RESPONSE AND DEVELOPMENT COMPLETION REPORT

AREA B: SUB-PARCEL B19-1 TRADEPOINT ATLANTIC SPARROWS POINT, MARYLAND

Prepared For:



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Respectfully Submitted,

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Revision 0 – July 15, 2020

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1.0 INTRODUCTION

ARM Group Inc. (ARM), on behalf of EnviroAnalytics Group (EAG), has prepared this Response and Development Completion Report for a portion of the Tradepoint Atlantic property that has been designated as Area B: Sub-Parcel B19-1 (the Site). Tradepoint Atlantic submitted a letter (**Appendix A**) requesting an expedited remedial plan review to achieve construction deadlines for the proposed development on this Site. The full Parcel B19 comprises 86 acres of the approximately 3,100-acre former plant property located as shown on **Figure 1**. Sub-Parcel B19-1 consists of approximately 3.2 acres that was developed in the eastern portion of Parcel B19.

This report documents completion of the development performed on Sub-Parcel B19-1. Details regarding environmental conditions encountered at the Site are presented in the Parcel B19-1 Phase II Investigation Report (Revision 0 dated April 9, 2018).

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 signed on June 18, 2014 and submitted to the MDE shortly thereafter. On September 11, 2014, MDE determined that Tradepoint Atlantic was eligible for participation in the VCP. On September 12, 2014, Tradepoint Atlantic and MDE entered into an Administrative Consent Order (ACO) that allows for designation of certain areas of the site-wide property for investigation and remediation on a priority basis through the VCP process. A VCP application for the priority areas (designated as Area A), including the Site, was submitted to the MDE on September 12, 2014.

The ACO provides the framework for investigations and remedial measures to address contaminants of concern on the entire 3,100-acre property under MDE's VCP. Additionally, Tradepoint Atlantic and the United States Environmental Protection Agency (USEPA) entered into a Settlement Agreement and Covenant Not to Sue (SA), which was effective as of November 25, 2014. The SA outlines Tradepoint Atlantic's obligations and work to be performed associated with the existing contamination on the site-wide property.

1.1. REPORT PURPOSE

The purpose of this Response and Development Completion Report is to document response action and development activities undertaken in order to secure a No Further Action (NFA) Letter and Certificate of Completion (COC) for the Site. In addition, this report is being submitted in accordance with the requirements outlined in the following agreements:

- ACO between Tradepoint Atlantic (formerly Sparrows Point Terminal, LLC) and the MDE, effective September 12, 2014; and
- Settlement Agreement and Covenant Not to Sue (SA) between Tradepoint Atlantic (formerly Sparrows Point Terminal, LLC) and the USEPA, effective November 25, 2014.



The following section (Section 1.2) provides the project background and Section 1.3 provides an overview of the Site development and response action activities. The response actions performed are described in Section 2, and conclusions are provided in Section 3.

1.2. PROJECT BACKGROUND

1.2.1. Site Description and History

Parcel B19 includes an area of 86 acres as shown in **Figure 1**. The Sub-Parcel B19-1 Development Area consists of 3.2 acres in the eastern portion of Parcel B19 and has been developed for use as a concrete batching plant (**Figure 2**). The Site is currently zoned Manufacturing Heavy-Industrial Major (MH-IM) and was not occupied prior to the start of development activities. All former buildings at the Site were demolished prior to the start of development activities, with the exception of a former office building, and was cleared of all significant vegetation.

The Site is part of an approximately 3,100-acre former steel mill that operated for over one hundred years. In 2012, steelmaking operations at the facility ceased. Throughout 2013 to the present day, a demolition contractor has been demolishing the majority of the above-grade structures on the site-wide property.

Sub-Parcel B19-1 is at an elevation of approximately 10 feet above mean sea level (amsl). Elevations in the parcel are fairly uniform between 8 and 14 feet over the majority of the sub-parcel area. Drainage directions appear to vary in different areas of the small sub-parcel based on existing topographic information (indicated on **Figure 2**). According to Figure B-2 of the Stormwater Pollution Prevention Plan (SWPPP) Revision 5 dated June 1, 2017, stormwater from the Site may be directed toward the adjacent Old Road Bay through National Pollution Discharge Elimination System (NPDES) Outfall 016 to the east or may be discharged through the NPDES Outfall 017 which is located in the adjacent Parcel B7 to the north of Parcel B19.

