March 12, 2018

Mr. Erich Weissbart Remedial Project Manager US EPA Region III, 3LC20 701 Mapes Road Fort Meade, MD 20755

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

#### Re: MULTIMEDIA CONSENT DECREE JFM-97-558 & JFM-97-559 ANNUAL REPORT CALENDAR YEAR 2017

Dear Mr. Weissbart and Ms. Brown:

On behalf of Sparrows Point LLC, enclosed please find the Multimedia Consent Decree Annual Report for 2017. This report provides information and activity progress for 2017 that was accomplished by Sparrows Point LLC, pursuant to Sections VI, XII, and XVIII of the Multimedia Consent Decree.

Please contact me at (314) 620-3056 should questions arise during your review of the enclosed annual report.

Sincerely,

James Calenda

James Calenda Senior Project Manager Enviro Analytics Group

Enclosure



# Multimedia Consent Decree 2017 Annual Report

**Prepared for:** 

**U S Environmental Protection Agency** 

**Maryland Department of the Environment** 

**Prepared for:** 

Sparrows Point, LLC 1600 Sparrows Point Boulevard Baltimore, MD 21219

February 2018



# TABLE OF CONTENTS

1.0	INTRODUCTION	2
2.0	WASTE MINIMIZATION PLAN	4
3.0	CORRECTIVE MEASURES	5
4.0	COMPLIANCE REQUIREMENTS	7
5.0	DECREE MANAGEMENT REPORTING	9

# 1.0 Introduction

The Multimedia Consent Decree (Decree), originally entered into by Bethlehem Steel Corporation (BSC), the U.S. Environmental Protection Agency Region III (EPA) and Maryland Department of the Environment (MDE), defines specific actions required at the Sparrows Point site "Site" located in Baltimore County, Maryland. The Decree became effective on October 8, 1997 (Civil Action JFM-97-558 and JFM-97-559). The Site was purchased by Sparrows Point LLC on September 14<sup>th</sup>, 2012. A stipulated order implementing modifications to the Decree and transferring the Decree to Sparrows Point LLC was executed on July 28, 2014 (Stipulated Order). A subsequent sale of the real property to Sparrows Point Terminal, LLC was completed on September 18, 2014 subject to the provisions of a purchase and sale agreement wherein Sparrows Point LLC remains responsible for the obligations arising under the Consent Decree. Sparrows Point Terminal, LLC is not a party to the Decree.

Environmental actions for the Site are now being implemented pursuant to the following:

- The Stipulated Order for the Decree entered into by Sparrows Point LLC and the respective agencies effective July 28, 2014;
- Administrative Consent Order (ACO) between Sparrows Point Terminal, LLC and the Maryland Department of the Environment (effective September 12, 2014);
- Settlement Agreement and Covenant Not to Sue (SA) between Sparrows Point Terminal, LLC and the United States Environmental Protection Agency (effective November 25, 2014).

The original Decree for the Sparrows Point Site dealt with many issues associated with iron-making, steelmaking, coking, byproduct, plating, and finishing operations. As these operations are no longer conducted, and the associated facilities no longer exist, many specific requirements of the Decree are no longer applicable and have been removed in accordance with the stipulated order implementing modifications to the Decree. In addition, the ACO and SA incorporate relevant ongoing aspects of the Decree by reference.

Specific actions outlined in the Decree include requirements for annual reporting of information and activity progress. This report provides information and activity progress for 2017 that was accomplished by Sparrows Point LLC. There are three sections in the Decree that require annual reporting of information;

Section VI	Paragraph 4	Waste Minimization Plan,
Section XII	Paragraph 5	Notification and Certification of Documents,
Section XVIII	Paragraph 2	Civil Penalties and Pollution Prevention Credits.

Section VI, Paragraph 4, (Waste Minimization Plan), requires a report on the previous year's status of implementing each Work Plan required under Section VI including sampling data related to hazardous waste regulatory determinations.

Section XII, Paragraph 5, Notification and Certification of Documents, requires a progress report on actions completed as required in Sections V (Corrective Measures Work) and VII (Compliance Requirements) of the Decree.

