RESPONSE AND DEVELOPMENT WORK PLAN

COKE POINT CONTAINER TERMINAL
AREA B: PARCELS B10, B11, B12, and B18
TRADEPOINT ATLANTIC
SPARROWS POINT, MARYLAND

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ACRONYMS AND ABBREVIATIONS

µg/dL	microgram(s) per deciliter
µg/L	microgram(s) per liter
ACO	Administrative Consent Order
ALM	Adult Lead Model
amsl	above mean seal level
AOC	area of concern
ARM	ARM Group, LLC
bgs	below ground surface
CHS	Controlled Hazardous Substance
CMS	Corrective Measures Study
COC	Contaminant of Concern
COA	Coke Oven Area
COMAR	Code of Maryland Regulations
COPC	Constituents of Potential Concern
CPA	Coke Point Area
CPLF	Coke Point Landfill
CY	cubic yards
DDC	Description of Current Conditions
DPE	dual-phase extraction
DMCF	Dredged Material Containment Facility
DNAPL	dense non-aqueous phase liquid
DRO	diesel range organics
EFR	enhanced fluid recovery
EP	Environmental Professional
EPC	Exposure Point Concentration
ESA	Environmental Site Assessment
EU	exposure unit(s)
ft	foot (feet)
ft^2	square foot (feet)
GRO	gasoline range organics
HASP	health and safety plan
HCWWTP	Humphrey Creek Wastewater Treatment Plant
HI	hazard index
HQ	hazard quotient
ID	identification
IM	interim measure

LOD	limit of disturbance
LNAPL	light non-aqueous phase liquid
mcy	million cubic yards
MDE	Maryland Department of the Environment
mg/kg	milligram(s) per kilogram
mg/m^3	milligrams per cubic meter
MH-IM	Manufacturing Heavy-Industrial Major
MLLW	mean lower low water
MPE	multi-phase extraction
NAPL	non-aqueous phase liquid
NFA	no further action
No.	number
NPDES	National Pollutant Discharge Elimination System
O&M	operation and maintenance
PAL	project action limit
PAH	polynuclear aromatic hydrocarbons
PCB	polychlorinated biphenyl
PID	photoionization detector
PPE	personal protective equipment
ppm	part(s) per million
QAPP	Quality Assurance Project Plan
RADWP	Response and Development Work Plan
RCRA	Resource Conservation and Recovery Act
REC	recognized environmental condition
RSL	regional screening level
SA	settlement agreement
Site	Coke Point Container Terminal includes portions of Area B: Parcels B10, B11, B12, and B18
SLRA	Screening Level Risk Assessment
SOP	Standard Operating Procedure
SSL	Soil Screening Levels
SVOC	semi-volatile organic compound
SWMU	Solid Waste Management Units
TAL	Target Analyte List
TCL	Target Compound List
THQ	target hazard quotient
TPA	Tradepoint Atlantic

TPH	Total petroleum hydrocarbon
UCL	upper confidence level
USEPA	U.S. Environmental Protection Agency
VISL	Vapor Intrusion Screening Levels
VCP	Voluntary Cleanup Program
VI	vapor intrusion
VOC	volatile organic compound

1.0 INTRODUCTION

ARM Group LLC (ARM), on behalf of Tradepoint Atlantic (TPA), has prepared this Response and Development Work Plan (RADWP) for a portion of the TPA property that has been designated as the Coke Point Container Terminal (Container Terminal) area, which includes portions of Area B: Parcels B10, B11, B12, and B18 (the Site). TPA submitted a letter (dated May 23, 2024; **Appendix A**) requesting an expedited plan review to achieve construction deadlines for the proposed development on this Site. As shown on **Figure 1**, the Container Terminal consists of approximately 168 acres located within the Coke Point Area (CPA) of the approximately 3,100-acre former steel plant property.

