumulative cancer risk exceeds 1E-5 but is less than or equal to 1E-4, then capping of the EU will be considered to be an acceptable remedy for the Composite Worker. For the Construction Worker, cumulative cancer risks exceeding 1E-5, but less than or equal to 1E-4, will be mitigated via site-specific health and safety requirements. The efficacy of capping for elevated non-cancer hazard will be evaluated in terms of the magnitude of exceedance and other factors such as bioavailability of the COPC.

Due to the grading activities including cut and fill which will be implemented during development at the Site, the SLRA was evaluated to determine baseline Composite and Construction Worker exposures to surface, subsurface, and pooled data. It should be noted that processed slag aggregate sourced from the Tradepoint Atlantic property will be used as the primary fill material and pavement subbase for this project; therefore, regardless of the findings of the Composite Worker baseline assessment, Sub-Parcel B1-1 will be subject to surface engineering controls (i.e., capping) unless separate approvals are received from the MDE following appropriate laboratory testing of the slag aggregate material. The goal of the SLRA is therefore to determine whether additional response actions beyond capping may be needed due to current conditions at the Site.

The USEPA's acceptable risk range is between 1E-6 and 1E-4. If the sum of the risk ratios for carcinogens exceeds a cumulative cancer risk of 1E-4, further analysis of site conditions will be required including the consideration of toxicity reduction in any proposal for a remedy. The magnitude of any non-carcinogen HI exceedances and bioavailability of the

COPC will also dictate further analysis of site conditions including consideration of toxicity reduction in any proposal for a remedy. For lead, if the ALM results indicate that the mean concentrations would present a 5% to 10% probability of a blood concentration of 10 ug/dL for the EU, then capping of the EU would be an acceptable presumptive remedy. The mean soil lead concentrations corresponding to ALM probabilities of 5% and 10% are 2,518 mg/kg, and 3,216 mg/kg, respectively. If the ALM indicates that the mean concentrations would present a >10% probability of a blood concentration of 10 ug/dL for the EU, further analysis of site conditions including toxicity reduction will be completed such that the probability would be reduced to less than 10% after toxicity reduction, but before capping.

3.3.2 Sub-Parcel B1-1 SLRA Results and Risk Characterization

Soil data were divided into three datasets (surface, subsurface, and pooled) for Sub-Parcel B1-1 to evaluate potential exposure scenarios. Due to the grading activities including cut and fill which will be implemented during development at the Site, each of these potential exposure scenarios is relevant for both the Composite and Construction Worker.

EPCs were calculated for each soil dataset (i.e., surface, subsurface, and pooled surface/subsurface) in each EU. ProUCL output tables (with computed UCLs) derived from the data for each COPC in soils are provided as electronic attachments, with computations presented and EPCs calculated for COPCs within each of the three datasets. The ProUCL input tables are also included as electronic attachments. The results were evaluated to identify any samples that may require additional assessment or special management based on the risk characterization approach. The calculated EPCs for the surface, subsurface, and pooled exposure scenarios are provided in **Table 9**. These EPCs were used for both the Composite Worker and Construction Worker risk assessments.

As indicated above, the EPCs for lead are the average (i.e., arithmetic mean) values for each dataset. A lead evaluation spreadsheet, providing the computations to determine lead averages for each dataset, is also included as an electronic attachment. The average lead concentrations are presented for each dataset in **Table 8**, which indicates that neither surface, subsurface, nor pooled soils exceeded the secondary limit of 2,518 mg/kg based on the May 2017 updated ALM developed by the USEPA (corresponding to a 5% probability of a blood lead level of 10 ug/dL). There were three locations within the Site boundary where concentrations of lead exceeded 10,000 mg/kg: B1-005-SB-8 (16,200 mg/kg), B1-091-SB-5 (15,000 mg/kg), and B1-132-SB-5 (10,600 mg/kg). Delineation of lead has been completed at these locations in accordance with the Work Plan for Delineation/Characterization of Lead Impacted Soil dated February 15, 2018. Following review of the analytical results (presented within the Interim Submittal dated June 26, 2018), the agencies have agreed that no further action is warranted with respect to these lead impacts. The lead delineation results have since been formally presented within the Supplemental Investigation Report dated December 20, 2018, which was approved by the MDE on January 17, 2019. The

initial elevated results (>10,000 mg/kg) have been included in this SLRA as a conservatism, and the delineation results (which were significantly lower) have been excluded.

None of the detections of PCBs included in the project-specific SLRA evaluation exceeded the mandatory excavation criterion of 50 mg/kg.

Composite Worker Assessment:

Risk ratios for the estimates of potential EPCs for the Composite Worker baseline scenario prior to the placement of slag aggregate at the Site are shown in **Table 10** (surface), **Table 11** (subsurface), and **Table 12** (pooled soils). The results are summarized as follows:

Worker Scenario	Exposure Unit	Medium	Hazard Index (>1)	Total Cancer Risk
Composite Worker	EU1 (50.5 acres)	Surface Soil	none	9E-6
		Subsurface Soil	none	2E-5
		Surface & Subsurface Soil	none	1E-5
	EU2 (32.3 acres)	Surface Soil	none	8E-6
		Subsurface Soil	none	9E-6
		Surface & Subsurface Soil	none	9E-6
	EU3 (32.3 acres)	Surface Soil	none	3E-5
		Subsurface Soil	none	1E-4
		Surface & Subsurface Soil	none	6E-5

Based on the risk ratios for Sub-Parcel B1-1, environmental capping (100% of the Site) is an acceptable remedy to be protective of future Composite Workers for the surface, subsurface, and pooled exposure scenarios. None of the carcinogenic risk estimates for the Composite Worker were greater than 1E-4, indicating that the proposed capping remedy will provide adequate protection from carcinogens in the soil. None of the non-carcinogenic HI values exceeded 1. Capping and institutional controls (to maintain the integrity of the cap) are suitable measures for the protection of the future Composite Worker for both cancer risks and non-cancer hazards. The capping remedy will additionally be protective of slag aggregate which will be used as the primary fill material and pavement subbase at the Site.

Construction Worker Assessment:

According to the work schedule provided by Tradepoint Atlantic, intrusive activities which could result in potential Construction Worker exposures are expected to be limited to three primary utility installation tasks:

- Domestic Water/Fire Loop: 105 exposure days estimated
- Sanitary: 105 exposure days estimated
- Stormwater: 96 exposure days estimated

Although the anticipated work period may be subject to change (see schedule in Section 7.0), the duration of these activities is not expected to increase. Each of these primary intrusive work tasks will be performed by a separate work crew. Construction Worker risks were evaluated for several exposure scenarios to determine the maximum exposure frequency for each EU that would result in risk ratios equivalent to a cumulative cancer risk of 1E-5 or HI of 1 for any individual target organ. Risk ratios for the estimates of potential EPCs for the Construction Worker scenario using the selected durations (100, 90, and 1.5 work days for EU1-EXP, EU2, and EU3, respectively) are shown in **Table 13** (surface), **Table 14** (subsurface), and **Table 15** (pooled soils). The variables entered for calculation of the site-specific Construction Worker SSLs (EU area, input assumptions, and exposure frequency) are indicated as notes on the tables. The spreadsheet used for computation of the site-specific Construction Worker SSLs is included in **Appendix D**. The results of the exposure scenarios are summarized as follows:

Worker Scenario	Exposure Unit	Medium	Hazard Index (>1)	Total Cancer Risk
Construction Worker	EU1-EXP (51.0 acres) (100 exposure days)	Surface Soil	none	7E-7
		Subsurface Soil	none	2E-6
		Surface & Subsurface Soil	none	1E-6
	EU2 (32.3 acres) (90 exposure days)	Surface Soil	none	6E-7
		Subsurface Soil	none	6E-7
		Surface & Subsurface Soil	none	7E-7
	EU3 (32.3 acres) (1.5 exposure days)	Surface Soil	none	4E-8
		Subsurface Soil	none	2E-7
		Surface & Subsurface Soil	none	8E-8

Using the respective exposure durations, the carcinogenic risks were all less than 1E-5, and none of the non-carcinogens caused a cumulative HI to exceed 1 for any target organ system. These findings are below the acceptable limits for no further action established by the agencies. This evaluation indicates that site-specific health and safety requirements (beyond standard Level D

protection) would be required only if the respective exposure durations were exceeded for an individual worker in each EU.

Certain activities at the Site (utility installations for specific crews as noted above) are anticipated to exceed these allowable durations, and Construction Worker risks must be mitigated to facilitate the proposed construction work. Additional site-specific health and safety requirements are warranted to be protective of workers. Upgraded Personal Protective Equipment (PPE) beyond standard Level D protection will be used for the entire scope of work covered by this RADWP as a protective measure to ensure that there are no unacceptable exposures for Construction Workers during project implementation. The modified Level D PPE requirements which will be applied during this project, including specific PPE details, planning, tracking/supervision, enforcement, and documentation, are outlined in the PPE Standard Operational Procedure (SOP) provided as **Appendix E**.

Institutional controls will be required to be established for the protection of future Construction Workers in the event of any future long-term development which could include intrusive activities. These institutional controls will need to include a written notice to the MDE and USEPA at least 30 days prior to any future soil disturbances if the proposed duration of intrusive activity exposure would exceed the allowable duration determined in the SLRA for that EU (unless the contractor is proposing to use the upgraded modified Level D PPE specified in the approved SOP), health and safety requirements for any excavations, and proper management and characterization of any removed material.

3.3.3 Evaluation of Comprehensive Environmental Response, Compensation, and Liability Act Criteria

Results from the SLRA indicate that a site-wide remedy of capping with institutional controls will be acceptable to mitigate potential current and future Composite Worker risks. Site-specific health and safety controls will be required to mitigate Construction Worker risks within the sub-parcel. This includes using modified Level D PPE. The modified Level D PPE requirements will be implemented throughout the project duration in accordance with the PPE SOP provided as **Appendix E**. Institutional controls will be required to be established for the protection of future Construction Workers in the event of any future long-term development which could include intrusive activities.

The proposed VCP capping remedy (with institutional controls) for Sub-Parcel B1-1 was evaluated for consistency with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Threshold Criteria and the Balancing Criteria. The Threshold Criteria assess the overall protection of human health and the environment, as well as achievement of media cleanup objectives and control of sources of releases at the Site. The Balancing Criteria assess long-term effectiveness and permanence; reduction of toxicity, mobility or volume; short-term effectiveness; implementability; cost effectiveness; and community and State acceptance.

Threshold Criteria:

Protect Human Health and the Environment: The assessment against this criterion evaluates how the remedy, as a whole, protects and maintains protection of human health and the environment. This criterion is satisfied when response actions are complete. The purpose of this remedy is to provide a protective barrier between human site users and impacted materials, and to protect the environment by preventing surface water from contacting potentially impacted materials in place. The capping and institutional control remedy would eliminate risk to current and future industrial workers by preventing exposure to areas of the Site where processed slag aggregate has been placed or where soil concentrations exceed a cancer risk of 1E-5 or a HI of 1. Groundwater does not present a human health hazard since there is no groundwater use on the property. Implementation of the proposed use restrictions will address the residual risk and will also protect hypothetical future Construction Workers by eliminating or controlling potential exposure pathways, thus, reducing potential intake and contact of soil/groundwater COPCs by human receptors.

Achieve Media Cleanup Objective: The assessment against this criterion describes how the remedy meets the cleanup objective, which is risk reduction, appropriate for the expected current and reasonably anticipated future land use. The objective is to protect current/future Composite Workers and Construction Workers from potential exposures to COPCs present in slag aggregate or soil at levels that may result in risks of adverse health effects. Given the controlled access and use restrictions, the proposed remedy will attain soil and groundwater objectives. The activity use restrictions will eliminate current and future unacceptable exposures to both soil and groundwater.

Control the Source of Releases: In its RCRA Corrective Action proposed remedies, USEPA seeks to eliminate or reduce further releases of hazardous wastes or hazardous constituents that may pose a threat to human health and the environment. Controlling the sources of contamination relates to the ability of the proposed remedy to reduce or eliminate, to the maximum extent practicable, further releases. Sampling results did not indicate localized, discernible source areas associated with the soil conditions observed at the Site, with the possible exception of NAPL at select locations (see Section 3.2.3). The proposed capping remedy will prevent contact with COPCs potentially present in the soil or slag aggregate, reducing potential risks for future industrial workers. The control measures included in the proposed remedy, such as Materials Management Plan requirements and groundwater use restrictions, provide a mechanism to control and reduce potential further releases of COPCs. This is achieved by eliminating the potential for groundwater use and requiring proper planning associated with intrusive activities.

Balancing Criteria:

Long-Term Reliability and Effectiveness: The assessment against this criterion evaluates the long-term effectiveness of the remedy in maintaining protection of human health and the environment after the response objectives have been met. The primary focus of this criterion is the extent and effectiveness of the controls that may be required to manage the risk posed by slag aggregate, treatment residuals, and/or untreated wastes. The capping remedy will permanently contain the slag aggregate and other potentially contaminated media in place. In order for the cap to effectively act as a barrier, regular inspections will be required to determine if erosion or cracks have formed that could expose workers to contaminated materials.

Institutional controls will be implemented to protect future Composite and Construction Workers against inadvertent contact with potentially impacted media. These institutional controls are anticipated to include a restriction prohibiting the use of groundwater for any purpose, a written notice to the MDE and USEPA at least 30 days prior to any future soil disturbances if the proposed duration of intrusive activity exposure would exceed the allowable duration determined in the SLRA for that EU (unless the contractor is proposing to use the upgraded modified Level D PPE specified in the approved SOP), health and safety requirements for any excavations, and proper management and characterization of any removed material. The Tenant will be required to sign onto the Environmental Covenant with restriction in the NFA. The proposed remedy will maintain protection of human health and the environment over time by controlling exposures to the hazardous constituents potentially remaining in slag aggregate or existing on-site media. The long-term effectiveness is high, as use restrictions are readily implementable and easily maintained. Given the historical, heavily industrial uses of the Site and the surrounding area, including the presence of landfills, land and groundwater use restrictions are expected to continue in the long term.

Reduction of Toxicity, Mobility, or Volume of Waste: The assessment against this criterion evaluates the anticipated performance of specific technologies that a remedial action alternative may employ. The capping remedy will prevent the spread of contaminants in wind-blown dust or stormwater and will prevent infiltration through the unsaturated zone from carrying contaminants to the groundwater. Thus, the mobility of contaminants will be reduced by the capping remedy.

Short-term Effectiveness: The assessment against this criterion examines how well the proposed remedy protects human health and the environment during the construction and implementation until response objectives have been met. This criterion also includes an estimate of the time required to achieve protection for either the entire site or individual elements associated with specific site areas or threats. The risks to the Construction Worker during remedy implementation are mitigated by executing the modified Level D

PPE requirements outlined in **Appendix E**. The short-term risk to site workers following these upgraded health and safety measures during implementation of the remedy will be low, leading to a high level of short-term effectiveness for protection of future site users and the environment. Short-term effectiveness in protecting on-site workers and the environment will be achieved through establishing appropriate management, construction, health and safety, and security procedures. Proper water management protocols will be implemented to prevent discharges offsite. Security and fences will be used to maintain controlled access during construction.

Implementability: The assessment against this criterion evaluates the technical and administrative feasibility, including the availability of trained and experienced personnel, materials, and equipment. Technical feasibility includes the ability to construct and operate the technology, the reliability of the technology, and the ability to effectively monitor the technology. Administrative feasibility includes the capability of obtaining permits, meeting permit requirements, and coordinating activities of governmental agencies. The proposed capping remedy for the Composite Worker area uses readily available capping techniques.

Cost Effectiveness: The assessment against this criterion evaluates the capital costs, annual Operating and Maintenance (O&M) costs, and the net present value (NPV) of this remedy relative to alternatives. The capping remedy remedial costs would be incurred as part of the proposed site development, regardless of the placement of slag aggregate.

State Support / Agency Acceptance: MDE has been involved throughout the Site investigation process. The proposed use restrictions included in the proposed remedy are generally recognized as commonly employed measures for long-term stewardship. Ultimately State/MDE support will be evaluated based on comments received during the public comment period.

A capping remedy with institutional controls would satisfy the CERCLA Threshold Criteria and the Balancing Criteria and would do so in a manner that ensures reliable implementation and effectiveness. The remedy is cost-effective and consistent with the proposed development plan.

4.0 PROPOSED SITE DEVELOPMENT PLAN

Tradepoint Atlantic is proposing to construct a parking complex and two processing buildings totaling approximately 161,000 square feet on Sub-Parcel B1-1. The proposed development of the parking facilities and buildings will include permanent improvements on approximately 115 acres of land intended for occupancy within Parcel B1 and extending into Parcels B4 and B5. The proposed future use of Sub-Parcel B1-1 is Tier 3 – Industrial. The remainder(s) of Parcels B1, B4, and B5 will be addressed in separate development plans in accordance with the requirements of the ACO that will include RADWPs, if necessary. Outside of the main development area, temporary construction zones with a total area of approximately 0.5 acres will be utilized to install the facility entrance and subgrade utilities for the project. The temporary utility work outside of the boundary of the Site is not intended to be the basis for the issuance of a NFA or a COC, although the scope of construction work is covered by this RADWP. The Site (115 acres encompassing Sub-Parcel B1-1; excluding the temporary construction zones) will be fully capped by surface engineering controls.

Certain compounds are present in the soils located near the surface and in the subsurface at concentrations in excess of the PALs. Therefore, soil is considered a potential media of concern. Potential risks to future adult workers associated with impacts to soil and groundwater exceeding the PALs will be addressed through a remedy consisting of surface engineering controls (capping of the entire area) and institutional controls (deed restrictions). The development plan provides for a containment remedy and institutional controls that will mitigate future adult workers from contacting impacted soil at the Site. In addition, Tradepoint Atlantic has proposed the use of processed slag aggregate as the primary fill material and pavement subbase at the Site. The placement of materials other than approved clean fill, including slag aggregate, requires the installation of surface engineering controls regardless of the existing soil conditions.

Future Construction Workers may contact impacted surface and/or subsurface soil during earth movement activities associated with construction activities, including within the temporary construction zones outside of the primary development area. The findings of the Construction Worker SLRA indicated that the screening level estimates of Construction Worker cancer risk for the site-specific 100-day, 90-day, and 1.5-day exposure frequencies were less than 1E-5 (the acceptable level for no further action) for EU1-EXP, EU2, and EU3, respectively. Furthermore, no HI values above 1 were identified for any target organ using the respective exposure frequencies.

Certain activities at the Site are anticipated to exceed these allowable durations, and Construction Worker risks must be mitigated to facilitate the proposed construction work. Additional site-specific health and safety requirements are warranted to be protective of workers. Upgraded PPE beyond standard Level D protection will be used in conjunction with the property-wide Health and Safety Plan (HASP) for the entire scope of work covered by this RADWP as a protective measure

to ensure that there are no unacceptable exposures for Construction Workers during project implementation. The modified Level D PPE requirements which will be applied during this project, including specific PPE details, planning, tracking/supervision, enforcement, and documentation, are outlined in the PPE SOP provided as **Appendix E**.

A restriction prohibiting the use of groundwater for any purpose at the Site will be included as an institutional control in the NFA and COC issued by the MDE, and a deed restriction prohibiting the use of groundwater will be filed. These groundwater use restrictions will protect future Composite Workers from potential exposures. Proper water management is required to prevent unacceptable discharges or risks to Construction Workers during development. Work practices and health and safety plans governing groundwater encountered during excavation activities will provide protection for Construction Workers involved with development at the Site.

The development plan for the Site is shown on **Figure 2**, and the detailed development drawings (provided by Morris and Ritchie Associates, Inc.) are included as **Appendix F**. The process of constructing the proposed parking facility and associated processing buildings will involve the tasks listed below. As-built and regulatory documentation for the outlined tasks and procedures will be provided in a Sub-Parcel B1-1 Development Completion Report.

4.1 RESPONSE PHASE – GROUNDWATER ABANDONMENTS

Permanent groundwater monitoring wells SW-060-MWS, SW-061-MWS, SW-062-MWS, SW-063-MWS, SW-068-MWS, and SW12-PZP001 were previously located inside the development boundary as shown on **Figure 9**. The listed groundwater monitoring wells were sampled during the Area B Groundwater Investigation, with the results presented and discussed in the Phase II Investigation Report. These monitoring wells have been properly abandoned in accordance with COMAR 26.04.04.34 through 36. It is understood that the agencies may require the installation of additional permanent wells in the future following site development.

Two deep industrial water supply wells were located at the Site, one of which was located in the vicinity of the B5-098-SB Response Area. During the completion of the excavation activities at B5-098-SB, the industrial water supply well in that area (Well #2A; Permit #BA-81-2741; depth of 674 feet bgs) was abandoned on May 7, 2019. The other industrial water supply well at the Site (Well #1; Permit #BA-81-2742; depth of 685 feet bgs) was abandoned several weeks later on June 19, 2019. Both locations were abandoned by A.C. Schultes in accordance with COMAR 26.04.04.34 through 36. The locations of the abandoned deep production wells are also shown on **Figure 9**, and the abandonment reports prepared by A.C. Schultes are included in **Appendix M**.

In addition, select NAPL screening piezometers were located within the LOD in the vicinity of B5-098-PZ and B5-099-PZ (including various NAPL delineation piezometers as well as B5-161-PZ). These NAPL screening piezometers are shown on **Figure 6**. B1-172-PZ was previously located within the LOD, but this location was observed to have been destroyed by vehicle traffic

or other causes (following the completion of the 30-day NAPL gauging measurement). The piezometers within the LOD were properly abandoned in accordance with COMAR 26.04.04.34 through 36. Each piezometer was gauged a final time on the abandonment date in accordance with standard methods.

The abandonment of any permitted groundwater wells must be reported to the Water Management Administration as per COMAR 26.04.04, and records of all groundwater well and piezometer abandonments (including abandonment forms, if available) will be included in the Development Completion Report.

4.2 DEVELOPMENT PHASE

4.2.1 Erosion and Sediment Control Installation

Installation of erosion and sediment controls will be completed in accordance with the requirements of the 2011 Maryland Standards and Specifications for Soil Erosion and Sediment Control prior to any construction at the Site. Any soils which are disturbed during the installation of erosion and sediment controls will be replaced on-site below the cap.

4.2.2 Grading and Site Preparation

As indicated on the development plans in **Appendix F**, grading activities including both cut and fill will occur within the Sub-Parcel B1-1 boundary. Any material that is not suitable for compaction will be excavated and replaced with subbase material, although it is not anticipated that poor soils will be encountered. Borrow materials will be obtained from MDE-approved sources and will be documented prior to transport to the Site. Processed slag aggregate sourced from the Tradepoint Atlantic property or other materials approved by the MDE for industrial use may be used as fill, but the placement of materials other than approved clean fill will necessitate that the Site will be subject to surface engineering controls (i.e., capping). Fill sources shall be free of organic material, frozen material, or other deleterious material. In the case that there is excess material (not anticipated), the spoils will be stockpiled at a suitable location in accordance with the Materials Management Plan (MMP) for the Sparrows Point Facility (Papadopulos & Associates, et al., June 17, 2015). This work will be coordinated with MDE accordingly. No excess material will leave the 3,100-acre property without prior approval from MDE.

4.2.3 Installation of Structures and Underground Utilities

The processing buildings, parking lots, and other infrastructure associated with the development of Sub-Parcel B1-1 will be installed as shown on the development plans in **Appendix F**. Soils relocated or removed during construction may be replaced on-site below the cap, but soil removed from utility trenches cannot be used as fill within the utility trenches unless such materials are approved for this use by the VCP. Additional protocols for the installation of utilities at the Site are provided in Section 5.1.2.

Any water removed will be collected to be sampled as described in Section 5.2 and, if acceptable, sent to the on-site HCWWTP. If analytical results indicate the presence of levels of contaminants exceeding levels that are acceptable for treatment at the HCWWTP (as defined in Section 5.2), the water will either be pre-treated through an on-site treatment system and retested prior to sending to the HCWWTP or will be disposed of at an appropriate off-site facility. Any water that must be removed and sent to the HCWWTP will be pumped to the nearest catch basin that discharges to the Tin Mill Canal (TMC). Any water discharged to a catch basin will be pumped through a filter bag or equivalent to remove suspended solids prior to discharge. Documentation of the catch basin(s) used shall be provided in the Development Completion Report.

4.2.4 Floor Slabs and Paving

Much of the Site will be covered with floor slabs or paving as indicated in the development plans provided in **Appendix F**. The paved areas will receive a layer of subbase material which will consist of compacted aggregate base, which may include processed slag aggregate sourced from the Tradepoint Atlantic property. The placement of processed slag aggregate or materials other than MDE-approved clean fill will necessitate that the Site will be subject to surface engineering controls (i.e., capping).

The required minimum thicknesses of all site-wide pavement sections which will serve as surface engineering controls are indicated in the general capping section details provided in **Appendix G**. According to the development plans, all paved areas at the Site will be installed with a minimum of 4 inches of compacted slag subgrade and a minimum of 4 inches of overlying pavement surface (asphalt or concrete), which meet these required minimum thicknesses.

4.2.5 Landscaping and Railway Caps

Small areas of the Site will be landscaped and may overlie areas which have been graded using processed slag aggregate as fill material. The areas marked as "Open Space" on the development plans (**Appendix F**) will be covered by landscaped caps. The required minimum thicknesses of all site-wide landscaping sections which will serve as surface engineering controls are indicated in the general capping sections provided in **Appendix G**. According to the development plans, all landscaped areas at the Site will be installed with a minimum of 6 inches of clean topsoil overlying 18 inches of clean fill, with an underlying geotextile marker fabric between the clean fill and the existing subgrade. The proposed landscape sections for the Site meet these minimum capping requirements.

As shown on the development plans (**Appendix F**), several new railways are proposed to be installed at the Site. The proposed cap sections for the two types of proposed railways, 1) track section for paved area, and 2) standard track section, are provided in **Appendix H**. The track sections in paved areas will include a minimum of 13 inches of ballast material and a minimum of 7 inches of overlying pavement surface. The standard track section will not include a paved barrier

between the surface and the ballast material; therefore, the ballast and sub-ballast material (each with a minimum thickness of 6 inches) will consist of MDE-approved clean fill materials. For any areas where landscaped caps will border railways, for example in the northeastern corner of the Site, the landscaped cap will be installed to within 12 feet of the rail centerline and will intersect with the clean sub-ballast material installed beneath the railway.

4.2.6 Stormwater Management

The proposed stormwater utility layout for the Site is provided on the development plan drawings in **Appendix F**. New stormwater infrastructure will be installed throughout the Site, and will connect to existing subgrade stormwater utilities. No permanent stormwater management ponds are proposed to be installed at the Site. Tradepoint Atlantic will work with the MDE Industrial & General Permits Division to renew the property-wide NPDES permit. A meeting has already been conducted for this purpose. The stormwater management systems for each parcel are reviewed and approved by Baltimore County for each individual development project. A full plan for the property will be designed once more parcels have been completed and there is a greater understanding of how the overall property will be developed. The agencies will be copied when the management plan is submitted.

5.0 DEVELOPMENT IMPLEMENTATION PROTOCOLS

5.1 DEVELOPMENT PHASE

This plan presents protocols for the handling of soils and fill materials in association with the development of Sub-Parcel B1-1. In particular, this plan highlights the minimum standards for construction practices and managing potentially contaminated materials to reduce potential risks to workers and the environment.

Several exceedances of the PALs were identified in soil samples across the Site. The PALs are set based on USEPA's RSLs for industrial soils, or other direct guidance from the MDE. Because PAL exceedances can present potential risks to human health and the environment at certain concentrations, this plan presents material management and other protocols to be followed during the work to adequately mitigate such potential risks for material remaining on-site during the development phase. No soils contaminated with total PCBs in excess of 50 mg/kg have been identified in Sub-Parcel B1-1. There were three soil samples in Sub-Parcel B1-1 with elevated concentrations of lead in excess of 10,000 mg/kg (B1-005-SB-8 with 16,200 mg/kg; B1-091-SB-5 with 15,000 mg/kg; and B1-132-SB-5 with 10,600 mg/kg); however, each of these sample locations has been delineated and these impacts are not expected to present an unacceptable risk to workers. As discussed in Section 3.2.3, no additional response actions are proposed with respect to lead in soil at the Site.

There were several locations within the proposed development boundary with soil exceedances of the TPH-DRO PAL (6,200 mg/kg) and/or potential indications of NAPL in the soil core (B1-172-SB, B1-178-SB, B5-098-SB, B5-099-SB, and B5-161-SB). These borings are pictured with the current development plan on **Figure 5** and should be considered with respect to utility alignments and inverts prior to trenching in these areas. The soil boring observation logs from these locations are provided for reference in **Appendix C**.

Figure 6 shows a detailed view of the NAPL delineation results in the vicinity of screening piezometers B5-098-PZ and B5-099-PZ, with respect to the planned utility alignments in the vicinity. The area containing potentially mobile NAPL was addressed via a remedial excavation, and a Response Action Completion Report dated July 12, 2019 has since been submitted following the successful implementation of the remedial excavation. The location of B5-161-PZ (which did not contain NAPL) is also shown on **Figure 6**. Additional delineation work was completed in the vicinity of B5-161-SB to identify any grossly contaminated material (i.e., NAPL) via the completion of test pits, and grossly contaminated material was not identified using field screening methods. The detailed findings from the supplemental field activities at B5-161-SB have since been reported within the Test Pitting Completion Letter dated July 12, 2019. Detailed summaries of the response activities completed in the vicinity of soil borings B5-098-SB/B5-099-SB and B5-161-SB (including supplemental figures and photograph logs) are provided in **Appendix L**. No

additional action is proposed, but soil screening will be especially important during any excavation of existing soil in these areas.

Following completion of the SLRA, the screening level estimates of Construction Worker cancer risk for the site-specific 100-day, 90-day, and 1.5-day exposure frequencies were less than 1E-5 (the acceptable level for no further action) for EU1-EXP, EU2, and EU3, respectively. Furthermore, none of the non-cancer hazards were elevated above the HI of 1 for any exposure scenario when the schedule for intrusive construction activities was limited to the respective exposure durations.

Certain activities at the Site are anticipated to exceed these allowable durations, and Construction Worker risks must be mitigated to facilitate the proposed construction work. Additional site-specific health and safety requirements are warranted to be protective of workers. Upgraded PPE beyond standard Level D protection will be used in conjunction with the property-wide HASP for the entire scope of work covered by this RADWP as a protective measure to ensure that there are no unacceptable exposures for Construction Workers during project implementation. The modified Level D PPE requirements which will be applied during this project, including specific PPE details, planning, tracking/supervision, enforcement, and documentation, are outlined in the PPE SOP provided as **Appendix E**.

Based on the characterization of surface and subsurface soils and the associated SLRA findings, surface engineering controls are an acceptable remedy to be protective of future adult Composite Workers who otherwise could potentially contact surface soil (or relocated subsurface soil) at the Site. In addition, Tradepoint Atlantic has proposed the use of processed slag aggregate as the primary fill material and pavement subbase at the Site. The placement of materials other than approved clean fill, including slag aggregate, requires the installation of surface engineering controls (i.e., capping) regardless of the existing soil conditions. The proposed capping sections will meet the required minimum thicknesses for surface engineering controls, which are provided in **Appendix G**.

5.1.1 Erosion/Sediment Control

Erosion and sediment controls will be installed prior to commencing work in accordance with the 2011 Maryland Standards and Specifications for Soil Erosion and Sediment Control. The erosion and sediment controls will be approved by the MDE. In addition, the following measures will be taken to prevent contaminated soil from exiting the Site:

- Stabilized construction entrance will be placed at site entrance.
- A dry street sweeper will be used as necessary on adjacent roads, and the swept dust will be collected and properly managed.
- Accumulated sediment removed from silt fence, and sediment traps if applicable, shall be periodically removed and returned to the Site.

5.1.2 Soil Excavation and Utility Trenching

A pre-excavation meeting shall be held to address proper operating procedures for working on-site and monitoring excavations and utility trenching in potentially contaminated material. This meeting shall include the construction manager and the Environmental Professional (EP) providing oversight on the project. During the meeting, the construction manager and the EP shall review the proposed excavation/trenching locations and any associated utility inverts. The construction manager will be responsible for conveying all relevant information regarding excavation/grading and/or utility work to the workers who will be involved with these activities.

There were several soil borings with potential evidence of NAPL identified during the previous Phase II Investigations within the development LOD (see **Figure 5** and **Appendix C**). Supplemental NAPL delineation results in the southeastern corner of the LOD (within Parcel B5) are shown with respect to planned utility installations on **Figure 6**. Because the NAPL mass appeared to extend to the alignment of a proposed stormwater utility, the area containing potentially mobile NAPL at B5-098-SB/B5-099-SB was addressed via a remedial excavation. A Response Action Completion Report dated July 12, 2019 has since been submitted following the successful implementation of the remedial excavation. Additional delineation work was also completed in the vicinity of B5-161-SB to identify any grossly contaminated material (i.e., NAPL) via the completion of test pits. The detailed findings from the supplemental field activities at B5-161-SB have since been reported within the Test Pitting Completion Letter dated July 12, 2019. Detailed summaries of the response activities completed in the vicinity of soil borings B5-098-SB/B5-099-SB and B5-161-SB (including supplemental figures and photograph logs) are provided in **Appendix L**. No additional action is proposed, but soil screening will be especially important during any excavation of existing soil in these areas. No additional response measures are proposed with respect to the remaining locations highlighted on **Figure 5**, but the NAPL Contingency Plan (discussed below) must be reviewed during the pre-excavation meeting. The HASP and PPE SOP for the project shall also be reviewed and discussed.

The EP will provide oversight of soil excavation/trenching activities as described in Section 5.6. Soil excavation/trenching will occur during various phases of construction. In general, and based on the existing sampling information, all excavated materials are expected to be suitable for replacement on the Site. However, the EP will monitor the soil excavation activities for signs of significantly contaminated material which may not be suitable for reuse (as described below).

To the extent practical, all excavation activities should be conducted in a manner to minimize double or extra handling of materials. Any stockpiles shall be kept within the Site footprint, and in a location that is not subjected to concentrated stormwater runoff. Stockpiles shall be managed as necessary to prevent the erosion and off-site migration of stockpiled materials, and in accordance with the applicable provisions of the 2011 Maryland Standards and Specifications for Soil Erosion and Sediment Control. Soil designated for replacement on-site which does not

otherwise exhibit evidence of contamination (as determined by the EP) may be managed in large stockpiles (no size restriction) as long as they remain within the erosion and sediment controls.

All utility trenches will be backfilled with bedding and backfill materials approved by the MDE for industrial use. A general utility cross section is provided as **Appendix I**. Additional preventative measures will be required if evidence of petroleum contamination is encountered, to prevent the discharge to, or migration of, petroleum product along a utility conduit. Contingency measures have been developed to ensure that utilities will be constructed in a manner that will prevent the migration of any encountered NAPL, and that excavated material will be properly managed. The Utility Excavation NAPL Contingency Plan (**Appendix J**) provides protocols to be followed if NAPL is encountered during the construction activities. Preventative measures to inhibit the spread of petroleum product will be conducted in accordance with this plan.

The EP will monitor all soil excavation and utility trenching activities for signs of potential contamination. In particular, soils will be monitored with a hand-held PID for potential VOCs, and will also be visually inspected for the presence of staining, petroleum waste materials, or other indications of significant contamination. If screening of excavated materials by the EP indicates the presence of conditions of potential concern (i.e., sustained PID readings greater than 10 ppm, visual staining, unsuitable waste materials, etc.), such materials shall be segregated for additional sampling and special management.

Excavated material exhibiting evidence of significant contamination shall be placed in stockpiles (not to exceed 500 cubic yards) on polyethylene sheeting and covered with polyethylene sheeting to minimize potential exposures and erosion when not in use. Materials stockpiled due to evidence of contamination will be sampled in accordance with waste disposal requirements and transported to an appropriate permitted disposal facility. Plans for analysis of segregated soils for any use other than disposal must be submitted to the MDE for approval.

Excavated material that is visibly impacted by NAPL will be segregated and managed in accordance with the requirements specified in the Utility Excavation NAPL Contingency Plan. Excavated material with indications of possible NAPL contamination will also be containerized or placed in a stockpile (not to exceed 500 cubic yards) on polyethylene sheeting and covered with polyethylene sheeting until the material can be analyzed for TPH/Oil & Grease and PCBs (total) to characterize the material for appropriate disposal. The MDE will be notified if such materials are encountered during excavation or utility trenching activities.

5.1.3 Soil Sampling and Disposal

Excavated materials that are determined by the EP to warrant sampling and analysis because of elevated PID readings or other indications of potential contamination shall be sampled and analyzed to determine how the materials should be managed. If excavated and stockpiled, such materials should be covered with a polyethylene tarp to minimize potential exposures and erosion.

All stockpiled soil may be considered for use as fill at this Site or on other areas of the property depending on the analytical results. A sampling Work Plan including a description of the material, estimated volume, and sampling parameters will be submitted to the MDE for approval. The resulting analytical data will be submitted to the MDE to determine the suitability of the material for reuse. If the MDE determines that the materials are unsuitable for reuse, the materials will be sampled to determine if they are classified as hazardous waste.

Soil material that is determined to be a hazardous waste shall be shipped off-site in accordance with applicable regulations to an appropriate and permitted RCRA disposal facility. Soil material may be taken to an appropriate off-site non-hazardous landfill for proper disposal if the concentrations of excavated sampled materials indicate that the materials are not hazardous, but still are not suitable for reuse. The quantities of all materials that require disposal off-site, if any, will be recorded and identified in the Development Completion Report.

5.1.4 **Fill**

Processed slag aggregate sourced from the Tradepoint Atlantic property will be used as the primary fill material for this project. The placement of processed slag aggregate or materials other than approved clean fill will necessitate that the Site will be subject to surface engineering controls (i.e., capping). Soil excavated on the sub-parcel has been determined to be suitable for re-use at the Site below the surface engineering controls, unless such materials are determined by the EP/MDE to be unsuitable for use as outlined in Section 5.1.2 and Section 5.1.3.

All over-excavated utility trenches will be backfilled with bedding and backfill approved by the MDE for industrial use. Soil removed from utility trenches cannot be used as fill within the utility trenches unless such materials are approved for this use by the VCP. As with structural fill, processed slag aggregate and other materials approved for industrial use can be used as backfill in utility trenches if the area will be covered by a VCP cap. Any utility backfill which will extend into the cap (i.e., top 2 feet of backfill in landscaped areas) must meet the VCP clean fill requirements, and a geotextile marker fabric will be placed between the VCP clean fill and any underlying material. Materials placed in areas outside of the Site boundary (i.e., within the temporary construction zones outside of Sub-Parcel B1-1) must meet the VCP clean fill requirements, or be otherwise approved by the MDE prior to placement. A general utility detail drawing is provided as **Appendix I**. Material imported to the Site will be screened according to MDE guidance for suitability.

5.1.5 **Dust Control**

General construction operations, including soil excavation and transport, and trenching for utilities will be performed at the Site. These activities are anticipated to be performed in areas of soil impacted with COPCs. Best management practices should be undertaken at the Sparrows Point property as a whole to prevent the generation of dust which could impact other areas of the property

outside of the immediate work zone. To limit worker exposure to contaminants borne on dust and windblown particulates, dust monitoring will be performed in the immediate work zone and at the upwind and downwind perimeter of the Site, and dust control measures will be implemented if warranted based on the monitoring results. The action level proposed for the purpose of determining the need for dust suppression techniques (e.g. watering and/or misting) during the development activities at the Site will be 3.0 mg/m³. The lowest of the site-specific dust action levels, OSHA PELs, and ACGIH TLV was selected as the proposed action level.

The EP will be responsible for the dust monitoring program. Air monitoring will be performed using Met One Instruments, Inc. E-Sampler dust monitors or equivalent real-time air monitoring devices. The EP will set-up dust monitoring equipment at the outset of ground intrusive work or other dust-generating activities, and continuous dust monitoring will be performed during this work. In addition to work area monitoring, a dust monitor will be placed at selected perimeter locations that will correspond to the upwind and downwind boundaries based on the prevailing wind direction predicted for that day. The prevailing wind direction will be assessed during the day, and the positions of the perimeter monitors will be adjusted if there is a substantial shift in the prevailing wind direction.

Once all dust-generating activities are complete (which may occur at a later stage of the project once ground intrusive work has been completed or after the Site has been capped), the dust monitoring program may be discontinued. If additional dust-generating activities commence, additional dust monitoring activities will be performed.

If sustained dust concentrations exceed the action level (3.0 mg/m³) at any of the monitoring locations as a result of conditions occurring at the Site, operations will be stopped temporarily until dust suppression can be implemented. Operations may be resumed once monitoring indicates that dust concentrations are below the action level. The background dust concentration will be utilized to evaluate whether Site activities are the source of the action level exceedance. The background dust concentration will be based on measurements over a minimum of a 1-hour period at the upwind Site boundary. The upwind data will be used to calculate a time weighted average background dust concentration. As noted above, the locations of the perimeter dust monitors may be adjusted periodically if there is a substantial shift in the prevailing wind direction.

As applicable, air monitoring will be conducted during development implementation activities to assess levels of exposure to Site workers, establish that the work zone designations are valid, and verify that respiratory protection being worn by personnel, if needed, is adequate. Concurrent with the work zone air monitoring, perimeter air monitoring will also be performed at the upwind and downwind Site boundaries to ensure contaminants are not migrating off-site. The concentration measured at the downwind perimeter shall not exceed the action level of 3.0 mg/m³, unless caused by background dust from upwind of the Site. If exceedances of the action level are identified downwind for more than five minutes, the background dust concentration shall be evaluated to

determine whether the action level exceedances are attributable to Site conditions. If on-site activities are the source of the exceedances, dust control measures and additional monitoring will be implemented. The dust suppression measures may include wetting or misting using a hose connected to a water supply or a water truck stationed at the Site.

Dust control measures will be implemented as described above to address dust generated as a result of construction activities conducted at the Site. However, based on the nature of the area and/or on-going activities surrounding the Site, it is possible that windblown particulates may come from surrounding areas. As discussed above, the dust concentration in the upwind portion of the Site will be considered when monitoring dust levels in the work area. A pre-construction meeting will be held to discuss the potential of windblown particulates from other activities impacting the air monitoring required for this RADWP. Site contact information will be provided to address the possibility of upwind dust impacts. If dust is observed above the action level (3.0 mg/m^3) and it is believed to originate from off-site (i.e., upwind) sources, this will immediately be reported to the MDE-VCP project team, as well as the MDE Air and Radiation Administration (ARA).

5.2 WATER MANAGEMENT

This plan presents the protocols for handling any groundwater or surface water that needs to be removed to facilitate construction of the proposed Sub-Parcel B1-1 development.

5.2.1 Groundwater PAL Exceedances

A total of 17 shallow groundwater samples (as shown on **Figure 4**) were collected during the preceding Phase II Investigations from temporary groundwater sample collection points and permanent monitoring wells within and surrounding the Site. Aqueous PAL exceedances in shallow groundwater in the vicinity of the development LOD included both inorganic and organic compounds. The aqueous PAL exceedances that are relevant for this RADWP obtained during the Area B Groundwater Investigation and Parcel B17 Phase II Investigation are summarized on **Figure GW1** through **Figure GW4**. Additional groundwater samples were also collected from the temporary piezometer B5-161-PZ during supplemental test pitting activities in this area, and these groundwater sampling data are provided in **Table 6** with PAL exceedances shown on **Figure 7**. While the concentrations of PAL exceedances are not deemed to be a significant human health hazard since there is no on-site groundwater use, proper water management is required to prevent unacceptable discharges or risks to on-site workers.

5.2.2 Dewatering

Dewatering may be necessary during the installation of underground utilities and within excavations/trenches. If dewatering is required, it shall be done in accordance with all local, state, and federal regulations. Water that collects in excavations/trenches due to intrusion of groundwater, stormwater, and/or dust control waters will be transported to the HCWWTP. The

water will be treated and discharged in accordance with NPDES Permit No. 90-DP-0064A; I. Special Conditions; A.4; Effluent Limitations and Monitoring Requirements.

Any water that must be removed and sent to the HCWWTP will be pumped to the nearest catch basin that discharges to the TMC. Water in the TMC feeds into the HCWWTP where it is treated prior to release into Bear Creek. Any water discharged to a catch basin will be pumped through a filter bag or equivalent to remove suspended solids prior to discharge. A figure is not being provided at this time as the specific discharge location for dewatering fluids may change during development as conditions dictate. Documentation of the catch basin(s) used shall be provided in the Development Completion Report.

The EP will inspect any water that collects in the excavations/trenches. If the water exhibits indications of significant contamination (sheen, odor, discoloration, presence of product), or if the excavation/trench is within a known area of significant groundwater contamination (if groundwater is the source of the intrusive water) or a significant Phase II Investigation target, the water may be sampled and analyzed for some or all of the analyses listed below. The analyses run will be dependent on the suspected source of contamination and local site conditions.

The results of the analyses will be reviewed by the HCWWTP operator to determine if any wastewater treatment system adjustments are necessary. If the results of the analyses are above the threshold levels listed below, the water will be further evaluated to confirm acceptable treatment at the HCWWTP, or will be evaluated to design an appropriate pre-treatment option. Alternatively, the water may be disposed of at an appropriate off-site facility.

Analysis	Threshold Levels
• Total metals by USEPA Method 6020A	1,000 ppm
• PCBs by USEPA Method 8082	>Non-Detect
• SVOCs by USEPA Method 8270C	1 ppm
• VOCs by USEPA Method 8260B	1 ppm
• Oil & Grease by USEPA Method 1664	200 ppm

Documentation of any water testing, as well as the selected disposal option, will be reported to the MDE in the Development Completion Report. Any permits or permit modifications related to dewatering will be provided to the agencies as addenda to this RADWP.

5.3 HEALTH AND SAFETY

A property-wide Health and Safety Plan (HASP provided as **Appendix K**) has been developed and is attached to this plan to present the minimum requirements for worker health and safety protection for all development projects. All contractors working on the Site must prepare their

own HASP that provides a level of protection at least as much as that provided by the attached HASP. Alternately, on-site contactors may elect to adopt the HASP provided.

General health and safety controls (level D protection) would be adequate to mitigate any potential risk to Construction Workers for a duration of up to 100 exposure days in EU1-EXP, 90 exposure days in EU2, and 1.5 exposure days in EU3. However, certain activities at the Site (utility installations for specific crews) are anticipated to exceed these allowable durations. Modified Level D PPE will be used for the entire scope of work covered by this RADWP as an additional protective measure to ensure that there are no unacceptable exposures for Construction Workers during project implementation. Health and safety controls outlined in the property-wide HASP and PPE SOP will mitigate any potential risk to Construction Workers from contacting impacted soil and groundwater during development. The modified Level D PPE requirements planned for this development project, including specific PPE details, planning, tracking/supervision, enforcement, and documentation, are outlined in the PPE SOP provided as **Appendix E**.

Prior to commencing work, the contractor must conduct an on-site safety meeting for all personnel. All personnel must be made aware of the HASP and the PPE SOP. Detailed safety information shall be provided to personnel who may be exposed to COPCs. Workers will be responsible for following established safety procedures to prevent contact with potentially contaminated material.

5.4 INSTITUTIONAL CONTROLS (FUTURE LAND USE CONTROLS)

Long-term conditions related to future use of the Site will be placed on the RADWP approval, NFA, and COC. These conditions are anticipated to include the following:

- A restriction prohibiting the use of groundwater for any purpose at the Site and a requirement to characterize, containerize, and properly dispose of groundwater in the event of deep excavations encountering groundwater. The entire Tradepoint Atlantic property will be subject to the groundwater use restriction.
- Notice to the MDE and USEPA at least 30 days prior to any future soil disturbances if the proposed duration of intrusive activity exposure would exceed the allowable duration determined in the SLRA for that EU, unless the contractor is proposing to use the upgraded modified Level D PPE specified in the approved SOP.
- Requirement for a HASP in the event of any future excavations at the Site.
- Complete appropriate characterization and disposal of any future material excavated at the Site in accordance with applicable local, state and federal requirements.
- Implementation of inspection procedures and maintenance of the containment remedies.

The responsible party will file the above deed restrictions as defined by the MDE-VCP in the NFA and COC. The Tenant will be required to sign onto the Environmental Covenant with restriction in the NFA. Tradepoint Atlantic will notify the Tenant of this requirement and will provide MDE with contact information for the Tenant prior to issuance of the NFA.

5.5 POST REMEDIATION REQUIREMENTS

Post remediation requirements will include compliance with the conditions specified in the NFA, COC, and the deed restrictions recorded for the Site. Deed restrictions will be recorded within 30 days after receipt of the final NFA. In addition, the MDE and USEPA will be provided with a written notice at least 30 days prior to any future soil disturbances if the proposed duration of intrusive activity exposure would exceed the allowable duration determined in the SLRA for that EU (unless the contractor is proposing to use the upgraded modified Level D PPE specified in the approved SOP). Written notice of planned excavation activities will include the proposed date(s) for the excavation, location of the excavation, health and safety protocols (as required), clean fill source (as required), and proposed characterization and disposal requirements.

Additional requirements will include inspection procedures and maintenance of the containment remedies to minimize degradation which could lead to future exposures. An Operations and Maintenance Plan (O&M Plan) will be submitted in the future for MDE approval, and will include long-term inspection and maintenance requirements for the capping remedies installed at the Site. The responsible party will perform cap inspections, perform maintenance of the cap, and retain cap inspection records, as required by the O&M Plan.

5.6 CONSTRUCTION OVERSIGHT

Construction Oversight by an EP will ensure and document that the project is built as designed and appropriate environmental and safety protocols are followed. Upon completion, the EP will certify that the project is constructed in accordance with this RADWP.

The EP will monitor all soil excavation/trenching activities for signs of potential contamination that may not have been previously identified. In particular, soils will be monitored with a hand-held PID for potential VOCs, and will also be visually inspected for staining, petroleum waste materials, or other indications of significant contamination. If screening of excavated materials by the EP indicates the presence of conditions of potential concern (i.e., sustained PID readings greater than 10 ppm, visual staining, unsuitable waste materials, etc.), such materials shall be segregated for additional sampling and special management (as described in Section 5.1.2; Soil Excavation and Utility Trenching). The EP will also perform routine periodic breathing zone monitoring and PPE spot checks during ground intrusive activities. The EP will also inspect any water that collects in the excavations/trenches on an as-needed basis to coordinate appropriate sampling prior to disposal (as described in Section 5.2.2; Dewatering).

Daily inspections, as necessary, will be performed during general site grading and cap construction activities to verify that appropriate fill materials are being used (as described in Section 5.1.4; Fill), dust monitoring and control measures are being implemented as appropriate (as described in Section 5.1.5; Dust Control), the requirements of the HASP and the PPE SOP are being enforced as applicable (as described in Section 5.3; Health and Safety), and surface engineering controls are being installed with the appropriate minimum thicknesses (shown on the RADWP attachments). Oversight by an EP will not be required during construction activities which do not have a significant environmental component, such as above-grade building construction.

Records shall be provided by the EP to document:

- Compliance with soil screening requirements
- Proper water management, including documentation of any testing and water disposal
- Observations of construction activities during site grading and cap construction
- Proper cap thickness and construction

6.0 PERMITS, NOTIFICATIONS AND CONTINGENCIES

The participant and their contractors will comply with all local, state, and federal laws and regulations by obtaining any necessary approvals and permits to conduct the activities contained herein. Any permits or permit modifications from State or local authorities will be provided as addenda to this RADWP.

A grading permit is required if the proposed grading disturbs over 5,000 square feet of surface area or over 100 cubic yards of earth. A grading permit is required for any grading activities in any watercourse, floodplain, wetland area, buffers (stream and within 100 feet of tidal water), habitat protection areas or forest buffer areas (includes forest conservation areas). Erosion and Sediment Control Plans will be submitted to, and approved by, the MDE prior to initiation of land disturbance for development.

There are no wetlands identified within the project area and no work will be performed beyond the shoreline, so no permits are required from the MDE Water Resources Administration.

Contingency measures will include the following:

1. The MDE will be notified immediately of any previously undiscovered contamination, previously undiscovered storage tanks and other oil-related issues, and citations from regulatory entities related to health and safety practices.

2. Any significant change to the implementation schedule will be noted in the progress reports to MDE.

3. General health and safety controls (level D protection) would be adequate to mitigate any potential risk to Construction Workers during development for a duration of up to 100 days, 90 days, and 1.5 days for EU1-EXP, EU2, and EU3, respectively. However, certain activities at the Site are anticipated to exceed these allowable durations. Therefore, additional site-specific health and safety requirements are warranted to be protective of workers. Upgraded PPE beyond standard Level D protection will be used for the entire scope of work covered by this RADWP as a protective measure to ensure that there are no unacceptable exposures for Construction Workers during project implementation. The modified Level D PPE requirements which will be applied during this project, including specific PPE details, planning, tracking/supervision, enforcement, and documentation, are outlined in the PPE SOP provided as **Appendix E**. If it is not possible to implement the PPE SOP as provided, the agencies will be notified and a RADWP Addendum will be submitted which details procedures to be undertaken to mitigate the potential risk to Construction Workers.

7.0 IMPLEMENTATION SCHEDULE

Progress reports will be submitted to the MDE on a quarterly basis. Each quarterly progress report will include, at a minimum, a discussion of the following information regarding tasks completed during the specified quarter:

- Development Progress
- Dust monitoring
- Water Management
- Soil Management (imported materials, screening, stockpiling)
- Soil Sampling and Disposal
- Notable Occurrences (if applicable)
- Additional Associated Work (if applicable)

The proposed implementation schedule is shown below:

Task	**Proposed Completion Date**
Anticipated RADWP Approval(s)	July 30, 2019 (approved to proceed with work) September 13, 2019 (final RADWP approval)

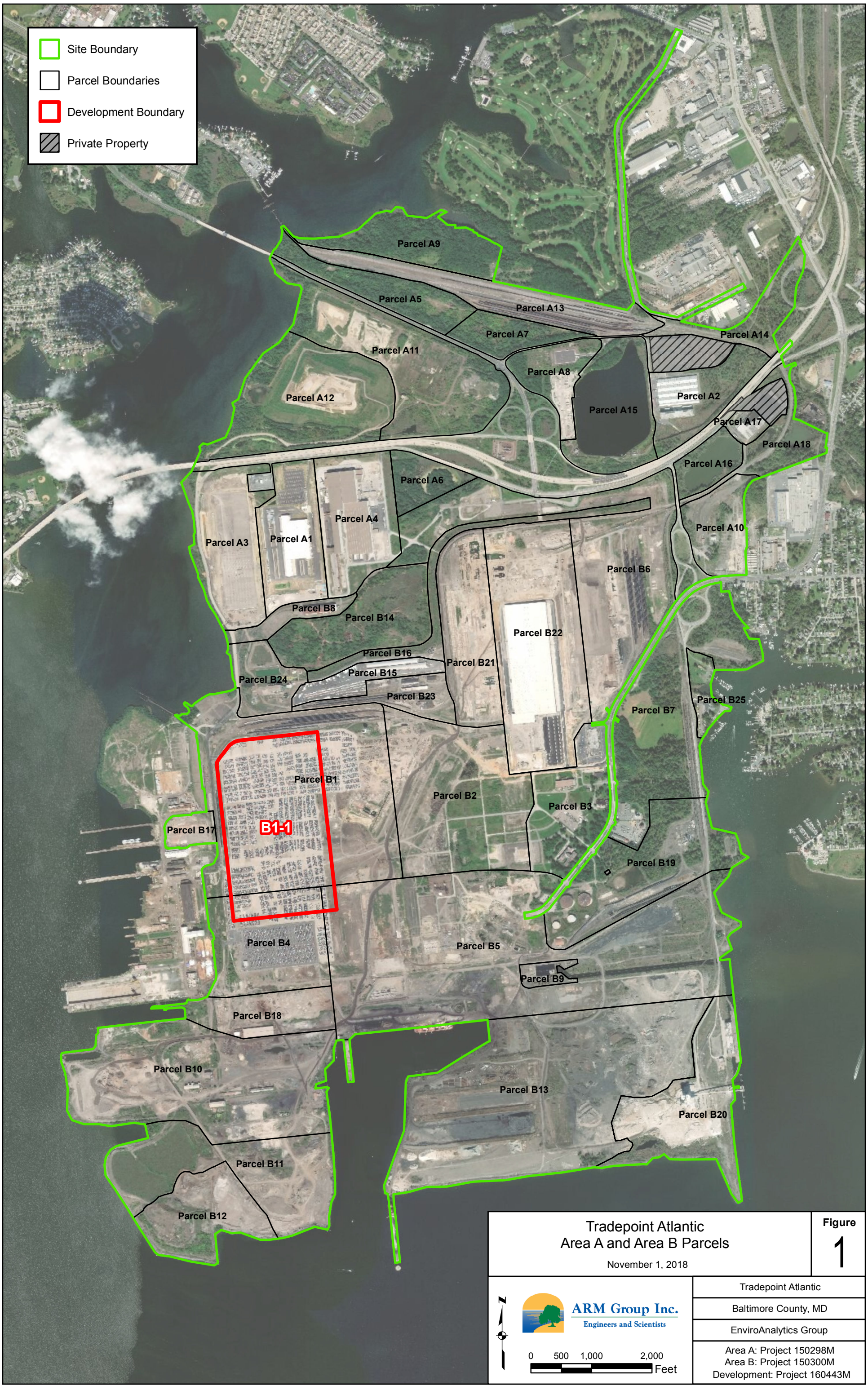
Task	**Proposed Completion Date**
Industrial Well Abandonment	May 2019
Monitoring Well Abandonments	June 2019

Task	**Proposed Completion Date**
Erosion and Sediment Control Installation	August 2019
Building Pad Construction	October 2019
Utility Installations:	
Domestic Water/Fire Loop	October 2019
Sanitary	October 2019
Stormwater	October 2019

Parking Area Grading Completion	May 2020
Shell Completion	December 2020
Submittal of Development Completion Report/ Notice of Completion of Remedial Actions*	April 2021
Request for NFA from the MDE	May 2021
Recordation of institutional controls in the land records office of Baltimore County	Within 30 days of receiving the approval of NFA from the MDE
Submit proof of recordation with Baltimore County	Upon receipt from Baltimore County

*Notice of Completion of Remedial Actions will be prepared by Professional Engineer registered in Maryland and submitted with the Development Completion Report to certify that the work is consistent with the requirements of this RADWP and the Site is suitable for occupancy and use.

FIGURES


Site Boundary
Parcel Boundaries
Development Boundary
Private Property
Parcel A9
Parcel A5
Parcel A13
Parcel A7
Parcel A14
Parcel A11
Parcel A8
Parcel A12
Parcel A15
Parcel A2
Parcel A17
Parcel A18
Parcel A16
Parcel A6
Parcel A4
Parcel A3
Parcel A1
Parcel A10
Parcel B6
Parcel B8
Parcel B14
Parcel B22
Parcel B16
Parcel B21
Parcel B15
Parcel B24
Parcel B23
Parcel B25
Parcel B7
Parcel B1
B1-1
Parcel B2
Parcel B3
Parcel B17
Parcel B19
Parcel B4
Parcel B5
Parcel B9
Parcel B18
Parcel B10
Parcel B13
Parcel B20
Parcel B11
Parcel B12
Tradepoint Atlantic
Area A and Area B Parcels
November 1, 2018
Figure
1
N
ARM Group Inc.
Engineers and Scientists
0 500 1,000 2,000
Feet
Tradepoint Atlantic
Baltimore County, MD
EnviroAnalytics Group
Area A: Project 150298M
Area B: Project 150300M
Development: Project 160443M

Parcel B1

Parcel B17

B1-1

Parcel B4

Parcel B5

Development Boundary

Additional Construction Worker Area

Parcel Boundary

Sub-Parcel B1-1
Proposed Development Area

February 25, 2019

Figure 2

ARM Group Inc.
Engineers and Scientists

0 125 250 500 Feet

Tradepoint Atlantic

Baltimore County, MD

EnviroAnalytics Group

ARM Project 160443M-18

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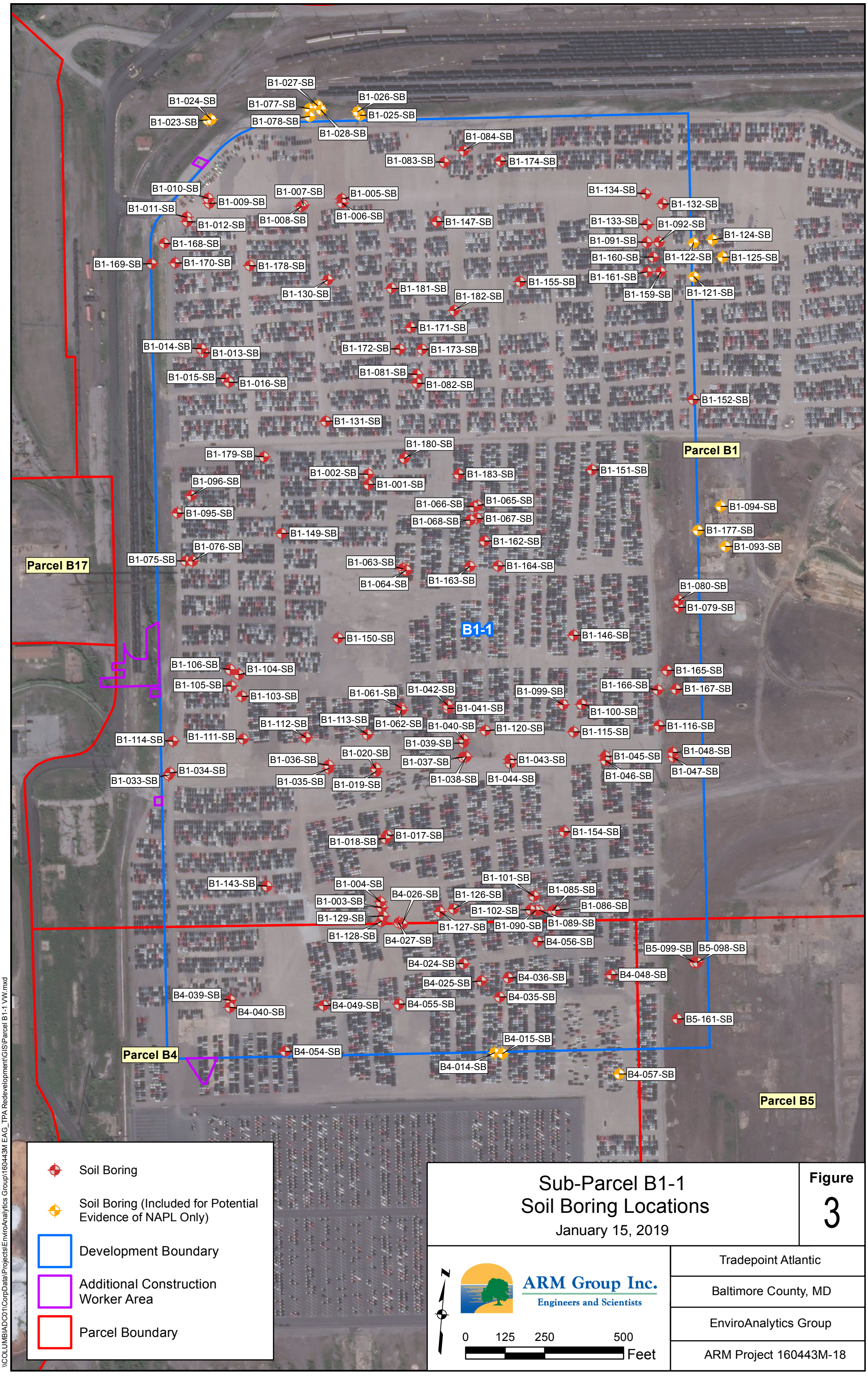

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B1-084-SB-1
B1-084-SB-4
B1-083-SB-1
B1-174-SB-1
B1-174-SB-4
B1-134-SB-1
B1-134-SB-5
B1-132-SB-1
Benzo[a]pyrene: 5.0 J
B1-132-SB-5
B1-005-SB-1
B1-005-SB-8
B1-010-SB-1
B1-010-SB-5
B1-009-SB-1
B1-009-SB-5
B1-008-SB-1
B1-008-SB-7.5
B1-006-SB-1
B1-006-SB-5
B1-007-SB-1
B1-007-SB-5
B1-011-SB-1
B1-011-SB-7
B1-012-SB-1
B1-012-SB-9
B1-147-SB-1
B1-147-SB-5
B1-133-SB-1
B1-133-SB-5
B1-092-SB-1
B1-092-SB-5
B1-091-SB-1
B1-091-SB-5
B1-168-SB-1
B1-168-SB-5
B1-160-SB-1
B1-160-SB-5
B1-169-SB-1
B1-169-SB-5
B1-170-SB-1
B1-178-SB-1
B1-130-SB-1
Benzo[a]pyrene: 2.8
B1-130-SB-9
B1-181-SB-1
Benzo[a]pyrene: 6.8 J
B1-181-SB-8
B1-155-SB-1
B1-155-SB-5
B1-159-SB-1
Benzo[a]pyrene: 2.3 J
B1-159-SB-5
B1-161-SB-1
B1-182-SB-1
B1-182-SB-8
B1-182-SB-10
B1-014-SB-1
B1-014-SB-5
Benzo[a]pyrene: 3.1 J
B1-014-SB-10
B1-171-SB-1
B1-173-SB-1
B1-173-SB-8
B1-172-SB-1
Benzo[a]pyrene: 2.8
B1-172-SB-4
B1-013-SB-1
B1-013-SB-9
B1-081-SB-1
B1-081-SB-4.5
B1-015-SB-1
B1-015-SB-9
B1-016-SB-1
B1-016-SB-5
B1-082-SB-1
B1-082-SB-5
B1-1-1
B1-152-SB-1
B1-152-SB-4
Benzo[a]pyrene: 5.5
B1-131-SB-1
B1-131-SB-4
B1-179-SB-1
B1-179-SB-9
B1-180-SB-1
B1-002-SB-1
B1-002-SB-9
B1-183-SB-1
B1-183-SB-8.5
B1-151-SB-1
Benzo[a]pyrene: 7.2 J
Benzo[b]fluoranthene: 21.2 J
B1-151-SB-5
Parcel B1
B1-096-SB-1
B1-096-SB-4
B1-096-SB-10
B1-001-SB-1
B1-001-SB-9
B1-066-SB-1
B1-066-SB-9
B1-065-SB-1
B1-065-SB-4
B1-095-SB-1
B1-095-SB-4
B1-068-SB-1
B1-067-SB-1
B1-067-SB-9
B1-149-SB-1
B1-162-SB-1
B1-162-SB-4
Parcel B17
B1-076-SB-1
B1-076-SB-4
Benzo[a]pyrene: 15.5
Benzo[b]fluoranthene: 27.9
Dibenz[a,h]anthracene: 3.1
B1-076-SB-10
B1-063-SB-1
B1-063-SB-5
B1-163-SB-1
B1-163-SB-4
Benzo[a]pyrene: 2.7 J
B1-163-SB-10
B1-164-SB-1
B1-164-SB-4
B1-075-SB-1
B1-075-SB-4
B1-075-SB-10
B1-064-SB-1
B1-064-SB-5
B1-080-SB-1
B1-080-SB-4
B1-079-SB-1
B1-079-SB-5
B1-146-SB-1
Benzo[a]pyrene: 2.5
B1-146-SB-5
B1-150-SB-1
B1-150-SB-8
B1-165-SB-1
Benzo[a]pyrene: 4.5
B1-165-SB-9.5
B1-106-SB-1
B1-106-SB-5
B1-104-SB-1
B1-104-SB-5
B1-167-SB-1
B1-167-SB-5
Benzo[a]pyrene: 3.1
B1-105-SB-1
B1-105-SB-5
B1-103-SB-1
B1-103-SB-5
B1-061-SB-1
B1-061-SB-7
B1-042-SB-1
B1-042-SB-5
B1-099-SB-1
B1-099-SB-5
B1-166-SB-9
B1-100-SB-1
B1-100-SB-5
B1-116-SB-1
B1-116-SB-5
B1-041-SB-1
B1-041-SB-8
B1-062-SB-1
B1-062-SB-6
B1-113-SB-1
B1-113-SB-5
Benzo[a]pyrene: 2.7
B1-112-SB-1
B1-112-SB-5
B1-111-SB-1
B1-111-SB-4
B1-040-SB-1
Benzo[a]pyrene: 2.3 J
B1-040-SB-5
B1-120-SB-1
B1-115-SB-1
Benzo[a]pyrene: 3.3 J
B1-048-SB-1
Benzo[a]pyrene: 3.2 J
B1-048-SB-7
B1-114-SB-1
B1-039-SB-1
B1-039-SB-5
B1-043-SB-1
B1-043-SB-5
B1-045-SB-1
B1-045-SB-5
B1-046-SB-1
B1-046-SB-6
B1-034-SB-1
B1-034-SB-4
B1-036-SB-1
B1-036-SB-4
B1-020-SB-1
B1-020-SB-5
B1-037-SB-1
B1-037-SB-5
B1-037-SB-10
B1-038-SB-1
B1-038-SB-5
B1-044-SB-1
B1-044-SB-5
Benzo[a]pyrene: 2.5
B1-047-SB-1
B1-047-SB-5
Benz[a]anthracene: 25.3
Benzo[a]pyrene: 16.0
Benzo[b]fluoranthene: 37.9
B1-047-SB-10
B1-033-SB-1
B1-033-SB-4
B1-035-SB-1
B1-035-SB-5
B1-019-SB-1
B1-019-SB-5
B1-017-SB-1
B1-017-SB-5
B1-154-SB-1
B1-154-SB-5
B1-018-SB-1
B1-018-SB-5
B1-143-SB-1
B1-143-SB-4.5
B1-101-SB-1
B1-101-SB-5
B1-004-SB-1
B1-004-SB-5
B1-127-SB-1
B1-127-SB-6
B1-102-SB-1
B1-102-SB-4.5
B1-085-SB-1
B1-129-SB-1
B1-129-SB-5
B1-086-SB-1
B1-086-SB-5
B1-003-SB-1
B1-003-SB-5
B1-126-SB-1
B1-090-SB-1
B1-090-SB-6
B1-089-SB-1
B1-128-SB-1
B4-026-SB-1
B4-026-SB-5
B4-027-SB-1
B4-027-SB-5
B4-056-SB-1.5
B4-056-SB-7.5
Benz[a]anthracene: 40.2
Benzo[a]pyrene: 23.9
Benzo[b]fluoranthene: 41.0
Dibenz[a,h]anthracene: 5.1
B5-099-SB-1
B5-099-SB-4.5
Benzo[a]pyrene: 3.6 J
B4-024-SB-1
B4-024-SB-4.5
B4-036-SB-1
B4-036-SB-5
B5-098-SB-1
B5-098-SB-4
Benzo[a]pyrene: 9.4
Dibenz[a,h]anthracene: 2.3
B4-048-SB-1
B4-048-SB-5
B4-048-SB-10
B4-025-SB-1
B4-025-SB-5
B4-039-SB-1
B4-039-SB-5
B4-049-SB-1
B4-049-SB-4.5
B4-055-SB-1
B4-055-SB-5
B4-035-SB-1
B4-035-SB-5
B4-040-SB-1
Benzo[a]pyrene: 2.5
B4-040-SB-5
B5-161-SB-1
Benz[a]anthracene: 279
Benzo[a]pyrene: 158
Benzo[b]fluoranthene: 521
Benzo[k]fluoranthene: 270
Dibenz[a,h]anthracene: 25.2
Indeno[1,2,3-c,d]pyrene: 75.3
B5-161-SB-4
Benz[a]anthracene: 290
Benzo[a]pyrene: 215
Benzo[b]fluoranthene: 307
Dibenz[a,h]anthracene: 44.6
Indeno[1,2,3-c,d]pyrene: 122
Naphthalene: 54.4
B5-161-SB-10
B4-054-SB-1
B4-054-SB-6
Parcel B4
Parcel B5

Soil Boring
Development Boundary
Additional Construction Worker Area
Parcel Boundary

Sub-Parcel B1-1
SVOC Soil PAL Exceedances (mg/kg)
January 15, 2019

Figure
S1

ARM Group Inc.
Engineers and Scientists

0 100 200 400 Feet

Tradepoint Atlantic
Baltimore County, MD
EnviroAnalytics Group
ARM Project 160443M-18

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B1-084-SB-1
Aroclor 1260: 6.77
PCBs (total): 6.77
B1-083-SB-1
B1-174-SB-1
B1-134-SB-1
B1-132-SB-1
PCBs (total): 1.172
B1-010-SB-1
B1-009-SB-1
B1-007-SB-1
B1-008-SB-1
B1-005-SB-1
B1-006-SB-1
B1-011-SB-1
B1-012-SB-1
B1-147-SB-1
B1-133-SB-1
PCBs (total): 1.174
B1-092-SB-1
B1-091-SB-1
B1-168-SB-1
B1-160-SB-1
B1-169-SB-1
B1-170-SB-1
B1-178-SB-1
B1-159-SB-1
PCBs (total): 1.262
B1-130-SB-1
B1-181-SB-1
B1-155-SB-1
B1-161-SB-1
B1-182-SB-1
B1-171-SB-1
B1-014-SB-1
B1-172-SB-1
B1-013-SB-1
B1-172-SB-4
B1-173-SB-1
B1-081-SB-1
B1-015-SB-1
PCBs (total): 1.498
B1-016-SB-1
B1-082-SB-1
B1-152-SB-1
B1-131-SB-1
B1-180-SB-1
B1-179-SB-1
Parcel B1
B1-002-SB-1
B1-183-SB-1
B1-151-SB-1
B1-096-SB-1
B1-001-SB-1
PCBs (total): 1.176
B1-066-SB-1
B1-065-SB-1
B1-095-SB-1
B1-068-SB-1
B1-067-SB-1
B1-149-SB-1
PCBs (total): 2.23
B1-162-SB-1
B1-063-SB-1
Aroclor 1260: 2.43
PCBs (total): 2.43
B1-164-SB-1
Aroclor 1260: 1.08
PCBs (total): 1.59
Parcel B17
B1-075-SB-1
B1-076-SB-1
B1-163-SB-1
B1-064-SB-1
Aroclor 1260: 1.0
PCBs (total): 1.0
B1-080-SB-1
B1-079-SB-1
B1-1
B1-146-SB-1
Aroclor 1254: 1.01
PCBs (total): 1.328
B1-150-SB-1
B1-106-SB-1
B1-165-SB-1
B1-104-SB-1
B1-167-SB-1
Aroclor 1260: 2.15
PCBs (total): 2.15
B1-105-SB-1
B1-061-SB-1
B1-042-SB-1
B1-103-SB-1
B1-062-SB-1
PCBs (total): 2.433
B1-041-SB-1
B1-099-SB-1
B1-100-SB-1
B1-111-SB-1
B1-112-SB-1
B1-113-SB-1
B1-040-SB-1
B1-120-SB-1
B1-116-SB-1
B1-114-SB-1
B1-039-SB-1
PCBs (total): 1.674
B1-115-SB-1
B1-048-SB-1
B1-020-SB-1
B1-043-SB-1
B1-034-SB-1
Aroclor 1254: 3.16
PCBs (total): 4.22
B1-036-SB-1
B1-037-SB-1
B1-045-SB-1
B1-047-SB-1
B1-033-SB-1
B1-035-SB-1
B1-038-SB-1
B1-044-SB-1
B1-046-SB-1
B1-019-SB-1
PCBs (total): 18.4
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B1-154-SB-1
B1-018-SB-1
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B1-004-SB-1
B1-101-SB-1
B1-085-SB-1
B1-127-SB-1
B1-003-SB-1
B1-126-SB-1
B1-086-SB-1
B1-129-SB-1
B4-026-SB-1
B1-102-SB-1
B1-089-SB-1
B1-128-SB-1
B4-027-SB-1
B4-056-SB-1.5
B5-099-SB-1
B5-098-SB-1
B4-024-SB-1
B4-036-SB-1
B4-048-SB-1
B4-025-SB-1
B4-039-SB-1
B4-035-SB-1
B4-040-SB-1
B4-049-SB-1
B4-055-SB-1
Aroclor 1260: 1.05
PCBs (total): 1.49
B5-161-SB-1
Parcel B4
B4-054-SB-1
Parcel B5

Soil Boring
Development Boundary
Additional Construction Worker Area
Parcel Boundary

Sub-Parcel B1-1
PCB Soil PAL Exceedances (mg/kg)

February 25, 2019

Figure
S2

ARM Group Inc.
Engineers and Scientists

0 125 250 500 Feet

Tradepoint Atlantic
Baltimore County, MD
EnviroAnalytics Group
ARM Project 160443M-18

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B1-084-SB-1
B1-084-SB-4
B1-083-SB-1
B1-174-SB-1
B1-174-SB-4
B1-010-SB-1
B1-010-SB-5
B1-009-SB-1
B1-009-SB-5
B1-007-SB-1
B1-007-SB-5
B1-005-SB-1
B1-005-SB-8
B1-008-SB-1
B1-008-SB-7.5
B1-006-SB-1
B1-006-SB-5
B1-011-SB-1
B1-011-SB-7
B1-012-SB-1
B1-012-SB-9
B1-147-SB-1
B1-147-SB-5
B1-134-SB-1
B1-134-SB-5
B1-132-SB-1
B1-132-SB-5
B1-133-SB-1
B1-133-SB-5
B1-091-SB-1
B1-091-SB-5
B1-092-SB-1
B1-092-SB-5
B1-160-SB-1
B1-160-SB-5
B1-159-SB-1
B1-159-SB-5
B1-161-SB-1
B1-168-SB-1
B1-168-SB-5
B1-169-SB-1
B1-169-SB-5
B1-170-SB-1
B1-178-SB-1
B1-130-SB-1
B1-130-SB-9
B1-181-SB-1
B1-181-SB-8
B1-155-SB-1
B1-155-SB-5
B1-182-SB-1
B1-182-SB-8
B1-014-SB-1
B1-014-SB-5
B1-014-SB-10
B1-013-SB-1
B1-013-SB-9
B1-172-SB-1
B1-172-SB-4
DRO: 8,000
B1-172-SB-10
B1-171-SB-1
B1-173-SB-1
B1-173-SB-8
B1-081-SB-1
B1-081-SB-4.5
B1-082-SB-1
B1-082-SB-5
B1-015-SB-1
B1-015-SB-9
B1-016-SB-1
B1-016-SB-5
B1-131-SB-1
B1-131-SB-4
B1-152-SB-1
B1-152-SB-4
B1-179-SB-1
B1-179-SB-9
B1-180-SB-1
B1-002-SB-1
B1-002-SB-9
B1-001-SB-1
B1-001-SB-9
B1-183-SB-1
B1-183-SB-8.5
B1-151-SB-1
B1-151-SB-5
B1-096-SB-1
B1-096-SB-4
B1-095-SB-1
B1-095-SB-4
B1-066-SB-1
B1-066-SB-9
B1-065-SB-1
B1-065-SB-4
B1-067-SB-1
B1-067-SB-9
B1-068-SB-1
B1-149-SB-1
B1-162-SB-1
B1-162-SB-4
B1-075-SB-1
B1-075-SB-4
B1-076-SB-1
B1-076-SB-4
B1-063-SB-1
B1-063-SB-5
B1-163-SB-1
B1-163-SB-4
B1-163-SB-10
B1-164-SB-1
B1-164-SB-4
B1-064-SB-1
B1-064-SB-5
B1-080-SB-1
B1-080-SB-4
B1-079-SB-1
B1-079-SB-5
B1-150-SB-1
B1-150-SB-8
B1-146-SB-1
B1-146-SB-5
B1-106-SB-1
B1-106-SB-5
B1-104-SB-1
B1-104-SB-5
B1-165-SB-1
B1-165-SB-9.5
B1-105-SB-1
B1-105-SB-5
B1-103-SB-1
B1-103-SB-5
B1-061-SB-1
B1-061-SB-7
B1-042-SB-1
B1-042-SB-5
B1-166-SB-9
B1-167-SB-1
B1-167-SB-5
B1-062-SB-1
B1-062-SB-6
B1-041-SB-1
B1-041-SB-8
B1-099-SB-1
B1-099-SB-5
B1-100-SB-1
B1-100-SB-5
B1-116-SB-1
B1-116-SB-5
B1-112-SB-1
B1-112-SB-5
B1-113-SB-1
B1-113-SB-5
B1-120-SB-1
B1-115-SB-1
B1-114-SB-1
B1-111-SB-1
B1-111-SB-4
B1-040-SB-1
B1-040-SB-5
B1-039-SB-1
B1-039-SB-5
B1-043-SB-1
B1-043-SB-5
B1-045-SB-1
B1-045-SB-5
B1-048-SB-1
B1-048-SB-7
B1-020-SB-1
B1-020-SB-5
B1-036-SB-1
B1-036-SB-4
B1-035-SB-1
B1-035-SB-5
B1-037-SB-1
B1-037-SB-5
B1-038-SB-1
B1-038-SB-5
B1-044-SB-1
B1-044-SB-5
B1-046-SB-1
B1-046-SB-6
B1-047-SB-1
B1-047-SB-5
B1-033-SB-1
B1-033-SB-4
B1-034-SB-1
B1-034-SB-4
B1-019-SB-1
B1-019-SB-5
B1-017-SB-1
B1-017-SB-5
B1-154-SB-1
B1-154-SB-5
B1-018-SB-1
B1-018-SB-5
B1-143-SB-1
B1-143-SB-4.5
B1-004-SB-1
B1-004-SB-5
B1-101-SB-1
B1-101-SB-5
B1-090-SB-1
B1-090-SB-6
B1-003-SB-1
B1-003-SB-5
B1-126-SB-1
B1-102-SB-1
B1-102-SB-4.5
B1-086-SB-1
B1-086-SB-5
B4-027-SB-1
B4-027-SB-5
B1-129-SB-1
B1-129-SB-5
B1-127-SB-1
B1-127-SB-6
B1-089-SB-1
B1-085-SB-1
B1-128-SB-1
B4-026-SB-1
B4-026-SB-5
B4-056-SB-1.5
B4-056-SB-7.5
B5-099-SB-1
B5-099-SB-4.5
DRO: 7,780
B5-098-SB-1
B5-098-SB-4
B4-024-SB-1
B4-024-SB-4.5
B4-036-SB-1
B4-036-SB-5
B4-048-SB-1
B4-048-SB-5
B4-048-SB-10
B4-039-SB-1
B4-039-SB-5
B4-025-SB-1
B4-025-SB-5
B4-035-SB-1
B4-035-SB-5
B4-049-SB-1
B4-049-SB-4.5
B4-055-SB-1
B4-055-SB-5
B5-161-SB-1
B5-161-SB-4
DRO: 17,900
B4-040-SB-1
B4-040-SB-5
B4-054-SB-1
B4-054-SB-6

B1-1

Parcel B1

Parcel B17

Parcel B4

Parcel B5

Soil Boring

Soil Boring (NAPL Observed)

Development Boundary

Additional Construction Worker Area

Parcel Boundary

Sub-Parcel B1-1
TPH/OG Soil PAL Exceedances (mg/kg)

January 15, 2019

Figure
S3

ARM Group Inc.
Engineers and Scientists

0 100 200 400 Feet

Tradepoint Atlantic

Baltimore County, MD

EnviroAnalytics Group

ARM Project 160443M-18

\\COLUMBIADC01\CorpData\Projects\EnviroAnalytics Group\160443M EAG_TPA Redevelopment\GIS\Parcel B1-1 VW.mxd

B1-1

Parcel B1

Parcel B17

Parcel B4

Parcel B5

B1-084-SB-1
Arsenic: 3.5 J
B1-084-SB-4
Arsenic: 76.8 J

B1-083-SB-1
Arsenic: 11.2 J

B1-174-SB-1
B1-174-SB-4
Arsenic: 39.1 J

B1-010-SB-1
Arsenic: 4.3 J
B1-010-SB-5
Arsenic: 4.6 J

B1-011-SB-1
Arsenic: 6.6 J
Manganese: 32,600
Vanadium: 6,480 J
B1-011-SB-7
Arsenic: 10.7 J

B1-009-SB-1
Arsenic: 9.0 J
B1-009-SB-5

B1-007-SB-1
B1-007-SB-5
Arsenic: 4.6

B1-005-SB-1
Arsenic: 3.6 J
B1-005-SB-8
Arsenic: 49.3 J
Lead: 16,200

B1-008-SB-1
B1-008-SB-7.5
Arsenic: 3.0

B1-006-SB-1
B1-006-SB-5
Arsenic: 11.5 J

B1-012-SB-1
Arsenic: 21.4 J
B1-012-SB-9

B1-147-SB-1
Arsenic: 3.3 J
Chromium VI: 9.5 J-
B1-147-SB-5
Arsenic: 16.4 J

B1-134-SB-1
Arsenic: 14.3
B1-134-SB-5
Arsenic: 8.0

B1-133-SB-1
Arsenic: 15.6
B1-133-SB-5
Arsenic: 6.8

B1-132-SB-1
Arsenic: 7.2
B1-132-SB-5
Arsenic: 7.8
Lead: 10,600

B1-091-SB-1
Arsenic: 11.7
B1-091-SB-5
Arsenic: 4.9
Lead: 15,000

B1-092-SB-1
Arsenic: 6.4
B1-092-SB-5
Arsenic: 3.5
B1-092-SB-10

B1-168-SB-1
Arsenic: 4.8 J
B1-168-SB-5
Arsenic: 32.2 J

B1-160-SB-1
Arsenic: 19.4
B1-160-SB-5
Arsenic: 7.8

B1-161-SB-1
Arsenic: 6.3

B1-159-SB-1
Arsenic: 6.0
B1-159-SB-5

B1-169-SB-1
Arsenic: 7.0 J
B1-169-SB-5
Arsenic: 12.5 J

B1-170-SB-1
Arsenic: 31.7 J
Manganese: 26,900

B1-178-SB-1
Manganese: 26,400

B1-130-SB-1
Arsenic: 11.7
B1-130-SB-9
Arsenic: 4.3

B1-181-SB-1
Arsenic: 5.4 J
B1-181-SB-8
Arsenic: 3.8 J

B1-155-SB-1
Arsenic: 9.8
B1-155-SB-5
Arsenic: 10.0

B1-182-SB-1
Arsenic: 4.4
B1-182-SB-8
Arsenic: 72.6
B1-182-SB-10

B1-014-SB-1
Arsenic: 21.5 J
B1-014-SB-5
Arsenic: 22.4 J
B1-014-SB-10
Arsenic: 402

B1-172-SB-1
Arsenic: 5.2
B1-172-SB-4
Arsenic: 13.5
Lead: 1,030
B1-172-SB-10
Arsenic: 5.0

B1-171-SB-1
Arsenic: 3.4

B1-173-SB-1
B1-173-SB-8

B1-013-SB-1
Arsenic: 11.9 J
B1-013-SB-9
Arsenic: 137 J
Lead: 5,290
B1-013-SB-10
Arsenic: 43.1
Lead: 1,160
Arsenic: 43.1

B1-015-SB-1
Arsenic: 6.1 J
B1-015-SB-9
Arsenic: 6.5 J
B1-015-SB-10
Arsenic: 17.2

B1-081-SB-1
Chromium VI: 7.3
Manganese: 26,800
B1-081-SB-4.5

B1-082-SB-1
Arsenic: 3.9
B1-082-SB-5

B1-016-SB-1
Arsenic: 5.6 J
B1-016-SB-5
Arsenic: 9.1 J

B1-152-SB-1
Arsenic: 15.3
B1-152-SB-4
Arsenic: 16.4

B1-131-SB-1
Arsenic: 4.0
Lead: 989
B1-131-SB-4
Arsenic: 5.5

B1-183-SB-1
Arsenic: 8.2
B1-183-SB-8.5
Arsenic: 16.6
Lead: 8,260

B1-096-SB-1
Arsenic: 15.2
B1-096-SB-4
Arsenic: 33.3
Lead: 1,600
B1-096-SB-10
Arsenic: 23.5

B1-179-SB-1
Arsenic: 5.4
B1-179-SB-9
Arsenic: 5.5

B1-002-SB-1
Arsenic: 5.8
Lead: 2,040
B1-002-SB-9
Arsenic: 3.2

B1-180-SB-1
Arsenic: 6.5

B1-151-SB-1
Arsenic: 14.8
B1-151-SB-5

B1-065-SB-1
Arsenic: 6.0
B1-065-SB-4
Arsenic: 3.2

B1-095-SB-1
Arsenic: 10.5
B1-095-SB-4
Arsenic: 5.7
Manganese: 41,300
B1-095-SB-10
Arsenic: 14.8

B1-001-SB-1
Arsenic: 4.2
B1-001-SB-9
Arsenic: 5.7
Manganese: 27,200

B1-066-SB-1
B1-066-SB-9
Arsenic: 15.3

B1-067-SB-1
Arsenic: 7.9
Manganese: 26,700
B1-067-SB-9
Arsenic: 14.1

B1-068-SB-1
Arsenic: 3.1
Chromium VI: 7.2
Manganese: 31,800

B1-162-SB-1
Arsenic: 4.3
B1-162-SB-4
Arsenic: 27.1
Lead: 2,450 J

B1-149-SB-1
Arsenic: 46.0

B1-063-SB-1
Arsenic: 5.0
B1-063-SB-5
Arsenic: 6.5
B1-063-SB-10

B1-076-SB-1
Arsenic: 9.2
B1-076-SB-4
Arsenic: 20.3
B1-076-SB-10
Arsenic: 16.2

B1-075-SB-1
Arsenic: 8.9
B1-075-SB-4
Arsenic: 12.2
B1-075-SB-10
Arsenic: 76.4

B1-064-SB-1
Arsenic: 7.1
B1-064-SB-5
Arsenic: 4.6

B1-163-SB-1
Arsenic: 31.4
B1-163-SB-4
Arsenic: 24.3
B1-163-SB-10
Arsenic: 18.4

B1-164-SB-1
Arsenic: 4.7
B1-164-SB-4
Arsenic: 7.7
Lead: 1,310

B1-080-SB-1
Arsenic: 8.0
B1-080-SB-4
Arsenic: 4.8

B1-079-SB-1
Arsenic: 17.7
B1-079-SB-5
Arsenic: 9.1

B1-106-SB-1
Arsenic: 3.8
Manganese: 36,700
B1-106-SB-5
Arsenic: 3.6
Chromium VI: 6.3 J-
Manganese: 28,400

B1-104-SB-1
Arsenic: 3.7
B1-104-SB-5
Arsenic: 5.2
Manganese: 28,000

B1-150-SB-1
B1-150-SB-8
Arsenic: 12.3

B1-061-SB-1
Arsenic: 17.1
Lead: 844
B1-061-SB-7
Arsenic: 10.3
Manganese: 30,800

B1-146-SB-1
Arsenic: 18.3
Lead: 1,380
B1-146-SB-5

B1-165-SB-1
Arsenic: 124
Lead: 940
Manganese: 36,500
B1-165-SB-9.5

B1-105-SB-1
Arsenic: 11.7
B1-105-SB-5
Arsenic: 6.1
Chromium VI: 7.4 J-
Manganese: 42,300

B1-103-SB-1
Arsenic: 16.5
B1-103-SB-5
Arsenic: 23.4

B1-062-SB-1
Arsenic: 14.3
Lead: 868
B1-062-SB-6

B1-042-SB-1
Arsenic: 4.7
B1-042-SB-5
Arsenic: 3.0

B1-041-SB-1
Arsenic: 5.3
B1-041-SB-8

B1-099-SB-1
Arsenic: 15.1
B1-099-SB-5
Arsenic: 7.5

B1-100-SB-1
Arsenic: 23.5
B1-100-SB-5
Arsenic: 20.2

B1-166-SB-9
Arsenic: 7.5

B1-167-SB-1
Arsenic: 71.5
B1-167-SB-5

B1-112-SB-1
Arsenic: 13.7
B1-112-SB-5
Arsenic: 17.0

B1-113-SB-1
Arsenic: 15.5
B1-113-SB-5
Arsenic: 5.7
Chromium VI: 10.4
Manganese: 34,600

B1-120-SB-1
Arsenic: 7.7

B1-115-SB-1
Arsenic: 27.1

B1-116-SB-1
B1-116-SB-5
Arsenic: 4.7

B1-114-SB-1
Arsenic: 3.1
Manganese: 29,000

B1-111-SB-1
B1-111-SB-4
Arsenic: 7.0

B1-039-SB-1
Arsenic: 18.5
Lead: 928
B1-039-SB-5

B1-040-SB-1
Arsenic: 7.5
B1-040-SB-5

B1-043-SB-1
Arsenic: 8.8
B1-043-SB-5
Arsenic: 6.1

B1-045-SB-1
Arsenic: 9.7
B1-045-SB-5

B1-048-SB-1
Arsenic: 24.7
B1-048-SB-7
Arsenic: 5.1
B1-048-SB-10
Arsenic: 3.7

B1-034-SB-1
Arsenic: 4.4
B1-034-SB-4
Arsenic: 3.4
Manganese: 29,100

B1-036-SB-1
Arsenic: 7.5
B1-036-SB-4
Arsenic: 87.1
Lead: 1,620

B1-020-SB-1
Arsenic: 7.2
B1-020-SB-5

B1-035-SB-1
Arsenic: 24.5
B1-035-SB-5
Arsenic: 3.8

B1-019-SB-1
Arsenic: 3.6
B1-019-SB-5
Arsenic: 28.6

B1-037-SB-1
Arsenic: 10.8
B1-037-SB-5
Arsenic: 4.3
B1-037-SB-10
Arsenic: 3.3

B1-038-SB-1
Arsenic: 14.0
B1-038-SB-5
Arsenic: 9.3

B1-044-SB-1
Arsenic: 8.3
B1-044-SB-5
Arsenic: 7.9

B1-046-SB-1
Arsenic: 3.3
B1-046-SB-6
Arsenic: 4.2
B1-046-SB-10

B1-047-SB-1
Arsenic: 12.9
B1-047-SB-5
Arsenic: 29.1
B1-047-SB-10
Arsenic: 8.0

B1-033-SB-1
Arsenic: 3.9
B1-033-SB-4
Arsenic: 5.1
Manganese: 27,700

B1-018-SB-1
Arsenic: 11.2
B1-018-SB-5
Arsenic: 18.9

B1-017-SB-1
Arsenic: 5.1
B1-017-SB-5
Arsenic: 166

B1-154-SB-1
Manganese: 26,700
B1-154-SB-5
Manganese: 30,600

B1-143-SB-1
Arsenic: 4.4
Manganese: 32,500
B1-143-SB-4.5
Arsenic: 18.8

B1-004-SB-1
Arsenic: 3.4
B1-004-SB-5

B1-003-SB-1
Arsenic: 4.8
B1-003-SB-5
Arsenic: 27.4

B4-027-SB-1
Arsenic: 8.2
Manganese: 40,400 J
B4-027-SB-5
Arsenic: 6.0

B1-101-SB-1
Arsenic: 7.6
B1-101-SB-5
Arsenic: 24.3
Cobalt: 694 J
Manganese: 38,500

B1-102-SB-1
B1-102-SB-4.5
Arsenic: 12.4

B1-085-SB-1

B1-086-SB-1
B1-086-SB-5
Arsenic: 4.8

B1-126-SB-1

B1-129-SB-1
Arsenic: 7.9
Manganese: 82,500
B1-129-SB-5
Arsenic: 5.3

B1-128-SB-1

B1-127-SB-1
Arsenic: 5.1
B1-127-SB-6
Arsenic: 17.0

B1-090-SB-1
B1-090-SB-6

B1-089-SB-1

B4-026-SB-1
Arsenic: 9.6
Manganese: 49,400 J
B4-026-SB-5

B4-056-SB-1.5
Arsenic: 5.8
B4-056-SB-7.5
Arsenic: 10.7

B5-099-SB-1
Arsenic: 11.7 J
B5-099-SB-4.5
Arsenic: 15.0 J
Lead: 873

B5-098-SB-1
Arsenic: 14.0 J
B5-098-SB-4
Arsenic: 12.3 J

B4-024-SB-1
Arsenic: 4.7
B4-024-SB-4.5

B4-048-SB-1
Arsenic: 9.8
B4-048-SB-5
B4-048-SB-10
Arsenic: 4.8

B4-039-SB-1
Arsenic: 7.5
B4-039-SB-5
Arsenic: 17.7
Lead: 3,120 J

B4-049-SB-1
Arsenic: 3.2
B4-049-SB-4.5
Arsenic: 10.7

B4-055-SB-1
Arsenic: 9.1
B4-055-SB-5
Arsenic: 8.3

B4-025-SB-1
B4-025-SB-5
Arsenic: 7.0

B4-036-SB-1
Arsenic: 10.7
B4-036-SB-5
Arsenic: 9.7

B4-035-SB-1
Arsenic: 4.4
B4-035-SB-5
Arsenic: 9.8

B5-161-SB-1
Arsenic: 13.8 J
B5-161-SB-4
Arsenic: 14.5 J
B5-161-SB-10
Arsenic: 4.2

B4-040-SB-1
Arsenic: 7.7
B4-040-SB-5
Arsenic: 3.9

B4-054-SB-1
Arsenic: 4.5
Manganese: 26,200
B4-054-SB-6

Soil Boring

Development Boundary

Additional Construction Worker Area

Parcel Boundary

Sub-Parcel B1-1
Inorganic Soil PAL Exceedances (mg/kg)

January 15, 2019

Figure S4

ARM Group Inc.
Engineers and Scientists

0 100 200 400 Feet

Tradepoint Atlantic

Baltimore County, MD

EnviroAnalytics Group

ARM Project 160443M-18

\\COLUMBIADC01\CorpData\Projects\EnviroAnalytics Group\160443M EAG_TPA Redevelopment\GIS\Parcel B1-1 VW.mxd



\\COLUMBIADC01\CorpData\Projects\EnviroAnalytics Group\160443M EAG_TPA Redevelopment\GIS\Parcel B1-1 VW 8x11.mxd

Sub-Parcel B1-1
Groundwater Sample Locations

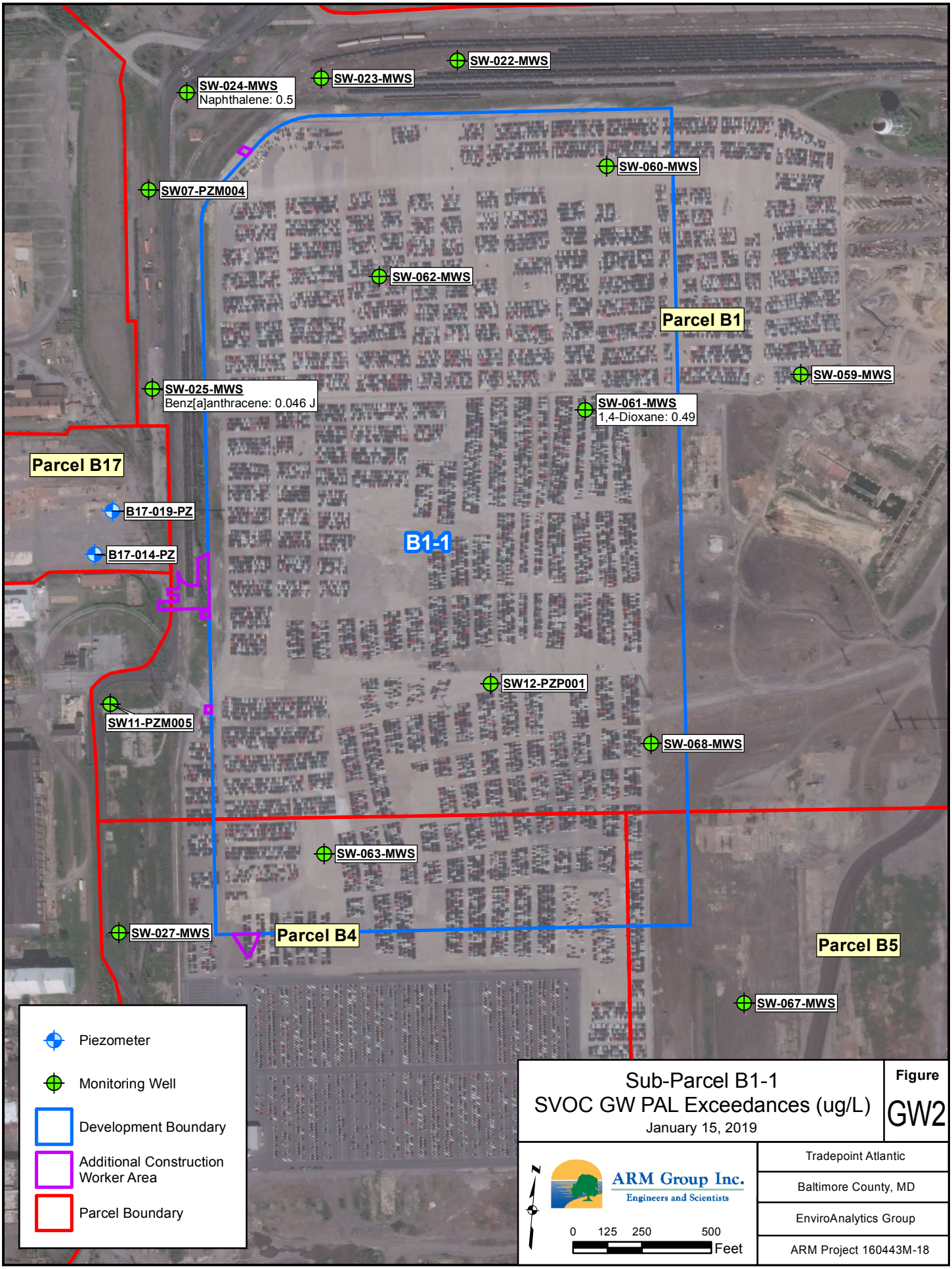
January 15, 2019

Figure 4

ARM Group Inc.
Engineers and Scientists

Tradepoint Atlantic
Baltimore County, MD
EnviroAnalytics Group
ARM Project 160443M-18


SW-022-MWS
SW-023-MWS
Chloroform: 2.5
SW-024-MWS
SW-060-MWS
SW07-PZM004
SW-062-MWS
Parcel B1
SW-059-MWS
SW-025-MWS
SW-061-MWS
Parcel B17
B17-019-PZ
B1-1
B17-014-PZ
SW12-PZP001
SW11-PZM005
SW-068-MWS
SW-063-MWS
SW-027-MWS
Parcel B4
Parcel B5
SW-067-MWS
Piezometer
Monitoring Well
Development Boundary
Additional Construction Worker Area
Parcel Boundary
Sub-Parcel B1-1
VOC GW PAL Exceedances (ug/L)
January 15, 2019
Figure
GW1
ARM Group Inc.
Engineers and Scientists
0 125 250 500
Feet
Tradepoint Atlantic
Baltimore County, MD
EnviroAnalytics Group
ARM Project 160443M-18
\\COLUMBIADC01\CorpData\Projects\EnviroAnalytics Group\160443M EAG_TPA Redevelopment\GIS\Parcel B1-1 VW 8x11.mxd



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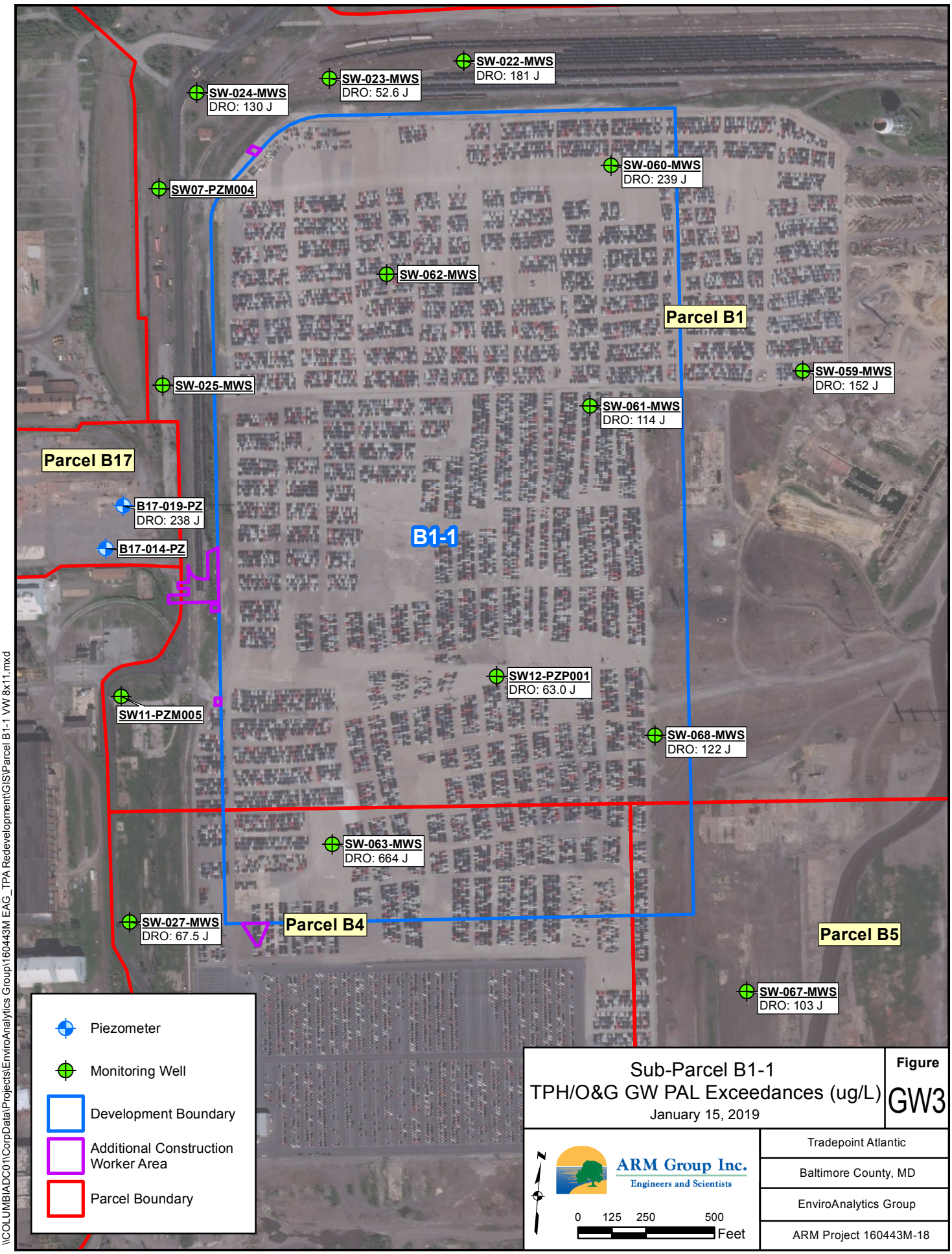
Sub-Parcel B1-1
SVOC GW PAL Exceedances (ug/L)
January 15, 2019

Figure
GW2

ARM Group Inc.
Engineers and Scientists

Tradepoint Atlantic
Baltimore County, MD
EnviroAnalytics Group
ARM Project 160443M-18



Sub-Parcel B1-1
TPH/O&G GW PAL Exceedances (ug/L)
January 15, 2019

Figure
GW3

ARM Group Inc.
Engineers and Scientists

Tradepoint Atlantic
Baltimore County, MD
EnviroAnalytics Group
ARM Project 160443M-18

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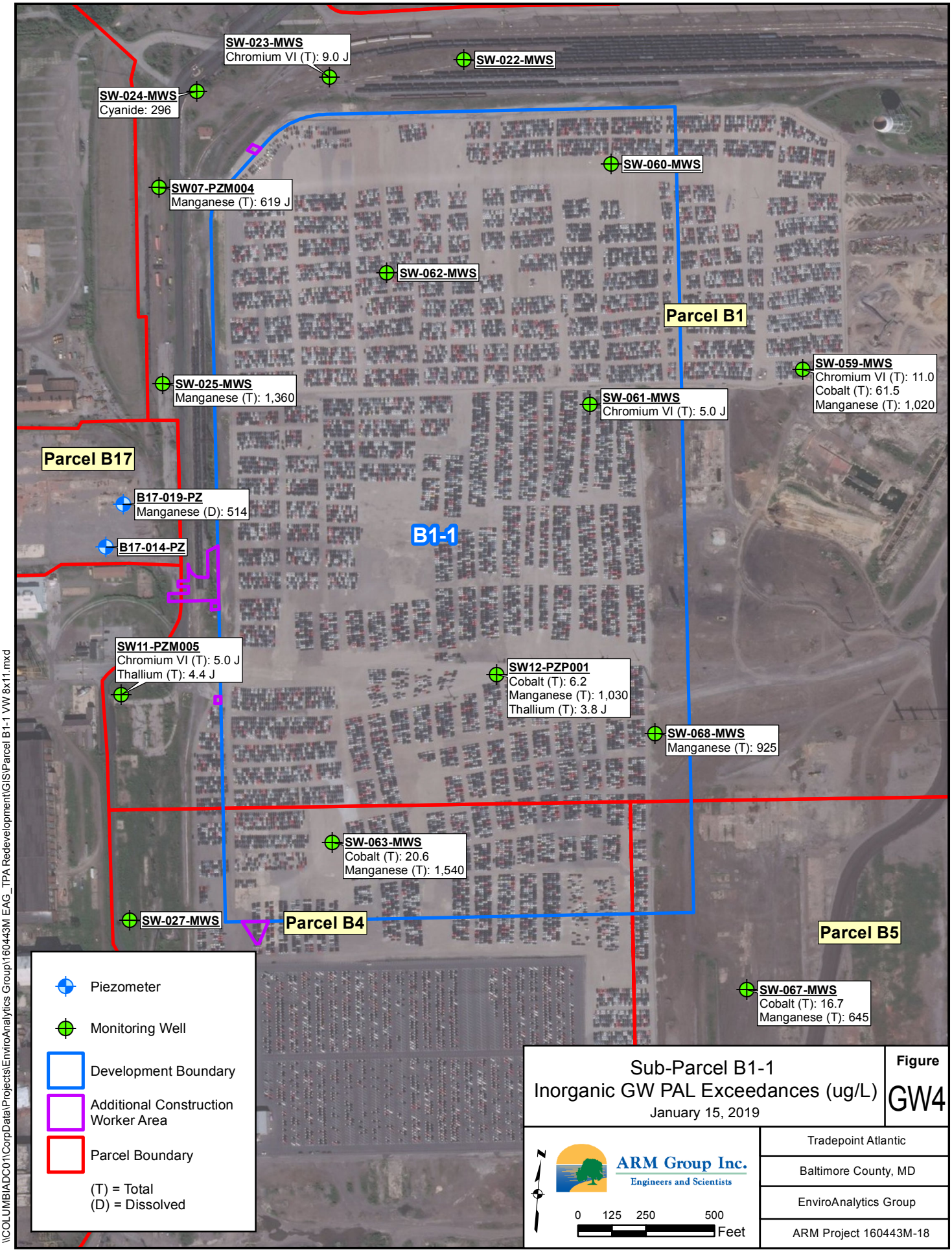

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Sub-Parcel B1-1
Inorganic GW PAL Exceedances (ug/L)

January 15, 2019

Figure
GW4

ARM Group Inc.
Engineers and Scientists

Tradepoint Atlantic
Baltimore County, MD
EnviroAnalytics Group
ARM Project 160443M-18

B1-005-SB
Lead (8ft): 16,200 mg/kg

B1-132-SB
Lead (5ft): 10,600 mg/kg

B1-091-SB
Lead (5ft): 15,000 mg/kg

B1-178-SB
NAPL: Visual Observation

B1-172-SB
DRO (4ft): 8,000 mg/kg
NAPL: Visual Observation

Parcel B1

Parcel B17

B1-1

B5-098-SB
NAPL: Visual Observation

B5-099-SB
DRO (4.5ft): 7,780 mg/kg
NAPL: Visual Observation

B5-161-SB
DRO (4ft): 17,900 mg/kg

Parcel B4

Parcel B5

Soil Boring with Potential Impacts

- NAPL Observed (and/or Elevated TPH)
- Elevated TPH
- Elevated Metals
- Development Boundary
- Additional Construction Worker Area
- Parcel Boundary

Sub-Parcel B1-1
Locations of Potential Concern

January 17, 2019

Figure 5

ARM Group Inc.
Engineers and Scientists

0 125 250 500 Feet

Tradepoint Atlantic

Baltimore County, MD

EnviroAnalytics Group

ARM Project 160443M-18

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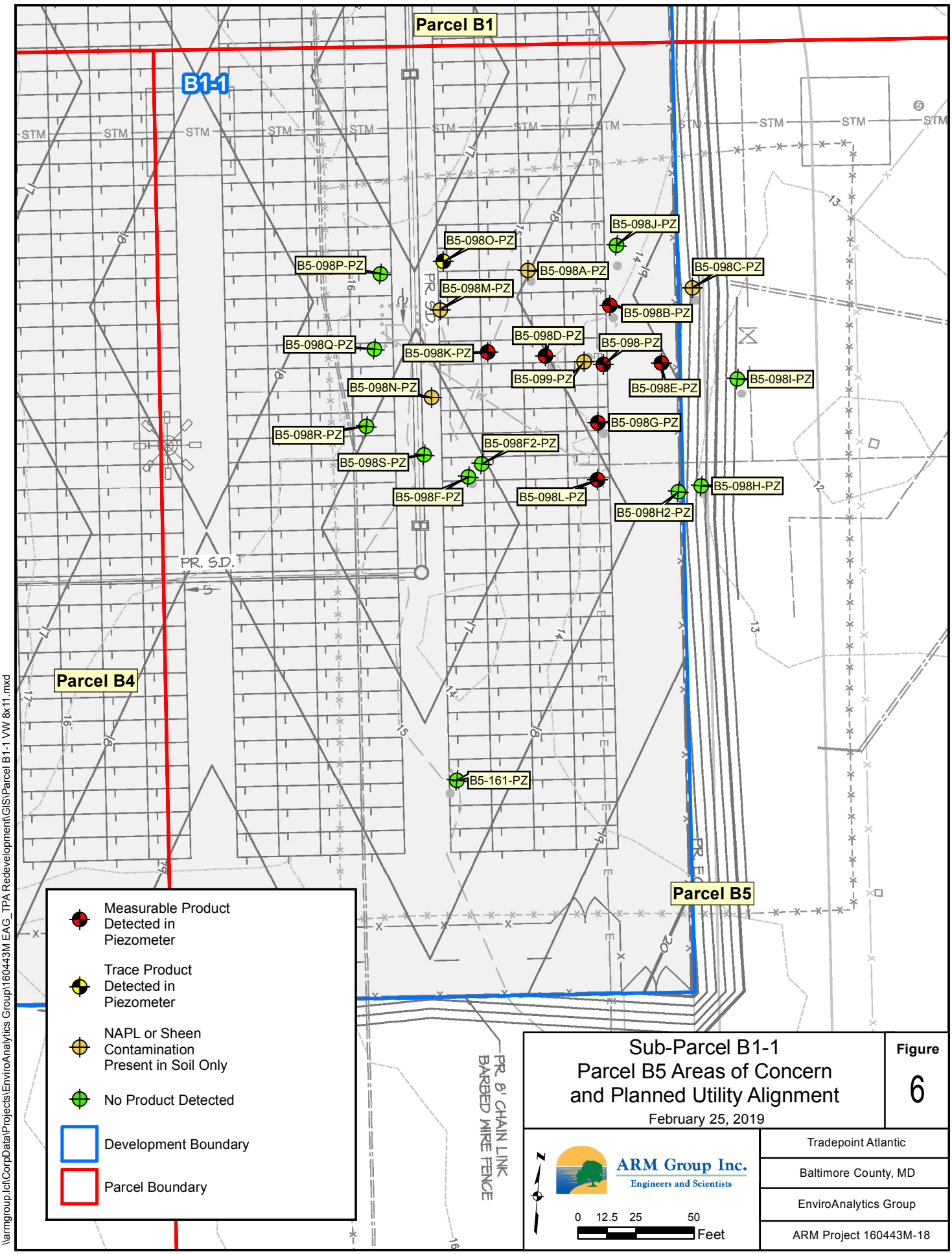

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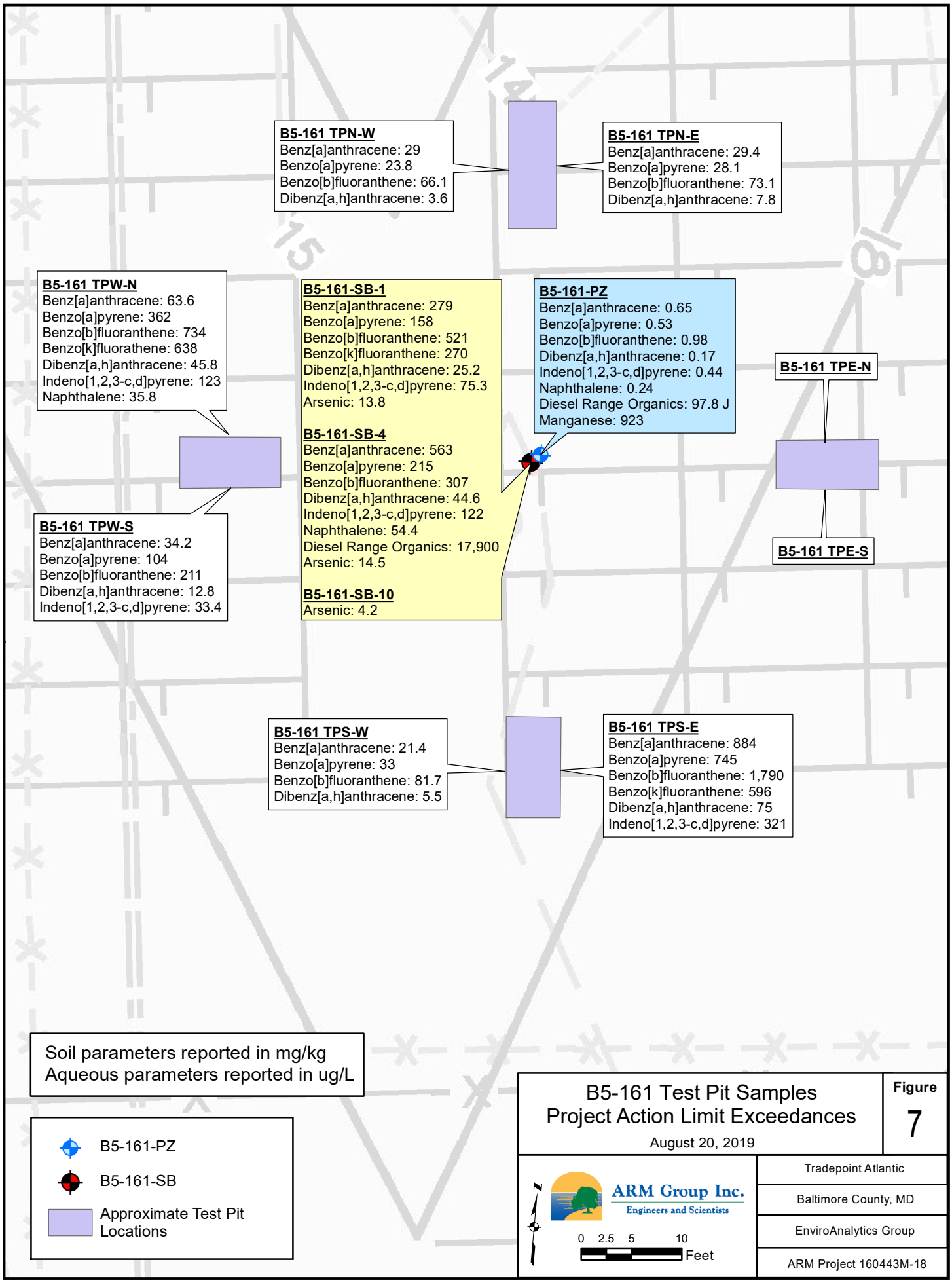
Sub-Parcel B1-1
Parcel B5 Areas of Concern and Planned Utility Alignment

February 25, 2019

Figure 6

ARM Group Inc.
Engineers and Scientists

Tradepoint Atlantic
Baltimore County, MD
EnviroAnalytics Group
ARM Project 160443M-18



B5-161 Test Pit Samples
Project Action Limit Exceedances

August 20, 2019

Figure 7

ARM Group Inc.
Engineers and Scientists

Tradepoint Atlantic
Baltimore County, MD
EnviroAnalytics Group
ARM Project 160443M-18

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B4-035-SB
B4-049-SB
B4-055-SB
B5-161-SB
B4-040-SB
B4-054-SB
Parcel B4
Parcel B5

Soil Boring
EU1
EU1-EXP
EU2
EU3
Development Boundary
Parcel Boundary

Sub-Parcel B1-1
Risk Assessment Exposure Units

August 20, 2019

Figure 8

ARM Group Inc.
Engineers and Scientists

0 125 250 500 Feet

Tradepoint Atlantic
Baltimore County, MD
EnviroAnalytics Group
ARM Project 160443M-18

