

SEDIMENT CHARACTERIZATION REPORT FOR THE TIN MILL CANAL

TRADEPOINT ATLANTIC
SPARROWS POINT, MARYLAND

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TABLE OF CONTENTS

1.0	INTRODUCTION	1
1.1.	Background	1
1.2.	Site Ownership History	2
2.0	TIN MILL CANAL	3
2.1.	Site Description	3
2.2.	Regulatory Process	3
2.3.	Previous Investigations	4
3.0	SEDIMENT CHARACTERIZATION INVESTIGATION	6
3.1.	Objectives.....	6
3.2.	Scope of Investigation Activities	8
3.3.	Sampling Locations.....	8
3.4.	Sample Collection Procedure	9
4.0	RESULTS OF THE INVESTIGATION.....	10
4.1.	Chemical Constituent Data.....	10
4.1.1.	Discrete Depth Sample Results.....	10
4.1.2.	Composite Sample Results	10
4.2.	Geotechnical Results	11
5.0	SUPPLEMENTAL INVESTIGATION.....	12
5.1.	Objectives of Sampling Effort.....	12
5.2.	Sample Collection	12
5.3.	PCB Delineation Sample Results.....	13
5.4.	SVOC Resample Results.....	13
5.5.	Restricted Access Sample Results.....	14
6.0	REMEDIATION WASTE Characterization.....	15
6.1.	RCRA Toxicity Characteristic Assessment	15
6.2.	RCRA Contained-In Waste Assessment	15
6.3.	Physical characteristics	17
7.0	Screening Level Risk Assessment	18
7.1.	Analysis Process.....	18
7.2.	Tin Mill Canal SLRA Results and Risk Characterization.....	20
7.3.	Management of PCB-Contaminated Media	21
8.0	Findings and Recommendations	22

8.1. Sediment.....	22
8.2. Remediation waste characterization.....	23
8.3. Human Health Screening Analysis	23
8.4. Recommendations	24
9.0 REFERENCES	25

FIGURES

Figure 1	Site Location Map	Following Text
Figure 2	TMC Investigation Transects.....	Following Text
Figure 3	Inorganic PAL Exceedances (Shallow)	Following Text
Figure 4	Inorganic PAL Exceedances (Deep).....	Following Text
Figure 5	SVOC PAL Exceedances (Shallow).....	Following Text
Figure 6	SVOC PAL Exceedances (Deep).....	Following Text
Figure 7	PCB PAL Exceedances (Shallow).....	Following Text
Figure 8	PCB PAL Exceedances (Deep).....	Following Text
Figure 9	PCB Delineation Sample Detections (Shallow)	Following Text
Figure 10	PCB Delineation Sample Detections (Deep).....	Following Text

TABLES

Table 1	Sediment Sample Analytical Data	Following Text
Table 2	Sediment Characterization and Geotechnical Data.....	Following Text
Table 3	TCLP Results	Following Text
Table 4	Supplemental Investigation Analytical Data	Following Text
Table 5	Adjusted RSL Comparison	Following Text
Table 6	COPC Screening Table	Following Text
Table 7	Lead Assessment.....	Following Text
Table 8	EPCs – Pooled Sediment	Following Text
Table 9	Risk Ratios – Pooled (Composite).....	Following Text

TABLE OF CONTENTS (CONT.)

APPENDICES

Appendix A MDE Remediation Waste Determination (email).....Following Text

ELECTRONIC ATTACHMENTS

Laboratory Certificates of Analysis Electronic Attachment
Data Validation Reports..... Electronic Attachment
ProUCL Input and Output..... Electronic Attachment

1.0 INTRODUCTION

This Sediment Characterization Report (SCR) for the Tin Mill Canal at the Tradepoint Atlantic property has been prepared by EnviroAnalytics Group (EAG), LLC with support by ARM Group. The report presents relevant historical information for the Tin Mill Canal (TMC), a description of the field activities that were completed to gather information regarding the sediments in TMC, results of the investigation including implications of the data with respect to the design and implementation of potential remedial actions for sediments deposited within the canal to be compliant with requirements of the Resource Conservation and Recovery Act (RCRA), the Maryland Voluntary Cleanup Program (VCP) and other regulatory requirements. The SCR was completed pursuant to a sampling and analysis work plan approved by the Maryland Department of the Environment and United States Environmental Protection Agency on March 24, 2015 (EAG, March 2015) and two separate work plan addenda approved by the Maryland Department of the Environment and United States Environmental Protection Agency on August 11, 2015 (EAG, August 2015) and July 27, 2016 (EAG, July 2016).

1.1. BACKGROUND

The Tradepoint Atlantic property is located in Baltimore County, Maryland at the southeast corner of the Baltimore metropolitan area, approximately nine miles from the downtown area. The property encompasses approximately 3,100 acres located on a peninsula situated on the Patapsco River near its confluence with the Chesapeake Bay physically positioned in the mouth of the heavily industrialized and urbanized Baltimore Harbor / Patapsco River region. A land connection to the northeast links the peninsula with the adjacent community of Edgemere.

From the late 1800s until 2012, the property was used for the production and manufacturing of steel. Iron and steel production operations and processes at the Site 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 steelmaking operations at the Facility ceased in fall 2012, and plans for the Site include demolition and redevelopment over the next several years.

The original topography of the peninsula was flat with elevations not exceeding 15 feet North American Vertical Datum 1988 (NAVD88). The peninsula has been drastically altered since the inception of the steel manufacturing activities. Creeks have been filled in and new land has been added to various areas of the Site by building up near-shore areas of the river.

1.2. SITE OWNERSHIP HISTORY

Bethlehem Steel Corporation operated an integrated steelmaking facility at the site from approximately 1916 through 2003. As a result of multiple market factors, Bethlehem Steel declared bankruptcy in 2001 and the facility was subsequently operated by a succession of owners, the last of which (RG Steel Sparrows Point, LLC) filed for bankruptcy in 2012. The site was subsequently purchased by Sparrows Point, LLC (SPLLC) at a bankruptcy sale on August 7, 2012. Sparrows Point Terminal, LLC (SPT) purchased the real property on September 18, 2014 subject to the provisions of a Purchase and Sale Agreement wherein SPLLC and SPT have allocated various environmental responsibilities, liabilities, and obligations among themselves. SPT has subsequently undergone a name change and is now doing business as Tradepoint Atlantic.

2.0 TIN MILL CANAL

2.1. SITE DESCRIPTION

The focus of this investigation, the Tin Mill Canal (TMC), is a constructed swale that currently serves as a conveyance for stormwater runoff and groundwater base flow from an approximately 800 acre drainage area of the Sparrows Point site. Waters collected in the TMC are routed to the Humphrey's Creek Waste Water Treatment Plant (HCWWTP) for treatment prior to discharge via the NPDES permitted Outfall 014. The average volume of water flowing through the canal to the HCWWTP during dry weather ranges is approximately 3,000 gallons per minute (gpm), but can increase to over 50,000 gpm during storm events. The TMC is located in the central portion of the Sparrows Point property, south of Interstate 695 and Highway Route 158. An aerial photo that shows the location of the canal is provided as **Figure 1**.

The TMC is approximately 7,500 feet in length, 30 to 50 feet wide and 15 feet below grade. The canal was constructed from slag and includes numerous point discharges from the site storm sewer system. The eastern portion of the TMC began operating in the early 1950's. The western (remaining) portions of the canal and HCWWTP were completed and began operating in approximately 1969. Since its construction, the TMC has historically also conveyed wastewater discharged from numerous manufacturing facilities associated with former steelmaking and steel finishing operations at the Sparrows Point site. Over the years, some of the heavier particles and oils in the wastewaters from the steel manufacturing facilities have settled to the bottom of TMC. Point discharges to the TMC also include an open channelway that is approximately 20 wide by 175 feet long. This area is referred to historically as the Pori Lagoon Area. The canal still receives and controls stormwater runoff from the Site; the HCWWTP remains operational to treat stormwater runoff prior to discharge.

2.2. REGULATORY PROCESS

Environmental responses for the TMC and for the site in general, are being implemented pursuant to the following:

- Multi-Media Consent Decree (Decree) between Bethlehem Steel Corporation, the United States Environmental Protection Agency, and the Maryland Department of the Environment (effective October 8, 1997); this 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); and,

- 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 Consent Decree for the Sparrows Point facility dealt with many issues associated with ongoing iron-making, steel-making, coking, byproduct, plating, and finishing operations. To the extent that 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. The TMC is part of the acreage that remains subject to the requirements of the Decree as documented in correspondence received from EPA on September 12, 2014.

2.3. PREVIOUS INVESTIGATIONS

Pursuant to the requirements of the 1997 Consent Decree, Site-Wide Investigation activities and associated environmental assessments have been performed at the site focused on characterizing the nature and extent of releases to on-site areas of the property. Work has been completed to implement an investigation and screening process to evaluate potential source areas of releases to the environment and define if further action (or no further action) is necessary. The TMC area was identified as a “Special Study Area” within the context of the Decree and was subject to applicable portions of the following major submittals completed to date as part of the Site-Wide Investigation:

- Description of Current Conditions, January 1998 (Rust 1998);
- Site-Wide Investigation Work Plan – Groundwater Study, June 2000 (CH2M Hill 2000);
- Site-Wide Investigation Groundwater Study Report, July 2001 (CH2M Hill 2001);
- Site-Wide Investigation Release Site Characterization Study, June 2002 (CH2M Hill 2002a);
- Site-Wide Investigation: Report of Nature & Extent of Releases to Groundwater From the Special Study Areas, International Steel Group, ISG Sparrows Point, Inc. Facility, Sparrows Point, Maryland, January 2005 (URS 2005a), revised 2007;
- CA725 Facility Investigation and Human Health Risk Evaluation (HHRE) Findings, ISG Sparrows Point, June 2005 (URS 2005b);
- Ecological Risk Assessment Strategy Document; ISG Sparrows Point Facility (URS 2006a);
- Final Ecological Risk Assessment Work Plan for On-Site Areas (URS 2007).
- Screening Level Ecological Risk Assessment For On-Site Areas Final (April 2009, URS)
- Supplemental Report County Lands Parcel 1B Ponds Final (May 2009, URS)
- Final Baseline Ecological Risk Assessment for On-Site Areas (BERA) Report (URS, October 7, 2011)

Work was also completed previously in conjunction with requirements of the Decree to identify and quantify discharges to the TMC (Tin Mill Canal Study Characterization, CH2MHill, 1997). Evaluation of the sediments in the canal was not included as part of previous investigations.

Phase II Investigations have been or are currently being carried out at the majority of the Sparrows Point property. For the purpose of these investigations, the property is divided into several parcels with individual designations. The Tin Mill Canal is designated as Parcel B16. All parcels are shown on **Figure 1**. The investigation efforts outlined in this SCR support the site-wide Phase II Investigation requirements as outlined under the ACO.

3.0 SEDIMENT CHARACTERIZATION INVESTIGATION

3.1. OBJECTIVES

The objective of the TMC sediment investigation is to provide information to characterize the physical and chemical characteristics of the sediments contained within the canal and to support development and implementation of a remedial cleanup action for the TMC that is protective of both human health and the environment. The immediate cleanup action being considered includes the removal of solids settled within the canal and subsequent channel stabilization work as summarized in the Site Conceptual Cleanup Plan (SCCP; EAG, August 2014a). Data for the sediments are required to develop the work scope necessary to complete this cleanup action.

The canal has been used historically for the conveyance of both stormwater and wastewater to a central wastewater treatment plant (HCWWTP) prior to discharge to surface water through a NPDES permitted discharge outfall. Materials that contain metals and oil/grease have been deposited in the TMC over time from process sewer discharges associated with the steel finishing operations. These materials are located within the entire length and width of the canal and affect water currently being controlled and discharged through the canal. The canal still receives and controls stormwater runoff from the Site; the HCWWTP remains operational to treat stormwater runoff prior to discharge.

Contaminants of concern include metals, organics, or oil & grease affecting the sediment of the TMC, and thus potentially the stormwater that continues to be conveyed by the TMC. Remediation will focus on the mitigation of future exposure pathways from contaminated sediment, impacts to stormwater conveyed by the canal and elimination of contaminants from the aggregate TMC discharge requiring treatment at the HCWWTP as follows:

- Sediment - Prevent potential future direct exposure to contaminated sediments located within Tin Mill Canal;
- Surface Water - Mitigate impacts to stormwater conveyed by Tin Mill Canal and eliminate need for ongoing treatment of stormwater at the HCWWTP.

Response actions being considered for the TMC are anticipated to include removal and disposal of impacted sediments associated with the canal or isolation techniques with sediments remaining in place and the subsequent installation of acceptable isolation and channel stabilization materials. Response actions being considered are further described as follows:

- Excavation/dredging and removal of sediment from the TMC – estimated amount to be removed - 7300' x 40' x 5' (the 5' being the thickness of sediment to be removed) = ~54,000 cu yds of material

- Restoration of the remaining slag fill and sediments by covering with an engineered barrier that will support acceptable future stormwater conveyance through the TMC.

This area will be subject to ongoing remedial obligations including the completion of a Corrective Measure Study that is expected to define implementation requirements for institutional controls. Closure tasks for this area may include future NPDES surface water discharge requirements. Surface water discharge modeling may be appropriate and will necessarily be integrated with site development plans. Continuing stormwater discharges from the TMC will need to meet current and potential future surface water quality criteria associated with NPDES discharge permits for the Site. .. These criteria are anticipated to be focused on surface water quality standards for metals such as, but not limited to, copper (0.0061 mg/L), nickel (0.0082 mg/L) and zinc (0.081 mg/L).

Specific objectives have been identified for the data collection and characterization effort of the TMC as follows:

1. Provide data to better approximate the volume of sediment that is present within the TMC and the Pori Lagoon Area.
2. Provide data to evaluate the physical and chemical characteristics of the settled material. Physical characteristics will be assessed to identify applicable technologies to be used to remove, handle and provide material adequate for transport and recycling or disposal.
3. Provide chemical characteristic and constituent data to be used for the management of remediation waste that may be subject to RCRA requirements outlined in 40 CFR 262.11 and COMAR 26.13.03.02 and TSCA requirements outlined in 40 CFR 761.61. The sampling and analysis program included testing of the settled materials for both individual Appendix IX analytes including PCBs identified as constituents of potential interest (COPIs) for the site and hazardous waste characteristic testing procedures (TCLP) in accordance with methods outlined in EPA SW-846. Concentrations of constituents within the sediment will be fully characterized to guide decisions for the proper management of environmental media that would be generated in the context of a removal and disposal remediation alternative.
4. Provide data to support the completion of health-based evaluations of environmental media that would require management as remediation waste and a human health Screening Level Risk Assessment (SLRA) for the TMC.

3.2. SCOPE OF INVESTIGATION ACTIVITIES

The investigation activities performed to characterize the sediments in TMC were conducted in accordance with the USEPA- and MDE-approved Work Plan, and in view of comments and suggestions provided by USEPA and MDE representatives during a scoping meeting held in November 2014.

This report presents the methods and protocols used to complete the site characterization. These methods and procedures follow the MDE-VCP and EPA guidelines. Information regarding the project organization, field activities and sampling methods, sampling equipment, sample handling and management procedures, the laboratory analytical methods and selected laboratory, quality control and quality assurance procedures, investigation-derived waste (IDW) management methods, are described in detail in the site-wide Quality Assurance Project Plan (QAPP) that has been developed to support the investigation and remediation of the Sparrows Point Terminal Site (Sparrows Point Terminal Quality Assurance Project Plan, ARM Group Inc., Revision 3; April 5th, 2016).

3.3. SAMPLING LOCATIONS

Sediment samples were collected from 16 transects along the length of the TMC and from 1 transect along the channelway from the Pori Lagoon area. Transect locations and numbers are shown on **Figure 2**. Samples were collected at each transect in accordance with the following plan:

- Discrete depth samples: The width of the sediment horizon was measured at each transect location. Depth of sediment to the slag bottom of the canal was measured at two locations that represent distances of one third and two thirds across the perpendicular width of the sediment horizon. At each of these two locations, a sediment sample was collected from the top foot of the sediment horizon (shallow discrete sample) and another sample was collected from the bottom foot of the sediment horizon (deep discrete sample). At some locations, there was not sufficient recovery of sediment to be able to collect both a shallow and a deep discrete sample. In total, 58 discrete depth samples were collected and analyzed for specific Appendix IX volatile organic compounds (VOCs), Appendix IX RCRA metals including hexavalent chromium, and for Toxicity Characteristic Leaching Procedure (TCLP) VOCs.
- Composite samples: For each transect, sediment from the two aforementioned shallow discrete samples was thoroughly mixed to produce a shallow composite sample, and sediment from the two deep discrete samples was thoroughly mixed to produce a deep composite sample. An “(S)” was added to the end of the sample IDs for the shallow composite samples and a “(D)” was added to the end of the sample IDs for the deep composite samples. In total, 29 composite samples were collected and analyzed for

specific Appendix IX semi-volatile organic compounds (SVOCs), cyanide, polychlorinated biphenyl (PCB) aroclors, TCLP SVOCs, and TCLP inorganics.

- **Bulk samples:** At Transects 5, 10 and 15, geotechnical sediment samples were collected and analyzed for moisture content and bulk density. For each of these transects, sediment was collected from 1-3' below grade using a shovel, and the resulting sediment was used to fill sampling containers for one geotechnical sample per transect.

3.4. SAMPLE COLLECTION PROCEDURE

A modified surge block sampling apparatus (suction sampler) was used to collect the sediment samples. The suction sampler consisted of a 2-inch diameter PVC pipe, the surge block (a piece of rubber between two 1 7/8-inch diameter washers), and a 1-inch diameter PVC pipe. The surge block was attached to the end of the 1-inch PVC pipe and secured in place with a nut. As the nut is tightened, the rubber is squeezed outward from between the washers. When the surge block is pushed into the 2-inch PVC pipe, the rubber between the washers creates a seal around the inside of the pipe.

To collect a sample, the suction sampler was driven downward into soft sediment, with the surge block at the bottom of the 2-inch PVC pipe, until the required sampling depth was achieved. Once at the desired sampling depth, the apparatus was withdrawn for one foot, then lowered back down one foot while pulling the surge block up through the interior of the 2-inch pipe. This process pulled the soft sediment into the sampler. The suction sampler was then extracted from the soft sediment, tilting it as the bottom reached surface grade. Sample material was then recovered out of the sampler into a plastic bag and distributed as required to sample containers.

Wide-mouth glass containers with Teflon-lined caps were utilized for sample containers. Sediment was transferred from plastic bags to sample containers using a stainless steel or plastic lab spoon or equivalent. For composite samples, recovered sediment was placed into a stainless steel, plastic or other appropriate composition (e.g.: Teflon) bucket and mixed thoroughly to obtain a homogeneous sample. The sediment samples were placed into labeled containers. Samples were preserved to 4 degrees Celsius immediately after recovery.

All sampling devices and non-disposable equipment that came into contact with sediment were decontaminated prior to reuse. Decontamination procedures included:

- Wash with a laboratory grade detergent, such as Alconox
- Rinse with distilled water
- Second rinse with distilled water

4.0 RESULTS OF THE INVESTIGATION

4.1. CHEMICAL CONSTITUENT DATA

Sediment analytical results were screened against Project Action Limits (PALs) established in the site-wide QAPP to determine PAL exceedances. PALs are generally based on the USEPA's Regional Screening Levels (RSLs) for the Composite Worker exposure to soil. The Composite Worker is defined by the USEPA as a long-term receptor exposed during the work day who is a full time employee that spends most of the workday conducting maintenance activities (which typically involve on-site exposures to surface soils) outdoors.

The analytical results for the detected parameters are summarized and compared to the PALs in the attached **Table 1**. The laboratory Certificates of Analysis (including Chains of Custody) and Data Validation Reports have been included as electronic attachments. The data validation reports contain a glossary of qualifiers for the final flags assigned to individual results in the attached summary tables.

4.1.1. Discrete Depth Sample Results

As provided in **Table 1**, nine VOCs were detected above the method detection limit (MDL); however, the majority of these detections were “J” flagged, meaning they were not detected above the laboratory reporting limit (RL). There were no VOCs detected above their respective PALs.

Table 1 provides a summary of metals were detected above the laboratory's MDLs in discrete depth sediment samples. Arsenic, cobalt and lead were detected above their respective PALs. Cobalt was only detected above its PAL in sample TM-SD-03, while lead was only detected above its PAL in sample TM-SD-86. Arsenic was detected above its PAL in 58 samples. Inorganic PAL exceedances are shown on **Figure 3** and **Figure 4**.

4.1.2. Composite Sample Results

As provided on **Table 1**, 13 SVOCs were detected above their respective MDLs. The majority of these detections were “J” flagged, meaning they were not detected above the laboratory reporting limit (RL). The concentration of 2,4-dinitrotoluene detected in composite sample TM-SD-10 (D) exceeded its applicable PAL. This was the only PAL exceedance for SVOCs. However, the laboratory's reporting limits for a majority of the SVOC results exceeded the PALs. Therefore, the majority of SVOC results were rejected, and the associated samples were scheduled to be collected for re-analysis of SVOCs as part of a supplemental investigation (see Section 6.0). SVOC PAL exceedances are shown on **Figure 5** and **Figure 6**.

Table 1 provides results of laboratory analyses for PCBs. Aroclor 1242 and Aroclor 1254 were detected above their respective PALs in nine samples. Only one sample contained a concentration that exceeded 50 mg/kg—Aroclor 1242 was detected in sample TM-SD-31 (D) at a concentration of 233 mg/kg. This sample was collected from Transect 6. All other detected concentrations of PCBs were 4.8 mg/kg or less. PCB PAL exceedances are shown on **Figure 7** and **Figure 8**.

Table 1 also provides the results of analyses for cyanide. Cyanide was detected in 28 composite samples—all composite samples except for TM-SD-05 (S). The majority of these detections were “J” flagged, meaning they were not detected above the laboratory reporting limit (RL). The concentration of cyanide did not exceed its PAL in any of the sediment samples.

4.2. GEOTECHNICAL RESULTS

A summary of geotechnical results has been provided on **Table 2**. This table includes thicknesses of sediment at each sampling location and the results of the laboratory analyses for moisture content and density for the three geotechnical samples collected.

5.0 SUPPLEMENTAL INVESTIGATION

On July 19, 2016, EAG submitted an addendum to the approved work plan that defined sampling and analysis procedures for further characterization of the sediments in the Tin Mill Canal. The proposed additional Sediment Sampling and Analysis Plan was approved on July 27, 2016 by U.S. EPA and MDE.

5.1. OBJECTIVES OF SAMPLING EFFORT

This supplemental investigation was carried out to complete the following objectives:

- Provide further delineation of the extent of elevated PCBs located between Transects 5-7;
- Recollect composite samples for semi-volatile compounds (SVOCs) at a number of transects for re-analysis to achieve lower laboratory reporting levels; and
- Collect samples at several TMC locations where access was restricted during the previous sampling events.

5.2. SAMPLE COLLECTION

During the supplemental investigation, 42 discrete sediment samples were collected and analyzed for PCBs in order to delineate the extent of elevated PCB concentrations surrounding the TM-SD-31 sampling location. These samples were collected between Transect 5 and Transect 7 from the top 12 inches and bottom 12 inches of the sediment horizon at 21 locations spaced approximately 50 feet apart. These samples are numbered TM-SD-89 through TM-SD-130. These samples were collected from the center of the canal.

In addition, 11 composite sediment samples were collected and analyzed for SVOCs. These samples were collected from sediment horizon at Transect 6 through Transect 16, as these were the locations for which the previous analytical results had unacceptably high reporting limits. The composite sample for a given transect consisted of sediment collected from the bottom 12 inches of the sediment horizon at locations approximately one-third and two-thirds across the length of the width of the sediment horizon.

Samples were not collected during the initial investigation from select locations at Transects 11, 12 and 14 due to restricted access. During the supplemental investigation, access to these locations was provided and samples were collected at the following locations: TM-SD-54, TM-SD-56, and TM-SD-59. These samples were analyzed for VOCs and metals.

Discrete and composite sediment samples were collected using the same methods employed during the initial investigation.

5.3. PCB DELINEATION SAMPLE RESULTS

Table 4 shows the PCB results for sediment samples collected during the supplemental investigation. Aroclor 1248, Aroclor 1260, and total PCBs were detected above their respective PALs in several samples. Aroclor 1248 and total PCBs were detected at concentrations greater than 50 mg/kg. Detected concentrations greater than 50 mg/kg were limited to samples TM-SD-118, TM-SD-120, and TM-SD-124. Of these samples, TM-SD-124 was located the farthest downstream. All PCB concentrations downstream of TM-SD-124 were 6.74 mg/kg or less. All samples with detected concentrations of PCBs greater than 50 mg/kg were collected from the deep sampling intervals. Specific depth intervals that were sampled are indicated in **Table 4**. Delineation samples collected as part of the Supplemental Investigation identified that areas with PCB concentrations greater than 50 mg/kg were laterally limited to the area between TM-SD-118 and TM-SD-124, as well as the area in the immediate vicinity of the individual sample location TM-SD-31. Because samples with PCB concentrations over 50 mg/kg were from deep sampling depth intervals, further vertical delineation is required. This delineation can be best implemented during the excavation process. The locations and concentrations of PAL exceedances of PCBs are shown on **Figure 7** through **Figure 10**.

5.4. SVOC RESAMPLE RESULTS

Table 4 shows the SVOC results for sediment samples collected during the supplemental investigation. A total of 25 SVOCs were detected at concentrations above the laboratory's MDLs across all 11 composite samples; however, only the concentrations of two SVOCs exceeded their respective PALs. Benzo(a)pyrene exceeded its PAL in samples TM-SD-36 (D), TM-SD-46 (D), and TM-SD-51 (D); while naphthalene exceeded its PAL in sample TM-SD-72 (D). The locations and concentrations of SVOC PAL exceedances are shown on **Figure 5** and **Figure 6**. The MDLs for the majority of the SVOCs were below the PALs for these samples; however, a small percentage (3.6%) of the MDLs for SVOC results exceeded their respective PALs. MDLs exceeded PALs for at least one sample result for the following parameters: 2,6-dinitrotoluene, bis(2-chloroethyl)ether, hexachlorobenzene, hexachlorocyclopentadiene, and pentachlorophenol. The MDL exceeded the PAL for less than half of the results for all of these parameters (except pentachlorophenol). Results for these constituents where the MDL was below the PAL were all non-detects.

TM-SD-72(D) was analyzed for VOCs and metals in addition to SVOCs. Four VOCs (benzene, ethylbenzene, toluene, and xylenes) were detected at concentrations above the laboratory's MDLs. The concentration of benzene in this sample (18 J mg/kg) exceeded its respective PAL (1.5 mg/kg); however, this concentration was detected below the reporting limit and therefore is an estimated value. The PAL exceedance for benzene is shown on **Figure 6**. Several metals were detected above the laboratory's MDLs in sample TM-SD-72 (D). The concentration of

arsenic in this sample (48 J mg/kg) exceeded its PAL (3 mg/kg). The PAL exceedance for arsenic is shown on **Figure 4**.

5.5. RESTRICTED ACCESS SAMPLE RESULTS

Table 3 provides the analytical results for samples TM-SD-54, TM-SD-56, and TM-SD-59. These samples were analyzed for VOCs and metals. Eight VOCs were detected at concentrations above the laboratory's MDLs; however, none of the detected concentrations of these parameters exceeded their respective PALs. A total of 17 metals were detected at concentrations above the laboratory's MDLs. The concentration of arsenic in each of these three samples exceeded the PAL. There were no other metals for which detected concentrations exceeded their respective PALs. The locations and concentrations of inorganic PAL exceedances are shown on **Figure 3** and **Figure 4**.

6.0 REMEDIATION WASTE CHARACTERIZATION

The analytic testing data reported by the laboratory for the collected samples was assessed in a stepwise manner to determine if the sediments removed from the TMC will be subject to regulation as hazardous waste under RCRA. The sediments removed from the canal are defined as remediation wastes in 40 CFR 260.10 or more specifically as contaminated environmental media. Contaminated environmental media generally is not subject to regulation under RCRA but may be subject to regulation if the media “contain” hazardous waste. Because of the varying nature of the sources of constituents in the canal and the potential that the media may have been contaminated with listed hazardous waste, the stepwise approach included the following procedures to identify the potential presence of hazardous remediation waste:

- 1) Evaluation of toxicity characteristics of hazardous waste (TCLP testing);
- 2) Evaluation of the concentration of hazardous constituents and whether the constituents exist at concentrations greater than health-based levels calculated using a reasonable maximum exposure scenario for the remedial activity;

6.1. RCRA TOXICITY CHARACTERISTIC ASSESSMENT

A representative number of samples of sediment from the TMC were analyzed using the Toxicity Characteristic Leaching Procedure (TCLP). Analytical results for toxicity characteristic testing of the sediments are summarized in **Table 3**. TCLP testing was completed for regulated volatile, semi-volatile and metal constituents of discrete and composite sediment samples recovered from all transects. As summarized in **Table 3**, no exceedances of the TCLP regulatory limits were identified; therefore it has been demonstrated that the contaminated environmental media that will be excavated/dredged from the canal will not exhibit a hazardous characteristic.

6.2. RCRA CONTAINED-IN WASTE ASSESSMENT

Based on the historical records, the sediment currently present in the TMC may have contacted and been contaminated with wastewater treatment sludges from electroplating operations, a listed hazardous waste (EPA Waste Code F006), prior to the installation of a separate wastewater treatment facility (HDS plant) in 1987. Spent pickle liquor, which was beneficially reused to adjust pH in the TMC, is also a listed hazardous waste (K062) when disposed rather than reused. Thus, under EPA’s “contained-in” policy, sediment excavated from the TMC could be considered contaminated media and could be subject to regulation under RCRA if determined to “contain” hazardous waste. EPA generally considers contaminated environmental media to contain hazardous waste: (1) when they exhibit a characteristic of hazardous waste; or, (2) when they are contaminated with concentrations of hazardous constituents from listed hazardous waste that are above health-based levels.

If contaminated environmental media contain hazardous waste, they are subject to all applicable RCRA requirements until they no longer contain hazardous waste. EPA considers contaminated environmental media to no longer contain hazardous waste: (1) when they no longer exhibit a characteristic of hazardous waste; and (2) when concentrations of hazardous constituents from listed hazardous wastes are below health-based levels.

In the case of environmental media that are contaminated by listed hazardous waste, EPA guidance recommends that “contained-in” determinations be made based on health-based levels of hazardous constituents below which contaminated environmental media would be considered to no longer contain hazardous waste. Since this determination involves development of site-specific health-based levels, the approval of EPA or an authorized state is required. In this case, MDE has been delegated the authority to make the determination of when the sediments no longer contain hazardous waste. In an email dated February 4, 2016 (**Appendix A**), MDE determined that for the Tin Mill Canal remediation waste to be considered to no longer contain hazardous waste, the characterization of the remediation waste must demonstrate that: (1) the waste no longer exhibits any characteristics of a hazardous waste; and (2) the concentrations of constituents are below the USEPA industrial soil Regional Screening Levels (RSLs) set to a hazard index of 10 and a cancer risk of 1×10^{-4} (Adjusted RSLs).

As discussed above, in order for contaminated environmental media to no longer contain hazardous waste, it must first no longer exhibit a characteristic of hazardous waste. The TMC sediments were tested for the toxicity characteristic via TCLP methods. The results of the TCLP testing are presented in **Table 4**. In this table, the results of the TCLP tests are compared to the regulatory criteria established to define a waste as characteristically hazardous under RCRA due to toxicity. As indicated, none of the regulatory criteria were exceeded. Therefore, the sediments do not exhibit the characteristic of hazardous waste.

A health-based assessment of hazardous constituents within the TMC sediments was completed by comparing the maximum detected concentrations or the maximum MDL of the constituents of potential interest (COPIs) developed for the sediments to the Adjusted RSLs. The TMC sediments were analyzed for a broad list of COPIs including TAL inorganics, TCL volatile organics, TCL semi-volatile organics, and PCBs. The COPI list specifically included the underlying hazardous constituents for which the F006 waste was listed (cadmium, chromium, cyanide, lead, nickel and silver) and K062 (Hexavalent chromium and lead). Detection limits for some SVOCs exceeded the Adjusted RSLs as part of the initial characterization work. Additional samples were collected for analysis of SVOCs during the supplemental investigation at the locations where the MDLs exceed the Adjusted RSLs. SVOC results from samples collected during the supplemental investigation had acceptable MDLs to support the health-based Adjusted RSL assessment. The assessment also compared concentrations of constituents measured in the sediment in place in the TMC, prior to excavation (i.e., generation) or any treatment that would occur to solidify the excavated material for disposal.

The data for the health-based assessment of hazardous constituents are presented in **Table 5**. The results indicate that the only concentrations of hazardous constituents above the Adjusted RSLs were a detection of PCB Aroclor 1242 in sample TM-SD-31 and a detection of Aroclor 1248 in sample TM-SD-120. These detections of PCBs also exceeded the TSCA limitation of 50 mg/kg. Therefore, based on the results of the TCLP analyses and the health-based “contained in determination” protocol, excavated environmental media and sediment from the TMC will not require management as a hazardous waste. However, excavated environmental media that contains PCBs with concentrations greater than 50 mg/kg will require management as a TSCA regulated waste material.

Environmental media excavated for remedial purposes in which the Total PCB concentration is found to exceed the 50 mg/kg threshold established by TSCA will require disposal as PCB remediation waste at a RCRA Sec. 3004 or 3006 permitted hazardous waste landfill or an approved PCB disposal facility per 40 CFR §761 .61(a)(5)(i)(B)(2)(iii). Environmental media that contains less than 50 mg/kg total PCB concentration removed from the TMC can be disposed at the on-site Greys Landfill. This non-hazardous, industrial landfill has received process waste and demolition debris from throughout the former mill and is operated under the oversight of the MDE.

6.3. PHYSICAL CHARACTERISTICS

The sediments were typically described as dark black fine silt; oily/greasy; and sludge-like (**Table 2**). Moisture content for the geotechnical samples ranged from 28 to 41.4%. Dry densities ranged from as high as 109 pounds per cubic foot (pcf) for material described as dry-ish to 76.8 pcf for more typical material. Therefore, the excavated sediment will need to be dewatered and likely stabilized to remove free liquids to make it suitable for transport off-site or to the on-site Greys landfill. Sediment can be dewatered and solidified with sorbent material (cement kiln dust, lime kiln dust, fly ash, gypsum, sawdust, soil, etc.) until the bulked material no longer contains free liquids and will pass the paint filter test. This may be done in place prior to removal from the canal, in roll-off containers, on a concrete containment pad, or in a portable pug mill. Bench scale testing should be conducted to determine and demonstrate the appropriate bulking agent, mix, and mixing method.

7.0 SCREENING LEVEL RISK ASSESSMENT

7.1. ANALYSIS PROCESS

A Screening Level Risk Assessment (SLRA) has been conducted for TMC sediments to further evaluate existing conditions in support of the design of necessary response measures. The data were evaluated to assess baseline risk for the Composite Worker exposure scenario. The Composite Worker is defined by the USEPA as a long-term receptor exposed during the work day who is a full time employee that spends most of the workday conducting maintenance activities (which typically involve on-site exposures to surface soils) outdoors. The SLRA included the following evaluation process:

Identification of Constituents of Potential Concern (COPCs): Compounds that are present at concentrations at or above the EPA Regional Screening Levels (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. The COPC screening levels for polynuclear aromatic hydrocarbons (PAHs) (as well as PALs discussed in preceding sections) were modified for the SLRA based on the USEPA Integrated Risk Information System (IRIS) Recent Additions for benzo[a]pyrene dated January 19, 2017 with adjustments for other PAH values based on the relative potency factors. A COPC screening analysis is provided in **Table 6** to identify compounds above the relevant cancer and non-cancer screening levels. Each compound with at least one detection in the TMC sediments was included in this analysis.

Identification of Exposure Units (EUs): The area of the TMC was analyzed as a single EU with an area of approximately 17 acres.

Exposure Point Concentrations (EPCs): The COPC data for shallow and deep sediment depths were pooled to assess potential exposures to TMC sediments for future Composite Workers. It was not necessary to assess Construction Workers because all maintenance cleanup work for the TMC sediments will be conducted by remediation-trained workers under a Health and Safety Plan addressing the contaminants of concern. The dataset of pooled samples of COPCs was used for estimation of potential EPCs within the EU. A limited amount of SVOC data (collected during the initial sediment investigation in 2015) did not meet the reporting limit requirements as specified by the QAPP. This unreliable SVOC data was rejected, and has been omitted from the EPC calculations. SVOC analyses from the supplemental investigation achieved lower reporting limits for SVOCs, so this data was used in the EPC calculations in place of the rejected data. A statistical analysis was performed for each COPC data set 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 the pooled dataset was calculated for comparison to the Adult Lead Model-based values, and any individual results exceeding 10,000 would be delineated for possible excavation and removal (if applicable). For PCBs, all results equaling or exceeding 50 mg/kg have been delineated for excavation and removal. All PCB results less than 50 mg/kg are included in the EPCs and risk ratio calculations.

Risk Ratios: The sediment EPCs were compared to the USEPA RSLs (for soils) to develop risk ratios to assess potential baseline risks to the Composite Worker based on equations derived in the USEPA Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites (OSWER 9355.4-24, December 2002). 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.

Assessment of Lead: For lead, the results for shallow and deep sediments were pooled for the EU, and an arithmetic mean value was computed and compared to the applicable RSL (800 mg/kg) as an initial screening. If the mean concentration for the EU was below the applicable RSL, the EU would require no further action for lead. If the mean concentration exceeded the RSL, the mean value would be compared to calculated Adult Lead Model values (ALM Version dated 6/21/2009 updated with the 8/2/2016 OLEM Directive) with inputs of 1.7 for the geometric standard deviation and a blood baseline lead level of 0.7 ug/dL. The ALM calculation generates a lead concentration of 2,737 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 concentration for the EU was below 2,737 mg/kg, the EU would be identified as requiring no further action for lead. The average lead value is presented (for pooled sediments) in **Table 7**. For lead, all results equaling or exceeding 10,000 mg/kg would require delineation for possible excavation and removal (if applicable).

Risk Characterization Approach: For the EU, if the risk ratios for each non-carcinogenic COPC or cumulative target organ did not exceed 1 (with the exception of lead), and the sum of the risk ratios for the carcinogenic COPCs did not exceed a cumulative cancer risk of $1E-5$, then a no further action determination would be recommended.

If the estimate of cumulative cancer risk exceeded $1E-5$, but was less than $1E-4$, then capping of the EU would be considered to be an acceptable remedy for the Composite Worker. The efficacy of capping for elevated non-cancer hazard would be evaluated in terms of the magnitude of exceedance and other factors such as bioavailability of the

COPC. Similarly, for lead, if the ALM results indicated 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 lead concentrations corresponding to ALM probabilities of 5% and 10% are 2,737 mg/kg, and 3,417 mg/kg, respectively. If capping of the identified area is not proposed, additional more detailed quantitative evaluation of risk will be required for the EU. This supplemental risk evaluation could include an evaluation of selective removal (excavation) to reduce site-wide cancer and/or non-cancer risks to acceptable levels.

The USEPA's acceptable risk range is between 1E-6 and 1E-4. If the sum of the risk ratios for carcinogens exceeded a cumulative cancer risk of 1E-4, further analysis of site conditions would be required including the consideration of toxicity reduction in any proposal for a remedy. The magnitude of non-carcinogen hazard exceedances and bioavailability of the COPC would also dictate further analysis of site conditions including consideration of toxicity reduction in any proposal for a remedy. In addition, if the ALM indicated 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 would be completed such that the probability would be reduced to less than 10% after toxicity reduction, but before capping.

7.2. TIN MILL CANAL SLRA RESULTS AND RISK CHARACTERIZATION

The results for 2,4-dinitrotoluene were eliminated from the sediment COPCs dataset for risk assessment because this compound was very infrequently detected in the TMC sediments. This compound was only detected in 2% (1 sample) of the relevant samples. If the detection frequency of an analyte is less than 5% in a dataset with a minimum of 20 samples, the COPC can be eliminated from the risk analysis 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 2,4-dinitrotoluene from the risk assessment based on the relatively low magnitude of the detection. Total PCBs have been included in the risk ratio analysis, but individual aroclors were omitted to avoid double-counting the risk associated with PCBs; the total PCB values include the sum of all aroclor mixtures. All remaining COPCs have been retained for the risk assessment based on the frequency of detections (>5%) in the overall sediment dataset.

EPCs for each applicable COPC were calculated for the pooled sediment dataset. As indicated above, the EPC for lead is the average (i.e., arithmetic mean) value for the pooled dataset. ProUCL output tables (with computed UCLs) derived from the data for each COPC in sediment are provided as electronic attachments, with computations presented and EPCs calculated for COPCs within the single pooled dataset for the EU. The ProUCL input tables are also included as electronic attachments. The calculated EPCs are shown in **Table 8**.

As indicated on **Table 7**, the pooled TMC sediments did not exceed an average lead value of 800 mg/kg. The screening criterion for lead was set at an exposure unit arithmetic mean of 800 mg/kg based on the RSL, with a secondary limit of 2,737 mg/kg based on the Adult Lead Model developed by the USEPA (corresponding to a 5% probability of a blood lead level of 10 ug/dL). There were no locations where detections of lead exceeded 10,000 mg/kg, the designated threshold at which delineation would be required.

Risk ratios for the estimates of potential EPCs for the Composite Worker scenario are shown in **Table 9** (pooled surface and subsurface sediments). The risk ratios indicated that the cumulative carcinogenic risk to a Composite Worker exposed to sediment was 3E-5. This level of risk exceeds the acceptable risk criterion identified in the Risk Characterization Approach for no further action (1E-5). When the non-cancer risks were segregated and summed by target organ for cumulative Hazard Index (HI), no target organ exceeded a cumulative HI of 1 in the pooled sediments (the level for no further action). The risk ratios indicate that an environmental capping remedy would be acceptable to mitigate any potential future exposures to TMC sediments. Institutional controls to ensure proper maintenance of the cap, as well as proper oversight and management of any future construction activity nearby that may require temporary disturbances of the existing sediment from below the cap, would be protective of future workers by limiting potential exposures to sediments which may be impacted above the acceptable risk criteria.

7.3. MANAGEMENT OF PCB-CONTAMINATED MEDIA

Sediments or contaminated media within the TMC sediments containing total PCB concentrations less than 50 mg/kg may be left in place if paved or otherwise capped. The TSCA low and high occupancy standards will not apply to structures serving as engineered barriers (including environmental capping).

Several sediment samples exceeded the level that would warrant mandatory delineation and excavation of PCBs (50 mg/kg). At this time, delineation activities have been completed within the TMC to define the areas with elevated PCBs. Material exceeding the threshold of 50 mg/kg will be excavated and disposed of at a permitted off-site commercial landfill approved to accept TSCA-regulated waste. As previously stated, the PCB detections in excess of 50 mg/kg were not included in the SLRA based on the expectation that applicable material will be excavated for appropriate disposal. A PCB excavation plan will be submitted under separate cover to the agencies for their review and approval.

8.0 FINDINGS AND RECOMMENDATIONS

The objective of the TMC investigations discussed herein was to fully characterize the nature and extent of contamination in sediments at the Site. During the investigation, a total of 143 sediment samples were collected and analyzed to define the nature and extent of contamination in the TMC. The sampling and analysis plan for the TMC was developed to provide adequate coverage throughout the TMC to identify potential releases of hazardous substances and/or petroleum products, and/or delineation elevated PCBs identified during the initial investigation. Sediment samples were analyzed for VOCs, SVOCs, metals, cyanide, and/or PCBs.

8.1. SEDIMENT

The concentrations of constituents in the sediment have been characterized to provide estimates of exposure point concentrations to support risk assessment.

Lead concentrations are well below the levels that would warrant evaluation of a removal remedy. None of the individual lead detections exceeded the mandatory delineation threshold of 10,000 mg/kg. The average lead concentration in the pooled sediments was well below the 800 mg/kg RSL in the TMC, indicating that no further action is needed with respect to lead.

Aroclor 1242, Aroclor 1248, Aroclor 1254, Aroclor 1260, and total PCBs exceeded their respective PALs in multiple locations collected from the TMC. Several deep sediment samples (TM-SD-31 (D), TM-SB-118, TM-SD-120, and TM-SD-124) exceeded the level that would warrant mandatory delineation and excavation of total PCBs (50 mg/kg). The extent of the TMC where total PCBs were identified above 50 mg/kg has been laterally delineated. Material exceeding the threshold of 50 mg/kg is required to be excavated and disposed of at a permitted off-site commercial landfill approved to accept TSCA-regulated PCB waste.

There was one VOC detection in excess of the applicable PAL. Benzene was detected in composite sample TM-SD-72 (D) at a concentration of 18 mg/kg. The remaining PAL exceedances in soil consisted of three inorganics (arsenic, cobalt, and lead) and three SVOCs (benzo[a]pyrene, naphthalene, and 2,4-dinitrotoluene). Arsenic was the most common inorganic exceedance, and was detected above the PAL in 62 of the total sediment samples analyzed at the Site. The maximum detection of arsenic was 132 mg/kg at sample location TM-SD-64. Lead and cobalt were each limited to a single PAL exceedance, in samples TM-SD-86 (946 mg/kg) and TM-SD-03 (386 mg/kg), respectively. Benzo[a]pyrene exceeded the PAL in the largest number of samples (three) of any SVOC. The maximum detection of benzo[a]pyrene was 10.3 mg/kg in composite sample TM-SD-51 (D). Naphthalene and 2,4-dinitrotoluene were each limited to a single PAL exceedance, in composite samples TM-SD-72 (D) (137 mg/kg) and TM-SD-10 (D) (26.8 mg/kg), respectively.

8.2. REMEDIATION WASTE CHARACTERIZATION

TCLP testing of discrete and composite sediment samples recovered from all transects was completed for regulated volatile, semi-volatile and metal constituents. No exceedances of the TCLP regulatory limits were identified. Furthermore, none of the maximum detected concentrations or maximum MDLs for all hazardous constituents (except PCBs) exceeded their respective health-based levels below which contaminated environmental media would be considered to no longer contain hazardous waste (“contained-in” criteria i.e., Adjusted RSLs). Therefore, with the exception of sediment with concentrations of PCBs greater than 50 mg/kg, the contaminated environmental media that will be excavated/dredged from the canal will be considered “contained out” and will not require management as a hazardous waste..

Sediments or contaminated media containing total PCB concentrations greater than 50 mg/kg are subject to requirements under TSCA. Therefore, material with total PCB concentrations greater than 50 mg/kg will be excavated and segregated for transport and disposal off-site to a permitted hazardous waste landfill approved to accept TSCA-regulated waste.

