



UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION III
STATEMENT OF BASIS

February 2017

Parcel A1

And

Sub-Parcel B4-1

Tradeport Atlantic

Sparrows Point, Maryland

MDD053945432

Table of Contents

I Introduction	1
II. Background	2
A. History.....	2
B. Site Geology and Hydrogeology	3
II. Parcel Descriptions	4
A. Parcel A1	4
B. Sub-Parcel B4-1.....	4
IV. Summary of Investigations	5
A. Parcel A1	5
(1) Soil Exposure Pathway	5
(2) Groundwater Exposure Pathway	6
(3) Vapor Intrusion	6
B. Sub-Parcel B4-1.....	7
(1) Soil Exposure Pathway	7
(2) Groundwater Exposure Pathway	8
(3) Vapor Intrusion	8
IV. Corrective Action Objectives	8
V. Proposed Remedy for Soils and Interim Remedy for Groundwater	9
A. Engineering Controls.....	9
B. Institutional Controls	9
C. Groundwater	10
VI. Evaluation of EPA’s Proposed Remedy.....	11
VII. Financial Assurance	13
VIII. Public Participation.....	13
Attachment 1 – Administrative Record List	
Figure 1 Site Location Map	
Figure 2 Site Map for Parcel A1	
Figure 3 Site Map for Parcel B4-1	

I Introduction

The United States Environmental Protection Agency (EPA) has prepared this Statement of Basis (SB) to solicit public comment on its proposed remedy for two parcels of property, Parcel A1 and Sub-Parcel B4-1, respectively, located on the 3,100-acre Sparrows Point Facility (Facility) in Baltimore Harbor. Tradepoint Atlantic (TPA), the current owner of the Facility, is subdividing the Facility into parcels for redevelopment. EPA understands that TPA has leased Parcel A1, comprising 48.5 acres, to the FedEx Corporation which is constructing a facility to be used as part of its delivery operations, and has constructed an asphalt car parking lot on Sub-Parcel B4-1, comprising 21 acres, to be used as part of an automotive and distribution center.

The Facility is subject to EPA's Corrective Action authorities under the Solid Waste Disposal Act, as amended, commonly referred to as the Resource Conservation and Recovery Act (RCRA), 42 U.S.C. §§ 6901 et seq. The Corrective Action Program requires that facilities subject to certain provisions of RCRA investigate and address releases of hazardous waste and hazardous constituents, often in the form of soil or groundwater contamination, that have occurred at or from their property. Maryland is not authorized for the Corrective Action Program under Section 3006 of RCRA, therefore, EPA retains primary authority in the State of Maryland to implement it.

EPA's proposed remedy for soils at Parcel A1 and Sub-Parcel B4-1 consists of 1) installation of protective caps and covers to restrict direct contact, using concrete (i.e., buildings) or asphalt paving, 2) clean fill cover in landscaped areas; 3) land use restrictions to prevent residential land use, and 4) operation and maintenance requirements to ensure the protectiveness and integrity of the covers. This SB does not include a proposed final remedy for groundwater at Parcel A1 and Sub-Parcel B4-1. EPA will issue a separate SB for Facility-wide groundwater, including groundwater at Parcel A1 and Sub-Parcel B4-1, to solicit public comment once the groundwater at the entire Facility has been evaluated under the Corrective Action program. In the interim, EPA, in this SB, is proposing to require groundwater use restrictions at Parcel A1 and Sub-Parcel B4-1 to prevent potable use of shallow groundwater until a final remedy for Facility-wide groundwater is selected.

EPA is providing a thirty (30) day public comment period on this SB. EPA may modify its proposed remedy based on comments received during this period. EPA will announce its selection of a final remedy for the Facility in a Final Decision and Response to Comments (Final Decision) after the public comment period has ended.

Information on the RCRA Corrective Action Program as well as a fact sheet for the Facility can be found by navigating to <https://www.epa.gov/hwcorrectiveactionsites/contact-information-corrective-action-hazardous-waste-clean-ups-delaware>. An index to the Administrative Record (AR) which supports this SB is attached as Appendix 1, and references all documents, including data and quality assurance information, on which EPA's proposed remedy is based. See Section VIII, Public Participation, for information on how you may review the AR.

II. Background

A. History

The Facility comprises a 3,100-acre peninsula in Baltimore Harbor (Sparrows Point Peninsula or Peninsula), generally bounded by the Back River, Bear Creek, and the Northwest Branch of the Patapsco River. In 1887 Maryland Steel built an iron furnace on the Facility, and the first iron was cast in 1889. The Bethlehem Steel Corporation (BSC) purchased the property in 1916 and enlarged it, building mills to produce hot rolled sheet, cold rolled sheet, galvanized sheet tin mill products, and steel plate. During peak production in 1959, BSC operated 12 coke-oven batteries, 10 blast furnaces, and four open-hearth furnaces at the Facility.