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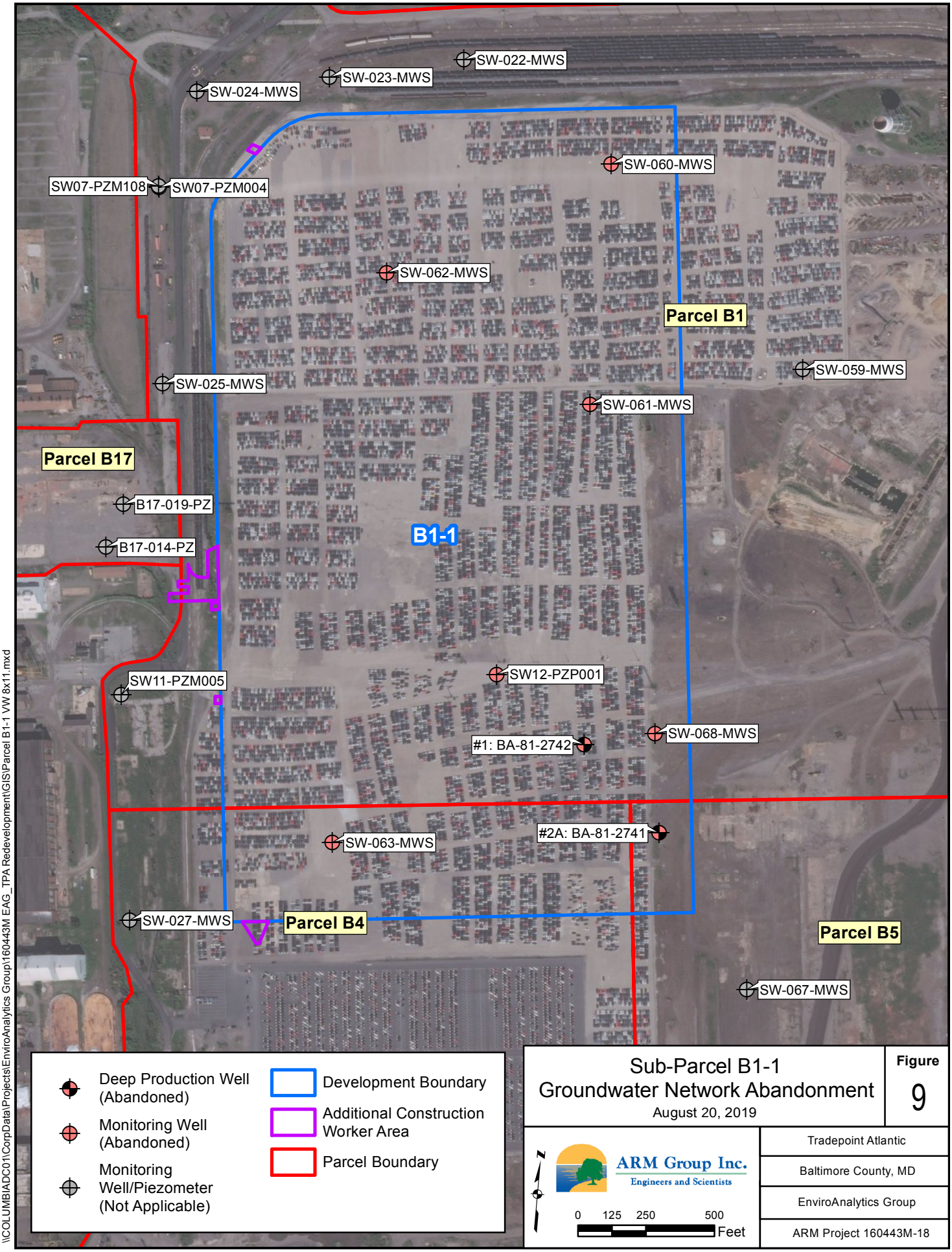

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Sub-Parcel B1-1 Groundwater Network Abandonment

August 20, 2019

Figure 9

ARM Group Inc.
Engineers and Scientists

Tradepoint Atlantic

Baltimore County, MD

EnviroAnalytics Group

ARM Project 160443M-18

TABLES

Table 1 - Sub-Parcel B1-1
Summary of Organics Detected in Soil

Parameter	Units	PAL	B1-001-SB-1*	B1-001-SB-9*	B1-002-SB-1*	B1-002-SB-9*	B1-003-SB-1	B1-003-SB-5	B1-004-SB-1	B1-004-SB-5	B1-005-SB-1	B1-005-SB-8	B1-006-SB-1	B1-006-SB-5	B1-007-SB-1*	B1-007-SB-5*	B1-008-SB-1*	B1-008-SB-7.5*	B1-009-SB-1	B1-009-SB-5	B1-010-SB-1	B1-010-SB-5	B1-011-SB-1	B1-011-SB-7
Volatile Organic Compounds																								
1,1,1-Trichloroethane	mg/kg	36,000	0.0056 U	0.0054 U	**0.034**	0.0094 U	0.0044 U	0.0056 U	0.0053 U	0.0045 U	0.0045 U	0.0056 U	0.0054 U	0.0084 U	0.0061 U	0.0058 U	0.0048 U	0.0057 U	0.0063 U	0.0045 U	0.0054 U	0.0047 U	0.0062 U	0.0064 U
1,2-Dichloroethane	mg/kg	2	0.0056 U	0.0054 U	0.0065 U	0.0094 U	0.0044 U	0.0056 U	0.0053 U	0.0045 U	0.0045 U	0.0056 U	0.0054 U	0.0084 U	0.0061 U	0.0058 U	0.0048 U	0.0057 U	0.0063 U	0.0045 U	0.0054 U	0.0047 U	0.0062 U	0.0064 U
1,4-Dichlorobenzene	mg/kg	11	0.0056 U	0.0054 U	0.0065 U	0.0094 U	0.0044 U	0.0056 U	0.0053 U	0.0045 U	0.0045 U	0.0056 U	0.0054 U	0.0084 U	0.0061 U	0.0058 U	0.0048 U	0.0057 U	0.0063 U	0.0045 U	0.0054 U	0.0047 U	0.0062 U	0.0064 U
2-Butanone (MEK)	mg/kg	190,000	0.011 U	0.011 U	0.013 U	**0.012 J**	0.0087 U	**0.0037 J**	0.011 U	0.0091 U	0.009 U	**0.029**	0.011 U	0.017 U	0.012 U	0.012 U	0.0096 U	0.011 U	0.013 U	**0.0054 J**	0.011 U	0.0094 U	0.012 U	**0.0049 J**
2-Hexanone	mg/kg	1,300	0.011 U	0.011 U	0.013 U	0.019 U	0.0087 U	0.011 U	0.011 U	0.0091 U	0.009 U	0.011 U	0.011 U	0.017 U	0.012 U	0.012 U	0.0096 U	0.011 U	0.013 U	0.009 U	0.011 U	0.0094 U	0.012 U	0.013 U
4-Methyl-2-pentanone (MIBK)	mg/kg	56,000	0.011 U	0.011 U	0.013 U	0.019 U	0.0087 U	0.011 U	0.011 U	0.0091 U	0.009 U	0.011 U	0.011 U	0.017 U	0.012 U	0.012 U	0.0096 U	0.011 U	0.013 U	0.009 U	0.011 U	0.0094 U	0.012 U	0.013 U
Acetone	mg/kg	670,000	0.011 U	**0.028**	0.013 U	**0.015 J**	0.0072 B	0.014 B	**0.0054 J**	0.0091 UJ	0.009 UJ	**0.045 J**	0.011 UJ	0.0097 B	0.012 U	**0.0081 J**	0.0096 U	0.011 U	0.025 B	**0.032 J**	0.0067 B	0.0094 UJ	**0.014 J**	**0.016 J**
Benzene	mg/kg	5.1	0.0056 U	**0.017**	0.0065 U	**0.046**	0.0044 U	**0.0021 J**	0.0053 U	0.0045 U	0.0045 U	**0.021**	0.0054 U	0.0084 U	0.0061 U	0.0058 U	0.0048 U	0.0057 U	0.0063 U	0.0045 U	0.0054 U	0.0047 U	**0.0018 J**	0.0064 U
Carbon disulfide	mg/kg	3,500	0.0056 U	0.0054 U	0.0065 U	0.0094 U	0.0044 U	0.0056 U	0.0053 U	0.0045 U	0.0045 U	0.0056 U	0.0054 U	0.0084 U	0.0061 U	0.0058 U	0.0048 U	0.0057 U	0.0063 U	0.0045 U	0.0054 U	0.0047 U	0.0062 U	0.0064 U
Carbon tetrachloride	mg/kg	2.9	0.0056 U	0.0054 U	**0.012**	0.0094 U	0.0044 U	0.0056 U	0.0053 U	0.0045 U	0.0045 U	0.0056 U	0.0054 U	0.0084 U	0.0061 U	0.0058 U	0.0048 U	0.0057 U	0.0063 U	0.0045 U	0.0054 U	0.0047 U	0.0062 U	0.0064 U
Chloroform	mg/kg	1.4	0.0056 U	0.0054 U	0.0065 U	0.0094 U	0.0044 U	0.0056 U	0.0053 U	0.0045 U	0.0045 U	0.0056 U	0.0054 U	0.0084 U	0.0061 U	0.0058 U	0.0048 U	0.0057 U	0.0063 U	0.0045 U	0.0054 U	0.0047 U	0.0062 U	0.0064 U
Cyclohexane	mg/kg	27,000	0.011 U	0.011 U	0.013 U	0.019 U	0.0087 U	0.011 U	0.011 U	0.0091 U	0.009 U	0.011 U	0.011 U	0.017 U	0.012 U	0.012 U	0.0096 U	0.011 U	0.013 U	0.009 U	0.011 U	0.0094 U	0.012 U	0.013 U
Ethylbenzene	mg/kg	25	0.0056 U	**0.0077**	0.0065 U	**0.011**	0.0044 U	0.0056 U	0.0053 U	0.0045 U	0.0045 U	**0.0088**	0.0054 U	0.0084 U	0.0061 U	0.0058 U	0.0048 U	0.0057 U	0.0063 U	0.0045 U	0.0054 U	0.0047 U	0.0062 U	0.0064 U
Isopropylbenzene	mg/kg	9,900	0.0056 U	**0.0025 J**	0.0065 U	0.0094 U	0.0044 U	0.0056 U	0.0053 U	0.0045 U	0.0045 U	0.0056 U	0.0054 U	0.0084 U	0.0061 U	0.0058 U	0.0048 U	0.0057 U	0.0063 U	0.0045 U	0.0054 U	0.0047 U	0.0062 U	0.0064 U
Methyl Acetate	mg/kg	1,200,000	0.056 U	0.054 U	0.065 U	0.094 U	0.044 U	0.056 U	0.053 U	0.045 U	0.045 U	0.056 U	0.054 U	0.084 R	0.061 U	0.058 U	0.048 U	0.057 U	0.063 U	0.045 U	0.054 U	0.047 U	0.062 U	0.064 U
Methylene Chloride	mg/kg	1,000	0.0056 U	0.0054 U	0.0065 U	0.0094 U	0.0044 U	0.0056 U	0.0053 U	0.0045 U	0.0045 UJ	0.0056 UJ	0.0054 UJ	0.0084 UJ	0.0061 U	0.0058 U	0.0048 U	0.0057 U	0.0063 U	0.0045 U	0.0054 UJ	0.0047 UJ	0.0062 U	0.0064 U
Styrene	mg/kg	35,000	0.0056 U	0.0054 U	0.0065 U	0.0094 U	0.0044 U	0.0056 U	0.0053 U	0.0045 U	0.0045 U	0.0056 U	0.0054 U	0.0084 U	0.0061 U	0.0058 U	0.0048 U	0.0057 U	0.0063 U	0.0045 U	0.0054 U	0.0047 U	0.0062 U	0.0064 U
Tetrachloroethene	mg/kg	100	0.0056 U	0.0054 U	0.0065 U	0.0094 U	0.0044 U	0.0056 U	0.0053 U	0.0045 U	0.0045 U	0.0056 U	0.0054 U	0.0084 U	0.0061 U	0.0058 U	0.0048 U	0.0057 U	0.0063 U	0.0045 U	0.0054 U	0.0047 U	0.0062 U	0.0064 U
Toluene	mg/kg	47,000	0.0056 U	**0.013**	0.0065 U	**0.04**	**0.0024 J**	**0.0017 J**	0.0053 U	0.0045 U	0.0045 U	**0.022**	0.0054 U	0.0084 U	0.0061 U	0.0058 U	0.0048 U	0.0057 U	0.0063 U	0.0045 U	0.0054 U	0.0047 U	**0.0043 J**	0.0064 U
Trichloroethene	mg/kg	6	0.0056 U	0.0054 U	0.0065 U	0.0094 U	0.0044 U	0.0056 U	0.0053 U	0.0045 U	0.0045 U	0.0056 U	0.0054 U	0.0084 U	0.0061 U	0.0058 U	0.0048 U	0.0057 U	0.0063 U	0.0045 U	0.0054 U	0.0047 U	0.0062 U	0.0064 U
Xylenes	mg/kg	2,800	0.017 U	**0.009 J**	0.02 U	**0.0076 J**	0.013 U	0.017 U	0.016 U	0.014 U	0.014 U	**0.0065 J**	0.016 U	0.025 U	0.018 U	0.017 U	0.014 U	0.017 U	0.019 U	0.013 U	0.016 U	0.014 U	0.019 U	0.019 U
Semi-Volatile Organic Compounds^																								
1,1-Biphenyl	mg/kg	200	**0.037 J**	0.073 U	**0.042 J**	0.083 U	0.072 U	**0.021 J**	0.074 U	0.07 U	0.075 U	0.075 U	0.079 U	**0.024 J**	0.086 U	**0.022 J**	0.073 U	**0.045 J**	**0.048 J**	0.079 U	**0.016 J**	0.081 U	**0.04 J**	0.077 U
2,3,4,6-Tetrachlorophenol	mg/kg	25,000	0.075 U	0.073 U	0.07 U	0.083 U	0.072 U	0.074 U	0.074 U	0.07 U	0.075 U	0.075 U	0.079 U	0.081 UJ	0.086 U	0.069 U	0.073 U	0.073 U	0.074 U	0.079 U	0.074 U	0.081 U	0.073 U	0.077 U
2,4-Dimethylphenol	mg/kg	16,000	**0.026 J**	0.073 U	0.07 U	0.083 U	0.072 U	0.074 U	0.074 U	0.07 U	0.075 U	0.075 U	0.079 U	0.081 UJ	0.086 U	0.069 U	0.073 U	0.073 U	0.074 U	0.079 U	0.074 U	0.081 U	0.073 U	0.077 U
2-Chloronaphthalene	mg/kg	60,000	0.075 U	0.073 U	0.07 U	0.083 U	0.072 U	0.074 U	0.074 U	0.07 U	0.075 U	0.075 U	0.079 U	0.081 U	0.086 U	0.069 U	0.073 U	0.073 U	0.074 U	0.079 U	0.074 U	0.081 U	0.073 U	0.077 U
2-Methylnaphthalene	mg/kg	3,000	**0.25**	**0.0086**	**0.14**	**0.0025 J**	**0.037**	**0.069**	**0.017**	**0.015**	**0.028**	**0.029 J**	**0.044**	**0.12**	**0.032**	**0.13**	**0.051**	**0.021**	**0.085**	0.0077 U	**0.11**	**0.018**	**0.1**	**0.071**
2-Methylphenol	mg/kg	41,000	**0.02 J**	0.073 U	0.07 U	0.083 U	**0.038 J**	0.074 U	0.074 U	0.07 U	0.075 U	0.075 U	0.079 U	0.081 UJ	0.086 U	0.069 U	0.073 U	0.073 U	0.074 U	0.079 U	0.074 U	0.081 U	0.073 U	0.077 U
2-Nitroaniline	mg/kg	8,000	0.19 U	0.18 U	0.18 U	0.21 U	0.18 U	0.18 U	0.19 U	0.18 U	0.19 U	0.19 U	0.2 U	0.2 U	0.22 U	0.17 U	0.18 U	0.18 U	**0.022 J**	0.2 U	0.19 U	0.2 U	0.18 U	0.19 U
3&4-Methylphenol(m&p Cresol)	mg/kg	41,000	**0.044 J**	0.15 U	0.14 U	0.17 U	0.14 U	0.15 U	0.15 U	0.14 U	0.15 U	0.15 U	0.16 U	0.16 UJ	0.17 U	0.14 U	0.15 U	0.15 U	0.15 U	0.16 U	0.15 U	0.16 U	0.15 U	0.15 U
3,3'-Dichlorobenzidine	mg/kg	5.1	0.075 U	0.073 U	0.07 U	0.083 U	0.072 U	0.074 UJ	0.074 UJ	0.07 UJ	0.075 UJ	0.075 UJ	0.079 UJ	0.081 UJ	0.086 U	0.069 U	0.073 U	0.073 U	0.074 UJ	0.079 U	0.074 UJ	0.081 U	0.073 UJ	0.077 UJ
4-Nitroaniline	mg/kg	110	0.19 U	0.18 U	0.18 U	0.21 U	0.18 U	0.18 U	0.19 U	0.18 U	0.19 U	0.19 U	0.2 U	0.2 U	0.22 U	0.17 U	0.18 U	0.18 U	0.19 U	0.2 U	0.19 U	0.2 U	0.18 U	0.19 U
Acenaphthene	mg/kg	45,000	**0.04**	**0.0066 J**	**0.018**	0.0085 U	**0.0086**	**0.0093**	**0.0038 J**	**0.012**	**0.0049 J**	**0.014 J**	**0.014**	**0.021 J**	**0.012**	**0.0084**	**0.0032 J**	**0.0095**	**0.054 J**	0.0077 U	0.074 U	**0.0083**	**0.018**	**0.0046 J**
Acenaphthylene	mg/kg	45,000	**0.057**	**0.0019 J**	**0.021**	**0.0008 J**	**0.051**	**0.082 J**	**0.014**	**0.014**	**0.066**	**0.07 J**	**0.25**	**0.047**	**0.008 J**	**0.04**	**0.0049 J**	**0.043**	**0.15**	0.0077 U	**0.03 J**	**0.0056 J**	**0.094**	**0.035**
Acetophenone	mg/kg	120,000	**0.02 J**	0.073 U	0.07 U	0.083 U	0.072 U	0.074 U	0.074 U	0.07 U	0.075 U	**0.024 J**	0.079 U	**0.024 J**	0.086 U	**0.02 J**	0.073 U	0.073 U	**0.022 J**	0.079 U	0.074 U	0.081 U	**0.03 J**	0.077 U
Anthracene	mg/kg	230,000	**0.27**	**0.0027 J**	**0.085**	0.0085 U	**0.14**	**0.047 J**	**0.02**	**0.054**	**0.07**	**0.025 J**	**0.23**	**0.13**	**0.032**	**0.056**	**0.016**	**0.084**	**0.72**	**0.001 J**	**0.046 J**	**0.053**	**0.3**	**0.068**
Benz[a]anthracene	mg/kg	21	**0.49**	**0.008**	**0.24**	**0.0043 J**	**0.27**	**0.18 J**	**0.064**	**0.21**	**0.11**	**0.078**	**0.46**	**0.35 J**	**0.079**	**0.18**	**0.039**	**0.35**	**1.5**	**0.0028 J**	**0.13**	**0.12**	**1.1**	**0.27**
Benzaldehyde	mg/kg	120,000	**0.037 J**	0.073 U	**0.055 J**	0.083 U	**0.027 J**	**0.045 J**	0.074 R	0.07 R	**0.046 J**	0.075 R	**0.022 J**	**0.027 J**	0.086 U	**0.043 J**	0.073 U	**0.02 J**	**0.032 J**	0.079 R	**0.038 J**	0.081 R	**0.05 J**	0.077 R
Benzo[a]pyrene	mg/kg	2.1	**0.64**	**0.0093**	**0.27**	**0.0034 J**	**0.2 J**	**0.25 J**	**0.071 J**	**0.19 J**	**0.17**	**0.13 J**	**0.75**	**0.38 J**	**0.095**	**0.2**	**0.044**	**0.44**	**1.7**	**0.0016 J**	**0.13**	**0.099**	**0.99**	**0.26**
Benzo[b]fluoranthene	mg/kg	21	**1.4**	**0.03**	**0.68**	**0.012**	**0.53 J**	**0.63 J**	**0.2 J**	**0.42 J**	**0.59**	**0.36 J**	**2.1 J**	**1**	**0.24**	**0.56**	**0.12**	**1**	**4.9**	**0.0057 J**	**0.36 ip**	**0.24 ip**	**2.7**	**0.71**
Benzo[g,h,i]perylene	mg/kg		**0.3**	**0.0039 J**	**0.19**	**0.003 J**	**0.13 J**	**0.17 J**	**0.027 J**	**0.044 J**	**0.12**	**0.14 J**	**0.31**	**0.11 J**	**0.064**	**0.086**	**0.03**	**0.2**	**1**	**0.0013 J**	**0.083**	**0.04**	**0.28**	**0.082**
Benzo[k]fluoranthene	mg/kg	210	**0.43**	**0.024**	**0.6**	**0.011**	**0.51 J**	**0.64 J**	**0.21 J**	**0.43 J**	**0.59**	**0.29 J**	**1.7 J**	**1**	**0.24**	**0.56**	**0.12**	**1**	**3.9**	**0.0046 J**	**0.29 ip**	**0.2 ip**	**2.7**	**0.72**
bis(2-Ethylhexyl)phthalate	mg/kg	160	**0.058 J**	0.073 U	**0.52**	0.083 U	**0.18**	0.074 UJ	**0.23 J**	**0.079 J**	**0.18 J**	0.075 UJ	0.049 B	0.035 B	0.086 U	**0.028 J**	0.073 U	0.073 U	0.074 UJ	0.079 U	**0.16 J**	0.081 U	0.073 UJ	0.077 UJ
Caprolactam	mg/kg	400,000	0.19 U	0.18 U	0.18 U	0.21 U	0.18 U	0.18 U	0.19 U	0.18 U	0.19 U	0.19 U	0.2 U	0.2 U	0.22 U	0.17 U	0.18 U	0.18 U	0.19 U	0.2 U	0.19 U	0.2 U	0.18 U	0.19 U
Carbazole	mg/kg		**0.13**	0.073 U	**0.054 J**	0.083 U	0.072 U	**0.056 J**	0.074 U	0.07 U	0.075 U	0.075 U	**0.073 J**	**0.082 J**	0.086 U	**0.023 J**	0.073 U	**0.85**	**0.21 J**	0.079 U	0.074 UJ	0.081 U	**0.028 J**	**0.1**
Chrysene	mg/kg	2,100	**0.5**	**0.01**	**0.28**	**0.0037 J**	**0.24**	**0.21 J**	**0.089**	**0.22**	**0.15**	**0.17**	**0.55**	**0.44 J**	**0.09**	**0.28**	**0.049**	**0.33**	**1.8**	**0.0025 J**	**0.16**	**0.12**	**1.1**	**0.31**
Dibenz[a,h]anthracene	mg/kg	2.1	**0.11**	0.0073 U	**0.053**	0.0085 U	**0.048 J**	**0.04 J**	**0.0099 J**	**0.021 J**	**0.034**	0.076 UJ	**0.11**	**0.045 J**	**0.018**	**0.034**	**0.0085**	**0.056**	**0.48**	0.0077 U	**0.029 J**	**0.025**	**0.18**	**0.047**
Diethylphthalate	mg/kg	660,000	0.075 U	0.073 U	0.07 U	0.083 U	0.072 U	0.074 U	0.074 U	0.07 U	0.075 U	0.075 U	0.079 U	0.081 U	0.086 U	0.069 U	0.073 U	0.073 U	0.074 U	0.079 U	0.074 U	0.081 U	0.073 U	0.077 U
Di-n-butylphthalate	mg/kg	82,000	0.075 U	0.073 U	0.07 U	0.083 U	0.072 U	0.074 U	0.074 U	0.07 U	0.075 U	0.075 U	0.079 U	0.081 U	0.086 U	0.069 U	0.073 U	0.073 U	0.074 UJ	0.079 U	0.074 UJ	0.081 U	0.073 U	0.077 U
Di-n-ocytlphthalate	mg/kg	8,200	0.075 U	0.073 U	0.07 U	0.083 U	0.072 U	0.074 UJ	0.074 UJ	0.07 UJ	0.075 UJ	0.075 UJ	0.079 UJ	0.081 UJ	0.086 U	0.069 U	0.073 U	0.073 U	0.074 UJ	0.079 U	0.074 UJ	0.081 U	0.073 UJ	0.077 UJ
Fluoranthene	mg/kg	30,000	**1**	**0.013**	**0.5**	**0.0035 J**	**0.52**	**0.24 J**	**0.12**	**0.33**	**0.16**	**0.069 J**	**0.54**	**0.5**	**0.16**	**0.34**	**0.084**	**0.59**	**2.5**	**0.0027 J**	**0.18**	**0.19**	**2.2**	**0.41**
Fluorene	mg/kg	30,000	**0.051**	**0.005 J**	**0.016**	0.0085 U	**0.014**	**0.013**	**0.0035 J**	**0.014**	**0.0056 J**	**0.018 J**	**0.014**	**0.02 J**	**0.012**	**0.0071**	**0.0037 J**	**0.013**	**0.065 J**	0.0077 U	**0.0095 J**	**0.01**	**0.037**	**0.0074 J**
Hexachlorobenzene	mg/kg	0.96	0.075 U	0.073 U	0.07 U	0.083 U	0.072 U	0.074 U	0.074 U	0.07 U	0.075 U	0.075 U	0.079 U	0.081 U	0.086 U	0.069 U	0.073 U	0.073 U	0.074 UJ	0.079 U	0.074 UJ	0.081 U	0.073 U	0.077 U
Hexachloroethane	mg/kg	8	0.075 U	0.073 U	0.07 U	0.083 U	0.072 U	**0.029 J**	0.074 U	0.07 U	0.075 U	0.075 U	0.079 U	0.081 U	0.086 U	0.069 U	0.073 U	0.073 U	0.074 U	0.079 U	0.074 U	0.081 U	0.073 U	0.077 U
Indeno[1,2,3-c,d]pyrene	mg/kg	21	**0.3**	**0.0039 J**	**0.16**	0.0085 U	**0.12 J**	**0.1 J**	**0.024 J**	**0.046 J**	**0.1**	**0.086 J**	**0.32**	**0.12 J**	**0.053**	**0.078**	**0.024**	**0.18**	**1.1**	0.0077 U	**0.073 J**	**0.048**	**0.37**	**0.1**
Naphthalene	mg/kg	17	**0.14**	**0.013**	**0.083**	**0.0027 J**	**0.13**	**0.14 J**	**0.063**	**0.025**	**0.023**	**0.047 J**	**0.044**	**0.1**	**0.031**	**0.087**	**0.04**	**0.019**	**0.22**	0.0018 B	**0.1**	**0.017**	**0.093**	**0.058**
Nitrobenzene	mg/kg	22	0.075 U	0.073 U	0.07 U	0.083 U	0.072 U	0.074 U	0.074 U	0.07 U	0.075 U	0.075 U	0.079 U	0.081 U	0.086 U	0.069 U	0.073 U	0.073 U	0.074 U	0.079 U	0.074 U	0.081 U	0.073 U	0.077 U
N-Nitrosodiphenylamine	mg/kg	470	0.075 U	0.073 U	0.07 U	0.083 U	0.072 U	0.074 U	0.074 U	0.07 U	0.075 U	0.075 U	0.079 U	0.081 U	0.086 U	0.069 U	0.073 U	0.073 U	0.074 UJ	0.079 U	0.074 UJ	0.081 U	0.073 U	0.077 U
Pentachlorophenol	mg/kg	4	0.19 U	0.18 U	0.18 U	0.21 U	0.18 U	0.18 U	0.19 U	0.18 U	0.19 U	0.19 U	0.2 U	0.2 R	0.22 U	0.17 U	0.18 U	0.18 U	0.19 UJ	0.2 U	0.19 UJ	0.2 U	0.18 U	0.19 U
Phenanthrene	mg/kg		**1.3**	**0.014**	**0.44**	**0.0046 J**	**0.3**	**0.12 J**	**0.059**	**0.18**	**0.063**	**0.068 J**	**0.17**	**0.37**	**0.14**	**0.2**	**0.086**	**0.26**	**1.9**	**0.0035 J**	**0.21**	**0.16**	**1**	**0.26**
Phenol	mg/kg	250,000	**0.023 J**	0.073 U	0.07 U	0.083 U	0.072 U	0.074 U	0.074 U	0.07 U	0.075 U	0.075 U	0.079 U	0.081 UJ	0.086 U	0.069 U	0.073 U	0.073 U	0.074 U	0.079 U	0.074 U	0.081 U	0.073 U	0.077 U
Pyrene	mg/kg	23,000	**0.99**	**0.01**	**0.46**	**0.0028 J**	**0.37**	**0.26 J**	**0.12**	**0.31**	**0.18**	**0.084**	**0.7**	**0.44**	**0.12**	**0.4**	**0.067**	**0.51**	**1.8**	**0.0033 J**	**0.16**	**0.15**	**1.2**	**0.31**
PCBs																								
Aroclor 1242	mg/kg	0.97	0.0522 U	N/A	0.0525 U	N/A	0.0554 U	N/A	0.0564 U	N/A	0.055 U	N/A	0.0572 U	N/A	0.0557 U	N/A	0.0554 U	N/A	0.0571 U	N/A	0.0543 U	N/A	0.055 U	N/A
Aroclor 1248	mg/kg	0.94	**0.269**	N/A	0.0525 U	N/A	0.0554 U	N/A	0.0564 U	N/A	0.055 U	N/A	0.0572 U	N/A	0.0557 U	N/A	0.0554 U	N/A	0.0571 U	N/A	0.0543 U	N/A	0.055 U	N/A
Aroclor 1254	mg/kg	0.97	0.0522 U	N/A	**0.108**	N/A	0.0554 U	N/A	0.0564 U	N/A	0.055 U	N/A	0.0572 U	N/A	0.0557 U	N/A	0.0554 U	N/A	0.0571 U	N/A	0.0543 U	N/A	0.055 U	N/A
Aroclor 1260	mg/kg	0.99	**0.907**	N/A	**0.225**	N/A	**0.0394 J**	N/A	0.0564 U	N/A	**0.0632**	N/A	**0.102**	N/A	0.0557 U	N/A	0.0554 U	N/A	0.0571 U	N/A	0.0543 U	N/A	0.055 U	N/A
Aroclor 1262	mg/kg		0.0522 U	N/A	0.0525 U	N/A	0.0554 U	N/A	0.0564 U	N/A	0.055 U	N/A	0.0572 U	N/A	0.0557 U	N/A	**0.0226 J**	N/A	0.0571 U	N/A	0.0543 U	N/A	0.055 U	N/A
Aroclor 1268	mg/kg		0.0522 U	N/A	0.0525 U	N/A	0.0554 U	N/A	0.0564 U	N/A	0.055 U	N/A	0.0572 U	N/A	**0.0433 J**	N/A	0.0554 U	N/A	0.0571 U	N/A	0.0543 U	N/A	0.055 U	N/A
PCBs (total)	mg/kg	0.97	**1.176**	N/A	**0.333**	N/A	**0.0394 J**	N/A	0.0564 U	N/A	**0.0632**	N/A	**0.102**	N/A	**0.0433 J**	N/A	**0.0226 J**	N/A	0.0571 U	N/A	0.0543 U	N/A	0.055 U	N/A
TPH/Oil and Grease																								
Diesel Range Organics	mg/kg	6,200	**124**	**22.8**	**162**	**5 J**	**122**	**112**	**75.1**	**26.5**	**40.1**	**752**	**59.9**	**70.9 J**	**60.6**	**134**	**33.1**	**121**	**817**	**7.1 J**	**111**	**7.3 J**	**54.1**	**166**
Gasoline Range Organics	mg/kg	6,200	13.9 U	**40.3**	16.1 U	**15.3 J**	10.5 U	11.8 U	10.2 U	9.2 U	10.8 U	**8.1 J**	10.6 U	16.1 U	11.9 U	11.4 U	9.9 U	11.7 U	14.4 U	9.3 U	11.7 U	12.4 U	13 U	10.8 U
Oil and Grease	mg/kg	6,200	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	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Detections in bold
Values in red indicate an exceedance of the Project Action Limit (PAL)
* Indicates non-validated data
^ PAH compounds were analyzed via SIM
N/A indicates that the parameter was not analyzed for this sample

U: This analyte was not detected in the sample. The numeric value represents the sample quantitation/detection limit.
UJ: This analyte was not detected in the sample. The actual quantitation/detection limit may be higher than reported.
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.
R: The result reported for this analyte is unreliable. Additional data is needed to confirm or disprove the presence of this analyte in the sample.

Table 1 - Sub-Parcel B1-1
Summary of Organics Detected in Soil

Parameter	Units	PAL	B1-012-SB-1	B1-012-SB-9	B1-013-SB-1	B1-013-SB-9	B1-014-SB-1	B1-014-SB-5	B1-014-SB-10*	B1-015-SB-1	B1-015-SB-9	B1-016-SB-1	B1-016-SB-5	B1-017-SB-1	B1-017-SB-5	B1-018-SB-1	B1-018-SB-5	B1-019-SB-1*	B1-019-SB-5*	B1-020-SB-1*	B1-020-SB-5*	B1-033-SB-1*	B1-033-SB-4*	B1-034-SB-1*
Volatile Organic Compounds																								
1,1,1-Trichloroethane	mg/kg	36,000	0.0061 U	0.0046 U	0.0075 U	0.0064 U	0.012 U	0.0068 U	N/A	0.005 U	0.0052 U	0.0058 U	0.0042 U	0.0047 U	0.0049 UJ	0.0045 U	0.0057 U	0.0055 U	0.0061 U	0.0047 U	0.0069 U	0.0049 U	0.0058 U	0.004 U
1,2-Dichloroethane	mg/kg	2	0.0061 U	0.0046 U	0.0075 U	0.0064 U	0.012 U	0.0068 U	N/A	0.005 U	0.0052 U	0.0058 U	0.0042 U	0.0047 U	0.0049 U	0.0045 U	0.0057 U	0.0055 U	0.0061 U	0.0047 U	0.0069 U	0.0049 U	0.0058 U	0.004 U
1,4-Dichlorobenzene	mg/kg	11	0.0061 U	0.0046 U	0.0075 U	0.0064 U	0.012 U	0.0068 U	N/A	0.005 U	0.0052 U	0.0058 U	0.0042 U	0.0047 U	0.0049 U	0.0045 U	0.0057 U	0.0055 U	0.0061 U	0.0047 U	0.0069 U	0.0049 U	0.0058 U	0.004 U
2-Butanone (MEK)	mg/kg	190,000	0.012 U	0.0091 U	0.015 U	0.013 U	0.023 U	0.014 U	N/A	**0.0089 J**	0.01 U	0.012 U	0.0085 U	0.0094 U	0.0099 UJ	0.0089 U	0.011 U	0.011 U	0.012 U	0.0095 U	0.014 U	0.0098 U	0.012 U	0.0079 U
2-Hexanone	mg/kg	1,300	0.012 U	0.0091 U	0.015 U	0.013 U	0.023 U	0.014 U	N/A	0.0099 U	0.01 U	0.012 U	0.0085 U	0.0094 U	0.0099 U	0.0089 U	0.011 U	0.011 U	0.012 U	0.0095 U	0.014 U	0.0098 U	0.012 U	0.0079 U
4-Methyl-2-pentanone (MIBK)	mg/kg	56,000	0.012 U	0.0091 U	0.015 U	0.013 U	0.023 U	0.014 U	N/A	0.0099 U	0.01 U	0.012 U	0.0085 U	0.0094 U	0.0099 U	0.0089 U	0.011 U	0.011 U	0.012 U	0.0095 U	0.014 U	0.0098 U	0.012 U	0.0079 U
Acetone	mg/kg	670,000	**0.027 J**	**0.0047 J**	**0.06 J**	0.013 UJ	**0.023 J**	**0.018 J**	N/A	**0.065 J**	0.01 UJ	0.012 UJ	**0.0057 J**	0.0094 U	0.0099 UJ	**0.0071 J**	0.011 UJ	0.011 U	0.012 U	0.033 B	**0.05**	0.037 B	**0.11**	**0.018**
Benzene	mg/kg	5.1	0.0061 U	0.0046 U	0.0075 U	0.0064 U	0.012 U	0.0068 U	N/A	0.005 U	**0.0027 J**	0.0058 U	0.0042 U	0.0047 U	0.0049 UJ	0.0045 U	0.0057 U	0.0055 U	0.0061 U	0.0047 U	0.0069 U	0.0049 U	0.0058 U	0.004 U
Carbon disulfide	mg/kg	3,500	0.0061 UJ	0.0046 U	0.0075 UJ	0.0064 U	0.012 U	0.0068 U	N/A	0.005 U	0.0052 UJ	0.0058 U	0.0042 U	0.0047 U	0.0049 UJ	0.0045 U	0.0057 U	0.0055 U	0.0061 U	0.0047 U	0.0069 U	0.0049 U	0.0058 U	0.004 U
Carbon tetrachloride	mg/kg	2.9	0.0061 U	0.0046 U	0.0075 U	0.0064 U	0.012 U	0.0068 U	N/A	0.005 U	0.0052 U	0.0058 U	0.0042 U	0.0047 U	0.0049 UJ	0.0045 U	0.0057 U	0.0055 U	0.0061 U	0.0047 U	0.0069 U	0.0049 U	0.0058 U	0.004 U
Chloroform	mg/kg	1.4	0.0061 U	0.0046 U	0.0075 U	0.0064 U	0.012 U	0.0068 U	N/A	0.005 U	0.0052 U	0.0058 U	0.0042 U	0.0047 U	0.0049 UJ	0.0045 U	**0.0057**	0.0055 U	0.0061 U	0.0047 U	0.0069 U	0.0049 U	0.0058 U	0.004 U
Cyclohexane	mg/kg	27,000	0.012 U	0.0091 U	0.015 U	0.013 U	0.023 U	**0.0049 J**	N/A	0.0099 U	**0.0058 J**	0.012 U	0.0085 U	0.0094 U	0.0099 UJ	0.0089 U	0.011 U	0.011 U	0.012 U	0.0095 U	0.014 U	0.0098 U	0.012 U	0.0079 U
Ethylbenzene	mg/kg	25	0.0061 U	0.0046 U	0.0075 U	0.0064 U	0.012 U	0.0068 U	N/A	0.005 U	0.0052 U	0.0058 U	0.0042 U	0.0047 U	0.0049 U	0.0045 U	0.0057 U	0.0055 U	0.0061 U	0.0047 U	0.0069 U	0.0049 U	0.0058 U	0.004 U
Isopropylbenzene	mg/kg	9,900	0.0061 U	0.0046 U	0.0075 U	0.0064 U	0.012 U	0.0068 U	N/A	0.005 U	0.0052 U	0.0058 U	0.0042 U	0.0047 U	0.0049 U	**0.0039 J**	0.0057 U	0.0055 U	0.0061 U	0.0047 U	0.0069 U	0.0049 U	0.0058 U	0.004 U
Methyl Acetate	mg/kg	1,200,000	0.061 U	0.046 U	0.075 UJ	0.064 U	0.12 U	0.068 U	N/A	**0.043 J**	0.052 U	0.058 U	0.042 U	0.047 U	0.049 UJ	0.045 U	0.057 U	0.055 U	0.061 U	0.047 U	0.069 U	0.049 U	0.058 U	0.04 U
Methylene Chloride	mg/kg	1,000	0.0061 UJ	0.0046 U	**0.059 J**	0.0064 U	0.012 U	0.0068 U	N/A	0.005 U	0.0052 UJ	0.0058 U	0.0042 U	0.0047 U	0.0049 UJ	0.0045 U	0.0057 U	0.0055 U	0.0061 U	0.0047 U	0.0069 U	0.0049 U	0.0058 U	0.004 U
Styrene	mg/kg	35,000	0.0061 U	0.0046 U	0.0075 U	0.0064 U	0.012 U	0.0068 U	N/A	0.005 U	0.0052 U	0.0058 U	0.0042 U	0.0047 U	0.0049 U	0.0045 U	0.0057 U	0.0055 U	0.0061 U	0.0047 U	0.0069 U	0.0049 U	0.0058 U	0.004 U
Tetrachloroethene	mg/kg	100	0.0061 U	0.0046 U	0.0075 U	0.0064 U	0.012 U	0.0068 U	N/A	0.005 U	0.0052 U	0.0058 U	0.0042 U	0.0047 U	0.0049 U	0.0045 U	0.0057 U	0.0055 U	0.0061 U	0.0047 U	0.0069 U	0.0049 U	0.0058 U	0.004 U
Toluene	mg/kg	47,000	0.0061 U	0.0046 U	0.0075 U	0.0064 U	**0.0048 J**	**0.0052 J**	N/A	0.005 U	**0.0041 J**	0.0058 U	0.0042 U	0.0047 U	0.0049 U	0.0045 U	0.0057 U	**0.0024 J**	**0.0019 J**	**0.0042 J**	**0.0083**	**0.01**	**0.013**	**0.004**
Trichloroethene	mg/kg	6	0.0061 U	0.0046 U	0.0075 U	0.0064 U	0.012 U	0.0068 U	N/A	0.005 U	0.0052 U	0.0058 U	0.0042 U	0.0047 U	0.0049 UJ	0.0045 U	0.0057 U	0.0055 U	0.0061 U	0.0047 U	0.0069 U	0.0049 U	0.0058 U	0.004 U
Xylenes	mg/kg	2,800	0.018 U	0.014 U	0.023 U	0.019 U	0.035 U	**0.0051 J**	N/A	0.015 U	0.016 U	0.017 U	0.013 U	0.014 U	0.015 U	0.013 U	0.017 U	0.017 U	0.018 U	0.014 U	0.021 U	0.015 U	0.017 U	0.012 U
Semi-Volatile Organic Compounds^																								
1,1-Biphenyl	mg/kg	200	**0.043 J**	0.074 U	**0.042 J**	0.08 U	**0.13**	**0.16**	N/A	0.073 U	0.071 U	0.075 U	0.074 U	0.075 U	0.081 U	0.075 U	**0.026 J**	0.074 U	**0.044 J**	0.074 U	0.072 U	0.07 U	0.074 U	0.073 U
2,3,4,6-Tetrachlorophenol	mg/kg	25,000	0.15 U	0.074 U	0.078 U	0.08 U	0.075 U	0.073 U	N/A	0.073 U	0.071 U	0.075 U	0.074 U	0.075 R	0.081 UJ	0.075 U	0.074 U	0.074 U	0.079 U	0.074 U	0.072 U	0.07 U	0.074 U	0.073 U
2,4-Dimethylphenol	mg/kg	16,000	0.15 U	0.074 U	0.078 U	0.08 U	**0.033 J**	**0.033 J**	N/A	0.073 U	0.071 U	0.075 U	0.074 U	0.075 R	0.081 UJ	0.075 U	0.074 U	0.074 U	0.079 U	0.074 U	0.072 U	0.07 U	0.074 U	0.073 U
2-Chloronaphthalene	mg/kg	60,000	0.15 U	0.074 U	0.078 U	0.08 U	0.075 U	0.073 U	N/A	0.073 U	0.071 U	0.075 U	0.074 U	0.075 U	0.081 U	0.075 U	0.074 U	0.074 U	0.079 U	0.074 U	0.072 U	0.07 U	0.074 U	0.073 U
2-Methylnaphthalene	mg/kg	3,000	**0.21**	0.0075 U	**0.11**	**0.028**	**0.94**	**1.1**	**0.024**	**0.047**	**0.0035 J**	**0.14**	**0.023 J**	**0.021**	**0.029**	**0.094**	**0.16**	**0.03**	**0.25**	**0.031**	0.0072 U	**0.01**	**0.013**	**0.02**
2-Methylphenol	mg/kg	41,000	0.15 U	0.074 U	0.078 U	0.08 U	**0.015 J**	**0.015 J**	N/A	0.073 U	0.071 U	0.075 U	0.074 U	0.075 R	0.081 UJ	0.075 U	0.074 U	0.074 U	0.079 U	0.074 U	0.072 U	0.07 U	0.074 U	0.073 U
2-Nitroaniline	mg/kg	8,000	0.38 U	0.19 U	0.2 U	0.2 U	0.19 U	0.18 U	N/A	0.18 U	0.18 U	0.19 U	0.18 U	0.19 U	0.2 U	0.19 U	0.18 U	0.19 U	0.2 U	0.19 U	0.18 U	0.18 U	0.19 U	0.18 U
3&4-Methylphenol(m&p Cresol)	mg/kg	41,000	0.3 U	0.15 U	0.16 U	0.16 U	**0.038 J**	**0.041 J**	N/A	0.15 U	0.14 U	0.15 U	0.15 U	0.15 R	0.16 UJ	0.15 U	0.15 U	0.15 U	0.16 U	0.15 U	0.14 U	0.14 U	0.15 U	0.15 U
3,3'-Dichlorobenzidine	mg/kg	5.1	0.15 U	0.074 U	0.078 UJ	0.08 U	0.075 UJ	0.073 UJ	N/A	0.073 UJ	0.071 U	0.075 UJ	0.074 UJ	0.075 UJ	0.081 U	0.075 UJ	0.074 UJ	0.074 U	0.079 U	0.074 U	0.072 U	0.07 U	0.074 U	0.073 U
4-Nitroaniline	mg/kg	110	0.38 U	0.19 U	0.2 UJ	0.2 U	0.19 U	0.18 U	N/A	0.18 U	0.18 U	0.19 U	0.18 U	0.19 U	0.2 U	0.19 U	0.18 U	0.19 U	0.2 U	0.19 U	0.18 U	0.18 U	0.19 U	0.18 U
Acenaphthene	mg/kg	45,000	**0.013**	0.0075 U	**0.021**	**0.0027 J**	**0.082**	**0.68**	**0.0012 J**	**0.01**	**0.0013 J**	**0.011**	0.073 U	**0.0032 J**	**0.028**	**0.013**	**0.014**	**0.0038 J**	**0.024**	**0.0039 J**	**0.00076 J**	**0.0019 J**	0.0075 U	**0.0063 J**
Acenaphthylene	mg/kg	45,000	**0.064**	0.0075 U	**0.054 J**	**0.038**	**0.16**	**0.3**	**0.002 J**	**0.013**	0.0072 U	**0.14**	**0.023 J**	**0.005 J**	**0.011**	**0.078**	**0.035**	**0.017**	**0.29**	**0.015**	**0.001 J**	**0.018**	**0.00088 J**	**0.092**
Acetophenone	mg/kg	120,000	**0.053 J**	0.074 U	0.078 U	0.08 U	**0.1**	**0.095**	N/A	**0.049 J**	0.071 U	0.075 U	0.074 U	0.075 U	0.081 U	0.075 U	0.074 U	0.074 U	**0.027 J**	0.074 U	0.072 U	0.07 U	0.074 U	**0.021 J**
Anthracene	mg/kg	230,000	**0.23**	0.0075 U	**0.17 J**	**0.029**	**0.41**	**1.8**	**0.014**	**0.019**	**0.001 J**	**0.26**	**0.02 J**	**0.013**	**0.061**	**0.16**	**0.1**	**0.02**	**0.23**	**0.032**	**0.0031 J**	**0.0085**	**0.0038 J**	**0.011**
Benz[a]anthracene	mg/kg	21	**0.7**	0.0075 U	**0.36**	**0.12**	**1.3**	**3.4**	**0.028**	**0.041**	**0.0073**	**1.1**	**0.037 J**	**0.062**	**0.084**	**0.46**	**0.27**	**0.056**	**1.1**	**0.084**	**0.0027 J**	**0.021**	**0.0069 J**	**0.054**
Benzaldehyde	mg/kg	120,000	**0.049 J**	0.074 R	**0.029 J**	**0.035 J**	**0.19 J**	**0.15 J**	N/A	**0.052 J**	0.071 R	**0.021 J**	**0.042 J**	0.075 R	**0.02 J**	0.075 R	**0.1 J**	0.074 U	**0.046 J**	0.074 U	0.072 U	0.07 U	0.074 U	**0.016 J**
Benzo[a]pyrene	mg/kg	2.1	**0.52**	0.0075 U	**0.28 J**	**0.16 J**	**1.2 J**	**3.1 J**	**0.018**	**0.06 J**	**0.0062 J**	**1.1**	**0.033 J**	**0.063**	**0.033**	**0.68**	**0.24 J**	**0.071**	**1.2**	**0.11**	**0.0013 J**	**0.021**	**0.0057 J**	**0.062**
Benzo[b]fluoranthene	mg/kg	21	**1.9**	**0.0013 J**	**0.72 J**	**0.43 J**	**3.2**	**5.8 J**	**0.094**	**0.18 J**	**0.16**	**2.5**	**0.1 J**	**0.16**	**0.094**	**1.8 J**	**0.73 J**	**0.24**	**2.5**	**0.35**	**0.0058 J**	**0.068**	**0.016**	**0.19**
Benzo[g,h,i]perylene	mg/kg		**0.11**	0.0075 U	**0.078 J**	**0.062 J**	**0.31 J**	**0.95**	**0.017**	**0.034 J**	**0.028**	**0.4**	**0.077 J**	**0.054**	**0.021**	**0.2**	**0.075 J**	**0.041**	**0.67**	**0.055**	0.0072 U	**0.024**	**0.0051 J**	**0.046**
Benzo[k]fluoranthene	mg/kg	210	**1.9**	**0.0013 J**	**0.74 J**	**0.43 J**	**3.2**	**2.5 J**	**0.093**	**0.19 J**	**0.16**	**2.5**	**0.1 J**	**0.16**	**0.091**	**1.8 J**	**0.74 J**	**0.23**	**2.4**	**0.34**	**0.0049 J**	**0.064**	**0.016**	**0.18**
bis(2-Ethylhexyl)phthalate	mg/kg	160	0.15 U	0.074 U	0.078 UJ	0.08 U	0.075 UJ	0.073 UJ	N/A	**0.14 J**	0.071 U	0.075 UJ	0.074 UJ	**0.19 J**	0.081 U	0.075 UJ	0.02 B	0.074 U	0.079 U	0.074 U	0.072 U	0.07 U	0.074 U	0.073 U
Caprolactam	mg/kg	400,000	0.38 U	0.19 U	0.2 U	0.2 U	0.19 U	0.18 U	N/A	0.18 U	0.18 U	0.19 U	0.18 U	0.19 U	0.2 U	0.19 U	0.18 U	**0.021 J**	0.2 U	0.19 U	0.18 U	0.18 U	0.19 U	0.18 U
Carbazole	mg/kg		**0.13 J**	0.074 U	**0.36 J**	0.08 U	**0.28**	**1.7**	N/A	0.073 U	0.071 U	**0.066 J**	0.074 U	0.075 U	0.081 U	**0.03 J**	**0.069 J**	0.074 U	**0.049 J**	0.074 U	0.072 U	0.07 U	0.074 U	0.073 U
Chrysene	mg/kg	2,100	**0.74**	**0.00084 J**	**0.4 J**	**0.18**	**1.4**	**3.6**	**0.074**	**0.069**	**0.078**	**1.2**	**0.027 J**	**0.088**	**0.092**	**0.57**	**0.45**	**0.066**	**1.1**	**0.096**	**0.0032 J**	**0.034**	**0.011**	**0.081**
Dibenz[a,h]anthracene	mg/kg	2.1	**0.077**	0.0075 U	**0.049 J**	**0.031 J**	**0.18 J**	**0.54**	**0.0082 J**	**0.0088 J**	**0.016**	**0.21**	**0.011 J**	**0.018**	**0.0083**	**0.09**	**0.043 J**	**0.013**	**0.25**	**0.02**	0.0072 U	**0.0065 J**	**0.0015 J**	**0.015**
Diethylphthalate	mg/kg	660,000	0.15 U	0.074 U	0.078 U	0.08 U	0.075 U	0.073 U	N/A	0.073 U	0.071 U	0.075 U	0.074 U	0.075 U	0.081 U	0.075 U	0.074 U	0.074 U	0.079 U	0.074 U	0.072 U	0.07 U	0.074 U	0.073 U
Di-n-butylphthalate	mg/kg	82,000	0.15 U	0.074 U	0.078 U	0.08 U	0.075 U	0.073 U	N/A	0.073 U	0.071 U	0.075 U	0.074 U	0.075 U	0.081 U	0.075 U	0.074 U	0.074 U	0.079 U	0.074 U	0.072 U	0.07 U	0.074 U	0.073 U
Di-n-octylphthalate	mg/kg	8,200	0.15 U	0.074 U	0.078 UJ	0.08 U	0.075 UJ	0.073 UJ	N/A	**0.032 J**	0.071 U	0.075 UJ	0.074 UJ	0.075 UJ	0.081 U	0.075 UJ	0.074 UJ	0.074 U	0.079 U	0.074 U	0.072 U	0.07 U	0.074 U	0.073 U
Fluoranthene	mg/kg	30,000	**1.3**	**0.0012 J**	**0.77**	**0.14**	**3.6**	**8.2**	**0.063**	**0.086**	**0.027**	**1.6**	**0.043 J**	**0.13**	**0.28**	**0.62**	**0.49**	**0.12**	**2.2**	**0.16**	**0.0082**	**0.05**	**0.035**	**0.08**
Fluorene	mg/kg	30,000	**0.024**	0.0075 U	**0.074 J**	**0.0045 J**	**0.1**	**0.62**	**0.0013 J**	**0.0087**	**0.00083 J**	**0.025**	0.073 U	**0.0021 J**	**0.028**	**0.015**	**0.029**	**0.004 J**	**0.036**	**0.0043 J**	**0.001 J**	**0.0029 J**	0.0075 U	**0.0038 J**
Hexachlorobenzene	mg/kg	0.96	0.15 U	0.074 U	0.078 U	0.08 U	0.075 U	0.073 U	N/A	0.073 U	0.071 U	0.075 U	0.074 U	0.075 U	0.081 U	0.075 U	0.074 U	0.074 U	0.079 U	0.074 U	0.072 U	0.07 U	0.074 U	0.073 U
Hexachloroethane	mg/kg	8	0.15 U	0.074 U	0.078 U	0.08 U	0.075 U	0.073 U	N/A	0.073 U	0.071 U	0.075 U	0.074 U	0.075 U	0.081 U	0.075 U	0.074 U	0.074 U	0.079 U	0.074 U	0.072 U	0.07 U	0.074 U	0.073 U
Indeno[1,2,3-c,d]pyrene	mg/kg	21	**0.15**	0.0075 U	**0.096 J**	**0.071 J**	**0.38 J**	**1.1**	**0.013**	**0.029 J**	**0.021**	**0.47**	**0.024 J**	**0.042**	**0.015**	**0.23**	**0.091 J**	**0.035**	**0.65**	**0.054**	0.0072 U	**0.019**	**0.0038 J**	**0.044**
Naphthalene	mg/kg	17	**0.16**	**0.0013 J**	**0.12**	**0.068**	**0.69**	**0.9**	**0.028**	**0.038**	**0.0059 J**	**0.14**	**0.027 J**	**0.019**	**0.052**	**0.09**	**0.24**	**0.1**	**0.28**	**0.037**	0.0072 U	**0.072**	**0.0092**	**0.13**
Nitrobenzene	mg/kg	22	0.15 U	0.074 U	0.078 U	0.08 U	0.075 U	0.073 U	N/A	0.073 U	0.071 U	0.075 U	0.074 U	0.075 U	0.081 U	0.075 U	0.074 U	0.074 U	0.079 U	0.074 U	0.072 U	0.07 U	0.074 U	0.073 U
N-Nitrosodiphenylamine	mg/kg	470	0.15 U	0.074 U	0.078 U	0.08 U	0.075 U	0.073 U	N/A	0.073 U	0.071 U	0.075 U	0.074 U	0.075 U	0.081 U	0.075 U	0.074 U	0.074 U	0.079 U	0.074 U	0.072 U	0.07 U	0.074 U	0.073 U
Pentachlorophenol	mg/kg	4	0.38 U	0.19 U	0.2 UJ	0.2 U	0.19 U	0.18 U	N/A	0.18 U	0.18 U	0.19 U	0.18 U	0.19 R	0.2 UJ	0.19 U	0.18 U	0.19 U	0.2 U	0.19 U	0.18 U	0.18 U	0.19 U	0.18 U
Phenanthrene	mg/kg		**0.87**	**0.0016 J**	**0.79**	**0.14**	**2.5**	**7.6**	**0.13**	**0.076**	**0.014**	**0.88**	**0.05 J**	**0.061**	**0.31**	**0.27**	**0.57**	**0.069**	**0.71**	**0.075**	**0.0065 J**	**0.029**	**0.031**	**0.047**
Phenol	mg/kg	250,000	0.15 U	0.074 U	0.078 U	0.08 U	**0.02 J**	**0.026 J**	N/A	0.073 U	0.071 U	0.075 U	0.074 U	0.075 R	0.081 UJ	0.075 U	0.074 U	0.074 U	0.079 U	0.074 U	0.072 U	0.07 U	0.074 U	0.073 U
Pyrene	mg/kg	23,000	**0.96**	**0.00093 J**	**0.57**	**0.12**	**3.2**	**6.4**	**0.044**	**0.071**	**0.01**	**1.3**	**0.037 J**	**0.12**	**0.28**	**0.62**	**0.41**	**0.11**	**1.8**	**0.15**	**0.0062 J**	**0.047**	**0.026**	**0.081**
PCBs																								
Aroclor 1242	mg/kg	0.97	0.0568 U	N/A	0.0645 U	N/A	0.0546 U	N/A	N/A	0.0549 U	N/A	0.0593 U	N/A	0.0568 U	N/A	0.0542 U	N/A	0.633 U	N/A	0.0544 U	N/A	0.0583 U	N/A	0.129 U
Aroclor 1248	mg/kg	0.94	0.0568 U	N/A	0.0645 U	N/A	0.0546 U	N/A	N/A	0.0549 U	N/A	0.0593 U	N/A	0.0568 U	N/A	0.0542 U	N/A	0.633 U	N/A	0.0544 U	N/A	0.0583 U	N/A	0.129 U
Aroclor 1254	mg/kg	0.97	0.0568 U	N/A	0.0645 U	N/A	0.0546 U	N/A	N/A	**0.198**	N/A	0.0593 U	N/A	0.0568 U	N/A	0.0542 U	N/A	0.633 U	N/A	0.0544 U	N/A	0.0583 U	N/A	**3.16**
Aroclor 1260	mg/kg	0.99	0.0568 U	N/A	0.0645 U	N/A	0.0546 U	N/A	N/A	0.0549 U	N/A	0.0593 U	N/A	0.0568 U	N/A	0.0542 U	N/A	0.633 U	N/A	0.0544 U	N/A	0.0583 U	N/A	0.129 U
Aroclor 1262	mg/kg		0.0568 U	N/A	0.0645 U	N/A	0.0546 U	N/A	N/A	**0.831**	N/A	**0.159**	N/A	0.0568 U	N/A	0.0542 U	N/A	0.633 U	N/A	0.0544 U	N/A	0.0583 U	N/A	0.129 U
Aroclor 1268	mg/kg		0.0568 U	N/A	0.0645 U	N/A	0.0546 U	N/A	N/A	**0.469**	N/A	**0.0691**	N/A	0.0568 U	N/A	0.0542 U	N/A	**18.4**	N/A	**0.451**	N/A	**0.964**	N/A	**1.06**
PCBs (total)	mg/kg	0.97	0.0568 U	N/A	0.0645 U	N/A	0.0546 U	N/A	N/A	**1.498**	N/A	**0.2281**	N/A	0.0568 U	N/A	0.0542 U	N/A	**18.4**	N/A	**0.451**	N/A	**0.964**	N/A	**4.22**
TPH/Oil and Grease																								
Diesel Range Organics	mg/kg	6,200	**50.8**	**3.9 J**	**56.7**	**18.8**	**319**	**650**	**19**	**397**	**13.2**	**133**	**854**	**36.6**	**23.8**	**59.3**	**61**	**29.4**	**146**	**24.6**	**2.7 J**	**45.3**	**21.8**	**56**
Gasoline Range Organics	mg/kg	6,200	16.3 U	8.8 U	16.1 U	13.6 U	**15.1 J**	14.8 U	N/A	9.4 U	11.6 U	12.1 U	10.1 U	11.1 U	13.9 U	10.4 U	12.5 U	12.5 U	15.7 U	9.5 U	13.3 U	10.9 U	10.7 U	9.5 U
Oil and Grease	mg/kg	6,200	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	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Detections in bold
Values in red indicate an exceedance of the Project Action Limit (PAL)
* Indicates non-validated data
^ PAH compounds were analyzed via SIM
N/A indicates that the parameter was not analyzed for this sample

U: This analyte was not detected in the sample. The numeric value represents the sample quantitation/detection limit.
UJ: This analyte was not detected in the sample. The actual quantitation/detection limit may be higher than reported.
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.
R: The result reported for this analyte is unreliable. Additional data is needed to confirm or disprove the presence of this analyte in the sample.

Table 1 - Sub-Parcel B1-1
Summary of Organics Detected in Soil

Parameter	Units	PAL	B1-034-SB-4*	B1-035-SB-1*	B1-035-SB-5*	B1-036-SB-1*	B1-036-SB-4*	B1-037-SB-1	B1-037-SB-5	B1-037-SB-10*	B1-038-SB-1	B1-038-SB-5	B1-039-SB-1	B1-039-SB-5	B1-040-SB-1	B1-040-SB-5	B1-041-SB-1*	B1-041-SB-8*	B1-042-SB-1*	B1-042-SB-5*	B1-043-SB-1	B1-043-SB-5	B1-044-SB-1
Volatile Organic Compounds																							
1,1,1-Trichloroethane	mg/kg	36,000	0.0048 U	0.0065 U	0.0048 U	0.0062 U	0.0074 U	0.0057 U	0.0057 U	N/A	0.0058 U	0.0058 U	0.0077 U	0.0064 U	0.0059 U	0.0059 U	0.005 U	0.0054 U	0.0055 U	0.0047 U	0.0053 U	0.0053 U	0.005 U
1,2-Dichloroethane	mg/kg	2	0.0048 U	0.0065 U	0.0048 U	0.0062 U	0.0074 U	0.0057 U	0.0057 U	N/A	0.0058 U	0.0058 U	0.0077 U	0.0064 U	0.0059 U	0.0059 U	0.005 U	0.0054 U	0.0055 U	0.0047 U	0.0053 U	0.0053 U	0.005 U
1,4-Dichlorobenzene	mg/kg	11	0.0048 U	0.0065 U	0.0048 U	0.0062 U	0.0074 U	0.0057 U	0.0057 U	N/A	0.0058 U	0.0058 U	0.0077 U	0.0064 U	0.0059 U	0.0059 U	0.005 U	0.0054 U	0.0055 U	0.0047 U	0.0053 U	0.0053 U	0.005 U
2-Butanone (MEK)	mg/kg	190,000	0.0097 U	0.013 U	**0.0061 J**	0.012 U	0.015 U	0.011 U	0.011 U	N/A	0.012 U	0.012 U	0.015 U	0.013 U	0.012 U	0.012 U	0.01 U	0.011 U	0.011 U	0.0094 U	0.011 U	0.011 U	0.01 U
2-Hexanone	mg/kg	1,300	0.0097 U	0.013 U	0.0096 U	0.012 U	0.015 U	0.011 U	0.011 U	N/A	0.012 U	0.012 U	0.015 U	0.013 U	0.012 U	0.012 U	0.01 U	0.011 U	0.011 U	0.0094 U	0.011 U	0.011 U	0.01 U
4-Methyl-2-pentanone (MIBK)	mg/kg	56,000	0.0097 U	0.013 U	0.0096 U	0.012 U	0.015 U	0.011 U	0.011 U	N/A	0.012 U	0.012 U	0.015 U	0.013 U	0.012 U	0.012 U	0.01 U	0.011 U	0.011 U	0.0094 U	0.011 U	0.011 U	0.01 U
Acetone	mg/kg	670,000	**0.053**	**0.017**	**0.065**	0.012 U	**0.056**	**0.017**	**0.046**	N/A	0.012 U	**0.033 J**	**0.061 J**	**0.064 J**	0.008 B	**0.035 J**	0.01 U	**0.04**	**0.076**	0.027 B	**0.025**	0.011 U	**0.02**
Benzene	mg/kg	5.1	0.0048 U	0.0065 U	0.0048 U	0.0062 U	0.0074 U	**0.0034 J**	0.0057 U	N/A	0.0058 U	0.0058 U	0.0077 U	0.0064 U	0.0059 U	0.0059 U	0.005 U	0.0054 U	0.0055 U	0.0047 U	0.0053 U	0.0053 U	0.005 U
Carbon disulfide	mg/kg	3,500	0.0048 U	0.0065 U	0.0048 U	0.0062 U	0.0074 U	0.0057 U	0.0057 U	N/A	0.0058 U	0.0058 U	0.0077 U	0.0064 U	0.0059 U	0.0059 U	0.005 U	0.0054 U	0.0055 U	0.0047 U	0.0053 U	0.0053 U	0.005 U
Carbon tetrachloride	mg/kg	2.9	0.0048 U	0.0065 U	0.0048 U	0.0062 U	0.0074 U	0.0057 UJ	0.0057 UJ	N/A	0.0058 U	0.0058 U	0.0077 U	0.0064 U	0.0059 U	0.0059 U	0.005 U	0.0054 U	0.0055 U	0.0047 U	0.0053 UJ	0.0053 UJ	0.005 UJ
Chloroform	mg/kg	1.4	0.0048 U	0.0065 U	0.0048 U	0.0062 U	**0.009**	0.0057 U	0.0057 U	N/A	0.0058 U	0.0058 U	0.0077 U	0.0064 U	0.0059 U	0.0059 U	0.005 U	0.0054 U	0.0055 U	0.0047 U	0.0053 U	0.0053 U	0.005 U
Cyclohexane	mg/kg	27,000	0.0097 U	0.013 U	0.0096 U	0.012 U	0.015 U	0.011 U	0.011 U	N/A	0.012 U	0.012 U	0.015 U	0.013 U	0.012 U	0.012 U	0.01 U	0.011 U	0.011 U	0.0094 U	0.011 U	0.011 U	0.01 U
Ethylbenzene	mg/kg	25	0.0048 U	0.0065 U	0.0048 U	0.0062 U	0.0074 U	0.0057 U	0.0057 U	N/A	0.0058 U	0.0058 U	0.0077 U	0.0064 U	0.0059 U	0.0059 U	0.005 U	0.0054 U	0.0055 U	0.0047 U	0.0053 U	0.0053 U	0.005 U
Isopropylbenzene	mg/kg	9,900	0.0048 U	0.0065 U	0.0048 U	0.0062 U	0.0074 U	0.0057 U	0.0057 U	N/A	0.0058 U	0.0058 U	0.0077 U	0.0064 U	0.0059 U	0.0059 U	0.005 U	0.0054 U	0.0055 U	0.0047 U	0.0053 U	0.0053 U	0.005 U
Methyl Acetate	mg/kg	1,200,000	0.048 U	0.065 U	0.048 U	0.062 U	0.074 U	0.057 U	0.057 U	N/A	0.058 U	0.058 U	0.077 U	0.064 U	0.059 U	0.059 U	0.05 U	0.054 U	0.055 U	0.047 U	0.053 U	0.053 U	0.05 U
Methylene Chloride	mg/kg	1,000	0.0048 U	0.0065 U	0.0048 U	0.0062 U	0.0074 U	0.0057 U	0.0057 U	N/A	0.0058 U	0.0058 U	0.0077 U	0.0064 U	0.0059 U	0.0059 U	0.005 U	0.0054 U	0.0055 U	0.0047 U	0.0053 U	0.0053 U	0.005 U
Styrene	mg/kg	35,000	0.0048 U	0.0065 U	0.0048 U	0.0062 U	0.0074 U	0.0057 U	0.0057 U	N/A	0.0058 U	0.0058 U	0.0077 U	0.0064 U	0.0059 U	0.0059 U	0.005 U	0.0054 U	0.0055 U	0.0047 U	0.0053 U	0.0053 U	0.005 U
Tetrachloroethene	mg/kg	100	0.0048 U	0.0065 U	0.0048 U	0.0062 U	0.0074 U	0.0057 U	0.0057 U	N/A	0.0058 U	0.0058 U	0.0077 U	0.0064 U	0.0059 U	0.0059 U	0.005 U	0.0054 U	0.0055 U	0.0047 U	0.0053 U	0.0053 U	0.005 U
Toluene	mg/kg	47,000	**0.01**	**0.0074**	**0.0058**	**0.011**	**0.0078**	0.0075 B	0.0064 B	N/A	0.0052 B	0.0052 B	0.0066 B	0.007 B	0.0067 B	0.0077 B	**0.0032 J**	**0.0042 J**	**0.0029 J**	**0.0048**	0.0042 B	0.0053 U	0.006 B
Trichloroethene	mg/kg	6	0.0048 U	0.0065 U	0.0048 U	0.0062 U	0.0074 U	0.0057 U	0.0057 U	N/A	0.0058 U	0.0058 U	0.0077 U	0.0064 U	0.0059 U	0.0059 U	0.005 U	0.0054 U	0.0055 U	0.0047 U	0.0053 U	0.0053 U	0.005 U
Xylenes	mg/kg	2,800	0.014 U	0.019 U	0.014 U	0.018 U	0.022 U	0.017 U	0.017 U	N/A	0.017 U	0.018 U	0.023 U	0.019 U	0.018 U	0.018 U	0.015 U	0.016 U	0.016 U	0.014 U	0.016 U	0.016 U	0.015 U
Semi-Volatile Organic Compounds^																							
1,1-Biphenyl	mg/kg	200	0.076 U	**0.054 J**	0.083 U	0.072 U	**0.021 J**	**0.91 J**	**0.11**	N/A	**0.029 J**	**0.04 J**	**0.78 J**	0.071 U	**1.6**	0.071 U	**0.25**	0.069 U	**0.045 J**	0.08 U	0.071 U	**0.024 J**	0.07 UJ
2,3,4,6-Tetrachlorophenol	mg/kg	25,000	0.076 U	0.077 U	0.083 U	0.072 U	0.078 U	0.077 U	0.078 U	N/A	0.079 U	**0.42 J**	0.084 U	0.071 U	0.075 U	0.071 U	0.073 U	0.069 U	0.073 U	0.08 U	0.071 U	0.081 U	0.07 UJ
2,4-Dimethylphenol	mg/kg	16,000	0.076 U	**0.024 J**	0.083 U	0.072 U	0.078 U	**0.018 J**	0.078 U	N/A	0.079 U	0.079 UJ	0.084 U	0.071 U	**0.015 J**	0.071 U	**0.14**	0.069 U	**0.043 J**	0.08 U	0.071 U	0.081 U	0.07 UJ
2-Chloronaphthalene	mg/kg	60,000	0.076 U	0.077 U	0.083 U	0.072 U	0.078 U	0.077 U	**0.044 J**	N/A	0.079 U	0.079 U	0.084 U	0.071 U	0.075 U	0.071 U	**0.18**	0.069 U	**0.16**	0.08 U	0.071 U	0.081 U	0.07 UJ
2-Methylnaphthalene	mg/kg	3,000	**0.0065 J**	**0.47**	**0.0057 J**	**0.082**	**0.088**	**0.26**	**0.51**	N/A	**0.05**	**0.12**	**0.22 J**	**0.0012 J**	**0.3**	**0.0039 J**	**0.16**	0.007 U	**0.28**	**0.0076 J**	**0.034**	**0.04**	**0.038**
2-Methylphenol	mg/kg	41,000	0.076 U	**0.017 J**	0.083 U	0.072 U	0.078 U	0.077 U	0.078 U	N/A	0.079 U	0.079 U	0.084 U	0.071 U	0.075 U	0.071 U	**0.12**	0.069 U	**0.046 J**	0.08 U	0.071 U	0.081 U	0.07 UJ
2-Nitroaniline	mg/kg	8,000	0.19 U	0.19 U	0.21 U	0.18 U	0.2 U	0.19 U	0.19 U	N/A	0.2 UJ	0.2 U	0.21 UJ	0.18 UJ	0.19 UJ	0.18 UJ	0.18 U	0.17 U	0.18 U	0.2 U	0.18 U	0.2 U	0.18 UJ
3&4-Methylphenol(m&p Cresol)	mg/kg	41,000	0.15 U	**0.051 J**	0.17 U	0.14 U	0.16 U	**0.023 J**	0.16 U	N/A	0.16 U	0.16 U	**0.024 J**	0.14 U	**0.031 J**	0.14 U	**0.27**	0.14 U	**0.12 J**	0.16 U	0.14 U	0.16 U	0.14 UJ
3,3'-Dichlorobenzidine	mg/kg	5.1	0.076 U	0.077 U	0.083 U	0.072 U	0.078 U	0.077 UJ	0.078 U	N/A	0.079 U	0.079 UJ	0.084 UJ	0.071 U	0.075 UJ	0.071 U	0.073 U	0.069 U	0.073 U	0.08 U	0.071 U	0.081 UJ	0.07 UJ
4-Nitroaniline	mg/kg	110	0.19 U	0.19 U	0.21 U	0.18 U	0.2 U	0.19 UJ	0.19 UJ	N/A	0.2 UJ	0.2 UJ	0.21 UJ	0.18 UJ	0.19 UJ	0.18 UJ	0.18 U	0.17 U	0.18 U	0.2 U	0.18 UJ	0.2 UJ	0.18 UJ
Acenaphthene	mg/kg	45,000	0.0075 U	**0.035**	**0.00093 J**	**0.0058 J**	**0.0046 J**	**0.096**	**0.08**	N/A	**0.0062 J**	**0.034**	**0.092**	0.0072 U	**0.15**	**0.0012 J**	**0.029**	0.007 U	**0.045**	0.0082 U	**0.0032 J**	**0.0018 J**	**0.0062 J**
Acenaphthylene	mg/kg	45,000	0.0075 U	**0.13**	**0.018**	**0.029**	**0.097**	**0.19**	**0.031**	N/A	**0.033**	**0.024**	**0.23 J**	0.0072 U	**0.21**	0.0071 U	**0.053**	0.007 U	**0.059**	**0.0011 J**	**0.062**	**0.0077 J**	**0.027**
Acetophenone	mg/kg	120,000	0.076 U	**0.023 J**	0.083 U	0.072 U	**0.019 J**	**0.067 J**	**0.14**	N/A	0.079 U	**0.045 J**	**0.069 J**	0.071 U	**0.08 J**	0.071 U	**0.024 J**	0.069 U	**0.036 J**	0.08 U	0.071 U	**0.033 J**	0.07 UJ
Anthracene	mg/kg	230,000	**0.0011 J**	**0.28**	**0.014**	**0.065**	**0.061**	**0.51**	**0.28**	N/A	**0.079**	**0.18**	**0.65 J**	**0.001 J**	**0.63**	**0.0018 J**	**0.14**	0.007 U	**0.29**	**0.0016 J**	**0.074**	**0.014**	**0.045**
Benz[a]anthracene	mg/kg	21	**0.002 J**	**0.34**	**0.061**	**0.1**	**0.19**	**1.7**	**1.2**	N/A	**0.12**	**0.93**	**1.2**	0.0072 U	**2.3**	**0.0089**	**0.4**	**0.0021 J**	**1.1**	**0.0061 J**	**0.12**	**0.054**	**0.18**
Benzaldehyde	mg/kg	120,000	0.076 U	**0.031 J**	0.083 U	0.072 U	**0.023 J**	**0.052 J**	**0.12 J**	N/A	0.079 R	**0.038 J**	**0.033 J**	0.071 R	**0.042 J**	0.071 R	**0.075**	0.069 U	**0.048 J**	0.08 U	0.071 R	**0.021 J**	0.07 R
Benzo[a]pyrene	mg/kg	2.1	0.0075 U	**0.49**	**0.12**	**0.13**	**0.2**	**1.4 J**	**0.93**	**0.001 J**	**0.19 J**	**1.2 J**	**1.4**	0.0072 U	**2.3 J**	**0.0056 J**	**0.47**	**0.0015 J**	**1.4**	**0.0062 J**	**0.18**	**0.056**	**0.19**
Benzo[b]fluoranthene	mg/kg	21	**0.004 J**	**1.5**	**0.3**	**0.47**	**0.56**	**3.3 J**	**2.1 J**	N/A	**0.44 J**	**2.5 J**	**3.1 J**	**0.0015 J**	**4.8 J**	**0.01**	**1.1**	**0.0032 J**	**2.8**	**0.014**	**0.5**	**0.12**	**0.44**
Benzo[g,h,i]perylene	mg/kg		**0.0014 J**	**0.17**	**0.058**	**0.055**	**0.14**	**0.57 J**	**0.58**	N/A	**0.076 J**	**0.4 J**	**0.42 J**	0.0072 U	**0.7**	**0.0033 J**	**0.2**	**0.0015 J**	**0.51**	**0.0055 J**	**0.21**	**0.042**	**0.17**
Benzo[k]fluoranthene	mg/kg	210	**0.0037 J**	**1.5**	**0.29**	**0.45**	**0.54**	**3.2 J**	**2 J**	N/A	**0.42 J**	**2.4 J**	**3 J**	**0.0016 J**	**4.6 J**	**0.01**	**1.1**	**0.0033 J**	**2.7**	**0.014**	**0.5**	**0.12**	**0.45**
bis(2-Ethylhexyl)phthalate	mg/kg	160	0.076 U	0.077 U	0.083 U	0.072 U	0.078 U	0.077 UJ	0.078 UJ	N/A	0.079 U	0.079 UJ	0.084 UJ	0.071 U	0.075 UJ	0.071 U	0.073 U	0.069 U	0.073 U	0.08 U	0.071 UJ	0.081 UJ	0.07 UJ
Caprolactam	mg/kg	400,000	0.19 U	**0.084 J**	0.21 U	0.18 U	**0.042 J**	0.19 UJ	**0.32 J**	N/A	0.2 U	0.2 UJ	0.21 U	0.18 U	0.19 U	0.18 U	0.18 U	0.17 U	0.18 U	0.2 U	0.18 UJ	**0.057 J**	**0.049 J**
Carbazole	mg/kg		0.076 U	**0.12**	0.083 U	0.072 U	**0.033 J**	**0.36 J**	**0.063 J**	N/A	**0.033 J**	**0.28 J**	**0.23 J**	0.071 U	**0.47 J**	0.071 U	**0.15**	0.069 U	**0.12**	0.08 U	**0.018 J**	**0.021 J**	**0.027 J**
Chrysene	mg/kg	2,100	**0.0021 J**	**0.43**	**0.086**	**0.15**	**0.23**	**1.5**	**1.2**	N/A	**0.18**	**0.89**	**1.2**	**0.00097 J**	**2.2**	**0.0095**	**0.45**	**0.0016 J**	**1.1**	**0.01**	**0.16**	**0.082**	**0.22**
Dibenz[a,h]anthracene	mg/kg	2.1	0.0075 U	**0.078**	**0.019**	**0.021**	**0.039**	**0.21 J**	**0.25**	N/A	**0.026 J**	**0.2 J**	**0.19 J**	0.0072 U	**0.25**	**0.0011 J**	**0.069**	0.007 U	**0.21**	**0.0017 J**	**0.069**	**0.019**	**0.056**
Diethylphthalate	mg/kg	660,000	0.076 U	0.077 U	0.083 U	0.072 U	0.078 U	0.077 U	0.078 U	N/A	0.079 U	0.079 U	0.084 U	0.071 U	0.075 U	0.071 U	0.073 U	0.069 U	0.073 U	0.08 U	0.071 U	0.081 U	0.07 UJ
Di-n-butylphthalate	mg/kg	82,000	0.076 U	0.077 U	0.083 U	0.072 U	0.078 U	**0.032 J**	0.078 U	N/A	**0.035 J**	0.079 U	**0.057 J**	0.071 U	0.075 U	0.071 U	0.073 U	0.069 U	0.073 U	0.08 U	0.071 U	0.081 U	0.07 UJ
Di-n-ocytlphthalate	mg/kg	8,200	0.076 U	0.077 U	0.083 U	0.072 U	0.078 U	0.077 UJ	0.078 UJ	N/A	0.079 U	0.079 UJ	0.084 UJ	0.071 U	0.075 UJ	0.071 U	0.073 U	0.069 U	0.073 U	0.08 U	0.071 UJ	0.081 UJ	0.07 UJ
Fluoranthene	mg/kg	30,000	**0.0061 J**	**0.6**	**0.11**	**0.22**	**0.39**	**3.2**	**2.3**	N/A	**0.33**	**1.6**	**3.2**	**0.0022 J**	**3.9**	**0.011**	**1**	**0.0025 J**	**1.7**	**0.0098**	**0.16**	**0.083**	**0.28**
Fluorene	mg/kg	30,000	0.0075 U	**0.023**	**0.0032 J**	**0.0077**	**0.012**	**0.097**	**0.036**	N/A	**0.011**	**0.027**	**0.11**	0.0072 U	**0.13**	**0.00074 J**	**0.033**	0.007 U	**0.047**	**0.0012 J**	**0.0049 J**	**0.0044 J**	**0.0071**
Hexachlorobenzene	mg/kg	0.96	0.076 U	0.077 U	0.083 U	0.072 U	0.078 U	0.077 U	0.078 U	N/A	0.079 U	0.079 U	0.084 U	0.071 U	0.075 U	0.071 U	0.073 U	0.069 U	0.073 U	0.08 U	0.071 U	0.081 U	0.07 UJ
Hexachloroethane	mg/kg	8	0.076 U	0.077 U	0.083 U	0.072 U	0.078 U	0.077 U	0.078 U	N/A	0.079 U	0.079 U	0.084 U	0.071 U	0.075 U	0.071 U	0.073 U	0.069 U	0.073 U	0.08 U	0.071 U	0.081 U	0.07 UJ
Indeno[1,2,3-c,d]pyrene	mg/kg	21	0.0075 U	**0.17**	**0.049**	**0.049**	**0.11**	**0.54 J**	**0.64**	N/A	**0.071 J**	**0.47 J**	**0.37 J**	0.0072 U	**0.7**	**0.0024 J**	**0.19**	**0.0012 J**	**0.52**	**0.0043 J**	**0.2**	**0.04**	**0.15**
Naphthalene	mg/kg	17	**0.0057 J**	**0.45**	**0.025**	**0.075**	**0.17**	**0.8**	**0.4**	N/A	**0.078**	**0.095**	**0.67 J**	**0.0039 J**	**0.85**	**0.0041 J**	**0.22**	0.007 U	**0.19**	**0.0064 J**	**0.036**	**0.028**	**0.041**
Nitrobenzene	mg/kg	22	0.076 U	0.077 U	0.083 U	0.072 U	0.078 U	0.077 U	0.078 U	N/A	0.079 U	0.079 U	0.084 U	0.071 U	0.075 U	0.071 U	0.073 U	0.069 U	0.073 U	0.08 U	0.071 U	0.081 U	0.07 UJ
N-Nitrosodiphenylamine	mg/kg	470	0.076 U	0.077 U	0.083 U	0.072 U	0.078 U	0.077 U	0.078 U	N/A	0.079 U	0.079 U	0.084 U	0.071 U	0.075 U	0.071 U	0.073 U	0.069 U	0.073 U	0.08 U	0.071 U	0.081 U	0.07 UJ
Pentachlorophenol	mg/kg	4	0.19 U	0.19 U	0.21 U	0.18 U	0.2 U	**0.058 J**	0.19 UJ	N/A	0.2 U	**3.7 J**	0.21 U	0.18 U	0.19 U	0.18 U	0.18 U	0.17 U	0.18 U	0.2 U	0.18 UJ	0.2 UJ	0.18 UJ
Phenanthrene	mg/kg		**0.0085**	**1**	**0.027**	**0.21**	**0.2**	**1.4**	**1.4**	N/A	**0.14**	**0.7**	**1.6**	**0.0017 J**	**1.9**	**0.0062 J**	**0.54**	**0.0017 J**	**1.2**	**0.011**	**0.084**	**0.096**	**0.12**
Phenol	mg/kg	250,000	0.076 U	**0.023 J**	0.083 U	0.072 U	0.078 U	**0.032 J**	0.078 U	N/A	**0.023 J**	0.079 U	**0.05 J**	0.071 U	**0.039 J**	0.071 U	**0.15**	0.069 U	**0.055 J**	0.08 U	0.071 U	0.081 U	0.07 UJ
Pyrene	mg/kg	23,000	**0.0055 J**	**0.58**	**0.092**	**0.2**	**0.31**	**3.4**	**1.8**	N/A	**0.35**	**1.6**	**3.3**	**0.002 J**	**4.1**	**0.015**	**1.1**	**0.0021 J**	**1.7**	**0.0087**	**0.14**	**0.076**	**0.26**
PCBs																							
Aroclor 1242	mg/kg	0.97	N/A	0.0571 U	N/A	0.0547 U	N/A	0.0696 U	N/A	N/A	0.0565 U	N/A	0.0647 U	N/A	0.0612 U	N/A	**0.29**	N/A	0.0545 U	N/A	0.052 U	N/A	0.064 U
Aroclor 1248	mg/kg	0.94	N/A	0.0571 U	N/A	0.0547 U	N/A	0.0696 U	N/A	N/A	0.0565 U	N/A	**0.543**	N/A	0.0612 U	N/A	0.0526 U	N/A	0.0545 U	N/A	0.052 U	N/A	0.064 U
Aroclor 1254	mg/kg	0.97	N/A	0.0571 U	N/A	0.0547 U	N/A	**0.235 J**	N/A	N/A	**0.164**	N/A	**0.715**	N/A	**0.162**	N/A	0.0526 U	N/A	0.0545 U	N/A	0.052 U	N/A	0.064 U
Aroclor 1260	mg/kg	0.99	N/A	0.0571 U	N/A	0.0547 U	N/A	0.0696 U	N/A	N/A	**0.0556 J**	N/A	**0.416**	N/A	0.0612 U	N/A	0.0526 U	N/A	0.0545 U	N/A	0.052 U	N/A	0.064 U
Aroclor 1262	mg/kg		N/A	**0.661**	N/A	**0.13**	N/A	**0.18**	N/A	N/A	0.0565 U	N/A	0.0647 U	N/A	**0.271**	N/A	0.0526 U	N/A	0.0545 U	N/A	0.052 U	N/A	0.064 U
Aroclor 1268	mg/kg		N/A	**0.294**	N/A	**0.0528 J**	N/A	0.0696 U	N/A	N/A	0.0565 U	N/A	0.0647 U	N/A	0.0612 U	N/A	**0.148**	N/A	**0.0246 J**	N/A	0.052 U	N/A	0.064 U
PCBs (total)	mg/kg	0.97	N/A	**0.955**	N/A	**0.1828**	N/A	**0.415**	N/A	N/A	**0.2196**	N/A	**1.674**	N/A	**0.433**	N/A	**0.438**	N/A	**0.0246 J**	N/A	0.052 U	N/A	0.064 U
TPH/Oil and Grease																							
Diesel Range Organics	mg/kg	6,200	**13.6**	**280**	**12.3**	**79.4**	**52.6**	**298 J**	**57.2 J**	N/A	**417 J**	**133 J**	**1,820 J**	7.1 UJ	**256 J**	**4.9 J**	**182**	7 U	**125**	**5.8 J**	**29.9 J**	**17.6 J**	**22.5 J**
Gasoline Range Organics	mg/kg	6,200	9.1 U	14.3 U	10.8 U	12.3 U	13.9 U	12.4 U	14.5 U	N/A	13.3 U	12.8 U	16 U	12.3 U	14.5 U	12.1 U	11.6 U	13 U	14.9 U	11.2 U	13.9 U	13.3 U	8.4 U
Oil and Grease	mg/kg	6,200	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	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Detections in bold
Values in red indicate an exceedance of the Project Action Limit (PAL)
* Indicates non-validated data
^ PAH compounds were analyzed via SIM
N/A indicates that the parameter was not analyzed for this sample

U: This analyte was not detected in the sample. The numeric value represents the sample quantitation/detection limit.
UJ: This analyte was not detected in the sample. The actual quantitation/detection limit may be higher than reported.
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.
R: The result reported for this analyte is unreliable. Additional data is needed to confirm or disprove the presence of this analyte in the sample.

Table 1 - Sub-Parcel B1-1
Summary of Organics Detected in Soil

Parameter	Units	PAL	B1-044-SB-5	B1-045-SB-1	B1-045-SB-5	B1-046-SB-1	B1-046-SB-6	B1-047-SB-1	B1-047-SB-5	B1-047-SB-10*	B1-048-SB-1	B1-048-SB-7	B1-061-SB-1*	B1-061-SB-7*	B1-062-SB-1*	B1-062-SB-6*	B1-063-SB-1	B1-063-SB-5	B1-064-SB-1	B1-064-SB-5	B1-065-SB-1*	B1-065-SB-4*	B1-066-SB-1*
Volatile Organic Compounds																							
1,1,1-Trichloroethane	mg/kg	36,000	0.0064 U	0.0044 U	0.012 U	0.0045 U	0.0047 U	0.0043 U	0.01 U	N/A	0.0059 U	0.0044 U	0.0046 U	0.006 U	0.0055 U	0.0055 U	0.0046 U	0.0071 U	0.0042 U	0.003 U	0.0053 U	0.0064 U	0.0068 U
1,2-Dichloroethane	mg/kg	2	0.0064 U	0.0044 U	0.012 U	0.0045 U	0.0047 U	0.0043 U	0.01 U	N/A	0.0059 U	0.0044 U	0.0046 U	0.006 U	0.0055 U	0.0055 U	0.0046 U	0.0071 U	0.0042 U	0.003 U	0.0053 U	0.0064 U	0.0068 U
1,4-Dichlorobenzene	mg/kg	11	0.0064 U	0.0044 U	0.012 U	0.0045 U	0.0047 U	0.0043 U	0.01 U	N/A	0.0059 U	0.0044 U	0.0046 U	0.006 U	0.0055 U	0.0055 U	0.0046 U	0.0071 U	0.0042 U	0.003 U	0.0053 U	0.0064 U	0.0068 U
2-Butanone (MEK)	mg/kg	190,000	0.013 U	0.0088 U	0.025 U	0.009 U	0.0093 U	0.0085 U	0.021 U	N/A	0.012 U	0.0088 U	0.0091 U	0.012 U	0.011 U	0.011 U	0.0092 UJ	0.014 UJ	0.0085 UJ	0.006 UJ	0.011 U	0.013 U	0.014 U
2-Hexanone	mg/kg	1,300	0.013 U	0.0088 U	0.025 U	0.009 U	0.0093 U	0.0085 U	0.021 U	N/A	0.012 U	0.0088 U	0.0091 U	0.012 U	0.011 U	0.011 U	0.0092 U	0.014 U	0.0085 U	0.006 U	0.011 U	0.013 U	0.014 U
4-Methyl-2-pentanone (MIBK)	mg/kg	56,000	0.013 U	0.0088 U	0.025 U	0.009 U	0.0093 U	0.0085 U	0.021 U	N/A	0.012 U	0.0088 U	0.0091 U	0.012 U	0.011 U	0.011 U	0.0092 U	0.014 U	0.0085 U	0.006 U	0.011 U	0.013 U	0.014 U
Acetone	mg/kg	670,000	**0.058 J**	0.0088 U	0.025 U	0.009 U	0.019 B	0.0085 UJ	0.012 B	N/A	0.012 UJ	0.0088 UJ	0.0091 U	**0.028**	0.0081 B	0.027 B	0.0092 U	0.014 U	0.0085 U	0.006 U	0.011 U	0.013 U	0.014 U
Benzene	mg/kg	5.1	0.0064 U	0.0044 U	0.012 U	0.0045 U	0.0047 U	0.0043 U	**0.022**	N/A	0.0059 U	0.0044 U	0.0046 U	0.006 U	0.0055 U	0.0055 U	0.0046 U	**0.0021 J**	0.0042 U	0.003 U	0.0053 U	0.0064 U	0.0068 U
Carbon disulfide	mg/kg	3,500	0.0064 U	0.0044 U	0.012 U	0.0045 U	0.0047 U	0.0043 U	0.01 U	N/A	0.0059 U	0.0044 U	0.0046 U	0.006 U	0.0055 U	0.0055 U	0.0046 U	0.0071 U	0.0042 U	0.003 U	0.0053 U	0.0064 U	0.0068 U
Carbon tetrachloride	mg/kg	2.9	0.0064 U	0.0044 UJ	0.012 UJ	0.0045 UJ	0.0047 UJ	0.0043 U	0.01 U	N/A	0.0059 U	0.0044 U	0.0046 U	0.006 U	0.0055 U	0.0055 U	0.0046 U	0.0071 U	0.0042 U	0.003 U	0.0053 U	0.0064 U	0.0068 U
Chloroform	mg/kg	1.4	0.0064 U	0.0044 U	0.012 U	0.0045 U	0.0047 U	0.0043 U	0.01 U	N/A	0.0059 U	0.0044 U	0.0046 U	0.006 U	0.0055 U	0.0055 U	0.0046 U	0.0071 U	0.0042 U	0.003 U	0.0053 U	0.0064 U	0.0068 U
Cyclohexane	mg/kg	27,000	0.013 U	0.0088 U	0.025 U	0.009 U	0.0093 U	0.0085 U	**0.0089 J**	N/A	0.012 U	0.0088 U	0.0091 U	0.012 U	0.011 U	0.011 U	0.0092 U	0.014 U	0.0085 U	0.006 U	0.011 U	0.013 U	0.014 U
Ethylbenzene	mg/kg	25	0.0064 U	0.0044 U	0.012 U	0.0045 U	0.0047 U	0.0043 U	0.01 U	N/A	0.0059 U	0.0044 U	0.0046 U	0.006 U	0.0055 U	0.0055 U	0.0046 U	0.0071 U	0.0042 U	0.003 U	0.0053 U	0.0064 U	0.0068 U
Isopropylbenzene	mg/kg	9,900	0.0064 U	0.0044 U	0.012 U	0.0045 U	0.0047 U	0.0043 U	0.01 U	N/A	0.0059 U	0.0044 U	0.0046 U	0.006 U	0.0055 U	0.0055 U	0.0046 U	0.0071 U	0.0042 U	0.003 U	0.0053 U	0.0064 U	0.0068 U
Methyl Acetate	mg/kg	1,200,000	0.064 U	0.044 U	0.12 U	0.045 U	0.047 U	0.043 U	0.1 U	N/A	0.059 U	0.044 U	0.046 U	0.06 U	0.055 U	0.055 U	0.046 U	0.071 U	0.042 U	0.03 U	0.053 U	0.064 U	0.068 U
Methylene Chloride	mg/kg	1,000	0.0064 U	0.0044 U	0.012 U	0.0045 U	0.0047 U	0.0043 U	0.01 U	N/A	0.0059 U	0.0044 U	0.0046 U	0.006 U	0.0055 U	0.0055 U	0.0046 U	0.0071 U	0.0042 U	0.003 U	0.0053 U	0.0064 U	0.0068 U
Styrene	mg/kg	35,000	0.0064 U	0.0044 U	0.012 U	0.0045 U	0.0047 U	0.0043 U	0.01 U	N/A	0.0059 U	0.0044 U	0.0046 U	0.006 U	0.0055 U	0.0055 U	0.0046 U	0.0071 U	0.0042 U	0.003 U	0.0053 U	0.0064 U	0.0068 U
Tetrachloroethene	mg/kg	100	0.0064 U	0.0044 U	0.012 U	0.0045 U	0.0047 U	0.0043 U	0.01 U	N/A	0.0059 U	0.0044 U	0.0046 U	0.006 U	0.0055 U	0.0055 U	0.0046 U	0.0071 U	0.0042 U	0.003 U	0.0053 U	0.0064 U	0.0068 U
Toluene	mg/kg	47,000	0.0039 B	0.0044 U	0.012 U	0.0045 U	0.0047 U	0.0043 U	**0.03**	N/A	0.0059 U	0.0044 U	**0.0037 J**	**0.0057 J**	**0.0026 J**	**0.0064**	0.0046 U	**0.0027 J**	0.0042 U	0.003 U	0.0053 U	0.0064 U	0.0068 U
Trichloroethene	mg/kg	6	0.0064 U	0.0044 U	0.012 U	0.0045 U	0.0047 U	0.0043 U	0.01 U	N/A	0.0059 U	0.0044 U	0.0046 U	0.006 U	0.0055 U	0.0055 U	0.0046 U	0.0071 U	0.0042 U	0.003 U	0.0053 U	0.0064 U	0.0068 U
Xylenes	mg/kg	2,800	0.019 U	0.013 U	0.037 U	0.014 U	0.014 U	0.013 U	**0.016 J**	N/A	0.018 U	0.013 U	0.014 U	0.018 U	0.016 U	0.017 U	0.014 U	0.021 U	0.013 U	0.009 U	0.016 U	0.019 U	0.02 U
Semi-Volatile Organic Compounds^																							
1,1-Biphenyl	mg/kg	200	**0.049 J**	0.14 UJ	0.1 U	0.071 U	0.081 U	0.072 U	**0.12 J**	N/A	**0.052 J**	0.08 U	**0.05 J**	0.076 U	**0.08**	0.074 U	0.072 U	**0.037 J**	0.073 U	0.07 U	0.07 U	0.073 U	0.07 U
2,3,4,6-Tetrachlorophenol	mg/kg	25,000	0.076 U	0.14 U	0.1 UJ	0.071 U	0.081 UJ	0.072 U	0.09 U	N/A	0.071 U	0.08 U	0.072 U	0.076 U	0.076 U	0.074 U	0.072 R	0.081 R	0.073 R	0.07 U	0.07 U	0.073 U	0.07 U
2,4-Dimethylphenol	mg/kg	16,000	0.076 U	0.14 U	0.1 U	0.071 U	0.081 U	0.072 U	0.09 U	N/A	0.071 U	0.08 U	0.072 U	0.076 U	0.076 U	0.074 U	0.072 R	0.081 R	0.073 R	0.07 U	0.07 U	0.073 U	0.07 U
2-Chloronaphthalene	mg/kg	60,000	**0.017 J**	0.14 UJ	0.1 U	0.071 U	0.081 U	0.072 U	0.09 U	N/A	0.071 U	0.08 U	0.072 U	0.076 U	0.076 U	0.074 U	0.072 U	0.081 U	0.073 U	0.07 U	0.07 U	0.073 U	0.07 U
2-Methylnaphthalene	mg/kg	3,000	**0.1**	**0.058**	**0.0086 J**	**0.018**	0.0082 U	**0.021**	**1**	0.0039 B	**0.13**	**0.0011 J**	**0.085**	**0.0032 J**	**0.42**	**0.012**	**0.0081**	**0.084**	**0.0099**	**0.0052 J**	**0.02 J**	**0.0082**	**0.0016 J**
2-Methylphenol	mg/kg	41,000	0.076 U	0.14 U	0.1 U	0.071 U	0.081 U	0.072 U	0.09 U	N/A	0.071 U	0.08 U	0.072 U	0.076 U	**0.016 J**	0.074 U	0.072 R	0.081 R	0.073 R	0.07 U	0.07 U	0.073 U	0.07 U
2-Nitroaniline	mg/kg	8,000	0.19 U	0.36 UJ	0.26 U	0.18 U	0.2 U	0.18 U	0.23 U	N/A	0.18 U	0.2 U	0.18 U	0.19 U	0.19 U	0.19 U	0.18 U	0.2 U	0.18 U	0.17 U	0.17 U	0.18 U	0.18 U
3&4-Methylphenol(m&p Cresol)	mg/kg	41,000	0.15 U	0.28 U	0.21 U	0.14 U	0.16 U	0.14 U	0.18 U	N/A	0.14 U	0.16 U	0.14 U	0.15 U	**0.026 J**	0.15 U	0.14 R	0.16 R	0.14 R	0.14 U	0.14 U	0.15 U	0.14 U
3,3'-Dichlorobenzidine	mg/kg	5.1	0.076 UJ	0.14 UJ	0.1 U	0.071 UJ	0.081 U	0.072 UJ	0.09 UJ	N/A	0.071 UJ	0.08 U	0.072 U	0.076 U	0.076 U	0.074 U	0.072 U	0.081 U	0.073 U	0.07 U	0.07 U	0.073 U	0.07 U
4-Nitroaniline	mg/kg	110	0.19 UJ	0.36 UJ	0.26 U	0.18 UJ	0.2 U	0.18 U	0.23 U	N/A	0.18 U	0.2 U	0.18 U	0.19 U	0.19 U	0.19 U	0.18 UJ	0.2 UJ	0.18 UJ	0.17 UJ	0.17 U	0.18 U	0.18 U
Acenaphthene	mg/kg	45,000	**0.12**	**0.042**	**0.0014 J**	**0.0051 J**	0.0082 U	**0.01**	**1.9**	**0.0044 J**	**0.16**	0.0082 U	**0.0086**	0.0076 U	**0.043**	**0.0014 J**	**0.0011 J**	**0.023**	0.0073 U	0.0069 U	**0.035 J**	**0.022**	0.007 U
Acenaphthylene	mg/kg	45,000	**0.043**	**0.13**	**0.0023 J**	**0.019**	0.0082 U	**0.096**	**0.12**	**0.0017 J**	**0.14**	**0.0016 J**	**0.019**	0.0076 U	**0.22**	**0.0043 J**	**0.0079**	**0.0054 J**	**0.0065 J**	**0.0009 J**	**0.013 J**	**0.0027 J**	**0.0011 J**
Acetophenone	mg/kg	120,000	**0.023 J**	0.14 U	0.1 U	0.071 U	0.081 U	0.072 U	**0.12 J**	N/A	**0.023 J**	0.08 U	**0.048 J**	0.076 U	**0.066 J**	0.074 U	0.072 U	0.081 U	0.073 U	0.07 U	0.07 U	0.073 U	0.07 U
Anthracene	mg/kg	230,000	**0.51**	**0.49**	**0.0072 J**	**0.026**	**0.0012 J**	**0.14**	**15.3**	**0.017**	**0.83**	**0.0046 J**	**0.022**	**0.0012 J**	**0.25**	**0.0052 J**	**0.012**	**0.069**	**0.013**	**0.003 J**	**0.033 J**	**0.01**	**0.0011 J**
Benz[a]anthracene	mg/kg	21	**2.7**	**1.4**	**0.0078 J**	**0.095**	0.0082 U	**0.67**	**25.3**	**0.015**	**3.3**	**0.012**	**0.086**	**0.0051 J**	**0.74**	**0.023**	**0.044**	**0.12**	**0.041**	**0.0076**	**0.1**	**0.046**	**0.0035 J**
Benzaldehyde	mg/kg	120,000	**0.025 J**	0.14 R	0.1 R	0.071 R	0.081 R	0.072 R	**0.087 J**	N/A	0.071 R	0.08 R	**0.022 J**	0.076 U	**0.053 J**	0.074 U	0.072 U	0.081 U	0.073 U	0.07 U	0.07 U	0.073 U	0.07 U
Benzo[a]pyrene	mg/kg	2.1	**2.5**	**2 J**	**0.0065 J**	**0.098 J**	0.0082 UJ	**0.74 J**	**16**	**0.0092**	**3.2 J**	**0.0079 J**	**0.081**	**0.0033 J**	**1**	**0.019**	**0.034 J**	**0.13 J**	**0.032 J**	**0.0067 J**	**0.22**	**0.1**	**0.0025 J**
Benzo[b]fluoranthene	mg/kg	21	**5.8**	**7.3 J**	**0.023 J**	**0.29 J**	**0.0023 J**	**1.4**	**37.9**	**0.029**	**7.3 J**	**0.028 J**	**0.32**	**0.014**	**2.7**	**0.084**	**0.15 J**	**0.43 J**	**0.14 J**	**0.036 J**	**0.68**	**0.23**	**0.0096**
Benzo[g,h,i]perylene	mg/kg		**0.99**	**0.52 J**	**0.0054 J**	**0.059 J**	**0.002 J**	**0.26 J**	**4.8**	**0.0031 J**	**0.99 J**	**0.0096 J**	**0.049**	**0.0047 J**	**0.67**	**0.014**	**0.013 J**	**0.045 J**	**0.012 J**	**0.0028 J**	**0.14**	**0.05**	**0.0023 J**
Benzo[k]fluoranthene	mg/kg	210	**5.6**	**7 J**	**0.021 J**	**0.28 J**	**0.0013 J**	**1.4**	**36.6**	**0.03**	**7 J**	**0.027 J**	**0.31**	**0.014**	**2.6**	**0.081**	**0.14 J**	**0.37 J**	**0.12 J**	**0.031 J**	**0.55**	**0.19**	**0.0078**
bis(2-Ethylhexyl)phthalate	mg/kg	160	0.076 UJ	0.14 UJ	0.1 U	0.071 UJ	0.081 U	0.072 UJ	0.09 UJ	N/A	0.071 UJ	0.08 UJ	0.072 U	0.076 U	0.076 U	0.074 U	0.072 U	0.081 U	0.073 U	0.07 U	**0.12**	0.073 U	0.07 U
Caprolactam	mg/kg	400,000	0.19 UJ	0.36 UJ	0.26 UJ	0.18 UJ	0.2 UJ	0.18 U	**0.35 J**	N/A	0.18 U	0.2 U	0.18 U	0.19 U	0.19 U	0.19 U	0.18 U	0.2 U	0.18 U	0.17 U	0.17 U	0.18 U	0.18 U
Carbazole	mg/kg		**0.58 J**	**0.065 J**	0.1 U	0.071 U	0.081 U	**0.039 J**	**0.063 J**	N/A	**0.69 J**	0.08 U	**0.061 J**	0.076 U	**0.12**	0.074 U	0.072 U	**0.029 J**	0.073 U	0.07 U	**0.017 J**	0.073 U	0.07 U
Chrysene	mg/kg	2,100	**2.6**	**1.9**	**0.0076 J**	**0.12**	**0.0016 J**	**0.7**	**24.8**	**0.016**	**3.1**	**0.014**	**0.15**	**0.0058 J**	**0.83**	**0.029**	**0.063**	**0.19**	**0.06**	**0.016**	**0.15**	**0.051**	**0.003 J**
Dibenz[a,h]anthracene	mg/kg	2.1	**0.43**	**0.21 J**	0.01 UJ	**0.014 J**	0.0082 UJ	**0.09 J**	**1.4**	0.0082 U	**0.34 J**	0.0082 UJ	**0.022**	**0.0021 J**	**0.31**	**0.0053 J**	**0.004 J**	**0.016 J**	**0.0037 J**	**0.0011 J**	**0.054 J**	**0.026**	0.007 U
Diethylphthalate	mg/kg	660,000	0.076 U	0.14 UJ	0.1 U	0.071 U	0.081 U	0.072 U	0.09 U	N/A	0.071 U	0.08 U	0.072 U	0.076 U	0.076 U	0.074 U	0.072 U	0.081 U	0.073 U	0.07 U	0.07 U	0.073 U	0.07 U
Di-n-butylphthalate	mg/kg	82,000	0.076 U	0.14 UJ	0.1 U	0.071 U	0.081 U	0.072 U	0.09 U	N/A	0.071 U	0.08 U	0.072 U	0.076 U	0.076 U	0.074 U	0.072 U	0.081 U	0.073 U	0.07 U	0.07 U	0.073 U	0.07 U
Di-n-ocytlphthalate	mg/kg	8,200	0.076 UJ	0.14 UJ	0.1 U	0.071 UJ	0.081 U	0.072 UJ	0.09 UJ	N/A	0.071 UJ	0.08 U	0.072 U	0.076 U	0.076 U	0.074 U	0.072 U	0.081 U	0.073 U	0.07 U	0.07 U	0.073 U	0.07 U
Fluoranthene	mg/kg	30,000	**6.3**	**2.2**	**0.013**	**0.17**	**0.0031 J**	**1.2**	**73.6**	**0.11**	**7.2**	**0.033 J**	**0.31**	**0.0087**	**1.5**	**0.053**	**0.14**	**0.52**	**0.11**	**0.018**	**0.17**	**0.054**	**0.0065 J**
Fluorene	mg/kg	30,000	**0.11**	**0.038**	**0.0017 J**	**0.0047 J**	0.0082 U	**0.012**	**0.86**	**0.016**	**0.097**	0.0082 U	**0.0075**	0.0076 U	**0.049**	**0.002 J**	**0.00095 J**	**0.0028 J**	**0.0017 J**	0.0069 U	**0.012 J**	**0.0033 J**	**0.00064 J**
Hexachlorobenzene	mg/kg	0.96	0.076 U	0.14 UJ	0.1 U	0.071 U	0.081 U	0.072 U	0.09 U	N/A	0.071 U	0.08 U	0.072 U	0.076 U	0.076 U	0.074 U	0.072 UJ	0.081 UJ	0.073 UJ	0.07 UJ	0.07 U	0.073 U	0.07 U
Hexachloroethane	mg/kg	8	0.076 U	0.14 U	0.1 U	0.071 U	0.081 U	0.072 U	0.09 U	N/A	0.071 U	0.08 U	0.072 U	0.076 U	0.076 U	0.074 U	0.072 U	0.081 U	0.073 U	0.07 U	0.07 U	0.073 U	0.07 U
Indeno[1,2,3-c,d]pyrene	mg/kg	21	**1**	**0.57 J**	**0.0041 J**	**0.044 J**	0.0082 UJ	**0.24 J**	**4.2**	**0.0027 J**	**0.96 J**	**0.0054 J**	**0.054**	**0.0034 J**	**0.64**	**0.012**	**0.013 J**	**0.043 J**	**0.012 J**	**0.0026 J**	**0.11**	**0.053**	**0.0017 J**
Naphthalene	mg/kg	17	**0.086**	**0.054**	**0.0075 J**	**0.016**	**0.0022 J**	**0.019**	**0.97**	0.0076 B	**0.12**	**0.0015 J**	**0.37**	**0.0067 J**	**0.7**	**0.039**	**0.012**	**0.12**	**0.015**	**0.0088**	**0.027 J**	**0.0097**	**0.0028 J**
Nitrobenzene	mg/kg	22	0.076 U	0.14 U	0.1 U	0.071 U	0.081 U	0.072 U	0.09 U	N/A	0.071 U	0.08 U	0.072 U	0.076 U	0.076 U	0.074 U	0.072 U	0.081 U	0.073 U	0.07 U	0.07 U	0.073 U	0.07 U
N-Nitrosodiphenylamine	mg/kg	470	0.076 U	0.14 UJ	0.1 U	0.071 U	0.081 U	0.072 U	0.09 U	N/A	0.071 U	0.08 U	0.072 U	0.076 U	0.076 U	0.074 U	0.072 U	0.081 U	0.073 U	0.07 U	0.07 U	0.073 U	0.07 U
Pentachlorophenol	mg/kg	4	**0.044 J**	0.36 UJ	0.26 U	0.18 UJ	0.2 U	0.18 U	0.23 U	N/A	0.18 U	0.2 U	0.18 U	0.19 U	0.19 U	0.19 U	0.18 R	0.2 R	0.18 R	0.17 U	0.17 U	0.18 U	0.18 U
Phenanthrene	mg/kg		**2.8**	**0.34**	**0.012**	**0.072**	**0.003 J**	**0.32**	**64.4**	**0.17**	**4.1**	**0.018**	**0.15**	**0.0064 J**	**1**	**0.03**	**0.087**	**1.1**	**0.075**	**0.024**	**0.12**	**0.04**	**0.0076**
Phenol	mg/kg	250,000	0.076 U	0.14 U	0.1 U	0.071 U	0.081 U	0.072 U	0.09 U	N/A	0.071 U	0.08 U	0.072 U	0.076 U	0.076 U	0.074 U	0.072 R	0.081 R	0.073 R	0.07 U	0.07 U	0.073 U	0.07 U
Pyrene	mg/kg	23,000	**4.9**	**3.3**	**0.012**	**0.16**	**0.0025 J**	**1.4**	**80.4**	**0.077**	**7.6**	**0.026 J**	**0.21**	**0.0061 J**	**1.1**	**0.041**	**0.11**	**0.37**	**0.091**	**0.016**	**0.13**	**0.047**	**0.0045 J**
PCBs																							
Aroclor 1242	mg/kg	0.97	N/A	0.0539 U	N/A	0.0524 U	N/A	0.0574 U	N/A	N/A	0.0558 U	N/A	0.0552 U	N/A	0.0553 U	N/A	0.0549 U	N/A	0.0534 U	N/A	0.051 U	N/A	0.0511 U
Aroclor 1248	mg/kg	0.94	N/A	0.0539 U	N/A	0.0524 U	N/A	0.0574 U	N/A	N/A	0.0558 U	N/A	0.0552 U	N/A	0.0553 U	N/A	0.0549 U	N/A	0.0534 U	N/A	**0.0417 J**	N/A	0.0511 U
Aroclor 1254	mg/kg	0.97	N/A	0.0539 U	N/A	0.0524 U	N/A	0.0574 U	N/A	N/A	**0.0469 J**	N/A	0.0552 U	N/A	0.0553 U	N/A	0.0549 U	N/A	0.0534 U	N/A	0.051 U	N/A	0.0511 U
Aroclor 1260	mg/kg	0.99	N/A	**0.0265 J**	N/A	0.0524 U	N/A	0.0574 U	N/A	N/A	0.0558 U	N/A	0.0552 U	N/A	0.0553 U	N/A	**2.43**	N/A	**1**	N/A	**0.0255 J**	N/A	0.0511 U
Aroclor 1262	mg/kg		N/A	0.0539 U	N/A	0.0524 U	N/A	0.0574 U	N/A	N/A	0.0558 U	N/A	**0.237**	N/A	**1.56**	N/A	0.0549 U	N/A	0.0534 U	N/A	0.051 U	N/A	0.0511 U
Aroclor 1268	mg/kg		N/A	0.0539 U	N/A	0.0524 U	N/A	0.0574 U	N/A	N/A	0.0558 U	N/A	**0.113**	N/A	**0.873**	N/A	0.0549 U	N/A	0.0534 U	N/A	0.051 U	N/A	0.0511 U
PCBs (total)	mg/kg	0.97	N/A	**0.0265 J**	N/A	0.0524 U	N/A	0.0574 U	N/A	N/A	**0.0469 J**	N/A	**0.35**	N/A	**2.433**	N/A	**2.43**	N/A	**1**	N/A	**0.0672**	N/A	0.0511 U
TPH/Oil and Grease																							
Diesel Range Organics	mg/kg	6,200	**333 J**	**146 J**	**6.6 J**	**22.9 J**	**8.3 J**	**50.6 J**	**178 J**	N/A	**140 J**	**5.8 J**	**71.6**	**6.2 J**	**139**	**10.3**	**35.9**	**43.4**	**18.3**	**12.5**	**337**	**13.1**	**5.2 J**
Gasoline Range Organics	mg/kg	6,200	11.6 U	7.8 U	13.3 U	9.8 U	10 U	10.3 U	23.1 U	N/A	22.8 U	10.6 UJ	10.8 U	12.9 U	11.4 U	12.5 U	9.1 U	17.2 U	9.4 U	5.4 U	9.2 U	13.9 U	19.7 U
Oil and Grease	mg/kg	6,200	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	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Detections in bold
Values in red indicate an exceedance of the Project Action Limit (PAL)
* Indicates non-validated data
^ PAH compounds were analyzed via SIM
N/A indicates that the parameter was not analyzed for this sample

U: This analyte was not detected in the sample. The numeric value represents the sample quantitation/detection limit.
UJ: This analyte was not detected in the sample. The actual quantitation/detection limit may be higher than reported.
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.
R: The result reported for this analyte is unreliable. Additional data is needed to confirm or disprove the presence of this analyte in the sample.