The proposed Sparrows Point Container Terminal project includes the construction of a new terminal on the east side of the Coke Point peninsula in the Patapsco River, Baltimore County, Maryland. The proposed facility consists of a ±3,000-feet (ft) wharf with cranes, a container yard, gate complex, intermodal/rail yard, and various support structures. **Figure 2** shows the proposed site plan for the Container Terminal. Development also includes the construction of three support buildings on the northern end of the Site, and installation of utilities including associated water lines, stormwater lines, electric lines, and sanitary sewer lines. The planned development activities will generally include grading, paving of parking areas, roadways, and the container terminal area, installation of utilities, and construction of three small buildings (approximately 7,000 square ft [ft^2], 9,000 ft^2, and 47,000 ft^2). Subsequent site use will involve workers loading and unloading containers from ships, workers in the on-site buildings, and truck drivers entering and leaving the Site with goods.

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

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

An application to enter the full TPA property (3,100 acres) into the MDE Voluntary Cleanup Program (VCP) was submitted to the MDE on June 27, 2014. The property's current and anticipated future use is Tier 3 (Industrial) and plans for the property include demolition and redevelopment over the next several years. The Container Terminal is part of the acreage that remains subject to the requirements of the Multimedia Consent Decree between Bethlehem Steel Corporation, the USEPA, and the MDE (effective October 8, 1997) as documented in correspondence received from the USEPA on September 12, 2014.

In consultation with the MDE, TPA affirms that it desires to accelerate the assessment, remediation, and redevelopment of certain sub-parcels within the larger site due to current market conditions. To that end, the MDE and TPA agree that the Controlled Hazardous Substance (CHS) Act (Section 7-222 of the Environment Article) and the CHS Response Plan (Code of Maryland Regulations [COMAR] 26.14.02) shall serve as the governing statutory and regulatory authority for completing the development activities on the Container Terminal and complement the statutory requirements of the VCP (Section 7-501 of the Environment Article). Upon submission of a RADWP and completion of any remedial activities for the Container Terminal, the MDE shall issue a No Further Action (NFA) Letter upon a recordation of an Environmental Covenant describing any necessary land use controls for the specific sub-parcel. At such time that all the sub-parcels within the larger parcel have completed remedial activities, TPA shall submit to the MDE a request for issuing a Certificate of Completion as well as all pertinent information concerning completion of remedial activities conducted on the parcel. Once the VCP has completed its review of the submitted information it shall issue a Certificate of Completion for the entire parcel described in TPA's VCP application.

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

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

This RADWP provides a site description and history; summary of environmental conditions identified by the 2014 Phase I Environmental Site Assessment (ESA); summary of relevant findings and environmental conditions identified by the relevant Phase II Investigations conducted between 2016 through 2024; a human health Screening Level Risk Assessment (SLRA) conducted for the identified conditions; and any necessary engineering and/or institutional controls to facilitate the planned development and address the impacts and potential human health exposures. These controls include work practices and applicable protocols that are submitted for approval to support the development and use of the Site. Engineering/institutional controls approved and installed for this RADWP shall be described in closure certification documentation submitted to the Agencies demonstrating that exposure pathways on the Site are addressed in a manner that protects public health and the environment.

The RADWP is being submitted to the MDE and the USEPA for review and approval. The MDE and USEPA will hereafter be referred to as the Agencies.

The remainder of Parcels B10, B11, B12, and B18 will be addressed in separate development plans in accordance with the requirements of the ACO, which may include RADWPs, if necessary.

2.0 SITE DESCRIPTION AND HISTORY

2.1 SITE DESCRIPTION

The Container Terminal development project consists of approximately 168 acres comprising portions of Parcels B10, B11, B12, and B18 (**Figure 1**). The development will include significant paving and the completion of three small support buildings (**Figure 2**). The Container Terminal project includes construction of a new wharf along the eastern shoreline of Parcels B10 and B11. This will involve excavation of slag fill and soil to realign the shoreline as well as offshore dredging to form a deepwater channel (with a bottom elevation of 50 ft below mean sea level) in the turning basin. **Figure 2** shows the proposed Container Terminal layout and wharf locations.