The sediments contain high moisture content and exhibit the presence of free liquids. Dewatering and stabilization will be required prior to disposal in the on-site Greys landfill or transport off-site to a permitted hazardous waste landfill approved to accept TSCA-regulated waste.. Bench or field testing should be conducted to determine an appropriate sorbent agent and the appropriate dewatering, dosing and mixing methods to eliminate free liquids and achieve a consistency suitable for transport and disposal.

8.3. HUMAN HEALTH SCREENING ANALYSIS

The current Composite Worker could potentially be exposed to sediments in the TMC. The SLRA analysis indicated that the cumulative cancer risk for the Composite Worker exposure to sediments, after removal of the sediment that will be excavated for off-site disposal due to PCB detections above 50 mg/kg, was equal to 3E-5, above the regulatory benchmark for no further action (1E-5). The main contributor to carcinogenic risk in pooled TMC sediments was total PCBs. The acceptable cumulative non-cancer HI of 1 was not exceeded for any organ system evaluated for Composite Worker exposure to sediments. Since no cumulative HI exceeded 1 for any target organ system and the estimates of cumulative cancer risk for exposure to sediments were less than 1E-4, environmental capping, after removal of sediments containing PCB concentrations exceeding 50 mg/kg, would be an acceptable remedy for protection of the current and future Composite Worker. In addition, institutional controls should be implemented for the protection of future Composite Workers to ensure proper oversight and management of any future intrusive construction activity nearby that may require temporary disturbance of sediments from below the cap.

8.4. RECOMMENDATIONS

Sufficient remedial investigation data has been collected to evaluate the nature and extent of possible constituents of concern in the TMC and further investigation is not warranted. The TMC does not meet the criteria for no further action, and the following remedial action or further evaluation is recommended to prevent potential unacceptable exposures:

- Sediment impacted by elevated PCBs (>50 mg/kg) in the northern portion of the TMC are required to be excavated. Lateral delineation has been completed, but the depth of sediments containing PCB concentrations greater than 50 mg/kg should be delineated during removal activities. Material exceeding the threshold of 50 mg/kg should be excavated and disposed of at a permitted off-site hazardous waste landfill approved to accept TSCA-regulated waste. Excavated sediments with concentrations of PCBs less than 50 mg/kg are considered non-hazardous and can be disposed at Greys Landfill. An excavation plan will be submitted to the agencies for approval.
- Supplemental excavation of sediments should be implemented to achieve appropriate hydraulic slope and cross-sectional area and to facilitate placement of an engineered barrier for protection of the current and future Composite Worker. This engineered barrier can be designed to provide acceptable stormwater quality for discharge without active treatment. Environmental capping, after excavation of sediments containing PCB concentrations exceeding 50 mg/kg, would be an acceptable remedy for protection of current and future Composite Worker.
- Institutional controls should be implemented for the protection of future workers to ensure proper maintenance of the engineered barrier, as well as proper oversight and management of any future intrusive construction activity nearby that may temporarily disturb sediments from below the cap. These institution controls would include a requirement for written notice to the MDE of any future intrusive activities, and may require worker health and safety requirements for any excavations of substantial time periods, and proper management and characterization of any material disturbed at the Site.
- If future development proposes disturbance of material below from below the cap, then a detailed risk analysis should be completed and presented in a Response and Development Work Plan to further assess potential exposures to future workers.

9.0 REFERENCES

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Rust Environmental & Infrastructure (1998). *Description of Current Conditions: Bethlehem Steel Corporation*. Final Draft. January, 1998.


ATSDR, 2000. *TOXICOLOGICAL PROFILE FOR POLYCHLORINATED BIPHENYLS (PCBs)*. Agency for Toxic Substances and Disease Registry. November 2000

USEPA, 2005. *Polychlorinated Biphenyl (PCB) Site Revitalization Guidance Under the Toxic Substances Control Act (TSCA)*, November 2005

FIGURES



Image courtesy of USGS Earthstar Geographics SIO © 2016 Microsoft Corporation



 ARM Group Inc.
 Earth Resource Engineers
 and Consultants

0 375 750 1,500
 Feet

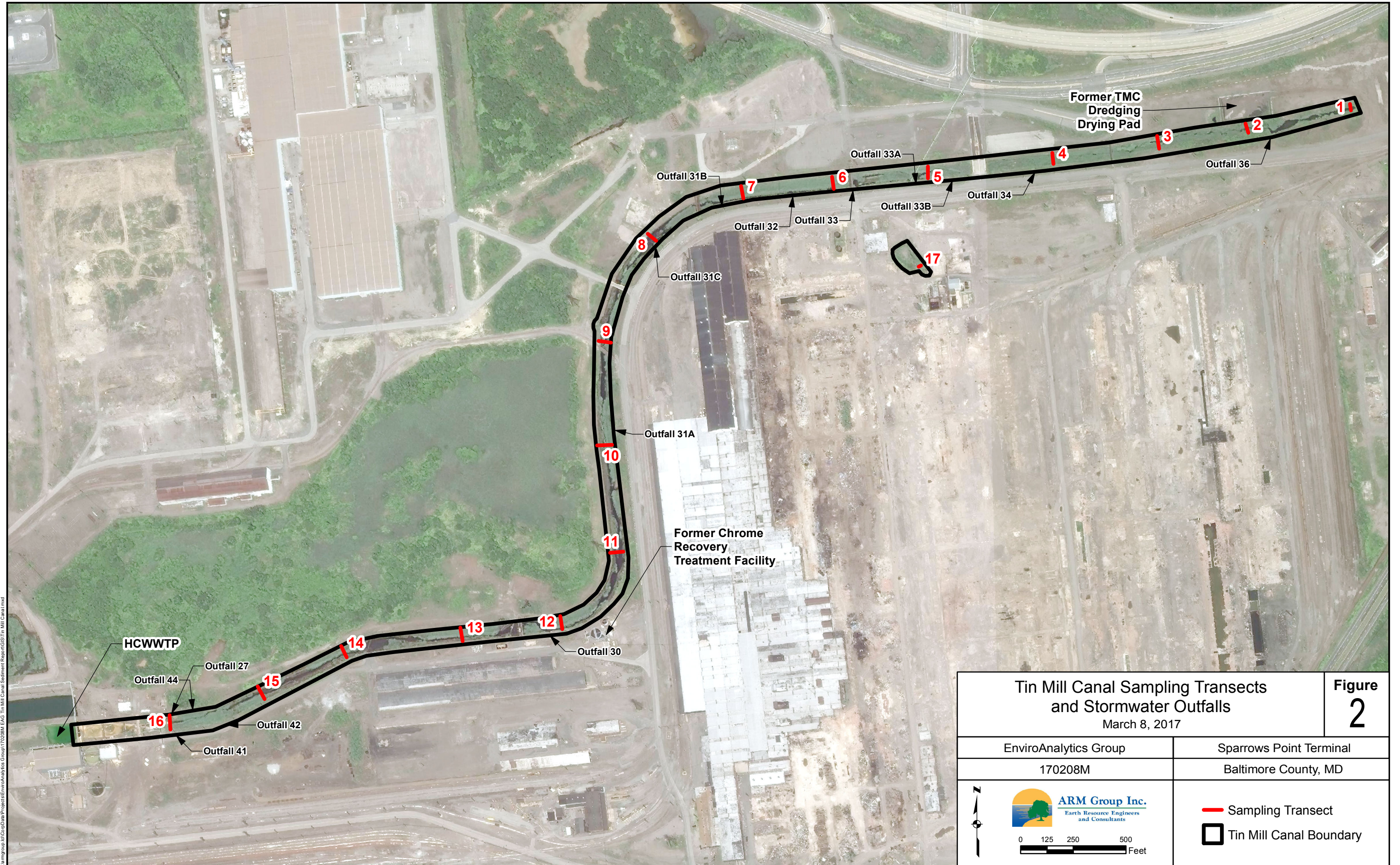
- Site Boundary
- Private Property
- Area A Boundaries
- Area B Boundaries

Tradepoint Atlantic
Area A and Area B Parcels
 August 1, 2016

EnviroAnalytics Group
 Area A: Project 150298M
 Area B: Project 150300M

Tradepoint Atlantic
 Baltimore County, MD





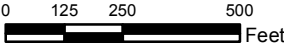
Figure
1

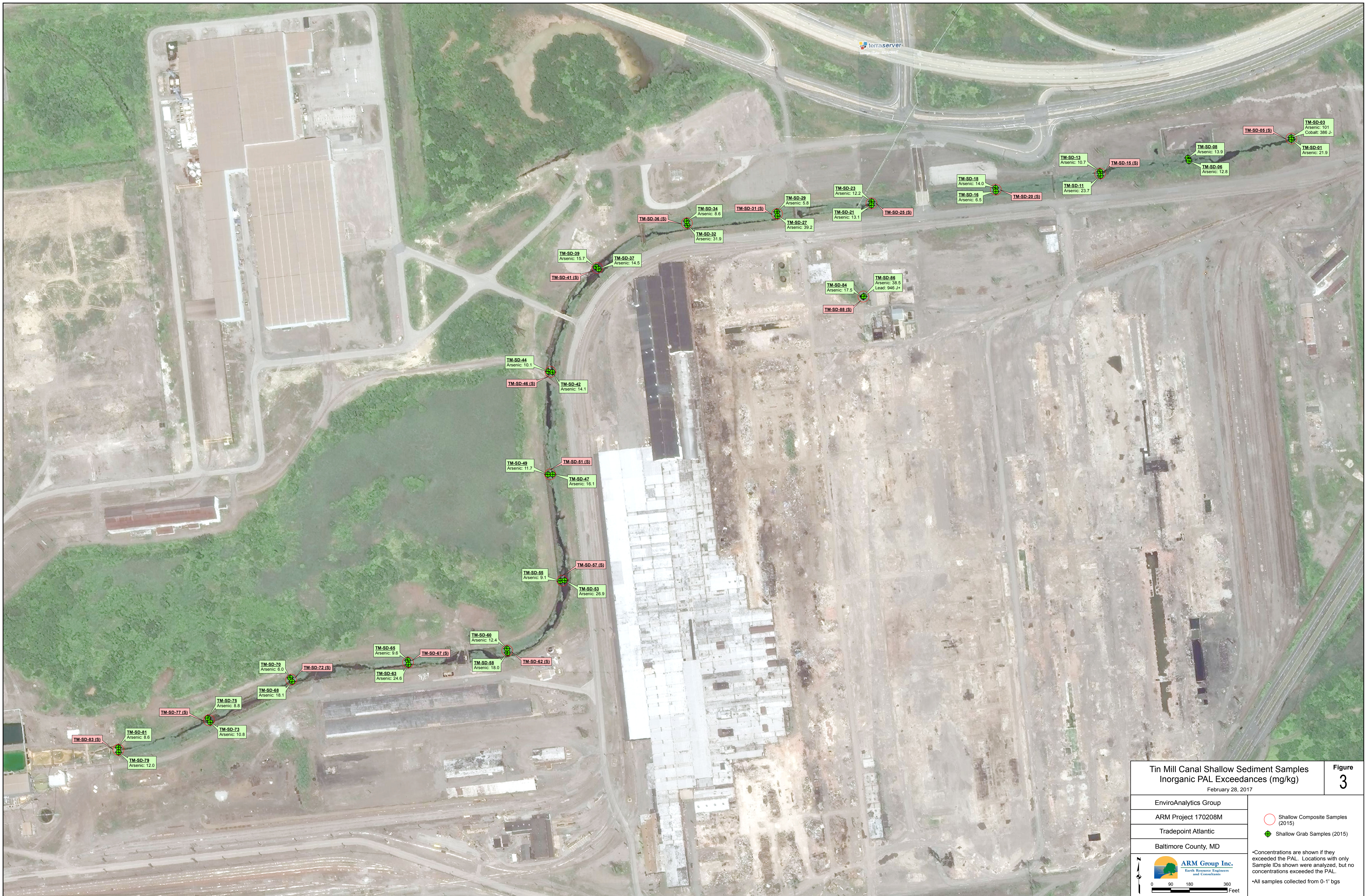


Tin Mill Canal Sampling Transects
and Stormwater Outfalls

March 8, 2017

Figure
2

EnviroAnalytics Group	Sparrows Point Terminal
170208M	Baltimore County, MD
 ARM Group Inc. Earth Resource Engineers and Consultants	 Sampling Transect  Tin Mill Canal Boundary
 	



Tin Mill Canal Shallow Sediment Samples
Inorganic PAL Exceedances (mg/kg)
February 28, 2017

EnviroAnalytics Group	<p>Shallow Composite Samples (2015) Shallow Grab Samples (2015)</p> <p>*Concentrations are shown if they exceeded the PAL. Locations with only Sample IDs shown were analyzed, but no concentrations exceeded the PAL. *All samples collected from 0-1' bgs</p>
ARM Project 170208M	
Tradepoint Atlantic	
Baltimore County, MD	

ARM Group Inc.
Earth Resource Engineers and Consultants



Tin Mill Canal Deep Sediment Samples Inorganic PAL Exceedances (mg/kg)
 March 10, 2017

Figure 4

EnviroAnalytics Group	Deep Composite Samples (2016)
ARM Project 170208M	Deep Composite Samples (2015)
Tradepoint Atlantic	Deep Grab Samples (2016)
Baltimore County, MD	Deep Grab Samples (2015)

ARM Group Inc.
 Earth Resource Engineers and Consultants

0 90 180 360 Feet

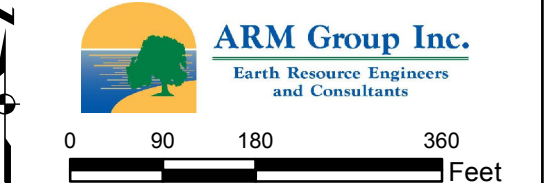
Concentrations are shown if they exceeded the PAL. Locations with only Sample IDs shown were analyzed, but no concentrations exceeded the PAL.



Tin Mill Canal Shallow Sediment Samples
 SVOC PAL Exceedances (mg/kg)
 February 28, 2017

Figure
 5

EnviroAnalytics Group
 ARM Project 170208M
 Tradepoint Atlantic
 Baltimore County, MD



○ Shallow Composite Samples (2015)
 *Concentrations are shown if they exceeded the PAL. Locations with only Sample IDs shown were analyzed, but no concentrations exceeded the PAL.
 *All samples collected from 0-1' dgs



**Tin Mill Canal Deep Sediment Samples
VOC/SVOC PAL Exceedances (mg/kg)**
February 28, 2017

Figure 6

EnviroAnalytics Group	<ul style="list-style-type: none"> ○ Deep Composite Samples (2016) ○ Deep Composite Samples (2015) <p>Concentrations are shown if they exceeded the PAL. Locations with only Sample IDs shown were analyzed, but no concentrations exceeded the PAL.</p>
ARM Project 170208M	
Tradepoint Atlantic	
Baltimore County, MD	

ARM Group Inc.
 Earth Resource Engineers and Consultants

0 90 180 360 Feet



TM-SD-115
 Aroclor 1248: 4.26 J
 Aroclor 1260: 1.38 J
 PCBs (total): 5.64 J

TM-SD-103
 Aroclor 1248: 8.02 J
 Aroclor 1260: 1.18 J
 PCBs (total): 12.9 J

TM-SD-125
 Aroclor 1248: 1.62 J
 Aroclor 1260: 1.17 J
 PCBs (total): 2.79 J

TM-SD-127
 Aroclor 1248: 0.959 J

TM-SD-123
 Aroclor 1248: 1.49 J
 PCBs (total): 1.49 J

TM-SD-117
 Aroclor 1248: 1.44 J
 PCBs (total): 1.44 J

TM-SD-105
 Aroclor 1248: 8.67 J
 Aroclor 1260: 3.13 J
 PCBs (total): 11.8 J

Tin Mill Canal Shallow Sediment Samples PCB PAL Exceedances (mg/kg) February 28, 2017		Figure 7
EnviroAnalytics Group ARM Project 170208M Tradepoint Atlantic Baltimore County, MD	○ Shallow Composite Samples (2015) ⊕ Shallow Grab Samples (2016)	*Concentrations are shown if they exceeded the PAL. Locations with only Sample IDs shown were analyzed, but no concentrations exceeded the PAL. *All samples collected from 0-1' bgs
		0 90 180 360 Feet



**Tin Mill Canal Deep Sediment Samples
PCB PAL Exceedances (mg/kg)**
February 28, 2017

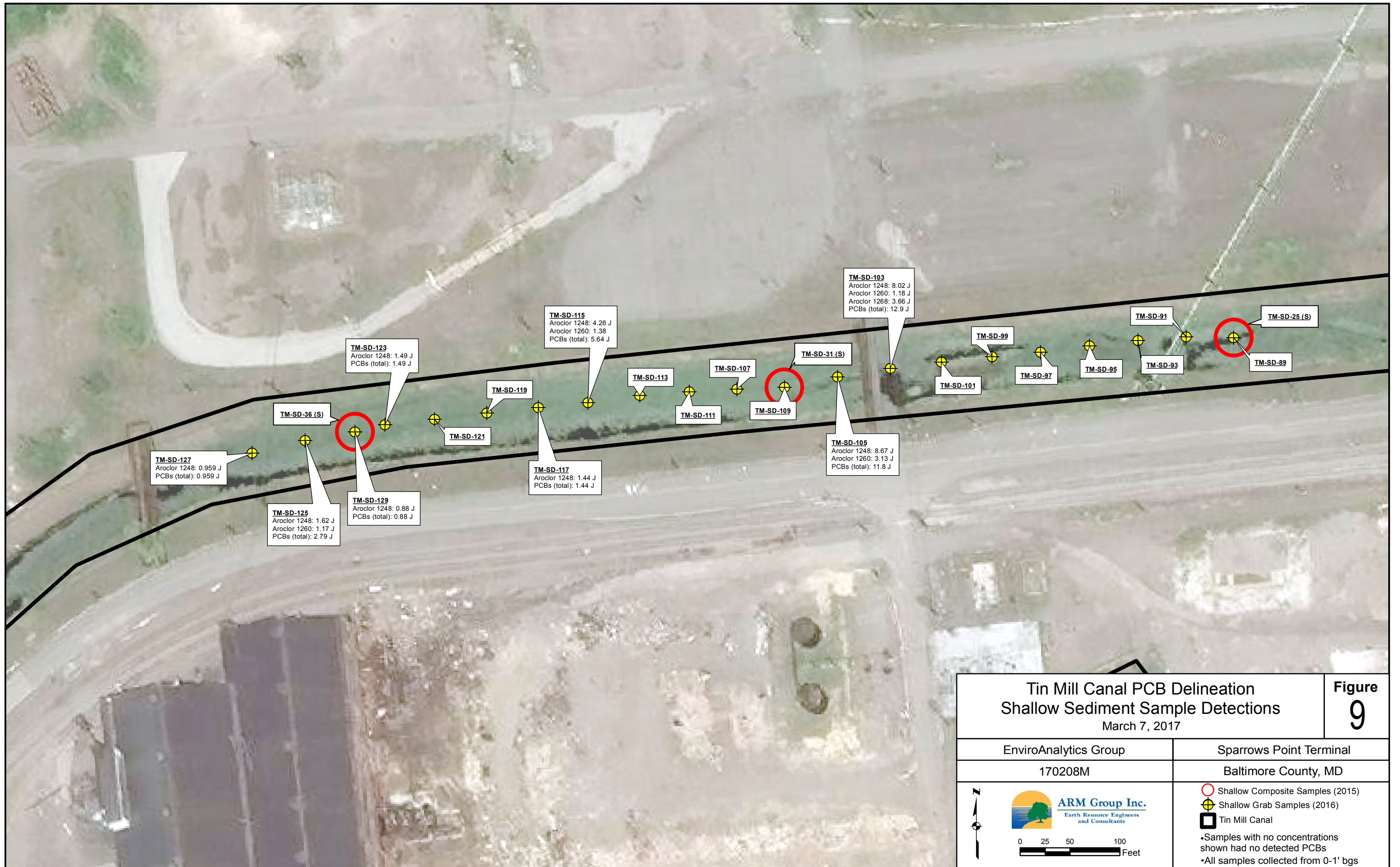
Figure 8


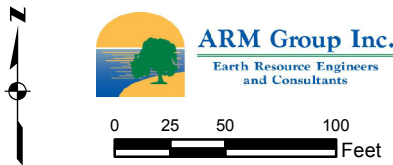
EnviroAnalytics Group
ARM Project 170208M
Tradepoint Atlantic
Baltimore County, MD

○ Deep Composite Samples (2015)
+ Deep Grab Samples (2016)
— Drainage+Trenches


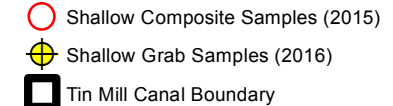
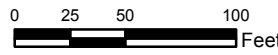
Concentrations are shown if they exceeded the PAL. Locations with only Sample IDs shown were analyzed, but no concentrations exceeded the PAL. PCB detections over 50 mg/kg shown in red.

0 90 180 360 Feet



Tin Mill Canal PCB Delineation Shallow Sediment Sample Detections March 7, 2017		Figure 9
EnviroAnalytics Group 170208M	Sparrows Point Terminal Baltimore County, MD	
		<ul style="list-style-type: none"> ○ Shallow Composite Samples (2015) ● Shallow Grab Samples (2016) Tin Mill Canal <p>•Samples with no concentrations shown had no detected PCBs •All samples collected from 0-1' bgs</p>
		



Tin Mill Canal PCB Delineation Deep Sediment Sample Detections March 10, 2017		Figure 10
EnviroAnalytics Group 170208M	Sparrows Point Terminal Baltimore County, MD	
		
	Samples with no concentrations shown had no detected PCBs	

TABLES

**Table 1 - Analytical Sample Results
Samples Collected April/August 2015**

Sample Identification Sample Date Sample Type Sample Location and Depth			Transect 1					
			TM-SD-01	TM-SD-02	TM-SD-03	TM-SD-04	TM-SD-05	TM-SD-05
			4/14/2015	8/12/2015	4/14/2015	8/12/2015	4/14/2015	8/12/2015
			Discrete	Discrete	Discrete	Discrete	Composite	Composite
Compound	PAL	Units	South 0-6"	No Recovery	North 0-6"	No Recovery	0-6"	No Recovery
VOC								
1,1,1,2-Tetrachloroethane	8.8	mg/kg	0.233 U		0.273 U			
1,1,1-Trichloroethane	36000	mg/kg	0.233 U		0.273 U			
1,1,2,2-Tetrachloroethane	2.7	mg/kg	0.233 U		0.273 U			
1,1,2-Trichloroethane	5	mg/kg	0.233 U		0.273 U			
1,1-Dichloroethane	16	mg/kg	0.233 U		0.273 U			
1,1-Dichloroethene	1000	mg/kg	0.233 U		0.273 U			
1,2-Dichloroethane	2	mg/kg	0.233 U		0.273 U			
1,2-Dichloropropane	4.4	mg/kg	0.233 U		0.273 U			
2-Butanone (MEK)	190000	mg/kg	0.466 U		0.546 U			
2-Hexanone	1300	mg/kg	0.466 U		0.546 U			
4-Methyl-2-pentanone (MIBK)	56000	mg/kg	0.466 U		0.546 U			
Acetone	670000	mg/kg	0.466 U		0.575			
Benzene	5.1	mg/kg	0.233 U		0.273 U			
Bromoform	86	mg/kg	0.233 U		0.273 U			
Carbon disulfide	3500	mg/kg	0.233 U		0.273 U			
Carbon tetrachloride	2.9	mg/kg	0.233 U		0.273 U			
Chlorobenzene	1300	mg/kg	0.874		0.273 U			
Chloroethane	57000	mg/kg	0.233 U		0.273 U			
Chloroform	1.4	mg/kg	0.233 U		0.273 U			
Ethylbenzene	25	mg/kg	0.233 U		0.273 U			
Methylene Chloride	1000	mg/kg	0.233 U		0.273 U			
Tetrachloroethene	100	mg/kg	0.233 U		0.273 U			
Toluene	47000	mg/kg	0.233 U		0.273 U			
Trichloroethene	6	mg/kg	0.233 U		0.273 U			
Vinyl chloride	1.7	mg/kg	0.233 U		0.273 U			
Xylene (Total)	2800	mg/kg	0.698 U		0.819 U			
cis-1,3-Dichloropropene	8.2	mg/kg	0.233 U		0.273 U			
trans-1,2-Dichloroethene	23000	mg/kg	0.233 U		0.273 U			
trans-1,3-Dichloropropene	8.2	mg/kg	0.233 U		0.273 U			
Metals								
Antimony	470.0	mg/kg	1 UJ		1.7 J-			
Arsenic	3.0	mg/kg	21.9		101			
Barium	220,000.0	mg/kg	268 J		101 J			
Beryllium	2,300.0	mg/kg	1.2 J		0.29 J			
Cadmium	980.0	mg/kg	3 J		14.9 J			
Chromium	120,000.0	mg/kg	809		379			
Cobalt	350.0	mg/kg	42.1 J-		386 J-			
Copper	47,000.0	mg/kg	268		1820			
Lead	800.0	mg/kg	138 J-		198 J-			
Nickel	22,000.0	mg/kg	37.2 J		77 J			
Selenium	5,800.0	mg/kg	7.9		18.2			
Silver	5,800.0	mg/kg	1.3		20.2			
Thallium	12.0	mg/kg	0.65 J		1.8 B			
Tin	700,000.0	mg/kg	30.5 J		32.3 J			
Vanadium	5,800.0	mg/kg	980 J		628 J			
Zinc	350,000.0	mg/kg	773 J		4280 J			
Chromium, Hexavalent	6.3	mg/kg	1.2 U		1.4 U			
Mercury	350.0	mg/kg	0.12 J-		0.21 J-			
PCB								
PCB-1016 (Aroclor 1016)	27	mg/kg					0.219 U	
PCB-1221 (Aroclor 1221)	0.72	mg/kg					0.219 U	
PCB-1232 (Aroclor 1232)	0.72	mg/kg					0.219 U	
PCB-1242 (Aroclor 1242)	0.97	mg/kg					0.219 U	
PCB-1248 (Aroclor 1248)	0.94	mg/kg					0.125 J	
PCB-1254 (Aroclor 1254)	0.97	mg/kg					0.219 U	
Cyanide								
Cyanide	150	mg/kg					1.1 UJ	

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- B - The compound/analyte was not detected substantially above the level of the associated method blank/preparation or field blank
- U - This analyte was not detected in the sample. The numeric value represents the sample quantitation/detection limit.
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- NJ - This analyte has been "tentatively" identified. The numeric value represents its approximate concentration.
- Y - This analyte coelutes with another target compound on the two chromatographic columns used for analysis.
- R - The result for this analyte is unreliable. Additional data is needed to confirm or disprove the presence of this compound/analyte in the sample.

**Table 1 - Analytical Sample Results
Samples Collected April/August 2015**

Sample Identification Sample Date Sample Type Sample Location and Depth	Transect 1							
	TM-SD-01	TM-SD-02	TM-SD-03	TM-SD-04	TM-SD-05	TM-SD-05		
	4/14/2015	8/12/2015	4/14/2015	8/12/2015	4/14/2015	8/12/2015		
	Discrete	Discrete	Discrete	Discrete	Composite	Composite		
Compound	PAL	Units	South 0-6"	No Recovery	North 0-6"	No Recovery	0-6"	No Recovery
SVOC								
1,2,4-Trichlorobenzene	110	mg/kg					4.37 RR	
1,2-Dichlorobenzene	9300	mg/kg					4.37 RR	
1,3-Dichlorobenzene		mg/kg					4.37 RR	
1,4-Dichlorobenzene	11	mg/kg					4.37 RR	
2,4,5-Trichlorophenol	82000	mg/kg					4.37 RR	
2,4,6-Trichlorophenol	210	mg/kg					4.37 RR	
2,4-Dichlorophenol	2500	mg/kg					4.37 RR	
2,4-Dimethylphenol	16000	mg/kg					4.37 RR	
2,4-Dinitrophenol	1600	mg/kg					21.9 RR	
2,4-Dinitrotoluene	7.4	mg/kg					4.37 RR	
2,6-Dinitrotoluene	1.5	mg/kg					4.37 RR	
2-Chloronaphthalene	60000	mg/kg					4.37 RR	
2-Chlorophenol	5800	mg/kg					4.37 RR	
2-Methylnaphthalene	3000	mg/kg					4.37 RR	
2-Methylphenol(o-Cresol)	41000	mg/kg					4.37 RR	
2-Nitrophenol		mg/kg					4.37 RR	
3&4-Methylphenol(m&p Cresol)	41000	mg/kg					4.37 RR	
3,3'-Dichlorobenzidine	5.1	mg/kg					21.9 RR	
3,3'-Dimethylbenzidine	0.21	mg/kg					43.7 RR	
4,6-Dinitro-2-methylphenol	66	mg/kg					8.75 RR	
4-Bromophenylphenyl ether		mg/kg					4.37 RR	
4-Chloro-3-methylphenol	82000	mg/kg					8.75 RR	
4-Chlorophenylphenyl ether		mg/kg					4.37 RR	
4-Nitrophenol		mg/kg					21.9 RR	
Acenaphthene	45000	mg/kg					4.37 RR	
Acenaphthylene	45000	mg/kg					4.37 RR	
Anthracene	230000	mg/kg					4.37 RR	
Benzo(a)anthracene	21	mg/kg					4.37 RR	
Benzo(a)pyrene	2.1	mg/kg					4.37 RR	
Benzo(b)fluoranthene	21	mg/kg					4.37 RR	
Benzo(g,h,i)perylene		mg/kg					4.37 RR	
Benzo(k)fluoranthene	210	mg/kg					4.37 RR	
Butylbenzylphthalate	1200	mg/kg					4.37 RR	
Di-n-butylphthalate	82000	mg/kg					4.37 RR	
Di-n-octylphthalate	8200	mg/kg					4.37 RR	
Dibenz(a,h)anthracene	2.1	mg/kg					4.37 RR	
Diethylphthalate	660000	mg/kg					4.37 RR	
Dimethylphthalate		mg/kg					4.37 RR	
Fluoranthene	30000	mg/kg					4.37 RR	
Fluorene	30000	mg/kg					4.37 RR	
Hexachloro-1,3-butadiene	5.3	mg/kg					4.37 RR	
Hexachlorobenzene	0.96	mg/kg					4.37 RR	
Hexachlorocyclopentadiene	7.5	mg/kg					4.37 RR	
Hexachloroethane	8	mg/kg					4.37 RR	
Indeno(1,2,3-cd)pyrene	21	mg/kg					4.37 RR	
Isophorone	2400	mg/kg					4.37 RR	
Naphthalene	17	mg/kg					4.37 RR	
Nitrobenzene	22	mg/kg					4.37 RR	
Pentachloroethane	36	mg/kg					8.75 RR	
Pentachlorophenol	4	mg/kg					21.9 RR	
Phenanthrene		mg/kg					4.37 RR	
Phenol	250000	mg/kg					4.37 RR	
Pyrene	23000	mg/kg					4.37 RR	
Pyridine	1200	mg/kg					4.37 RR	
bis(2-Chloroethoxy)methane	2500	mg/kg					4.37 RR	
bis(2-Chloroethyl) ether	1	mg/kg					4.37 RR	
bis(2-Chloroisopropyl) ether	22	mg/kg					4.37 RR	
bis(2-Ethylhexyl)phthalate	160	mg/kg					4.37 RR	

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- Y** - This analyte coelutes with another target compound on the two chromatographic columns used for analysis.
- R** - The result for this analyte is unreliable. Additional data is needed to confirm or disprove the presence of this compound/analyte in the sample.
- RR** - Results were rejected and scheduled for resampling.

Table 1 - Analytical Sample Results
Samples Collected April/August 2015

Sample Identification	Transect 2					
	TM-SD-06	TM-SD-07	TM-SD-08	TM-SD-09	TM-SD-10	
	4/14/2015	4/14/2015	4/14/2015	4/14/2015	4/14/2015	
Sample Date	Discrete	Discrete	Discrete	Discrete	Composite	
Sample Type	South 0-12"	South 4-5'	North 0-12"	North 4-5'	4-5'	
Sample Location and Depth	PAL	Units				
VOC						
1,1,1,2-Tetrachloroethane	8.8	mg/kg	0.343 U	0.319 U	0.258 U	0.145 U
1,1,1-Trichloroethane	36000	mg/kg	0.343 U	0.319 U	0.258 U	0.145 U
1,1,2,2-Tetrachloroethane	2.7	mg/kg	0.343 U	0.319 U	0.258 U	0.145 U
1,1,2-Trichloroethane	5	mg/kg	0.343 U	0.319 U	0.258 U	0.145 U
1,1-Dichloroethane	16	mg/kg	0.343 U	0.319 U	0.258 U	0.145 U
1,1-Dichloroethene	1000	mg/kg	0.343 U	0.319 U	0.258 U	0.145 U
1,2-Dichloroethane	2	mg/kg	0.343 U	0.319 U	0.258 U	0.145 U
1,2-Dichloropropane	4.4	mg/kg	0.343 U	0.319 U	0.258 U	0.145 U
2-Butanone (MEK)	190000	mg/kg	0.687 U	0.638 U	0.516 U	0.289 U
2-Hexanone	1300	mg/kg	0.687 U	0.638 U	0.516 U	0.289 U
4-Methyl-2-pentanone (MIBK)	56000	mg/kg	0.119 J	0.638 U	0.246 J	0.289 U
Acetone	670000	mg/kg	0.687 U	0.638 U	0.516 U	0.289 U
Benzene	5.1	mg/kg	0.343 U	0.319 U	0.258 U	0.145 U
Bromoform	86	mg/kg	0.343 U	0.319 U	0.258 U	0.145 U
Carbon disulfide	3500	mg/kg	0.343 U	0.319 U	0.258 U	0.145 U
Carbon tetrachloride	2.9	mg/kg	0.343 U	0.319 U	0.258 U	0.145 U
Chlorobenzene	1300	mg/kg	0.343 U	0.319 U	0.258 U	0.145 U
Chloroethane	57000	mg/kg	0.343 U	0.319 U	0.258 U	0.145 U
Chloroform	1.4	mg/kg	0.343 U	0.319 U	0.258 U	0.145 U
Ethylbenzene	25	mg/kg	0.343 U	0.211 J	0.258 U	0.145 U
Methylene Chloride	1000	mg/kg	0.343 U	0.319 U	0.258 U	0.145 U
Tetrachloroethene	100	mg/kg	0.343 U	0.319 U	0.258 U	0.145 U
Toluene	47000	mg/kg	0.133 J	0.412	0.501	0.145 U
Trichloroethene	6	mg/kg	0.343 U	0.319 U	0.258 U	0.145 U
Vinyl chloride	1.7	mg/kg	0.343 U	0.319 U	0.258 U	0.145 U
Xylene (Total)	2800	mg/kg	1.03 U	0.525 J	0.775 U	0.434 U
cis-1,3-Dichloropropene	8.2	mg/kg	0.343 U	0.319 U	0.258 U	0.145 U
trans-1,2-Dichloroethene	23000	mg/kg	0.343 U	0.319 U	0.258 U	0.145 U
trans-1,3-Dichloropropene	8.2	mg/kg	0.343 U	0.319 U	0.258 U	0.145 U
Metals						
Antimony	470.0	mg/kg	10.1 J-	8.2 J-	11.2 J-	3.7 J-
Arsenic	3.0	mg/kg	12.8	10.5	13.9	18
Barium	220,000.0	mg/kg	446 J	48.4 J	290 J	17.7 J
Beryllium	2,300.0	mg/kg	0.34 J	0.12 B	0.2 B	0.071 B
Cadmium	980.0	mg/kg	0.36 J	0.69 J	4.4 J	0.21 U
Chromium	120,000.0	mg/kg	467	263	347	368
Cobalt	350.0	mg/kg	15.5 J-	16 J-	15.6 J-	16.9 J-
Copper	47,000.0	mg/kg	221	221	256	135
Lead	800.0	mg/kg	64 J	80.8 J-	291 J-	27.3 J-
Nickel	22,000.0	mg/kg	283 J	123 J	185 J	172 J
Selenium	5,800.0	mg/kg	1	1.3	1.5	1.4
Silver	5,800.0	mg/kg	2.2	2.9	4.5	2.4
Thallium	12.0	mg/kg	1.8 U	1.6 U	2 U	1.4 U
Tin	700,000.0	mg/kg	111 J	652 J	219 J	43.5 J
Vanadium	5,800.0	mg/kg	48.5 J	39.4 J	36.8 J	28.5 J
Zinc	350,000.0	mg/kg	1070 J	1240 J	7400 J	242 J
Chromium, Hexavalent	6.3	mg/kg	1.4 U	1.3 U	1.3 U	1.2 U
Mercury	350.0	mg/kg	0.38 J-	0.28 J-	0.36 J-	0.026 J-
PCB						
PCB-1016 (Aroclor 1016)	27	mg/kg				1.59 U
PCB-1221 (Aroclor 1221)	0.72	mg/kg				1.59 U
PCB-1232 (Aroclor 1232)	0.72	mg/kg				1.59 U
PCB-1242 (Aroclor 1242)	0.97	mg/kg				1.59 U
PCB-1248 (Aroclor 1248)	0.94	mg/kg				1.59 U
PCB-1254 (Aroclor 1254)	0.97	mg/kg				1.59 U
Cyanide						
Cyanide	150	mg/kg				1 J-

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Table 1 - Analytical Sample Results
Samples Collected April/August 2015

Sample Identification Sample Date Sample Type Sample Location and Depth	Transect 2				
	TM-SD-06	TM-SD-07	TM-SD-08	TM-SD-09	TM-SD-10
	4/14/2015	4/14/2015	4/14/2015	4/14/2015	4/14/2015
	Discrete	Discrete	Discrete	Discrete	Composite
	South 0-12"	South 4-5'	North 0-12"	North 4-5'	4-5'
Compound	PAL	Units			
SVOC					
1,2,4-Trichlorobenzene	110	mg/kg			23 RR
1,2-Dichlorobenzene	9300	mg/kg			23 RR
1,3-Dichlorobenzene		mg/kg			23 RR
1,4-Dichlorobenzene	11	mg/kg			23 RR
2,4,5-Trichlorophenol	82000	mg/kg			23 RR
2,4,6-Trichlorophenol	210	mg/kg			23 RR
2,4-Dichlorophenol	2500	mg/kg			23 RR
2,4-Dimethylphenol	16000	mg/kg			23 RR
2,4-Dinitrophenol	1600	mg/kg			115 RR
2,4-Dinitrotoluene	7.4	mg/kg			26.8 RR
2,6-Dinitrotoluene	1.5	mg/kg			23 RR
2-Chloronaphthalene	60000	mg/kg			23 RR
2-Chlorophenol	5800	mg/kg			23 RR
2-Methylnaphthalene	3000	mg/kg			23 RR
2-Methylphenol(o-Cresol)	41000	mg/kg			23 RR
2-Nitrophenol		mg/kg			23 RR
3&4-Methylphenol(m&p Cresol)	41000	mg/kg			23 RR
3,3'-Dichlorobenzidine	5.1	mg/kg			115 RR
3,3'-Dimethylbenzidine	0.21	mg/kg			230 RR
4,6-Dinitro-2-methylphenol	66	mg/kg			45.9 RR
4-Bromophenylphenyl ether		mg/kg			23 RR
4-Chloro-3-methylphenol	82000	mg/kg			45.9 RR
4-Chlorophenylphenyl ether		mg/kg			23 RR
4-Nitrophenol		mg/kg			115 RR
Acenaphthene	45000	mg/kg			23 RR
Acenaphthylene	45000	mg/kg			23 RR
Anthracene	230000	mg/kg			23 RR
Benzo(a)anthracene	21	mg/kg			23 RR
Benzo(a)pyrene	2.1	mg/kg			23 RR
Benzo(b)fluoranthene	21	mg/kg			23 RR
Benzo(g,h,i)perylene		mg/kg			23 RR
Benzo(k)fluoranthene	210	mg/kg			23 RR
Butylbenzylphthalate	1200	mg/kg			23 RR
Di-n-butylphthalate	82000	mg/kg			23 RR
Di-n-octylphthalate	8200	mg/kg			23 RR
Dibenz(a,h)anthracene	2.1	mg/kg			23 RR
Diethylphthalate	660000	mg/kg			23 RR
Dimethylphthalate		mg/kg			23 RR
Fluoranthene	30000	mg/kg			23 RR
Fluorene	30000	mg/kg			23 RR
Hexachloro-1,3-butadiene	5.3	mg/kg			23 RR
Hexachlorobenzene	0.96	mg/kg			23 RR
Hexachlorocyclopentadiene	7.5	mg/kg			23 RR
Hexachloroethane	8	mg/kg			23 RR
Indeno(1,2,3-cd)pyrene	21	mg/kg			23 RR
Isophorone	2400	mg/kg			23 RR
Naphthalene	17	mg/kg			23 RR
Nitrobenzene	22	mg/kg			23 RR
Pentachloroethane	36	mg/kg			45.9 RR
Pentachlorophenol	4	mg/kg			115 RR
Phenanthrene		mg/kg			23 RR
Phenol	250000	mg/kg			23 RR
Pyrene	23000	mg/kg			23 RR
Pyridine	1200	mg/kg			23 RR
bis(2-Chloroethoxy)methane	2500	mg/kg			23 RR
bis(2-Chloroethyl) ether	1	mg/kg			23 RR
bis(2-Chloroisopropyl) ether	22	mg/kg			23 RR
bis(2-Ethylhexyl)phthalate	160	mg/kg			23 RR

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- R** - The result for this analyte is unreliable. Additional data is needed to confirm or disprove the presence of this compound/analyte in the sample.
- RR** - Results were rejected and scheduled for resampling.

Table 1 - Analytical Sample Results
Samples Collected April/August 2015

Sample Identification	Transect 3						
	TM-SD-11	TM-SD-12	TM-SD-13	TM-SD-14	TM-SD-14	TM-SD-15	TM-SD-15
	4/15/2015	8/12/2015	4/16/2015	4/16/2015	8/12/2015	4/16/2015	8/12/2015
	Discrete	Discrete	Discrete	Discrete	Discrete	Composite	Composite
Sample Location and Depth	South 0-12"	South 3-4'	North 0-12"	North 4-5'	North 3-4'	0-12"	3-4'
Compound	PAL	Units					
VOC							
1,1,1,2-Tetrachloroethane	8.8	mg/kg	0.343 U	0.359 U	0.288 U	0.397 U	0.419 U
1,1,1-Trichloroethane	36000	mg/kg	0.343 U	0.359 U	0.288 U	0.397 U	0.419 UJ
1,1,2,2-Tetrachloroethane	2.7	mg/kg	0.343 U	0.359 U	0.288 U	0.397 U	0.419 U
1,1,2-Trichloroethane	5	mg/kg	0.343 U	0.359 U	0.288 U	0.397 U	0.419 U
1,1-Dichloroethane	16	mg/kg	0.343 U	0.359 U	0.288 U	0.397 U	0.419 UJ
1,1-Dichloroethene	1000	mg/kg	0.343 U	0.359 U	0.288 U	0.397 U	0.419 U
1,2-Dichloroethane	2	mg/kg	0.343 U	0.359 U	0.288 U	0.397 U	0.419 UJ
1,2-Dichloropropane	4.4	mg/kg	0.343 U	0.359 U	0.288 U	0.397 U	0.419 U
2-Butanone (MEK)	190000	mg/kg	0.685 U	0.717 U	0.576 U	0.793 U	0.839 U
2-Hexanone	1300	mg/kg	0.685 U	0.717 U	0.576 U	0.793 U	0.839 U
4-Methyl-2-pentanone (MIBK)	56000	mg/kg	0.685 U	0.717 U	0.576 U	0.793 U	0.839 U
Acetone	670000	mg/kg	0.685 U	0.717 U	0.576 U	0.793 U	0.839 U
Benzene	5.1	mg/kg	0.343 U	0.359 U	0.288 U	0.397 U	0.419 U
Bromoform	86	mg/kg	0.343 U	0.359 U	0.288 U	0.397 U	0.419 U
Carbon disulfide	3500	mg/kg	0.343 U	0.359 U	0.288 U	0.397 U	0.419 U
Carbon tetrachloride	2.9	mg/kg	0.343 U	0.359 U	0.288 U	0.397 U	0.419 UJ
Chlorobenzene	1300	mg/kg	0.343 U	0.359 U	0.288 U	0.397 U	0.419 U
Chloroethane	57000	mg/kg	0.343 U	0.359 U	0.288 U	0.397 U	0.419 U
Chloroform	1.4	mg/kg	0.343 U	0.359 U	0.288 U	0.397 U	0.419 U
Ethylbenzene	25	mg/kg	0.343 U	0.359 U	0.288 U	0.397 U	0.419 U
Methylene Chloride	1000	mg/kg	0.343 U	0.359 U	0.288 U	0.397 U	0.419 UJ
Tetrachloroethene	100	mg/kg	0.343 U	0.359 U	0.288 U	0.397 U	0.419 U
Toluene	47000	mg/kg	0.343 U	0.211 J	0.288 U	0.397 U	0.419 U
Trichloroethene	6	mg/kg	0.343 U	0.359 U	0.288 U	0.397 U	0.419 U
Vinyl chloride	1.7	mg/kg	0.343 U	0.359 U	0.288 U	0.397 U	0.419 U
Xylene (Total)	2800	mg/kg	1.03 U	1.08 U	0.864 U	1.19 U	0.256 J
cis-1,3-Dichloropropene	8.2	mg/kg	0.343 U	0.359 U	0.288 U	0.397 U	0.419 U
trans-1,2-Dichloroethene	23000	mg/kg	0.343 U	0.359 U	0.288 U	0.397 U	0.419 U
trans-1,3-Dichloropropene	8.2	mg/kg	0.343 U	0.359 U	0.288 U	0.397 U	0.419 U
Metals							
Antimony	470.0	mg/kg	0.63 J-	0.49 UJ	5.6 J-	1.9 J-	3 J
Arsenic	3.0	mg/kg	23.7	21.2	10.7	10.2	12
Barium	220,000.0	mg/kg	68.1 J	34	30.3 J	59.9 J	76.3
Beryllium	2,300.0	mg/kg	0.14 B	0.11 B	0.071 B	0.15 B	0.097 B
Cadmium	980.0	mg/kg	0.78 J	2.4 J	0.13 B	0.58 J	0.97 J
Chromium	120,000.0	mg/kg	538	1040	232	203	261
Cobalt	350.0	mg/kg	18.3 J-	18.6	12.5 J-	9.9 J-	11.8
Copper	47,000.0	mg/kg	281	190 J	140	171	187 J
Lead	800.0	mg/kg	135 J-	60.6 J	51.4 J-	163 J-	107 J
Nickel	22,000.0	mg/kg	268 J	504 J	163 J	71.3 J	143 J
Selenium	5,800.0	mg/kg	0.71 J	2.2 J	0.74	1.2	1.5 J
Silver	5,800.0	mg/kg	4.9	7.4	2.6	1.6	4.9
Thallium	12.0	mg/kg	2 U	1.6 U	1.8 U	2.1 U	2.3 U
Tin	700,000.0	mg/kg	240 J	289	66.2 J	172 J	231
Vanadium	5,800.0	mg/kg	115 J	36.7	26.6 J	231 J	155
Zinc	350,000.0	mg/kg	553 J	1060	293 J	370 J	516
Chromium, Hexavalent	6.3	mg/kg	1.4 U	1.5 UJ	1.3 U	1.6 U	1.4 UJ
Mercury	350.0	mg/kg	0.39 J-	0.09 J	0.1 J-	0.13 J-	0.2
PCB							
PCB-1016 (Aroclor 1016)	27	mg/kg					1.7 U
PCB-1221 (Aroclor 1221)	0.72	mg/kg					1.7 U
PCB-1232 (Aroclor 1232)	0.72	mg/kg					1.7 U
PCB-1242 (Aroclor 1242)	0.97	mg/kg					1.7 U
PCB-1248 (Aroclor 1248)	0.94	mg/kg					1.7 U
PCB-1254 (Aroclor 1254)	0.97	mg/kg					0.614 J
Cyanide							
Cyanide	150	mg/kg					4.8 J-

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- U - This analyte was not detected in the sample. The numeric value represents the sample quantitation/detection limit.
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- NJ - This analyte has been "tentatively" identified. The numeric value represents its approximate concentration.
- Y - This analyte coelutes with another target compound on the two chromatographic columns used for analysis.
- R - The result for this analyte is unreliable. Additional data is needed to confirm or disprove the presence of this compound/analyte in the sample.