Table 1 - Sub-Parcel B1-1
Summary of Organics Detected in Soil

Parameter	Units	PAL	B1-066-SB-9*	B1-067-SB-1*	B1-067-SB-9*	B1-068-SB-1*	B1-075-SB-1*	B1-075-SB-4*	B1-075-SB-10	B1-076-SB-1*	B1-076-SB-4*	B1-076-SB-10	B1-079-SB-1*	B1-079-SB-5*	B1-080-SB-1*	B1-080-SB-4*	B1-081-SB-1*	B1-081-SB-4.5*	B1-082-SB-1*	B1-082-SB-5*	B1-083-SB-1	B1-084-SB-1	B1-084-SB-4
Volatile Organic Compounds																							
1,1,1-Trichloroethane	mg/kg	36,000	0.0052 U	0.0056 U	0.0066 U	0.0051 U	0.0051 U	0.0056 U	N/A	0.0067 U	0.0051 U	N/A	0.0052 U	0.0045 U	0.005 U	0.0045 U	0.0043 U	0.0047 U	0.0056 U	0.013 U	0.0058 U	**0.01**	0.0084 U
1,2-Dichloroethane	mg/kg	2	0.0052 U	0.0056 U	0.0066 U	0.0051 U	0.0051 U	0.0056 U	N/A	0.0067 U	0.0051 U	N/A	0.0052 U	0.0045 U	0.005 U	0.0045 U	0.0043 U	**0.001 J**	0.0056 U	0.013 U	0.0058 U	0.0064 U	0.0084 U
1,4-Dichlorobenzene	mg/kg	11	0.0052 U	0.0056 U	0.0066 U	0.0051 U	0.0051 U	0.0056 U	N/A	0.0067 U	0.0051 U	N/A	0.0052 U	0.0045 U	0.005 U	0.0045 U	0.0043 U	0.0047 U	0.0056 U	0.013 U	0.0058 U	0.0064 U	0.0084 U
2-Butanone (MEK)	mg/kg	190,000	0.01 U	0.011 U	0.013 U	0.01 U	0.01 U	**0.0036 J**	N/A	0.013 U	0.01 U	N/A	**0.0054 J**	0.009 U	**0.01**	**0.006 J**	0.0085 U	**0.0054 J**	0.011 U	0.026 U	0.012 U	0.013 U	0.017 U
2-Hexanone	mg/kg	1,300	0.01 U	0.011 U	0.013 U	0.01 U	0.01 U	0.011 U	N/A	0.013 U	0.01 U	N/A	0.01 U	0.009 U	0.0099 U	0.009 U	0.0085 U	0.0093 U	0.011 U	0.026 U	0.012 U	0.013 U	0.017 U
4-Methyl-2-pentanone (MIBK)	mg/kg	56,000	0.01 U	0.011 U	0.013 U	0.01 U	0.01 U	0.011 U	N/A	0.013 U	0.01 U	N/A	0.01 U	0.009 U	0.0099 U	0.009 U	0.0085 U	0.0093 U	0.011 U	0.026 U	0.012 U	0.013 U	0.017 U
Acetone	mg/kg	670,000	0.01 U	0.011 U	0.013 U	**0.0087 J**	0.01 U	**0.02**	N/A	0.013 U	0.01 U	N/A	**0.045**	**0.0048 J**	**0.084**	**0.048**	**0.0069 J**	**0.038**	0.011 U	**0.016 J**	0.012 U	0.013 U	**0.029 J**
Benzene	mg/kg	5.1	0.0052 U	0.0056 U	0.0066 U	0.0051 U	0.0051 U	**0.0026 J**	N/A	0.0067 U	0.0051 U	N/A	0.0052 U	0.0045 U	0.005 U	0.0045 U	0.0043 U	0.0047 U	0.0056 U	0.013 U	0.0058 U	0.0064 U	0.0084 U
Carbon disulfide	mg/kg	3,500	0.0052 U	0.0056 U	0.0066 U	0.0051 U	0.0051 U	0.0056 U	N/A	0.0067 U	0.0051 U	N/A	0.0052 U	0.0045 U	0.005 U	0.0045 U	0.0043 U	0.0047 U	0.0056 U	0.013 U	0.0058 U	0.0064 U	0.0084 U
Carbon tetrachloride	mg/kg	2.9	0.0052 U	0.0056 U	0.0066 U	0.0051 U	0.0051 U	0.0056 U	N/A	0.0067 U	0.0051 U	N/A	0.0052 U	0.0045 U	0.005 U	0.0045 U	0.0043 U	0.0047 U	0.0056 U	0.013 U	0.0058 U	0.0064 U	0.0084 U
Chloroform	mg/kg	1.4	0.0052 U	0.0056 U	0.0066 U	0.0051 U	0.0051 U	0.0056 U	N/A	0.0067 U	0.0051 U	N/A	0.0052 U	0.0045 U	0.005 U	0.0045 U	0.0043 U	0.0047 U	0.0056 U	0.013 U	0.0058 U	0.0064 U	0.0084 U
Cyclohexane	mg/kg	27,000	0.01 U	0.011 U	0.013 U	0.01 U	0.01 U	0.011 U	N/A	0.013 U	0.01 U	N/A	0.01 U	0.009 U	0.0099 U	0.009 U	0.0085 U	0.0093 U	0.011 U	0.026 U	0.012 U	0.013 U	0.017 U
Ethylbenzene	mg/kg	25	0.0052 U	0.0056 U	0.0066 U	0.0051 U	0.0051 U	0.0056 U	N/A	0.0067 U	0.0051 U	N/A	0.0052 U	0.0045 U	0.005 U	0.0045 U	0.0043 U	0.0047 U	0.0056 U	0.013 U	0.0058 U	0.0064 U	0.0084 U
Isopropylbenzene	mg/kg	9,900	0.0052 U	0.0056 U	0.0066 U	0.0051 U	0.0051 U	0.0056 U	N/A	0.0067 U	0.0051 U	N/A	0.0052 U	0.0045 U	0.005 U	0.0045 U	0.0043 U	0.0047 U	0.0056 U	0.013 U	0.0058 U	0.0064 U	0.0084 U
Methyl Acetate	mg/kg	1,200,000	0.052 U	0.056 U	0.066 U	0.051 U	0.051 U	0.056 U	N/A	0.067 U	0.051 U	N/A	0.052 U	0.045 U	0.05 U	0.045 U	0.043 U	0.047 U	0.056 U	0.13 U	0.058 U	0.064 U	0.084 U
Methylene Chloride	mg/kg	1,000	0.0052 U	0.0056 U	0.0066 U	0.0051 U	0.0051 U	0.0056 U	N/A	0.0067 U	0.0051 U	N/A	0.0052 U	0.0045 U	0.005 U	0.0045 U	0.0043 U	0.0047 U	0.0056 U	0.013 U	0.0058 U	0.0064 U	0.0084 U
Styrene	mg/kg	35,000	0.0052 U	0.0056 U	0.0066 U	0.0051 U	0.0051 U	0.0056 U	N/A	0.0067 U	0.0051 U	N/A	0.0052 U	0.0045 U	0.005 U	0.0045 U	0.0043 U	0.0047 U	0.0056 U	0.013 U	0.0058 U	0.0064 U	0.0084 U
Tetrachloroethene	mg/kg	100	0.0052 U	0.0056 U	0.0066 U	0.0051 U	0.0051 U	0.0056 U	N/A	0.0067 U	0.0051 U	N/A	0.0052 U	0.0045 U	**0.0042 J**	0.0045 U	0.0043 U	0.0047 U	0.0056 U	0.013 U	0.0058 U	0.0064 U	0.0084 U
Toluene	mg/kg	47,000	0.0052 U	0.0056 U	0.0066 U	0.0051 U	0.0051 U	**0.0034 J**	N/A	0.0067 U	0.0051 U	N/A	0.0052 U	0.0045 U	**0.0016 J**	0.0045 U	0.0043 U	0.0047 U	0.0056 U	0.013 U	0.0058 U	0.0064 U	0.0084 U
Trichloroethene	mg/kg	6	0.0052 U	0.0056 U	0.0066 U	0.0051 U	0.0051 U	0.0056 U	N/A	0.0067 U	0.0051 U	N/A	0.0052 U	0.0045 U	**0.0024 J**	0.0045 U	0.0043 U	0.0047 U	0.0056 U	0.013 U	0.0058 U	0.0064 U	0.0084 U
Xylenes	mg/kg	2,800	0.016 U	0.017 U	0.02 U	0.015 U	0.015 U	**0.0082 J**	N/A	0.02 U	0.015 U	N/A	0.016 U	0.013 U	0.015 U	0.013 U	0.013 U	0.014 U	0.017 U	0.039 U	0.017 U	0.019 U	0.025 U
Semi-Volatile Organic Compounds^																							
1,1-Biphenyl	mg/kg	200	**0.2**	0.073 U	**0.032 J**	0.075 U	**0.019 J**	**0.057 J**	N/A	0.082 U	**0.027 J**	N/A	**0.045 J**	0.083 U	0.073 U	0.08 U	0.073 U	0.075 U	0.074 U	0.11 U	**0.073 J**	0.073 U	**0.039 J**
2,3,4,6-Tetrachlorophenol	mg/kg	25,000	0.077 U	0.073 U	0.076 U	0.075 U	0.072 U	0.072 U	N/A	0.082 U	0.073 U	N/A	0.078 U	0.083 U	0.073 U	0.08 U	0.073 U	0.075 U	0.074 U	0.11 U	0.073 U	0.073 U	0.079 U
2,4-Dimethylphenol	mg/kg	16,000	0.077 U	0.073 U	0.076 U	0.075 U	0.072 U	0.072 U	N/A	0.082 U	0.073 U	N/A	0.078 U	0.083 U	0.073 U	0.08 U	0.073 U	0.075 U	0.074 U	0.11 U	**0.015 J**	0.073 U	**0.041 J**
2-Chloronaphthalene	mg/kg	60,000	0.077 U	0.073 U	0.076 U	0.075 U	0.072 U	0.072 U	N/A	0.082 U	0.073 U	N/A	0.078 U	0.083 U	0.073 U	0.08 U	0.073 U	0.075 U	0.074 U	0.11 U	0.073 U	0.073 U	**0.14**
2-Methylnaphthalene	mg/kg	3,000	**0.2**	**0.026 J**	**0.098**	0.0076 U	**0.056**	**0.087**	N/A	**0.11**	**0.087**	**0.11**	**0.48**	**0.0064 J**	**0.026**	**0.034**	0.0073 U	**0.0075**	**0.025**	0.011 U	**0.29**	**0.068**	**0.24**
2-Methylphenol	mg/kg	41,000	0.077 U	0.073 U	0.076 U	0.075 U	0.072 U	0.072 U	N/A	0.082 U	0.073 U	N/A	0.078 U	0.083 U	0.073 U	0.08 U	0.073 U	0.075 U	0.074 U	0.11 U	0.073 U	0.073 U	**0.015 J**
2-Nitroaniline	mg/kg	8,000	0.19 U	0.18 U	0.19 U	0.19 U	0.18 U	0.18 U	N/A	0.2 U	0.18 U	N/A	0.2 U	0.21 U	0.18 U	0.2 U	0.18 U	0.19 U	0.18 U	0.27 U	0.18 U	0.18 U	0.2 U
3&4-Methylphenol(m&p Cresol)	mg/kg	41,000	**0.036 J**	0.15 U	0.15 U	0.15 U	0.14 U	**0.023 J**	N/A	**0.021 J**	0.14 U	N/A	0.16 U	0.17 U	0.15 U	0.16 U	0.15 U	0.15 U	0.15 U	0.21 U	0.15 U	0.15 U	**0.031 J**
3,3'-Dichlorobenzidine	mg/kg	5.1	0.077 U	0.073 U	0.076 U	0.075 U	0.072 U	0.072 U	N/A	0.082 U	0.073 U	N/A	0.078 U	0.083 U	0.073 U	0.08 U	0.073 U	0.075 U	0.074 U	0.11 U	0.073 UJ	0.073 UJ	0.079 UJ
4-Nitroaniline	mg/kg	110	0.19 U	0.18 U	0.19 U	0.19 U	0.18 U	0.18 U	N/A	0.2 U	0.18 U	N/A	0.2 U	0.21 U	0.18 U	0.2 U	0.18 U	0.19 U	0.18 U	0.27 U	0.18 U	0.18 U	0.2 U
Acenaphthene	mg/kg	45,000	**0.34**	**0.039 J**	**0.09**	0.0076 U	**0.0096**	**0.26**	N/A	**0.018**	**0.052**	**0.061 J**	**0.016**	0.0083 U	0.0098 B	0.0017 B	0.0073 U	**0.007 J**	**0.0042 J**	**0.0011 J**	**0.012 J**	**0.0018 J**	**0.0024 J**
Acenaphthylene	mg/kg	45,000	**0.25**	**0.012 J**	**0.11**	**0.0016 J**	**0.24**	**0.42**	N/A	**0.34**	**0.16**	**0.13**	**0.014**	**0.0019 J**	**0.0079**	**0.0033 J**	0.0073 U	**0.007 J**	**0.014**	0.011 U	**0.033 J**	**0.0023 J**	**0.022**
Acetophenone	mg/kg	120,000	**0.019 J**	0.073 U	**0.019 J**	0.075 U	**0.022 J**	**0.046 J**	N/A	**0.066 J**	**0.018 J**	N/A	**0.044 J**	0.083 U	0.073 U	0.08 U	0.073 U	0.075 U	0.074 U	0.11 U	**0.079 J**	**0.02 J**	**0.074 J**
Anthracene	mg/kg	230,000	**1.2**	**0.042 J**	**0.37**	**0.0015 J**	**0.056**	**0.32**	N/A	**0.14**	**0.55**	**0.48**	**0.049**	0.0059 B	**0.04**	0.0087 B	**0.00078 J**	**0.055**	**0.032**	**0.0047 J**	**0.089**	**0.0034 J**	**0.026**
Benz[a]anthracene	mg/kg	21	**1.8**	**0.13**	**1**	**0.003 J**	**0.17**	**0.58**	N/A	**0.19**	**12.8**	**1.2**	**0.15**	**0.014**	**0.17**	**0.01**	**0.0022 J**	**0.088**	**0.15**	**0.014**	**0.34**	**0.0049 J**	**0.039**
Benzaldehyde	mg/kg	120,000	**0.023 J**	0.073 U	**0.029 J**	0.075 U	0.072 U	**0.05 J**	N/A	**0.061 J**	**0.034 J**	N/A	**0.088**	0.083 U	0.073 U	0.08 U	0.073 U	0.075 U	0.074 U	0.11 U	**0.054 J**	0.073 R	**0.14 J**
Benzo[a]pyrene	mg/kg	2.1	**1.8**	**0.23**	**1.4**	**0.0016 J**	**0.25**	**0.73**	**0.021**	**0.22**	**15.5**	**0.88**	**0.18**	**0.039**	**0.23**	**0.016**	0.0073 U	**0.11**	**0.17**	**0.015**	**0.34**	**0.0075 J**	**0.054 J**
Benzo[b]fluoranthene	mg/kg	21	**3.9**	**0.55**	**2.3**	**0.0068 J**	**0.71**	**1.7**	N/A	**0.43**	**27.9**	**1.8**	**0.4**	**0.058**	**0.43**	**0.033**	0.0073 U	**0.29**	**0.31**	**0.034**	**0.86**	**0.032 J**	**0.14 J**
Benzo[g,h,i]perylene	mg/kg		**1.1**	**0.13**	**0.51**	**0.0016 J**	**0.19**	**0.63**	N/A	**0.94**	**6.7**	**0.57**	**0.061**	**0.011**	**0.16**	**0.013**	0.0073 U	**0.05**	**0.068**	**0.0054 J**	**0.12**	**0.0089 J**	**0.027 J**
Benzo[k]fluoranthene	mg/kg	210	**3.4**	**0.44**	**2**	**0.0053 J**	**0.71**	**1.7**	N/A	**0.42**	**28.7**	**1.8**	**0.41**	**0.059**	**0.44**	**0.034**	0.0073 U	**0.25**	**0.1**	**0.03**	**0.7**	**0.026 J**	**0.11 J**
bis(2-Ethylhexyl)phthalate	mg/kg	160	0.077 U	**0.12**	0.076 U	0.075 U	**0.14**	**0.087**	N/A	**0.25**	0.073 U	N/A	0.078 U	**0.023 J**	**0.015 J**	0.08 U	0.073 U	**25.5**	**0.14**	0.11 U	**0.73 J**	**0.35 J**	0.079 UJ
Caprolactam	mg/kg	400,000	0.19 U	0.18 U	0.19 U	0.19 U	0.18 U	0.18 U	N/A	0.2 U	0.18 U	N/A	0.2 U	0.21 U	0.18 U	0.2 U	0.18 U	0.19 U	0.18 U	0.27 U	0.18 U	0.18 U	0.2 U
Carbazole	mg/kg		**1**	0.073 U	**0.16**	0.075 U	**0.025 J**	**0.071 J**	N/A	0.082 U	**0.29**	N/A	0.078 U	0.083 U	0.073 U	0.08 U	0.073 U	0.075 U	**0.019 J**	0.11 U	**0.048 J**	0.073 UJ	0.079 UJ
Chrysene	mg/kg	2,100	**2**	**0.11**	**0.98**	**0.0023 J**	**0.19**	**0.59**	N/A	**0.2**	**13.4**	**1.1**	**0.22**	**0.024**	**0.24**	**0.024**	**0.0013 J**	**0.088**	**0.18**	**0.016**	**0.4**	**0.0094**	**0.049**
Dibenz[a,h]anthracene	mg/kg	2.1	**0.45**	**0.048 J**	**0.22**	0.0076 U	**0.041**	**0.13**	N/A	**0.052**	**3.1**	**0.28**	**0.023**	0.0083 U	**0.054**	**0.0034 J**	0.0073 U	**0.017**	**0.023**	0.011 U	**0.054 J**	0.0072 UJ	**0.016 J**
Diethylphthalate	mg/kg	660,000	0.077 U	0.073 U	0.076 U	0.075 U	0.072 U	0.072 U	N/A	0.082 U	0.073 U	N/A	0.078 U	0.083 U	0.073 U	0.08 U	0.073 U	0.075 U	0.074 U	0.11 U	0.073 U	0.073 U	0.079 U
Di-n-butylphthalate	mg/kg	82,000	0.077 U	0.073 U	0.076 U	0.075 U	0.072 U	**0.094**	N/A	0.082 U	0.073 U	N/A	0.078 U	0.083 U	0.073 U	0.08 U	0.073 U	**0.025 J**	0.074 U	0.11 U	**0.22 J**	**0.046 J**	0.079 UJ
Di-n-ocytlphthalate	mg/kg	8,200	0.077 U	0.073 U	0.076 U	0.075 U	**0.042 J**	0.072 U	N/A	0.082 U	0.073 U	N/A	0.078 U	0.083 U	0.073 U	0.08 U	0.073 U	**0.044 J**	0.074 U	0.11 U	0.073 UJ	0.073 UJ	0.079 UJ
Fluoranthene	mg/kg	30,000	**4.6**	**0.14**	**2.1**	**0.0048 J**	**0.28**	**1.1**	N/A	**0.23**	**6.9**	**2.6**	**0.25**	0.02 B	**0.46**	**0.03**	**0.0026 J**	**0.18**	**0.28**	**0.036**	**0.56**	**0.0088**	**0.043**
Fluorene	mg/kg	30,000	**0.27**	**0.011 J**	**0.091**	0.0076 U	**0.0098**	**0.23**	N/A	**0.023**	**0.066**	**0.19**	0.014 B	0.0016 B	0.0051 B	0.0043 B	0.0073 U	**0.015**	**0.0053 J**	0.011 U	**0.013 J**	**0.0032 J**	**0.0058 J**
Hexachlorobenzene	mg/kg	0.96	0.077 U	0.073 U	0.076 U	0.075 U	0.072 U	0.072 U	N/A	0.082 U	0.073 U	N/A	0.078 U	0.083 U	0.073 U	0.08 U	0.073 U	0.075 U	0.074 U	0.11 U	0.073 UJ	0.073 UJ	0.079 UJ
Hexachloroethane	mg/kg	8	0.077 U	0.073 U	0.076 U	0.075 U	0.072 U	0.072 U	N/A	0.082 U	0.073 U	N/A	0.078 U	0.083 U	0.073 U	0.08 U	0.073 U	0.075 U	0.074 U	0.11 U	0.073 U	0.073 U	0.079 U
Indeno[1,2,3-c,d]pyrene	mg/kg	21	**1.2**	**0.11**	**0.55**	0.0076 U	**0.13**	**0.42**	N/A	**0.12**	**7.4**	**0.57**	**0.051**	**0.006 J**	**0.13**	**0.011**	0.0073 U	**0.043**	**0.068**	**0.0048 J**	**0.14**	**0.0041 J**	**0.022 J**
Naphthalene	mg/kg	17	**0.17**	**0.027 J**	**0.11**	**0.0015 J**	**0.15**	**0.4**	N/A	**0.4**	**0.22**	**0.17**	**0.28**	0.0069 B	0.019 B	**0.035**	**0.0017 J**	**0.012**	**0.029**	0.011 U	**0.23**	**0.034**	**0.2**
Nitrobenzene	mg/kg	22	0.077 U	0.073 U	0.076 U	0.075 U	0.072 U	0.072 U	N/A	0.082 U	0.073 U	N/A	0.078 U	0.083 U	0.073 U	0.08 U	0.073 U	0.075 U	0.074 U	0.11 U	0.073 U	0.073 U	0.079 U
N-Nitrosodiphenylamine	mg/kg	470	0.077 U	0.073 U	0.076 U	0.075 U	0.072 U	0.072 U	N/A	0.082 U	0.073 U	N/A	0.078 U	0.083 U	0.073 U	0.08 U	0.073 U	0.075 U	0.074 U	0.11 U	0.073 UJ	0.073 UJ	0.079 UJ
Pentachlorophenol	mg/kg	4	0.19 U	0.18 U	0.19 U	0.19 U	0.18 U	0.18 U	N/A	0.2 U	0.18 U	N/A	0.2 U	0.21 U	0.18 U	0.2 U	0.18 U	0.19 U	0.18 U	0.27 U	0.18 UJ	0.18 UJ	0.2 UJ
Phenanthrene	mg/kg		**4.2**	**0.12**	**1.6**	**0.005 J**	**0.16**	**0.87**	N/A	**0.22**	**1.3**	**2**	**0.36**	0.017 B	**0.32**	0.029 B	**0.0031 J**	**0.16**	**0.16**	**0.027**	**0.37**	**0.015**	**0.12**
Phenol	mg/kg	250,000	**0.023 J**	0.073 U	0.076 U	0.075 U	0.072 U	**0.019 J**	N/A	**0.028 J**	0.073 U	N/A	0.078 U	0.083 U	0.073 U	0.08 U	0.073 U	0.075 U	0.074 U	0.11 U	0.073 U	0.073 U	**0.028 J**
Pyrene	mg/kg	23,000	**4.7**	**0.12**	**2.1**	**0.0045 J**	**0.26**	**0.9**	N/A	**0.22**	**10.3**	**2**	**0.22**	**0.026**	**0.54**	**0.033**	**0.0024 J**	**0.16**	**0.28**	**0.038**	**0.56**	**0.0081**	**0.038**
PCBs																							
Aroclor 1242	mg/kg	0.97	N/A	0.0524 U	N/A	0.0521 U	0.0566 U	N/A	N/A	0.0603 U	N/A	N/A	0.0563 U	N/A	0.0547 U	N/A	0.0536 U	N/A	0.055 U	N/A	0.0549 U	0.214 U	N/A
Aroclor 1248	mg/kg	0.94	N/A	0.0524 U	N/A	0.0521 U	0.0566 U	N/A	N/A	0.0603 U	N/A	N/A	0.0563 U	N/A	0.0547 U	N/A	0.0536 U	N/A	0.055 U	N/A	0.0549 U	0.214 U	N/A
Aroclor 1254	mg/kg	0.97	N/A	0.0524 U	N/A	0.0521 U	**0.0404 J**	N/A	N/A	**0.174**	N/A	N/A	0.0563 U	N/A	0.0547 U	N/A	0.0536 U	N/A	0.055 U	N/A	0.0549 U	0.214 U	N/A
Aroclor 1260	mg/kg	0.99	N/A	**0.0745**	N/A	0.0521 U	0.0566 U	N/A	N/A	**0.119**	N/A	N/A	0.0563 U	N/A	0.0547 U	N/A	0.0536 U	N/A	**0.107**	N/A	**0.0767**	6.77	N/A
Aroclor 1262	mg/kg		N/A	0.0524 U	N/A	0.0521 U	**0.0667**	N/A	N/A	0.0603 U	N/A	N/A	0.0563 U	N/A	0.0547 U	N/A	0.0536 U	N/A	0.055 U	N/A	0.0549 U	0.214 U	N/A
Aroclor 1268	mg/kg		N/A	0.0524 U	N/A	0.0521 U	0.0566 U	N/A	N/A	0.0603 U	N/A	N/A	0.0563 U	N/A	0.0547 U	N/A	0.0536 U	N/A	0.055 U	N/A	0.0549 U	0.214 U	N/A
PCBs (total)	mg/kg	0.97	N/A	**0.0745**	N/A	0.0521 U	**0.1071**	N/A	N/A	**0.293**	N/A	N/A	0.0563 U	N/A	0.0547 U	N/A	0.0536 U	N/A	**0.107**	N/A	**0.0767**	6.77	N/A
TPH/Oil and Grease																							
Diesel Range Organics	mg/kg	6,200	**134**	**318**	**209**	**7.8**	**188**	**611**	N/A	**2,020**	**493**	N/A	**472**	**788**	**370**	**139**	**17**	**119**	**56.7**	**5.4 J**	**234**	**217**	**806**
Gasoline Range Organics	mg/kg	6,200	12.1 U	12.3 U	12.2 U	9.7 U	10.2 U	11.3 U	N/A	14.4 U	11.9 U	N/A	**24.9**	9.5 U	11.5 U	9.7 U	9.2 U	9.9 U	12.1 U	24.4 U	12.2 U	12.5 U	15.7 U
Oil and Grease	mg/kg	6,200	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	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Detections in bold
Values in red indicate an exceedance of the Project Action Limit (PAL)
* Indicates non-validated data
^ PAH compounds were analyzed via SIM
N/A indicates that the parameter was not analyzed for this sample

U: This analyte was not detected in the sample. The numeric value represents the sample quantitation/detection limit.
UJ: This analyte was not detected in the sample. The actual quantitation/detection limit may be higher than reported.
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.
R: The result reported for this analyte is unreliable. Additional data is needed to confirm or disprove the presence of this analyte in the sample.

Table 1 - Sub-Parcel B1-1
Summary of Organics Detected in Soil

Parameter	Units	PAL	B1-085-SB-1	B1-086-SB-1	B1-086-SB-5	B1-089-SB-1	B1-090-SB-1	B1-090-SB-6	B1-091-SB-1	B1-091-SB-5	B1-092-SB-1	B1-092-SB-5	B1-095-SB-1*	B1-095-SB-4*	B1-096-SB-1*	B1-096-SB-4*	B1-096-SB-10	B1-099-SB-1	B1-099-SB-5	B1-100-SB-1	B1-100-SB-5	B1-101-SB-1	B1-101-SB-5	B1-102-SB-1
Volatile Organic Compounds																								
1,1,1-Trichloroethane	mg/kg	36,000	0.005 U	0.0047 U	0.0068 U	0.005 U	0.0053 U	0.0064 U	0.0054 U	0.0077 U	0.0044 U	0.0055 U	0.0029 U	0.0058 U	0.0061 U	0.0049 U	N/A	0.0036 U	0.016 U	0.0042 U	0.0061 U	0.005 U	0.0045 U	0.0061 U
1,2-Dichloroethane	mg/kg	2	0.005 U	0.0047 U	0.0068 U	0.005 U	0.0053 U	0.0064 U	0.0054 U	0.0077 U	0.0044 U	0.0055 U	0.0029 U	0.0058 U	0.0061 U	0.0049 U	N/A	0.0036 U	0.016 U	0.0042 U	0.0061 U	0.005 U	0.0045 U	0.0061 U
1,4-Dichlorobenzene	mg/kg	11	0.005 U	0.0047 U	0.0068 U	0.005 U	0.0053 U	0.0064 U	0.0054 U	0.0077 U	0.0044 U	0.0055 U	0.0029 U	0.0058 U	0.0061 U	0.0049 U	N/A	0.0036 U	0.016 U	0.0042 U	0.0061 U	0.005 U	0.0045 U	0.0061 U
2-Butanone (MEK)	mg/kg	190,000	0.01 U	0.0095 U	0.014 U	0.01 U	0.011 U	0.013 U	0.011 U	0.015 UJ	0.0087 U	0.011 U	0.0058 U	0.012 U	0.012 U	0.0099 U	N/A	0.0072 U	0.032 U	0.0084 U	0.012 U	0.01 U	0.009 U	**0.025**
2-Hexanone	mg/kg	1,300	0.01 U	0.0095 U	0.014 U	0.01 U	0.011 U	0.013 U	0.011 U	0.015 U	0.0087 U	0.011 U	0.0058 U	0.012 U	0.012 U	0.0099 U	N/A	0.0072 U	0.032 U	0.0084 U	0.012 U	0.01 U	0.009 U	**0.0071 J**
4-Methyl-2-pentanone (MIBK)	mg/kg	56,000	0.01 U	0.0095 U	0.014 U	0.01 U	0.011 U	0.013 U	0.011 U	0.015 U	0.0087 U	0.011 U	0.0058 U	0.012 U	0.012 U	0.0099 U	N/A	0.0072 U	0.032 U	0.0084 U	0.012 U	0.01 U	0.009 U	**0.0034 J**
Acetone	mg/kg	670,000	0.007 B	0.0095 U	0.0079 B	0.0062 B	0.0066 B	0.008 B	0.011 U	0.023 B	0.0087 U	0.006 B	0.0058 U	0.012 U	**0.0071 J**	0.0099 U	N/A	0.0072 U	0.032 U	0.0084 U	0.012 U	0.0062 B	0.0093 B	**0.15**
Benzene	mg/kg	5.1	0.005 U	0.0047 U	0.0068 U	0.005 U	0.0053 U	0.0064 U	0.0054 U	0.0077 U	0.0044 U	0.0055 U	0.0029 U	0.0058 U	0.0061 U	0.0049 U	N/A	0.0036 U	0.016 U	0.0042 U	0.0061 U	0.005 U	**0.0023 J**	0.0061 U
Carbon disulfide	mg/kg	3,500	0.005 U	0.0047 U	0.0068 U	0.005 U	0.0053 U	0.0064 U	0.0054 U	0.0077 UJ	0.0044 U	0.0055 U	0.0029 U	0.0058 U	0.0061 U	0.0049 U	N/A	0.0036 U	0.016 U	0.0042 U	0.0061 U	0.005 U	0.0045 U	0.0061 U
Carbon tetrachloride	mg/kg	2.9	0.005 U	0.0047 U	0.0068 U	0.005 U	0.0053 U	0.0064 U	0.0054 U	0.0077 U	0.0044 U	0.0055 U	0.0029 U	0.0058 U	0.0061 U	0.0049 U	N/A	0.0036 UJ	0.016 UJ	0.0042 UJ	0.0061 UJ	0.005 U	0.0045 U	0.0061 U
Chloroform	mg/kg	1.4	0.005 U	0.0047 U	0.0068 U	0.005 U	0.0053 U	0.0064 U	0.0054 U	0.0077 UJ	0.0044 U	0.0055 U	0.0029 U	0.0058 U	0.0061 U	0.0049 U	N/A	0.0036 U	0.016 U	0.0042 U	0.0061 U	0.005 U	0.0045 U	0.0061 U
Cyclohexane	mg/kg	27,000	0.01 U	0.0095 U	0.014 U	0.01 U	0.011 U	0.013 U	0.011 U	0.015 UJ	0.0087 U	0.011 U	0.0058 U	0.012 U	0.012 U	0.0099 U	N/A	0.0072 U	0.032 U	0.0084 U	0.012 U	0.01 U	0.009 U	0.012 U
Ethylbenzene	mg/kg	25	0.005 U	0.0047 U	0.0068 U	0.005 U	0.0053 U	0.0064 U	0.0054 U	0.0077 U	0.0044 U	0.0055 U	0.0029 U	0.0058 U	0.0061 U	0.0049 U	N/A	0.0036 U	0.016 U	0.0042 U	0.0061 U	0.005 U	0.0045 U	0.0061 U
Isopropylbenzene	mg/kg	9,900	0.005 U	0.0047 U	0.0068 U	0.005 U	0.0053 U	0.0064 U	0.0054 U	0.0077 U	0.0044 U	0.0055 U	0.0029 U	0.0058 U	0.0061 U	0.0049 U	N/A	0.0036 U	0.016 U	0.0042 U	0.0061 U	0.005 U	0.0045 U	0.0061 U
Methyl Acetate	mg/kg	1,200,000	0.05 U	0.047 U	0.068 U	0.05 U	0.053 U	0.064 U	0.054 U	0.077 U	0.044 U	0.055 U	0.029 U	0.058 U	0.061 U	0.049 U	N/A	0.036 U	0.16 U	0.042 U	0.061 U	0.05 U	0.045 U	0.061 U
Methylene Chloride	mg/kg	1,000	0.005 U	0.0047 U	0.0068 U	0.005 U	0.0053 U	0.0064 U	0.0054 U	0.0077 UJ	0.0044 U	0.0055 U	0.0029 U	0.0058 U	0.0061 U	0.0049 U	N/A	0.0036 U	0.016 U	0.0042 U	0.0061 U	0.005 U	0.0045 U	0.0061 U
Styrene	mg/kg	35,000	0.005 U	0.0047 U	0.0068 U	0.005 U	0.0053 U	0.0064 U	0.0054 U	0.0077 U	0.0044 U	0.0055 U	0.0029 U	0.0058 U	0.0061 U	0.0049 U	N/A	0.0036 U	0.016 U	0.0042 U	0.0061 U	0.005 U	0.0045 U	0.0061 U
Tetrachloroethene	mg/kg	100	0.005 U	0.0047 U	0.0068 U	0.005 U	0.0053 U	0.0064 U	0.0054 U	0.0077 U	0.0044 U	0.0055 U	0.0029 U	0.0058 U	0.0061 U	0.0049 U	N/A	0.0036 U	0.016 U	0.0042 U	0.0061 U	0.005 U	0.0045 U	0.0061 U
Toluene	mg/kg	47,000	0.005 U	0.0047 U	0.0068 U	0.005 U	0.0053 U	0.0064 U	0.0054 U	**0.01**	0.0044 U	**0.0021 J**	0.0029 U	0.0058 U	0.0061 U	0.0049 U	N/A	0.0036 U	0.016 U	0.0042 U	0.0061 U	0.005 U	**0.0019 J**	**0.0022 J**
Trichloroethene	mg/kg	6	0.005 U	0.0047 U	0.0068 U	0.005 U	0.0053 U	0.0064 U	0.0054 U	0.0077 UJ	0.0044 U	0.0055 U	0.0029 U	0.0058 U	0.0061 U	0.0049 U	N/A	0.0036 U	0.016 U	0.0042 U	0.0061 U	0.005 U	0.0045 U	0.0061 U
Xylenes	mg/kg	2,800	0.015 U	0.014 U	0.02 U	0.015 U	0.016 U	0.019 U	0.016 U	**0.0088 J**	0.013 U	0.017 U	0.0088 U	0.018 U	0.018 U	0.015 U	N/A	0.011 U	0.047 U	0.013 U	0.018 U	0.015 U	0.014 U	0.018 U
Semi-Volatile Organic Compounds^																								
1,1-Biphenyl	mg/kg	200	0.069 U	0.07 U	**0.02 J**	0.068 U	0.073 U	0.074 U	**0.07 J**	**0.24 J**	**0.24 J**	0.071 U	0.069 U	0.075 U	**0.03 J**	**0.034 J**	N/A	**0.047 J**	0.13 U	**0.047 J**	0.074 U	**0.093**	**0.084**	0.07 U
2,3,4,6-Tetrachlorophenol	mg/kg	25,000	0.069 U	0.07 U	0.077 U	0.068 U	0.073 U	0.074 R	0.073 U	0.079 U	0.072 U	0.071 UJ	0.069 U	0.075 U	0.074 U	0.073 U	N/A	0.069 UJ	0.13 UJ	0.069 UJ	0.074 U	0.073 R	0.074 R	0.07 U
2,4-Dimethylphenol	mg/kg	16,000	0.069 U	0.07 U	0.077 U	0.068 U	0.073 U	0.074 R	0.073 U	**0.074 J**	0.072 U	0.071 U	0.069 U	0.075 U	0.074 U	0.073 U	N/A	0.069 UJ	0.13 U	0.069 UJ	0.074 U	0.073 UJ	0.074 R	0.07 U
2-Chloronaphthalene	mg/kg	60,000	0.069 U	0.07 U	0.077 U	0.068 U	0.073 U	0.074 U	0.073 U	0.079 U	0.072 U	0.071 U	0.069 U	0.075 U	0.074 U	**0.017 J**	N/A	0.069 U	0.13 U	0.069 U	0.074 U	0.073 U	0.074 U	0.07 U
2-Methylnaphthalene	mg/kg	3,000	**0.0084**	**0.0027 J**	**0.078**	**0.0021 J**	**0.0022 J**	**0.0014 J**	**0.089**	**1.6**	**0.045 J**	**0.0015 J**	**0.023**	**0.017**	**0.099**	**0.092**	N/A	**0.23**	**0.037**	**0.082**	**0.012**	**0.14**	**0.11**	**0.0068 J**
2-Methylphenol	mg/kg	41,000	0.069 U	0.07 U	0.077 U	0.068 U	0.073 U	0.074 R	0.073 U	**0.028 J**	0.072 U	0.071 U	0.069 U	0.075 U	0.074 U	0.073 U	N/A	**0.017 J**	0.13 U	0.069 UJ	0.074 U	0.073 U	0.074 R	0.07 U
2-Nitroaniline	mg/kg	8,000	0.17 U	0.17 U	0.19 U	0.17 U	0.18 U	0.19 U	0.18 U	0.2 U	0.18 U	0.18 U	0.17 U	0.19 U	0.18 U	0.18 U	N/A	0.17 U	0.32 U	0.17 U	0.19 U	0.18 U	0.19 U	0.18 U
3&4-Methylphenol(m&p Cresol)	mg/kg	41,000	0.14 U	0.14 U	0.15 U	0.13 U	0.15 U	0.15 R	0.15 U	**0.044 J**	0.14 U	0.14 U	0.14 U	0.15 U	0.15 U	**0.019 J**	N/A	**0.018 J**	0.26 U	0.14 UJ	0.15 U	0.15 U	0.15 R	0.14 U
3,3'-Dichlorobenzidine	mg/kg	5.1	0.069 UJ	0.07 UJ	0.077 UJ	0.068 UJ	0.073 UJ	0.074 U	0.073 UJ	0.079 UJ	0.072 UJ	0.071 UJ	0.069 U	0.075 U	0.074 U	0.073 U	N/A	0.069 UJ	0.13 U	0.069 U	0.074 U	0.073 UJ	0.074 UJ	0.07 UJ
4-Nitroaniline	mg/kg	110	0.17 U	**0.04 J**	0.19 U	0.17 U	0.18 U	0.19 U	0.18 U	0.2 U	0.18 U	0.18 U	0.17 U	0.19 U	0.18 U	0.18 U	N/A	0.17 UJ	0.32 U	0.17 UJ	0.19 UJ	0.18 U	0.19 U	0.18 U
Acenaphthene	mg/kg	45,000	**0.0031 J**	0.007 U	**0.01**	0.0069 U	0.0074 U	0.0074 U	**0.017 J**	**0.096**	**0.012 J**	0.0073 U	**0.0026 J**	**0.0095**	**0.041**	**0.085**	N/A	**0.6**	**0.011 J**	**0.032**	**0.0063 J**	**0.094**	**0.057**	**0.0021 J**
Acenaphthylene	mg/kg	45,000	**0.0081**	**0.0024 J**	**0.058**	**0.0014 J**	**0.0042 J**	**0.0011 J**	**0.13**	**0.26**	**0.063 J**	**0.00069 J**	**0.025**	**0.056**	**0.08**	**0.16**	N/A	**0.081**	**0.0051 J**	**0.12**	**0.0095**	**0.12**	**0.13**	**0.017**
Acetophenone	mg/kg	120,000	**0.019 J**	0.07 U	0.077 U	0.068 U	0.073 U	0.074 U	**0.026 J**	**0.33 J**	**0.044 J**	0.071 U	0.069 U	0.075 U	**0.019 J**	**0.02 J**	N/A	**0.06 J**	0.13 U	0.069 U	0.074 U	**0.019 J**	0.074 U	0.07 U
Anthracene	mg/kg	230,000	**0.013**	0.07 U	**0.068**	**0.0014 J**	**0.0014 J**	**0.0013 J**	**0.12**	**0.29**	**0.13**	0.0013 B	**0.026**	**0.051**	**0.25**	**0.44**	N/A	**0.99**	**0.03**	**0.2**	**0.045**	**0.22 J**	**0.22**	**0.0071**
Benz[a]anthracene	mg/kg	21	**0.057**	**0.011**	**0.38**	**0.0034 J**	**0.006 J**	**0.0061 J**	**0.27**	**0.86**	**0.34**	0.0038 B	**0.082**	**0.19**	**0.69**	**1.4**	N/A	**0.95**	**0.032**	**0.82**	**0.075**	**0.97 J**	**0.96**	**0.042**
Benzaldehyde	mg/kg	120,000	**0.09 J**	**0.042 J**	**0.022 J**	**0.023 J**	**0.046 J**	0.074 R	**0.048 J**	**0.28 J**	**0.038 J**	0.071 R	0.069 U	0.075 U	**0.031 J**	**0.048 J**	N/A	**0.15 J**	0.13 R	**0.017 J**	**0.024 J**	**0.022 J**	0.074 R	**0.026 J**
Benzo[a]pyrene	mg/kg	2.1	**0.095**	**0.016 J**	**0.37 J**	**0.0051 J**	**0.0074 J**	**0.0045 J**	**0.32 J**	**0.73 J**	**0.35**	0.0044 B	**0.1**	**0.24**	**0.84**	**1.6**	**1.5**	**0.79**	**0.025**	**1**	**0.067**	**1.1 J**	**0.99**	**0.053**
Benzo[b]fluoranthene	mg/kg	21	**0.25**	**0.052 J**	**0.91 J**	**0.027**	**0.032**	**0.019**	**0.86 J**	**1.6 J**	**0.67**	**0.015**	**0.22**	**0.39**	**1.3**	**3.3**	**1.9**	**3.4 J**	**0.075**	**3.6 J**	**0.14**	**3.2 J**	**3.1**	**0.13**
Benzo[g,h,i]perylene	mg/kg		**0.038**	**0.02 J**	**0.21 J**	**0.0057 J**	**0.0063 J**	**0.0042 J**	**0.16 J**	**0.21 J**	**0.24**	**0.0049 J**	**0.063**	**0.097**	**0.33**	**0.5**	N/A	**0.28**	**0.019**	**0.46**	**0.035**	**0.42 J**	**0.33**	**0.022**
Benzo[k]fluoranthene	mg/kg	210	**0.26**	**0.05 J**	**0.88 J**	**0.027**	**0.032**	**0.019**	**0.87 J**	**1.6 J**	**0.68**	**0.015**	**0.081**	**0.18**	**0.61**	**3.4**	N/A	**3.1 J**	**0.073**	**3.5 J**	**0.13**	**3.2 J**	**3.2**	**0.13**
bis(2-Ethylhexyl)phthalate	mg/kg	160	0.069 UJ	0.07 UJ	0.077 UJ	0.068 UJ	0.073 UJ	0.074 U	**0.096 J**	0.079 UJ	**0.21 J**	0.071 U	0.069 U	0.075 U	0.074 U	0.073 U	N/A	0.069 UJ	0.13 U	0.069 UJ	0.074 UJ	0.039 B	0.074 UJ	**0.32 J**
Caprolactam	mg/kg	400,000	0.17 U	0.17 U	**0.067 J**	0.17 U	0.18 U	0.19 U	0.18 U	0.2 U	0.18 U	0.18 U	0.17 U	0.19 U	0.18 U	0.18 U	N/A	**0.084 J**	0.32 UJ	0.17 UJ	0.19 UJ	0.18 U	0.19 U	0.18 U
Carbazole	mg/kg		0.069 U	0.07 U	**0.033 J**	0.068 U	0.073 U	0.074 U	**0.042 J**	**0.12 J**	**0.069 J**	0.071 U	0.069 U	0.075 U	**0.14**	**0.17**	N/A	0.069 U	0.13 U	**0.048 J**	0.074 U	**0.064 J**	**0.058 J**	0.07 U
Chrysene	mg/kg	2,100	**0.093**	**0.011**	**0.37**	**0.0062 J**	**0.012**	**0.012**	**0.3**	**0.82**	**0.37**	0.007 B	**0.09**	**0.16**	**0.63**	**1.3**	N/A	**0.86**	**0.032**	**0.79**	**0.073**	**0.99 J**	**0.96**	**0.06**
Dibenz[a,h]anthracene	mg/kg	2.1	**0.015**	0.007 UJ	**0.082 J**	0.0069 U	**0.0014 J**	**0.0014 J**	**0.048 J**	**0.11 J**	**0.08**	**0.0016 J**	**0.016**	**0.038**	**0.14**	**0.19**	N/A	**0.11**	**0.0047 J**	**0.17**	**0.012**	**0.19 J**	**0.16**	**0.0067 J**
Diethylphthalate	mg/kg	660,000	0.069 U	0.07 U	0.077 U	0.068 U	0.073 U	0.074 U	0.073 U	0.079 U	0.072 U	0.071 U	0.069 U	0.075 U	0.074 U	0.073 U	N/A	0.069 U	0.13 U	0.069 U	0.074 U	0.073 U	0.074 U	0.07 U
Di-n-butylphthalate	mg/kg	82,000	0.069 U	0.07 U	0.077 U	0.068 U	0.073 U	0.074 U	0.073 U	0.079 U	0.072 U	0.071 U	0.069 U	0.075 U	0.074 U	0.073 U	N/A	0.069 U	0.13 U	0.069 U	0.074 U	0.073 U	0.074 U	**0.038 J**
Di-n-ocytlphthalate	mg/kg	8,200	0.069 UJ	0.07 UJ	0.077 UJ	0.068 UJ	0.073 UJ	0.074 U	0.073 UJ	0.079 UJ	**0.15 J**	0.071 U	0.069 U	0.075 U	0.074 U	0.073 U	N/A	0.069 UJ	0.13 U	0.069 UJ	0.074 UJ	0.073 UJ	0.074 UJ	**0.32 J**
Fluoranthene	mg/kg	30,000	**0.073**	**0.01 J**	**0.49**	**0.0067 J**	**0.012**	**0.0071 J**	**0.45**	**1.5**	**0.71**	0.006 B	**0.1**	**0.28**	**1.3**	**3.3**	N/A	**3.5**	**0.097**	**1.7**	**0.22**	**1.3 J**	**2.4**	**0.078**
Fluorene	mg/kg	30,000	**0.0023 J**	**0.0013 J**	**0.013**	0.0069 U	0.0074 U	0.0074 U	**0.033 J**	**0.11**	0.02 B	0.0073 U	**0.0031 J**	**0.0058 J**	**0.048**	**0.067**	N/A	**0.45**	**0.0072 J**	**0.028**	**0.0064 J**	**0.06**	**0.041**	**0.0031 J**
Hexachlorobenzene	mg/kg	0.96	0.069 U	0.07 U	0.077 U	0.068 U	0.073 U	0.074 U	0.073 U	0.079 U	0.072 U	0.071 UJ	0.069 U	0.075 U	0.074 U	0.073 U	N/A	0.069 U	0.13 U	0.069 U	0.074 U	0.073 U	0.074 U	0.07 U
Hexachloroethane	mg/kg	8	0.069 U	0.07 U	0.077 U	0.068 U	0.073 U	0.074 U	0.073 U	0.079 U	0.072 U	0.071 U	0.069 U	0.075 U	0.074 U	0.073 U	N/A	0.069 U	0.13 U	0.069 U	0.074 U	0.073 U	0.074 U	0.07 U
Indeno[1,2,3-c,d]pyrene	mg/kg	21	**0.037**	**0.013 J**	**0.15 J**	**0.0047 J**	**0.0039 J**	**0.0039 J**	**0.14 J**	**0.25 J**	**0.22**	**0.0047 J**	**0.055**	**0.098**	**0.36**	**0.53**	N/A	**0.3**	**0.016**	**0.5**	**0.031**	**0.48 J**	**0.39**	**0.017**
Naphthalene	mg/kg	17	**0.011**	**0.0034 J**	**0.058**	**0.0028 J**	**0.0037 J**	**0.002 J**	**0.12**	**1.4**	**0.15**	**0.0033 J**	**0.016**	**0.026**	**0.11**	**0.086**	N/A	**0.29**	**0.039**	**0.15**	**0.015**	**0.25**	**0.2**	**0.0086**
Nitrobenzene	mg/kg	22	0.069 U	0.07 U	0.077 U	0.068 U	0.073 U	0.074 U	0.073 U	0.079 U	0.072 U	0.071 U	0.069 U	0.075 U	0.074 U	0.073 U	N/A	0.069 U	0.13 U	0.069 U	0.074 U	0.073 U	0.074 U	0.07 U
N-Nitrosodiphenylamine	mg/kg	470	0.069 U	0.07 U	0.077 U	0.068 U	0.073 U	0.074 U	0.073 U	0.079 U	0.072 U	0.071 U	0.069 U	0.075 U	0.074 U	0.073 U	N/A	0.069 U	0.13 U	0.069 U	0.074 U	0.073 U	0.074 U	0.07 U
Pentachlorophenol	mg/kg	4	0.17 U	0.17 U	0.19 U	0.17 U	0.18 U	0.19 R	0.18 UJ	0.2 UJ	0.18 UJ	0.18 UJ	0.17 U	0.19 U	0.18 U	0.18 U	N/A	0.17 UJ	0.32 U	0.17 UJ	0.19 UJ	0.18 R	0.19 R	0.18 U
Phenanthrene	mg/kg		**0.036**	**0.009 J**	**0.16**	**0.0053 J**	**0.0063 J**	**0.0038 J**	**0.24**	**1.6**	**0.41**	0.0064 B	**0.048**	**0.054**	**1.1**	**2**	N/A	**2.9**	**0.14**	**0.5**	**0.19**	**0.61 J**	**0.57**	**0.046**
Phenol	mg/kg	250,000	0.069 U	0.07 U	0.077 U	0.068 U	0.073 U	0.074 R	0.073 U	**0.021 J**	**0.027 J**	0.071 U	0.069 U	0.075 U	0.074 U	0.073 U	N/A	**0.041 J**	0.13 U	0.069 UJ	0.074 U	0.073 U	0.074 R	0.07 U
Pyrene	mg/kg	23,000	**0.095**	**0.014 J**	**0.6**	**0.0082**	**0.016**	**0.013**	**0.46**	**1.2**	**0.74**	0.0043 B	**0.11**	**0.27**	**1.3**	**3.1**	N/A	**2.8**	**0.064**	**1.4**	**0.2**	**1.4 J**	**2.2**	**0.075**
PCBs																								
Aroclor 1242	mg/kg	0.97	0.0515 U	0.0506 U	N/A	0.051 U	0.0502 U	N/A	0.0541 U	N/A	**0.0362 J**	N/A	0.053 U	N/A	0.0559 U	N/A	N/A	0.0523 U	N/A	0.0504 U	N/A	0.0551 U	N/A	0.0579 U
Aroclor 1248	mg/kg	0.94	0.0515 U	0.0506 U	N/A	0.051 U	0.0502 U	N/A	0.0541 U	N/A	0.0528 U	N/A	0.053 U	N/A	0.0559 U	N/A	N/A	0.0523 U	N/A	0.0504 U	N/A	0.0551 U	N/A	0.0579 U
Aroclor 1254	mg/kg	0.97	0.0515 U	0.0506 U	N/A	0.051 U	0.0502 U	N/A	0.0541 U	N/A	**0.182 J**	N/A	0.053 U	N/A	0.0559 U	N/A	N/A	0.0523 U	N/A	**0.0464 J**	N/A	0.0551 U	N/A	0.0579 U
Aroclor 1260	mg/kg	0.99	0.0515 U	0.0506 U	N/A	0.051 U	0.0502 U	N/A	**0.862**	N/A	**0.453 J**	N/A	0.053 U	N/A	0.0559 U	N/A	N/A	0.0523 U	N/A	**0.0356 J**	N/A	0.0551 U	N/A	0.0579 U
Aroclor 1262	mg/kg		0.0515 U	0.0506 U	N/A	0.051 U	0.0502 U	N/A	0.0541 U	N/A	0.0528 U	N/A	0.053 U	N/A	0.0559 U	N/A	N/A	0.0523 U	N/A	0.0504 U	N/A	0.0551 U	N/A	0.0579 U
Aroclor 1268	mg/kg		0.0515 U	0.0506 U	N/A	0.051 U	0.0502 U	N/A	0.0541 U	N/A	0.0528 U	N/A	0.053 U	N/A	**0.145**	N/A	N/A	0.0523 U	N/A	0.0504 U	N/A	0.0551 U	N/A	0.0579 U
PCBs (total)	mg/kg	0.97	0.0515 U	0.0506 U	N/A	0.051 U	0.0502 U	N/A	**0.862**	N/A	**0.6712**	N/A	0.053 U	N/A	**0.145**	N/A	N/A	0.0523 U	N/A	**0.082**	N/A	0.0551 U	N/A	0.0579 U
TPH/Oil and Grease																								
Diesel Range Organics	mg/kg	6,200	**554**	**521 J**	**275**	**386**	**453**	**55**	**240**	**78.7**	**302**	4.7 B	**65.6**	**49.3**	**138**	**285**	N/A	**195 J**	**25.1 J**	**102 J**	**51.7 J**	**160 J**	**188**	**344**
Gasoline Range Organics	mg/kg	6,200	9.8 U	10 U	13.7 U	10 U	11 U	14.2 U	10.3 U	**24.8**	10.2 U	12.6 U	6.4 U	12.6 U	11.4 U	11.5 U	N/A	11 U	32.4 U	16 U	7.7 U	10.1 U	9.3 U	13.3 U
Oil and Grease	mg/kg	6,200	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	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Detections in bold
Values in red indicate an exceedance of the Project Action Limit (PAL)
* Indicates non-validated data
^ PAH compounds were analyzed via SIM
N/A indicates that the parameter was not analyzed for this sample

U: This analyte was not detected in the sample. The numeric value represents the sample quantitation/detection limit.
UJ: This analyte was not detected in the sample. The actual quantitation/detection limit may be higher than reported.
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.
R: The result reported for this analyte is unreliable. Additional data is needed to confirm or disprove the presence of this analyte in the sample.

Table 1 - Sub-Parcel B1-1
Summary of Organics Detected in Soil

Parameter	Units	PAL	B1-102-SB-4.5	B1-103-SB-1	B1-103-SB-5	B1-104-SB-1	B1-104-SB-5	B1-105-SB-1	B1-105-SB-5	B1-106-SB-1	B1-106-SB-5	B1-111-SB-1*	B1-111-SB-4*	B1-112-SB-1*	B1-112-SB-5*	B1-113-SB-1*	B1-113-SB-5*	B1-114-SB-1*	B1-115-SB-1	B1-116-SB-1	B1-116-SB-5	B1-120-SB-1	B1-126-SB-1	B1-127-SB-1
Volatile Organic Compounds																								
1,1,1-Trichloroethane	mg/kg	36,000	0.0051 U	0.0035 U	0.0032 U	0.0065 U	0.004 U	0.0061 U	0.0042 U	0.005 U	0.0043 U	0.0053 U	0.0046 U	0.0053 U	0.0043 U	0.0052 U	0.0047 U	0.0048 U	0.0051 U	0.0071 U	0.0051 U	0.0061 U	0.0045 U	0.0051 U
1,2-Dichloroethane	mg/kg	2	0.0051 U	0.0035 U	0.0032 U	0.0065 U	0.004 U	0.0061 U	0.0042 U	0.005 U	0.0043 U	0.0053 U	0.0046 U	0.0053 U	0.0043 U	0.0052 U	0.0047 U	0.0048 U	0.0051 U	0.0071 U	0.0051 U	0.0061 U	0.0045 U	0.0051 U
1,4-Dichlorobenzene	mg/kg	11	0.0051 U	0.0035 U	0.0032 U	0.0065 U	0.004 U	0.0061 U	0.0042 U	0.005 U	0.0043 U	0.0053 U	0.0046 U	0.0053 U	0.0043 U	0.0052 U	0.0047 U	0.0048 U	0.0051 U	0.0071 U	0.0051 U	0.0061 U	0.0045 U	0.0051 U
2-Butanone (MEK)	mg/kg	190,000	0.01 U	0.007 U	0.0063 U	0.013 U	0.0079 U	0.012 U	0.0084 U	0.01 U	0.0085 U	0.011 U	0.0093 U	**0.0051 J**	**0.011**	0.01 U	0.0094 U	**0.0029 J**	0.01 U	0.014 U	0.01 U	0.012 U	**0.0039 J**	0.01 U
2-Hexanone	mg/kg	1,300	0.01 U	0.007 U	0.0063 U	0.013 U	0.0079 U	0.012 U	0.0084 U	0.01 U	0.0085 U	0.011 U	0.0093 U	0.011 U	**0.0029 J**	0.01 U	0.0094 U	0.0097 U	0.01 U	0.014 U	0.01 U	0.012 U	0.0091 U	0.01 U
4-Methyl-2-pentanone (MIBK)	mg/kg	56,000	0.01 U	0.007 U	0.0063 U	0.013 U	0.0079 U	0.012 U	0.0084 U	0.01 U	0.0085 U	0.011 U	0.0093 U	0.011 U	0.0086 U	0.01 U	0.0094 U	0.0097 U	0.01 U	0.014 U	0.01 U	0.012 U	0.0091 U	0.01 U
Acetone	mg/kg	670,000	0.0086 B	**0.013**	**0.0041 J**	**0.0086 J**	**0.0059 J**	**0.0064 J**	**0.0054 J**	0.01 UJ	**0.0063 J**	**0.026**	0.021 B	0.037 B	**0.1**	0.043 B	0.0094 U	0.0087 B	0.016 B	0.0088 B	0.01 UJ	0.012 U	**0.12**	0.017 B
Benzene	mg/kg	5.1	0.0051 U	0.0035 U	0.0032 U	0.0065 U	0.004 U	0.0061 U	0.0042 U	0.005 U	0.0043 U	0.0053 U	0.0046 U	**0.002 J**	**0.006**	0.0052 U	0.0047 U	0.0048 U	0.0051 U	0.0071 U	0.0051 U	**0.0025 J**	0.0045 U	0.0051 U
Carbon disulfide	mg/kg	3,500	0.0051 U	0.0035 U	0.0032 U	0.0065 U	0.004 U	0.0061 U	0.0042 U	0.005 U	0.0043 U	0.0053 U	0.0046 U	0.0053 U	0.0043 U	0.0052 U	0.0047 U	0.0048 U	0.0051 U	0.0071 U	0.0051 U	0.0061 U	0.0045 U	0.0051 U
Carbon tetrachloride	mg/kg	2.9	0.0051 U	0.0035 U	0.0032 U	0.0065 U	0.004 U	0.0061 U	0.0042 U	0.005 U	0.0043 U	0.0053 U	0.0046 U	0.0053 U	0.0043 U	0.0052 U	0.0047 U	0.0048 U	0.0051 UJ	0.0071 U	0.0051 U	0.0061 UJ	0.0045 U	0.0051 U
Chloroform	mg/kg	1.4	**0.012**	0.0035 U	0.0032 U	0.0065 U	0.004 U	0.0061 U	0.0042 U	0.005 U	0.0043 U	0.0053 U	0.0046 U	0.0053 U	0.0043 U	0.0052 U	0.0047 U	0.0048 U	0.0051 U	0.0071 U	0.0051 U	0.0061 U	0.0045 U	0.0051 U
Cyclohexane	mg/kg	27,000	0.01 U	0.007 U	0.0063 U	0.013 U	0.0079 U	0.012 U	0.0084 U	0.01 U	0.0085 U	0.011 U	0.0093 U	0.011 U	0.0086 U	0.01 U	0.0094 U	0.0097 U	0.01 U	0.014 U	0.01 U	0.012 U	0.0091 U	0.01 U
Ethylbenzene	mg/kg	25	0.0051 U	0.0035 U	0.0032 U	0.0065 U	0.004 U	0.0061 U	0.0042 U	0.005 U	0.0043 U	0.0053 U	0.0046 U	**0.0019 J**	**0.0029 J**	0.0052 U	0.0047 U	0.0048 U	0.0051 U	0.0071 U	0.0051 U	0.0061 U	0.0045 U	0.0051 U
Isopropylbenzene	mg/kg	9,900	0.0051 U	0.0035 U	0.0032 U	0.0065 U	0.004 U	0.0061 U	0.0042 U	0.005 U	0.0043 U	0.0053 U	0.0046 U	0.0053 U	0.0043 U	0.0052 U	0.0047 U	0.0048 U	0.0051 U	0.0071 U	0.0051 U	0.0061 U	0.0045 U	0.0051 U
Methyl Acetate	mg/kg	1,200,000	0.051 U	**0.0015 J**	0.032 U	0.065 U	0.04 U	0.061 U	0.042 U	0.05 U	0.043 U	0.053 U	0.046 U	0.053 U	0.043 U	0.052 U	0.047 U	0.048 U	0.051 U	0.071 U	0.051 U	0.061 U	0.045 U	0.051 U
Methylene Chloride	mg/kg	1,000	0.0051 U	0.0035 U	0.0032 U	0.0065 U	0.004 U	0.0061 U	0.0042 U	0.005 U	0.0043 U	0.0053 U	0.0046 U	0.0053 U	0.0043 U	0.0052 U	0.0047 U	0.0048 U	0.0051 U	0.0071 U	0.0051 U	0.0061 U	0.0045 U	0.0051 U
Styrene	mg/kg	35,000	0.0051 U	0.0035 U	0.0032 U	0.0065 U	0.004 U	0.0061 U	0.0042 U	0.005 U	0.0043 U	0.0053 U	0.0046 U	0.0053 U	0.0043 U	0.0052 U	0.0047 U	0.0048 U	0.0051 U	0.0071 U	0.0051 U	0.0061 U	0.0045 U	0.0051 U
Tetrachloroethene	mg/kg	100	0.0051 U	0.0035 U	0.0032 U	0.0065 U	0.004 U	0.0061 U	0.0042 U	0.005 U	0.0043 U	0.0053 U	0.0046 U	0.0053 U	0.0043 U	0.0052 U	0.0047 U	0.0048 U	0.0051 U	0.0071 U	0.0051 U	0.0061 U	0.0045 U	0.0051 U
Toluene	mg/kg	47,000	0.0051 U	0.0035 U	0.0032 U	0.0065 U	0.004 U	0.0061 U	0.0042 U	0.005 U	0.0043 U	**0.0078**	**0.0071**	**0.0091**	**0.011**	**0.0054**	**0.0076**	**0.009**	0.0051 U	0.0071 U	0.0051 U	0.0052 B	0.0045 U	0.0051 U
Trichloroethene	mg/kg	6	0.0051 U	0.0035 U	0.0032 U	0.0065 U	0.004 U	0.0061 U	0.0042 U	0.005 U	0.0043 U	0.0053 U	0.0046 U	0.0053 U	0.0043 U	0.0052 U	0.0047 U	0.0048 U	0.0051 U	0.0071 U	0.0051 U	0.0061 U	0.0045 U	0.0051 U
Xylenes	mg/kg	2,800	0.015 U	0.01 U	0.0095 U	0.019 U	0.012 U	0.018 U	0.013 U	0.015 U	0.013 U	0.016 U	0.014 U	0.016 U	**0.0091 J**	0.016 U	0.014 U	0.014 U	0.015 U	0.021 U	0.015 U	0.018 U	0.014 U	0.015 U
Semi-Volatile Organic Compounds^																								
1,1-Biphenyl	mg/kg	200	**0.024 J**	0.071 U	0.066 U	0.15 U	0.073 U	**0.02 J**	0.07 U	0.072 U	0.072 U	0.07 U	0.075 U	0.074 U	**0.18**	**0.016 J**	**0.05 J**	0.074 U	**0.11 J**	0.074 U	0.07 U	**1.2 J**	0.071 U	**0.027 J**
2,3,4,6-Tetrachlorophenol	mg/kg	25,000	0.074 U	0.071 U	0.066 U	0.15 U	0.073 R	0.077 U	0.07 R	0.072 R	0.072 R	0.07 U	0.075 U	0.074 U	0.075 U	0.075 U	0.072 U	0.074 U	0.077 U	0.074 UJ	0.07 U	0.073 U	0.071 R	0.077 R
2,4-Dimethylphenol	mg/kg	16,000	0.074 U	0.071 U	0.066 U	0.15 U	0.073 R	0.077 U	0.07 R	0.072 R	0.072 R	0.07 U	0.075 U	0.074 U	0.075 U	0.075 U	0.072 U	0.074 U	0.077 U	0.074 UJ	0.07 U	0.073 U	0.071 R	0.077 R
2-Chloronaphthalene	mg/kg	60,000	0.074 U	0.071 U	0.066 U	0.15 U	0.073 U	0.077 U	0.07 U	0.072 U	0.072 U	0.07 U	0.075 U	0.074 U	0.075 U	0.075 U	0.072 U	0.074 U	0.077 U	0.074 U	0.07 U	0.073 U	0.071 U	0.077 U
2-Methylnaphthalene	mg/kg	3,000	**0.08**	**0.021**	**0.0068 J**	0.074 U	**0.035**	**0.041**	0.0071 U	**0.0021 J**	0.0073 U	**0.01**	**0.006 J**	**0.0023 J**	**0.8**	**0.026**	**0.49**	**0.0028 J**	**0.24**	**0.0076**	0.0071 U	**0.27**	**0.061**	**0.13**
2-Methylphenol	mg/kg	41,000	0.074 U	0.071 U	0.066 U	0.15 U	0.073 R	0.077 U	0.07 R	0.072 R	0.072 R	0.07 U	0.075 U	0.074 U	0.075 U	0.075 U	0.072 U	0.074 U	0.077 U	0.074 UJ	0.07 U	0.073 U	0.071 R	0.077 R
2-Nitroaniline	mg/kg	8,000	0.18 U	0.18 U	0.17 U	0.38 U	0.18 U	0.19 U	0.18 U	0.18 U	0.18 U	0.18 U	0.19 U	0.19 U	0.19 U	0.19 U	0.18 U	0.19 U	0.19 U	0.18 U	0.18 U	0.18 U	0.18 U	0.19 U
3&4-Methylphenol(m&p Cresol)	mg/kg	41,000	0.15 U	0.14 U	0.13 U	0.3 U	0.15 R	0.15 U	0.14 R	0.14 R	0.14 R	0.14 U	0.15 U	0.15 U	0.15 U	0.15 U	0.14 U	0.15 U	0.15 U	0.15 UJ	0.14 U	0.15 U	0.14 R	0.15 R
3,3'-Dichlorobenzidine	mg/kg	5.1	0.074 UJ	0.071 UJ	0.066 UJ	0.15 UJ	0.073 U	0.077 UJ	0.07 U	0.072 U	0.072 U	0.07 U	0.075 U	0.074 U	0.075 U	0.075 U	0.072 U	0.074 U	0.077 UJ	0.074 UJ	0.07 U	0.073 UJ	0.071 U	0.077 U
4-Nitroaniline	mg/kg	110	0.18 U	0.18 U	0.17 UJ	0.38 U	0.18 U	0.19 U	0.18 U	0.18 U	0.18 U	0.18 U	0.19 U	0.19 U	0.19 U	0.19 U	0.18 U	0.19 U	0.19 UJ	0.18 U	0.18 U	0.18 UJ	0.18 U	0.19 U
Acenaphthene	mg/kg	45,000	**0.067**	**0.0091**	0.0068 U	**0.011 J**	**0.0096**	**0.0057 J**	0.0071 U	0.0073 U	0.0073 U	**0.0054 J**	0.0076 U	**0.0012 J**	**0.17**	**0.0028 J**	**2.5**	**0.00073 J**	**0.35**	**0.02**	**0.00083 J**	**0.1**	**0.0055 J**	**0.021**
Acenaphthylene	mg/kg	45,000	**0.15**	**0.008**	**0.001 J**	**0.035 J**	**0.0097**	**0.02**	0.0071 U	**0.00096 J**	0.0073 U	**0.0023 J**	**0.0013 J**	0.0074 U	**0.23**	**0.013**	**0.23**	0.0076 U	**0.19**	**0.11**	0.0017 B	**0.22**	**0.02**	**0.057**
Acetophenone	mg/kg	120,000	0.074 U	0.071 U	0.066 U	0.15 U	0.073 U	**0.04 J**	0.07 U	0.072 U	0.072 U	0.07 U	0.075 U	0.074 U	0.075 U	0.075 U	0.072 U	0.074 U	**0.026 J**	0.074 U	0.07 U	**0.051 J**	**0.02 J**	0.077 U
Anthracene	mg/kg	230,000	**0.38**	**0.053**	**0.0026 J**	**0.15**	**0.016**	**0.028**	0.0071 U	**0.0029 J**	0.0073 U	**0.012**	**0.0057 J**	**0.0022 J**	**0.67**	**0.015**	**2.3**	**0.0032 J**	**3.3**	**0.31**	0.0066 B	**0.52**	**0.042**	**0.11**
Benz[a]anthracene	mg/kg	21	**0.93**	**0.21**	**0.0074**	**0.51**	**0.054**	**0.13**	0.0071 U	**0.0088**	0.0073 U	**0.049**	**0.011**	**0.0028 J**	**1.8**	**0.042**	**3.9**	**0.016**	**5.4**	**1.5**	**0.019**	**1.5**	**0.14**	**0.34**
Benzaldehyde	mg/kg	120,000	0.074 R	**0.028 J**	0.066 R	0.15 R	0.073 R	**0.028 J**	0.07 R	0.072 R	0.072 R	0.07 U	0.075 U	0.074 U	0.075 U	**0.02 J**	0.072 U	0.074 U	**0.023 J**	0.074 R	0.07 R	**0.039 J**	0.071 R	**0.021 J**
Benzo[a]pyrene	mg/kg	2.1	**0.87 J**	**0.21 J**	**0.0079 J**	**0.34**	**0.045**	**0.12**	0.0071 UJ	**0.0073 J**	0.0073 UJ	**0.057**	**0.006 J**	**0.0019 J**	**1.6**	**0.068**	**2.7**	**0.044**	**3.3 J**	**1.4**	**0.015**	**1.6 J**	**0.14**	**0.28**
Benzo[b]fluoranthene	mg/kg	21	**1.5**	**0.51 J**	**0.021 J**	**0.8**	**0.1**	**0.3**	0.0071 UJ	**0.021 J**	**0.00089 J**	**0.14**	**0.024**	**0.0032 J**	**3.1**	**0.19**	**6.2**	**0.064**	**10.6 J**	**4.2 J**	**0.029**	**3.3 J**	**0.35**	**0.76**
Benzo[g,h,i]perylene	mg/kg		**0.34 J**	**0.059 J**	**0.0036 J**	**0.14**	**0.032**	**0.047**	0.0071 UJ	**0.0028 J**	0.0073 UJ	**0.039**	**0.0043 J**	0.0074 U	**0.72**	**0.025**	**0.84**	**0.05**	**2.1 J**	**0.52**	**0.012**	**0.73 J**	**0.049**	**0.12**
Benzo[k]fluoranthene	mg/kg	210	**1.5**	**0.52 J**	**0.021 J**	**0.77**	**0.099**	**0.29**	0.0071 UJ	**0.021 J**	**0.00091 J**	**0.13**	**0.022**	**0.003 J**	**3**	**0.18**	**6**	**0.061**	**10.2 J**	**4.1 J**	**0.029**	**3.2 J**	**0.36**	**0.77**
bis(2-Ethylhexyl)phthalate	mg/kg	160	0.074 UJ	0.055 B	**0.019 J**	**0.17 J**	**8 J**	**0.1 J**	0.07 U	0.072 U	0.072 U	0.07 U	0.075 U	0.074 U	0.075 U	0.075 U	0.072 U	0.074 U	0.077 UJ	0.074 UJ	0.07 UJ	0.073 UJ	0.071 U	0.077 U
Caprolactam	mg/kg	400,000	**0.038 J**	0.18 U	0.17 U	0.38 U	0.18 U	0.19 U	0.18 U	0.18 U	0.18 U	0.18 U	0.19 U	0.19 U	0.19 U	0.19 U	0.18 U	0.19 U	0.19 UJ	0.18 U	0.18 U	0.18 UJ	0.18 U	0.19 U
Carbazole	mg/kg		**0.045 J**	**0.026 J**	0.066 U	**0.068 J**	**0.04 J**	**0.058 J**	0.07 U	0.072 U	0.072 U	0.07 U	0.075 U	0.074 U	**0.23**	0.075 U	**0.3**	0.074 U	**0.95 J**	**0.34 J**	0.07 U	**0.2 J**	**0.017 J**	**0.062 J**
Chrysene	mg/kg	2,100	**0.87**	**0.22**	**0.0095**	**0.37**	**0.064**	**0.15**	**0.00056 J**	**0.011**	0.0073 U	**0.074**	**0.016**	**0.0029 J**	**1.5**	**0.081**	**3.1**	**0.029**	**5.4**	**2.2**	**0.02**	**1.5**	**0.14**	**0.4**
Dibenz[a,h]anthracene	mg/kg	2.1	**0.17 J**	**0.026 J**	0.0068 UJ	**0.06 J**	**0.011**	**0.021**	0.0071 UJ	0.0073 UJ	0.0073 UJ	**0.012**	**0.0012 J**	0.0074 U	**0.25**	**0.0093**	**0.44**	**0.042**	**0.8 J**	**0.22**	**0.0034 J**	**0.33 J**	**0.02**	**0.05**
Diethylphthalate	mg/kg	660,000	0.074 U	0.071 U	0.066 U	0.15 U	0.073 U	0.077 U	0.07 U	0.072 U	0.072 U	0.07 U	0.075 U	**0.081**	0.075 U	**0.024 J**	0.072 U	0.074 U	0.077 U	0.074 U	0.07 U	0.073 U	0.071 U	0.077 U
Di-n-butylphthalate	mg/kg	82,000	0.074 U	0.071 U	0.066 U	0.15 U	0.073 U	**0.019 J**	0.07 U	0.072 U	0.072 U	0.07 U	0.075 U	0.074 U	0.075 U	0.075 U	0.072 U	0.074 U	0.077 U	0.074 U	0.07 U	**0.018 J**	0.071 U	0.077 U
Di-n-ocytlphthalate	mg/kg	8,200	0.074 UJ	0.071 UJ	0.066 UJ	0.15 UJ	0.073 U	0.077 UJ	0.07 U	0.072 U	0.072 U	0.07 U	0.075 U	0.074 U	0.075 U	0.075 U	0.072 U	0.074 U	0.077 UJ	0.074 UJ	0.07 UJ	0.073 UJ	0.071 U	0.077 U
Fluoranthene	mg/kg	30,000	**1.5**	**0.41**	**0.015**	**0.94**	**0.16**	**0.29**	**0.0011 J**	**0.022**	**0.0011 J**	**0.1**	**0.045**	**0.0098**	**4.5**	**0.15**	**14.9**	**0.013**	**13.9**	**3.7**	**0.04**	**2.4**	**0.32**	**0.88**
Fluorene	mg/kg	30,000	**0.078**	**0.0081**	**0.00087 J**	**0.013 J**	**0.0054 J**	**0.0073 J**	0.0071 U	0.0073 U	0.0073 U	**0.0036 J**	0.0076 U	0.0074 U	**0.28**	**0.0026 J**	**2.6**	**0.0011 J**	**0.15**	**0.011**	**0.0012 J**	**0.095**	**0.009**	**0.022**
Hexachlorobenzene	mg/kg	0.96	0.074 U	0.071 U	0.066 U	0.15 U	0.073 U	0.077 U	0.07 U	0.072 U	0.072 U	0.07 U	0.075 U	0.074 U	0.075 U	0.075 U	0.072 U	0.074 U	0.077 U	0.074 U	0.07 U	0.073 U	0.071 U	0.077 U
Hexachloroethane	mg/kg	8	0.074 U	0.071 U	0.066 U	0.15 U	0.073 U	0.077 U	0.07 U	0.072 U	0.072 U	0.07 U	0.075 U	0.074 U	0.075 U	0.075 U	0.072 U	0.074 U	0.077 U	0.074 U	0.07 U	0.073 U	0.071 U	0.077 U
Indeno[1,2,3-c,d]pyrene	mg/kg	21	**0.35 J**	**0.064 J**	**0.0021 J**	**0.13**	**0.025**	**0.044**	0.0071 UJ	**0.0024 J**	0.0073 UJ	**0.028**	**0.0037 J**	0.0074 U	**0.75**	**0.024**	**0.88**	**0.029**	**1.6 J**	**0.49**	**0.0091**	**0.74 J**	**0.055**	**0.14**
Naphthalene	mg/kg	17	**0.077**	**0.021**	**0.0049 J**	**0.011 J**	**0.029**	**0.052**	**0.0014 J**	**0.0028 J**	**0.0013 J**	**0.023**	**0.017**	**0.013**	**4.8**	**0.033**	**0.31**	**0.0052 J**	**0.33**	**0.011**	0.0023 B	**0.77**	**0.11**	**0.33**
Nitrobenzene	mg/kg	22	0.074 U	0.071 U	0.066 U	0.15 U	0.073 U	0.077 U	0.07 U	0.072 U	0.072 U	0.07 U	0.075 U	0.074 U	0.075 U	0.075 U	0.072 U	0.074 U	0.077 U	0.074 U	0.07 U	0.073 U	0.071 U	0.077 U
N-Nitrosodiphenylamine	mg/kg	470	0.074 U	0.071 U	0.066 U	0.15 U	0.073 U	0.077 U	0.07 U	0.072 U	0.072 U	0.07 U	0.075 U	0.074 U	0.075 U	0.075 U	0.072 U	0.074 U	0.077 U	0.074 U	0.07 U	0.073 U	0.071 U	0.077 U
Pentachlorophenol	mg/kg	4	0.18 U	0.18 U	0.17 U	0.38 U	0.18 R	0.19 U	0.18 R	0.18 R	0.18 R	0.18 U	0.19 U	0.19 U	0.19 U	0.19 U	0.18 U	0.19 U	0.19 UJ	0.18 UJ	0.18 U	0.18 UJ	0.18 R	0.19 R
Phenanthrene	mg/kg		**1**	**0.18**	**0.01**	**0.37**	**0.15**	**0.12**	**0.0021 J**	**0.013**	**0.0015 J**	**0.07**	**0.033**	**0.011**	**4.5**	**0.099**	**8.3**	**0.012**	**12.2**	**1.1**	**0.025**	**0.97**	**0.25**	**0.74**
Phenol	mg/kg	250,000	0.074 U	0.071 U	0.066 U	0.15 U	0.073 R	0.077 U	0.07 R	0.072 R	0.072 R	0.07 U	0.075 U	0.074 U	0.075 U	0.075 U	0.072 U	0.074 U	0.077 U	0.074 UJ	0.07 U	**0.029 J**	**0.16 J**	0.077 R
Pyrene	mg/kg	23,000	**1.7**	**0.35**	**0.015**	**0.72**	**0.13**	**0.25**	**0.00075 J**	**0.017**	**0.001 J**	**0.1**	**0.034**	**0.0063 J**	**3.4**	**0.1**	**13.8**	**0.012**	**14.2**	**5.2**	**0.044**	**2.6**	**0.27**	**0.75**
PCBs																								
Aroclor 1242	mg/kg	0.97	N/A	0.0528 U	N/A	0.057 U	N/A	0.0561 U	N/A	0.0541 U	N/A	0.0556 U	N/A	0.0551 U	N/A	0.0539 U	N/A	0.0623 U	0.0571 U	0.057 U	N/A	0.0551 U	0.0543 U	0.0546 U
Aroclor 1248	mg/kg	0.94	N/A	0.0528 U	N/A	0.057 U	N/A	0.0561 U	N/A	0.0541 U	N/A	0.0556 U	N/A	0.0551 U	N/A	0.0539 U	N/A	0.0623 U	0.0571 U	0.057 U	N/A	0.0551 U	0.0543 U	0.0546 U
Aroclor 1254	mg/kg	0.97	N/A	0.0528 U	N/A	0.057 U	N/A	0.0561 U	N/A	0.0541 U	N/A	0.0556 U	N/A	0.0551 U	N/A	0.0539 U	N/A	0.0623 U	**0.145**	0.057 U	N/A	**0.296**	0.0543 U	0.0546 U
Aroclor 1260	mg/kg	0.99	N/A	0.0528 U	N/A	0.057 U	N/A	0.0561 U	N/A	0.0541 U	N/A	0.0556 U	N/A	0.0551 U	N/A	0.0539 U	N/A	0.0623 U	0.0571 U	0.057 U	N/A	0.0551 U	0.0543 U	0.0546 U
Aroclor 1262	mg/kg		N/A	0.0528 U	N/A	0.057 U	N/A	**0.304**	N/A	0.0541 U	N/A	0.0556 U	N/A	0.0551 U	N/A	0.0539 U	N/A	0.0623 U	**0.177 J**	0.057 U	N/A	**0.4**	0.0543 U	0.0546 U
Aroclor 1268	mg/kg		N/A	0.0528 U	N/A	0.057 U	N/A	0.0561 U	N/A	0.0541 U	N/A	**0.0494 J**	N/A	0.0551 U	N/A	**0.162**	N/A	**0.201**	0.0571 U	0.057 U	N/A	0.0551 U	0.0543 U	0.0546 U
PCBs (total)	mg/kg	0.97	N/A	0.0528 U	N/A	0.057 U	N/A	**0.304**	N/A	0.0541 U	N/A	**0.0494 J**	N/A	0.0551 U	N/A	**0.162**	N/A	**0.201**	**0.322**	0.057 U	N/A	**0.696**	0.0543 U	0.0546 U
TPH/Oil and Grease																								
Diesel Range Organics	mg/kg	6,200	**244**	**35**	**18.6**	**308**	**60.4**	**29.6**	**6.8 J**	**14.8**	**15.9**	**15.1**	**34.9**	**8.3**	**82.4**	**63.3**	**30.7**	**9.1**	**327 J**	**125**	3.2 B	**223 J**	**189**	**80.1**
Gasoline Range Organics	mg/kg	6,200	11.3 U	6.4 U	8.1 U	12.2 U	10 U	10.5 U	8.6 U	12.9 U	9 U	10.7 U	11.6 U	**12.2**	8 U	11.6 U	10.4 U	11.4 U	12.7 U	9.4 U	10.1 U	11 U	8.7 U	5.9 U
Oil and Grease	mg/kg	6,200	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	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Detections in bold
Values in red indicate an exceedance of the Project Action Limit (PAL)
* Indicates non-validated data
^ PAH compounds were analyzed via SIM
N/A indicates that the parameter was not analyzed for this sample

U: This analyte was not detected in the sample. The numeric value represents the sample quantitation/detection limit.
UJ: This analyte was not detected in the sample. The actual quantitation/detection limit may be higher than reported.
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.
R: The result reported for this analyte is unreliable. Additional data is needed to confirm or disprove the presence of this analyte in the sample.

Table 1 - Sub-Parcel B1-1
Summary of Organics Detected in Soil

Parameter	Units	PAL	B1-127-SB-6	B1-128-SB-1	B1-129-SB-1	B1-129-SB-5	B1-130-SB-1*	B1-130-SB-9*	B1-131-SB-1*	B1-131-SB-4*	B1-132-SB-1	B1-132-SB-5	B1-133-SB-1	B1-133-SB-5	B1-134-SB-1	B1-134-SB-5	B1-143-SB-1	B1-143-SB-4.5	B1-146-SB-1	B1-146-SB-5	B1-147-SB-1	B1-147-SB-5	B1-149-SB-1*	B1-150-SB-1
Volatile Organic Compounds																								
1,1,1-Trichloroethane	mg/kg	36,000	0.0063 U	0.0046 U	0.0043 U	0.0055 U	0.0059 U	0.0048 U	0.0044 U	0.0058 U	0.0049 U	0.0086 U	0.0046 U	0.006 U	0.0049 U	0.0062 U	0.0051 U	0.0059 U	0.0055 U	0.013 U	0.005 U	0.0033 U	0.0047 U	0.0065 U
1,2-Dichloroethane	mg/kg	2	0.0063 U	0.0046 U	0.0043 U	0.0055 U	0.0059 U	0.0048 U	0.0044 U	0.0058 U	0.0049 U	0.0086 U	0.0046 U	0.006 U	0.0049 U	0.0062 U	0.0051 U	0.0059 U	0.0055 U	0.013 U	0.005 U	0.0033 U	0.0047 U	0.0065 U
1,4-Dichlorobenzene	mg/kg	11	0.0063 U	0.0046 U	0.0043 U	0.0055 U	0.0059 U	0.0048 U	0.0044 U	0.0058 U	0.0049 U	0.0086 U	0.0046 U	0.006 U	0.0049 U	0.0062 U	0.0051 U	0.0059 U	0.0055 U	0.013 U	0.005 U	0.0033 R	0.0047 U	0.0065 U
2-Butanone (MEK)	mg/kg	190,000	0.013 U	0.0092 U	0.0086 U	0.011 U	0.012 U	0.0096 U	0.0089 U	0.012 U	0.0098 U	0.017 U	0.0093 U	0.012 U	0.0099 U	0.012 U	0.01 U	0.012 U	0.011 U	0.026 U	0.01 U	0.0066 U	0.0093 U	0.013 UJ
2-Hexanone	mg/kg	1,300	0.013 U	0.0092 U	0.0086 U	0.011 U	0.012 U	0.0096 U	0.0089 U	0.012 U	0.0098 U	0.017 U	0.0093 U	0.012 U	0.0099 U	0.012 U	0.01 U	0.012 U	0.011 U	0.026 U	0.01 U	0.0066 U	0.0093 U	0.013 U
4-Methyl-2-pentanone (MIBK)	mg/kg	56,000	0.013 U	0.0092 U	0.0086 U	0.011 U	0.012 U	0.0096 U	0.0089 U	0.012 U	0.0098 U	0.017 U	0.0093 U	0.012 U	0.0099 U	0.012 U	0.01 U	0.012 U	0.011 U	0.026 U	0.01 U	0.0066 U	0.0093 U	0.013 U
Acetone	mg/kg	670,000	0.0072 B	0.0064 B	0.0064 B	0.0077 B	0.012 U	0.0096 U	0.0089 U	0.012 U	0.0055 B	0.027 B	0.0093 U	0.012 B	0.0099 U	0.0075 B	**0.0092 J**	**0.0066 J**	0.011 U	**0.12**	0.01 U	0.0095 B	0.0093 U	0.013 U
Benzene	mg/kg	5.1	0.0063 U	0.0046 U	0.0043 U	0.0055 U	0.0059 U	0.0048 U	0.0044 U	0.0058 U	**0.0038 J**	**0.006 J**	0.0046 U	**0.0079**	0.0049 U	0.0062 U	0.0051 U	0.0059 U	0.0055 U	0.013 U	0.005 U	0.0033 U	0.0047 U	0.0065 U
Carbon disulfide	mg/kg	3,500	0.0063 U	0.0046 U	0.0043 U	0.0055 U	0.0059 U	0.0048 U	0.0044 U	0.0058 U	0.0049 U	0.0086 U	0.0046 U	0.006 U	0.0049 U	0.0062 U	0.0051 U	0.0059 U	0.0055 U	0.013 U	0.005 U	0.0033 U	0.0047 U	0.0065 U
Carbon tetrachloride	mg/kg	2.9	0.0063 U	0.0046 U	0.0043 U	0.0055 U	0.0059 U	0.0048 U	0.0044 U	0.0058 U	0.0049 U	0.0086 U	0.0046 U	0.006 U	0.0049 U	0.0062 U	0.0051 U	0.0059 U	0.0055 U	0.013 UJ	0.005 U	0.0033 U	0.0047 U	0.0065 U
Chloroform	mg/kg	1.4	0.0063 U	0.0046 U	0.0043 U	0.0055 U	0.0059 U	0.0048 U	0.0044 U	0.0058 U	0.0049 U	0.0086 U	0.0046 U	0.006 U	0.0049 U	0.0062 U	0.0051 U	0.0059 U	0.0055 U	0.013 U	0.005 U	0.0033 U	0.0047 U	0.0065 U
Cyclohexane	mg/kg	27,000	0.013 U	0.0092 U	0.0086 U	0.011 U	0.012 U	0.0096 U	0.0089 U	0.012 U	0.0098 U	0.017 U	0.0093 U	0.012 U	0.0099 U	0.012 U	0.01 U	0.012 U	0.011 U	0.026 U	0.01 U	0.0066 U	0.0093 U	0.013 U
Ethylbenzene	mg/kg	25	0.0063 U	0.0046 U	0.0043 U	0.0055 U	0.0059 U	0.0048 U	0.0044 U	0.0058 U	0.0049 U	0.0086 U	0.0046 U	0.006 U	0.0049 U	0.0062 U	0.0051 U	0.0059 U	0.0055 U	0.013 U	0.005 U	0.0033 U	0.0047 U	0.0065 U
Isopropylbenzene	mg/kg	9,900	0.0063 U	0.0046 U	0.0043 U	0.0055 U	0.0059 U	0.0048 U	0.0044 U	0.0058 U	0.0049 U	0.0086 U	0.0046 U	0.006 U	0.0049 U	0.0062 U	0.0051 U	0.0059 U	0.0055 U	0.013 U	0.005 U	0.0033 U	0.0047 U	0.0065 U
Methyl Acetate	mg/kg	1,200,000	0.063 U	0.046 U	0.043 U	0.055 U	0.059 U	0.048 U	0.044 U	0.058 U	0.049 U	0.086 U	0.046 U	0.06 U	0.049 U	0.062 U	0.051 U	0.059 U	0.055 U	0.13 U	0.05 U	0.033 U	0.047 U	0.065 U
Methylene Chloride	mg/kg	1,000	0.0063 U	0.0046 U	0.0043 U	0.0055 U	0.0059 U	0.0048 U	0.0044 U	0.0058 U	0.0049 U	0.0086 U	0.0046 U	0.006 U	0.0049 U	0.0062 U	0.0051 U	0.0059 U	0.0055 U	0.013 U	0.005 U	0.0033 U	0.0047 U	0.0065 U
Styrene	mg/kg	35,000	0.0063 U	0.0046 U	0.0043 U	0.0055 U	0.0059 U	0.0048 U	0.0044 U	0.0058 U	0.0049 U	0.0086 U	0.0046 U	0.006 U	0.0049 U	0.0062 U	0.0051 U	0.0059 U	0.0055 U	0.013 U	0.005 U	0.0033 U	0.0047 U	0.0065 U
Tetrachloroethene	mg/kg	100	0.0063 U	0.0046 U	0.0043 U	0.0055 U	0.0059 U	0.0048 U	0.0044 U	0.0058 U	0.0049 U	0.0086 U	0.0046 U	0.006 U	0.0049 U	0.0062 U	0.0051 U	0.0059 U	0.0055 U	0.013 U	0.005 U	0.0033 U	0.0047 U	0.0065 U
Toluene	mg/kg	47,000	0.0063 U	0.0046 U	0.0043 U	0.0055 U	0.0059 U	0.0048 U	0.0044 U	0.0058 U	**0.0028 J**	**0.0067 J**	0.0046 U	**0.003 J**	0.0049 U	0.0062 U	0.0051 U	0.0059 U	0.003 B	0.015 B	0.005 U	0.0033 U	0.0047 U	0.0065 U
Trichloroethene	mg/kg	6	0.0063 U	0.0046 U	0.0043 U	0.0055 U	0.0059 U	0.0048 U	0.0044 U	0.0058 U	0.0049 U	0.0086 U	0.0046 U	0.006 U	0.0049 U	0.0062 U	0.0051 U	0.0059 U	0.0055 U	0.013 U	0.005 U	0.0033 U	0.0047 U	0.0065 U
Xylenes	mg/kg	2,800	0.019 U	0.014 U	0.013 U	0.016 U	0.018 U	0.014 U	0.013 U	0.018 U	0.015 U	0.026 U	0.014 U	0.018 U	0.015 U	0.019 U	0.015 U	0.018 U	0.017 U	0.039 U	0.015 U	0.0098 U	0.014 U	0.02 U
Semi-Volatile Organic Compounds^																								
1,1-Biphenyl	mg/kg	200	**0.031 J**	0.072 U	0.073 U	0.075 U	**0.033 J**	0.076 U	**0.023 J**	0.077 U	**1.3 J**	0.08 U	**0.21**	0.075 U	**0.13**	**0.037 J**	0.071 U	**0.89 J**	**0.16 J**	0.11 U	0.072 U	**0.02 J**	0.074 U	0.072 U
2,3,4,6-Tetrachlorophenol	mg/kg	25,000	0.079 U	0.072 U	0.073 U	0.075 U	0.076 U	0.076 U	0.074 U	0.077 U	0.077 U	0.08 U	0.074 U	0.075 U	0.072 U	0.082 U	0.071 R	0.075 U	0.073 U	0.11 R	0.072 R	0.067 U	0.074 U	0.072 U
2,4-Dimethylphenol	mg/kg	16,000	0.079 U	0.072 U	0.073 U	0.075 U	0.076 U	0.076 U	**0.047 J**	0.077 U	**0.021 J**	0.08 U	0.074 U	0.075 U	0.072 U	**0.033 J**	0.071 R	0.075 U	0.073 U	0.11 R	0.072 R	0.067 U	0.074 U	0.072 U
2-Chloronaphthalene	mg/kg	60,000	0.079 U	0.072 U	0.073 U	0.075 U	0.076 U	0.076 U	0.074 U	0.077 U	0.077 U	0.08 U	0.074 U	0.075 U	0.072 U	0.082 U	0.071 U	0.075 U	0.073 U	0.11 U	0.072 U	**0.017 J**	0.074 U	0.072 U
2-Methylnaphthalene	mg/kg	3,000	**0.13**	**0.017**	**0.029**	**0.051**	**0.17**	**0.0016 J**	**0.042**	**0.054**	**0.47**	**0.1**	**0.12**	**0.012**	**0.18**	**0.34**	**0.0042 J**	**14**	**0.1**	0.011 U	**0.0043 J**	**0.025**	**0.051**	**0.019 J**
2-Methylphenol	mg/kg	41,000	0.079 U	0.072 U	0.073 U	0.075 U	0.076 U	0.076 U	0.074 U	0.077 U	**0.023 J**	0.08 U	0.074 U	0.075 U	0.072 U	**0.056 J**	0.071 R	0.075 U	0.073 U	0.11 R	0.072 R	0.067 U	0.074 U	0.072 U
2-Nitroaniline	mg/kg	8,000	0.2 U	0.18 U	0.18 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.2 U	0.19 U	0.19 U	0.18 U	0.2 U	0.18 U	0.19 U	0.18 U	0.27 U	0.18 U	0.17 U	0.19 U	0.18 U
3&4-Methylphenol(m&p Cresol)	mg/kg	41,000	**0.038 J**	0.14 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	**0.044 J**	0.16 U	0.15 U	0.15 U	0.14 U	**0.11 J**	0.14 R	0.15 U	0.15 U	0.22 R	0.14 R	0.13 U	0.15 U	0.14 U
3,3'-Dichlorobenzidine	mg/kg	5.1	0.079 U	0.072 UJ	0.073 U	0.075 UJ	0.076 U	0.076 U	0.074 U	0.077 U	0.077 UJ	0.08 UJ	0.074 UJ	0.075 U	0.072 UJ	0.082 U	0.071 U	0.075 UJ	0.073 UJ	0.11 U	0.072 U	0.067 UJ	0.074 U	0.072 UJ
4-Nitroaniline	mg/kg	110	0.2 U	0.18 U	0.18 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.2 U	0.19 U	0.19 U	0.18 U	0.2 U	0.18 U	0.19 U	0.18 UJ	0.27 U	0.18 U	0.17 UJ	0.19 U	0.18 U
Acenaphthene	mg/kg	45,000	**0.011**	**0.003 J**	**0.006 J**	**0.0094**	**0.098**	0.0075 U	**0.076**	**0.0055 J**	**0.25**	**0.5**	**0.052**	0.0074 U	**0.026**	**0.011**	0.0072 U	**0.14**	**0.25**	0.011 U	0.0073 U	**0.0011 J**	**0.019**	**0.015 J**
Acenaphthylene	mg/kg	45,000	**0.082**	**0.017**	**0.036**	**0.038**	**0.26**	**0.004 J**	**0.15**	**0.0098**	**0.81**	**0.052**	**0.22**	**0.025**	**0.12**	**0.055**	**0.002 J**	**0.084**	**0.11**	0.011 U	**0.0015 J**	**0.019**	**0.039**	0.073 U
Acetophenone	mg/kg	120,000	0.079 U	0.072 U	0.073 U	0.075 U	**0.029 J**	0.076 U	**0.028 J**	**0.23**	**0.11 J**	0.08 U	**0.035 J**	0.075 U	**0.025 J**	0.082 U	0.071 U	**0.09 J**	**0.2 J**	0.11 U	0.072 U	0.067 U	**0.019 J**	0.072 U
Anthracene	mg/kg	230,000	**0.11**	**0.014**	**0.025**	**0.13**	**0.79**	**0.0035 J**	**0.53**	**0.025**	**1.5**	**1.1**	**0.25**	**0.0047 J**	**0.15**	**0.11**	**0.0029 J**	**0.28**	**0.66**	0.011 U	**0.0027 J**	**0.013**	**0.15**	**0.036 J**
Benz[a]anthracene	mg/kg	21	**0.41**	**0.06**	**0.092**	**0.81**	**3.3**	**0.02**	**1.9**	**0.1**	**5.2**	**1.5**	**0.74**	**0.0082**	**0.47**	**0.063**	**0.013**	**0.25**	**2.7**	0.011 U	**0.0084**	**0.038**	**0.7**	**0.082**
Benzaldehyde	mg/kg	120,000	**0.039 J**	0.072 R	0.073 R	0.075 R	**0.06 J**	0.076 U	0.074 U	**0.055 J**	**0.057 J**	0.08 R	**0.021 J**	0.075 R	**0.022 J**	**0.066 J**	0.071 R	**0.13 J**	**0.093 J**	0.11 R	0.072 R	0.067 R	**0.026 J**	0.072 U
Benzo[a]pyrene	mg/kg	2.1	**0.4 J**	**0.055 J**	**0.084 J**	**1.1 J**	**2.8**	**0.02**	**1.8**	**0.19**	**5 J**	**1.6 J**	**0.91 J**	**0.011 J**	**0.53 J**	**0.042 J**	**0.012 J**	**0.21**	**2.5**	**0.0015 J**	**0.0049 J**	**0.053 J**	**1.1**	**0.09 J**
Benzo[b]fluoranthene	mg/kg	21	**1.2 J**	**0.15 J**	**0.27 J**	**2.4**	**7.6**	**0.044**	**3.9**	**0.44**	**10.9 J**	**3.2 J**	**2 J**	**0.037 J**	**1.4 J**	**0.15 J**	**0.044 J**	**0.56**	**6.1**	**0.003 J**	**0.03 J**	**0.17 J**	**2.7**	**0.49 J**
Benzo[g,h,i]perylene	mg/kg		**0.21 J**	**0.049 J**	**0.064 J**	**0.56 J**	**1.2**	**0.0091**	**0.68**	**0.13**	**1.8 J**	**0.56 J**	**0.34 J**	**0.0051 J**	**0.2 J**	**0.025 J**	**0.0045 J**	**0.11**	**0.85**	0.011 U	**0.0042 J**	**0.026 J**	**0.45**	**0.062 J**
Benzo[k]fluoranthene	mg/kg	210	**1.2 J**	**0.14 J**	**0.26 J**	**2.5**	**7.8**	**0.045**	**4**	**0.44**	**11.1 J**	**3.2 J**	**2.1 J**	**0.038 J**	**1.4 J**	**0.15 J**	**0.045 J**	**0.54**	**5.9**	**0.0029 J**	**0.024 J**	**0.14 J**	**2.7**	**0.47 J**
bis(2-Ethylhexyl)phthalate	mg/kg	160	0.079 U	**0.11 J**	**0.12**	0.018 B	0.076 U	0.076 U	**0.87**	**0.25**	**0.27 J**	0.08 UJ	0.069 B	0.075 U	0.042 B	0.082 U	0.071 U	0.016 B	0.073 UJ	0.11 U	0.072 U	0.067 UJ	**0.72**	0.072 UJ
Caprolactam	mg/kg	400,000	0.2 U	0.18 U	0.18 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.2 U	0.19 U	0.19 U	0.18 U	0.2 U	0.18 U	0.19 U	0.18 UJ	0.27 UJ	0.18 U	0.17 U	0.19 U	0.18 U
Carbazole	mg/kg		**0.046 J**	0.072 U	0.073 U	**0.018 J**	**0.25**	0.076 U	**0.26**	0.077 U	**0.52 J**	**0.15**	**0.071 J**	0.075 U	**0.08**	**0.032 J**	0.071 U	**0.074 J**	**0.25 J**	0.11 U	0.072 U	0.067 U	**0.089**	**0.023 J**
Chrysene	mg/kg	2,100	**0.35**	**0.066**	**0.094**	**1.1**	**3.6**	**0.025**	**1.9**	**0.13**	**5.3**	**1.3**	**0.76**	**0.014**	**0.55**	**0.12**	**0.023**	**0.35**	**2.5**	**0.0016 J**	**0.01**	**0.046 J**	**0.79**	**0.15**
Dibenz[a,h]anthracene	mg/kg	2.1	**0.086 J**	**0.016 J**	**0.02 J**	**0.2 J**	**0.49**	0.0075 U	**0.21**	**0.044**	**0.74 J**	**0.23 J**	**0.12 J**	**0.0017 J**	**0.085 J**	**0.01 J**	**0.0014 J**	**0.062**	**0.44**	0.011 U	0.0073 UJ	**0.0079 J**	**0.18**	0.073 UJ
Diethylphthalate	mg/kg	660,000	0.079 U	0.072 U	0.073 U	0.075 U	0.076 U	0.076 U	0.074 U	0.077 U	0.077 U	0.08 U	0.074 U	0.075 U	0.072 U	0.082 U	0.071 U	0.075 U	0.073 U	0.11 U	0.072 U	0.067 U	0.074 U	0.072 U
Di-n-butylphthalate	mg/kg	82,000	0.079 U	0.072 U	0.073 U	0.075 U	0.076 U	0.076 U	0.074 U	0.077 U	0.077 U	0.08 U	0.074 U	0.075 U	0.072 U	0.082 U	0.071 U	0.075 U	**0.044 J**	0.11 U	0.072 U	0.067 U	0.074 U	0.072 UJ
Di-n-ocytlphthalate	mg/kg	8,200	0.079 U	0.072 UJ	0.073 U	0.075 UJ	**0.044 J**	0.076 U	0.074 U	0.077 U	**0.031 J**	0.08 UJ	0.074 UJ	0.075 U	0.072 UJ	0.082 U	0.071 U	0.075 UJ	0.073 UJ	0.11 U	0.072 U	0.067 UJ	0.074 U	0.072 UJ
Fluoranthene	mg/kg	30,000	**0.58**	**0.084**	**0.15**	**1**	**5.3**	**0.033**	**4.2**	**0.15**	**10**	**4.4**	**1.3**	**0.019**	**0.85**	**0.16**	**0.037**	**0.59**	**5.8**	**0.0026 J**	**0.018**	**0.069**	**1.2**	**0.18**
Fluorene	mg/kg	30,000	**0.014**	**0.0061 J**	**0.0082**	**0.0069 J**	**0.14**	**0.0013 J**	**0.035**	**0.004 J**	**0.23**	**0.42**	**0.056**	**0.0024 J**	**0.028**	**0.025**	0.0072 U	**0.1**	**0.17**	0.011 U	**0.00078 J**	**0.0018 J**	**0.018**	**0.018 J**
Hexachlorobenzene	mg/kg	0.96	0.079 U	0.072 U	0.073 U	0.075 U	0.076 U	0.076 U	0.074 U	0.077 U	0.077 U	0.08 U	0.074 U	0.075 U	0.072 U	0.082 U	0.071 U	0.075 U	0.073 U	0.11 U	0.072 U	0.067 U	0.074 U	0.072 UJ
Hexachloroethane	mg/kg	8	0.079 U	0.072 U	0.073 U	0.075 U	0.076 U	0.076 U	0.074 U	0.077 U	0.077 U	0.08 U	0.074 U	0.075 U	0.072 U	0.082 U	0.071 U	0.075 U	0.073 U	0.11 U	0.072 U	0.067 U	0.074 U	0.072 U
Indeno[1,2,3-c,d]pyrene	mg/kg	21	**0.19 J**	**0.033 J**	**0.047 J**	**0.39 J**	**1.2**	**0.0066 J**	**0.65**	**0.097**	**2 J**	**0.56 J**	**0.33 J**	**0.0045 J**	**0.21 J**	**0.016 J**	**0.0046 J**	**0.12**	**0.95**	0.011 U	**0.0037 J**	**0.023 J**	**0.47**	**0.033 J**
Naphthalene	mg/kg	17	**0.15**	**0.087**	**0.15**	**0.078**	**0.17**	**0.0028 J**	**0.05**	**0.032**	**1.6**	**0.1**	**0.41**	**0.046**	**0.27**	**0.24**	**0.006 J**	**6.1**	**0.21**	0.011 U	0.0037 B	**0.029**	**0.044**	**0.022 J**
Nitrobenzene	mg/kg	22	0.079 U	0.072 U	0.073 U	0.075 U	0.076 U	0.076 U	0.074 U	0.077 U	0.077 U	0.08 U	0.074 U	0.075 U	0.072 U	0.082 U	0.071 U	0.075 U	0.073 U	0.11 U	0.072 U	0.067 U	0.074 U	0.072 U
N-Nitrosodiphenylamine	mg/kg	470	0.079 U	0.072 U	0.073 U	0.075 U	0.076 U	0.076 U	0.074 U	0.077 U	0.077 U	0.08 U	0.074 U	0.075 U	0.072 U	0.082 U	0.071 U	0.075 U	0.073 U	0.11 U	0.072 U	0.067 U	0.074 U	0.072 UJ
Pentachlorophenol	mg/kg	4	0.2 U	0.18 U	0.18 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 UJ	0.2 UJ	0.19 UJ	0.19 UJ	0.18 UJ	0.2 UJ	0.18 R	0.19 U	0.18 UJ	0.27 R	0.18 R	0.17 U	0.19 U	0.18 UJ
Phenanthrene	mg/kg		**0.21**	**0.047**	**0.075**	**0.27**	**3.3**	**0.015**	**2.3**	**0.097**	**5.4**	**3.8**	**0.76**	**0.019**	**0.54**	**0.53**	**0.016**	**2.9**	**2.1**	**0.0017 J**	**0.012**	**0.047**	**0.5**	**0.17**
Phenol	mg/kg	250,000	**0.033 J**	0.072 U	0.073 U	0.075 U	0.076 U	0.076 U	0.074 U	**0.069 J**	**0.059 J**	0.08 U	0.074 U	0.075 U	**0.018 J**	**0.065 J**	0.071 R	0.075 U	**0.021 J**	0.11 R	0.072 R	0.067 U	0.074 U	0.072 U
Pyrene	mg/kg	23,000	**0.55**	**0.069**	**0.13**	**1.4**	**6.3**	**0.033**	**4.8**	**0.14**	**11.1**	**3.5**	**1.3**	**0.019**	**0.84**	**0.15**	**0.024**	**0.45**	**5.1**	**0.002 J**	**0.016**	**0.062**	**1.2**	**0.16**
PCBs																								
Aroclor 1242	mg/kg	0.97	N/A	0.05 U	0.0549 U	N/A	0.0587 U	N/A	0.0545 U	N/A	**0.353**	N/A	0.0535 U	N/A	0.0565 U	N/A	0.0543 U	N/A	0.0549 U	N/A	0.0556 U	N/A	0.055 U	0.0528 U
Aroclor 1248	mg/kg	0.94	N/A	0.05 U	0.0549 U	N/A	0.0587 U	N/A	0.0545 U	N/A	0.0574 U	N/A	0.0535 U	N/A	0.0565 U	N/A	0.0543 U	N/A	0.0549 U	N/A	0.0556 U	N/A	0.055 U	0.0528 U
Aroclor 1254	mg/kg	0.97	N/A	**0.16**	0.0549 U	N/A	0.0587 U	N/A	**0.284**	N/A	**0.477 J**	N/A	**0.211**	N/A	0.0565 U	N/A	0.0543 U	N/A	**1.01**	N/A	0.0556 U	N/A	0.055 U	0.0528 U
Aroclor 1260	mg/kg	0.99	N/A	0.05 U	**0.0542 J**	N/A	0.0587 U	N/A	**0.0527 J**	N/A	0.0574 U	N/A	**0.963**	N/A	**0.0325 J**	N/A	0.0543 U	N/A	**0.318**	N/A	0.0556 U	N/A	0.055 U	0.0528 U
Aroclor 1262	mg/kg		N/A	0.05 U	0.0549 U	N/A	0.0587 U	N/A	0.0545 U	N/A	**0.342**	N/A	0.0535 U	N/A	0.0565 U	N/A	**0.165**	N/A	0.0549 U	N/A	0.0556 U	N/A	0.055 U	0.0528 U
Aroclor 1268	mg/kg		N/A	0.05 U	0.0549 U	N/A	0.0587 U	N/A	0.0545 U	N/A	0.0574 U	N/A	0.0535 U	N/A	0.0565 U	N/A	0.0543 U	N/A	0.0549 U	N/A	0.0556 U	N/A	**2.23**	0.0528 U
PCBs (total)	mg/kg	0.97	N/A	**0.16**	**0.0542 J**	N/A	0.0587 U	N/A	**0.3367**	N/A	**1.172**	N/A	**1.174**	N/A	**0.0325 J**	N/A	**0.165**	N/A	**1.328**	N/A	0.0556 U	N/A	**2.23**	0.0528 U
TPH/Oil and Grease																								
Diesel Range Organics	mg/kg	6,200	**64.9**	**144**	**80.2**	**229**	**713**	**9.1**	**217**	**87.7**	**348**	**74.8**	**97.1**	**10.5**	**81.4**	**28.6**	**15.7**	**515**	**163 J**	**9.6 J**	**31.9**	**20.5**	**133**	**1,360**
Gasoline Range Organics	mg/kg	6,200	12.7 U	9.1 U	9.8 U	10.3 U	**10.4 J**	9.6 U	11.4 U	13.2 U	11.8 U	18.5 U	10.2 U	9.7 U	11.5 U	15.2 U	12.5 U	12.4 U	13.4 U	16.6 U	10 U	7.6 U	10.6 U	12.1 U
Oil and Grease	mg/kg	6,200	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	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Detections in bold
Values in red indicate an exceedance of the Project Action Limit (PAL)
* Indicates non-validated data
^ PAH compounds were analyzed via SIM
N/A indicates that the parameter was not analyzed for this sample

U: This analyte was not detected in the sample. The numeric value represents the sample quantitation/detection limit.
UJ: This analyte was not detected in the sample. The actual quantitation/detection limit may be higher than reported.
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.
R: The result reported for this analyte is unreliable. Additional data is needed to confirm or disprove the presence of this analyte in the sample.

Table 1 - Sub-Parcel B1-1
Summary of Organics Detected in Soil

Parameter	Units	PAL	B1-150-SB-8	B1-151-SB-1	B1-151-SB-5	B1-152-SB-1*	B1-152-SB-4*	B1-154-SB-1	B1-154-SB-5	B1-155-SB-1	B1-155-SB-5	B1-159-SB-1	B1-159-SB-5	B1-160-SB-1	B1-160-SB-5	B1-161-SB-1	B1-162-SB-1	B1-162-SB-4	B1-163-SB-1	B1-163-SB-4	B1-163-SB-10	B1-164-SB-1	B1-164-SB-4	B1-165-SB-1
Volatile Organic Compounds																								
1,1,1-Trichloroethane	mg/kg	36,000	0.0048 U	0.0055 U	0.012 U	0.0062 U	0.0056 U	0.0044 U	0.0049 U	0.0094 U	0.0079 U	**0.0023 J**	**0.13**	0.0049 U	0.0062 U	0.0057 U	0.0048 U	0.0054 U	0.0033 U	0.0062 U	N/A	0.0062 U	0.0065 U	**0.054**
1,2-Dichloroethane	mg/kg	2	0.0048 U	0.0055 U	0.012 U	0.0062 U	0.0056 U	0.0044 U	0.0049 U	0.0094 U	0.0079 U	0.0054 U	0.011 U	0.0049 U	0.0062 U	0.0057 U	0.0048 U	0.0054 U	0.0033 U	0.0062 U	N/A	0.0062 U	0.0065 U	0.008 U
1,4-Dichlorobenzene	mg/kg	11	0.0048 U	0.0055 U	0.012 U	0.0062 U	0.0056 U	0.0044 U	0.0049 U	0.0094 U	0.0079 U	0.0054 U	0.011 U	0.0049 U	0.0062 U	0.0057 U	0.0048 U	0.0054 U	0.0033 U	0.0062 U	N/A	0.0062 U	0.0065 U	0.008 U
2-Butanone (MEK)	mg/kg	190,000	0.0095 UJ	0.011 UJ	0.023 U	0.012 U	0.011 U	0.0089 U	0.0098 U	0.019 U	0.016 U	0.011 U	0.023 U	0.0097 U	0.012 U	0.011 U	0.0096 UJ	0.011 UJ	0.0065 UJ	0.012 UJ	N/A	0.012 UJ	0.013 UJ	0.016 U
2-Hexanone	mg/kg	1,300	0.0095 U	0.011 U	0.023 U	0.012 U	0.011 U	0.0089 U	0.0098 U	0.019 U	0.016 U	0.011 U	0.023 U	0.0097 U	0.012 U	0.011 U	0.0096 U	0.011 U	0.0065 U	0.012 U	N/A	0.012 U	0.013 U	0.016 U
4-Methyl-2-pentanone (MIBK)	mg/kg	56,000	0.0095 U	0.011 U	0.023 U	0.012 U	0.011 U	0.0089 U	0.0098 U	0.019 U	0.016 U	0.011 U	0.023 U	0.0097 U	0.012 U	0.011 U	0.0096 U	0.011 U	0.0065 U	0.012 U	N/A	0.012 U	0.013 U	0.016 U
Acetone	mg/kg	670,000	0.0095 U	0.011 U	0.023 U	0.012 U	0.011 U	**0.055**	**0.14**	0.019 U	**0.0098 J**	0.011 U	0.014 B	0.013 B	0.012 U	0.011 U	0.0096 U	0.011 U	0.0065 U	0.012 U	N/A	0.012 U	0.013 U	0.016 UJ
Benzene	mg/kg	5.1	0.0048 U	0.0055 U	0.012 U	0.0062 U	0.0056 U	0.0044 U	0.0049 U	0.0094 U	0.0079 U	**0.0023 J**	0.011 U	0.0049 U	0.0062 U	0.0057 U	0.0048 U	0.0054 U	0.0033 U	0.0062 U	N/A	0.0062 U	0.0065 U	**0.0058 J**
Carbon disulfide	mg/kg	3,500	0.0048 U	0.0055 U	0.012 U	0.0062 U	0.0056 U	0.0044 U	0.0049 U	0.0094 U	0.0079 U	0.0054 U	0.011 U	0.0049 U	0.0062 U	0.0057 U	0.0048 U	0.0054 U	0.0033 U	0.0062 U	N/A	0.0062 U	0.0065 U	0.008 U
Carbon tetrachloride	mg/kg	2.9	0.0048 U	0.0055 U	0.012 U	0.0062 U	0.0056 U	0.0044 U	0.0049 U	0.0094 U	0.0079 U	0.0054 U	0.011 U	0.0049 U	0.0062 U	0.0057 U	0.0048 U	0.0054 U	0.0033 U	0.0062 U	N/A	0.0062 U	0.0065 U	0.008 U
Chloroform	mg/kg	1.4	0.0048 U	0.0055 U	0.012 U	0.0062 U	0.0056 U	0.0044 U	0.0049 U	0.0094 U	0.0079 U	0.0054 U	0.011 U	0.0049 U	0.0062 U	0.0057 U	0.0048 U	0.0054 U	0.0033 U	0.0062 U	N/A	0.0062 U	0.0065 U	0.008 U
Cyclohexane	mg/kg	27,000	0.0095 U	0.011 U	0.023 U	0.012 U	0.011 U	0.0089 U	0.0098 U	0.019 U	0.016 U	0.011 U	0.023 U	0.0097 U	0.012 U	0.011 U	0.0096 U	0.011 U	0.0065 U	0.012 U	N/A	0.012 U	0.013 U	0.016 U
Ethylbenzene	mg/kg	25	0.0048 U	0.0055 U	0.012 U	0.0062 U	0.0056 U	0.0044 U	0.0049 U	0.0094 U	0.0079 U	0.0054 U	0.011 U	0.0049 U	0.0062 U	0.0057 U	0.0048 U	0.0054 U	0.0033 U	0.0062 U	N/A	0.0062 U	0.0065 U	0.008 U
Isopropylbenzene	mg/kg	9,900	0.0048 U	0.0055 U	0.012 U	0.0062 U	0.0056 U	0.0044 U	0.0049 U	0.0094 U	0.0079 U	0.0054 U	0.011 U	0.0049 U	0.0062 U	0.0057 U	0.0048 U	0.0054 U	0.0033 U	0.0062 U	N/A	0.0062 U	0.0065 U	0.008 U
Methyl Acetate	mg/kg	1,200,000	0.048 U	0.055 U	0.12 U	0.062 U	0.056 U	0.044 U	0.049 U	0.094 U	0.079 U	0.054 U	0.11 U	0.049 U	0.062 U	0.057 U	0.048 U	0.054 U	0.033 U	0.062 U	N/A	0.062 U	0.065 U	0.08 U
Methylene Chloride	mg/kg	1,000	0.0048 U	0.0055 U	0.012 U	0.0062 U	0.0056 U	0.0044 U	0.0049 U	0.0094 U	0.0079 U	0.0054 U	0.011 U	0.0049 U	0.0062 U	0.0057 U	0.0048 U	0.0054 U	0.0033 U	0.0062 U	N/A	0.0062 U	0.0065 U	0.008 U
Styrene	mg/kg	35,000	0.0048 U	0.0055 U	0.012 U	0.0062 U	0.0056 U	0.0044 U	0.0049 U	0.0094 U	0.0079 U	0.0054 U	0.011 U	0.0049 U	0.0062 U	0.0057 U	0.0048 U	0.0054 U	0.0033 U	0.0062 U	N/A	0.0062 U	0.0065 U	0.008 U
Tetrachloroethene	mg/kg	100	0.0048 U	0.0055 U	0.012 U	0.0062 U	0.0056 U	0.0044 U	0.0049 U	0.0094 U	0.0079 U	0.0054 U	**0.0072 J**	0.0049 U	0.0062 U	0.0057 U	0.0048 U	0.0054 U	0.0033 U	0.0062 U	N/A	0.0062 U	0.0065 U	0.008 U
Toluene	mg/kg	47,000	0.0048 U	0.0055 U	0.012 U	0.0062 U	0.0056 U	0.0044 U	0.0049 U	0.0094 U	**0.0035 J**	**0.0019 J**	0.011 U	0.0049 U	0.0062 U	0.0057 U	0.0048 U	0.0054 U	0.0033 U	0.0062 U	N/A	0.0062 U	0.0065 U	**0.01**
Trichloroethene	mg/kg	6	0.0048 U	0.0055 U	0.012 U	0.0062 U	0.0056 U	0.0044 U	0.0049 U	0.0094 U	0.0079 U	0.0054 U	**0.014**	0.0049 U	0.0062 U	0.0057 U	0.0048 U	0.0054 U	0.0033 U	0.0062 U	N/A	0.0062 U	0.0065 U	**0.031**
Xylenes	mg/kg	2,800	0.014 U	0.017 U	0.035 U	0.019 U	0.017 U	0.013 U	0.015 U	0.028 U	0.024 U	0.016 U	0.034 U	0.015 U	0.019 U	0.017 U	0.014 U	0.016 U	0.0098 U	0.019 U	N/A	0.019 U	0.02 U	0.024 U
Semi-Volatile Organic Compounds^																								
1,1-Biphenyl	mg/kg	200	0.082 U	**0.064 J**	0.1 U	0.071 U	**0.016 J**	0.073 U	**0.74**	0.075 U	**0.17**	**0.95**	0.091 U	**0.38 J**	0.074 U	**0.08 J**	0.073 U	0.079 U	0.069 U	**0.3 J**	N/A	0.077 U	**0.028 J**	**0.26 J**
2,3,4,6-Tetrachlorophenol	mg/kg	25,000	0.082 U	0.074 U	0.1 R	0.071 U	0.073 U	0.073 R	0.07 R	0.075 U	0.081 U	0.077 U	0.091 UJ	0.075 U	0.074 UJ	0.071 U	0.073 U	0.079 U	0.069 U	0.071 U	N/A	0.077 U	0.087 U	0.076 U
2,4-Dimethylphenol	mg/kg	16,000	0.082 U	0.074 U	0.1 R	0.071 U	0.073 U	0.073 R	0.07 R	0.075 U	**0.035 J**	0.077 U	0.091 U	0.075 U	0.074 U	0.071 U	0.073 U	0.079 U	0.069 U	**0.029 J**	N/A	0.077 U	0.087 U	**0.026 J**
2-Chloronaphthalene	mg/kg	60,000	0.082 U	0.074 U	0.1 U	0.071 U	0.073 U	0.073 U	0.07 U	0.075 U	0.081 U	0.077 U	0.091 U	0.075 U	0.074 U	0.071 U	**0.019 J**	0.079 U	0.069 U	0.071 U	N/A	0.077 U	0.087 U	0.076 U
2-Methylnaphthalene	mg/kg	3,000	**0.013**	**0.17**	**0.0032 J**	**0.038**	**0.12**	**0.013**	**0.23**	**0.1**	**2.1**	**0.35**	**0.0018 J**	**0.12**	**0.073**	**0.073**	**0.033**	**0.033**	**0.015**	**0.55**	**0.023**	**0.017**	**0.44 J**	**0.64**
2-Methylphenol	mg/kg	41,000	0.082 U	0.074 U	0.1 R	0.071 U	0.073 U	0.073 R	0.07 R	0.075 U	**0.02 J**	**0.016 J**	0.091 U	0.075 U	0.074 U	0.071 U	0.073 U	0.079 U	0.069 U	0.071 U	N/A	0.077 U	0.087 U	0.076 U
2-Nitroaniline	mg/kg	8,000	0.21 U	0.19 U	0.25 U	0.18 U	0.18 U	0.18 U	0.18 U	0.19 U	0.2 U	0.19 U	0.23 U	0.19 U	0.19 U	0.18 U	0.18 U	0.2 U	0.17 U	0.18 U	N/A	0.19 U	0.22 U	0.19 U
3&4-Methylphenol(m&p Cresol)	mg/kg	41,000	0.16 U	0.15 U	0.2 R	0.14 U	0.15 U	0.14 R	0.14 R	0.15 U	**0.03 J**	**0.038 J**	0.18 U	0.15 U	0.15 U	0.14 U	0.15 U	0.16 U	0.14 U	**0.028 J**	N/A	0.15 U	0.17 U	**0.045 J**
3,3'-Dichlorobenzidine	mg/kg	5.1	0.082 U	0.074 UJ	0.1 U	0.071 U	0.073 U	0.073 U	0.07 UJ	0.075 U	0.081 UJ	0.077 UJ	0.091 UJ	**0.071 J**	0.074 UJ	0.071 UJ	0.073 UJ	0.079 U	0.069 U	0.071 UJ	N/A	0.077 UJ	0.087 UJ	0.076 UJ
4-Nitroaniline	mg/kg	110	0.21 U	0.19 U	0.25 U	0.18 U	0.18 U	0.18 U	0.18 U	0.19 U	0.2 U	0.19 U	0.23 U	0.19 U	0.19 U	0.18 U	0.18 U	0.2 U	0.17 U	0.18 UJ	N/A	0.19 UJ	0.22 U	0.19 U
Acenaphthene	mg/kg	45,000	**0.0019 J**	**0.35**	0.01 U	**0.0032 J**	**0.46**	0.0074 U	**0.33**	**0.017**	**0.061**	**0.14**	0.0092 U	**0.031**	**0.0019 J**	**0.035**	**0.0076**	**0.0044 J**	**0.0046 J**	**0.64**	0.0084 U	**0.008**	**0.0088**	**0.8**
Acenaphthylene	mg/kg	45,000	**0.00091 J**	**0.24**	**0.0012 J**	**0.018**	**0.028**	0.0014 B	**0.12**	**0.092**	**0.11**	**0.63**	0.0092 U	**0.14**	**0.0099**	**0.22**	**0.15**	**0.011**	**0.012**	**0.04 J**	0.0084 U	**0.092**	**0.025**	**0.24**
Acetophenone	mg/kg	120,000	0.082 U	0.074 U	0.1 U	0.071 U	0.073 U	0.073 U	0.07 U	0.075 U	**0.13**	**0.1**	0.091 U	**0.066 J**	0.074 U	0.071 U	0.073 U	0.079 U	0.069 U	0.071 U	N/A	0.077 U	0.087 U	**0.049 J**
Anthracene	mg/kg	230,000	**0.0052 J**	**2.6**	**0.0044 J**	**0.019**	**0.6**	**0.0082**	**4.5**	**0.11**	**0.14**	**1.1**	0.0092 U	**0.23**	**0.013**	**0.32**	**0.15**	**0.079**	**0.038**	**2.2**	0.0084 U	**0.1**	**0.07**	**4.5**
Benz[a]anthracene	mg/kg	21	**0.0092**	**7**	**0.01**	**0.11**	**3.7**	**0.027**	**1.9**	**0.26**	**0.33**	**2.4**	0.0092 U	**0.64**	**0.029**	**0.79**	**0.27**	**0.29**	**0.17**	**3**	**0.0027 J**	**0.32**	**0.31**	**4.6**
Benzaldehyde	mg/kg	120,000	0.082 U	**0.029 J**	0.1 U	0.071 U	0.073 U	0.073 R	0.07 R	0.075 U	0.081 U	**0.055 J**	0.091 R	**0.046 J**	0.074 R	0.071 R	**0.03 J**	0.079 U	0.069 U	**0.02 J**	N/A	0.077 U	0.087 U	**0.044 J**
Benzo[a]pyrene	mg/kg	2.1	**0.0073 J**	**7.2 J**	**0.008 J**	**0.12**	**5.5**	**0.041**	**0.71**	**0.24 J**	**0.23 J**	**2.3 J**	0.0092 U	**0.7 J**	**0.026 J**	**0.77**	**0.26 J**	**0.24 J**	**0.14 J**	**2.7 J**	**0.0014 J**	**0.5 J**	**0.31 J**	**4.5**
Benzo[b]fluoranthene	mg/kg	21	**0.028 J**	**21.2 J**	**0.031 J**	**0.34**	**9.3**	**0.08**	**2.3 J**	**1.3 J**	**0.71 J**	**4.8 J**	0.0021 B	**1.1 J**	**0.089 J**	**1.8**	**0.84 J**	**0.7 J**	**0.32 J**	**5.6 J**	**0.0034 J**	**1.1 J**	**0.9 J**	**9.6**
Benzo[g,h,i]perylene	mg/kg		**0.003 J**	**4.2 J**	**0.0072 J**	**0.066**	**4.6**	**0.022**	**0.24**	**0.11 J**	**0.12 J**	**1.3 J**	0.0092 U	**0.32 J**	**0.0098 J**	**0.46**	**0.15 J**	**0.072 J**	**0.03 J**	**0.59 J**	**0.0014 J**	**0.15 J**	**0.17 J**	**1.5**
Benzo[k]fluoranthene	mg/kg	210	**0.025 J**	**18.6 J**	**0.028 J**	**0.34**	**9.6**	**0.027**	**2.1 J**	**1.1 J**	**0.62 J**	**4.9 J**	**0.0022 J**	**1.2 J**	**0.09 J**	**1.9**	**0.26 J**	**0.62 J**	**0.28 J**	**4.9 J**	**0.0034 J**	**0.34 J**	**0.79 J**	**9.1**
bis(2-Ethylhexyl)phthalate	mg/kg	160	0.082 U	0.074 UJ	0.1 U	0.071 U	0.073 U	0.073 U	0.07 UJ	**0.11**	0.081 UJ	**0.39 J**	0.091 U	**0.5 J**	0.074 U	**0.13 J**	**0.14 J**	0.079 U	0.069 U	0.071 UJ	N/A	0.068 B	0.087 UJ	0.076 UJ
Caprolactam	mg/kg	400,000	0.21 U	0.19 U	0.25 U	0.18 U	0.18 U	0.18 U	0.18 U	0.19 U	0.2 U	0.19 U	0.23 U	0.19 U	0.19 U	0.18 U	0.18 U	0.2 U	0.17 U	0.18 U	N/A	0.19 U	0.22 U	0.19 U
Carbazole	mg/kg		0.082 U	**0.79**	0.1 U	0.071 U	**0.25**	0.073 U	**6.2**	**0.033 J**	**0.074 J**	**0.42**	0.091 U	**0.14 J**	0.074 U	**0.034 J**	0.073 U	**0.024 J**	**0.017 J**	**1.3 J**	N/A	**0.02 J**	**0.1**	**2.1**
Chrysene	mg/kg	2,100	**0.0099**	**6.5**	**0.0092 J**	**0.12**	**4.5**	**0.072**	**2.2**	**0.39**	**0.4**	**2.5**	0.00088 B	**0.68**	**0.05**	**0.81**	**0.32**	**0.3**	**0.19**	**3**	**0.0019 J**	**0.34**	**0.41**	**5.5**
Dibenz[a,h]anthracene	mg/kg	2.1	0.0082 UJ	**1.6 J**	0.01 UJ	**0.02**	**0.9**	**0.0073 J**	**0.11**	**0.046 J**	**0.065 J**	**0.49 J**	0.0092 U	**0.1 J**	**0.0045 J**	**0.16**	**0.065 J**	**0.045 J**	**0.012 J**	**0.18 J**	0.0084 U	**0.066 J**	**0.07 J**	**0.78 J**
Diethylphthalate	mg/kg	660,000	0.082 U	0.074 U	0.1 U	0.071 U	0.073 U	0.073 U	0.07 U	0.075 U	0.081 U	0.077 U	0.091 U	0.075 U	0.074 U	0.071 U	0.073 U	0.079 U	0.069 U	0.071 U	N/A	0.077 U	0.087 U	0.076 U
Di-n-butylphthalate	mg/kg	82,000	0.082 U	**0.022 J**	0.1 U	0.071 U	0.073 U	0.073 U	0.07 U	0.075 U	0.081 U	0.077 U	0.091 U	0.075 U	0.074 U	0.071 U	0.073 U	0.079 U	0.069 U	0.071 U	N/A	**0.018 J**	0.087 U	0.076 UJ
Di-n-octylphthalate	mg/kg	8,200	0.082 U	0.074 UJ	0.1 U	0.071 U	0.073 U	0.073 U	0.07 UJ	0.075 U	0.081 UJ	0.077 UJ	0.091 U	**0.065 J**	0.074 U	0.071 UJ	0.073 UJ	0.079 U	0.069 U	0.071 UJ	N/A	0.077 UJ	0.087 UJ	0.076 UJ
Fluoranthene	mg/kg	30,000	**0.022**	**14**	**0.022**	**0.17**	**6.3**	**0.088**	**8.2**	**0.62**	**0.64**	**4.8**	0.0012 B	**1.1**	**0.064**	**2.3**	**0.31**	**0.44**	**0.31**	**8.6**	**0.0026 J**	**0.5**	**0.65 J**	**13.1**
Fluorene	mg/kg	30,000	**0.0036 J**	**0.19**	**0.0013 J**	**0.0037 J**	**0.2**	**0.0012 J**	**0.24**	**0.021**	**0.067**	**0.21**	0.0092 U	**0.042**	**0.0028 J**	**0.086**	**0.0088**	**0.0079 J**	**0.0066 J**	**0.67**	0.0084 U	**0.01**	**0.0075 J**	**0.66**
Hexachlorobenzene	mg/kg	0.96	0.082 U	0.074 U	0.1 U	0.071 U	0.073 U	0.073 U	0.07 U	0.075 U	0.081 U	0.077 U	0.091 UJ	0.075 U	0.074 UJ	0.071 U	0.073 U	0.079 U	0.069 U	0.071 UJ	N/A	0.077 UJ	0.087 U	0.076 UJ
Hexachloroethane	mg/kg	8	0.082 U	0.074 U	0.1 U	0.071 U	0.073 U	0.073 U	0.07 U	0.075 U	0.081 U	0.077 U	0.091 U	0.075 U	0.074 U	0.071 U	0.073 U	0.079 U	0.069 U	0.071 U	N/A	0.077 U	0.087 U	0.076 U
Indeno[1,2,3-c,d]pyrene	mg/kg	21	**0.0026 J**	**4.3 J**	**0.0043 J**	**0.056**	**3.9**	**0.012**	**0.29**	**0.1 J**	**0.11 J**	**1.3 J**	0.0092 U	**0.29 J**	**0.0093 J**	**0.44**	**0.16 J**	**0.091 J**	**0.031 J**	**0.58 J**	0.0084 U	**0.18 J**	**0.17 J**	**1.1**
Naphthalene	mg/kg	17	**0.0096**	**0.37**	**0.0037 J**	**0.026**	**0.28**	**0.0099**	**0.18**	**0.2**	**1.6**	**1.1**	**0.0068 J**	**0.44**	**0.06**	**0.23**	**0.057**	**0.045**	**0.017**	**0.79**	**0.029**	**0.023**	**0.22 J**	**0.68**
Nitrobenzene	mg/kg	22	0.082 U	0.074 U	0.1 U	0.071 U	0.073 U	0.073 U	0.07 U	0.075 U	0.081 U	0.077 U	0.091 U	0.075 U	0.074 U	0.071 U	0.073 U	0.079 U	0.069 U	0.071 U	N/A	0.077 U	0.087 U	0.076 U
N-Nitrosodiphenylamine	mg/kg	470	0.082 U	0.074 U	0.1 U	0.071 U	0.073 U	0.073 U	0.07 U	0.075 U	0.081 U	0.077 U	0.091 U	0.075 U	0.074 U	0.071 U	0.073 U	0.079 U	0.069 U	0.071 U	N/A	0.077 U	0.087 U	0.076 UJ
Pentachlorophenol	mg/kg	4	0.21 U	0.19 U	0.25 R	0.18 U	0.18 U	0.18 R	0.18 R	0.19 U	0.2 U	0.19 UJ	0.23 UJ	0.19 UJ	0.19 UJ	0.18 UJ	0.18 U	0.2 U	0.17 U	0.18 U	N/A	0.19 U	0.22 U	0.19 UJ
Phenanthrene	mg/kg		**0.022**	**7.9**	**0.02**	**0.086**	**2.9**	**0.082**	**10.5**	**0.66**	**1.6**	**2.5**	0.0016 B	**0.7**	**0.081**	**1.4**	**0.15**	**0.29**	**0.18**	**11.1**	**0.0022 J**	**0.21**	**0.66 J**	**10.9**
Phenol	mg/kg	250,000	0.082 U	0.074 U	0.1 R	0.071 U	0.073 U	0.073 R	0.07 R	0.075 U	0.081 U	**0.064 J**	0.091 U	**0.063 J**	0.074 U	0.071 U	0.073 U	0.079 U	0.069 U	0.071 U	N/A	0.077 U	0.087 U	0.076 U
Pyrene	mg/kg	23,000	**0.016**	**10.9**	**0.017**	**0.15**	**6.1**	**0.1**	**5.5**	**0.53**	**0.53**	**4.9**	0.0012 B	**1.1**	**0.051**	**2.3**	**0.33**	**0.32**	**0.36**	**7.9**	**0.0027 J**	**0.66**	**0.67 J**	**14**
PCBs																								
Aroclor 1242	mg/kg	0.97	N/A	0.0565 U	N/A	0.0545 U	N/A	0.0541 U	N/A	0.0545 U	N/A	**0.186 J**	N/A	**0.112 J**	N/A	0.0543 U	0.0564 U	N/A	0.0538 U	N/A	N/A	0.0564 U	N/A	0.0546 U
Aroclor 1248	mg/kg	0.94	N/A	0.0565 U	N/A	0.0545 U	N/A	0.0541 U	N/A	0.0545 U	N/A	0.0574 U	N/A	0.054 U	N/A	0.0543 U	0.0564 U	N/A	0.0538 U	N/A	N/A	**0.51**	N/A	0.0546 U
Aroclor 1254	mg/kg	0.97	N/A	**0.0786**	N/A	0.0545 U	N/A	0.0541 U	N/A	0.0545 U	N/A	**0.638 J**	N/A	**0.245 J**	N/A	0.0543 U	0.0564 U	N/A	0.0538 U	N/A	N/A	0.0564 U	N/A	0.0546 U
Aroclor 1260	mg/kg	0.99	N/A	0.0565 U	N/A	0.0545 U	N/A	0.0541 U	N/A	**0.0364 J**	N/A	0.0574 U	N/A	0.054 U	N/A	**0.279**	**0.0764**	N/A	**0.601**	N/A	N/A	**1.08**	N/A	0.0546 U
Aroclor 1262	mg/kg		N/A	**0.0619**	N/A	0.0545 U	N/A	0.0541 U	N/A	0.0545 U	N/A	**0.438**	N/A	**0.501**	N/A	0.0543 U	0.0564 U	N/A	0.0538 U	N/A	N/A	0.0564 U	N/A	0.0546 U
Aroclor 1268	mg/kg		N/A	0.0565 U	N/A	0.0545 U	N/A	0.0541 U	N/A	0.0545 U	N/A	0.0574 U	N/A	0.054 U	N/A	0.0543 U	0.0564 U	N/A	0.0538 U	N/A	N/A	0.0564 U	N/A	0.0546 U
PCBs (total)	mg/kg	0.97	N/A	**0.1405**	N/A	0.0545 U	N/A	0.0541 U	N/A	**0.0364 J**	N/A	**1.262**	N/A	**0.858**	N/A	**0.279**	**0.0764**	N/A	**0.601**	N/A	N/A	**1.59**	N/A	0.0546 U
TPH/Oil and Grease																								
Diesel Range Organics	mg/kg	6,200	**10.3**	**164**	**9.4 J**	**45.5**	**58.1**	**46.7**	**258**	**46.4**	**227**	**280**	**11.2**	**194**	**25.7**	**103**	**48**	**37.3**	**21.7**	**662**	**4.7 J**	**63.7**	**99.2 J**	**494 J**
Gasoline Range Organics	mg/kg	6,200	10.4 U	11.6 U	24 U	13.1 U	11.4 U	11.3 U	11.5 U	20.1 U	16.7 U	14.3 U	22.8 U	10.2 U	12.5 U	11.8 U	11.4 U	10.6 U	6.2 U	9.2 U	N/A	12.7 U	17.9 U	12.7 U
Oil and Grease	mg/kg	6,200	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	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Detections in bold
Values in red indicate an exceedance of the Project Action Limit (PAL)
* Indicates non-validated data
^ PAH compounds were analyzed via SIM
N/A indicates that the parameter was not analyzed for this sample

U: This analyte was not detected in the sample. The numeric value represents the sample quantitation/detection limit.
UJ: This analyte was not detected in the sample. The actual quantitation/detection limit may be higher than reported.
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.
R: The result reported for this analyte is unreliable. Additional data is needed to confirm or disprove the presence of this analyte in the sample.