Annual reports of actual pollution prevention expenditures during the previous calendar year for pollution prevention projects described in Section VI are also required by Section XVIII, Paragraph 2, Civil Penalties and Pollution Prevention Credits.

This Annual Report provides information on actions undertaken in 2017 that comply with the requirements of these three paragraphs. Section 2.0 provides the status on the Waste Minimization Plan required in Section VI of the Decree and includes project cost information for the plan as required in Section XVIII. Sections 3.0 and 4.0 provide progress reports as required in Sections V (Corrective Measures) and Section VII (Compliance Requirements) respectively. Section 5.0 presents other supporting information required in Section XII including spill release reporting and changes to the overall management structure utilized by Sparrows Point LLC to implement the Decree.

## 2.0 Waste Minimization Plan

As outlined in the Modified Order, obligations associated with Section VI (Waste Minimization Plan) are no longer required with the exception of Section VI, Paragraph 1.b.6 related to maintenance dredging of the Tin Mill Canal. Information associated with this obligation is as follows:

#### Maintenance Dredging of the Tin Mill Canal

#### **Description of 2017 Activity:**

No maintenance dredging activities were conducted in 2017. However, the *Maintenance Cleanup Plan for the Tin Mill Canal* was finalized and will be implemented in 2018. Once complete, the Decree obligation associated with maintenance dredging will no longer be relevant or required.

#### **2017 Expenditures:** \$0

## **3.0 Corrective Measures**

Paragraph 5 of Section XII of the Decree requires a description of the work undertaken in Sections V (Corrective Measures) and VII (Compliance Requirements) of the Decree. This section provides a status report for corrective measures projects included in Section V of the Decree as follows:

- Rod & Wire Mill Sludge Bin Remediation Area
- Coke Oven Area Interim Measure
- Site Wide Investigation

#### Rod & Wire Mill Sludge Bin Remediation Area

Tasks were completed for the Interim Measure at the former Rod & Wire Mill Sludge Bin Storage Area at Sparrows Point during 2017. An Interim Measure Work Plan (R&W Mill IM Workplan) was implemented in 2017 to install an upgraded interim measure designed to remediate elevated dissolved cadmium and zinc metals within groundwater at the former Rod and Wire Mill Area (*Interim Measure Work Plan In-Situ Groundwater Treatment*, Advanced GeoServices Corp, August 2017). Groundwater from a portion of the Rod and Wire Mill Area has been undergoing pump and treat interim measure actions for a significant period of time.

The Interim Measures (IM) Work Plan described the use of a blend of alkaline reagents (TerrabondMG and crushed limestone) to be placed into trenches corresponding with elevated concentrations of cadmium and zinc within the intermediate zone groundwater. The intention of the IM Work Plan was to place alkaline reagent into contact with impacted groundwater in the intermediate zone. The alkaline reagent would then react with the low pH groundwater to increase the pH sufficiently to precipitate dissolved cadmium and zinc as well as form chemical bonds that would further limit the mobility of cadmium and zinc in the groundwater. Prior to the start of the IM construction two pumping wells were used in this area to capture impacted groundwater. Groundwater modeling performed by the ARM Group indicated that the pumping wells were responsible for creating the hydraulic gradient within this portion of the Site; and that with the pumping wells turned off the hydraulic gradient and resulting groundwater seepage velocity would be very low (less than 10 feet per year).

An Interim Measures Construction Report (IM Construction Report) was prepared by Advanced GeoServices Cop (January 2018) that documented the work performed to implement the scope of work outlined in the *Work Plan.* The construction of the groundwater treatment trenches occurred from October 2016 through December 2016. The pumping wells were turned off prior to the start of construction. Advanced GeoServices provided direct oversight of the treatment trench construction (excavation, reagent placement, and overburden backfill), installation of new monitoring wells, and remediation of lead and cadmium hotspots. The IM Construction Report provides observations made during the construction of the treatment trenches and limited post-construction observations. A 2017 Progress Report for the Rod and Wire Mill Interim Measures for Groundwater Remediation at the Tradepoint Atlantic property has been prepared by ARM Group (ARM) (January 2018). This report presents a brief history of the Rod and Wire Mill (RWM), a description of historical interim measures that operated at the RWM, a description of additional new remedial work that was completed to provide soil and groundwater treatment in the RWM area, the resulting changes observed in groundwater flow patterns and contaminant distribution, and an initial evaluation of the effectiveness of the new interim measures.