There is no groundwater use on-site or within the surrounding Tradepoint Atlantic property.

1.2.2 Historical Environmental Activities

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 Sub-Parcel B19-1 Development Area was formerly occupied by the Maryland Pig Plant. Several buildings associated with the former Maryland Pig Plant were demolished prior to the start of development. One existing building (former office building) was retained. The main



components and function of the Maryland Pig Plant are discussed in greater detail in the Sub-Parcel B19-1 RADWP.

A Phase I Environmental Site Assessment (ESA) was completed by Weaver Boos Consultants for the entire Sparrows Point property which resulted in a report titled *Phase I Environmental Site* Assessment Report, Former RG Steel Facility, 1430 Sparrows Point Boulevard and 5111 North Point Boulevard, Sparrows Point, Maryland dated 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 Resource Conservation and Recovery Act (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 Environmental 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. There were no RECs identified within the Sub-Parcel B19-1 development boundaries.

Relevant SWMUs and AOCs were also identified as located in 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 SWMUs or AOCs identified anywhere within the entire Parcel B19 boundary.

A Phase II Investigation specific to soil conditions was performed for Parcel B19 in accordance with the requirements outlined in the ACO as further described in the Phase II Investigation Work Plan – Area B: Parcel B19 (Revision 1) dated August 10, 2016. This Work Plan and an associated comment response letter dated March 7, 2017 were approved by the agencies on March 9, 2017. Four additional soil borings were installed to further evaluate the Sub-Parcel B19-1 Development Area following approval of the Phase II Investigation Work Plan, in accordance with a comment response letter dated May 15, 2017 which was submitted to the agencies in support of the Sub-Parcel B19-1 RADWP.

A total of 90 soil samples (from 42 boring locations) were collected and analyzed to assess the presence or absence of contamination in Parcel B19. Based on the scope of development and



limited footprint for the proposed concrete batching plant (3.2 acres), a total of 28 of the Phase II Investigation samples from 12 boring locations were selected for a representative evaluation of Sub-Parcel B19-1. These borings are all located within, or immediately adjacent to, the proposed development area such that the data from these borings are considered representative of soil conditions within Sub-Parcel B19-1. The findings of the Phase II Investigation are presented in the Parcel B19 Phase II Investigation Report.

Soil sample results relevant for the Sub-Parcel B19-1 Development Area were screened against the Project Action Limits (PALs) established in the site-wide Quality Assurance Project Plan (QAPP) dated April 5, 2016, or based on other direct agency guidance (e.g., TPH/Oil & Grease). In general, results of the Phase II ESA indicated the presence of three metals (arsenic, manganese, and hexavalent chromium) at concentrations exceeding Project Action Limits established in the QAPP. No samples evaluated within the B19-1 Development Area exceeded the PAL for TPH/Oil & Grease (6,200 mg/kg). In addition, no evidence of potential non-aqueous phase liquid (NAPL) was noted in the soil core of any Phase II Investigation boring relevant for Sub-Parcel B19-1.

Groundwater within Parcel B19 was investigated in accordance with the separate Area B Groundwater Investigation Work Plan (Revision 3) dated October 6, 2015. This Work Plan was previously approved by the agencies on October 5, 2015. No permanent wells were installed or sampled within Sub-Parcel B19-1 for the Area B Groundwater Investigation. Groundwater was not encountered during development in the sub-parcel.

The analytical results for the investigation activities are discussed in detail in the Parcel B19 Phase II Investigation Report. The Sub-Parcel B19-1 RADWP presents a human health Screening Level Risk Analysis (SLRA) for the surface and subsurface soils within the proposed development area. Based on this SLRA, no further action was required to be protective of current or future Composite Workers either before or after the proposed development. No environmental capping was required for this project.

1.3. SITE DEVELOPMENT AND RESPONSE ACTIONS

Sub-Parcel B19-1 has been redeveloped as a concrete batching plant. Development improvements took place on approximately 3.2 acres of land in the eastern portion of Parcel B19. The proposed future use is Tier 3B – Restricted Industrial. The remainder of Parcel B19 will be addressed in additional separate development plans in accordance with the requirements of the ACO that will include RADWPs, if necessary.