The Site is currently zoned Manufacturing Heavy-Industrial Major (MH-IM) and is not occupied. There is no groundwater use on-site or within the surrounding TPA property.

Ground surface elevations at the Site are generally flat and range from approximately 8 to 14 ft above mean sea level (amsl), with the majority of the Site being relatively flat at 12 ft amsl. According to Figure B-2 of the property Stormwater Pollution Prevention Plan (Revision 10 dated July 15, 2023), surface water runoff from the Site flows through gravel filter berms to the east and south, which discharges to the Patapsco River.

2.2 SITE HISTORY

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

Groundcover at the Site is comprised of approximately 94 percent (%) non-native fill materials (i.e., slag) based on the approximate shoreline of the Sparrows Point Peninsula in 1916 (adapted from Figure 2-20 on the Description of Current Conditions (DCC) Report (Rust Environment and Infrastructure, 1998).

The Site is mainly positioned within the CPA of the TPA property, and includes portions of Parcels B10, B11, B12, and B18. The CPA was the location of the former coking operations from the 1940s to the early 1980s. Prior to that time, the CPA did not exist and was open water; slag (a byproduct of iron- and steel-making) was used as an on-site fill material to build up the land surface. Historic aerial photographs show a progression of filling and expansion of operations in the CPA beginning in the 1938 aerial, and continuing to the present CPA configuration (as shown in a 1982 photograph). The navigation charts show the depth of the water surrounding the CPA to

be roughly 15 to 20 ft. Boring logs show the thickness of the slag fill in the CPA to be 20 to 45 ft. Numerous plants, shops, offices, tar storage tanks, and oil tanks were located throughout the Site.

The Phase I Environmental Site Assessment (Weaver Boos Consultants 2014) identified the Coke Oven Area (COA) and Coke Point Landfill (CPLF) as Special Study Areas with numerous Findings and Recognized Environmental Conditions (RECs). Refer to **Section 3.1** for additional information.

The northern portion of the Container Terminal Site (within Parcels B10 and B18) was the historic COA. The COA included the former coke ovens and coke batteries, former coke wharfs, former coal tar processing area, the former benzene / light oil processing area, former coal conveyors, and the former biological wastewater treatment plant. A Phase II investigation was previously completed for Parcel B18, with the results summarized in the *Parcel B18 Phase II Investigation Report* (ARM, 2020b).

The southern portion of the Container Terminal Site (within Parcels B11 and B12) includes historical bulk storage areas and scrap reclamation areas (Parcel B11) and a portion of the CPLF (Parcel B12). A Phase II investigation was previously completed for Parcel B11, with the results summarized in the *Parcel B11 Phase II Investigation Report* (ARM, 2020a). The remainder of this area of the Site (primarily within Parcel B10 and Parcel B12) is covered by the Container Terminal Phase II Investigation, summarized in the *Container Terminal Phase II Investigation Report* (ARM, 2024k).

Groundwater in the vicinity of the CPLF is monitored semi-annually, while groundwater within a portion of the COA is monitored quarterly. The results from each groundwater sampling event are reported to the Agencies within routine monitoring reports.

The COA has several operational interim measure (IM) remediation cells. These operations are discussed in the Coke Oven Annual Interim Measures Progress Reports. As shown on **Figure 3**, a portion of COA IM Cell 6 and the entirety of Cell 4 and Cell 5 are contained within the boundary of the Site. The IMs for these Cells are as follows:

- Cell 4 (Coal Tar Storage Area): Former Dense Non-Aqueous Phase Liquid (DNAPL) Recovery system; excavation also performed for the removal of DNAPL saturated soil;
- Cell 5: Dual Phase Extraction (DPE) system for the treatment of shallow zone groundwater downgradient of Cell 4; and
- Cell 6 (former Benzol Processing Area): Multi-Phase Extraction (MPE) of Light Non-Aqueous Phase Liquid (LNAPL) for the recovery of LNAPL; hot spot excavation and treatment also performed for Non-Aqueous Phase Liquid (NAPL) impacted soil.