Table 1 - Analytical Sample Results
Samples Collected April/August 2015

Sample Identification	Transect 3						
	TM-SD-11	TM-SD-12	TM-SD-13	TM-SD-14	TM-SD-14	TM-SD-15	TM-SD-15
	4/15/2015	8/12/2015	4/16/2015	4/16/2015	8/12/2015	4/16/2015	8/12/2015
	Discrete	Discrete	Discrete	Discrete	Discrete	Composite	Composite
Sample Date							
Sample Type							
Sample Location and Depth	South 0-12"	South 3-4'	North 0-12"	North 4-5'	North 3-4'	0-12"	3-4'
Compound	PAL	Units					
SVOC							
1,2,4-Trichlorobenzene	110	mg/kg				25 RR	22.7 RR
1,2-Dichlorobenzene	9300	mg/kg				25 RR	22.7 RR
1,3-Dichlorobenzene		mg/kg				25 RR	22.7 RR
1,4-Dichlorobenzene	11	mg/kg				25 RR	22.7 RR
2,4,5-Trichlorophenol	82000	mg/kg				25 RR	22.7 RR
2,4,6-Trichlorophenol	210	mg/kg				25 RR	22.7 RR
2,4-Dichlorophenol	2500	mg/kg				25 RR	22.7 RR
2,4-Dimethylphenol	16000	mg/kg				25 RR	22.7 RR
2,4-Dinitrophenol	1600	mg/kg				125 RR	113 RR
2,4-Dinitrotoluene	7.4	mg/kg				25 RR	22.7 RR
2,6-Dinitrotoluene	1.5	mg/kg				25 RR	22.7 RR
2-Chloronaphthalene	60000	mg/kg				25 RR	22.7 RR
2-Chlorophenol	5800	mg/kg				25 RR	22.7 RR
2-Methylnaphthalene	3000	mg/kg				25 RR	22.7 RR
2-Methylphenol(o-Cresol)	41000	mg/kg				25 RR	22.7 RR
2-Nitrophenol		mg/kg				25 RR	22.7 RR
3&4-Methylphenol(m&p Cresol)	41000	mg/kg				25 RR	22.7 RR
3,3'-Dichlorobenzidine	5.1	mg/kg				125 RR	113 RR
3,3'-Dimethylbenzidine	0.21	mg/kg				250 RR	227 RR
4,6-Dinitro-2-methylphenol	66	mg/kg				49.9 RR	45.4 RR
4-Bromophenylphenyl ether		mg/kg				25 RR	22.7 RR
4-Chloro-3-methylphenol	82000	mg/kg				49.9 RR	45.4 RR
4-Chlorophenylphenyl ether		mg/kg				25 RR	22.7 RR
4-Nitrophenol		mg/kg				125 RR	113 RR
Acenaphthene	45000	mg/kg				25 RR	22.7 RR
Acenaphthylene	45000	mg/kg				25 RR	22.7 RR
Anthracene	230000	mg/kg				25 RR	22.7 RR
Benzo(a)anthracene	21	mg/kg				25 RR	22.7 RR
Benzo(a)pyrene	2.1	mg/kg				25 RR	22.7 RR
Benzo(b)fluoranthene	21	mg/kg				25 RR	22.7 RR
Benzo(g,h,i)perylene		mg/kg				25 RR	22.7 RR
Benzo(k)fluoranthene	210	mg/kg				25 RR	22.7 RR
Butylbenzylphthalate	1200	mg/kg				25 RR	22.7 RR
Di-n-butylphthalate	82000	mg/kg				25 RR	22.7 RR
Di-n-octylphthalate	8200	mg/kg				25 RR	22.7 RR
Dibenz(a,h)anthracene	2.1	mg/kg				25 RR	22.7 RR
Diethylphthalate	660000	mg/kg				25 RR	22.7 RR
Dimethylphthalate		mg/kg				25 RR	22.7 RR
Fluoranthene	30000	mg/kg				25 RR	22.7 RR
Fluorene	30000	mg/kg				25 RR	22.7 RR
Hexachloro-1,3-butadiene	5.3	mg/kg				25 RR	22.7 RR
Hexachlorobenzene	0.96	mg/kg				25 RR	22.7 RR
Hexachlorocyclopentadiene	7.5	mg/kg				25 RR	22.7 RR
Hexachloroethane	8	mg/kg				25 RR	22.7 RR
Indeno(1,2,3-cd)pyrene	21	mg/kg				25 RR	22.7 RR
Isophorone	2400	mg/kg				25 RR	22.7 RR
Naphthalene	17	mg/kg				25 RR	22.7 RR
Nitrobenzene	22	mg/kg				25 RR	22.7 RR
Pentachloroethane	36	mg/kg				49.9 RR	45.4 RR
Pentachlorophenol	4	mg/kg				125 RR	113 RR
Phenanthrene		mg/kg				25 RR	22.7 RR
Phenol	250000	mg/kg				25 RR	22.7 RR
Pyrene	23000	mg/kg				25 RR	22.7 RR
Pyridine	1200	mg/kg				25 RR	22.7 RR
bis(2-Chloroethoxy)methane	2500	mg/kg				25 RR	22.7 RR
bis(2-Chloroethyl) ether	1	mg/kg				25 RR	22.7 RR
bis(2-Chloroisopropyl) ether	22	mg/kg				25 RR	22.7 RR
bis(2-Ethylhexyl)phthalate	160	mg/kg				25 RR	22.7 RR

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- NJ** - This analyte has been "tentatively" identified. The numeric value represents its approximate concentration.
- Y** - This analyte coelutes with another target compound on the two chromatographic columns used for analysis.
- R** - The result for this analyte is unreliable. Additional data is needed to confirm or disprove the presence of this compound/analyte in the sample.
- RR** - Results were rejected and scheduled for resampling.

**Table 1 - Analytical Sample Results
Samples Collected April/August 2015**

Sample Identification Sample Date Sample Type Sample Location and Depth			Transect 4					
			TM-SD-16	TM-SD-17	TM-SD-18	TM-SD-19	TM-SD-20	TM-SD-20
			4/16/2015	8/12/2015	4/16/2015	8/12/2015	4/16/2015	8/12/2015
			Discrete	Discrete	Discrete	Discrete	Composite	Composite
PAL			South 0-12"	South 5-6'	North 0-12"	North 2-3'	0-12"	2-6'
Compound	PAL	Units						
<i>VOC</i>								
1,1,1,2-Tetrachloroethane	8.8	mg/kg	0.324 U	0.314 U	0.307 U	0.421 U		
1,1,1-Trichloroethane	36000	mg/kg	0.324 U	0.314 U	0.307 U	0.421 U		
1,1,2,2-Tetrachloroethane	2.7	mg/kg	0.324 U	0.314 U	0.307 U	0.421 U		
1,1,2-Trichloroethane	5	mg/kg	0.324 U	0.314 U	0.307 U	0.421 U		
1,1-Dichloroethane	16	mg/kg	0.324 U	0.314 U	0.307 U	0.421 U		
1,1-Dichloroethene	1000	mg/kg	0.324 U	0.314 U	0.307 U	0.421 U		
1,2-Dichloroethane	2	mg/kg	0.324 U	0.314 U	0.307 U	0.421 U		
1,2-Dichloropropane	4.4	mg/kg	0.324 U	0.314 U	0.307 U	0.421 U		
2-Butanone (MEK)	190000	mg/kg	0.647 U	0.628 U	0.614 U	0.842 U		
2-Hexanone	1300	mg/kg	0.647 U	0.628 U	0.614 U	0.842 U		
4-Methyl-2-pentanone (MIBK)	56000	mg/kg	0.647 U	0.628 U	0.614 U	0.842 U		
Acetone	670000	mg/kg	1.03	0.628 U	0.529 J	0.842 U		
Benzene	5.1	mg/kg	0.324 U	0.314 U	0.307 U	0.421 U		
Bromoform	86	mg/kg	0.324 U	0.314 U	0.307 U	0.421 U		
Carbon disulfide	3500	mg/kg	0.324 U	0.314 U	0.307 U	0.421 U		
Carbon tetrachloride	2.9	mg/kg	0.324 U	0.314 U	0.307 U	0.421 U		
Chlorobenzene	1300	mg/kg	0.324 U	0.314 U	0.307 U	0.421 U		
Chloroethane	57000	mg/kg	0.324 U	0.314 U	0.307 U	0.421 U		
Chloroform	1.4	mg/kg	0.324 U	0.314 U	0.307 U	0.421 U		
Ethylbenzene	25	mg/kg	0.324 U	0.314 U	0.307 U	0.421 U		
Methylene Chloride	1000	mg/kg	0.324 U	0.314 U	0.307 U	0.421 U		
Tetrachloroethene	100	mg/kg	0.324 U	0.314 U	0.307 U	0.421 U		
Toluene	47000	mg/kg	0.324 U	0.314 U	0.307 U	0.421 U		
Trichloroethene	6	mg/kg	0.324 U	0.314 U	0.307 U	0.421 U		
Vinyl chloride	1.7	mg/kg	0.324 U	0.314 U	0.307 U	0.421 U		
Xylene (Total)	2800	mg/kg	0.971 U	0.943 U	0.921 U	1.26 U		
cis-1,3-Dichloropropene	8.2	mg/kg	0.324 U	0.314 U	0.307 U	0.421 U		
trans-1,2-Dichloroethene	23000	mg/kg	0.324 U	0.314 U	0.307 U	0.421 U		
trans-1,3-Dichloropropene	8.2	mg/kg	0.324 U	0.314 U	0.307 U	0.421 U		
<i>Metals</i>								
Antimony	470.0	mg/kg	5.2 J-	1.7 J	11.2 J-	0.77 UJ		
Arsenic	3.0	mg/kg	6.5	35	14	23.1		
Barium	220,000.0	mg/kg	30.5 J	47.1	48.9 J	46.5		
Beryllium	2,300.0	mg/kg	0.12 B	0.16 B	0.12 B	0.056 B		
Cadmium	980.0	mg/kg	0.37 J	1.2 J	0.32 U	1.2 J		
Chromium	120,000.0	mg/kg	179	251	317	207		
Cobalt	350.0	mg/kg	7.6 J-	21.5	16.3 J-	23.3		
Copper	47,000.0	mg/kg	94.5	268 J	199	293 J		
Lead	800.0	mg/kg	38.3 J-	81.9 J	51.3 J-	121 J		
Nickel	22,000.0	mg/kg	95.4 J	156 J	163 J	161 J		
Selenium	5,800.0	mg/kg	1.2	1.4 J	0.98	1.7 J		
Silver	5,800.0	mg/kg	2.1	9.2	2.7	8.3		
Thallium	12.0	mg/kg	2.1 U	2.2 U	2.2 U	2.6 U		
Tin	700,000.0	mg/kg	120 J	329	166 J	208		
Vanadium	5,800.0	mg/kg	32.8 J	41.6	40.2 J	70.2		
Zinc	350,000.0	mg/kg	272 J	326	546 J	212		
Chromium, Hexavalent	6.3	mg/kg	1.4 U	1.6 UJ	1.5 U	1.9 UJ		
Mercury	350.0	mg/kg	0.14 J-	0.41	0.041 J-	0.28		
<i>PCB</i>								
PCB-1016 (Aroclor 1016)	27	mg/kg				1.55 U	1.07 U	
PCB-1221 (Aroclor 1221)	0.72	mg/kg				1.55 U	1.07 U	
PCB-1232 (Aroclor 1232)	0.72	mg/kg				1.55 U	1.07 U	
PCB-1242 (Aroclor 1242)	0.97	mg/kg				1.55 U	3.3	
PCB-1248 (Aroclor 1248)	0.94	mg/kg				1.55 U	1.07 U	
PCB-1254 (Aroclor 1254)	0.97	mg/kg				1.55 U	1.48	
<i>Cyanide</i>								
Cyanide	150	mg/kg				2.3 J-	4.9	

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

**Table 1 - Analytical Sample Results
Samples Collected April/August 2015**

Sample Identification Sample Date Sample Type Sample Location and Depth			Transect 4					
			TM-SD-16	TM-SD-17	TM-SD-18	TM-SD-19	TM-SD-20	TM-SD-20
			4/16/2015	8/12/2015	4/16/2015	8/12/2015	4/16/2015	8/12/2015
			Discrete	Discrete	Discrete	Discrete	Composite	Composite
Compound	PAL	Units	South 0-12"	South 5-6'	North 0-12"	North 2-3'	0-12"	2-6'
<i>SVOC</i>								
1,2,4-Trichlorobenzene	110	mg/kg					21.6 RR	7.19 RR
1,2-Dichlorobenzene	9300	mg/kg					21.6 RR	7.19 RR
1,3-Dichlorobenzene		mg/kg					21.6 RR	7.19 RR
1,4-Dichlorobenzene	11	mg/kg					21.6 RR	7.19 RR
2,4,5-Trichlorophenol	82000	mg/kg					21.6 RR	7.19 RR
2,4,6-Trichlorophenol	210	mg/kg					21.6 RR	7.19 RR
2,4-Dichlorophenol	2500	mg/kg					21.6 RR	7.19 RR
2,4-Dimethylphenol	16000	mg/kg					21.6 RR	7.19 RR
2,4-Dinitrophenol	1600	mg/kg					108 RR	36 U
2,4-Dinitrotoluene	7.4	mg/kg					21.6 RR	7.19 UJ
2,6-Dinitrotoluene	1.5	mg/kg					21.6 RR	7.19 RR
2-Chloronaphthalene	60000	mg/kg					21.6 RR	7.19 RR
2-Chlorophenol	5800	mg/kg					21.6 RR	7.19 RR
2-Methylnaphthalene	3000	mg/kg					21.6 RR	7.19 RR
2-Methylphenol(o-Cresol)	41000	mg/kg					21.6 RR	7.19 RR
2-Nitrophenol		mg/kg					21.6 RR	7.19 RR
3&4-Methylphenol(m&p Cresol)	41000	mg/kg					21.6 RR	7.19 RR
3,3'-Dichlorobenzidine	5.1	mg/kg					108 RR	1.84 RR
3,3'-Dimethylbenzidine	0.21	mg/kg					216 RR	71.9 RR
4,6-Dinitro-2-methylphenol	66	mg/kg					43.3 RR	14.4 RR
4-Bromophenylphenyl ether		mg/kg					21.6 RR	7.19 RR
4-Chloro-3-methylphenol	82000	mg/kg					43.3 RR	14.4 RR
4-Chlorophenylphenyl ether		mg/kg					21.6 RR	7.19 RR
4-Nitrophenol		mg/kg					108 RR	6.55 RR
Acenaphthene	45000	mg/kg					21.6 RR	7.19 RR
Acenaphthylene	45000	mg/kg					21.6 RR	7.19 RR
Anthracene	230000	mg/kg					21.6 RR	7.19 RR
Benzo(a)anthracene	21	mg/kg					21.6 RR	2.57 RR
Benzo(a)pyrene	2.1	mg/kg					21.6 RR	2.05 RR
Benzo(b)fluoranthene	21	mg/kg					21.6 RR	2.26 RR
Benzo(g,h,i)perylene		mg/kg					21.6 RR	7.19 RR
Benzo(k)fluoranthene	210	mg/kg					21.6 RR	2.46 RR
Butylbenzylphthalate	1200	mg/kg					21.6 RR	1.88 RR
Di-n-butylphthalate	82000	mg/kg					21.6 RR	7.19 RR
Di-n-octylphthalate	8200	mg/kg					21.6 RR	4.6 RR
Dibenz(a,h)anthracene	2.1	mg/kg					21.6 RR	7.19 RR
Diethylphthalate	660000	mg/kg					21.6 RR	7.19 RR
Dimethylphthalate		mg/kg					21.6 RR	7.19 RR
Fluoranthene	30000	mg/kg					21.6 RR	7.19 RR
Fluorene	30000	mg/kg					21.6 RR	7.19 RR
Hexachloro-1,3-butadiene	5.3	mg/kg					21.6 RR	7.19 RR
Hexachlorobenzene	0.96	mg/kg					21.6 RR	7.19 RR
Hexachlorocyclopentadiene	7.5	mg/kg					21.6 RR	7.19 RR
Hexachloroethane	8	mg/kg					21.6 RR	7.19 RR
Indeno(1,2,3-cd)pyrene	21	mg/kg					21.6 RR	7.19 RR
Isophorone	2400	mg/kg					21.6 RR	7.19 RR
Naphthalene	17	mg/kg					21.6 RR	7.19 RR
Nitrobenzene	22	mg/kg					21.6 RR	7.19 RR
Pentachloroethane	36	mg/kg					43.3 RR	14.4 RR
Pentachlorophenol	4	mg/kg					108 RR	36 RR
Phenanthrene		mg/kg					21.6 RR	7.19 RR
Phenol	250000	mg/kg					21.6 RR	7.19 RR
Pyrene	23000	mg/kg					21.6 RR	7.19 RR
Pyridine	1200	mg/kg					21.6 RR	7.19 RR
bis(2-Chloroethoxy)methane	2500	mg/kg					21.6 RR	7.19 RR
bis(2-Chloroethyl) ether	1	mg/kg					21.6 RR	7.19 RR
bis(2-Chloroisopropyl) ether	22	mg/kg					21.6 RR	7.19 RR
bis(2-Ethylhexyl)phthalate	160	mg/kg					21.6 RR	3.16 RR

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- Y** - This analyte coelutes with another target compound on the two chromatographic columns used for analysis.
- R** - The result for this analyte is unreliable. Additional data is needed to confirm or disprove the presence of this compound/analyte in the sample.
- RR** - Results were rejected and scheduled for resampling.

Table 1 - Analytical Sample Results
Samples Collected April/August 2015

Sample Identification	Transect 5						
	TM-SD-21	TM-SD-22	TM-SD-22	TM-SD-23	TM-SD-24	TM-SD-25	TM-SD-25
	4/16/2015	4/16/2015	8/12/2015	4/16/2015	8/12/2015	4/16/2015	8/12/2015
	Discrete	Discrete	Discrete	Discrete	Discrete	Composite	Composite
Sample Date	South 0-12"	South 4-5'	South 3-4'	North 0-12"	North 3.5-4.5'	0-12"	3-4.5'
Sample Type	PAL		Units				
Sample Location and Depth							
VOC							
1,1,1,2-Tetrachloroethane	8.8	mg/kg	0.243 U	0.226 U	0.238 U	0.356 U	0.331 U
1,1,1-Trichloroethane	36000	mg/kg	0.243 U	0.226 U	0.238 U	0.356 U	0.331 U
1,1,2,2-Tetrachloroethane	2.7	mg/kg	0.243 U	0.226 U	0.238 U	0.356 U	0.331 U
1,1,2-Trichloroethane	5	mg/kg	0.243 U	0.226 U	0.238 U	0.356 U	0.331 U
1,1-Dichloroethane	16	mg/kg	0.243 U	0.226 U	0.238 U	0.356 U	0.331 U
1,1-Dichloroethene	1000	mg/kg	0.243 U	0.226 U	0.238 U	0.356 U	0.331 U
1,2-Dichloroethane	2	mg/kg	0.243 U	0.226 U	0.238 U	0.356 U	0.331 U
1,2-Dichloropropane	4.4	mg/kg	0.243 U	0.226 U	0.238 U	0.356 U	0.331 U
2-Butanone (MEK)	190000	mg/kg	0.486 U	0.192 J	0.244 J	0.712 U	0.662 U
2-Hexanone	1300	mg/kg	0.486 U	0.453 U	0.476 U	0.712 U	0.662 U
4-Methyl-2-pentanone (MIBK)	56000	mg/kg	0.486 U	0.453 U	0.476 U	0.712 U	0.662 U
Acetone	670000	mg/kg	0.298 J	0.515	0.476 U	0.712 U	0.662 U
Benzene	5.1	mg/kg	0.243 U	0.226 U	0.238 U	0.356 U	0.331 U
Bromoform	86	mg/kg	0.243 U	0.226 U	0.238 U	0.356 U	0.331 U
Carbon disulfide	3500	mg/kg	0.243 U	0.226 U	0.238 U	0.356 U	0.331 U
Carbon tetrachloride	2.9	mg/kg	0.243 U	0.226 U	0.238 U	0.356 U	0.331 U
Chlorobenzene	1300	mg/kg	0.243 U	0.226 U	0.238 U	0.356 U	0.331 U
Chloroethane	57000	mg/kg	0.243 U	0.226 U	0.238 U	0.356 U	0.331 U
Chloroform	1.4	mg/kg	0.243 U	0.226 U	0.238 U	0.356 U	0.331 U
Ethylbenzene	25	mg/kg	0.243 U	0.226 U	0.238 U	0.356 U	0.331 U
Methylene Chloride	1000	mg/kg	0.243 U	0.226 U	0.238 U	0.356 U	0.331 U
Tetrachloroethene	100	mg/kg	0.243 U	0.226 U	0.238 U	0.356 U	0.331 U
Toluene	47000	mg/kg	0.243 U	0.226 U	8.84	5.93	0.331 U
Trichloroethene	6	mg/kg	0.243 U	0.226 U	0.238 U	0.356 U	0.331 U
Vinyl chloride	1.7	mg/kg	0.243 U	0.226 U	0.238 U	0.356 U	0.331 U
Xylene (Total)	2800	mg/kg	0.729 U	0.679 U	0.157 J	1.07 U	0.994 U
cis-1,3-Dichloropropene	8.2	mg/kg	0.243 U	0.226 U	0.238 U	0.356 U	0.331 U
trans-1,2-Dichloroethene	23000	mg/kg	0.243 U	0.226 U	0.238 U	0.356 U	0.331 U
trans-1,3-Dichloropropene	8.2	mg/kg	0.243 U	0.226 U	0.238 U	0.356 U	0.331 U
Metals							
Antimony	470.0	mg/kg	4.1 J-	3.8 J-	0.55 UJ	3 J-	0.81 UJ
Arsenic	3.0	mg/kg	13.1	10.7	22.3	12.2	31.5
Barium	220,000.0	mg/kg	133 J	55.2 J	61	59.5 J	15.9
Beryllium	2,300.0	mg/kg	0.23 J	0.14 B	0.27	0.052 B	0.27 U
Cadmium	980.0	mg/kg	0.35 U	0.26 U	0.59 J	0.29 U	0.8 J
Chromium	120,000.0	mg/kg	685	399	411	236	173
Cobalt	350.0	mg/kg	14.7 J-	15.8 J-	17.5	12.3 J-	30.9
Copper	47,000.0	mg/kg	187	157	201 J	152	271 J
Lead	800.0	mg/kg	78.7 J-	48.6 J-	57.7 J	68.5 J-	53.7 J
Nickel	22,000.0	mg/kg	131 J	128 J	153 J	97.7 J	168 J
Selenium	5,800.0	mg/kg	1.6	1.4	1.6 J	0.99	2.1 J
Silver	5,800.0	mg/kg	5.1	2.9	7.6	5.3	8.4
Thallium	12.0	mg/kg	2.3 U	1.8 U	1.8 U	1.9 U	2.7 U
Tin	700,000.0	mg/kg	192 J	180 J	100	52.5 J	48.2
Vanadium	5,800.0	mg/kg	42.3 J	37.1 J	32.7	8.2 J	20.7
Zinc	350,000.0	mg/kg	331 J	379 J	157	50.8 J	67.2
Chromium, Hexavalent	6.3	mg/kg	1.4 U	1.3 U	1.3 UJ	1.3 U	1.5 UJ
Mercury	350.0	mg/kg	0.42 J-	0.56 J-	0.33	0.23 J-	0.48
PCB							
PCB-1016 (Aroclor 1016)	27	mg/kg					1.65 U
PCB-1221 (Aroclor 1221)	0.72	mg/kg					1.65 U
PCB-1232 (Aroclor 1232)	0.72	mg/kg					1.65 U
PCB-1242 (Aroclor 1242)	0.97	mg/kg					1.65 U
PCB-1248 (Aroclor 1248)	0.94	mg/kg					1.65 U
PCB-1254 (Aroclor 1254)	0.97	mg/kg					1.65 U
Cyanide							
Cyanide	150	mg/kg					1.4 J-
							1.9

Data Validation Qualifier Code

- 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 compound/analyte was not detected substantially above the level of the associated method blank/preparation or field blank
- 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.
- NJ - This analyte has been "tentatively" identified. The numeric value represents its approximate concentration.
- Y - This analyte coelutes with another target compound on the two chromatographic columns used for analysis.
- R - The result for this analyte is unreliable. Additional data is needed to confirm or disprove the presence of this compound/analyte in the sample.

Table 1 - Analytical Sample Results
Samples Collected April/August 2015

Sample Identification	Transect 5						
	TM-SD-21	TM-SD-22	TM-SD-22	TM-SD-23	TM-SD-24	TM-SD-25	TM-SD-25
	4/16/2015	4/16/2015	8/12/2015	4/16/2015	8/12/2015	4/16/2015	8/12/2015
	Discrete	Discrete	Discrete	Discrete	Discrete	Composite	Composite
Sample Location and Depth	South 0-12"	South 4-5'	South 3-4'	North 0-12"	North 3.5-4.5'	0-12"	3-4.5'
Compound	PAL	Units					
SVOC							
1,2,4-Trichlorobenzene	110	mg/kg				23.2 RR	4.94 RR
1,2-Dichlorobenzene	9300	mg/kg				23.2 RR	4.94 RR
1,3-Dichlorobenzene		mg/kg				23.2 RR	4.94 RR
1,4-Dichlorobenzene	11	mg/kg				23.2 RR	4.94 RR
2,4,5-Trichlorophenol	82000	mg/kg				23.2 RR	4.94 RR
2,4,6-Trichlorophenol	210	mg/kg				23.2 RR	4.94 RR
2,4-Dichlorophenol	2500	mg/kg				23.2 RR	4.94 RR
2,4-Dimethylphenol	16000	mg/kg				23.2 RR	4.94 RR
2,4-Dinitrophenol	1600	mg/kg				116 RR	24.7 RR
2,4-Dinitrotoluene	7.4	mg/kg				23.2 RR	4.94 RR
2,6-Dinitrotoluene	1.5	mg/kg				23.2 RR	4.94 RR
2-Chloronaphthalene	60000	mg/kg				23.2 RR	4.94 RR
2-Chlorophenol	5800	mg/kg				23.2 RR	4.94 RR
2-Methylnaphthalene	3000	mg/kg				23.2 RR	4.94 RR
2-Methylphenol(o-Cresol)	41000	mg/kg				23.2 RR	4.94 RR
2-Nitrophenol		mg/kg				23.2 RR	4.94 RR
3&4-Methylphenol(m&p Cresol)	41000	mg/kg				23.2 RR	4.94 RR
3,3'-Dichlorobenzidine	5.1	mg/kg				116 RR	24.7 RR
3,3'-Dimethylbenzidine	0.21	mg/kg				23.2 RR	49.4 RR
4,6-Dinitro-2-methylphenol	66	mg/kg				46.5 RR	9.88 RR
4-Bromophenylphenyl ether		mg/kg				23.2 RR	4.94 RR
4-Chloro-3-methylphenol	82000	mg/kg				46.5 RR	9.88 RR
4-Chlorophenylphenyl ether		mg/kg				23.2 RR	4.94 RR
4-Nitrophenol		mg/kg				116 RR	24.7 RR
Acenaphthene	45000	mg/kg				23.2 RR	4.94 RR
Acenaphthylene	45000	mg/kg				23.2 RR	4.94 RR
Anthracene	230000	mg/kg				23.2 RR	4.94 RR
Benzo(a)anthracene	21	mg/kg				23.2 RR	4.94 RR
Benzo(a)pyrene	2.1	mg/kg				23.2 RR	4.94 RR
Benzo(b)fluoranthene	21	mg/kg				23.2 RR	1.04 RR
Benzo(g,h,i)perylene		mg/kg				23.2 RR	4.94 RR
Benzo(k)fluoranthene	210	mg/kg				23.2 RR	1.02 RR
Butylbenzylphthalate	1200	mg/kg				23.2 RR	4.94 RR
Di-n-butylphthalate	82000	mg/kg				23.2 RR	4.94 RR
Di-n-octylphthalate	8200	mg/kg				23.2 RR	1.17 RR
Dibenz(a,h)anthracene	2.1	mg/kg				23.2 RR	4.94 RR
Diethylphthalate	660000	mg/kg				23.2 RR	4.94 RR
Dimethylphthalate		mg/kg				23.2 RR	4.94 RR
Fluoranthene	30000	mg/kg				23.2 RR	4.94 RR
Fluorene	30000	mg/kg				23.2 RR	4.94 RR
Hexachloro-1,3-butadiene	5.3	mg/kg				23.2 RR	4.94 RR
Hexachlorobenzene	0.96	mg/kg				23.2 RR	4.94 RR
Hexachlorocyclopentadiene	7.5	mg/kg				23.2 RR	4.94 RR
Hexachloroethane	8	mg/kg				23.2 RR	4.94 RR
Indeno(1,2,3-cd)pyrene	21	mg/kg				23.2 RR	4.94 RR
Isophorone	2400	mg/kg				23.2 RR	4.94 RR
Naphthalene	17	mg/kg				23.2 RR	4.94 RR
Nitrobenzene	22	mg/kg				23.2 RR	4.94 RR
Pentachloroethane	36	mg/kg				46.5 RR	9.88 RR
Pentachlorophenol	4	mg/kg				116 RR	24.7 RR
Phenanthrene		mg/kg				23.2 RR	4.94 RR
Phenol	250000	mg/kg				23.2 RR	4.94 RR
Pyrene	23000	mg/kg				23.2 RR	4.94 RR
Pyridine	1200	mg/kg				23.2 RR	4.94 RR
bis(2-Chloroethoxy)methane	2500	mg/kg				23.2 RR	4.94 RR
bis(2-Chloroethyl) ether	1	mg/kg				23.2 RR	4.94 RR
bis(2-Chloroisopropyl) ether	22	mg/kg				23.2 RR	4.94 RR
bis(2-Ethylhexyl)phthalate	160	mg/kg				6.42 RR	4.94 RR

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- B** - The compound/analyte was not detected substantially above the level of the associated method blank/preparation or field blank
- U** - This analyte was not detected in the sample. The numeric value represents the sample quantitation/detection limit.
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- NJ** - This analyte has been "tentatively" identified. The numeric value represents its approximate concentration.
- Y** - This analyte coelutes with another target compound on the two chromatographic columns used for analysis.
- R** - The result for this analyte is unreliable. Additional data is needed to confirm or disprove the presence of this compound/analyte in the sample.
- RR** - Results were rejected and scheduled for resampling.

**Table 1 - Analytical Sample Results
Samples Collected April/August 2015**

Sample Identification Sample Date Sample Type Sample Location and Depth			Transect 6					
			TM-SD-27	TM-SD-28	TM-SD-29	TM-SD-30	TM-SD-31	TM-SD-31
			4/17/2015	8/12/2015	4/20/2015	8/12/2015	4/20/2015	8/12/2015
			Discrete	Discrete	Discrete	Discrete	Composite	Composite
Sample Location and Depth			South 0-12"	South 3-4'	North 0-12"	North 2-3'	0-12"	2-4'
Compound	PAL	Units						
VOC								
1,1,1,2-Tetrachloroethane	8.8	mg/kg	0.404 U	0.53 U	0.521 U	0.454 U		
1,1,1-Trichloroethane	36000	mg/kg	0.404 U	0.53 U	0.521 U	0.454 U		
1,1,2,2-Tetrachloroethane	2.7	mg/kg	0.404 U	0.53 U	0.521 U	0.454 U		
1,1,2-Trichloroethane	5	mg/kg	0.404 U	0.53 U	0.521 U	0.454 U		
1,1-Dichloroethane	16	mg/kg	0.404 U	0.53 U	0.521 U	0.454 U		
1,1-Dichloroethene	1000	mg/kg	0.404 U	0.53 U	0.521 U	0.454 U		
1,2-Dichloroethane	2	mg/kg	0.404 U	0.53 U	0.521 U	0.454 U		
1,2-Dichloropropane	4.4	mg/kg	0.404 U	0.53 U	0.521 U	0.454 U		
2-Butanone (MEK)	190000	mg/kg	0.808 U	1.06 U	1.04 U	0.908 U		
2-Hexanone	1300	mg/kg	0.808 UJ	1.06 U	1.04 U	0.908 U		
4-Methyl-2-pentanone (MIBK)	56000	mg/kg	0.808 U	1.06 U	1.04 U	0.908 U		
Acetone	670000	mg/kg	0.808 UJ	1.06 U	1.04 U	0.908 U		
Benzene	5.1	mg/kg	0.404 U	0.53 U	0.521 U	0.454 U		
Bromoform	86	mg/kg	0.404 U	0.53 U	0.521 U	0.454 U		
Carbon disulfide	3500	mg/kg	0.404 U	0.53 U	0.521 U	0.454 U		
Carbon tetrachloride	2.9	mg/kg	0.404 U	0.53 UJ	0.521 U	0.454 UJ		
Chlorobenzene	1300	mg/kg	0.404 U	0.53 U	0.521 U	0.454 U		
Chloroethane	57000	mg/kg	0.404 U	0.53 U	0.521 U	0.454 U		
Chloroform	1.4	mg/kg	0.404 U	0.53 U	0.521 U	0.454 U		
Ethylbenzene	25	mg/kg	0.404 U	0.53 U	0.521 U	0.454 U		
Methylene Chloride	1000	mg/kg	0.404 UJ	0.53 U	0.521 UJ	0.454 U		
Tetrachloroethene	100	mg/kg	0.404 U	0.53 U	0.521 U	0.454 U		
Toluene	47000	mg/kg	73.1	8.01	0.521 U	0.454 U		
Trichloroethene	6	mg/kg	0.404 U	0.53 U	0.521 U	0.454 U		
Vinyl chloride	1.7	mg/kg	0.404 U	0.53 U	0.521 U	0.454 U		
Xylene (Total)	2800	mg/kg	0.264 J	1.59 U	1.56 U	1.36 U		
cis-1,3-Dichloropropene	8.2	mg/kg	0.404 U	0.53 U	0.521 U	0.454 U		
trans-1,2-Dichloroethene	23000	mg/kg	0.404 U	0.53 U	0.521 U	0.454 U		
trans-1,3-Dichloropropene	8.2	mg/kg	0.404 U	0.53 U	0.521 U	0.454 U		
Metals								
Antimony	470.0	mg/kg	1.1 UJ	1.1 UJ	0.89 UJ	0.52 UJ		
Arsenic	3.0	mg/kg	39.2	60.2	5.8	17.7		
Barium	220,000.0	mg/kg	78	65.9	99	58.7		
Beryllium	2,300.0	mg/kg	0.13 B	0.15 B	0.35	0.12 B		
Cadmium	980.0	mg/kg	1.2	1.5 J	0.74	0.96 J		
Chromium	120,000.0	mg/kg	713	569	524	303		
Cobalt	350.0	mg/kg	22.3	35.1	15.4	13.4		
Copper	47,000.0	mg/kg	457	744 J	234	570 J		
Lead	800.0	mg/kg	160 J+	166 J	90.1 J+	75 J		
Nickel	22,000.0	mg/kg	119	142 J	147	114 J		
Selenium	5,800.0	mg/kg	1.5	2.3 J	6.8	1.8 J		
Silver	5,800.0	mg/kg	13.7	15.4	9.2	5.4		
Thallium	12.0	mg/kg	1.9 U	3.6 U	3 U	1.7 U		
Tin	700,000.0	mg/kg	2500 J+	3550	265 J+	58.5		
Vanadium	5,800.0	mg/kg	54.9	85.1	448	45.9		
Zinc	350,000.0	mg/kg	454	345	1030	133		
Chromium, Hexavalent	6.3	mg/kg	1.6 R	1.8 UJ	2.5 R	1.3 UJ		
Mercury	350.0	mg/kg	1.1	0.83	0.56	0.2		
PCB								
PCB-1016 (Aroclor 1016)	27	mg/kg				4.9 U	17.6 U	
PCB-1221 (Aroclor 1221)	0.72	mg/kg				4.9 U	17.6 U	
PCB-1232 (Aroclor 1232)	0.72	mg/kg				4.9 U	17.6 U	
PCB-1242 (Aroclor 1242)	0.97	mg/kg				4.9 U	233	
PCB-1248 (Aroclor 1248)	0.94	mg/kg				4.9 U	17.6 U	
PCB-1254 (Aroclor 1254)	0.97	mg/kg				4.9 U	17.6 U	
Cyanide								
Cyanide	150	mg/kg				0.88 J-	4.5	

Data Validation Qualifier Code

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- NJ** - This analyte has been "tentatively" identified. The numeric value represents its approximate concentration.
- Y** - This analyte coelutes with another target compound on the two chromatographic columns used for analysis.
- R** - The result for this analyte is unreliable. Additional data is needed to confirm or disprove the presence of this compound/analyte in the sample.

**Table 1 - Analytical Sample Results
Samples Collected April/August 2015**

Sample Identification Sample Date Sample Type Sample Location and Depth	Transect 6							
	TM-SD-27	TM-SD-28	TM-SD-29	TM-SD-30	TM-SD-31	TM-SD-31		
	4/17/2015	8/12/2015	4/20/2015	8/12/2015	4/20/2015	8/12/2015		
	Discrete	Discrete	Discrete	Discrete	Composite	Composite		
Compound	PAL	Units	South 0-12"	South 3-4'	North 0-12"	North 2-3'	0-12"	2-4'
SVOC								
1,2,4-Trichlorobenzene	110	mg/kg					2040 RR	5.87 RR
1,2-Dichlorobenzene	9300	mg/kg					2040 RR	5.87 RR
1,3-Dichlorobenzene		mg/kg					2040 RR	5.87 RR
1,4-Dichlorobenzene	11	mg/kg					2040 RR	5.87 RR
2,4,5-Trichlorophenol	82000	mg/kg					2040 RR	5.87 RR
2,4,6-Trichlorophenol	210	mg/kg					2040 RR	5.87 RR
2,4-Dichlorophenol	2500	mg/kg					2040 RR	5.87 RR
2,4-Dimethylphenol	16000	mg/kg					2040 RR	4.26 RR
2,4-Dinitrophenol	1600	mg/kg					10200 RR	29.3 RR
2,4-Dinitrotoluene	7.4	mg/kg					2040 RR	5.87 RR
2,6-Dinitrotoluene	1.5	mg/kg					2040 RR	5.87 RR
2-Chloronaphthalene	60000	mg/kg					2040 RR	5.87 RR
2-Chlorophenol	5800	mg/kg					2040 RR	5.87 RR
2-Methylnaphthalene	3000	mg/kg					2040 RR	5.87 RR
2-Methylphenol(o-Cresol)	41000	mg/kg					2040 RR	5.87 RR
2-Nitrophenol		mg/kg					2040 RR	5.87 RR
3&4-Methylphenol(m&p Cresol)	41000	mg/kg					2040 RR	5.87 RR
3,3'-Dichlorobenzidine	5.1	mg/kg					10200 RR	29.3 RR
3,3'-Dimethylbenzidine	0.21	mg/kg					20400 RR	58.7 RR
4,6-Dinitro-2-methylphenol	66	mg/kg					4090 RR	11.7 RR
4-Bromophenylphenyl ether		mg/kg					2040 RR	5.87 RR
4-Chloro-3-methylphenol	82000	mg/kg					4090 RR	11.7 RR
4-Chlorophenylphenyl ether		mg/kg					2040 RR	5.87 RR
4-Nitrophenol		mg/kg					10200 RR	29.3 RR
Acenaphthene	45000	mg/kg					2040 RR	5.87 RR
Acenaphthylene	45000	mg/kg					2040 RR	5.87 RR
Anthracene	230000	mg/kg					2040 RR	5.87 RR
Benzo(a)anthracene	21	mg/kg					2040 RR	5.87 RR
Benzo(a)pyrene	2.1	mg/kg					2040 RR	5.87 RR
Benzo(b)fluoranthene	21	mg/kg					2040 RR	1.14 RR
Benzo(g,h,i)perylene		mg/kg					2040 RR	5.87 RR
Benzo(k)fluoranthene	210	mg/kg					2040 RR	5.87 RR
Butylbenzylphthalate	1200	mg/kg					2040 RR	5.87 RR
Di-n-butylphthalate	82000	mg/kg					2040 RR	5.87 RR
Di-n-octylphthalate	8200	mg/kg					2040 RR	5.87 RR
Dibenz(a,h)anthracene	2.1	mg/kg					2040 RR	5.87 RR
Diethylphthalate	660000	mg/kg					2040 RR	5.87 RR
Dimethylphthalate		mg/kg					2040 RR	5.87 RR
Fluoranthene	30000	mg/kg					2040 RR	5.87 RR
Fluorene	30000	mg/kg					2040 RR	5.87 RR
Hexachloro-1,3-butadiene	5.3	mg/kg					2040 RR	5.87 RR
Hexachlorobenzene	0.96	mg/kg					2040 RR	5.87 RR
Hexachlorocyclopentadiene	7.5	mg/kg					2040 RR	5.87 RR
Hexachloroethane	8	mg/kg					2040 RR	5.87 RR
Indeno(1,2,3-cd)pyrene	21	mg/kg					2040 RR	5.87 RR
Isophorone	2400	mg/kg					2040 RR	5.87 RR
Naphthalene	17	mg/kg					2040 RR	5.87 RR
Nitrobenzene	22	mg/kg					2040 RR	5.87 RR
Pentachloroethane	36	mg/kg					4090 RR	11.7 RR
Pentachlorophenol	4	mg/kg					10200 RR	29.3 RR
Phenanthrene		mg/kg					2040 RR	1.75 RR
Phenol	250000	mg/kg					2040 RR	5.87 RR
Pyrene	23000	mg/kg					2040 RR	5.87 RR
Pyridine	1200	mg/kg					2040 RR	5.87 RR
bis(2-Chloroethoxy)methane	2500	mg/kg					2040 RR	5.87 RR
bis(2-Chloroethyl) ether	1	mg/kg					2040 RR	5.87 RR
bis(2-Chloroisopropyl) ether	22	mg/kg					2040 RR	5.87 RR
bis(2-Ethylhexyl)phthalate	160	mg/kg					2040 RR	1.75 RR

Data Validation Qualifier Code

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- B - The compound/analyte was not detected substantially above the level of the associated method blank/preparation or field blank
- U - This analyte was not detected in the sample. The numeric value represents the sample quantitation/detection limit.
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- Y - This analyte coelutes with another target compound on the two chromatographic columns used for analysis.
- R - The result for this analyte is unreliable. Additional data is needed to confirm or disprove the presence of this compound/analyte in the sample.
- RR - Results were rejected and scheduled for resampling.