This SB summarizes work undertaken under a 1997 federal consent decree and a 2014 settlement agreement, as detailed below. RCRA Corrective Action work is ongoing at the Facility.

In 1997 the Federal District Court for the District of Maryland entered a Consent Decree (CD) under Section 3008(h) of RCRA, 42 U.S.C. § 6928(h), that had been signed by BSC, the Maryland Department of Environment (MDE), and EPA (Civil Action Nos. JFM-97-558 and JFM-97-559). The CD required BSC to undertake certain RCRA Corrective Action activities at the Facility, including, among other tasks, completing a Site Wide Investigation (SWI) and a Corrective Measures Study (CMS), and implementing Interim Measures (IMs) as necessary. At the time the CD was entered, EPA and MDE had identified eighty-one (81) solid waste management units (SWMUs) and twenty-eight (28) areas of concern (AOCs) at the Facility, and had designated five special study areas to focus on initially in the SWI, consisting of the Tin Mill Canal/Finishing Mills, Greys Landfill, Coke Point Landfill, Coke Oven Areas and Humphreys Impoundment. The CD did not require implementation of corrective measures, apart from IMs, several of which are currently in operation at the Facility.

After BSC declared bankruptcy in 2003, steelmaking continued at the Facility under a series of new owners, each of which also continued to carry out the work required under the CD. Steelmaking operations at the Facility ended in 2012, when then-owner, RG Steel Sparrows Point LLC, declared bankruptcy. In August, 2012 several companies, including Sparrows Point LLC (SPLLC), purchased the Facility from RG Steel Sparrows Point LLC through a bankruptcy sale. SPLLC subsequently acquired all of the property interests in the Facility. In July, 2014, the District Court entered an amendment to the CD adding SPLLC as a Respondent. Meanwhile, SPLLC had notified EPA and MDE of its interest in selling the Facility to Sparrows Point Terminal LLC (SPTLLC). In September, 2014, EPA and MDE entered into a Settlement Agreement (SA) that was subject to public comment, and an Administrative Order on Consent (ACO), respectively, with SPTLLC. The agreements, together, provide for the cleanup of the Facility under both RCRA Corrective Action and Maryland law. SPTLLC subsequently acquired the Facility, and following public comment and publication of EPA's response, the SA was finalized in November, 2014. In 2016 SPTLLC changed its name to TPA. TPA has organized the Facility into parcels for redevelopment as commercial, light industrial and logistics facilities.

The EPA and MDE have been working jointly to oversee the investigation and cleanup of the Facility being conducted under MDE's ACO and EPA's SA. With respect to RCRA Corrective Action, EPA has determined that all of the work required under the CD at Parcel A1 and Sub-Parcel B4-1 has been completed.¹

B. Site Geology and Hydrogeology

The Facility is located within the Coastal Plain Physiographic Province, which is the relatively low-lying portion of the Atlantic Slope. The unconsolidated sediments beneath the Sparrows Point Peninsula lie horizontally on a bedrock surface of Precambrian and Early Paleozoic crystalline rock that slopes downward to the southeast. The unconsolidated sediments include (from youngest corresponding to surficial to oldest) recent fill deposits consisting primarily of iron- and steel-making slag; the Pleistocene Talbot Formation (predominantly clays, organic clays, silts, and muds) approximately five to 100 ft. thick; the Upper Cretaceous Patapsco Formation (predominantly sand and gravel interbedded with lenses of sandy clay) approximately 145 to 255 ft. thick; the Upper Cretaceous Arundel Formation (predominantly dense, plastic clays with nodules of iron oxide and a few discontinuous lenses of sand) approximately 20 to 180 ft. thick with an average thickness of 100 ft.; and the Lower Cretaceous Patuxent Formation (interbedded and lenticular beds of gravel, sand, sandy clay, and clay) approximately 50 to 250 ft. thick. The Cretaceous formations comprise the Potomac Group.

The aquifer system immediately underlying the Sparrow's Point Peninsula is called the Lower Patapsco Aquifer system. A deeper confined aquifer exists below the approximately 100 feet overlying Arundel Clay confining unit in the Patuxent Formation and is called the Patuxent aquifer system. Groundwater investigations at Sparrow's Point are conducted solely in the Lower Patapsco because there is no connection between the two aquifers.