Additional details about these cells are included below.

2.2.1 Cell 4

The Former Coal Tar Recovery Area is the source of the Cell 4 impacts, which includes DNAPL in the shallow zone groundwater. The Cell 4 IM included the use of pneumatic skimmer pumps to recover high-naphthalene DNAPL from shallow zone groundwater. The DNAPL recovery pumps were last operated in early January 2023. A cumulative total of approximately 1,604 gallons of DNAPL have been removed since 2015. To address source removal, an excavation plan for the Cell 4 area was submitted to the agencies. All wells and piezometers within the proposed excavation area were then abandoned in accordance with the *DNAPL Excavation Work Plan Area B: Parcel B10 Cell 4* (ARM, 2022b, and subsequent comments received November 15, 2022, with a comment response provided December 13, 2022).

In 2023, excavation activities were conducted at Cell 4 to maximize source (mass) removal and toxicity reduction and reduce impacts on the downgradient groundwater quality. Excavation activities were undertaken between January and June 2023, with backfilling performed in October and November 2023. The excavation was advanced to approximately 22 ft below ground surface (bgs), and 18,165 tons of impacted material (approximately 336,000 pounds of naphthalene) were removed and disposed at Greys Landfill (*Cell 4 DNAPL Excavation Report*, ARM, 2024i). Quarterly groundwater gauging and sampling is ongoing, with results most recently reported in the *Cell 4 Semi-Annual Groundwater Sampling Report* (ARM, 2024f).

2.2.2 Cell 5

Cell 5 consists of the dissolved phase shallow zone naphthalene groundwater impacts related to the Cell 4 DNAPL. The Cell 4 DNAPL had acted as the primary source of naphthalene groundwater impacts on the Site.

Located approximately 350 ft southeast of Cell 4, the Cell 5 IM consists of a DPE system to extract naphthalene-impacted shallow groundwater from an aligned series of groundwater extraction wells. In March 2023, eight of the original DPE wells were replaced with new extraction wells constructed with deeper screen intervals to more effectively target the removal of naphthalene-impacted groundwater. The DPE system operated at 78% runtime during 2023, and removed approximately 263 pounds of Volatile Organic Compounds (VOCs), compared to 179 pounds removed in 2022. The increase in recovery volumes can be attributed to the design of the new extraction wells. Approximately 2,404 pounds of VOCs have been removed since system startup in 2014.

2.2.3 Cell 6

In the western portion of the Site, the Former Benzol Processing Area is the source of the Cell 6 groundwater impacts. The IM for Cell 6 included the use of a LNAPL MPE system with catalytic oxidizer (CatOx) and/or carbon off-gas treatment units. The MPE system removed 7,643 gallons of benzene-impacted NAPL between 2016 and 2023. An additional 16,162 gallons of NAPL were

removed between 2010 and 2019 via manual skimming and bailing. Manual LNAPL recovery was also conducted at well CO173 (8,355 gallons of LNAPL removed between 2020 and 2023) and several test pits/recovery sumps located in the Cell 6 vicinity (approximately 2,443 gallons removed in 2023). Since mid-2010, approximately 34,603 gallons of LNAPL have been recovered from Cell 6 (through the end of 2023). LNAPL recovery is ongoing via CO173 and several test pits / recovery sumps.