**Table 1 - Analytical Sample Results
Samples Collected April/August 2015**

Sample Identification Sample Date Sample Type Sample Location and Depth			Transect 7					
			TM-SD-32	TM-SD-33	TM-SD-34	TM-SD-35	TM-SD-36	TM-SD-36
			4/17/2015	8/13/2015	4/20/2015	8/13/2015	4/20/2015	8/13/2015
			Discrete	Discrete	Discrete	Discrete	Composite	Composite
Compound	PAL	Units	South 0-12"	No Recovery	North 0-12"	North 5.5-6.5"	0-12"	5.5-6.5"
VOC								
1,1,1,2-Tetrachloroethane	8.8	mg/kg	0.408 U		0.427 U	0.383 U		
1,1,1-Trichloroethane	36000	mg/kg	0.408 U		0.427 U	0.383 U		
1,1,2,2-Tetrachloroethane	2.7	mg/kg	0.408 U		0.427 U	0.383 U		
1,1,2-Trichloroethane	5	mg/kg	0.408 U		0.427 U	0.383 U		
1,1-Dichloroethane	16	mg/kg	0.408 U		0.427 U	0.383 U		
1,1-Dichloroethene	1000	mg/kg	0.408 U		0.427 U	0.383 U		
1,2-Dichloroethane	2	mg/kg	0.408 UJ		0.427 UJ	0.383 U		
1,2-Dichloropropane	4.4	mg/kg	0.408 U		0.427 U	0.383 U		
2-Butanone (MEK)	190000	mg/kg	0.816 U		0.853 U	0.486 J		
2-Hexanone	1300	mg/kg	0.816 U		0.853 U	0.765 U		
4-Methyl-2-pentanone (MIBK)	56000	mg/kg	0.816 U		0.853 U	0.765 U		
Acetone	670000	mg/kg	0.816 U		0.853 U	0.378 J		
Benzene	5.1	mg/kg	0.408 U		0.427 U	0.383 U		
Bromoform	86	mg/kg	0.408 U		0.427 U	0.383 U		
Carbon disulfide	3500	mg/kg	0.408 U		0.427 U	0.383 U		
Carbon tetrachloride	2.9	mg/kg	0.408 U		0.427 U	0.383 U		
Chlorobenzene	1300	mg/kg	0.408 U		0.427 U	0.383 U		
Chloroethane	57000	mg/kg	0.408 U		0.427 U	0.383 U		
Chloroform	1.4	mg/kg	0.408 U		0.427 U	0.383 U		
Ethylbenzene	25	mg/kg	0.408 U		0.427 U	0.16 J		
Methylene Chloride	1000	mg/kg	0.408 UJ		0.427 UJ	0.383 U		
Tetrachloroethene	100	mg/kg	0.408 U		0.427 U	0.383 U		
Toluene	47000	mg/kg	0.204 J		0.427 U	15		
Trichloroethene	6	mg/kg	0.408 U		0.427 U	0.383 U		
Vinyl chloride	1.7	mg/kg	0.408 U		0.427 U	0.383 U		
Xylene (Total)	2800	mg/kg	1.22 U		1.28 U	0.68 J		
cis-1,3-Dichloropropene	8.2	mg/kg	0.408 U		0.427 U	0.383 U		
trans-1,2-Dichloroethene	23000	mg/kg	0.408 U		0.427 U	0.383 U		
trans-1,3-Dichloropropene	8.2	mg/kg	0.408 U		0.427 U	0.383 U		
Metals								
Antimony	470.0	mg/kg	0.81 UJ		0.63 UJ	0.7 B		
Arsenic	3.0	mg/kg	31.9		8.6	19.9		
Barium	220,000.0	mg/kg	78.7		62	79.8		
Beryllium	2,300.0	mg/kg	0.26 B		0.29	0.18 B		
Cadmium	980.0	mg/kg	1.2		0.31 U	3 J		
Chromium	120,000.0	mg/kg	347		425	333		
Cobalt	350.0	mg/kg	29.5		18.1	16.2		
Copper	47,000.0	mg/kg	509		170	586 J		
Lead	800.0	mg/kg	114 J+		40.3 J+	146 J		
Nickel	22,000.0	mg/kg	104		170	147 J		
Selenium	5,800.0	mg/kg	1.1		1.6	3.1 J		
Silver	5,800.0	mg/kg	9.1		9.2	9.2		
Thallium	12.0	mg/kg	2.7 U		2.1 U	2.7 U		
Tin	700,000.0	mg/kg	1740 J+		98.1 J+	144 J		
Vanadium	5,800.0	mg/kg	102		49	28.6		
Zinc	350,000.0	mg/kg	559		315	281 J		
Chromium, Hexavalent	6.3	mg/kg	2 R		1.8 R	1.5 UJ		
Mercury	350.0	mg/kg	0.32		0.16 J	0.63		
PCB								
PCB-1016 (Aroclor 1016)	27	mg/kg				3.24 U		4.8 U
PCB-1221 (Aroclor 1221)	0.72	mg/kg				3.24 U		4.8 U
PCB-1232 (Aroclor 1232)	0.72	mg/kg				3.24 U		4.8 U
PCB-1242 (Aroclor 1242)	0.97	mg/kg				3.24 U		3.33 J
PCB-1248 (Aroclor 1248)	0.94	mg/kg				3.24 U		4.8 U
PCB-1254 (Aroclor 1254)	0.97	mg/kg				3.24 U		4.8
Cyanide								
Cyanide	150	mg/kg				0.44 J-		4.3

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**Table 1 - Analytical Sample Results
Samples Collected April/August 2015**

Sample Identification Sample Date Sample Type Sample Location and Depth	Transect 7					
	TM-SD-32	TM-SD-33	TM-SD-34	TM-SD-35	TM-SD-36	TM-SD-36
	4/17/2015	8/13/2015	4/20/2015	8/13/2015	4/20/2015	8/13/2015
	Discrete	Discrete	Discrete	Discrete	Composite	Composite
	South 0-12"	No Recovery	North 0-12"	North 5.5-6.5'	0-12"	5.5-6.5'
Compound	PAL	Units				
SVOC						
1,2,4-Trichlorobenzene	110	mg/kg			1600 RR	32.9 RR
1,2-Dichlorobenzene	9300	mg/kg			1600 RR	32.9 RR
1,3-Dichlorobenzene		mg/kg			1600 RR	32.9 RR
1,4-Dichlorobenzene	11	mg/kg			1600 RR	32.9 RR
2,4,5-Trichlorophenol	82000	mg/kg			1600 RR	32.9 RR
2,4,6-Trichlorophenol	210	mg/kg			1600 RR	32.9 RR
2,4-Dichlorophenol	2500	mg/kg			1600 RR	32.9 RR
2,4-Dimethylphenol	16000	mg/kg			1600 RR	32.9 RR
2,4-Dinitrophenol	1600	mg/kg			8010 RR	164 RR
2,4-Dinitrotoluene	7.4	mg/kg			1600 RR	32.9 RR
2,6-Dinitrotoluene	1.5	mg/kg			1600 RR	32.9 RR
2-Chloronaphthalene	60000	mg/kg			1600 RR	32.9 RR
2-Chlorophenol	5800	mg/kg			1600 RR	32.9 RR
2-Methylnaphthalene	3000	mg/kg			1600 RR	32.9 RR
2-Methylphenol(o-Cresol)	41000	mg/kg			1600 RR	32.9 RR
2-Nitrophenol		mg/kg			1600 RR	32.9 RR
3&4-Methylphenol(m&p Cresol)	41000	mg/kg			1600 RR	32.9 RR
3,3'-Dichlorobenzidine	5.1	mg/kg			8010 RR	164 RR
3,3'-Dimethylbenzidine	0.21	mg/kg			16000 RR	32.9 RR
4,6-Dinitro-2-methylphenol	66	mg/kg			3210 RR	65.8 RR
4-Bromophenylphenyl ether		mg/kg			1600 RR	32.9 RR
4-Chloro-3-methylphenol	82000	mg/kg			3210 RR	65.8 RR
4-Chlorophenylphenyl ether		mg/kg			1600 RR	32.9 RR
4-Nitrophenol		mg/kg			8010 RR	164 RR
Acenaphthene	45000	mg/kg			1600 RR	32.9 RR
Acenaphthylene	45000	mg/kg			1600 RR	32.9 RR
Anthracene	230000	mg/kg			1600 RR	32.9 RR
Benzo(a)anthracene	21	mg/kg			1600 RR	32.9 RR
Benzo(a)pyrene	2.1	mg/kg			1600 RR	32.9 RR
Benzo(b)fluoranthene	21	mg/kg			1600 RR	32.9 RR
Benzo(g,h,i)perylene		mg/kg			1600 RR	32.9 RR
Benzo(k)fluoranthene	210	mg/kg			1600 RR	32.9 RR
Butylbenzylphthalate	1200	mg/kg			1600 RR	32.9 RR
Di-n-butylphthalate	82000	mg/kg			1600 RR	32.9 RR
Di-n-octylphthalate	8200	mg/kg			1600 RR	32.9 RR
Dibenz(a,h)anthracene	2.1	mg/kg			1600 RR	32.9 RR
Diethylphthalate	660000	mg/kg			1600 RR	32.9 RR
Dimethylphthalate		mg/kg			1600 RR	32.9 RR
Fluoranthene	30000	mg/kg			1600 RR	32.9 RR
Fluorene	30000	mg/kg			1600 RR	32.9 RR
Hexachloro-1,3-butadiene	5.3	mg/kg			1600 RR	32.9 RR
Hexachlorobenzene	0.96	mg/kg			1600 RR	32.9 RR
Hexachlorocyclopentadiene	7.5	mg/kg			1600 RR	32.9 RR
Hexachloroethane	8	mg/kg			1600 RR	32.9 RR
Indeno(1,2,3-cd)pyrene	21	mg/kg			1600 RR	32.9 RR
Isophorone	2400	mg/kg			1600 RR	32.9 RR
Naphthalene	17	mg/kg			1600 RR	32.9 RR
Nitrobenzene	22	mg/kg			1600 RR	32.9 RR
Pentachloroethane	36	mg/kg			3210 RR	65.8 RR
Pentachlorophenol	4	mg/kg			8010 RR	164 RR
Phenanthrene		mg/kg			1600 RR	8.82 RR
Phenol	250000	mg/kg			1600 RR	32.9 RR
Pyrene	23000	mg/kg			1600 RR	32.9 RR
Pyridine	1200	mg/kg			1600 RR	32.9 RR
bis(2-Chloroethoxy)methane	2500	mg/kg			1600 RR	32.9 RR
bis(2-Chloroethyl) ether	1	mg/kg			1600 RR	32.9 RR
bis(2-Chloroisopropyl) ether	22	mg/kg			1600 RR	32.9 RR
bis(2-Ethylhexyl)phthalate	160	mg/kg			1600 RR	32.9 RR

Data Validation Qualifier Code

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- RR** - Results were rejected and scheduled for resampling.

**Table 1 - Analytical Sample Results
Samples Collected April/August 2015**

Sample Identification Sample Date Sample Type Sample Location and Depth			Transect 8					
			TM-SD-37	TM-SD-38	TM-SD-39	TM-SD-40	TM-SD-41	TM-SD-41
			4/20/2015	8/13/2015	4/20/2015	8/13/2015	4/20/2015	8/13/2015
			Discrete	Discrete	Discrete	Discrete	Composite	Composite
Compound	PAL	Units	South 0-12"	No Recovery	North 0-12"	No Recovery	0-12"	No Recovery
VOC								
1,1,1,2-Tetrachloroethane	8.8	mg/kg	0.281 U		0.28 U			
1,1,1-Trichloroethane	36000	mg/kg	0.281 U		0.28 U			
1,1,2,2-Tetrachloroethane	2.7	mg/kg	0.281 U		0.28 U			
1,1,2-Trichloroethane	5	mg/kg	0.281 U		0.28 U			
1,1-Dichloroethane	16	mg/kg	0.281 U		0.28 U			
1,1-Dichloroethene	1000	mg/kg	0.281 U		0.28 U			
1,2-Dichloroethane	2	mg/kg	0.281 UJ		0.28 UJ			
1,2-Dichloropropane	4.4	mg/kg	0.281 U		0.28 U			
2-Butanone (MEK)	190000	mg/kg	0.154 J		0.559 U			
2-Hexanone	1300	mg/kg	0.562 U		0.559 U			
4-Methyl-2-pentanone (MIBK)	56000	mg/kg	0.562 U		0.559 U			
Acetone	670000	mg/kg	0.562 U		0.559 U			
Benzene	5.1	mg/kg	0.281 U		3.83			
Bromoform	86	mg/kg	0.281 U		0.28 U			
Carbon disulfide	3500	mg/kg	0.281 U		0.28 U			
Carbon tetrachloride	2.9	mg/kg	0.281 U		0.28 U			
Chlorobenzene	1300	mg/kg	0.281 U		6			
Chloroethane	57000	mg/kg	0.281 U		0.28 U			
Chloroform	1.4	mg/kg	0.281 U		0.28 U			
Ethylbenzene	25	mg/kg	0.281 U		0.28 U			
Methylene Chloride	1000	mg/kg	0.281 UJ		0.28 UJ			
Tetrachloroethene	100	mg/kg	0.281 U		0.28 U			
Toluene	47000	mg/kg	0.281 U		0.101 J			
Trichloroethene	6	mg/kg	0.281 U		0.28 U			
Vinyl chloride	1.7	mg/kg	0.281 U		0.28 U			
Xylene (Total)	2800	mg/kg	0.842 U		0.257 J			
cis-1,3-Dichloropropene	8.2	mg/kg	0.281 U		0.28 U			
trans-1,2-Dichloroethene	23000	mg/kg	0.281 U		0.28 U			
trans-1,3-Dichloropropene	8.2	mg/kg	0.281 U		0.28 U			
Metals								
Antimony	470.0	mg/kg	3.6 J-		0.83 J-			
Arsenic	3.0	mg/kg	14.5		15.7			
Barium	220,000.0	mg/kg	51.1		161			
Beryllium	2,300.0	mg/kg	0.15 B		0.13 B			
Cadmium	980.0	mg/kg	0.36 U		1			
Chromium	120,000.0	mg/kg	366		389			
Cobalt	350.0	mg/kg	15.5		14.7			
Copper	47,000.0	mg/kg	189		428			
Lead	800.0	mg/kg	48.6 J+		200 J+			
Nickel	22,000.0	mg/kg	158		260			
Selenium	5,800.0	mg/kg	1.8		2			
Silver	5,800.0	mg/kg	8.8		7.8			
Thallium	12.0	mg/kg	2.4 U		2 U			
Tin	700,000.0	mg/kg	434 J+		92.7 J+			
Vanadium	5,800.0	mg/kg	64.7		23.3			
Zinc	350,000.0	mg/kg	364		321			
Chromium, Hexavalent	6.3	mg/kg	1.7 R		1.3 R			
Mercury	350.0	mg/kg	0.23		0.098 J			
PCB								
PCB-1016 (Aroclor 1016)	27	mg/kg					3.2 U	
PCB-1221 (Aroclor 1221)	0.72	mg/kg					3.2 U	
PCB-1232 (Aroclor 1232)	0.72	mg/kg					3.2 U	
PCB-1242 (Aroclor 1242)	0.97	mg/kg					3.2 U	
PCB-1248 (Aroclor 1248)	0.94	mg/kg					3.2 U	
PCB-1254 (Aroclor 1254)	0.97	mg/kg					3.2 U	
Cyanide								
Cyanide	150	mg/kg					0.45 J-	

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- NJ - This analyte has been "tentatively" identified. The numeric value represents its approximate concentration.
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**Table 1 - Analytical Sample Results
Samples Collected April/August 2015**

Sample Identification Sample Date Sample Type Sample Location and Depth	Transect 8					
	TM-SD-37	TM-SD-38	TM-SD-39	TM-SD-40	TM-SD-41	TM-SD-41
	4/20/2015	8/13/2015	4/20/2015	8/13/2015	4/20/2015	8/13/2015
	Discrete	Discrete	Discrete	Discrete	Composite	Composite
PAL	Units					
SVOC						
1,2,4-Trichlorobenzene	110	mg/kg			1490 RR	
1,2-Dichlorobenzene	9300	mg/kg			1490 RR	
1,3-Dichlorobenzene		mg/kg			1490 RR	
1,4-Dichlorobenzene	11	mg/kg			1490 RR	
2,4,5-Trichlorophenol	82000	mg/kg			1490 RR	
2,4,6-Trichlorophenol	210	mg/kg			1490 RR	
2,4-Dichlorophenol	2500	mg/kg			1490 RR	
2,4-Dimethylphenol	16000	mg/kg			1490 RR	
2,4-Dinitrophenol	1600	mg/kg			7440 RR	
2,4-Dinitrotoluene	7.4	mg/kg			1490 RR	
2,6-Dinitrotoluene	1.5	mg/kg			1490 RR	
2-Chloronaphthalene	60000	mg/kg			1490 RR	
2-Chlorophenol	5800	mg/kg			1490 RR	
2-Methylnaphthalene	3000	mg/kg			1490 RR	
2-Methylphenol(o-Cresol)	41000	mg/kg			1490 RR	
2-Nitrophenol		mg/kg			1490 RR	
3&4-Methylphenol(m&p Cresol)	41000	mg/kg			1490 RR	
3,3'-Dichlorobenzidine	5.1	mg/kg			7440 RR	
3,3'-Dimethylbenzidine	0.21	mg/kg			14900 RR	
4,6-Dinitro-2-methylphenol	66	mg/kg			2980 RR	
4-Bromophenylphenyl ether		mg/kg			1490 RR	
4-Chloro-3-methylphenol	82000	mg/kg			2980 RR	
4-Chlorophenylphenyl ether		mg/kg			1490 RR	
4-Nitrophenol		mg/kg			7440 RR	
Acenaphthene	45000	mg/kg			1490 RR	
Acenaphthylene	45000	mg/kg			1490 RR	
Anthracene	230000	mg/kg			1490 RR	
Benzo(a)anthracene	21	mg/kg			1490 RR	
Benzo(a)pyrene	2.1	mg/kg			1490 RR	
Benzo(b)fluoranthene	21	mg/kg			1490 RR	
Benzo(g,h,i)perylene		mg/kg			1490 RR	
Benzo(k)fluoranthene	210	mg/kg			1490 RR	
Butylbenzylphthalate	1200	mg/kg			1490 RR	
Di-n-butylphthalate	82000	mg/kg			1490 RR	
Di-n-octylphthalate	8200	mg/kg			1490 RR	
Dibenz(a,h)anthracene	2.1	mg/kg			1490 RR	
Diethylphthalate	660000	mg/kg			1490 RR	
Dimethylphthalate		mg/kg			1490 RR	
Fluoranthene	30000	mg/kg			1490 RR	
Fluorene	30000	mg/kg			1490 RR	
Hexachloro-1,3-butadiene	5.3	mg/kg			1490 RR	
Hexachlorobenzene	0.96	mg/kg			1490 RR	
Hexachlorocyclopentadiene	7.5	mg/kg			1490 RR	
Hexachloroethane	8	mg/kg			1490 RR	
Indeno(1,2,3-cd)pyrene	21	mg/kg			1490 RR	
Isophorone	2400	mg/kg			1490 RR	
Naphthalene	17	mg/kg			1490 RR	
Nitrobenzene	22	mg/kg			1490 RR	
Pentachloroethane	36	mg/kg			2980 RR	
Pentachlorophenol	4	mg/kg			7440 RR	
Phenanthrene		mg/kg			1490 RR	
Phenol	250000	mg/kg			1490 RR	
Pyrene	23000	mg/kg			1490 RR	
Pyridine	1200	mg/kg			1490 RR	
bis(2-Chloroethoxy)methane	2500	mg/kg			1490 RR	
bis(2-Chloroethyl) ether	1	mg/kg			1490 RR	
bis(2-Chloroisopropyl) ether	22	mg/kg			1490 RR	
bis(2-Ethylhexyl)phthalate	160	mg/kg			1490 RR	

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- B** - The compound/analyte was not detected substantially above the level of the associated method blank/preparation or field blank
- 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.
- NJ** - This analyte has been "tentatively" identified. The numeric value represents its approximate concentration.
- Y** - This analyte coelutes with another target compound on the two chromatographic columns used for analysis.
- R** - The result for this analyte is unreliable. Additional data is needed to confirm or disprove the presence of this compound/analyte in the sample.
- RR** - Results were rejected and scheduled for resampling.

**Table 1 - Analytical Sample Results
Samples Collected April/August 2015**

Sample Identification Sample Date Sample Type Sample Location and Depth			Transect 9					
			TM-SD-42	TM-SD-43	TM-SD-44	TM-SD-45	TM-SD-46	TM-SD-46
			4/17/2015	8/13/2015	4/20/2015	8/13/2015	4/20/2015	8/13/2015
			Discrete	Discrete	Discrete	Discrete	Composite	Composite
Sample Location and Depth			South 0-12"	South 6-7"	North 0-12"	No Recovery	0-12"	6-7"
Compound	PAL	Units						
VOC								
1,1,1,2-Tetrachloroethane	8.8	mg/kg	0.439 U	0.307 U	0.339 U			
1,1,1-Trichloroethane	36000	mg/kg	0.439 U	0.307 U	0.339 U			
1,1,2,2-Tetrachloroethane	2.7	mg/kg	0.439 U	0.307 U	0.339 U			
1,1,2-Trichloroethane	5	mg/kg	0.439 U	0.307 U	0.339 U			
1,1-Dichloroethane	16	mg/kg	0.439 U	0.307 U	0.339 U			
1,1-Dichloroethene	1000	mg/kg	0.439 U	0.307 U	0.339 U			
1,2-Dichloroethane	2	mg/kg	0.439 UJ	0.307 U	0.339 UJ			
1,2-Dichloropropane	4.4	mg/kg	0.439 U	0.307 U	0.339 U			
2-Butanone (MEK)	190000	mg/kg	0.248 J	0.614 U	0.679 U			
2-Hexanone	1300	mg/kg	0.877 U	0.614 U	0.679 U			
4-Methyl-2-pentanone (MIBK)	56000	mg/kg	0.877 U	0.614 U	0.679 U			
Acetone	670000	mg/kg	0.877 U	0.614 U	0.679 U			
Benzene	5.1	mg/kg	0.439 U	0.558	0.339 U			
Bromoform	86	mg/kg	0.439 U	0.307 U	0.339 U			
Carbon disulfide	3500	mg/kg	0.439 U	0.307 U	0.339 U			
Carbon tetrachloride	2.9	mg/kg	0.439 U	0.307 U	0.339 U			
Chlorobenzene	1300	mg/kg	0.439 U	0.307 U	0.339 U			
Chloroethane	57000	mg/kg	0.439 U	0.307 U	0.339 U			
Chloroform	1.4	mg/kg	0.439 U	0.307 U	0.339 U			
Ethylbenzene	25	mg/kg	0.439 U	2.45	0.339 U			
Methylene Chloride	1000	mg/kg	0.439 UJ	0.307 U	0.339 UJ			
Tetrachloroethene	100	mg/kg	0.439 U	0.307 U	0.339 U			
Toluene	47000	mg/kg	0.439 U	3.73	0.339 U			
Trichloroethene	6	mg/kg	0.439 U	0.307 U	0.339 U			
Vinyl chloride	1.7	mg/kg	0.439 U	0.307 U	0.339 U			
Xylene (Total)	2800	mg/kg	0.696 J	9.37	1.02 U			
cis-1,3-Dichloropropene	8.2	mg/kg	0.439 U	0.307 U	0.339 U			
trans-1,2-Dichloroethene	23000	mg/kg	0.439 U	0.307 U	0.339 U			
trans-1,3-Dichloropropene	8.2	mg/kg	0.439 U	0.307 U	0.339 U			
Metals								
Antimony	470.0	mg/kg	4.6 J-	4.8 UJ	10.9			
Arsenic	3.0	mg/kg	14.1	26.1	10.1			
Barium	220,000.0	mg/kg	43.2	173	40.2			
Beryllium	2,300.0	mg/kg	0.067 B	0.099 B	0.08 B			
Cadmium	980.0	mg/kg	0.34 U	2.1 J	0.3			
Chromium	120,000.0	mg/kg	591	1930	330			
Cobalt	350.0	mg/kg	15.3	10.9	13.4			
Copper	47,000.0	mg/kg	205	390 J	212			
Lead	800.0	mg/kg	44.8 J+	113 J	80.6			
Nickel	22,000.0	mg/kg	147	155 J	123			
Selenium	5,800.0	mg/kg	1.7	1.8 J	1.8			
Silver	5,800.0	mg/kg	9.3	9.9	6.2			
Thallium	12.0	mg/kg	2.2 U	1.6 U	2 U			
Tin	700,000.0	mg/kg	1940 J+	1770 J	389			
Vanadium	5,800.0	mg/kg	26.2	17.1	31.3			
Zinc	350,000.0	mg/kg	310	259 J	809			
Chromium, Hexavalent	6.3	mg/kg	1.8 R	1.5 UJ	1.3 R			
Mercury	350.0	mg/kg	0.2	0.28	0.19			
PCB								
PCB-1016 (Aroclor 1016)	27	mg/kg				3.67 U	4.07 U	
PCB-1221 (Aroclor 1221)	0.72	mg/kg				3.67 U	4.07 U	
PCB-1232 (Aroclor 1232)	0.72	mg/kg				3.67 U	4.07 U	
PCB-1242 (Aroclor 1242)	0.97	mg/kg				3.67 U	4.07 U	
PCB-1248 (Aroclor 1248)	0.94	mg/kg				3.67 U	4.07 U	
PCB-1254 (Aroclor 1254)	0.97	mg/kg				3.67 U	4.07 U	
Cyanide								
Cyanide	150	mg/kg				3.6 J-	12.5	

Data Validation Qualifier Code

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- Y** - This analyte coelutes with another target compound on the two chromatographic columns used for analysis.
- R** - The result for this analyte is unreliable. Additional data is needed to confirm or disprove the presence of this compound/analyte in the sample.

**Table 1 - Analytical Sample Results
Samples Collected April/August 2015**

Sample Identification Sample Date Sample Type Sample Location and Depth	Transect 9							
	TM-SD-42	TM-SD-43	TM-SD-44	TM-SD-45	TM-SD-46	TM-SD-46		
	4/17/2015	8/13/2015	4/20/2015	8/13/2015	4/20/2015	8/13/2015		
	Discrete	Discrete	Discrete	Discrete	Composite	Composite		
Compound	PAL	Units	South 0-12"	South 6-7'	North 0-12"	No Recovery	0-12"	6-7'
SVOC								
1,2,4-Trichlorobenzene	110	mg/kg					1570 RR	28.2 RR
1,2-Dichlorobenzene	9300	mg/kg					1570 RR	28.2 RR
1,3-Dichlorobenzene		mg/kg					1570 RR	28.2 RR
1,4-Dichlorobenzene	11	mg/kg					1570 RR	28.2 RR
2,4,5-Trichlorophenol	82000	mg/kg					1570 RR	28.2 RR
2,4,6-Trichlorophenol	210	mg/kg					1570 RR	28.2 RR
2,4-Dichlorophenol	2500	mg/kg					1570 RR	28.2 RR
2,4-Dimethylphenol	16000	mg/kg					1570 RR	28.2 RR
2,4-Dinitrophenol	1600	mg/kg					7860 RR	141 RR
2,4-Dinitrotoluene	7.4	mg/kg					1570 RR	28.2 RR
2,6-Dinitrotoluene	1.5	mg/kg					1570 RR	28.2 RR
2-Chloronaphthalene	60000	mg/kg					1570 RR	28.2 RR
2-Chlorophenol	5800	mg/kg					1570 RR	28.2 RR
2-Methylnaphthalene	3000	mg/kg					1570 RR	7.01 RR
2-Methylphenol(o-Cresol)	41000	mg/kg					1570 RR	28.2 RR
2-Nitrophenol		mg/kg					1570 RR	28.2 RR
3&4-Methylphenol(m&p Cresol)	41000	mg/kg					1570 RR	28.2 RR
3,3'-Dichlorobenzidine	5.1	mg/kg					7860 RR	141 RR
3,3'-Dimethylbenzidine	0.21	mg/kg					15700 RR	282 RR
4,6-Dinitro-2-methylphenol	66	mg/kg					3140 RR	56.4 RR
4-Bromophenylphenyl ether		mg/kg					1570 RR	28.2 RR
4-Chloro-3-methylphenol	82000	mg/kg					3140 RR	56.4 RR
4-Chlorophenylphenyl ether		mg/kg					1570 RR	28.2 RR
4-Nitrophenol		mg/kg					7860 RR	141 RR
Acenaphthene	45000	mg/kg					1570 RR	28.2 RR
Acenaphthylene	45000	mg/kg					1570 RR	28.2 RR
Anthracene	230000	mg/kg					1570 RR	28.2 RR
Benzo(a)anthracene	21	mg/kg					1570 RR	28.2 RR
Benzo(a)pyrene	2.1	mg/kg					1570 RR	28.2 RR
Benzo(b)fluoranthene	21	mg/kg					1570 RR	28.2 RR
Benzo(g,h,i)perylene		mg/kg					1570 RR	28.2 RR
Benzo(k)fluoranthene	210	mg/kg					1570 RR	28.2 RR
Butylbenzylphthalate	1200	mg/kg					1570 RR	28.2 RR
Di-n-butylphthalate	82000	mg/kg					1570 RR	28.2 RR
Di-n-octylphthalate	8200	mg/kg					1570 RR	28.2 RR
Dibenz(a,h)anthracene	2.1	mg/kg					1570 RR	28.2 RR
Diethylphthalate	660000	mg/kg					1570 RR	28.2 RR
Dimethylphthalate		mg/kg					1570 RR	28.2 RR
Fluoranthene	30000	mg/kg					1570 RR	28.2 RR
Fluorene	30000	mg/kg					1570 RR	28.2 RR
Hexachloro-1,3-butadiene	5.3	mg/kg					1570 RR	28.2 RR
Hexachlorobenzene	0.96	mg/kg					1570 RR	28.2 RR
Hexachlorocyclopentadiene	7.5	mg/kg					1570 RR	28.2 RR
Hexachloroethane	8	mg/kg					1570 RR	28.2 RR
Indeno(1,2,3-cd)pyrene	21	mg/kg					1570 RR	28.2 RR
Isophorone	2400	mg/kg					1570 RR	28.2 RR
Naphthalene	17	mg/kg					1570 RR	8.53 RR
Nitrobenzene	22	mg/kg					1570 RR	28.2 RR
Pentachloroethane	36	mg/kg					3140 RR	56.4 RR
Pentachlorophenol	4	mg/kg					7860 RR	141 RR
Phenanthrene		mg/kg					1570 RR	4.93 RR
Phenol	250000	mg/kg					1570 RR	28.2 RR
Pyrene	23000	mg/kg					1570 RR	28.2 RR
Pyridine	1200	mg/kg					1570 RR	28.2 RR
bis(2-Chloroethoxy)methane	2500	mg/kg					1570 RR	28.2 RR
bis(2-Chloroethyl) ether	1	mg/kg					1570 RR	28.2 RR
bis(2-Chloroisopropyl) ether	22	mg/kg					1570 RR	28.2 RR
bis(2-Ethylhexyl)phthalate	160	mg/kg					1570 RR	11.1 RR

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- NJ - This analyte has been "tentatively" identified. The numeric value represents its approximate concentration.
- Y - This analyte coelutes with another target compound on the two chromatographic columns used for analysis.
- R - The result for this analyte is unreliable. Additional data is needed to confirm or disprove the presence of this compound/analyte in the sample.
- RR - Results were rejected and scheduled for resampling.

Table 1 - Analytical Sample Results
Samples Collected April/August 2015

Sample Identification Sample Date Sample Type Sample Location and Depth			Transect 10					
			TM-SD-47	TM-SD-48	TM-SD-49	TM-SD-50	TM-SD-51	TM-SD-51
			4/17/2015	8/13/2015	4/20/2015	8/13/2015	4/20/2015	8/13/2015
			Discrete	Discrete	Discrete	Discrete	Composite	Composite
PAL			South 0-12"	South 5.5-6.5'	North 0-12"	North 1.5-2.5'	0-12"	1.5-6.5'
Compound	PAL	Units						
VOC								
1,1,1,2-Tetrachloroethane	8.8	mg/kg	0.811 U	0.848 U	0.423 U	0.696 U		
1,1,1-Trichloroethane	36000	mg/kg	0.811 U	0.848 U	0.423 U	0.696 U		
1,1,2,2-Tetrachloroethane	2.7	mg/kg	0.811 U	0.848 U	0.423 U	0.696 U		
1,1,2-Trichloroethane	5	mg/kg	0.811 U	0.848 U	0.423 U	0.696 U		
1,1-Dichloroethane	16	mg/kg	0.811 U	0.848 U	0.423 U	0.696 U		
1,1-Dichloroethene	1000	mg/kg	0.811 U	0.848 U	0.423 U	0.696 U		
1,2-Dichloroethane	2	mg/kg	0.811 UJ	0.848 U	0.423 UJ	0.696 U		
1,2-Dichloropropane	4.4	mg/kg	0.811 U	0.848 U	0.423 U	0.696 U		
2-Butanone (MEK)	190000	mg/kg	1.62 U	1.7 U	0.846 U	1.39 U		
2-Hexanone	1300	mg/kg	1.62 U	1.7 U	0.846 U	1.39 U		
4-Methyl-2-pentanone (MIBK)	56000	mg/kg	1.62 U	1.7 U	0.846 U	1.39 U		
Acetone	670000	mg/kg	1.62 U	1.7 U	0.64 J	1.39 U		
Benzene	5.1	mg/kg	0.811 U	0.696 J	0.423 U	0.477 J		
Bromoform	86	mg/kg	0.811 U	0.848 U	0.423 U	0.696 U		
Carbon disulfide	3500	mg/kg	0.811 U	0.848 U	0.423 U	0.696 U		
Carbon tetrachloride	2.9	mg/kg	0.811 U	0.848 U	0.423 U	0.696 U		
Chlorobenzene	1300	mg/kg	0.811 U	0.848 U	8.44	0.696 U		
Chloroethane	57000	mg/kg	0.811 U	0.848 U	0.423 U	0.696 U		
Chloroform	1.4	mg/kg	0.811 U	0.848 U	0.423 U	0.696 U		
Ethylbenzene	25	mg/kg	0.811 U	0.728 J	0.423 U	1.86		
Methylene Chloride	1000	mg/kg	0.811 UJ	0.848 U	0.423 UJ	0.696 U		
Tetrachloroethene	100	mg/kg	0.811 U	0.848 U	0.423 U	0.696 U		
Toluene	47000	mg/kg	0.811 U	0.848 U	0.146 J	0.229 J		
Trichloroethene	6	mg/kg	0.811 U	0.848 U	0.423 U	0.696 U		
Vinyl chloride	1.7	mg/kg	0.811 U	0.848 U	0.423 U	0.696 U		
Xylene (Total)	2800	mg/kg	2.43 U	9.59	0.54 J	13.8		
cis-1,3-Dichloropropene	8.2	mg/kg	0.811 U	0.848 U	0.423 U	0.696 U		
trans-1,2-Dichloroethene	23000	mg/kg	0.811 U	0.848 U	0.423 U	0.696 U		
trans-1,3-Dichloropropene	8.2	mg/kg	0.811 U	0.848 U	0.423 U	0.696 U		
Metals								
Antimony	470.0	mg/kg	0.72 B	13 UJ	10.4	10.6 UJ		
Arsenic	3.0	mg/kg	16.1	28.8	11.7	26.5		
Barium	220,000.0	mg/kg	81.3	291	43	204		
Beryllium	2,300.0	mg/kg	0.24 B	0.18 B	0.067 B	0.1 B		
Cadmium	980.0	mg/kg	0.3 B	4.7 J	1.4	3.3 J		
Chromium	120,000.0	mg/kg	1950	4130	371	3470		
Cobalt	350.0	mg/kg	17.7	14.3	13.2	11.7		
Copper	47,000.0	mg/kg	328	620 J	161	509 J		
Lead	800.0	mg/kg	91.1 J+	222 J	30.2	172 J		
Nickel	22,000.0	mg/kg	178	195 J	138	167 J		
Selenium	5,800.0	mg/kg	1.7	3.4 J	2.2	2.7 J		
Silver	5,800.0	mg/kg	9.3	11.4	5.9	12		
Thallium	12.0	mg/kg	3.7 U	4.3 U	2.5 U	3.5 U		
Tin	700,000.0	mg/kg	7680 J+	3750 J	828	3430 J		
Vanadium	5,800.0	mg/kg	60	37.7	22.2	26.5		
Zinc	350,000.0	mg/kg	601	709 J	284	497 J		
Chromium, Hexavalent	6.3	mg/kg	2.5 R	2.3 UJ	1.5 R	2 UJ		
Mercury	350.0	mg/kg	0.16 J	0.39	0.046 J	0.43		
PCB								
PCB-1016 (Aroclor 1016)	27	mg/kg				3.62 U	4.71 U	
PCB-1221 (Aroclor 1221)	0.72	mg/kg				3.62 U	4.71 U	
PCB-1232 (Aroclor 1232)	0.72	mg/kg				3.62 U	4.71 U	
PCB-1242 (Aroclor 1242)	0.97	mg/kg				3.62 U	4.71 U	
PCB-1248 (Aroclor 1248)	0.94	mg/kg				3.62 U	4.71 U	
PCB-1254 (Aroclor 1254)	0.97	mg/kg				3.62 U	3.82 J	
Cyanide								
Cyanide	150	mg/kg				3.4 J-	3.2	

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**Table 1 - Analytical Sample Results
Samples Collected April/August 2015**

Sample Identification Sample Date Sample Type Sample Location and Depth	Transect 10							
	TM-SD-47	TM-SD-48	TM-SD-49	TM-SD-50	TM-SD-51	TM-SD-51		
	4/17/2015	8/13/2015	4/20/2015	8/13/2015	4/20/2015	8/13/2015		
	Discrete	Discrete	Discrete	Discrete	Composite	Composite		
Compound	PAL	Units	South 0-12"	South 5.5-6.5'	North 0-12"	North 1.5-2.5'	0-12"	1.5-6.5'
<i>SVOC</i>								
1,2,4-Trichlorobenzene	110	mg/kg					1560 RR	31.3 RR
1,2-Dichlorobenzene	9300	mg/kg					1560 RR	31.3 RR
1,3-Dichlorobenzene		mg/kg					1560 RR	31.3 RR
1,4-Dichlorobenzene	11	mg/kg					1560 RR	31.3 RR
2,4,5-Trichlorophenol	82000	mg/kg					1560 RR	31.3 RR
2,4,6-Trichlorophenol	210	mg/kg					1560 RR	31.3 RR
2,4-Dichlorophenol	2500	mg/kg					1560 RR	31.3 RR
2,4-Dimethylphenol	16000	mg/kg					1560 RR	31.3 RR
2,4-Dinitrophenol	1600	mg/kg					7820 RR	157 RR
2,4-Dinitrotoluene	7.4	mg/kg					1560 RR	31.3 RR
2,6-Dinitrotoluene	1.5	mg/kg					1560 RR	31.3 RR
2-Chloronaphthalene	60000	mg/kg					1560 RR	31.3 RR
2-Chlorophenol	5800	mg/kg					1560 RR	31.3 RR
2-Methylnaphthalene	3000	mg/kg					1560 RR	31.3 RR
2-Methylphenol(o-Cresol)	41000	mg/kg					1560 RR	31.3 RR
2-Nitrophenol		mg/kg					1560 RR	31.3 RR
3&4-Methylphenol(m&p Cresol)	41000	mg/kg					1560 RR	31.3 RR
3,3'-Dichlorobenzidine	5.1	mg/kg					7820 RR	157 RR
3,3'-Dimethylbenzidine	0.21	mg/kg					15600 RR	313 RR
4,6-Dinitro-2-methylphenol	66	mg/kg					3130 RR	62.6 RR
4-Bromophenylphenyl ether		mg/kg					1560 RR	31.3 RR
4-Chloro-3-methylphenol	82000	mg/kg					3130 RR	62.6 RR
4-Chlorophenylphenyl ether		mg/kg					1560 RR	31.3 RR
4-Nitrophenol		mg/kg					7820 RR	157 RR
Acenaphthene	45000	mg/kg					1560 RR	31.3 RR
Acenaphthylene	45000	mg/kg					1560 RR	31.3 RR
Anthracene	230000	mg/kg					1560 RR	31.3 RR
Benzo(a)anthracene	21	mg/kg					1560 RR	31.3 RR
Benzo(a)pyrene	2.1	mg/kg					1560 RR	31.3 RR
Benzo(b)fluoranthene	21	mg/kg					1560 RR	31.3 RR
Benzo(g,h,i)perylene		mg/kg					1560 RR	31.3 RR
Benzo(k)fluoranthene	210	mg/kg					1560 RR	31.3 RR
Butylbenzylphthalate	1200	mg/kg					1560 RR	31.3 RR
Di-n-butylphthalate	82000	mg/kg					1560 RR	31.3 RR
Di-n-octylphthalate	8200	mg/kg					1560 RR	31.3 RR
Dibenz(a,h)anthracene	2.1	mg/kg					1560 RR	31.3 RR
Diethylphthalate	660000	mg/kg					1560 RR	31.3 RR
Dimethylphthalate		mg/kg					1560 RR	31.3 RR
Fluoranthene	30000	mg/kg					1560 RR	31.3 RR
Fluorene	30000	mg/kg					1560 RR	31.3 RR
Hexachloro-1,3-butadiene	5.3	mg/kg					1560 RR	31.3 RR
Hexachlorobenzene	0.96	mg/kg					1560 RR	31.3 RR
Hexachlorocyclopentadiene	7.5	mg/kg					1560 RR	31.3 RR
Hexachloroethane	8	mg/kg					1560 RR	31.3 RR
Indeno(1,2,3-cd)pyrene	21	mg/kg					1560 RR	31.3 RR
Isophorone	2400	mg/kg					1560 RR	31.3 RR
Naphthalene	17	mg/kg					1560 RR	31.3 RR
Nitrobenzene	22	mg/kg					1560 RR	31.3 RR
Pentachloroethane	36	mg/kg					3130 RR	62.6 RR
Pentachlorophenol	4	mg/kg					7820 RR	157 RR
Phenanthrene		mg/kg					1560 RR	31.3 RR
Phenol	250000	mg/kg					1560 RR	31.3 RR
Pyrene	23000	mg/kg					1560 RR	31.3 RR
Pyridine	1200	mg/kg					1560 RR	31.3 RR
bis(2-Chloroethoxy)methane	2500	mg/kg					1560 RR	31.3 RR
bis(2-Chloroethyl) ether	1	mg/kg					1560 RR	31.3 RR
bis(2-Chloroisopropyl) ether	22	mg/kg					1560 RR	31.3 RR
bis(2-Ethylhexyl)phthalate	160	mg/kg					1560 RR	31.3 RR

Data Validation Qualifier Code

- J - The positive result reported for this analyte is a quantitative estimate.
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- Y - This analyte coelutes with another target compound on the two chromatographic columns used for analysis.
- R - The result for this analyte is unreliable. Additional data is needed to confirm or disprove the presence of this compound/analyte in the sample.
- RR - Results were rejected and scheduled for resampling.

Table 1 - Analytical Sample Results
Samples Collected April/August 2015

Sample Identification	Transect 11					
	TM-SD-53	TM-SD-54	TM-SD-55	TM-SD-56	TM-SD-57	TM-SD-57
	4/17/2015	8/13/2015	4/20/2015	8/13/2015	4/20/2015	8/13/2015
	Discrete	Discrete	Discrete	Discrete	Composite	Composite
Sample Location and Depth	South 0-12"	Inaccessible	North 0-12"	Inaccessible	0-12"	Inaccessible
Compound	PAL	Units				
VOC						
1,1,1,2-Tetrachloroethane	8.80	mg/kg	0.583 U	0.41 U		
1,1,1-Trichloroethane	36,000.00	mg/kg	0.583 U	0.41 U		
1,1,2,2-Tetrachloroethane	2.70	mg/kg	0.583 U	0.41 U		
1,1,2-Trichloroethane	5.00	mg/kg	0.583 U	0.41 U		
1,1-Dichloroethane	16.00	mg/kg	0.583 U	0.41 U		
1,1-Dichloroethene	1,000.00	mg/kg	0.583 U	0.41 U		
1,2-Dichloroethane	2.00	mg/kg	0.583 UJ	0.41 UJ		
1,2-Dichloropropane	4.40	mg/kg	0.583 U	0.41 U		
2-Butanone (MEK)	190,000.00	mg/kg	1.17 U	0.82 U		
2-Hexanone	1,300.00	mg/kg	1.17 U	0.82 U		
4-Methyl-2-pentanone (MIBK)	56,000.00	mg/kg	1.17 U	0.82 U		
Acetone	670,000.00	mg/kg	0.849 J	0.82 U		
Benzene	5.10	mg/kg	0.583 U	0.41 U		
Bromoform	86.00	mg/kg	0.583 U	0.41 U		
Carbon disulfide	3,500.00	mg/kg	0.583 U	0.41 U		
Carbon tetrachloride	2.90	mg/kg	0.583 U	0.41 U		
Chlorobenzene	1,300.00	mg/kg	2.41	0.41 U		
Chloroethane	57,000.00	mg/kg	0.583 U	0.41 U		
Chloroform	1.40	mg/kg	0.583 U	0.41 U		
Ethylbenzene	25.00	mg/kg	0.583 U	0.41 U		
Methylene Chloride	1,000.00	mg/kg	0.583 UJ	0.41 UJ		
Tetrachloroethene	100.00	mg/kg	0.583 U	0.41 U		
Toluene	47,000.00	mg/kg	0.583 U	0.41 U		
Trichloroethene	6.00	mg/kg	0.583 U	0.41 U		
Vinyl chloride	1.70	mg/kg	0.583 U	0.41 U		
Xylene (Total)	2,800.00	mg/kg	1.12 J	1.23 U		
cis-1,3-Dichloropropene	8.20	mg/kg	0.583 U	0.41 U		
trans-1,2-Dichloroethene	23,000.00	mg/kg	0.583 U	0.41 U		
trans-1,3-Dichloropropene	8.20	mg/kg	0.583 U	0.41 U		
Metals						
Antimony	470.0	mg/kg	2 UJ	19.7		
Arsenic	3.0	mg/kg	26.9	9.1		
Barium	220,000.0	mg/kg	195	47.5		
Beryllium	2,300.0	mg/kg	0.084 B	0.12 B		
Cadmium	980.0	mg/kg	1.7	0.84		
Chromium	120,000.0	mg/kg	2350	286		
Cobalt	350.0	mg/kg	12.7	8.5		
Copper	47,000.0	mg/kg	366	186		
Lead	800.0	mg/kg	145 J+	59		
Nickel	22,000.0	mg/kg	159	101		
Selenium	5,800.0	mg/kg	3.1	1.9		
Silver	5,800.0	mg/kg	12.7	3.6		
Thallium	12.0	mg/kg	3.3 U	1.7 U		
Tin	700,000.0	mg/kg	3510 J+	1090		
Vanadium	5,800.0	mg/kg	21.7	45.1		
Zinc	350,000.0	mg/kg	403	790		
Chromium, Hexavalent	6.3	mg/kg	1.9 R	1.4 R		
Mercury	350.0	mg/kg	0.43	0.02 J		
PCB						
PCB-1016 (Aroclor 1016)	27	mg/kg			3.21 U	
PCB-1221 (Aroclor 1221)	0.72	mg/kg			3.21 U	
PCB-1232 (Aroclor 1232)	0.72	mg/kg			3.21 U	
PCB-1242 (Aroclor 1242)	0.97	mg/kg			3.21 U	
PCB-1248 (Aroclor 1248)	0.94	mg/kg			3.21 U	
PCB-1254 (Aroclor 1254)	0.97	mg/kg			3.21 U	
Cyanide						
Cyanide	150	mg/kg			1.1 J-	

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**Table 1 - Analytical Sample Results
Samples Collected April/August 2015**

Sample Identification Sample Date Sample Type Sample Location and Depth	Transect 11					
	TM-SD-53	TM-SD-54	TM-SD-55	TM-SD-56	TM-SD-57	TM-SD-57
	4/17/2015	8/13/2015	4/20/2015	8/13/2015	4/20/2015	8/13/2015
	Discrete	Discrete	Discrete	Discrete	Composite	Composite
Compound	PAL	Units				
<i>SVOC</i>						
1,2,4-Trichlorobenzene	110	mg/kg			1300 RR	
1,2-Dichlorobenzene	9,300	mg/kg			1300 RR	
1,3-Dichlorobenzene		mg/kg			1300 RR	
1,4-Dichlorobenzene	11	mg/kg			1300 RR	
2,4,5-Trichlorophenol	82,000	mg/kg			1300 RR	
2,4,6-Trichlorophenol	210	mg/kg			1300 RR	
2,4-Dichlorophenol	2,500	mg/kg			1300 RR	
2,4-Dimethylphenol	16,000	mg/kg			1300 RR	
2,4-Dinitrophenol	1,600	mg/kg			6500 RR	
2,4-Dinitrotoluene	7	mg/kg			1300 RR	
2,6-Dinitrotoluene	2	mg/kg			1300 RR	
2-Chloronaphthalene	60,000	mg/kg			1300 RR	
2-Chlorophenol	5,800	mg/kg			1300 RR	
2-Methylnaphthalene	3,000	mg/kg			1300 RR	
2-Methylphenol(o-Cresol)	41,000	mg/kg			1300 RR	
2-Nitrophenol		mg/kg			1300 RR	
3&4-Methylphenol(m&p Cresol)	41,000	mg/kg			1300 RR	
3,3'-Dichlorobenzidine	5	mg/kg			6500 RR	
3,3'-Dimethylbenzidine	0	mg/kg			13000 RR	
4,6-Dinitro-2-methylphenol	66	mg/kg			2600 RR	
4-Bromophenylphenyl ether		mg/kg			1300 RR	
4-Chloro-3-methylphenol	82,000	mg/kg			2600 RR	
4-Chlorophenylphenyl ether		mg/kg			1300 RR	
4-Nitrophenol		mg/kg			6500 RR	
Acenaphthene	45,000	mg/kg			1300 RR	
Acenaphthylene	45,000	mg/kg			1300 RR	
Anthracene	230,000	mg/kg			1300 RR	
Benzo(a)anthracene	21	mg/kg			1300 RR	
Benzo(a)pyrene	2	mg/kg			1300 RR	
Benzo(b)fluoranthene	21	mg/kg			1300 RR	
Benzo(g,h,i)perylene		mg/kg			1300 RR	
Benzo(k)fluoranthene	210	mg/kg			1300 RR	
Butylbenzylphthalate	1,200	mg/kg			1300 RR	
Di-n-butylphthalate	82,000	mg/kg			1300 RR	
Di-n-octylphthalate	8,200	mg/kg			1300 RR	
Dibenz(a,h)anthracene	2	mg/kg			1300 RR	
Diethylphthalate	660,000	mg/kg			1300 RR	
Dimethylphthalate		mg/kg			1300 RR	
Fluoranthene	30,000	mg/kg			1300 RR	
Fluorene	30,000	mg/kg			1300 RR	
Hexachloro-1,3-butadiene	5	mg/kg			1300 RR	
Hexachlorobenzene	1	mg/kg			1300 RR	
Hexachlorocyclopentadiene	8	mg/kg			1300 RR	
Hexachloroethane	8	mg/kg			1300 RR	
Indeno(1,2,3-cd)pyrene	21	mg/kg			1300 RR	
Isophorone	2,400	mg/kg			1300 RR	
Naphthalene	17	mg/kg			1300 RR	
Nitrobenzene	22	mg/kg			1300 RR	
Pentachloroethane	36	mg/kg			2600 RR	
Pentachlorophenol	4	mg/kg			6500 RR	
Phenanthrene		mg/kg			1300 RR	
Phenol	250,000	mg/kg			1300 RR	
Pyrene	23,000	mg/kg			1300 RR	
Pyridine	1,200	mg/kg			1300 RR	
bis(2-Chloroethoxy)methane	2,500	mg/kg			1300 RR	
bis(2-Chloroethyl) ether	1	mg/kg			1300 RR	
bis(2-Chloroisopropyl) ether	22	mg/kg			1300 RR	
bis(2-Ethylhexyl)phthalate	160	mg/kg			1300 RR	

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- RR - Results were rejected and scheduled for resampling.