Table 1 - Sub-Parcel B1-1
Summary of Organics Detected in Soil

Parameter	Units	PAL	B1-165-SB-9.5	B1-166-SB-9	B1-167-SB-1	B1-167-SB-5	B1-168-SB-1	B1-168-SB-5	B1-169-SB-1	B1-169-SB-5	B1-170-SB-1	B1-171-SB-1*	B1-172-SB-1*	B1-172-SB-4*	B1-172-SB-10*	B1-173-SB-1*	B1-173-SB-8*	B1-174-SB-1	B1-174-SB-4	B1-178-SB-1*	B1-179-SB-1*	B1-179-SB-9*	B1-180-SB-1*
Volatile Organic Compounds																							
1,1,1-Trichloroethane	mg/kg	36,000	0.0064 U	0.008 U	0.0049 U	0.0078 U	0.0049 U	0.0077 U	0.0043 U	0.0096 U	0.0069 U	0.0079 U	0.0056 U	0.0053 U	N/A	0.0069 U	0.014 U	0.0069 U	0.0077 U	0.0071 U	0.0051 U	0.0046 U	0.0058 U
1,2-Dichloroethane	mg/kg	2	0.0064 U	0.008 U	0.0049 U	0.0078 U	0.0049 U	0.0077 U	0.0043 U	0.0096 U	0.0069 U	0.0079 U	0.0056 U	0.0053 U	N/A	0.0069 U	0.014 U	0.0069 U	0.0077 U	0.0071 U	0.0051 U	0.0046 U	0.0058 U
1,4-Dichlorobenzene	mg/kg	11	0.0064 U	0.008 U	0.0049 U	0.0078 U	0.0049 U	0.0077 U	0.0043 U	0.0096 U	0.0069 U	0.0079 U	0.0056 U	0.0053 U	N/A	0.0069 U	0.014 U	0.0069 U	0.0077 U	0.0071 U	0.0051 U	0.0046 U	0.0058 U
2-Butanone (MEK)	mg/kg	190,000	0.013 U	0.016 U	0.0098 U	0.016 U	0.0098 U	0.015 U	0.0086 U	0.019 U	0.014 U	0.016 U	0.011 U	**0.02**	N/A	0.014 U	0.028 U	0.014 U	0.015 U	**0.007 J**	0.01 U	0.0093 U	0.012 U
2-Hexanone	mg/kg	1,300	0.013 U	0.016 U	0.0098 U	0.016 U	0.0098 U	0.015 U	0.0086 U	0.019 U	0.014 U	0.016 U	0.011 U	**0.0095 J**	N/A	0.014 U	0.028 U	0.014 U	0.015 U	0.014 U	0.01 U	0.0093 U	0.012 U
4-Methyl-2-pentanone (MIBK)	mg/kg	56,000	0.013 U	0.016 U	0.0098 U	0.016 U	0.0098 U	0.015 U	0.0086 U	0.019 U	0.014 U	0.016 U	0.011 U	**0.012**	N/A	0.014 U	0.028 U	0.014 U	0.015 U	0.014 U	0.01 U	0.0093 U	0.012 U
Acetone	mg/kg	670,000	0.013 UJ	0.013 B	0.0098 UJ	0.016 UJ	0.0098 UJ	**0.0082 J**	0.0086 UJ	**0.01 J**	**0.02 J**	0.016 U	0.011 U	**0.079**	N/A	**0.018**	0.028 U	0.014 U	0.015 U	**0.071**	0.01 U	0.0093 U	**0.011 J**
Benzene	mg/kg	5.1	0.0064 U	0.008 U	0.0049 U	0.0078 U	0.0049 U	0.0077 U	0.0043 U	0.0096 U	0.0069 U	0.0079 U	0.0056 U	**0.0054**	N/A	0.0069 U	0.014 U	0.0069 U	0.0077 U	0.0071 U	0.0051 U	0.0046 U	0.0058 U
Carbon disulfide	mg/kg	3,500	0.0064 U	0.008 U	0.0049 U	0.0078 U	0.0049 U	0.0077 UJ	0.0043 U	0.0096 U	0.0069 U	0.0079 U	0.0056 U	**0.016**	N/A	**0.01**	0.014 U	0.0069 U	0.0077 U	0.0071 U	0.0051 U	0.0046 U	0.0058 U
Carbon tetrachloride	mg/kg	2.9	0.0064 U	0.008 U	0.0049 U	0.0078 U	0.0049 U	0.0077 U	0.0043 U	0.0096 U	0.0069 U	0.0079 U	0.0056 U	0.0053 U	N/A	0.0069 U	0.014 U	0.0069 U	0.0077 U	0.0071 U	0.0051 U	0.0046 U	0.0058 U
Chloroform	mg/kg	1.4	0.0064 U	0.008 U	0.0049 U	0.0078 U	0.0049 U	0.0077 U	0.0043 U	0.0096 U	0.0069 U	0.0079 U	0.0056 U	0.0053 U	N/A	0.0069 U	0.014 U	0.0069 U	0.0077 U	0.0071 U	0.0051 U	0.0046 U	0.0058 U
Cyclohexane	mg/kg	27,000	0.013 U	0.016 U	0.0098 U	0.016 U	0.0098 U	0.015 U	0.0086 U	0.019 U	0.014 U	0.016 U	0.011 U	0.011 U	N/A	0.014 U	0.028 U	0.014 U	0.015 U	0.014 U	0.01 U	0.0093 U	0.012 U
Ethylbenzene	mg/kg	25	0.0064 U	0.008 U	0.0049 U	0.0078 U	0.0049 U	0.0077 U	0.0043 U	0.0096 U	0.0069 U	0.0079 U	0.0056 U	0.0053 U	N/A	0.0069 U	0.014 U	0.0069 U	0.0077 U	0.0071 U	0.0051 U	0.0046 U	0.0058 U
Isopropylbenzene	mg/kg	9,900	0.0064 U	0.008 U	0.0049 U	0.0078 U	0.0049 U	0.0077 U	0.0043 U	0.0096 U	0.0069 U	0.0079 U	0.0056 U	0.0053 U	N/A	0.0069 U	0.014 U	0.0069 U	0.0077 U	0.0071 U	0.0051 U	0.0046 U	0.0058 U
Methyl Acetate	mg/kg	1,200,000	0.064 U	0.08 U	0.049 U	0.078 U	0.049 U	0.077 U	**0.023 J**	0.096 U	0.069 U	0.079 U	0.056 U	0.053 U	N/A	0.069 U	0.14 U	0.069 U	0.077 U	0.071 U	0.051 U	0.046 U	0.058 U
Methylene Chloride	mg/kg	1,000	0.0064 U	0.008 U	0.0049 U	0.0078 U	0.0049 U	0.0077 UJ	0.0043 U	0.0096 U	0.0069 U	0.0079 U	0.0056 U	0.0053 U	N/A	0.0069 U	0.014 U	0.0069 U	0.0077 U	0.0071 U	0.0051 U	0.0046 U	0.0058 U
Styrene	mg/kg	35,000	0.0064 U	0.008 U	0.0049 U	0.0078 U	0.0049 U	0.0077 U	0.0043 U	0.0096 U	0.0069 U	0.0079 U	0.0056 U	0.0053 U	N/A	0.0069 U	0.014 U	0.0069 U	0.0077 U	0.0071 U	0.0051 U	0.0046 U	0.0058 U
Tetrachloroethene	mg/kg	100	0.0064 U	0.008 U	0.0049 U	0.0078 U	0.0049 U	0.0077 U	0.0043 U	0.0096 U	0.0069 U	0.0079 U	0.0056 U	0.0053 U	N/A	0.0069 U	0.014 U	0.0069 U	0.0077 U	0.0071 U	0.0051 U	0.0046 U	0.0058 U
Toluene	mg/kg	47,000	**0.003 J**	0.008 U	0.0049 U	0.0078 U	0.0049 U	0.0077 U	0.0043 U	0.0096 U	0.0069 U	0.0079 U	0.0056 U	**0.002 J**	N/A	0.0069 U	0.014 U	0.0069 U	0.0077 U	**0.0023 J**	0.0051 U	0.0046 U	0.0058 U
Trichloroethene	mg/kg	6	0.0064 U	0.008 U	0.0049 U	0.0078 U	0.0049 U	0.0077 U	0.0043 U	0.0096 U	0.0069 U	0.0079 U	0.0056 U	0.0053 U	N/A	0.0069 U	0.014 U	0.0069 U	0.0077 U	0.0071 U	0.0051 U	0.0046 U	0.0058 U
Xylenes	mg/kg	2,800	0.019 U	0.024 U	0.015 U	0.023 U	0.015 U	0.023 U	0.013 U	0.029 U	0.021 U	0.024 U	0.017 U	0.016 U	N/A	0.021 U	0.042 U	0.021 U	0.023 U	0.021 U	0.015 U	0.014 U	**0.0084 J**
Semi-Volatile Organic Compounds^																							
1,1-Biphenyl	mg/kg	200	0.073 U	0.09 U	0.093 U	0.45 U	0.074 U	0.078 U	0.072 U	**0.035 J**	0.07 U	0.076 U	**0.24**	**0.05 J**	N/A	0.071 U	0.11 U	0.073 U	**0.2 J**	0.076 U	**0.021 J**	**0.071 J**	0.074 U
2,3,4,6-Tetrachlorophenol	mg/kg	25,000	0.073 U	0.09 UJ	0.093 U	0.09 R	0.074 U	0.078 U	0.072 U	0.082 U	0.07 U	0.076 U	0.076 U	0.078 U	N/A	0.071 U	0.11 U	0.073 U	0.075 U	0.076 U	0.072 U	0.074 U	0.074 U
2,4-Dimethylphenol	mg/kg	16,000	0.073 U	0.09 UJ	0.093 U	**0.047 J**	0.074 U	0.078 U	0.072 U	0.082 U	0.07 U	0.076 U	**0.019 J**	**0.023 J**	N/A	0.071 U	0.11 U	0.073 U	**0.048 J**	0.076 U	0.072 U	0.074 U	0.074 U
2-Chloronaphthalene	mg/kg	60,000	0.073 U	0.09 U	0.093 U	0.45 U	0.074 U	0.078 U	0.072 U	0.082 U	0.07 U	0.076 U	0.076 U	0.078 U	N/A	0.071 U	0.11 U	0.073 U	**0.032 J**	0.076 U	0.072 U	0.074 U	0.074 U
2-Methylnaphthalene	mg/kg	3,000	**0.0038 J**	**0.013**	**0.19**	**0.57**	**0.14**	**0.33**	**0.032**	**0.029**	**0.016**	**0.021 J**	**0.38**	**0.065 J**	N/A	**0.03 J**	**0.036**	0.074 U	**0.63**	**0.011**	**0.058**	**0.23**	**0.01**
2-Methylphenol	mg/kg	41,000	0.073 U	0.09 UJ	0.093 U	0.09 R	0.074 U	0.078 U	0.072 U	0.082 U	0.07 U	0.076 U	0.076 U	0.078 U	N/A	0.071 U	0.11 U	0.073 U	**0.025 J**	0.076 U	0.072 U	0.074 U	0.074 U
2-Nitroaniline	mg/kg	8,000	0.18 U	0.23 U	0.23 U	1.1 U	0.19 U	0.2 U	0.18 U	0.21 U	0.17 U	0.19 U	0.19 U	0.2 U	N/A	0.18 U	0.27 U	0.18 U	0.19 U	0.19 U	0.18 U	0.19 U	0.18 U
3&4-Methylphenol(m&p Cresol)	mg/kg	41,000	0.14 U	0.18 UJ	0.19 U	0.18 R	0.15 U	0.16 U	0.14 U	0.16 U	0.14 U	0.15 U	**0.023 J**	**0.031 J**	N/A	0.14 U	0.22 U	0.15 U	**0.065 J**	0.15 U	0.14 U	0.15 U	0.15 U
3,3'-Dichlorobenzidine	mg/kg	5.1	0.073 U	0.09 U	0.093 UJ	0.09 U	0.074 UJ	0.078 UJ	0.072 U	0.082 U	0.07 UJ	0.076 U	0.076 U	0.078 U	N/A	0.071 U	0.11 U	0.073 UJ	0.075 UJ	0.076 U	0.072 U	0.074 U	0.074 U
4-Nitroaniline	mg/kg	110	0.18 U	0.23 U	0.23 U	1.1 U	0.19 U	0.2 U	0.18 U	0.21 U	0.17 U	0.19 U	0.19 U	0.2 U	N/A	0.18 U	0.27 U	0.18 U	0.19 U	0.19 U	0.18 U	0.19 U	0.18 U
Acenaphthene	mg/kg	45,000	**0.0013 J**	**0.0023 J**	**0.012 J**	**1.5**	**0.0073 J**	**0.0069 J**	**0.003 J**	0.0083 U	**0.0073**	0.075 U	**0.14**	**0.036 J**	N/A	**0.014 J**	**0.083**	0.074 U	**0.24**	**0.0022 J**	**0.019**	**0.35**	0.0074 U
Acenaphthylene	mg/kg	45,000	**0.0033 J**	**0.0018 J**	**0.061 J**	**0.078**	**0.051 J**	**0.018**	**0.014**	**0.033**	**0.0073**	**0.017 J**	**0.41**	**0.0088 J**	N/A	**0.062 J**	**0.029**	0.074 U	**0.15**	**0.0029 J**	**0.58**	**0.5**	**0.0027 J**
Acetophenone	mg/kg	120,000	0.073 U	0.09 U	0.093 U	0.09 U	0.074 U	0.078 U	0.072 U	0.082 U	0.07 U	0.076 U	**0.092**	**0.072 J**	N/A	0.071 U	0.11 U	0.073 U	**0.1 J**	**0.041 J**	**0.018 J**	0.074 U	0.074 U
Anthracene	mg/kg	230,000	**0.012**	**0.0069 J**	**0.08 J**	**2.2**	**0.069 J**	**0.053**	**0.022**	**0.008 J**	**0.027**	**0.034 J**	**0.86**	**0.053 J**	N/A	**0.15**	**0.2**	0.074 U	**0.98**	**0.013**	**0.66**	**2.3**	**0.0046 J**
Benz[a]anthracene	mg/kg	21	**0.041**	**0.013**	**0.24 J**	**3.4**	**0.1**	**0.13**	**0.083**	**0.013**	**0.064**	**0.061 J**	**3.4**	**0.11**	N/A	**0.22**	**0.17**	0.074 U	**1.7**	**0.014**	**0.95**	**1.9**	**0.029**
Benzaldehyde	mg/kg	120,000	0.073 R	0.09 R	0.093 R	0.09 R	0.074 R	0.078 R	0.072 R	**0.032 J**	0.07 R	**0.032 J**	**0.088**	**0.049 J**	N/A	0.071 U	0.11 U	0.073 R	**0.3 J**	**0.021 J**	**0.017 J**	0.074 U	**0.031 J**
Benzo[a]pyrene	mg/kg	2.1	**0.034 J**	**0.008 J**	**0.21 J**	**3.1**	**0.12**	**0.08**	**0.13**	**0.0085**	**0.071 J**	**0.13**	**2.8**	**0.17**	N/A	**0.34**	**0.19**	**0.025 J**	**2 J**	**0.017**	**1.8**	**1.3**	**0.016**
Benzo[b]fluoranthene	mg/kg	21	**0.096 J**	**0.027 J**	**0.66 J**	**5.1**	**0.39**	**0.24**	**0.34**	**0.03**	**0.17 J**	**0.26**	**6.2**	**0.71**	N/A	**0.88**	**0.49**	**0.087 J**	**5.2 J**	**0.068**	**5.2**	**3.4**	**0.033**
Benzo[g,h,i]perylene	mg/kg		**0.02 J**	**0.0064 J**	**0.15 J**	**1.5**	**0.062 J**	**0.04**	**0.052**	**0.0053 J**	**0.028 J**	**0.28**	**0.96**	**0.088**	N/A	**0.12**	**0.063**	0.074 UJ	**0.7 J**	**0.016**	**0.61**	**0.46**	**0.046**
Benzo[k]fluoranthene	mg/kg	210	**0.092 J**	**0.025 J**	**0.67 J**	**5.2**	**0.39**	**0.25**	**0.35**	**0.03**	**0.17 J**	**0.21**	**5.5**	**0.63**	N/A	**0.72**	**0.4**	**0.069 J**	**4.2 J**	**0.069**	**5.3**	**3.5**	**0.03**
bis(2-Ethylhexyl)phthalate	mg/kg	160	0.073 UJ	0.09 UJ	0.093 UJ	0.09 UJ	0.033 B	0.037 B	0.072 U	0.082 U	0.07 UJ	0.076 U	**0.46**	**0.86**	N/A	0.071 U	0.11 U	**0.078 J**	0.075 UJ	**0.094**	**0.21**	**19.1**	0.074 U
Caprolactam	mg/kg	400,000	0.18 U	0.23 U	0.23 U	0.22 U	0.19 U	0.2 U	0.18 U	0.21 U	0.17 U	0.19 U	0.19 U	0.2 U	N/A	0.18 U	0.27 U	0.18 U	0.19 U	0.19 U	0.18 U	0.19 U	0.18 U
Carbazole	mg/kg		0.073 U	0.09 U	**0.043 J**	0.45 U	0.074 U	0.078 U	0.072 U	0.082 U	0.07 U	0.076 U	**0.46**	**0.032 J**	N/A	0.071 U	0.11 U	0.073 U	**0.54 J**	0.076 U	**0.062 J**	**0.08**	0.074 U
Chrysene	mg/kg	2,100	**0.035**	**0.015**	**0.36 J**	**3.7**	**0.15**	**0.22**	**0.11**	**0.058**	**0.085**	**0.079**	**3.6**	**0.34**	N/A	**0.29**	**0.19**	**0.03 J**	**1.8**	**0.039**	**1.1**	**1.8**	**0.035**
Dibenz[a,h]anthracene	mg/kg	2.1	0.0072 UJ	0.0091 UJ	**0.062 J**	**0.47**	**0.019 J**	**0.019**	**0.021**	**0.0044 J**	**0.0092 J**	**0.059 J**	**0.39**	0.077 U	N/A	0.071 U	**0.024**	0.074 UJ	**0.22 J**	0.0076 U	**0.26**	**0.2**	0.0074 U
Diethylphthalate	mg/kg	660,000	0.073 U	0.09 U	0.093 U	0.45 U	0.074 U	0.078 U	0.072 U	0.082 U	0.07 U	0.076 U	0.076 U	0.078 U	N/A	0.071 U	0.11 U	0.073 U	0.075 U	0.076 U	0.072 U	0.074 U	0.074 U
Di-n-butylphthalate	mg/kg	82,000	0.073 U	0.09 U	0.093 U	0.45 U	0.074 U	0.078 U	0.072 U	0.082 U	0.07 U	0.076 U	0.076 U	**0.048 J**	N/A	0.071 U	0.11 U	0.073 U	**0.041 J**	0.076 U	0.072 U	**12.2**	0.074 U
Di-n-octylphthalate	mg/kg	8,200	0.073 UJ	0.09 UJ	0.093 UJ	0.09 UJ	0.074 UJ	0.078 UJ	0.072 U	0.082 U	0.07 UJ	0.076 U	0.076 U	**0.18**	N/A	0.071 U	0.11 U	0.073 UJ	0.075 UJ	0.076 U	0.072 U	0.074 U	0.074 U
Fluoranthene	mg/kg	30,000	**0.091**	**0.03**	**0.65 J**	**9.1**	**0.15**	**0.19**	**0.13**	**0.017**	**0.15**	**0.11**	**5.3**	**0.31**	N/A	**0.3**	**0.4**	**0.016 J**	**5.2**	**0.027**	**1**	**4.8**	**0.018**
Fluorene	mg/kg	30,000	**0.002 J**	**0.0031 J**	**0.012 J**	**1.2**	**0.0075 J**	**0.011**	**0.0022 J**	**0.0061 J**	**0.0056 J**	**0.0091 J**	**0.14**	**0.12**	N/A	**0.025 J**	**0.071**	0.074 U	**0.24**	**0.0049 J**	**0.025**	**0.58**	**0.0009 J**
Hexachlorobenzene	mg/kg	0.96	0.073 U	0.09 U	0.093 U	0.45 U	0.074 U	0.078 U	0.072 U	0.082 U	0.07 U	0.076 U	0.076 U	0.078 U	N/A	0.071 U	0.11 U	0.073 U	0.075 U	0.076 U	0.072 U	0.074 U	0.074 U
Hexachloroethane	mg/kg	8	0.073 U	0.09 U	0.093 U	0.09 U	0.074 U	0.078 U	0.072 U	0.082 U	0.07 U	0.076 U	0.076 U	0.078 U	N/A	0.071 U	0.11 U	0.073 U	0.075 U	0.076 U	0.072 U	0.074 U	0.074 U
Indeno[1,2,3-c,d]pyrene	mg/kg	21	**0.015 J**	0.0091 UJ	**0.15 J**	**1.3**	**0.063 J**	**0.029**	**0.056**	**0.0036 J**	**0.023 J**	**0.051 J**	**1.1**	**0.052 J**	N/A	**0.12**	**0.063**	0.074 UJ	**0.63 J**	**0.0073 J**	**0.69**	**0.53**	**0.0087**
Naphthalene	mg/kg	17	**0.0041 J**	**0.032**	**0.23 J**	**0.33**	**0.11**	**0.24**	**0.026**	**0.064**	**0.013**	**0.014 J**	**0.98**	**0.15**	N/A	**0.013 J**	**0.023**	0.074 U	**0.5**	**0.015**	**0.053**	**0.25**	**0.0058 J**
Nitrobenzene	mg/kg	22	0.073 U	0.09 U	0.093 U	0.09 U	0.074 U	0.078 U	0.072 U	0.082 U	0.07 U	0.076 U	0.076 U	0.078 U	N/A	0.071 U	0.11 U	0.073 U	0.075 U	0.076 U	0.072 U	0.074 U	0.074 U
N-Nitrosodiphenylamine	mg/kg	470	0.073 U	0.09 U	0.093 U	0.45 U	0.074 U	0.078 U	0.072 U	0.082 U	0.07 U	0.076 U	0.076 U	**0.034 J**	N/A	0.071 U	0.11 U	0.073 U	0.075 U	0.076 U	0.072 U	0.074 U	0.074 U
Pentachlorophenol	mg/kg	4	0.18 U	0.23 UJ	0.23 U	1.1 R	0.19 U	0.2 U	0.18 U	0.21 U	0.17 U	0.19 U	0.19 U	0.2 U	N/A	0.18 U	0.27 U	0.18 U	0.19 U	0.19 U	0.18 U	0.19 U	0.18 U
Phenanthrene	mg/kg		**0.047**	**0.042**	**0.54 J**	**11.7**	**0.12**	**0.51**	**0.053**	**0.08**	**0.12**	**0.09**	**2.6**	**0.41**	N/A	**0.15**	**0.35**	**0.023 J**	**5.3**	**0.047**	**0.21**	**2.8**	**0.022**
Phenol	mg/kg	250,000	0.073 U	0.09 UJ	0.093 U	0.09 R	0.074 U	0.078 U	0.072 U	0.082 U	0.07 U	0.076 U	0.076 U	**0.027 J**	N/A	0.071 U	0.11 U	0.073 U	**0.045 J**	**0.041 J**	0.072 U	0.074 U	0.074 U
Pyrene	mg/kg	23,000	**0.092**	**0.027**	**0.55 J**	**10.4**	**0.18**	**0.21**	**0.14**	**0.022**	**0.15**	**0.16**	**6**	**0.27**	N/A	**0.32**	**0.39**	**0.015 J**	**4.9**	**0.03**	**1.3**	**3.9**	**0.02**
PCBs																							
Aroclor 1242	mg/kg	0.97	N/A	N/A	0.0574 U	N/A	0.0614 U	N/A	0.0593 U	N/A	0.0529 U	0.0559 U	0.0555 U	0.0585 U	N/A	0.0521 U	N/A	0.0555 U	N/A	0.0571 U	0.0542 U	N/A	0.0545 U
Aroclor 1248	mg/kg	0.94	N/A	N/A	0.0574 U	N/A	0.0614 U	N/A	0.0593 U	N/A	0.0529 U	0.0559 U	**0.139**	**0.0576 J**	N/A	0.0521 U	N/A	0.0555 U	N/A	0.0571 U	0.0542 U	N/A	0.0545 U
Aroclor 1254	mg/kg	0.97	N/A	N/A	0.0574 U	N/A	0.0614 U	N/A	0.0593 U	N/A	0.0529 U	0.0559 U	**0.336**	0.0585 U	N/A	0.0521 U	N/A	0.0555 U	N/A	0.0571 U	**0.0817**	N/A	**0.0238 J**
Aroclor 1260	mg/kg	0.99	N/A	N/A	**2.15**	N/A	0.0614 U	N/A	0.0593 U	N/A	0.0529 U	0.0559 U	0.0555 U	**0.0524 J**	N/A	0.0521 U	N/A	0.0555 U	N/A	0.0571 U	0.0542 U	N/A	0.0545 U
Aroclor 1262	mg/kg		N/A	N/A	0.0574 U	N/A	0.0614 U	N/A	0.0593 U	N/A	0.0529 U	0.0559 U	**0.278**	0.0585 U	N/A	0.0521 U	N/A	0.0555 U	N/A	**0.0507 J**	**0.14**	N/A	0.0545 U
Aroclor 1268	mg/kg		N/A	N/A	0.0574 U	N/A	0.0614 U	N/A	0.0593 U	N/A	0.0529 U	0.0559 U	0.0555 U	0.0585 U	N/A	0.0521 U	N/A	0.0555 U	N/A	0.0571 U	0.0542 U	N/A	0.0545 U
PCBs (total)	mg/kg	0.97	N/A	N/A	**2.15**	N/A	0.0614 U	N/A	0.0593 U	N/A	0.0529 U	0.0559 U	**0.753**	**0.11**	N/A	0.0521 U	N/A	0.0555 U	N/A	**0.0507 J**	**0.2217**	N/A	**0.0238 J**
TPH/Oil and Grease																							
Diesel Range Organics	mg/kg	6,200	**12.7**	**15.3**	**253**	**1,880**	**51.7**	**120**	**23.5**	**15.1**	**30.9**	**789**	**304**	**8,000**	**395**	**1,160**	**178**	**275**	**356**	**769**	**218**	**345**	**1,040**
Gasoline Range Organics	mg/kg	6,200	15.3 U	11.8 U	11 U	18.4 U	11.9 U	**15.9 J**	13.4 U	22.3 U	14.4 U	14.7 U	13.8 U	9.4 U	9.2 U	12.2 U	34.3 U	**10.8 J**	14.2 U	11.1 U	9.4 U	9.4 U	13 U
Oil and Grease	mg/kg	6,200	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**4,190**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Detections in bold
Values in red indicate an exceedance of the Project Action Limit (PAL)
* Indicates non-validated data
^ PAH compounds were analyzed via SIM
N/A indicates that the parameter was not analyzed for this sample

U: This analyte was not detected in the sample. The numeric value represents the sample quantitation/detection limit.
UJ: This analyte was not detected in the sample. The actual quantitation/detection limit may be higher than reported.
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.
R: The result reported for this analyte is unreliable. Additional data is needed to confirm or disprove the presence of this analyte in the sample.

Table 1 - Sub-Parcel B1-1
Summary of Organics Detected in Soil

Parameter	Units	PAL	B1-181-SB-1	B1-181-SB-8	B1-182-SB-1*	B1-182-SB-8*	B1-182-SB-10	B1-183-SB-1*	B1-183-SB-8.5*	B4-024-SB-1	B4-024-SB-4.5	B4-025-SB-1	B4-025-SB-5	B4-026-SB-1	B4-026-SB-5	B4-027-SB-1	B4-027-SB-5	B4-035-SB-1	B4-035-SB-5	B4-036-SB-1	B4-036-SB-5	B4-039-SB-1	B4-039-SB-5	B4-040-SB-1
Volatile Organic Compounds																								
1,1,1-Trichloroethane	mg/kg	36,000	0.0056 U	0.0092 U	0.0045 U	0.0064 U	N/A	0.0054 U	0.0051 U	0.0063 U	0.0045 U	0.0053 U	0.0079 U	0.005 U	0.0046 U	0.005 U	0.0057 U	0.005 U	0.0063 U	0.0051 U	0.0057 U	0.0047 U	0.0064 U	0.0057 U
1,2-Dichloroethane	mg/kg	2	**0.0013 J**	0.0092 U	0.0045 U	0.0064 U	N/A	0.0054 U	0.0051 U	0.0063 U	0.0045 U	0.0053 U	0.0079 U	0.005 U	0.0046 U	0.005 U	0.0057 U	0.005 U	0.0063 U	0.0051 U	0.0057 U	0.0047 U	0.0064 U	0.0057 U
1,4-Dichlorobenzene	mg/kg	11	0.0056 U	0.0092 U	0.0045 U	0.0064 U	N/A	0.0054 U	0.0051 U	0.0063 U	0.0045 U	**0.0039 J**	0.0079 U	0.005 U	0.0046 U	0.005 U	0.0057 U	0.005 U	0.0063 U	**0.0032 J**	0.0057 U	0.0047 U	0.0064 U	0.0057 U
2-Butanone (MEK)	mg/kg	190,000	0.011 U	0.018 U	0.009 U	0.013 U	N/A	**0.0029 J**	**0.0058 J**	0.013 U	0.009 U	0.011 U	0.016 U	**0.0032 J**	0.0092 U	0.01 U	0.011 U	0.01 U	0.013 U	0.01 U	0.011 U	0.0094 U	0.013 U	0.011 U
2-Hexanone	mg/kg	1,300	0.011 U	0.018 U	0.009 U	0.013 U	N/A	0.011 U	0.01 U	0.013 U	0.009 U	0.011 U	0.016 U	0.0099 U	0.0092 U	0.01 U	0.011 U	0.01 U	0.013 U	0.01 U	0.011 U	0.0094 U	0.013 U	0.011 U
4-Methyl-2-pentanone (MIBK)	mg/kg	56,000	0.011 U	0.018 U	0.009 U	0.013 U	N/A	0.011 U	0.01 U	0.013 U	0.009 U	0.011 U	0.016 U	0.0099 U	0.0092 U	0.01 U	0.011 U	0.01 U	0.013 U	0.01 U	0.011 U	0.0094 U	0.013 U	0.011 U
Acetone	mg/kg	670,000	0.011 U	0.018 U	0.009 U	0.013 U	N/A	**0.0066 J**	**0.0084 J**	**0.031 J**	**0.01 J**	**0.029 J**	**0.057 J**	**0.035 J**	**0.039 J**	0.01 U	**0.019 J**	**0.02**	**0.025**	**0.021**	**0.029**	**0.059 J**	**0.036 J**	0.011 U
Benzene	mg/kg	5.1	0.0056 U	0.0092 U	0.0045 U	0.0064 U	N/A	0.0054 U	0.0051 U	0.0063 U	0.0045 U	0.0053 U	0.0079 U	0.005 U	0.0046 U	0.005 U	0.0057 U	0.005 U	0.0063 U	0.0051 U	0.0057 U	0.0047 U	0.0064 U	0.0057 U
Carbon disulfide	mg/kg	3,500	0.0056 U	**0.012**	**0.0041 J**	0.0064 U	N/A	0.0054 U	0.0051 U	0.0063 U	0.0045 U	0.0053 U	0.0079 U	0.005 U	0.0046 U	0.005 U	0.0057 U	0.005 U	0.0063 U	0.0051 U	0.0057 U	0.0047 U	0.0064 U	0.0057 U
Carbon tetrachloride	mg/kg	2.9	0.0056 U	0.0092 U	0.0045 U	0.0064 U	N/A	0.0054 U	0.0051 U	0.0063 U	0.0045 U	0.0053 U	0.0079 U	0.005 U	0.0046 U	0.005 U	0.0057 U	0.005 U	0.0063 U	0.0051 U	0.0057 U	0.0047 U	0.0064 U	0.0057 U
Chloroform	mg/kg	1.4	0.0056 U	0.0092 U	0.0045 U	0.0064 U	N/A	0.0054 U	0.0051 U	0.0063 U	0.0045 U	0.0053 U	0.0079 U	0.005 U	0.0046 U	0.005 U	0.0057 U	0.005 U	0.0063 U	0.0051 U	0.0057 U	0.0047 U	0.0064 U	0.0057 U
Cyclohexane	mg/kg	27,000	0.011 U	0.018 U	0.009 U	0.013 U	N/A	0.011 U	0.01 U	0.013 U	0.009 U	0.011 U	0.016 U	0.0099 U	0.0092 U	0.01 U	0.011 U	0.01 U	0.013 U	0.01 U	0.011 U	0.0094 U	0.013 U	0.011 U
Ethylbenzene	mg/kg	25	0.0056 U	0.0092 U	0.0045 U	0.0064 U	N/A	0.0054 U	0.0051 U	0.0063 U	0.0045 U	0.0053 U	0.0079 U	0.005 U	0.0046 U	0.005 U	0.0057 U	0.005 U	0.0063 U	0.0051 U	0.0057 U	0.0047 U	0.0064 U	0.0057 U
Isopropylbenzene	mg/kg	9,900	0.0056 U	0.0092 U	0.0045 U	0.0064 U	N/A	0.0054 U	0.0051 U	0.0063 U	0.0045 U	0.0053 U	0.0079 U	0.005 U	0.0046 U	0.005 U	0.0057 U	0.005 U	0.0063 U	0.0051 U	0.0057 U	0.0047 U	0.0064 U	0.0057 U
Methyl Acetate	mg/kg	1,200,000	0.056 U	0.092 U	0.045 U	0.064 U	N/A	0.054 U	0.051 U	0.063 U	0.045 U	0.053 U	0.079 U	0.05 U	0.046 U	0.05 U	0.057 U	**0.0025 J**	0.063 U	0.051 U	0.057 U	0.047 U	0.064 U	0.057 U
Methylene Chloride	mg/kg	1,000	0.0056 U	0.0092 U	0.0045 U	0.0064 U	N/A	0.0054 U	0.0051 U	0.0063 U	0.0045 U	0.0053 U	0.0079 U	0.005 UJ	0.0046 UJ	0.005 UJ	0.0057 U	0.005 U	0.0063 U	0.0051 U	0.0057 U	0.0047 UJ	0.0064 UJ	0.0057 UJ
Styrene	mg/kg	35,000	0.0056 U	0.0092 U	0.0045 U	0.0064 U	N/A	0.0054 U	0.0051 U	0.0063 U	0.0045 U	0.0053 U	0.0079 U	0.005 U	0.0046 U	0.005 U	0.0057 U	0.005 U	0.0063 U	0.0051 U	0.0057 U	0.0047 U	0.0064 U	0.0057 U
Tetrachloroethene	mg/kg	100	0.0056 U	0.0092 U	0.0045 U	0.0064 U	N/A	0.0054 U	0.0051 U	0.0063 U	0.0045 U	0.0053 U	0.0079 U	0.005 U	0.0046 U	0.005 U	0.0057 U	0.005 U	0.0063 U	0.0051 U	0.0057 U	0.0047 U	0.0064 U	0.0057 U
Toluene	mg/kg	47,000	0.0056 U	0.0092 U	0.0045 U	0.0064 U	N/A	0.0054 U	0.0051 U	**0.015**	**0.0098**	**0.012**	**0.021**	**0.0096**	**0.012**	**0.0043 J**	**0.0066**	0.011 B	0.015 B	0.014 B	0.013 B	**0.0078**	**0.0044 J**	**0.0045 J**
Trichloroethene	mg/kg	6	0.0056 U	0.0092 U	0.0045 U	0.0064 U	N/A	0.0054 U	0.0051 U	0.0063 U	0.0045 U	0.0053 U	0.0079 U	0.005 U	0.0046 U	0.005 U	0.0057 U	0.005 U	0.0063 U	0.0051 U	0.0057 U	0.0047 U	0.0064 U	0.0057 U
Xylenes	mg/kg	2,800	0.017 U	0.028 U	0.014 U	0.019 U	N/A	0.016 U	0.015 U	0.019 U	0.014 U	0.016 U	0.024 U	0.015 U	0.014 U	0.015 U	0.017 U	0.015 U	0.019 U	0.015 U	0.017 U	0.014 U	0.019 U	0.017 U
Semi-Volatile Organic Compounds^																								
1,1-Biphenyl	mg/kg	200	**0.2**	0.089 U	**0.015 J**	**0.028 J**	N/A	0.073 U	**0.015 J**	0.076 U	0.072 U	0.075 U	0.086 U	0.073 U	0.075 U	0.073 U	**0.017 J**	0.083 U	0.084 U	0.082 U	0.085 U	0.077 U	**0.019 J**	**0.12 J**
2,3,4,6-Tetrachlorophenol	mg/kg	25,000	0.074 U	0.089 U	0.07 U	0.077 U	N/A	0.073 U	0.074 U	0.076 U	0.072 U	0.075 U	0.086 U	0.073 U	0.075 U	0.073 U	0.077 U	0.083 U	0.084 U	0.082 U	0.085 U	0.077 U	0.083 UJ	0.079 U
2,4-Dimethylphenol	mg/kg	16,000	0.074 U	0.089 U	0.07 U	0.077 U	N/A	0.073 U	0.074 U	0.076 U	0.072 U	0.075 U	0.086 U	0.073 U	0.075 U	0.073 U	0.077 U	0.083 U	0.084 U	0.082 U	0.085 U	0.077 U	0.083 UJ	0.079 U
2-Chloronaphthalene	mg/kg	60,000	0.074 U	0.089 U	0.07 U	0.077 U	N/A	0.073 U	0.074 U	0.076 U	0.072 U	0.075 U	0.086 U	0.073 U	0.075 U	0.073 U	0.077 U	0.083 U	0.084 U	0.082 U	0.085 U	0.077 U	0.083 U	0.079 U
2-Methylnaphthalene	mg/kg	3,000	**0.51**	**0.035**	**0.063**	**0.12**	N/A	**0.035**	**0.057**	**0.012 J**	**0.0011 J**	0.074 U	**0.023**	**0.021**	**0.0037 J**	0.074 U	**0.14**	**0.035**	**0.0052 J**	**0.052**	**0.0085**	**0.0021 J**	**0.037**	**0.48**
2-Methylphenol	mg/kg	41,000	0.074 U	0.089 U	0.07 U	0.077 U	N/A	0.073 U	0.074 U	0.076 U	0.072 U	0.075 U	0.086 U	0.073 U	0.075 U	0.073 U	0.077 U	0.083 U	0.084 U	0.082 U	0.085 U	0.077 U	0.083 UJ	0.079 U
2-Nitroaniline	mg/kg	8,000	0.18 U	0.22 U	0.18 U	0.19 U	N/A	0.18 U	0.19 U	0.19 U	0.18 U	0.19 U	0.21 U	0.18 U	0.19 U	0.18 U	0.19 U	0.21 U	0.21 U	0.21 U	0.21 U	0.19 U	0.21 U	0.2 U
3&4-Methylphenol(m&p Cresol)	mg/kg	41,000	0.15 U	0.18 U	0.14 U	0.15 U	N/A	0.14 U	0.15 U	0.15 U	0.14 U	0.15 U	0.17 U	0.15 U	0.15 U	0.15 U	0.15 U	0.17 U	0.17 U	0.16 U	0.17 U	0.15 U	0.17 UJ	**0.047 J**
3,3'-Dichlorobenzidine	mg/kg	5.1	0.074 UJ	0.089 UJ	0.07 U	0.077 U	N/A	0.073 U	0.074 U	0.076 UJ	0.072 U	0.075 UJ	0.086 U	0.073 UJ	0.075 U	0.073 UJ	0.077 U	0.083 U	0.084 U	0.082 UJ	0.085 UJ	0.077 UJ	0.083 UJ	0.079 UJ
4-Nitroaniline	mg/kg	110	0.18 U	0.22 U	0.18 U	0.19 U	N/A	0.18 U	0.19 U	0.19 U	0.18 U	0.19 U	0.21 U	0.18 U	0.19 U	0.18 U	0.19 U	0.21 U	0.21 U	0.21 U	0.21 U	0.19 U	0.21 U	0.2 U
Acenaphthene	mg/kg	45,000	**0.29**	**0.019**	**0.0095**	**0.056**	N/A	**0.014**	**0.044**	0.077 U	**0.00082 J**	0.074 U	0.0087 U	**0.0079**	0.0076 U	0.074 U	0.0078 U	**0.013**	0.0023 B	0.0055 B	0.0021 B	0.0079 U	**0.0099**	**0.96**
Acenaphthylene	mg/kg	45,000	**0.6**	**0.016**	**0.025**	**0.084**	N/A	**0.022**	**0.035**	0.077 U	**0.0011 J**	0.074 U	**0.0056 J**	**0.0041 J**	**0.0032 J**	0.074 U	**0.044**	**0.017**	**0.0013 J**	**0.0098**	**0.0056 J**	**0.0011 J**	**0.025**	**0.14**
Acetophenone	mg/kg	120,000	**0.052 J**	0.089 U	0.07 U	**0.021 J**	N/A	0.073 U	0.074 U	0.076 U	0.072 U	0.075 U	0.086 U	0.073 U	0.075 U	0.073 U	0.077 U	0.083 U	0.084 U	0.082 U	0.085 U	0.077 U	**0.02 J**	**0.18 J**
Anthracene	mg/kg	230,000	**2.7**	**0.09**	**0.091**	**0.32**	N/A	**0.083**	**0.24**	**0.015 J**	**0.0061 J**	0.074 U	**0.0037 J**	**0.019**	**0.0035 J**	0.074 U	**0.047**	**0.051**	0.0079 B	**0.02**	**0.01**	**0.0035 J**	**0.038**	**2.1**
Benz[a]anthracene	mg/kg	21	**6.9**	**0.15**	**0.25**	**1**	N/A	**0.29**	**0.5**	**0.049 J**	**0.0074**	**0.038 J**	**0.015**	**0.04**	**0.0098**	**0.03 J**	**0.26**	**0.12**	**0.019**	**0.063**	**0.043**	**0.0095**	**0.18**	**2.9**
Benzaldehyde	mg/kg	120,000	**0.022 J**	**0.064 J**	0.07 U	0.077 U	N/A	**0.018 J**	0.074 U	0.076 R	0.072 R	0.075 R	0.086 R	0.073 R	0.075 R	0.073 R	0.077 R	0.083 R	0.084 R	0.082 R	0.085 R	0.077 R	**0.078 J**	**0.067 J**
Benzo[a]pyrene	mg/kg	2.1	**6.8 J**	**0.12 J**	**0.21**	**0.96**	**0.7 J**	**0.35**	**0.68**	**0.037 J**	**0.0073 J**	0.074 UJ	**0.087**	**0.037 J**	**0.013**	0.074 UJ	**0.28**	**0.14**	**0.02**	**0.092**	**0.057**	**0.012**	**0.23**	**2.5**
Benzo[b]fluoranthene	mg/kg	21	**16.2 J**	**0.37 J**	**0.78**	**2.2**	N/A	**0.93**	**1.5**	**0.11**	**0.017**	0.074 UJ	**0.12**	**0.1**	**0.036**	0.074 UJ	**0.74**	**0.22**	**0.045**	**0.15**	**0.12**	**0.018**	**0.77**	**4.9**
Benzo[g,h,i]perylene	mg/kg		**2.7 J**	**0.044 J**	**0.091**	**0.58**	N/A	**0.18**	**0.33**	**0.035 J**	**0.0058 J**	0.074 UJ	**0.11**	**0.044 J**	**0.0085**	0.074 UJ	**0.17**	**0.064**	**0.01**	**0.046**	**0.029**	**0.0068 J**	**0.08**	**1.4**
Benzo[k]fluoranthene	mg/kg	210	**13.1 J**	**0.3 J**	**0.63**	**1.9**	N/A	**0.75**	**1.2**	**0.1**	**0.016**	0.074 UJ	**0.048**	**0.1**	**0.034**	0.074 UJ	**0.71**	**0.086**	**0.043**	**0.053**	**0.12**	**0.0071 J**	**0.74**	**4.7**
bis(2-Ethylhexyl)phthalate	mg/kg	160	**0.83 J**	0.023 B	0.07 U	**0.019 J**	N/A	0.073 U	0.074 U	0.076 UJ	0.072 U	0.075 UJ	0.086 U	0.073 UJ	0.075 U	0.073 UJ	0.077 U	0.083 U	0.084 U	0.082 UJ	0.085 UJ	0.077 U	**0.48 J**	0.079 UJ
Caprolactam	mg/kg	400,000	0.18 U	0.22 U	0.18 U	0.19 U	N/A	0.18 U	0.19 U	0.19 U	0.18 U	0.19 U	0.21 U	0.18 U	0.19 U	0.18 U	0.19 U	0.21 U	0.21 U	0.21 U	0.21 U	0.19 U	0.21 U	0.2 U
Carbazole	mg/kg		**0.29 J**	**0.043 J**	**0.042 J**	**0.11**	N/A	**0.042 J**	**0.073 J**	0.076 U	0.072 U	0.075 U	0.086 U	0.073 U	0.075 U	0.073 UJ	**0.022 J**	0.083 U	0.084 U	0.082 U	**0.16**	0.077 U	**0.097**	**0.89 J**
Chrysene	mg/kg	2,100	**6.5**	**0.14**	**0.34**	**1**	N/A	**0.32**	**0.47**	**0.043 J**	**0.0065 J**	**0.013 J**	**0.023**	**0.06**	**0.0081**	**0.019 J**	**0.3**	**0.12**	**0.02**	**0.073**	**0.046**	**0.012**	**0.26**	**2.8**
Dibenz[a,h]anthracene	mg/kg	2.1	**0.87 J**	**0.016 J**	**0.036**	**0.23**	N/A	**0.066**	**0.091**	**0.01 J**	**0.0016 J**	0.074 UJ	**0.034**	**0.013 J**	0.0076 U	0.074 UJ	**0.08**	**0.027**	**0.0034 J**	**0.021**	**0.01**	**0.0023 J**	**0.031**	**0.6**
Diethylphthalate	mg/kg	660,000	0.074 U	0.089 U	0.07 U	0.077 U	N/A	0.073 U	0.074 U	0.076 U	0.072 U	0.075 U	0.086 U	0.073 U	0.075 U	0.073 U	0.077 U	0.083 U	0.084 U	0.082 U	0.085 U	0.077 U	0.083 U	0.079 U
Di-n-butylphthalate	mg/kg	82,000	0.074 U	0.089 U	0.07 U	0.077 U	N/A	0.073 U	0.074 U	0.076 U	0.072 U	0.075 U	0.086 U	0.073 U	0.075 U	0.073 UJ	0.077 U	0.083 UJ	0.084 UJ	0.082 UJ	0.085 UJ	0.077 U	0.083 U	**0.037 J**
Di-n-octylphthalate	mg/kg	8,200	0.074 UJ	0.089 UJ	0.07 U	0.077 U	N/A	0.073 U	0.074 U	0.076 UJ	0.072 U	0.075 UJ	0.086 U	0.073 UJ	0.075 U	0.073 UJ	0.077 U	0.083 U	0.084 U	0.082 UJ	0.085 UJ	0.077 U	0.083 UJ	0.079 UJ
Fluoranthene	mg/kg	30,000	**15**	**0.45**	**0.86**	**2**	N/A	**0.49**	**1.3**	**0.077**	**0.019**	**0.013 J**	**0.011**	**0.081**	**0.013**	**0.015 J**	**0.6**	**0.31**	**0.052**	**0.13**	**0.11**	**0.021**	**0.44**	**7.9**
Fluorene	mg/kg	30,000	**0.29**	**0.013**	**0.0099**	**0.061**	N/A	**0.0084**	**0.039**	0.077 U	**0.0012 J**	0.074 U	0.0087 U	**0.0057 J**	0.0076 U	0.074 U	**0.0097**	**0.017**	0.002 B	0.0049 B	0.0023 B	0.0079 U	**0.0087**	**0.94**
Hexachlorobenzene	mg/kg	0.96	0.074 U	0.089 U	0.07 U	0.077 U	N/A	0.073 U	0.074 U	0.076 U	0.072 U	0.075 U	0.086 U	0.073 U	0.075 U	0.073 UJ	0.077 U	0.083 U	0.084 U	0.082 U	0.085 U	0.077 U	0.083 U	0.079 UJ
Hexachloroethane	mg/kg	8	0.074 U	0.089 U	0.07 U	0.077 U	N/A	0.073 U	0.074 U	0.076 U	0.072 U	0.075 U	0.086 U	0.073 U	0.075 U	0.073 U	0.077 U	0.083 U	0.084 U	0.082 U	0.085 U	0.077 U	0.083 U	0.079 U
Indeno[1,2,3-c,d]pyrene	mg/kg	21	**2.6 J**	**0.04 J**	**0.089**	**0.61**	N/A	**0.17**	**0.29**	**0.028 J**	**0.0048 J**	0.074 UJ	**0.099**	**0.03 J**	**0.0069 J**	0.074 UJ	**0.18**	**0.065**	**0.01**	**0.049**	**0.028**	**0.0052 J**	**0.071**	**1.3**
Naphthalene	mg/kg	17	**1.1**	**0.059**	**0.057**	**0.11**	N/A	**0.025**	**0.059**	**0.015 J**	**0.0016 J**	0.074 U	**0.017**	**0.018**	**0.003 J**	0.074 U	**0.11**	**0.05**	0.0053 B	**0.034**	**0.011**	**0.0028 J**	**0.04**	**0.48**
Nitrobenzene	mg/kg	22	0.074 U	0.089 U	0.07 U	0.077 U	N/A	0.073 U	0.074 U	0.076 U	0.072 U	0.075 U	0.086 U	0.073 U	0.075 U	0.073 U	0.077 U	0.083 U	0.084 U	0.082 U	0.085 U	0.077 U	**0.044 J**	0.079 U
N-Nitrosodiphenylamine	mg/kg	470	0.074 U	0.089 U	0.07 U	0.077 U	N/A	0.073 U	0.074 U	0.076 U	0.072 U	0.075 U	0.086 U	0.073 U	0.075 U	0.073 UJ	0.077 U	0.083 U	0.084 U	0.082 U	0.085 U	0.077 U	0.083 U	0.079 UJ
Pentachlorophenol	mg/kg	4	0.18 U	0.22 U	0.18 U	0.19 U	N/A	0.18 U	0.19 U	0.19 U	0.18 U	0.19 U	0.21 U	0.18 U	0.19 U	0.18 UJ	0.19 U	0.21 U	0.21 U	0.21 U	0.21 U	0.19 UJ	0.21 UJ	0.2 UJ
Phenanthrene	mg/kg		**9.6**	**0.51**	**0.49**	**1.4**	N/A	**0.36**	**1.4**	**0.038 J**	**0.014**	0.074 U	**0.023**	**0.061**	**0.0059 J**	**0.015 J**	**0.24**	**0.19**	**0.027**	**0.072**	**0.039**	**0.008**	**0.19**	**7.1**
Phenol	mg/kg	250,000	0.074 U	0.089 U	0.07 U	0.077 U	N/A	0.073 U	0.074 U	0.076 U	0.072 U	**1.4**	0.086 U	0.073 U	0.075 U	0.073 U	0.077 U	0.083 U	0.084 U	0.082 U	0.085 U	0.077 U	0.083 U	**0.062 J**
Pyrene	mg/kg	23,000	**15.5**	**0.39**	**0.69**	**1.4**	N/A	**0.57**	**1.3**	**0.089**	**0.017**	**0.02 J**	**0.01**	**0.085**	**0.014**	**0.028 J**	**0.52**	**0.27**	**0.048**	**0.13**	**0.096**	**0.022**	**0.36**	**6.9**
PCBs																								
Aroclor 1242	mg/kg	0.97	0.055 U	N/A	0.0524 U	N/A	N/A	0.0534 U	N/A	0.057 U	N/A	0.0555 U	N/A	0.0563 U	N/A	0.0505 U	N/A	0.0593 U	N/A	0.0578 U	N/A	0.0608 U	N/A	0.054 U
Aroclor 1248	mg/kg	0.94	**0.233**	N/A	**0.145**	N/A	N/A	0.0534 U	N/A	0.057 U	N/A	0.0555 U	N/A	0.0563 U	N/A	0.0505 U	N/A	0.0593 U	N/A	0.0578 U	N/A	0.0608 U	N/A	0.054 U
Aroclor 1254	mg/kg	0.97	**0.266**	N/A	0.0524 U	N/A	N/A	0.0534 U	N/A	0.057 U	N/A	0.0555 U	N/A	0.0563 U	N/A	0.0505 U	N/A	0.0593 U	N/A	0.0578 U	N/A	0.0608 U	N/A	**0.21**
Aroclor 1260	mg/kg	0.99	**0.275**	N/A	**0.0319 J**	N/A	N/A	0.0534 U	N/A	0.057 U	N/A	0.0555 U	N/A	0.0563 U	N/A	0.0505 U	N/A	0.0593 U	N/A	0.0578 U	N/A	0.0608 U	N/A	**0.185**
Aroclor 1262	mg/kg		0.055 U	N/A	0.0524 U	N/A	N/A	**0.0633**	N/A	0.057 U	N/A	0.0555 U	N/A	0.0563 U	N/A	0.0505 U	N/A	0.0593 U	N/A	0.0578 U	N/A	0.0608 U	N/A	0.054 U
Aroclor 1268	mg/kg		0.055 U	N/A	0.0524 U	N/A	N/A	0.0534 U	N/A	0.057 U	N/A	0.0555 U	N/A	0.0563 U	N/A	0.0505 U	N/A	0.0593 U	N/A	0.0578 U	N/A	0.0608 U	N/A	0.054 U
PCBs (total)	mg/kg	0.97	**0.774**	N/A	**0.1769**	N/A	N/A	**0.0633**	N/A	0.057 U	N/A	0.0555 U	N/A	0.0563 U	N/A	0.0505 U	N/A	0.0593 U	N/A	0.0578 U	N/A	0.0608 U	N/A	**0.395**
TPH/Oil and Grease																								
Diesel Range Organics	mg/kg	6,200	**379**	**72.4**	**98.3**	**85.3**	N/A	**81.7**	**62.9**	**84.3**	**5 J**	**219**	**24.9**	**88.3**	**5 J**	**175**	**66.9**	**110**	**16.8**	**49.5**	**14.9**	**15.7**	**156**	**428**
Gasoline Range Organics	mg/kg	6,200	12.2 U	23.7 U	11.6 U	**11.5 J**	N/A	12.7 U	**7.1 J**	15.9 U	9.8 U	13.2 U	14.5 U	8.4 U	9.4 U	12 U	12.5 U	11.6 U	11.3 U	11.3 U	13.2 U	9.7 U	13.5 U	13.2 U
Oil and Grease	mg/kg	6,200	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	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Detections in bold
Values in red indicate an exceedance of the Project Action Limit (PAL)
* Indicates non-validated data
^ PAH compounds were analyzed via SIM
N/A indicates that the parameter was not analyzed for this sample

U: This analyte was not detected in the sample. The numeric value represents the sample quantitation/detection limit.
UJ: This analyte was not detected in the sample. The actual quantitation/detection limit may be higher than reported.
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.
R: The result reported for this analyte is unreliable. Additional data is needed to confirm or disprove the presence of this analyte in the sample.

Table 1 - Sub-Parcel B1-1
Summary of Organics Detected in Soil

Parameter	Units	PAL	B4-040-SB-5	B4-048-SB-1	B4-048-SB-5	B4-048-SB-10	B4-049-SB-1	B4-049-SB-4.5	B4-054-SB-1*	B4-054-SB-6*	B4-055-SB-1*	B4-055-SB-5*	B4-056-SB-1.5*	B4-056-SB-7.5*	B5-098-SB-1	B5-098-SB-4	B5-099-SB-1	B5-099-SB-4.5	B5-161-SB-1	B5-161-SB-4	B5-161-SB-10*
Volatile Organic Compounds																					
1,1,1-Trichloroethane	mg/kg	36,000	0.0048 U	0.0068 U	0.0055 U	0.0054 U	0.0049 U	0.0062 U	0.0051 U	0.0056 U	0.0061 U	0.0096 U	0.0054 U	0.0076 U	0.25 U	0.72 U	0.27 U	0.25 U	0.0049 U	0.35 U	N/A
1,2-Dichloroethane	mg/kg	2	0.0048 U	0.0068 U	0.0055 U	0.0054 U	0.0049 U	0.0062 U	0.0051 U	0.0056 U	0.0061 U	0.0096 U	0.0054 U	0.0076 U	0.25 U	0.72 U	0.27 U	0.25 U	0.0049 U	0.35 U	N/A
1,4-Dichlorobenzene	mg/kg	11	0.0048 U	0.0068 U	0.0055 U	0.0054 U	0.0049 U	0.0062 U	0.0051 U	0.0056 U	0.0061 U	0.0096 U	0.0054 U	0.0076 U	0.25 U	0.72 U	0.27 U	0.25 U	0.0049 UJ	0.35 U	N/A
2-Butanone (MEK)	mg/kg	190,000	0.0095 U	0.014 U	0.011 U	0.011 U	0.0098 U	0.012 U	0.01 U	0.011 U	0.012 U	0.019 U	0.011 U	0.015 U	0.51 U	1.4 U	0.53 U	0.49 U	0.0098 U	0.71 U	N/A
2-Hexanone	mg/kg	1,300	0.0095 U	0.014 U	0.011 U	0.011 U	0.0098 U	0.012 U	0.01 U	0.011 U	0.012 U	0.019 U	0.011 U	0.015 U	0.51 U	1.4 U	0.53 U	0.49 U	0.0098 U	0.71 U	N/A
4-Methyl-2-pentanone (MIBK)	mg/kg	56,000	0.0095 U	0.014 U	0.011 U	0.011 U	0.0098 U	0.012 U	0.01 U	0.011 U	0.012 U	0.019 U	0.011 U	0.015 U	0.51 U	1.4 U	0.53 U	0.49 UJ	0.0098 U	0.71 U	N/A
Acetone	mg/kg	670,000	**0.029 J**	0.014 U	**0.045**	**0.038**	**0.11 J**	**0.039 J**	0.01 U	0.011 U	**0.016**	**0.027**	0.011 U	0.015 U	0.51 U	1.4 U	0.53 U	0.49 U	**0.069**	0.71 U	N/A
Benzene	mg/kg	5.1	0.0048 U	0.0068 U	0.0055 U	0.0054 U	0.0049 U	0.0062 U	0.0051 U	0.0056 U	0.0061 U	0.0096 U	0.0054 U	0.0076 U	0.25 U	**0.52 J**	0.27 U	0.25 U	**0.004 J**	**0.26 J**	N/A
Carbon disulfide	mg/kg	3,500	0.0048 U	0.0068 U	0.0055 U	0.0054 U	0.0049 U	0.0062 U	0.0051 U	0.0056 U	0.0061 U	0.0096 U	0.0054 U	0.0076 U	0.25 U	0.72 U	0.27 U	0.25 U	0.0049 U	0.35 U	N/A
Carbon tetrachloride	mg/kg	2.9	0.0048 U	0.0068 U	0.0055 U	0.0054 U	0.0049 U	0.0062 U	0.0051 U	0.0056 U	0.0061 U	0.0096 U	0.0054 U	0.0076 U	0.25 U	0.72 U	0.27 U	0.25 U	0.0049 U	0.35 U	N/A
Chloroform	mg/kg	1.4	0.0048 U	0.0068 U	0.0055 U	0.0054 U	0.0049 U	0.0062 U	0.0051 U	0.0056 U	0.0061 U	0.0096 U	**0.022**	**0.077**	0.25 U	0.72 U	0.27 U	0.25 U	0.0049 U	0.35 U	N/A
Cyclohexane	mg/kg	27,000	0.0095 U	0.014 U	0.011 U	0.011 U	0.0098 U	0.012 U	0.01 U	0.011 U	0.012 U	0.019 U	0.011 U	0.015 U	0.51 U	1.4 U	0.53 U	0.49 U	0.0098 U	0.71 U	N/A
Ethylbenzene	mg/kg	25	0.0048 U	0.0068 U	0.0055 U	0.0054 U	0.0049 U	0.0062 U	0.0051 U	0.0056 U	0.0061 U	0.0096 U	0.0054 U	0.0076 U	0.25 U	**1.4**	0.27 U	**0.16 J**	0.0049 U	0.35 U	N/A
Isopropylbenzene	mg/kg	9,900	0.0048 U	0.0068 U	0.0055 U	0.0054 U	0.0049 U	0.0062 U	0.0051 U	0.0056 U	0.0061 U	0.0096 U	0.0054 U	0.0076 U	0.25 U	**0.41 J**	0.27 U	**0.78**	0.0049 U	0.35 U	N/A
Methyl Acetate	mg/kg	1,200,000	0.048 U	0.068 U	0.055 U	0.054 U	0.049 U	0.062 U	0.051 U	0.056 U	0.061 U	0.096 U	0.054 U	0.076 U	2.5 U	7.2 U	2.7 U	2.5 U	0.049 U	3.5 U	N/A
Methylene Chloride	mg/kg	1,000	0.0048 UJ	0.0068 U	0.0055 U	0.0054 U	0.0049 UJ	0.0062 UJ	0.0051 U	0.0056 U	0.0061 U	0.0096 U	0.0054 U	0.0076 U	0.25 U	0.72 U	0.27 U	0.25 U	0.0049 U	0.35 U	N/A
Styrene	mg/kg	35,000	0.0048 U	0.0068 U	0.0055 U	0.0054 U	0.0049 U	0.0062 U	0.0051 U	0.0056 U	0.0061 U	0.0096 U	0.0054 U	0.0076 U	0.25 U	0.72 U	0.27 U	0.25 U	0.0049 U	**0.19 J**	N/A
Tetrachloroethene	mg/kg	100	0.0048 U	0.0068 U	0.0055 U	0.0054 U	0.0049 U	0.0062 U	0.0051 U	0.0056 U	0.0061 U	0.0096 U	0.0054 U	0.0076 U	0.25 U	0.72 U	0.27 U	0.25 U	0.0049 U	0.35 U	N/A
Toluene	mg/kg	47,000	**0.0031 J**	0.0097 B	0.017 B	0.0067 B	**0.0075**	**0.0058 J**	0.0051 U	0.0056 U	0.0061 U	0.0096 U	0.0054 U	0.0076 U	**0.08 J**	**1.1**	**0.1 J**	0.25 U	**0.0021 J**	**0.28 J**	N/A
Trichloroethene	mg/kg	6	0.0048 U	0.0068 U	0.0055 U	0.0054 U	0.0049 U	0.0062 U	0.0051 U	0.0056 U	0.0061 U	0.0096 U	0.0054 U	0.0076 U	0.25 U	0.72 U	0.27 U	0.25 U	0.0049 U	0.35 U	N/A
Xylenes	mg/kg	2,800	0.014 U	0.02 U	0.016 U	0.016 U	0.015 U	0.019 U	0.015 U	0.017 U	0.018 U	0.029 U	0.016 U	0.023 U	0.76 U	**3.5**	**0.28 J**	**0.25 J**	0.015 U	**0.26 J**	N/A
Semi-Volatile Organic Compounds^																					
1,1-Biphenyl	mg/kg	200	**0.022 J**	0.072 U	0.07 U	0.07 U	0.074 U	**0.019 J**	0.074 U	**0.028 J**	0.089 U	0.087 U	0.078 U	**0.03 J**	7.5 U	8 U	7.2 U	8.1 U	7.1 U	**26.8**	N/A
2,3,4,6-Tetrachlorophenol	mg/kg	25,000	0.077 R	0.072 R	0.07 UJ	0.07 U	0.074 U	0.076 U	0.074 U	0.077 U	0.089 U	0.087 U	0.078 U	0.084 U	7.5 U	8 U	7.2 U	8.1 U	7.1 U	7.7 U	N/A
2,4-Dimethylphenol	mg/kg	16,000	0.077 R	0.072 R	0.07 UJ	0.07 U	0.074 U	0.076 U	0.074 U	0.077 U	0.089 U	0.087 U	0.078 U	**0.052 J**	7.5 U	**2.6 J**	7.2 U	8.1 U	7.1 U	**2.4 J**	N/A
2-Chloronaphthalene	mg/kg	60,000	0.077 U	0.072 U	0.07 U	0.07 U	0.074 U	0.076 U	0.074 U	**0.083**	0.089 U	0.087 U	0.078 U	0.084 U	7.5 U	8 U	7.2 U	8.1 U	7.1 U	7.7 U	N/A
2-Methylnaphthalene	mg/kg	3,000	**0.044**	**0.014**	**0.0039 J**	0.0072 U	**0.0085**	**0.079**	**0.028**	**0.013**	**0.026 J**	**0.16**	**0.022**	**1.5**	**0.58**	**5.3**	**0.94**	**4.9**	**0.35**	**25.4**	**0.051**
2-Methylphenol	mg/kg	41,000	0.077 R	0.072 R	0.07 UJ	0.07 U	0.074 U	0.076 U	0.074 U	0.077 U	0.089 U	0.087 U	0.078 U	0.084 U	7.5 U	8 U	7.2 U	8.1 U	7.1 U	7.7 U	N/A
2-Nitroaniline	mg/kg	8,000	0.19 U	0.18 U	0.18 U	0.18 U	0.19 U	0.19 U	0.19 U	0.19 U	0.22 U	0.22 U	0.2 U	0.21 U	18.7 U	20 U	17.9 U	20.3 U	17.8 U	19.2 U	N/A
3&4-Methylphenol(m&p Cresol)	mg/kg	41,000	0.15 R	0.14 R	0.14 UJ	0.14 U	0.15 U	0.15 U	0.15 U	0.15 U	0.18 U	0.17 U	**0.025 J**	**0.024 J**	15 U	16 U	14.3 U	16.2 U	14.2 U	**2.2 J**	N/A
3,3'-Dichlorobenzidine	mg/kg	5.1	0.077 UJ	0.072 UJ	0.07 U	0.07 U	0.074 UJ	0.076 UJ	0.074 U	0.077 U	0.089 U	0.087 U	0.078 U	0.084 U	0.19 U*	0.2 U*	0.18 U*	0.2 U*	0.18 U*	1.9 U*	N/A
4-Nitroaniline	mg/kg	110	0.19 U	0.18 U	0.18 U	0.18 U	0.19 U	0.19 U	0.19 U	0.19 U	0.22 U	0.22 U	0.2 U	0.21 U	18.7 UJ	20 UJ	17.9 UJ	20.3 UJ	17.8 UJ	19.2 UJ	N/A
Acenaphthene	mg/kg	45,000	**0.048**	**0.0077**	0.0069 U	0.0072 U	**0.0013 J**	**0.0036 J**	0.0074 U	**0.00066 J**	**0.012 J**	**0.0017 J**	**0.033**	**0.6**	**0.02**	**0.96**	**0.015**	**4**	**0.2**	**28.9**	**0.044**
Acenaphthylene	mg/kg	45,000	**0.052**	**0.08**	**0.0025 J**	0.0072 U	**0.0034 J**	**0.033**	**0.0046 J**	0.0077 U	**0.017 J**	**0.019**	**0.031**	**5.2**	**0.033**	**0.48**	**0.075**	**1.5**	**1.2**	**29.5**	**0.039**
Acetophenone	mg/kg	120,000	**0.036 J**	**0.021 J**	0.07 UJ	0.07 U	0.074 U	0.076 U	0.074 U	0.077 U	**0.034 J**	0.087 U	0.078 U	0.084 U	7.5 U	8 U	7.2 U	8.1 U	7.1 U	7.7 U	N/A
Anthracene	mg/kg	230,000	**0.18**	**0.13**	0.0056 B	0.003 B	**0.0088**	**0.1**	**0.019**	**0.0028 J**	**0.02 J**	**0.014**	**0.19**	**15.7**	**0.069**	**3.5**	**0.091**	**4.6**	**26**	**192**	**0.28**
Benz[a]anthracene	mg/kg	21	**0.42**	**0.68**	**0.036**	0.0029 B	**0.018**	**0.13**	**0.056**	**0.016**	**0.1**	**0.09**	**0.67**	**40.2**	**0.23**	**6.5**	**0.12**	**4.2**	**279**	**290**	**0.34**
Benzaldehyde	mg/kg	120,000	**0.033 J**	0.072 R	0.07 R	0.07 R	0.074 R	0.076 R	0.074 U	**0.028 J**	**0.046 J**	**0.022 J**	0.078 U	**0.026 J**	7.5 UJ	8 UJ	7.2 UJ	8.1 UJ	7.1 UJ	7.7 UJ	N/A
Benzo[a]pyrene	mg/kg	2.1	**0.54**	**1.9**	**0.037**	0.0029 B	**0.023**	**0.14**	**0.022**	**0.017**	**0.071 J**	**0.087**	**0.61**	**23.9**	**0.25**	**9.4**	**0.14**	**3.6 J**	**158**	**215**	**0.35**
Benzo[b]fluoranthene	mg/kg	21	**1.1**	**4.5**	**0.15**	**0.031**	**0.073**	**0.45**	**0.15**	**0.06**	**0.17**	**0.19**	**0.9**	**41**	**0.72**	**13.2**	**0.51**	**7.6 J**	**521**	**307**	**0.54**
Benzo[g,h,i]perylene	mg/kg		**0.35**	**0.89**	**0.029**	0.0054 B	**0.013**	**0.069**	**0.044**	**0.022**	**0.04 J**	**0.041**	**0.32**	**11.7**	**0.17**	**4.1**	**0.078**	**1.3 J**	**53.2**	**105**	**0.073**
Benzo[k]fluoranthene	mg/kg	210	**1.1**	**4.3**	**0.15**	**0.03**	**0.07**	**0.43**	**0.11**	**0.045**	**0.16**	**0.17**	**0.3**	**17.2**	**0.6**	**5**	**0.42**	**2.6 J**	**270**	**136**	**0.28**
bis(2-Ethylhexyl)phthalate	mg/kg	160	0.047 B	0.072 UJ	0.07 U	0.07 U	0.074 UJ	0.015 B	0.074 U	0.077 U	**3**	0.087 U	0.078 U	0.084 U	7.5 U	8 U	7.2 U	8.1 U	7.1 U	7.7 U	N/A
Caprolactam	mg/kg	400,000	0.19 U	0.18 U	0.18 U	0.18 U	0.19 U	0.19 U	0.19 U	0.19 U	0.22 U	0.22 U	0.2 U	0.21 U	18.7 U	20 U	17.9 U	20.3 U	17.8 U	19.2 U	N/A
Carbazole	mg/kg		**0.16**	**0.053 J**	0.07 U	0.07 U	0.074 U	**0.18**	0.074 U	0.077 U	0.089 U	0.087 U	**0.021 J**	**0.042 J**	7.5 U	8 U	7.2 U	8.1 U	**8.6**	**233**	N/A
Chrysene	mg/kg	2,100	**1.3**	**0.75**	**0.069**	**0.022**	**0.036**	**0.21**	**0.098**	**0.025**	**0.18**	**0.12**	**0.62**	**30.3**	**0.28**	**6.5**	**0.15**	**4**	**292**	**248**	**0.33**
Dibenz[a,h]anthracene	mg/kg	2.1	**0.11 J**	**0.32**	**0.011**	**0.0023 J**	**0.0032 J**	**0.027**	**0.013**	**0.0075 J**	**0.016 J**	**0.015**	**0.094**	**5.1**	**0.054**	**2.3**	**0.031**	**0.67 J**	**25.2**	**44.6**	**0.035**
Diethylphthalate	mg/kg	660,000	0.077 U	0.072 U	0.07 U	0.07 U	0.074 U	0.076 U	0.074 U	0.077 U	0.089 U	0.087 U	0.078 U	0.084 U	7.5 U	8 U	7.2 U	8.1 U	7.1 U	7.7 U	N/A
Di-n-butylphthalate	mg/kg	82,000	0.077 U	0.072 UJ	0.07 UJ	0.07 UJ	0.074 U	0.076 U	0.074 U	0.077 U	0.089 U	0.087 U	0.078 U	0.084 U	7.5 U	8 U	7.2 U	8.1 U	7.1 U	7.7 U	N/A
Di-n-ocytlphthalate	mg/kg	8,200	0.077 UJ	0.072 UJ	0.07 U	0.07 U	0.074 UJ	0.076 UJ	0.074 U	0.077 U	0.089 U	0.087 U	0.078 U	0.084 U	7.5 U	8 U	7.2 U	8.1 U	7.1 U	7.7 U	N/A
Fluoranthene	mg/kg	30,000	**1.2**	**0.99**	**0.13**	**0.034**	**0.047**	**0.38**	**0.18**	**0.026**	**0.19**	**0.13**	**1.8**	**82.8**	**0.41**	**9.1**	**0.21**	**8.3**	**508**	**745**	**1**
Fluorene	mg/kg	30,000	**0.035**	**0.017**	0.00075 B	0.0072 U	**0.0017 J**	**0.009**	0.0074 U	0.0077 U	**0.0088 J**	**0.0027 J**	**0.073**	**4.6**	**0.033**	**2.2**	**0.051**	**6**	**1.2**	**194**	**0.27**
Hexachlorobenzene	mg/kg	0.96	0.077 U	0.072 U	0.07 U	0.07 U	0.074 U	**0.041 J**	0.074 U	0.077 U	0.089 U	0.087 U	0.078 U	0.084 U	7.5 U	8 U	7.2 U	8.1 U	7.1 U	7.7 U	N/A
Hexachloroethane	mg/kg	8	0.077 U	0.072 U	0.07 U	0.07 U	0.074 U	0.076 U	0.074 U	0.077 U	0.089 U	0.087 U	0.078 U	0.084 U	7.5 U	8 U	7.2 U	8.1 U	7.1 U	7.7 U	N/A
Indeno[1,2,3-c,d]pyrene	mg/kg	21	**0.31**	**0.87**	**0.029**	**0.0056 J**	**0.01**	**0.075**	**0.034**	**0.018**	**0.032 J**	**0.042**	**0.32**	**13.9**	**0.16**	**4.5**	**0.084**	**1.6 J**	**75.3**	**122**	**0.077**
Naphthalene	mg/kg	17	**0.093**	**0.021**	0.0064 B	0.0026 B	**0.0072 J**	**0.1**	**0.029**	**0.022**	**0.097**	**0.1**	**0.018**	**1**	**0.22**	**1.9**	**0.43**	**3.1**	**1.5**	**54.4**	**0.14**
Nitrobenzene	mg/kg	22	0.077 U	0.072 U	0.07 U	0.07 U	0.074 U	0.076 U	0.074 U	0.077 U	0.089 U	0.087 U	0.078 U	0.084 U	7.5 U	8 U	7.2 U	8.1 U	7.1 U	7.7 U	N/A
N-Nitrosodiphenylamine	mg/kg	470	0.077 U	0.072 U	0.07 U	0.07 U	0.074 U	0.076 U	0.074 U	0.077 U	0.089 U	0.087 U	0.078 U	0.084 U	7.5 U	8 U	7.2 U	8.1 U	7.1 U	7.7 U	N/A
Pentachlorophenol	mg/kg	4	0.19 R	0.18 R	0.18 UJ	0.18 U	0.19 UJ	0.19 UJ	0.19 U	0.19 U	0.22 U	0.22 U	0.2 U	0.21 U	0.19 U*	0.2 U*	0.18 U*	0.2 U*	0.18 U*	1.9 U*	N/A
Phenanthrene	mg/kg		**0.59**	**0.27**	**0.059**	**0.023**	**0.028**	**0.16**	**0.12**	**0.038**	**0.085 J**	**0.15**	**1.1**	**78.7**	**0.24**	**7.8**	**0.27**	**15.6**	**240**	**809**	**1**
Phenol	mg/kg	250,000	0.077 R	0.072 R	0.07 UJ	0.07 U	0.074 U	0.076 U	0.074 U	0.077 U	**0.49**	0.087 U	0.078 U	0.084 U	7.5 U	8 U	7.2 U	8.1 U	7.1 U	7.7 U	N/A
Pyrene	mg/kg	23,000	**1.1**	**0.96**	**0.087**	**0.0083**	**0.047**	**0.33**	**0.14**	**0.02**	**0.21**	**0.11**	**1.2**	**57.8**	**0.36**	**6.7**	**0.19**	**6.7**	**407**	**518**	**0.71**
PCBs																					
Aroclor 1242	mg/kg	0.97	N/A	0.0544 U	N/A	N/A	0.0572 U	N/A	0.0537 U	N/A	0.0602 U	N/A	0.0598 U	N/A	0.092 U	N/A	0.09 U	N/A	0.9 U	N/A	N/A
Aroclor 1248	mg/kg	0.94	N/A	0.0544 U	N/A	N/A	0.0572 U	N/A	**0.0354 J**	N/A	**0.44**	N/A	0.0598 U	N/A	0.092 U	N/A	0.09 U	N/A	0.9 U	N/A	N/A
Aroclor 1254	mg/kg	0.97	N/A	0.0544 U	N/A	N/A	0.0572 U	N/A	0.0537 U	N/A	0.0602 U	N/A	0.0598 U	N/A	**0.26**	N/A	**0.11**	N/A	0.9 U	N/A	N/A
Aroclor 1260	mg/kg	0.99	N/A	0.0544 U	N/A	N/A	0.0572 U	N/A	0.0537 U	N/A	**1.05**	N/A	0.0598 U	N/A	0.092 U	N/A	0.09 U	N/A	0.9 U	N/A	N/A
Aroclor 1262	mg/kg		N/A	0.0544 U	N/A	N/A	0.0572 U	N/A	**0.101**	N/A	0.0602 U	N/A	0.0598 U	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Aroclor 1268	mg/kg		N/A	**0.178**	N/A	N/A	0.0572 U	N/A	0.0537 U	N/A	0.0602 U	N/A	0.0598 U	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PCBs (total)	mg/kg	0.97	N/A	**0.178**	N/A	N/A	0.0572 U	N/A	**0.1364**	N/A	**1.49**	N/A	0.0598 U	N/A	**0.26 J**	N/A	0.63 U	N/A	6.3 U	N/A	N/A
TPH/Oil and Grease																					
Diesel Range Organics	mg/kg	6,200	**191**	**107**	**12.1**	3.2 B	**45.7**	**125**	**30.5**	**10.4**	**158**	**56.8**	**22.8**	**116**	**371**	**4,760**	**1,140**	**7,780**	**3,370**	**17,900**	N/A
Gasoline Range Organics	mg/kg	6,200	10.2 U	10.6 U	14.7 U	10.1 U	10.3 U	12.5 U	11 U	12.9 U	13 U	16 U	13 U	13.4 U	51.6 U	304 U	54.2 U	**165 J**	11.2 U	297 UJ	N/A
Oil and Grease	mg/kg	6,200	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	N/A	N/A	N/A	N/A	N/A

Detections in bold
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^ PAH compounds were analyzed via SIM
N/A indicates that the parameter was not analyzed for this sample

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R: The result reported for this analyte is unreliable. Additional data is needed to confirm or disprove the presence of this analyte in the sample.

Table 2 - Sub-Parcel B1-1
Summary of Inorganics Detected in Soil

Parameter	Units	PAL	B1-001-SB-1*	B1-001-SB-9*	B1-002-SB-1*	B1-002-SB-9*	B1-003-SB-1	B1-003-SB-5	B1-004-SB-1	B1-004-SB-5	B1-005-SB-1	B1-005-SB-8
Metals												
Aluminum	mg/kg	1,100,000	**5,300**	**15,600**	**4,270**	**84,800**	**25,900**	**10,700**	**30,700 J**	**19,500 J**	**25,300**	**5,540**
Antimony	mg/kg	470	3.3 U	3 U	2.8 U	3.8 U	2.8 UJ	3.1 U	2.9 U	3.1 U	3.2 U	**307**
Arsenic	mg/kg	3	**4.2**	**5.7**	**5.8**	**3.2**	**4.8**	**27.4**	**3.4**	2.6 U	**3.6 J**	**49.3 J**
Barium	mg/kg	220,000	**65.7**	**138**	**108**	**650**	**153 J**	**172**	**291**	**163**	**210 J**	**108 J**
Beryllium	mg/kg	2,300	**0.48 J**	**0.83 J**	**0.52 J**	**4.3**	**1.5**	**1.2**	**3.4**	**2.1**	**3.5**	**0.23 J**
Cadmium	mg/kg	980	**1.8**	0.35 B	0.81 B	**0.61 J**	**2.1**	3 B	1.4 B	0.89 B	**0.8 J**	0.73 B
Chromium	mg/kg	120,000	**28.8**	**543**	**493**	**909**	**553**	**411**	**544**	**244**	**258**	**1,810**
Chromium VI	mg/kg	6.3	0.31 B	0.31 B	2.2 B	0.36 B	1.1 UJ	1.1 UJ	1.1 UJ	1.1 UJ	0.31 B	0.41 B
Cobalt	mg/kg	350	**2.4 J**	**37.7**	**7.5**	**8.7**	**10.5 J**	**74.7**	4.8 B	**5.2**	**9.5 J**	**234 J**
Copper	mg/kg	47,000	**62.1**	**132**	**48.4**	**31**	**84 J**	**610**	**56.4 J**	**29.4 J**	**139**	**1,820**
Iron	mg/kg	820,000	**17,100**	**106,000**	**22,800**	**12,600**	**174,000**	**262,000**	**121,000 J**	**51,900 J**	**126,000**	**260,000**
Lead	mg/kg	800	**59.8**	**39.8**	**2,040**	**209**	**93.9 J**	**173**	**37 J**	**35.6 J**	**46.5**	**16,200**
Manganese	mg/kg	26,000	**1,130**	**27,200**	**918**	**6,060**	**20,800**	**8,990**	**16,800**	**6,880**	**6,730**	**6,190**
Mercury	mg/kg	350	0.11 U	**0.0035 J**	**0.023 J**	0.12 U	**0.57 J-**	**0.75 J-**	0.11 U	0.1 U	**0.015 J**	**0.021 J**
Nickel	mg/kg	22,000	**9.5 J**	**282**	**18.5**	**54.2**	**39.2 J**	**314**	**21.3 J**	**18.1 J**	**99.3 J**	**1,970 J**
Selenium	mg/kg	5,800	4.4 U	4 U	3.7 U	**5**	3.7 U	4.1 U	3.9 U	4.1 U	4.2 U	3.9 U
Silver	mg/kg	5,800	3.3 U	**0.91 J**	2.8 U	3.8 U	**1.7 J**	**2.4 J**	0.89 B	3.1 U	3.2 U	**4.4**
Thallium	mg/kg	12	11 U	9.9 U	9.2 U	10.1 U	9.3 U	10.3 U	9.7 U	10.2 U	10.6 U	9.7 U
Vanadium	mg/kg	5,800	**37**	**56.4**	**27.5**	**42.3**	**315**	**421**	**333**	**135**	**125 J**	**56.6 J**
Zinc	mg/kg	350,000	**232**	**20.4**	**297**	**34.9**	**852 J**	**220**	**272 J**	**219 J**	**221**	**308**
Other												
Cyanide	mg/kg	150	**0.52 J**	**2.1**	**0.5 J**	**3.4**	**4.5 J-**	**1 J-**	**2.6 J-**	**2.5 J-**	**0.73 J-**	**0.31 J-**

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Table 2 - Sub-Parcel B1-1
Summary of Inorganics Detected in Soil

Parameter	Units	PAL	B1-006-SB-1	B1-006-SB-5	B1-007-SB-1*	B1-007-SB-5*	B1-008-SB-1*	B1-008-SB-7.5*	B1-009-SB-1	B1-009-SB-5	B1-010-SB-1	B1-010-SB-5
Metals												
Aluminum	mg/kg	1,100,000	**36,800**	**21,900**	**29,400**	**35,400**	**15,900**	**4,670**	**27,500**	**4,740**	**39,000**	**13,100**
Antimony	mg/kg	470	3.6 U	3.6 UJ	3.3 U	3 U	2.9 U	3.2 U	3.2 UJ	3.1 UJ	2.9 UJ	3.7 UJ
Arsenic	mg/kg	3	3 B	**11.5 J**	2.7 U	**4.6**	**2.6**	**3**	**9 J**	2.6 U	**4.3 J**	**4.6 J**
Barium	mg/kg	220,000	**275 J**	**270**	**294**	**227**	**209**	**62.8**	**465**	**113**	**427**	**58.3**
Beryllium	mg/kg	2,300	**6.4**	**2.3**	**4.2**	**2**	**2.1**	**0.26 J**	**3**	**0.33 J**	**4.3**	**0.65 J**
Cadmium	mg/kg	980	**0.78 J**	**1.7 J**	**0.45 J**	**1.1 J**	**0.52 J**	**0.2 J**	**0.57 J**	1.6 U	**0.59 J**	1.9 U
Chromium	mg/kg	120,000	**83.2**	**183 J**	**591**	**145**	**760**	**52**	**75.2 J**	**7 J**	**38.7 J**	**25.2 J**
Chromium VI	mg/kg	6.3	0.62 B	0.35 B	0.63 B	0.37 B	0.52 B	0.31 B	0.31 B	0.33 B	0.31 B	0.54 B
Cobalt	mg/kg	350	**3.3 J**	**16.1 J**	**4.3 J**	**5.1**	**3.7 J**	**8.1**	**12.3 J**	**4 J**	**6.2 J**	**4.7 J**
Copper	mg/kg	47,000	**52**	**210 J**	**46.4**	**50.8**	**45.5**	**69.4**	**109 J**	**4.1 J**	**42.9 J**	**13.7 J**
Iron	mg/kg	820,000	**55,200**	**131,000 J**	**171,000**	**18,400**	**201,000**	**51,200**	**73,800 J**	**5,900 J**	**26,400 J**	**23,900 J**
Lead	mg/kg	800	**42.2**	**196 J**	**22.6**	**61.9**	**12.2**	**51.2**	**84.6 J**	**62 J**	**65.9 J**	**27.2 J**
Manganese	mg/kg	26,000	**4,170**	**2,710**	**14,800**	**2,330**	**16,200**	**748**	**4,920**	**826**	**6,430**	**221**
Mercury	mg/kg	350	**0.0058 J**	**0.053 J**	**0.0032 J**	**0.047 J**	**0.0054 J**	**0.011 J**	**0.03 J**	**0.14**	**0.022 J**	**0.031 J**
Nickel	mg/kg	22,000	**28.3 J**	**54.1 J**	**26.7**	**27.6**	**30.9**	**21.3**	**76.2 J**	5.4 B	**10 J**	10.7 B
Selenium	mg/kg	5,800	4.8 U	4.8 U	4.4 U	**3.6 J**	3.8 U	4.3 U	**2.9 J**	4.2 U	**3.6 J**	5 U
Silver	mg/kg	5,800	3.6 U	**0.88 J**	3.3 U	3 U	**1.5 J**	3.2 U	3.2 U	3.1 U	2.9 U	3.7 U
Thallium	mg/kg	12	9.7 U	9.7 U	10.9 U	9.9 U	9.5 U	10.8 U	10.6 U	10.4 U	9.5 U	9.9 U
Vanadium	mg/kg	5,800	**40.7 J**	**53.1 J**	**283**	**64.7**	**362**	**30**	**111 J**	**8.9 J**	**78.3 J**	**42.6 J**
Zinc	mg/kg	350,000	**123**	**310 J**	**90.7**	**102**	**164**	**46.1**	**117 J**	**18.3 J**	**96.1 J**	**37.7 J**
Other												
Cyanide	mg/kg	150	**0.29 J-**	**3.4 J-**	**0.63**	**4.4**	**0.32 J**	**1.4**	**0.64 J-**	0.57 UJ	**0.54 J-**	0.71 UJ

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Table 2 - Sub-Parcel B1-1
Summary of Inorganics Detected in Soil

Parameter	Units	PAL	B1-011-SB-1	B1-011-SB-7	B1-012-SB-1	B1-012-SB-9	B1-013-SB-1	B1-013-SB-9	B1-013-SB-10*	B1-014-SB-1	B1-014-SB-5	B1-014-SB-10*
Metals												
Aluminum	mg/kg	1,100,000	**6,300 J**	**12,300 J**	**6,130 J**	**6,760 J**	**7,700 J**	**30,500 J**	N/A	**7,160 J**	**5,480 J**	N/A
Antimony	mg/kg	470	3.2 UJ	3.1 UJ	2.1 B	3.1 UJ	3.1 UJ	**5.2 J**	N/A	**5.6 J**	**8.2 J**	N/A
Arsenic	mg/kg	3	**6.6 J**	**10.7 J**	**21.4 J**	2.6 U	**11.9 J**	**137 J**	**43.1**	**21.5 J**	**22.4 J**	**402**
Barium	mg/kg	220,000	**115 J**	**144 J**	**145 J**	**15.8 J**	**114 J**	**492 J**	N/A	**272 J**	**218 J**	N/A
Beryllium	mg/kg	2,300	1.1 U	0.56 B	0.31 B	0.22 B	0.71 B	**4.1**	N/A	0.47 B	0.44 B	N/A
Cadmium	mg/kg	980	**0.49 J**	1 B	1 B	1.6 U	**1.3 J**	**4**	N/A	**1.9**	**1.7**	N/A
Chromium	mg/kg	120,000	**1,520 J**	**222 J**	**120 J**	**8.6 J**	**147 J**	**16.9 J**	N/A	**167 J**	**153 J**	N/A
Chromium VI	mg/kg	6.3	1.1 UJ	1.2 UJ	1.1 UJ	1.1 UJ	1.2 UJ	1.2 UJ	N/A	1.1 UJ	1.1 UJ	N/A
Cobalt	mg/kg	350	**4.7 J**	**16.9**	**26.8**	1.7 B	**31.7**	**14**	N/A	**21.9**	**32.8**	N/A
Copper	mg/kg	47,000	**117 J**	**219 J**	**561 J**	**2.2 J**	**381 J**	**363 J**	N/A	**264 J**	**292 J**	N/A
Iron	mg/kg	820,000	**125,000**	**126,000**	**248,000**	**6,380**	**261,000**	**191,000**	N/A	**123,000**	**143,000**	N/A
Lead	mg/kg	800	**82.5**	**239**	**261**	**3.5**	**687**	**5,290**	**1,160**	**761**	**573**	N/A
Manganese	mg/kg	26,000	**32,600**	**18,800**	**11,500**	**70**	**2,950**	**5,190**	N/A	**5,690**	**7,290**	N/A
Mercury	mg/kg	350	**0.084 J-**	**0.063 J-**	**0.1 J-**	**0.006 J-**	**0.034 J-**	**0.09 J-**	N/A	**0.65 J-**	**0.4 J-**	N/A
Nickel	mg/kg	22,000	**14.2 J**	**59.3 J**	**52.9 J**	4.1 B	**86.3 J**	**11.1 J**	N/A	**93.2 J**	**148 J**	N/A
Selenium	mg/kg	5,800	4.3 U	4.2 U	4.1 U	4.1 U	4.1 U	3.1 B	N/A	4.6 U	4 U	N/A
Silver	mg/kg	5,800	3.2 U	1.6 B	**3.3**	3.1 U	**3.6**	2.8 B	N/A	1.1 B	1.7 B	N/A
Thallium	mg/kg	12	10.7 UJ	10.4 UJ	10.2 UJ	10.4 UJ	10.3 UJ	**10.8 J**	N/A	11.4 UJ	**10.1 J**	N/A
Vanadium	mg/kg	5,800	**6,480 J**	**712 J**	**205 J**	**12.9 J**	**147 J**	**35 J**	N/A	**494 J**	**339 J**	N/A
Zinc	mg/kg	350,000	**86.2**	**268**	**332**	**12.3**	**444**	**2,060**	N/A	**767**	**749**	N/A
Other												
Cyanide	mg/kg	150	**2.1 J-**	**0.84 J-**	**0.25 J-**	0.59 UJ	**5.2 J-**	**0.22 J-**	N/A	**1 J-**	**1.3 J-**	N/A

Detections in bold
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R: The result for this analyte is unreliable. Additional data is needed to confirm or disprove the presence of this analyte in the sample.

Table 2 - Sub-Parcel B1-1
Summary of Inorganics Detected in Soil

Parameter	Units	PAL	B1-015-SB-1	B1-015-SB-9	B1-015-SB-10*	B1-016-SB-1	B1-016-SB-5	B1-017-SB-1	B1-017-SB-5	B1-018-SB-1	B1-018-SB-5	B1-019-SB-1*
Metals												
Aluminum	mg/kg	1,100,000	**29,800 J**	**12,600 J**	N/A	**21,200 J**	**2,000 J**	**34,500 J**	**5,770 J**	**18,400 J**	**10,700 J**	**22,200**
Antimony	mg/kg	470	3.3 UJ	3 UJ	N/A	3 UJ	**21.2 J**	3 U	3.5 U	3 U	3.1 U	2.8 U
Arsenic	mg/kg	3	**6.1 J**	**6.5 J**	**17.2**	**5.6 J**	**9.1 J**	**5.1**	**166**	**11.2**	**18.9**	**3.6**
Barium	mg/kg	220,000	**246 J**	**40.3 J**	N/A	**284 J**	**33 J**	**283**	**136**	**214**	**210**	**174**
Beryllium	mg/kg	2,300	**4.6**	0.44 B	N/A	**1.4**	1.1 U	**3.8**	**0.78 J**	**1.7**	**1.1**	**2.8**
Cadmium	mg/kg	980	1.3 B	0.45 B	N/A	0.93 B	0.36 B	0.93 B	**1.1 J**	**2.7**	**4**	**0.9 J**
Chromium	mg/kg	120,000	**417 J**	**62.7 J**	N/A	**76.8 J**	**273 J**	**624**	**36.4**	**274**	**97.8**	**662**
Chromium VI	mg/kg	6.3	1.1 UJ	1.1 UJ	N/A	1.2 UJ	**0.57 J-**	1.2 UJ	1.3 UJ	1.1 UJ	1.1 UJ	1.1 U
Cobalt	mg/kg	350	**9.1**	**20.2**	N/A	**8.1**	**43.8**	3.5 B	**22.7**	**10.2**	**21.1**	**2.7 J**
Copper	mg/kg	47,000	**597 J**	**110 J**	N/A	**153 J**	**1,520 J**	**48.2 J**	**71 J**	**119 J**	**176 J**	**65.5**
Iron	mg/kg	820,000	**121,000**	**52,300**	N/A	**42,600**	**440,000**	**122,000 J**	**20,500 J**	**174,000 J**	**71,700 J**	**130,000**
Lead	mg/kg	800	**407**	**22.3**	N/A	**254**	**509**	**38.4 J**	**231 J**	**176 J**	**529 J**	**98.2**
Manganese	mg/kg	26,000	**9,730**	**2,440**	N/A	**2,700**	**2,210**	**18,700**	**451**	**9,690**	**7,090**	**15,500**
Mercury	mg/kg	350	0.11 UJ	**0.0048 J-**	N/A	**0.077 J-**	**0.037 J-**	**0.013 J**	**0.35**	**0.033 J**	**0.12**	**1.1**
Nickel	mg/kg	22,000	**48.7 J**	**33.6 J**	N/A	**30 J**	**130 J**	**20.8 J**	**73.4 J**	**44.6 J**	**81.4 J**	**26.7**
Selenium	mg/kg	5,800	4.4 U	4 U	N/A	4 U	4.4 U	4.1 U	4.7 U	3.9 U	4.1 U	3.8 U
Silver	mg/kg	5,800	3.3 U	3 U	N/A	3 U	**6.1**	0.89 B	3.5 U	1.6 B	1.7 B	2.8 U
Thallium	mg/kg	12	11.1 UJ	9.9 UJ	N/A	10 UJ	11.1 UJ	10.1 U	11.8 U	9.9 U	10.2 U	9.4 U
Vanadium	mg/kg	5,800	**184 J**	**27.7 J**	N/A	**102 J**	**18.9 J**	**357**	**19.3**	**325**	**108**	**435**
Zinc	mg/kg	350,000	**185**	**66.1**	N/A	**407**	**162**	**233 J**	**284 J**	**476 J**	**776 J**	**326**
Other												
Cyanide	mg/kg	150	**1.8 J-**	**0.51 J-**	N/A	**3 J-**	**0.06 J-**	**0.33 J-**	**0.28 J-**	**0.98 J-**	**1.1 J-**	**3.6**

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Table 2 - Sub-Parcel B1-1
Summary of Inorganics Detected in Soil

Parameter	Units	PAL	B1-019-SB-5*	B1-020-SB-1*	B1-020-SB-5*	B1-033-SB-1*	B1-033-SB-4*	B1-034-SB-1*	B1-034-SB-4*	B1-035-SB-1*	B1-035-SB-5*
Metals											
Aluminum	mg/kg	1,100,000	**6,230**	**31,800**	**44,100**	**16,600**	**9,290**	**26,900**	**17,600**	**8,210**	**14,200**
Antimony	mg/kg	470	3.1 U	3.4 U	2.9 U	2.9 U	3.3 U	2.8 U	3.1 U	3 U	3.2 U
Arsenic	mg/kg	3	**28.6**	**7.2**	2.4 U	**3.9**	**5.1**	**4.4**	**3.4**	**24.5**	**3.8**
Barium	mg/kg	220,000	**154**	**233**	**292**	**95.3**	**30.9**	**131**	**28.8**	**107**	**131**
Beryllium	mg/kg	2,300	**0.42 J**	**4.3**	**6.8**	**0.95 J**	1.1 U	**1.4**	1 U	**0.65 J**	**1.1**
Cadmium	mg/kg	980	**1.4 J**	**0.9 J**	**0.23 J**	**0.55 J**	**0.4 J**	**0.76 J**	**0.21 J**	**3.9**	1.6 U
Chromium	mg/kg	120,000	**762**	**297**	**12.2**	**763**	**1,230**	**857**	**1,070**	**109**	**17.2**
Chromium VI	mg/kg	6.3	1.2 U	1.1 U	1.1 U	1.1 U	**5.3**	**0.99 J**	**6**	1.2 U	1.3 U
Cobalt	mg/kg	350	**51.1**	**3.8 J**	4.9 U	**2.5 J**	**3 J**	**3.2 J**	5.2 U	**5 J**	**15.6**
Copper	mg/kg	47,000	**409**	**128**	4.9 U	**41.9**	**30.3**	**44.6**	**17.9**	**126**	**10**
Iron	mg/kg	820,000	**207,000**	**106,000**	**2,980**	**144,000**	**203,000**	**178,000**	**157,000**	**51,000**	**16,100**
Lead	mg/kg	800	**268**	**71.5**	2.4 U	**173**	**7.7**	**163**	2.6 U	**277**	**19.9**
Manganese	mg/kg	26,000	**12,600**	**8,910**	**2,840**	**16,000**	**27,700**	**20,700**	**29,100**	**3,000**	**2,240**
Mercury	mg/kg	350	**0.067 J**	**0.16**	0.11 U	**0.87**	0.11 U	**0.42**	**0.0074 J**	**2.9**	**0.055 J**
Nickel	mg/kg	22,000	**294**	**39.3**	9.7 U	**21.9**	**25**	**26.3**	**9.9 J**	**17.2**	**16.5**
Selenium	mg/kg	5,800	4.2 U	4.5 U	**2.6 J**	3.8 U	4.4 U	3.8 U	4.2 U	4 U	4.3 U
Silver	mg/kg	5,800	**2.5 J**	3.4 U	2.9 U	**1.1 J**	**2.3 J**	**1.7 J**	**1.4 J**	**0.87 J**	3.2 U
Thallium	mg/kg	12	10.5 U	11.2 U	9.7 U	9.5 U	10.9 U	9.5 U	10.4 U	10.1 U	10.6 U
Vanadium	mg/kg	5,800	**129**	**179**	**12.3**	**457**	**680**	**445**	**684**	**159**	**27**
Zinc	mg/kg	350,000	**445**	**182**	**0.43 J**	**201**	**21.4**	**173**	**15.3**	**902**	**48.7**
Other											
Cyanide	mg/kg	150	**0.47 J**	**1**	**0.14 J**	**3.4**	0.68 U	**4.5**	**0.058 J**	**4.5**	**0.77**

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Table 2 - Sub-Parcel B1-1
Summary of Inorganics Detected in Soil

Parameter	Units	PAL	B1-036-SB-1*	B1-036-SB-4*	B1-037-SB-1	B1-037-SB-5	B1-037-SB-10*	B1-038-SB-1	B1-038-SB-5	B1-039-SB-1	B1-039-SB-5	B1-040-SB-1
Metals												
Aluminum	mg/kg	1,100,000	**40,800**	**17,800**	**17,000**	**16,400**	N/A	**25,200**	**14,800**	**18,700**	**45,900**	**12,400**
Antimony	mg/kg	470	2.9 U	**7.4**	3.1 UJ	3.4 UJ	N/A	3.5 UJ	3.2 UJ	**2.9 J**	3.1 UJ	3.4 UJ
Arsenic	mg/kg	3	**7.5**	**87.1**	**10.8**	**4.3**	**3.3**	**14**	**9.3**	**18.5**	2.6 UJ	**7.5**
Barium	mg/kg	220,000	**380**	**228**	**186 J**	**227 J**	N/A	**396 J**	**147 J**	**163 J**	**640 J**	**152 J**
Beryllium	mg/kg	2,300	**7.7**	**0.88 J**	**1.8**	0.84 B	N/A	**3.3**	**1.3**	**2**	**6.1**	**1.2**
Cadmium	mg/kg	980	0.94 B	**1.8**	**7.7**	**0.43 J**	N/A	**4.2**	**2.5**	**5.6**	**0.4 J**	**3.3**
Chromium	mg/kg	120,000	**22.6**	**191**	**273**	**69.9**	N/A	**404**	**614**	**332**	**11.5**	**364**
Chromium VI	mg/kg	6.3	1.1 U	1.2 U	1.1 UJ	1.2 UJ	N/A	1.2 UJ	1.2 UJ	1.2 UJ	1.1 UJ	1.1 UJ
Cobalt	mg/kg	350	**2.1 J**	**38.8**	**10**	4.7 B	N/A	**10.3**	**10.5**	**18.4**	2.1 B	**7.9**
Copper	mg/kg	47,000	**33.2**	**297**	**134 J**	**55.7 J**	N/A	**205 J**	**377 J**	**325 J**	**7.7 J**	**162 J**
Iron	mg/kg	820,000	**17,500**	**92,300**	**100,000 J**	**22,100 J**	N/A	**136,000 J**	**112,000 J**	**216,000 J**	**13,400 J**	**99,500 J**
Lead	mg/kg	800	**93.3**	**1,620**	**713**	**77.8**	N/A	**768**	**151**	**928**	2.6 UJ	**697**
Manganese	mg/kg	26,000	**3,010**	**2,320**	**7,350**	**1,420**	N/A	**9,790**	**11,100**	**8,770**	**6,700**	**7,200**
Mercury	mg/kg	350	**14.9**	**0.23**	**57.8 J**	**0.21 J**	N/A	**25.4 J**	**4.1 J**	**115 J**	0.11 U	**4.8 J**
Nickel	mg/kg	22,000	**8.6 J**	**350**	**48.8**	**17.8**	N/A	**60.2**	**42.7**	**57.3**	2.7 B	**66**
Selenium	mg/kg	5,800	**5.3**	4.4 U	**2.9 J**	4.5 U	N/A	4.6 U	4.2 U	4.4 U	**4.4**	4.5 U
Silver	mg/kg	5,800	2.9 U	**5**	**3.2**	3.4 U	N/A	2.9 B	1.5 B	0.87 B	3.1 U	0.95 B
Thallium	mg/kg	12	9.6 U	11.1 U	10.4 U	11.2 U	N/A	11.5 U	10.6 U	11 U	10.4 U	11.3 U
Vanadium	mg/kg	5,800	**27.1**	**197**	**258**	**123**	N/A	**207**	**650**	**527**	**38.8**	**453**
Zinc	mg/kg	350,000	**216**	**811**	**6,780**	**127**	N/A	**8,090**	**476**	**5,090**	**9**	**2,660**
Other												
Cyanide	mg/kg	150	**5.1**	**2.7**	**21.9 J-**	**0.91 J-**	N/A	**38.1 J-**	**0.96 J-**	**102 J-**	**0.4 J-**	**9.4 J-**

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Summary of Inorganics Detected in Soil

Parameter	Units	PAL	B1-040-SB-5	B1-041-SB-1*	B1-041-SB-8*	B1-042-SB-1*	B1-042-SB-5*	B1-043-SB-1	B1-043-SB-5	B1-044-SB-1	B1-044-SB-5	B1-045-SB-1
Metals												
Aluminum	mg/kg	1,100,000	**49,500**	**17,200**	**1,750**	**13,700**	**15,100**	**21,300**	**16,900**	**34,100**	**12,200**	**30,800**
Antimony	mg/kg	470	2.9 UJ	2.8 U	2.7 U	3.3 U	3.5 U	3.2 UJ	3.2 UJ	3.1 UJ	3.3 UJ	2.7 UJ
Arsenic	mg/kg	3	2.4 U	**5.3**	2.3 U	**4.7**	**3**	**8.8**	**6.1**	**8.3**	**7.9**	**9.7**
Barium	mg/kg	220,000	**673 J**	**202**	**8.2 J**	**152**	**84.8**	**163 J**	**71.1 J**	**242 J**	**122 J**	**251 J**
Beryllium	mg/kg	2,300	**6.1**	**2.4**	**0.26 J**	**1.7**	**0.57 J**	**2.5**	0.62 B	**4.2**	**1.4**	**4.1**
Cadmium	mg/kg	980	**0.31 J**	**1.1 J**	1.4 U	**0.76 J**	1.8 U	**0.97 J**	1.6 U	**1.2 J**	**1.8**	**1.2 J**
Chromium	mg/kg	120,000	**10**	**64.3**	**10.8**	**49**	**26.2**	**133**	**41**	**184**	**226**	**437**
Chromium VI	mg/kg	6.3	1.1 UJ	1.1 U	1 U	1.1 U	1.2 U	1.1 UJ	**0.2 J**	1.1 UJ	1.2 UJ	1.1 U
Cobalt	mg/kg	350	1.2 B	**5.1**	**1.8 J**	**4.5 J**	**4.1 J**	**9.4**	**7.8**	4.9 B	**13.3**	**5.3**
Copper	mg/kg	47,000	4.6 B	**75.3**	**3.8 J**	**57.7**	**17.9**	**205 J**	**35.7 J**	**175 J**	**202 J**	**155**
Iron	mg/kg	820,000	**9,820 J**	**62,500**	**4,240**	**50,800**	**15,700**	**120,000 J**	**20,700 J**	**65,200 J**	**87,200 J**	**115,000 J**
Lead	mg/kg	800	2.4 UJ	**89.6**	2.3 U	**44.5**	**40.3**	**88.1**	**43.1**	**74.7**	**92.6**	**70.8**
Manganese	mg/kg	26,000	**8,230**	**2,040**	**27.5**	**1,530**	**169**	**4,520**	**311**	**6,270**	**5,490**	**11,500**
Mercury	mg/kg	350	0.11 U	**0.043 J**	**0.0037 J**	**0.02 J**	**0.03 J**	**0.026 J**	**0.055 J**	**0.13 J**	**0.15 J**	**0.0094 J**
Nickel	mg/kg	22,000	2.1 B	**38**	**3 J**	**48.3**	**10.7 J**	**57.1**	**27.2**	**30.4**	**65.6**	**47.6**
Selenium	mg/kg	5,800	**2.8 J**	3.8 U	**2.7 J**	4.4 U	4.7 U	4.3 U	4.2 U	4.1 U	4.4 U	**2.3 J**
Silver	mg/kg	5,800	2.9 U	2.8 U	2.7 U	3.3 U	3.5 U	1.7 B	3.2 U	**0.75 J**	3.3 U	2.7 U
Thallium	mg/kg	12	9.7 U	9.5 U	9.1 U	11 U	11.8 U	10.7 U	10.6 U	10.2 U	11 U	9.1 U
Vanadium	mg/kg	5,800	**41.2**	**44.5**	**9.3**	**39.8**	**27.4**	**105**	**30.1**	**102**	**453**	**278 J**
Zinc	mg/kg	350,000	**8.5**	**239**	**8.4**	**143**	**84.3**	**248**	**82.9**	**355**	**213**	**295 J**
Other												
Cyanide	mg/kg	150	**0.36 J-**	**2.3**	0.61 U	**0.62 J**	**0.74 J**	**0.64 J-**	0.62 UJ	**0.51 J-**	**0.44 J-**	**0.53 J-**

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Table 2 - Sub-Parcel B1-1
Summary of Inorganics Detected in Soil