The *COA Cell 6 Hotspot Excavation Work Plan* (ARM, 2022a) and the *COA Cell 6 Pilot Test Work Plan, Revision 1* (ARM, 2023b), and respective comment response letters proposed "hotspot" excavation and treatment for the remaining areas that persistently showed LNAPL within the Cell 6 MPE system recovery field while other areas were approaching asymptotic levels. The excavations were performed in order to maximize and expedite source mass removal. A pilot test was performed in November 2023 to assess the use of sodium persulfate and hydrogen peroxide to reduce the benzene concentrations in LNAPL-impacted soils, with results presented in the *COA Cell 6 Pilot Test Status Update – Revision 1* (ARM, January 9, 2024). An expanded pilot test was conducted in February 2024 to further evaluate hotspot removal/treatment for the residual NAPL within the Cell 6 MPE system recovery field (*Cell 6 Expanded Pilot Test Report (Revision 1),* ARM, 2024k). Full scale removal and treatment was conducted in May and June 2024 and is summarized in the *Cell 6 Final Treatment Report* (ARM, 2024d). A total of 628 cubic yards (CY) of LNAPL impacted material was excavated, treated (if needed based on initial sampling results), and transported to Greys Landfill for disposal.

The downgradient dissolved phase plume associated with the Cell 6 LNAPL flows to the west, northwest, and southwest, and is treated by IMs at Cell 1, Cell 2, and Cell 3 which are located outside of the proposed Site Limit of Disturbance (LOD). NAPL delineation and removal activities are ongoing to the northwest of Cell 6 (outside of the Container Terminal LOD).

3.0 ENVIRONMENTAL SITE ASSESSMENT RESULTS

3.1 PHASE I ENVIRONMENTAL SITE ASSESSMENT RESULTS

A Phase I ESA was completed by Weaver Boos for the entire Sparrows Point property on May 19, 2014. Weaver Boos completed site visits of Sparrows Point from February 19 through 21, 2014, for the purpose of characterizing current conditions at the former steel plant. The Phase I ESA identified particular features across the TPA property which presented potential risks to the environment. These RECs included buildings and process areas where releases of hazardous substances and/or petroleum products potentially may have occurred. The Phase I ESA also relied upon findings identified during a previous visual site inspection conducted in 1991 as part of the Resource Conservation and Recovery Act (RCRA) Facility Assessment (A.T. Kearney, Inc., 1993) for the purpose of identifying Solid Waste Management Units (SWMUs) and Areas of Concern (AOCs) on the property. This visual site inspection is regularly cited in the Description of Current Conditions (DCC) Report (Rust Environment and Infrastructure, 1998).

Weaver Boos' distinction of a REC or Non-REC was based upon the findings of the DCC Report (which was prepared when the features remained on-site in 1998) or on observations of the general area during their site visit. Weaver Boos made the determination to identify a feature as a REC based on historical information, observations during the site visit, and prior knowledge and experience with similar facilities. RECs, Findings, SWMUs, and/or AOCs identified within the Container Terminal development area include Coke Battery #3, the Mechanical Shop Waster Oil Accumulation Area, Tar Storage Tanks, Oil Storage Tanks, and the Coke Point Landfill.

3.2 PHASE II INVESTIGATION RESULTS

Phase II Investigations specific to soil and groundwater conditions were performed for the property area in accordance with the requirements outlined in the ACO as further described in the following agency-approved Phase II Investigation Work Plans:

- Area B: Parcel B11 (ARM, 2020b)
- Area B: Parcel B18 (ARM, 2016)
- Container Terminal (ARM, 2023c)

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

- Area B: Parcel B11 (ARM, 2020a)
- Area B: Parcel B18 (ARM, 2020b)
- Container Terminal (ARM, 2024k)

This RADWP summarizes the relevant soil and groundwater findings from these Phase II Investigations with respect to the proposed development of the Container Terminal.

3.2.1 Soil Investigation Findings

Based on the scope of development for the Container Terminal, 144 soil samples collected from 62 soil sample locations were included in this evaluation. The 62 sample locations are shown on **Figure 3**, and the samples obtained from these borings provided relevant analytical data for discussion of on-site conditions.