An as-built drawing for the completed development is included in **Appendix A**.

The Site is serviced by municipal water and sanitary sewer through Baltimore County as well as below grade storm water drains and storm water management structures, natural gas, and electric installed as part of the redevelopment activities. Groundwater beneath the Site is not used as a



potable water supply. To ensure groundwater will not be used, a groundwater use restriction will be placed on the Site as part of the deed restrictions recorded as discussed further in Section 2.12.

Based on the SLRA, no engineered barriers were required to be protective of current or future Composite Workers. Following approval of the Development Completion Report and receipt of the NFA Letter, institutional controls including a groundwater use deed restriction and industrial land use restriction will be recorded for the Site in order to mitigate potential exposure.

This Development Completion Report demonstrates that potential exposure pathways on the parcel are addressed in a manner that protects public health and the environment.



2.0 DEVELOPMENT ACTIONS

Between October 2017 and January 2018, the following activities were conducted as part of the development actions:

- Completion of site preparation/grading
- Installation of structures

The primary construction contractor for this work was PCS Concrete.

As no intrusive activities were performed, no environmental professional (EP) oversight occurred during development. A site inspection was conducted by representatives from ARM and Hillis Carnes Engineering Associates on August 16, 2018 to confirm that all development improvements had been constructed as proposed. A photograph log for the Site is provided in **Appendix B**. The Notice of Readiness of Use (As-Built) letter provided by HCEA (**Appendix C**) states that development activities were completed in general accordance with the Sub-Parcel B19-1 RADWP.

2.1. EROSION AND SEDIMENT CONTROL INSTALLATION FOR DEVELOPMENT

Installation of erosion and sediment controls was completed in accordance with the requirements of the Baltimore County permit prior to any construction at the Site. It should be noted that no ground intrusive activities were performed during construction.

2.2. HEALTH AND SAFETY PLAN

During redevelopment activities, there was the potential for exposure to constituents of potential concern (COPCs) through incidental ingestion of soil and/or groundwater, dermal contact of soil and/or groundwater, and inhalation of soil particles by construction workers. Therefore, construction contractors and field personnel were required to comply with the Health and Safety Plan (HASP) prepared by EAG (January 2015).

The primary actions utilized to manage exposure for construction workers were dust control, as further discussed in Section 2.9, and the use of appropriate personal protective equipment (PPE) during construction activities. A copy of the HASP was present at the Site during response action activities, and construction personnel were advised of the requirements of the HASP prior to working on the Site. The Contractor required its employees and subcontractor employees to sign in and out each day.

2.3. SITE PREPARATION/GRADING

The Contractor confirmed that no grading activities were performed. All plant equipment was installed above existing concrete pads.



2.4. Installation of Structures

Minor structures in support of the concrete batching plant were installed at the grades and lines shown on the development plan in **Appendix A**. No ground intrusive work was performed.

Although a set of wash-out pits was proposed in the original development plans presented in the RADWP, no new stormwater facilities were constructed at the Site. The tenant has elected to use aboveground portable basins in lieu of the wash-out pits. As no intrusive activities were performed, the Construction Worker exposure risk was reduced.

2.5. WATER MANAGEMENT

No dewatering or stormwater management practices were required or implemented during construction at the Site.

2.6. REMOVAL OF MATERIAL

The Contractor confirmed that no ground intrusive work was performed. No excess soil was removed from the parcel during construction work.

2.7. FILL MATERIAL CHARACTERIZATION

As no site grading work was performed, no fill materials were brought to the site.

2.8. DUST MONITORING

2.9. SITE CAPPING

No environmental capping was required for the Sub-Parcel 19-1 Development to be protective of future Composite Workers. No capped areas were constructed in any areas of the Site.

2.10. INSTITUTIONAL CONTROLS (FUTURE LAND USE CONTROLS)

Long-term conditions related to future use of the Site will be placed on the No Further Action Letter (NFA) and COC. These conditions are anticipated to include the following:

- A restriction that limits the use of the property to industrial land use.
- 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.
- Requirement for a HASP in the event of any future excavations at the Site.
- Complete appropriate characterization and disposal of any future material excavated from the subsurface in accordance with applicable local, state, and federal requirements.