Approximately 2,392 cubic yards of contaminated soil were removed from the RWM during construction of the trenches. Construction of the trenches was completed in January 2017. After the completion of remediation trenches, several new groundwater wells were installed in the RWM to facilitate monitoring of the groundwater conditions in the shallow and intermediate zones. Following installation of the remediation trenches, the groundwater wells in the RWM were sampled to help assess groundwater flow directions and groundwater quality in the shallow and intermediate zones. Shallow Groundwater Zone

#### Shallow Groundwater Zone

Cadmium results for wells screened in the shallow zone collected in July 2017 show that the cadmium concentration is below 8.8  $\mu$ g/L at all wells along the western Site boundary. These wells include RW01-MW(S), RW02-MW(S), RW03-MW(S), RW04-MW(S), RW06-MW(S), RW07-MW(S) and RW08-MW(S). The highest cadmium concentration in the shallow zone during the July 2017 sampling event was RW18-MW(S) at a concentration of 240  $\mu$ g/L.

Zinc results for wells screened in the shallow zone show that concentrations have exhibited increases for some wells in the southwest and along the western Site boundary. During the July 2017 sampling event, the highest concentration of zinc in the shallow zone was at well RW02 (97,100  $\mu$ g/L). However, this concentration measured in July was anomalously high, as the concentration in this well in all previous months of 2017 has been below 50,000  $\mu$ g/L. For the majority of shallow wells, the zinc concentration has remained below 14,000  $\mu$ g/L over the first six months after installation of the remediation trenches. The concentration in most wells exhibits fluctuation but no distinct trend (except those noted for RW07 and RW19 below).

#### Intermediate Groundwater Zone

A synoptic round of groundwater level measurements was collected from the existing monitoring wells on November 13th, 2017, and a groundwater contour map was developed to show the interpreted groundwater elevations for the intermediate zone on that date.

Cadmium results for wells screened in the intermediate zone collected in July 2017 show that cadmium concentrations vary significantly, but have generally decreased from levels observed in February 2017. Of wells along the western Site boundary, intermediate wells RW22 and RW07 were below 8.8  $\mu$ g/L. Cadmium concentrations were highest at RW12 (2,730  $\mu$ g/L), and also relatively high farther to the southwest.

Zinc results for wells screened in the intermediate zone show that concentrations are highest at RW19 and generally decrease towards the western Site boundary.

In general, the pH of groundwater in the shallow zone exhibited overall increases in most wells during the first six months following installation of the remediation trenches. In both February and July 2017, the lowest two measurements of pH were observed in wells RW01 and RW02. Over this six-month period, the pH in these wells increased from 5.04 to 5.66 and 5.22 to 5.68, respectively.

Concentrations of cadmium in the shallow zone along the western Site boundary have generally been below 8.8  $\mu$ g/L over the entire six months following installation of the remediation trenches. A few of the other shallow wells (not along the western Site boundary) have cadmium concentrations above this level, with the highest concentration in RW18-MW(S). However, the cadmium level notably decreased in this well between its first two measurements collected in June and July.

Following the first six months after installation of the remediation trenches, concentrations of zinc in all shallow zone wells ranged from 30.2  $\mu$ g/L (RW06-MW(S) in June) to 97,100  $\mu$ g/L (RW02-MW(SA) in July). . Although a few shallow wells exhibited decreases, zinc generally increased in concentration in the majority of these wells over this time frame. The wells with the two highest zinc concentrations correspond to the wells with the two lowest pH measurements (RW01 and RW02).

In the intermediate zone, pH generally remained relatively stable in most wells over the first six months following installation of the remediation trenches. However, a few wells (RW08, RW10, and RW12) exhibited overall decreases over this time frame.