Soil samples collected during the Phase II Investigation were analyzed for the Target Compound List (TCL) VOCs, TCL semi-volatile organic compounds (SVOCs) and polynuclear aromatic hydrocarbons (PAHs), total petroleum hydrocarbon (TPH) diesel range organics (DRO) and gasoline range organics (GRO), Oil & Grease, Target Analyte List (TAL) metals, hexavalent chromium, and cyanide. Shallow soil samples (0 to 1 ft bgs) were analyzed for polychlorinated biphenyls (PCBs). The laboratory Certificates of Analysis (including Chains of Custody) and Data Validation Reports are included as electronic attachments.

Soil sample results were screened against the Project Action Limits (PALs) established in the property-wide Quality Assurance Project Plan (QAPP; Revision 4 dated May 31, 2022) or based on other direct agency guidance. Several PALs have been adjusted based on revised toxicity data published by the USEPA (May 2021). **Table 1** and **Table 2** provide summaries of the detected organic compounds and inorganics in the soil samples collected from the soil borings relevant for this Site evaluation. **Figure S1** through **Figure S5** present the soil sample results that exceeded the PALs among these soil borings. PAL exceedances consisted of two VOCs (benzene and ethylbenzene), six SVOCs (benz[a]anthracene, benzo[a]pyrene, benzo[b]fluoranthene, dibenz[a,h]anthracene, indeno[1,2,3-c,d]pyrene, and naphthalene), total PCBs, DRO, Oil & Grease, and six inorganics (arsenic, hexavalent chromium, lead, manganese, thallium, and vanadium).

NAPL was also observed at seven soil boring locations (B11-026-SB, CT-004-SB, CT-006-SB, CT-007-SB, CT-010-SB, CT-017-SB, and CT-018-SB) within the Site. These locations are shown on **Figure S4**.

NAPL was identified in soil boring B11-026-SB and the subsequent B11-026-PZ/MWS during the Parcel B11 Phase II in October 2020; delineation piezometers were installed (refer to Section 3.2.4 for more information).

NAPL was identified in the other six soil borings during the Container Terminal Phase II. NAPL screening piezometers with screened intervals across the water table were installed as CT-007-PZ, CT-010-PZ, and CT-017-PZ. NAPL was not observed in any of the piezometers during the 0-hr, 48-hr, 7-day, or 30-day gauging events, and the piezometers were abandoned on November 30, 2023, with Agency approval. A piezometer was not installed at CT-018-SB because dense NAPL observed in the soil boring was likely associated with Cell 4.

Piezometers were not installed at CT-004-SB and CT-006-SB due to rig refusal, but were addressed subsequently via test pitting. Refer to **Section 3.2.4** for NAPL Delineation and Observations.

3.2.1.1 CT-004-SB Test Pit

In November 2023, a test pit was completed at soil boring location CT-004-SB to identify the presence or absence of NAPL in the subsurface in this area. Test pit CT-004-TP was completed to a depth of 13 ft bgs, with no NAPL initially observed. Four sidewall samples (CT-004-TP-S1, CT-004-TP-S2, CT-004-TP-S3, and CT-004-TP-S4) were collected from the CT-004-TP excavation at 5 ft bgs. Refer to **Tables 1** and **2** for the sidewall sample results. Refer to the *Coke Point Container Terminal Interim Status Update* (ARM, 2024m) for additional details. Stockpiled soil was transported to Greys Landfill for disposal.

Trace NAPL was later identified in the test pit, in April 23, 2024. Refer to **Section 3.2.4**.

3.2.1.2 CT-007-SB Excavation

In November 2023, an excavation was completed at CT-007-SB to remove the PAH- and naphthalene-impacted soil identified at CT-007-SB-3 (3 ft bgs). The final excavation extents were approximately 10 ft by 10 ft by 5 ft deep. No visual impacts were observed in the soil.