Tradepoint Atlantic will file the above deed restrictions as defined by the MDE VCP in the NFA. The entire Site will be subject to the industrial use groundwater use restrictions.

2.11. POST REMEDIATION REQUIREMENTS

Post remediation requirements will include compliance with the conditions specified in the NFA and the deed restrictions recorded for the Site. Deed restrictions will be recorded within 30 days after receipt of the final NFA.

The MDE will be provided with a written notice at least 30 days prior to any planned excavation activities at the Site. 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 procedures.



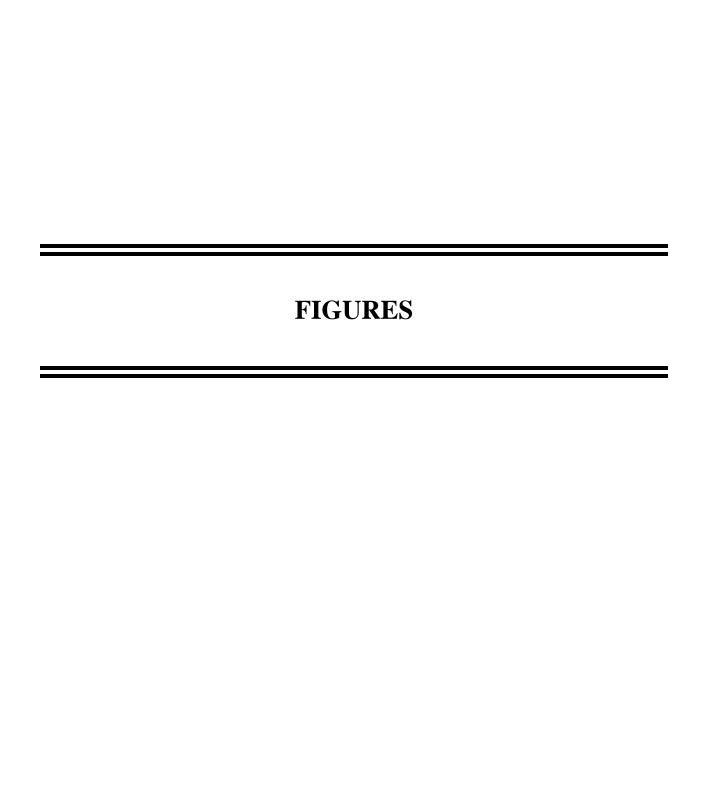
3.0 CONCLUSION

Between October 2017 and January 2018, development actions were conducted as part of the redevelopment of the Site identified as Sub-Parcel B19-1. No further action was required to be protective of current and future Composite Workers. The primary development actions included the installation of a concrete plant.