For cadmium in the intermediate zone, concentrations in the three northernmost wells along the western Site boundary (RW07, RW08, and RW22) have been below 8.8 µg/L over the entire six month period following the installation of the remediation trenches. Concentrations of cadmium in all other intermediate zone wells are above 8.8 µg/L; however, the majority of wells have been relatively stable or exhibited overall decreases in cadmium concentrations over this time frame.

For zinc in the intermediate zone, one well along the western Site boundary (RW07) had a concentration below 81  $\mu$ g/L following the first six months after installation of the remediation trenches. The remaining intermediate zones wells exhibited varying trends in zinc concentrations, with some wells exhibiting increases, and some wells exhibiting decreases.

The number of wells in which concentrations of cadmium and/or zinc have exhibited overall decreases over the first six months following installation of the remediation trenches, particularly in the intermediate zone, indicates measurable progress towards the goals of the new interim measures for the RWM. However, only a limited view of the trends in groundwater quality is available thus far because of the relatively few data points that have been collected, and the relatively short period of operation. Therefore, it is recommended that monitoring should continue at the Site in order to acquire a more robust data set for assessing the overall performance and effectiveness of the remediation trenches.

## **Coke Oven Area Interim Measures**

Interim measures (IMs) have been developed to address identified environmental conditions at the Coke Oven Area (COA) Special Study Area in accordance with the United States Environmental Protection Agency's (US EPA)'s September 2, 2010 letter. The following designations identify the operating IM "Cells" at the COA:

- Cell 1: Air Sparge/Soil Vapor Extraction (AS/SVE) System in the Former Benzol Processing Area,
- Cell 2: Air Sparge/Soil Vapor Extraction (AS/SVE) System in the shallow groundwater zone, groundwater pump and treat (GW P&T) system in the intermediate zone, Former Coal Basin Area,
- Cell 3: AS/SVE System in "Cove" Area,
- Cell 5: Dual Phase Extraction (DPE) system for the shallow zone, "Turning Basin" side of former Coke Oven Area,
- Cell 5: Dense Non-Aqueous Phase Liquid (DNAPL) Recovery
- Cell 6: Light Non-Aqueous Phase Liquid (LNAPL) Recovery at the Former Benzol Processing Area.

As of the end of 2017, Cells 1, 2, 3, 5 and 6 remediation systems are operational.

#### CELL 1

The AS/SVE system in the Former Benzol Processing Area (Cell 1) operated from April 5, 2017 through the end of the year, removing an estimated 311 pounds of hydrocarbons. From January 1, 2017 to April 5, 2017 the system was inactive due to maintenance activity; the system was turned off throughout January so that carbon filters could be installed, and the system remained off in February and March because the system trailer was shipped to Massachusetts for overhaul. On April 1, 2017 the unit was received and finally began operation on April 5, 2017. Removal efficiencies and amounts were the highest in the period immediately following restart of the system, and the concentrations of total VOCs in groundwater at the two monitoring wells that are located within or downgradient of the Cell 1 boundary reflect downward concentration trends since the restart of system operation on April 5, 2017.

#### CELL 2

Cell 2 includes an AS/SVE system for the shallow zone groundwater and a GWPT system for the intermediate zone groundwater in the Former Coal Basin Area of the site. These systems operated for the majority of the year, resulting in the total removal of approximately 6,800 pounds of hydrocarbons from the Cell 2 area; less than 0.03% of the total amount removed was through the AS/SVE system, with the rest removed through the GWPT system. Since 2014, total VOC concentrations in shallow zone groundwater have generally remained the same or decreased slightly, while total VOC concentrations in intermediate zone groundwater have decreased by more than 50% for the two wells with the highest total VOC concentrations, and remained generally stable at the other wells. Based on the relatively low removal effectiveness of the AS/SVE system at Cell 2, this system should be considered for shut-down and potential relocation to Cell 3.