Unconfined groundwater exists within the shallow aquifer comprised of the slag fill material, and intermediate and deeper aquifers exist within the Talbot and Patapsco Formations, respectively. The Lower Patapsco aquifers are hydraulically interconnected, but are partially separated in areas by discontinuous lenses of silt and clay. Radial flow on the western side of the peninsula is toward Bear Creek and the Patapsco River to the west. Flow on the south side of the peninsula is south toward the southern shoreline and turning basin. Flow on the east side of the peninsula is toward Old Road Bay to the east. Groundwater flow direction within the intermediate aquifer along the western portion of the Peninsula is northwest, influenced by historical pumping activities in the area near the shipyard to the west

¹ See September, 12 2014 letter from EPA to SPLLC regarding "carve out area", including Subparcel B4-1, and July 9, 2015 letter from EPA to SPLLC regarding Parcel A1.

of the Peninsula. Groundwater flow direction within the intermediate aquifer along the eastern portion of the peninsula is south-southwest in the apparent direction of the natural gradient. Groundwater flow direction within the deep aquifer is unidirectional to the east-northeast.

II. Parcel Descriptions

A. Parcel A1

Parcel A1 (the Parcel) is located on the northern portion of the Sparrows Point Peninsula adjacent to Bethlehem Boulevard to the north, and the former Rod and Wire Mill to the west. (See Facility Development Map, Figure 1.) The Parcel formerly contained structures and operated historically as a pipe mill from the 1940s until 1984 when operations ceased. In 1998 the Pipe Mill was demolished and the Parcel became and now remains vacant. As part of the SWI, and again during the ACO/SA investigation, building foundations and concrete slabs from the former structures were identified at the Parcel. TPA is constructing a 338,000 square foot, single-story distribution center/warehouse and associated parking lots and landscaped areas for the Fedex Corporation.

The Parcel initially included a portion of East Pond associated with waste-water treatment at the neighboring Rod and Wire Mill (Parcel A-3). In 1985 a pump-and-treat system was installed at the former Rod and Wire Mill, to remove zinc and cadmium contamination in groundwater. This system was upgraded in late 2016 but remains in operation as an IM under the CD. As a result, to ensure that the anticipated development does not adversely impact the pump-and-treat system, the impacted portion of the former East Pond has been carved out of the northwestern corner of Parcel A-1 and is not addressed by this SB.

In addition to the East Pond, three areas of concern were identified on the Parcel during the ACO/SA investigation: the hydraulic oil storage area, the pipe mill selenium testing area, and the pipe mill acid tanks.

B. Sub-Parcel B4-1

Sub-parcel B4-1 (Sub-parcel), part of Parcel B4, is located between the shipyard and Parcel B5 in the southwestern portion of the Facility (Figure 1). TPA has informed EPA that it expects to develop Parcel B4 for use as an automotive and distribution center (Roll-On, Roll-Off or RORO) with development activities including grading, asphalt paving, lighting and security improvements. Sub-parcel B4-1 has already been paved in its entirety with asphalt in accordance with an MDE-approved workplan under Maryland's Controlled Hazardous Substances Program. The Sub-parcel therefore contains no landscaped areas.

Historical activities at Parcel B4 initially included operation of open hearth furnaces, and later, operation of a Basic Oxygen Furnace, Mould Yard, and a Continuous Caster. While the furnace operations historically generated air pollutants, the SWI and the ACO/SA investigation detailed below shows that there currently are no unacceptable risks posed by exposure to soil or groundwater presented by the Sub-parcel. Sub-Parcel B4-1 is presently vacant and all

structures have been demolished except for a 5,750 square foot equipment maintenance shop that will be retained to serve as a future vehicle maintenance shop.

IV. Summary of Investigations

The investigation results of Parcel A1 and Sub-parcel B4-1 are presented in the following subsections. Samples of soil and groundwater were collected at both parcels and compared with site-wide Project Action Limits (PALs) (screening values) that were established in a Quality Assurance Project Plan, dated October 2, 2015, which in turn were based on EPA's Regional Screening Levels for Industrial Exposure (that includes a worker composite exposure to soil, soil vapor levels based on OSWER generic screening levels for vapor intrusion², and potable use of groundwater). Each constituent that exceeded its PAL is deemed a Constituent of Potential Concern (COPC).

A. Parcel A1

Pursuant to approved workplans, approximately 29 surface soil samples, the majority of which are within a 1.5-foot depth, were collected to analyze for Volatile Organic Compounds (VOCs), Semivolatile Organic Compounds (SVOCs), Pesticides/Herbicides/PCBs, inorganics and cyanide. Five temporary monitoring wells were installed with screen intervals between 6 to 16 feet below ground surface. Groundwater was encountered at a depth of 1 to 3.5 feet, and groundwater samples were collected to analyze for VOCs, SVOCs and inorganics. The sampling results are summarized for each media/pathway to support a screening level human health risk assessment. Ecological exposure is not included in the assessment because the area contains no terrestrial habitat.

(1) Soil Exposure Pathway

Three COPCs were present in soil samples in concentrations higher than their respective PALs. The maximum concentration of each of these three COPCs are summarized in Table 1a below. Due to exceedances of PALs for the COPCs shown, surface soil is considered a media of potential concern and may pose unacceptable risks to potential residents (including children), facility workers or visitors, and construction workers that come into contact with impacted soil.