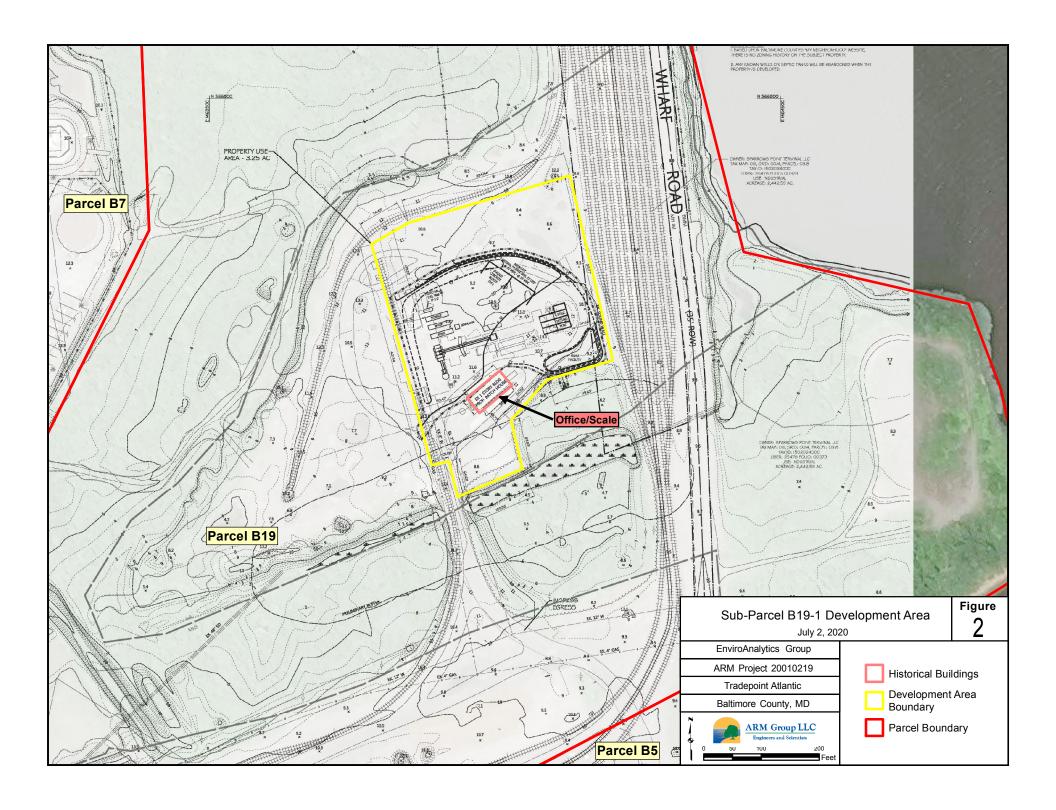
No response actions were proposed in the RADWP. As a result of the information contained in this document, it has been demonstrated that the development actions have been completed in accordance with the Sub-Parcel B19-1 RADWP. A Notice of Readiness of Use (As-Built) prepared by the EP, a Professional Engineer registered in Maryland, is enclosed in **Appendix C** to certify that the Site is suitable for occupancy and use.

With the redevelopment of the Site, the applicable requirements for obtaining a NFA Letter and COC for this Site have been fulfilled. Therefore, Tradepoint Atlantic is respectfully requesting issuance of a NFA Letter for the Site at this time. It is ARM's understanding that Tradepoint Atlantic will record the NFA Letter and the deed restrictions identified in the RADWP within 30 days after receipt of the final NFA Letter. Proof of recordation will be submitted to MDE upon receipt from Baltimore County.









APPENDIX A



APPENDIX B

Sub-Parcel B19-1 Tradepoint Atlantic Sparrows Point, MD



081618-1: Concrete plant in center of site.



081618-2: Stacked concrete blocks and materials storage.

Sub-Parcel B19-1 Tradepoint Atlantic Sparrows Point, MD



 $081618\hbox{-}3$: Stacked concrete blocks and materials storage.



081618-4: Electrical transformer on concrete pad.

APPENDIX C



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December 10, 2019

Mr. Pete Haid Tradepoint Atlantic 1600 Sparrows Point Boulevard Baltimore, Maryland 21219

Readiness of Use – As-Built Letter

Area B: Sub-Parcel B19-1 Tradepoint Atlantic Sparrows Point, Maryland

Dear Mr. Haid:

RE:

Per the request of Tradepoint Atlantic (Client), Hillis-Carnes Engineering Associates, Inc. (HCEA) is providing this Readiness of Use – As-Built Letter (Letter) for Area B: Sub-Parcel B19-1 at Sparrows Point, Maryland (Site).

In conjunction with HCEA's environmental services at the Site, HCEA was provided with the Response and Development Work Plan for Area B: Sub-Parcel B19-1 (Revision 3 – September 27, 2017), hereafter referred to as the RDWP. Based on observations made by HCEA, it is HCEA's opinion that the work performed at the Site was completed in general accordance with the RDWP.

This Letter has been prepared for the exclusive use of the Client pursuant to the agreement between the Client and HCEA, and in accordance with generally accepted engineering practices. No warranty, express or implied, is made herein. Use and reproduction of this Letter by any other person is unauthorized.

HCEA appreciates the opportunity to have been of assistance on this project. If you have any questions regarding this Letter, please feel free to contact us at 410-880-4788.

Sincerely,

HILLIS-CARNES ENGINEERING ASSOCIATES, INC.

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