#### CELL 3

The AS/SVE system in the "Cove" Area (Cell 3) operated for approximately 6,500 hours in 2017, removing an estimated 79 pounds of hydrocarbons. Overall removal rates were similar to previous time periods. The concentrations of volatile hydrocarbons in the groundwater have generally decreased slightly over the past year or two, but there is no apparent overall trend, and current concentrations at the monitoring wells are generally similar to or slightly lower than the concentrations when the remedial AS/SVE system was started in June 2011. Enhancements to the Cell 3 IMs will be considered in 2018, possibly involving expansion of the AS/SVE system with additional AS and SVE wells.

#### CELL 5

Cell 5 includes a dual-phase extraction (DPE) system and a Dense Non-Aqueous Phase Liquid (DNAPL) recovery system for the shallow zone groundwater in the "Turning Basin" side of the former Coke Oven Area. These systems were operated for the majority of the year, resulting in the total removal of approximately 2,260 pounds of hydrocarbons from the Cell 5 area. Although the current IMs appear to be effectively removing hydrocarbons from the Cell 5 area, system enhancements will be evaluated in 2018 in an attempt to better reduce hydrocarbon (primarily naphthalene) concentrations in groundwater.

#### CELL 6

Cell 6 consists of an LNAPL Multi-Phase Extraction (MPE) monitoring and recovery system at the Former Benzol Processing Area, along with some manual bailing and skimming. The extraction system and manual skimming and bailing removed an estimated 12,059 pounds of LNAPL during 2017, with a cumulative removal amount of approximately 135,880 pounds since LNAPL recovery was started in Cell 6 in July 2010 (the MPE system starting operating in October 2016).

#### SUMMARY

Overall, the IMs at the former CO area were operated during 2017 in accordance with the general operating plans. Based on the estimated hydrocarbon removal amounts from the remedial activities at Cells 1, 2, 3, 5, and 6, a total of approximately 19,600 pounds of hydrocarbons were removed from this area in 2017.

Based on the results of monitoring data collected at the CO during 2017, it is recommended that: the frequency of groundwater monitoring be reduced from quarterly sample collection to semi-annual sample collection; the systems continue to be operated in accordance with current plans; semi-annual progress reporting be replaced with an annual report (similar to this document); and each of the existing systems be re-evaluated in more detail during 2018 in an attempt to identify cost-effective system improvements or changes. Among other possible changes, shut-down of the Cell 2 AS/AVE system will

be considered, along with system improvements to the Cell 3 and Cell 5 areas to increase removal amounts and improve groundwater quality.

## Site Wide Investigation

Environmental responses, including Consent Decree obligations for Site Wide Investigation, for the Site are being implemented pursuant to the following:

- Multimedia Consent Decree between Bethlehem Steel Corporation, the United States Environmental Protection Agency, and the Maryland Department of the Environment (effective October 8, 1997); this Consent Decree has been modified in accordance with a stipulated order entered into by Sparrows Point LLC and the respective agencies effective July 28, 2014
- Administrative Consent Order (ACO) between Sparrows Point Terminal, LLC and the Maryland Department of the Environment (effective September 12, 2014);
- Settlement Agreement and Covenant Not to Sue (SA) between Sparrows Point Terminal, LLC and the United States Environmental Protection Agency (effective November 25, 2014).

Regulatory obligations for investigation, remediation, pathway exclusion, and closure of applicable areas of the Site are addressed within the ACO and EPA Agreement. As described within the ACO, Phase II investigations will be conducted and Work Plans will be developed for Site. Regulatory obligations and closure will be conducted in accordance with the terms of the Regulatory Agreements, which include obtaining a Certificate of Completion under MDE's Voluntary Cleanup Program and an EPA Certificate of Completeness after the BSC Consent Decree Areas proceed through RCRA's Statement of Basis process upon which a Final Decision and Response to Documents is rendered.

Certain portions of the Site have been defined as Area A and have been designated for investigation, remediation, and/or development on a priority basis as defined in the ACO. To delineate Area A in accordance with the ACO, Sparrows Point Terminal, LLC (now Tradepoint Atlantic) submitted a VCP application for Area A on September 10, 2014.