¹ Screening levels from the Office of Solid Waste and Emergency Response (OSWER) Draft Guidance for Evaluating the Vapor Intrusion to Indoor Air Pathway from Groundwater and Soils, Table 2c, November 2002.

Table 1a PARCEL A1 SOIL	PAL (mg/kg)	Maximum Concentrations Detected (mg/kg)
Arsenic	3	15
Arocolor1260	1	21
TPH-DRO ³	620	26000

(2) Groundwater Exposure Pathway

Four COPCs were present in groundwater samples in concentrations higher than their respective PALs and the maximum concentration of these COPCs are summarized in Table 2a below. Due to exceedance of PALs, groundwater is considered a media of potential concern for potable use.

Table 2a PARCEL A1 GROUNDWATER	PAL (ug/l)	Maximum Concentrations Detected (ug/l)
Iron	14000	26000
Lead	15	17
Manganese	430	2200
1,1-Dichloroethane	2.7	7.7

(3) Vapor Intrusion

Total Petroleum Hydrocarbons were detected in certain locations in groundwater and soil, but none of the petroleum constituents (benzene, toluene, ethylbenzene, xylenes or naphthalene) exceed vapor intrusion PALs. One non-petroleum VOC, 1,1-Dichloroethane, was detected in groundwater above the tap water PAL, but not above the vapor intrusion PAL.

³ Total Petroleum Hydrocarbons – Diesel Range Organics.

Therefore, vapor intrusion is not a media of potential concern for future occupied buildings at the Parcel.

B. Sub-Parcel B4-1

Thirteen soil borings and one groundwater well were sampled at the main parking area located on Sub-parcel B4-1. In addition, three subslab soil vapor samples were collected inside the existing maintenance shop that is retained for future use.

(1) Soil Exposure Pathway

The maximum concentration of each of the COPCs detected above its respective PAL in soil samples is shown in Table 1b, below. Due to exceedances of some PALs, surface soil is considered a media of potential concern and may pose unacceptable risks to residents (including children), facility workers or visitors, and construction workers that come into contact with impacted soil.

Table 1b		
SUB-PARCEL B4-1		
SOIL	PAL in (mg/kg)	Maximum Concentrations Detected (mg/kg)
Benzo(a)pyrene	0.29	1.5
Benzo(b)fluoranthene	2.9	3.7
Dibenz(a,h)anthracene	0.29	0.29
Aroclor1254	0.97	9.53
Aroclor1260	0.99	1.78
Total PCB	0.97	2.191
Arsenic	3	40.5
Chromium VI	6.3	7.5
Lead	800	1110
Manganese	26,000	42,900

(2) Groundwater Exposure Pathway

The groundwater sampling results are summarized in Table 2b below, showing only maximum concentrations of the constituents that were detected above their respective PAL. Due to exceedance of PALs, groundwater is considered a media of potential concern for potable water.

Table 2b SUB-PARCEL B4-1 GROUNDWATER	PAL (ug/l)	Maximum Concentrations Detected (ug/l)
Benzo(a)anthracene	0.012	0.024
Benzo(b)fluoranthene	0.034	0.11
TPH-DRO	47	694
Chloroform	0.22	1.3
Thallium	2	10

(3) Vapor Intrusion

One round of subslab soil vapor samples was collected from three probes installed under the slab of the existing maintenance shop building. The samples were analyzed for VOCs. None of the detected vapor concentrations exceeded soil vapor intrusion PALs, therefore, vapor intrusion is not a media of concern for future occupied buildings at the Parcel.

IV. Corrective Action Objectives

EPA's Corrective Action Objectives for the specific environmental media at the Parcel and Sub-parcel are as follows:

1. Soils

EPA's Corrective Action Objective for the surface soil at the Parcel and Sub-parcel is to prevent direct human contact with hazardous constituents remaining in the soil that have been detected above applicable PALs as identified in Tables 1a and 1b.

2. Groundwater

While Facility-wide groundwater is being evaluated under the Corrective Action Program, EPA's proposed interim corrective action objective for groundwater at the Parcel and

Sub-parcel is to prevent exposures to hazardous constituents in groundwater that have been detected above applicable PALs as identified in Tables 2a and 2b.

V. Proposed Remedy for Soils and Interim Remedy for Groundwater

A. Soils

EPA's Proposed Remedy for soils at the Parcel and Sub-parcel consists of engineering and institutional controls as described below.

(1) Engineering Controls

The proposed engineering controls consist of capping impacted soil with a concrete cover, building foundation, asphalt parking lot, concrete walkways, and/or landscaped areas with two-foot thick clean fill or top soil over a geotextile barrier. Submerged gravel wetlands will be constructed to facilitate storm water drainage. Impacted soil removed from grading and construction activities will be placed beneath the building footprint or paved areas, and soils deemed less than geotechnically sufficient to support construction activities will be removed and disposed of offsite at a permitted facility. The permanent cover will protect onsite workers or visitors from direct exposure to the impacted soil by contact or dust inhalation.