Parameter	Units	PAL	B1-045-SB-5	B1-046-SB-1	B1-046-SB-6	B1-046-SB-10*	B1-047-SB-1	B1-047-SB-5	B1-047-SB-10*	B1-048-SB-1	B1-048-SB-7	B1-048-SB-10*
Metals												
Aluminum	mg/kg	1,100,000	**61,300**	**30,500**	**16,200**	N/A	**25,700**	**50,000**	N/A	**19,100**	**13,000**	N/A
Antimony	mg/kg	470	4.7 UJ	3.1 UJ	3.3 UJ	N/A	**13.2 J**	3.8 UJ	N/A	2.9 UJ	3.2 UJ	N/A
Arsenic	mg/kg	3	1.6 U	**3.3**	**4.2**	**2.6 J**	**12.9**	**29.1**	**8**	**24.7**	**5.1**	**3.7**
Barium	mg/kg	220,000	**397 J**	**264 J**	**72.8 J**	N/A	**224 J**	**494 J**	N/A	**189 J**	**47 J**	N/A
Beryllium	mg/kg	2,300	**3.3**	**3.4**	0.72 B	N/A	**3.3**	**2.3**	N/A	**2.1**	**0.79 J**	N/A
Cadmium	mg/kg	980	**0.66 J**	**0.84 J**	1.7 U	N/A	0.73 B	**0.74 J**	N/A	**1.9**	1.6 U	N/A
Chromium	mg/kg	120,000	**265**	**776**	**26.8**	N/A	**496**	**517**	N/A	**155**	**40.3**	N/A
Chromium VI	mg/kg	6.3	1.6 U	1.1 U	1.2 U	N/A	1.1 U	1.4 U	N/A	1.1 U	1.2 U	N/A
Cobalt	mg/kg	350	2 B	2.8 B	4.7 B	N/A	**7.2**	**21.5**	N/A	**10.5**	**9**	N/A
Copper	mg/kg	47,000	**21.9**	**59.7**	**14**	N/A	**13,200**	**163**	N/A	**382**	**18.9**	N/A
Iron	mg/kg	820,000	**3,830 J**	**138,000 J**	**14,300 J**	N/A	**171,000**	**62,500**	N/A	**105,000**	**21,500**	N/A
Lead	mg/kg	800	3.9 U	**28.4**	**20.4**	N/A	**198**	**43.3**	N/A	**165**	**18.3**	N/A
Manganese	mg/kg	26,000	**1,710**	**18,500**	**128**	N/A	**11,400**	**2,460**	N/A	**4,620**	**278**	N/A
Mercury	mg/kg	350	**0.0073 J**	**0.043 J**	**0.036 J**	N/A	**0.027 J**	**0.083 J**	N/A	**0.047 J**	**0.035 J**	N/A
Nickel	mg/kg	22,000	12.6 B	**28**	**14.3**	N/A	**161 J**	**114 J**	N/A	**65.9 J**	**54.1 J**	N/A
Selenium	mg/kg	5,800	**6.1 J**	4.1 U	4.5 U	N/A	3.9 U	**8.1**	N/A	3.8 U	4.2 U	N/A
Silver	mg/kg	5,800	4.7 U	3.1 U	3.3 U	N/A	**13.6**	3.8 U	N/A	2.9 U	3.2 U	N/A
Thallium	mg/kg	12	6.3 U	10.2 U	11.1 U	N/A	9.8 U	10.1 U	N/A	9.6 U	10.6 U	N/A
Vanadium	mg/kg	5,800	**27.2 J**	**420 J**	**35 J**	N/A	**218**	**74.6**	N/A	**295**	**33.1**	N/A
Zinc	mg/kg	350,000	6.2 B	**225 J**	**36.9 J**	N/A	**449 J**	**91.9 J**	N/A	**547 J**	**44.8 J**	N/A
Other												
Cyanide	mg/kg	150	**7.3 J-**	**0.77 J-**	0.7 UJ	N/A	**0.53 J-**	**1.5 J-**	N/A	**0.31 J-**	0.64 UJ	N/A

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Table 2 - Sub-Parcel B1-1
Summary of Inorganics Detected in Soil

Parameter	Units	PAL	B1-061-SB-1*	B1-061-SB-7*	B1-062-SB-1*	B1-062-SB-6*	B1-063-SB-1	B1-063-SB-5	B1-063-SB-10	B1-064-SB-1	B1-064-SB-5	B1-065-SB-1*
Metals												
Aluminum	mg/kg	1,100,000	**27,500**	**25,300**	**11,600**	**36,100**	**24,600**	**44,200**	N/A	**12,700**	**1,330**	**21,200**
Antimony	mg/kg	470	3.3 U	2.9 U	3.5 U	3.1 U	2.9 U	3.6 UJ	N/A	3 UJ	2.9 UJ	2.7 U
Arsenic	mg/kg	3	**17.1**	**10.3**	**14.3**	2.6 U	**5**	**6.5**	2.9 U	**7.1**	**4.6**	**6**
Barium	mg/kg	220,000	**345**	**308**	**237**	**230**	**94.8 J**	**557 J**	N/A	**96.7 J**	**16.6 J**	**285**
Beryllium	mg/kg	2,300	**3.8**	**1.2**	**1.1 J**	**2**	**0.71 J**	**3.1**	N/A	**0.84 J**	0.95 U	**3.8**
Cadmium	mg/kg	980	**7**	**0.52 J**	**7.1**	**0.42 J**	0.65 B	0.7 B	N/A	**1.6**	0.37 B	0.66 B
Chromium	mg/kg	120,000	**158**	**1,820**	**623**	**5,200**	**838 J**	**413 J**	N/A	**738 J**	**104 J**	**606**
Chromium VI	mg/kg	6.3	1.1 U	1.2 U	1.2 U	1.1 U	**5.1 J-**	0.3 B	N/A	**2.9 J-**	0.33 B	0.54 B
Cobalt	mg/kg	350	**13.5**	**86**	**12.4**	**26.1**	**6.6**	**21.3**	N/A	**9.1**	**30.8**	**3.6 J**
Copper	mg/kg	47,000	**227**	**191**	**191**	**346**	**75.1**	**102**	N/A	**191**	**336**	**39.6**
Iron	mg/kg	820,000	**125,000**	**118,000**	**112,000**	**57,100**	**210,000 J**	**75,900 J**	N/A	**297,000 J**	**221,000 J**	**97,900**
Lead	mg/kg	800	**844**	**44.1**	**868**	**38.3**	**34.1 J**	**45 J**	N/A	**52.6 J**	**65.8 J**	**92.5**
Manganese	mg/kg	26,000	**5,470**	**30,800**	**14,000**	**21,400**	**24,900**	**2,180**	N/A	**14,300**	**1,710**	**16,600**
Mercury	mg/kg	350	**0.026 J**	0.11 U	**0.31**	0.1 U	**0.014 J-**	**0.042 J-**	N/A	**0.0092 J+**	**0.0079 J-**	**0.04 J**
Nickel	mg/kg	22,000	**66.1**	**850**	**67.1**	**274**	**43.4 J**	**146 J**	N/A	**122 J**	**71.9 J**	**18**
Selenium	mg/kg	5,800	4.4 U	3.9 U	4.6 U	**3.5 J**	3.9 U	4.8 U	N/A	4 U	3.8 U	**2.7 J**
Silver	mg/kg	5,800	3.3 U	**1.6 J**	3.5 U	3.1 U	**2.9 J**	3.6 U	N/A	**4**	**3.2**	2.7 U
Thallium	mg/kg	12	11.1 U	9.7 U	11.6 U	10.3 U	9.8 U	9.7 U	N/A	9.9 U	9.5 U	9 U
Vanadium	mg/kg	5,800	**131**	**402**	**2,460**	**288**	**478 J**	**29.5 J**	N/A	**325 J**	**17.7 J**	**1,690**
Zinc	mg/kg	350,000	**1,130**	**202**	**1,050**	**42.8**	**93.7 J**	**34.8 J**	N/A	**123 J**	**56.9 J**	**123**
Other												
Cyanide	mg/kg	150	**4.3**	**0.39 J**	**16.7**	**5.1**	**1.1 J-**	**3 J-**	N/A	**0.65 J-**	0.23 B	**1.8**

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Table 2 - Sub-Parcel B1-1
Summary of Inorganics Detected in Soil

Parameter	Units	PAL	B1-065-SB-4*	B1-066-SB-1*	B1-066-SB-9*	B1-067-SB-1*	B1-067-SB-9*	B1-068-SB-1*	B1-075-SB-1*	B1-075-SB-4*	B1-075-SB-10
Metals											
Aluminum	mg/kg	1,100,000	**30,300**	**43,700**	**19,200**	**10,100**	**24,300**	**12,400**	**21,700**	**18,300**	N/A
Antimony	mg/kg	470	3.3 U	2.7 U	3.3 U	3 U	3 U	3.1 U	3 U	3.1 U	N/A
Arsenic	mg/kg	3	**3.2**	**2 J**	**15.3**	**7.9**	**14.1**	**3.1**	**8.9**	**12.2**	**76.4**
Barium	mg/kg	220,000	**370**	**440**	**271**	**113**	**412**	**69.4**	**209**	**230**	N/A
Beryllium	mg/kg	2,300	**5.9**	**7**	**1.8**	**1.1**	**2.2**	**0.3 J**	**3.5**	**2.3**	N/A
Cadmium	mg/kg	980	**0.57 J**	0.35 B	**2.2**	**2**	**1.6**	0.72 B	**1.4 J**	**1.5**	N/A
Chromium	mg/kg	120,000	**96.6**	**6.7**	**499**	**894**	**288**	**1,470**	**150**	**132**	N/A
Chromium VI	mg/kg	6.3	0.35 B	0.25 B	0.37 B	0.31 B	0.56 B	**7.2**	0.66 B	0.48 B	N/A
Cobalt	mg/kg	350	**2.4 J**	**0.68 J**	**14.4**	**7**	**15.2**	5.1 U	**8.4**	**17**	N/A
Copper	mg/kg	47,000	**14.2**	**4.8**	**261**	**71.3**	**383**	**33**	**138**	**174**	N/A
Iron	mg/kg	820,000	**131,000**	**9,720**	**105,000**	**220,000**	**126,000**	**196,000**	**123,000**	**121,000**	N/A
Lead	mg/kg	800	**13.3**	**2.7**	**443**	**120**	**428**	**6.4**	**189**	**188**	N/A
Manganese	mg/kg	26,000	**5,420**	**2,480**	**10,500**	**26,700**	**10,600**	**31,800**	**3,470**	**3,610**	N/A
Mercury	mg/kg	350	0.11 U	0.1 U	**0.085 J**	**0.025 J**	**0.15**	0.11 U	0.11 U	0.11 U	N/A
Nickel	mg/kg	22,000	**8.1 J**	**1.9 J**	**125**	**40.9**	**72.2**	**13.7**	**63.9**	**64.2**	N/A
Selenium	mg/kg	5,800	**2.9 J**	**4.2**	4.4 U	4 U	4 U	4.1 U	4.1 U	4.1 U	N/A
Silver	mg/kg	5,800	3.3 U	2.7 U	3.3 U	3 U	3 U	3.1 U	3 U	3.1 U	N/A
Thallium	mg/kg	12	11.1 U	8.9 U	10.9 U	10.1 U	10.1 U	10.2 U	10.2 U	10.2 U	N/A
Vanadium	mg/kg	5,800	**343**	**10.9**	**1,480**	**1,970**	**250**	**868**	**91.4**	**188**	N/A
Zinc	mg/kg	350,000	**39.7**	**8**	**583**	**300**	**384**	**81.4**	**324**	**329**	N/A
Other											
Cyanide	mg/kg	150	**0.36 J**	**0.94**	**0.32 J**	**0.25 J**	**0.99**	**2**	**2.5**	**2.8**	N/A

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Table 2 - Sub-Parcel B1-1
Summary of Inorganics Detected in Soil

Parameter	Units	PAL	B1-076-SB-1*	B1-076-SB-4*	B1-076-SB-10	B1-079-SB-1*	B1-079-SB-5*	B1-080-SB-1*	B1-080-SB-4*	B1-081-SB-1*	B1-081-SB-4.5*
Metals											
Aluminum	mg/kg	1,100,000	**21,300**	**12,600**	N/A	**13,000**	**19,100**	**9,770**	**12,700**	**9,210**	**48,500**
Antimony	mg/kg	470	3.3 U	3.2 U	N/A	**18.7**	3.4 U	**2.8 J**	3.3 U	3.2 U	**1.7 J**
Arsenic	mg/kg	3	**9.2**	**20.3**	**16.2**	**17.7**	**9.1**	**8**	**4.8**	2.7 U	**2.3 J**
Barium	mg/kg	220,000	**280**	**206**	N/A	**271**	**566**	**171**	**101**	**26.7**	**497**
Beryllium	mg/kg	2,300	**2.7**	**0.63 J**	N/A	**0.69 J**	**0.99 J**	**0.96 J**	**1.2**	1.1 U	**2.8**
Cadmium	mg/kg	980	**5.1**	**4.1**	N/A	1.1 B	0.38 B	0.9 B	0.22 B	0.47 B	0.87 B
Chromium	mg/kg	120,000	**166**	**439**	N/A	**114**	**2,200**	**37.7**	**22.6**	**1,390**	**145**
Chromium VI	mg/kg	6.3	0.93 B	0.53 B	N/A	0.51 B	0.55 B	0.3 B	0.39 B	**7.3**	0.36 B
Cobalt	mg/kg	350	**10.7**	**27.4**	N/A	**27.8**	**9.1**	**7**	**17.9**	5.3 U	**9.7**
Copper	mg/kg	47,000	**179**	**217**	N/A	**949**	**244**	**2,460**	**592**	**20.6**	**146**
Iron	mg/kg	820,000	**97,100**	**134,000**	N/A	**127,000**	**51,300**	**44,900**	**19,900**	**174,000**	**56,800**
Lead	mg/kg	800	**689**	**378**	N/A	**715**	**161**	**731**	**36.2**	2.7 U	**264**
Manganese	mg/kg	26,000	**4,120**	**15,700**	N/A	**1,270**	**9,680**	**1,000**	**246**	**26,800**	**457**
Mercury	mg/kg	350	**0.4**	**0.069 J**	N/A	**0.22**	**0.041 J**	**0.14**	**0.034 J**	0.11 U	**0.031 J**
Nickel	mg/kg	22,000	**67.1**	**82.1**	N/A	**107**	**40.8**	**25.7**	**40.4**	**9.2 J**	**30.3**
Selenium	mg/kg	5,800	4.4 U	4.2 U	N/A	4.5 U	4.6 U	3.9 U	4.4 U	4.3 U	3.8 U
Silver	mg/kg	5,800	3.3 U	3.2 U	N/A	**1.5 J**	3.4 U	3 U	3.3 U	3.2 U	2.9 U
Thallium	mg/kg	12	10.9 U	10.6 U	N/A	11.1 U	11.4 U	9.9 U	11.1 U	10.6 U	9.6 U
Vanadium	mg/kg	5,800	**137**	**799**	N/A	**44.5**	**737**	**20.6**	**19**	**816**	**65.5**
Zinc	mg/kg	350,000	**535**	**996**	N/A	**355**	**184**	**328**	**108**	**16**	**428**
Other											
Cyanide	mg/kg	150	**3.5**	**1.1**	N/A	**2**	0.32 B	0.24 B	0.58 B	**0.5 J**	**0.45 J**

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Table 2 - Sub-Parcel B1-1
Summary of Inorganics Detected in Soil

Parameter	Units	PAL	B1-082-SB-1*	B1-082-SB-5*	B1-083-SB-1	B1-084-SB-1	B1-084-SB-4	B1-085-SB-1	B1-086-SB-1	B1-086-SB-5	B1-089-SB-1	B1-090-SB-1
Metals												
Aluminum	mg/kg	1,100,000	**17,700**	**60,400**	**25,700**	**41,400**	**6,000**	**3,960**	**2,450**	**29,700**	**2,640**	**6,190**
Antimony	mg/kg	470	3.2 U	4.7 U	3 UJ	3.1 UJ	**6.2 J**	**2.2 J**	**2.5 J**	3.3 UJ	2.6 UJ	**102 J**
Arsenic	mg/kg	3	**3.9**	**2.5**	**11.2 J**	**3.5 J**	**76.8 J**	2.5 U	**2.6**	**4.8**	2.2 U	2.6 U
Barium	mg/kg	220,000	**179**	**2,330**	**380**	**476**	**87.8**	**395 J**	**452 J**	**292 J**	**267 J**	**275 J**
Beryllium	mg/kg	2,300	**2.4**	**2.5**	**3.8**	**6.3**	0.41 B	**0.32 J**	**0.19 J**	**4.3**	**0.21 J**	1 U
Cadmium	mg/kg	980	**3.2**	**0.54 J**	**2.3**	**10.1**	0.4 B	0.65 B	0.25 B	**3.9**	1.3 U	0.96 B
Chromium	mg/kg	120,000	**101**	**615**	**435 J**	**24 J**	**44 J**	**101**	**84**	**53.6**	**28.1**	**44.7**
Chromium VI	mg/kg	6.3	0.35 B	0.45 B	0.31 B	0.3 B	0.52 B	1.1 UJ	1.1 UJ	1.2 UJ	1 UJ	1.1 UJ
Cobalt	mg/kg	350	**3.4 J**	**2.9 J**	**12.9 J**	**3.3 J**	**22.3 J**	**2.7 J**	**2.9 J**	**6 J**	**1.4 J**	**2.1 J**
Copper	mg/kg	47,000	**40.9**	**52.9**	**178 J**	**48.5 J**	**227 J**	**35.9 J**	**41.1 J**	**30.4 J**	**24.3 J**	**49.1 J**
Iron	mg/kg	820,000	**28,600**	**7,900**	**76,600 J**	**21,900 J**	**101,000 J**	**67,900**	**75,300**	**26,300**	**32,500**	**36,800**
Lead	mg/kg	800	**66.1**	3.9 U	**309 J**	**422 J**	**155 J**	**14.8 J**	**5 J**	**152 J**	**4.9 J**	**35.9 J**
Manganese	mg/kg	26,000	**2,910**	**2,340**	**7,790**	**5,410**	**2,600**	**2,430**	**2,040**	**2,950**	**871**	**1,090**
Mercury	mg/kg	350	0.11 U	0.16 U	**0.082 J**	**0.0081 J**	**0.066 J**	**0.017 J-**	**0.017 J-**	**0.0025 J-**	**0.01 J-**	**0.019 J-**
Nickel	mg/kg	22,000	**10 J**	**15.3 J**	**54.9 J**	9.1 B	**55.9 J**	**18.4 J**	**20.7 J**	**15.4 J**	**9.5 J**	**15.3 J**
Selenium	mg/kg	5,800	4.3 U	**4.9 J**	2.8 B	4.1 U	4.3 U	4 U	3.6 U	4.4 U	3.5 U	4.2 U
Silver	mg/kg	5,800	3.2 U	4.7 U	3 U	3.1 U	**0.89 J**	3 U	0.87 B	3.3 U	2.6 U	3.1 U
Thallium	mg/kg	12	10.7 U	6.2 U	10 U	10.2 U	10.9 U	10 U	9.1 U	10.9 U	8.8 U	10.4 U
Vanadium	mg/kg	5,800	**57.9**	**45.2**	**1,280 J**	**40.1 J**	**60.4 J**	**42.3**	**31.1**	**46.4**	**9.4**	**13.9**
Zinc	mg/kg	350,000	**255**	**4.4 J**	**700 J**	**282 J**	**107 J**	**1,120 J**	**206 J**	**426 J**	**150 J**	**463 J**
Other												
Cyanide	mg/kg	150	**0.55 J**	**5.2**	**1 J-**	0.52 B	0.16 B	0.53 UJ	0.55 UJ	**0.68 J-**	0.52 UJ	0.59 UJ

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Table 2 - Sub-Parcel B1-1
Summary of Inorganics Detected in Soil

Parameter	Units	PAL	B1-090-SB-6	B1-091-SB-1	B1-091-SB-5	B1-092-SB-1	B1-092-SB-5	B1-092-SB-10	B1-095-SB-1*	B1-095-SB-4*	B1-095-SB-10	B1-096-SB-1*
Metals												
Aluminum	mg/kg	1,100,000	**43,900**	**20,300**	**8,610**	**21,900 J**	**3,650 J**	N/A	**1,860**	**17,500**	N/A	**11,900**
Antimony	mg/kg	470	3.1 UJ	3.2 UJ	**5.2 J**	2.9 UJ	2.9 UJ	N/A	2.8 U	3.1 U	N/A	3.2 U
Arsenic	mg/kg	3	**2.9**	**11.7**	**4.9**	**6.4**	**3.5**	2.9 U	**10.5**	**5.7**	**14.8**	**15.2**
Barium	mg/kg	220,000	**331 J**	**233**	**93.7**	**194 J**	**27.1 J**	N/A	**61.3**	**556**	N/A	**183**
Beryllium	mg/kg	2,300	**8.5**	**1.8**	**0.62 J**	**3.2**	**0.3 J**	N/A	**0.24 J**	**1.4**	N/A	**0.7 J**
Cadmium	mg/kg	980	0.34 B	1.3 B	**0.21 J**	0.81 B	0.17 B	N/A	**0.52 J**	**0.93 J**	N/A	**1.6**
Chromium	mg/kg	120,000	**12.8**	**130**	**12.8**	**109 J**	**8 J**	N/A	**362**	**1,470**	N/A	**399**
Chromium VI	mg/kg	6.3	1.1 UJ	**3.9 J-**	1.2 UJ	1.1 UJ	1.1 UJ	N/A	0.5 B	0.49 B	N/A	0.35 B
Cobalt	mg/kg	350	5.2 U	**12.1**	**6.2**	**9.5 J**	**2.4 J**	N/A	**14**	**4.8 J**	N/A	**14.1**
Copper	mg/kg	47,000	3.5 B	**216**	**240**	**217 J**	**29.2 J**	N/A	**274**	**48**	N/A	**184**
Iron	mg/kg	820,000	**11,500**	**118,000**	**42,800**	**59,100 J**	**18,700 J**	N/A	**260,000**	**97,600**	N/A	**115,000**
Lead	mg/kg	800	**3.5 J**	**510**	**15,000**	**219 J**	**67.2 J**	N/A	**43.5**	**52.7**	N/A	**365**
Manganese	mg/kg	26,000	**3,170**	**3,250**	**240**	**5,770 J**	**1,060 J**	N/A	**3,210**	**41,300**	**3,890**	**24,600**
Mercury	mg/kg	350	**0.0023 J-**	**1.8**	**0.027 J**	**0.0062 J-**	**0.0034 J-**	N/A	**0.022 J**	**0.0064 J**	N/A	**0.15**
Nickel	mg/kg	22,000	1.8 B	**74.7**	**16.8**	**48.9 J**	**4.9 J**	N/A	**261**	**19.5**	N/A	**62.3**
Selenium	mg/kg	5,800	4.2 U	4.3 U	4.4 U	3.9 U	3.8 U	N/A	3.7 U	4.1 U	N/A	4.2 U
Silver	mg/kg	5,800	3.1 U	1.1 B	3.3 U	2.9 U	2.9 U	N/A	**3.6**	3.1 U	N/A	3.2 U
Thallium	mg/kg	12	10.5 U	10.7 U	11 U	9.6 U	9.5 U	N/A	9.3 U	10.3 U	N/A	10.6 U
Vanadium	mg/kg	5,800	**9.5**	**96.6**	**19.2**	**126 J**	**12.7 J**	N/A	**79.2**	**5,670**	N/A	**706**
Zinc	mg/kg	350,000	**27.7 J**	**470**	**54.9**	**223 J**	**38.6 J**	N/A	**144**	**189**	N/A	**524**
Other												
Cyanide	mg/kg	150	**0.23 J-**	0.53 B	0.28 B	**0.66 J-**	0.2 B	N/A	**0.079 J**	**1.4**	N/A	**3**

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Table 2 - Sub-Parcel B1-1
Summary of Inorganics Detected in Soil

Parameter	Units	PAL	B1-096-SB-4*	B1-096-SB-10	B1-099-SB-1	B1-099-SB-5	B1-100-SB-1	B1-100-SB-5	B1-101-SB-1	B1-101-SB-5	B1-102-SB-1	B1-102-SB-4.5
Metals												
Aluminum	mg/kg	1,100,000	**21,100**	N/A	**2,910**	**82,100**	**3,020**	**3,120**	**6,040**	**12,100**	**3,920**	**25,800**
Antimony	mg/kg	470	**5**	N/A	2.9 UJ	**6 J**	2.8 UJ	2.9 UJ	3 UJ	3.1 UJ	3.2 UJ	2.9 UJ
Arsenic	mg/kg	3	**33.3**	**23.5**	**15.1**	**7.5**	**23.5**	**20.2**	**7.6**	**24.3**	2.7 U	**12.4**
Barium	mg/kg	220,000	**212**	N/A	**17.7 J**	**961 J**	**23.2 J**	**27.8 J**	**59.1 J**	**105 J**	**227 J**	**306 J**
Beryllium	mg/kg	2,300	**0.78 J**	N/A	0.19 B	**4.4**	0.2 B	0.98 U	**0.33 J**	**0.45 J**	**0.28 J**	**3.8**
Cadmium	mg/kg	980	**6**	N/A	**0.3 J**	**3.2**	**0.65 J**	**0.22 J**	**1.5**	**7.1**	1.1 B	**1.9**
Chromium	mg/kg	120,000	**461**	N/A	**114**	**398**	**209**	**80.8**	**779**	**1,550**	**61.5**	**176**
Chromium VI	mg/kg	6.3	0.34 B	N/A	1.1 U	1.9 U	1.1 U	1.1 U	1.1 UJ	1.1 UJ	1 UJ	1.1 UJ
Cobalt	mg/kg	350	**29.5**	N/A	**14.1**	**25.5**	**17.6**	**23.1**	**49.2 J**	**694 J**	**2 J**	**16.1 J**
Copper	mg/kg	47,000	**699**	N/A	**192 J**	**271 J**	**168 J**	**196 J**	**164 J**	**193 J**	**32.4 J**	**129 J**
Iron	mg/kg	820,000	**143,000**	N/A	**276,000 J**	**50,200 J**	**266,000 J**	**209,000 J**	**144,000**	**210,000**	**38,900**	**104,000**
Lead	mg/kg	800	**1,600**	**693**	**94.5**	**19.5**	**141**	**29.4**	**120 J**	**130 J**	**22.1 J**	**137 J**
Manganese	mg/kg	26,000	**4,430**	N/A	**2,660**	**5,760**	**2,720**	**2,410**	**15,800**	**38,500**	**1,490**	**4,980**
Mercury	mg/kg	350	**0.14**	N/A	**0.071 J**	**0.032 J**	**2.6 J**	**0.034 J**	**0.14 J-**	**0.14 J-**	**0.021 J-**	0.11 UJ
Nickel	mg/kg	22,000	**368**	N/A	**127**	**367**	**168**	**107**	**52 J**	**132 J**	**13.2 J**	**39.3 J**
Selenium	mg/kg	5,800	4.3 U	N/A	3.9 U	7.1 U	3.8 U	3.9 U	3.8 B	**5.4**	4.3 U	3.9 U
Silver	mg/kg	5,800	**1.4 J**	N/A	**5.1**	5.3 U	**4.9**	**3.8**	3 U	3.1 U	3.2 U	2.9 U
Thallium	mg/kg	12	10.8 U	N/A	9.6 U	7.1 U	9.4 U	9.8 U	10 U	10.4 U	10.7 U	9.8 U
Vanadium	mg/kg	5,800	**178**	N/A	**27.3**	**109**	**82.3**	**20.5**	**1,800**	**2,960**	**24.8**	**834**
Zinc	mg/kg	350,000	**1,500**	N/A	**56.5**	**52.6**	**332**	**71**	**415 J**	**845 J**	**463 J**	**301 J**
Other												
Cyanide	mg/kg	150	**1**	N/A	**0.32 J-**	**7.8 J-**	**2.3 J-**	**0.53 J-**	**1.3 J-**	**1.7 J-**	**0.27 J-**	**1 J-**

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Table 2 - Sub-Parcel B1-1
Summary of Inorganics Detected in Soil

Parameter	Units	PAL	B1-103-SB-1	B1-103-SB-5	B1-104-SB-1	B1-104-SB-5	B1-105-SB-1	B1-105-SB-5	B1-106-SB-1	B1-106-SB-5	B1-111-SB-1*	B1-111-SB-4*
Metals												
Aluminum	mg/kg	1,100,000	**8,070 J**	**637 J**	**20,300 J**	**14,900 J**	**10,000 J**	**7,280 J**	**8,090 J**	**7,400 J**	**39,100**	**32,300**
Antimony	mg/kg	470	2.9 U	2.7 U	3.3 U	3 U	3 U	2.8 U	3.3 U	3.1 U	3.1 U	3.2 U
Arsenic	mg/kg	3	**16.5**	**23.4**	**3.7**	**5.2**	**11.7**	**6.1**	**3.8**	**3.6**	**2.5 J**	**7**
Barium	mg/kg	220,000	**52.5**	9.2 B	**251**	**51.1**	**86.3**	**51**	**37.2**	**32.7**	**423**	**157**
Beryllium	mg/kg	2,300	0.52 B	0.92 U	**2.5**	0.2 B	0.68 B	0.33 B	1.1 U	1 U	**6.6**	**2.1**
Cadmium	mg/kg	980	**2.1**	0.88 B	1.1 B	0.56 B	**2**	0.72 B	0.5 B	0.44 B	**0.37 J**	**0.39 J**
Chromium	mg/kg	120,000	**324**	**81.1**	**137**	**1,270**	**796**	**2,150**	**1,420**	**1,230**	**58**	**451**
Chromium VI	mg/kg	6.3	**0.74 J-**	1 UJ	1.1 UJ	**2.8 J-**	1.2 UJ	**7.4 J-**	**3 J-**	**6.3 J-**	1.1 U	1.1 U
Cobalt	mg/kg	350	**8.2**	**10.3**	3 B	2.2 B	**9.1**	2.6 B	0.35 B	**2 J**	**1.2 J**	**2.4 J**
Copper	mg/kg	47,000	**152 J**	**174 J**	**27.6 J**	**39.8 J**	**173 J**	**30.8 J**	**13.9 J**	**28.2 J**	**17.3**	**19**
Iron	mg/kg	820,000	**208,000 J**	**205,000 J**	**39,700 J**	**177,000 J**	**187,000 J**	**256,000 J**	**163,000 J**	**232,000 J**	**31,600**	**130,000**
Lead	mg/kg	800	**98.8 J**	**51.7 J**	**127 J**	**15.6 J**	**470 J**	2.3 UJ	**3.4 J**	2.6 UJ	**38**	**10.4**
Manganese	mg/kg	26,000	**8,420**	**1,270**	**5,020**	**28,000**	**13,900**	**42,300**	**36,700**	**28,400**	**4,230**	**16,400**
Mercury	mg/kg	350	**2**	**0.74**	0.11 U	**0.13**	**0.98**	0.1 U	0.11 U	0.1 U	0.099 U	**0.0061 J**
Nickel	mg/kg	22,000	**97 J**	**126 J**	**20.4 J**	**29.6 J**	**88.3 J**	**19.5 J**	10.9 B	**21.5 J**	**8.2 J**	**28.9**
Selenium	mg/kg	5,800	3.8 U	3.7 U	4.4 U	4 U	4 U	3.7 U	4.4 U	4.1 U	**2.9 J**	4.2 U
Silver	mg/kg	5,800	2.6 B	**2.9**	3.3 U	2.2 B	1.7 B	**4.1**	1.3 B	2.3 B	3.1 U	3.2 U
Thallium	mg/kg	12	9.6 U	9.2 U	11 U	10 U	9.9 U	9.3 U	11.1 U	10.4 U	10.3 U	10.6 U
Vanadium	mg/kg	5,800	**118**	**9.2**	**113**	**499**	**233**	**601**	**768**	**517**	**33.1**	**324**
Zinc	mg/kg	350,000	**221 J**	**32.3 J**	**101 J**	**83.4 J**	**395 J**	**38.3 J**	**13.6 J**	**27.8 J**	**39.3**	**71**
Other												
Cyanide	mg/kg	150	**0.64 J-**	0.62 UJ	**0.22 J-**	**0.054 J-**	**0.22 J-**	**0.059 J-**	**0.048 J-**	**0.15 J-**	**0.97**	**0.27 J**

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Table 2 - Sub-Parcel B1-1
Summary of Inorganics Detected in Soil

Parameter	Units	PAL	B1-112-SB-1*	B1-112-SB-5*	B1-113-SB-1*	B1-113-SB-5*	B1-114-SB-1*	B1-115-SB-1	B1-116-SB-1	B1-116-SB-5	B1-120-SB-1	B1-126-SB-1
Metals												
Aluminum	mg/kg	1,100,000	**15,800**	**9,360**	**11,600**	**6,710**	**8,820**	**13,100**	**42,800**	**5,810**	**21,300**	**19,600**
Antimony	mg/kg	470	3.4 U	3.1 U	3 U	2.8 U	2.8 U	3.3 UJ	2.9 UJ	3 UJ	2.9 UJ	2.7 UJ
Arsenic	mg/kg	3	**13.7**	**17**	**15.5**	**5.7**	**3.1**	**27.1**	2.4 U	**4.7**	**7.7**	**2.7**
Barium	mg/kg	220,000	**159**	**39.5**	**67.7**	**34.4**	**33.1**	**67.9 J**	**47.7 J**	**25 J**	**214 J**	**80.2 J**
Beryllium	mg/kg	2,300	**2**	**0.27 J**	**0.59 J**	0.95 U	0.94 U	0.61 B	**0.52 J**	0.99 U	**1.8**	**0.22 J**
Cadmium	mg/kg	980	**0.3 J**	**0.54 J**	**0.6 J**	0.34 B	**0.46 J**	**1.5 J**	0.47 B	1.5 U	**3.8**	**1.1 J**
Chromium	mg/kg	120,000	**417**	**658**	**635**	**1,530**	**1,420**	**305**	**769**	**26.3**	**298**	**880**
Chromium VI	mg/kg	6.3	1.1 U	1.1 U	1.2 U	**10.4**	**2.8**	1.2 U	**1.2**	1.1 U	**0.62 J**	1.1 UJ
Cobalt	mg/kg	350	**3.3 J**	**5.8**	**7.1**	**0.33 J**	**1.4 J**	**23.5**	**0.75 J**	**1.1 J**	**9.9**	**2.4 J**
Copper	mg/kg	47,000	**19.7**	**35.4**	**77.1**	**25.6**	**19.7**	**364**	**24.6**	**75.4**	**132 J**	**51.2 J**
Iron	mg/kg	820,000	**257,000**	**333,000**	**328,000**	**174,000**	**203,000**	**232,000 J**	**147,000**	**33,100**	**122,000 J**	**162,000**
Lead	mg/kg	800	2.8 U	**8.7**	**80.9**	**3.3**	**2.5**	**352**	**35**	**19.2**	**603**	**36 J**
Manganese	mg/kg	26,000	**9,200**	**16,000**	**16,000**	**34,600**	**29,000**	**7,060**	**24,200**	**323**	**9,290**	**22,000**
Mercury	mg/kg	350	0.1 U	**0.011 J**	**0.044 J**	0.11 U	**0.0054 J**	**8.6 J**	**0.056 J**	**0.0027 J**	**5.4 J**	**0.042 J-**
Nickel	mg/kg	22,000	**13.9**	**34.4**	**54.3**	**14.1**	**16**	**289**	**14.1 J**	**12.6 J**	**60.1**	**19.3 J**
Selenium	mg/kg	5,800	**3.1 J**	4.2 U	4 U	3.8 U	3.7 U	4.4 U	3.9 U	4 U	3.9 U	3.7 U
Silver	mg/kg	5,800	**2.5 J**	**3.1**	**3.6**	**2.2 J**	**1.5 J**	**2.3 J**	2.9 U	3 U	2.4 B	**0.77 J**
Thallium	mg/kg	12	11.2 U	10.4 U	10 U	9.5 U	9.4 U	11 U	9.8 U	9.9 U	9.8 U	9.1 U
Vanadium	mg/kg	5,800	**174**	**351**	**304**	**706**	**959**	**120 J**	**576**	**32.8**	**214**	**578**
Zinc	mg/kg	350,000	**35.7**	**72.4**	**137**	**15.2**	**47.4**	**553 J**	**89.8 J**	**21.1 J**	**7,700**	**662 J**
Other												
Cyanide	mg/kg	150	**0.68**	**0.46 J**	**0.54 J**	**0.14 J**	**0.5 J**	**1.9 J-**	**1.2 J-**	0.56 UJ	**7.1 J-**	**0.46 J-**

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Table 2 - Sub-Parcel B1-1
Summary of Inorganics Detected in Soil

Parameter	Units	PAL	B1-127-SB-1	B1-127-SB-6	B1-128-SB-1	B1-129-SB-1	B1-129-SB-5	B1-130-SB-1*	B1-130-SB-9*	B1-131-SB-1*	B1-131-SB-4*	B1-132-SB-1
Metals												
Aluminum	mg/kg	1,100,000	**13,400**	**34,800**	**8,750**	**21,100**	**22,500**	**22,400**	**7,710**	**14,000**	**20,900**	**20,100**
Antimony	mg/kg	470	3.5 UJ	3.2 UJ	3.1 UJ	2.9 UJ	3.2 UJ	3.3 U	2.8 U	3.3 U	3.4 U	3 UJ
Arsenic	mg/kg	3	**5.1**	**17**	2.6 U	**7.9**	**5.3**	**11.7**	**4.3**	**4**	**5.5**	**7.2**
Barium	mg/kg	220,000	**81.4 J**	**817 J**	**39.5 J**	**146 J**	**188 J**	**375**	**67.5**	**97.6**	**294**	**249**
Beryllium	mg/kg	2,300	**0.36 J**	**2.7**	1 U	**1.2**	**2.6**	**1.6**	**0.75 J**	**0.33 J**	**2**	**2.8**
Cadmium	mg/kg	980	1.6 B	**3.1**	**1.3 J**	**1.9**	**1.3 J**	**1.3 J**	**0.65 J**	**0.91 J**	**1.4 J**	**2.6**
Chromium	mg/kg	120,000	**880**	**427**	**186**	**937**	**153 J**	**218**	**10.6**	**755**	**132**	**278**
Chromium VI	mg/kg	6.3	1.2 UJ	1.2 UJ	1.1 UJ	1.1 UJ	1.1 UJ	0.5 B	0.4 B	1 B	0.41 B	1.1 UJ
Cobalt	mg/kg	350	**5.8 J**	**31.5 J**	**6.5 J**	**74.7 J**	**5.7 J**	**14.8**	**9**	**4.8 J**	**8.2**	**6.4**
Copper	mg/kg	47,000	**76.7 J**	**282 J**	**34.1 J**	**85.2 J**	**87.2 J**	**237**	**22.6**	**46.5**	**85.1**	**82.3**
Iron	mg/kg	820,000	**190,000**	**111,000**	**50,400**	**147,000**	**121,000**	**75,900**	**10,600**	**152,000**	**57,000**	**89,400**
Lead	mg/kg	800	**47.4 J**	**420 J**	**42.5 J**	**77.7 J**	**109 J**	**433**	**213**	**989**	**187**	**295**
Manganese	mg/kg	26,000	**23,300**	**5,700**	**7,910**	**82,500**	**5,520**	**3,540**	**386**	**15,500**	**5,680**	**7,380**
Mercury	mg/kg	350	**0.043 J-**	**0.068 J-**	**0.3 J-**	**0.013 J-**	**0.011 J-**	**0.059 J**	**0.33**	**0.018 J**	**0.097 J**	**0.99**
Nickel	mg/kg	22,000	**32.6 J**	**138 J**	**18.2 J**	**58.4 J**	**38.8 J**	**43.7**	**10.5**	**47.5**	**29.1**	**45.4**
Selenium	mg/kg	5,800	4.7 U	4.3 U	4.2 U	3.8 U	4.3 U	4.4 U	3.7 U	4.4 U	4.5 U	**2.7 J**
Silver	mg/kg	5,800	1.2 B	3.2 U	3.1 U	**7.2**	3.2 U	3.3 U	2.8 U	3.3 U	3.4 U	3 U
Thallium	mg/kg	12	11.7 U	10.6 U	10.5 U	9.5 U	10.7 U	11.1 U	9.3 U	10.9 U	11.2 U	10.1 U
Vanadium	mg/kg	5,800	**572**	**507**	**115**	**523**	**115**	**286**	**12.4**	**398**	**137**	**230**
Zinc	mg/kg	350,000	**1,500 J**	**831 J**	**704 J**	**708 J**	**243 J**	**515**	**191**	**382**	**262**	**1,800**
Other												
Cyanide	mg/kg	150	**0.71 J-**	**3.8 J-**	**2.3 J-**	**5 J-**	**0.66 J-**	**1.6**	**0.19 J**	**0.71**	**0.4 J**	**3.2 J-**

Detections in bold
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Table 2 - Sub-Parcel B1-1
Summary of Inorganics Detected in Soil

Parameter	Units	PAL	B1-132-SB-5	B1-133-SB-1	B1-133-SB-5	B1-134-SB-1	B1-134-SB-5	B1-143-SB-1	B1-143-SB-4.5	B1-146-SB-1	B1-146-SB-5	B1-147-SB-1
Metals												
Aluminum	mg/kg	1,100,000	**26,700**	**15,700**	**26,600 J**	**11,700**	**21,300**	**10,200 J**	**9,770 J**	**19,200**	**49,900**	**8,000**
Antimony	mg/kg	470	3.5 UJ	2.8 UJ	2.3 B	2.8 UJ	3.6 UJ	2.7 U	3.4 U	3 UJ	4.9 UJ	3.1 UJ
Arsenic	mg/kg	3	**7.8**	**15.6**	**6.8**	**14.3**	**8**	**4.4**	**18.8**	**18.3**	**1.9**	**3.3 J**
Barium	mg/kg	220,000	**995**	**259**	**279 J**	**322**	**387**	**24.7**	**168**	**254 J**	**503 J**	**57.4**
Beryllium	mg/kg	2,300	**1.6**	**0.95**	**3.3**	**0.96**	**1.3**	0.89 U	**1.4**	**2.3**	**2.5**	1 U
Cadmium	mg/kg	980	**1.9**	1.3 B	0.76 B	0.83 B	0.56 B	0.5 B	1.4 B	**4.6**	**0.27 J**	0.29 B
Chromium	mg/kg	120,000	**149**	**3,110**	**103 J**	**34.4**	**215**	**1,410**	**93.2**	**652**	**416**	**1,060 J**
Chromium VI	mg/kg	6.3	1.2 UJ	1.1 UJ	1.1 UJ	1.1 UJ	1.2 UJ	**5 J-**	1.1 UJ	**0.27 J**	1.6 U	**9.5 J-**
Cobalt	mg/kg	350	**18.8**	**6.9**	**6.4 J**	**11.1**	**14.7**	4.4 U	**19.1**	**18.3**	**17.8**	4 B
Copper	mg/kg	47,000	**197**	**131**	**81.6 J**	**121**	**51.2**	**13.5 J**	**227 J**	**248 J**	**50.6 J**	**101 J**
Iron	mg/kg	820,000	**63,500**	**213,000**	**41,000 J**	**51,700**	**15,400**	**164,000 J**	**54,700 J**	**182,000 J**	**25,000 J**	**282,000 J**
Lead	mg/kg	800	**10,600**	**158**	**95 J**	**137**	**44.1**	**10.2 J**	**295 J**	**1,380**	4.1 UJ	**5.8 J**
Manganese	mg/kg	26,000	**3,140**	**20,600**	**2,650 J**	**2,120**	**1,230**	**32,500**	**2,060**	**11,400**	**3,840**	**23,600**
Mercury	mg/kg	350	**0.079 J**	**0.21**	**0.017 J-**	**0.0035 J**	**0.016 J**	**0.0044 J**	**0.13**	**0.084 J**	0.15 U	0.11 U
Nickel	mg/kg	22,000	**80.4**	**65.7**	**21.5 J**	**19.3**	**32.3**	8.5 B	**83.7 J**	**88.7**	**119**	**63.7 J**
Selenium	mg/kg	5,800	4.6 U	3.7 U	4 U	3.7 U	4.8 U	3.5 U	4.5 U	4 U	6.5 U	4.2 U
Silver	mg/kg	5,800	2.6 B	1.2 B	3 U	2.8 U	3.6 U	1.7 B	3.4 U	**3.5**	4.9 U	3.1 U
Thallium	mg/kg	12	11.5 U	9.3 U	10.1 U	9.3 U	12 U	8.9 U	11.2 U	10.1 U	6.5 U	10.4 U
Vanadium	mg/kg	5,800	**199**	**1,040**	**45.2 J**	**69.8**	**84.2**	**835**	**69.9**	**314**	**34.2**	**946 J**
Zinc	mg/kg	350,000	**952**	**301**	**189 J**	**225**	**122**	**34.5 J**	**432 J**	**798**	4.4 B	**71.5 J**
Other												
Cyanide	mg/kg	150	0.28 B	**1 J-**	0.47 B	**1.2 J-**	**5.9 J-**	**0.16 J-**	**1.2 J-**	**0.83 J-**	**10.9 J-**	0.13 B

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Table 2 - Sub-Parcel B1-1
Summary of Inorganics Detected in Soil

Parameter	Units	PAL	B1-147-SB-5	B1-149-SB-1*	B1-150-SB-1	B1-150-SB-8	B1-151-SB-1	B1-151-SB-5	B1-152-SB-1*	B1-152-SB-4*	B1-154-SB-1	B1-154-SB-5
Metals												
Aluminum	mg/kg	1,100,000	**2,620**	**10,900**	**43,000**	**17,500**	**13,000**	**68,100**	**16,100**	**13,300**	**17,500**	**13,000**
Antimony	mg/kg	470	2.6 U	2.8 U	2.7 UJ	3.3 UJ	3.4 UJ	4.3 UJ	3 U	3 U	2.8 UJ	3 UJ
Arsenic	mg/kg	3	**16.4 J**	**46**	**2.3**	**12.3**	**14.8**	**2.8 J**	**15.3**	**16.4**	2.3 U	2.5 U
Barium	mg/kg	220,000	**78.3 J**	**178**	**769 J**	**94.7 J**	**196 J**	**557 J**	**244**	**413**	**111 J**	**27.3 J**
Beryllium	mg/kg	2,300	**0.32 J**	**1.3**	**6.5**	**1.1 J**	**1.2**	**3.4**	**2.5**	**0.59 J**	**1.6**	0.98 U
Cadmium	mg/kg	980	**1.7**	**7.2**	0.99 B	0.4 B	**6.2**	0.7 B	**2.1**	**1.8**	**0.5 J**	0.37 B
Chromium	mg/kg	120,000	**243**	**149**	**59.9 J**	**24.5 J**	**233 J**	**248 J**	**143**	**1,010**	**1,090**	**1,500**
Chromium VI	mg/kg	6.3	0.32 B	0.53 B	0.26 B	0.3 B	0.36 B	0.42 B	0.26 B	0.35 B	1.1 UJ	1.1 UJ
Cobalt	mg/kg	350	**43.5 J**	**19.6**	3.2 B	**12.7**	**18.5**	3.8 B	**33.7**	**32.3**	0.7 B	4.9 U
Copper	mg/kg	47,000	**389**	**520**	**35.2**	**28.7**	**249**	**26.5**	**314**	**323**	**18 J**	**19.2 J**
Iron	mg/kg	820,000	**297,000**	**141,000**	**35,700 J**	**32,400 J**	**116,000 J**	**9,920 J**	**205,000**	**99,100**	**195,000**	**208,000**
Lead	mg/kg	800	**249**	**438**	**35.6 J**	**141 J**	**428 J**	3.6 U	**311**	**260**	**7.4 J**	**7.6 J**
Manganese	mg/kg	26,000	**3,840**	**5,650**	**6,290**	**494**	**5,210**	**3,640**	**2,110**	**8,860**	**26,700**	**30,600**
Mercury	mg/kg	350	**0.027 J**	**0.17**	0.11 U	**0.0068 J**	**0.12**	0.15 U	**0.057 J**	**0.04 J**	**0.011 J-**	0.1 UJ
Nickel	mg/kg	22,000	**139 J**	**143**	**18 J**	**18.5 J**	**48.4 J**	**19.8 J**	**91**	**228**	**15.5 J**	**15.8 J**
Selenium	mg/kg	5,800	3.4 U	3.7 U	**3.3 J**	4.5 U	4.5 U	5.8 U	4.1 U	4 U	3.7 U	3.9 U
Silver	mg/kg	5,800	**3.9**	**1.4 J**	2.7 U	3.3 U	**1 J**	4.3 U	**2.6 J**	**1.1 J**	1.4 B	2 B
Thallium	mg/kg	12	8.6 U	9.4 U	9.1 U	11.1 U	11.3 U	11.6 U	10.2 U	10.1 U	9.2 U	9.8 U
Vanadium	mg/kg	5,800	**68 J**	**234**	**101 J**	**33.6 J**	**491 J**	**22.9 J**	**48.8**	**151**	**777**	**887**
Zinc	mg/kg	350,000	**518**	**1,650**	**169 J**	**356 J**	**1,290 J**	**9 J**	**504**	**1,030**	**208 J**	**23 J**
Other												
Cyanide	mg/kg	150	0.19 B	**0.51 J**	0.48 B	0.26 B	**1.3 J-**	**8 J-**	**0.61**	**1.9**	**0.15 J-**	0.59 UJ

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Table 2 - Sub-Parcel B1-1
Summary of Inorganics Detected in Soil

Parameter	Units	PAL	B1-155-SB-1	B1-155-SB-5	B1-159-SB-1	B1-159-SB-5	B1-160-SB-1	B1-160-SB-5	B1-161-SB-1	B1-162-SB-1	B1-162-SB-4	B1-163-SB-1
Metals												
Aluminum	mg/kg	1,100,000	**23,700**	**13,300**	**5,860 J**	**1,600 J**	**9,370**	**3,050 J**	**38,600 J**	**33,000**	**25,700**	**10,900**
Antimony	mg/kg	470	3.4 UJ	**8.4 J**	3 UJ	4 UJ	3.2 UJ	2.8 UJ	2.8 UJ	2.9 UJ	3.1 UJ	3 UJ
Arsenic	mg/kg	3	**9.8**	**10**	**6**	2.7 U	**19.4**	**7.8**	**6.3**	**4.3**	**27.1**	**31.4**
Barium	mg/kg	220,000	**278 J**	**142 J**	**71.1 J**	**28.3 J**	**132**	**32 J**	**365 J**	**1,090 J**	**314 J**	**112 J**
Beryllium	mg/kg	2,300	**2.7**	**0.61 J**	0.42 B	1.3 U	1.1 B	**0.2 J**	**5.7**	**3.1**	**1.6**	**1.5**
Cadmium	mg/kg	980	1.5 B	0.26 B	**4.1**	2 U	**3.2**	0.52 B	**1.8**	0.89 B	**11.2**	0.81 B
Chromium	mg/kg	120,000	**56.6 J**	**25.8 J**	**131 J**	**13.5 J**	**284**	**34 J**	**66.8 J**	**74.8 J**	**289 J**	**124 J**
Chromium VI	mg/kg	6.3	0.31 B	0.34 B	1.2 UJ	1.4 UJ	1.1 UJ	1.1 UJ	1.1 UJ	0.26 B	0.61 B	0.25 B
Cobalt	mg/kg	350	**10.8**	**8.7**	**4.6 J**	**3.9 J**	**21.4**	**5.7 J**	**4.1 J**	**5.9**	**21.5**	**30.9**
Copper	mg/kg	47,000	**127**	**492**	**54.1 J**	**14.3 J**	**587**	**57.6 J**	**61.5 J**	**85.4**	**259**	**359**
Iron	mg/kg	820,000	**79,600 J**	**50,700 J**	**73,600 J**	**37,800 J**	**341,000**	**23,700 J**	**62,800 J**	**51,700 J**	**70,500 J**	**332,000 J**
Lead	mg/kg	800	**120 J**	**345 J**	**156 J**	**6.2 J**	**602**	**198 J**	**219 J**	**57.9 J**	**2,450 J**	**70.8 J**
Manganese	mg/kg	26,000	**3,340**	**434**	**3,660 J**	**452 J**	**5,570**	**901 J**	**3,790 J**	**5,890**	**6,800**	**3,680**
Mercury	mg/kg	350	**0.23**	**0.077 J**	**0.85 J-**	0.13 UJ	**0.54**	**0.028 J-**	0.1 UJ	**0.02 J-**	**0.0096 J-**	**0.016 J-**
Nickel	mg/kg	22,000	**29.6 J**	**25.5 J**	**27.8 J**	**15.1 J**	**169**	**24.1 J**	**21.3 J**	**52.3 J**	**66.9 J**	**150 J**
Selenium	mg/kg	5,800	4.5 U	4.7 U	4 U	5.4 U	4.2 U	3.7 U	**2.7 J**	**4.3**	4.1 U	4 U
Silver	mg/kg	5,800	3.4 U	3.6 U	3 U	4 U	**4.6**	2.8 U	2.8 U	2.9 U	2.6 B	**4.3**
Thallium	mg/kg	12	11.3 U	11.9 U	9.9 U	10.7 U	10.5 U	9.3 U	9.4 U	9.7 U	10.3 U	10 U
Vanadium	mg/kg	5,800	**55.3 J**	**64.5 J**	**99.1 J**	**10.6 J**	**88.7**	**48.8 J**	**46.9 J**	**89.8 J**	**956 J**	**45.5 J**
Zinc	mg/kg	350,000	**215 J**	**112 J**	**2,530 J**	**15.6 J**	**1,180**	**201 J**	**485 J**	**174 J**	**3,180 J**	**176 J**
Other												
Cyanide	mg/kg	150	**1.4 J-**	**1 J-**	**2.2 J-**	0.12 B	**1.3 J-**	**0.61 J-**	**1.4 J-**	**0.57 J-**	**0.88 J-**	0.32 B

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Table 2 - Sub-Parcel B1-1
Summary of Inorganics Detected in Soil

Parameter	Units	PAL	B1-163-SB-4	B1-163-SB-10	B1-164-SB-1	B1-164-SB-4	B1-165-SB-1	B1-165-SB-9.5	B1-166-SB-9	B1-167-SB-1	B1-167-SB-5	B1-168-SB-1
Metals												
Aluminum	mg/kg	1,100,000	**21,600**	N/A	**46,900**	**34,500**	**7,150**	**17,200**	**70,600**	**18,600**	**52,900**	**45,800 J**
Antimony	mg/kg	470	3.1 B	N/A	3 UJ	**195 J**	**12.4 J**	3.2 UJ	4.1 UJ	4.2 UJ	3.5 UJ	3 UJ
Arsenic	mg/kg	3	**24.3**	**18.4**	**4.7**	**7.7**	**124**	2.5 B	**7.5**	**71.5**	2.9 U	**4.8 J**
Barium	mg/kg	220,000	**507 J**	N/A	**674 J**	**474**	**525 J**	**275 J**	**324 J**	**402 J**	**403 J**	**460 J**
Beryllium	mg/kg	2,300	**2**	N/A	**5.8**	**1.8**	**0.68 J**	**0.93 J**	**2.8**	**1.9**	**2.6**	**5.4**
Cadmium	mg/kg	980	**1.7**	N/A	1.5 B	**1.5 J**	**8.9**	**0.39 J**	**0.72 J**	**7.1**	**0.4 J**	**1.5**
Chromium	mg/kg	120,000	**43.9 J**	N/A	**219 J**	**216 J**	**233**	**60**	**275**	**176**	**363**	**17.9 J**
Chromium VI	mg/kg	6.3	0.73 B	N/A	0.42 B	0.42 B	1.2 U	1.1 U	1.4 U	1.4 U	1.3 U	1.1 UJ
Cobalt	mg/kg	350	**11.2**	N/A	**3.9 J**	**15.9**	**81.8**	**4.6 J**	**3.2 J**	**54.8**	**24**	**3.9 J**
Copper	mg/kg	47,000	**162**	N/A	**57.5**	**4,570**	**1,110**	**19.2**	**29.3**	**698**	**98.4**	**24.2 J**
Iron	mg/kg	820,000	**75,600 J**	N/A	**62,100 J**	**86,500**	**361,000**	**9,720**	**7,300**	**323,000**	**55,000**	**17,700**
Lead	mg/kg	800	**148 J**	N/A	**53.2 J**	**1,310**	**940**	**23.1**	**16.1**	**466**	2.9 U	**95.6**
Manganese	mg/kg	26,000	**4,120**	N/A	**9,950**	**2,820**	**36,500**	**1,910**	**1,490**	**6,880**	**3,350**	**6,780**
Mercury	mg/kg	350	**0.0022 J-**	N/A	0.11 UJ	**0.11 J-**	**0.13**	**0.012 J**	0.13 U	**0.066 J**	0.13 U	0.11 UJ
Nickel	mg/kg	22,000	**93.1 J**	N/A	**16.1 J**	**84.5 J**	**427 J**	**14.3 J**	**22.5 J**	**263 J**	**118 J**	6.1 B
Selenium	mg/kg	5,800	4.3 U	N/A	2.8 B	5 U	4.4 U	4.2 U	**6**	5.6 U	**6**	2.3 B
Silver	mg/kg	5,800	3.2 U	N/A	3 U	3.7 U	**7.3**	3.2 U	4.1 U	**4 J**	3.5 U	3 U
Thallium	mg/kg	12	10.6 U	N/A	9.9 U	10 UJ	11 U	10.6 U	11 U	11.2 U	11.5 U	9.8 UJ
Vanadium	mg/kg	5,800	**560 J**	N/A	**147 J**	**100 J**	**104**	**32**	**18.8**	**116**	**30.9**	**31.7 J**
Zinc	mg/kg	350,000	**254 J**	N/A	**87.1 J**	**343 J**	**1,310 J**	**52.3 J**	**16.9 J**	**2,730 J**	**10.2 J**	**328**
Other												
Cyanide	mg/kg	150	0.39 B	N/A	**0.78 J-**	**2.6 J-**	**0.65 J-**	**0.83 J-**	**25.3 J-**	**1.5 J-**	**47.2 J-**	**0.36 J-**

Detections in bold
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Table 2 - Sub-Parcel B1-1
Summary of Inorganics Detected in Soil

Parameter	Units	PAL	B1-168-SB-5	B1-169-SB-1	B1-169-SB-5	B1-170-SB-1	B1-171-SB-1*	B1-172-SB-1*	B1-172-SB-4*	B1-172-SB-10*	B1-173-SB-1*
Metals											
Aluminum	mg/kg	1,100,000	**15,100 J**	**24,500 J**	**2,470 J**	**10,300 J**	**45,300**	**19,100**	**5,970**	N/A	**29,800**
Antimony	mg/kg	470	3 B	2.8 UJ	3.3 UJ	3.1 UJ	3.4 U	3.2 U	3.4 U	N/A	3.2 U
Arsenic	mg/kg	3	**32.2 J**	**7 J**	**12.5 J**	**31.7 J**	**3.4**	**5.2**	**13.5**	**5**	2.7 U
Barium	mg/kg	220,000	**238 J**	**327 J**	**60.7 J**	**112 J**	**485**	**146**	**71.5**	N/A	**330**
Beryllium	mg/kg	2,300	**1.3**	**3.5**	0.31 B	0.74 B	**4.1**	**1.1**	**0.32 J**	N/A	**4.5**
Cadmium	mg/kg	980	**2.1**	**0.73 J**	**0.18 J**	**5.4**	**2.5**	**1.8**	**2.5**	N/A	0.39 B
Chromium	mg/kg	120,000	**68.4 J**	**309 J**	**5.3 J**	**43.7 J**	**148**	**242**	**680**	N/A	**16.1**
Chromium VI	mg/kg	6.3	1.2 UJ	1.1 UJ	1.3 UJ	1.1 UJ	0.64 B	0.32 B	0.19 B	N/A	0.29 B
Cobalt	mg/kg	350	**17.3**	**9.4**	**4.6 J**	**20.8**	**3 J**	**7.4**	**11.9**	N/A	**3.5 J**
Copper	mg/kg	47,000	**196 J**	**101 J**	**39.3 J**	**285 J**	**63.2**	**68**	**17,900**	N/A	**8.5**
Iron	mg/kg	820,000	**94,200**	**143,000**	**10,500**	**187,000**	**17,600**	**71,800**	**228,000**	N/A	**11,300**
Lead	mg/kg	800	**715**	**58.4**	**7.9**	**494**	**45.3**	**273**	**1,030**	**48.5**	**7.2**
Manganese	mg/kg	26,000	**7,070**	**10,200**	**65.9**	**26,900**	**3,030**	**6,190**	**12,200**	N/A	**2,820**
Mercury	mg/kg	350	**0.082 J-**	**0.014 J-**	**0.068 J-**	**0.01 J-**	**0.0027 J**	**0.62**	**0.055 J**	N/A	0.099 U
Nickel	mg/kg	22,000	**60 J**	**71.8 J**	9.9 B	**23.2 J**	**11.3 J**	**35.4**	**329**	N/A	**8.6 J**
Selenium	mg/kg	5,800	4.2 U	2.8 U	4.5 U	4.1 U	4.6 U	4.3 U	4.5 U	N/A	4.3 U
Silver	mg/kg	5,800	3.2 U	2.8 U	3.3 U	**3.2**	3.4 U	3.2 U	**1.6 J**	N/A	3.2 U
Thallium	mg/kg	12	10.6 UJ	9.3 UJ	11.2 UJ	10.2 UJ	11.4 U	10.7 U	11.2 U	N/A	10.8 U
Vanadium	mg/kg	5,800	**94.1 J**	**499 J**	**8.8 J**	**333 J**	**41.1**	**200**	**1,560**	N/A	**84.7**
Zinc	mg/kg	350,000	**1,050**	**191**	**83.7**	**18,000**	**99.2**	**1,050**	**2,020**	N/A	**21.4**
Other											
Cyanide	mg/kg	150	**0.84 J-**	**0.4 J-**	0.75 UJ	**0.64 J-**	0.074 B	**1.3**	**5.2**	N/A	**2.8**

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Table 2 - Sub-Parcel B1-1
Summary of Inorganics Detected in Soil

Parameter	Units	PAL	B1-173-SB-8*	B1-174-SB-1	B1-174-SB-4	B1-178-SB-1*	B1-179-SB-1*	B1-179-SB-9*	B1-180-SB-1*	B1-181-SB-1	B1-181-SB-8	B1-182-SB-1*
Metals												
Aluminum	mg/kg	1,100,000	**37,000**	**39,200**	**11,600**	**12,000**	**16,900**	**19,000**	**39,700**	**19,500**	**43,900**	**18,900**
Antimony	mg/kg	470	4.7 U	2.9 UJ	3.4 UJ	3.1 U	2.9 U	3.1 U	2.9 U	2.9 UJ	4 UJ	2.8 U
Arsenic	mg/kg	3	**2**	**2.7 J**	**39.1 J**	2.6 U	**5.4**	**5.5**	**6.5**	**5.4 J**	**3.8 J**	**4.4**
Barium	mg/kg	220,000	**406**	**482**	**217**	**136**	**178**	**199**	**518**	**198**	**1,070**	**218**
Beryllium	mg/kg	2,300	**2.1**	**7.6**	**1.3**	1 U	**2.2**	**2.4**	**5.5**	**2.3**	**2.6**	**2.1**
Cadmium	mg/kg	980	**0.6 J**	**0.44 J**	**18.3**	**0.9 J**	**1.7**	**1.8**	0.98 B	**1.8**	**0.35 J**	0.76 B
Chromium	mg/kg	120,000	**305**	**20.1 J**	**171 J**	**1,510**	**273**	**655**	**75.9**	**456 J**	**104 J**	**406**
Chromium VI	mg/kg	6.3	0.39 B	0.26 B	0.41 B	0.6 B	0.47 B	0.39 B	0.54 B	0.36 B	0.32 B	0.34 B
Cobalt	mg/kg	350	**14.9**	1.5 B	**32.2 J**	**0.58 J**	**4.9**	**4.7 J**	**7.1**	4.7 B	**4.2 J**	**7.5**
Copper	mg/kg	47,000	**45.5**	**9.3 J**	**510 J**	**52**	**94.8**	**99.8**	**111**	**92.8 J**	**76.6 J**	**45.7**
Iron	mg/kg	820,000	**34,900**	**15,500 J**	**258,000 J**	**179,000**	**94,200**	**124,000**	**42,800**	**87,300 J**	**21,700 J**	**55,000**
Lead	mg/kg	800	**27.8**	**303 J**	**375 J**	**121**	**199**	**451**	**362**	**404 J**	**7.3 J**	**55.1**
Manganese	mg/kg	26,000	**1,620**	**4,660**	**2,110**	**26,400**	**7,680**	**11,100**	**2,380**	**8,430**	**1,430**	**13,800**
Mercury	mg/kg	350	**0.014 J**	0.11 U	**0.44**	**0.024 J**	**0.29**	**0.27**	0.11 U	**0.12**	**0.0086 J**	**0.02 J**
Nickel	mg/kg	22,000	**83**	6.4 B	**136 J**	**12.4**	**32.7**	**42.7**	**34**	**27.1 J**	**17.4 J**	**15.2**
Selenium	mg/kg	5,800	6.2 U	3.9 B	4.6 U	4.1 U	3.9 U	4.1 U	3.9 U	3.9 U	**5.6**	3.7 U
Silver	mg/kg	5,800	4.7 U	2.9 U	**2.6 J**	3.1 U	2.9 U	3.1 U	2.9 U	2.9 U	4 U	2.8 U
Thallium	mg/kg	12	6.2 U	9.7 U	11.4 U	10.3 U	9.7 U	10.3 U	9.8 U	9.7 U	10.8 U	9.2 U
Vanadium	mg/kg	5,800	**18.5**	**47.4 J**	**99.1 J**	**774**	**207**	**403**	**29.1**	**603 J**	**36.5 J**	**799**
Zinc	mg/kg	350,000	**23.6**	**40.8 J**	**587 J**	**376**	**454**	**496**	**59.6**	**1,140 J**	**14.6 J**	**274**
Other												
Cyanide	mg/kg	150	**0.48 J**	0.33 B	**0.98 J-**	**0.42 J**	**0.88**	**0.43 J**	**2.7**	**3.4 J-**	**6.5 J-**	**2.4**

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Table 2 - Sub-Parcel B1-1
Summary of Inorganics Detected in Soil

Parameter	Units	PAL	B1-182-SB-8*	B1-182-SB-10	B1-183-SB-1*	B1-183-SB-8.5*	B4-024-SB-1	B4-024-SB-4.5	B4-025-SB-1	B4-025-SB-5	B4-026-SB-1
Metals											
Aluminum	mg/kg	1,100,000	**19,400**	N/A	**25,100**	**5,430**	**33,400**	**3,590**	**36,600**	**46,200**	**17,600**
Antimony	mg/kg	470	**2.2 J**	N/A	2.8 U	**39.7**	1.9 UJ	3 UJ	3.1 UJ	3.8 UJ	3.3 UJ
Arsenic	mg/kg	3	**72.6**	2.6 U	**8.2**	**16.6**	**4.7**	2.5 U	**2.7**	**7**	**9.6**
Barium	mg/kg	220,000	**323**	N/A	**327**	**592**	**291**	**20.8 J**	**328 J**	**424 J**	**117**
Beryllium	mg/kg	2,300	**1.2**	N/A	**3.7**	**0.41 J**	**5.4**	0.38 B	**6.6**	**2.1**	**1.1**
Cadmium	mg/kg	980	**6.2**	N/A	1.1 B	**4.1**	**2.7**	1.5 U	0.36 B	**2.6**	**8**
Chromium	mg/kg	120,000	**435**	N/A	**261**	**106**	**56.1**	**7.5**	**32.4**	**271**	**745**
Chromium VI	mg/kg	6.3	0.42 B	N/A	0.35 B	0.35 B	0.18 B	1.1 U	1.1 U	1.3 U	0.31 B
Cobalt	mg/kg	350	**53.8**	N/A	**7.6**	**20.6**	**3.3**	**0.32 J**	**0.85 J**	**11.1**	**33.8**
Copper	mg/kg	47,000	**398**	N/A	**144**	**984**	**28.6**	**2.3 J**	**4.2 J**	**64.9**	**61.1**
Iron	mg/kg	820,000	**140,000**	N/A	**59,400**	**101,000**	**18,000**	**2,310**	**9,020**	**25,200**	**154,000**
Lead	mg/kg	800	**768**	N/A	**273**	**8,260**	**160 J**	**3.3**	**11.2**	**478**	**88.2 J**
Manganese	mg/kg	26,000	**12,000**	N/A	**6,810**	**1,000**	**3,400 J**	**205 J+**	**4,070 J+**	**2,460 J+**	**49,400 J**
Mercury	mg/kg	350	**0.13**	N/A	0.11 U	**0.033 J**	**0.0022 J**	**0.0031 J**	0.11 R	**0.079 J**	**0.073 J**
Nickel	mg/kg	22,000	**336**	N/A	**33.3**	**101**	**9.7**	10 U	3.1 B	**63.2**	**62.2**
Selenium	mg/kg	5,800	4.4 U	N/A	3.7 U	4 U	2.5 B	4 U	4.1 U	**5.6**	4.3 U
Silver	mg/kg	5,800	**1.1 J**	N/A	2.8 U	**2.5 J**	1.9 U	3 U	3.1 U	3.8 U	**5.9**
Thallium	mg/kg	12	11.1 U	N/A	9.3 U	10 U	6.4 U	10 U	10.3 U	10.2 U	10.8 U
Vanadium	mg/kg	5,800	**290**	N/A	**378**	**43.1**	**36.7**	**9.4**	**29.3**	**37.3**	**429**
Zinc	mg/kg	350,000	**1,340**	N/A	**275**	**1,140**	**362**	**3.6 J**	**55.5**	**451**	**932**
Other											
Cyanide	mg/kg	150	**0.7**	N/A	**1.8**	**1.3**	**0.52 J**	**0.27 J**	**0.31 J**	**2.4**	**0.28 J**

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Table 2 - Sub-Parcel B1-1
Summary of Inorganics Detected in Soil

Parameter	Units	PAL	B4-026-SB-5	B4-027-SB-1	B4-027-SB-5	B4-035-SB-1	B4-035-SB-5	B4-036-SB-1	B4-036-SB-5	B4-039-SB-1	B4-039-SB-5	B4-040-SB-1
Metals												
Aluminum	mg/kg	1,100,000	**6,220**	**7,780**	**25,500**	**17,900**	**18,100**	**23,900**	**22,200**	**10,100**	**12,200**	**16,000**
Antimony	mg/kg	470	3.2 UJ	2.1 UJ	2.6 UJ	3.3 UJ	3.6 UJ	3.3 UJ	3.6 UJ	2.6 UJ	2.9 UJ	2 UJ
Arsenic	mg/kg	3	2.7 U	**8.2**	**6**	**4.4**	**9.8**	**10.7**	**9.7**	**7.5**	**17.7**	**7.7**
Barium	mg/kg	220,000	**28.5**	**24.3**	**445**	**105 J**	**224 J**	**148 J**	**161 J**	**47.3**	**235**	**225**
Beryllium	mg/kg	2,300	**0.2 J**	0.7 U	**3.3**	0.71 B	0.75 B	**1.3**	1.1 B	**0.49 J**	**0.54 J**	**1.8**
Cadmium	mg/kg	980	**60.8**	0.81 B	**1.8**	**2**	**0.55 J**	1.2 B	**2.3**	0.28 B	**7**	**6.6**
Chromium	mg/kg	120,000	**40.7**	**303**	**151**	**87.7**	**142**	**147**	**180**	**41.1**	**750**	**199**
Chromium VI	mg/kg	6.3	0.18 B	0.81 B	1.1 R	**0.44 J**	**0.84 J**	1.2 U	**1.3**	0.19 B	0.66 B	0.43 B
Cobalt	mg/kg	350	**2.5 J**	**31**	**6.8**	**5.4 J**	**5.5 J**	**7.8**	**6.5**	**5**	**25.9**	**10.8**
Copper	mg/kg	47,000	**7.7**	**29.7**	**59.6**	**24.4**	**26.1**	**41.4**	**42.5**	**16.5**	**125**	**231**
Iron	mg/kg	820,000	**9,570**	**58,400**	**33,900**	**24,100**	**36,800**	**37,300**	**39,500**	**19,100**	**185,000**	**91,000**
Lead	mg/kg	800	**10.4 J**	**12.4 J**	**90.9 J**	**70.5**	**24.7**	**69.5**	**112**	**20.2 J**	**3,120 J**	**653 J**
Manganese	mg/kg	26,000	**439 J**	**40,400 J**	**4,630 J**	**1,910 J**	**4,110 J**	**2,610 J**	**5,050 J**	**282 J**	**17,800 J**	**5,590 J**
Mercury	mg/kg	350	**0.015 J**	**0.011 J**	0.11 U	**0.3**	**0.061 J**	**0.094 J**	**0.2**	**0.13**	**0.052 J**	0.11 U
Nickel	mg/kg	22,000	**17.4**	**30.5**	**29.8**	**26**	**23.1**	**32.7**	**39.4**	**10.8**	**200**	**43.5**
Selenium	mg/kg	5,800	4.3 U	2.8 U	2.9 B	4.4 U	4.8 U	4.5 U	4.8 U	3.4 U	3.9 U	2.7 U
Silver	mg/kg	5,800	3.2 U	**5.4**	2.6 U	3.3 U	3.6 U	3.3 U	3.6 U	2.6 U	**2.5 J**	**1.8 J**
Thallium	mg/kg	12	10.8 U	7 U	8.6 U	11 U	11.9 U	11.1 U	12 U	8.6 U	9.8 U	6.7 U
Vanadium	mg/kg	5,800	**21.3**	**176**	**477**	**63.8**	**92.8**	**71.7**	**116**	**35.2**	**432**	**135**
Zinc	mg/kg	350,000	**29.5**	**129**	**261**	**269**	**80.4**	**1,230**	**337**	**61.4**	**1,900**	**835**
Other												
Cyanide	mg/kg	150	0.69 U	0.64 U	**2.8**	**0.96 J-**	0.69 UJ	**0.29 J-**	**0.73 J-**	**0.12 J**	**0.24 J**	**0.33 J**

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Table 2 - Sub-Parcel B1-1
Summary of Inorganics Detected in Soil

Parameter	Units	PAL	B4-040-SB-5	B4-048-SB-1	B4-048-SB-5	B4-048-SB-10	B4-049-SB-1	B4-049-SB-4.5	B4-054-SB-1*	B4-054-SB-6*	B4-055-SB-1*	B4-055-SB-5*
Metals												
Aluminum	mg/kg	1,100,000	**14,100**	**10,200**	**10,300**	**4,180**	**10,400**	**6,110**	**8,450**	**4,240**	**18,800**	**11,600**
Antimony	mg/kg	470	2.1 UJ	3.2 UJ	3.2 UJ	3.2 UJ	2.1 UJ	2.7 UJ	2.7 U	2.9 U	2.7 U	2.6 U
Arsenic	mg/kg	3	**3.9**	**9.8**	2.6 U	**4.8**	**3.2**	**10.7**	**4.5**	**2.2 J**	**9.1**	**8.3**
Barium	mg/kg	220,000	**51.3**	**299 J**	**122 J**	**39.1 J**	**57.5**	**60.9**	**33.9**	**40.4**	**232**	**199**
Beryllium	mg/kg	2,300	**0.44 J**	0.44 B	0.38 B	1.1 U	**0.45 J**	0.2 B	0.89 U	**0.35 J**	**0.76 J**	**0.59 J**
Cadmium	mg/kg	980	**1.9**	**7.6**	0.76 B	0.86 B	0.75 B	**5.9**	**0.54 J**	**0.49 J**	**3.4**	0.77 B
Chromium	mg/kg	120,000	**1,050**	**209**	**555**	**677**	**334**	**134**	**1,190**	**288**	**335**	**92.6**
Chromium VI	mg/kg	6.3	**1.2 J-**	1.1 UJ	1.1 UJ	**6 J-**	**1.4 J-**	1.1 B	**5**	0.42 B	0.32 B	1.3 U
Cobalt	mg/kg	350	1.9 B	**8.3**	**2.5 J**	**10.4**	**4.7**	**12.3**	4.4 U	**3.7 J**	**12.4**	**14.1**
Copper	mg/kg	47,000	**39.6**	**72.7**	**19.2**	**76.8**	**25.5**	**215**	**31.4**	**60.1**	**211**	**335**
Iron	mg/kg	820,000	**164,000**	**131,000**	**106,000**	**69,500**	**68,900**	**86,000**	**171,000**	**54,000**	**149,000**	**87,700**
Lead	mg/kg	800	**87.6 J**	**544**	**63.1**	**172**	**58.9 J**	**695 J**	**48**	**19**	**758**	**74.9**
Manganese	mg/kg	26,000	**24,400 J**	**5,260 J**	**11,000 J**	**9,030 J**	**6,970 J**	**1,560 J**	**26,200**	**5,360**	**11,500**	**2,340**
Mercury	mg/kg	350	**0.019 J**	**0.16**	**0.022 J**	**0.065 J**	**0.33**	**0.26**	**0.027 J**	**0.048 J**	**2.6**	**0.02 J**
Nickel	mg/kg	22,000	**18.1**	**38.1**	**14.8**	**39**	**14**	**65.5**	**21.6**	**15.8**	**78.2**	**21.8**
Selenium	mg/kg	5,800	2.8 U	4.2 U	4.2 U	4.2 U	2.8 U	3.6 U	3.5 U	3.8 U	3.6 U	3.4 U
Silver	mg/kg	5,800	1.8 B	**2.1 J**	3.2 U	3.2 U	2.1 U	**1.7 J**	**2.8**	2.9 U	**2.2 J**	**0.86 J**
Thallium	mg/kg	12	7.1 U	10.6 U	10.6 U	10.5 U	7.1 U	9 U	8.9 U	9.5 U	9.1 U	8.6 U
Vanadium	mg/kg	5,800	**816**	**180**	**691**	**2,680**	**173**	**100**	**604**	**192**	**339**	**23.7**
Zinc	mg/kg	350,000	**302**	**1,100**	**136**	**233**	**164**	**1,750**	**63.2**	**39.2**	**1,020**	**163**
Other												
Cyanide	mg/kg	150	**0.15 J**	**0.49 J-**	**0.21 J-**	0.52 UJ	**0.24 J**	**1.3**	**0.17 J**	**0.14 J**	**2.6**	**2.8**

Detections in bold
Values in red indicate an exceedance of the Project Action Limit (PAL)
* Indicates non-validated data
N/A indicates that the parameter was not analyzed for this sample

U: This analyte was not detected in the sample. The numeric value represents the sample quantitation/detection limit.
UJ: This analyte was not detected in the sample. The actual quantitation/detection limit may be higher than reported.
J: The positive result reported for this analyte is a quantitative estimate.
J+: The positive result reported for this analyte is a quantitative estimate but may be biased high.
J-: The positive result reported for this analyte is a quantitative estimate but may be biased low.
B: The analyte was not detected substantially above the level of the associated method blank/preparation or field blank.
R: The result for this analyte is unreliable. Additional data is needed to confirm or disprove the presence of this analyte in the sample.

Table 2 - Sub-Parcel B1-1
Summary of Inorganics Detected in Soil

Parameter	Units	PAL	B4-056-SB-1.5*	B4-056-SB-7.5*	B5-098-SB-1	B5-098-SB-4	B5-099-SB-1	B5-099-SB-4.5	B5-161-SB-1	B5-161-SB-4	B5-161-SB-10*
Metals											
Aluminum	mg/kg	1,100,000	**21,100**	**30,400**	**12,600**	**12,600**	**16,900**	**11,000**	**7,900**	**8,610**	N/A
Antimony	mg/kg	470	2.6 U	2.6 U	3.3 UJ	2.7 UJ	2.9 UJ	2.8 UJ	3.3 UJ	2.7 UJ	N/A
Arsenic	mg/kg	3	**5.8**	**10.7**	**14 J**	**12.3 J**	**11.7 J**	**15 J**	**13.8 J**	**14.5 J**	**4.2**
Barium	mg/kg	220,000	**166**	**350**	**230 J**	**245 J**	**313 J**	**128 J**	**80.8 J**	**53.3 J**	N/A
Beryllium	mg/kg	2,300	**1.5**	**1.9**	**1.3**	**0.66 J**	**1.6**	**0.59 J**	**0.69 J**	**0.39 J**	N/A
Cadmium	mg/kg	980	0.68 B	**3.5**	**13.9**	**4.2**	**7.4**	**3.5**	1.6 B	1.9 B	N/A
Chromium	mg/kg	120,000	**84.3**	**543**	**255**	**478**	**226**	**317**	**146**	**122**	N/A
Chromium VI	mg/kg	6.3	0.32 B	0.3 B	1.1 UJ	**0.43 J-**	**0.26 J-**	**0.24 J-**	**0.22 J-**	1.1 UJ	N/A
Cobalt	mg/kg	350	**8**	**19.8**	**19.4 J**	**20.4 J**	**13.2 J**	**16.2 J**	**13.1 J**	**16.8 J**	N/A
Copper	mg/kg	47,000	**33**	**438**	**241 J**	**202 J**	**154 J**	**187 J**	**167 J**	**130 J**	N/A
Iron	mg/kg	820,000	**32,900**	**71,300**	**141,000**	**100,000**	**98,000**	**71,100**	**134,000**	**105,000**	N/A
Lead	mg/kg	800	**76.3**	**420**	**682**	**569**	**490**	**873**	**91.3**	**247 J**	N/A
Manganese	mg/kg	26,000	**1,450**	**6,030**	**7,080**	**16,100**	**7,230**	**7,830**	**4,460**	**2,010**	N/A
Mercury	mg/kg	350	**0.069 J**	**0.069 J**	**0.044 J-**	**0.052 J-**	**0.059 J-**	**0.15 J-**	**0.013 J-**	**0.042 J-**	N/A
Nickel	mg/kg	22,000	**31.3**	**103**	**44.6 J**	**53.9 J**	**47 J**	**61.6 J**	**51.4 J**	**45.7 J**	N/A
Selenium	mg/kg	5,800	3.4 U	**3.3 J**	4.5 U	3.6 U	3.8 U	3.7 U	4.4 U	3.6 U	N/A
Silver	mg/kg	5,800	2.6 U	**1 J**	2.2 B	2.7 U	0.7 B	2.8 U	1.4 B	1.2 B	N/A
Thallium	mg/kg	12	8.6 U	8.7 U	11.1 U	9.1 U	9.5 U	9.4 U	11 U	8.9 U	N/A
Vanadium	mg/kg	5,800	**45.9**	**158**	**396**	**2,530**	**439**	**1,970**	**192**	**285**	N/A
Zinc	mg/kg	350,000	**127**	**704**	**3,080**	**1,330**	**1,330**	**1,170**	**222**	**365**	N/A
Other											
Cyanide	mg/kg	150	**1.4**	**5.6**	**0.3 J-**	**0.46 J-**	**0.12 J-**	**0.51 J-**	**0.1 J-**	**0.2 J-**	N/A

Detections in bold
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* Indicates non-validated data
N/A indicates that the parameter was not analyzed for this sample

U: This analyte was not detected in the sample. The numeric value represents the sample quantitation/detection limit.
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B: The analyte was not detected substantially above the level of the associated method blank/preparation or field blank.
R: The result for this analyte is unreliable. Additional data is needed to confirm or disprove the presence of this analyte in the sample.

Table 3 - Sub-Parcel B1-1
Summary of Organics Detected in Groundwater

Parameter	Units	PAL	B17-014-PZ*	B17-019-PZ	SW-022-MWS	SW-023-MWS	SW-024-MWS	SW-025-MWS	SW-027-MWS	SW-059-MWS	SW-060-MWS
Volatile Organic Compounds											
1,1,1-Trichloroethane	µg/L	200	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	µg/L	2.7	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene	µg/L	7	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Acetone	µg/L	14,000	**4.8 J**	8 B	10 U	10 R	10 R	10 R	10 R	10 R	10 U
Chloroform	µg/L	0.22	1 U	1 U	1 U	**2.5**	1 U	1 U	1 U	1 U	1 U
Isopropylbenzene	µg/L	450	1 U	1 U	1 U	1 U	1 U	**0.29 J**	1 U	1 U	1 U
Toluene	µg/L	1,000	1 U	1 U	1 U	1 U	**0.34 J**	1 U	1 U	1 U	1 U
Semi-Volatile Organic Compounds^											
1,4-Dioxane	µg/L	0.46	0.1 U	**0.032 J**	**0.14**	**0.037 J**	0.1 U	0.1 U	0.1 U	**0.19**	**0.12**
2-Methylnaphthalene	µg/L	36	0.1 U	0.098 U	**0.023 J**	0.1 U	**0.084 J**	0.1 U	0.1 U	0.1 U	0.1 U
Acenaphthylene	µg/L	530	0.1 U	0.098 U	0.1 U	0.1 U	**0.041 J**	0.1 U	0.1 U	0.1 U	0.1 U
Acetophenone	µg/L	1,900	1 U	0.98 U	1 U	1 U	**0.36 J**	1 U	1 U	1 U	1 U
Anthracene	µg/L	1,800	0.1 U	0.098 U	**0.063 J**	**0.081 J**	**0.028 J**	**0.02 J**	**0.041 J**	**0.049 J**	**0.053 J**
Benz[a]anthracene	µg/L	0.03	0.1 U	0.098 U	0.1 U	**0.015 J**	0.1 U	**0.046 J**	**0.015 J**	0.1 U	0.1 U
Benzo[a]pyrene	µg/L	0.2	0.1 U	0.098 U	0.1 U	0.1 U	0.1 U	**0.046 J**	0.1 U	0.1 U	0.1 U
Benzo[b]fluoranthene	µg/L	0.25	0.1 U	0.098 U	0.1 U	0.031 B	0.1 U	**0.17**	0.022 B	0.1 U	0.1 U
Benzo[k]fluoranthene	µg/L	2.5	0.1 U	0.098 U	0.1 U	0.022 B	0.1 U	**0.12**	0.1 U	0.1 U	0.1 U
bis(2-Ethylhexyl)phthalate	µg/L	6	1 U	0.98 U	1 U	1 U	1 U	1 U	1 U	1 U	0.26 B
Caprolactam	µg/L	9,900	2.6 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Diethylphthalate	µg/L	15,000	1 U	0.98 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Fluoranthene	µg/L	800	0.1 U	**0.07 J**	**0.031 J**	0.1 U	**0.039 J**	**0.032 J**	0.1 U	0.1 U	0.1 U
Fluorene	µg/L	290	0.1 U	0.098 U	0.1 U	0.1 U	**0.018 J**	0.1 U	0.1 U	0.1 U	0.1 U
Naphthalene	µg/L	0.17	0.1 U	0.098 U	0.095 B	0.032 B	**0.5**	0.025 B	0.024 B	0.1 U	0.053 B
Pentachlorophenol	µg/L	1	2.6 U	2.5 UJ	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	**0.95 J**
Phenanthrene	µg/L		0.1 U	0.098 U	**0.048 J**	0.1 U	0.1 U	**0.034 J**	0.1 U	0.1 U	0.1 U
Pyrene	µg/L	120	0.1 U	**0.065 J**	**0.023 J**	0.1 U	**0.063 J**	**0.025 J**	0.1 U	0.1 U	0.1 U
TPH/Oil and Grease											
Diesel Range Organics	µg/L	47	84.4 B	**238 J**	**181 J**	**52.6 J**	**130 J**	102 UJ	**67.5 J**	**152 J**	**239 J**

Detections in bold
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* Indicates non-validated data
^ PAH compounds were analyzed via SIM

U: This analyte was not detected in the sample. The numeric value represents the sample quantitation/detection limit.
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R: The result for this analyte is unreliable. Additional data is needed to confirm or disprove the presence of this analyte in the sample.

Table 3 - Sub-Parcel B1-1
Summary of Organics Detected in Groundwater

Parameter	Units	PAL	SW-061-MWS	SW-062-MWS	SW-063-MWS	SW-067-MWS	SW-068-MWS	SW07-PZM004	SW11-PZM005	SW12-PZP001
Volatile Organic Compounds										
1,1,1-Trichloroethane	µg/L	200	**4.1**	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	µg/L	2.7	**1.7**	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene	µg/L	7	**0.39 J**	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Acetone	µg/L	14,000	10 R	10 R	10 U	10 U	10 U	10 UJ	10 U	10 U
Chloroform	µg/L	0.22	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Isopropylbenzene	µg/L	450	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Toluene	µg/L	1,000	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Semi-Volatile Organic Compounds^										
1,4-Dioxane	µg/L	0.46	**0.49**	0.1 U	**0.19**	0.1 U	**0.07 J**	0.1 U	0.1 U	0.1 U
2-Methylnaphthalene	µg/L	36	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Acenaphthylene	µg/L	530	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Acetophenone	µg/L	1,900	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Anthracene	µg/L	1,800	**0.046 J**	**0.023 J**	**0.2**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benz[a]anthracene	µg/L	0.03	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo[a]pyrene	µg/L	0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo[b]fluoranthene	µg/L	0.25	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo[k]fluoranthene	µg/L	2.5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
bis(2-Ethylhexyl)phthalate	µg/L	6	1 U	1 U	**0.26 J**	0.25 B	1 U	1 U	1 U	1 UJ
Caprolactam	µg/L	9,900	2.5 U	2.5 U	2.5 U	**0.51 J**	2.5 U	2.5 UJ	2.5 U	2.5 U
Diethylphthalate	µg/L	15,000	1 U	1 U	1 U	**2.1**	1 U	1 U	1 U	1 U
Fluoranthene	µg/L	800	**0.011 J**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Fluorene	µg/L	290	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Naphthalene	µg/L	0.17	0.03 B	0.022 B	0.1 U	0.043 B	0.1 U	0.045 B	0.018 B	0.1 U
Pentachlorophenol	µg/L	1	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Phenanthrene	µg/L		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Pyrene	µg/L	120	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
TPH/Oil and Grease										
Diesel Range Organics	µg/L	47	**114 J**	104 UJ	**664 J**	**103 J**	**122 J**	101 UJ	101 UJ	**63 J**

Detections in bold
Values in red indicate an exceedance of the Project Action Limit (PAL)
* Indicates non-validated data
^ PAH compounds were analyzed via SIM

U: This analyte was not detected in the sample. The numeric value represents the sample quantitation/detection limit.
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Table 4 - Sub-Parcel B1-1
Summary of Inorganics Detected in Groundwater

Parameter	Units	PAL	B17-014-PZ*	B17-019-PZ	SW-022-MWS	SW-023-MWS	SW-024-MWS	SW-025-MWS	SW-027-MWS	SW-059-MWS	SW-060-MWS
Total Metals											
Aluminum	µg/L	20,000	N/A	N/A	**325**	**806**	**182**	**125**	**32.8 J**	**223**	**455**
Antimony	µg/L	6	N/A	N/A	6 U	6 U	6 U	6 U	**3.8 J**	6 U	6 U
Arsenic	µg/L	10	N/A	N/A	5 U	5 U	4 B	5 U	**4.2 J**	5 U	5 U
Barium	µg/L	2,000	N/A	N/A	**65.3**	**23.4**	**39**	**69.4**	**32.4**	**21.4**	**70.2**
Beryllium	µg/L	4	N/A	N/A	1 U	1 U	1 U	1 U	1 U	**1**	1 U
Cadmium	µg/L	5	N/A	N/A	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Chromium	µg/L	100	N/A	N/A	1.5 B	**18.9**	3.8 B	1.1 B	**9.9**	**22.8**	4.2 B
Chromium VI	µg/L	0.035	N/A	N/A	10 U	**9 J**	10 U	10 U	10 U	**11**	10 U
Cobalt	µg/L	6	N/A	N/A	5 U	5 U	5 U	5 U	5 U	**61.5**	5 U
Iron	µg/L	14,000	N/A	N/A	**53.4 J**	45.3 B	**727**	**765**	**26.6 J**	**498**	14.2 B
Lead	µg/L	15	N/A	N/A	5 U	5 U	5 U	**14**	5 U	5 U	5 U
Manganese	µg/L	430	N/A	N/A	**15**	**4.2 J**	**264**	**1,360**	1.8 B	**1,020**	**2.6 J**
Nickel	µg/L	390	N/A	N/A	0.78 B	1.4 B	10 U	0.8 B	10 U	**52.6**	10 U
Selenium	µg/L	50	N/A	N/A	8 U	**11.1**	3.6 B	8 U	8 U	3.5 B	3.3 B
Thallium	µg/L	2	N/A	N/A	4.2 B	4.7 B	10 U	10 U	10 U	10 U	10 U
Vanadium	µg/L	86	N/A	N/A	4.2 B	**12.9**	**8.5**	5 U	**31.8**	**41.6**	**7.2**
Zinc	µg/L	6,000	N/A	N/A	0.64 B	**0.8 J**	1.4 B	**19.2**	7.1 B	**64.4**	**6.7 J**
Dissolved Metals											
Aluminum, Dissolved	µg/L	20,000	**21.1 J**	**34.6 J**	**267**	**804**	**149**	**21.5 J**	50 U	**134**	**412**
Arsenic, Dissolved	µg/L	10	**6.8**	5 U	5 U	5 U	4 B	5 U	5 U	5 U	5 U
Barium, Dissolved	µg/L	2,000	**58.9**	**111**	**58.3**	**22.7**	**34.5**	**69.3**	**34.2**	**17.6**	**62.4**
Beryllium, Dissolved	µg/L	4	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**0.84 J**	1 U
Cadmium, Dissolved	µg/L	5	3 U	3 U	3 U	3 U	3 U	3 U	**0.51 J**	0.5 B	3 U
Chromium, Dissolved	µg/L	100	5 U	5 U	1.6 B	**19.7**	1.6 B	5 U	**10.2**	**22.2**	4.8 B
Cobalt, Dissolved	µg/L	6	5 U	5 U	5 U	5 U	5 U	5 U	5 U	**49.6**	5 U
Copper, Dissolved	µg/L	1,300	5 U	5 U	5 U	3.1 B	5 U	5 U	3.1 B	2 B	5 U
Iron, Dissolved	µg/L	14,000	**311**	**516**	29.4 B	**34.4 J**	**249**	**263**	12.2 B	**310**	70 U
Manganese, Dissolved	µg/L	430	**389**	**514**	1.8 B	**3.7 J**	**245**	**1,320**	**2.2 J**	**827**	2.4 B
Nickel, Dissolved	µg/L	390	10 U	10 U	10 U	0.94 B	0.8 B	0.7 B	1.6 B	**45.2**	10 U
Selenium, Dissolved	µg/L	50	8 U	8 U	8 U	**12.4**	8 U	8 U	4.5 B	8 U	8 U
Vanadium, Dissolved	µg/L	86	**0.64 J**	5 U	3.6 B	**12.3**	**7.7**	5 U	**32.8**	**39.2**	**6.2**
Zinc, Dissolved	µg/L	6,000	**1.6 J**	1.1 B	10 U	10 U	1.2 B	**1.5 J**	**7.4 J**	**52**	10 U
Other											
Available Cyanide	µg/L	200	**2.4**	**1.6 J**	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Cyanide	µg/L	200	**3.5 J**	**6.6 J+**	10 U	10 U	**296**	10 U	10 U	10 U	10 U

Detections in bold
Values in red indicate an exceedance of the Project Action Limit (PAL)
* Indicates non-validated data
N/A indicates that the parameter was not analyzed for this sample

U: This analyte was not detected in the sample. The numeric value represents the sample quantitation/detection limit.
UJ: This analyte was not detected in the sample. The actual quantitation/detection limit may be higher than reported.
J: The positive result reported for this analyte is a quantitative estimate.
J+: The positive result reported for this analyte is a quantitative estimate but may be biased high.
B: This analyte was not detected substantially above the level of the associated method blank/preparation or field blank.

Table 4 - Sub-Parcel B1-1
Summary of Inorganics Detected in Groundwater

Parameter	Units	PAL	SW-061-MWS	SW-062-MWS	SW-063-MWS	SW-067-MWS	SW-068-MWS	SW07-PZM004	SW11-PZM005	SW12-PZP001
Total Metals										
Aluminum	µg/L	20,000	**338**	**40.4 J**	**380**	**719**	35.7 B	49.2 B	**71.4**	**2,290**
Antimony	µg/L	6	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U
Arsenic	µg/L	10	5 U	5 U	4.4 B	5 U	5 U	5 U	5 U	5 U
Barium	µg/L	2,000	**49.9**	**58.4**	**65.3**	**23.6**	**84.6**	**31.5**	**50.1**	**55.7**
Beryllium	µg/L	4	1 U	1 U	1 U	**1.8**	1 U	1 U	1 U	1 U
Cadmium	µg/L	5	3 U	3 U	3 U	3 U	3 U	**0.5 J**	0.77 B	**0.62 J**
Chromium	µg/L	100	4 B	2.3 B	**1 J**	5 U	**1.4 J**	5 U	3.6 B	3 B
Chromium VI	µg/L	0.035	**5 J**	10 U	10 UJ	10 U	10 U	10 U	**5 J**	10 U
Cobalt	µg/L	6	5 U	5 U	**20.6**	**16.7**	5 U	1.3 B	**1 J**	**6.2**
Iron	µg/L	14,000	53.2 B	28.2 B	**13,000**	**12,400**	**666**	**3,150**	40.9 B	**1,470**
Lead	µg/L	15	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Manganese	µg/L	430	**128**	**68**	**1,540**	**645**	**925**	**619 J**	**83.6**	**1,030**
Nickel	µg/L	390	10 U	10 U	9.7 B	**19.1**	1.3 B	10 U	0.61 B	6 B
Selenium	µg/L	50	4.3 B	8 U	8 U	8 U	8 U	8 U	8 U	**6.1 J**
Thallium	µg/L	2	10 U	10 U	10 U	10 U	4 B	10 U	**4.4 J**	**3.8 J**
Vanadium	µg/L	86	3.5 B	1.8 B	5 U	5 U	5 U	0.65 B	**12.4**	4.3 B
Zinc	µg/L	6,000	0.65 B	**0.74 J**	5.7 B	**68.2**	1.8 B	2.2 B	**13.5**	**50.1**
Dissolved Metals										
Aluminum, Dissolved	µg/L	20,000	**192**	26.6 B	**62.7**	**652**	50 U	50 U	**21.3 J**	50 U
Arsenic, Dissolved	µg/L	10	5 U	5 U	5 U	3.5 B	5 U	5 U	5 U	5 U
Barium, Dissolved	µg/L	2,000	**47.3**	**53.9**	**62.5**	**21.5**	**84.9**	**28.4**	**48.8**	**47.9**
Beryllium, Dissolved	µg/L	4	1 U	1 U	1 U	**1.7**	1 U	1 U	1 U	1 U
Cadmium, Dissolved	µg/L	5	**0.65 J**	0.56 B	3 U	3 U	3 U	3 U	**0.68 J**	**0.65 J**
Chromium, Dissolved	µg/L	100	3.3 B	2.7 B	**0.86 J**	5 U	**0.88 J**	0.9 B	3.2 B	0.97 B
Cobalt, Dissolved	µg/L	6	5 U	5 U	**20.1**	**15.8**	5 U	1.5 B	0.96 B	**6.1**
Copper, Dissolved	µg/L	1,300	5 U	5 U	5 U	1.8 B	5 U	5 U	**4.2 J**	5 U
Iron, Dissolved	µg/L	14,000	70 U	14.3 B	**11,700**	**11,400**	**630**	**1,150**	68.6 B	**592**
Manganese, Dissolved	µg/L	430	**123**	**66**	**1,510**	**625**	**934**	**600 J**	**73.6**	**1,040**
Nickel, Dissolved	µg/L	390	10 U	10 U	9.7 B	**19**	1.4 B	10 U	1 B	5.7 B
Selenium, Dissolved	µg/L	50	8 U	8 U	8 U	8 U	8 U	8 U	**3.8 J**	8 U
Vanadium, Dissolved	µg/L	86	3.2 B	**1.4 J**	5 U	5 U	5 U	5 U	**12.4**	**1 J**
Zinc, Dissolved	µg/L	6,000	10 U	10 U	5.2 B	**68.5**	10 U	10 U	**14.8**	**39**
Other										
Available Cyanide	µg/L	200	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Cyanide	µg/L	200	10 U	10 U	10 U	10 U	10 U	10 U	10 U	**59**

Detections in bold
Values in red indicate an exceedance of the Project Action Limit (PAL)
* Indicates non-validated data
N/A indicates that the parameter was not analyzed for this sample

U: This analyte was not detected in the sample. The numeric value represents the sample quantitation/detection limit.
UJ: This analyte was not detected in the sample. The actual quantitation/detection limit may be higher than reported.
J: The positive result reported for this analyte is a quantitative estimate.
J+: The positive result reported for this analyte is a quantitative estimate but may be biased high.
B: This analyte was not detected substantially above the level of the associated method blank/preparation or field blank.

Table 5
B5-161-SB Test Pitting Confirmation Soil Sample Results
Parcel B5
Tradepoint Atlantic
Sparrows Point, Maryland

Parameter	Units	PAL	B5-161-SB-1	B5-161-SB-4	B5-161-SB-10	B5-161 TPN-W	B5-161 TPN-E	B5-161 TPE-N	B5-161 TPE-S	B5-161 TPS-E	B5-161 TPS-W	B5-161 TPW-S	B5-161 TPW-N
Volatile Organic Compounds													
Acetone	mg/kg	670,000	**0.069**	0.71 U	N/A	0.011 U	0.012 U	**0.035**	**0.02**	**0.011**	0.01 U	0.0095 U	0.012 U
Benzene	mg/kg	5.1	**0.004 J**	**0.26 J**	N/A	0.0055 U	0.0059 U	0.0067 U	0.0062 U	0.0049 U	0.0051 U	0.0047 U	0.006 U
Ethylbenzene	mg/kg	25	0.0049 U	0.35 U	N/A	0.0055 U	**0.0077**	0.0067 U	0.0062 U	0.0049 U	0.0051 U	0.0047 U	0.006 U
Styrene	mg/kg	35,000	0.0049 U	**0.19 J**	N/A	0.0055 U	**0.0035 J**	0.0067 U	0.0062 U	0.0049 U	0.0051 U	0.0047 U	0.006 U
Toluene	mg/kg	47,000	**0.0021 J**	**0.28 J**	N/A	0.0055 U	**0.0078**	0.0067 U	0.0062 U	0.0049 U	0.0051 U	0.0047 U	0.006 U
Xylenes	mg/kg	2,800	0.015 U	**0.26 J**	N/A	0.017 U	**0.047**	0.02 U	0.019 U	0.015 U	0.015 U	0.014 U	0.018 U
Semi-Volatile Organic Compounds^													
1,1-Biphenyl	mg/kg	200	7.1 U	**26.8**	N/A	0.83 U	0.72 U	0.091 U	**0.021 J**	73.6 U	0.77 U	7.6 U	7.7 U
2,4-Dimethylphenol	mg/kg	16,000	7.1 U	**2.4 J**	N/A	0.83 U	0.72 U	0.091 U	0.091 U	73.6 U	0.77 U	7.6 U	7.7 U
2-Methylnaphthalene	mg/kg	3,000	**0.35**	**25.4**	**0.051**	**0.91**	**0.5**	**0.016**	**0.039**	**0.95**	**0.25 J**	**1.6 J**	**16.8**
3&4-Methylphenol(m&p Cresol)	mg/kg	41,000	14.2 U	**2.2 J**	N/A	1.7 U	1.4 U	0.18 U	0.18 U	147 U	1.5 U	15.2 U	15.4 U
Acenaphthene	mg/kg	45,000	**0.2**	**28.9**	**0.044**	**0.23**	**0.52**	**0.0024 J**	**0.0086 J**	**9.4**	**0.13 J**	**3.8 J**	**23.6**
Acenaphthylene	mg/kg	45,000	**1.2**	**29.5**	**0.039**	**0.25**	**0.68**	**0.057**	**0.13**	**2.2**	**0.68 J**	**7.6**	**46**
Anthracene	mg/kg	230,000	**26**	**192**	**0.28**	**3.5**	**3**	**0.035**	**0.13**	**90.1**	**2.2**	**49.5**	**231**
Benz[a]anthracene	mg/kg	21	**279**	**563**	**0.34**	**29**	**29.4**	**0.27**	**1.1**	**884**	**21.4**	**34.2**	**63.6**
Benzo[a]pyrene	mg/kg	2.1	**158**	**215**	**0.35**	**23.8**	**28.1**	**0.25**	**0.92**	**745**	**33**	**104**	**362**
Benzo[b]fluoranthene	mg/kg	21	**521**	**307**	**0.54**	**66.1**	**73.1**	**0.36**	**1.3**	**1,790**	**81.7**	**211**	**734**
Benzo[g,h,i]perylene	mg/kg		**53.2**	**105**	**0.073**	**8.2**	**13**	**0.19**	**0.59**	**285**	**14.7**	**35**	**114**
Benzo[k]fluoranthene	mg/kg	210	**270**	**136**	**0.28**	**57.5**	**63.5**	**0.15**	**0.55**	**596**	**71.1**	**184**	**638**
Carbazole	mg/kg		**8.6**	**233**	N/A	**0.88**	**1.2**	0.091 U	**0.038 J**	73.6 U	**0.23 J**	**2.7 J**	**5.5 J**
Chrysene	mg/kg	2,100	**292**	**248**	**0.33**	**25.7**	**28.1**	**0.27**	**0.91**	**690**	**21.5**	**92.4**	**335**
Dibenz[a,h]anthracene	mg/kg	2.1	**25.2**	**44.6**	**0.035**	**3.6**	**7.8**	**0.068**	**0.24**	**75**	**5.5**	**12.8**	**45.8**
Fluoranthene	mg/kg	30,000	**508**	**745**	**1**	**36**	**35.5**	**0.41**	**1.5**	**1,330**	**18.4**	**184**	**809**
Fluorene	mg/kg	30,000	**1.2**	**194**	**0.27**	**0.16**	**0.2**	**0.0062 J**	**0.016**	**9.8**	**0.15 J**	**12.6**	**135**
Indeno[1,2,3-c,d]pyrene	mg/kg	21	**75.3**	**122**	**0.077**	**9**	**13.4**	**0.17**	**0.57**	**321**	**15.1**	**33.4**	**123**
Naphthalene	mg/kg	17	**1.5**	**54.4**	**0.14**	**0.81**	**2.9**	**0.035**	**0.12**	**2.5**	**0.53 J**	**5.5 J**	**35.8**
Phenanthrene	mg/kg		**240**	**809**	**1**	**12.5**	**13.6**	**0.15**	**0.42**	**597**	**4**	**95**	**770**
Pyrene	mg/kg	23,000	**407**	**518**	**0.71**	**33**	**31.6**	**0.33**	**1.2**	**1,070**	**16.7**	**142**	**553**

Detections in bold
Values in red indicate an exceedance of the Project Action Limit (PAL)
^PAH compounds were analyzed via SIM
N/A indicates that the parameter was not analyzed for this sample
U: This analyte was not detected in the sample. The numeric value respresents the sample quantitation/detection limit.
J: The positive result for this analyte is a quantitative estimate.
B: The analyte was not detected substantially above the level of the associated method blank or field blank.

Table 5
B5-161-SB Test Pitting Confirmation Soil Sample Results
Parcel B5
Tradepoint Atlantic
Sparrows Point, Maryland

Parameter	Units	PAL	B5-161-SB-1	B5-161-SB-4	B5-161-SB-10	B5-161 TPN-W	B5-161 TPN-E	B5-161 TPE-N	B5-161 TPE-S	B5-161 TPS-E	B5-161 TPS-W	B5-161 TPW-S	B5-161 TPW-N
TPH/Oil and Grease													
Diesel Range Organics	mg/kg	6,200	**3,370**	**17,900**	N/A	**231**	**345**	**41.1**	**47.4**	**2,500**	**91.9**	**1,040**	**1,210**
Oil and Grease	mg/kg	6,200	N/A	N/A	N/A	**1,730**	**1,700**	**1,910**	**1,870**	**5,390**	**534**	**2,440**	**2,210**
Metals													
Aluminum	mg/kg	1,100,000	**7,900**	**8,610**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Arsenic	mg/kg	3	**13.8**	**14.5**	**4.2**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Barium	mg/kg	220,000	**80.8**	**53.3**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Beryllium	mg/kg	2,300	**0.69 J**	**0.39 J**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Chromium	mg/kg	120,000	**146**	**122**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Chromium VI	mg/kg	6.3	**0.22 J**	1.1 U	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cobalt	mg/kg	350	**13.1**	**16.8**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Copper	mg/kg	47,000	**167**	**130**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Iron	mg/kg	820,000	**134,000**	**105,000**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Lead	mg/kg	800	**91.3**	**247**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Manganese	mg/kg	26,000	**4,460**	**2,010**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mercury	mg/kg	350	**0.013 J**	**0.042 J**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Nickel	mg/kg	22,000	**51.4**	**45.7**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Silver	mg/kg	5,800	**1.4 J**	**1.2 J**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Vanadium	mg/kg	5,800	**192**	**285**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zinc	mg/kg	350,000	**222**	**365**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Other													
Cyanide	mg/kg	150	**0.1 J**	**0.2 J**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Detections in bold

Values in red indicate an exceedance of the Project Action Limit (PAL)

^PAH compounds were analyzed via SIM

N/A indicates that the parameter was not analyzed for this sample

U: This analyte was not detected in the sample. The numeric value respresents the sample quantitation/detection limit.

J: The positive result for this analyte is a quantitative estimate.

B: The analyte was not detected substantially above the level of the associated method blank or field blank.

Table 6
B5-161-PZ Supplemental Groundwater Sample Results
Parcel B5
Tradepoint Atlantic
Sparrows Point, Maryland

Parameter	Units	PAL	B5-161-PZ
Semi-Volatile Organic Compounds^			
Anthracene	µg/L	1,800	**0.15**
Benz[a]anthracene	µg/L	0.03	**0.65**
Benzo[a]pyrene	µg/L	0.2	**0.53**
Benzo[b]fluoranthene	µg/L	0.25	**0.98**
Benzo[g,h,i]perylene	µg/L		**0.47**
Benzo[k]fluoranthene	µg/L	2.5	**0.42**
Chrysene	µg/L	25	**0.61**
Dibenz[a,h]anthracene	µg/L	0.025	**0.17**
Fluoranthene	µg/L	800	**0.91**
Indeno[1,2,3-c,d]pyrene	µg/L	0.25	**0.44**
Naphthalene	µg/L	0.17	**0.24**
Phenanthrene	µg/L		**0.28**
Pyrene	µg/L	120	**0.88**
TPH			
Diesel Range Organics	µg/L	47	**97.8 J**
Metals			
Aluminum	µg/L	20,000	**150**
Arsenic	µg/L	10	**5.1**
Barium	µg/L	2,000	**44.3**
Chromium	µg/L	100	**0.43 J**
Iron	µg/L	14,000	**2,290**
Manganese	µg/L	430	**923**
Zinc	µg/L	6,000	**5.8 J**

Detections in bold
Values in red indicate an exceedance of the Project Action Limit (PAL)
^PAH compounds were analyzed via SIM
J: The positive result reported for this analyte is a quantitative estimate

Table 7 - Sub-Parcel B1-1
COPC Screening Analysis

Parameter	CAS#	Location of Max Result	Max Detection (mg/kg)	Final Flag	Min Detection (mg/kg)	Average Detection (mg/kg)	Total Samples	Frequency of Detection (%)	Cancer TR=1E-06 (mg/kg)	Non-Cancer HQ=0.1 (mg/kg)	COPC?
1,1,1-Trichloroethane	71-55-6	B1-159-SB-5	0.13		0.0023	0.05	255	1.96		3,600	no
1,1-Biphenyl	92-52-4	B5-161-SB-4	26.8		0.015	0.43	255	38.04	410	20	YES (NC)
1,2-Dichloroethane	107-06-2	B1-181-SB-1	0.0013	J	0.001	0.001	255	0.78	2	14	no
1,4-Dichlorobenzene	106-46-7	B4-025-SB-1	0.0039	J	0.0032	0.004	254	0.79	11	2,500	no
2,3,4,6-Tetrachlorophenol	58-90-2	B1-038-SB-5	0.42	J	0.42	0.42	233	0.43		2,500	no
2,4-Dimethylphenol	105-67-9	B5-098-SB-4	2.6	J	0.015	0.24	235	10.21		1,600	no
2-Butanone (MEK)	78-93-3	B1-005-SB-8	0.029		0.0029	0.009	255	8.63		19,000	no
2-Chloronaphthalene	91-58-7	B1-041-SB-1	0.18		0.017	0.07	255	3.92		6,000	no
2-Hexanone	591-78-6	B1-172-SB-4	0.0095	J	0.0029	0.007	255	1.18		130	no
2-Methylnaphthalene	91-57-6	B5-161-SB-4	25.4		0.0011	0.42	260	93.08		300	no
2-Methylphenol	95-48-7	B1-041-SB-1	0.12		0.015	0.03	234	6.84		4,100	no
2-Nitroaniline	88-74-4	B1-009-SB-1	0.022	J	0.022	0.02	255	0.39		800	no
3,3'-Dichlorobenzidine	91-94-1	B1-160-SB-1	0.071	J	0.071	0.07	255	0.39	5.1		no
4-Methyl-2-pentanone (MIBK)	108-10-1	B1-172-SB-4	0.012		0.0034	0.008	255	0.78		14,000	no
4-Nitroaniline	100-01-6	B1-086-SB-1	0.04	J	0.04	0.04	255	0.39	110	330	no
Acenaphthene	83-32-9	B5-161-SB-4	28.9		0.00066	0.44	260	78.08		4,500	no
Acenaphthylene	208-96-8	B5-161 TPW-N	46		0.00069	0.48	260	89.62			no
Acetone	67-64-1	B1-102-SB-1	0.15		0.0041	0.04	255	37.65		67,000	no
Acetophenone	98-86-2	B1-091-SB-5	0.33	J	0.018	0.06	255	29.02		12,000	no
Aluminum	7429-90-5	B1-002-SB-9	84,800		637	19,775	247	100.00		110,000	no
Anthracene	120-12-7	B5-161 TPW-N	231		0.00078	2.91	260	92.69		23,000	no
Antimony	7440-36-0	B1-005-SB-8	307		1.7	33.9	247	9.31		47	YES (NC)
Aroclor 1242	53469-21-9	B1-132-SB-1	0.353		0.0362	0.20	131	3.82	0.95		no
Aroclor 1248	12672-29-6	B1-039-SB-1	0.543		0.0354	0.24	131	7.63	0.95		no
Aroclor 1254	11097-69-1	B1-034-SB-1	3.16		0.0238	0.35	131	22.14	0.97	1.5	YES (C/NC)
Aroclor 1260	11096-82-5	B1-084-SB-1	6.77		0.0255	0.60	131	26.72	0.99		YES (C)
Arsenic	7440-38-2	B1-014-SB-10	402		1.9	15.1	264	88.26	3	48	YES (C/NC)
Barium	7440-39-3	B1-082-SB-5	2,330		8.2	240	247	99.60		22,000	no
Benz[a]anthracene	56-55-3	B5-161 TPS-E	884		0.002	9.24	260	96.15	21		YES (C)
Benzaldehyde	100-52-7	B1-174-SB-4	0.3	J	0.016	0.05	177	57.06	820	12,000	no
Benzene	71-43-2	B5-098-SB-4	0.52	J	0.0018	0.04	255	9.02	5.1	42	no
Benzo[a]pyrene	50-32-8	B5-161 TPS-E	745		0.001	7.46	264	95.45	2.1	22	YES (C/NC)
Benzo[b]fluoranthene	205-99-2	B5-161 TPS-E	1,790		0.00089	16.6	261	98.08	21		YES (C)
Benzo[g,h,i]perylene	191-24-2	B5-161 TPS-E	285		0.0013	2.92	260	95.00			no
Benzo[k]fluoranthene	207-08-9	B5-161 TPW-N	638		0.00091	9.44	260	98.46	210		YES (C)
Beryllium	7440-41-7	B1-090-SB-6	8.5		0.19	2.18	247	78.95	6,900	230	no
bis(2-Ethylhexyl)phthalate	117-81-7	B1-081-SB-4.5	25.5		0.015	1.37	255	19.22	160	1,600	no
Cadmium	7440-43-9	B4-026-SB-5	60.8		0.18	2.86	247	63.56	9,300	98	no

Table 7 - Sub-Parcel B1-1
COPC Screening Analysis

Parameter	CAS#	Location of Max Result	Max Detection (mg/kg)	Final Flag	Min Detection (mg/kg)	Average Detection (mg/kg)	Total Samples	Frequency of Detection (%)	Cancer TR=1E-06 (mg/kg)	Non-Cancer HQ=0.1 (mg/kg)	COPC?
Caprolactam	105-60-2	B1-047-SB-5	0.35	J	0.021	0.11	255	3.92		40,000	no
Carbazole	86-74-8	B5-161-SB-4	233		0.017	2.27	255	48.63			no
Carbon disulfide	75-15-0	B1-172-SB-4	0.016		0.0041	0.01	255	1.57		350	no
Carbon tetrachloride	56-23-5	B1-002-SB-1	0.012		0.012	0.01	255	0.39	2.9	57	no
Chloroform	67-66-3	B4-056-SB-7.5	0.077		0.0057	0.03	255	1.96	1.4	100	no
Chromium	7440-47-3	B1-062-SB-6	5,200		5.3	404	247	100.00		180,000	no
Chromium VI	18540-29-9	B1-113-SB-5	10.4		0.2	3.24	246	13.41	6.3	350	YES (C)
Chrysene	218-01-9	B5-161 TPS-E	690		0.00056	7.62	260	98.85	2,100		no
Cobalt	7440-48-4	B1-101-SB-5	694	J	0.32	17.6	247	88.26	1,900	35	YES (NC)
Copper	7440-50-8	B1-172-SB-4	17,900		2.2	315	247	98.79		4,700	YES (NC)
Cyanide	57-12-5	B1-039-SB-1	102	J-	0.048	2.71	247	83.81		120	no
Cyclohexane	110-82-7	B1-047-SB-5	0.0089	J	0.0049	0.007	255	1.18		2,700	no
Dibenz[a,h]anthracene	53-70-3	B5-161 TPS-E	75		0.0011	1.19	260	83.08	2.1		YES (C)
Diethylphthalate	84-66-2	B1-112-SB-1	0.081		0.024	0.05	255	0.78		66,000	no
Di-n-butylphthalate	84-74-2	B1-179-SB-9	12.2		0.018	0.76	255	6.67		8,200	no
Di-n-ocytlphthalate	117-84-0	B1-102-SB-1	0.32	J	0.031	0.10	255	3.53		820	no
Ethylbenzene	100-41-4	B5-098-SB-4	1.4		0.0019	0.20	255	3.14	25	2,000	no
Fluoranthene	206-44-0	B5-161 TPS-E	1,330		0.0011	16.2	260	98.85		3,000	no
Fluorene	86-73-7	B5-161-SB-4	194		0.00064	1.79	260	81.92		3,000	no
Hexachlorobenzene	118-74-1	B4-049-SB-4.5	0.041	J	0.041	0.04	255	0.39	0.96	93	no
Hexachloroethane	67-72-1	B1-003-SB-5	0.029	J	0.029	0.03	255	0.39	8	46	no
Indeno[1,2,3-c,d]pyrene	193-39-5	B5-161 TPS-E	321		0.0012	3.34	260	92.69	21		YES (C)
Iron	7439-89-6	B1-016-SB-5	440,000		2,310	108,001	247	100.00		82,000	YES (NC)
Isopropylbenzene	98-82-8	B5-099-SB-4.5	0.78		0.0025	0.30	255	1.57		990	no
Lead^	7439-92-1	B1-005-SB-8	16,200		2.5	494	250	94.40		800	YES (NC)
Manganese	7439-96-5	B1-129-SB-1	82,500		27.5	9,392	248	100.00		2,600	YES (NC)
Mercury	7439-97-6	B1-039-SB-1	115	J	0.0022	1.34	246	82.11		35	YES (NC)
Methyl Acetate	79-20-9	B1-015-SB-1	0.043	J	0.0015	0.02	254	1.57		120,000	no
Methylene Chloride	75-09-2	B1-013-SB-1	0.059	J	0.059	0.06	255	0.39	1,000	320	no
Naphthalene	91-20-3	B5-161-SB-4	54.4		0.0013	0.64	260	93.85	17	59	YES (C)
Nickel	7440-02-0	B1-005-SB-8	1,970	J	1.9	76.1	247	93.52	64,000	2,200	no
Nitrobenzene	98-95-3	B4-039-SB-5	0.044	J	0.044	0.04	255	0.39	22	130	no
N-Nitrosodiphenylamine	86-30-6	B1-172-SB-4	0.034	J	0.034	0.03	255	0.39	470		no
PCBs (total)*	1336-36-3	B1-019-SB-1	18.4		0.0226	0.90	131	57.25	0.94		YES (C)
Pentachlorophenol	87-86-5	B1-038-SB-5	3.7	J	0.044	1.27	232	1.29	4	280	no
Phenanthrene	85-01-8	B5-161-SB-4	809		0.0015	11.5	260	98.08			no
Phenol	108-95-2	B4-025-SB-1	1.4		0.018	0.10	235	14.04		25,000	no
Pyrene	129-00-0	B5-161 TPS-E	1,070		0.00075	12.5	260	99.23		2,300	no

Table 7 - Sub-Parcel B1-1
COPC Screening Analysis

Parameter	CAS#	Location of Max Result	Max Detection (mg/kg)	Final Flag	Min Detection (mg/kg)	Average Detection (mg/kg)	Total Samples	Frequency of Detection (%)	Cancer TR=1E-06 (mg/kg)	Non-Cancer HQ=0.1 (mg/kg)	COPC?
Selenium	7782-49-2	B1-047-SB-5	8.1		2.3	4.05	247	12.15		580	no
Silver	7440-22-4	B1-047-SB-1	13.6		0.75	2.94	247	26.32		580	no
Styrene	100-42-5	B5-161-SB-4	0.19	J	0.0035	0.10	255	0.78		3,500	no
Tetrachloroethene	127-18-4	B1-159-SB-5	0.0072	J	0.0042	0.006	255	0.78	100	39	no
Thallium	7440-28-0	B1-013-SB-9	10.8	J	10.1	10.5	247	0.81		1.2	YES (NC)
Toluene	108-88-3	B5-098-SB-4	1.1		0.0016	0.03	255	28.63		4,700	no
Trichloroethene	79-01-6	B1-165-SB-1	0.031		0.0024	0.02	255	1.18	6	1.9	no
Vanadium	7440-62-2	B1-011-SB-1	6,480	J	8.8	356	247	100.00		580	YES (NC)
Xylenes	1330-20-7	B5-098-SB-4	3.5		0.0051	0.32	255	5.49		250	no
Zinc	7440-66-6	B1-170-SB-1	18,000		0.43	599	247	99.19		35,000	no

J: The positive result reported for this analyte is a quantitative estimate.
J-: The positive result reported for this analyte is a quantitative estimate but may be biased low.

COPC = Constituent of Potential Concern
TR = Target Risk
HQ = Hazard Quotient

C = Compound was identified as a cancer COPC
NC = Compound was identified as a non-cancer COPC

*PCBs (total) include the sum of all detected aroclor mixtures, including those without regional screening levels (e.g. Aroclor 1262, Aroclor 1268) which are not displayed.
^The COPC screening level for lead was not adjusted to the HQ=0.1 because lead is not assessed in the SLRA. The 800 mg/kg PAL is relevant to the Adult Lead Model procedure.