Work plans to investigate the site were initiated in 2017 and submitted for approval in accordance with the requirements and schedule outlined in the ACO and SA. Phase II work plans and Response and Development Plans were submitted in 2017 for the following parcels and areas, please refer to the attached figure for parcel area definition:

- Parcel A-2 Revised Phase II Investigation Report (Rev3)
- Parcel A-2 Water Line Modification Letter
- Sub-Parcel A-3-1 Lead & TPH/O&G Delineation and Excavation Work Plan (Rev 1&2)
- Sub Parcel A-3-1 RW22 NAPL Excavation Work Plan
- Sub Parcel A-3-1 Revised Response and Development Work Plan (Rev 1-3)
- Sub Parcel A-3-1 RW-052 Lead Excavation Letter
- Parcel A-3 East Pond Cadmium Delineation Report
- Parcel A-4 Revised Phase II Investigation Report (Rev 1&2)

- Parcel A-5 Phase II Investigation Work Plan and field work implementation
- Parcel A-7 Phase II Investigation Work Plan and field work implementation
- Parcel A-9 Phase II Investigation Work Plan and field work implementation
- Parcel A-13 Phase II Investigation Work Plan and field work implementation
- Parcel B-1 Phase II Investigation Report (Rev0)
- Parcel B-2 Phase II Investigation Work Plan and field work implementation
- Parcel B-3 Phase II Investigation Work Plan and field work implementation
- Parcel B-4 Phase II Investigation Report (Rev0)
- Parcel B-5 Phase II Investigation Report (Rev0)
- Parcel B-5 PCB Delineation/Excavation Letter (B5-101-SB)
- Sub Parcel B-5-1 Response and Development Work Plan (Rev 1-3)
- Sub Parcel B-5-1 Response and Development Work Plan Addendum (Rev 0&1)
- Parcel B-6 Phase II Investigation Report (Rev 0&1)
- Sub Parcel B-6-1 Response and Development Work Plan (Rev 1&2)
- Parcel B-6 NAPL Excavation Work Plan (B6-011-SB)
- Sub Parcel B-6-2 Response and Development Work Plan (Rev0)
- Parcel B-8 Phase II Investigation Report (Rev0)
- Parcel B-13 Phase II Investigation Report (Rev0)
- Parcel B-13 Arsenic Delineation Work Plan (B13-031-SB)
- Parcel B-14 Phase II Investigation Work Plan and field work implementation
- Parcel B-15 Development Expansion Letter
- Parcel B-17 Phase II Investigation Work Plan and field work implementation
- Sub-Parcel B-19-1 Response and Development Work Plan (Rev 1-3)
- Parcel B-22 Response and Development Work Plan (Rev 4&5)
- Parcel B-22 Road & Utility Investigation Report (Rev 0&1)
- Parcel B-22 PCB/DRO Excavation Completion Letter
- Parcel B-22 NAPL Excavation Work Plan (B22-128-SB)
- Parcel B-22 Lead Delineation Work Plan (B22-047-SB)

- Parcel B-22 Lead Delineation Completion Report (B22-047-SB)
- Parcel B-22 Utility Line Modification Notification Letter
- Site Wide Groundwater Summary Report
- Generic Road & Utility Development Work Plan (Rev0)
- Utility Excavation NAPL Contingency Plan (Rev4)
- Tin Mill Canal Sediment Characterization Report (Rev 1&2)
- Tin Mill Canal Maintenance Cleanup Plan (Rev 0&1)

# 4.0 Compliance Requirements

As outlined in the Modified Order, obligations associated with Section VII (Compliance Requirements) are no longer required with the exception of Section VII.C. related to compliance requirements for the operation of Coke Point and Greys Landfill. Information associated with this obligation is as follows:

# **Coke Point and Greys Landfill Operation**

Activities conducted in 2017 for the landfills were as follows:

#### Coke Point Landfill

The Coke Point Landfill is currently not being utilized for the management of non-hazardous waste materials. Waste materials have not been received at this landfill since the change in ownership from RG Steel Sparrows Point LLC to Sparrows Point LLC in 2012. The plan for Coke Point Landfill is to continue to use the facility for slag storage and tenant scrap metal recycling and iron bearing material recovery operations.