Once EPA selects the Final Remedy for the Parcel and Sub-parcel, the components of the Final Remedy will be incorporated into and become enforceable under paragraph 72 of the PPA. In addition, if required, within sixty (60) days of the issuance of the Final Remedy, TPA shall submit to EPA for approval a Corrective Measures Implementation Workplan ("CMI Workplan") for implementation of the corrective measures selected in the Final Remedy. EPA acknowledges that TPA may not be required to submit a CMI Workplan if EPA determines that all of the information required in a CMI Workplan has been included in the Response Action Plan (RAP) for Parcel A-1 (April 2015) and the Response and Development Work Plan (Development Plan) for Sub-parcel B4-1 (May 2016). The RAPs and Development Plan currently include construction of 1) a Federal Express building (slab on grade), with associated parking lots and landscaped areas on Parcel A1, and 2) a large vehicle parking and storage area on Sub-parcel B4-1, respectively. If EPA determines that a CMI Workplan is not required, EPA will so notify TPA, and the RAP and Development Plan will then be enforceable by EPA under paragraph 72 of the PPA.

(2) Institutional Controls

EPA's proposed remedy for soils includes the following use restrictions and requirements to be implemented through institutional controls (ICs):

- The Parcels shall not be used for residential purposes, and within 90 days of EPA's issuance of a Final Decision, the then-current owner shall file a deed restriction to prevent use of the Parcels for residences, schools, day care facilities, or recreational

uses that would result in exposure to contaminated soil above residential risk-based concentrations and shall limit land use to commercial or industrial;

- The then-current owner shall maintain the integrity of all caps and covers on the Parcel and Sub-parcel by conducting regular periodic inspections (no less frequently than [yearly]), making timely repairs if needed, and maintaining a record of such inspection and maintenance.
- All earth moving activities on the Parcel and Sub-parcel, including excavation, grading, and/or utility construction, shall be conducted in compliance with an MDE-approved Soil Management Plan such that the activity will not pose a threat to human health and the environment or adversely affect or interfere with the covered areas;
- A site-specific health and Safety Plan shall be submitted to MDE and EPA for approval prior to any earth moving activities to protect construction workers from engaging in activities that could expose them to contaminants remaining in soils; and
- The then-current owner shall allow EPA, MDE and/or their authorized agents and representatives, access to the Parcel and Sub-parcel to inspect and evaluate the continued effectiveness of the caps and covers, and (if necessary) to ensure completion of any additional remediation necessary to ensure the protection of public health and safety and the environment.

EPA anticipates that the above-listed use restrictions necessary to prevent human exposure to contaminants remaining in soils at the Parcel and Sub-parcel will be implemented through an enforceable environmental covenant, filed with the Baltimore County Land Records Office or other appropriate office. If EPA determines that additional maintenance and monitoring activities, use restrictions, or other corrective actions are necessary to protect human health or the environment, EPA has the authority to require and enforce such additional corrective actions through an enforceable instrument, provided any necessary public participation requirements are met.

B. Groundwater

Because contaminants remain in the groundwater at the Facility above levels appropriate for residential use, while Facility-wide groundwater is being investigated further, EPA is proposing to prohibit the potable use of groundwater at the Parcel and Sub-parcel as an interim remedy to prevent human exposure to those contaminants in the short-term. The groundwater use restriction will be implemented through enforceable ICs in conjunction with the land use restriction described above.

VI. Evaluation of EPA's Proposed Remedy

For purposes of EPA's evaluation below, the proposed remedy for soils and the proposed interim remedy for groundwater will be hereinafter referred to collectively as the Proposed Remedy.

A. Threshold Criteria

1. Protect Human Health and the Environment

The Proposed Remedy will protect human health from exposure, including future exposure, to soil and groundwater contamination. The Proposed Remedy will require that the owner install caps throughout the Parcel and Sub-parcel where soil samples show exceedances of PALs. In addition, because contaminants will remain in the soil and groundwater at the Parcel and Sub-parcel at levels inappropriate for residential use, EPA's Proposed Remedy requires land and groundwater use restrictions that will prohibit future uses that would pose an unacceptable risk.

2. Achieve Media Cleanup Objectives

EPA's Proposed Remedy meets the soil cleanup objectives appropriate for the current and reasonably anticipated future land use. The Proposed Remedy does not include cleanup of groundwater, which will instead be addressed separately by a Facility-wide groundwater remedy developed for the entire 3,100-acre Sparrows Point Facility. In the short-term, the Proposed Remedy will prohibit potable use of groundwater at the Parcel and Sub-parcel.