Table 8 - Sub-Parcel B1-1
Assessment of Lead

Exposure Unit	Surface/Sub-Surface	Arithmetic Mean (mg/kg)
EU1 & EU1-EXP (50.5 ac. & 51.0 ac.)	Surface	271
	Sub-Surface	742
	Pooled	501
EU2 (32.3 ac.)	Surface	180
	Sub-Surface	1,525
	Pooled	808
EU3 (32.3 ac.)	Surface	275
	Sub-Surface	119
	Pooled	200

Adult Lead Model (ALM) Risk Levels	
Soil Concentration (mg/kg)	Probability of Blood Concentration of 10 ug/dL
2,518 mg/kg	5%
3,216 mg/kg	10%

Table 9 - Sub-Parcel B1-1
Soil Exposure Point Concentrations

			EU1 & EU1-EXP (50.5 ac. & 51.0 ac.)					
			EPCs - Surface Soils		EPCs - Sub-Surface Soils		EPCs - Pooled Soils	
Parameter	Cancer COPC Screening Level (mg/kg)	Non-Cancer COPC Screening Level (mg/kg)	EPC Type	EPC (mg/kg)	EPC Type	EPC (mg/kg)	EPC Type	EPC (mg/kg)
1,1-Biphenyl	410	20.0	95% KM (t) UCL	0.050	95% KM (% Bootstrap) UCL	0.094	95% KM (% Bootstrap) UCL	0.066
Antimony		47.0	Maximum Value	5.6	95% KM (Chebyshev) UCL	40.0	95% KM (BCA) UCL	12.0
Arsenic	3.00	48.0	95% KM (Chebyshev) UCL	**14.2**	95% KM (Chebyshev) UCL	**63.0**	95% KM (BCA) UCL	**27.0**
Chromium VI	6.30	350	95% KM (Percentile Bootstrap) UCL	0.87	95% KM (Percentile Bootstrap) UCL	1.68	95% KM (Percentile Bootstrap) UCL	1.11
Cobalt	1,900	35.0	95% GROS Approximate Gamma UCL	9.77	95% KM (Chebyshev) UCL	**42.8**	95% KM (Chebsyhev) UCL	25.1
Copper		4,700	95% Approximate Gamma UCL	166	95% KM (Chebyshev) UCL	412	95% KM (Chebsyhev) UCL	275
Iron		82,000	95% Student's-t UCL	**143,118**	95% Student's-t UCL	**138,038**	95% Student's-t UCL	**134,690**
Manganese		2,600	95% Approximate Gamma UCL	**14,010**	95% Adjusted Gamma UCL	**15,405**	95% Approximate Gamma UCL	**13,494**
Mercury		35.0	97.5% KM (Chebyshev) UCL	2.38	95% KM (Chebyshev) UCL	0.18	97.5% KM (Chebyshev) UCL	1.29
Vanadium		580	95% H-UCL	**594**	95% Adjusted Gamma UCL	502	95% H-UCL	575
PCBs (total)	0.94		95% KM (Chebyshev) UCL	**2.36**	N/A	N/A	95% KM (Chebsyhev) UCL	**2.36**
Aroclor 1254	NE	1.50	95% KM (BCA) UCL	0.27	N/A	N/A	95% KM (BCA) UCL	0.27
Benz[a]anthracene	21.0		95% H-UCL	1.44	99% KM (Chebyshev) UCL	3.43	97.5% KM (Chebyshev) UCL	1.60
Benzo[a]pyrene	2.10	22.0	95% H-UCL	1.65	99% KM (Chebyshev) UCL	**3.77**	97.5% KM (Chebyshev) UCL	1.71
Benzo[b]fluoranthene	21.0		95% H-UCL	4.24	95% KM (Chebyshev) UCL	3.88	97.5% KM (Chebyshev) UCL	3.56
Benzo[k]fluoranthene	210		95% H-UCL	4.13	99% KM (Chebyshev) UCL	7.23	97.5% KM (Chebyshev) UCL	3.42
Dibenz[a,h]anthracene	2.10		95% KM (Chebyshev) UCL	0.21	97.5% KM (Chebyshev) UCL	0.53	97.5% KM (Chebyshev) UCL	0.32
Indeno[1,2,3-c,d]pyrene	21.0		97.5% KM (Chebyshev) UCL	0.65	97.5% KM (Chebyshev) UCL	1.26	97.5% KM (Chebyshev) UCL	0.79
Naphthalene	17.0	59.0	95% Approximate Gamma UCL	0.19	97.5% KM (Chebyshev) UCL	1.28	97.5% KM (Chebyshev) UCL	0.71

Bold indicates EPC higher than lowest COPC SL
COPC = Constituent of Potential Concern
N/A indicates not detected
NE = Not Evaluated. Aroclor 1254 was included for non-cancer hazard only. The carcinogenic risk is evaluated with Total PCBs.

Table 9 - Sub-Parcel B1-1
Soil Exposure Point Concentrations

			EU2 (32.3 ac.)					
			EPCs - Surface Soils		EPCs - Sub-Surface Soils		EPCs - Pooled Soils	
Parameter	Cancer COPC Screening Level (mg/kg)	Non-Cancer COPC Screening Level (mg/kg)	EPC Type	EPC (mg/kg)	EPC Type	EPC (mg/kg)	EPC Type	EPC (mg/kg)
1,1-Biphenyl	410	20.0	95% Adjusted Gamma KM-UCL	0.28	97.5% KM (Chebyshev) UCL	0.16	95% Approximate Gamma KM-UCL	0.17
Antimony		47.0	N/A	N/A	95% Adjusted Gamma KM-UCL	**54.8**	95% Approximate Gamma KM-UCL	20.0
Arsenic	3.00	48.0	95% GROS Adjusted Gamma UCL	**11.0**	95% GROS Adjusted Gamma UCL	**22.4**	95% KM (Chebyshev) UCL	**18.5**
Chromium VI	6.30	350	95% KM (t) UCL	2.13	N/A	N/A	95% KM (Percentile Bootstrap) UCL	1.24
Cobalt	1,900	35.0	95% GROS Adjusted Gamma UCL	11.7	95% KM (t) UCL	20.8	95% KM (Chebyshev) UCL	18.5
Copper		4,700	95% Adjusted Gamma UCL	167	95% Chebyshev (Mean, Sd) UCL	3,963	95% H-UCL	541
Iron		82,000	95% Adjusted Gamma UCL	**156,654**	95% Adjusted Gamma UCL	**127,601**	95% Approximate Gamma UCL	**128,831**
Manganese		2,600	95% Chebyshev (Mean, Sd) UCL	**16,302**	95% Adjusted Gamma UCL	**5,575**	95% Approximate Gamma UCL	**8,676**
Mercury		35.0	95% Adjusted Gamma KM-UCL	0.40	95% KM (Chebyshev) UCL	0.13	97.5% KM (Chebyshev) UCL	0.37
Vanadium		580	95% H-UCL	**907**	95% H-UCL	556	95% Chebyshev (Mean, Sd) UCL	**599**
PCBs (total)	0.94		95% KM (Chebyshev) UCL	**1.62**	Maximum Value	0.11	95% KM (Chebyshev) UCL	**1.58**
Aroclor 1254	NE	1.50	95% KM (Percentile Bootstrap) UCL	0.14	N/A	N/A	95% KM (Percentile Bootstrap) UCL	0.14
Benz[a]anthracene	21.0		99% KM (Chebyshev) UCL	3.54	95% KM (Chebyshev) UCL	1.38	97.5% KM (Chebyshev) UCL	1.74
Benzo[a]pyrene	2.10	22.0	99% KM (Chebyshev) UCL	**3.50**	95% KM (Chebyshev) UCL	1.63	95% KM (Chebyshev) UCL	1.49
Benzo[b]fluoranthene	21.0		99% KM (Chebyshev) UCL	9.20	95% KM (Chebyshev) UCL	3.24	95% KM (Chebyshev) UCL	3.57
Benzo[k]fluoranthene	210		95% KM (Chebyshev) UCL	4.64	95% Adjusted Gamma UCL	2.39	97.5% KM (Chebyshev) UCL	4.03
Dibenz[a,h]anthracene	2.10		97.5% KM (Cheyshev) UCL	0.48	95% KM (Chebyshev) UCL	0.26	97.5% KM (Chebyshev) UCL	0.33
Indeno[1,2,3-c,d]pyrene	21.0		99% KM (Chebyshev) UCL	1.84	95% KM (Chebyshev) UCL	0.96	97.5% KM (Chebyshev) UCL	0.99
Naphthalene	17.0	59.0	99% KM (Chebyshev) UCL	0.85	95% KM (Chebyshev) UCL	0.56	97.5% KM (Chebyshev) UCL	0.52

Bold indicates EPC higher than lowest COPC SL
COPC = Constituent of Potential Concern
N/A indicates not detected
NE = Not Evaluated. Aroclor 1254 was included for non-cancer hazard only. The carcinogenic risk is evaluated with Total PCBs.

Table 9 - Sub-Parcel B1-1
Soil Exposure Point Concentrations

			EU3 (32.3 ac.)					
			EPCs - Surface Soils		EPCs - Sub-Surface Soils		EPCs - Pooled Soils	
Parameter	Cancer COPC Screening Level (mg/kg)	Non-Cancer COPC Screening Level (mg/kg)	EPC Type	EPC (mg/kg)	EPC Type	EPC (mg/kg)	EPC Type	EPC (mg/kg)
1,1-Biphenyl	410	20.0	95% Adjusted Gamma KM-UCL	0.28	95% KM (Chebyshev) UCL	2.98	95% KM (Chebyshev) UCL	1.60
Antimony		47.0	95% Adjusted Gamma KM-UCL	12.4	Maximum Value	6.00	95% Approximate Gamma KM-UCL	6.67
Arsenic	3.00	48.0	95% KM (Chebyshev) UCL	**25.4**	95% GROS Adjusted Gamma UCL	**10.7**	95% KM (BCA) UCL	**13.0**
Chromium VI	6.30	350	95% KM (Percentile Bootstrap) UCL	0.39	95% Adjusted Gamma KM-UCL	0.85	95% Approximate Gamma KM-UCL	0.53
Cobalt	1,900	35.0	95% KM (Chebyshev) UCL	25.7	95% KM (Chebyshev) UCL	**97.1**	95% KM (Chebyshev) UCL	**54.2**
Copper		4,700	95% H-UCL	517	95% KM (Chebyshev) UCL	229	95% KM (Chebyshev) UCL	967
Iron		82,000	95% Student's-t UCL	**144,634**	95% Adjusted Gamma UCL	**83,307**	95% Approximate Gamma UCL	**112,385**
Manganese		2,600	95% Adjusted Gamma UCL	**15,718**	95% Adjusted Gamma UCL	**8,003**	95% Approximate Gamma UCL	**11,037**
Mercury		35.0	99% KM (Chebyshev) UCL	32.8	97.5% KM (Chebyshev) UCL	0.76	97.5% KM (Chebyshev) UCL	11.8
Vanadium		580	95% Adjusted Gamma UCL	340	95% Chebsyhev (Mean, Sd) UCL	**901**	95% Chebyshev (Mean, Sd) UCL	**586**
PCBs (total)	0.94		95% Adjusted Gamma KM-UCL	0.42	N/A	N/A	95% Adjusted Gamma KM-UCL	0.42
Aroclor 1254	NE	1.50	95% Adjusted Gamma KM-UCL	0.17	N/A	N/A	95% Adjusted Gamma KM-UCL	0.17
Benz[a]anthracene	21.0		97.5% Chebyshev (Mean, Sd) UCL	**43.7**	99% KM (Chebyshev) UCL	**226**	97.5% KM (Chebyshev) UCL	**88.1**
Benzo[a]pyrene	2.10	22.0	97.5% KM (Chebyshev) UCL	**25.0**	99% KM (Chebyshev) UCL	**185**	97.5% KM (Chebyshev) UCL	**71.0**
Benzo[b]fluoranthene	21.0		97.5% KM (Chebyshev) UCL	**82.0**	97.5% Chebyshev (Mean, Sd) UCL	**292**	97.5% KM (Chebyshev) UCL	**166**
Benzo[k]fluoranthene	210		97.5% KM (Chebyshev) UCL	43.3	97.5% Chebyshev (Mean, Sd) UCL	139	97.5% KM (Chebyshev) UCL	79.9
Dibenz[a,h]anthracene	2.10		97.5% KM (Chebyshev) UCL	**4.00**	99% KM (Chebyshev) UCL	**22.1**	97.5% KM (Chebyshev) UCL	**8.69**
Indeno[1,2,3-c,d]pyrene	21.0		97.5% KM (Chebyshev) UCL	11.9	99% KM (Chebyshev) UCL	**80.1**	97.5% KM (Chebyshev) UCL	**30.6**
Naphthalene	17.0	59.0	95% KM (Chebyshev) UCL	0.40	99% KM (Chebyshev) UCL	14.2	97.5% KM (Chebyshev) UCL	5.27

Bold indicates EPC higher than lowest COPC SL
COPC = Constituent of Potential Concern
N/A indicates not detected
NE = Not Evaluated. Aroclor 1254 was included for non-cancer hazard only. The carcinogenic risk is evaluated with Total PCBs.

Table 10 - Sub-Parcel B1-1
Surface Soils
Composite Worker Risk Ratios

Parameter	Target Organ	EU1 (50.5 ac.)				
			Composite Worker			
			RSLs		Risk Estimates	
		EPC (mg/kg)	Cancer	Non-Cancer	Risk	HQ
1,1-Biphenyl	Urinary	0.050	410	200	1.2E-10	0.0003
Antimony	Hematologic	**5.60**		470		0.01
Arsenic	Cardiovascular; Dermal	14.2	3.00	480	4.7E-06	0.03
Chromium VI	Respiratory	0.87	6.30	3,500	1.4E-07	0.0002
Cobalt	Thyroid	9.77	1,900	350	5.1E-09	0.03
Copper	Gastrointestinal	166		47,000		0.004
Iron	Gastrointestinal	143,118		820,000		0.2
Manganese	Nervous	14,010		26,000		0.5
Mercury	Nervous	2.38		350		0.007
Vanadium	Dermal	594		5,800		0.1
PCBs (Total)		2.36	0.94		2.5E-06	
Aroclor 1254	Dermal; Immune; Ocular	0.27	NE	15.0		0.02
Benz(a)anthracene		1.44	21.0		6.9E-08	
Benzo(a)pyrene	Developmental	1.65	2.10	220	7.9E-07	0.008
Benzo(b)fluoranthene		4.24	21.0		2.0E-07	
Benzo(k)fluoranthene		4.13	210		2.0E-08	
Dibenz(a,h)anthracene		0.21	2.10		1.0E-07	
Indeno(1,2,3-c,d)pyrene		0.65	21.0		3.1E-08	
Naphthalene	Nervous; Respiratory	0.19	17.0	590	1.1E-08	0.0003
					9E-06	↓

Bold indicates maximum value used
N/A indicates no detections
NE = Not Evaluated. Aroclor 1254 was included for non-cancer hazard only. The carcinogenic risk is evaluated with Total PCBs.
RSLs were obtained from the EPA Regional Screening Levels at https://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search

Total HI	Urinary	0
	Hematologic	0
	Cardiovascular	0
	Dermal	0
	Respiratory	0
	Thyroid	0
	Gastrointestinal	0
	Nervous	1
	Immune	0
	Ocular	0
	Developmental	0

Table 10 - Sub-Parcel B1-1
Surface Soils
Composite Worker Risk Ratios

Parameter	Target Organ	EU2 (32.3 ac.)				
			Composite Worker			
			RSLs		Risk Estimates	
		EPC (mg/kg)	Cancer	Non-Cancer	Risk	HQ
1,1-Biphenyl	**Urinary**	0.28	410	200	6.8E-10	0.001
Antimony	**Hematologic**	N/A		470		
Arsenic	**Cardiovascular; Dermal**	11.0	3.00	480	3.7E-06	0.02
Chromium VI	**Respiratory**	2.13	6.30	3,500	3.4E-07	0.0006
Cobalt	**Thyroid**	11.7	1,900	350	6.2E-09	0.03
Copper	**Gastrointestinal**	167		47,000		0.004
Iron	**Gastrointestinal**	156,654		820,000		0.2
Manganese	**Nervous**	16,302		26,000		0.6
Mercury	**Nervous**	0.40		350		0.001
Vanadium	**Dermal**	907		5,800		0.2
PCBs (Total)		1.62	0.94		1.7E-06	
Aroclor 1254	**Dermal; Immune; Ocular**	0.14	NE	15.0		0.009
Benz(a)anthracene		3.54	21.0		1.7E-07	
Benzo(a)pyrene	**Developmental**	3.50	2.10	220	1.7E-06	0.02
Benzo(b)fluoranthene		9.20	21.0		4.4E-07	
Benzo(k)fluoranthene		4.64	210		2.2E-08	
Dibenz(a,h)anthracene		0.48	2.10		2.3E-07	
Indeno(1,2,3-c,d)pyrene		1.84	21.0		8.8E-08	
Naphthalene	**Nervous; Respiratory**	0.85	17.0	590	5.0E-08	0.001
					8E-06	↓

Bold indicates maximum value used
N/A indicates no detections
NE = Not Evaluated. Aroclor 1254 was included for non-cancer hazard only. The carcinogenic risk is evaluated with Total PCBs.
RSLs were obtained from the EPA Regional Screening Levels at https://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search

Total HI	Urinary	0
	Hematologic	0
	Cardiovascular	0
	Dermal	0
	Respiratory	0
	Thyroid	0
	Gastrointestinal	0
	Nervous	1
	Immune	0
	Ocular	0
	Developmental	0

Table 10 - Sub-Parcel B1-1
Surface Soils
Composite Worker Risk Ratios

Parameter	Target Organ	EU3 (32.3 ac.)				
			Composite Worker			
			RSLs		Risk Estimates	
		EPC (mg/kg)	Cancer	Non-Cancer	Risk	HQ
1,1-Biphenyl	**Urinary**	0.28	410	200	6.8E-10	0.001
Antimony	**Hematologic**	12.4		470		0.03
Arsenic	**Cardiovascular; Dermal**	25.4	3.00	480	8.5E-06	0.05
Chromium VI	**Respiratory**	0.39	6.30	3,500	6.2E-08	0.0001
Cobalt	**Thyroid**	25.7	1,900	350	1.4E-08	0.07
Copper	**Gastrointestinal**	517		47,000		0.01
Iron	**Gastrointestinal**	144,634		820,000		0.2
Manganese	**Nervous**	15,718		26,000		0.6
Mercury	**Nervous**	32.8		350		0.09
Vanadium	**Dermal**	340		5,800		0.06
PCBs (Total)		0.42	0.94		4.5E-07	
Aroclor 1254	**Dermal; Immune; Ocular**	0.17	NE	15.0		0.01
Benz(a)anthracene		43.7	21.0		2.1E-06	
Benzo(a)pyrene	**Developmental**	25.0	2.10	220	1.2E-05	0.1
Benzo(b)fluoranthene		82.0	21.0		3.9E-06	
Benzo(k)fluoranthene		43.3	210		2.1E-07	
Dibenz(a,h)anthracene		4.00	2.10		1.9E-06	
Indeno(1,2,3-c,d)pyrene		11.9	21.0		5.7E-07	
Naphthalene	**Nervous; Respiratory**	0.40	17.0	590	2.4E-08	0.0007
					3E-05	↓

Bold indicates maximum value used
N/A indicates no detections
NE = Not Evaluated. Aroclor 1254 was included for non-cancer hazard only. The carcinogenic risk is evaluated with Total PCBs.
RSLs were obtained from the EPA Regional Screening Levels at https://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search

Total HI	Urinary	0
	Hematologic	0
	Cardiovascular	0
	Dermal	0
	Respiratory	0
	Thyroid	0
	Gastrointestinal	0
	Nervous	1
	Immune	0
	Ocular	0
	Developmental	0

Table 11 - Sub-Parcel B1-1
Sub-Surface Soils
Composite Worker Risk Ratios

Parameter	Target Organ	EU1 (50.5 ac.)				
			Composite Worker			
			RSLs		Risk Estimates	
		EPC (mg/kg)	Cancer	Non-Cancer	Risk	HQ
1,1-Biphenyl	**Urinary**	0.094	410	200	2.3E-10	0.0005
Antimony	**Hematologic**	40.0		470		0.09
Arsenic	**Cardiovascular; Dermal**	63.0	3.00	480	2.1E-05	0.1
Chromium VI	**Respiratory**	1.68	6.30	3,500	2.7E-07	0.0005
Cobalt	**Thyroid**	42.8	1,900	350	2.3E-08	0.1
Copper	**Gastrointestinal**	412		47,000		0.009
Iron	**Gastrointestinal**	138,038		820,000		0.2
Manganese	**Nervous**	15,405		26,000		0.6
Mercury	**Nervous**	0.18		350		0.0005
Vanadium	**Dermal**	502		5,800		0.09
PCBs (Total)		N/A	0.94			
Aroclor 1254	**Dermal; Immune; Ocular**	N/A	NE	15.0		
Benz(a)anthracene		3.43	21.0		1.6E-07	
Benzo(a)pyrene	**Developmental**	3.77	2.10	220	1.8E-06	0.02
Benzo(b)fluoranthene		3.88	21.0		1.8E-07	
Benzo(k)fluoranthene		7.23	210		3.4E-08	
Dibenz(a,h)anthracene		0.53	2.10		2.5E-07	
Indeno(1,2,3-c,d)pyrene		1.26	21.0		6.0E-08	
Naphthalene	**Nervous; Respiratory**	1.28	17.0	590	7.5E-08	0.002
					2E-05	↓

Bold indicates maximum value used
N/A indicates no detections
NE = Not Evaluated. Aroclor 1254 was included for non-cancer hazard only. The carcinogenic risk is evaluated with Total PCBs.
RSLs were obtained from the EPA Regional Screening Levels at https://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search

Total HI	Urinary	0
	Hematologic	0
	Cardiovascular	0
	Dermal	0
	Respiratory	0
	Thyroid	0
	Gastrointestinal	0
	Nervous	1
	Immune	0
	Ocular	0
	Developmental	0

Table 11 - Sub-Parcel B1-1
Sub-Surface Soils
Composite Worker Risk Ratios

Parameter	Target Organ	EU2 (32.3 ac.)				
			Composite Worker			
			RSLs		Risk Estimates	
		EPC (mg/kg)	Cancer	Non-Cancer	Risk	HQ
1,1-Biphenyl	Urinary	0.16	410	200	3.9E-10	0.0008
Antimony	Hematologic	54.8		470		0.1
Arsenic	Cardiovascular; Dermal	22.4	3.00	480	7.5E-06	0.05
Chromium VI	Respiratory	N/A	6.30	3,500		
Cobalt	Thyroid	20.8	1,900	350	1.1E-08	0.06
Copper	Gastrointestinal	3,963		47,000		0.08
Iron	Gastrointestinal	127,601		820,000		0.2
Manganese	Nervous	5,575		26,000		0.2
Mercury	Nervous	0.13		350		0.0004
Vanadium	Dermal	556		5,800		0.1
PCBs (Total)		**0.11**	0.94		1.2E-07	
Aroclor 1254	Dermal; Immune; Ocular	N/A	NE	15.0		
Benz(a)anthracene		1.38	21.0		6.6E-08	
Benzo(a)pyrene	Developmental	1.63	2.10	220	7.8E-07	0.007
Benzo(b)fluoranthene		3.24	21.0		1.5E-07	
Benzo(k)fluoranthene		2.39	210		1.1E-08	
Dibenz(a,h)anthracene		0.26	2.10		1.2E-07	
Indeno(1,2,3-c,d)pyrene		0.96	21.0		4.6E-08	
Naphthalene	Nervous; Respiratory	0.56	17.0	590	3.3E-08	0.0009
					9E-06	↓

Bold indicates maximum value used
N/A indicates no detections
NE = Not Evaluated. Aroclor 1254 was included for non-cancer hazard only. The carcinogenic risk is evaluated with Total PCBs.
RSLs were obtained from the EPA Regional Screening Levels at https://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search

Total HI	Urinary	0
	Hematologic	0
	Cardiovascular	0
	Dermal	0
	Respiratory	0
	Thyroid	0
	Gastrointestinal	0
	Nervous	0
	Immune	0
	Ocular	0
	Developmental	0

Table 11 - Sub-Parcel B1-1
Sub-Surface Soils
Composite Worker Risk Ratios

Parameter	Target Organ	EU3 (32.3 ac.)				
			Composite Worker			
			RSLs		Risk Estimates	
		EPC (mg/kg)	Cancer	Non-Cancer	Risk	HQ
1,1-Biphenyl	**Urinary**	2.98	410	200	7.3E-09	0.01
Antimony	**Hematologic**	**6.00**		470		0.01
Arsenic	**Cardiovascular; Dermal**	10.7	3.00	480	3.6E-06	0.02
Chromium VI	**Respiratory**	0.85	6.30	3,500	1.3E-07	0.0002
Cobalt	**Thyroid**	97.1	1,900	350	5.1E-08	0.3
Copper	**Gastrointestinal**	229		47,000		0.005
Iron	**Gastrointestinal**	83,307		820,000		0.1
Manganese	**Nervous**	8,003		26,000		0.3
Mercury	**Nervous**	0.76		350		0.002
Vanadium	**Dermal**	901		5,800		0.2
PCBs (Total)		N/A	0.94			
Aroclor 1254	**Dermal; Immune; Ocular**	N/A	NE	15.0		
Benz(a)anthracene		226	21.0		1.1E-05	
Benzo(a)pyrene	**Developmental**	185	2.10	220	8.8E-05	0.8
Benzo(b)fluoranthene		292	21.0		1.4E-05	
Benzo(k)fluoranthene		139	210		6.6E-07	
Dibenz(a,h)anthracene		22.1	2.10		1.1E-05	
Indeno(1,2,3-c,d)pyrene		80.1	21.0		3.8E-06	
Naphthalene	**Nervous; Respiratory**	14.2	17.0	590	8.4E-07	0.02
					1E-04	↓

Bold indicates maximum value used
N/A indicates no detections
NE = Not Evaluated. Aroclor 1254 was included for non-cancer hazard only. The carcinogenic risk is evaluated with Total PCBs.
RSLs were obtained from the EPA Regional Screening Levels at https://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search

Total HI	Urinary	0
	Hematologic	0
	Cardiovascular	0
	Dermal	0
	Respiratory	0
	Thyroid	0
	Gastrointestinal	0
	Nervous	0
	Immune	0
	Ocular	0
	Developmental	1

Table 12 - Sub-Parcel B1-1
Pooled Soils
Composite Worker Risk Ratios

Parameter	Target Organ	EU1 (50.5 ac.)				
			Composite Worker			
			RSLs		Risk Estimates	
		EPC (mg/kg)	Cancer	Non-Cancer	Risk	HQ
1,1-Biphenyl	Urinary	0.066	410	200	1.6E-10	0.0003
Antimony	Hematologic	12.0		470		0.03
Arsenic	Cardiovascular; Dermal	27.0	3.00	480	9.0E-06	0.06
Chromium VI	Respiratory	1.11	6.30	3,500	1.8E-07	0.0003
Cobalt	Thyroid	25.1	1,900	350	1.3E-08	0.07
Copper	Gastrointestinal	275		47,000		0.006
Iron	Gastrointestinal	134,690		820,000		0.2
Manganese	Nervous	13,494		26,000		0.5
Mercury	Nervous	1.29		350		0.004
Vanadium	Dermal	575		5,800		0.1
PCBs (Total)		2.36	0.94		2.5E-06	
Aroclor 1254	Dermal; Immune; Ocular	0.27	NE	15.0		0.02
Benz(a)anthracene		1.60	21.0		7.6E-08	
Benzo(a)pyrene	Developmental	1.71	2.10	220	8.1E-07	0.008
Benzo(b)fluoranthene		3.56	21.0		1.7E-07	
Benzo(k)fluoranthene		3.42	210		1.6E-08	
Dibenz(a,h)anthracene		0.32	2.10		1.5E-07	
Indeno(1,2,3-c,d)pyrene		0.79	21.0		3.8E-08	
Naphthalene	Nervous; Respiratory	0.71	17.0	590	4.2E-08	0.001
					1E-05	↓

NE = Not Evaluated. Aroclor 1254 was included for non-cancer hazard only. The carcinogenic risk is evaluated with Total PCBs.
RSLs were obtained from the EPA Regional Screening Levels at https://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search

Total HI	Urinary	0
	Hematologic	0
	Cardiovascular	0
	Dermal	0
	Respiratory	0
	Thyroid	0
	Gastrointestinal	0
	Nervous	1
	Immune	0
	Ocular	0
	Developmental	0

Table 12 - Sub-Parcel B1-1
Pooled Soils
Composite Worker Risk Ratios

Parameter	Target Organ	EU2 (32.3 ac.)				
			Composite Worker			
			RSLs		Risk Estimates	
		EPC (mg/kg)	Cancer	Non-Cancer	Risk	HQ
1,1-Biphenyl	Urinary	0.17	410	200	4.1E-10	0.0009
Antimony	Hematologic	20.0		470		0.04
Arsenic	Cardiovascular; Dermal	18.5	3.00	480	6.2E-06	0.04
Chromium VI	Respiratory	1.24	6.30	3,500	2.0E-07	0.0004
Cobalt	Thyroid	18.5	1,900	350	9.7E-09	0.05
Copper	Gastrointestinal	541		47,000		0.01
Iron	Gastrointestinal	128,831		820,000		0.2
Manganese	Nervous	8,676		26,000		0.3
Mercury	Nervous	0.37		350		0.001
Vanadium	Dermal	599		5,800		0.1
PCBs (Total)		1.58	0.94		1.7E-06	
Aroclor 1254	Dermal; Immune; Ocular	0.14	NE	15.0		0.009
Benz(a)anthracene		1.74	21.0		8.3E-08	
Benzo(a)pyrene	Developmental	1.49	2.10	220	7.1E-07	0.007
Benzo(b)fluoranthene		3.57	21.0		1.7E-07	
Benzo(k)fluoranthene		4.03	210		1.9E-08	
Dibenz(a,h)anthracene		0.33	2.10		1.6E-07	
Indeno(1,2,3-c,d)pyrene		0.99	21.0		4.7E-08	
Naphthalene	Nervous; Respiratory	0.52	17.0	590	3.1E-08	0.0009
					9E-06	↓

NE = Not Evaluated. Aroclor 1254 was included for non-cancer hazard only. The carcinogenic risk is evaluated with Total PCBs.
RSLs were obtained from the EPA Regional Screening Levels at https://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search

Total HI	Urinary	0
	Hematologic	0
	Cardiovascular	0
	Dermal	0
	Respiratory	0
	Thyroid	0
	Gastrointestinal	0
	Nervous	0
	Immune	0
	Ocular	0
	Developmental	0

Table 12 - Sub-Parcel B1-1
Pooled Soils
Composite Worker Risk Ratios

Parameter	Target Organ	EU3 (32.3 ac.)				
			Composite Worker			
			RSLs		Risk Estimates	
		EPC (mg/kg)	Cancer	Non-Cancer	Risk	HQ
1,1-Biphenyl	Urinary	1.60	410	200	3.9E-09	0.008
Antimony	Hematologic	6.67		470		0.01
Arsenic	Cardiovascular; Dermal	13.0	3.00	480	4.3E-06	0.03
Chromium VI	Respiratory	0.53	6.30	3,500	8.4E-08	0.0002
Cobalt	Thyroid	54.2	1,900	350	2.9E-08	0.2
Copper	Gastrointestinal	967		47,000		0.02
Iron	Gastrointestinal	112,385		820,000		0.1
Manganese	Nervous	11,037		26,000		0.4
Mercury	Nervous	11.8		350		0.03
Vanadium	Dermal	586		5,800		0.1
PCBs (Total)		0.42	0.94		4.5E-07	
Aroclor 1254	Dermal; Immune; Ocular	0.17	NE	15.0		0.01
Benz(a)anthracene		88.1	21.0		4.2E-06	
Benzo(a)pyrene	Developmental	71.0	2.10	220	3.4E-05	0.3
Benzo(b)fluoranthene		166	21.0		7.9E-06	
Benzo(k)fluoranthene		79.9	210		3.8E-07	
Dibenz(a,h)anthracene		8.69	2.10		4.1E-06	
Indeno(1,2,3-c,d)pyrene		30.6	21.0		1.5E-06	
Naphthalene	Nervous; Respiratory	5.27	17.0	590	3.1E-07	0.009
					6E-05	↓

NE = Not Evaluated. Aroclor 1254 was included for non-cancer hazard only. The carcinogenic risk is evaluated with Total PCBs.
RSLs were obtained from the EPA Regional Screening Levels at https://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search

Total HI	Urinary	0
	Hematologic	0
	Cardiovascular	0
	Dermal	0
	Respiratory	0
	Thyroid	0
	Gastrointestinal	0
	Nervous	0
	Immune	0
	Ocular	0
	Developmental	0

Table 13 - Sub-Parcel B1-1
Surface Soils
Construction Worker Risk Ratios

		100 Day - EU1-EXP (51.0 ac.)				
			Construction Worker			
			SSLs		Risk Estimates	
Parameter	Target Organ	EPC (mg/kg)	Cancer	Non-Cancer	Risk	HQ
1,1-Biphenyl	Urinary	0.050	7,517	150	6.7E-12	0.0003
Antimony	Hematologic	**5.60**		295		0.02
Arsenic	Cardiovascular; Dermal	14.2	37.8	241	3.8E-07	0.06
Chromium VI	Respiratory	0.87	54.2	2,003	1.6E-08	0.0004
Cobalt	Thyroid	9.77	13,545	2,400	7.2E-10	0.004
Copper	Gastrointestinal	166		8,591		0.02
Iron	Gastrointestinal	143,118		601,353		0.2
Manganese	Nervous	14,010		10,651		1
Mercury	Nervous	2.38		1,236		0.002
Vanadium	Dermal	594		4,014		0.1
PCBs (Total)		2.36	11.0		2.1E-07	
Aroclor 1254	Dermal; Immune; Ocular	0.27	NE	18.7		0.01
Benz(a)anthracene		1.44	355		4.1E-09	
Benzo(a)pyrene	Developmental	1.65	42.5	14.7	3.9E-08	0.1
Benzo(b)fluoranthene		4.24	423		1.0E-08	
Benzo(k)fluoranthene		4.13	4,237		9.7E-10	
Dibenz(a,h)anthracene		0.21	44.6		4.7E-09	
Indeno(1,2,3-c,d)pyrene		0.65	435		1.5E-09	
Naphthalene	Nervous; Respiratory	0.19	31.8	46.3	6.0E-09	0.004
					7E-07	↓

Bold indicates maximum value
N/A indicates no detections
NE = Not Evaluated. Aroclor 1254 was included for non-cancer hazard only. The carcinogenic risk is evaluated with Total PCBs.
SSLs calculated using equations in the EPA Supplemental Guidance dated 2002
Guidance Equation Input Assumptions:
5 cars/day (2 tons/car)
5 trucks/day (20 tons/truck)
3 meter source depth thickness

Total HI	Urinary	0
	Hematologic	0
	Cardiovascular	0
	Dermal	0
	Respiratory	0
	Thyroid	0
	Gastrointestinal	0
	Nervous	1
	Immune	0
	Ocular	0
	Developmental	0

Table 13 - Sub-Parcel B1-1
Surface Soils
Construction Worker Risk Ratios

		90 Day - EU2 (32.3 ac.)				
			Construction Worker			
			SSLs		Risk Estimates	
Parameter	Target Organ	EPC (mg/kg)	Cancer	Non-Cancer	Risk	HQ
1,1-Biphenyl	Urinary	0.28	8,352	170	3.4E-11	0.002
Antimony	Hematologic	N/A		328		
Arsenic	Cardiovascular; Dermal	11.0	42.0	268	2.6E-07	0.04
Chromium VI	Respiratory	2.13	59.7	2,224	3.6E-08	0.001
Cobalt	Thyroid	11.7	12,292	2,626	9.5E-10	0.004
Copper	Gastrointestinal	167		9,545		0.02
Iron	Gastrointestinal	156,654		668,170		0.2
Manganese	Nervous	16,302		11,518		1
Mercury	Nervous	0.40		1,372		0.0003
Vanadium	Dermal	907		4,437		0.2
PCBs (Total)		1.62	12.3		1.3E-07	
Aroclor 1254	Dermal; Immune; Ocular	0.14	NE	20.8		0.007
Benz(a)anthracene		3.54	396		8.9E-09	
Benzo(a)pyrene	Developmental	3.50	47.3	16.5	7.4E-08	0.2
Benzo(b)fluoranthene		9.20	470		2.0E-08	
Benzo(k)fluoranthene		4.64	4,711		9.8E-10	
Dibenz(a,h)anthracene		0.48	49.5		9.7E-09	
Indeno(1,2,3-c,d)pyrene		1.84	484		3.8E-09	
Naphthalene	Nervous; Respiratory	0.85	35.8	52.2	2.4E-08	0.02
					6E-07	↓

Bold indicates maximum value
N/A indicates no detections
NE = Not Evaluated. Aroclor 1254 was included for non-cancer hazard only. The carcinogenic risk is evaluated with Total PCBs.
SSLs calculated using equations in the EPA Supplemental Guidance dated 2002
Guidance Equation Input Assumptions:
5 cars/day (2 tons/car)
5 trucks/day (20 tons/truck)
3 meter source depth thickness

Total HI	Urinary	0
	Hematologic	0
	Cardiovascular	0
	Dermal	0
	Respiratory	0
	Thyroid	0
	Gastrointestinal	0
	Nervous	1
	Immune	0
	Ocular	0
	Developmental	0

Table 13 - Sub-Parcel B1-1
Surface Soils
Construction Worker Risk Ratios

		1.5 Day - EU3 (32.3 ac.)				
			Construction Worker			
			SSLs		Risk Estimates	
Parameter	Target Organ	EPC (mg/kg)	Cancer	Non-Cancer	Risk	HQ
1,1-Biphenyl	Urinary	0.28	501,128	1,316	5.6E-13	0.0002
Antimony	Hematologic	12.4		19,663		0.0006
Arsenic	Cardiovascular; Dermal	25.4	2,521	16,053	1.0E-08	0.002
Chromium VI	Respiratory	0.39	3,584	133,439	1.1E-10	0.000003
Cobalt	Thyroid	25.7	737,507	157,542	3.5E-11	0.0002
Copper	Gastrointestinal	517		572,717		0.0009
Iron	Gastrointestinal	144,634		40,090,223		0.004
Manganese	Nervous	15,718		691,081		0.02
Mercury	Nervous	32.8		82,347		0.0004
Vanadium	Dermal	340		266,193		0.001
PCBs (Total)		0.42	170		2.5E-09	
Aroclor 1254	Dermal; Immune; Ocular	0.17	NE	1,246		0.0001
Benz(a)anthracene		43.7	10,097		4.3E-09	
Benzo(a)pyrene	Developmental	25.0	2,177	138	1.1E-08	0.2
Benzo(b)fluoranthene		82.0	21,149		3.9E-09	
Benzo(k)fluoranthene		43.3	213,286		2.0E-10	
Dibenz(a,h)anthracene		4.00	2,970		1.3E-09	
Indeno(1,2,3-c,d)pyrene		11.9	25,221		4.7E-10	
Naphthalene	Nervous; Respiratory	0.40	278	405	1.4E-09	0.001
					4E-08	↓

Bold indicates maximum value
N/A indicates no detections
NE = Not Evaluated. Aroclor 1254 was included for non-cancer hazard only. The carcinogenic risk is evaluated with Total PCBs.
SSLs calculated using equations in the EPA Supplemental Guidance dated 2002
Guidance Equation Input Assumptions:
5 cars/day (2 tons/car)
5 trucks/day (20 tons/truck)
3 meter source depth thickness

Total HI	Urinary	0
	Hematologic	0
	Cardiovascular	0
	Dermal	0
	Respiratory	0
	Thyroid	0
	Gastrointestinal	0
	Nervous	0
	Immune	0
	Ocular	0
	Developmental	0

Table 14 - Sub-Parcel B1-1
Sub-Surface Soils
Construction Worker Risk Ratios

		100 Day - EU1-EXP (51.0 ac.)				
			Construction Worker			
			SSLs		Risk Estimates	
Parameter	Target Organ	EPC (mg/kg)	Cancer	Non-Cancer	Risk	HQ
1,1-Biphenyl	Urinary	0.094	7,517	150	1.3E-11	0.0006
Antimony	Hematologic	40.0		295		0.1
Arsenic	Cardiovascular; Dermal	63.0	37.8	241	1.7E-06	0.3
Chromium VI	Respiratory	1.68	54.2	2,003	3.1E-08	0.0008
Cobalt	Thyroid	42.8	13,545	2,400	3.2E-09	0.02
Copper	Gastrointestinal	412		8,591		0.05
Iron	Gastrointestinal	138,038		601,353		0.2
Manganese	Nervous	15,405		10,651		1
Mercury	Nervous	0.18		1,236		0.0001
Vanadium	Dermal	502		4,014		0.1
PCBs (Total)		N/A	11.0			
Aroclor 1254	Dermal; Immune; Ocular	N/A	NE	18.7		
Benz(a)anthracene		3.43	355		9.7E-09	
Benzo(a)pyrene	Developmental	3.77	42.5	14.7	8.9E-08	0.3
Benzo(b)fluoranthene		3.88	423		9.2E-09	
Benzo(k)fluoranthene		7.23	4,237		1.7E-09	
Dibenz(a,h)anthracene		0.53	44.6		1.2E-08	
Indeno(1,2,3-c,d)pyrene		1.26	435		2.9E-09	
Naphthalene	Nervous; Respiratory	1.28	31.8	46.3	4.0E-08	0.03
					2E-06	↓

Bold indicates maximum value
N/A indicates no detections
NE = Not Evaluated. Aroclor 1254 was included for non-cancer hazard only. The carcinogenic risk is evaluated with Total PCBs.
SSLs calculated using equations in the EPA Supplemental Guidance dated 2002
Guidance Equation Input Assumptions:
5 cars/day (2 tons/car)
5 trucks/day (20 tons/truck)
3 meter source depth thickness

Total HI	Urinary	0
	Hematologic	0
	Cardiovascular	0
	Dermal	0
	Respiratory	0
	Thyroid	0
	Gastrointestinal	0
	Nervous	1
	Immune	0
	Ocular	0
	Developmental	0

Table 14 - Sub-Parcel B1-1
Sub-Surface Soils
Construction Worker Risk Ratios

		90 Day - EU2 (32.3 ac.)				
			Construction Worker			
			SSLs		Risk Estimates	
Parameter	Target Organ	EPC (mg/kg)	Cancer	Non-Cancer	Risk	HQ
1,1-Biphenyl	Urinary	0.16	8,352	170	1.9E-11	0.0009
Antimony	Hematologic	54.8		328		0.2
Arsenic	Cardiovascular; Dermal	22.4	42.0	268	5.3E-07	0.08
Chromium VI	Respiratory	N/A	59.7	2,224		
Cobalt	Thyroid	20.8	12,292	2,626	1.7E-09	0.008
Copper	Gastrointestinal	3,963		9,545		0.4
Iron	Gastrointestinal	127,601		668,170		0.2
Manganese	Nervous	5,575		11,518		0.5
Mercury	Nervous	0.13		1,372		0.00009
Vanadium	Dermal	556		4,437		0.1
PCBs (Total)		**0.11**	12.3		8.9E-09	
Aroclor 1254	Dermal; Immune; Ocular	N/A	NE	20.8		
Benz(a)anthracene		1.38	396		3.5E-09	
Benzo(a)pyrene	Developmental	1.63	47.3	16.5	3.4E-08	0.1
Benzo(b)fluoranthene		3.24	470		6.9E-09	
Benzo(k)fluoranthene		2.39	4,711		5.1E-10	
Dibenz(a,h)anthracene		0.26	49.5		5.3E-09	
Indeno(1,2,3-c,d)pyrene		0.96	484		2.0E-09	
Naphthalene	Nervous; Respiratory	0.56	35.8	52.2	1.6E-08	0.01
					6E-07	↓

Bold indicates maximum value
N/A indicates no detections
NE = Not Evaluated. Aroclor 1254 was included for non-cancer hazard only. The carcinogenic risk is evaluated with Total PCBs.
SSLs calculated using equations in the EPA Supplemental Guidance dated 2002
Guidance Equation Input Assumptions:
5 cars/day (2 tons/car)
5 trucks/day (20 tons/truck)
3 meter source depth thickness

Total HI	Urinary	0
	Hematologic	0
	Cardiovascular	0
	Dermal	0
	Respiratory	0
	Thyroid	0
	Gastrointestinal	1
	Nervous	0
	Immune	0
	Ocular	0
	Developmental	0

Table 14 - Sub-Parcel B1-1
Sub-Surface Soils
Construction Worker Risk Ratios

		1.5 Day - EU3 (32.3 ac.)				
			Construction Worker			
			SSLs		Risk Estimates	
Parameter	Target Organ	EPC (mg/kg)	Cancer	Non-Cancer	Risk	HQ
1,1-Biphenyl	Urinary	2.98	501,128	1,316	5.9E-12	0.002
Antimony	Hematologic	**6.00**		19,663		0.0003
Arsenic	Cardiovascular; Dermal	10.7	2,521	16,053	4.2E-09	0.0007
Chromium VI	Respiratory	0.85	3,584	133,439	2.4E-10	0.000006
Cobalt	Thyroid	97.1	737,507	157,542	1.3E-10	0.0006
Copper	Gastrointestinal	229		572,717		0.0004
Iron	Gastrointestinal	83,307		40,090,223		0.002
Manganese	Nervous	8,003		691,081		0.01
Mercury	Nervous	0.76		82,347		0.000009
Vanadium	Dermal	901		266,193		0.003
PCBs (Total)		N/A	170			
Aroclor 1254	Dermal; Immune; Ocular	N/A	NE	1,246		
Benz(a)anthracene		226	10,097		2.2E-08	
Benzo(a)pyrene	Developmental	185	2,177	138	8.5E-08	1
Benzo(b)fluoranthene		292	21,149		1.4E-08	
Benzo(k)fluoranthene		139	213,286		6.5E-10	
Dibenz(a,h)anthracene		22.1	2,970		7.4E-09	
Indeno(1,2,3-c,d)pyrene		80.1	25,221		3.2E-09	
Naphthalene	Nervous; Respiratory	14.2	278	405	5.1E-08	0.04
					2E-07	↓

Bold indicates maximum value
N/A indicates no detections
NE = Not Evaluated. Aroclor 1254 was included for non-cancer hazard only. The carcinogenic risk is evaluated with Total PCBs.
SSLs calculated using equations in the EPA Supplemental Guidance dated 2002
Guidance Equation Input Assumptions:

- 5 cars/day (2 tons/car)
- 5 trucks/day (20 tons/truck)
- 3 meter source depth thickness

Total HI	Urinary	0
	Hematologic	0
	Cardiovascular	0
	Dermal	0
	Respiratory	0
	Thyroid	0
	Gastrointestinal	0
	Nervous	0
	Immune	0
	Ocular	0
	Developmental	1

Table 15 - Sub-Parcel B1-1
Pooled Soils
Construction Worker Risk Ratios

		100 Day - EU1-EXP (51.0 ac.)				
			Construction Worker			
			SSLs		Risk Estimates	
Parameter	Target Organ	EPC (mg/kg)	Cancer	Non-Cancer	Risk	HQ
1,1-Biphenyl	Urinary	0.066	7,517	150	8.8E-12	0.0004
Antimony	Hematologic	12.0		295		0.04
Arsenic	Cardiovascular; Dermal	27.0	37.8	241	7.1E-07	0.1
Chromium VI	Respiratory	1.11	54.2	2,003	2.0E-08	0.0006
Cobalt	Thyroid	25.1	13,545	2,400	1.9E-09	0.01
Copper	Gastrointestinal	275		8,591		0.03
Iron	Gastrointestinal	134,690		601,353		0.2
Manganese	Nervous	13,494		10,651		1
Mercury	Nervous	1.29		1,236		0.001
Vanadium	Dermal	575		4,014		0.1
PCBs (Total)		2.36	11.0		2.1E-07	
Aroclor 1254	Dermal; Immune; Ocular	0.27	NE	18.7		0.01
Benz(a)anthracene		1.60	355		4.5E-09	
Benzo(a)pyrene	Developmental	1.71	42.5	14.7	4.0E-08	0.1
Benzo(b)fluoranthene		3.56	423		8.4E-09	
Benzo(k)fluoranthene		3.42	4,237		8.1E-10	
Dibenz(a,h)anthracene		0.32	44.6		7.2E-09	
Indeno(1,2,3-c,d)pyrene		0.79	435		1.8E-09	
Naphthalene	Nervous; Respiratory	0.71	31.8	46.3	2.2E-08	0.02
					1E-06	↓

NE = Not Evaluated. Aroclor 1254 was included for non-cancer hazard only. The carcinogenic risk is evaluated with Total PCBs.
SSLs calculated using equations in the EPA Supplemental Guidance dated 2002
Guidance Equation Input Assumptions:
5 cars/day (2 tons/car)
5 trucks/day (20 tons/truck)
3 meter source depth thickness

Total HI	Urinary	0
	Hematologic	0
	Cardiovascular	0
	Dermal	0
	Respiratory	0
	Thyroid	0
	Gastrointestinal	0
	Nervous	1
	Immune	0
	Ocular	0
	Developmental	0

Table 15 - Sub-Parcel B1-1
Pooled Soils
Construction Worker Risk Ratios

		90 Day - EU2 (32.3 ac.)				
			Construction Worker			
			SSLs		Risk Estimates	
Parameter	Target Organ	EPC (mg/kg)	Cancer	Non-Cancer	Risk	HQ
1,1-Biphenyl	Urinary	0.17	8,352	170	2.0E-11	0.001
Antimony	Hematologic	20.0		328		0.06
Arsenic	Cardiovascular; Dermal	18.5	42.0	268	4.4E-07	0.07
Chromium VI	Respiratory	1.24	59.7	2,224	2.1E-08	0.0006
Cobalt	Thyroid	18.5	12,292	2,626	1.5E-09	0.007
Copper	Gastrointestinal	541		9,545		0.06
Iron	Gastrointestinal	128,831		668,170		0.2
Manganese	Nervous	8,676		11,518		0.8
Mercury	Nervous	0.37		1,372		0.0003
Vanadium	Dermal	599		4,437		0.1
PCBs (Total)		1.58	12.3		1.3E-07	
Aroclor 1254	Dermal; Immune; Ocular	0.14	NE	20.8		0.007
Benz(a)anthracene		1.74	396		4.4E-09	
Benzo(a)pyrene	Developmental	1.49	47.3	16.5	3.2E-08	0.09
Benzo(b)fluoranthene		3.57	470		7.6E-09	
Benzo(k)fluoranthene		4.03	4,711		8.6E-10	
Dibenz(a,h)anthracene		0.33	49.5		6.7E-09	
Indeno(1,2,3-c,d)pyrene		0.99	484		2.0E-09	
Naphthalene	Nervous; Respiratory	0.52	35.8	52.2	1.5E-08	0.01
					7E-07	↓

NE = Not Evaluated. Aroclor 1254 was included for non-cancer hazard only. The carcinogenic risk is evaluated with Total PCBs.
SSLs calculated using equations in the EPA Supplemental Guidance dated 2002
Guidance Equation Input Assumptions:
5 cars/day (2 tons/car)
5 trucks/day (20 tons/truck)
3 meter source depth thickness

Total HI	Urinary	0
	Hematologic	0
	Cardiovascular	0
	Dermal	0
	Respiratory	0
	Thyroid	0
	Gastrointestinal	0
	Nervous	1
	Immune	0
	Ocular	0
	Developmental	0

Table 15 - Sub-Parcel B1-1
Pooled Soils
Construction Worker Risk Ratios

		1.5 Day - EU3 (32.3 ac.)				
			Construction Worker			
			SSLs		Risk Estimates	
Parameter	Target Organ	EPC (mg/kg)	Cancer	Non-Cancer	Risk	HQ
1,1-Biphenyl	Urinary	1.60	501,128	1,316	3.2E-12	0.001
Antimony	Hematologic	6.67		19,663		0.0003
Arsenic	Cardiovascular; Dermal	13.0	2,521	16,053	5.2E-09	0.0008
Chromium VI	Respiratory	0.53	3,584	133,439	1.5E-10	0.000004
Cobalt	Thyroid	54.2	737,507	157,542	7.3E-11	0.0003
Copper	Gastrointestinal	967		572,717		0.002
Iron	Gastrointestinal	112,385		40,090,223		0.003
Manganese	Nervous	11,037		691,081		0.02
Mercury	Nervous	11.8		82,347		0.0001
Vanadium	Dermal	586		266,193		0.002
PCBs (Total)		0.42	170		2.5E-09	
Aroclor 1254	Dermal; Immune; Ocular	0.17	NE	1,246		0.0001
Benz(a)anthracene		88.1	10,097		8.7E-09	
Benzo(a)pyrene	Developmental	71.0	2,177	138	3.3E-08	0.5
Benzo(b)fluoranthene		166	21,149		7.8E-09	
Benzo(k)fluoranthene		79.9	213,286		3.7E-10	
Dibenz(a,h)anthracene		8.69	2,970		2.9E-09	
Indeno(1,2,3-c,d)pyrene		30.6	25,221		1.2E-09	
Naphthalene	Nervous; Respiratory	5.27	278	405	1.9E-08	0.01
					8E-08	↓

NE = Not Evaluated. Aroclor 1254 was included for non-cancer hazard only. The carcinogenic risk is evaluated with Total PCBs.
SSLs calculated using equations in the EPA Supplemental Guidance dated 2002
Guidance Equation Input Assumptions:

- 5 cars/day (2 tons/car)
- 5 trucks/day (20 tons/truck)
- 3 meter source depth thickness

Total HI	Urinary	0
	Hematologic	0
	Cardiovascular	0
	Dermal	0
	Respiratory	0
	Thyroid	0
	Gastrointestinal	0
	Nervous	0
	Immune	0
	Ocular	0
	Developmental	1

APPENDIX A

TRADEPOINT
ATLANTIC
1600 Sparrows Point Boulevard
Baltimore, Maryland 21219

November 8, 2018

Maryland Department of Environment
1800 Washington Boulevard
Baltimore MD, 21230

Attention: Ms. Barbara Brown

Subject: Request to Enter Temporary CHS Review
Tradepoint Atlantic Parcel B1-1

Dear Ms. Brown:

The conduct of any environmental assessment and cleanup activities on the Tradepoint Atlantic property, as well as any associated development, is subject to the requirements outlined in the following agreements:

- Administrative Consent Order (ACO) between Tradepoint Atlantic (formerly Sparrows Point Terminal, LLC) and the Maryland Department of the Environment (effective September 12, 2014); and
- Settlement Agreement and Covenant Not to Sue (SA) between Tradepoint Atlantic (formerly Sparrows Point Terminal, LLC) and the United States Environmental Protection Agency (effective November 25, 2014).

On September 11, 2014, Tradepoint Atlantic submitted an application to the Maryland Department of the Environment's (Department) Voluntary Cleanup Program (VCP).

In consultation with the Department, Tradepoint Atlantic affirms that it desires to accelerate the assessment, remediation and redevelopment of certain sub-parcels within the larger site due to current market conditions. To that end, the Department and Tradepoint Atlantic agree that the Controlled Hazardous Substance (CHS) Act (Section 7-222 of the Environment Article) and the CHS Response Plan (COMAR 26.14.02) shall serve as the governing statutory and regulatory authority for completing the development activities on Parcel B1-1 and complement the statutory requirements of the Voluntary Cleanup Program (Section 7-501 of the Environment Article). Upon submission of a Site Response and Development Work Plan and completion of the remedial activities for the sub-parcel, the Department shall issue a "No Further Action" letter upon a recordation of an environmental covenant describing any necessary land use controls for the specific sub-parcel. At such time that all the sub-parcels within the larger parcel have completed remedial activities, Tradepoint Atlantic shall submit to the Department a request for issuing a Certificate of Completion (COC) as well as all pertinent information concerning completion of remedial activities conducted on the parcel. Once the VCP has completed its review of the submitted information it shall issue a COC for the entire parcel described in Tradepoint Atlantic's VCP application.

TRADEPOINT
ATLANTIC
1600 Sparrows Point Boulevard
Baltimore, Maryland 21219

Alternatively, Tradepoint Atlantic or other entity may elect to submit an application for a specific sub-parcel and submit it to the VCP for review and acceptance. If the application is received after the cleanup and redevelopment activities described in this work plan are implemented and a No Further Action letter is issued by the Department pursuant to the CHS Act, the VCP shall prepare a No Further Requirements Determination for the sub-parcel.

If Tradepoint Atlantic or other entity has not carried out cleanup and redevelopment activities described in the work plan, the cleanup and redevelopment activities may be conducted under the oversight authority of either the VCP or the CHS Act, so long as those activities comport with this work plan.

Engineering and institutional controls approved as part of this Site Response and Development Work Plan shall be described in documentation submitted to the Department demonstrating that the exposure pathways on the sub-parcel are addressed in a manner that protects public health and the environment. This information shall support Tradepoint Atlantic's request for the issuance of a COC for the larger parcel.

Please do not hesitate to contact Tradepoint Atlantic for further information.

Thank you,



Peter Haid

Senior Director of Environmental
TRADEPOINT ATLANTIC
1600 Sparrows Point Boulevard
Baltimore, Maryland 21219
T 443.649.5055 C 732.841.7935
phaid@tradepointatlantic.com

APPENDIX B

Sub-Parcel B1-1
Summary of Organics Detected in Soil (NAPL Screening Locations)

Parameter	Units	PAL	B1-023-SB-1	B1-023-SB-4	B1-024-SB-1	B1-024-SB-5	B1-025-SB-1	B1-026-SB-1	B1-026-SB-7.5	B1-027-SB-1	B1-028-SB-1	B1-028-SB-4	B1-077-SB-1
Volatile Organic Compounds													
1,2,3-Trichlorobenzene	mg/kg	930	0.0056 U	0.0085 U	0.0048 U	0.0069 U	0.0058 U	0.0044 U	0.0095 U	0.0067 U	0.0063 U	0.014 U	0.0081 U
1,2,4-Trichlorobenzene	mg/kg	110	0.0056 U	0.0085 U	0.0048 U	0.0069 U	0.0058 U	0.0044 U	0.0095 U	0.0067 U	0.0063 U	0.014 U	0.0081 U
1,2-Dichlorobenzene	mg/kg	9,300	0.0056 U	0.0085 U	0.0048 U	0.0069 U	0.0058 U	0.0044 U	0.0095 U	0.0067 U	0.0063 U	0.014 U	0.0081 U
2-Butanone (MEK)	mg/kg	190,000	0.011 U	0.017 U	0.0097 U	0.014 U	0.012 U	0.0088 U	0.019 U	0.013 U	0.013 U	0.028 U	**0.0046 J**
4-Methyl-2-pentanone (MIBK)	mg/kg	56,000	0.011 U	0.017 U	0.0097 U	0.014 U	0.012 U	0.0088 U	0.019 U	0.013 U	0.013 U	0.028 U	0.016 U
Acetone	mg/kg	670,000	0.011 U	0.017 U	0.0097 U	**0.011 J**	0.0064 B	0.0088 UJ	0.012 B	0.013 U	0.013 U	0.028 U	**0.073 J**
Benzene	mg/kg	5.1	0.0056 U	0.0085 U	**0.0027 J**	0.0069 U	0.0058 U	0.0044 U	0.0095 U	0.0067 U	0.0063 U	0.014 U	0.0081 U
Toluene	mg/kg	47,000	0.0056 U	0.0085 U	**0.0034 J**	0.0069 U	0.0058 U	0.0044 U	0.0095 U	0.0067 U	0.0063 U	0.014 U	0.0081 U
Semi-Volatile Organic Compounds^													
1,1-Biphenyl	mg/kg	200	**0.066 J**	0.079 U	**0.076**	0.082 U	0.073 U	0.073 U	0.079 U	**0.081**	**0.65 J**	0.096 U	**0.11**
2,4-Dimethylphenol	mg/kg	16,000	**0.03 J**	0.079 U	**0.026 J**	0.082 U	0.073 U	0.073 U	0.079 U	**0.018 J**	**0.34 J**	0.096 UJ	**0.036 J**
2,6-Dinitrotoluene	mg/kg	1.5	0.072 U	0.079 U	0.073 U	0.082 U	0.073 U	0.073 U	0.079 U	0.077 U	0.076 UJ	0.096 U	0.079 U
2-Chloronaphthalene	mg/kg	60,000	**0.083**	0.079 U	**0.03 J**	0.082 U	0.073 U	0.073 U	0.079 U	0.077 U	0.076 U	0.096 U	0.079 U
2-Methylnaphthalene	mg/kg	3,000	**0.34**	**0.027**	**0.29**	**0.0041 J**	**0.051**	**0.02**	**0.079**	**0.5**	**1**	**0.022**	**0.85**
2-Methylphenol	mg/kg	41,000	**0.021 J**	0.079 U	**0.022 J**	0.082 U	0.073 U	0.073 U	0.079 U	0.077 U	**0.087 J**	0.096 UJ	**0.028 J**
3&4-Methylphenol(m&p Cresol)	mg/kg	41,000	**0.048 J**	0.16 U	**0.042 J**	0.16 U	0.15 U	0.15 U	0.16 U	**0.033 J**	**0.34 J**	0.19 UJ	**0.035 J**
4-Chloroaniline	mg/kg	11	0.072 UJ	0.079 UJ	0.073 UJ	0.082 UJ	0.073 U	0.073 U	0.079 U	0.077 UJ	0.076 UJ	0.096 UJ	0.079 U
Acenaphthene	mg/kg	45,000	**0.025**	**0.015**	**0.024**	**0.0014 J**	**0.0079**	**0.0052 J**	**0.0048 J**	**0.11**	**2.9**	**0.006 J**	**0.04**
Acenaphthylene	mg/kg	45,000	**0.16**	**0.012**	**0.58**	**0.0018 J**	**0.058**	**0.06**	**0.025**	**0.16**	**0.37**	**0.0059 J**	**0.16**
Acetophenone	mg/kg	120,000	**0.043 J**	0.079 U	**0.093**	0.082 U	0.073 U	0.073 U	0.079 U	**0.076 J**	**0.45 J**	0.096 U	**0.078 J**
Anthracene	mg/kg	230,000	**0.19**	**0.16**	**0.34**	**0.0041 J**	**0.057**	**0.076**	**0.041**	**0.37**	**10.5**	**0.042**	**0.23**
Benz[a]anthracene	mg/kg	21	**0.57**	**0.58**	**1.9**	**0.006 J**	**0.15**	**0.066**	**0.12**	**1**	**48.2**	**0.09**	**0.61**
Benzaldehyde	mg/kg	120,000	**0.093**	0.079 U	**0.1**	0.082 U	0.073 R	0.073 R	0.079 R	**0.064 J**	0.076 U	0.096 U	**0.28 J**
Benzo[a]pyrene	mg/kg	2.1	**0.74 J**	**0.58 J**	**1.7**	**0.003 J**	**0.2 J**	**0.11 J**	**0.15 J**	**1.2 J**	**37.6**	**0.079 J**	**0.68 J**
Benzo[b]fluoranthene	mg/kg	21	**0.93**	**1.4 J**	**3.6**	**0.014 J**	**0.62 J**	**0.39 J**	**0.47 J**	**2.1**	**48**	**0.24 J**	**1.7 ip**
Benzo[g,h,i]perylene	mg/kg		**0.34 J**	**0.19 J**	**0.7 J**	**0.0044 J**	**0.11 J**	**0.064 J**	**0.063 J**	**0.5 J**	**7.2**	**0.034 J**	**0.22 J**
Benzo[k]fluoranthene	mg/kg	210	**0.45**	**1.3 J**	**3.1**	**0.012 J**	**0.62 J**	**0.32 J**	**0.38 J**	**1.9**	**12.9**	**0.21 J**	**1.5 ip**
bis(2-Chloroethyl)ether	mg/kg	1	0.072 U	0.079 U	0.073 U	0.082 U	0.073 U	0.073 U	0.079 U	0.077 U	**0.022 J**	0.096 U	0.079 U
bis(2-Ethylhexyl)phthalate	mg/kg	160	**0.034 J**	0.079 U	**0.032 J**	0.082 U	0.073 UJ	**0.41 J**	0.079 U	**0.063 J**	0.076 UJ	0.096 U	0.056 B
Carbazole	mg/kg		**0.13**	0.079 U	**0.07 J**	0.082 U	0.073 UJ	0.073 UJ	**0.024 J**	**0.19**	**12.1**	0.096 U	**0.12**
Chrysene	mg/kg	2,100	**0.7**	**0.52**	**1.7**	**0.0052 J**	**0.19**	**0.065**	**0.13**	**1.4**	**42.2**	**0.1**	**0.69**
Dibenz[a,h]anthracene	mg/kg	2.1	**0.14 J**	**0.063 J**	**0.32 J**	0.0082 UJ	**0.038 J**	**0.024 J**	**0.026 J**	**0.21 J**	**3.3 J**	**0.01 J**	**0.12 J**
Di-n-butylphthalate	mg/kg	82,000	0.072 U	0.079 U	0.073 U	0.082 U	0.073 UJ	0.073 UJ	0.079 U	**0.019 J**	0.076 U	0.096 U	0.079 U
Di-n-ocytlphthalate	mg/kg	8,200	0.072 U	0.079 U	0.073 U	0.082 U	0.073 UJ	0.073 UJ	0.079 U	0.077 UJ	0.076 UJ	0.096 U	0.079 UJ
Fluoranthene	mg/kg	30,000	**0.9**	**0.94**	**2.1**	**0.0097**	**0.19**	**0.092**	**0.22**	**1.9**	**99.5**	**0.19**	**1.2**
Fluorene	mg/kg	30,000	**0.024**	**0.019**	**0.024**	**0.0012 J**	**0.005 J**	**0.0075**	**0.007 J**	**0.08**	**3**	**0.0091 J**	**0.056**
Hexachloroethane	mg/kg	8	0.072 U	0.079 U	0.073 U	0.082 U	0.073 U	0.073 U	0.079 U	0.077 U	0.076 U	0.096 U	**0.069 J**
Indeno[1,2,3-c,d]pyrene	mg/kg	21	**0.37 J**	**0.2 J**	**0.86 J**	**0.0025 J**	**0.11 J**	**0.061 J**	**0.069 J**	**0.53 J**	**8.7**	**0.028 J**	**0.28 J**
Naphthalene	mg/kg	17	**0.27**	**0.046**	**0.26**	**0.0066 J**	**0.04**	**0.017**	**0.06**	**0.4**	**1.7**	**0.037**	**0.55**
N-Nitrosodiphenylamine	mg/kg	470	0.072 U	0.079 U	0.073 U	0.082 U	0.073 UJ	0.073 UJ	0.079 U	0.077 U	0.076 U	0.096 U	0.079 U
Phenanthrene	mg/kg		**0.59**	**0.5**	**0.7**	**0.0083**	**0.11**	**0.046**	**0.14**	**1.6**	**54.4**	**0.15**	**1.1**
Phenol	mg/kg	250,000	**0.053 J**	0.079 U	**0.043 J**	0.082 U	0.073 U	0.073 U	0.079 U	0.077 U	**0.12 J**	0.096 UJ	0.079 U
Pyrene	mg/kg	23,000	**0.81**	**0.79**	**1.9**	**0.0066 J**	**0.2**	**0.1**	**0.18**	**2**	**77.8**	**0.13**	**0.99**
PCBs													
Aroclor 1242	mg/kg	0.97	0.0556 U	N/A	0.057 U	N/A	0.0554 U	0.053 U	N/A	0.0581 U	0.0627 U	N/A	0.0592 U
Aroclor 1254	mg/kg	0.97	0.0556 U	N/A	0.057 U	N/A	**0.127**	0.053 U	N/A	**0.194**	0.0627 U	N/A	0.0592 U
Aroclor 1260	mg/kg	0.99	0.0556 U	N/A	**0.159**	N/A	**0.0669**	**0.0442 J**	N/A	**0.239**	0.0627 U	N/A	**0.0945**
Aroclor 1262	mg/kg		0.0556 U	N/A	0.057 U	N/A	0.0554 U	0.053 U	N/A	0.0581 U	0.0627 U	N/A	0.0592 U
Aroclor 1268	mg/kg		**0.281**	N/A	0.057 U	N/A	0.0554 U	0.053 U	N/A	0.0581 U	0.0627 U	N/A	0.0592 U
PCBs (total)	mg/kg	0.97	**0.281**	N/A	**0.159**	N/A	**0.1939**	**0.0442 J**	N/A	**0.433**	0.0627 U	N/A	**0.0945**
TPH/Oil and Grease													
Diesel Range Organics	mg/kg	6,200	**111**	**22.9**	**83.8**	**6.8 J**	**45.4**	**78.9**	**30.9**	**156**	**1,730**	**16.9**	**161**
Gasoline Range Organics	mg/kg	6,200	9.8 U	12.7 U	9.7 U	19.9 U	13.9 U	9.7 U	17.9 U	19.1 U	**10.6 J**	24 U	11.8 U

Detections in bold
Values in red indicate an exceedance of the Project Action Limit (PAL)
* Indicates non-validated data
^ PAH compounds were analyzed via SIM
N/A indicates that the parameter was not analyzed for this sample

U: This analyte was not detected in the sample. The numeric value represents the sample quantitation/detection limit.
UJ: This analyte was not detected in the sample. The actual quantitation/detection limit may be higher than reported.
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.
R: The result reported for this analyte is unreliable. Additional data is needed to confirm or disprove the presence of this analyte in the sample.

Sub-Parcel B1-1
Summary of Organics Detected in Soil (NAPL Screening Locations)

Parameter	Units	PAL	B1-077-SB-4	B1-078-SB-1	B1-078-SB-4	B1-093-SB-1*	B1-093-SB-5*	B1-094-SB-1*	B1-094-SB-7*	B1-121-SB-1	B1-122-SB-1	B1-124-SB-1
Volatile Organic Compounds												
1,2,3-Trichlorobenzene	mg/kg	930	0.011 U	0.0059 U	0.0079 U	0.0062 U	0.0051 U	0.011 U	0.013 U	0.0048 U	0.0058 U	0.0052 U
1,2,4-Trichlorobenzene	mg/kg	110	0.011 U	0.0059 U	0.0079 U	0.0062 U	0.0051 U	0.011 U	0.013 U	0.0048 U	0.0058 U	0.0052 U
1,2-Dichlorobenzene	mg/kg	9,300	0.011 U	0.0059 U	0.0079 U	0.0062 U	0.0051 U	0.011 U	0.013 U	0.0048 U	0.0058 U	0.0052 U
2-Butanone (MEK)	mg/kg	190,000	0.021 U	0.012 U	0.016 U	**0.0033 J**	0.01 U	0.023 U	0.027 U	0.0095 U	0.012 U	0.01 U
4-Methyl-2-pentanone (MIBK)	mg/kg	56,000	0.021 U	0.012 U	0.016 U	0.012 U	0.01 U	0.023 U	0.027 U	0.0095 U	0.012 U	0.01 U
Acetone	mg/kg	670,000	0.011 B	0.0095 B	0.0082 B	**0.024**	**0.0053 J**	**0.022 J**	**0.032**	0.0047 B	0.012 U	0.0053 B
Benzene	mg/kg	5.1	0.011 U	0.0059 U	0.0079 U	0.0062 U	0.0051 U	0.011 U	0.013 U	**0.0025 J**	**0.0016 J**	**0.0016 J**
Toluene	mg/kg	47,000	0.011 U	0.0059 U	0.0079 U	0.0062 U	0.0051 U	0.011 U	0.013 U	**0.0025 J**	**0.002 J**	**0.0018 J**
Semi-Volatile Organic Compounds^												
1,1-Biphenyl	mg/kg	200	0.083 U	**0.12**	**0.025 J**	**0.027 J**	0.086 U	0.11 U	**0.04 J**	**0.28**	**0.61**	**0.61**
2,4-Dimethylphenol	mg/kg	16,000	0.083 U	**0.028 J**	0.076 U	0.083 U	0.086 U	0.11 U	**0.02 J**	0.074 U	0.075 U	0.076 U
2,6-Dinitrotoluene	mg/kg	1.5	0.083 U	0.078 U	0.076 U	0.083 U	0.086 U	0.11 U	0.1 U	0.074 U	0.075 U	0.076 U
2-Chloronaphthalene	mg/kg	60,000	0.083 U	0.078 U	0.076 U	0.083 U	0.086 U	0.11 U	0.1 U	0.074 U	0.075 U	0.076 U
2-Methylnaphthalene	mg/kg	3,000	**0.038**	**2.7**	**0.18**	**0.12**	**0.13**	0.011 U	**0.11**	**0.34**	**0.26 J**	**0.38**
2-Methylphenol	mg/kg	41,000	0.083 U	**0.016 J**	0.076 U	0.083 U	0.086 U	0.11 U	0.1 U	0.074 U	0.075 U	0.076 U
3&4-Methylphenol(m&p Cresol)	mg/kg	41,000	0.17 U	**0.044 J**	0.15 U	0.17 U	0.17 U	0.21 U	**0.052 J**	0.15 U	0.15 U	0.15 U
4-Chloroaniline	mg/kg	11	0.083 U	0.078 U	0.076 U	0.083 U	0.086 U	0.11 U	0.1 U	0.074 U	0.075 U	0.076 U
Acenaphthene	mg/kg	45,000	**0.0018 J**	**4.5**	**0.017**	**0.89**	**0.032**	0.011 U	**0.35**	**0.14**	**0.14 J**	**0.13**
Acenaphthylene	mg/kg	45,000	**0.0079 J**	**0.33**	**0.027**	**0.19**	**0.52**	**0.001 J**	**0.032**	**0.25**	**0.29 J**	**0.41**
Acetophenone	mg/kg	120,000	0.083 U	**0.029 J**	**0.022 J**	0.083 U	0.086 U	0.11 U	0.1 U	**0.071 J**	**0.085**	**0.065 J**
Anthracene	mg/kg	230,000	**0.0087**	**14.8**	**0.087**	**3.3**	**0.8**	0.0023 B	**0.7**	**0.61**	**0.61 J**	**0.74**
Benz[a]anthracene	mg/kg	21	**0.031**	**27.1**	**0.21**	**12.3**	**2.7**	**0.0037 J**	**1.3**	**1.6**	**2.5**	**2.3**
Benzaldehyde	mg/kg	120,000	0.083 R	**0.062 J**	**0.092 J**	0.083 U	0.086 U	0.11 U	**0.21**	**0.034 J**	**0.033 J**	**0.042 J**
Benzo[a]pyrene	mg/kg	2.1	**0.036 J**	**24.6 J**	**0.22**	**15.1**	**2.8**	**0.0021 J**	**1.2**	**1.7 J**	**2.6**	**2.5 J**
Benzo[b]fluoranthene	mg/kg	21	**0.11 J**	**25.3 J**	**0.53 ip**	**35.7**	**5.6**	**0.0052 J**	**3.2**	**3.6 J**	**5.3**	**5.3 J**
Benzo[g,h,i]perylene	mg/kg		**0.015 J**	**8.6 J**	**0.11**	**5.6**	**1.1**	**0.0017 J**	**0.42**	**0.7**	**0.92**	**1.1 J**
Benzo[k]fluoranthene	mg/kg	210	**0.092 J**	**20.6 J**	**0.43 ip**	**36**	**5.7**	**0.0053 J**	**3.3**	**3.6 J**	**5.5**	**5.3 J**
bis(2-Chloroethyl)ether	mg/kg	1	0.083 U	0.078 U	0.076 U	0.083 U	0.086 U	0.11 U	0.1 U	0.074 U	0.075 U	0.076 U
bis(2-Ethylhexyl)phthalate	mg/kg	160	0.083 U	0.016 B	0.076 U	0.083 U	0.086 U	0.11 U	**0.94**	0.074 UJ	**0.19 J**	0.067 B
Carbazole	mg/kg		0.083 U	**1.3 J**	**0.028 J**	**3.2**	**0.17**	0.11 U	**0.86**	**0.16**	**0.29**	**0.22**
Chrysene	mg/kg	2,100	**0.044**	**22.9**	**0.25**	**12.4**	**2.7**	**0.0034 J**	**1.4**	**1.7**	**2.6**	**2.4**
Dibenz[a,h]anthracene	mg/kg	2.1	**0.0056 J**	**3.3 J**	**0.054**	**2**	**0.56**	0.011 U	**0.18**	**0.27**	**0.34**	**0.6 J**
Di-n-butylphthalate	mg/kg	82,000	0.083 U	0.078 U	0.076 U	0.083 U	0.086 U	0.11 U	0.1 U	0.074 U	0.075 U	0.076 U
Di-n-ocytlphthalate	mg/kg	8,200	0.083 U	0.078 UJ	0.076 U	0.083 U	0.086 U	0.11 U	0.1 U	0.074 UJ	0.075 UJ	0.076 U
Fluoranthene	mg/kg	30,000	**0.072**	**22.8**	**0.41**	**45.3**	**5.1**	0.0076 B	**4.8**	**3.3**	**5.1**	**4.4**
Fluorene	mg/kg	30,000	**0.0034 J**	**4.8**	**0.02**	**0.65**	**0.1**	0.011 U	**0.28**	**0.15**	**0.13 J**	**0.13**
Hexachloroethane	mg/kg	8	0.083 U	0.078 U	0.076 U	0.083 U	0.086 U	0.11 U	0.1 U	0.074 U	0.075 U	0.076 U
Indeno[1,2,3-c,d]pyrene	mg/kg	21	**0.015 J**	**9.1 J**	**0.12**	**6.2**	**1.4**	0.011 U	**0.46**	**0.69**	**0.93**	**1 J**
Naphthalene	mg/kg	17	**0.03**	**5.6**	**0.1**	**0.33**	**0.46**	0.0017 B	**0.27**	**0.96**	**0.91**	**1.5**
N-Nitrosodiphenylamine	mg/kg	470	0.083 U	0.078 U	0.076 U	0.083 U	0.086 U	0.11 U	0.1 U	0.074 U	0.075 U	0.076 U
Phenanthrene	mg/kg		**0.061**	**20.4**	**0.44**	**14.7**	**1.7**	0.011 B	**3.5**	**2.2**	**3.1**	**2.4**
Phenol	mg/kg	250,000	0.083 U	0.078 UJ	0.076 U	0.083 U	0.086 U	0.11 U	**0.072 J**	**0.018 J**	**0.036 J**	**0.045 J**
Pyrene	mg/kg	23,000	**0.055**	**17.4**	**0.33**	**40.1**	**4.1**	0.0043 B	**5.4**	**3.5**	**5.6**	**4.6**
PCBs												
Aroclor 1242	mg/kg	0.97	N/A	0.0577 U	N/A	0.0648 U	N/A	0.0762 U	N/A	**0.0708 J**	**0.19**	**0.131**
Aroclor 1254	mg/kg	0.97	N/A	0.0577 U	N/A	**0.0577 J**	N/A	0.0762 U	N/A	**0.158 J**	**0.378 J**	**0.363 J**
Aroclor 1260	mg/kg	0.99	N/A	0.0577 U	N/A	0.0648 U	N/A	0.0762 U	N/A	0.0556 U	0.0571 U	0.0582 U
Aroclor 1262	mg/kg		N/A	0.0577 U	N/A	**0.152**	N/A	0.0762 U	N/A	**0.177**	**0.411 J**	**0.544**
Aroclor 1268	mg/kg		N/A	0.0577 U	N/A	0.0648 U	N/A	0.0762 U	N/A	0.0556 U	0.0571 U	0.0582 U
PCBs (total)	mg/kg	0.97	N/A	0.0577 U	N/A	**0.2097**	N/A	0.0762 U	N/A	**0.4058**	**0.979**	**1.038**
TPH/Oil and Grease												
Diesel Range Organics	mg/kg	6,200	**17.2**	**251**	**40.8**	**359**	**109**	**8.8 J**	**390**	**193**	**287**	**240**
Gasoline Range Organics	mg/kg	6,200	15.8 U	10.8 U	13.3 U	13.7 U	14.4 U	23.5 U	24.6 U	12.6 U	12.7 U	10.6 U

Detections in bold
Values in red indicate an exceedance of the Project Action Limit (PAL)
* Indicates non-validated data
^ PAH compounds were analyzed via SIM
N/A indicates that the parameter was not analyzed for this sample

U: This analyte was not detected in the sample. The numeric value represents the sample quantitation/detection limit.
UJ: This analyte was not detected in the sample. The actual quantitation/detection limit may be higher than reported.
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.
R: The result reported for this analyte is unreliable. Additional data is needed to confirm or disprove the presence of this analyte in the sample.

Sub-Parcel B1-1
Summary of Organics Detected in Soil (NAPL Screening Locations)

Parameter	Units	PAL	B1-125-SB-1	B1-177-SB-1*	B1-177-SB-5*	B4-014-SB-1	B4-014-SB-5	B4-015-SB-1	B4-015-SB-5	B4-057-SB-1*	B4-057-SB-5*	B4-057-SB-10*
Volatile Organic Compounds												
1,2,3-Trichlorobenzene	mg/kg	930	0.0051 U	0.0062 U	0.0086 U	**0.0046 J**	0.0049 U	**0.0017 J**	0.0052 U	0.0047 U	0.0054 U	N/A
1,2,4-Trichlorobenzene	mg/kg	110	0.0051 U	0.0062 U	0.0086 U	**0.0083**	0.0049 U	**0.0037 J**	0.0052 U	0.0047 U	0.0054 U	N/A
1,2-Dichlorobenzene	mg/kg	9,300	**0.0011 J**	0.0062 U	0.0086 U	0.005 U	0.0049 U	0.005 U	0.0052 U	0.0047 U	0.0054 U	N/A
2-Butanone (MEK)	mg/kg	190,000	**0.0026 J**	**0.0054 J**	0.017 U	0.0099 U	**0.0025 J**	0.0099 U	**0.0026 J**	0.0094 U	0.011 U	N/A
4-Methyl-2-pentanone (MIBK)	mg/kg	56,000	0.01 U	0.012 U	0.017 U	0.0099 U	**0.0024 J**	0.0099 U	0.01 U	0.0094 U	0.011 U	N/A
Acetone	mg/kg	670,000	0.04 B	**0.033**	**0.013 J**	0.0099 U	**0.035**	**0.047**	**0.045**	0.0094 U	0.011 U	N/A
Benzene	mg/kg	5.1	0.0051 U	0.0062 U	0.0086 U	0.005 U	0.0049 U	0.005 U	0.0052 U	0.0047 U	0.0054 U	N/A
Toluene	mg/kg	47,000	0.0051 U	0.0062 U	0.0086 U	0.013 B	0.012 B	0.018 B	0.015 B	0.0047 U	0.0054 U	N/A
Semi-Volatile Organic Compounds^												
1,1-Biphenyl	mg/kg	200	**0.17 J**	**0.064 J**	0.09 U	**0.038 J**	0.08 U	0.073 U	0.081 U	0.072 U	0.072 U	N/A
2,4-Dimethylphenol	mg/kg	16,000	0.075 U	**0.41**	0.09 U	**0.055 J**	0.08 U	0.073 R	0.081 U	0.072 U	0.072 U	N/A
2,6-Dinitrotoluene	mg/kg	1.5	0.075 U	0.077 U	0.09 U	0.077 U	0.08 U	0.073 U	**0.039 J**	0.072 U	0.072 U	N/A
2-Chloronaphthalene	mg/kg	60,000	0.075 U	0.077 U	0.09 U	0.077 U	0.08 U	0.073 U	0.081 U	0.072 U	0.072 U	N/A
2-Methylnaphthalene	mg/kg	3,000	**0.13**	**0.2**	**0.019**	**0.013**	0.0081 U	**0.011**	**0.14**	**0.014**	**0.022**	N/A
2-Methylphenol	mg/kg	41,000	0.075 U	**0.058 J**	0.09 U	**0.064 J**	0.08 U	0.073 R	0.081 U	0.072 U	0.072 U	N/A
3&4-Methylphenol(m&p Cresol)	mg/kg	41,000	**0.14 J**	**0.33**	0.18 U	**0.042 J**	0.16 U	0.15 R	0.16 U	0.14 U	0.14 U	N/A
4-Chloroaniline	mg/kg	11	**0.22 J**	0.077 U	0.09 U	0.077 U	0.08 U	0.073 U	0.081 U	0.072 U	0.072 U	N/A
Acenaphthene	mg/kg	45,000	**0.059**	**0.069**	**0.0045 J**	0.004 B	0.0081 U	0.0015 B	**0.0094**	**0.0044 J**	**0.0017 J**	N/A
Acenaphthylene	mg/kg	45,000	**0.12**	**0.035**	**0.012**	**0.0051 J**	**0.0026 J**	**0.0019 J**	**0.018**	**0.0054 J**	**0.006 J**	N/A
Acetophenone	mg/kg	120,000	**0.044 J**	0.077 U	0.09 U	0.077 U	0.08 U	0.073 U	0.081 U	0.072 U	0.072 U	N/A
Anthracene	mg/kg	230,000	**0.28**	**0.034**	**0.02**	**0.011**	0.0081 U	0.0074 U	**0.039**	**0.012**	**0.038**	N/A
Benz[a]anthracene	mg/kg	21	**0.7**	**0.092**	**0.1**	**0.049**	0.0081 U	**0.021**	**0.091**	**0.04**	**0.41**	N/A
Benzaldehyde	mg/kg	120,000	**0.019 J**	0.077 U	0.09 U	**0.15 J**	0.08 R	0.073 R	0.081 R	**0.023 J**	0.072 U	N/A
Benzo[a]pyrene	mg/kg	2.1	**0.88 J**	**0.086**	**0.14**	**0.057**	0.001 B	**0.021**	**0.13**	**0.026**	**0.32**	**0.55**
Benzo[b]fluoranthene	mg/kg	21	**2.2**	**0.25**	**0.35**	**0.17**	0.0022 B	**0.098**	**0.26**	**0.094**	**0.77**	N/A
Benzo[g,h,i]perylene	mg/kg		**0.32 J**	**0.054**	**0.063**	**0.018**	0.0081 U	**0.016**	**0.072**	**0.029**	**0.28**	N/A
Benzo[k]fluoranthene	mg/kg	210	**2.3**	**0.25**	**0.35**	**0.16**	0.0021 B	**0.095**	**0.24**	**0.069**	**0.23**	N/A
bis(2-Chloroethyl)ether	mg/kg	1	0.075 U	0.077 U	0.09 U	0.077 U	0.08 U	0.073 U	0.081 U	0.072 U	0.072 U	N/A
bis(2-Ethylhexyl)phthalate	mg/kg	160	**1.6 J**	0.077 U	0.09 U	0.077 UJ	0.08 U	0.073 U	0.081 U	0.072 U	0.072 U	N/A
Carbazole	mg/kg		**0.085 J**	**0.022 J**	0.09 U	0.077 U	0.08 U	0.073 U	**0.026 J**	0.072 U	**0.036 J**	N/A
Chrysene	mg/kg	2,100	**0.77**	**0.15**	**0.12**	**0.13**	0.0011 B	**0.051**	**0.11**	**0.049**	**0.39**	N/A
Dibenz[a,h]anthracene	mg/kg	2.1	**0.11 J**	**0.014**	**0.021**	0.015 U	0.0081 U	**0.0056 J**	**0.03**	**0.0083**	**0.11**	N/A
Di-n-butylphthalate	mg/kg	82,000	0.075 U	**0.022 J**	0.09 U	**0.044 J**	0.08 UJ	0.073 UJ	0.081 UJ	0.072 U	0.072 U	N/A
Di-n-ocytlphthalate	mg/kg	8,200	**0.11 J**	0.077 U	0.09 U	0.077 UJ	0.08 U	0.073 U	0.081 U	0.072 U	0.072 U	N/A
Fluoranthene	mg/kg	30,000	**1.2**	**0.2**	**0.2**	**0.27**	0.002 B	**0.16**	**0.24**	**0.082**	**0.51**	N/A
Fluorene	mg/kg	30,000	**0.087**	**0.057**	**0.0043 J**	0.0035 B	0.0081 U	0.0015 B	**0.018**	**0.0012 J**	**0.0015 J**	N/A
Hexachloroethane	mg/kg	8	0.075 U	0.077 U	0.09 U	0.077 U	0.08 U	0.073 U	0.081 U	0.072 U	0.072 U	N/A
Indeno[1,2,3-c,d]pyrene	mg/kg	21	**0.31 J**	**0.039**	**0.058**	**0.012 J**	0.0081 U	**0.016**	**0.07**	**0.022**	**0.27**	N/A
Naphthalene	mg/kg	17	**0.33**	**0.1**	**0.017**	**0.023**	0.0081 U	**0.017**	**0.09**	**0.012**	**0.022**	N/A
N-Nitrosodiphenylamine	mg/kg	470	0.075 U	0.077 U	0.09 U	**0.065 J**	0.08 U	0.073 U	0.081 U	0.072 U	0.072 U	N/A
Phenanthrene	mg/kg		**0.94**	**0.26**	**0.1**	**0.1**	0.0028 B	**0.27**	**0.2**	**0.066**	**0.28**	N/A
Phenol	mg/kg	250,000	**0.24 J**	**1.1**	0.09 U	**0.13 J**	0.08 U	0.073 R	0.081 U	0.072 U	0.072 U	N/A
Pyrene	mg/kg	23,000	**1.4**	**0.19**	**0.18**	**0.19**	**0.0015 J**	**0.079**	**0.24**	**0.072**	**0.39**	N/A
PCBs												
Aroclor 1242	mg/kg	0.97	**0.136 J**	0.0576 U	N/A	0.164 U	N/A	0.0538 U	N/A	0.0536 U	N/A	N/A
Aroclor 1254	mg/kg	0.97	**0.307 J**	**0.071**	N/A	0.164 U	N/A	0.0538 U	N/A	0.0536 U	N/A	N/A
Aroclor 1260	mg/kg	0.99	0.0577 U	0.0576 U	N/A	**4.68**	N/A	**0.839**	N/A	0.0536 U	N/A	N/A
Aroclor 1262	mg/kg		**0.433**	0.0576 U	N/A	0.164 U	N/A	0.0538 U	N/A	0.0536 U	N/A	N/A
Aroclor 1268	mg/kg		0.0577 U	0.0576 U	N/A	0.164 U	N/A	0.0538 U	N/A	0.0536 U	N/A	N/A
PCBs (total)	mg/kg	0.97	**0.876**	**0.071**	N/A	**4.68**	N/A	**0.839**	N/A	0.0536 U	N/A	N/A
TPH/Oil and Grease												
Diesel Range Organics	mg/kg	6,200	**1,140**	**729**	**56.5**	**423**	**7.8 J**	**55.6 J**	**15.9**	**222**	**19.2**	N/A
Gasoline Range Organics	mg/kg	6,200	11.9 U	15.1 U	21.3 U	**7.2 J**	11 U	9.8 U	10.4 U	8.7 U	11.6 U	N/A

Detections in bold
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^ PAH compounds were analyzed via SIM
N/A indicates that the parameter was not analyzed for this sample

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UJ: This analyte was not detected in the sample. The actual quantitation/detection limit may be higher than reported.
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.
R: The result reported for this analyte is unreliable. Additional data is needed to confirm or disprove the presence of this analyte in the sample.

Sub-Parcel B1-1
Summary of Inorganics Detected in Soil (NAPL Screening Locations)

Parameter	Units	PAL	B1-023-SB-1	B1-023-SB-4	B1-024-SB-1	B1-024-SB-5	B1-025-SB-1	B1-026-SB-1	B1-026-SB-7.5	B1-027-SB-1
Metals										
Aluminum	mg/kg	1,100,000	**1,300**	**23,400**	**8,320**	**55,500**	**31,000**	**25,700**	**30,400**	**12,400**
Antimony	mg/kg	470	2.7 UJ	3.6 UJ	3.2 UJ	3.5 UJ	1.9 B	2.9 U	3.6 U	**2.5 J**
Arsenic	mg/kg	3	2.3 U	**15.8 J**	**15 J**	**8.7 J**	**9.9 J**	**7.4 J**	**22.9 J**	**49.4 J**
Barium	mg/kg	220,000	**28.3**	**289**	**162**	**736**	**386 J**	**268 J**	**820 J**	**175**
Beryllium	mg/kg	2,300	0.92 U	**1.5**	**0.97 J**	**2.5**	**3.1**	**3.8**	**1.9**	**0.72 J**
Cadmium	mg/kg	980	**0.58 J**	**0.62 J**	**2.9**	**0.51 J**	0.83 B	0.87 B	0.88 B	**3.5**
Chromium	mg/kg	120,000	**33.7**	**453**	**145**	**516**	**48.7**	**234**	**344**	**402**
Chromium VI	mg/kg	6.3	0.3 B	0.34 B	0.35 B	0.29 B	0.36 B	0.35 B	0.43 B	0.38 B
Cobalt	mg/kg	350	**5.4**	**27.5**	**24.2**	**29.6**	4.1 B	**8.2 J**	**17.7 J**	**35.9**
Copper	mg/kg	47,000	**51.6**	**85.3**	**340**	**70.1**	**1,850**	**144**	**130**	**838**
Iron	mg/kg	820,000	**49,400 J**	**46,100 J**	**199,000 J**	**59,000 J**	**19,100**	**146,000**	**44,800**	**314,000 J**
Lead	mg/kg	800	**67.7**	**185**	**277**	**11.5**	**154**	**75.3**	**645**	**323**
Manganese	mg/kg	26,000	**899**	**4,820**	**4,180**	**7,480**	**3,750**	**6,080**	**2,030**	**3,350**
Mercury	mg/kg	350	**0.19 J+**	**0.03 J+**	**0.18 J+**	**0.0025 J+**	**0.0028 J**	**0.054 J**	**0.037 J**	**0.2 J+**
Nickel	mg/kg	22,000	**29.7 J**	**167 J**	**130 J**	**195 J**	**14.6 J**	**72.5 J**	**122 J**	**380 J**
Selenium	mg/kg	5,800	3.7 U	2.8 B	4.2 U	**6.3**	3.8 U	3.9 U	3.7 B	2.4 B
Silver	mg/kg	5,800	0.81 B	1.1 B	**3.5**	3.5 U	2.8 U	1.4 B	3.6 U	**5.2**
Vanadium	mg/kg	5,800	**60.3**	**51.3**	**129**	**28.6**	**41.3 J**	**120 J**	**169 J**	**134**
Zinc	mg/kg	350,000	**276**	**91.9**	**790**	**10.3**	**213**	**133**	**208**	**996**
Other										
Cyanide	mg/kg	150	**0.62 J-**	0.55 B	0.61 B	**1.2 J-**	**0.47 J-**	**0.58 J-**	**3.7 J-**	**2.1 J-**

Detections in bold
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B: The analyte was not detected substantially above the level of the associated method blank/preparation or field blank.

Sub-Parcel B1-1
Summary of Inorganics Detected in Soil (NAPL Screening Locations)

Parameter	Units	PAL	B1-028-SB-1	B1-028-SB-4	B1-077-SB-1	B1-077-SB-4	B1-078-SB-1	B1-078-SB-4	B1-093-SB-1*	B1-093-SB-5*
Metals										
Aluminum	mg/kg	1,100,000	**15,700**	**78,200**	**10,700**	**47,100**	**24,400**	**51,200**	**10,600**	**23,900**
Antimony	mg/kg	470	1.9 B	3.7 UJ	3.4 U	3.3 U	**5.3**	2.9 U	3.2 U	3.7 U
Arsenic	mg/kg	3	**19.9 J**	2.5 U	**22.7 J**	**14 J**	**14.9 J**	**5.3 J**	**14.2**	**40**
Barium	mg/kg	220,000	**249**	**298**	**169 J**	**183 J**	**348 J**	**296 J**	**109**	**794**
Beryllium	mg/kg	2,300	**1**	**2.6**	**0.85 J**	**1.6**	**1.4**	**2.3**	**0.58 J**	**1.4**
Cadmium	mg/kg	980	**3**	**0.88 J**	**3.3**	0.32 B	**2.1**	0.72 B	0.98 B	0.67 B
Chromium	mg/kg	120,000	**209**	**222**	**194**	**3,110**	**174**	**213**	**74.1**	**337**
Chromium VI	mg/kg	6.3	0.36 B	0.34 B	0.56 B	0.35 B	0.37 B	0.37 B	0.3 B	0.31 B
Cobalt	mg/kg	350	**25.6**	**4.6 J**	**22.4 J**	**134 J**	**19.2 J**	**8.5 J**	**7.4**	**6.7**
Copper	mg/kg	47,000	**349**	**26.4**	**675**	**242**	**175**	**58.8**	**48.4**	**54.9**
Iron	mg/kg	820,000	**70,600 J**	**7,860 J**	**77,400**	**135,000**	**70,600**	**25,800**	**29,200**	**56,100**
Lead	mg/kg	800	**537**	**20.2**	**391**	2.8 U	**752**	**82.2**	**279**	**76.6**
Manganese	mg/kg	26,000	**2,540**	**1,840**	**1,870**	**2,430**	**2,150**	**3,030**	**1,480**	**19,600**
Mercury	mg/kg	350	**0.033 J+**	**0.0051 J+**	**0.19**	**0.0025 J**	**0.073 J**	**0.04 J**	**0.13**	**0.011 J**
Nickel	mg/kg	22,000	**172 J**	**26 J**	**170 J**	**913 J**	**78.5 J**	**49.6 J**	**20.9**	**28.1**
Selenium	mg/kg	5,800	4 U	**5.3**	**2.7 J**	3.3 B	3.3 B	**4.6**	4.3 U	5 U
Silver	mg/kg	5,800	**1.6 J**	3.7 U	1.2 B	1.1 B	3.2 U	2.9 U	3.2 U	3.7 U
Vanadium	mg/kg	5,800	**51**	**14.4**	**88.3 J**	**95.1 J**	**62 J**	**24.9 J**	**104**	**986**
Zinc	mg/kg	350,000	**991**	**47.8**	**1,240**	**3.7 J**	**722**	**112**	**385**	**133**
Other										
Cyanide	mg/kg	150	**3.8 J-**	**4.2 J-**	**2.8 J-**	**9.7 J-**	**6.4 J-**	**5.2 J-**	**0.8**	**1.6**

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B: The analyte was not detected substantially above the level of the associated method blank/preparation or field blank.

Sub-Parcel B1-1
Summary of Inorganics Detected in Soil (NAPL Screening Locations)

Parameter	Units	PAL	B1-094-SB-1*	B1-094-SB-7*	B1-121-SB-1	B1-122-SB-1	B1-124-SB-1	B1-125-SB-1	B1-177-SB-1*	B1-177-SB-5*
Metals										
Aluminum	mg/kg	1,100,000	**46,300**	**38,600**	**15,700**	**11,700**	**16,500**	**11,700**	**9,890**	**41,800**
Antimony	mg/kg	470	4.1 U	4.2 U	3 UJ	3.1 UJ	3 UJ	3.4 UJ	**1.9 J**	**36.2**
Arsenic	mg/kg	3	2.7 U	2.8 U	**7.6**	**12.1**	**9.6**	**14.7**	**47.3**	**54.2**
Barium	mg/kg	220,000	**1,230**	**568**	**192**	**123**	**244**	**145**	**254**	**399**
Beryllium	mg/kg	2,300	**2.5**	**2.5**	**1.9**	0.87 B	**2.3**	1.1 B	**0.59 J**	**2.1**
Cadmium	mg/kg	980	**0.37 J**	**0.53 J**	**2**	**2.1**	**1.8**	**2**	**1.4 J**	**0.61 J**
Chromium	mg/kg	120,000	**55.1**	**47.2**	**208**	**315**	**187**	**355**	**4,990**	**174**
Chromium VI	mg/kg	6.3	0.33 B	0.36 B	1.1 UJ	1.1 UJ	1.2 UJ	1.1 UJ	0.56 B	0.32 B
Cobalt	mg/kg	350	**2 J**	**1.9 J**	**5.8**	**8.3**	**7.6**	**16.7**	**138**	**8.4**
Copper	mg/kg	47,000	**46.2**	**28.6**	**303**	**131**	**126**	**172**	**495**	**223**
Iron	mg/kg	820,000	**7,080**	**5,600**	**88,500**	**131,000**	**91,300**	**188,000**	**321,000**	**76,900**
Lead	mg/kg	800	3.4 U	**10**	**192**	**360**	**253**	**350**	**235**	**65.3**
Manganese	mg/kg	26,000	**1,140**	**984**	**9,010**	**6,640**	**5,360**	**7,180**	**5,500**	**2,000**
Mercury	mg/kg	350	0.16 U	0.14 U	**0.021 J**	**0.96**	**1.5**	**0.73**	0.11 U	**0.0063 J**
Nickel	mg/kg	22,000	**8.7 J**	**5.2 J**	**33.5**	**95.7**	**40.6**	**102**	**11,700**	**43.7**
Selenium	mg/kg	5,800	**8.4**	**6.3**	4 U	4.1 U	4 U	4.6 U	3.9 U	5.3 U
Silver	mg/kg	5,800	4.1 U	4.2 U	0.77 B	1.2 B	3 U	2.1 B	**3.1**	4 U
Vanadium	mg/kg	5,800	**24.6**	**30.9**	**182**	**248**	**168**	**399**	**235**	**71.7**
Zinc	mg/kg	350,000	**2.6 J**	**30.2**	**906**	**1,080**	**1,140**	**1,120**	**233**	**60.2**
Other										
Cyanide	mg/kg	150	**3.1**	**3.4**	**1.4 J-**	**3 J-**	**1.7 J-**	0.51 B	**0.56 J**	**26.6**

Detections in bold
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Sub-Parcel B1-1
Summary of Inorganics Detected in Soil (NAPL Screening Locations)

Parameter	Units	PAL	B4-014-SB-1	B4-014-SB-5	B4-015-SB-1	B4-015-SB-5	B4-057-SB-1*	B4-057-SB-5*	B4-057-SB-10*
Metals									
Aluminum	mg/kg	1,100,000	**7,970**	**16,200**	**13,900**	**17,400**	**7,240**	**24,100**	N/A
Antimony	mg/kg	470	3.5 UJ	3.2 UJ	3.1 UJ	3.3 UJ	2.5 U	2.7 U	N/A
Arsenic	mg/kg	3	**7.1**	**3**	**3.3**	**7.3**	**8.9**	**13.1**	**4.9**
Barium	mg/kg	220,000	**101 J**	**54.8 J**	**60.9 J**	**78.1 J**	**53.5**	**199**	N/A
Beryllium	mg/kg	2,300	0.32 B	0.54 B	0.78 B	0.69 B	**0.16 J**	**0.99**	N/A
Cadmium	mg/kg	980	**7.5**	1.6 U	1.4 B	0.29 B	**27.3**	**1.1 J**	N/A
Chromium	mg/kg	120,000	**764**	**17.9**	**1,130**	**35.6**	**836**	**365**	N/A
Chromium VI	mg/kg	6.3	1.2 U	1.2 U	**5.8**	1.2 UJ	0.3 B	0.51 B	N/A
Cobalt	mg/kg	350	**6.7**	**4.1 J**	**2.3 J**	**6.8**	**4.8**	**52**	N/A
Copper	mg/kg	47,000	**146**	**9.8**	**72.3**	**19.7**	**119**	**76.7**	N/A
Iron	mg/kg	820,000	**234,000**	**17,500**	**203,000**	**32,400**	**329,000**	**58,100**	N/A
Lead	mg/kg	800	**597**	**11.6**	**68.2**	**64.7**	**556**	**165**	N/A
Manganese	mg/kg	26,000	**20,200 J**	**89.2 J**	**25,800 J**	**237 J**	**14,700**	**4,000**	N/A
Mercury	mg/kg	350	**0.35**	**0.0079 J**	**0.049 J**	**0.066 J**	**0.019 J**	**0.029 J**	N/A
Nickel	mg/kg	22,000	**53.6**	**12.8**	**25.5**	**18.6**	**69.6**	**415**	N/A
Selenium	mg/kg	5,800	4.7 U	4.3 U	4.1 U	4.5 U	3.4 U	3.6 U	N/A
Silver	mg/kg	5,800	**3 J**	3.2 U	**2 J**	3.3 U	**11.1**	**0.72 J**	N/A
Vanadium	mg/kg	5,800	**503**	**20.6**	**768**	**46.6**	**343**	**231**	N/A
Zinc	mg/kg	350,000	**3,190**	**32.3**	**698**	**119**	**36,700**	**504**	N/A
Other									
Cyanide	mg/kg	150	**0.45 J-**	0.69 UJ	**0.33 J-**	**0.069 J-**	**0.45 J**	**6.7**	N/A

Detections in bold
Values in red indicate an exceedance of the Project Action Limit (PAL)
* Indicates non-validated data
N/A indicates that the parameter was not analyzed for this sample

U: This analyte was not detected in the sample. The numeric value represents the sample quantitation/detection limit.
UJ: This analyte was not detected in the sample. The actual quantitation/detection limit may be higher than reported.
J: The positive result reported for this analyte is a quantitative estimate.
J+: The positive result reported for this analyte is a quantitative estimate but may be biased high.
J-: The positive result reported for this analyte is a quantitative estimate but may be biased low.
B: The analyte was not detected substantially above the level of the associated method blank/preparation or field blank.

APPENDIX C

ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B1-172-SB/PZ

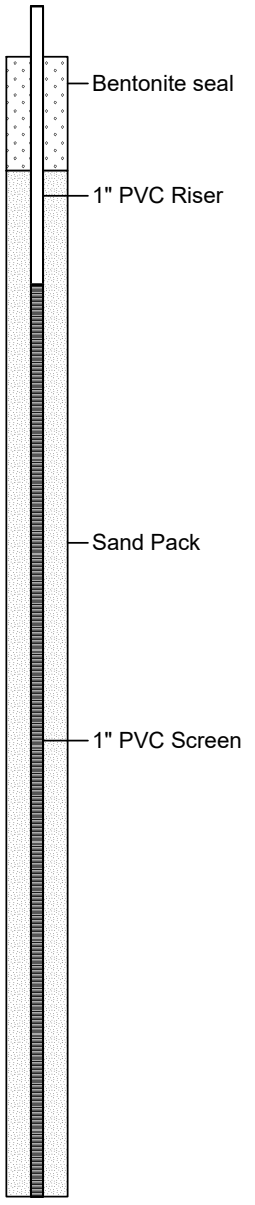
(page 1 of 1)

Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-1-3
Project Description	: Sparrows Point - Parcel B5
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: M. Replogle, E.I.T.
Drilling Company	: GSI/Allied Drilling Co.
Driller	: Don Marchese/Rick Miller
Drilling Equipment	: Geoprobe 7822DT

Soil Boring Installation Date	: 3/25/2016
Piezometer Installation Date	: 3/13/2017
Casing/Riser/Screen Type	: PVC
Borehole Diameter	: 2.25"
Riser/Screen Diameter	: 1"
Northing (US ft)	: 567297.64
Easting (US ft)	: 1457065.04
0-Hr DTW	: 15.46' TOC
48-Hr DTW	: ' TOC

No LNAPL or DNAPL detected at 0 or 48 hours

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		-	B1-172-SB-1	(0-2.5') SILT with trace SAND and GRAVEL, soft, brown, dry, no plasticity, cohesive	ML	
	100	12.2				
		28.8		(2.5-3.3') SILT, hard, brown, dry, low plasticity, cohesive	ML	
		19.2	B1-172-SB-4	(3.3-4') SILT with CONCRETE and SLAG GRAVEL, soft, black and brown, moist, low plasticity, cohesive	ML	Sheen and oil-like smell from 3.3-4' bgs
	60	181.8		Piezometer installation later date: (4-9') SILTY SAND, loose to medium dense, brown to very dark brown, wet, no plasticity, no cohesion	SW	
5		-				
		-				
	40	-				
		0.0				Light to trace, brown product 12.8-13.2' bgs
		1.3		Piezometer installation later date: (9-12.8') Non-native SAND with SLAG and BRICK GRAVEL, medium dense, brown and light gray, dry to moist, no plasticity, no cohesion	SW/GW	Wet at 13' bgs
10		-				
		-				
	44	-				
		0.0		Piezometer installation later date: (12.8-13.5') SILTY SAND, medium dense, dark greenish gray and brown, wet, no plasticity, no cohesion, with SAND and GRAVEL fill at depth	SM	Light product 13.5-14.8' bgs
		0.0			SW-SM	
15				Piezometer installation later date: (13.5-14.8') SLAG and BRICK, SAND to SILT-sized, medium dense to dense, brown and greenish gray, wet, no plasticity, no cohesion with thin hard SILT layer at depth	SW/GW	Light sheen 15.5-16' bgs
		-		Piezometer installation later date: (15-16.2') SANDY GRAVEL, loose, dark brown, wet, no plasticity, no cohesion	CL	
	100	-				
		-		Piezometer installation later date: (16.2-20') CLAY, hard, very pale brown with little reddish yellow mottling, dry, low plasticity, cohesive, with very moist reddish yellow SANDY CLAY from 17.9-18.2' bgs		
		-				
20				End of boring		



Boring terminated at 20' bgs during piezometer installation.
TOC: Top of PVC casing
DTW: Depth to water
bgs: Below ground surface
AMSL: Above mean sea level

Riser Stickup: 4.15'
Riser: 0 - 2' bgs
Screen: 4 - 20' bgs [Slot Size: 0.010"]
Sand Pack: 2 - 20' bgs [Grain Size: WG #1]
Bentonite Seal: 0 - 4' bgs [Grain Size: granular (30-50 mesh)]

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B1-178-SB

(page 1 of 1)

Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-1-3
Project Description	: Sparrows Point - Parcel B1
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: W. Mader P.G., CPSS
Drilling Company	: Green Services, Inc
Driller	: Ali Berenbrok-Niblett
Drilling Equipment	: Geoprobe 7822DT

Date	: 3/23/2016
Weather	: 50s, cloudy
Northing (US ft)	: 567518.56
Easting (US ft)	: 1456569.02

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
		-	B1-178-SB-1	(0-1') SILT, soft, brown, moist, no plasticity, cohesive, trace oxidation	ML	
1				(1-2.3') CONCRETE, loose, gray, gravel -sized, dry, no plasticity, no cohesion	GP	
		8.9				
2						
	71	7.3		(2.3-3.5') SILT, soft, black, very moist, low plasticity, cohesive	ML	Oil-like odor, sticky soft black product throughout, oil sheen
3						Boring terminated at 3.5 bgs due to refusal
				End of boring		
4						

Total Borehole Depth: 3.5' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B5-098-SB/PZ

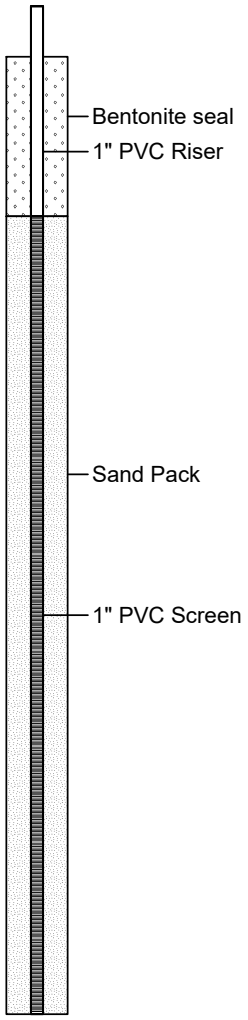
(page 1 of 1)

Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-3-3
Project Description	: Sparrows Point - Parcel B5
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: M. Replogle, E.I.T.
Drilling Company	: Green Services, Inc
Driller	: Kevin Pumphrey
Drilling Equipment	: Geoprobe 7822DT

Soil Boring Installation Date	: 01/07/2016
Piezometer Installation Date	: 01/07/2016
Casing/Riser/Screen Type	: PVC
Borehole Diameter	: 2.25"
Riser/Screen Diameter	: 1"
Northing (US ft)	: 565,447.79
Easting (US ft)	: 1,458,171.90
0-Hr DTW	: 7.70' TOC
48-Hr DTW	: 7.69' TOC

No LNAPL or DNAPL detected at 0 or 48 hours

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0	80	-	B5-098-SB-1	(0-2.5') SAND, fine to medium grained, some SLAG GRAVEL, loose, brown, dry, no plasticity, no cohesion	SW	
		23.7				
		51.5		(2.5-10') SLAG, medium SAND to GRAVEL-sized, loose, dark brown to black, moist to wet at 4' bgs, slimy from 4-10' bgs		
		103.5	B5-098-SB-4			Wet at 4' bgs
		181.8				Strong odor from 4-5' bgs
5	50	-			SW/GW	
		-				
		-				
		-				Trace oily product in sleeve from 7.5-10' bgs
		-				
10				End of boring		
15						



Boring logged to 10' bgs and extended to 12' bgs during piezometer installation.
TOC: Top of PVC casing
DTW: Depth to water
bgs: Below ground surface
AMSL: Above mean sea level

Riser Stickup: 2.75'
Riser: 0 - 2' bgs
Screen: 2 - 12' bgs [Slot Size: 0.010"]
Sand Pack: 2 - 12' bgs [Grain Size: WG #1]
Bentonite Seal: 0 - 2' bgs [Grain Size: granular (30-50 mesh)]

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B5-099-SB/PZ

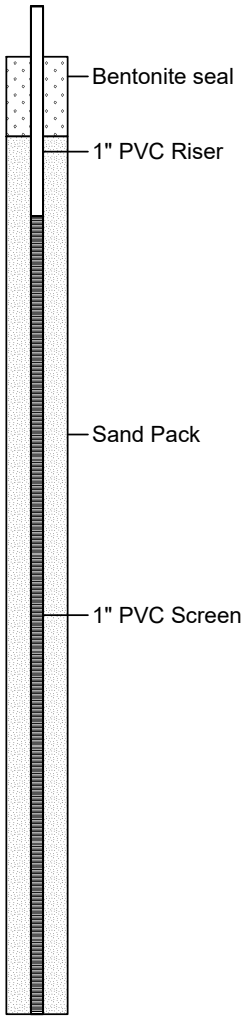
(page 1 of 1)

Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-3-3
Project Description	: Sparrows Point - Parcel B5
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: M. Replogle, E.I.T.
Drilling Company	: Green Services, Inc
Driller	: Kevin Pumphrey
Drilling Equipment	: Geoprobe 7822DT

Soil Boring Installation Date	: 01/07/2016
Piezometer Installation Date	: 01/07/2016
Casing/Riser/Screen Type	: PVC
Borehole Diameter	: 2.25"
Riser/Screen Diameter	: 1"
Northing (US ft)	: 565,446.56
Easting (US ft)	: 1,458,162.28
0-Hr DTW	: 7.41' TOC
48-Hr DTW	: 7.36' TOC

No LNAPL or DNAPL detected at 0 or 48 hours

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		-	B5-099-SB-1	(0-2') SAND, medium to coarse grained, and GRAVEL SLAG, loose, brown to black, dry	SW/GW	
		146.8				Strong propane-like odor from 2-10' bgs
	80	239.7		(2-10') SANDY CLAY with coarse SAND and black GRAVEL SLAG, soft, olive green, wet at 4.5' bgs, low plasticity, cohesive, slimy and very sticky from 6-10' bgs		
		371.0	B5-099-SB-4.5			Wet at 4.5' bgs
		399.0				
5		-			CL	
		-				
	60	-				
		-				Visible product from 7-10' bgs
		-				
10				End of boring		
15						



Boring logged to 10' bgs and extended to 12' bgs during piezometer installation.
TOC: Top of PVC casing
DTW: Depth to water
bgs: Below ground surface
AMSL: Above mean sea level

Riser Stickup: 2.46'
Riser: 0 - 2' bgs
Screen: 2 - 12' bgs [Slot Size: 0.010"]
Sand Pack: 1 - 12' bgs [Grain Size: WG #1]
Bentonite Seal: 0 - 1' bgs [Grain Size: granular (30-50 mesh)]

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B5-161-SB/PZ

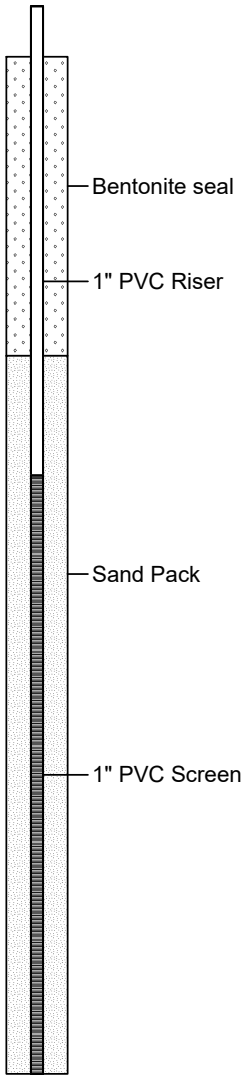
(page 1 of 1)

Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-3-3
Project Description	: Sparrows Point - Parcel B5
Site Location	: Sparrows Point, MD
ARM Representative	: L. Glumac
Checked by	: M. Replogle, E.I.T.
Drilling Company	: Allied Drilling Co.
Driller	: Rick Miller
Drilling Equipment	: Geoprobe 7822DT

Soil Boring Installation Date	: 01/07/2016
Piezometer Installation Date	: 04/26/2017
Casing/Riser/Screen Type	: PVC
Borehole Diameter	: 2.25"
Riser/Screen Diameter	: 1"
Northing (US ft)	: 565264.01
Easting (US ft)	: 1458124.37
0-Hr DTW	: 9.11' TOC
48-Hr DTW	: 8.45' TOC

No LNAPL or DNAPL detected at 0 or 48 hours

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		-	B5-161-SB-1	(0-2.2') SAND, coarse, and GRAVEL SLAG, loose, brown, dry	SW/GW	
		-				
	80	6.5		(2.2-2.7') SAND, coarse, loose, yellowish brown to yellow, dry, no plasticity, cohesive	SW	
		400.2	B5-161-SB-4	(2.7-3.7') CLAY, hard, gray and reddish yellow, dry, high plasticity, cohesive	CL	
		185.6		(3.7-5') SAND, fine, medium dense, light brown to yellowish brown, dry to moist, no plasticity, no cohesion	SW	Strong creosote-like odor at 4' bgs
5		-		(5-10') CLAY, hard, gray and reddish yellow, dry, medium plasticity, cohesive		
		-				
	100	0.7			CL	
		0.7				
		0.8	B5-161-SB-10			
10		-		(10-11') SLAG GRAVEL with trace SANDY CLAY lenses, coarse, loose, dark brown, wet, no plasticity, no cohesion	GW	Wet at 10' bgs
		-		(11-15') CLAYEY SAND, firm, reddish yellow, moist to wet at 13.5' bgs, no plasticity, no cohesion		
	100	-			SC	
		-				
		-				
15		-		Piezometer installation later date: (15-17') SAND, fine, yellowish brown to reddish yellow, wet, no plasticity, no cohesion		
	100	-			SW	
		-				
				End of boring		
20						



Boring terminated at 17' bgs due to water and piezometer installation.
TOC: Top of PVC casing
DTW: Depth to water
bgs: Below ground surface
AMSL: Above mean sea level

Riser Stickup: 3.21'
Riser: 0 - 7' bgs
Screen: 7 - 17' bgs [Slot Size: 0.010"]
Sand Pack: 5 - 17' bgs [Grain Size: WG #2]
Bentonite Seal: 0 - 5' bgs [Grain Size: granular (30-50 mesh)]

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APPENDIX D

Construction Worker Soil Screening Levels
Maximum Allowable Work Day Exposure
Calculation Spreadsheet - Sub-Parcel B1-1

Description	Variable	Value
Days worked per week	DW	5
Exposure duration (yr)	ED	1
Hours worked per day	ET	8
A/constant (unitless) - particulate emission factor	Aconst	12.9351
B/constant (unitless) - particulate emission factor	Bconst	5.7383
C/constant (unitless) - particulate emission factor	Cconst	71.7711
Dispersion correction factor (unitless)	FD	0.185
Days per year with at least .01" precipitation	P	130
Target hazard quotient (unitless)	THQ	1
Body weight (kg)	BW	80
Averaging time - noncancer (yr)	ATnc	1
Soil ingestion rate (mg/d)	IR	330
Skin-soil adherence factor (mg/cm2)	AF	0.3
Skin surface exposed (cm2)	SA	3300
Event frequency (ev/day)	EV	1
Target cancer risk (unitless)	TR	01E-06
Averaging time - cancer (yr)	ATc	70
A/constant (unitless) - volatilization	Aconstv	2.4538
B/constant (unitless) - volatilization	Bconstv	17.566
C/constant (unitless) - volatilization	Cconstv	189.0426
Dry soil bulk density (kg/L)	Pb	1.5
Average source depth (m)	ds	3
Soil particle density (g/cm3)	Ps	2.65
Total soil porosity	Lpore/Lsoil	0.43
Air-filled soil porosity	Lair/Lsoil	0.28

Construction Worker Soil Screening Levels
Maximum Allowable Work Day Exposure
Calculation Spreadsheet - Sub-Parcel B1-1

Area of site (ac)	Ac	51	→ EU1-EXP
Overall duration of construction (wk/yr)	EW	20	
Exposure frequency (day/yr)	EF	**100**	
Cars per day	Ca	5	
Tons per car	CaT	2	
Trucks per day	Tru	5	
Tons per truck	TrT	20	
Mean vehicle weight (tons)	w	**11**	
Derivation of dispersion factor - particulate emission factor (g/m2-s per kg/m3)	Q/Csr	**13.5**	
Overall duration of construction (hr)	tc	**3,360**	
Overall duration of traffic (s)	Tt	**2,880,000**	
Surface area (m2)	AR	**206,390**	
Length (m)	LR	**454**	
Distance traveled (km)	ΣVKT	**454**	
Particulate emission factor (m3/kg)	PEFsc	**159,046,179**	
Derivation of dispersion factor - volatilization (g/m2-s per kg/m3)	Q/Csa	**6.56**	
Total time of construction (s)	Tcv	**2,880,000**	

Input
Calculation

Chemical	RfD & RfC Sources	^Ingestion SF $(mg/kg\text{-}day)^{-1}$	^Inhalation Unit Risk $(ug/m^3)^{-1}$	^Subchronic RfD (mg/kg-day)	^Subchronic RfC (mg/m^3)	^GIABS	Dermally Adjusted RfD (mg/kg-day)	^ABS	^RBA	*Dia	*Diw	*Henry's Law Constant (unitless)	*Kd	*Koc	DA	Volatilization Factor - Unlimited Reservoir (m^3/kg)	Carcinogenic Ingestion/ Dermal SL (SLing/der)	Carcinogenic Inhalation SL (SLinh)	Carcinogenic SL (mg/kg)	Non-Carcinogenic Ingestion/ Dermal SL (SLing/der)	Non-Carcinogenic Inhalation SL (SLinh)	Non-Carcinogenic SL (mg/kg)
1,1-Biphenyl	P	8.00E-03	-	1.00E-01	4.00E-03	1	1.00E-01	**0.01**	1	4.70E-02	7.60E-06	1.30E-02	3.06E+01	5.10E+03	1.07E-06	3.44E+3	7,517		7,517	85,908	151	150
Antimony	I	-	-	4.00E-04	-	0.15	6.00E-05	**0.01**	1			-	4.50E+01							295		295
Arsenic, Inorganic	I/C	1.50E+00	4.30E-03	3.00E-04	1.50E-05	1	3.00E-04	0.03	0.6			-	2.90E+01				37.9	28,351	37.8	244	26,123	241
Chromium(VI)	A/C/I	5.00E-01	8.40E-02	5.00E-03	3.00E-04	0.025	1.25E-04	**0.01**	1			-	1.90E+01				56.3	1,451	54.2	2,011	522,467	2,003
Cobalt	P	-	9.00E-03	3.00E-03	2.00E-05	1	3.00E-03	**0.01**	1			-	4.50E+01					13,545	13,545	2,577	34,831	2,400
Copper	A	-	-	1.00E-02	-	1	1.00E-02	**0.01**	1			-	3.50E+01							8,591		8,591
Iron	P	-	-	7.00E-01	-	1	7.00E-01	**0.01**	1			-	2.50E+01							601,353		601,353
Manganese (Non-diet)	I	-	-	2.40E-02	5.00E-05	0.04	9.60E-04	**0.01**	1			-	6.50E+01							12,135	87,078	10,651
Mercuric Chloride (and other salts)	I	-	-	2.00E-03	3.00E-04	0.07	1.40E-04	**0.01**	1			-								1,239	522,467	1,236
Vanadium and Compounds	A	-	-	1.00E-02	1.00E-04	0.026	2.60E-04	**0.01**	1			-	1.00E+03							4,108	174,156	4,014
PCB Total	I	2.00E+00	5.71E-04	-	-	1		0.14	1	2.40E-02	6.30E-06	1.70E-02	4.68E+02	7.80E+04	4.66E-08	1.65E+4	21.8	22.1	11.0			
Aroclor 1254	A/I	2.00E+00	5.71E-04	3.00E-05	-	1	3.00E-05	0.14	1	2.40E-02	6.10E-06	1.16E-02	7.80E+02	1.30E+05	1.91E-08	2.57E+4	21.8	34.5	NE	18.7		18.7
Benz[a]anthracene	I	1.00E-01	6.00E-05	-	-	1		0.13	1	2.60E-02	6.70E-06	4.91E-04	1.08E+03	1.80E+05	6.71E-10	1.37E+5	446	1,751	355			
Benzo[a]pyrene	I	1.00E+00	6.00E-04	3.00E-04	2.00E-06	1	3.00E-04	0.13	1	4.80E-02	5.60E-06	1.87E-05	3.54E+03	5.90E+05	2.37E-11	7.31E+5	44.6	929	42.5	191	15.9	14.7
Benzo[b]fluoranthene	I	1.00E-01	6.00E-05	-	-	1		0.13	1	4.80E-02	5.60E-06	2.69E-05	3.60E+03	6.00E+05	2.91E-11	6.59E+5	446	8,379	423			
Benzo[k]fluoranthene	I	1.00E-02	6.00E-06	-	-	1		0.13	1	4.80E-02	5.60E-06	2.39E-05	3.54E+03	5.90E+05	2.74E-11	6.78E+5	4,456	86,309	4,237			
Dibenz[a,h]anthracene	I	1.00E+00	6.00E-04	-	-	1		0.13	1	4.50E-02	5.20E-06	5.76E-06	1.14E+04	1.90E+06	4.13E-12	1.75E+6	44.6	203,181	44.6			
Indeno[1,2,3-c,d]pyrene	I	1.00E-01	6.00E-05	-	-	1		0.13	1	4.50E-02	5.20E-06	1.42E-05	1.20E+04	2.00E+06	5.62E-12	1.50E+6	446	18,980	435			
Naphthalene	C/I/A	-	3.40E-05	6.00E-01	3.00E-03	1	6.00E-01	0.13	1	6.00E-02	8.40E-06	1.80E-02	9.00E+00	1.50E+03	6.35E-06	1.41E+3		31.8	31.8	381,949	46.3	46.3

*chemical specific parameters found in Chemical Specific Parameters Spreadsheet at https://www.epa.gov/risk/regional-screening-levels-rsls
^chemical specific parameters found in Unpaved Road Traffic calculator at https://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search
I: chemical specific parameters found in the IRIS at https://www.epa.gov/iris
C: chemical specific parameters found in Cal EPA at https://www.dtsc.ca.gov/AssessingRisk
A: chemical specific parameters found in Agency for Toxic Substances and Disease Registry Minimal Risk Levels (MRLs) at https://www.atsdr.cdc.gov/mrls/pdfs/atsdr_mrls.pdf
P: chemical specific parameters found in the Database of EPA PPRTVs at https://hhpprtv.ornl.gov/quickview/pprtv.php

NE = Not Evaluated. Aroclor 1254 was included for non-cancer hazard only. The carcinogenic risk is evaluated with total PCBs.