Confirmation samples were collected from the four excavation sidewalls (CT-007-TP-S1, CT-007-TP-S2, CT-007-TP-S3, and CT-007-TP-S4, from an approximate depth of 3-ft bgs) and the excavation base (CT-007-TP-B1, from an approximate depth of 5-ft bgs) at the CT-007 excavation. There were still PAL exceedances in soil; however the results are generally one order of magnitude less than the original CT-007-SB-3 sample. Refer to **Tables 1** and **2** for the sidewall sample results. Refer to the *Coke Point Container Terminal Interim Status Update* (ARM, 2024m) for additional details. Stockpiled soil was transported to Greys Landfill for disposal.

3.2.1.3 CT-006-SB Test Pit and Excavation

In November 2023, a test pit was completed at soil boring location CT-006-SB to identify the presence or absence of NAPL in the subsurface in this area. Test pit CT-006-TP was completed to a depth of 12 ft bgs, with NAPL observed at 10 ft bgs. Refer to the *Coke Point Container Terminal Interim Status Update* (ARM, 2024m) for additional details. In February 2024, four sidewall samples (CT-006-TP-S1, CT-006-TP-S2, CT-006-TP-S3, and CT-006-TP-S4) were collected

from the CT-006-SB excavation at 5 ft bgs. In September 2024, additional material was excavated to the north and west (removing sidewall samples CT-006-TP-S1 and CT-006-TP-S4), and three additional sidewall samples were collected (TP-006-West, TP-006-Northwall-East, TP-006-Northwall-East-East). Refer to **Tables 1** and **2** for the sidewall sample results from both excavation rounds. Stockpiled soil was transported to Greys Landfill for disposal.

3.2.2 Groundwater Investigation Findings

3.2.2.1 Phase II Groundwater Investigations

Groundwater conditions were investigated as part of the ongoing evaluation of groundwater in the CPA. A total of 53 shallow monitoring wells provide relevant analytical data for the proposed Container Terminal development project and are shown on **Figure 4** (shallow monitoring wells not sampled due to NAPL are not included in **Figure 4**). Because construction workers will only be potentially exposed to risks associated with shallow groundwater, the reporting and evaluation of intermediate zone monitoring wells are not included in this RADWP.

For groundwater samples related to Phase II Investigations, samples were analyzed for TCL-VOCs, TCL-SVOCs, Target Analyte List metals, hexavalent chromium, total cyanide, TPH-DRO, and TPH-GRO. The laboratory Certificates of Analysis (including Chains of Custody) and Data Validation Reports are included as electronic attachments. There is no permitted use of groundwater on the TPA property; however, groundwater may be encountered in the Container Terminal during some construction tasks. If groundwater is encountered, it will be managed to prevent exposures in accordance with the dewatering requirements outlined in **Section 5.2**. Additionally, vapor intrusion (VI) risks are evaluated in **Section 3.2.3**.

NAPL impacts are present within the Site at Cell 6, Cells 4/5, monitoring well B11-026-MWS and the northern Container Terminal area, as shown on **Figure 5**. **Figure 5** includes NAPL observations in soil borings, test pits, and monitoring wells. Refer to **Section 3.2.4** for additional information on NAPL observations.

The groundwater results were screened against the PALs established in the property-wide QAPP (Revision 4 dated May 31, 2022), or based on other direct agency guidance. Similar to the evaluation of soil data, several PALs have been adjusted based on revised toxicity data published by the USEPA (May 2021). **Table 3** and **Table 4** provide summaries of the detected organic compounds and inorganics in the groundwater samples, and **Figure GW1** through **Figure GW4** present groundwater results that exceeded the PALs. Note that **Table 3** is broken into three parts due to the number of relevant samples. PAL exceedances in the vicinity of the proposed development project consisted of eight VOCs (1,4-dioxane, benzene, bromomethane, chloroform, ethylbenzene, methylene chloride, styrene, and toluene), 10 SVOCs (1,1-biphenyl, bis(2-chloroethyl)ether, 2-methylnaphthalene, benz[a]anthracene, benzo[a]pyrene, benzo[b]fluoranthene, dibenz[a,h]anthracene, indeno[1,2,3-c,d]pyrene, pentachlorophenol, and

naphthalene), DRO, GRO, Oil & Grease, and nine dissolved/total metals (cadmium, hexavalent chromium, chromium, cobalt, iron, lead, manganese, thallium, and vanadium).