3. Remediating the Source of Releases

The Proposed Remedy does not require remediating the sources of releases. The soil management procedures will require the proper removal and disposal of potentially contaminated soils that are disturbed during any construction/excavation activities conducted on-Site in accordance with applicable state and federal laws and regulations, thereby removing the source of contaminants from Facility soils and thereby reducing the potential for contaminants to migrate from those soils to groundwater.

B. Balancing/Evaluation Criteria

1. Long-Term Effectiveness

The Proposed Remedy will provide long-term effectiveness in protecting human health and the environment by controlling exposure to contaminants remaining in soils. Land use restrictions will prohibit use of the Parcel and Sub-parcel for residences, schools, day care facilities, and recreational uses that would result in exposure to contaminated soil above residential risk-based concentrations. The Proposed Remedy requires compliance with an MDE-approved Soil Management Plan to control exposure to and spread of contaminated soil during construction and regrading activities. Additionally, the ICs will impose a requirement

that the owner inspect the engineering covers no less than annually, and to make repairs as necessary. While EPA is not proposing a remedy for groundwater in this SB, the Proposed Remedy does not propose an interim remedy which will provide long-term effectiveness by prohibiting groundwater withdrawal for all potable uses.

2. Reduction of Toxicity, Mobility, or Volume of the Hazardous Constituents

The hazardous constituents in the soil are largely immobile. Compliance with an MDE-approved Soil Management Plan in construction and landscaping activities will control exposure and spread of contaminated soil. No new activities are anticipated at the Parcel or Sub-parcel that would further contaminate soil or groundwater.

3. Short-Term Effectiveness

The installation of caps and covers requires minimal installation time, minimal excavation, and minimal offsite disposal which minimize short-term exposure to contaminated soil. The work will be performed by qualified persons in compliance with the MDE-approved Soil Management and an acceptable health and safety plan.

4. Implementability

EPA does not anticipate any technical or institutional constraints that will inhibit installation of the covers or implementation of the ICs proposed.

5. Cost

The Proposed Remedy will meet the corrective objectives at cost significantly lower than other alternatives such as complete removal of contaminated media. The remedy construction and maintenance costs are incorporated into the necessary costs to develop the Parcel and Sub-parcel.

6. Community Acceptance

EPA will provide public comment opportunity on the Proposed Remedy for both the Parcel and Sub-parcel to evaluate community acceptance and document the Final Remedy in the Final Decision. In accordance with the MDE Voluntary Cleanup Process, MDE held a public information section on the RAP for Parcel A1 on May 11, 2015 before approving it on July 14, 2015.

7. State/Support Agency Acceptance

MDE and EPA have jointly conducted this investigation. The basis of EPA's proposed remedy is based on MDE-approved Remedial Action Plan (RAP) for the Parcel and Development Plan for the Sub-parcel.

VII. Financial Assurance

The ACO requires TPA to establish and maintain financial assurance for completion of work in accordance with Section XIII (Financial Assurance) of the ACO. TPA has provided MDE a copy of the Trust Agreement and documentation that the Trust has been initially funded with \$48 million, in addition to a \$5 million bond. This financial assurance, for which MDE is the custodian, will also satisfy EPA's financial assurance requirements for this Proposed Remedy.

VIII. Public Participation

Before EPA selects a Final Remedy for the Parcel and Sub-parcel, the public may participate in the remedy selection process by reviewing this SB and documents contained in the Administrative Record (AR). The AR contains all information considered by EPA in reaching this proposed decision and is available for public review during office hours at two locations:

Barbara Brown
Land Management Administration
Maryland Department of the Environment
1800 Washington Boulevard Baltimore, Maryland 21230
(410) 537-3493

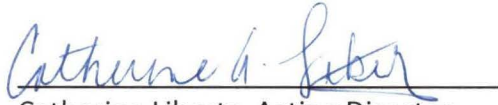
Or

Erich Weissbart
U.S. EPA Region III
1650 Arch Street
Philadelphia, PA 19103
weissbart.erich@epa.gov
(410) 305-2779

Interested parties are encouraged to review the AR and comment on EPA's Proposed Remedy. The public comment period will last thirty (30) calendar days from the date that notice is published in a local newspaper. You may submit comments by mail, fax, or e-mail to Erich Weissbart, EPA project manager. EPA may hold a public meeting to discuss this Proposed Remedy upon request, which should also be made to Erich Weissbart whose contact information is listed above.

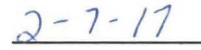
EPA will respond to all relevant comments received during the comment period. If EPA determines that new information warrants a modification to the Proposed Remedy, EPA will modify the Proposed Remedy or select other alternatives based on such new information and/or public comments. EPA will announce its Final Remedy and explain the rationale for any changes in the FDRTC. All persons who comment on this Proposed Remedy will receive a copy of the FDRTC. Others may obtain a copy by contacting Erich Weissbart at the address listed above.

Signature:

A handwritten signature in blue ink, appearing to read "Catherine A. Libertz", written over a horizontal line.