Construction Worker Soil Screening Levels
Maximum Allowable Work Day Exposure
Calculation Spreadsheet - Sub-Parcel B1-1

Area of site (ac)	Ac	32.3	→ EU2
Overall duration of construction (wk/yr)	EW	18	
Exposure frequency (day/yr)	EF	**90**	
Cars per day	Ca	5	
Tons per car	CaT	2	
Trucks per day	Tru	5	
Tons per truck	TrT	20	
Mean vehicle weight (tons)	w	**11**	
Derivation of dispersion factor - particulate emission factor (g/m2-s per kg/m3)	Q/Csr	**13.9**	
Overall duration of construction (hr)	tc	**3,024**	
Overall duration of traffic (s)	Tt	**2,592,000**	
Surface area (m2)	AR	**130,714**	
Length (m)	LR	**362**	
Distance traveled (km)	ΣVKT	**325**	
Particulate emission factor (m3/kg)	PEFsc	**129,893,568**	
Derivation of dispersion factor - volatilization (g/m2-s per kg/m3)	Q/Csa	**7.01**	
Total time of construction (s)	Tcv	**2,592,000**	

Input
Calculation

Chemical	RfD & RfC Sources	^Ingestion SF $(mg/kg\text{-}day)^{-1}$	^Inhalation Unit Risk $(ug/m^3)^{-1}$	^Subchronic RfD (mg/kg-day)	^Subchronic RfC (mg/m^3)	^GIABS	Dermally Adjusted RfD (mg/kg-day)	^ABS	^RBA	*Dia	*Diw	*Henry's Law Constant (unitless)	*Kd	*Koc	DA	Volatilization Factor - Unlimited Reservoir (m^3/kg)	Carcinogenic Ingestion/ Dermal SL (SLing/der)	Carcinogenic Inhalation SL (SLinh)	Carcinogenic SL (mg/kg)	Non-Carcinogenic Ingestion/ Dermal SL (SLing/der)	Non-Carcinogenic Inhalation SL (SLinh)	Non-Carcinogenic SL (mg/kg)
1,1-Biphenyl	P	8.00E-03	-	1.00E-01	4.00E-03	1	1.00E-01	**0.01**	1	4.70E-02	7.60E-06	1.30E-02	3.06E+01	5.10E+03	1.07E-06	3.49E+3	8,352		8,352	95,453	170	170
Antimony	I	-	-	4.00E-04	-	0.15	6.00E-05	**0.01**	1			-	4.50E+01							328		328
Arsenic, Inorganic	I/C	1.50E+00	4.30E-03	3.00E-04	1.50E-05	1	3.00E-04	0.03	0.6			-	2.90E+01				42.1	25,727	42.0	271	23,706	268
Chromium(VI)	A/C/I	5.00E-01	8.40E-02	5.00E-03	3.00E-04	0.025	1.25E-04	**0.01**	1			-	1.90E+01				62.6	1,317	59.7	2,234	474,112	2,224
Cobalt	P	-	9.00E-03	3.00E-03	2.00E-05	1	3.00E-03	**0.01**	1			-	4.50E+01					12,292	12,292	2,864	31,607	2,626
Copper	A	-	-	1.00E-02	-	1	1.00E-02	**0.01**	1			-	3.50E+01							9,545		9,545
Iron	P	-	-	7.00E-01	-	1	7.00E-01	**0.01**	1			-	2.50E+01							668,170		668,170
Manganese (Non-diet)	I	-	-	2.40E-02	5.00E-05	0.04	9.60E-04	**0.01**	1			-	6.50E+01							13,483	79,019	11,518
Mercuric Chloride (and other salts)	I	-	-	2.00E-03	3.00E-04	0.07	1.40E-04	**0.01**	1			-								1,376	474,112	1,372
Vanadium and Compounds	A	-	-	1.00E-02	1.00E-04	0.026	2.60E-04	**0.01**	1			-	1.00E+03							4,565	158,037	4,437
PCB Total	I	2.00E+00	5.71E-04	-	-	1		0.14	1	2.40E-02	6.30E-06	1.70E-02	4.68E+02	7.80E+04	4.66E-08	1.67E+4	24.2	24.9	12.3			
Aroclor 1254	A/I	2.00E+00	5.71E-04	3.00E-05	-	1	3.00E-05	0.14	1	2.40E-02	6.10E-06	1.16E-02	7.80E+02	1.30E+05	1.91E-08	2.61E+4	24.2	38.9	NE	20.8		20.8
Benz[a]anthracene	I	1.00E-01	6.00E-05	-	-	1		0.13	1	2.60E-02	6.70E-06	4.91E-04	1.08E+03	1.80E+05	6.71E-10	1.39E+5	495	1,973	396			
Benzo[a]pyrene	I	1.00E+00	6.00E-04	3.00E-04	2.00E-06	1	3.00E-04	0.13	1	4.80E-02	5.60E-06	1.87E-05	3.54E+03	5.90E+05	2.37E-11	7.41E+5	49.5	1,046	47.3	212	17.9	16.5
Benzo[b]fluoranthene	I	1.00E-01	6.00E-05	-	-	1		0.13	1	4.80E-02	5.60E-06	2.69E-05	3.60E+03	6.00E+05	2.91E-11	6.68E+5	495	9,435	470			
Benzo[k]fluoranthene	I	1.00E-02	6.00E-06	-	-	1		0.13	1	4.80E-02	5.60E-06	2.39E-05	3.54E+03	5.90E+05	2.74E-11	6.88E+5	4,951	97,181	4,711			
Dibenz[a,h]anthracene	I	1.00E+00	6.00E-04	-	-	1		0.13	1	4.50E-02	5.20E-06	5.76E-06	1.14E+04	1.90E+06	4.13E-12	1.77E+6	49.5	184,377	49.5			
Indeno[1,2,3-c,d]pyrene	I	1.00E-01	6.00E-05	-	-	1		0.13	1	4.50E-02	5.20E-06	1.42E-05	1.20E+04	2.00E+06	5.62E-12	1.52E+6	495	21,344	484			
Naphthalene	C/I/A	-	3.40E-05	6.00E-01	3.00E-03	1	6.00E-01	0.13	1	6.00E-02	8.40E-06	1.80E-02	9.00E+00	1.50E+03	6.35E-06	1.43E+3		35.8	35.8	424,388	52.2	52.2

*chemical specific parameters found in Chemical Specific Parameters Spreadsheet at https://www.epa.gov/risk/regional-screening-levels-rsls
^chemical specific parameters found in Unpaved Road Traffic calculator at https://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search
I: chemical specific parameters found in the IRIS at https://www.epa.gov/iris
C: chemical specific parameters found in Cal EPA at https://www.dtsc.ca.gov/AssessingRisk
A: chemical specific parameters found in Agency for Toxic Substances and Disease Registry Minimal Risk Levels (MRLs) at https://www.atsdr.cdc.gov/mrls/pdfs/atsdr_mrls.pdf
P: chemical specific parameters found in the Database of EPA PPRTVs at https://hhpprtv.ornl.gov/quickview/pprtv.php

NE = Not Evaluated. Aroclor 1254 was included for non-cancer hazard only. The carcinogenic risk is evaluated with total PCBs.

Construction Worker Soil Screening Levels
Maximum Allowable Work Day Exposure
Calculation Spreadsheet - Sub-Parcel B1-1

Area of site (ac)	Ac	32.3 → EU3
Overall duration of construction (wk/yr)	EW	0.3
Exposure frequency (day/yr)	EF	**1.5**
Cars per day	Ca	5
Tons per car	CaT	2
Trucks per day	Tru	5
Tons per truck	TrT	20
Mean vehicle weight (tons)	w	**11**
Derivation of dispersion factor - particulate emission factor (g/m2-s per kg/m3)	Q/Csr	**13.9**
Overall duration of construction (hr)	tc	**50**
Overall duration of traffic (s)	Tt	**43,200**
Surface area (m2)	AR	**130,714**
Length (m)	LR	**362**
Distance traveled (km)	ΣVKT	**5**
Particulate emission factor (m3/kg)	PEFsc	**129,893,568**
Derivation of dispersion factor - volatilization (g/m2-s per kg/m3)	Q/Csa	**7.01**
Total time of construction (s)	Tcv	**43,200**

Input
Calculation

Chemical	RfD & RfC Sources	^Ingestion SF $(mg/kg\text{-}day)^{-1}$	^Inhalation Unit Risk $(ug/m^3)^{-1}$	^Subchronic RfD (mg/kg-day)	^Subchronic RfC (mg/m^3)	^GIABS	Dermally Adjusted RfD (mg/kg-day)	^ABS	^RBA	*Dia	*Diw	*Henry's Law Constant (unitless)	*Kd	*Koc	DA	Volatilization Factor - Unlimited Reservoir (m^3/kg)	Carcinogenic Ingestion/ Dermal SL (SLing/der)	Carcinogenic Inhalation SL (SLinh)	Carcinogenic SL (mg/kg)	Non-Carcinogenic Ingestion/ Dermal SL (SLing/der)	Non-Carcinogenic Inhalation SL (SLinh)	Non-Carcinogenic SL (mg/kg)
1,1-Biphenyl	P	8.00E-03	-	1.00E-01	4.00E-03	1	1.00E-01	**0.01**	1	4.70E-02	7.60E-06	1.30E-02	3.06E+01	5.10E+03	1.07E-06	4.51E+2	501,128		501,128	5,727,175	1,316	1,316
Antimony	I	-	-	4.00E-04	-	0.15	6.00E-05	**0.01**	1			-	4.50E+01							19663		19,663
Arsenic, Inorganic	I/C	1.50E+00	4.30E-03	3.00E-04	1.50E-05	1	3.00E-04	0.03	0.6			-	2.90E+01				2525.6	1,543,619	2,521	16236	1,422,335	16,053
Chromium(VI)	A/C/I	5.00E-01	8.40E-02	5.00E-03	3.00E-04	0.025	1.25E-04	**0.01**	1			-	1.90E+01				3753.9	79,019	3,584	134,068	28,446,691	133,439
Cobalt	P	-	9.00E-03	3.00E-03	2.00E-05	1	3.00E-03	**0.01**	1			-	4.50E+01					737,507	737,507	171,815	1,896,446	157,542
Copper	A	-	-	1.00E-02	-	1	1.00E-02	**0.01**	1			-	3.50E+01							572,717		572,717
Iron	P	-	-	7.00E-01	-	1	7.00E-01	**0.01**	1			-	2.50E+01							40,090,223		40,090,223
Manganese (Non-diet)	I	-	-	2.40E-02	5.00E-05	0.04	9.60E-04	**0.01**	1			-	6.50E+01							809,004	4,741,115	691,081
Mercuric Chloride (and other salts)	I	-	-	2.00E-03	3.00E-04	0.07	1.40E-04	**0.01**	1			-								82,586	28,446,691	82,347
Vanadium and Compounds	A	-	-	1.00E-02	1.00E-04	0.026	2.60E-04	**0.01**	1			-	1.00E+03							273,882	9,482,230	266,193
PCB Total	I	2.00E+00	5.71E-04	-	-	1		0.14	1	2.40E-02	6.30E-06	1.70E-02	4.68E+02	7.80E+04	4.66E-08	2.16E+3	1454.0	192.9	170			
Aroclor 1254	A/I	2.00E+00	5.71E-04	3.00E-05	-	1	3.00E-05	0.14	1	2.40E-02	6.10E-06	1.16E-02	7.80E+02	1.30E+05	1.91E-08	3.37E+3	1454.0	301.5	NE	1246.3		1,246
Benz[a]anthracene	I	1.00E-01	6.00E-05	-	-	1		0.13	1	2.60E-02	6.70E-06	4.91E-04	1.08E+03	1.80E+05	6.71E-10	1.80E+4	29707	15,297	10,097			
Benzo[a]pyrene	I	1.00E+00	6.00E-04	3.00E-04	2.00E-06	1	3.00E-04	0.13	1	4.80E-02	5.60E-06	1.87E-05	3.54E+03	5.90E+05	2.37E-11	9.57E+4	2970.7	8,142	2,177	12732	139.6	138
Benzo[b]fluoranthene	I	1.00E-01	6.00E-05	-	-	1		0.13	1	4.80E-02	5.60E-06	2.69E-05	3.60E+03	6.00E+05	2.91E-11	8.63E+4	29707	73,408	21,149			
Benzo[k]fluoranthene	I	1.00E-02	6.00E-06	-	-	1		0.13	1	4.80E-02	5.60E-06	2.39E-05	3.54E+03	5.90E+05	2.74E-11	8.89E+4	297,071	756,233	213,286			
Dibenz[a,h]anthracene	I	1.00E+00	6.00E-04	-	-	1		0.13	1	4.50E-02	5.20E-06	5.76E-06	1.14E+04	1.90E+06	4.13E-12	2.29E+5	2970.7	11,062,602	2,970			
Indeno[1,2,3-c,d]pyrene	I	1.00E-01	6.00E-05	-	-	1		0.13	1	4.50E-02	5.20E-06	1.42E-05	1.20E+04	2.00E+06	5.62E-12	1.96E+5	29707	167,014	25,221			
Naphthalene	C/I/A	-	3.40E-05	6.00E-01	3.00E-03	1	6.00E-01	0.13	1	6.00E-02	8.40E-06	1.80E-02	9.00E+00	1.50E+03	6.35E-06	1.85E+2		277.6	278	25,463,266	404.6	405

*chemical specific parameters found in Chemical Specific Parameters Spreadsheet at https://www.epa.gov/risk/regional-screening-levels-rsls
^chemical specific parameters found in Unpaved Road Traffic calculator at https://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search
I: chemical specific parameters found in the IRIS at https://www.epa.gov/iris
C: chemical specific parameters found in Cal EPA at https://www.dtsc.ca.gov/AssessingRisk
A: chemical specific parameters found in Agency for Toxic Substances and Disease Registry Minimal Risk Levels (MRLs) at https://www.atsdr.cdc.gov/mrls/pdfs/atsdr_mrls.pdf
P: chemical specific parameters found in the Database of EPA PPRTVs at https://hhpprtv.ornl.gov/quickview/pprtv.php

NE = Not Evaluated. Aroclor 1254 was included for non-cancer hazard only. The carcinogenic risk is evaluated with total PCBs.

APPENDIX E

Sparrows Point Development - PPE Standard Operational Procedure, Revision 3

Planning, Tracking/Supervision, Enforcement, and Documentation

Planning

- Response and Development Work Plan (RDWP) for each individual redevelopment sub-parcel identifies and documents site conditions.
- RDWP is reviewed and approved by regulators.
- Contractor HASP to address site-specific conditions and PPE requirements:
    - Contractor H&S professional to sign-off on PPE requirements for site workers;
    - Job Safety Analysis (JSA) to be performed for ground intrusive work.
- Project Environmental Professional (EP) assigned to each construction project – monitors project during environmentally sensitive project phases and is available to construction contractor on an as needed basis. EP responsibilities include the following:
    - Dust monitoring
    - Routine ground intrusive breathing space air monitoring
    - Soil tracking
    - Water handling oversight
    - Ground intrusive work observation
    - Notification for unexpected conditions
- Pre-construction meeting identifies EP roles and responsibilities and reviews site conditions.
- Contractor to perform job-site HazCom. HazCom to be addressed in Contractor HASP and include:
    - PPE requirements,
    - Exposure time limits,
    - Identification of chemicals of concern and potential effects of over-exposure (adverse reactions),
    - Methods and routes of potential exposure.
- All personnel that will be performing ground intrusive work within impacted soils shall sign-off on HazCom.
- If, based on a thorough review of Site conditions, it is expected that construction workers will have the potential to encounter materials considered hazardous waste under RCRA or DOT regulations, HAZWOPER-trained personnel will be utilized.

Tracking/Supervision

- Contractor to record any day that there is ground intrusive work and confirm that proper PPE is being worn.
- EP will note ground intrusive work on daily work sheets and perform at least one spot check per day.
- EP will log on daily work sheets PPE compliance for all intrusive work areas at least once per day.

- EP to take example photos of Exclusion Zones/Contamination Reduction Zones periodically.

Work Zones Delineation

- Exclusion Zone – The Exclusion Zones will include the areas proposed for excavation or with active trenches, excavations, or ground intrusive work, at a minimum. Personnel working within the exclusion zone will be required to wear Modified Level D PPE as described in this SOP. EP to take example photos of Exclusion Zones/Contamination Reduction Zones periodically. The Exclusion Zones will be identified each work day.
- Contamination Reduction Zone – This work zone is located outside of the exclusion zone, but inside of the limits of development (LOD). The Contamination Reduction Zone will be located adjacent to the Exclusion Zone, and all personal decontamination including removal of all disposable PPE/removal of soil from boots will be completed in the Contamination Reduction Zone.

Documentation

- Contractor HASP and HazCom.
- Contractor ground intrusive tracking record.
- HASP and HazCom sign-in sheets.
- EP pre-con memos.
- EP daily work sheets.
- Records documenting intrusive work and proper PPE use to be provided in completion report.

Enforcement

- Non-compliance of PPE requirements will result in disciplinary action up to and including prohibition from working on Sparrows Point.

Unknown and/or Unexpected Conditions

If unknown and/or unexpected conditions are encountered during the project that the EP determines to have a reasonable potential to significantly impact construction worker health and safety, the following will be initiated:

1. Job stoppage,
2. TPA and MDE notification,
3. Re-assessment of conditions.

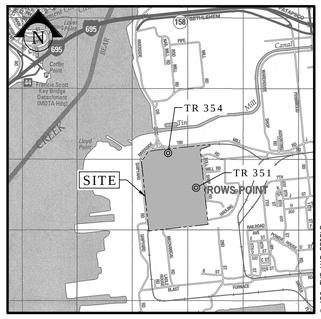
Work will not continue until EP has cleared the area. If hazardous waste is identified, a HAZWOPER contractor will be brought in to address. The approved contingency plan will be implemented, where appropriate.

Modified Level D PPE

Modified Level D PPE will include, at a minimum, overalls such as polyethylene-coated Tyvek or clean washable cloth overalls, latex (or similar) disposable gloves (when working in wet/chemical surroundings) or work gloves, steel-toe/steel-shank high ankle work boots with taped chemical-protective over-boots (as necessary), dust mask, hard hat, safety glasses with

side shields, and hearing protection (as necessary). If chemical-protective over-boots create increased slip/trip/fall hazardous, then standard leather or rubber work boots could be used, but visible soils from the sides and bottoms of the boots must be removed upon exiting the Exclusion Zone.

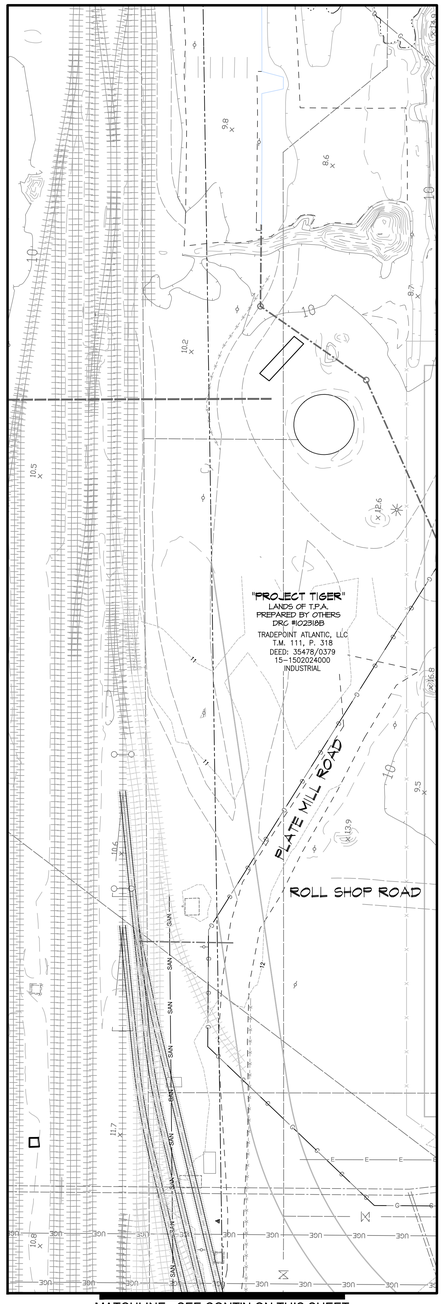
APPENDIX F



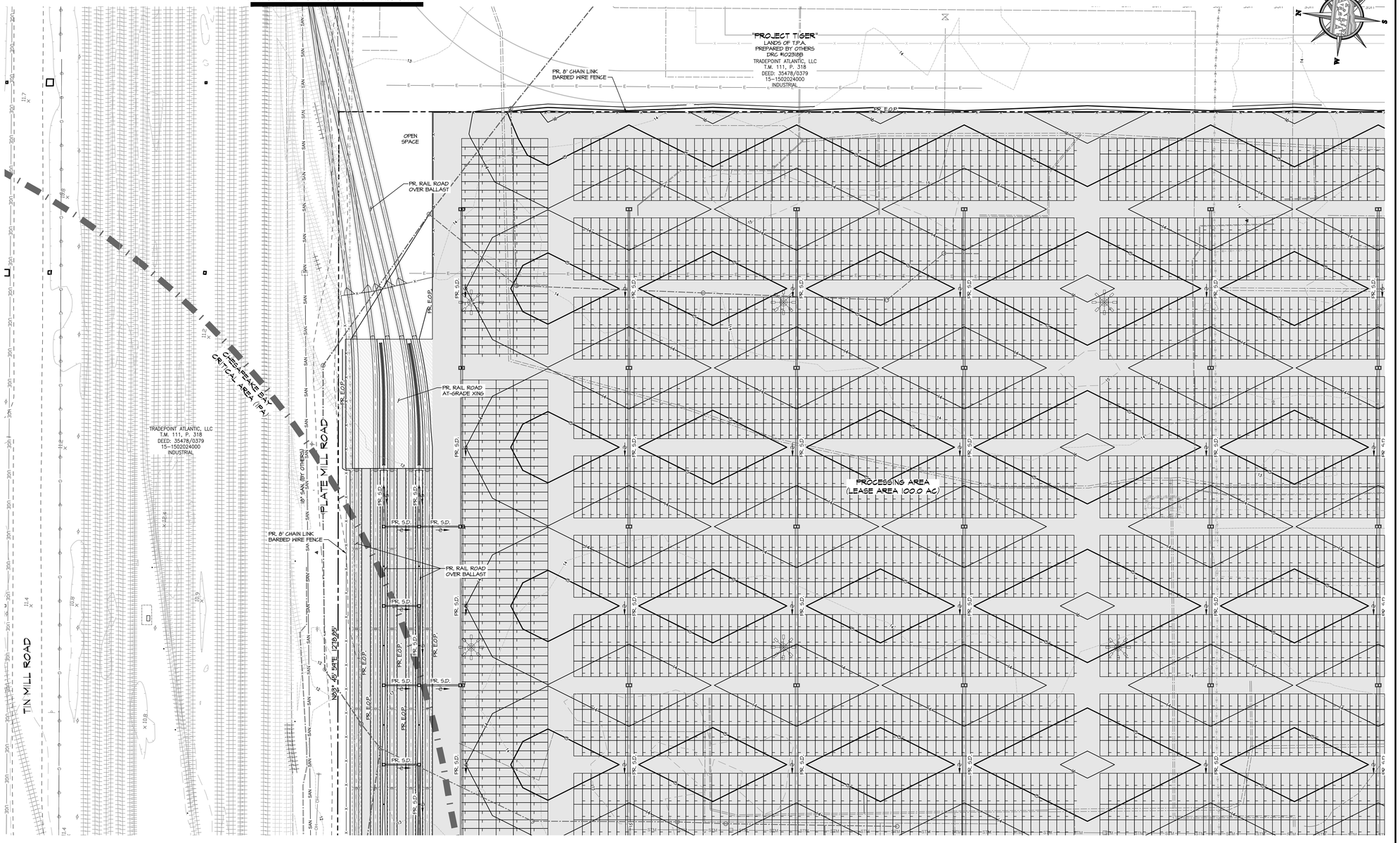
VICINITY MAP

SCALE: 1" = 2,000'

MATCHLINE - SEE CONT'N ON THIS SHEET

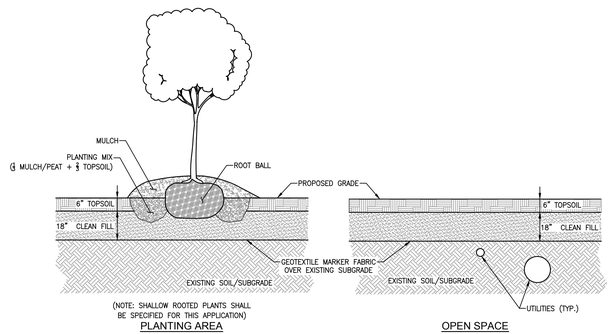


MATCHLINE - SEE CONT'N ON THIS SHEET



LEGEND

EXISTING	PROPOSED
BUILDING	BUILDING
CONCRETE	EDGE OF PAVING OR SIDEWALK
CURB	CURB
EASEMENT	EASEMENT
LOT LINE	BUILDING SETBACK
CRITICAL AREA (IDA)	TRACT BOUNDARY
FEMA FLOODPLAIN	RIGHT-OF-WAY
WOODS	METAL FENCE
METAL FENCE	SANITARY SEWER LINE (PUBLIC)
GAS LINE	SANITARY SEWER LINE (PRIVATE)
GRAVEL	STORM DRAIN LINE (RCCP)
GUARDRAIL	STORM DRAIN LINE (PVC OR HDPE)
OVERHEAD LINE	RETAINING WALL
RAILROAD	WATER LINE (PUBLIC)
SANITARY SEWER	WATER LINE (PRIVATE)
FORCE MAIN	ADA PARKING SPACE
STORM DRAIN	WHEEL STOP
STEAM PIPES	EXISTING 1' CONTOUR
UNDERGROUND ELECTRIC	EXISTING 5' CONTOUR
RETAINING WALL	PROPOSED 1' CONTOUR
WATER LINE	PROPOSED 5' CONTOUR



LANDSCAPED AREA TYPICAL SECTIONS

NOT TO SCALE

50 0 50

Scale 1" = 50'

THE CORRECTNESS OR COMPLETENESS OF EXISTING INFORMATION SHOWN ON THE DRAWING IS NOT WARRANTED OR GUARANTEED. THE CONTRACTOR SHALL VERIFY THE LOCATION OF UTILITIES AND UNDERGROUND FACILITIES, BY TEST PITS OR OTHER METHODS APPROVED BY THE OWNER'S REPRESENTATIVE, AS REQUIRED TO VERIFY EXACT LOCATIONS AND DEPTHS WITHIN THE LIMIT OF DISTURBANCE. ALL DISCREPANCIES BETWEEN INFORMATION SHOWN ON THE DRAWINGS AND THAT VERIFIED IN THE FIELD SHALL BE REPORTED TO THE OWNER'S REPRESENTATIVE PRIOR TO BEGINNING WORK.

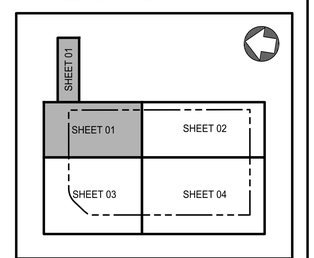
SITE ANALYSIS

TOTAL AREA OF SITE:		115.00 AC.
LIMIT OF DISTURBANCE (L.O.D.):	5,184,300 S.F.	/ 119.02 AC.
AREA TO BE VEGETATED:	225,641 S.F.	/ 5.18 AC.
AREA TO BE IMPERVIOUS:	4,870,444 S.F.	/ 111.81 AC.
AREA TO BE RAIL BALLAST:	88,395 S.F.	/ 2.03 AC.

TOTAL CUT (W/OUT TOPSOIL): 96,900 CY
TOTAL FILL (0% SHRINK): 95,900 CY
TOPSOIL (N/A): N/A

"THE EARTHWORK QUANTITIES SHOWN HEREON ARE FOR INFORMATION PURPOSES ONLY. MRA MAKES NO GUARANTEE OF ACCURACY OF QUANTITIES OR BALANCE OF SITE. THE DEVELOPER AND CONTRACTOR SHALL TAKE FULL RESPONSIBILITY OF ACTUAL EARTHWORK QUANTITIES ENCOUNTERED DURING CONSTRUCTION."

WATERSHED: BEAR CREEK / PATAPSCO RIVER [PATAPSCO RIVER AREA SUB-BASIN 02-13-09]



KEY MAP

SCALE: 1"=1,000'

DATE	REVISIONS

OWNER/DEVELOPER

TRADEPOINT ATLANTIC

1600 SPARROWS POINT BOULEVARD
BALTIMORE, MARYLAND 21219
PHONE: (443) 452-1509
ATTN: MR. JOHN M. MARTIN

MORRIS ▯ RITCHIE ASSOCIATES, INC.
ENGINEERS, ARCHITECTS, PLANNERS, SURVEYORS & LANDSCAPE ARCHITECTS
3445-A BOX HILL CORPORATE CENTER DRIVE
ABINGDON, MARYLAND 2100▯
PHONE (410) 515-▯000
FAX (410) 515-▯002

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REMEDIAL DESIGN WORK PLAN

DEVELOPMENT PLAN

FOR

TPA - B1 - IMPORT PROCESSING FACILITY

1401 ▯ 1501 SHIPYARD ROAD

15TH ELECTION DISTRICT

SPARROWS POINT, MARYLAND

JOB NO:	20104
SCALE:	1"=50'
DATE:	12/11/2018
DRAWN BY:	AJH
DESIGN BY:	AGD
REVIEW BY:	AGD
SHEET:	01 OF 04

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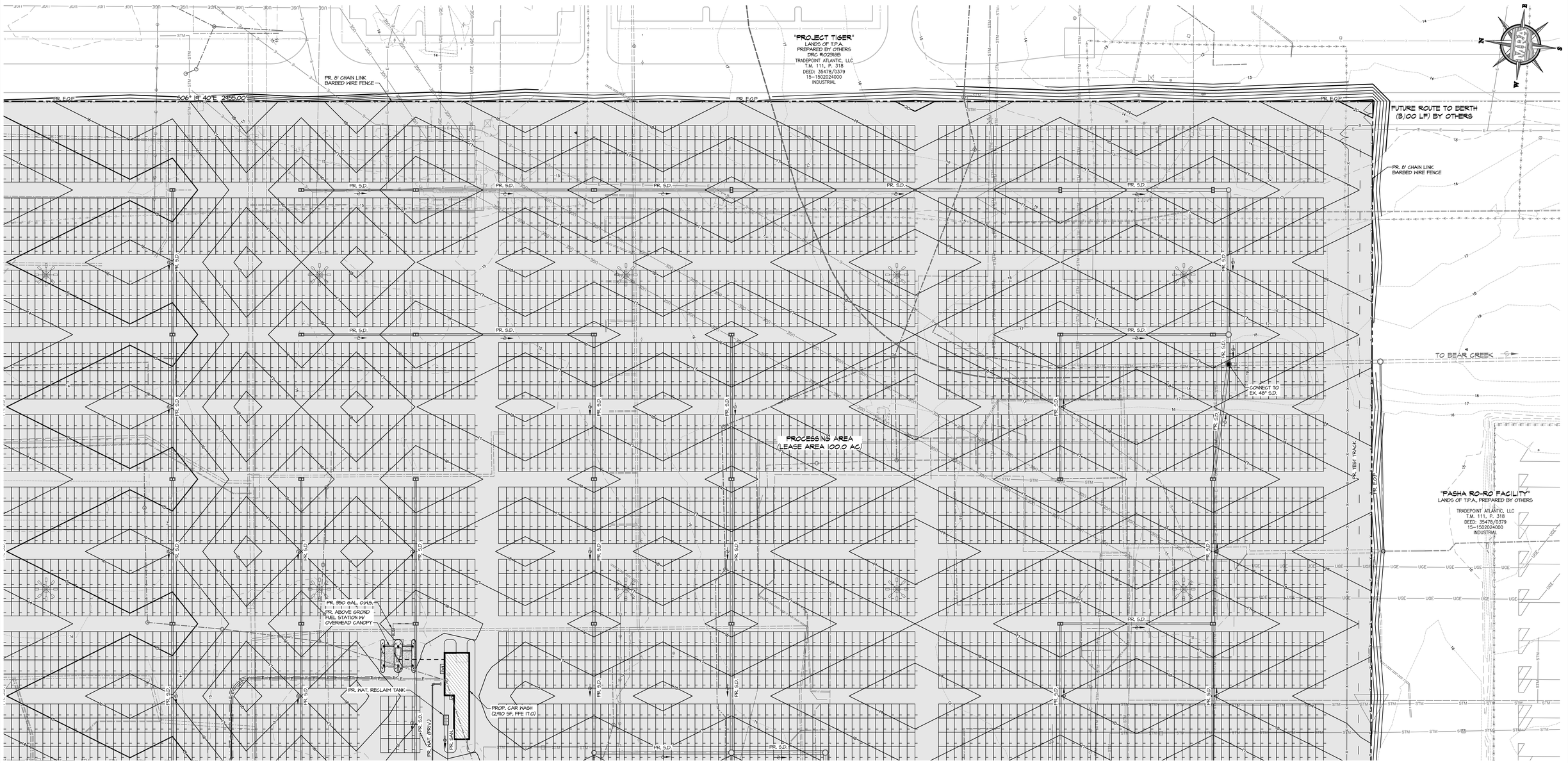
ıı, Copyright 2018 Morris & Ritchie Associates, Inc.



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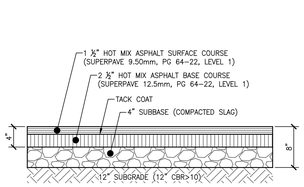
Scale 1" = 50'

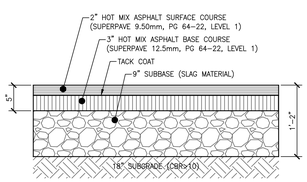
LEGEND

EXISTING	PROPOSED
BUILDING	BUILDING
CONCRETE	EDGE OF PAVING OR SIDEWALK
CURB	CURB
EASEMENT	EASEMENT
LOT LINE	BUILDING SETBACK
CRITICAL AREA (CA)	TRACT BOUNDARY
FEMA FLOODPLAIN	RIGHT-OF-WAY
WOODS	METAL FENCE
METAL FENCE	SANITARY SEWER LINE (PUBLIC)
GAS LINE	SANITARY SEWER LINE (PRIVATE)
GRAVEL	STORM DRAIN LINE (RCCP)
GUARDRAIL	STORM DRAIN LINE (PVC OR HDPE)
OVERHEAD LINE	RETAINING WALL
RAILROAD	WATER LINE (PUBLIC)
SANITARY SEWER	WATER LINE (PRIVATE)
FORCE MAIN	ADA PARKING SPACE
STORM DRAIN	WHEEL STOP
STEAM PIPES	EXISTING 1' CONTOUR
UNDERGROUND ELECTRIC	EXISTING 5' CONTOUR
RETAINING WALL	PROPOSED 1' CONTOUR
WATER LINE	PROPOSED 5' CONTOUR



LIGHT DUTY ASPHALT PAVING SECTION

NOT TO SCALE



HEAVY DUTY ASPHALT PAVING SECTION

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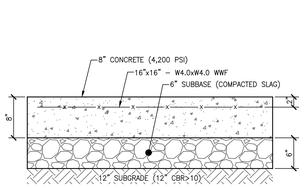
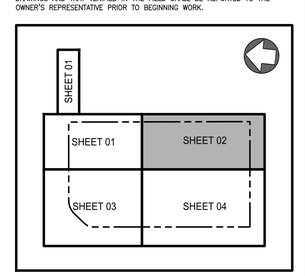


CONCRETE PAVEMENT SECTION

NOT TO SCALE

THE CORRECTNESS OR COMPLETENESS OF EXISTING INFORMATION SHOWN ON THE DRAWING IS NOT WARRANTED OR GUARANTEED. THE CONTRACTOR SHALL VERIFY THE LOCATION OF UTILITIES AND UNDERGROUND FACILITIES, BY TEST PITS OR OTHER METHODS APPROVED BY THE OWNER'S REPRESENTATIVE, AS REQUIRED TO VERIFY EXACT LOCATIONS AND DEPTHS WITHIN THE LIMIT OF DISTURBANCE. ALL DISCREPANCIES BETWEEN INFORMATION SHOWN ON THE DRAWINGS AND THAT VERIFIED IN THE FIELD SHALL BE REPORTED TO THE OWNER'S REPRESENTATIVE PRIOR TO BEGINNING WORK.



KEY MAP

SCALE: 1"=1,000'

DATE	REVISIONS

OWNER/DEVELOPER

TRADEPOINT ATLANTIC

1600 SPARROWS POINT BOULEVARD
BALTIMORE, MARYLAND 21219
PHONE: (443) 452-1509
ATTN: MR. JOHN M. MARTIN

MORRIS ▯ RITCHIE ASSOCIATES, INC.
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REMEDIAL DESIGN WORK PLAN

DEVELOPMENT PLAN

FOR

TPA - B1 - IMPORT PROCESSING FACILITY

1401 ▯ 1501 SHIPYARD ROAD

15TH ELECTION DISTRICT — SPARROWS POINT, MARYLAND

JOB NO:	20104
SCALE:	1"=50'
DATE:	12/11/2018
DRAWN BY:	AJH
DESIGN BY:	AGD
REVIEW BY:	AGD
SHEET:	02 OF 04

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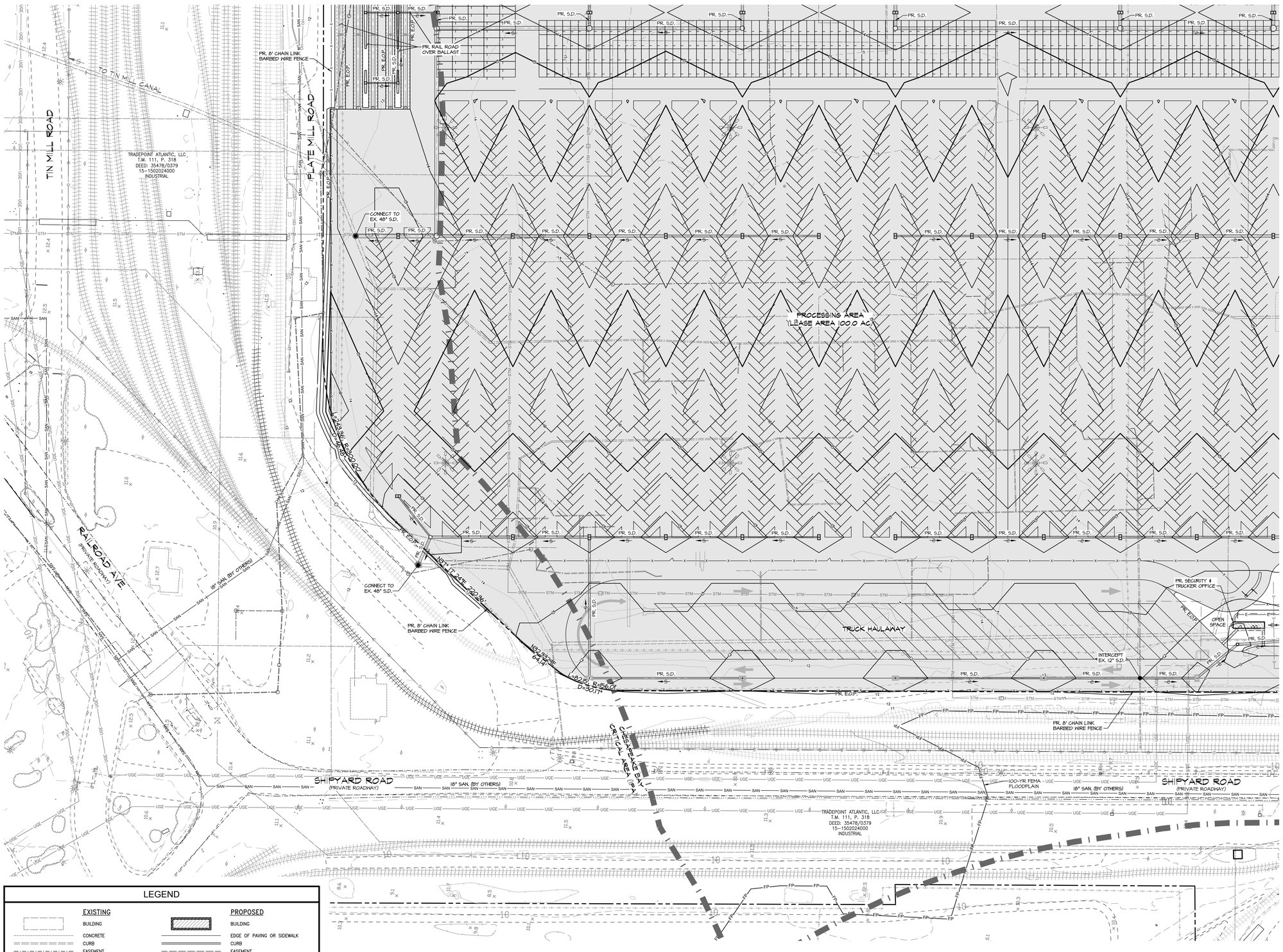

LEGEND

EXISTING	PROPOSED
BUILDING	BUILDING
CONCRETE	EDGE OF PAVING OR SIDEWALK
CURB	CURB
EASEMENT	EASEMENT
LOT LINE	BUILDING SETBACK
CRITICAL AREA (IDA)	TRACT BOUNDARY
FEMA FLOODPLAIN	RIGHT-OF-WAY
WOODS	METAL FENCE
METAL FENCE	SANITARY SEWER LINE (PUBLIC)
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SANITARY SEWER	WATER LINE (PRIVATE)
FORCE MAIN	ADA PARKING SPACE
STORM DRAIN	WHEEL STOP
STEAM PIPES	EXISTING 1' CONTOUR
UNDERGROUND ELECTRIC	EXISTING 5' CONTOUR
RETAINING WALL	PROPOSED 1' CONTOUR
WATER LINE	PROPOSED 5' CONTOUR

Scale 1" = 50'

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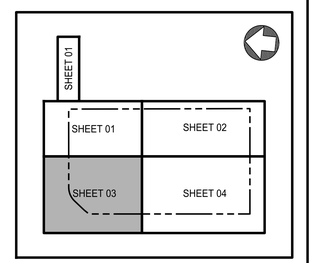

KEY MAP
SCALE: 1"=1,000'

DATE	REVISIONS

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TRADEPOINT ATLANTIC
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BALTIMORE, MARYLAND 21219
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3445-A BOX HILL CORPORATE CENTER DRIVE
ABINGDON, MARYLAND 21009
PHONE (410) 515-9000
FAX (410) 515-9002

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REMEDIAL DESIGN WORK PLAN
DEVELOPMENT PLAN
FOR
TPA - B1 - IMPORT PROCESSING FACILITY
1401 & 1501 SHIPYARD ROAD
15TH ELECTION DISTRICT
SPARROWS POINT, MARYLAND

JOB NO:	20104
SCALE:	1"=50'
DATE:	12/11/2018
DRAWN BY:	AJH
DESIGN BY:	AGD
REVIEW BY:	AGD
SHEET:	03 OF 04

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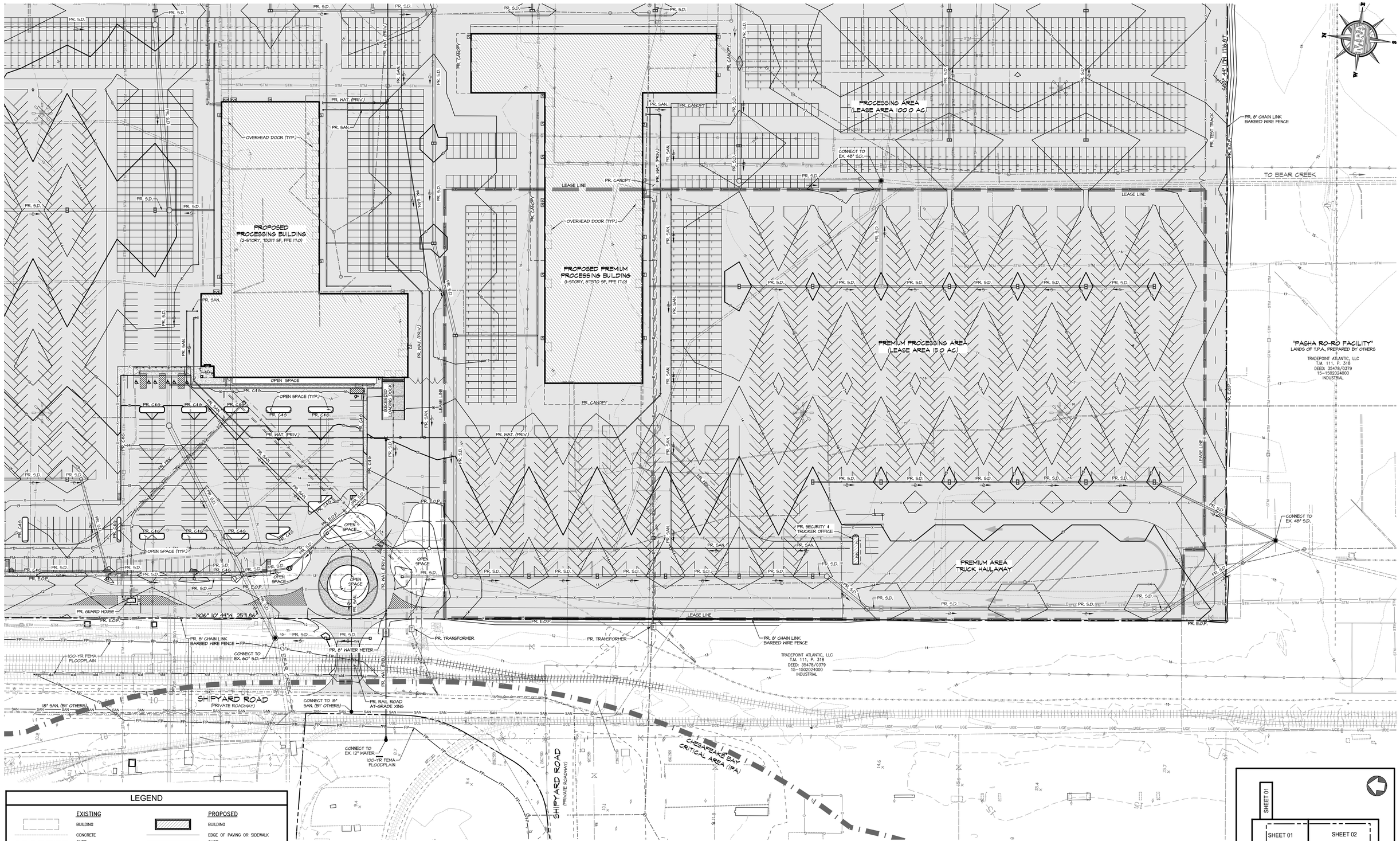

LEGEND

EXISTING	PROPOSED
BUILDING	BUILDING
CONCRETE	EDGE OF PAVING OR SIDEWALK
CURB	CURB
EASEMENT	EASEMENT
LOT LINE	BUILDING SETBACK
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50 0 50
Scale 1" = 50'

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KEY MAP
SCALE: 1"=1,000'

DATE	REVISIONS

OWNER/DEVELOPER
TRADEPOINT ATLANTIC
1600 SPARROWS POINT BOULEVARD
BALTIMORE, MARYLAND 21219
PHONE: (443) 452-1509
ATTN: MR. JOHN M. MARTIN

MRA

MORRIS □ RITCHIE ASSOCIATES, INC.
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REMEDIAL DESIGN WORK PLAN
DEVELOPMENT PLAN
FOR
TPA - B1 - IMPORT PROCESSING FACILITY
1401 □ 1501 SHIPYARD ROAD
15TH ELECTION DISTRICT
SPARROWS POINT, MARYLAND

JOB NO:	20104
SCALE:	1"=50'
DATE:	12/11/2018
DRAWN BY:	AJH
DESIGN BY:	AGD
REVIEW BY:	AGD
SHEET:	04 OF 04

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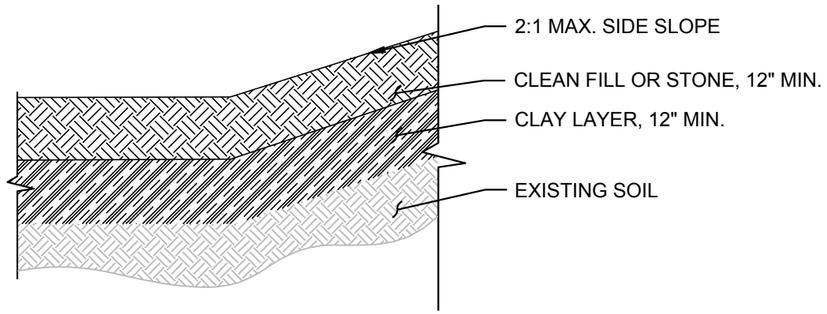
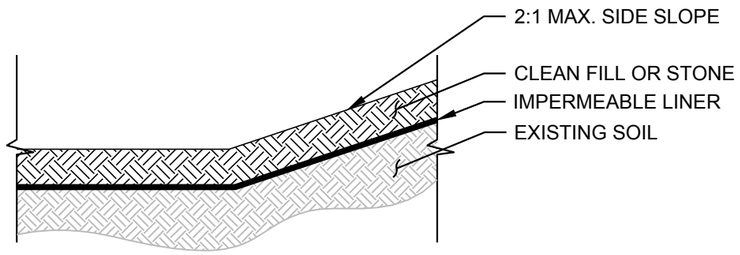
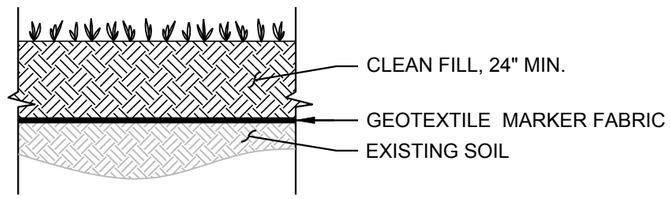
APPENDIX G





TYPICAL POND SECTIONS
NOT TO SCALE



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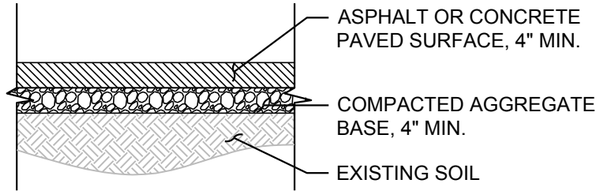

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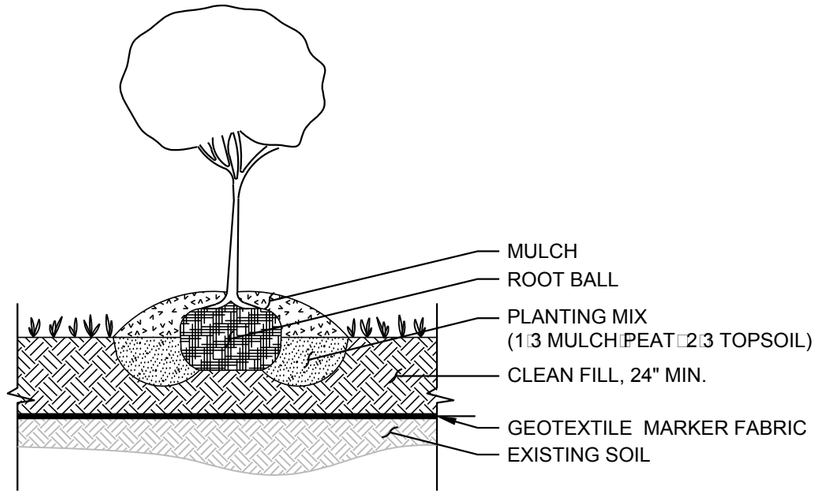
NOT TO SCALE



TYPICAL PLANTING SECTION
NOT TO SCALE

GEOTEXTILE MARKER FABRIC SPECIFICATIONS

THE GEOTEXTILE MARKER FABRIC SHALL BE A NONWOVEN PERVIOUS SHEET OF POLYPROPYLENE MATERIAL. ADD STABILIZERS AND/OR INHIBITORS TO THE BASE MATERIAL, AS NEEDED, TO MAKE THE FILAMENTS RESISTANT TO DETERIORATION BY ULTRAVIALET LIGHT, OXIDATION AND HEAT EXPOSURE. REGRIND MATERIAL, WHICH CONSISTS OF EDGE TRIMMINGS AND OTHER SCRAPS THAT HAVE NEVER REACHED THE CONSUMER, MAY BE USED TO PRODUCE THE GEOTEXTILE. POST-CONSUMER RECYCLED MATERIAL MAY BE USED. GEOTEXTILE SHALL BE FORMED INTO A NETWORK SUCH THAT THE FILAMENTS OR YARNS RETAIN DIMENSIONAL STABILITY RELATIVE TO EACH OTHER, INCLUDING THE EDGES. GEOTEXTILES SHALL MEET THE REQUIREMENTS SPECIFIED IN TABLE 1. WHERE APPLICABLE, TABLE 1 PROPERTY VALUES REPRESENT THE MINIMUM AVERAGE ROLL VALUES IN THE WEAKEST PRINCIPAL DIRECTION. VALUES FOR APPARENT OPENING SIZE (AOS) REPRESENT MAXIMUM AVERAGE ROLL VALUES

TABLE 1

		WOVEN SLIT FILM GEOTEXTILE		WOVEN MONOFILAMENT GEOTEXTILE		NONWOVEN GEOTEXTILE	
		MINIMUM AVERAGE ROLL VALUE[1]					
PROPERTY	TEST METHOD	MD	CD	MD	CD	MD	CD
Grab Tensile Strength	ASTM D-4632	200 lb	200 lb	370 lb	250 lb	200 lb	200 lb
Grab Tensile Elongation	ASTM D-4632	15%	10%	15%	15%	50%	50%
Trapezoidal Tear Strength	ASTM D-4533	75 lb	75 lb	100 lb	60 lb	80 lb	80 lb
Puncture Strength	ASTM D-6241	450 lb		900 lb		450 lb	
Apparent Opening Size[2]	ASTM D-4751	U.S. Sieve 30 (0.59 mm)		U.S. Sieve 70 (0.21 mm)		U.S. Sieve 70 (0.21 mm)	
Permittivity	ASTM D-4491	0.05 sec^{-1}		0.28 sec^{-1}		1.1 sec^{-1}	
Ultraviolet Resistance Retained at 500 hours	ASTM D-4355	70% strength		70% strength		70% strength	

[1] All numeric values except apparent opening size (AOS) represent minimum average roll values (MARV). MARV is calculated as the typical minus two standard deviations. MD is machine direction; CD is cross direction.

[2] Values for AOS represent the average maximum opening.

ARM Group Inc.
Engineers and Scientists

designed	RJC
checked	TNP
drawn	RJC
scale	N/A
date	1/31/2019
project no.	160443M

Appendix G

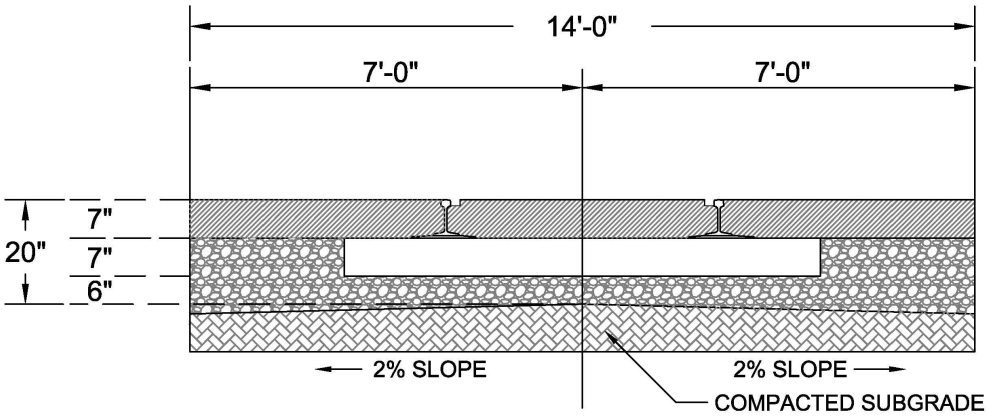
drawing title: CAPPING SECTION DETAILS

project title: SPARROWS POINT ENVIROANALYTICS GROUP

SPARROWS POINT
BALT. COUNTY, MARYLAND

\\armgroup.lcl\CorpData\Projects\EnviroAnalytics Group\160443M EAG_TPA Redevelopment\Dwg\B6\Production\Figure 6b - Environmental Capping Detail.dwg, Plotted: January 31, 2019

APPENDIX H



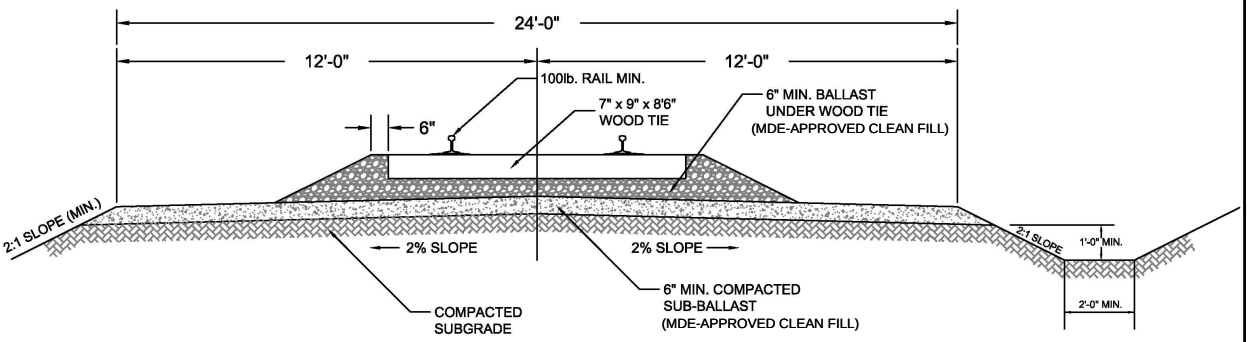
TRADEPOINT RAIL

Track Section for Paved Area

SCALE:	DRAWN BY:	DATE:	DRAWING:
N.T.S.	SJY	6/15/16	

TRADEPOINT RAIL
Sparrows Point, Maryland

TPR-0101



TRADEPOINT RAIL

Standard Track Section

SCALE:	DRAWN BY:	DATE:	DRAWING:
N.T.S.	SJY	6/15/16	

TRADEPOINT RAIL
Sparrows Point, Maryland

TPR-0101

APPENDIX I

GENERAL NOTES:

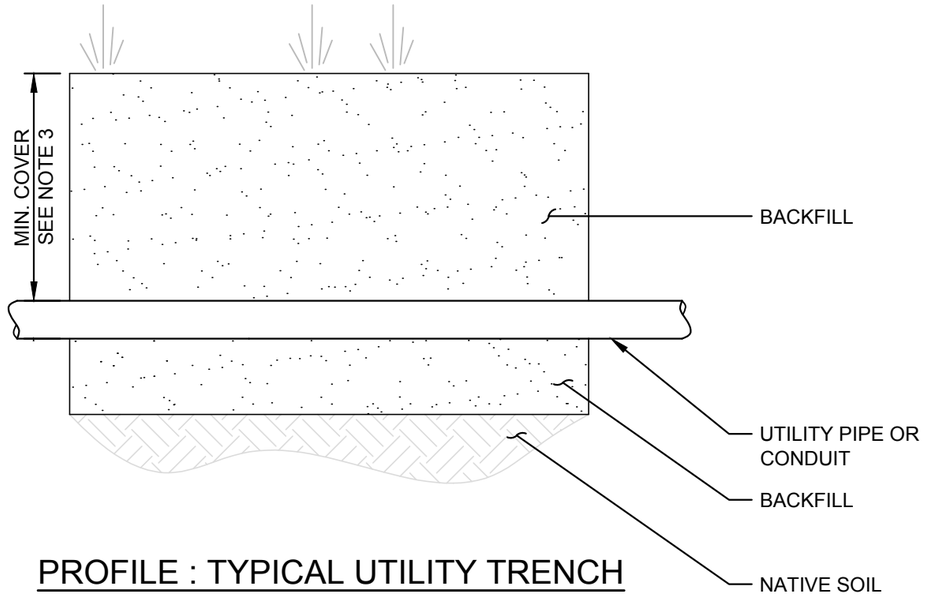
1. ALL PIPES OR CONDUIT SHALL BE LEAK-PROOF AND WATERTIGHT. ALL JOINTS SHALL BE SEALED OR GASKETED.

2. ALL PIPES SHALL BE PROPERLY PLACED AND BEDDED TO PREVENT MISALIGNMENT OR LEAKAGE. PIPE BEDDING SHALL BE INSTALLED IN SUCH A MANNER AS TO MINIMIZE THE POTENTIAL FOR ACCUMULATION OF WATER AND CONCENTRATED INFILTRATION.

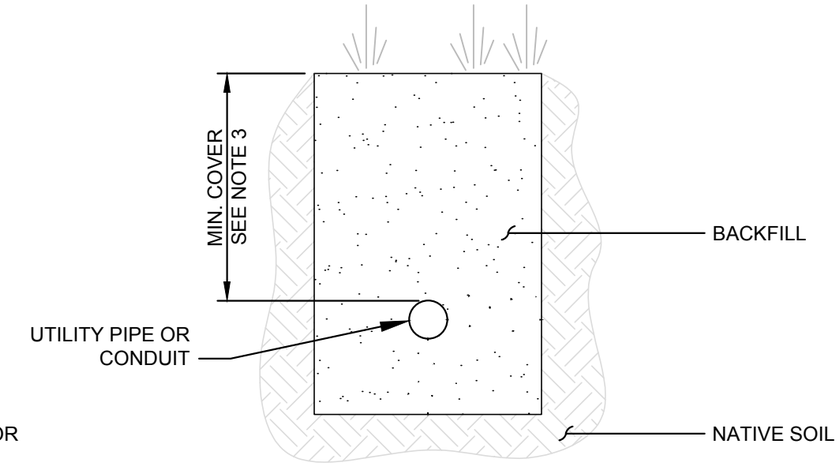
3. MINIMUM COVER ABOVE UTILITY SHALL BE BASED ON SPECIFIC UTILITY REQUIREMENTS.

4. TRENCHES SHALL BE BACKFILLED WITH BEDDING AND MATERIALS APPROVED BY MDE.

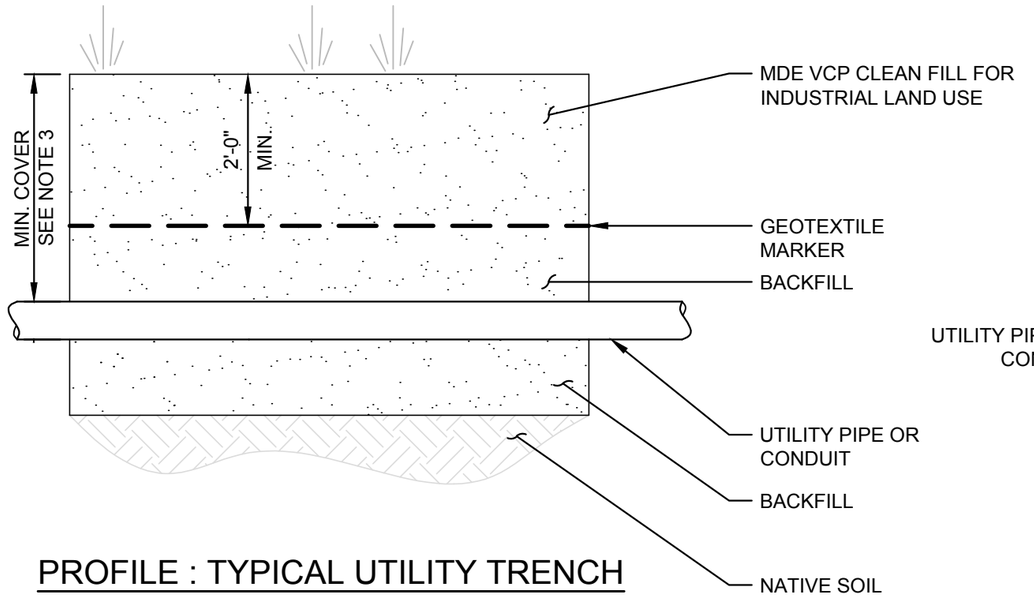
5. FOR ANY UTILITY SEGMENT WHICH GOES THROUGH AN AREA WHICH IS DESIGNATED TO RECEIVE A LANDSCAPED CAP, THE UPPER 2 FEET OF BACKFILL MUST MEET THE REQUIREMENTS OF MDE VCP CLEAN FILL FOR INDUSTRIAL LAND USE. IN THIS CASE THE MDE VCP CLEAN FILL WILL BE UNDERLAIN BY A GEOTEXTILE MARKER FABRIC. UTILITY SEGMENTS WHICH GO THROUGH AREAS WHICH DO NOT REQUIRE CAPPING OR ARE DESIGNATED TO RECEIVED A PAVED CAP WILL BE BACKFILLED WITH MATERIALS APPROVED BY MDE FOR THIS USE.



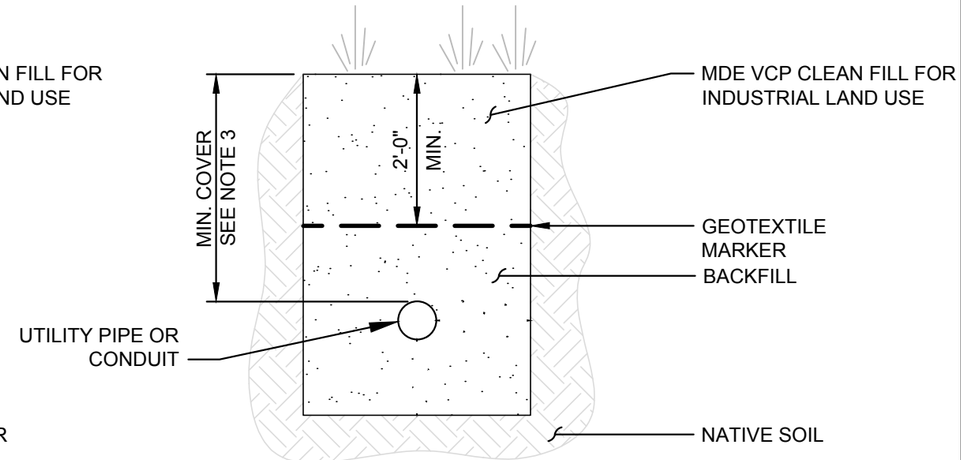
PROFILE : TYPICAL UTILITY TRENCH



SECTION : TYPICAL UTILITY



PROFILE : TYPICAL UTILITY TRENCH
(SEE NOTE 5)



SECTION : TYPICAL UTILITY
(SEE NOTE 5)

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ARM Group Inc.
Earth Resource Engineers and Consultants
www.armgroup.net

TYPICAL UTILITY CROSS SECTIONS
Sparrows Point Site
EnviroAnalytics Group, LLC

September 2018
1/2" = 1'-0"
160443M

Figure 1

\\armgroup.lcl\CorpData\Projects\EnviroAnalytics Group\160443M EAG_TPA Redevelopment\Drwg\Reference\Utility Cross Section_REV.dwg Plotted: January 11, 2018

APPENDIX J

Utility Excavation NAPL Contingency Plan

Revision 4 – June 19, 2017

Introduction:

Proposed underground utilities and excavations necessary for the redevelopment of the Tradepoint Atlantic property may encounter areas of petroleum and/or Oil & Grease contamination in soil. The assessment of total petroleum hydrocarbons (TPH) diesel range organics (DRO), gasoline range organics (GRO), Oil & Grease, and/or non-aqueous phase liquid (NAPL) completed as part of each Phase II Investigation includes the following:

- Each soil boring with evidence of NAPL (i.e., containing a sheen or free oil in the soil core), whether located near utilities or not, is investigated via the installation of a piezometer to assess mobility to groundwater. If measureable NAPL is present in the initial piezometer, additional soil borings and shallow temporary piezometers are installed surrounding the initial detection to delineate the impacts. Each piezometer installed to delineate the presence or absence of NAPL is checked with an oil-water interface probe immediately after installation, 48 hours after installation, and at least 30 days after installation.
- TPH-DRO/GRO and Oil & Grease data, once received, are assessed in their magnitude and location respective to subsurface utilities, stormwater conveyances, and surface waters.
- Locations that exhibit elevated detections of TPH/Oil & Grease or evidence of NAPL, that are within reasonable proximity (i.e. 25 feet) to subsurface utilities or stormwater conveyances and/or within reasonable proximity (i.e. 100 feet) to surface waters, are identified for further delineation and selective removal (if warranted).

Any NAPL identified in soil borings or piezometers during the Phase II Investigation would be noted on relevant logs and identified in Response and Development Work Plans for construction planning purposes. Despite these planning efforts, unidentified pockets of contamination (including NAPL) may still be encountered during construction. This contingency plan provides the procedures to be utilized during construction work to properly address response and construction techniques if any materials impacted with NAPL are encountered.

Objectives:

The purpose of this plan is to describe procedures to be followed in the event that NAPL is encountered in utility trenches or other excavations during development of the Tradepoint Atlantic property. The specific objectives of this plan and the procedures outlined herein are:

1. To ensure identification and proper management of Oil & Grease and petroleum-contaminated soils.
2. To ensure proper worker protection for working in areas of Oil & Grease and petroleum contamination.
3. To ensure that the installation of new utilities does not create new preferential flow paths for the migration of free-phase hydrocarbons (Oil & Grease, TPH-DRO/GRO, etc.) or soil vapors.

Identification of Oil & Grease and Petroleum Contaminated Soil:

An Environmental Professional (EP) will be on-site to determine if soils show evidence of the presence of Oil & Grease or TPH present as NAPL during installation of utility trenches or other excavation activities completed during development. Oil & Grease or petroleum-contaminated soils can be identified by the presence of free oil, oil staining, a petroleum odor, or any combination of these conditions. Free oil (NAPL) is liquid oil which could potentially be drained or otherwise extracted from the soil, and is the focus of this contingency plan, although severe staining accompanied by odors should be addressed via the same contingency measures provided herein (based on the judgement of the EP). The appearance of oil staining is not always consistent, but varies depending on the nature of the oil, the soil type, and the age of the release. Staining associated with old petroleum contamination often has a greenish hue, but may also be brown or black. The olfactory sense is the most sensitive instrument for identifying petroleum contamination in the field. Therefore, a petroleum odor may be noted although there is no visible sign of oil or staining. In some instances, decaying organic matter can produce an odor similar to petroleum, but this is rare.

If NAPL is encountered during construction, the extent of impacts shall be delineated by excavating trenches or installing four soil borings (two in each direction) perpendicular to the utility alignment or excavation to examine the soil for physical evidence of NAPL. Perpendicular transects will be investigated every 50 feet along the section of the utility trench or excavation where there is physical evidence of NAPL. Each transect will extend to a distance of 10 feet from the edge of the utility trench or excavation. This represents the maximum distance which would require mandatory excavation to mitigate potential migration risks (see below).

NAPL delineation will be guided primarily by screening observations from the perpendicular borings or trenches, and samples will be collected to test for extractable Oil & Grease or petroleum-contaminated soil using the Oil Sticks™ test kit. This test kit provides a determination of whether hydrocarbons are present in soil and extractable (i.e. could mobilize as a NAPL). Oil Sticks™ change from a pale blue to a deep blue color when they come in contact with free product. This instantaneous change in color occurs even when miniscule amounts of product come in contact with the strip. The sensitivity of Oil Sticks™ to determine the presence/absence of oil is reported by the manufacturer to be about 1,000 to 2,000 mg/kg. The

field test is performed by placing approximately 3 tablespoons of soil in a clean sample cup and adding enough water to cover the sample. After stirring the sample and waiting ~1 minute, the Oil Sticks™ test strip should be swished through the water, making sure to touch the strip to the sides of the cup where product may collect at the interface (meniscus) between the cup, water, and air. If the strip turns deep blue, or deep blue spots appear, oil or hydrocarbon is present. However, the MDE has observed that the Oil Sticks™ method may produce inconsistent results. Therefore, documentation of all screening methods is necessary during boring/trenching work. This documentation shall include an accurate record of visual and olfactory screening, along with a narrative with photographs. Field screening will be aided by photoionization detector (PID) results, and Oil Sticks™ samples should be biased to target elevated PID readings, if any. The agencies have requested that all soil samples prepared for the Oil Sticks™ field test be photographed for evidence of sheen/residue on the cup sides. Detailed records are required to be submitted with the project-specific Completion Report.

If petroleum or Oil & Grease impacts are identified in Site soils based on use of the Oil Sticks™ test kit or other field screening methods, disposal requirements will be determined using the quantitative PetroFLAG™ hydrocarbon analysis system or fixed laboratory analysis (see following section). The PetroFLAG™ hydrocarbon analysis system is a broad spectrum field test kit suitable for TPH contamination regardless of the source or state of degradation (Dexsil Corporation). PetroFLAG™ field test kits do not distinguish between aromatic and aliphatic hydrocarbons, but quantify all fuels, oils, and greases as TPH. Dilutions can be used to determine concentrations of TPH/Oil & Grease above the normal calibration range. Dexsil notes that positive results for TPH may occur if naturally occurring waxes and oils, such as vegetable oils, are present in the sample. Additional detail regarding the procedure for the PetroFLAG™ kit is given in **Attachment 1**.

Soil Excavation, Staging, Sampling and Disposal:

The EP will monitor all utility trenching and excavation activities for signs of potential contamination. In particular, soils will be monitored with a hand-held PID for potential VOCs, and will also be visually inspected for the presence of staining, petroleum waste materials, or other indications of NAPL contamination that may be different than what was already characterized. Excavated material that is visibly stained or that exhibits a sustained PID reading of greater than 10 ppm will be segregated and containerized or placed in a stockpile on polyethylene or impervious surface until the material can be analyzed using the PetroFLAG™ test kit to characterize the material for appropriate disposal. If a PetroFLAG™ test kit is not available to the contractor, or if the contractor prefers to use fixed laboratory analysis, samples may be characterized via submittal to a laboratory for TPH/Oil & Grease analysis. However, any excavated material containing NAPL (i.e., containing free oil) cannot be characterized for waste disposal using the PetroFLAG™ test kit and must instead be characterized via fixed laboratory analysis, as described in the final paragraph of this section. In addition, any hydrocarbon contaminated soil discovered during construction activities that was not previously

characterized must also be analyzed for PCBs prior to removal and transport to an appropriate disposal facility. If excavated and stockpiled, such materials will be covered with a plastic tarp so that the entire stockpile is encapsulated, and anchored to prevent the elements from affecting the integrity of the containment. The MDE will be notified if such materials are encountered during utility work.

Soil exhibiting physical evidence of NAPL contamination or elevated TPH/Oil & Grease with detections in the low percentage range, which is located within 10 feet of a proposed new utility or subsurface structure (i.e., foundation, sump, electrical vault, underground tank, etc.), will be excavated and segregated for disposal at the on-site nonhazardous landfill (Greys Landfill) or an off-site facility pending the completion of any required PCB analytical testing. Impacted soil which is located greater than 10 feet away from the proposed utility or subsurface structure may be left in place and undisturbed. The extent of the excavation will be determined in the field following visual/olfactory screening supplemented by the PID and Oil Sticks™ test kit, but soil disposal requirements will be determined with the PetroFLAG™ test kit (since the Oil Sticks™ method is not quantitative) or via fixed laboratory analysis for TPH/Oil & Grease (if preferred by the contractor or if the PetroFLAG™ test kit is unavailable to the contractor).

Any recovered NAPL will be collected for off-site disposal. As required by the appropriate and MDE approved facility, samples impacted by NAPL (i.e., containing free oil) will be collected for profiling/waste characterization and submitted to a fixed laboratory, as mentioned above, for the following analyses: metals, VOCs, TPH-DRO/GRO, and/or additional analysis required by the selected disposal facility. Upon receipt of any additional characterization analytical results, the MDE will be notified of the proposed disposal facility. Non-impacted material with no evidence of NAPL (i.e. soils that may contain measureable concentrations of TPH/Oil & Grease but below percentage levels) may be placed on the Site in areas to be paved or capped as long as all other requirements specified in the Response and Development Work Plan (or similar governing document) are met.

Initial Reporting:

If evidence of NAPL in soil or groundwater is encountered during excavation, it will be reported to the MDE within two hours. Information regarding the location and characteristics of any NAPL contaminated soil will be documented as follows:

- Location (exact stationing);
- Extent of contamination (horizontally and vertically – prepare a sketch including dimensions);
- Relative degree of contamination (i.e. free oil with strong odor vs. staining); and
- Visual documentation (take photographs and complete a photograph log)

Utility Installations in Impacted Areas:

Underground piping or conduits installed through areas of Oil & Grease or petroleum contamination shall be leak proof and water tight. All joints will be adequately sealed or gasketed, and pipes or conduits will be properly bedded and placed to prevent leakage. All trench backfill will meet the MDE definition of clean fill, or otherwise be approved by the MDE. Pipe bedding will be installed to minimize the potential for accumulation of water and concentrated infiltration. This can be achieved by using a relatively small amount of low-permeability pipe bedding; open-graded stone will be avoided or only used in thicknesses of 6 inches or less. Bedding must be properly placed and compacted below the haunches of the pipe. Clay, flowable fill, or concrete plugs will be placed every 100 feet across any permeable bedding to minimize the preferential flow and concentration of water along the bedding of such utilities.

If required, each trench plug will be constructed with a 2-foot-thick clay plug or 1-foot-thick flowable fill or concrete plug, perpendicular to the pipe, which extends at least 1 foot in all directions beyond the permeable pipe bedding. The plug acts as an anti-seep collar, and will extend above the top of the pipe. Installation of each trench plug will follow the completion of the trench excavation, installation of granular pipe bedding (because dense-graded aggregate or soil or other pipe bedding is difficult to properly compact below the haunches of the pipe), and seating of the pipe. The trench plug will then be installed by digging out a 1-foot trench below and around the pipe corridor, and placing clay, flowable fill, or concrete to construct the plug. A specification drawing for installation of the trench plug has been provided as **Figure 1**.

Attachment 1 - PetroFLAG™ Procedure

PetroFLAG™ field test kits use a proprietary turbidimetric reaction to determine the TPH concentration of solvent extracted samples (USEPA). Calibration standards provided with the unit are used to perform a two-point calibration for the PetroFLAG™. A blank and a 1,000 ppm standard are run by the analyzer unit to create an internal calibration curve.

Analysis of a soil sample is performed using three simple steps: extraction, filtration, and analysis. The PetroFLAG™ analysis is performed as follows:

- Place a 10 gram soil sample in a test tube.
- Add extraction solvent to the tube.
- Shake the tube intermittently for four minutes.
- Filter the extract into a vial that contains development solution
- Allow the solution to react for 10 minutes.

The filtration step is important because the PetroFLAG™ analyzer measures the turbidity or "optical density" of the final solution. Approximately 25 samples can be analyzed per hour. The vial of developed solution is placed in the meter, and the instrument produces a quantitative reading that reveals the concentration of hydrocarbons in the soil sample. The PetroFLAG™ method quantifies all fuels, oils, and greases as TPH between 15 and 2000 ppm (Dexsil Corporation). A 10x dilution of the filtered extraction solvent will be completed to allow for quantification of soil concentrations in excess of 10,000 ppm. The specially designed PetroFLAG™ analyzer allows the user to select, in the field, the response factor that is appropriate for the suspected contaminant at each site. Vegetable-based oils have been shown to exhibit a response factor of 18% (EPA Method 9074). Using the selected response factor, the analyzer compensates for the relative response of each analyte and displays the correct concentration in parts per million (ppm).

References:

U.S. Environmental Protection Agency (EPA). Contaminated Site Clean-up Information (Clu-IN): Test Kits. Office of Superfund Remediation and Technology Innovation. http://www.clu-in.net/characterization/technologies/color.cfm

Dexsil Corporation. 2016. PetroFLAG Analyzer System (PF-MTR-01). http://www.dexsil.com/products/detail.php?product_id=23

EPA SW-846 Method Number 9074 - Turbidimetric Screening Procedure for Total Recoverable Hydrocarbons in Soil

GENERAL NOTES:

1. ALL PIPES OR CONDUIT PASSING THROUGH AREAS OF PETROLEUM CONTAMINATION SHALL BE LEAK-PROOF AND WATERTIGHT. ALL JOINTS SHALL BE SEALED OR GASKETED.

2. ALL PIPES SHALL BE PROPERLY PLACED AND BEDDED TO PREVENT MISALIGNMENT OR LEAKAGE. PIPE BEDDING SHALL BE INSTALLED IN SUCH A MANNER AS TO MINIMIZE THE POTENTIAL FOR ACCUMULATION OF WATER AND CONCENTRATED INFILTRATION.

3. ANTI-SEEP COLLARS FROM THE PIPE MANUFACTURER, THAT ARE PRODUCED SPECIFICALLY FOR THE PURPOSE OF PREVENTING SEEPAGE AROUND THE PIPE, ARE ACCEPTABLE IF INSTALLED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS, AND ONLY WITH PRIOR APPROVAL BY EAG.

4. MINIMUM COVER ABOVE UTILITY SHALL BE BASED ON SPECIFIC UTILITY REQUIREMENTS.

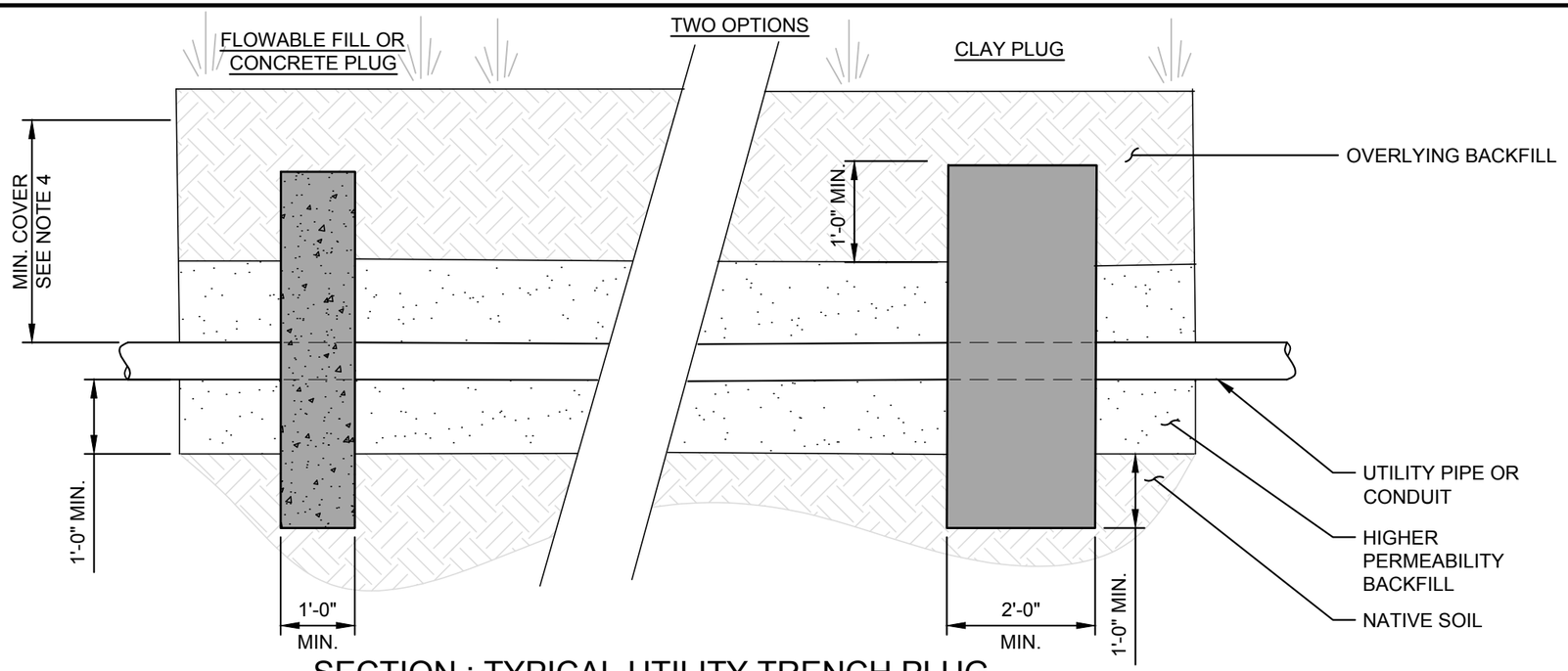
5. TRENCHES SHALL BE BACKFILLED WITH BEDDING AND MATERIALS APPROVED BY MDE.

6. FOR ADDITIONAL REQUIREMENTS, INCLUDING THE USE OF MDE VCP CLEAN FILL FOR INDUSTRIAL LAND USE AND INSTALLATION OF GEOTEXTILE MARKER FABRIC, REFER TO NOTE 5 ON THE TYPICAL UTILITY CROSS SECTIONS.

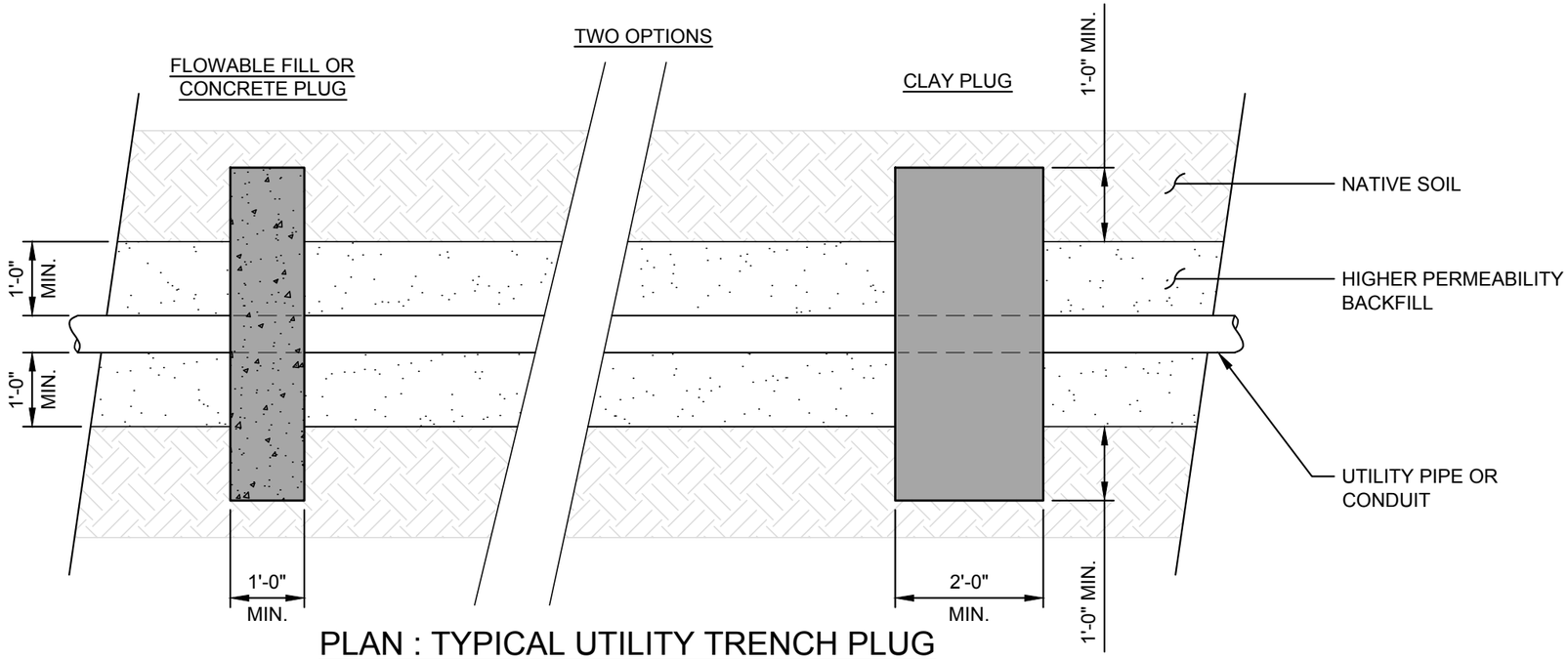
7. ALL UTILITIES INSTALLED THROUGH AREAS CONTAINING NAPL OR ELEVATED CHEMICAL IMPACTS WITH THE POTENTIAL TO TRANSMIT VAPORS ALONG PREFERENTIAL FLOW PATHWAYS SHALL BE EITHER 1) BACKFILLED WITH LOW PERMEABILITY BACKFILL MATERIAL (LESS THAN OR EQUAL TO THE PERMEABILITY OF THE EXISTING SUBGRADE), OR 2) INSTALLED WITH TRENCH PLUGS ALONG THE ALIGNMENT IN ACCORDANCE WITH THE DETAILS SHOWN ON THIS PLAN AND THE FOLLOWING NOTES:

   A.) UTILITY TRENCH PLUGS SHALL BE INSTALLED AT 100-FOOT (MAX.) INTERVALS THROUGH ALL AREAS OF NAPL CONTAMINATION.

   B.) UTILITY TRENCH PLUGS SHALL EXTEND A MINIMUM OF 1-FOOT IN ALL DIRECTIONS BEYOND ANY HIGHER PERMEABILITY BACKFILL MATERIALS (I.E., MATERIALS EXCEEDING THE PERMEABILITY OF THE EXISTING SUBGRADE).



SECTION : TYPICAL UTILITY TRENCH PLUG



PLAN : TYPICAL UTILITY TRENCH PLUG

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ARM Group Inc.
Engineers and Scientists

UTILITY TRENCH PLUG
Sparrows Point Site
EnviroAnalytics Group, LLC

September 2018	Figure
Not to Scale	1
160443M	

P:\EnviroAnalytics Group\160443M EAG_TPA Redevelopment\Drwg\NAPL Contingency\SK01_Utility Trench Plug_rev2.dwg Plotted: September 24, 2018

APPENDIX K

HEALTH AND SAFETY PLAN

SPARROWS POINT TERMINAL
SPARROWS POINT, MARYLAND

Prepared by:

EnviroAnalytics Group

Environmental Engineers

January 2015

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ATTACHMENTS

Attachment A – EAG Acknowledgment Form
Attachment B – MSDSs

1.0 INTRODUCTION

1.1 Background

The Sparrows Point Terminal site has historically been a steel making facility. It is located in Baltimore County, Maryland in the southeast corner of the Baltimore metropolitan area (approximately 9 miles from the downtown area), on the Sparrows Point Peninsula in the Chesapeake Bay watershed. The facility occupies the entire peninsula and is bounded to the west by Bear Creek; to the south by Patapsco River; and to the east by Jones Creek, Old Road Bay and residential areas of the City of Edgemere. The facility is bounded to the north by the Sparrows Point Country Club. The site is approximately 3,100 acres in size.

Pennsylvania Steel built the furnace at Sparrows Point in 1887 and the first iron was cast in 1889. Bethlehem Steel Corporation (BSC) purchased the facility in 1916 and enlarged it by building additional and plating facilities. BSC filed for bankruptcy in 2001. A series of entities has owned the site between then and now: the International Steel Group (ISG), Mittal Steel, ISG Sparrows Point, LLC, Severstal Sparrows Holding LLC, which was renamed to Severstal Sparrows Point, LLC, RG Steel Sparrows Point, LLC, and then a joint venture to Sparrows Point LLC (SP) and HRE Sparrows Point LLC. Most recently, in 2014, the property and assets were sold to Sparrows Point Terminal LLC (SPT). Environmental liability was retained by SP and work is currently being conducted by EnviroAnalytics Group, LLC (EAG) on behalf of SP.

- In addition to the current environmental investigation and remediation being conducted onsite by EAG and their consultants, there are other entities conducting work on the facility. Demolition of the remaining structures is currently ongoing at the site, and those contractors are being managed by SPT.
- The purpose of this document is to provide an overall health and safety plan (HASP) for EAG personnel and EAG directed contractors who are engaging in environmental investigation and remediation activities onsite. EAG directed contractors will also be expected to have their own Health and Safety Program, and they may opt to draft their own site specific HASP, provided it meets the requirements in this HASP.

1.2 Historic Operations

Steel manufacturing involves handling vast amounts of raw material including coke, iron ore, limestone and scrap steel, as well as recovering byproducts and managing waste materials. The operations listed below either were or are currently performed at the Sparrows Point Facility.

- Iron and steel production
- Coal chemical recovery system
- Other byproducts recovery systems
- Wastewater treatment systems
- Solid waste management
- Air pollution control

A number of site-specific environmental and hydrogeologic investigations have been prepared for the Sparrows Point facility. For the purposes of this HASP, information was obtained from the "Special Study Area Release Site Characterization" completed in 2001 by CH2MHill, as well as additional documents submitted since that time. There are five separate Special Study Areas as put forth in the Consent Decree:

- Humphrey Impoundment,
- Tin Mill Canal/Finishing Mills Areas,
- Coke Oven Area,
- Coke Point Landfill, and
- Greys Landfill.

Contaminated soils and groundwater may be present at the site. This plan was prepared based on an assessment of hazards expected to be present and a review of data from the previous site investigations and groundwater sampling events.

During the current investigations and remedial efforts, all related work will be performed in accordance with the requirements of this HASP and Occupational Safety and Health Administration (OSHA) regulations as defined in 29 Code of Federal Regulations (CFR) 1910.120 and 1926.65.

2.0 PURPOSE, SCOPE AND ORGANIZATION

This section describes the purpose, scope and organization of this HASP and the health and safety responsibilities of EAG, their employees, and their subcontractors involved in the field investigation and remediation activities at the Sparrows Point facility.

2.1 Scope

Field investigation and remediation activities for this project may include, but are not limited to:

- Groundwater sampling and monitoring,
- Groundwater and remediation well installation,
- Groundwater and remediation well repairs,
- Groundwater and remediation well closure and abandonment,
- Surface water sampling,
- Sediment sampling,
- Soil boring and subsurface soil sampling,
- Soil excavations for remedial purposes,
- Installation and operation of remediation systems for soil, soil vapor, and groundwater,
- Decommissioning and closure of remediation systems,
- Soil excavations for remedial purposes,
- Insitu soil mixing/soil stabilization,
- Exsitu soil mixing/soil stabilization,
- Dredging operations along Tin Mill Canal,
- Insitu chemical and/or biological injections, and
- Recovery of non-aqueous phase liquids (NAPL)

When EAG personnel are providing oversight of subcontractors, they will attend the safety and health briefings held by the contractor. EAG personnel will follow the requirements of this HASP, as well as any potentially more stringent requirements of the contractor's health and safety plan.

When EAG personnel are conducting tasks on their own, with or without subcontractors, they will follow the requirements of this HASP. EAG contractors, such as drillers, will also be required to follow the requirements of this HASP, as well as any more stringent requirements of the contractor's health and safety plan.

All EAG field personnel, including subcontractors to EAG, will be required to read and understand this HASP and agree to implement its provisions. All site personnel will sign the Acknowledgement Form included in **Attachment A** stating that they have read, understood, and agree to abide by the guidelines and requirements set forth in this plan.

2.2 Organization of Document

This HASP includes health and safety procedures for all generally anticipated project field activities. This plan also meets the OSHA requirements contained in the CFR, specifically 29 CFR 1910.120 and 29 CFR 1926, by including the following items:

- A description of staff organization, qualifications and responsibilities (Section 2.3),
- Hazard analysis (Section 3.0),
- Health hazard information (Section 4.0),
- Personal protective equipment (PPE), including available first aid, emergency, and safety equipment (Section 5.0),
- Employee and subcontractor training and standard safety procedures (section 6.0),
- Exposure monitoring plan (Section 7.0),
- Medical surveillance (Section 8.0),
- Site control measures and decontamination procedures for personnel and equipment (Section 9.0),
- Emergency response and contingency procedures (section 10.0), and
- Material Safety Data Sheets (MSDSs) for chemicals used on-site (**Attachment B**).

2.3 EAG Health and Safety Personnel

Personnel responsible for implementing this HASP include:

EAG Contacts for Sparrows Point Project Work	
VP Remediation, Russ Becker	(314) 686-5611
Senior Project Manager, James Calenda	(314) 620-3056
Senior Project Engineer, Elizabeth Schlaeger	(314) 307-1732
Josh Burke – Field Operations Manager	(314) 686-5623
Project Field Team Members, Jeff Wilson and Bill Trentzsch	(314) 620-3135, (314) 686-5598

3.0 HAZARD ANALYSIS

This section outlines the potential hazards related to the field activities listed in Section 2.1.

3.1 Hazard Analysis

The field activities planned for this project pose potential health and safety hazards for field team members. This section describes the hazards associated with the above-listed field activities. Detailed chemical, physical, and biological hazards information is provided in Section 4.0 (Health Hazard Information).

Hazards to which employees and subcontractors may be exposed to as a result of the above-listed activities include potential chemical exposures, lacerations, excessive noise, thermal stress, lifting of excessive weight or bulk, hand tools and heavy equipment, drilling and slips, trips and falls.

3.1.1 Chemical Hazards

Potential exposures to chemicals in the soil or groundwater include the possibility of dermal exposure (contact and/or absorption), inhalation of chemical contamination that may be encountered during sampling or during equipment decontamination activities, or ingestion of contaminants if good personal hygiene practices are not followed.

Benzene, naphthalene, and various metals are the major contaminants that have been identified in groundwater during previous investigations at the site In addition, light NAPL (LNAPL – benzene, in particular) and dense NAPL (DNAPL – naphthalene, in particular) have also been identified or are heavily suspected in various locations in the Coke Oven Area. Dissolved metals the chemicals of concern primarily located in the area of Tin Mill Canal and the Rod and Wire Mill Area. Treatment chemicals, such as sulfuric acid, are currently being used in remediation systems. All appropriate MSDS sheets will be reviewed that apply to the investigation or remedial tasks being conducted. MSDS sheets are located in **Attachment B**. It should be noted that this is a dynamic document: should any additional chemicals be introduced or discovered, the MSDS sheets will be added to **Attachment B**, as necessary.

3.1.2 Physical Hazards

The potential physical hazards associated with field activities include:

- Excessive lifting
- Slips, trips, and falls
- Working at heights
- Exposure to extreme outside temperatures and weather
- Equipment hazards
- Drilling Hazards
- Noise
- Dust and fumes
- Injury from tools, equipment, rotating parts
- Electrical hazards
- Buried and overhead hazards
- Work over water
- Driving to, from, and around the site (including working in trafficked areas)

Additional hazards may be encountered based on the various task at hand. It will be the responsibility of the site manager, with the help of field staff, to identify and address any additional hazards on a "per task or job" basis. A Job Safety Analyses (JSA) may need to be conducted prior to the start of various tasks. Safety meetings will be conducted with all staff in attendance, before the start of any new task or when any significant personnel or other changes (such as a swift change in weather, for example) occur. Updated information relating to physical hazards will be presented during these meetings in an effort to familiarize the crew with potential hazards, discuss new situations, and determine how the associated risks can be reduced. Further, good housekeeping practices will be enforced to preclude other risks resulting from clutter and inattention to detail. In addition, internal field audits will be randomly conducted to ensure adherence to all procedures are being followed.

3.1.3 Biological Hazards

Biological hazards that may be encountered when conducting field activities include the following:

- Poisonous snakes and spiders
- Ticks and tick-borne diseases
- Stinging insects such as chiggers, bees, wasps, etc.
- Various viruses and diseases spread via animal to human contact such as West Nile virus or rabies
- Various viruses and diseases spread via human to human contact such as colds or the flu
- Dermal contact with poison ivy, oak, and/or sumac
- Bloodborne pathogens when administering first aid

First aid kits will be available on-site. It is crucial to note that any site personnel who has significant allergies should communicate that information to the field team they are working with, along with the location of their auto-injector pen (such as an Epi-Pen) for use in case of going into anaphylactic shock from something that would cause such a reaction (like a bee sting, for example). Personnel who suffer from such allergies are responsible for providing their own auto-injector devices as those are typically prescription based as well as specific to their particular allergy.

4.0 HEALTH HAZARD INFORMATION

This section provides chemical hazard information for those potentially hazardous materials expected to be present at the facility. Potential physical and biological hazards are also discussed in this section.

4.1 Chemical Hazards

Exposure to chemicals through inhalation, ingestion, or skin contact may result in health hazards to field workers. Hazards associated with exposure will be evaluated using OSHA Permissible Exposure Limits (PELs) and the American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Values (TLVs). Each of these values are 8-hour, time-weighted averaged (TWAs) above which an employee cannot be exposed. EAG may also use the National Institute of Occupational Safety and Health (NIOSH) Recommended Exposure Limits (RELs) where applicable. Although the OSHA PELs are the only exposure limits enforceable by law, the most stringent of exposure limits will be used as the EAG-enforced exposure criteria during field activities.

The following is a summary of the potential hazards created by the compounds that may be encountered during field activities. Data from sampling of groundwater wells was reviewed to identify potential contaminants at the site. Contaminants of concern may include benzene, toluene, ethylbenzene and xylenes (BTEX), polycyclic aromatic hydrocarbons (PAHs), phenols, metals and water treatment chemicals. Table 4-1 contains chemical information and exposure limits for various chemicals that may be expected to be present in the investigation and remediation efforts. During the recovery of NAPL, the major contaminants of concern are benzene and naphthalene. It is possible that carbon monoxide may also be encountered from the use of various internal combustion engines (vehicular or otherwise); however, it is anticipated that since any such engine will be used outdoors, it is not expected that concentrations of concern will accumulate. With the use of any such engine, the engine should be positioned such that site personnel are upwind of the engine exhaust.

If any chemicals are brought on-site, MSDS must be made available and added to **Attachment B**. Personnel must be trained in the hazards and use of chemicals.

Table 4-1
Chemical Contaminants of Potential Concern

Chemical Name Synonyms (trade name)	Exposure Limits	Characteristics	Route of Exposure	Symptoms of Exposure
Benzene	PEL: 1PPM REL: 0.1 CA TLV: 0.5PPM STEL: 1PPM (NIOSH) Skin: YES	Colorless to light-yellow liquid with aromatic odor. LEL: 1.2% UEL: 7.8% VP: 75mm FI.P: 12°F	INH ABS ING CON	Irritation of eyes, skin, nose, respiratory system, giddiness, headache, nausea, fatigue, anorexia, dermatitis, bone marrow depression
Ethylbenzene	PEL: 100PPM REL: 100PPM TLV: 100PPM STEL: 125PPM IDLH: 800PPM Skin: NO	Colorless liquid with an aromatic odor. LEL: 0.85 UEL: 6.7% IP: 8.76EV VP: 7mm FI.P: 55°F	INH ING CON	Irritation of eyes, skin, mucous membranes; headache; dermatitis
1,1 dichloroethane	PEL: 100PPM REL: 100PPM TLV: 100PPM STEL: NA IDLH: 3000PPM Skin: NO	Colorless, oily liquid with a chloroform-like odor. LEL: 6.2% UEL: 16% IP: 11.05EV Vp: 64mm FI.P: 56°F	INH ING CON	Irritation of eyes, CNS depression, liver, kidney, lung damage
Phenol	PEL: 5PPM REL: 5PPM, 15.6PPM (C) TLV: 5PPM STEL: NA IDLH 250PPM Skin: YES	Colorless to light pink crystalline solid with a sweet, acrid odor. LEL: 1.8% UEL: 5.9% IP: 8.12EV Vp: 0.08mm FI.P: 175°F	INH ING CON ABS	Irritated eyes, nose, throat, anorexia, weakness, muscular ache, pain, dark urine, cyanosis, liver, kidney damage, skin burns, dermatitis, tremor, convulsions, twitch
Naphthalene	PEL: 10PPM REL: 10PPM TLV: 10PPM STEL: 15PPM IDLH: 250PPM Skin: YES	Colorless to brown solid with an odor of mothballs LEL: 0.9% UEL: 5.9% IP: 8.12EV Vp: 0.08mm FI.P: 174°F	INH ABS ING CON	Irritation of eyes, headache, confusion, excitement, malaise, nausea, vomiting, abdominal pain, irritated bladder, profuse sweating, jaundice, hematuria, renal shutdown, dermatitis, optical neuritis, corneal damage
Toluene	PEL: 200PPM, 300PPM (C) REL: 100PPM TLV: 20PPM STEL: 150PPM IDLH: 500PPM Skin: YES	Colorless liquid with a sweet, pungent benzene-like odor. LEL: 1.1% UEL: 7.1% IP: 8.82EV VP: 21MM FI.P: 40°F	INH ABS ING CON	Irritation of eyes, nose, fatigue, weakness, confusion, euphoria, dizziness, headache, dilated pupils, lacrimation, nervousness, muscle fatigue, insomnia, dermatitis, liver, kidney damage
Xylenes	PEL: 100PPM REL: 100PPM TLV: 100PPM STEL: 150PPM IDLH: 900PPM Skin: NO	Colorless liquid with an aromatic odor. LEL: 0.9% UEL: 6.7% IP: 8.40EV VP: 5MM FI.P: 88°F	INH ABS ING CON	Irritated eyes, nose, respiratory system, headache, fatigue, dizziness, confusion, malaise, drowsiness, incoherence, staggering gait, corneal vacuolization, anorexia, nausea, vomiting, abdominal pain, dermatitis

Chemical Name Synonyms (trade name)	Exposure Limits	Characteristics	Route of Exposure	Symptoms of Exposure
Styrene	PEL: 100PPM, 200PPM (C) REL: 50PPM TLV: 20PPM STEL: 40PPM IDLH: 700PPM Skin: NO	Colorless to yellow, oily liquid with a sweet, floral odor. LEL: 0.9% UEL: 6.8% IP: 8.40eV VP: 5MM FI.P: 88°F	INH ABS ING CON	Irritated eyes, nose, respiratory system, headache, fatigue, dizziness, confusion, malaise, drowsiness, weakness, narcosis, dermatitis
Chlorodiphenyl (54% chlorine) (11097-69-1)	PEL: 0.5mg/m³ REL: 0.001mg/m³ TLV: 0.5mg/m³ STEL: N/A IDLH: 5mg/m³(CA) Skin: YES	Colorless to pale yellow viscous liquid with a mild hydrocarbon odor. LEL: NA UEL: NA IP: UNKNOWN VP: 0.00006MM FI.P: NA	INH ABS ING CON	Irritated eyes, chloracne, liver damage, reproductive effects (carcinogen)
Polynuclear aromatic hydrocarbons (PAHs) (coal tar pitch volatiles) (65996-93-2)	PEL: 0.2mg/m³ REL: 0.1mg/m³ TLV: 0.2 mg/m³ STEL: N/A IDLH: 80mg/m³(CA) Skin: NO	The pitch of coal tar is black or dark brown amorphous residue that remains after the redistillation process. LEL: N/A UEL: N/A IP: VARIES VP: VARIES FI.P: VARIES	INH CON	Direct contact or exposure to vapors may be irritating to the eyes. Direct contact can be highly irritating to the skin and produce dermatitis. Exposure to vapors may cause nausea and vomiting. A potential human carcinogen.
Arsenic (inorganic)	PEL: 0.01mg/m³ REL: NONE TLV: 0.5 mg/m³ STEL: N/A IDLH: 5mg/m³ (CA) Skin: NO	Silver-gray or tin-white brittle odorless solid. Air odor threshold: N/D.	INH ABS CON ING	Symptoms include ulceration of nasal septum, gastrointestinal disturbances, respiratory irritation and peripheral neuropathy. Potential occupational carcinogen.
Barium	PEL: 0.5mg/m³ REL: 0.5mg/m³ TLV: 0.5mg/m³ STEL: N/A IDLH: 50mg/m³ Skin: NO	White, odorless solid. Air odor threshold: N/D.	INH ING CON	Irritated eyes, skin, upper respiratory system, skin burns, gastroenteritis, muscle spasm, slow pulse, cardiac arrhythmia
Cadmium (elemental)	PEL: 0.005mg/m³ REL: CA TLV: 0.01mg/m³ STEL: N/A IDLH: 9mg/m³ (CA) Skin: NO	Silver-white, blue-tinged lustrous, odorless solid. Air odor threshold: N/D.	INH ING	Symptoms include pulmonary edema, cough, tight chest, head pain, chills, muscle aches, vomiting and diarrhea. Potential occupational carcinogen.
Chromium (Metal)	PEL: 1.0mg/m³ REL: 0.5mg/m³ TLV: 0.5mg/m³ STEL: N/A IDLH: 250mg/m³ Skin: NO	Blue-white to steel-gray lustrous, brittle, hard odorless solid. Air odor threshold: N/D.	INH ING CON	Symptoms may include irritated eyes and skin, lung fibrosis.
Chromium (Chromium III inorganic compounds)	PEL: 0.5mg/m³ REL: 0.5mg/m³ TLV: 0.5mg/m³ STEL: N/A IDLH: 25mg/m³ Skin: NO	Varies depending on specific compound.	INH ING CON	Irritation of eyes, sensitivity dermatitis

Chemical Name Synonyms (trade name)	Exposure Limits	Characteristics	Route of Exposure	Symptoms of Exposure
Copper	PEL: 1mg/m³ REL: 1mg/m³ TLV: 1mg/m³ STEL: N/A IDLH: 100mg/m³ Skin: NO	Reddish, lustrous, malleable, odorless solid	INH ING CON	Irritation of eyes, nose, pharynx, nasal septum perforations, metallic taste, dermatitis
Lead (Elemental & Inorganic as Pb)	PEL: 0.05mg/m³ REL0.1mg/m³ TLV: 0.05mg/m³ STEL: N/A IDLH: 100mg/m³ Skin: NO	A heavy, ductile soft gray solid. Air odor threshold: N/D.	INH ING CON	Accumulative poison may cause weakness, insomnia, facial pallor, anorexia, malnutrition, constipation, abdominal pain, anemia, gingival lead line, paralysis of wrists and ankles, hypertension and kidney disease.
Nickel	PEL: 1mg/m³ REL: 0.015mg/m³ (Ca) TLV: 0.1mg/m³ STEL: N/A IDLH: 10mg/m³ Skin: NO	Lustrous, silvery, odorless solid. Air odor threshold: N/A VP: 0mm	INH CON ING	Sensitivity dermatitis, allergic asthma, pneumonitis
Vanadium pentoxide dust	PEL: 0.5mg/m³ (C) REL: 0.05mg/m³ (C) TLV: 0.05mg/m³ STEL: N/A IDLH: 35mg/m³ Skin: NO	Yellow-orange powder or dark gray, odorless flakes dispersed in air. VP: 0mm	INH ING CON	Irritated eyes, skin, throat, green tongue, metallic taste, eczema, cough, fine rales, wheezing, bronchitis
Zinc oxide	PEL: 5mg/m³ REL: 5mg/m³ TLV: 2mg/m³ STEL: 10mg/m³ IDLH: 500mg/m³ Skin: NO	White, lustrous solid	INH	Metal fume fever, chills, muscular ache, nausea, fever, dry throat, cough, weakness, metallic taste, headache, blurred vision, low back pain, vomiting, fatigue, malaise
Sulfuric Acid (water treatment chemical)	PEL: 1mg/m³ TLV: 0.2mg/m³ Skin: YES	Oily, colorless to slightly yellow, clear to turbid liquid	IHN ABS ING CON	Can cause irritation or corrosive burns to the upper respiratory system, lung irritation, pulmonary edema, burns to mouth throat and stomach, erode teeth, skin lesions
Antiscale (water treatment chemical)	PEL: 1mg/m³ TLV: 0.2mg/m³ Skin: YES	Liquid, colorless, clear	IHN ABS ING CON	May cause severe skin burns and eye damage, can cause cancer, fatal if inhaled, may damage organs through prolonged exposure
Antifoam (water treatment chemical)	N/E	Liquid emulsion, white, opaque	IHN ABS ING CON	May be harmful to skin, if inhaled and if swallowed
Gases				
Carbon Monoxide	PEL: 50PPM REL: 35PPM TLV: 25PPM STEL: 200PPM (C) IDLH: 1200PPM Skin: NO	Colorless, odorless gas LEL: 12.5% UEL: 74% IP: 14.01eV VP: >35atm FI.P: N/A	INH	Headache, rapid breathing, nausea, tiredness, dizziness, confusion

NOTES:

OSHA PEL	Occupational Safety and Health administration Final Rule Limits, Permissible Exposure Limit for an eight=hour, time-weighted average
ACGIH TLV	American Conference of Governmental Industrial Hygienists, Threshold Limit Value for eight-hour, time-weighted average
STEL	Short-term Exposure Limit for a 15-minute, time-weighted average
NIOSH IDLH	National Institute for Occupational Safety and Health, Immediately Dangerous to Life or Health concentration
PPM	Part of vapor or gas per millions parts of air by volume at 25°Celsius and 760mm Hg mg/m³ (milligram of substance per cubic meter of air)
CA	NIOSH has identified numerous chemicals that it recommends to be treated as potential or confirmed human carcinogens.
(C)	The (ceiling) concentration that should not be exceed during any part of the working exposure.
Skin	Refers to the potential contribution to the overall exposure by the cutaneous (absorption) route, including mucous membranes and eye, either by airborne or more particularly by direct contact with the substance.
UEL	Upper Explosive Limit – the highest concentration of a material in air that produces an explosion in fire or ignites when it contacts an ignition source.
LEL	Lower Explosive Limit – the lowest concentration of the material in air that can be detonated by spark, shock, fire, etc.
INH	Inhalation
ABS	Skin absorption
ING	Ingestion
CON	Skin and/or eye contact

4.2 Physical Hazards

Field employees and subcontractors may be exposed to a number of physical hazards during this project. Physical hazards that may be encountered include the following:

- Heat and cold stress
- Lifting hazards
- Slips, trips and falls
- Working around heavy equipment
- Drilling hazards
- Noise
- Use of hand and power tools
- Buried hazards
- Electrical hazards
- Underground and overhead utilities
- Working over water
- Travel to and from site

4.2.1 Heat Stress

Local weather conditions may produce an environment that will require restricted work schedules in order to protect employees from heat stress. The Project Manager or the Field Lead Team Member will observe workers for any potential symptoms of heat stress. Adaptation of work schedules and training on recognition of heat stress conditions should help prevent heat-related illnesses from occurring. Heat stress controls will be stated at 70°F for personnel in protective clothing and at 90°F for personnel in regular work clothing. Heat stress prevention controls include:

- Allow workers to become acclimatized to heat (three to six days)
- Provide rest breaks in a shaded or air-conditioned break area
- Provide sun screen to prevent sun burn
- Provide drinking water and electrolyte-replenishing fluids
- Keep ice readily available to rapidly cool field team members

The following Heat Stress Index should be used as a guide to evaluate heat stress situations. If the Heat Stress exceeds 105 degrees Fahrenheit, contact the project manager prior to conducting work for detailed guidance.