Table 1 - Analytical Sample Results
Samples Collected April/August 2015

Sample Identification Sample Date Sample Type Sample Location and Depth			Transect 12					
			TM-SD-58	TM-SD-59	TM-SD-60	TM-SD-61	TM-SD-62	TM-SD-62
			4/17/2015	8/13/2015	4/20/2015	8/13/2015	4/20/2015	8/13/2015
			Discrete	Discrete	Discrete	Discrete	Composite	Composite
Sample Location and Depth			South 0-12"	Inaccessible	North 0-12"	North 3.5-4.5'	0-12"	3.5-4.5'
Compound	PAL	Units						
VOC								
1,1,1,2-Tetrachloroethane	8.8	mg/kg	0.406 U		0.436 U	0.878 U		
1,1,1-Trichloroethane	36000	mg/kg	0.406 U		0.436 U	0.878 U		
1,1,2,2-Tetrachloroethane	2.7	mg/kg	0.406 U		0.436 U	0.878 U		
1,1,2-Trichloroethane	5	mg/kg	0.406 U		0.436 U	0.878 U		
1,1-Dichloroethane	16	mg/kg	0.406 U		0.436 U	0.878 U		
1,1-Dichloroethene	1000	mg/kg	0.406 U		0.436 U	0.878 U		
1,2-Dichloroethane	2	mg/kg	0.406 U		0.436 UJ	0.878 U		
1,2-Dichloropropane	4.4	mg/kg	0.406 U		0.436 U	0.878 U		
2-Butanone (MEK)	190000	mg/kg	0.812 U		0.871 U	1.76 U		
2-Hexanone	1300	mg/kg	0.812 UJ		0.871 U	1.76 U		
4-Methyl-2-pentanone (MIBK)	56000	mg/kg	0.812 U		0.871 U	1.76 U		
Acetone	670000	mg/kg	0.812 UJ		0.589 J	1.76 U		
Benzene	5.1	mg/kg	0.406 U		0.436 U	0.84 J		
Bromoform	86	mg/kg	0.406 U		0.436 U	0.878 U		
Carbon disulfide	3500	mg/kg	0.406 U		0.436 U	0.878 U		
Carbon tetrachloride	2.9	mg/kg	0.406 U		0.436 U	0.878 U		
Chlorobenzene	1300	mg/kg	0.406 U		0.834	5.69		
Chloroethane	57000	mg/kg	0.406 U		0.436 U	0.878 U		
Chloroform	1.4	mg/kg	0.406 U		0.436 U	0.878 U		
Ethylbenzene	25	mg/kg	0.406 U		0.436 U	0.878 U		
Methylene Chloride	1000	mg/kg	0.406 UJ		0.436 UJ	0.878 U		
Tetrachloroethene	100	mg/kg	0.406 U		0.436 U	0.878 U		
Toluene	47000	mg/kg	0.406 U		0.436 U	0.309 J		
Trichloroethene	6	mg/kg	0.406 U		0.436 U	0.878 U		
Vinyl chloride	1.7	mg/kg	0.406 U		0.436 U	0.878 U		
Xylene (Total)	2800	mg/kg	1.22 U		1.2 J	3.34		
cis-1,3-Dichloropropene	8.2	mg/kg	0.406 U		0.436 U	0.878 U		
trans-1,2-Dichloroethene	23000	mg/kg	0.406 U		0.436 U	0.878 U		
trans-1,3-Dichloropropene	8.2	mg/kg	0.406 U		0.436 U	0.878 U		
Metals								
Antimony	470.0	mg/kg	1.2 UJ		5.4	12.4 UJ		
Arsenic	3.0	mg/kg	18		12.4	30.7		
Barium	220,000.0	mg/kg	114		59.9	172		
Beryllium	2,300.0	mg/kg	0.3		0.14 B	0.12 B		
Cadmium	980.0	mg/kg	5.3		0.43	8.7 J		
Chromium	120,000.0	mg/kg	1690		590	3620		
Cobalt	350.0	mg/kg	9		10.6	13.6		
Copper	47,000.0	mg/kg	331		248	562 J		
Lead	800.0	mg/kg	224 J+		55.2	240 J		
Nickel	22,000.0	mg/kg	96.2		111	192 J		
Selenium	5,800.0	mg/kg	2.3		1.5	3.2 J		
Silver	5,800.0	mg/kg	7.4		6	12		
Thallium	12.0	mg/kg	2 U		2.2 U	4.1 U		
Tin	700,000.0	mg/kg	1340 J+		1520	2640 J		
Vanadium	5,800.0	mg/kg	73.6		37.5	23.7		
Zinc	350,000.0	mg/kg	1280		332	1110 J		
Chromium, Hexavalent	6.3	mg/kg	1.7 R		1.7 R	2.3 UJ		
Mercury	350.0	mg/kg	0.24		0.34	0.41		
PCB								
PCB-1016 (Aroclor 1016)	27	mg/kg				3.75 U	5.06 U	
PCB-1221 (Aroclor 1221)	0.72	mg/kg				3.75 U	5.06 U	
PCB-1232 (Aroclor 1232)	0.72	mg/kg				3.75 U	5.06 U	
PCB-1242 (Aroclor 1242)	0.97	mg/kg				3.75 U	5.06 U	
PCB-1248 (Aroclor 1248)	0.94	mg/kg				3.75 U	5.06 U	
PCB-1254 (Aroclor 1254)	0.97	mg/kg				3.75 U	3.7 J	
Cyanide								
Cyanide	150	mg/kg				6.9 J-	18.7 J	

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**Table 1 - Analytical Sample Results
Samples Collected April/August 2015**

Sample Identification Sample Date Sample Type Sample Location and Depth	Transect 12							
	TM-SD-58	TM-SD-59	TM-SD-60	TM-SD-61	TM-SD-62	TM-SD-62		
	4/17/2015	8/13/2015	4/20/2015	8/13/2015	4/20/2015	8/13/2015		
	Discrete	Discrete	Discrete	Discrete	Composite	Composite		
Compound	PAL	Units	South 0-12"	Inaccessible	North 0-12"	North 3.5-4.5'	0-12"	3.5-4.5'
<i>SVOC</i>								
1,2,4-Trichlorobenzene	110	mg/kg					1620 RR	35.2 RR
1,2-Dichlorobenzene	9300	mg/kg					1620 RR	35.2 RR
1,3-Dichlorobenzene		mg/kg					1620 RR	35.2 RR
1,4-Dichlorobenzene	11	mg/kg					1620 RR	35.2 RR
2,4,5-Trichlorophenol	82000	mg/kg					1620 RR	35.2 RR
2,4,6-Trichlorophenol	210	mg/kg					1620 RR	35.2 RR
2,4-Dichlorophenol	2500	mg/kg					1620 RR	35.2 RR
2,4-Dimethylphenol	16000	mg/kg					1620 RR	35.2 RR
2,4-Dinitrophenol	1600	mg/kg					8080 RR	176 RR
2,4-Dinitrotoluene	7.4	mg/kg					1620 RR	35.2 RR
2,6-Dinitrotoluene	1.5	mg/kg					1620 RR	35.2 RR
2-Chloronaphthalene	60000	mg/kg					1620 RR	35.2 RR
2-Chlorophenol	5800	mg/kg					1620 RR	35.2 RR
2-Methylnaphthalene	3000	mg/kg					1620 RR	35.2 RR
2-Methylphenol(o-Cresol)	41000	mg/kg					1620 RR	35.2 RR
2-Nitrophenol		mg/kg					1620 RR	35.2 RR
3&4-Methylphenol(m&p Cresol)	41000	mg/kg					1620 RR	35.2 RR
3,3'-Dichlorobenzidine	5.1	mg/kg					8080 RR	176 RR
3,3'-Dimethylbenzidine	0.21	mg/kg					16200 RR	352 RR
4,6-Dinitro-2-methylphenol	66	mg/kg					3230 RR	70.3 RR
4-Bromophenylphenyl ether		mg/kg					1620 RR	35.2 RR
4-Chloro-3-methylphenol	82000	mg/kg					3230 RR	70.3 RR
4-Chlorophenylphenyl ether		mg/kg					1620 RR	35.2 RR
4-Nitrophenol		mg/kg					8080 RR	176 RR
Acenaphthene	45000	mg/kg					1620 RR	35.2 RR
Acenaphthylene	45000	mg/kg					1620 RR	35.2 RR
Anthracene	230000	mg/kg					1620 RR	35.2 RR
Benzo(a)anthracene	21	mg/kg					1620 RR	35.2 RR
Benzo(a)pyrene	2.1	mg/kg					1620 RR	35.2 RR
Benzo(b)fluoranthene	21	mg/kg					1620 RR	35.2 RR
Benzo(g,h,i)perylene		mg/kg					1620 RR	35.2 RR
Benzo(k)fluoranthene	210	mg/kg					1620 RR	35.2 RR
Butylbenzylphthalate	1200	mg/kg					1620 RR	35.2 RR
Di-n-butylphthalate	82000	mg/kg					1620 RR	35.2 RR
Di-n-octylphthalate	8200	mg/kg					1620 RR	35.2 RR
Dibenz(a,h)anthracene	2.1	mg/kg					1620 RR	35.2 RR
Diethylphthalate	660000	mg/kg					1620 RR	35.2 RR
Dimethylphthalate		mg/kg					1620 RR	35.2 RR
Fluoranthene	30000	mg/kg					1620 RR	35.2 RR
Fluorene	30000	mg/kg					1620 RR	35.2 RR
Hexachloro-1,3-butadiene	5.3	mg/kg					1620 RR	35.2 RR
Hexachlorobenzene	0.96	mg/kg					1620 RR	35.2 RR
Hexachlorocyclopentadiene	7.5	mg/kg					1620 RR	35.2 RR
Hexachloroethane	8	mg/kg					1620 RR	35.2 RR
Indeno(1,2,3-cd)pyrene	21	mg/kg					1620 RR	35.2 RR
Isophorone	2400	mg/kg					1620 RR	35.2 RR
Naphthalene	17	mg/kg					1620 RR	35.2 RR
Nitrobenzene	22	mg/kg					1620 RR	35.2 RR
Pentachloroethane	36	mg/kg					3230 RR	70.3 RR
Pentachlorophenol	4	mg/kg					8080 RR	176 RR
Phenanthrene		mg/kg					1620 RR	35.2 RR
Phenol	250000	mg/kg					1620 RR	35.2 RR
Pyrene	23000	mg/kg					1620 RR	35.2 RR
Pyridine	1200	mg/kg					1620 RR	35.2 RR
bis(2-Chloroethoxy)methane	2500	mg/kg					1620 RR	35.2 RR
bis(2-Chloroethyl) ether	1	mg/kg					1620 RR	35.2 RR
bis(2-Chloroisopropyl) ether	22	mg/kg					1620 RR	35.2 RR
bis(2-Ethylhexyl)phthalate	160	mg/kg					1620 RR	35.2 RR

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- UJ - This analyte was not detected in the sample. The actual quantitation/detection limit may be higher than reported.
- NJ - This analyte has been "tentatively" identified. The numeric value represents its approximate concentration.
- Y - This analyte coelutes with another target compound on the two chromatographic columns used for analysis.
- R - The result for this analyte is unreliable. Additional data is needed to confirm or disprove the presence of this compound/analyte in the sample.
- RR - Results were rejected and scheduled for resampling.

**Table 1 - Analytical Sample Results
Samples Collected April/August 2015**

Sample Identification Sample Date Sample Type Sample Location and Depth			Transect 13					
			TM-SD-63	TM-SD-64	TM-SD-65	TM-SD-66	TM-SD-67	TM-SD-67
			4/17/2015	8/13/2015	4/20/2015	8/13/2015	4/20/2015	8/13/2015
			Discrete	Discrete	Discrete	Discrete	Composite	Composite
Sample Location and Depth			South 0-12"	South 5-6'	North 0-12"	North 6-7'	0-12"	5-7'
Compound	PAL	Units						
VOC								
1,1,1,2-Tetrachloroethane	8.8	mg/kg	0.569 U	1.44 UJ	0.671 U	1.03 U		
1,1,1-Trichloroethane	36000	mg/kg	0.569 U	1.44 UJ	0.671 U	1.03 U		
1,1,2,2-Tetrachloroethane	2.7	mg/kg	0.569 U	1.44 UJ	0.671 U	1.03 U		
1,1,2-Trichloroethane	5	mg/kg	0.569 U	1.44 UJ	0.671 U	1.03 U		
1,1-Dichloroethane	16	mg/kg	0.569 U	1.44 UJ	0.671 U	1.03 U		
1,1-Dichloroethene	1000	mg/kg	0.569 U	1.44 UJ	0.671 U	1.03 U		
1,2-Dichloroethane	2	mg/kg	0.569 U	1.44 UJ	0.671 UJ	1.03 U		
1,2-Dichloropropane	4.4	mg/kg	0.569 U	1.44 UJ	0.671 U	1.03 U		
2-Butanone (MEK)	190000	mg/kg	1.14 U	2.87 UJ	1.34 U	2.06 U		
2-Hexanone	1300	mg/kg	1.14 UJ	2.87 UJ	1.34 U	2.06 U		
4-Methyl-2-pentanone (MIBK)	56000	mg/kg	1.14 U	2.87 UJ	1.34 U	2.06 U		
Acetone	670000	mg/kg	1.14 UJ	2.87 UJ	1.34 U	2.06 U		
Benzene	5.1	mg/kg	0.569 U	1.44 UJ	0.671 U	0.346 J		
Bromoform	86	mg/kg	0.569 U	1.44 UJ	0.671 U	1.03 U		
Carbon disulfide	3500	mg/kg	0.569 U	1.44 UJ	0.671 U	1.03 U		
Carbon tetrachloride	2.9	mg/kg	0.569 U	1.44 UJ	0.671 U	1.03 U		
Chlorobenzene	1300	mg/kg	3.3	2.21 J	0.671 U	2.3		
Chloroethane	57000	mg/kg	0.569 U	1.44 UJ	0.671 U	1.03 U		
Chloroform	1.4	mg/kg	0.569 U	1.44 UJ	0.671 U	1.03 U		
Ethylbenzene	25	mg/kg	0.569 U	1.44 UJ	0.671 U	1.03 U		
Methylene Chloride	1000	mg/kg	0.569 UJ	1.44 UJ	0.671 UJ	1.03 U		
Tetrachloroethene	100	mg/kg	0.569 U	1.44 UJ	0.671 U	1.03 U		
Toluene	47000	mg/kg	0.569 U	0.831 J	0.671 U	1.03 U		
Trichloroethene	6	mg/kg	0.569 U	1.44 UJ	0.671 U	1.03 U		
Vinyl chloride	1.7	mg/kg	0.569 U	1.44 UJ	0.671 U	1.03 U		
Xylene (Total)	2800	mg/kg	2.08	4.91 J	2.01 U	0.908 J		
cis-1,3-Dichloropropene	8.2	mg/kg	0.569 U	1.44 UJ	0.671 U	1.03 U		
trans-1,2-Dichloroethene	23000	mg/kg	0.569 U	1.44 UJ	0.671 U	1.03 U		
trans-1,3-Dichloropropene	8.2	mg/kg	0.569 U	1.44 UJ	0.671 U	1.03 U		
Metals								
Antimony	470.0	mg/kg	0.52 UJ	24 UJ	1.4 U	11.9 UJ		
Arsenic	3.0	mg/kg	24.6	132 J	9.6	20.7		
Barium	220,000.0	mg/kg	166	783 J	36.6	98.5		
Beryllium	2,300.0	mg/kg	0.075 B	0.15 B	0.097 B	0.068 B		
Cadmium	980.0	mg/kg	0.16 B	3.4 J	0.58 J	3.3 J		
Chromium	120,000.0	mg/kg	3190	15000 J	1240	3720		
Cobalt	350.0	mg/kg	12.1	9 J	14.8	14.5		
Copper	47,000.0	mg/kg	263	604 J	220	351 J		
Lead	800.0	mg/kg	59.1 J+	364 J	53.9	108 J		
Nickel	22,000.0	mg/kg	141	132 J	150	170 J		
Selenium	5,800.0	mg/kg	1.9	5 J	1.8 U	3.4 J		
Silver	5,800.0	mg/kg	8.9	20.9 J	7.6	8.8		
Thallium	12.0	mg/kg	1.7 U	8 UJ	4.6 U	4 U		
Tin	700,000.0	mg/kg	2880 J+	39400 J	1120	3620 J		
Vanadium	5,800.0	mg/kg	31.8	64.8 J	35.8	28.2		
Zinc	350,000.0	mg/kg	284	709 J	635	915 J		
Chromium, Hexavalent	6.3	mg/kg	1.6 R	4.9 UJ	3.1 R	2.2 UJ		
Mercury	350.0	mg/kg	0.3 J-	0.97 J	0.29 J	0.37		
PCB								
PCB-1016 (Aroclor 1016)	27	mg/kg				5.13 U	5 U	
PCB-1221 (Aroclor 1221)	0.72	mg/kg				5.13 U	5 U	
PCB-1232 (Aroclor 1232)	0.72	mg/kg				5.13 U	5 U	
PCB-1242 (Aroclor 1242)	0.97	mg/kg				5.13 U	5 U	
PCB-1248 (Aroclor 1248)	0.94	mg/kg				5.13 U	5 U	
PCB-1254 (Aroclor 1254)	0.97	mg/kg				5.13 U	2.96 J	
Cyanide								
Cyanide	150	mg/kg				4.9 J-	9.1	

Data Validation Qualifier Code

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- B - The compound/analyte was not detected substantially above the level of the associated method blank/preparation or field blank
- U - This analyte was not detected in the sample. The numeric value represents the sample quantitation/detection limit.
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- NJ - This analyte has been "tentatively" identified. The numeric value represents its approximate concentration.
- Y - This analyte coelutes with another target compound on the two chromatographic columns used for analysis.
- R - The result for this analyte is unreliable. Additional data is needed to confirm or disprove the presence of this compound/analyte in the sample.

**Table 1 - Analytical Sample Results
Samples Collected April/August 2015**

Sample Identification Sample Date Sample Type Sample Location and Depth	Transect 13					
	TM-SD-63	TM-SD-64	TM-SD-65	TM-SD-66	TM-SD-67	TM-SD-67
	4/17/2015	8/13/2015	4/20/2015	8/13/2015	4/20/2015	8/13/2015
	Discrete	Discrete	Discrete	Discrete	Composite	Composite
	South 0-12"	South 5-6'	North 0-12"	North 6-7'	0-12"	5-7'
Compound	PAL	Units				
SVOC						
1,2,4-Trichlorobenzene	110	mg/kg			2250 U	34.7 RR
1,2-Dichlorobenzene	9300	mg/kg			2250 U	34.7 RR
1,3-Dichlorobenzene		mg/kg			2250 U	34.7 RR
1,4-Dichlorobenzene	11	mg/kg			2250 U	34.7 RR
2,4,5-Trichlorophenol	82000	mg/kg			2250 U	34.7 RR
2,4,6-Trichlorophenol	210	mg/kg			2250 U	34.7 RR
2,4-Dichlorophenol	2500	mg/kg			2250 U	34.7 RR
2,4-Dimethylphenol	16000	mg/kg			2250 U	34.7 RR
2,4-Dinitrophenol	1600	mg/kg			11200 RR	173 RR
2,4-Dinitrotoluene	7.4	mg/kg			2250 U	34.7 RR
2,6-Dinitrotoluene	1.5	mg/kg			2250 U	34.7 RR
2-Chloronaphthalene	60000	mg/kg			2250 U	34.7 RR
2-Chlorophenol	5800	mg/kg			2250 U	34.7 RR
2-Methylnaphthalene	3000	mg/kg			2250 U	34.7 RR
2-Methylphenol(o-Cresol)	41000	mg/kg			2250 U	34.7 RR
2-Nitrophenol		mg/kg			2250 U	34.7 RR
3&4-Methylphenol(m&p Cresol)	41000	mg/kg			2250 U	34.7 RR
3,3'-Dichlorobenzidine	5.1	mg/kg			11200 U	173 RR
3,3'-Dimethylbenzidine	0.21	mg/kg			22500 U	34.7 RR
4,6-Dinitro-2-methylphenol	66	mg/kg			4500 U	69.3 RR
4-Bromophenylphenyl ether		mg/kg			2250 U	34.7 RR
4-Chloro-3-methylphenol	82000	mg/kg			4500 U	69.3 RR
4-Chlorophenylphenyl ether		mg/kg			2250 U	34.7 RR
4-Nitrophenol		mg/kg			11200 U	173 RR
Acenaphthene	45000	mg/kg			2250 U	34.7 RR
Acenaphthylene	45000	mg/kg			2250 U	34.7 RR
Anthracene	230000	mg/kg			2250 U	34.7 RR
Benzo(a)anthracene	21	mg/kg			2250 U	34.7 RR
Benzo(a)pyrene	2.1	mg/kg			2250 U	34.7 RR
Benzo(b)fluoranthene	21	mg/kg			2250 U	34.7 RR
Benzo(g,h,i)perylene		mg/kg			2250 U	34.7 RR
Benzo(k)fluoranthene	210	mg/kg			2250 U	34.7 RR
Butylbenzylphthalate	1200	mg/kg			2250 U	34.7 RR
Di-n-butylphthalate	82000	mg/kg			2250 U	34.7 RR
Di-n-octylphthalate	8200	mg/kg			2250 U	34.7 RR
Dibenz(a,h)anthracene	2.1	mg/kg			2250 U	34.7 RR
Diethylphthalate	660000	mg/kg			2250 U	34.7 RR
Dimethylphthalate		mg/kg			2250 U	34.7 RR
Fluoranthene	30000	mg/kg			2250 U	34.7 RR
Fluorene	30000	mg/kg			2250 U	34.7 RR
Hexachloro-1,3-butadiene	5.3	mg/kg			2250 U	34.7 RR
Hexachlorobenzene	0.96	mg/kg			2250 U	34.7 RR
Hexachlorocyclopentadiene	7.5	mg/kg			2250 U	34.7 RR
Hexachloroethane	8	mg/kg			2250 U	34.7 RR
Indeno(1,2,3-cd)pyrene	21	mg/kg			2250 U	34.7 RR
Isophorone	2400	mg/kg			2250 U	34.7 RR
Naphthalene	17	mg/kg			2250 U	34.7 RR
Nitrobenzene	22	mg/kg			2250 U	34.7 RR
Pentachloroethane	36	mg/kg			4500 U	69.3 RR
Pentachlorophenol	4	mg/kg			11200 U	173 RR
Phenanthrene		mg/kg			2250 U	34.7 RR
Phenol	250000	mg/kg			2250 RR	34.7 RR
Pyrene	23000	mg/kg			2250 RR	34.7 RR
Pyridine	1200	mg/kg			2250 U	34.7 RR
bis(2-Chloroethoxy)methane	2500	mg/kg			2250 U	34.7 RR
bis(2-Chloroethyl) ether	1	mg/kg			2250 U	34.7 RR
bis(2-Chloroisopropyl) ether	22	mg/kg			2250 U	34.7 RR
bis(2-Ethylhexyl)phthalate	160	mg/kg			2250 RR	34.7 RR

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- RR** - Results were rejected and scheduled for resampling.

Table 1 - Analytical Sample Results
Samples Collected April/August 2015

Sample Identification Sample Date Sample Type Sample Location and Depth			Transect 14					
			TM-SD-68	TM-SD-69	TM-SD-70	TM-SD-71	TM-SD-72	TM-SD-72
			4/17/2015	8/13/2015	4/17/2015	8/13/2015	4/17/2015	8/13/2015
			Discrete	Discrete	Discrete	Discrete	Composite	Composite
Sample Location and Depth			South 0-12"	South 5-6'	North 0-12"	Inaccessible	0-12"	5-6'
Compound	PAL	Units						
VOC								
1,1,1,2-Tetrachloroethane	8.8	mg/kg	0.861 U	0.614 U	0.57 U			
1,1,1-Trichloroethane	36000	mg/kg	0.861 U	0.614 U	0.57 U			
1,1,2,2-Tetrachloroethane	2.7	mg/kg	0.861 U	0.614 U	0.57 U			
1,1,2-Trichloroethane	5	mg/kg	0.861 U	0.614 U	0.57 U			
1,1-Dichloroethane	16	mg/kg	0.861 U	0.614 U	0.57 U			
1,1-Dichloroethene	1000	mg/kg	0.861 U	0.614 U	0.57 U			
1,2-Dichloroethane	2	mg/kg	0.861 UJ	0.614 U	0.57 U			
1,2-Dichloropropane	4.4	mg/kg	0.861 U	0.614 U	0.57 U			
2-Butanone (MEK)	190000	mg/kg	1.72 U	1.23 U	1.14 U			
2-Hexanone	1300	mg/kg	1.72 U	1.23 U	1.14 UJ			
4-Methyl-2-pentanone (MIBK)	56000	mg/kg	1.72 U	1.23 U	1.14 U			
Acetone	670000	mg/kg	1.72 U	1.23 U	1.14 UJ			
Benzene	5.1	mg/kg	0.861 U	0.318 J	4.59			
Bromoform	86	mg/kg	0.861 U	0.614 U	0.57 U			
Carbon disulfide	3500	mg/kg	0.861 U	0.614 U	0.57 U			
Carbon tetrachloride	2.9	mg/kg	0.861 U	0.614 U	0.57 U			
Chlorobenzene	1300	mg/kg	0.861 U	0.236 J	0.57 U			
Chloroethane	57000	mg/kg	0.861 U	0.614 U	0.57 U			
Chloroform	1.4	mg/kg	0.861 U	0.614 U	0.57 U			
Ethylbenzene	25	mg/kg	0.861 U	0.217 J	1.43			
Methylene Chloride	1000	mg/kg	0.861 UJ	0.614 U	0.57 UJ			
Tetrachloroethene	100	mg/kg	0.861 U	0.614 U	0.57 U			
Toluene	47000	mg/kg	0.861 U	0.614 U	0.57 U			
Trichloroethene	6	mg/kg	0.861 U	0.614 U	0.57 U			
Vinyl chloride	1.7	mg/kg	0.861 U	0.614 U	0.57 U			
Xylene (Total)	2800	mg/kg	2.58 U	0.826 J	1.34 J			
cis-1,3-Dichloropropene	8.2	mg/kg	0.861 U	0.614 U	0.57 U			
trans-1,2-Dichloroethene	23000	mg/kg	0.861 U	0.614 U	0.57 U			
trans-1,3-Dichloropropene	8.2	mg/kg	0.861 U	0.614 U	0.57 U			
Metals								
Antimony	470.0	mg/kg	1.4 UJ	1 UJ	0.79 UJ			
Arsenic	3.0	mg/kg	18.1	26.6	6			
Barium	220,000.0	mg/kg	80.5	145	34.8			
Beryllium	2,300.0	mg/kg	0.47 U	0.35 U	0.08 B			
Cadmium	980.0	mg/kg	0.93	1.1 J	0.64			
Chromium	120,000.0	mg/kg	1940	2460	617			
Cobalt	350.0	mg/kg	9.4	6.9	11.2			
Copper	47,000.0	mg/kg	235	193 J	198			
Lead	800.0	mg/kg	99.1 J+	90.7 J	66.3 J+			
Nickel	22,000.0	mg/kg	108	73.4 J	113			
Selenium	5,800.0	mg/kg	1.9 U	2.5 J	1.3			
Silver	5,800.0	mg/kg	7	5.9	6			
Thallium	12.0	mg/kg	4.7 U	3.5 U	2.6 U			
Tin	700,000.0	mg/kg	2830 J+	6280 J	1070 J+			
Vanadium	5,800.0	mg/kg	53.6	29.7	34.2			
Zinc	350,000.0	mg/kg	1270	342 J	1030			
Chromium, Hexavalent	6.3	mg/kg	2.9 R	1.7 UJ	2 R			
Mercury	350.0	mg/kg	0.51 J-	0.041 J	0.25 J-			
PCB								
PCB-1016 (Aroclor 1016)	27	mg/kg				5.59 U	7.45 U	
PCB-1221 (Aroclor 1221)	0.72	mg/kg				5.59 U	7.45 U	
PCB-1232 (Aroclor 1232)	0.72	mg/kg				5.59 U	7.45 U	
PCB-1242 (Aroclor 1242)	0.97	mg/kg				5.59 U	7.45 U	
PCB-1248 (Aroclor 1248)	0.94	mg/kg				5.59 U	7.45 U	
PCB-1254 (Aroclor 1254)	0.97	mg/kg				5.59 U	7.45 U	
Cyanide								
Cyanide	150	mg/kg				1.8 J-	4.1	

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- Y** - This analyte coelutes with another target compound on the two chromatographic columns used for analysis.
- R** - The result for this analyte is unreliable. Additional data is needed to confirm or disprove the presence of this compound/analyte in the sample.

**Table 1 - Analytical Sample Results
Samples Collected April/August 2015**

Sample Identification Sample Date Sample Type Sample Location and Depth	Transect 14					
	TM-SD-68	TM-SD-69	TM-SD-70	TM-SD-71	TM-SD-72	TM-SD-72
	4/17/2015	8/13/2015	4/17/2015	8/13/2015	4/17/2015	8/13/2015
	Discrete	Discrete	Discrete	Discrete	Composite	Composite
Sample Location and Depth	South 0-12"	South 5-6'	North 0-12"	Inaccessible	0-12"	5-6'
Compound	PAL	Units				
<i>SVOIC</i>						
1,2,4-Trichlorobenzene	110	mg/kg			2570 RR	26 RR
1,2-Dichlorobenzene	9300	mg/kg			2570 RR	26 RR
1,3-Dichlorobenzene		mg/kg			2570 RR	26 RR
1,4-Dichlorobenzene	11	mg/kg			2570 RR	26 RR
2,4,5-Trichlorophenol	82000	mg/kg			2570 RR	26 RR
2,4,6-Trichlorophenol	210	mg/kg			2570 RR	26 RR
2,4-Dichlorophenol	2500	mg/kg			2570 RR	26 RR
2,4-Dimethylphenol	16000	mg/kg			2570 RR	26 RR
2,4-Dinitrophenol	1600	mg/kg			12900 RR	130 RR
2,4-Dinitrotoluene	7.4	mg/kg			2570 RR	26 RR
2,6-Dinitrotoluene	1.5	mg/kg			2570 RR	26 RR
2-Chloronaphthalene	60000	mg/kg			2570 RR	26 RR
2-Chlorophenol	5800	mg/kg			2570 RR	26 RR
2-Methylnaphthalene	3000	mg/kg			2570 RR	26 RR
2-Methylphenol(o-Cresol)	41000	mg/kg			2570 RR	26 RR
2-Nitrophenol		mg/kg			2570 RR	26 RR
3&4-Methylphenol(m&p Cresol)	41000	mg/kg			2570 RR	26 RR
3,3'-Dichlorobenzidine	5.1	mg/kg			12900 RR	130 RR
3,3'-Dimethylbenzidine	0.21	mg/kg			25700 RR	260 RR
4,6-Dinitro-2-methylphenol	66	mg/kg			5150 RR	52.1 RR
4-Bromophenylphenyl ether		mg/kg			2570 RR	26 RR
4-Chloro-3-methylphenol	82000	mg/kg			5150 RR	52.1 RR
4-Chlorophenylphenyl ether		mg/kg			2570 RR	26 RR
4-Nitrophenol		mg/kg			12900 RR	130 RR
Acenaphthene	45000	mg/kg			2570 RR	26 RR
Acenaphthylene	45000	mg/kg			2570 RR	26 RR
Anthracene	230000	mg/kg			2570 RR	26 RR
Benzo(a)anthracene	21	mg/kg			2570 RR	26 RR
Benzo(a)pyrene	2.1	mg/kg			2570 RR	26 RR
Benzo(b)fluoranthene	21	mg/kg			2570 RR	26 RR
Benzo(g,h,i)perylene		mg/kg			2570 RR	26 RR
Benzo(k)fluoranthene	210	mg/kg			2570 RR	26 RR
Butylbenzylphthalate	1200	mg/kg			2570 RR	26 RR
Di-n-butylphthalate	82000	mg/kg			2570 RR	26 RR
Di-n-octylphthalate	8200	mg/kg			2570 RR	26 RR
Dibenz(a,h)anthracene	2.1	mg/kg			2570 RR	26 RR
Diethylphthalate	660000	mg/kg			2570 RR	26 RR
Dimethylphthalate		mg/kg			2570 RR	26 RR
Fluoranthene	30000	mg/kg			2570 RR	26 RR
Fluorene	30000	mg/kg			2570 RR	26 RR
Hexachloro-1,3-butadiene	5.3	mg/kg			2570 RR	26 RR
Hexachlorobenzene	0.96	mg/kg			2570 RR	26 RR
Hexachlorocyclopentadiene	7.5	mg/kg			2570 RR	26 RR
Hexachloroethane	8	mg/kg			2570 RR	26 RR
Indeno(1,2,3-cd)pyrene	21	mg/kg			2570 RR	26 RR
Isophorone	2400	mg/kg			2570 RR	26 RR
Naphthalene	17	mg/kg			2570 RR	26 RR
Nitrobenzene	22	mg/kg			2570 RR	26 RR
Pentachloroethane	36	mg/kg			5150 RR	52.1 RR
Pentachlorophenol	4	mg/kg			12900 RR	130 RR
Phenanthrene		mg/kg			2570 RR	26 RR
Phenol	250000	mg/kg			2570 RR	26 RR
Pyrene	23000	mg/kg			2570 RR	26 RR
Pyridine	1200	mg/kg			2570 RR	26 RR
bis(2-Chloroethoxy)methane	2500	mg/kg			2570 RR	26 RR
bis(2-Chloroethyl) ether	1	mg/kg			2570 RR	26 RR
bis(2-Chloroisopropyl) ether	22	mg/kg			2570 RR	26 RR
bis(2-Ethylhexyl)phthalate	160	mg/kg			2570 RR	26 RR

Data Validation Qualifier Code

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- 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 compound/analyte was not detected substantially above the level of the associated method blank/preparation or field blank
- 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.
- NJ - This analyte has been "tentatively" identified. The numeric value represents its approximate concentration.
- Y - This analyte coelutes with another target compound on the two chromatographic columns used for analysis.
- R - The result for this analyte is unreliable. Additional data is needed to confirm or disprove the presence of this compound/analyte in the sample.
- RR - Results were rejected and scheduled for resampling.

**Table 1 - Analytical Sample Results
Samples Collected April/August 2015**

Sample Identification Sample Date Sample Type Sample Location and Depth			Transect 15					
			TM-SD-73	TM-SD-74	TM-SD-75	TM-SD-76	TM-SD-77	TM-SD-77
			4/17/2015	8/14/2015	4/17/2015	8/14/2015	4/17/2015	8/14/2015
			Discrete	Discrete	Discrete	Discrete	Composite	Composite
Sample Location and Depth			South 0-12"	South 5-6'	North 0-12"	North 3-4'	0-12"	3-6'
Compound	PAL	Units						
VOC								
1,1,1,2-Tetrachloroethane	8.8	mg/kg	0.393 U	0.562 U	0.41 U	0.328 U		
1,1,1-Trichloroethane	36000	mg/kg	0.393 U	0.562 U	0.41 U	0.328 U		
1,1,2,2-Tetrachloroethane	2.7	mg/kg	0.393 U	0.562 U	0.41 U	0.328 U		
1,1,2-Trichloroethane	5	mg/kg	0.393 U	0.562 U	0.41 U	0.328 U		
1,1-Dichloroethane	16	mg/kg	0.393 U	0.562 U	0.41 U	0.328 U		
1,1-Dichloroethene	1000	mg/kg	0.393 U	0.562 U	0.41 U	0.328 U		
1,2-Dichloroethane	2	mg/kg	0.393 U	0.562 U	0.41 U	0.328 U		
1,2-Dichloropropane	4.4	mg/kg	0.393 U	0.562 U	0.41 U	0.328 U		
2-Butanone (MEK)	190000	mg/kg	0.786 U	1.12 R	0.82 U	0.657 R		
2-Hexanone	1300	mg/kg	0.786 UJ	1.12 UJ	0.82 UJ	0.657 UJ		
4-Methyl-2-pentanone (MIBK)	56000	mg/kg	0.786 U	1.12 UJ	0.82 U	0.657 UJ		
Acetone	670000	mg/kg	0.786 UJ	1.12 U	0.82 UJ	0.657 U		
Benzene	5.1	mg/kg	0.393 U	0.562 U	0.41 U	0.328 U		
Bromoform	86	mg/kg	0.393 U	0.562 U	0.41 U	0.328 U		
Carbon disulfide	3500	mg/kg	0.393 U	0.562 U	0.41 U	0.328 U		
Carbon tetrachloride	2.9	mg/kg	0.393 U	0.562 U	0.41 U	0.328 U		
Chlorobenzene	1300	mg/kg	1.96	0.562 U	0.41 U	0.328 U		
Chloroethane	57000	mg/kg	0.393 U	0.562 U	0.41 U	0.328 U		
Chloroform	1.4	mg/kg	0.393 U	0.562 U	0.41 U	0.328 U		
Ethylbenzene	25	mg/kg	0.393 U	0.562 U	0.41 U	0.328 U		
Methylene Chloride	1000	mg/kg	0.393 UJ	0.562 UJ	0.41 UJ	0.328 UJ		
Tetrachloroethene	100	mg/kg	0.393 U	0.562 U	0.41 U	0.328 U		
Toluene	47000	mg/kg	0.393 U	0.756	0.41 U	0.328 U		
Trichloroethene	6	mg/kg	0.393 U	0.562 U	0.41 U	0.328 U		
Vinyl chloride	1.7	mg/kg	0.393 U	0.562 U	0.41 U	0.328 U		
Xylene (Total)	2800	mg/kg	1.18 U	3.26	1.23 U	0.985 U		
cis-1,3-Dichloropropene	8.2	mg/kg	0.393 U	0.562 U	0.41 U	0.328 U		
trans-1,2-Dichloroethene	23000	mg/kg	0.393 U	0.562 U	0.41 U	0.328 U		
trans-1,3-Dichloropropene	8.2	mg/kg	0.393 U	0.562 U	0.41 U	0.328 U		
Metals								
Antimony	470.0	mg/kg	0.67 UJ	1.4 U	7.9 J-	11.4 U		
Arsenic	3.0	mg/kg	10.8	24.1	8.8	27.6		
Barium	220,000.0	mg/kg	44.4	266	35.6	182		
Beryllium	2,300.0	mg/kg	0.096 B	0.21 J	0.088 B	0.73		
Cadmium	980.0	mg/kg	0.69	2.2	0.95	4.5		
Chromium	120,000.0	mg/kg	898	7120	901	1990		
Cobalt	350.0	mg/kg	13.9	9.6	12.1	16		
Copper	47,000.0	mg/kg	250	382	203	293		
Lead	800.0	mg/kg	88.8 J+	268 J	81.4 J+	475 J		
Nickel	22,000.0	mg/kg	133	124	123	59.2		
Selenium	5,800.0	mg/kg	1.7	4.6	1.7	3.4		
Silver	5,800.0	mg/kg	8	12.7	2.4	7.1		
Thallium	12.0	mg/kg	2.2 U	4.5 U	2.7 U	3.8 U		
Tin	700,000.0	mg/kg	1230 J+	4560	1500 J+	5260		
Vanadium	5,800.0	mg/kg	47.1	49.5	46.2	133		
Zinc	350,000.0	mg/kg	1060	858	1270	1480		
Chromium, Hexavalent	6.3	mg/kg	1.6 R	2.7 UJ	1.8 R	2.2 UJ		
Mercury	350.0	mg/kg	0.18 J-	0.72 J-	0.25 J-	0.5 J-		
PCB								
PCB-1016 (Aroclor 1016)	27	mg/kg				3.21 U	2.39 U	
PCB-1221 (Aroclor 1221)	0.72	mg/kg				3.21 U	2.39 U	
PCB-1232 (Aroclor 1232)	0.72	mg/kg				3.21 U	2.39 U	
PCB-1242 (Aroclor 1242)	0.97	mg/kg				3.21 U	3.29 J	
PCB-1248 (Aroclor 1248)	0.94	mg/kg				3.21 U	2.39 U	
PCB-1254 (Aroclor 1254)	0.97	mg/kg				3.21 U	2.79 J	
Cyanide								
Cyanide	150	mg/kg				2.9 J-	4.5 J	

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- NJ - This analyte has been "tentatively" identified. The numeric value represents its approximate concentration.
- Y - This analyte coelutes with another target compound on the two chromatographic columns used for analysis.
- R - The result for this analyte is unreliable. Additional data is needed to confirm or disprove the presence of this compound/analyte in the sample.

**Table 1 - Analytical Sample Results
Samples Collected April/August 2015**

Sample Identification Sample Date Sample Type Sample Location and Depth	Transect 15					
	TM-SD-73	TM-SD-74	TM-SD-75	TM-SD-76	TM-SD-77	TM-SD-77
	4/17/2015	8/14/2015	4/17/2015	8/14/2015	4/17/2015	8/14/2015
	Discrete	Discrete	Discrete	Discrete	Composite	Composite
	South 0-12"	South 5-6'	North 0-12"	North 3-4'	0-12"	3-6'
Compound	PAL	Units				
SVOC						
1,2,4-Trichlorobenzene	110	mg/kg			158 RR	3.3 RR
1,2-Dichlorobenzene	9300	mg/kg			158 RR	3.3 RR
1,3-Dichlorobenzene		mg/kg			158 RR	3.3 RR
1,4-Dichlorobenzene	11	mg/kg			158 RR	3.3 RR
2,4,5-Trichlorophenol	82000	mg/kg			158 RR	3.3 RR
2,4,6-Trichlorophenol	210	mg/kg			158 RR	3.3 RR
2,4-Dichlorophenol	2500	mg/kg			158 RR	3.3 RR
2,4-Dimethylphenol	16000	mg/kg			158 RR	3.3 RR
2,4-Dinitrophenol	1600	mg/kg			789 RR	16.5 RR
2,4-Dinitrotoluene	7.4	mg/kg			158 RR	3.3 RR
2,6-Dinitrotoluene	1.5	mg/kg			158 RR	3.3 RR
2-Chloronaphthalene	60000	mg/kg			158 RR	3.3 RR
2-Chlorophenol	5800	mg/kg			158 RR	3.3 RR
2-Methylnaphthalene	3000	mg/kg			158 RR	3.3 RR
2-Methylphenol(o-Cresol)	41000	mg/kg			158 RR	3.3 RR
2-Nitrophenol		mg/kg			158 RR	3.3 RR
3&4-Methylphenol(m&p Cresol)	41000	mg/kg			158 RR	3.3 RR
3,3'-Dichlorobenzidine	5.1	mg/kg			789 RR	16.5 RR
3,3'-Dimethylbenzidine	0.21	mg/kg			1580 RR	33 RR
4,6-Dinitro-2-methylphenol	66	mg/kg			315 RR	6.6 RR
4-Bromophenylphenyl ether		mg/kg			158 RR	3.3 RR
4-Chloro-3-methylphenol	82000	mg/kg			315 RR	6.6 RR
4-Chlorophenylphenyl ether		mg/kg			158 RR	3.3 RR
4-Nitrophenol		mg/kg			789 RR	16.5 RR
Acenaphthene	45000	mg/kg			158 RR	3.3 RR
Acenaphthylene	45000	mg/kg			158 RR	3.3 RR
Anthracene	230000	mg/kg			158 RR	3.3 RR
Benzo(a)anthracene	21	mg/kg			158 RR	3.3 RR
Benzo(a)pyrene	2.1	mg/kg			158 RR	3.3 RR
Benzo(b)fluoranthene	21	mg/kg			158 RR	3.3 RR
Benzo(g,h,i)perylene		mg/kg			158 RR	3.3 RR
Benzo(k)fluoranthene	210	mg/kg			158 RR	3.3 RR
Butylbenzylphthalate	1200	mg/kg			158 RR	3.3 RR
Di-n-butylphthalate	82000	mg/kg			158 RR	3.3 RR
Di-n-octylphthalate	8200	mg/kg			158 RR	3.3 RR
Dibenz(a,h)anthracene	2.1	mg/kg			158 RR	3.3 RR
Diethylphthalate	660000	mg/kg			158 RR	3.3 RR
Dimethylphthalate		mg/kg			158 RR	3.3 RR
Fluoranthene	30000	mg/kg			158 RR	3.3 RR
Fluorene	30000	mg/kg			158 RR	3.3 RR
Hexachloro-1,3-butadiene	5.3	mg/kg			158 RR	3.3 RR
Hexachlorobenzene	0.96	mg/kg			158 RR	3.3 RR
Hexachlorocyclopentadiene	7.5	mg/kg			158 RR	3.3 RR
Hexachloroethane	8	mg/kg			158 RR	3.3 RR
Indeno(1,2,3-cd)pyrene	21	mg/kg			158 RR	3.3 RR
Isophorone	2400	mg/kg			158 RR	3.3 RR
Naphthalene	17	mg/kg			158 RR	3.3 RR
Nitrobenzene	22	mg/kg			158 RR	3.3 RR
Pentachloroethane	36	mg/kg			315 RR	6.6 RR
Pentachlorophenol	4	mg/kg			789 RR	16.5 RR
Phenanthrene		mg/kg			158 RR	0.91 RR
Phenol	250000	mg/kg			158 RR	3.3 RR
Pyrene	23000	mg/kg			158 RR	3.3 RR
Pyridine	1200	mg/kg			158 RR	3.3 RR
bis(2-Chloroethoxy)methane	2500	mg/kg			158 RR	3.3 RR
bis(2-Chloroethyl) ether	1	mg/kg			158 RR	3.3 RR
bis(2-Chloroisopropyl) ether	22	mg/kg			158 RR	3.3 RR
bis(2-Ethylhexyl)phthalate	160	mg/kg			158 RR	3.3 RR

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- RR** - Results were rejected and scheduled for resampling.