Catherine Libertz, Acting Director
Land and Chemicals Division
USEPA, Region III

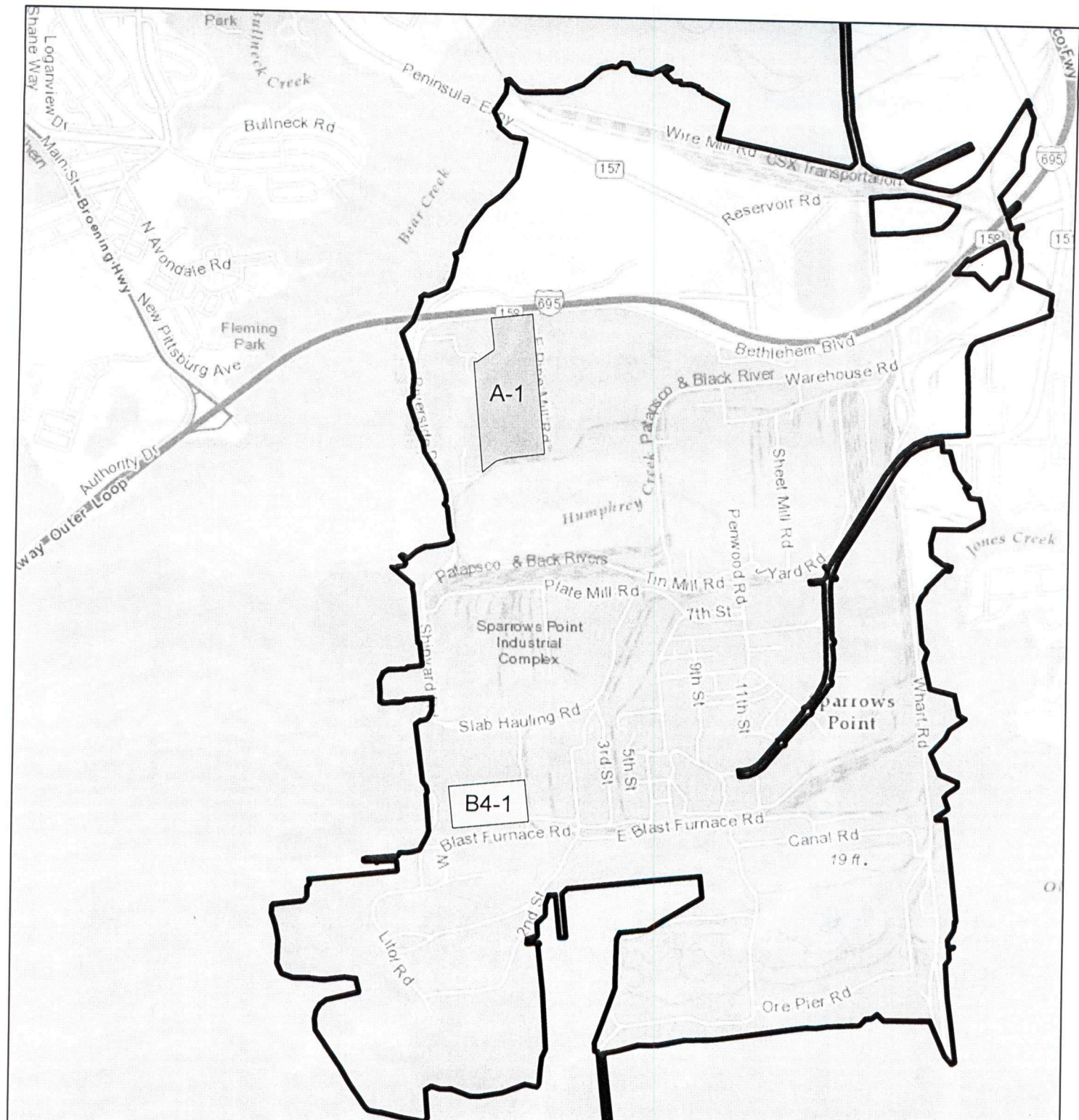
Date:

A handwritten date "2-7-17" in blue ink, written over a horizontal line.

Attachment 1

Administrative Record List

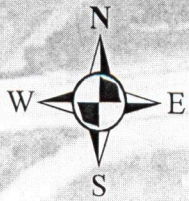
1. September, 12 2014 letter from EPA to SPLLC regarding carve out area.
2. July 9, 2015 letter from EPA to SPLLC regarding Parcel A1
3. Phase II Environmental Site Assessment Report/Response Action Plan, Parcel A1, Sparrows Point Terminal, Maryland, revised July 6, 2015
4. Phase II Investigation Work Plan, Area B: Parcel B4, Sub-parcel B4-1 and Sub-parcel B4-2, Tradepoint Atlantic Sparrows Point, MD, Revision 1, July 8, 2016
5. Response and Development Work Plan, Area B: Sub-parcel B4-1, Tradepoint Atlantic Sparrows Point, MD, Revision 2 August 10, 2016.
6. Quality Assurance Project Plan, Sparrow's Point Terminal Site, Sparrow's Point, Maryland. Enviroanalytics. Revision 3, April 5, 2016.