Heat Stress Index

Temp. °F	Relative Humidity								
	10%	20%	30%	40%	50%	60%	70%	80%	90%
105	98	104	110	120	132				
102	97	101	108	117	125				
100	95	99	105	110	120	132			
98	93	97	101	106	110	125			
96	91	95	98	104	108	120	128		
94	89	93	95	100	105	111	122		
92	87	90	92	96	100	106	114	122	
90	85	88	90	92	96	100	106	114	122
88	82	86	87	89	93	95	100	106	115
86	80	84	85	87	90	92	96	100	109
84	78	81	83	85	86	89	91	95	99
82	77	79	80	81	84	86	89	91	95
80	75	77	78	79	81	83	85	86	89
78	72	75	77	78	79	80	81	83	85
76	70	72	75	76	77	77	77	78	79
74	68	70	73	74	75	75	75	76	77

NOTES: Add 10° F when protective clothing is being used; Add 10° F when in direct sunlight

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HSI Temp	Category	Injury Threat
Above 130° F	Extreme Danger	No work unless emergency exists. Contact Cardno ATC RSC and Corporate Risk Management Department prior to proceeding. Heat cramps or exhaustion likely, heat stroke possible if exposure is prolonged and there is physical activity.
105° to 130° F	Danger	Contact RSC prior to proceeding. Requires strict adherence to ACGIH Heat Stress Guidelines, including use of on-site WBGT equipment. Heat cramps or exhaustion likely, heat stroke possible if exposure is prolonged and there is physical activity.
90° to 105° F	Extreme Caution	Heat cramps or exhaustion likely, heat stroke possible if exposure is prolonged and there is physical activity.
80° to 90° F	Caution	Heat cramps or exhaustion likely, heat stroke possible if exposure is prolonged and there is physical activity.
Below 80° F	Normal Range	Typical conditions for time of year. Little or no danger under normal circumstances. As always, anticipate problems and work safely.

4.2.2 Cold Stress

Frostbite and hypothermia are two types of cold injury that personnel must be protected against during the performance of field duties. The objective is to prevent the deep body temperature from falling below 96.8° F and to prevent cold injury to body extremities. Two factors influence the development of a cold injury the ambient temperature, and wind velocity. Reduced body temperature will very likely result in reduced mental alertness, reduction in rational decision making, and/or loss of consciousness with the threat of death.

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Use appropriate cold weather clothing when temperatures are at or below 40° F as exposed skin surfaces must be protected. These protective items can include facemask, hand wear, and foot wear. Workers handling evaporative solvents during cold stress conditions will take special precautions to avoid soaking gloves and clothing because of the added danger of prolonged skin contact and evaporative cooling. Personnel will wear protective clothing appropriate for the level of cold and planned physical activity. The objective is to protect all parts of the body, with emphasis on the hands and feet. Eye protection against glare and ultraviolet light should be worn in snowy and icy conditions.

The work rate should not be so great as to cause heavy sweating that could result in wet clothing. If heavy work must be done, opportunities for rest breaks will be provided where workers have the opportunity to change into dry clothing. Conversely, plan work activities to minimize time spent sitting or standing still. Rest breaks should be taken in a warm, dry area. Windbreaks can also be used to shield the work area from the cooling effects of wind.

If extreme cold-related weather conditions occur, EAG field personnel and subcontractors will take the following precautions:

- Wear adequate insulated clothing when the air temperature drops below 40°F
- Reduce work periods in extreme conditions to allow adequate rest periods in a warm area
- Change clothes when work clothes become wet
- Avoid caffeine (which has diuretic and circulatory effects)

4.2.3 Lifting Hazards

Field personnel may be exposed to injury caused by lifting heavy objects and various pieces large or unwieldy pieces of equipment. All field team members will be trained in the proper methods for lifting heavy and/or large equipment and are cautioned against lifting objects that are too heavy or too big for one person. Proper lifting techniques include the following:

- Keep feet approximately shoulder width apart
- Bend at the knees
- Tighten abdominal muscles
- Lift with the legs
- Keep the load close to the body
- Keep the back upright
- Use the buddy system for larger or heavy pieces of equipment

All drums will be staged using an approved drum dolly or other appropriate equipment. Proper care will be taken in the use of this equipment. Healthy employees with no medical restrictions may lift and carry a maximum of 50 pounds using proper lifting and carrying techniques. This recommended weight limit may be reduced depending on physical and workplace factors.

4.2.4 Slips, Trips and Falls

The most common hazards that will be encountered during field activities will be slips, trips and falls. Field team members are trained to use common sense to avoid these hazards such as using work boots/safety shoes with nonskid soles. When working on slippery surfaces, tasks will be planned to decrease the risk of slipping via avoiding the slippery areas, if possible, or utilizing engineering controls. Engineering controls may involve the placement of supplemental material such as boards, gravel, or ice melt should be utilized to mitigate slippery conditions. Other engineering controls may involve the use of footgear traction control devices. Employees and subcontractors will avoid slippery surfaces, use engineering controls as appropriate, not hurry, and maintain good housekeeping.

4.2.5 Buried Hazards

Whenever the ground is penetrated, the potential for contacting buried hazards exists. During the planning/mobilization phase, prior to drilling or other excavation activities, EAG personnel and/or their contractors will establish the location of underground utility lines (gas, electrical, telephone, fiber optic cable, etc.) and/or substructures or other potential buried hazardous items. This may be conducted by review of historic utility and substructure maps, private utility locates, ground penetrating radar, or other technologies. If there is any evidence of utilities or subsurface objects/structures, drilling or excavation activities may be offset. If activities cannot be offset, measures will be taken to remove, disconnect, and/or protect the utilities and/or subsurface structures and/or objects. Every reasonable effort will be made to clear the area of intrusive work prior to fieldwork being started.

4.2.6 Electrical Hazards

It may be possible that overhead power lines will be in proximate locations during drilling or excavation activities. At least a 20 foot clearance must be maintained from overhead power lines. No equipment such as drill rigs or dump trucks can be moved while masts or buckets are in the upright position. Field personnel and subcontractors performing electrical work are required to be appropriately trained to work on the electrical systems in question prior to start of work. Authorization from project management personnel is required prior to any electrical work or work near overhead power lines. . When using extension cords, all field workers will ensure that they are in good working condition, are correctly rated for use, and do not contain abrasions such that bare wires could be exposed to the environment. Extension cords will not be used in wet areas without plugging the extension cord into a ground fault circuit interrupter (GFCI). GFCIs will detect a short circuit and cut power.

4.2.7 Heavy Equipment Operations

Heavy equipment must be operated in a safe manner and be properly maintained such that operators and ground personnel are protected.

Requirements for Operators

- Only qualified, trained, and authorized operators are allowed to operate equipment
- Seat belts will be used at all times in all equipment and trucks
- Operators will stop work whenever ground personnel or other equipment enter their work area; work will resume only when the area has been cleared
- No personnel may ride on equipment other than the Authorized Operator
- No personnel may be carried or lifted in the buckets or working "arms" of the equipment
- Spotters will be used when ground personnel are in the vicinity of heavy equipment work areas and/or when an operator is backing equipment near other structures or congested area

Requirements for Ground Personnel

- All ground personnel must wear orange protective vests in work areas with any operating heavy equipment
- Ground personnel will stay outside of the swing zone or work area of any operating equipment
- Ground personnel may only enter the swing or work area of any operating equipment when:
  -They have attracted the operators attention and made eye contact
  -The operator has idled the equipment down and grounded all extensions
  -The operator gives the ground personnel permission to approach
- Ground personnel shall never walk or position themselves between any fixed object and running equipment or between two running pieces of equipment

Equipment

- Maintain operations manuals at the site for each piece of equipment that is present and in use
- Ensure operators are familiar with the manual for the equipment and operate the equipment within the parameters of the manual
- Ensure all equipment is provided with roll-over protection systems
- Verify that seatbelts are present and functional in all equipment
- Prohibit the use of equipment that has cab glass which is broken or missing
- Ensure that backup alarms are functional on all trucks and equipment
- Require all extensions such as buckets, blades, forks, etc. to be grounded when not in use
- Require brakes to be set and wheels chocked (when applicable) when not in use

Daily inspections of equipment are required using a Daily Heavy Equipment Safety Checklist. Equipment deemed to be unsafe as a result of daily inspection will not be used until required repairs or maintenance occurs. During maintenance/repair, ensure that motors are turned off, all extensions are grounded or securely blocked, controls are in a neutral position, and the brakes are set.

4.2.8 Drilling and Excavation Safety

Prior to any intrusive work, as previously mentioned, the location of underground utilities, such as sewer, telephone, gas, water and electric lines must be determined and plainly staked. Necessary arrangements must be made with the utility company or owner for the protection, removal or relocation of the underground utilities. In such circumstances, excavation will be done in a manner that

does not endanger the field personnel engaged in the work or the underground utility. Utilities left in place will be protected by barricading, shoring, suspension or other measures, as necessary.

The use of unsafe or defective equipment is not permitted. Equipment must be inspected regularly. If found to be defective, equipment must be immediately removed from use and either repaired or replaced prior to resuming work with that equipment. Field personnel will be familiar with the location of first-aid kits and fire extinguishers. Telephone numbers for emergency assistance must be prominently posted and kept current.

Good housekeeping conditions will be observed in and around the work areas. Suitable storage places will be provided for all materials and supplies. Pipe, drill rods, etc. must be securely stacked on solid, level sills. Work surfaces, platforms, stairways, walkways, scaffolding, and access ways will be kept free of obstructions. All debris will be collected and stored in piles or containers for removal and disposal.

The area of the site to undergo intrusive activity must be walked over with the drillers and/or heavy equipment operators to identify all work locations, as well as making sure all marked utilities are seen by those doing the intrusive work.

Drilling Specific Concerns:

In areas where utilities have been identified or may be suspected, pre-drilling clearance such hand-augering, hand excavation (with shovels or post-hole diggers), or air-knifing to a depth of at least 5' below ground surface (BGS) may be required. The Project Manager will provide guidance in those instances on what has been determined as an acceptable means of clearing drilling locations. It should be noted that if the soil lithology changes to gravel within those 5 feet, that may be an indication of a utility trench and extreme caution should be taken OR the drilling location should be offset 5 horizontal feet from the original location. Should 3 consecutive attempts be made without success to offset a particular drilling location, the field personnel should stop and contact the Project Manager for further instruction.

Special precaution must be taken when using a drill rig on a site within the vicinity of electrical power lines and other overhead utilities. Electricity can shock, burn and cause death. When overhead electrical power lines exist at or near a drilling site, all wires will be considered dangerous.

A check will be made for sagging power lines before a site is entered. Power lines will not be lifted to gain entrance. The appropriate utility company will be contacted and a request will be made that it lift or raise cut off power to the lines.

The area around the drill rig will be inspected before the drill rig mast (derrick) is raised at a site in the vicinity of power lines. The minimum distance from any point on the drill rig to the nearest power line will be determined when the mast is raised or is being raised. The mast will not be raised and the drill rig will not be operated if this distance is less than 20 feet, because hoist lines and overhead power lines can be moved toward each other by the wind.

Before the mast is raised, personnel will be cleared from the immediate area, with the exception of the operator and a helper, when necessary. A check will be made to ensure safe clearance from energized power lines or equipment (minimum 20-foot clearance). Unsecured equipment must be removed from the mast and cables, mud lines and catline ropes must be adequately secured to the mast before raising. After it is raised, the mast must be secured to the rig in an upright position with steel pins.

Excavation Specific Concerns:

For excavation work, entry into an excavated area or trench will only be allowed when:

- Shoring, sloping, and spoil pile placement is in conformance with 29 CFR 1926 Subpart P, and
- Personal protection and monitoring, as detailed in this HASP, has been implemented.

All excavation contractors are required to provide an OSHA trained and certified Competent Person. Daily inspections of excavations, the adjacent areas, and protective systems shall be made by the Competent Person for evidence of a situation that could result in a possible cave-in, indications of failure of protective systems, hazardous atmospheres, or other hazardous conditions. An inspection shall be conducted by the Competent Person prior to the start of work and as needed throughout each shift. Inspections shall also be made after every rainstorm or other hazard increasing occurrence. All inspections made by the Competent Person should be recorded in the field log book. No personnel shall perform work in a trench or excavation that contains accumulated water (any accumulated water will need to be either pumped out until the trench/excavation is dry, or the accumulated water is allowed to disperse naturally). Each employee in an excavation shall be protected from cave-ins by an adequate protective system except when excavations are made entirely in stable rock or the excavation is less than 5 feet in depth and examination by the Competent Person provides no indication of a potential cave-in. Protective systems consist of sloping or benching, use of trench boxes or other shielding mechanisms, or the use of a shoring system in accordance with the regulations.

When mobile equipment is operated adjacent to an excavation and the operators/drivers do not have a clear and direct view of the edge of the excavation, a warning system such as barricades, hand or mechanical signals, or spotters are required.

Adequate protection shall be provided to protect employees from loose rock or soil that could pose a hazard to personnel in the excavation. All temporary spoil piles shall be kept at least 2 feet away from the edge of the excavation. Spoil piles should be placed to channel rainwater or other run-off water away from the excavation.

All excavations deeper than 4 feet deep and which have the potential to have a hazardous atmosphere or oxygen deficient atmospheres (less than 19.5% oxygen) must be tested to ensure safe working conditions, prior to entry.

4.2.9 Use of Hand Tools and Portable Power Tools

Hand tools will be kept in good repair and used only for their designed purposes. Proper protective eyewear will be worn when using hand tools and portable power tools. Unguarded sharp-edged or

pointed tools will not be carried in field personnel's pockets. The use of tools with mushroomed heads, split or defective handles, worn parts, or other defects will not be permitted. Inspect all tools prior to start-up or use to identify any defects. Tools that have become unsafe will be reconditioned before reissue or they will be discarded and replaced. Throwing or dropping of tools from one level to another will not be permitted; rather, containers and hand lines will be used for transporting tools from one level to another if working at heights.

Non-sparking tools will be used in atmospheres where sources of ignition may cause fire or explosion. Electric-powered shop and hand tools will be of the double-insulated, shockproof type, or they will be effectively grounded. Power tools will be operated only by designated personnel who are familiar and trained with their use. When not in use, tools will not be left on scaffolds, ladders or overhead working surfaces.

4.2.10 Noise

Exposure to high levels of noise may occur when working near drill rigs or other heavy equipment. Also, depending upon where the work is being performed, local equipment (e.g., airports, factory machines, etc.) may produce high levels of noise. A good indication of the need for hearing protection is when verbal communication is difficult at a distance of 2-3 feet. Personnel will be provided with ear plugs and/or earmuffs when exposed to noise levels in excess of the 8-hour Permissible Exposure Limit (PEL) of 90 decibels.

4.2.11 Work Zone Traffic Control

Personnel will exercise caution when working near areas of vehicular traffic. Work zones will be identified by the use of delineators (traffic cones, flags, vehicles, DOT approved devices, temporary or permanent fencing, and/or safety barrier tape). Personnel will wear reflective vests when working in these areas. Depending on frequency, proximity, and nature of traffic, a flag person may also be utilized.

4.2.12 Work Over Water

If personnel will be working near, above or immediately adjacent to or within 6 feet of water that is 3 feet or more deep or where water presents a drowning hazard (e.g., fast-moving stream, water body with a soft bottom), employees are required to a U.S. Coast Guard (USCG) approved personal flotation device (PFD). All PFDs must have reflective tape on them to facilitate visibility. Employees must inspect PFDs daily before use for defects. Do no use defective PFDs.

4.2.13 Vehicle Use

Personnel must use caution when driving to, from, and across the site, paying special attention to other site traffic, as well as weather and road conditions. Heavy equipment should be transported during non-rush hour traffic.

4.3 Biological Hazards

Site activities on this Site may expose workers to other hazards such as poisonous plants, insects, animals, and indigenous pathogens. Protective clothing and respiratory protection equipment, and being capable of identifying poisonous plants, animals, and insects, can greatly reduce the chances of exposure. Thoroughly washing any exposed body parts, clothing, and equipment will also protect against infections. Avoiding contact with biological hazards is the best way to prevent potential adverse health effects. Recognition of potential hazards is essential. When avoidance is impractical or impossible, PPE, personal hygiene, good general health and awareness must be used to prevent adverse effects. If working in wooded/grassy areas, use appropriate insect repellants (containing DEET and/or Permethrin) and apply them per the manufacturers' directions. The following is a list of biological hazards that may be encountered while performing field activities at the project site and surrounding areas:

BIOLOGICAL HAZARD and LOCATION	CONTROL MEASURES
Snakes typically are found in underbrush and tall grassy areas.	If you encounter a snake, stay calm and look around; there may be other snakes. Turn around and walk away on the same path you used to approach the area. If a person is bitten by a snake, wash and immobilize the injured area, keeping it lower than the heart if possible. Seek medical attention immediately. **DO NOT** apply ice, cut the wound or apply a tourniquet. Carry the victim or have him/her walk slowly if the victim must be moved. Try to identify the snake: note color, size, patterns and markings.
Poison ivy, poison oak and poison sumac typically are found in brush or wooded areas. They are more commonly found in moist areas or along the edges of wooded areas.	Become familiar with the identity of these plants. Wear protective clothing that covers exposed skin and clothes. Avoid contact with plants and the outside of protective clothing. If skin contacts a plant, wash the area with soap and water immediately. If the reaction is severe or worsens, seek medical attention.
Exposure to **bloodborne pathogens** may occur when rendering first aid or CPR, or when coming into contact with medical or other potentially infectious material or when coming into contact with landfill waste or waste streams containing such infectious material.	Training is required before a task involving potential exposure is performed. Exposure controls and personal protective equipment (PPE) area required. Hepatitis B vaccination must be offered before the person participates in a task where exposure is a possibility.
Bees, spiders and other stinging insects may be encountered almost anywhere and may present a serious hazard particularly to people who are allergic.	Watch for and avoid nests. Keep exposed skin to a minimum. Carry a kit if you have had allergic reactions in the past and inform the Project Manager and/or the buddy. If a stinger is present, remove it carefully with tweezers. Watch for allergic reaction; seek medical attention if a reaction develops.
Ticks typically are in wooded areas, bushes, tall grass and brush. Ticks are black, black and red or brown and can be up to one-quarter inch in size.	Avoid tick areas. Wear tightly woven, light-colored clothing with pants tucked into boots or socks. Spray outside of clothing with insect repellent containing permethrin. Check yourself for ticks often. If bitten, carefully remove tick with tweezers. Report the bit to the Project Manager. Look for symptoms of Lyme

	disease that include a rash that looks like a bulls eye and chills, fever, headache, fatigue, stiff neck or bone pain. If symptoms appear, seek medical attention.

5.0 PERSONAL PROTECTIVE EQUIPMENT

PPE ensembles are used to protect employees and subcontractors from potential contamination hazards while conducting project field activities. Level D is expected to be used for most activities at the site. The following subsections describe the PPE requirements for the field activities.

5.1 Level D Protection

When the atmosphere contains no known hazards and work functions preclude splashes, immersions or the potential for unexpected inhalation of or contact with hazardous levels of any chemicals, Level D protection may be used. Level D does not provide respiratory protection and only provides minimal dermal protection. The Level D ensemble consists of the following:

- Work clothes that may consist of a short or long-sleeved cotton shirt and cotton pants, cotton overalls, or disposal overalls such as Tyvek™
- Steel-toe/steel-shank work boots
- Safety glasses with side shields
- Hearing protection, as necessary
- Hand protection, as appropriate
- Hard hat when working around overhead equipment such as a drilling rig
- Reflective vests when working around heavy equipment or near roadways
- Body harness and life vests when working on or within 6 feet of bulkheads, at heights, or in 3 feet or more of standing water (such as in Tin Mill Canal)

5.2 Modified Level D Protection

This is the level of protection that may be needed for material handling, sampling operations, and operation of remediation equipment when splash hazards are present. Modified Level D protection consists of the following:

- Disposable overalls such as polyethylene-coated Tyvek™
- Latex, vinyl, or nitrite inner gloves when handling liquids/fluids
- Nitrile outer gloves (taped to outer suit)
- Chemical-protective over-boots (taped to outer suit)
- Steel-toe/steel-shank, high-ankle work boots
- Hard hat with face shield
- Safety glasses with side shields or goggles
- 5dzăű a l·ă]
- Hearing protection, as necessary

5.3 Level C Protection

Level C protection will be used when site action levels are exceeded and respiratory protection is required. The Level C ensemble consists of Modified Level D with the following modifications:

- Half or full-face air-purifying respirator (APR) equipped with appropriate cartridges/filters
- Chemical resistant clothing such as poly-coated Tyvek™
- Inner and outer nitrile gloves
- Chemical-resistant safety boots or boot covers to go over safety boots

Upgrading or downgrading the level of protection used by EAG employees and subcontractors is a decision made by EAG based on the air monitoring protocols presented in Section 7.0 for respiratory protection, the potential for inhalation exposure to toxic chemicals, and the need for dermal protection during the activity.

5.4 First Aid, Emergency and Safety Equipment

The following first aid, emergency and safety equipment will be maintained onsite at the work area:

- A portable eye wash
- Appropriate ABC-type fire extinguishers (minimum of 10 pounds; remediation systems to house individual 20 pound extinguishers) carried in every vehicle used during field operations
- Industrial first-aid kit (one 16-unit that complies with American National Standards Institute (ANSI) Z308A for every 25 persons or less)
- Bloodborne pathogen precaution kit with CPR mouth shield
- Instant cold packs
- Soap or waterless hand cleaner and towels
- American Red Cross First Aid and CPR Instruction Manuals

6.0 PERSONNEL TRAINING AND STANDARD SAFETY PROCEDURES

Employees must have received, at the time of project assignment, a minimum of 40 hours of initial OSHA health and safety training for hazardous waste site operations. Personnel who have not met the requirements for the initial training will not be allowed in the Exclusion Zone (EZ) or Contamination Reduction Zone (CRZ) of any active work area. A copy of each subcontractor site worker's 40-hour training certificate must be sent to the Project Manager for review prior to the start of the site work.

The 8-hour refresher training course must be taken at a minimum of once per year. At the time of the job assignment, all site workers must have received 8 hours of refresher training within the past year. This course is required of all field personnel to maintain their qualifications for hazardous waste site work. A copy of each subcontractor site worker's most recent 8-hour refresher training certificate must be sent to the Project Manager for review prior to the start of the site work.

A site-specific safety orientation will be conducted by EAG for all EAG employees and subcontractors engaged in fieldwork.

6.1 Onsite Safety, Health and Emergency Response Training

The OSHA 1910.120 standard requires that site safety and health training be provided by a trained, experienced supervisor. "Trained" is defined to mean an individual that has satisfactorily completed the OSHA 40-hour Hazardous Waste Operations and Emergency Response (HAZWOPER) course and 8-hour site supervisor training. Training will be offered at the time of the initial task assignment and/or whenever new chemicals are introduced into the workplace. Training will include all applicable regulatory requirements, location of the program, inventory and MSDSs, chemicals used and their hazards (chemical, physical, and health), how to detect the presence or release of chemicals, safe work practices and methods employees can take to protect themselves from hazards, how to read MSDSs and site or project specific information on hazard warnings and labels in use at that location. All training will be documented and training certificates will be kept in the employee's permanent training file. All applicable training will also require annual refreshers.

EAG qualified personnel must also provide safety meetings.

6.2 Standard Safety Procedures

This section describes the standard safety procedures that EAG requires all onsite personnel to follow during site activities.

6.2.1 General Safety Work Practices

All onsite employees and subcontractors will observe the following general safety work practices:

- Health and safety tailgate briefings will occur to introduce new activities, any new safety issues, and emergency egress routes for work areas; any significant change (added personnel, change in scope, or change in field conditions) will trigger a second (or more) tailgate meeting to address whatever change occurred
- No food, drink, or tobacco products will be allowed in the Exclusion and Contamination Reduction Zones
- Loose clothing, hair, and/or jewelry will not be permitted around moving or rotating equipment
- The "buddy system" will be implemented as necessary whereby a pair of co-workers watches out for each other while in proximity of potential physical work hazards
- Good housekeeping of all work areas will be maintained on an ongoing basis

6.2.2 Hand Safety

This standard is intended to protect employees from activities that may expose them to injury. This standard provides information on recognizing those conditions that require personal protective equipment (PPE) or specific work practices to reduce the risk of hand injury.

Appropriate gloves must be worn when persons work with materials or equipment that presents the potential for hand injury due to sharp edges, corrosives, flammable and irritating materials, extreme temperatures, splinters, etc.

<u>Guidelines for Working With and Around Equipment (Hand Tools, Portable Powered Equipment)</u>:

- Employees should be trained in the use of all tools.
- Keep hand and power tools in good repair and use them only for the task for which they were designed.

- Inspect tools before use and remove damaged or defective tools from service.
- Operate tools in accordance with manufacturer's instructions.
- Do not remove or bypass a guarding device for any reason.
- Keep surfaces and handles clean and free of excess oil to prevent slipping.
- Wear proper PPE, including gloves, as necessary.
- Do not carry sharp tools in pockets.
- Clean tools and return to the toolbox or storage area upon completion of a job.
- Before applying pressure, ensure that wrenches have a good bite.
- Brace yourself by placing your body in the proper position so you will not fall if the tool slips.
- Make sure hands and fingers have sufficient clearance in the event the tool slips.
- Always pull on a wrench, never push.
- When working with tools overhead, place tools in a holding receptacle when not in use.
- Do not throw tools from place to place or from person to person, or drop tools from heights.
- Inspect all tools prior to start-up or use to identify any defects.
- Powered hand tools should not be capable of being locked in the ON position.
- Require that all power-fastening devices be equipped with a safety interlock capable of activation only when in contact with the work surface.
- Do not allow loose clothing, long hair, loose jewelry, rings, and chains to be worn while working with power tools.
- Do not use cheater pipes.
- Make provisions to prevent machines from restarting through proper lockout/tagout.

<u>Guidelines for using Cutting Tools:</u>

- Always use the specific tool for the task. Tubing cutters, snips, self- retracting knives, concealed blade cutters, and related tools are task specific and minimize the risk of hand injury. For more information about cutting tools, see Supplemental Information A.
- Fixed open-blade knives (FOBK) are prohibited from use. Examples of fixed open-blade knives include pocket knives, multitools, hunting knives, and standard utility knives.
- When utilizing cutting tools, personnel will observe the following precautions to the fullest extent possible:
- Use the correct tool and correct size tool for the job.
- Cut in a direction away from yourself and not toward other workers in the area.
- Maintain the noncutting hand and arm toward the body and out of the direction of the cutting tool if it were to slip out of the material being cut.
- Ensure that the tool is sharp and clean; dirty and dull tools typically cause poor cuts and more hazard than a sharp, clean cutting tool.
- Store these tools correctly with covers in place or blades retracted, as provided by the manufacturer.
- On tasks where cutting may be very frequent or last all day (e.g., liner samples), consider Kevlar® gloves in the PPE evaluation for the project.
- Do not remove guards on paper cutters.

6.2.3 Respiratory Protection

Based on air monitoring, an upgrade to Level C protection may be indicated. Half or full-face APRs will be utilized for protection against organic vapors and particulates. All employees required to wear respirators will be need to be medically cleared, in writing to do so by a qualified Occupational Physician.

All respirator users must be trained before they are assigned a respirator, annually thereafter, whenever a new hazard or job is introduces and whenever employees fail to demonstrate proper use or knowledge. Training will include, at a minimum:

- Why the respirator is necessary and what conditions can make the respirator ineffective.
- What limitation and capabilities of the respirators area.
- How to inspect, put on and remove and check the seals of the respirator.
- What respirator maintenance and storage procedures are.
- How to recognize medicals signs and symptoms that may limit or prevent effective use of the respirator.
- The engineering and administrative controls being used and the need for respirators.
- The hazards and consequences of improper respirator use.
- How to recognize and handle emergency situations.

Training will be documented and training certificated will be kept in the employee's permanent training file.

6.2.4 Personal Hygiene Practices

The field team must pay strict attention to sanitation and personal hygiene requirements to avoid personal contamination. The following instructions will be discussed and must be followed:

- During field activities, never put anything in the mouth, including fingers
- All employees must wash their hands, forearms, face, and neck before eating drinking, smoking or using the restroom
- Smoking is prohibited except in designated areas outside the work zone
- At the end of the day, all employees will shower upon returning home or to their hotel

6.2.5 Electrical Safety

All extension cords used onsite must be heavy-duty variety and must be properly grounded. All temporary circuitry must incorporate the use of GFCI devices. Refer to electrical safety in Section 4.2.6, Electrical Hazards.

6.2.6 Fire Safety

All flammable liquids will be used only for their intended purpose and stored and handled only in approved containers. Portable containers must be the approved red safety containers equipped with flame arresters and self-closing lids. All transfers of flammable liquids must be made with the containers grounded or bonded. Also, gasoline containers will be clearly labeled and storage areas (if

applicable) will be posted with "No Smoking" signs. Fire extinguishers will be stalled in all areas that contain flammable liquids.

6.2.7 Illumination

All work is planned for daylight hours. No special requirements are anticipated. However, should any work take place outdoors after daylight hours, suitable lighting will be required. In addition, suitable lighting is to be provided in each remediation system building or enclosure.

6.2.8 Sanitation

Potable water and toilet facilities will be provided in compliance with the OSHA 1926.51 standard. Any container used to distribute drinking water shall be clearly marked and not used for any other purpose. Single drinking cups will be supplied, both a sanitary container for the unused cups and a receptacle for disposed of the used cups will also be provided. Port-a-johns will be provided since there are no sanitary sewers on the job site.

7.0 EXPOSURE MONITORING PLAN

This section describes air and personnel monitoring protocols, sampling methods, and instrumentation to be used, as well as the methods and frequency of sampling instrument calibration and action levels for potential work site hazards. When engaged in air monitoring, EAG personnel and subcontractors must use the forms to record air monitoring data and air monitoring instrument calibration records. All monitoring records/forms are to be maintained in the project file by the EAG Project Manager.

7.1 Air Monitoring

The surveillance program is established to detect changes in the ambient air at the work site and to ensure the continuing safety of the work zones and adequacy of the level of worker protection. During field activities, the designated field team member will monitor the work site for combustible gas concentrations and organic vapors. Calibration of all monitoring equipment will be performed in accordance with the manufacturers' procedures by trained EAG employees and subcontractors. The Project Manager, Project Field Team Leader or representative will be notified immediately of any contaminant levels that could trigger an upgrade in PPE or cause a suspension of site activities.

- One or more of the following direct-reading instruments may be used to aid in this determination. Photoionization Detectors (PID) and Flame Ionization Detectors (FID) will measure non-specific organic gases and vapors. Combustible Gas Indicators (CGI) will detect explosive atmospheres. Oxygen (O2) meters will detect fluctuations in oxygen concentrations. These instruments should be calibrated or bump tested daily and whenever the readings may be erratic. All readings should be recorded in the field log books.

Air monitoring results obtained from the breathing zone during field activities will be recorded in field log books. All such records will also include the location, date/time, weather conditions, person monitored, background concentration, and identification of specific contaminant whenever possible. Air monitoring information will be utilized to evaluate personnel exposure and assess the appropriateness of PPE for Site conditions.

7.1.1 Combustible Gas and Oxygen Deficiency/Excess Monitoring

Explosive gas concentrations are not expected to exceed 10% of the lower explosive level (LEL). Should the need be indicated for monitoring, action guidance for the CGI/O2 meter responses is contained in **Table 7-1**.

Table 7-1

CGI/Oxygen Meter Action Levels	
Meter Response	**Action**
CGI response 0%-10% LEL	Continue normal operations
CGI initial response >10% and <20% LEL	Eliminate all sources of ignition from the work area; temporarily retreat from work area for 15-30 minutes and then monitor area again
CGI response after 15-30 minute retreat >10% and <20% LEL	Retreat from work area; notify Project Manager
CGI response >20%	Discontinue operations; retreat from work area
Oxygen level <19.5%	Retreat from work area; notify Project Manager
Oxygen level >23.5%	Retreat from work area; notify Project Manager

7.1.2 Organic Vapor Concentrations

Real-time monitoring for organic vapor concentrations in the breathing zone and down hole will be conducted during field operations (installation of groundwater monitoring and groundwater sampling by EAG and EAG subcontractor personnel) with a PID equipped with a 10.2- or 11.7-electron volt (eV) probe. The PID will be taken into the field and operated during site activities where contaminated soil and/or groundwater may be present. Air monitoring will be conducted during well installation and when a well is opened for groundwater measurements. Measurements will be made at the well head and personnel breathing zones where activities are being performed. The instrument will be calibrated using ultra-high purity air and isobutylene vapor of known concentration before and after use each day. Air calibration measurements will be documented in writing and kept in the project file. Action guidance for PID responses is contained in **Table 7-2**.

Table 7-2

Action Levels for General Site Work	
Meter Response in Breathing Zone (minimum of 3 minutes)	**Action Required**
<5ppm above background	Use Level D PPE
>5ppm above background	Level C PPE, including half or full-face APR with organic vapor cartridges/P100 filters
>50ppm above background	Stop work
Action Levels for Handling NAPL	
Meter Response in Breathing Zone (minimum of 3 minutes)	**Action Required**
<1ppm above background	Use Modified Level D PPE
>1ppm to <10ppm	Level C PPE, including half or full-face APR with organic vapor cartridges
>10ppm above background	Immediately withdraw; monitoring will continue until action levels will allow safe re-entry

If air concentrations of organic vapors are greater than 5 ppm above background in the breathing zone for a 3-minute period, personnel will stop work, retreat from site, and allow time (at least 15 minutes) for vapors to dissipate. If monitoring indicates that concentrations still exceed 5 ppm, workers will upgrade to Level C PPE. If monitoring indicates that concentrations exceed 50 ppm, work will be stopped until site conditions can be re-evaluated.

These action levels are based on the assumption that the major component of free product being recovered will be benzene or naphthalene.

Work involving NAPL recovery from monitoring wells will be conducted in Level C PPE. This level may be downgraded based on air monitoring data and actual field conditions. Downgrading of PPE must be approved by the PM and HSE staff. If ventilation is conducted, additional air monitoring will be performed to the resumption of work to determine the level of PPE required.

7.2 Physical Conditions Monitoring

Site workers will be monitored by the Project Manager for signs of weather-related symptoms from exposure to excessive heat or cold.

Whenever the air temperature exceeds 70°F for personnel wearing chemical protective clothing or 90°F for personnel wearing regular work clothes, the Project Manager will assess conditions that may cause heat stress in site workers.

8.0 MEDICAL SURVEILLANCE

This section discusses the medical surveillance program, how the results are reviewed by a physician and how participation is documented.

8.1 Medical Surveillance Program

All personnel who will be performing any task where potential exposure to hazardous material exists will undergo medical surveillance as outlined in OSHA 29 CFR 1910.120(f). All personnel performing tasks in the Exclusion Zone or Contamination Reduction Zone will be required to have passed the EAG medical surveillance examination (or equivalent), performed by a licensed Occupational Physician. The Project Manager will verify that all EAG and subcontractor personnel meet applicable OSHA medical surveillance requirements.

Applicable field employees will undergo an annual comprehensive medical examination, including a comprehensive health history, blood chemistry with complete blood count and differential, urinalysis, medical history, required chest x-rays, audiogram, pulmonary function testing, testing for heavy metals (as needed), and a physician's interpretation of each employee's medical surveillance examination, including the ability of the employee to wear a respirator. A comprehensive medical examination will be performed if an employee develops signs or symptoms indicating possible overexposure to hazardous substances and/or heat or cold stress.

8.2 Physician Review

All medical surveillance and examination results are reviewed by a licensed physician who is certified in Occupational Medicine by the American Board of Preventive Medicine. EAG employee participation in the medical surveillance program is a part of their permanent medical record maintained in the employee's home office. A copy of the current medical clearance signed by the occupational health physician for all EAG employees must be maintained at the home office.

9.0 SITE CONTROL MEASURES AND DECONTAMINATION

To provide for the protection of public health and safety and minimize the possibility of transferring hazardous substances from the site, contamination control procedures are required. These procedures consist of site control measures (which entail the delineation of work zones, communications, and site security) and decontamination procedures (which are necessary for both personnel and equipment). Contaminants that may be uncovered during sampling operations must not be transferred outside the work zone unless properly containerized, and must be removed from clothing, personnel, and equipment prior to relocation from that zone. This section discusses site control measures and decontamination procedures to be used during the collection of samples, the installation of soil borings and/or groundwater monitoring/remediation wells, excavations, and other intrusive work where contact with impacted soils and groundwater could occur by EAG and/or EAG subcontractor personnel.

9.1 Site Control Measures

Site control can be achieved by effectively delineating the work zone, providing appropriate communication, and establishing site security.

9.1.1 Work Zone Delineation

To minimize the transfer of hazardous substances from the site and to ensure proper protection of employees and subcontractors, work zones will be established by the Field Project Team Leader. Applicable site work and the associated requirement for work zones will be determined by the Project Manager. The work area will be divided into an Exclusion Zone (EZ), a Contamination Reduction Zone (CRZ), and a Support Zone (SZ). A typical work zone delineation setup is shown as **Figure 9-1**, below.

Exclusion Zone (EZ)

Contamination does or could exist in this zone. Only properly authorized and trained individuals (refer to Section 6.0) wearing appropriate PPE will be allowed to enter and work in this zone. All people entering the EZ must wear, at a minimum, Level D protection. An entry and exit point for personnel and equipment will be established at the periphery of the EZ (between the EZ and the CRZ) to regulate the flow of personnel and equipment.

Contamination Reduction Zone (CRZ)

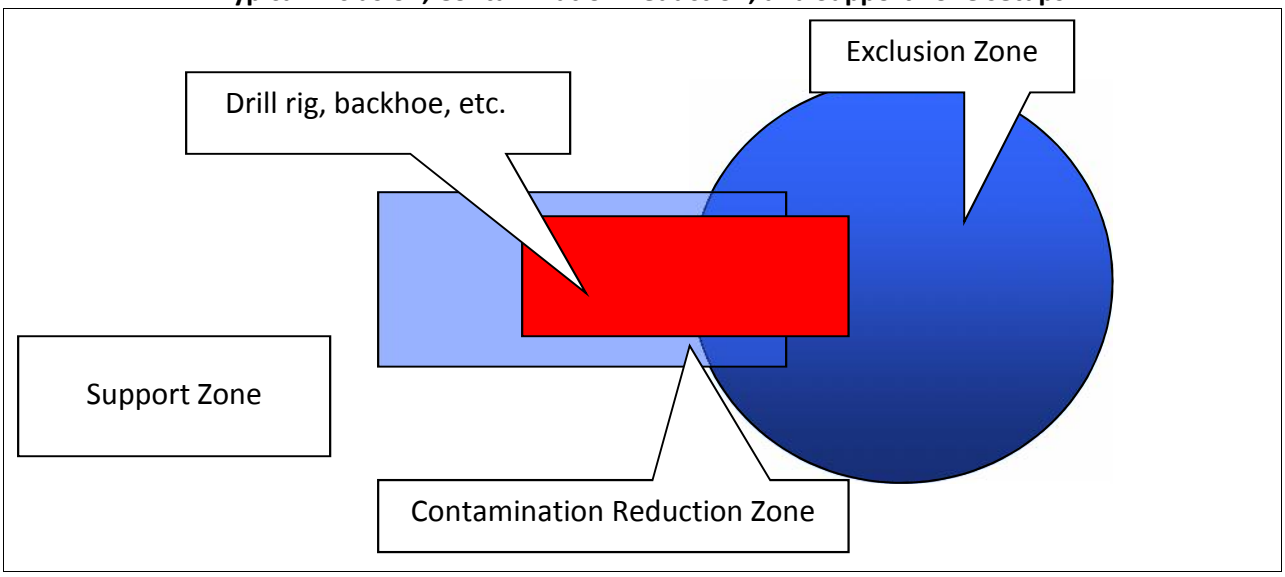
Between the EZ and the SZ will be the CRZ, which will provide a transition between the potentially contaminated EZ and the clean SZ. The CRZ (located upwind of the EZ, if possible) will be a corridor leading from the EZ and will serve as a buffer to further reduce the probability of the SZ becoming contaminated. Exit from the EZ will only be allowed through this CRZ. The CRZ will provide additional assurance that the physical transfer of contaminating substances on people, equipment, and/or in the air will be limited through a combination of decontamination and zone restrictions. Within this zone, employees and subcontractors may perform personal decontamination (e.g., face and hand washing), and certain PPE and small equipment decontamination. Buckets or wash basins for boot

washing and equipment decontamination will be stationed on a sheet of plastic (a minimum of 8 feet by 8 feet), the boundaries of which will constitute the CRZ.

Support Zone (SZ)

The Support Zone will be considered a non-contaminated area. The location of support facilities in the SZ will be upwind of the EZ (where possible) and readily accessible to the nearest road. The field office/support facilities, equipment vehicles, a first aid station and a visitors/personnel entry and exit log for the work site will be located in this zone. Potentially contaminated personal clothing, equipment and samples are not permitted in this zone unless properly containerized.

Figure 9-1
Typical Exclusion, Contamination Reduction, and Support Zone setups



9.1.2 Communications

A loud and clear form of communication should be made available for Site personnel entering the work zones. Site communication may be in the form of hand signals, voice, or other communication devices. All forms of communication should be understood by all workers on the Site prior to starting work. Offsite communications may be conducted with mobile phones or walkie-talkies only if the atmosphere has been deemed non-explosive, and the person using the mobile device is in the SZ while placing the call, or inside the cab of a stationary vehicle.

9.1.3 Site Security

The Sparrows Point facility is not open to the public, and there is a strictly monitored main entrance with a security guard on duty at all times who only allows authorized personnel onto the Site. This limited access to the facility should eliminate the need for many requirements for specific site security except those needed to maintain work zone integrity, such as visible barriers around open excavations or EZs and CRZs. No site visitors will be allowed to travel unescorted by EAG or subcontractor personnel around the facility.

Once site visitors arrive at their intended work zone, they must check in with the Field Team Lead. If visitors are authorized to enter the CRZ and/or the EZ, they must have completed OSHA 1910.120 medical surveillance and training requirements (refer to Section 8.0 and Section 6.0). Visitors must wear

appropriate PPE before they will be allowed to enter the CRZ and/or the EZ. They must also be taken through this HASP during a brief tail-gate meeting and sign the Acknowledgement page in the back prior to engaging in any activities inside the CRZ or the EZ. All site visitors must follow the same site control measures and decontamination procedures as EAG personnel and subcontractors. The Project Manager must also be informed of each visitor's name, purpose for their visit, time of entry (and exit), location of tasks they wish to perform, whether they completed their intended task(s), and any other relevant information pertaining to their visit.

9.2 Decontamination Procedures

Decontamination of employees, subcontractors, and equipment leaving the EZ will be performed to minimize human exposure to hazardous substances and to minimize the spread of contamination to surrounding areas. The purpose of the CRZ is to provide a location to perform limited personnel decontamination and certain PPE and small equipment decontamination.

9.2.1 Personnel Decontamination

Persons leaving the EZ must pass through the CRZ and follow decontamination procedures before entering the SZ. Hand tools and other sampling equipment used in the EZ and reusable PPE (boots, safety glasses, etc.) will be appropriately cleaned prior to removal from the site each day. The step-by-step sequence for personnel decontamination is as follows:

- Remove boot covers (if used) at the boot washing station and place them in the disposal container provided
- Wash outer gloves and chemical resistant boots (if used) at the boot washing station
- Remove wrist tape (if used) and outer gloves and place them in the disposal container provided
- Remove ankle tape (if used) and disposable coveralls (if used) and place them in the disposal container provided
- Remove respirators (if used) and place each in designated locations in the CRZ
- Remove inner gloves and discard in the disposal container provided
- Wash hands and face and proceed to the SZ

Respirators must be fully decontaminated after each use by the personnel who previously wore them. All project employees and subcontractors are required to take a thorough soap and water shower in their home or motel room at the end of each workday. If monitoring or a general exposure assessment indicates that an employee has become contaminated, the employee or subcontractor will notify the EAG Project Manager and the Field Team Lead as soon as the contaminated state has been discovered.

9.2.2 Equipment Decontamination

All equipment leaving the EZ must be decontaminated either within the CRZ or at the central decontamination area. Small equipment, such as hand tools, will be thoroughly decontaminated within the CRZ before being placed in the SZ. The field tools may be scrubbed visually clean using a detergent solution (Alconox/Liquinox) with water and a stiff, long-bristled scrub brush. Following the solution scrubbing, the tools may be rinsed with distilled water or isopropyl alcohol. Any vehicle working in an EZ will be decontaminated before leaving the site. The vehicle will be cleaned by sweeping excess soil and debris off the wheels. A high-pressure sprayer will then be used to wash the wheels, if necessary.

Each piece of equipment will be inspected after cleaning for any soil remaining on the tires or elsewhere. All vehicles will be cleaned to the satisfaction of the Field Team Lead or a designated assistant prior to entering the SZ or leaving the site. Employees or subcontractors performing decontamination shall wear the appropriate level of PPE (refer to Section 5.0).

9.2.3 Waste Management

The Project Manager and the Field Team Leads will be responsible for overseeing the containerization and disposal of any field derived wastes. Contaminated or suspected contaminated field derived wastes shall be disposed of in accordance with all local, state, and/or federal regulations. Field derived wastes include decontamination rinse waters and other related decontamination generated wastes.

Soils and groundwater expected to be encountered during any sampling or intrusive work not to be contaminated, based on existing data, may be discharged to the ground surface in the immediate vicinity of the monitoring well. However, any known or suspected to be contaminated soil (in small quantities) or groundwater will be containerized for future removal, likely in 55-gallon drums or other approved storage vessels. Depending on the suspected contaminants, the recovered groundwater may be sent through one of the onsite groundwater treatment units. However, the treatment unit must be designed to address the contaminants of concern in the groundwater being treated. Otherwise, the liquid must be staged onsite for eventual offsite disposal at an approved facility.

Impacted soil, if in drums, will be staged in an area designated by the Project Manager or Field Team Lead for eventual disposal. For large excavations, where excavated soil is stockpiled, it may be necessary to place soils on plastic and cover with plastic to prevent any potential leachable runoff. The Project Manager and/or Field Team Lead will provide the proper guidance necessary for handling bulk soil piles.

Any NAPL recovered via remediation systems or manual recovery efforts will be properly containerized and either disposed of offsite as a recyclable material, if possible, or as a hazardous waste. The receiving facility must be an approved facility.

10.0 EMERGENCY RESPONSE AND CONTINGENCY PROCEDURES

The objective of emergency response and contingency procedures is to ensure that effective actions are implemented in a timely manner to minimize or control the effects of adverse events (e.g., potential chemical exposures, personal injuries, fires/explosions, and spills/releases). The following subsections describe the basic emergency responses required should an emergency take place during field investigation or remedial effort activities.

10.1 Emergency Phone Numbers

Emergency telephone numbers are listed in **Table 10-1**.

Table 10-1
Emergency Telephone Numbers and Agencies

Agency	Telephone Number
Security (Sparrows Point facility)	(410) 388-7761
Ambulance	911
Fire	911
Occupational Health Clinic	(410) 633-3600
Hospital	(410) 550-0100 (general) (410) 550-0350 (emergency)
National Response Center	(800) 424-8802
Poison Control Center - Maryland	(800) 222-1222
EAG Main Contact	
VP Remediation, Russ Becker	(314) 686-5611
Project Manager, James Calenda	(314) 620-3056

10.2 Injury/Illness Treatment

In the event of illness or injury, the following steps will be taken:

- Evaluate the extent of injuries or seriousness of illness.
- When employees require urgent medical attention, call for emergency assistance. First aid should be administered while awaiting an ambulance or paramedics. All emergency medical treatment, other than first aid, will be administered by the local paramedics. **Table 10-1** lists site emergency telephone numbers. In all cases, critical injuries must be immediately referred for professional medical attention.
- For a non-critical injury/illness, first aid will be administered by onsite personnel. Anyone sustaining a non-critical injury/illness who continues to work will be monitored by the Field Team Lead for any signs of worsening condition, if it is deemed that the person can return to work by the Team Lead and Project Manager. Injured personnel who later suffer any worsening change in status are to immediately notify the Team Lead or the Project Manager.

10.3 Occupational Health Clinic and Hospital Information

Occupational Health Clinic

The Concentra Medical Center, located at 1833 Portal Street, Baltimore, MD, is the closest occupational health clinic, just over 6 miles away. A map to the clinic in included as **Figure 10-1**. The clinic should be used for non-emergency injuries and illnesses.

Directions:
From Sparrow's Point Road, turn left onto Wharf Road;
Turn left onto MD-158 W/Bethlehem Blvd. (0.4 mile);
Turn right onto MD-157 N/Peninsula Expy. (2.7 miles);
Turn slight left onto Merritt Ave. (0.1 mile);
Merritt Ave. becomes Sollers Point Rd. (0.3 mile);
Turn left to stay on Sollers Point Rd (0.6 mile);
Turn left onto Williams Ave. (0.2 mile);
Turn right onto Dundalk Ave. (<0.1 miles);
Turn left onto Chandlery St. (0.1 mile);
Turn left onto Portal St.

Figure 10-1: Health Clinic (Non-Emergency) Map



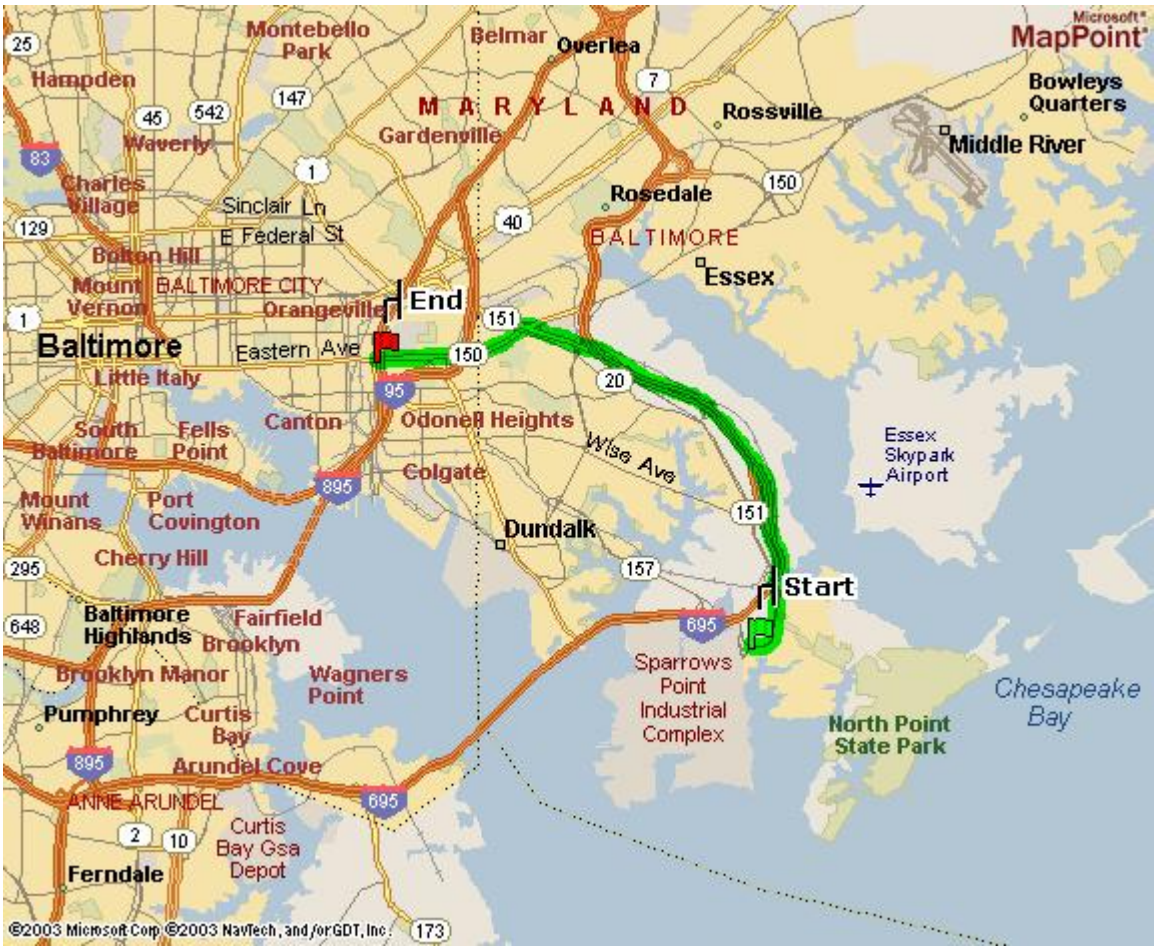
Hospital

The Johns Hopkins Bayview Hospital is the closest emergency facility, just over 9 miles away. The hospital is located at 4940 Eastern Avenue in Baltimore, MD. **Figure 10-2** is a map to this hospital. Maps are also included in **Attachment E**.

Directions:

From the Sparrows Point Industrial Complex, go north on Route 151 for approximately one mile.
Take ramp (right) onto I-695 towards I-695/Essex.
At exit 40, take ramp (right) onto Route 151/North Point Boulevard North/MD 150;
Take ramp (right) onto Route 150 (Eastern Avenue).
Continue on Eastern Avenue to hospital on right.

Figure 10-2: Hospital Map



Prior to the start of field activities, the Project Field Team Leader will call to verify the telephone numbers and directions for the clinic and hospital, and then distribute location maps and the emergency telephone list to workers and vehicles.

10.4 Accident and Emergency Medical Response

All field team members will be aware of the location of a first aid kit kept onsite. All vehicles used to transport injured persons to an offsite medical facility will be provided with directions and a map to the medical facility.

If treatment beyond first aid is required, emergency response personnel will be contacted for assistance and transport. Before beginning site activities, the Project Field Team Leader will ensure that each field team member knows where the nearest emergency medical facilities are and how to get there. The closest hospital will be used in cases of life-threatening emergencies at the direction of the Project Field Team Leader. The telephone numbers of the local emergency services will be available in the SZ, and the Project Field Team Leader will brief the field team on the procedures for calling for help in an emergency.

Site personnel will inform the Project Manager of any medications, allergies, or other medical information that may be applicable for their medical treatment. The Project Manager will supply this information to emergency response personnel, and will accompany the victim to the hospital, if possible.

10.4.1 Chemical Exposure

In case of accidental overexposure to a hazardous material (groundwater, soil, and/or off-gas materials), guidelines shown in **Table 10-2** will be used.

Table 10-2
Chemical Exposure Guidelines

Type of Overexposure	First Aid Guidelines
Skin Contact	Skin: Wash/rinse the affected area thoroughly with copious amounts of soap and water.
	Eyes: Eyes should be rinsed for at least 15 minutes following chemical contamination.
	Contact emergency response personnel if required, or transport victim to the hospital.
Inhalation	Move the victim to fresh air.
	Contact emergency response personnel if required, or transport victim to the hospital.
Ingestion	Contact Poison Control Center.
	Contact emergency response personnel, or transport victim to the hospital.

10.4.2 Decontamination During a Medical Emergency

For minor medical problems or injuries, regular decontamination procedures will be followed. If emergency, life-saving first aid and/or medical treatment are required, regular decontamination procedures may need to be abbreviated or omitted:

- Do not attempt to wash or rinse an unresponsive victim unless the victim has been contaminated with an extremely toxic or corrosive chemical that may cause injury or loss of life to emergency response personnel.
- Outer garments can be removed if it does not cause a delay, interfere with treatment, or aggravate the problem.

- PPE can be cut away and respiratory protective equipment must always be removed.
- If contaminated clothing cannot be safely removed, then the victim should be wrapped in a blanket or plastic sheeting to prevent contamination to the inside of the ambulance and/or emergency response personnel.

The Project Manager or Field Team Lead will advise the medical staff as to the type of contamination possibly involved.

10.4.3 Small or Incipient Fire

A small fire is defined as a fire that can be extinguished with an available 20 pound type ABC fire extinguisher. An incipient fire is a fire that is small because it has just started. In the event of a small or incipient fire, the following minimum actions will be taken:

- Evacuate nearby personnel from the area, if possible, to an upwind location or to an area not affected by smoke or hazardous decomposition products if an upwind location is not feasible.
- Attempt to extinguish fire using portable fire extinguisher or by smothering.
- Contact emergency response personnel, as needed, for any injuries or exposures to hazardous decomposition products, or if fire cannot be put out.
- After the fire has been extinguished, or emergency response personnel have been contacted, notify the following project personnel:

  The Project Manager

10.4.4 Large Fire or Explosion

An explosion, large fire or a small fire which cannot be extinguished is beyond the first line capabilities of EAG personnel. Professional emergency response personnel would be needed to provide emergency assistance for these types of incidents. In the event of a large fire, explosion or a small fire that cannot be extinguished, the following minimum actions will be taken:

- Evacuate all personnel from the site, if possible, to an upwind location, or to an area not affected by smoke or hazardous decomposition products if an upwind location is not feasible
- Perform a quick role call to account for all site personnel
- Contact the fire department
- Contact emergency response personnel, as needed, for any injuries or exposures to hazardous decomposition products
- After emergency response personnel have been contacted, notify the following project personnel:

  The Project Manager

10.4.5 Adverse Weather Conditions

In the event of adverse weather conditions, the Project Manager will determine if work can continue without sacrificing the health and safety of site personnel. Threatening weather conditions will be monitored by the Project Manager and possibly the Team Lead via radio, television, internet, and/ or calls to the National Weather Service. Some of the conditions to be considered include:

- Potential for heat or cold stress
- Limited visibility

- Electrical storms
- Treacherous weather-related working conditions (i.e., heavy rainfall, icy conditions causing slippery footing hazards, etc.).

10.4.6 First Aid for Heat Stress/Cold Stress

First aid treatment for **heat cramps** includes shade, rest and fluid replacement. If available, the individual should drink electrolyte replacement fluids (e.g., Gatorade, Squincher or 10-K). The individual should recover within half an hour.

First aid treatment for **heat exhaustion** includes cooling the victim, elevating the feet and fluid replacement. If the individual has not recovered within half an hour, then transport the victim to the hospital for medical attention.

Heat stroke is a medical emergency, requiring the immediate cooling of the victim and transport to the hospital for medical treatment immediately.

First aid treatment for **frost nip** and **frostbite** includes covering the affected area with warmth and retreating to a warm area. If the individual has not recovered within half an hour, then transport the victim to the hospital for medical attention.

Frozen tissue is a medical emergency and the victim must receive medical attention immediately. Contact emergency response personnel immediately or transport the victim to the hospital.

First aid treatment of **mild hypothermia** includes using heat to raise the individual's body temperature. Heat may be applied to the victim in the form of heat packs, hot water bottles and blankets. If the individual has not recovered within half an hour, then transport the victim to the hospital for medical attention.

Severe hypothermia is a medical emergency and the victim must be transported to the hospital immediately. First aid treatment for severe hypothermia includes handling the victim very gently; rough handling may set off of an irregular heartbeat. ***DO NOT*** attempt to re-warm the severely hypothermic victim; re-warming may cause the development of an irregular heartbeat.

10.4.7 Snake Bites

If bitten, lower the extremity below the heart to reduce the poison's dissemination through the body. Remain calm, try to keep the heart rate reduced and seek medical attention immediately. Do not cut the wound or attempt to suck out the venom. Note any physical features (e.g., shape of head and color or pattern on body) of the snake.

10.4.8 Animal Bites

All bites should be treated as contaminated soft tissue injuries. Bites should be washed immediately with large amounts of soap and water. If soap is not available, flush the wound with water. The severity and onset of any infection is dependent upon the number of organisms (viruses or bacteria) introduced into the wound. Washing saliva out of the wound immediately will reduce the number of bacteria or viruses that can enter the tissue. Medical attention must be sought if rabies is suspected or the individual has not had a recent tetanus booster.

10.4.9 Insect Bites and Stings

Emergency care for insect bites and stings depends on the individual's reaction. To treat a sting that results in a minor reaction, remove the stinger by gently scraping it off the skin. Do not try to grasp the sac or stinger, because this forces the remaining venom into the skin. Once the stinger has been removed, clean the wound and surrounding area. Apply cold packs to slow the absorption of the venom and reduce pain and swelling. The treatment for a severe reaction to insect stings includes the following:

- Confirm with the victim whether they are highly allergic to the insect that stung them
    - If victim has gone into anaphylactic shock, retrieve their epi pen or other auto-injector and administer per the directions as hastily as possible
- Assuming the victim remains conscious, ask them to refrain from moving around, and to lie down
- Immobilize the injured area immediately
- If an extremity is involved, remove any rings or watch
- Keep the affected part low, below the level of the heart
- Apply cold compresses to the affected area
- If possible, try to identify the type of insect that inflicted the sting
- Transport the victim to a medical facility immediately, continuing supportive measures en route.

All employees and subcontractors must report severe reactions to insect stings prior to the beginning of work to both the Project Manager and Field Team Lead.

10.4.10 Poisonous Plants

Decontamination: Wash the skin immediately after contact with the plant. Proper washing may not be practical in the middle of the woods, but a product such as Technu or a small wash-up kit with prepackaged, alcohol-based cleansing tissues can be effective. Employees and subcontractors should not forget to wash contaminated clothing and clean up contaminated equipment prior to re-use.

Treatment: Options are as follows:

- Home treatment: Calamine lotion and an oatmeal bath (one cup to a tub full of water) can help relieve itching. To prevent secondary skin infection, scratching is not helpful and the fingernails should be cut to avoid damage to the skin. Over-the-counter hydrocortisone cream can decrease inflammation and itching; however, the label should be read and the cream used according to directions.
- When to see the doctor: Severe cases may require further treatment. A physician should be seen if the rash appears infected, is on the face or other sensitive body areas, or is too extensive to be easily treated at home.

10.4.11 Ticks

To remove an attached tick:

- Use fine-tipped tweezers or a "tick tool" to grasp the tick at the surface of the skin
- If tweezers are not available, use a tissue to protect the fingers (exposure to the tick's body fluid may lead to transmission of disease)
- With a steady motion, pull the tick straight out

Disinfect the bite site and the tweezers. Wash your hands thoroughly with soap and water. Save the tick if you can by placing it in a Ziploc bag in the freezer; this may help with diagnosis in the future.

If flu-like symptoms such as fatigue, headache, neck-stiffness or jaw discomfort begin following a tick bite, seek medical attention.

APPENDICES

EnviroAnalytics Group

Environmental Engineers

ATTACHMENT A

COMPLIANCE AGREEMENT

EAG HEALTH AND SAFETY PLAN

ACKNOWLEDGEMENT FORM

I, _____, have read (or had read to me), EAG's health and safety plan.
(Print Name)

I understand my responsibilities as they are defined in this plan and will abide by these rules and procedures, as well as any regulations or otherwise governing safety. When in doubt concerning safe job performance, I will speak to my immediate supervisor and/or Project Manager.

I understand EAG reserves the right to change or amend the HASP at any time.

I understand any violation to the plan policies or procedures will be cause for disciplinary action up to and including termination.

_____ _____

Employee Signature Date

_____ _____

EAG Supervisor/Project Manager Signature Date

ATTACHMENT B

Material Safety Data Sheets (MSDSs)

APPENDIX L

ARM Group Inc.
Engineers and Scientists

To: Barbara Brown (MDE), Ruth Prince (USEPA)
From: Taylor R. Smith, Neil Peters (QA Reviewer)
Date: August 26, 2019
Re: B5-098 Response Area – Summary of Completed Activities

In review comments on the Sub-Parcel B1-1 Response and Development Work Plan (RADWP) received from the Maryland Department of the Environment (MDE) via email on August 1, 2019, the MDE specified that a revised RADWP must be submitted including a concise detailed summary in an addendum of all additional work completed on the parcel for delineation and removal since Revision 0 was submitted.

This memorandum summarizes activities completed in the vicinity of soil boring B5-098-SB, which has been designated as the B5-098 Response Area. This summary is presented to facilitate the review of the RADWP. A complete description of the response activities, including the full scope, methods, and results, is presented within the Response Action Completion Report dated July 12, 2019.

Attachments to the RADWP are referenced below (in bold), as appropriate. A photograph log documenting the test pitting activities is provided with this memorandum as *Attachment 1*. *Figure 1* through *Figure 6* from the Response Action Completion Report are also provided as inclusions with this memorandum.

The following activities were completed prior to the previous submission of the RADWP (Revision 0 dated March 1, 2019):

- During the Phase II Investigation of Parcel B5, non-aqueous phase liquid (NAPL) was identified within the soil cores of soil boring locations B5-098-SB and B5-099-SB on January 7, 2016. These two borings are identified as locations of potential concern on **Figure 5** of the Sub-Parcel B1-1 RADWP.
- The discovery of NAPL necessitated that additional delineation activities be performed in the vicinity of the borings. Piezometers were installed at locations B5-098-SB and B5-099-SB and ultimately a total of 23 temporary NAPL screening piezometers were installed to delineate the extent of the NAPL.
- NAPL was consistently detected (with varying thicknesses) at six piezometer locations (B5-098-PZ, B5-098B-PZ, B5-098D-PZ, B5-098E-PZ, B5-098G-PZ, and B5-098K-PZ).

The delineation results indicated that the NAPL impacts in the vicinity of B5-098-PZ were adequately defined in order to implement a response action.

- The complete results of the delineation are provided in the B5-098 Delineation Completion Report and Proposed Excavation Response Action Work Plan (Response Action Work Plan) dated February 27, 2019. The delineation results are also shown on **Figure 6** of the Sub-Parcel B1-1 RADWP.

The following activities were completed after the previous submission of the RADWP:

- MDE approved the Response Action Work Plan via email on March 6, 2019.
- Permission to abandon the delineation piezometers remaining in the B5-098 Response Area was granted by the MDE via email on March 15, 2019. The piezometers were subsequently abandoned on March 20 and March 21, 2019. No measurable NAPL was detected in any piezometer which was not previously determined to be impacted.
- Soil was excavated from the B5-098 Response Area from April 16, 2019 to May 15, 2019. The preliminary extent of the excavation was based on the NAPL gauging data from the delineation piezometers and NAPL observed in the soil cores. The actual extent of the excavation was modified based on field observations (odors, staining, etc.). When an excavation was limited laterally or vertically by below-grade metal structures, the structures were cleared of soil and left in place. Excavation work was performed by ACV Enviro (ACV). Oversight of the excavation activities was performed by an ARM Environmental Professional (EP).
- Throughout the excavation process, soils in discrete areas or at depths which did not exhibit visual/olfactory evidence of NAPL contamination were stockpiled separately from soils which appeared to be impacted by NAPL. The criteria that triggered the need for segregation included observed NAPL or evidence of staining, and/or strong odors.
- Representatives from the MDE visited the Response Area on May 13, 2019 and gave approval to backfill following their instructions to excavate additional identified impacted material in a few small areas along the northern perimeter of the main excavation area. No analytical confirmation samples were required to be collected from the excavation bottom or sidewalls; therefore, a table of sampling results is not provided with this summary document.
- A total of approximately 3,200 cubic yards (cy) of bulk non-impacted soil (approximately 2,400 cy bank) and 4,600 cy of bulk impacted non-hazardous soil (approximately 3,500 cy bank) were excavated.
- Composite samples, each containing 10 random aliquots, were collected from the impacted stockpiles and submitted to Caliber Analytical Services for laboratory testing at a rate of one sample for every 500 cy of material.

- All excavated soils, from both the impacted and non-impacted stockpiles, were determined to be non-hazardous and were transported to Greys Landfill for disposal.
- On May 23, 2019, backfilling of the excavation began using poorly graded coarse slag aggregate. On June 5, 2019, the placement of the coarse slag within the excavation was completed to an approximate depth of 2.5 feet below the surrounding surface grades.
- The remaining 2.5 feet depth was backfilled with three lifts of well-graded sand and aggregate (i.e. fine slag). A layer of geotextile* was placed atop the exposed coarse slag to reduce the potential for fine particle migration into the coarse slag. No more than 12 inches of loose fine slag were placed for each lift (prior to compaction) up to the final grade. Backfilling activities in this manner were concluded on June 7, 2019.

  *On June 3, 2019, FCL Builders and DXI rebuilt the haul road above the coarse slag aggregate backfill on Sub-Parcel B1-2 prior to the placement of geotextile. ARM was unable to observe or assess the backfill in the easternmost portion of the excavation. A figure showing the haul road installation is included below.

Inclusions:

Figure 1 B5-098 Response Area: Aerial View
Figure 2 B5-098-PZ Delineation Results (Historical Drawings 5000 Set)
Figure 3 B5-098-PZ Delineation Results (Proposed Development Details)
Figure 4 B5-098 Response Area: Proposed Excavation Boundary
Figure 5 B5-098 Response Area: Final Excavation Boundary
Figure 6 B5-098 Response Area: Haul Road Installation

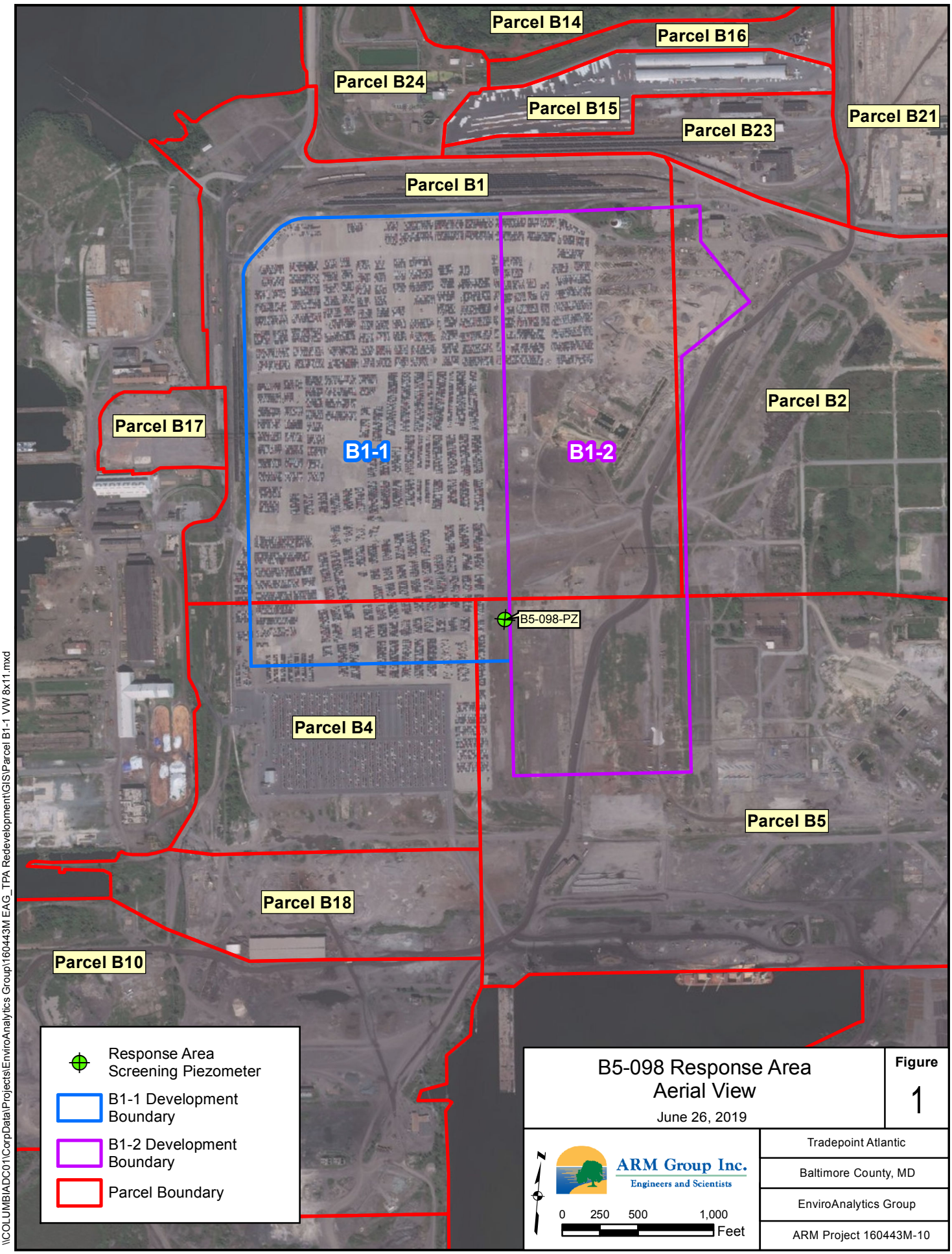
Attachment 1 Photograph Log

Documents for reference:

ARM Group Inc. (2019). *Response Action Work Plan: Delineation Completion Report and Proposed Excavation of NAPL at B5-098-SB*. February 27, 2019.

ARM Group Inc. (2019). *Response Action Completion Report: B5-098 Response Area*. July 12, 2019.

MEMORANDUM - FIGURES



B5-098 Response Area
Aerial View

June 26, 2019

Figure
1

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Baltimore County, MD

EnviroAnalytics Group

ARM Project 160443M-10

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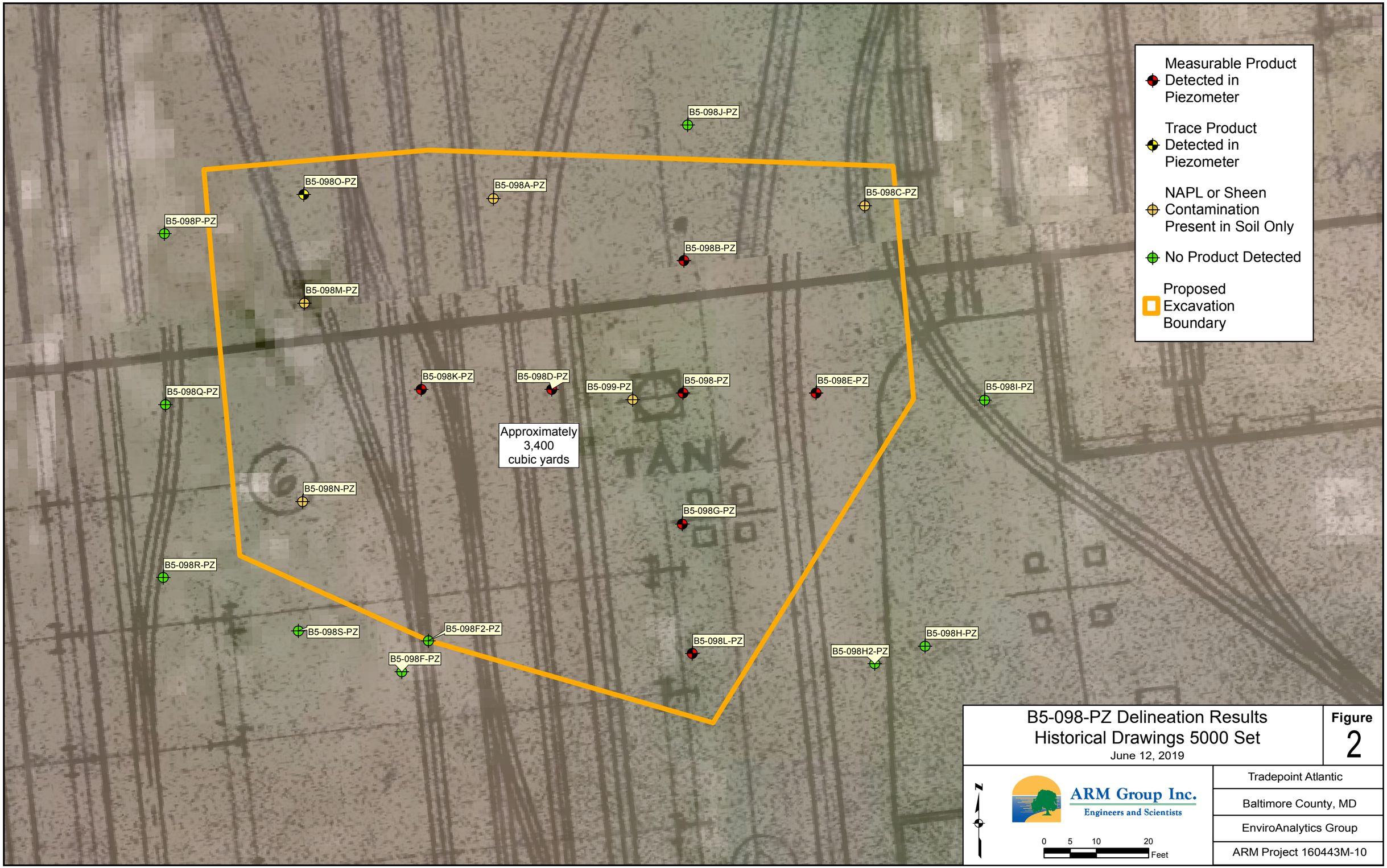

B5-098J-PZ
B5-098O-PZ
B5-098A-PZ
B5-098C-PZ
B5-098P-PZ
B5-098B-PZ
B5-098M-PZ
B5-098K-PZ
B5-098D-PZ
B5-099-PZ
B5-098-PZ
B5-098E-PZ
B5-098I-PZ
B5-098Q-PZ
Approximately
3,400
cubic yards
B5-098N-PZ
B5-098G-PZ
B5-098R-PZ
B5-098S-PZ
B5-098F2-PZ
B5-098L-PZ
B5-098H2-PZ
B5-098H-PZ
B5-098F-PZ
TANK
Measurable Product Detected in Piezometer
Trace Product Detected in Piezometer
NAPL or Sheen Contamination Present in Soil Only
No Product Detected
Proposed Excavation Boundary
B5-098-PZ Delineation Results
Historical Drawings 5000 Set
June 12, 2019
Figure
2
N
ARM Group Inc.
Engineers and Scientists
0 5 10 20
Feet
Tradepoint Atlantic
Baltimore County, MD
EnviroAnalytics Group
ARM Project 160443M-10



B5-098-PZ Delineation Results
Proposed Development Details

June 12, 2019

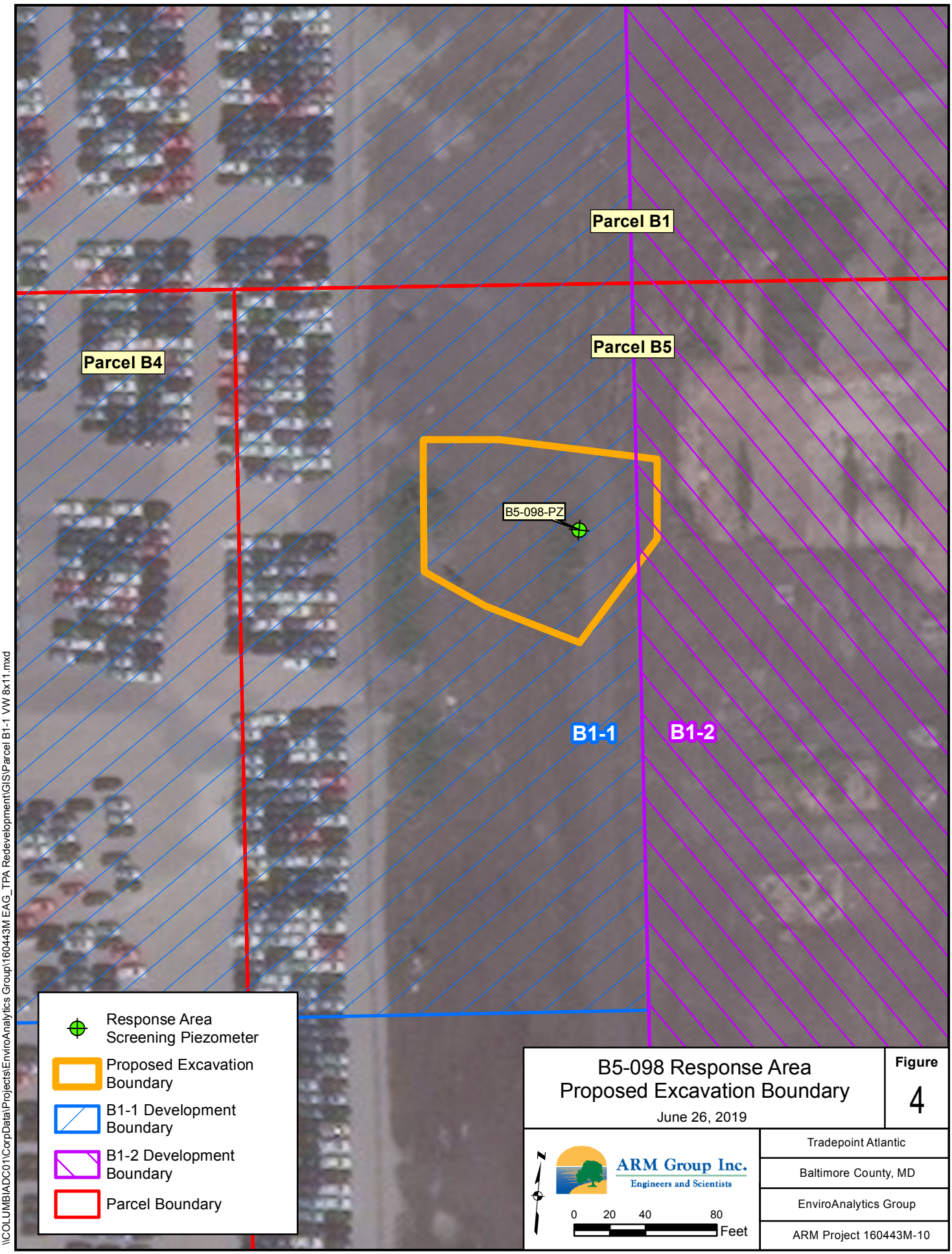
Figure 3

Tradepoint Atlantic

Baltimore County, MD

EnviroAnalytics Group

ARM Project 160443M-10



B5-098 Response Area Proposed Excavation Boundary

June 26, 2019

Figure 4

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Baltimore County, MD

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ARM Project 160443M-10

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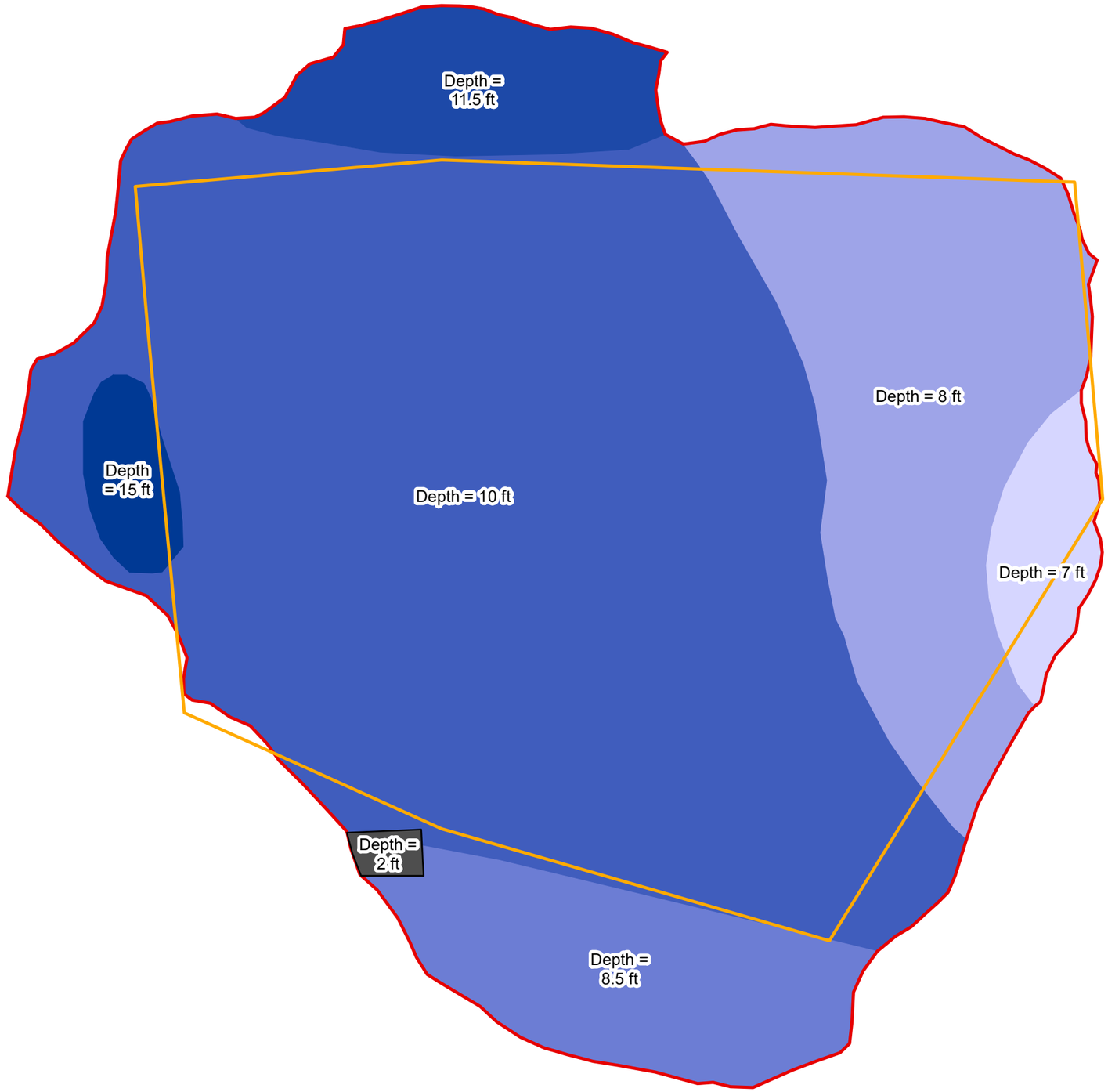

Proposed Excavation Boundary

Final Excavation Boundary

Metal Platform

Depth (ft)	Area (ft^2)
7	450
8	3,000
8.5	1,450
10	9,840
11.5	910
15	290
Volume (ft^3)	152,690
Volume (yd^3)	5,655

Parcel B5: B5-098 Response Area Final Excavation Boundary

June 14, 2019

Figure 5

N

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0 5 10 20 Feet

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Baltimore County, MD

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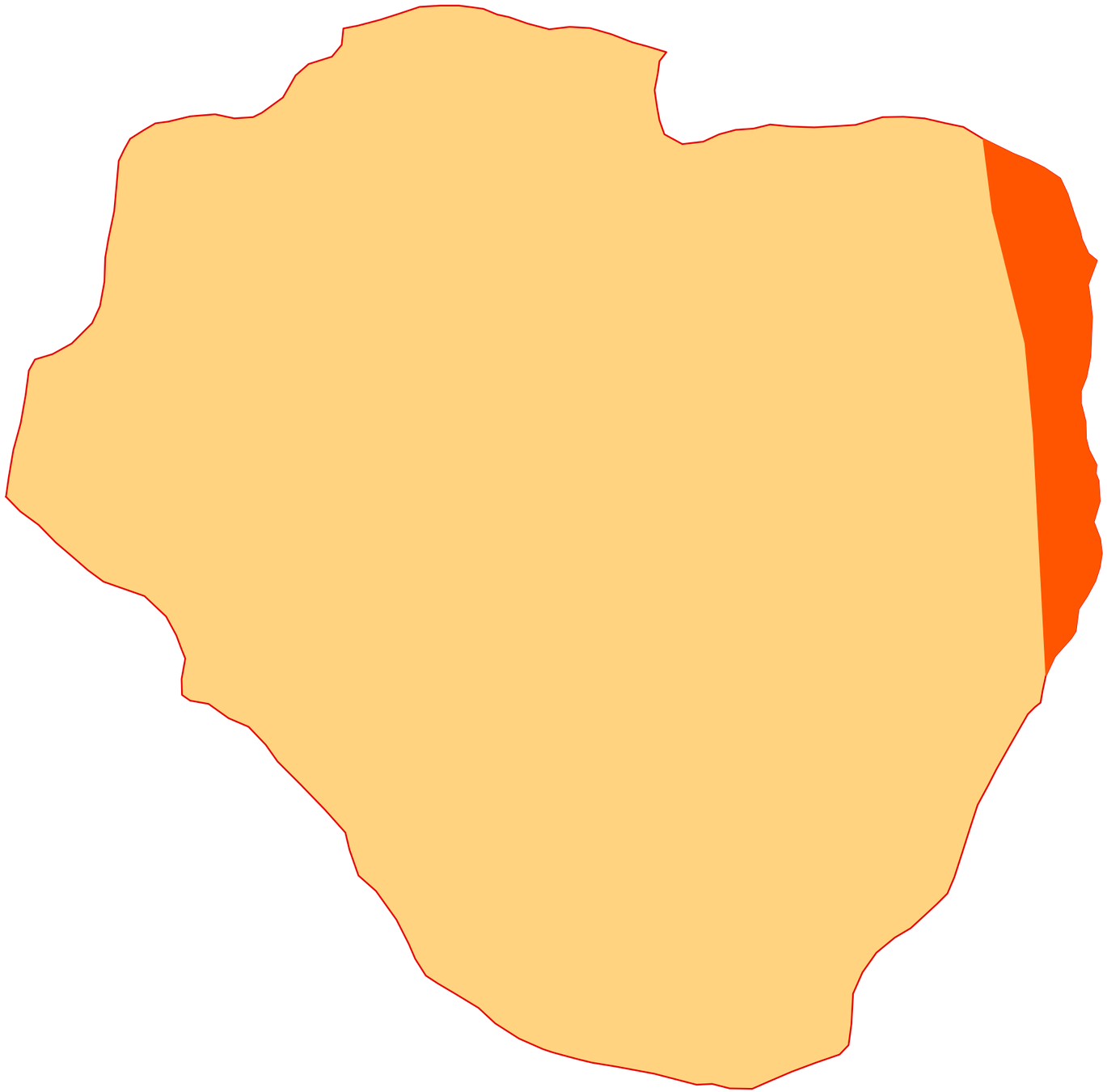
ARM Project 160443M-10



Entire excavation backfilled with 2-3 inch graded slag aggregate to a depth of 2.5 feet below ground surface.

Geotextile placed over slag aggregate

Placement and compaction of slag fines overseen by ARM

Section of haul road installed by FCL and DXI

No geotextile placed

Placement and compaction of slag fines not overseen by ARM

Parcel B5: B5-098 Response Area
Haul Road Installation

June 20, 2019

Figure
6

N

ARM Group Inc.
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0 5 10 20
Feet

Tradepoint Atlantic

Baltimore County, MD

EnviroAnalytics Group

ARM Project 160443M-10

MEMORANDUM - ATTACHMENT 1



04/16/19: View to the west of the impacted soil stockpile area.



04/16/19: View to the south of the start of excavation at the B5-098 Response Area.



04/17/19: View to the south of the excavation in progress.



04/18/19: View to the east of covered stockpiles of soil from the B5-098 excavation.



04/18/19: View to the northeast of the excavation in progress.



04/22/19: View to the east of concrete structure demolition in progress from the B5-098 excavation.



05/01/19: A.C. Schultes begins removing the pump from the western edge of the excavation site.



05/07/19: View to the north of the eastern boundary of the excavation site where a water drain line was exposed during the installation of the temporary silt fence.



05/09/19: View to the south of the railroad line that ran north-south within the eastern portion of the pit.



05/09/19: View to the southeast of the water level due to groundwater infiltration.



05/13/19: View to the southeast of the water level after a heavy rain event over a weekend from the previous photo. A sheen is present on the surface of the water.



05/22/19: View to the west of the ramp that was constructed to allow for equipment to drive into the pit.



05/23/19: View to the northeast of the water level after dewatering was completed.



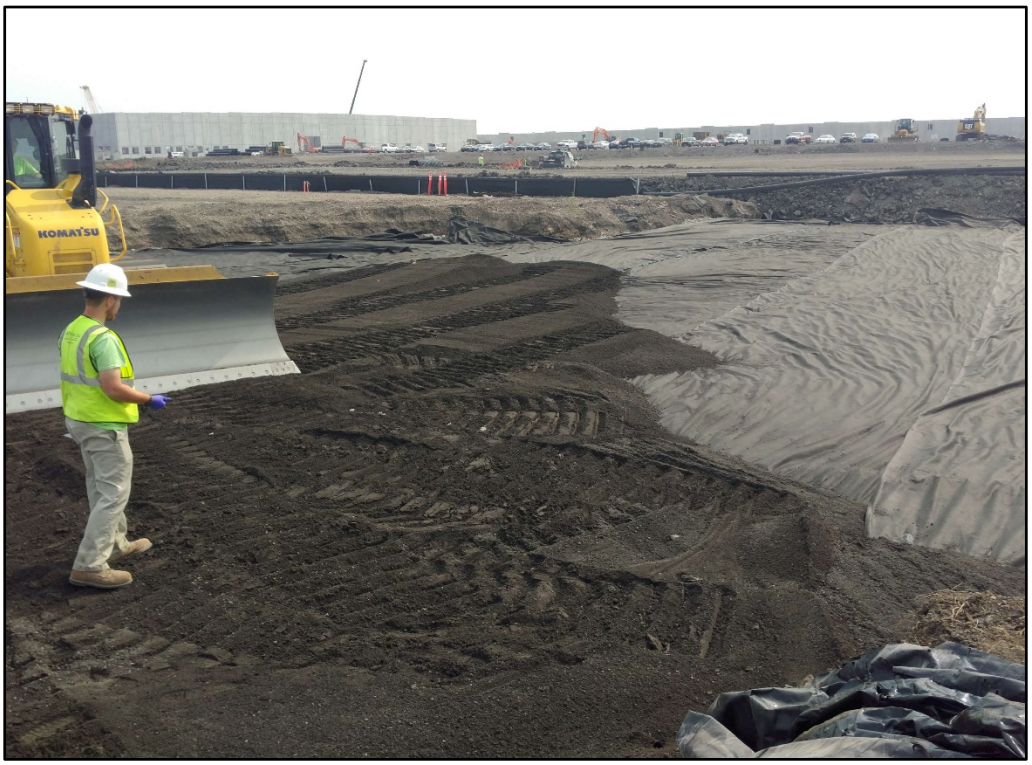
05/28/19: View of the uncovered deep well prior to inspection. The well was located directly beneath the ramp that led into the excavation.



06/03/19: View to the northeast of the final level of slag fill 2.5 feet below the surface.



06/03/19: View to the south of the eastern edge of the excavation pit after FCL Builders' operators removed the temporary silt fence and laid down slag for road construction.



06/05/19: Slag fines were used as the final backfill material. Geofabric was placed on top of the larger slag before the slag fines were added.



06/07/19: View to the south of the excavation site after all backfilling and compaction testing had been completed.

ARM Group Inc.
Engineers and Scientists

To: Barbara Brown (MDE), Ruth Prince (USEPA)
From: Taylor R. Smith, Neil Peters (QA Reviewer)
Date: August 26, 2019
Re: B5-161 Test Pitting – Summary of Completed Activities

In review comments on the Sub-Parcel B1-1 Response and Development Work Plan (RADWP) received from the Maryland Department of the Environment (MDE) via email on August 1, 2019, the MDE specified that a revised RADWP must be submitted including a concise detailed summary in an addendum of all additional work completed on the parcel for delineation and removal since Revision 0 was submitted.

This memorandum summarizes test pitting and sampling activities completed in the vicinity of soil boring B5-161-SB. This summary is presented to facilitate the review of the RADWP. A complete description of these activities, including the full scope, methods, and results of the test pitting activities, is presented within the Test Pitting Completion Letter dated July 12, 2019.

Attachments to the RADWP are referenced below (in bold), as appropriate. A photograph log documenting the test pitting activities is provided with this memorandum as *Attachment 1*. *Figure 1* through *Figure 3* from the Test Pitting Completion Letter are also provided as inclusions with this memorandum. *Figure 3* was provided as a supplemental figure to the original Completion Letter following a request from the MDE on July 23, 2019.

The following activities were completed prior to the previous submission of the RADWP (Revision 0 dated March 1, 2019):

- During the Phase II Investigation of Parcel B5, the maximum detection of TPH-DRO at the Site was identified in sample B5-161-SB-4, with a concentration of 17,900 mg/kg. Elevated concentrations of several polynuclear aromatic hydrocarbons (PAHs) were also identified in the same sample. Despite the elevated detections, there was no physical evidence of non-aqueous phase liquid (NAPL) identified in the soil cores. This boring is identified as a location of potential concern on **Figure 5** of the Sub-Parcel B1-1 RADWP.
- Even though there was no physical evidence of NAPL, a screening piezometer was installed at B5-161-SB to determine the potential presence of any mobile NAPL associated with the elevated analytical detections (specifically the detection of TPH-DRO in the low percentage range). NAPL was not detected in the screening piezometer.

The following activities were completed after the previous submission of the RADWP:

- The MDE specified that additional investigation would be required at location B5-161-SB due to the elevated concentrations of TPH-DRO and PAHs documented at this soil boring location.
- Additional investigation was proposed under the B5-161-SB Test Pitting Work Plan (Revision 1) dated May 8, 2019, which was approved by the MDE on May 10, 2019.
- Test pits were completed surrounding B5-161-SB at four locations on May 15, 2019 to attempt to identify any grossly contaminated material (i.e., NAPL). Each test pit was located 25 feet to the north, south, east, and west of B5-161-SB. Excavation work was performed by ACV Enviro (ACV). Oversight of the excavation activities was performed by an ARM Environmental Professional (EP).
- As material was removed from the test pits, it was screened to determine if there was evidence of potential NAPL contamination. No visual or olfactory evidence of NAPL was observed during the B5-161 test pitting. The excavated materials from each test pit were managed in accordance with the requirements established by the Response Action Work Plan for the nearby B5-098-SB response action excavation. Materials management between the two areas was addressed concurrently.
- An estimated total of approximately 100 to 110 cubic yards (cy) of bulk soil (approximately 80 cy bank) were excavated during the test pitting.
- ARM collected a series of analytical soil confirmation samples from the test pit sidewalls. Two samples were collected from each of the four test pits on May 15 and May 17, 2019. The samples were submitted to Pace Analytical Services, Inc. (PACE) and analyzed for VOCs, SVOCs, TPH-DRO/GRO, and Oil & Grease. A summary of the detected parameters among the test pitting analytical samples is provided as **Table 5** of the Sub-Parcel B1-1 RADWP. **Figure 7** of the Sub-Parcel B1-1 RADWP shows the soil results that exceeded the applicable Project Action Limits (PALs) among these samples, including PAL exceedances at the original soil boring B5-161-SB.
- ARM collected groundwater samples from piezometer B5-161-PZ for laboratory analysis on May 10, 2019. The samples were submitted to PACE and analyzed for SVOCs, TPH-DRO/GRO, total metals, and mercury. The results of the detected parameters are provided in **Table 6** of the Sub-Parcel B1-1 RADWP. **Figure 7** of the Sub-Parcel B1-1 RADWP shows the groundwater results that exceeded the aqueous PALs.
- B5-161-PZ was abandoned on June 24, 2019. In accordance with standard methods, the piezometer was gauged a final time on the abandonment date, and no accumulated NAPL was observed.

Inclusions:

Figure 1 B5-161-SB Reference Map: Aerial View
Figure 2 Sub-Parcel B1-1 Development Plan: B5-161-SB Location
Figure 3 Test Pit Samples: Project Action Limit Exceedances

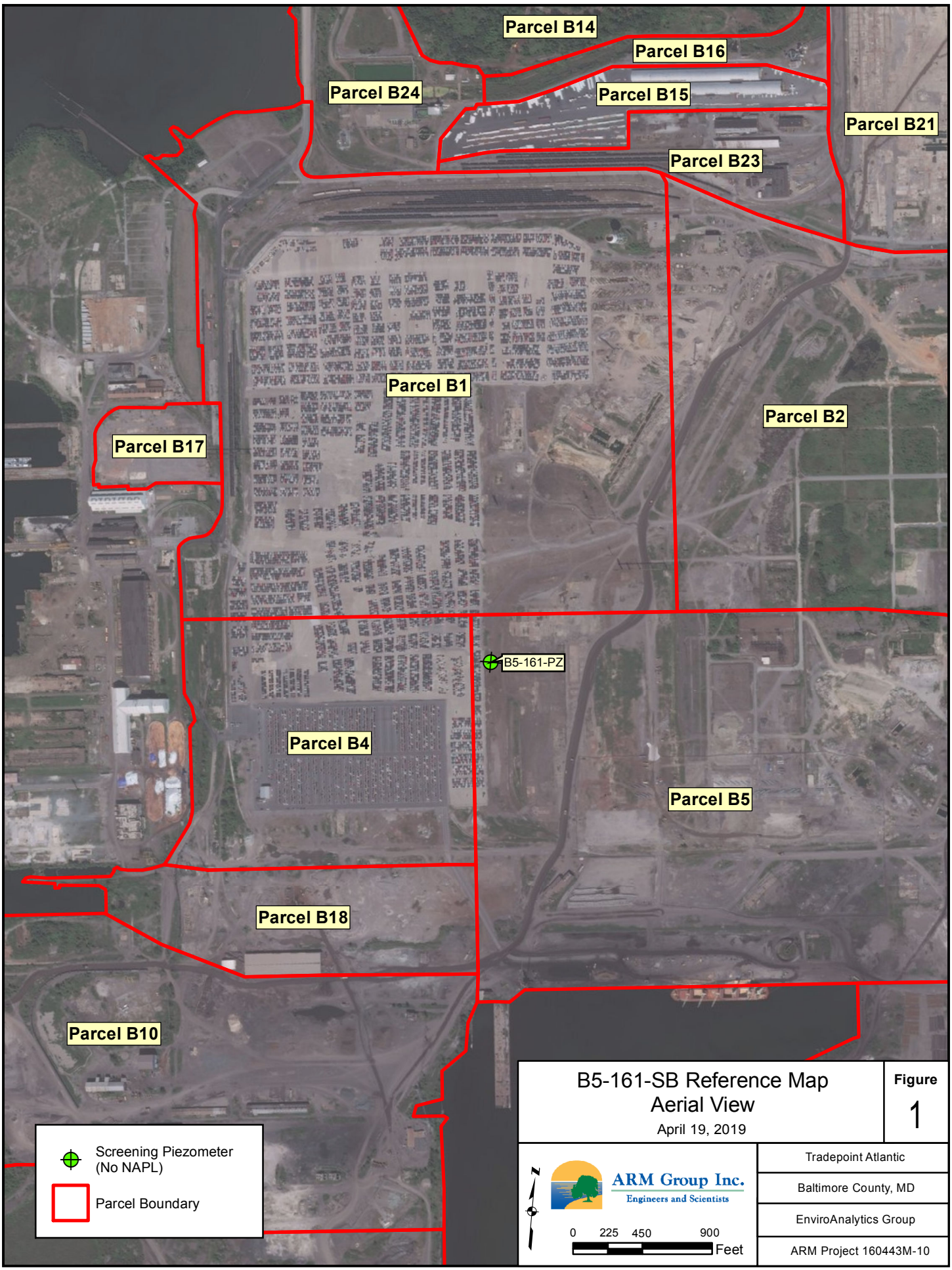
Attachment 1 Photograph Log

Documents for reference:

ARM Group Inc. (2019). *Test Pitting Work Plan: Area B: Parcel B5 (B5-161-SB).* Revision 1. May 8, 2019.

ARM Group Inc. (2019). *Test Pitting Completion Letter: B5-161-SB.* July 12, 2019.

MEMORANDUM - FIGURES



B5-161-SB Reference Map
Aerial View

April 19, 2019

Figure 1

ARM Group Inc.
Engineers and Scientists

Tradepoint Atlantic
Baltimore County, MD
EnviroAnalytics Group
ARM Project 160443M-10

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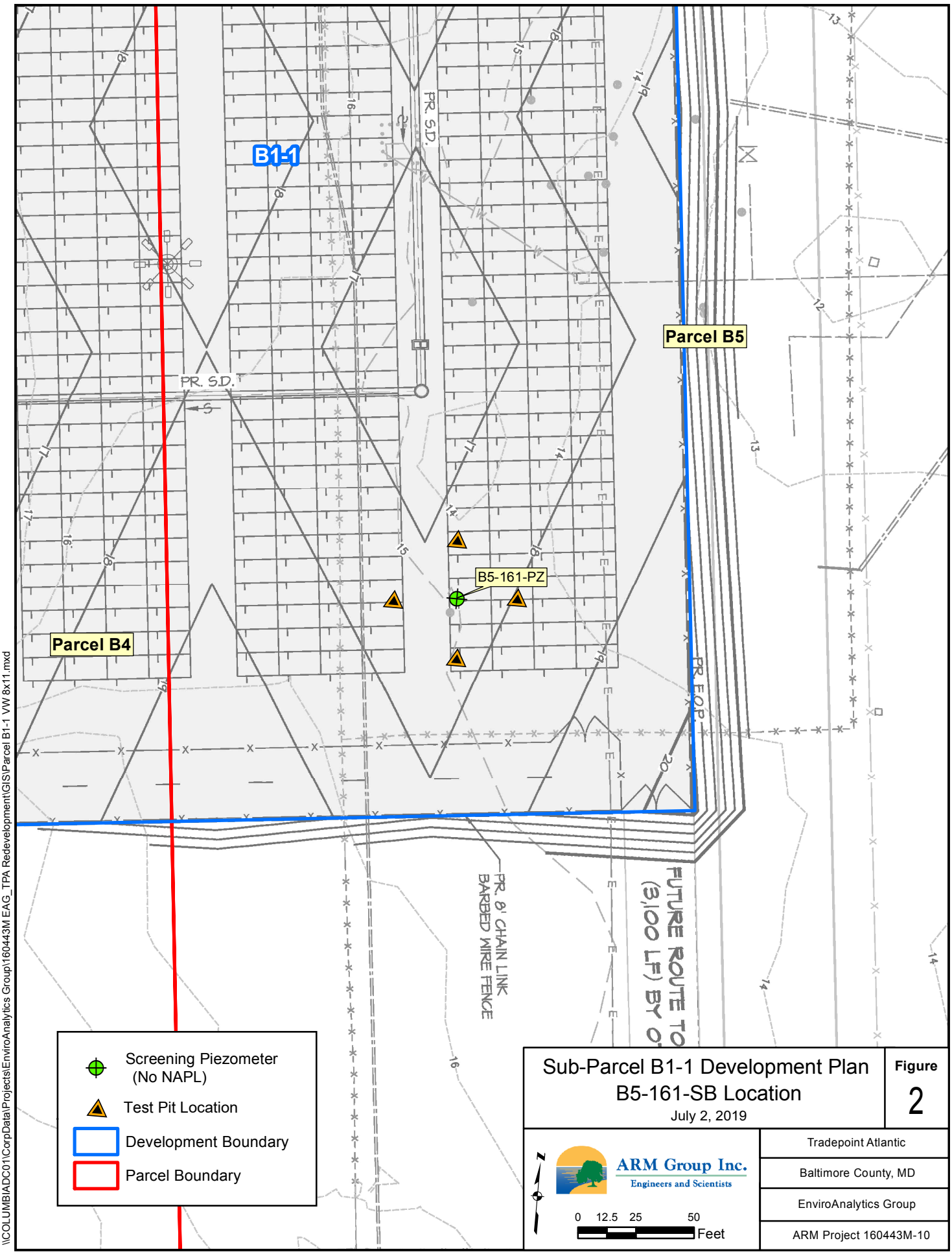

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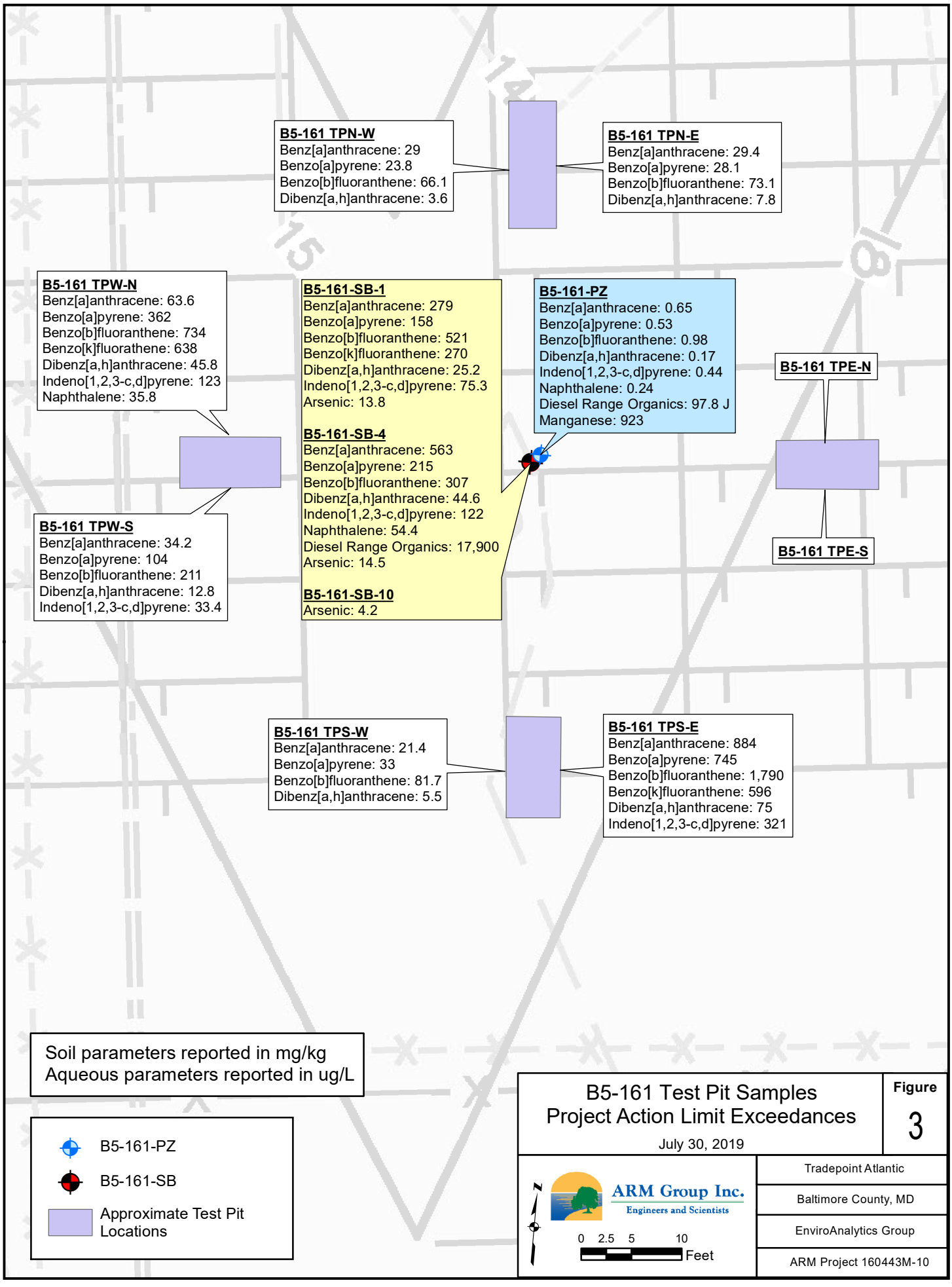
Sub-Parcel B1-1 Development Plan
B5-161-SB Location

July 2, 2019

Figure 2

ARM Group Inc.
Engineers and Scientists

Tradepoint Atlantic
Baltimore County, MD
EnviroAnalytics Group
ARM Project 160443M-10


B5-161 TPN-W
Benz[a]anthracene: 29
Benzo[a]pyrene: 23.8
Benzo[b]fluoranthene: 66.1
Dibenz[a,h]anthracene: 3.6
B5-161 TPN-E
Benz[a]anthracene: 29.4
Benzo[a]pyrene: 28.1
Benzo[b]fluoranthene: 73.1
Dibenz[a,h]anthracene: 7.8
B5-161 TPW-N
Benz[a]anthracene: 63.6
Benzo[a]pyrene: 362
Benzo[b]fluoranthene: 734
Benzo[k]fluorathene: 638
Dibenz[a,h]anthracene: 45.8
Indeno[1,2,3-c,d]pyrene: 123
Naphthalene: 35.8
B5-161-SB-1
Benz[a]anthracene: 279
Benzo[a]pyrene: 158
Benzo[b]fluoranthene: 521
Benzo[k]fluoranthene: 270
Dibenz[a,h]anthracene: 25.2
Indeno[1,2,3-c,d]pyrene: 75.3
Arsenic: 13.8
B5-161-SB-4
Benz[a]anthracene: 563
Benzo[a]pyrene: 215
Benzo[b]fluoranthene: 307
Dibenz[a,h]anthracene: 44.6
Indeno[1,2,3-c,d]pyrene: 122
Naphthalene: 54.4
Diesel Range Organics: 17,900
Arsenic: 14.5
B5-161-SB-10
Arsenic: 4.2
B5-161-PZ
Benz[a]anthracene: 0.65
Benzo[a]pyrene: 0.53
Benzo[b]fluoranthene: 0.98
Dibenz[a,h]anthracene: 0.17
Indeno[1,2,3-c,d]pyrene: 0.44
Naphthalene: 0.24
Diesel Range Organics: 97.8 J
Manganese: 923
B5-161 TPE-N
B5-161 TPE-S
B5-161 TPW-S
Benz[a]anthracene: 34.2
Benzo[a]pyrene: 104
Benzo[b]fluoranthene: 211
Dibenz[a,h]anthracene: 12.8
Indeno[1,2,3-c,d]pyrene: 33.4
B5-161 TPS-W
Benz[a]anthracene: 21.4
Benzo[a]pyrene: 33
Benzo[b]fluoranthene: 81.7
Dibenz[a,h]anthracene: 5.5
B5-161 TPS-E
Benz[a]anthracene: 884
Benzo[a]pyrene: 745
Benzo[b]fluoranthene: 1,790
Benzo[k]fluoranthene: 596
Dibenz[a,h]anthracene: 75
Indeno[1,2,3-c,d]pyrene: 321
Soil parameters reported in mg/kg
Aqueous parameters reported in ug/L
B5-161-PZ
B5-161-SB
Approximate Test Pit Locations
B5-161 Test Pit Samples
Project Action Limit Exceedances
July 30, 2019
Figure
3
ARM Group Inc.
Engineers and Scientists
0 2.5 5 10
Feet
Tradepoint Atlantic
Baltimore County, MD
EnviroAnalytics Group
ARM Project 160443M-10
P:\EnviroAnalytics Group\160443M EAG_TPA Redevelopment\GIS\Parcel B5-161-Test-Pit.mxd

MEMORANDUM - ATTACHMENT 1

Photograph Log
Test Pitting Activities
B5-161 Response Area



05/15/19: View of the northern test pit.



05/15/19: View of the eastern test pit.



05/15/19: View of the southern test pit.



05/15/19: View of the western test pit.



05/24/19: View to the east of B5-161-PZ after the surrounding test pits were backfilled.

APPENDIX M

MARYLAND DEPARTMENT OF THE ENVIRONMENT, WATER MANAGEMENT ADMINISTRATION
1800 Washington Blvd., Baltimore, Maryland 21230 (410) 537-3784

****

WATER WELL ABANDONMENT-SEALING REPORT FORM

****

SUBMIT COPIES OF COMPLETED FORM TO:
* COUNTY ENVIRONMENTAL AGENCY (contact MDE, WMA if address needed)
* WELL OWNER
* MDE, WATER MANAGEMENT ADMINISTRATION, WELL PROGRAM

DATE WELL ABANDONED: 6/19/2019 (month/day/year)

* PERMIT NUMBER OF ABANDONED WELL (if any) BA – 81 – 2742

* PERMIT NUMBER OF REPLACEMENT WELL: – n/a –

* PERSON ABANDONING WELL: Richard Schultes WELL DRILLER'S LICENSE NUMBER: 577

CIRCLE: (MWD) / MSD / MGD

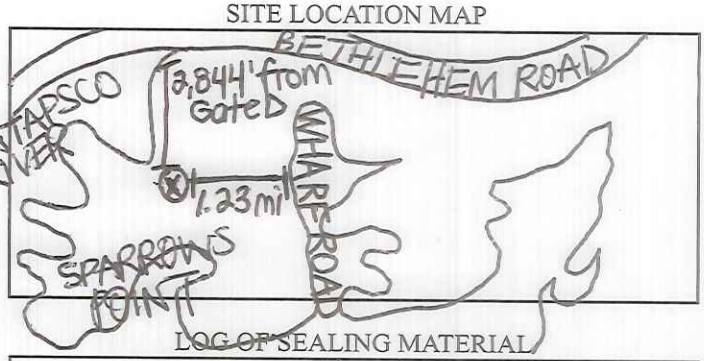
* OWNER'S NAME: Tradepoint Atlantic

* WELL LOCATION:
COUNTY: Baltimore
NEAREST TOWN: Sparrows Point
TAX MAP _____ BLOCK _____ PARCEL _____
SUBDIVISION: _____
SECTION: _____ LOT: _____
STREET ADDRESS: Riverside Drive, Sparrows Point

LATITUDE 39.219011

LONGITUDE 76.486626

SITE LOCATION MAP



LOG OF SEALING MATERIAL

MATERIAL	FEET	
	FROM	TO
Well gravel	674'	524'
Portland cement	524'	0'

VOLUME OF MATERIAL USED

(105) 50 lb bags of gravel
15 yards cement

* TYPE OF WELL BEING ABANDONED:
X DRILLED _____ JETTED
_____ BORED _____ HAND DUG
_____ OTHER (specify) _____

* USE CODE:
_____ DOMESTIC _____ MUNICIPAL/PUBLIC
_____ IRRIGATION X INDUSTRIAL
_____ TEST/OBSERVATION _____ GEOTHERMAL

* TYPE OF CASING:
X STEEL _____ PLASTIC
_____ CONCRETE X OTHER (specify) bronze

SIZE OF CASING: 12x10x8 INCHES IN DIAMETER

DEPTH OF WELL: 685 FEET DEEP

WAS ANY CASING REMOVED? ____ YES X NO
If yes, length removed, in feet: _____

WAS CASING RIPPED OR PERFORATED? ____ YES X NO

Pursuant to § 10-624 of the State Govt. Article of the Maryland Code, personal info requested on this form is used in processing this form pursuant to COMAR 26.04.04. Failure to provide the info may result in this form not being processed. You have the right to inspect, amend, or correct this form. The Maryland Department of the Environment is subject to the Maryland Public Information Act. This form may be made available on the Internet via MDE's website and is subject to inspection or copying, in whole or in part, by the public and other governmental agencies, if not protected by federal or State Law.

[signature] MWD597 (MWD) MSD / MGS 6/24/2019

SIGNATURE-MASTER WELL DRILLER OR SUPERVISING SANITARIAN LICENSE# CIRCLE ONE DATE

ORIGINAL

MARYLAND DEPARTMENT OF THE ENVIRONMENT, WATER MANAGEMENT ADMINISTRATION
1800 Washington Blvd., Baltimore, Maryland 21230 (410) 537-3784

****

WATER WELL ABANDONMENT-SEALING REPORT FORM

****

5/31/19 Mailed to HD JJ

SUBMIT COPIES OF COMPLETED FORM TO:
* COUNTY ENVIRONMENTAL AGENCY (contact MDE, WMA if address needed)
* WELL OWNER
* MDE, WATER MANAGEMENT ADMINISTRATION, WELL PROGRAM

DATE WELL ABANDONED: 5/7/2019 (month/day/year)

* PERMIT NUMBER OF ABANDONED WELL (if any) BA -81- 2741

* PERMIT NUMBER OF REPLACEMENT WELL: -n/a-

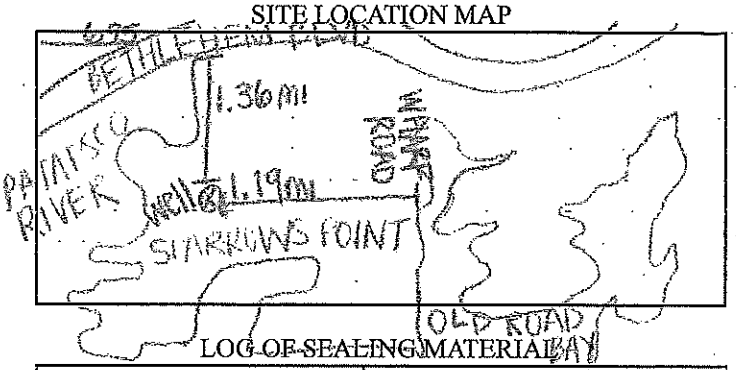
* PERSON ABANDONING WELL: Richard Schultes WELL DRILLER'S LICENSE NUMBER: MWD577
CIRCLE: MWD / MSD / MGD

* OWNER'S NAME: Tradepoint Atlantic

* WELL LOCATION:
COUNTY: Baltimore
NEAREST TOWN: Sparrows Pt.
TAX MAP _____ BLOCK _____ PARCEL _____
SUBDIVISION: _____
SECTION: _____ LOT: _____
STREET ADDRESS: _____

LATITUDE 39.218190
LONGITUDE 76.485567

SITE LOCATION MAP



LOG OF SEALING MATERIAL

MATERIAL	FEET	
	FROM	TO
Wellgravel	674	613
Portland cement	613	2

VOLUME OF MATERIAL USED
(1) super sack of well gravel
(18) Yards of cement

* TYPE OF WELL BEING ABANDONED:
X DRILLED ____ JETTED
____ BORED ____ HAND DUG
____ OTHER (specify) _____

* USE CODE:
____ DOMESTIC X MUNICIPAL/PUBLIC
____ IRRIGATION X INDUSTRIAL
____ TEST/OBSERVATION ____ GEOTHERMAL

* TYPE OF CASING:
____ STEEL ____ PLASTIC
____ CONCRETE X OTHER (specify) bronze

SIZE OF CASING: 12" x 10" INCHES IN DIAMETER

DEPTH OF WELL: 674 FEET DEEP

WAS ANY CASING REMOVED? X YES ____ NO
If yes, length removed, in feet: 14

WAS CASING RIPPED OR PERFORATED? ____ YES X NO

Pursuant to § 10-624 of the State Govt. Article of the Maryland Code, personal info requested on this form is used in processing this form pursuant to COMAR 26.04.04. Failure to provide the info may result in this form not being processed. You have the right to inspect, amend, or correct this form. The Maryland Department of the Environment is subject to the Maryland Public Information Act. This form may be made available on the Internet via MDE's website and is subject to inspection or copying, in whole or in part, by the public and other governmental agencies, if not protected by federal or State Law.

MWD597 — MWD / MSD / MGS — 5/30/2019

SIGNATURE-MASTER WELL DRILLER OR SUPERVISING SANITARIAN LICENSE# — CIRCLE ONE — DATE

OWNER