**Table 1 - Analytical Sample Results
Samples Collected April/August 2015**

Sample Identification Sample Date Sample Type Sample Location and Depth			Transect 16					
			TM-SD-79	TM-SD-80	TM-SD-81	TM-SD-82	TM-SD-83	TM-SD-83
			4/17/2015	8/14/2015	4/17/2015	8/14/2015	4/17/2015	8/14/2015
			Discrete	Discrete	Discrete	Discrete	Composite	Composite
Compound	PAL	Units	South 0-12"	South 5.5-6.5'	North 0-12"	North 5-6'	0-12"	5-6.5'
VOC								
1,1,1,2-Tetrachloroethane	8.8	mg/kg	0.488 U	0.342 U	0.3 U	0.337 U		
1,1,1-Trichloroethane	36000	mg/kg	0.488 U	0.342 U	0.3 U	0.337 U		
1,1,2,2-Tetrachloroethane	2.7	mg/kg	0.488 U	0.342 U	0.3 U	0.337 U		
1,1,2-Trichloroethane	5	mg/kg	0.488 U	0.342 U	0.3 U	0.337 U		
1,1-Dichloroethane	16	mg/kg	0.488 U	0.342 UJ	0.3 U	0.337 U		
1,1-Dichloroethene	1000	mg/kg	0.488 U	0.342 U	0.3 U	0.337 U		
1,2-Dichloroethane	2	mg/kg	0.488 U	0.342 U	0.3 UJ	0.337 U		
1,2-Dichloropropane	4.4	mg/kg	0.488 U	0.342 U	0.3 U	0.337 U		
2-Butanone (MEK)	190000	mg/kg	0.976 U	0.684 R	0.6 U	0.673 R		
2-Hexanone	1300	mg/kg	0.976 UJ	0.684 UJ	0.6 U	0.673 UJ		
4-Methyl-2-pentanone (MIBK)	56000	mg/kg	0.976 U	0.684 UJ	0.6 U	0.673 UJ		
Acetone	670000	mg/kg	0.976 UJ	0.684 UJ	0.6 U	0.673 U		
Benzene	5.1	mg/kg	0.488 U	0.342 U	0.3 U	0.337 U		
Bromoform	86	mg/kg	0.488 U	0.342 U	0.3 U	0.337 U		
Carbon disulfide	3500	mg/kg	0.488 U	0.342 UJ	0.3 U	0.337 U		
Carbon tetrachloride	2.9	mg/kg	0.488 U	0.342 U	0.3 U	0.337 U		
Chlorobenzene	1300	mg/kg	0.488 U	0.342 U	0.3 U	0.337 U		
Chloroethane	57000	mg/kg	0.488 U	0.342 UJ	0.3 U	0.337 U		
Chloroform	1.4	mg/kg	0.488 U	0.342 U	0.3 U	0.337 U		
Ethylbenzene	25	mg/kg	0.488 U	0.342 U	0.3 U	0.337 U		
Methylene Chloride	1000	mg/kg	0.488 UJ	0.342 UJ	0.3 UJ	0.337 UJ		
Tetrachloroethene	100	mg/kg	0.488 U	0.342 U	0.3 U	0.337 U		
Toluene	47000	mg/kg	0.488 U	21.8	0.3 U	0.721		
Trichloroethene	6	mg/kg	0.488 U	0.342 U	0.3 U	0.337 U		
Vinyl chloride	1.7	mg/kg	0.488 U	0.342 U	0.3 U	0.337 U		
Xylene (Total)	2800	mg/kg	1.46 U	1.03 U	0.899 U	1.01 U		
cis-1,3-Dichloropropene	8.2	mg/kg	0.488 U	0.342 U	0.3 U	0.337 U		
trans-1,2-Dichloroethene	23000	mg/kg	0.488 U	0.342 UJ	0.3 U	0.337 U		
trans-1,3-Dichloropropene	8.2	mg/kg	0.488 U	0.342 U	0.3 U	0.337 U		
Metals								
Antimony	470.0	mg/kg	0.65 UJ	8.1 U	1.1 UJ	5.1 U		
Arsenic	3.0	mg/kg	12	22.9	8.6	14.1		
Barium	220,000.0	mg/kg	112	55	83.7	17.5		
Beryllium	2,300.0	mg/kg	0.13 B	0.093 B	0.32	0.069 B		
Cadmium	980.0	mg/kg	5	2.4	2.4	2		
Chromium	120,000.0	mg/kg	384	5980	615	5280		
Cobalt	350.0	mg/kg	12.6	16.9	7.8	19.1		
Copper	47,000.0	mg/kg	188	239	119	214		
Lead	800.0	mg/kg	260 J+	148 J	122 J+	113 J		
Nickel	22,000.0	mg/kg	122	508	67	322		
Selenium	5,800.0	mg/kg	1.5	2.5	1.6	2.8		
Silver	5,800.0	mg/kg	8	11	4.2	6.1		
Thallium	12.0	mg/kg	2.2 U	2.7 U	1.9 U	1.7 U		
Tin	700,000.0	mg/kg	478 J+	2740	303 J+	309		
Vanadium	5,800.0	mg/kg	62.4	41.2	175	69.1		
Zinc	350,000.0	mg/kg	5080	2530	2310	1040		
Chromium, Hexavalent	6.3	mg/kg	1.7 R	1.5 UJ	1.5 R	1.5 UJ		
Mercury	350.0	mg/kg	0.21 J-	0.25 J-	0.15	0.068 J-		
PCB								
PCB-1016 (Aroclor 1016)	27	mg/kg				4.02 U	1.61 U	
PCB-1221 (Aroclor 1221)	0.72	mg/kg				4.02 U	1.61 U	
PCB-1232 (Aroclor 1232)	0.72	mg/kg				4.02 U	1.61 U	
PCB-1242 (Aroclor 1242)	0.97	mg/kg				4.02 U	2.8 J	
PCB-1248 (Aroclor 1248)	0.94	mg/kg				4.02 U	1.61 U	
PCB-1254 (Aroclor 1254)	0.97	mg/kg				4.02 U	1.2 J	
Cyanide								
Cyanide	150	mg/kg				2.5 J-	5 J	

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**Table 1 - Analytical Sample Results
Samples Collected April/August 2015**

Sample Identification Sample Date Sample Type Sample Location and Depth	Transect 16					
	TM-SD-79	TM-SD-80	TM-SD-81	TM-SD-82	TM-SD-83	TM-SD-83
	4/17/2015	8/14/2015	4/17/2015	8/14/2015	4/17/2015	8/14/2015
	Discrete	Discrete	Discrete	Discrete	Composite	Composite
	South 0-12"	South 5.5-6.5'	North 0-12"	North 5-6'	0-12"	5-6.5'
Compound	PAL	Units				
SVOC						
1,2,4-Trichlorobenzene	110	mg/kg			166 RR	3.3 RR
1,2-Dichlorobenzene	9300	mg/kg			166 RR	3.3 RR
1,3-Dichlorobenzene		mg/kg			166 RR	3.3 RR
1,4-Dichlorobenzene	11	mg/kg			166 RR	3.3 RR
2,4,5-Trichlorophenol	82000	mg/kg			166 RR	3.3 RR
2,4,6-Trichlorophenol	210	mg/kg			166 RR	3.3 RR
2,4-Dichlorophenol	2500	mg/kg			166 RR	3.3 RR
2,4-Dimethylphenol	16000	mg/kg			166 RR	3.3 RR
2,4-Dinitrophenol	1600	mg/kg			830 RR	16.5 RR
2,4-Dinitrotoluene	7.4	mg/kg			166 RR	3.3 RR
2,6-Dinitrotoluene	1.5	mg/kg			166 RR	3.3 RR
2-Chloronaphthalene	60000	mg/kg			166 RR	3.3 RR
2-Chlorophenol	5800	mg/kg			166 RR	3.3 RR
2-Methylnaphthalene	3000	mg/kg			166 RR	3.3 RR
2-Methylphenol(o-Cresol)	41000	mg/kg			166 RR	3.3 RR
2-Nitrophenol		mg/kg			166 RR	3.3 RR
3&4-Methylphenol(m&p Cresol)	41000	mg/kg			166 RR	3.3 RR
3,3'-Dichlorobenzidine	5.1	mg/kg			830 RR	16.5 RR
3,3'-Dimethylbenzidine	0.21	mg/kg			1660 RR	33 RR
4,6-Dinitro-2-methylphenol	66	mg/kg			332 RR	6.6 RR
4-Bromophenylphenyl ether		mg/kg			166 RR	3.3 RR
4-Chloro-3-methylphenol	82000	mg/kg			332 RR	6.6 RR
4-Chlorophenylphenyl ether		mg/kg			166 RR	3.3 RR
4-Nitrophenol		mg/kg			830 RR	16.5 RR
Acenaphthene	45000	mg/kg			166 RR	3.3 RR
Acenaphthylene	45000	mg/kg			166 RR	3.3 RR
Anthracene	230000	mg/kg			166 RR	3.3 RR
Benzo(a)anthracene	21	mg/kg			166 RR	3.3 RR
Benzo(a)pyrene	2.1	mg/kg			166 RR	3.3 RR
Benzo(b)fluoranthene	21	mg/kg			166 RR	3.3 RR
Benzo(g,h,i)perylene		mg/kg			166 RR	3.3 RR
Benzo(k)fluoranthene	210	mg/kg			166 RR	3.3 RR
Butylbenzylphthalate	1200	mg/kg			166 RR	3.3 RR
Di-n-butylphthalate	82000	mg/kg			166 RR	3.3 RR
Di-n-octylphthalate	8200	mg/kg			166 RR	3.3 RR
Dibenz(a,h)anthracene	2.1	mg/kg			166 RR	3.3 RR
Diethylphthalate	660000	mg/kg			166 RR	3.3 RR
Dimethylphthalate		mg/kg			166 RR	3.3 RR
Fluoranthene	30000	mg/kg			166 RR	3.3 RR
Fluorene	30000	mg/kg			166 RR	3.3 RR
Hexachloro-1,3-butadiene	5.3	mg/kg			166 RR	3.3 RR
Hexachlorobenzene	0.96	mg/kg			166 RR	3.3 RR
Hexachlorocyclopentadiene	7.5	mg/kg			166 RR	3.3 RR
Hexachloroethane	8	mg/kg			166 RR	3.3 RR
Indeno(1,2,3-cd)pyrene	21	mg/kg			166 RR	3.3 RR
Isophorone	2400	mg/kg			166 RR	3.3 RR
Naphthalene	17	mg/kg			166 RR	3.3 RR
Nitrobenzene	22	mg/kg			166 RR	3.3 RR
Pentachloroethane	36	mg/kg			332 RR	6.6 RR
Pentachlorophenol	4	mg/kg			830 RR	16.5 RR
Phenanthrene		mg/kg			166 RR	3.3 RR
Phenol	250000	mg/kg			166 RR	3.3 RR
Pyrene	23000	mg/kg			166 RR	3.3 RR
Pyridine	1200	mg/kg			166 RR	3.3 RR
bis(2-Chloroethoxy)methane	2500	mg/kg			166 RR	3.3 RR
bis(2-Chloroethyl) ether	1	mg/kg			166 RR	3.3 RR
bis(2-Chloroisopropyl) ether	22	mg/kg			166 RR	3.3 RR
bis(2-Ethylhexyl)phthalate	160	mg/kg			166 RR	3.3 RR

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**Table 1 - Analytical Sample Results
Samples Collected April/August 2015**

Sample Identification Sample Date Sample Type Sample Location and Depth			Transect 17					
			TM-SD-84	TM-SD-85	TM-SD-86	TM-SD-87	TM-SD-88	TM-SD-88
			4/20/2015	xx/xx/xxxx	4/20/2015	xx/xx/xxxx	4/20/2015	xx/xx/xxxx
			Discrete	Discrete	Discrete	Discrete	Composite	Composite
Sample Location and Depth			South 0-12"	-----	North 0-12"	-----	0-12"	-----
Compound	PAL	Units						
VOC								
1,1,1,2-Tetrachloroethane	8.8	mg/kg	0.383 U		0.44 U			
1,1,1-Trichloroethane	36000	mg/kg	0.383 U		0.44 U			
1,1,2,2-Tetrachloroethane	2.7	mg/kg	0.383 U		0.44 U			
1,1,2-Trichloroethane	5	mg/kg	0.383 U		0.44 U			
1,1-Dichloroethane	16	mg/kg	0.383 U		0.44 U			
1,1-Dichloroethene	1000	mg/kg	0.383 U		0.44 U			
1,2-Dichloroethane	2	mg/kg	0.383 U		0.44 UJ			
1,2-Dichloropropane	4.4	mg/kg	0.383 U		0.44 U			
2-Butanone (MEK)	190000	mg/kg	0.765 U		0.88 U			
2-Hexanone	1300	mg/kg	0.765 UJ		0.88 U			
4-Methyl-2-pentanone (MIBK)	56000	mg/kg	0.765 U		0.88 U			
Acetone	670000	mg/kg	0.765 UJ		0.88 U			
Benzene	5.1	mg/kg	0.383 U		0.44 U			
Bromoform	86	mg/kg	0.383 U		0.44 U			
Carbon disulfide	3500	mg/kg	0.383 U		0.506			
Carbon tetrachloride	2.9	mg/kg	0.383 U		0.44 U			
Chlorobenzene	1300	mg/kg	0.383 U		0.44 U			
Chloroethane	57000	mg/kg	0.383 U		0.44 U			
Chloroform	1.4	mg/kg	0.383 U		0.44 U			
Ethylbenzene	25	mg/kg	0.383 U		0.44 U			
Methylene Chloride	1000	mg/kg	0.383 UJ		0.44 UJ			
Tetrachloroethene	100	mg/kg	0.383 U		0.44 U			
Toluene	47000	mg/kg	0.383 U		0.44 U			
Trichloroethene	6	mg/kg	0.383 U		0.44 U			
Vinyl chloride	1.7	mg/kg	0.383 U		0.44 U			
Xylene (Total)	2800	mg/kg	1.74		0.578 J			
cis-1,3-Dichloropropene	8.2	mg/kg	0.383 U		0.44 U			
trans-1,2-Dichloroethene	23000	mg/kg	0.383 U		0.44 U			
trans-1,3-Dichloropropene	8.2	mg/kg	0.383 U		0.44 U			
Metals								
Antimony	470.0	mg/kg	0.59 UJ		9.9 J-			
Arsenic	3.0	mg/kg	17.5		38.5			
Barium	220,000.0	mg/kg	173		661			
Beryllium	2,300.0	mg/kg	0.73		0.44			
Cadmium	980.0	mg/kg	4.3		9.5			
Chromium	120,000.0	mg/kg	1000		588			
Cobalt	350.0	mg/kg	12.5		27.3			
Copper	47,000.0	mg/kg	205		529			
Lead	800.0	mg/kg	311 J+		946 J+			
Nickel	22,000.0	mg/kg	337		264			
Selenium	5,800.0	mg/kg	3.1		2.1			
Silver	5,800.0	mg/kg	3.2		2.8			
Thallium	12.0	mg/kg	1.1 J		2 U			
Tin	700,000.0	mg/kg	480 J+		2420 J+			
Vanadium	5,800.0	mg/kg	133		109			
Zinc	350,000.0	mg/kg	3500		7870			
Chromium, Hexavalent	6.3	mg/kg	1.6 R		1.5 R			
Mercury	350.0	mg/kg	0.43		0.23			
PCB								
PCB-1016 (Aroclor 1016)	27	mg/kg					3.57 U	
PCB-1221 (Aroclor 1221)	0.72	mg/kg					3.57 U	
PCB-1232 (Aroclor 1232)	0.72	mg/kg					3.57 U	
PCB-1242 (Aroclor 1242)	0.97	mg/kg					3.57 U	
PCB-1248 (Aroclor 1248)	0.94	mg/kg					3.57 U	
PCB-1254 (Aroclor 1254)	0.97	mg/kg					3.57 U	
Cyanide								
Cyanide	150	mg/kg					1.2 J-	

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Table 1 - Analytical Sample Results
Samples Collected April/August 2015

Sample Identification Sample Date Sample Type Sample Location and Depth	Transect 17					
	TM-SD-84	TM-SD-85	TM-SD-86	TM-SD-87	TM-SD-88	TM-SD-88
	4/20/2015	xx/xx/xxxx	4/20/2015	xx/xx/xxxx	4/20/2015	xx/xx/xxxx
	Discrete	Discrete	Discrete	Discrete	Composite	Composite
Compound	PAL	Units	South 0-12"	-----	North 0-12"	-----
SVOC						
1,2,4-Trichlorobenzene	110	mg/kg				1540 RR
1,2-Dichlorobenzene	9300	mg/kg				1540 RR
1,3-Dichlorobenzene		mg/kg				1540 RR
1,4-Dichlorobenzene	11	mg/kg				1540 RR
2,4,5-Trichlorophenol	82000	mg/kg				1540 RR
2,4,6-Trichlorophenol	210	mg/kg				1540 RR
2,4-Dichlorophenol	2500	mg/kg				1540 RR
2,4-Dimethylphenol	16000	mg/kg				1540 RR
2,4-Dinitrophenol	1600	mg/kg				7720 RR
2,4-Dinitrotoluene	7.4	mg/kg				1540 RR
2,6-Dinitrotoluene	1.5	mg/kg				1540 RR
2-Chloronaphthalene	60000	mg/kg				1540 RR
2-Chlorophenol	5800	mg/kg				1540 RR
2-Methylnaphthalene	3000	mg/kg				1540 RR
2-Methylphenol(o-Cresol)	41000	mg/kg				1540 RR
2-Nitrophenol		mg/kg				1540 RR
3&4-Methylphenol(m&p Cresol)	41000	mg/kg				1540 RR
3,3'-Dichlorobenzidine	5.1	mg/kg				7720 RR
3,3'-Dimethylbenzidine	0.21	mg/kg				15400 RR
4,6-Dinitro-2-methylphenol	66	mg/kg				3090 RR
4-Bromophenylphenyl ether		mg/kg				1540 RR
4-Chloro-3-methylphenol	82000	mg/kg				3090 RR
4-Chlorophenylphenyl ether		mg/kg				1540 RR
4-Nitrophenol		mg/kg				7720 RR
Acenaphthene	45000	mg/kg				1540 RR
Acenaphthylene	45000	mg/kg				1540 RR
Anthracene	230000	mg/kg				1540 RR
Benzo(a)anthracene	21	mg/kg				1540 RR
Benzo(a)pyrene	2.1	mg/kg				1540 RR
Benzo(b)fluoranthene	21	mg/kg				1540 RR
Benzo(g,h,i)perylene		mg/kg				1540 RR
Benzo(k)fluoranthene	210	mg/kg				1540 RR
Butylbenzylphthalate	1200	mg/kg				1540 RR
Di-n-butylphthalate	82000	mg/kg				1540 RR
Di-n-octylphthalate	8200	mg/kg				1540 RR
Dibenz(a,h)anthracene	2.1	mg/kg				1540 RR
Diethylphthalate	660000	mg/kg				1540 RR
Dimethylphthalate		mg/kg				1540 RR
Fluoranthene	30000	mg/kg				1540 RR
Fluorene	30000	mg/kg				1540 RR
Hexachloro-1,3-butadiene	5.3	mg/kg				1540 RR
Hexachlorobenzene	0.96	mg/kg				1540 RR
Hexachlorocyclopentadiene	7.5	mg/kg				1540 RR
Hexachloroethane	8	mg/kg				1540 RR
Indeno(1,2,3-cd)pyrene	21	mg/kg				1540 RR
Isophorone	2400	mg/kg				1540 RR
Naphthalene	17	mg/kg				1540 RR
Nitrobenzene	22	mg/kg				1540 RR
Pentachloroethane	36	mg/kg				3090 RR
Pentachlorophenol	4	mg/kg				7720 RR
Phenanthrene		mg/kg				1540 RR
Phenol	250000	mg/kg				1540 RR
Pyrene	23000	mg/kg				1540 RR
Pyridine	1200	mg/kg				1540 RR
bis(2-Chloroethoxy)methane	2500	mg/kg				1540 RR
bis(2-Chloroethyl) ether	1	mg/kg				1540 RR
bis(2-Chloroisopropyl) ether	22	mg/kg				1540 RR
bis(2-Ethylhexyl)phthalate	160	mg/kg				1540 RR

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Table 2 - Sediment Characterization and Geotechnical Sample Results

Transects	Width of Canal (feet)	Width of Sediment Horizon (feet)	SEDIMENT THICKNESS (feet)		DEPTH OF WATER (feet)		SEDIMENT DESCRIPTION		Geotech Sample ID	Moisture Content (%)	Dry Density (pcf)
			D1	D2	D1	D2	D1	D2			
TRANSECT 1	48.00	24.25	0.17	0.17	8.00	11.00	Dark black fine silt; oily/greasy; sludge-like. Low sample recovery due to thin sediment before refusal.	Dark black fine silt; oily/greasy; sludge-like. Low sample recovery due to thin sediment before refusal.	---	---	---
TRANSECT 2	75.00	42.50	>5.00	>5.00	0.50	0.67	Dark black fine silt. Oily/greasy. Sludge-like. Sample location is within reed mat; not cohesive enough to walk on - sample contained minor organic material from root system.	Dark black fine silt; oily/greasy; sludge-like.	---	---	---
TRANSECT 3	78.00	59.00	>5.00	>5.00	1.50	1.50	Dark black fine silt; oily/greasy; sludge-like.	Dark black fine silt; oily/greasy; sludge-like.	---	---	---
TRANSECT 4	81.00	51.00	>5.00	>5.00	0.83	0.83	Top 4" is black silt with some organic material (roots) in sample.. Sample is dark black fine silt; oily/greasy; sludge-like. Sample collected by walking out onto reed mat.	Top 4" is black silt with some organic material (roots) in sample.. Sample is dark black fine silt; oily/greasy; sludge-like. Sample collected by walking out onto reed mat.	---	---	---
TRANSECT 5	84.00	55.00	>5.00	>5.00	0.00	0.50	Top 5" black dry-ish silt. Sample is dark black fine silt; oily/greasy; sludge-like. Able to walk onto reed mat for sample collection.	Top 5" black dry-ish silt. Sample is dark black fine silt; oily/greasy; sludge-like. Able to walk onto reed mat for sample collection.	TM-SD-26	28.0	109.3
TRANSECT 6	88.00	59.00	>5.00	>5.00	1.50	0.17	Top 5" black dry-ish silt. Sample is dark black fine silt; oily/greasy; sludge-like. Able to walk onto reed mat for sample collection.	Top 5" black dry-ish silt. Sample is dark black fine silt; oily/greasy; sludge-like. Able to walk onto reed mat for sample collection.	---	---	---
TRANSECT 7	92.00	57.00	>5.00	>5.00	2.00	0.17	Dark black fine silt; oily/greasy; sludge-like.	Top 5" black dry-ish silt. Sample is dark black fine silt; oily/greasy; sludge-like. Able to walk onto reed mat for sample collection.	---	---	---
TRANSECT 8	88.00	50.00	>5.00	>5.00	2.00	0.50	Dark black fine silt; oily/greasy; sludge-like. Shoreline is stained black (oil?). Just upstream from skimmer.	Dark black fine silt; oily/greasy; sludge-like. Shoreline is stained black (oil?).	---	---	---
TRANSECT 9	90.00	55.00	>5.00	>5.00	0.00	0.00	Top 5" black dry-ish silt. Sample is dark black fine silt; oily/greasy; sludge-like. Able to walk onto reed mat for sample collection. Sample contains minor organic matter - roots.	Dark black fine silt; oily/greasy; sludge-like.	---	---	---
TRANSECT 10	95.00	71.00	>5.00	>5.00	0.17	0.17	Top 4" is black silt with some organic material (roots) in sample. Sample is dark black fine silt; oily/greasy; sludge-like. Sample collected by walking out onto reed mat.	Dark black fine silt; oily/greasy; sludge-like.	TM-SD-52	41.4	76.8
TRANSECT 11	95.00	63.00	>5.00	>5.00	0.00	0.00	Top 6" is brown silt below which is dark black fine silt; oily/greasy; sludge-like. Able to walk out onto "mud mat" for sample collection.	Top 3" is black silt with some organic material (roots) in sample. Sample is dark black fine silt; oily/greasy; sludge-like. Sample collected by walking out onto reed mat.	---	---	---
TRANSECT 12	105.00	60.00	>5.00	>5.00	2.00	0.00	Top 4" is black silt with some organic material (roots) in sample. Sample is dark black fine silt; oily/greasy; sludge-like. Sample collected by walking out onto reed mat.	Top 4" is black silt with some organic material (roots) in sample. Sample is dark black fine silt; oily/greasy; sludge-like. Sample collected by walking out onto reed mat.	---	---	---
TRANSECT 13	95.00	64.00	>5.00	>5.00	0.00	0.17	Top 5" is black silt below which is dark black fine silt; oily/greasy; sludge-like. Able to walk out onto "mud mat" for sample collection.	Top 4" is black silt with some organic material (roots) in sample. Sample is dark black fine silt; oily/greasy; sludge-like. Sample collected by walking out onto reed mat.	---	---	---
TRANSECT 14	100.00	57.00	>5.00	>5.00	1.50	1.00	Top 5" is black silt below which is dark black fine silt; oily/greasy; sludge-like. Able to walk out onto "mud mat" for sample collection.	Top 5" is black silt with some organic material (roots) in sample. Sample is dark black fine silt; oily/greasy; sludge-like. Sample collected by walking out onto reed mat.	---	---	---
TRANSECT 15	105.00	69.00	>5.00	>5.00	0.50	0.50	Top 4" is black silt with some organic material (roots) in sample. Sample is dark black fine silt; oily/greasy; sludge-like. Sample collected by walking out onto reed mat.	Top 3" is black silt with some organic material (roots) in sample. Sample is dark black fine silt; oily/greasy; sludge-like. Sample collected by walking out onto reed mat.	TM-SD-78	35.8	77.5
TRANSECT 16	98.00	71.00	>5.00	>5.00	0.33	2.50	Top 4" is black silt with some organic material (roots) in sample. Sample is dark black fine silt; oily/greasy; sludge-like. Sample collected by walking out onto reed mat.	Dark black fine silt; oily/greasy; sludge-like.	---	---	---
TRANSECT 17 (Lagoon)	44.00	13.00	>5.00	>5.00	0.33	0.33	Brown fine silt; sludge-like. Same consistency as other samples, but not oily/greasy.	Brown fine silt; sludge-like. Same consistency as other samples, but not oily/greasy.	---	---	---

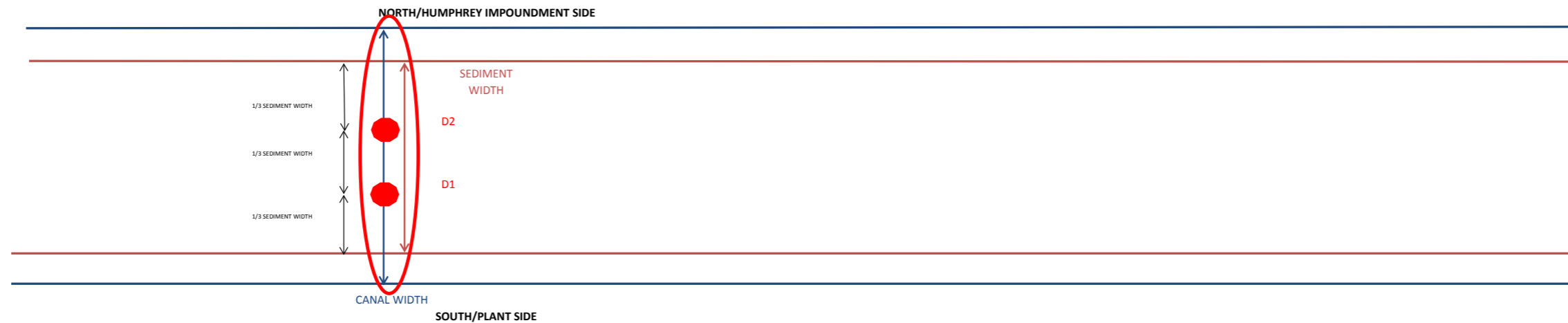


Table 3 - TCLP Test Results

TIN MILL CANAL TCLP TEST RESULTS			Transect 1			Transect 2				
			TM-SD-01	TM-SD-03	TM-SD-05	TM-SD-06	TM-SD-07	TM-SD-08	TM-SD-09	TM-SD-10
Sample Identification										
Sample Date			4/14/2015							
Sample Type			Discrete							
Sample Location and Depth			South 0-6"	North 0-6"	0-6"	South 0-12"	South 4-5'	North 0-12"	North 4-5'	4-5'
Compound	Regulatory Level	Units								
TCLP VOC										
1,1-Dichloroethene	0.7	mg/L	0.05 U	0.05 U		0.05 U	0.05 U	0.05 U	0.05 U	
1,2-Dichloroethane	0.5	mg/L	0.05 U	0.05 U		0.05 U	0.05 U	0.05 U	0.05 U	
2-Butanone (MEK)	200.0	mg/L	5 U	5 U		5 U	0.0317 J	5 U	5 U	
Benzene	0.5	mg/L	0.05 U	0.05 U		0.05 U	0.05 U	0.05 U	0.05 U	
Carbon tetrachloride	0.5	mg/L	0.05 UJ	0.05 UJ		0.05 UJ	0.05 UJ	0.05 UJ	0.05 UJ	
Chlorobenzene	100.0	mg/L	0.0064 J	1 U		1 U	1 U	1 U	1 U	
Chloroform	6.0	mg/L	0.0038 J	0.0042 J		0.0037 J	0.0053 B	0.0034 J	0.0052 B	
Tetrachloroethene	0.7	mg/L	0.05 U	0.05 U		0.05 U	0.05 U	0.05 U	0.05 U	
Trichloroethene	0.5	mg/L	0.05 U	0.05 U		0.05 U	0.05 U	0.05 U	0.05 U	
Vinyl chloride	0.2	mg/L	0.05 U	0.05 U		0.05 U	0.05 U	0.05 U	0.05 U	
TCLP Metals										
Arsenic	5.0	mg/L			0.01 J					0.012 J
Barium	100.0	mg/L			0.45 J					2.1
Cadmium	1.0	mg/L			0.00079 J					0.00087 J
Chromium	5.0	mg/L			0.0023 J					0.0016 J
Lead	5.0	mg/L			0.05 U					0.05 U
Selenium	1.0	mg/L			0.013 J					0.015 J
Silver	5.0	mg/L			0.0022 J					0.001 J
Mercury	0.2	mg/L			0.001 U					0.001 U
TCLP SVOC										
1,4-Dichlorobenzene	7.5	mg/L			0.5 RR					0.5 RR
2,4,5-Trichlorophenol	400.0	mg/L			5 RR					5 RR
2,4,6-Trichlorophenol	2.0	mg/L			0.1 RR					0.1 RR
2,4-Dinitrotoluene	0.13	mg/L			0.1 RR					0.1 RR
2-Methylphenol(o-Cresol)	200.0	mg/L			2 RR					2 RR
3&4-Methylphenol(m&p Cresol)	200.0	mg/L			2 RR					2 RR
Hexachloro-1,3-butadiene	0.5	mg/L			0.1 RR					0.1 RR
Hexachlorobenzene	0.13	mg/L			0.1 RR					0.1 RR
Hexachloroethane	3.0	mg/L			0.5 RR					0.5 RR
Nitrobenzene	2.0	mg/L			0.1 RR					0.1 RR
Pentachlorophenol	100.0	mg/L			5 RR					5 RR
Pyridine	5.0	mg/L			0.5 RR					0.5 RR

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Table 3 - TCLP Test Results

TIN MILL CANAL TCLP TEST RESULTS			Transect 3						Transect 4											
			TM-SD-11	TM-SD-12	TM-SD-13	TM-SD-14	TM-SD-14	TM-SD-15	TM-SD-15	TM-SD-16	TM-SD-17	TM-SD-18	TM-SD-19	TM-SD-20	TM-SD-20					
			4/15/2015	8/12/2015	4/16/2015	4/16/2015	8/12/2015	4/16/2015	8/12/2015	4/16/2015	8/12/2015	4/16/2015	8/12/2015	4/16/2015	8/12/2015					
			Discrete	Discrete	Discrete	Discrete	Discrete	Composite	Composite	Discrete	Discrete	Discrete	Discrete	Composite	Composite					
Sample Identification		Sample Date		Sample Type		Sample Location and Depth		South 0-12"	South 3-4'	North 0-12"	North 3-4'	North 3-4'	0-12"	3-4'	South 0-12"	South 5-6'	North 0-12"	North 2-3'	0-12"	2-6'
Compound	Regulatory Level	Units																		
TCLP VOC																				
1,1-Dichloroethene	0.7	mg/L	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U								0.05 U	0.05 U	0.05 U	0.05 U		
1,2-Dichloroethane	0.5	mg/L	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U								0.05 U	0.05 U	0.05 U	0.05 U		
2-Butanone (MEK)	200.0	mg/L	5 U	5 U	5 U	5 U	5 U								5 U	5 U	5 U	5 U		
Benzene	0.5	mg/L	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U								0.05 U	0.05 U	0.05 U	0.05 U		
Carbon tetrachloride	0.5	mg/L	0.05 UJ	0.05 UJ	0.05 UJ	0.05 UJ	0.05 UJ								0.05 UJ	0.05 UJ	0.05 UJ	0.05 UJ		
Chlorobenzene	100.0	mg/L	1 U	1 U	1 U	1 U	1 U								1 U	1 U	1 U	1 U		
Chloroform	6.0	mg/L	0.0036 J	0.5 U	0.0032 J	0.0047 B	0.5 U								0.0029 J	0.5 U	0.0033 J	0.5 U		
Tetrachloroethene	0.7	mg/L	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U								0.05 U	0.05 U	0.05 U	0.05 U		
Trichloroethene	0.5	mg/L	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U								0.05 U	0.05 U	0.05 U	0.05 U		
Vinyl chloride	0.2	mg/L	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U								0.05 U	0.05 U	0.05 U	0.05 U		
TCLP Metals																				
Arsenic	5.0	mg/L																	0.022 J	0.05 U
Barium	100.0	mg/L																	0.24 J	0.17 B
Cadmium	1.0	mg/L																	0.0011 J	0.05 U
Chromium	5.0	mg/L																	0.0052 J	0.00096 B
Lead	5.0	mg/L																	0.0099 J	0.05 U
Selenium	1.0	mg/L																	0.0073 J	0.0071 B
Silver	5.0	mg/L																	0.05 U	0.05 U
Mercury	0.2	mg/L																	0.001 U	0.001 U
TCLP SVOC																				
1,4-Dichlorobenzene	7.5	mg/L																	0.5 RR	0.5 RR
2,4,5-Trichlorophenol	400.0	mg/L																	5 RR	5 RR
2,4,6-Trichlorophenol	2.0	mg/L																	0.1 RR	0.1 RR
2,4-Dinitrotoluene	0.13	mg/L																	0.1 RR	0.1 RR
2-Methylphenol(o-Cresol)	200.0	mg/L																	2 RR	2 RR
3&4-Methylphenol(m&p Cresol)	200.0	mg/L																	2 RR	2 RR
Hexachloro-1,3-butadiene	0.5	mg/L																	0.1 RR	0.1 RR
Hexachlorobenzene	0.13	mg/L																	0.1 RR	0.1 RR
Hexachloroethane	3.0	mg/L																	0.5 RR	0.5 RR
Nitrobenzene	2.0	mg/L																	0.1 RR	0.1 RR
Pentachlorophenol	100.0	mg/L																	5 RR	5 RR
Pyridine	5.0	mg/L																	0.5 RR	0.5 RR

Data Validation Qualifier Code

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- UJ - This analyte was not detected in the sample. The actual quantitation/detection limit may be higher than reported.
- NJ - This analyte has been "tentatively" identified. The numeric value represents its approximate concentration.
- Y - This analyte coelutes with another target compound on the two chromatographic columns used for analysis.
- R - The result for this analyte is unreliable. Additional data is needed to confirm or disprove the presence of this compound/analyte in the sample.
- RR - Results were rejected and scheduled for resampling.

Table 3 - TCLP Test Results

TIN MILL CANAL TCLP TEST RESULTS			Transect 5						Transect 6								
			Sample Identification		TM-SD-21	TM-SD-22	TM-SD-22	TM-SD-23	TM-SD-24	TM-SD-25	TM-SD-25	TM-SD-27	TM-SD-28	TM-SD-29	TM-SD-30	TM-SD-31	TM-SD-31
			Sample Date	Sample Type	4/16/2015	4/16/2015	8/12/2015	4/16/2015	8/12/2015	4/16/2015	8/12/2015	4/17/2015	8/12/2015	4/20/2015	8/12/2015	4/20/2015	8/12/2015
			Sample Location and Depth	Units	Discrete	Discrete	Discrete	Discrete	Discrete	Composite	Composite	Discrete	Discrete	Discrete	Discrete	Composite	Composite
Compound	Regulatory Level	Units	South 0-12"	South 4-5'	South 3-4'	North 0-12"	North 3.5-4.5'	0-12"	3-4.5'	South 0-12"	South 3-4'	North 0-12"	North 2-3'	0-12"	2-4'		
TCLP VOC																	
1,1-Dichloroethene	0.7	mg/L	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U			0.05 U	0.05 U	0.05 U	0.05 U				
1,2-Dichloroethane	0.5	mg/L	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U			0.05 U	0.05 U	0.05 U	0.05 U				
2-Butanone (MEK)	200.0	mg/L	5 U	5 U	0.0115 J	0.0331 J	5 U			0.058 J	5 U	0.0447 J	5 U				
Benzene	0.5	mg/L	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U			0.05 U	0.05 U	0.05 U	0.05 U				
Carbon tetrachloride	0.5	mg/L	0.05 UJ	0.05 U	0.05 UJ	0.05 UJ	0.05 UJ			0.05 UJ	0.05 UJ	0.05 UJ	0.05 UJ				
Chlorobenzene	100.0	mg/L	1 U	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U				
Chloroform	6.0	mg/L	0.0028 J	0.006 B	0.5 U	0.0034 J	0.5 U			0.0024 B	0.5 U	0.5 U	0.5 U				
Tetrachloroethene	0.7	mg/L	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U			0.05 U	0.05 U	0.05 U	0.05 U				
Trichloroethene	0.5	mg/L	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U			0.05 U	0.05 U	0.05 U	0.05 U				
Vinyl chloride	0.2	mg/L	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U			0.05 U	0.05 U	0.05 U	0.05 U				
TCLP Metals																	
Arsenic	5.0	mg/L						0.022 J	0.0077 J					0.0077 J	0.02 B		
Barium	100.0	mg/L						0.35 J	0.28 B					0.46 J	0.33 B		
Cadmium	1.0	mg/L						0.00085 J	0.05 U					0.05 U	0.05 U		
Chromium	5.0	mg/L						0.0068 J	0.002 B					0.0027 J	0.0052 B		
Lead	5.0	mg/L						0.011 J	0.05 U					0.0057 J	0.05 U		
Selenium	1.0	mg/L						0.016 J	0.1 U					0.014 J	0.013 B		
Silver	5.0	mg/L						0.05 U	0.0024 B					0.0011 J	0.0025 B		
Mercury	0.2	mg/L						0.001 U	0.001 U					0.001 U	0.001 U		
TCLP SVOC																	
1,4-Dichlorobenzene	7.5	mg/L						0.5 RR	0.5 RR					0.5 RR	0.5 RR		
2,4,5-Trichlorophenol	400.0	mg/L						5 RR	5 RR					5 RR	5 RR		
2,4,6-Trichlorophenol	2.0	mg/L						0.1 RR	0.1 RR					0.1 RR	0.1 RR		
2,4-Dinitrotoluene	0.13	mg/L						0.1 RR	0.1 RR					0.1 RR	0.1 RR		
2-Methylphenol(o-Cresol)	200.0	mg/L						2 RR	2 RR					2 RR	0.019 RR		
3&4-Methylphenol(m&p Cresol)	200.0	mg/L						0.15 RR	0.108 RR					2 RR	0.0498 RR		
Hexachloro-1,3-butadiene	0.5	mg/L						0.1 RR	0.1 RR					0.1 RR	0.1 RR		
Hexachlorobenzene	0.13	mg/L						0.1 RR	0.1 RR					0.1 RR	0.1 RR		
Hexachloroethane	3.0	mg/L						0.5 RR	0.5 RR					0.5 RR	0.5 RR		
Nitrobenzene	2.0	mg/L						0.1 RR	0.1 RR					0.1 RR	0.1 RR		
Pentachlorophenol	100.0	mg/L						5 RR	5 RR					5 RR	5 RR		
Pyridine	5.0	mg/L						0.5 RR	0.5 RR					0.5 RR	0.5 RR		

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- Y - This analyte coelutes with another target compound on the two chromatographic columns used for analysis.
- R - The result for this analyte is unreliable. Additional data is needed to confirm or disprove the presence of this compound/analyte in the sample.
- RR - Results were rejected and scheduled for resampling.

Table 3 - TCLP Test Results

TIN MILL CANAL TCLP TEST RESULTS			Transect 7						Transect 8						
			Sample Identification		TM-SD-32	TM-SD-33	TM-SD-34	TM-SD-35	TM-SD-36	TM-SD-36	TM-SD-37	TM-SD-38	TM-SD-39	TM-SD-40	TM-SD-41
			Sample Date		4/17/2015	8/13/2015	4/20/2015	8/13/2015	4/20/2015	8/13/2015	4/20/2015	8/13/2015	4/20/2015	8/13/2015	4/20/2015
			Sample Type		Discrete	Discrete	Discrete	Discrete	Composite	Composite	Discrete	Discrete	Discrete	Discrete	Composite
Sample Location and Depth			South 0-12"	No Recovery	North 0-12"	North 5.5-6.5'	0-12"	5.5-6.5'	South 0-12"	No Recovery	North 0-12"	No Recovery	0-12"		
Compound	Regulatory Level	Units													
<i>TCLP VOC</i>															
1,1-Dichloroethene	0.7	mg/L	0.05 U		0.05 U	0.05 U			0.05 U		0.05 U				
1,2-Dichloroethane	0.5	mg/L	0.05 U		0.05 U	0.05 U			0.05 U		0.05 U				
2-Butanone (MEK)	200.0	mg/L	5 U		5 U	0.0516 J			5 U		5 U				
Benzene	0.5	mg/L	0.05 U		0.05 U	0.05 U			0.0122 J		0.131				
Carbon tetrachloride	0.5	mg/L	0.05 U		0.05 U	0.05 U			0.05 U		0.05 U				
Chlorobenzene	100.0	mg/L	1 U		1 U	1 U			0.013 J		0.125 J				
Chloroform	6.0	mg/L	0.5 U		0.0025 B	0.5 U			0.5 U		0.5 U				
Tetrachloroethene	0.7	mg/L	0.05 U		0.05 U	0.05 U			0.05 U		0.05 U				
Trichloroethene	0.5	mg/L	0.05 U		0.05 U	0.05 U			0.05 U		0.05 U				
Vinyl chloride	0.2	mg/L	0.05 U		0.05 U	0.05 U			0.05 U		0.05 U				
<i>TCLP Metals</i>															
Arsenic	5.0	mg/L						0.0087 J	0.0049 B				0.013 J		
Barium	100.0	mg/L						0.41 J	0.59 B				0.55 J		
Cadmium	1.0	mg/L						0.05 U	0.05 U				0.05 U		
Chromium	5.0	mg/L						0.0022 J	0.002 B				0.0052 J		
Lead	5.0	mg/L						0.0073 J	0.05 U				0.0083 J		
Selenium	1.0	mg/L						0.008 J	0.0058 B				0.0098 J		
Silver	5.0	mg/L						0.0019 J	0.0045 B				0.0021 J		
Mercury	0.2	mg/L						0.001 U	0.001 U				0.001 U		
<i>TCLP SVOC</i>															
1,4-Dichlorobenzene	7.5	mg/L						0.5 RR	0.5 RR				0.5 RR		
2,4,5-Trichlorophenol	400.0	mg/L						5 RR	5 RR				5 RR		
2,4,6-Trichlorophenol	2.0	mg/L						0.1 RR	0.1 RR				0.1 RR		
2,4-Dinitrotoluene	0.13	mg/L						0.1 RR	0.1 RR				0.1 RR		
2-Methylphenol(o-Cresol)	200.0	mg/L						2 RR	2 RR				2 RR		
3&4-Methylphenol(m&p Cresol)	200.0	mg/L						2 RR	2 RR				2 RR		
Hexachloro-1,3-butadiene	0.5	mg/L						0.1 RR	0.1 RR				0.1 RR		
Hexachlorobenzene	0.13	mg/L						0.1 RR	0.1 RR				0.1 RR		
Hexachloroethane	3.0	mg/L						0.5 RR	0.5 RR				0.5 RR		
Nitrobenzene	2.0	mg/L						0.1 RR	0.1 RR				0.1 RR		
Pentachlorophenol	100.0	mg/L						5 RR	5 RR				5 RR		
Pyridine	5.0	mg/L						0.5 RR	0.5 RR				0.5 RR		

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- R** - The result for this analyte is unreliable. Additional data is needed to confirm or disprove the presence of this compound/analyte in the sample.
- RR** - Results were rejected and scheduled for resampling.