#### **Control of Landfill Access and Activities**

Access control berms and a gate access structure are installed at Coke Point Landfill to mark the boundaries of the landfill and to prevent unauthorized access. Access control berms were upgraded in 2013 and placed around the perimeter of the landfill and are of sufficient height and grade to prevent vehicular access. The access control structures are being maintained as part of the current compliance actions for the landfill.

Specific measures are being conducted to prevent unauthorized waste disposal at the landfill and include the following:

• Coke Point Landfill is located within the Sparrows Point site which currently has access control restricted to owners of the facility, demolition and scrap management operations and tenant operations. Access control includes security personnel at three operating gates to the facility and routine perimeter security patrols and inspections. Entities that have access to the site have been informed of the status of Coke Point Landfill and the restriction on future waste placement.

#### **Groundwater Monitoring Program**

Groundwater monitoring was conducted at Coke Point Landfill in 2017 in accordance with a request received from the Maryland Department of the Environment on December 3, 2012. Semi-annual sampling events were completed in the 2<sup>nd</sup> and 4<sup>th</sup> quarters of 2017. A semi-annual groundwater monitoring report providing data analysis and results consistent with normal practices of the Department for landfill groundwater compliance monitoring programs will be submitted in 2018.

The reports include summaries of the following data collection activities:

- water level measurements in monitoring wells;
- sampling of monitoring wells; and
- laboratory analysis of monitoring well samples.

#### **Greys Landfill**

The landfill continues to operate in accordance with the approved landfill operations and engineering plan. The current systems are being maintained at the landfill; maintenance activities completed in 2017 included the following:

- Vegetation and tree growth has been removed as necessary within swales, the sediment basin and other control features at the landfill;
- Replacement of gravel erosion control lining with the swale structures;
- Existing silt fences have been replaced and additional silt fence has been installed at the clean soil stockpile area;
- The soil stockpile area has been graded and seeded;
- As-built plans for the sediment control basin have been reviewed to document that adequacy of the current performance of the sediment control basin.

#### **Groundwater Monitoring Program**

Groundwater monitoring was conducted at Greys Landfill in 2017 in accordance with a request received from the Maryland Department of the Environment on December 3, 2012. Semi-annual sampling events were completed in the 2<sup>nd</sup> and 4<sup>th</sup> quarters of 2017. A semi-annual groundwater monitoring report providing data analysis and results consistent with normal practices of the Department for landfill groundwater compliance monitoring programs will be submitted in 2018.

The reports include summaries of the following data collection activities:

- water level measurements in monitoring wells;
- sampling of monitoring wells; and
- laboratory analysis of monitoring well samples.

# 5.0 Decree Management Reporting

# **Project Management**

The US EPA and MDE were informed of the ownership change of the facility from Sparrows Point LLC to TradePoint Atlantic (formerly Sparrows Point Terminal, LLC) on September 18, 2014. As noted previously, ongoing obligations of the Consent Decree remained with Sparrows Point LLC as part of the purchase and sale contract between Sparrows Point LLC and TradePoint Atlantic.

Notification to the U. S. Environmental Protection Agency and the Maryland Department of the Environment is hereby provided that the Project Coordinator responsible for the referenced Consent Decree is:

Mr. Russell Becker, Sparrows Point, LLC 1650 Des Peres Road, Suite 306 St. Louis, MO 63131 Phone: (314) 686-5611

e-mail: rbecker@enviroanalyticsgroup.com

Communications between or among the parties, and documents, reports, approvals and other correspondence concerning the activities performed pursuant to the terms and conditions of the Consent Decree shall be directed to Mr. Becker. Copies of all documents to be submitted to Sparrows Point, LLC shall be sent to the Project Coordinator.

# **Release Reporting**

Non-aqueous phase liquid was identified in groundwater wells installed as part of the Phase II Investigations for parcels A-3, B-5, B-8, B-13, B-14, B-18, B-6 and A-8. The presence of this liquid was reported to the agencies in 2017 and monitoring programs are underway. There were no other releases, including spills or other events that occurred at the Facility in 2017 that were required to be reported to the Agencies.