TradePoint Atlantic
EPA ID # MDD053945432

- A1
- B4-1
- Former Sparrows Point Boundary

Sources: Esri, DeLorme, NAVTEQ, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, and the GIS User Community



A-1

Figure 2
Parcel A1
Tradeport Atlantic
EPA ID # MDD053945432



Source: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

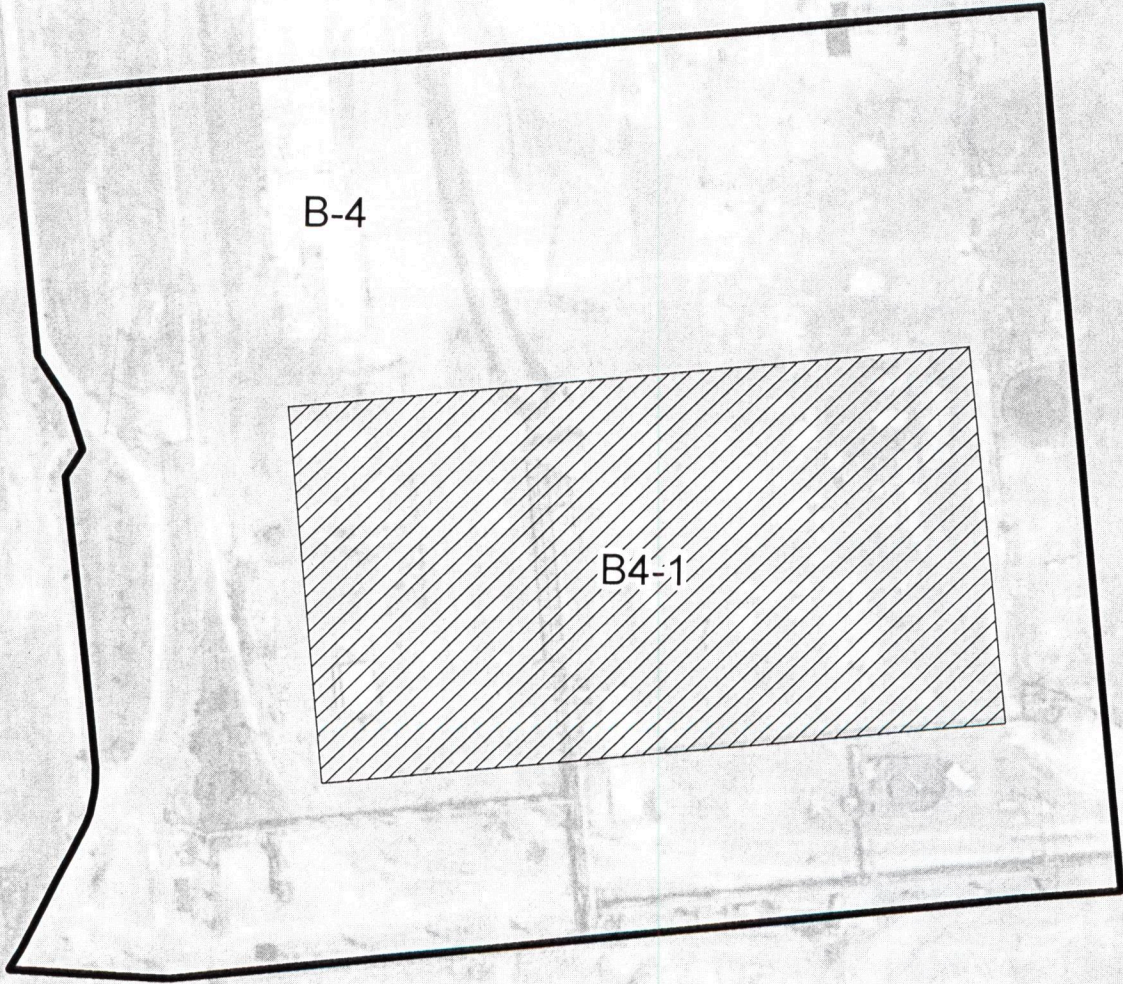
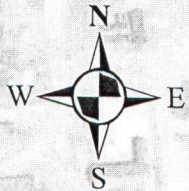
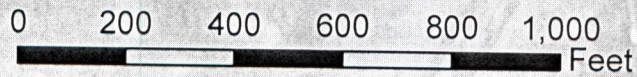
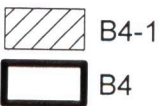


Figure 3
SubParcel B4-1
Tradepoint Atlantic
EPA ID # MDD053945432



Source: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community