Table 3 - TCLP Test Results

TIN MILL CANAL TCLP TEST RESULTS			Transect 9						Transect 10					
			TM-SD-42	TM-SD-43	TM-SD-44	TM-SD-45	TM-SD-46	TM-SD-46	TM-SD-47	TM-SD-48	TM-SD-49	TM-SD-50	TM-SD-51	TM-SD-51
			4/17/2015	8/13/2015	4/20/2015	8/13/2015	4/20/2015	8/13/2015	4/17/2015	8/13/2015	4/20/2015	8/13/2015	4/20/2015	8/13/2015
			Discrete	Discrete	Discrete	Discrete	Composite	Composite	Discrete	Discrete	Discrete	Discrete	Composite	Composite
Sample Identification		Sample Date	Sample Location and Depth											
Compound	Regulatory Level	Units	South 0-12"	South 6-7'	North 0-12"	No Recovery	0-12"	6-7'	South 0-12"	South 5.5-6.5'	North 0-12"	North 1.5-2.5'	0-12"	1.5-6.5'
TCLP VOC														
1,1-Dichloroethene	0.7	mg/L	0.05 U	0.05 U	0.05 U				0.05 U	0.05 U	0.05 U	0.05 U		
1,2-Dichloroethane	0.5	mg/L	0.05 U	0.05 U	0.05 U				0.05 U	0.05 U	0.05 U	0.05 U		
2-Butanone (MEK)	200.0	mg/L	0.0544 B	5 U	5 U				5 U	5 U	0.0304 J	5 U		
Benzene	0.5	mg/L	0.05 U	0.0089 J	0.05 U				0.05 U	0.008 J	0.05 U	0.0063 J		
Carbon tetrachloride	0.5	mg/L	0.05 U	0.05 U	0.05 U				0.05 U	0.05 U	0.05 U	0.05 U		
Chlorobenzene	100.0	mg/L	1 U	0.0078 J	1 U				1 U	0.004 J	0.0177 J	1 U		
Chloroform	6.0	mg/L	0.5 U	0.5 U	0.5 U				0.5 U	0.5 U	0.5 U	0.5 U		
Tetrachloroethene	0.7	mg/L	0.05 U	0.05 U	0.05 U				0.05 U	0.05 U	0.05 U	0.0221 J		
Trichloroethene	0.5	mg/L	0.05 U	0.05 U	0.05 U				0.05 U	0.05 U	0.05 U	0.05 U		
Vinyl chloride	0.2	mg/L	0.05 U	0.05 U	0.05 U				0.05 U	0.05 U	0.05 U	0.05 U		
TCLP Metals														
Arsenic	5.0	mg/L					0.019 B	0.011 J					0.016 J	0.05 U
Barium	100.0	mg/L					0.45 B	0.38 J					0.18 J	0.23 B
Cadmium	1.0	mg/L					0.05 U	0.05 U					0.05 U	0.05 U
Chromium	5.0	mg/L					0.026 B	0.0064 J					0.017 J	0.0085 B
Lead	5.0	mg/L					0.05 U	0.05 U					0.05 U	0.05 U
Selenium	1.0	mg/L					0.006 B	0.01 J					0.013 J	0.0079 B
Silver	5.0	mg/L					0.0023 B	0.0019 J					0.0021 J	0.0036 B
Mercury	0.2	mg/L					0.001 U	0.001 U					0.001 U	0.001 U
TCLP SVOC														
1,4-Dichlorobenzene	7.5	mg/L					0.5 RR	0.5 RR					0.5 RR	0.5 RR
2,4,5-Trichlorophenol	400.0	mg/L					5 RR	5 RR					5 RR	5 RR
2,4,6-Trichlorophenol	2.0	mg/L					0.1 RR	0.1 RR					0.1 RR	0.1 RR
2,4-Dinitrotoluene	0.13	mg/L					0.1 RR	0.1 RR					0.1 RR	0.1 RR
2-Methylphenol(o-Cresol)	200.0	mg/L					2 RR	2 RR					2 RR	2 RR
3&4-Methylphenol(m&p Cresol)	200.0	mg/L					2 RR	2 RR					2 RR	2 RR
Hexachloro-1,3-butadiene	0.5	mg/L					0.1 RR	0.1 RR					0.1 RR	0.1 RR
Hexachlorobenzene	0.13	mg/L					0.1 RR	0.1 RR					0.1 RR	0.1 RR
Hexachloroethane	3.0	mg/L					0.5 RR	0.5 RR					0.5 RR	0.5 RR
Nitrobenzene	2.0	mg/L					0.1 RR	0.1 RR					0.1 RR	0.1 RR
Pentachlorophenol	100.0	mg/L					5 RR	5 RR					5 RR	5 RR
Pyridine	5.0	mg/L					0.5 RR	0.5 RR					0.5 RR	0.5 RR

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- Y** - This analyte coelutes with another target compound on the two chromatographic columns used for analysis.
- R** - The result for this analyte is unreliable. Additional data is needed to confirm or disprove the presence of this compound/analyte in the sample.
- RR** - Results were rejected and scheduled for resampling.

Table 3 - TCLP Test Results

TIN MILL CANAL TCLP TEST RESULTS			Transect 11					Transect 12							
			Sample Identification		TM-SD-53	TM-SD-54	TM-SD-55	TM-SD-56	TM-SD-57	TM-SD-58	TM-SD-59	TM-SD-60	TM-SD-61	TM-SD-62	TM-SD-62
			Sample Date		4/17/2015	8/13/2015	4/20/2015	8/13/2015	4/20/2015	4/17/2015	8/13/2015	4/20/2015	8/13/2015	4/20/2015	8/13/2015
			Sample Type		Discrete	Discrete	Discrete	Discrete	Composite	Discrete	Discrete	Discrete	Discrete	Composite	Composite
Sample Location and Depth			South 0-12"	Inaccessible	North 0-12"	Inaccessible	0-12"	South 0-12"	Inaccessible	North 0-12"	North 3.5-4.5'	0-12"	3.5-4.5'		
Compound	Regulatory Level	Units													
TCLP VOC															
1,1-Dichloroethene	0.7	mg/L	0.05 U		0.05 U			0.05 U		0.05 U	0.05 U				
1,2-Dichloroethane	0.5	mg/L	0.05 U		0.05 U			0.05 U		0.05 U	0.05 U				
2-Butanone (MEK)	200.0	mg/L	0.0414 J		5 U			0.0584 B		5 U	5 U				
Benzene	0.5	mg/L	0.05 U		0.05 U			0.05 U		0.05 U	0.0082 J				
Carbon tetrachloride	0.5	mg/L	0.05 U		0.05 U			0.05 U		0.05 U	0.05 U				
Chlorobenzene	100.0	mg/L	1 U		1 U			1 U		0.0053 J	0.0249 J				
Chloroform	6.0	mg/L	0.5 U		0.5 U			0.5 U		0.0022 B	0.5 U				
Tetrachloroethene	0.7	mg/L	0.05 U		0.05 U			0.05 U		0.05 U	0.05 U				
Trichloroethene	0.5	mg/L	0.05 U		0.05 U			0.05 U		0.05 U	0.05 U				
Vinyl chloride	0.2	mg/L	0.05 U		0.05 U			0.05 U		0.05 U	0.05 U				
TCLP Metals															
Arsenic	5.0	mg/L						0.016 J				0.05 U	0.0059 B		
Barium	100.0	mg/L						0.15 J				0.51 J	0.28 B		
Cadmium	1.0	mg/L						0.0006 J				0.05 U	0.05 U		
Chromium	5.0	mg/L						0.03 J				0.0073 J	0.012 B		
Lead	5.0	mg/L						0.0084 J				0.0068 J	0.05 U		
Selenium	1.0	mg/L						0.0098 J				0.0054 J	0.008 B		
Silver	5.0	mg/L						0.0016 J				0.05 U	0.0043 B		
Mercury	0.2	mg/L						0.001 U				0.001 U	0.001 U		
TCLP SVOC															
1,4-Dichlorobenzene	7.5	mg/L						0.5 RR				0.5 RR	0.5 RR		
2,4,5-Trichlorophenol	400.0	mg/L						5 RR				5 RR	5 RR		
2,4,6-Trichlorophenol	2.0	mg/L						0.1 RR				0.1 RR	0.1 RR		
2,4-Dinitrotoluene	0.13	mg/L						0.1 RR				0.1 RR	0.1 RR		
2-Methylphenol(o-Cresol)	200.0	mg/L						2 RR				2 RR	2 RR		
3&4-Methylphenol(m&p Cresol)	200.0	mg/L						2 RR				2 RR	2 RR		
Hexachloro-1,3-butadiene	0.5	mg/L						0.1 RR				0.1 RR	0.1 RR		
Hexachlorobenzene	0.13	mg/L						0.1 RR				0.1 RR	0.1 RR		
Hexachloroethane	3.0	mg/L						0.5 RR				0.5 RR	0.5 RR		
Nitrobenzene	2.0	mg/L						0.1 RR				0.1 RR	0.1 RR		
Pentachlorophenol	100.0	mg/L						5 RR				5 RR	5 RR		
Pyridine	5.0	mg/L						0.5 RR				0.5 RR	0.5 RR		

Data Validation Qualifier Code

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- J+** - The positive result reported for this analyte is a quantitative estimate, but may be biased high.
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- B** - The compound/analyte was not detected substantially above the level of the associated method blank/preparation or field blank
- 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.
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- Y** - This analyte coelutes with another target compound on the two chromatographic columns used for analysis.
- R** - The result for this analyte is unreliable. Additional data is needed to confirm or disprove the presence of this compound/analyte in the sample.
- RR** - Results were rejected and scheduled for resampling.

Table 3 - TCLP Test Results

TIN MILL CANAL TCLP TEST RESULTS			Transect 13						Transect 14					
			TM-SD-63	TM-SD-64	TM-SD-65	TM-SD-66	TM-SD-67	TM-SD-67	TM-SD-68	TM-SD-69	TM-SD-70	TM-SD-71	TM-SD-72	TM-SD-72
			4/17/2015	8/13/2015	4/20/2015	8/13/2015	4/20/2015	8/13/2015	4/17/2015	8/13/2015	4/17/2015	8/13/2015	4/17/2015	8/13/2015
			Discrete	Discrete	Discrete	Discrete	Composite	Composite	Discrete	Discrete	Discrete	Discrete	Composite	Composite
Sample Identification		Sample Date	Sample Location and Depth											
Compound	Regulatory Level	Units	South 0-12"	South 5-6'	North 0-12"	North 6-7'	0-12"	5-7'	South 0-12"	South 5-6'	North 0-12"	Inaccessible	0-12"	5-6'
TCLP VOC														
1,1-Dichloroethene	0.7	mg/L	0.05 U	0.05 UJ	0.05 U	0.05 U			0.05 U	0.05 U	0.05 U			
1,2-Dichloroethane	0.5	mg/L	0.05 U	0.05 UJ	0.05 U	0.05 U			0.05 U	0.05 U	0.05 U			
2-Butanone (MEK)	200.0	mg/L	0.0421 B	5 UJ	5 U	5 U			5 U	5 U	5 U			
Benzene	0.5	mg/L	0.05 U	0.05 UJ	0.05 U	0.05 U			0.05 U	0.05 U	0.0795			
Carbon tetrachloride	0.5	mg/L	0.05 U	0.05 UJ	0.05 U	0.05 U			0.05 U	0.05 U	0.05 U			
Chlorobenzene	100.0	mg/L	1 U	0.0098 J	1 U	0.0077 J			1 U	1 U	1 U			
Chloroform	6.0	mg/L	0.5 U	0.5 UJ	0.5 U	0.5 U			0.5 U	0.5 U	0.5 U			
Tetrachloroethene	0.7	mg/L	0.05 U	0.05 UJ	0.05 U	0.05 U			0.05 U	0.05 U	0.05 U			
Trichloroethene	0.5	mg/L	0.05 U	0.05 UJ	0.05 U	0.05 U			0.05 U	0.05 U	0.05 U			
Vinyl chloride	0.2	mg/L	0.05 U	0.05 UJ	0.05 U	0.05 U			0.05 U	0.05 U	0.05 U			
TCLP Metals														
Arsenic	5.0	mg/L						0.0097 J	0.0058 B				0.05 U	0.012 B
Barium	100.0	mg/L						0.1 J	0.36 B				0.31 J	0.21 B
Cadmium	1.0	mg/L						0.00099 J	0.05 U				0.00061 J	0.05 U
Chromium	5.0	mg/L						0.00097 J	0.019 B				0.0043 J	0.044 B
Lead	5.0	mg/L						0.05 U	0.05 U				0.0039 J	0.05 U
Selenium	1.0	mg/L						0.014 J	0.0047 B				0.0084 J	0.0069 B
Silver	5.0	mg/L						0.0033 J	0.004 B				0.0022 J	0.002 B
Mercury	0.2	mg/L						0.001 U	0.001 U				0.001 U	0.001 U
TCLP SVOC														
1,4-Dichlorobenzene	7.5	mg/L						0.5 RR	0.5 RR				0.5 RR	0.5 RR
2,4,5-Trichlorophenol	400.0	mg/L						5 RR	5 RR				5 RR	5 RR
2,4,6-Trichlorophenol	2.0	mg/L						0.1 RR	0.1 RR				0.1 RR	0.1 RR
2,4-Dinitrotoluene	0.13	mg/L						0.1 RR	0.1 RR				0.1 RR	0.1 RR
2-Methylphenol(o-Cresol)	200.0	mg/L						2 RR	2 RR				2 RR	2 RR
3&4-Methylphenol(m&p Cresol)	200.0	mg/L						2 RR	2 RR				2 RR	2 RR
Hexachloro-1,3-butadiene	0.5	mg/L						0.1 RR	0.1 RR				0.1 RR	0.1 RR
Hexachlorobenzene	0.13	mg/L						0.1 RR	0.1 RR				0.1 RR	0.1 RR
Hexachloroethane	3.0	mg/L						0.5 RR	0.5 RR				0.5 RR	0.5 RR
Nitrobenzene	2.0	mg/L						0.1 RR	0.1 RR				0.1 RR	0.1 RR
Pentachlorophenol	100.0	mg/L						5 RR	5 RR				5 RR	5 RR
Pyridine	5.0	mg/L						0.5 RR	0.5 RR				0.5 RR	0.5 RR

Data Validation Qualifier Code

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- Y - This analyte coelutes with another target compound on the two chromatographic columns used for analysis.
- R - The result for this analyte is unreliable. Additional data is needed to confirm or disprove the presence of this compound/analyte in the sample.
- RR - Results were rejected and scheduled for resampling.

Table 3 - TCLP Test Results

TIN MILL CANAL TCLP TEST RESULTS			Transect 15						Transect 16						Transect 17		
			TM-SD-73	TM-SD-74	TM-SD-75	TM-SD-76	TM-SD-77	TM-SD-77	TM-SD-79	TM-SD-80	TM-SD-81	TM-SD-82	TM-SD-83	TM-SD-83	TM-SD-84	TM-SD-86	TM-SD-88
			4/17/2015	8/14/2015	4/17/2015	8/14/2015	4/17/2015	8/14/2015	4/17/2015	8/14/2015	4/17/2015	8/14/2015	4/17/2015	8/14/2015	4/20/2015	4/20/2015	4/20/2015
			Discrete	Discrete	Discrete	Discrete	Composite	Composite	Discrete	Discrete	Discrete	Discrete	Composite	Composite	Discrete	Discrete	Composite
Sample Identification			Sample Date		Sample Type		Sample Location and Depth		Sample Location and Depth		Sample Location and Depth		Sample Location and Depth		Sample Location and Depth		
Compound	Regulatory Level	Units	South 0-12"	South 5-6'	North 0-12"	North 3-4'	0-12"	3-6'	South 0-12"	South 5.5-6.5'	North 0-12"	North 5-6'	0-12"	5-6.5'	0-12"	5-6'	5-6'
TCLP VOC																	
1,1-Dichloroethene	0.7	mg/L	0.05 U	0.05 U	0.05 U	0.05 U			0.05 U	0.05 U	0.05 U	0.05 U			0.05 U	0.05 U	
1,2-Dichloroethane	0.5	mg/L	0.05 U	0.05 U	0.05 U	0.05 U			0.05 U	0.05 U	0.05 U	0.05 U			0.05 U	0.05 U	
2-Butanone (MEK)	200.0	mg/L	0.0343 B	0.0331 J	5 U	5 U			5 U	5 U	0.0398 J	5 U			0.0299 J	0.0329 J	
Benzene	0.5	mg/L	0.05 U	0.05 U	0.05 U	0.05 U			0.05 U	0.05 U	0.05 U	0.05 U			0.05 U	0.05 U	
Carbon tetrachloride	0.5	mg/L	0.05 U	0.05 U	0.05 U	0.05 U			0.05 U	0.05 U	0.05 U	0.05 U			0.05 U	0.05 U	
Chlorobenzene	100.0	mg/L	1 U	1 U	1 U	1 U			1 U	1 U	1 U	1 U			1 U	1 U	
Chloroform	6.0	mg/L	0.5 U	0.5 U	0.5 U	0.5 U			0.5 U	0.5 U	0.5 U	0.5 U			0.0024 B	0.5 U	
Tetrachloroethene	0.7	mg/L	0.05 U	0.05 U	0.05 U	0.05 U			0.05 U	0.05 U	0.05 U	0.05 U			0.05 U	0.05 U	
Trichloroethene	0.5	mg/L	0.05 U	0.05 U	0.05 U	0.05 U			0.05 U	0.05 U	0.05 U	0.05 U			0.05 U	0.05 U	
Vinyl chloride	0.2	mg/L	0.05 U	0.05 U	0.05 U	0.05 U			0.05 U	0.05 U	0.05 U	0.05 U			0.05 U	0.05 U	
TCLP Metals																	
Arsenic	5.0	mg/L						0.05 U	0.015 B					0.05 U	0.0091 B		0.012 J
Barium	100.0	mg/L						0.59 J	1.1					0.4 J	0.52 B		1.2
Cadmium	1.0	mg/L						0.05 U	0.05 U					0.05 U	0.05 U		0.00056 J
Chromium	5.0	mg/L						0.004 J	0.015 B					0.0053 J	0.0026 B		0.0019 J
Lead	5.0	mg/L						0.0041 J	0.026 B					0.0062 J	0.0039 B		0.016 J
Selenium	1.0	mg/L						0.021 J	0.012 B					0.0083 J	0.014 B		0.017 J
Silver	5.0	mg/L						0.0018 J	0.0014 B					0.0017 J	0.0039 B		0.001 J
Mercury	0.2	mg/L						0.001 U	0.001 U					0.001 U	0.001 U		0.001 U
TCLP SVOC																	
1,4-Dichlorobenzene	7.5	mg/L						0.5 RR	0.5 RR					0.5 RR	0.5 RR		0.5 RR
2,4,5-Trichlorophenol	400.0	mg/L						5 RR	5 RR					5 RR	5 RR		5 RR
2,4,6-Trichlorophenol	2.0	mg/L						0.1 RR	0.1 RR					0.1 RR	0.1 RR		0.1 RR
2,4-Dinitrotoluene	0.13	mg/L						0.1 RR	0.1 RR					0.1 RR	0.1 RR		0.1 RR
2-Methylphenol(o-Cresol)	200.0	mg/L						2 RR	2 RR					2 RR	2 RR		2 RR
3&4-Methylphenol(m&p Cresol)	200.0	mg/L						2 RR	2 RR					2 RR	0.0438 RR		2 RR
Hexachloro-1,3-butadiene	0.5	mg/L						0.1 RR	0.1 RR					0.1 RR	0.1 RR		0.1 RR
Hexachlorobenzene	0.13	mg/L						0.1 RR	0.1 RR					0.1 RR	0.1 RR		0.1 RR
Hexachloroethane	3.0	mg/L						0.5 RR	0.5 RR					0.5 RR	0.5 RR		0.5 RR
Nitrobenzene	2.0	mg/L						0.1 RR	0.1 RR					0.1 RR	0.1 RR		0.1 RR
Pentachlorophenol	100.0	mg/L						5 RR	5 RR					5 RR	5 RR		5 RR
Pyridine	5.0	mg/L						0.5 RR	0.5 RR					0.5 RR	0.5 RR		0.5 RR

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- RR** - Results were rejected and scheduled for resampling.

Table 4 - Supplemental Investigation
Sediment Analytical Results

Parameter Group	Parameter	PAL	Units	Transect 6	Transect 7	Transect 8	Transect 9	Transect 10
				TM-SD-31 (D)	TM-SD-36 (D)	TM-SD-41 (D)	TM-SD-46 (D)	TM-SD-51 (D)
				Sample Date	Sample Date	Sample Date	Sample Date	Sample Date
				Sample Type	Sample Type	Sample Type	Sample Type	Sample Type
				Composite	Composite	Composite	Composite	Composite
				1-5'	1-5'	1-4'	2.5-6.5'	7-8'
SVOC	1,2,4-Trichlorobenzene	110	mg/kg	0.214 J	0.46 J	4.7 U	4.62 U	0.369 J
SVOC	1,2-Dichlorobenzene	9300	mg/kg	3.05 U	1.96 U	4.7 U	4.62 U	2.88 U
SVOC	1,3-Dichlorobenzene		mg/kg	3.05 UJ	1.96 U	4.7 UJ	4.62 U	2.88 U
SVOC	1,4-Dichlorobenzene	11	mg/kg	3.05 UJ	1.96 U	4.7 UJ	4.62 U	2.88 U
SVOC	2,4,5-Trichlorophenol	82000	mg/kg	3.05 U	1.96 U	4.7 U	4.62 U	2.88 UJ
SVOC	2,4,6-Trichlorophenol	210	mg/kg	3.05 U	1.96 U	4.7 U	4.62 U	2.88 UJ
SVOC	2,4-Dichlorophenol	2500	mg/kg	3.05 U	1.96 U	4.7 U	4.62 U	2.88 UJ
SVOC	2,4-Dimethylphenol	16000	mg/kg	9.09	1.96 U	4.7 U	2.31 J	0.583 J
SVOC	2,4-Dinitrophenol	1600	mg/kg	18.3 U	11.8 UJ	28.2 U	27.7 UJ	17.3 UJ
SVOC	2,4-Dinitrotoluene	7.4	mg/kg	3.05 U	1.96 U	4.7 U	4.62 U	2.88 U
SVOC	2,6-Dinitrotoluene	1.5	mg/kg	3.05 U	1.96 U	4.7 U	4.62 U	2.88 U
SVOC	2-Chloronaphthalene	60000	mg/kg	0.68 U	0.641 U	0.661 U	0.352 U	0.414 U
SVOC	2-Chlorophenol	5800	mg/kg	3.05 U	1.96 U	4.7 U	4.62 U	2.88 UJ
SVOC	2-Methylnaphthalene	3000	mg/kg	1.71	2.69	4.55	2.41	0.961
SVOC	2-Methylphenol	41000	mg/kg	0.982 J	1.96 U	4.7 U	4.62 U	2.88 UJ
SVOC	2-Nitrophenol		mg/kg	3.05 U	1.96 U	4.7 U	4.62 U	2.88 UJ
SVOC	3,3'-Dichlorobenzidine	5.1	mg/kg	6.1 U	3.93 U	0.884 J	9.23 U	5.77 U
SVOC	4,6-Dinitro-2-methylphenol	66	mg/kg	18.3 U	11.8 UJ	28.2 U	27.7 U	17.3 UJ
SVOC	4-Bromophenyl phenyl ether		mg/kg	3.05 U	1.96 U	4.7 U	4.62 U	2.88 U
SVOC	4-Chloro-3-methylphenol	82000	mg/kg	3.05 U	1.96 U	4.7 U	4.62 U	2.88 UJ
SVOC	4-Chlorophenyl phenyl ether		mg/kg	3.05 U	1.96 U	4.7 U	4.62 U	2.88 U
SVOC	4-Methylphenol	82000	mg/kg	61	1.96 U	3.57 J	1.23 J	2.88 UJ
SVOC	4-Nitrophenol		mg/kg	50.6 U	32.6 U	78 U	76.6 U	47.9 UJ
SVOC	Acenaphthene	45000	mg/kg	0.23 B	3.5	1.13	0.763	10.7
SVOC	Acenaphthylene	45000	mg/kg	0.0541 B	0.542 B	0.376 B	0.797	2.23
SVOC	Anthracene	230000	mg/kg	0.23 J	2.08	1.24	1.7	9.9
SVOC	Benzo[a]anthracene	21	mg/kg	0.718	3.4	1.34	2.72	10.1
SVOC	Benzo[a]pyrene	2.1	mg/kg	0.251 J	2.56	0.87	3.2	10.3
SVOC	Benzo[b]fluoranthene	21	mg/kg	0.286 J	1.57	0.586 J	2.24	6.17
SVOC	Benzo[g,h,i]perylene		mg/kg	0.12 J	1.17	0.366 J	1.42	4.28
SVOC	Benzo[k]fluoranthene	210	mg/kg	0.138 J	2.12	0.501 J	1.61	5.02
SVOC	bis(2-chloroethoxy)methane	2500	mg/kg	3.05 U	1.96 U	4.7 U	4.62 U	2.88 U
SVOC	bis(2-Chloroethyl)ether	1	mg/kg	3.05 U	1.96 U	4.7 U	4.62 U	2.88 U
SVOC	bis(2-Chloroisopropyl)ether	22	mg/kg	3.05 U	1.96 U	4.7 U	4.62 U	2.88 U
SVOC	bis(2-Ethylhexyl)phthalate	160	mg/kg	12.9	9.24	14.9	11	10.3
SVOC	Butylbenzylphthalate	1200	mg/kg	3.05 U	1.96 U	1.84 J	4.62 U	2.88 U
SVOC	Dibenz[a,h]anthracene	2.1	mg/kg	0.68 U	0.275 J	0.661 U	0.351 J	1.04
SVOC	Diethylphthalate	660000	mg/kg	3.05 U	1.96 U	4.7 U	4.62 U	2.88 U
SVOC	Dimethylphthalate		mg/kg	3.05 U	1.96 U	4.7 U	4.62 U	2.88 U
SVOC	Di-n-butylphthalate	82000	mg/kg	1.94 B	0.79 B	1.87 B	4.62 U	0.317 B
SVOC	Di-n-octylphthalate	8200	mg/kg	6.1 U	3.93 U	9.4 U	9.23 U	5.77 U
SVOC	Fluoranthene	30000	mg/kg	0.584 J	9.37	3.68	6.19	28.6
SVOC	Fluorene	30000	mg/kg	0.483 J	3.54	1.29	2.74	4.66
SVOC	Hexachlorobenzene	0.96	mg/kg	3.05 U	1.96 U	4.7 U	4.62 U	2.88 U
SVOC	Hexachlorobutadiene	5.3	mg/kg	3.05 U	1.96 U	4.7 U	4.62 U	2.88 U
SVOC	Hexachlorocyclopentadiene	7.5	mg/kg	18.3 UJ	11.8 U	28.2 UJ	27.7 UJ	17.3 UJ
SVOC	Hexachloroethane	8	mg/kg	3.05 UJ	1.96 U	4.7 UJ	4.62 U	2.88 U
SVOC	Indeno[1,2,3-c,d]pyrene	21	mg/kg	0.68 U	1.5	0.6 J	1.42	4.08
SVOC	Isophorone	2400	mg/kg	3.05 U	1.96 U	4.7 U	4.62 U	2.88 U
SVOC	Naphthalene	17	mg/kg	1.16	3.09	7.23	12.6	1.19
SVOC	Nitrobenzene	22	mg/kg	3.05 U	1.96 U	4.7 U	4.62 U	2.88 U
SVOC	Pentachlorophenol	4	mg/kg	18.3 U	11.8 U	28.2 U	27.7 U	17.3 UJ
SVOC	Phenanthrene		mg/kg	2.09	11.3	5.27	11.1	4.5
SVOC	Phenol	250000	mg/kg	1.24 J	1.96 U	4.7 U	1.19 J	2.88 UJ
SVOC	Pyrene	23000	mg/kg	0.842	6.94	2.83	5.13	25.2
SVOC	Pyridine	1200	mg/kg	12.2 UJ	7.86 U	18.8 UJ	18.5 U	11.5 U

Table 4 - Supplemental Investigation
Sediment Analytical Results

Parameter Group	Parameter	PAL	Units	Transect 11			Transect 12		Transect 13	Transect 14	
				TM-SD-54	TM-SD-56	TM-SD-57 (D)	TM-SD-59	TM-SD-62 (D)	TM-SD-67 (D)	TM-SD-72 (D)	
				Sample ID	Sample Date	Sample Type	Sample ID	Sample Date	Sample Type	Sample ID	Sample Date
				Discrete	Discrete	Composite	Discrete	Composite	Composite	Composite	
Sample Location and Depth	North 5-6'	South 4-5'	4-6'	North 3-4'	3-4'	0-6.5'	0.5-4.5'				
VOC	1,1,1,2-Tetrachloroethane	8.8	mg/kg	0.17 U	0.21 U		0.0024 U		1.5 UJ		
VOC	1,1,1-Trichloroethane	36000	mg/kg	0.17 U	0.21 U		0.0024 U		1.5 UJ		
VOC	1,1,2,2-Tetrachloroethane	2.7	mg/kg	0.17 U	0.21 U		0.0024 U		1.5 UJ		
VOC	1,1,2-Trichloroethane	5	mg/kg	0.26 U	0.32 U		0.0037 U		2.2 UJ		
VOC	1,1-Dichloroethane	16	mg/kg	0.26 U	0.32 U		0.0025 J		2.2 UJ		
VOC	1,1-Dichloroethene	1000	mg/kg	0.17 U	0.21 U		0.0024 U		1.5 UJ		
VOC	1,2-Dichloroethane	2	mg/kg	0.17 U	0.21 U		0.0024 U		1.5 UJ		
VOC	1,2-Dichloropropane	4.4	mg/kg	0.6 U	0.74 U		0.0086 U		5.1 UJ		
VOC	2-Butanone (MEK)	190000	mg/kg	0.28 J	2.1 U		0.024 U		15 UJ		
VOC	2-Hexanone	1300	mg/kg	1.7 U	2.1 U		0.024 UJ		15 UJ		
VOC	4-Methyl-2-pentanone (MIBK)	56000	mg/kg	1.7 U	2.1 U		0.024 U		15 UJ		
VOC	Acetone	670000	mg/kg	0.83 B	0.96 B		0.033 J		53 UJ		
VOC	Benzene	5.1	mg/kg	0.15 J	0.21 U		0.00034 B		18 J		
VOC	Bromoform	86	mg/kg	0.69 U	0.85 U		0.0098 U		5.8 UJ		
VOC	Carbon disulfide	3500	mg/kg	1.7 U	2.1 U		0.024 UJ		15 UJ		
VOC	Carbon tetrachloride	2.9	mg/kg	0.17 U	0.21 U		0.0024 U		1.5 UJ		
VOC	Chlorobenzene	1300	mg/kg	0.5	0.44		0.0024 U		1.5 UJ		
VOC	Chloroethane	57000	mg/kg	0.34 U	0.42 U		0.0049 U		2.9 UJ		
VOC	Chloroform	1.4	mg/kg	0.26 U	0.32 U		0.0037 U		2.2 UJ		
VOC	cis-1,3-Dichloropropene		mg/kg	0.17 U	0.21 U		0.0024 U		1.5 UJ		
VOC	Ethylbenzene	25	mg/kg	0.073 J	0.21 U		0.0014 J		2.6 J		
VOC	Methylene Chloride	1000	mg/kg	1.7 U	2.1 U		0.024 U		15 UJ		
VOC	Tetrachloroethene	100	mg/kg	0.17 U	0.21 U		0.0024 U		1.5 UJ		
VOC	Toluene	47000	mg/kg	0.52	0.32 U		0.0037 U		0.3 J		
VOC	trans-1,2-Dichloroethene	23000	mg/kg	0.26 U	0.32 U		0.0037 U		2.2 UJ		
VOC	trans-1,3-Dichloropropene		mg/kg	0.17 U	0.21 U		0.0024 U		1.5 UJ		
VOC	Trichloroethene	6	mg/kg	0.17 U	0.21 U		0.0024 U		1.5 UJ		
VOC	Vinyl chloride	1.7	mg/kg	0.34 U	0.42 U		0.0049 U		2.9 UJ		
VOC	Xylenes	2800	mg/kg	3.6	0.39 J		0.0062 J		4.9 J		
Metal	Antimony	470	mg/kg	5.86	5.57		5 J		8.4 J		
Metal	Arsenic	3	mg/kg	19.8	19.8		22		48 J		
Metal	Barium	220000	mg/kg	80.4	92.7		170		274 J		
Metal	Beryllium	2300	mg/kg	0.576 U	0.576 U		0.177 J		0.353 J		
Metal	Cadmium	980	mg/kg	3.46	4.35		8.89		0.206 UJ		
Metal	Chromium	120000	mg/kg	2310	3010		3880		9180 J		
Metal	Chromium VI	6.3	mg/kg	1.6 R	1.6 R		1.9 R		0.65 J-		
Metal	Cobalt	350	mg/kg	10.6	10.6		11.4		16.2 J		
Metal	Copper	47000	mg/kg	298	322		334		438 J		
Metal	Lead	800	mg/kg	224	220		261		444 J		
Metal	Mercury	350	mg/kg	0.978	0.835		0.927		1.63 J		
Metal	Nickel	22000	mg/kg	103	117		167		135 J		
Metal	Selenium	5800	mg/kg	3.84 U	3.84 U		5.36		2.18 J		
Metal	Silver	5800	mg/kg	6.45 J	7.11 J		5.78		10.4 J		
Metal	Thallium	12	mg/kg	0.384 U	0.384 U		0.234		0.362 J		
Metal	Tin	700000	mg/kg	1970	2830		2480		18900 J		
Metal	Vanadium	5800	mg/kg	192 UJ	192 UJ		190		78.5 J		
Metal	Zinc	350000	mg/kg	568	526		1740		1710 J		

Table 4 - Supplemental Investigation
Sediment Analytical Results

Parameter Group	Parameter	PAL	Units	Transect 11			Transect 12		Transect 13	Transect 14	Transect 15	Transect 16
				TM-SD-54	TM-SD-56	TM-SD-57 (D)	TM-SD-59	TM-SD-62 (D)	TM-SD-67 (D)	TM-SD-72 (D)	TM-SD-77 (D)	TM-SD-83 (D)
				Sample Date	Sample Date	Sample Date	Sample Date	Sample Date	Sample Date	Sample Date	Sample Date	Sample Date
				Sample Type	Sample Type	Sample Type	Sample Type	Sample Type	Sample Type	Sample Type	Sample Type	Sample Type
				Discrete	Discrete	Composite	Discrete	Composite	Composite	Composite	Composite	
				North 5-6'	South 4-5'	4-6'	North 3-4'	3-4'	0-6.5'	0.5-4.5'	3-4'	
SVOC	1,2,4-Trichlorobenzene	110	mg/kg			9.18 U		4.25 U	7.82 U	15 UJ	8.02 U	2.59 U
SVOC	1,2-Dichlorobenzene	9300	mg/kg			9.18 U		4.25 U	7.82 U	15 UJ	8.02 U	2.59 U
SVOC	1,3-Dichlorobenzene		mg/kg			9.18 U		4.25 U	7.82 UJ	15 UJ	8.02 UJ	2.59 UJ
SVOC	1,4-Dichlorobenzene	11	mg/kg			9.18 U		4.25 U	7.82 UJ	15 UJ	8.02 UJ	2.59 UJ
SVOC	2,4,5-Trichlorophenol	82000	mg/kg			9.18 U		4.25 U	7.82 U	15 UJ	8.02 U	2.59 U
SVOC	2,4,6-Trichlorophenol	210	mg/kg			9.18 U		4.25 U	7.82 U	15 UJ	8.02 U	2.59 U
SVOC	2,4-Dichlorophenol	2500	mg/kg			9.18 U		4.25 U	7.82 U	15 UJ	8.02 U	2.59 U
SVOC	2,4-Dimethylphenol	16000	mg/kg			9.18 U		4.25 U	7.82 U	15 UJ	8.02 U	2.59 U
SVOC	2,4-Dinitrophenol	1600	mg/kg			55.1 UJ		25.5 U	46.9 U	89.8 UJ	48.1 U	15.5 U
SVOC	2,4-Dinitrotoluene	7.4	mg/kg			9.18 U		4.25 U	7.82 U	15 UJ	8.02 U	2.59 U
SVOC	2,6-Dinitrotoluene	1.5	mg/kg			9.18 U		4.25 U	7.82 U	15 UJ	8.02 U	2.59 U
SVOC	2-Chloronaphthalene	60000	mg/kg			0.752 U		0.656 U	0.838 U	1.54 UJ	0.854 U	0.656 U
SVOC	2-Chlorophenol	5800	mg/kg			9.18 U		4.25 U	7.82 U	15 UJ	8.02 U	2.59 U
SVOC	2-Methylnaphthalene	3000	mg/kg			0.619 B		0.385 B	6.44	9.07 J	5.03	0.909
SVOC	2-Methylphenol	41000	mg/kg			9.18 U		4.25 U	7.82 U	15 UJ	8.02 U	2.59 U
SVOC	2-Nitrophenol		mg/kg			9.18 U		4.25 U	7.82 U	15 UJ	8.02 U	2.59 U
SVOC	3,3'-Dichlorobenzidine	5.1	mg/kg			18.4 U		8.5 U	15.6 U	29.9 UJ	16 U	5.18 U
SVOC	4,6-Dinitro-2-methylphenol	66	mg/kg			55.1 U		25.5 U	46.9 U	89.8 UJ	48.1 U	15.5 U
SVOC	4-Bromophenyl phenyl ether		mg/kg			9.18 U		4.25 U	7.82 U	15 UJ	8.02 U	2.59 U
SVOC	4-Chloro-3-methylphenol	82000	mg/kg			9.18 U		4.25 U	7.82 U	15 UJ	8.02 U	2.59 U
SVOC	4-Chlorophenyl phenyl ether		mg/kg			9.18 U		4.25 U	7.82 U	15 UJ	8.02 U	2.59 U
SVOC	4-Methylphenol	82000	mg/kg			9.18 U		4.25 U	7.82 U	15 UJ	8.02 U	2.59 U
SVOC	4-Nitrophenol		mg/kg			152 U		70.5 U	130 U	248 UJ	133 U	43 U
SVOC	Acenaphthene	45000	mg/kg			1.92		0.408 B	1.06	4.14 J	1.04	0.166 B
SVOC	Acenaphthylene	45000	mg/kg			0.198 J		0.22 B	0.262 B	12 J	0.272 B	0.181 B
SVOC	Anthracene	230000	mg/kg			1.04		0.691	1.42	2.53 J	1.47	0.206 J
SVOC	Benzo[a]anthracene	21	mg/kg			1.58		1.72	1.91	2.41 J	2.12	0.47 J
SVOC	Benzo[a]pyrene	2.1	mg/kg			1.37		0.919	1.07	1.28 J	1.31	0.312 J
SVOC	Benzo[b]fluoranthene	21	mg/kg			1.05		1	1.02	0.935 J	1.29	0.169 J
SVOC	Benzo[g,h,i]perylene		mg/kg			0.48 B		0.472 J	0.602 J	0.609 J	0.741 J	0.204 J
SVOC	Benzo[k]fluoranthene	210	mg/kg			0.477 J		0.621 J	0.902	0.76 J	0.917	0.239 J
SVOC	bis(2-chloroethoxy)methane	2500	mg/kg			9.18 U		4.25 U	7.82 U	15 UJ	8.02 U	2.59 U
SVOC	bis(2-Chloroethyl)ether	1	mg/kg			9.18 U		4.25 U	7.82 U	15 UJ	8.02 U	2.59 U
SVOC	bis(2-Chloroisopropyl)ether	22	mg/kg			9.18 U		4.25 U	7.82 U	15 UJ	8.02 U	2.59 U
SVOC	bis(2-Ethylhexyl)phthalate	160	mg/kg			24.8		13	34.8	55.2 J	19.8	7.82
SVOC	Butylbenzylphthalate	1200	mg/kg			7.88 J		4.25 U	2.49 J	15 UJ	8.02 U	2.59 U
SVOC	Dibenz[a,h]anthracene	2.1	mg/kg			0.752 U		0.656 U	0.172 J	1.54 UJ	0.854 U	0.656 U
SVOC	Diethylphthalate	660000	mg/kg			9.18 U		4.25 U	7.82 U	15 UJ	8.02 U	2.59 U
SVOC	Dimethylphthalate		mg/kg			9.18 U		4.25 U	7.82 U	15 UJ	8.02 U	2.59 U
SVOC	Di-n-butylphthalate	82000	mg/kg			9.18 U		2.68 U	3.77 B	3.11 B	2.16 B	0.819 B
SVOC	Di-n-octylphthalate	8200	mg/kg			18.4 U		8.5 U	15.6 U	29.9 UJ	16 U	5.18 U
SVOC	Fluoranthene	30000	mg/kg			5.16		3.78	4.16	6.08 J	4.73	1.02
SVOC	Fluorene	30000	mg/kg			1.77		1.21	2.75	5.74 J	3.05	0.507 B
SVOC	Hexachlorobenzene	0.96	mg/kg			9.18 U		4.25 U	7.82 U	15 UJ	8.02 U	2.59 U
SVOC	Hexachlorobutadiene	5.3	mg/kg			9.18 U		4.25 U	7.82 U	15 UJ	8.02 U	2.59 U
SVOC	Hexachlorocyclopentadiene	7.5	mg/kg			55.1 UJ		25.5 U	46.9 UJ	89.8 UJ	48.1 UJ	15.5 UJ
SVOC	Hexachloroethane	8	mg/kg			9.18 U		4.25 U	7.82 UJ	15 UJ	8.02 UJ	2.59 UJ
SVOC	Indeno[1,2,3-c,d]pyrene	21	mg/kg			0.262 J		0.712	0.912	1.09 J	1.03	0.436 J
SVOC	Isophorone	2400	mg/kg			9.18 U		4.25 U	7.82 U	15 UJ	8.02 U	2.59 U
SVOC	Naphthalene	17	mg/kg			0.258 B		0.553 J	3.45	137 J	4.13	1.2
SVOC	Nitrobenzene	22	mg/kg			9.18 U		4.25 U	7.82 U	15 UJ	8.02 U	2.59 U
SVOC	Pentachlorophenol	4	mg/kg			55.1 U		25.5 U	46.9 U	89.8 UJ	48.1 U	15.5 U
SVOC	Phenanthrene		mg/kg			7.83		6.05	16.8	7.62 J	17.1	1.41
SVOC	Phenol	250000	mg/kg			9.18 U		4.25 U	7.82 U	15 UJ	8.02 U	2.59 U
SVOC	Pyrene	23000	mg/kg			5.85		2.99	3.93	5.96 J	4.46	0.924
SVOC	Pyridine	1200	mg/kg			36.7 U		17 U	31.3 UJ	59.9 UJ	32.1 UJ	10.4 UJ

Table 4 - Supplemental Investigation
Sediment Analytical Results

Parameter Group	Parameter	Sample Location and Depth													
		PAL	Units	Transect 5		Transect 5-1		Transect 5-2		Transect 5-3		Transect 5-4		Transect 5-5	
				TM-SD-89	TM-SD-90	TM-SD-91	TM-SD-92	TM-SD-93	TM-SD-94	TM-SD-95	TM-SD-96	TM-SD-97	TM-SD-98	TM-SD-99	TM-SD-100
				Discrete	Discrete	Discrete	Discrete	Discrete	Discrete	Discrete	Discrete	Discrete	Discrete	Discrete	Discrete
Sample ID		Sample Date		Sample Type		Center 0-1'	Center 2-3'	Center 0-1'	Center 3-4'	Center 0-1'	Center 3-4'	Center 0-1'	Center 3-4'	Center 0-1'	Center 3-4'
PCB	Aroclor 1016	27	mg/kg	0.574 U	0.591 U	0.551 U	0.553 U	0.542 U	0.47 U	0.662 UJ	0.5 U	0.646 UJ	0.48 UJ	0.519 UJ	0.595 UJ
PCB	Aroclor 1221	0.72	mg/kg	0.574 U	0.591 U	0.551 U	0.553 U	0.542 U	0.47 U	0.662 U	0.5 U	0.646 U	0.48 U	0.519 U	0.595 U
PCB	Aroclor 1232	0.72	mg/kg	0.574 U	0.591 U	0.551 U	0.553 U	0.542 U	0.47 U	0.662 U	0.5 U	0.646 U	0.48 U	0.519 U	0.595 U
PCB	Aroclor 1242	0.97	mg/kg	0.574 U	0.591 U	0.551 U	0.553 U	0.542 U	0.47 U	0.662 U	0.5 U	0.646 U	0.48 U	0.519 U	0.595 U
PCB	Aroclor 1248	0.94	mg/kg	0.574 U	0.591 U	0.551 U	0.553 U	0.542 U	0.47 U	0.662 U	0.5 U	0.646 U	0.48 U	0.519 U	0.595 U
PCB	Aroclor 1254	0.97	mg/kg	0.574 U	0.591 U	0.551 U	0.553 U	0.542 U	0.47 U	0.662 U	0.5 U	0.646 U	0.48 U	0.519 U	0.595 U
PCB	Aroclor 1260	0.99	mg/kg	0.574 U	0.591 U	0.551 U	0.553 U	0.542 U	0.47 U	0.662 UJ	0.5 U	0.646 UJ	0.48 UJ	0.519 UJ	0.595 UJ
PCB	Aroclor 1262		mg/kg	0.574 U	0.591 U	0.551 U	0.553 U	0.542 U	0.47 U	0.662 U	0.5 U	0.646 U	0.48 U	0.519 U	0.595 U
PCB	Aroclor 1268		mg/kg	0.574 U	0.591 U	0.551 U	0.553 U	0.542 U	0.47 U	0.662 U	0.5 U	0.646 U	0.48 U	0.519 U	0.595 U
PCB	PCBs (total)	0.97	mg/kg	0.574 U	0.591 U	0.551 U	0.553 U	0.542 U	0.47 U	0.662 U	0.5 U	0.646 U	0.48 U	0.519 U	0.595 U

Table 4 - Supplemental Investigation
Sediment Analytical Results

				Transect 5-6		Transect 5-7		Transect 5-8		Transect 6-1		Transect 6	
Sample ID	Sample Date	Sample Type	Sample Location and Depth	TM-SD-101	TM-SD-102	TM-SD-103	TM-SD-104	TM-SD-105	TM-SD-106	TM-SD-107	TM-SD-108	TM-SD-109	TM-SD-110
				Discrete	Discrete	Discrete	Discrete	Discrete	Discrete	Discrete	Discrete	Discrete	Discrete
				Center 0-1'	Center 3-4'	Center 0-1'	Center 4-5'	Center 0-1'	Center 4-5'	Center 0-1'	Center 7-8'	Center 0-1'	Center 4-5'
Parameter Group	Parameter	PAL	Units										
PCB	Aroclor 1016	27	mg/kg	0.487 UJ	0.498 UJ	0.542 U	0.533 U	0.765 U	0.49 U	0.788 U	0.516 U	0.537 U	0.704 U
PCB	Aroclor 1221	0.72	mg/kg	0.487 U	0.498 U	0.542 U	0.533 U	0.765 U	0.49 U	0.788 U	0.516 U	0.537 U	0.704 U
PCB	Aroclor 1232	0.72	mg/kg	0.487 U	0.498 U	0.542 UJ	0.533 U	0.765 U	0.49 U	0.788 U	0.516 U	0.537 U	0.704 U
PCB	Aroclor 1242	0.97	mg/kg	0.487 U	0.498 U	0.542 U	0.533 U	0.765 U	0.49 U	0.788 U	0.516 U	0.537 U	0.704 U
PCB	Aroclor 1248	0.94	mg/kg	0.487 U	0.498 U	8.02 J	1.63 J	8.67 J	2.38 J	0.788 UJ	7.5 J	0.537 UJ	6.93 J
PCB	Aroclor 1254	0.97	mg/kg	0.487 U	0.498 U	0.542 U	0.533 U	0.765 U	0.49 U	0.788 U	0.516 U	0.537 U	0.704 U
PCB	Aroclor 1260	0.99	mg/kg	0.487 UJ	0.498 UJ	1.18 J	0.533 U	3.13 J	0.49 U	0.788 U	1.19	0.537 U	6 J
PCB	Aroclor 1262		mg/kg	0.487 U	0.498 U	0.542 U	0.533 U	0.765 U	0.49 U	0.788 U	0.516 U	0.537 U	0.704 U
PCB	Aroclor 1268		mg/kg	0.487 U	0.498 U	3.66 J	0.533 U	0.765 U	0.49 U	0.788 U	0.516 U	0.537 U	0.704 U
PCB	PCBs (total)	0.97	mg/kg	0.487 U	0.498 U	12.9 J	1.63 J	11.8 J	2.38 J	0.788 U	8.69 J	0.537 U	12.9 J

Table 4 - Supplemental Investigation
Sediment Analytical Results

				Transect 6-2		Transect 6-3		Transect 6-4		Transect 6-5		Transect 6-6	
Sample ID	Sample Date	Sample Type	Sample Location and Depth	TM-SD-111	TM-SD-112	TM-SD-113	TM-SD-114	TM-SD-115	TM-SD-116	TM-SD-117	TM-SD-118	TM-SD-119	TM-SD-120
				Discrete	Discrete	Discrete	Discrete	Discrete	Discrete	Discrete	Discrete	Discrete	Discrete
				Center 0-1'	Center 4-5'	Center 0-1'	Center 4-5'	Center 0-1'	Center 4-5'	Center 0-1'	Center 6-7'	Center 0-1'	Center 7-8'
Parameter Group	Parameter	PAL	Units										
PCB	Aroclor 1016	27	mg/kg	0.788 U	0.753 U	0.894 U	0.476 U	0.486 U	0.508 U	0.727 UJ	4.79 UJ	0.925 UJ	5.78 UJ
PCB	Aroclor 1221	0.72	mg/kg	0.788 U	0.753 U	0.894 U	0.476 U	0.486 U	0.508 U	0.727 U	4.79 U	0.925 U	5.78 U
PCB	Aroclor 1232	0.72	mg/kg	0.788 U	0.753 U	0.894 U	0.476 U	0.486 U	0.508 U	0.727 U	4.79 U	0.925 U	5.78 U
PCB	Aroclor 1242	0.97	mg/kg	0.788 U	0.753 U	0.894 U	0.476 U	0.486 U	0.508 U	0.727 U	4.79 U	0.925 U	5.78 U
PCB	Aroclor 1248	0.94	mg/kg	0.788 UJ	5.14 J	0.894 UJ	2.96 J	4.26 J	7.84 J	1.44 J	343 J	0.925 UJ	346 J
PCB	Aroclor 1254	0.97	mg/kg	0.788 U	0.753 U	0.894 U	0.476 U	0.486 U	0.508 U	0.727 U	4.79 U	0.925 U	5.78 U
PCB	Aroclor 1260	0.99	mg/kg	0.788 U	2.02	0.894 U	1.17 J	1.38	5.06 J	0.727 UJ	9.95 J	0.925 UJ	11.3 J
PCB	Aroclor 1262		mg/kg	0.788 U	0.753 U	0.894 U	0.476 U	0.486 U	0.508 U	0.727 U	4.79 U	0.925 U	5.78 U
PCB	Aroclor 1268		mg/kg	0.788 U	0.753 U	0.894 U	0.476 U	0.486 U	0.508 U	0.727 U	4.79 U	0.925 U	5.78 U
PCB	PCBs (total)	0.97	mg/kg	0.788 U	7.16 J	0.894 U	4.13 J	5.64 J	12.9 J	1.44 J	353 J	0.925 UJ	357 J

Table 4 - Supplemental Investigation
Sediment Analytical Results

Parameter Group	Parameter	PAL	Units	Transect 6-7		Transect 6-8		Transect 6-9		Transect 6-10		Transect 7	
				TM-SD-121	TM-SD-122	TM-SD-123	TM-SD-124	TM-SD-125	TM-SD-126	TM-SD-127	TM-SD-128	TM-SD-129	TM-SD-130
				Sample ID	Sample Date	Sample Date	Sample Date	Sample Date	Sample Date	Sample Date	Sample Date	Sample Date	Sample Date
				Sample Type	Sample Type	Sample Type	Sample Type	Sample Type	Sample Type	Sample Type	Sample Type	Sample Type	Sample Type
Sample Location and Depth		Center 0-1'	Center 5.5-6.5'	Center 0-1'	Center 7.5-8.5'	Center 0-1'	Center 5-6'	Center 0-1'	Center 4.5-5.5'	Center 0-1'	Center 4.5-5.5'		
PCB	Aroclor 1016	27	mg/kg	0.779 UJ	0.594 UJ	0.719 UJ	3.81 UJ	0.754 UJ	0.592 UJ	0.586 UJ	0.528 UJ	0.532 UJ	0.571 UJ
PCB	Aroclor 1221	0.72	mg/kg	0.779 U	0.594 U	0.719 U	3.81 U	0.754 U	0.592 U	0.586 U	0.528 U	0.532 U	0.571 U
PCB	Aroclor 1232	0.72	mg/kg	0.779 U	0.594 U	0.719 U	3.81 U	0.754 U	0.592 U	0.586 U	0.528 U	0.532 U	0.571 U
PCB	Aroclor 1242	0.97	mg/kg	0.779 U	0.594 U	0.719 U	3.81 U	0.754 U	0.592 U	0.586 U	0.528 U	0.532 U	0.571 U
PCB	Aroclor 1248	0.94	mg/kg	0.779 UJ	34 J	1.49 J	202 J	1.62 J	5.21 J	0.959 J	3.75 J	0.88 J	2.19 J
PCB	Aroclor 1254	0.97	mg/kg	0.779 U	0.594 U	0.719 U	3.81 U	0.754 U	0.592 U	0.586 U	0.528 U	0.532 U	0.571 U
PCB	Aroclor 1260	0.99	mg/kg	0.779 UJ	2.38 J	0.719 UJ	11.5 J	1.17 J	1.53 J	0.586 UJ	1.81 J	0.532 UJ	1.39 J
PCB	Aroclor 1262		mg/kg	0.779 U	0.594 U	0.719 U	3.81 U	0.754 U	0.592 U	0.586 U	0.528 U	0.532 U	0.571 U
PCB	Aroclor 1268		mg/kg	0.779 U	0.594 U	0.719 U	3.81 U	0.754 U	0.592 U	0.586 U	0.528 U	0.532 U	0.571 U
PCB	PCBs (total)	0.97	mg/kg	0.779 UJ	36.4 J	1.49 J	214 J	2.79 J	6.74 J	0.959 J	5.56 J	0.88 J	3.58 J

Table 5 - Adjusted RSL Comparison

Parameter	Parameter Group	CAS#	# of Results	# of Detections	Max MDL	Unit	Final Flag	Sample ID of Max MDL	Sample Date of Max MDL	Max Detection	Unit	Final Flag	Sample ID of Max Detection	Sample Date of Max Detection	Haz Waste Cancer RSL	Haz Waste Non-Cancer RSL	Max MDL > Haz Waste Cancer RSL?	Max MDL > Haz Waste Non-Cancer RSL?	Max Detection > Haz Waste Cancer RSL?	Max Detection > Haz Waste Non-Cancer RSL?
1,1,1,2-Tetrachloroethane	VOC	630-20-6	68	0	0.46	mg/kg	UJ	TM-SD-72 (D)	26-Oct-16						875	350000	no	no	no	no
1,1,1-Trichloroethane	VOC	71-55-6	68	0	0.594	mg/kg	UJ	TM-SD-64	13-Aug-15							356000	no	no	no	no
1,1,2,2-Tetrachloroethane	VOC	79-34-5	68	0	0.402	mg/kg	UJ	TM-SD-64	13-Aug-15						267	234000	no	no	no	no
1,1,2-Trichloroethane	VOC	79-00-5	68	0	0.44	mg/kg	UJ	TM-SD-72 (D)	26-Oct-16						505	63.1	no	no	no	no
1,1-Dichloroethane	VOC	75-34-3	68	1	0.755	mg/kg	UJ	TM-SD-64	13-Aug-15	0.0025	mg/kg	J	TM-SD-59	26-Oct-16	1550	2340000	no	no	no	no
1,1-Dichloroethene	VOC	75-35-4	68	0	0.824	mg/kg	UJ	TM-SD-64	13-Aug-15							9950	no	no	no	no
1,2,4-Trichlorobenzene	VOC	120-82-1	43	33	499	mg/kg	RR	TM-SD-72 (S)	17-Apr-15	0.46	mg/kg	J	TM-SD-36 (D)	26-Oct-16	11300	2560	no	no	no	no
1,2-Dichlorobenzene	VOC	95-50-1	43	30	686	mg/kg	RR	TM-SD-72 (S)	17-Apr-15							93300	no	no	no	no
1,2-Dichloroethane	VOC	107-06-2	68	0	0.304	mg/kg	UJ	TM-SD-64	13-Aug-15						204	1370	no	no	no	no
1,2-Dichloropropane	VOC	78-87-5	68	0	0.345	mg/kg	UJ	TM-SD-64	13-Aug-15						124	663	no	no	no	no
1,3-Dichlorobenzene	VOC	541-73-1	43	30	585	mg/kg	RR	TM-SD-72 (S)	17-Apr-15								no	no	no	no
1,4-Dichlorobenzene	VOC	106-46-7	43	30	725	mg/kg	RR	TM-SD-72 (S)	17-Apr-15						1140	253000	no	no	no	no
2-Butanone (MEK)	VOC	78-93-3	68	12	0.606	mg/kg	UJ	TM-SD-64	13-Aug-15	1.41	mg/kg	R	TM-SD-74D Dup	14-Aug-15		1930000	no	no	no	no
2-Hexanone	VOC	591-78-6	68	0	0.97	mg/kg	UJ	TM-SD-72 (D)	26-Oct-16							13400	no	no	no	no
4-Methyl-2-pentanone (MIBK)	VOC	108-10-1	68	2	0.488	mg/kg	UJ	TM-SD-64	13-Aug-15	0.246	mg/kg	J	TM-SD-08	14-Apr-15		1390000	no	no	no	no
Acetone	VOC	67-64-1	68	14	1.5	mg/kg	UJ	TM-SD-72 (D)	26-Oct-16	1.03	mg/kg		TM-SD-16	16-Apr-15		6700000	no	no	no	no
Benzene	VOC	71-43-2	68	11	0.391	mg/kg	UJ	TM-SD-64	13-Aug-15	18	mg/kg	J	TM-SD-72 (D)	26-Oct-16	508	4230	no	no	no	no
Bromoform	VOC	75-25-2	68	0	1.18	mg/kg	UJ	TM-SD-64	13-Aug-15						8570	234000	no	no	no	no
Carbon disulfide	VOC	75-15-0	68	1	1.6	mg/kg	UJ	TM-SD-72 (D)	26-Oct-16	0.506	mg/kg		TM-SD-86	20-Apr-15		34700	no	no	no	no
Carbon tetrachloride	VOC	56-23-5	68	0	1.28	mg/kg	UJ	TM-SD-64	13-Aug-15						287	5740	no	no	no	no
Chlorobenzene	VOC	108-90-7	68	14	0.51	mg/kg	UJ	TM-SD-72 (D)	26-Oct-16	8.44	mg/kg		TM-SD-49	20-Apr-15		13300	no	no	no	no
Chloroethane	VOC	75-00-3	68	0	0.534	mg/kg	UJ	TM-SD-64	13-Aug-15							567000	no	no	no	no
Chloroform	VOC	67-66-3	68	0	0.781	mg/kg	UJ	TM-SD-64	13-Aug-15						138	10300	no	no	no	no
cis-1,3-Dichloropropene	VOC	10061-01-5	68	0	0.376	mg/kg	UJ	TM-SD-64	13-Aug-15								no	no	no	no
Ethylbenzene	VOC	100-41-4	68	10	0.29	mg/kg	UJ	TM-SD-64	13-Aug-15	2.6	mg/kg	J	TM-SD-72 (D)	26-Oct-16	2540	205000	no	no	no	no
Methylene Chloride	VOC	75-09-2	68	0	1.6	mg/kg	UJ	TM-SD-72 (D)	26-Oct-16						102000	31600	no	no	no	no
Tetrachloroethene	VOC	127-18-4	68	0	0.841	mg/kg	UJ	TM-SD-64	13-Aug-15						10300	3890	no	no	no	no
Toluene	VOC	108-88-3	68	23	1.26	mg/kg	UJ	TM-SD-27	17-Apr-15	73.1	mg/kg		TM-SD-27	17-Apr-15		468000	no	no	no	no
trans-1,2-Dichloroethene	VOC	156-60-5	68	0	0.844	mg/kg	UJ	TM-SD-64	13-Aug-15							234000	no	no	no	no
trans-1,3-Dichloropropene	VOC	10061-02-6	68	0	0.29	mg/kg	UJ	TM-SD-64	13-Aug-15								no	no	no	no
Trichloroethene	VOC	79-01-6	68	0	0.638	mg/kg	UJ	TM-SD-64	13-Aug-15						604	187	no	no	no	no
Vinyl chloride	VOC	75-01-4	68	0	0.83	mg/kg	UJ	TM-SD-64	13-Aug-15						168	3740	no	no	no	no
Xylenes	VOC	1330-20-7	68	28	0.816	mg/kg	J	TM-SD-64	13-Aug-15	13.8	mg/kg		TM-SD-50	13-Aug-15		24900	no	no	no	no
Antimony	Inorganic	7440-36-0	68	34	10.8	mg/kg	UJ	TM-SD-64	13-Aug-15	39.6	mg/kg	J-	TM-SD-186 Dup	20-Apr-15		4670	no	no	no	no
Arsenic	Inorganic	7440-38-2	68	68	1.7	mg/kg	J	TM-SD-64	13-Aug-15	132	mg/kg	J	TM-SD-64	13-Aug-15	300	4790	no	no	no	no
Barium	Inorganic	7440-39-3	68	68	0.62	mg/kg	J	TM-SD-64	13-Aug-15	783	mg/kg	J	TM-SD-64	13-Aug-15		2170000	no	no	no	no
Beryllium	Inorganic	7440-41-7	68	63	0.167	mg/kg	U	TM-SD-54	20-Nov-16	1.2	mg/kg	J	TM-SD-01	14-Apr-15	695000	22900	no	no	no	no
Beryllium	Inorganic	7440-41-7	68	63	0.167	mg/kg	U	TM-SD-56	20-Nov-16	1.2	mg/kg	J	TM-SD-01	14-Apr-15	695000	22900	no	no	no	no
Cadmium	Inorganic	7440-43-9	68	59	0.3	mg/kg	J	TM-SD-64	13-Aug-15	14.9	mg/kg	J	TM-SD-03	14-Apr-15	926000	9820	no	no	no	no
Chromium	Inorganic	7440-47-3	68	68	2.41	mg/kg	J	TM-SD-72 (D)	26-Oct-16	15000	mg/kg	J	TM-SD-64	13-Aug-15			no	no	no	no
Chromium VI	Inorganic	18540-29-9	68	30	1.8	mg/kg	UJ	TM-SD-64	13-Aug-15	3.1	mg/kg	R	TM-SD-65	20-Apr-15	633	34800	no	no	no	no
Cobalt	Inorganic	7440-48-4	68	68	0.29	mg/kg	J	TM-SD-64	13-Aug-15	386	mg/kg	J-	TM-SD-03	14-Apr-15	185000	3470	no	no	no	no
Copper	Inorganic	7440-50-8	68	68	1.5	mg/kg		TM-SD-186 Dup	20-Apr-15	10800	mg/kg		TM-SD-186 Dup	20-Apr-15		467000	no	no	no	no
Lead	Inorganic	7439-92-1	68	68	1.9	mg/kg	J	TM-SD-64	13-Aug-15	1500	mg/kg	J+	TM-SD-186 Dup	20-Apr-15		8000	no	no	no	no
Mercury	Inorganic	7439-97-6	68	68	0.011	mg/kg	J	TM-SD-64	13-Aug-15	1.63	mg/kg	J	TM-SD-72 (D)	26-Oct-16		3500	no	no	no	no
Nickel	Inorganic	7440-02-0	68	68	1	mg/kg	J	TM-SD-64	13-Aug-15	508	mg/kg		TM-SD-80	14-Aug-15	6410000	224000	no	no	no	no
Selenium	Inorganic	7782-49-2	68	64	2.4	mg/kg	J	TM-SD-64	13-Aug-15	18.2	mg/kg		TM-SD-03	14-Apr-15		58400	no	no	no	no
Silver	Inorganic	7440-22-4	68	68	0.25	mg/kg	J	TM-SD-64	13-Aug-15	20.9	mg/kg	J	TM-SD-64	13-Aug-15		58400	no	no	no	no
Thallium	Inorganic	7440-28-0	68	5	2.1	mg/kg	UJ	TM-SD-64	13-Aug-15	1.8	mg/kg	B	TM-SD-03	14-Apr-15		117	no	no	no	no
Tin	Inorganic	7440-31-5	68	68	5.2	mg/kg	J	TM-SD-64	13-Aug-15	39400	mg/kg	J	TM-SD-64	13-Aug-15		7010000	no	no	no	no
Vanadium	Inorganic	7440-62-2	68	66	72.8	mg/kg	UJ	TM-SD-54	20-Nov-16	980	mg/kg	J	TM-SD-01	14-Apr-15		58300	no	no	no	no
Vanadium	Inorganic	7440-62-2	68	66	72.8	mg/kg	UJ	TM-SD-56	20-Nov-16	980	mg/kg	J	TM-SD-01	14-Apr-15		58300	no	no	no	no
Zinc	Inorganic	7440-66-6	68	68	4.99	mg/kg		TM-SD-54	20-Nov-16	7870	mg/kg		TM-SD-86	20-Apr-15		3500000	no	no	no	no
Zinc	Inorganic	7440-66-6	68	68	4.99	mg/kg		TM-SD-56	20-Nov-16	7870	mg/kg		TM-SD-86	20-Apr-15		3500000	no	no	no	no
Cyanide	Inorganic	57-12-5	31	30	3.6	mg/kg	J	TM-SD-62 (D)	13-Aug-15	18.7	mg/kg	J	TM-SD-62 (D)	13-Aug-15		1470	no	no	no	no
Aroclor 1016	PCB	12674-11-2	73	0	6.02	mg/kg	U	TM-SD-31 (D)	12-Aug-15						2750	513	no	no	no	no
Aroclor 1221	PCB	11104-28-2	73	0	5.78	mg/kg	U	TM-SD-120	26-Oct-16						83.2		no	no	no	no
Aroclor 1232	PCB	11141-16-5	73	0	8.65	mg/kg	U	TM-SD-31 (D)	12-Aug-15						71.9		no	no	no	no
Aroclor 1242	PCB	53469-21-9	73	7	5.78	mg/kg	U	TM-SD-120	26-Oct-16	233	mg/kg		TM-SD-31 (D)	12-Aug-15		95	no	no	YES	no
Aroclor 1248	PCB	12672-29-6	73	23	8.12	mg/kg	U	TM-SD-31 (D)	12-Aug-15	346	mg/kg	J	TM-SD-120	26-Oct-16	95.4		no	no	YES	no
Aroclor 1254	PCB	11097-69-1	73	10	5.78	mg/kg	U	TM-SD-120	26-Oct-16	4.8	mg/kg		TM-SD-36 (D)	13-Aug-15	97.2	147	no	no	no	no
Aroclor 1260	PCB	11096-82-5	42	16	5.78	mg/kg	J	TM-SD-120	26-Oct-16	11.5	mg/kg	J	TM-SD-124	26-Oct-16	99.1		no	no	no	no
Aroclor 1262	PCB	37324-23-5	42	0	5.78	mg/kg	U	TM-SD-120	26-Oct-16								no	no	no	no
Aroclor 1268	PCB	11100-14-4	42	1	5.78	mg/kg	U	TM-SD-120	26-Oct-16	3.66	mg/kg	J	TM-SD-103	27-Oct-16			no	no	no	no
PCBs (total)	PCB	1336-36-3	42	22	5.78	mg/kg	J	TM-SD-120	26-Oct-16	357	mg/kg	J	TM-SD-120	26-Oct-16	94.2		no	no	YES	no

Table 5 - Adjusted RSL Comparison

Parameter	Parameter Group	CAS#	# of Results	# of Detections	Max MDL	Unit	Final Flag	Sample ID of Max MDL	Sample Date of Max MDL	Max Detection	Unit	Final Flag	Sample ID of Max Detection	Sample Date of Max Detection	Haz Waste Cancer RSL	Haz Waste Non-Cancer RSL	Max MDL > Haz Waste Cancer RSL?	Max MDL > Haz Waste Non-Cancer RSL?	Max Detection > Haz Waste Cancer RSL?	Max Detection > Haz Waste Non-Cancer RSL?
2,4,5-Trichlorophenol	SVOC	95-95-4	43	30	795	mg/kg	RR	TM-SD-72 (S)	17-Apr-15							821000	no	no	no	no
2,4,6-Trichlorophenol	SVOC	88-06-2	43	30	569	mg/kg	RR	TM-SD-72 (S)	17-Apr-15						20900	8210	no	no	no	no
2,4-Dichlorophenol	SVOC	120-83-2	43	30	561	mg/kg	RR	TM-SD-72 (S)	17-Apr-15							24600	no	no	no	no
2,4-Dimethylphenol	SVOC	105-67-9	43	34	1010	mg/kg	RR	TM-SD-72 (S)	17-Apr-15	9.09	mg/kg		TM-SD-31 (D)	27-Oct-16		164000	no	no	no	no
2,4-Dinitrophenol	SVOC	51-28-5	43	29	421	mg/kg	RR	TM-SD-72 (S)	17-Apr-15							16400	no	no	no	no
2,4-Dinitrotoluene	SVOC	121-14-2	43	29	483	mg/kg	RR	TM-SD-72 (S)	17-Apr-15						737	16300	no	no	no	no
2,6-Dinitrotoluene	SVOC	606-20-2	43	30	538	mg/kg	RR	TM-SD-72 (S)	17-Apr-15						154	2470	YES	no	no	no
2-Chloronaphthalene	SVOC	91-58-7	42	30	507	mg/kg	RR	TM-SD-72 (S)	17-Apr-15							603000	no	no	no	no
2-Chlorophenol	SVOC	95-57-8	43	30	702	mg/kg	RR	TM-SD-72 (S)	17-Apr-15							58400	no	no	no	no
2-Methylnaphthalene	SVOC	91-57-6	42	41	554	mg/kg	RR	TM-SD-72 (S)	17-Apr-15	9.07	mg/kg	J	TM-SD-72 (D)	26-Oct-16		30100	no	no	no	no
2-Methylphenol	SVOC	95-48-7	43	31	780	mg/kg	RR	TM-SD-72 (S)	17-Apr-15	0.982	mg/kg	J	TM-SD-31 (D)	27-Oct-16		410000	no	no	no	no
2-Nitrophenol	SVOC	88-75-5	43	30	624	mg/kg	RR	TM-SD-72 (S)	17-Apr-15								no	no	no	no
3&4-Methylphenol(m&p Cresol)	SVOC	108-39-4/106-44-5	31	30	1010	mg/kg	RR	TM-SD-72 (S)	17-Apr-15								no	no	no	no
3,3'-Dichlorobenzidine	SVOC	91-94-1	43	31	561	mg/kg	RR	TM-SD-72 (S)	17-Apr-15	0.884	mg/kg	J	TM-SD-41 (D)	26-Oct-16		511	YES	no	no	no
3,3'-Dimethylbenzidine	SVOC	119-93-7	31	30	421	mg/kg	RR	TM-SD-72 (S)	17-Apr-15							20.9	YES	no	no	no
4,6-Dinitro-2-methylphenol	SVOC	534-52-1	43	30	515	mg/kg	RR	TM-SD-72 (S)	17-Apr-15							657	no	no	no	no
4-Bromophenyl phenyl ether	SVOC	101-55-3	43	30	468	mg/kg	RR	TM-SD-72 (S)	17-Apr-15								no	no	no	no
4-Chloro-3-methylphenol	SVOC	59-50-7	43	30	530	mg/kg	RR	TM-SD-72 (S)	17-Apr-15							821000	no	no	no	no
4-Chlorophenyl phenyl ether	SVOC	7005-72-3	43	30	530	mg/kg	RR	TM-SD-72 (S)	17-Apr-15								no	no	no	no
4-Methylphenol	SVOC	106-44-5	12	3	1.96	mg/kg	UJ	TM-SD-72 (D)	26-Oct-16	61	mg/kg		TM-SD-31 (D)	27-Oct-16		821000	no	no	no	no
4-Nitrophenol	SVOC	100-02-7	43	30	460	mg/kg	RR	TM-SD-72 (S)	17-Apr-15								no	no	no	no
Acenaphthene	SVOC	83-32-9	42	41	593	mg/kg	RR	TM-SD-72 (S)	17-Apr-15	10.7	mg/kg		TM-SD-51 (D)	20-Nov-16		452000	no	no	no	no
Acenaphthylene	SVOC	208-96-8	42	41	608	mg/kg	RR	TM-SD-72 (S)	17-Apr-15	12	mg/kg	J	TM-SD-72 (D)	26-Oct-16			no	no	no	no
Anthracene	SVOC	120-12-7	42	41	577	mg/kg	RR	TM-SD-72 (S)	17-Apr-15	9.9	mg/kg		TM-SD-51 (D)	20-Nov-16		2260000	no	no	no	no
Benz[a]anthracene	SVOC	56-55-3	42	41	476	mg/kg	RR	TM-SD-72 (S)	17-Apr-15	10.1	mg/kg		TM-SD-51 (D)	20-Nov-16	2100		no	no	no	no
Benzo[a]pyrene	SVOC	50-32-8	42	41	491	mg/kg	RR	TM-SD-72 (S)	17-Apr-15	10.3	mg/kg		TM-SD-51 (D)	20-Nov-16	210	2200	YES	no	no	no
Benzo[b]fluoranthene	SVOC	205-99-2	42	41	444	mg/kg	RR	TM-SD-72 (S)	17-Apr-15	6.17	mg/kg		TM-SD-51 (D)	20-Nov-16	2100		no	no	no	no
Benzo[g,h,i]perylene	SVOC	191-24-2	42	41	655	mg/kg	RR	TM-SD-72 (S)	17-Apr-15	4.28	mg/kg		TM-SD-51 (D)	20-Nov-16			no	no	no	no
Benzo[k]fluoranthene	SVOC	207-08-9	42	41	507	mg/kg	RR	TM-SD-72 (S)	17-Apr-15	5.02	mg/kg		TM-SD-51 (D)	20-Nov-16	21000		no	no	no	no
bis(2-chloroethoxy)methane	SVOC	111-91-1	43	30	600	mg/kg	RR	TM-SD-72 (S)	17-Apr-15							24600	no	no	no	no
bis(2-Chloroethyl)ether	SVOC	111-44-4	43	30	655	mg/kg	RR	TM-SD-72 (S)	17-Apr-15						103		YES	no	no	no
bis(2-Chloroisopropyl)ether	SVOC	108-60-1	43	30	686	mg/kg	RR	TM-SD-72 (S)	17-Apr-15							467000	no	no	no	no
bis(2-Ethylhexyl)phthalate	SVOC	117-81-7	43	43	702	mg/kg	RR	TM-SD-72 (S)	17-Apr-15	55.2	mg/kg	J	TM-SD-72 (D)	26-Oct-16	16400	164000	no	no	no	no
Butylbenzylphthalate	SVOC	85-68-7	43	33	546	mg/kg	RR	TM-SD-72 (S)	17-Apr-15	7.88	mg/kg	J	TM-SD-57 (D)	20-Nov-16	121000	1640000	no	no	no	no
Dibenz[a,h]anthracene	SVOC	53-70-3	42	34	546	mg/kg	RR	TM-SD-72 (S)	17-Apr-15	1.04	mg/kg		TM-SD-51 (D)	20-Nov-16	210		YES	no	no	no
Diethylphthalate	SVOC	84-66-2	43	30	398	mg/kg	RR	TM-SD-72 (S)	17-Apr-15							6570000	no	no	no	no
Dimethylphthalate	SVOC	131-11-3	43	30	522	mg/kg	RR	TM-SD-72 (S)	17-Apr-15							73900	no	no	no	no
Di-n-butylphthalate	SVOC	84-74-2	43	39	421	mg/kg	RR	TM-SD-72 (S)	17-Apr-15	3.77	mg/kg	B	TM-SD-67 (D)	26-Oct-16		821000	no	no	no	no
Di-n-octylphthalate	SVOC	117-84-0	43	30	538	mg/kg	RR	TM-SD-72 (S)	17-Apr-15							82100	no	no	no	no
Fluoranthene	SVOC	206-44-0	42	41	374	mg/kg	RR	TM-SD-72 (S)	17-Apr-15	28.6	mg/kg		TM-SD-51 (D)	20-Nov-16		301000	no	no	no	no
Fluorene	SVOC	86-73-7	42	41	530	mg/kg	RR	TM-SD-72 (S)	17-Apr-15	5.74	mg/kg	J	TM-SD-72 (D)	26-Oct-16		301000	no	no	no	no
Hexachlorobenzene	SVOC	118-74-1	43	30	327	mg/kg	RR	TM-SD-72 (S)	17-Apr-15						96	9340	YES	no	no	no
Hexachlorobutadiene	SVOC	87-68-3	43	30	444	mg/kg	RR	TM-SD-72 (S)	17-Apr-15						526	11700	no	no	no	no
Hexachlorocyclopentadiene	SVOC	77-47-4	43	30	476	mg/kg	RR	TM-SD-72 (S)	17-Apr-15							74.5	no	YES	no	no
Hexachloroethane	SVOC	67-72-1	43	30	678	mg/kg	RR	TM-SD-72 (S)	17-Apr-15						805	4600	no	no	no	no
Indeno[1,2,3-c,d]pyrene	SVOC	193-39-5	42	40	530	mg/kg	RR	TM-SD-72 (S)	17-Apr-15	4.08	mg/kg		TM-SD-51 (D)	20-Nov-16	2100		no	no	no	no
Isophorone	SVOC	78-59-1	43	30	577	mg/kg	RR	TM-SD-72 (S)	17-Apr-15						242000	1640000	no	no	no	no
Naphthalene	SVOC	91-20-3	42	41	631	mg/kg	RR	TM-SD-72 (S)	17-Apr-15	137	mg/kg	J	TM-SD-72 (D)	26-Oct-16	1670	5850	no	no	no	no
Nitrobenzene	SVOC	98-95-3	43	30	702	mg/kg	RR	TM-SD-72 (S)	17-Apr-15						2240	12900	no	no	no	no
Pentachloroethane	SVOC	76-01-7	31	30	1480	mg/kg	RR	TM-SD-72 (S)	17-Apr-15						3630		no	no	no	no
Pentachlorophenol	SVOC	87-86-5	43	30	468	mg/kg	RR	TM-SD-72 (S)	17-Apr-15						397	28400	YES	no	no	no
Phenanthrene	SVOC	85-01-8	42	41	429	mg/kg	RR	TM-SD-72 (S)	17-Apr-15	17.1	mg/kg		TM-SD-77 (D)	26-Oct-16			no	no	no	no
Phenol	SVOC	108-95-2	43	33	772	mg/kg	RR	TM-SD-72 (S)	17-Apr-15	1.24	mg/kg	J	TM-SD-31 (D)	27-Oct-16		2460000	no	no	no	no
Pyrene	SVOC	129-00-0	42	42	437	mg/kg	RR	TM-SD-72 (S)	17-Apr-15	25.2	mg/kg		TM-SD-51 (D)	20-Nov-16		226000	no	no	no	no
Pyridine	SVOC	110-86-1	43	30	569	mg/kg	RR	TM-SD-72 (S)	17-Apr-15							11700	no	no	no	no

**Table 6 - Tin Mill Canal
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-Dichloroethane	75-34-3	TM-SD-59	0.0025	J	0.0025	0.47	62	1.6	15.5	23,400	no
1,2,4-Trichlorobenzene	120-82-1	TM-SD-36 (D)	0.46	J	0.214	4.99	12	25.0	113	25.6	no
2,4-Dimethylphenol	105-67-9	TM-SD-31 (D)	9.09		0.461	5.50	12	33.3		1,640	no
2-Butanone (MEK)	78-93-3	TM-SD-35	0.486	J	0.0115	2.37	116	19.0		19,300	no
2-Methylnaphthalene	91-57-6	TM-SD-72 (D)	9.07	J	0.385	3.16	11	100.0		301	no
2-Methylphenol	95-48-7	TM-SD-31 (D)	0.982	J	0.982	5.39	12	8.3		4,100	no
3,3'-Dichlorobenzidine	91-94-1	TM-SD-41 (D)	0.884	J	0.884	10.40	12	8.3	5.11		no
4-Methyl-2-pentanone (MIBK)	108-10-1	TM-SD-08	0.246	J	0.119	1.13	62	3.2		13,900	no
4-Methylphenol	106-44-5	TM-SD-31 (D)	61		1.23	10.02	12	25.0		8,210	no
Acenaphthene	83-32-9	TM-SD-51 (D)	10.7		0.166	2.28	11	100.0		4,520	no
Acenaphthylene	208-96-8	TM-SD-72 (D)	12	J	0.0541	1.56	11	100.0			no
Acetone	67-64-1	TM-SD-16	1.03		0.033	1.71	62	19.4		67,000	no
Anthracene	120-12-7	TM-SD-51 (D)	9.9		0.206	2.05	11	100.0		22,600	no
Antimony	7440-36-0	TM-SD-55	19.7		0.63	4.79	62	48.4		46.7	no
Aroclor 1242	53469-21-9	TM-SD-31 (D)	233		1.76	5.16	71	8.5	0.95		YES (C)
Aroclor 1248	12672-29-6	TM-SD-120	346	J	0.125	15.8	71	32.4	0.954		YES (C)
Aroclor 1254	11097-69-1	TM-SD-36 (D)	4.8		0.614	2.00	71	12.7	0.972	1.47	YES (C/NC)
Aroclor 1260	11096-82-5	TM-SD-124	11.5	J	1.17	1.86	42	38.1	0.991		YES (C)
Arsenic	7440-38-2	TM-SD-64	132	J	0.0049	15.4	91	93.4	3	47.9	YES (C/NC)
Barium	7440-39-3	TM-SD-64	783	J	0.1	85.1	91	100.0		21,700	no
Benzene	71-43-2	TM-SD-72 (D)	18	J	0.00034	0.45	120	15.0	5.08	42.3	YES (C)
Benzo[a]anthracene	56-55-3	TM-SD-51 (D)	10.1		0.47	2.59	11	100.0	21		no
Benzo[a]pyrene	50-32-8	TM-SD-51 (D)	10.3		0.251	2.13	11	100.0	2.1	22	YES (C)
Benzo[b]fluoranthene	205-99-2	TM-SD-51 (D)	6.17		0.169	1.48	11	100.0	21		no
Benzo[g,h,i]perylene	191-24-2	TM-SD-51 (D)	4.28		0.12	0.95	11	100.0			no
Benzo[k]fluoranthene	207-08-9	TM-SD-51 (D)	5.02		0.138	1.21	11	100.0	210		no
Beryllium	7440-41-7	TM-SD-01	1.2	J	0.052	0.22	62	91.9	6,950	229	no
bis(2-Ethylhexyl)phthalate	117-81-7	TM-SD-72 (D)	55.2	J	7.82	18.7	12	100.0	164	1,640	no
Butylbenzylphthalate	85-68-7	TM-SD-57 (D)	7.88	J	1.84	4.77	12	25.0	1,210	16,400	no
Cadmium	7440-43-9	TM-SD-03	14.9	J	0.00056	1.49	91	68.1	9,260	98.2	no
Carbon disulfide	75-15-0	TM-SD-86	0.506		0.506	0.73	62	1.6		347	no
Chlorobenzene	108-90-7	TM-SD-49	8.44		0.004	0.87	120	19.2		133	no
Chloroform	67-66-3	TM-SD-22 (D2)	0.006	B	0.0022	0.41	120	15.0	1.38	103	no
Chromium	7440-47-3	TM-SD-64	15,000	J	0.00096	1,147	91	100.0			no
Chromium VI	18540-29-9	TM-SD-72 (D)	0.65	J	0.65	1.67	36	2.8	6.33	348	no
Cobalt	7440-48-4	TM-SD-03	386	J-	6.9	21.4	62	100.0	1,850	34.7	YES (NC)
Copper	7440-50-8	TM-SD-03	1,820		94.5	319	62	100.0		4,670	no
Cyanide	57-12-5	TM-SD-62 (D)	18.7	J	0.44	3.97	29	96.6		14.7	YES (NC)

**Table 6 - Tin Mill Canal
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?
Dibenz[a,h]anthracene	53-70-3	TM-SD-51 (D)	1.04		0.172	0.69	11	36.4	2.1		no
Di-n-butylphthalate	84-74-2	TM-SD-67 (D)	3.77	B	0.317	2.67	12	75.0		8,210	no
Ethylbenzene	100-41-4	TM-SD-72 (D)	2.6	J	0.0014	0.52	62	16.1	25.4	2,050	no
Fluoranthene	206-44-0	TM-SD-51 (D)	28.6		0.584	6.67	11	100.0		3,010	no
Fluorene	86-73-7	TM-SD-72 (D)	5.74	J	0.483	2.52	11	100.0		3,010	no
Indeno[1,2,3-c,d]pyrene	193-39-5	TM-SD-51 (D)	4.08		0.262	1.16	11	90.9	21		no
Lead^	7439-92-1	TM-SD-86	946	J+	0.0039	102	91	84.6		800	YES (NC)
Mercury	7439-97-6	TM-SD-72 (D)	1.63	J	0.02	0.25	91	68.1		4.56	no
Naphthalene	91-20-3	TM-SD-72 (D)	137	J	0.258	15.6	11	100.0	16.7	58.5	YES (C/NC)
Nickel	7440-02-0	TM-SD-80	508		37.2	159	62	100.0	64,100	2,240	no
PCBs (total)*	1336-36-3	TM-SD-120	357	J	0.88	25.6	42	52.4	0.942		YES (C)
Phenanthrene	85-01-8	TM-SD-77 (D)	17.1		1.41	8.28	11	100.0			no
Phenol	108-95-2	TM-SD-31 (D)	1.24	J	1.19	5.13	12	16.7		24,600	no
Pyrene	129-00-0	TM-SD-51 (D)	25.2		0.842	5.91	11	100.0		2,260	no
Selenium	7782-49-2	TM-SD-03	18.2		0.0047	1.74	91	93.4		584	no
Silver	7440-22-4	TM-SD-64	20.9	J	0.001	5.06	91	94.5		584	no
Tetrachloroethene	127-18-4	TM-SD-50	0.0221	J	0.0221	0.26	120	0.8	103	38.9	no
Thallium	7440-28-0	TM-SD-03	1.8	J	0.234	2.41	62	8.1		1.17	YES (NC)
Tin	7440-31-5	TM-SD-64	39,400	J	30.5	2,337	62	100.0		70,100	no
Toluene	108-88-3	TM-SD-27	73.1		0.101	2.57	62	33.9		4,680	no
Vanadium	7440-62-2	TM-SD-01	980	J	8.2	93.1	62	96.8		583	YES (NC)
Xylenes	1330-20-7	TM-SD-50	13.8		0.0062	1.74	62	41.9		249	no
Zinc	7440-66-6	TM-SD-86	7,870		50.8	1,098	62	100.0		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 high.

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

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

COPC = Constituent of Potential Concern

C = Compound was identified as a cancer COPC

NC = Compound was identified as a non-cancer COPC

TR = Target Risk

HI = Hazard Quotient

*PCBs (total) include the sum of all detected arochlor mixtures, including those without regional screening levels (e.g. Arochlor 1262, Arochlor 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 7 - Tin Mill Canal
Pooled Sediments
Assessment of Lead**

Exposure Unit	Arithmetic Mean (mg/kg)
Tin Mill	139.43

Adult Lead Model (ALM) Risk Levels	
Soil Concentration (mg/kg)	Probability of Blood Concentration of 10 ug/dL
2,737 mg/kg	5%
3,417 mg/kg	10%

**Table 8 - Tin Mill Canal
Pooled Sediments
Exposure Point Concentrations**

Parameter	Cancer COPC Screening Level (mg/kg)	Non-Cancer COPC Screening Level (mg/kg)	EPC Type Site-Wide Exposure Unit	EPC Site-Wide Exposure Unit (mg/kg)
Arsenic	3.00E+00	4.80E+01	95% Approximate Gamma UCL	25.8
Cobalt	1.90E+03	3.50E+01	95% Chebyshev (Mean, Sd) UCL	50.2
Cyanide		1.50E+01	95% KM (Chebyshev) UCL	7.12
Thallium		1.20E+00	95% KM (t) UCL	1.26
Vanadium		5.80E+02	95% Chebyshev (Mean, Sd) UCL	177
PCB (total)	9.40E-01		95% GROS Adjusted Gamma UCL	9.37
Benzo[a]pyrene	2.10E+00	2.20E+01	95% Adjusted Gamma UCL	4.48
Naphthalene	1.70E+01	5.90E+01	99% Chebyshev (Mean, Sd) UCL	137
Benzene	5.10E+00	4.20E+01	95% Approximate Gamma KM-UCL	1.85

Bold indicates EPC exceedance of lowest COPC Screening Level

COPC = Constituent of Potential Concern

EPC = Exposure Point Concentration

**Table 9 - Tin Mill Canal
Pooled Sediments
Composite Worker Risk Ratios**

Parameter	Target Organs	Site-Wide Exposure Unit (17.1 ac.)				
		EPC mg/kg	Composite Worker			
			RSLs (mg/kg)		Risk Ratios	
			Cancer	Non-Cancer	Risk	HQ
Arsenic	Cardiovascular; Dermal	25.8	3.00E+00	4.80E+02	8.6E-06	0.05
Cobalt	None Specified	50.2	1.90E+03	3.50E+02	2.6E-08	0.1
Cyanide	None Specified	7.12		1.50E+02		0.05
Thallium	None Specified	1.26		1.20E+01		0.1
Vanadium	Dermal	177		5.80E+03		0.03
PCBs (total)		9.37	9.40E-01		1.0E-05	
Benzo[a]pyrene	Developmental Neurotoxicity	4.48	2.10E+00	2.20E+02	2.1E-06	0.02
Naphthalene	Nervous; Respiratory	137	1.70E+01	5.90E+02	8.1E-06	0.23
Benzene	Immune	1.85	5.10E+00	4.20E+02	3.6E-07	0.004
					3E-05	↓

RSLs were obtained from the EPA Regional Screening Levels at <https://www.epa.gov/risk/regional-screening-levels-rsls-generic-tables-may-2016>

Total HI	Cardiovascular	0
	Dermal	0
	Nervous	0
	Respiratory	0
	Immune	0
	Developmental Neurotoxicity	0
	None Specified	0

APPENDIX A

From: Barbara Brown -MDE- [<mailto:barbara.brown1@maryland.gov>]

Sent: Thursday, February 04, 2016 3:23 PM

To: Dorgan, Doug <ddorgan@wcgrp.com>; James Calenda <jcalenda@enviroanalyticsgroup.com>; RLUTZ@SAUL.COM; Russ Becker <rbecker@enviroanalyticsgroup.com>; Jennifer Sohns -MDE- <jennifer.sohns@maryland.gov>; fan.andrew@epa.gov; Mark Mank -MDE- <mark.mank@maryland.gov>; Prince.Ruth@epa.gov; Hilary Miller -MDE- <hilary.miller@maryland.gov>; pizarro.luis@epa.gov; Kaley Laleker -MDE- <kaley.laleker@maryland.gov>

Subject: Tin Mill Canal Remediation Waste Determination

EPA and MDE have considered your request to make a contained in/out determination on a site-specific basis for the remediation waste to be removed from the Tin Mill Canal, as per EPA's Management of Remediation Waste Under RCRA (EPA530-F-98-026) guidance. MDE has determined that for the Tin Mill Canal remediation waste to be considered to no longer contain hazardous waste, the characterization of the remediation waste must demonstrate that: (1) the waste no longer exhibits any characteristics of a hazardous waste; and (2) the concentrations of constituents are below the USEPA industrial soil Regional Screening Levels (RSLs) set to a hazard index of 10 and a cancer risk of 1×10^{-4} .

If you have any questions regarding this determination please contact either Andrew Fan, EPA or myself.

Barbara Brown
MDE Project Coordinator

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Barbara Brown
MDE-LRP-VCP Section Head
direct 410 537 3212
general 410 537 3493