3.2.2.2 Groundwater Sampling

Groundwater within the portions of the Site related to Cells 4 and 5 is monitored for BTEX and naphthalene on a quarterly basis. All results are included in the Cove Oven Annual IM Progress Reports. The *Coke Oven 2023 Annual IM Progress Report* (ARM, 2024h) identified variable but generally decreasing concentrations for most of the wells downgradient of Cell 5.

3.2.2.3 Shoreline Monitoring Wells

Shallow monitoring wells located along the eastern shoreline generally have a maximum depth of 25 ft bgs and are screened from 5 to 15 ft bgs or 5 to 25 ft bgs. Ground surface elevations for the shallow monitoring wells range from 10 to 13 ft amsl, with a maximum depth of -12 to -15 ft amsl. There are multiple PAL exceedances for shallow monitoring wells along the eastern shoreline for benzene and naphthalene, with maximum concentrations of benzene of 523 micrograms per liter (µg/L) in CO203-MWS and naphthalene of 21,600 µg/L in CO204-MWS (refer to **Figures GW1 and GW2**).

Based on a review of groundwater and surface water results with respect to surface water screening levels and sediment toxicity, the *Assessment of Current Groundwater to Surface Water Discharges from the Coke Point Area* (ARM, 2018) concluded that the risk to aquatic organisms is diminishing.

The future sediment and pore water receptor will be located at the toe of the concrete capped revetment and the bottom of the new channel (-50 ft mean lower low water [MLLW] and approximately 120 ft off the proposed shoreline). This zone is segregated from the impacted upper water bearing zone by an impervious clay unit that retards the vertical migration of groundwater (refer to the cross section in **Appendix B-4**).

3.2.3 Locations of Potential Concern

Groundwater data were screened to determine whether any sample results exceeded the USEPA Vapor Intrusion Screening Levels for cumulative carcinogenic or non-carcinogenic risks. Refer to **Table 5** for the VI risk evaluation and to **Figure 6** for the locations where VI exceedances were identified. **Figure 6** includes all 53 shallow monitoring wells where groundwater samples were collected. Several individual sample results exceeded the cumulative VI cancer Target Risk screening level of 1E-5 or the non-cancer VI Hazard Index (HI) value of 1. Cancer VI risks were primarily driven by benzene and naphthalene while non-cancer VI hazard was driven by xylenes. VI risks were identified proximate to proposed future building locations; CO05B-PZM is located adjacent to the footprint of a proposed building.

Lead, PCBs, and TPH/Oil & Grease are subject to special requirements as designated by the agencies: lead results above 10,000 milligrams per kilogram (mg/kg) are subject to additional delineation (and possible excavation), PCB results above 50 mg/kg are subject to delineation and excavation, and TPH/Oil & Grease results above 6,200 mg/kg should be evaluated for the potential presence and mobility of NAPL in any future development planning:

- There were no locations where detections of lead exceeded 10,000 mg/kg.
- There were no locations where detections of PCBs exceeded 50 mg/kg.
- There were five locations where detections of TPH/Oil & Grease exceeded 6,200 mg/kg (B11-026-SB, CT-003-SB, CT-004-SB, CT-006-SB, CT-007-SB).

3.2.4 NAPL Observations

NAPL is present in several locations throughout the Site. NAPL observations in the northern portion of the Site are shown on **Figure 7**. The DNAPL at Cell 4 and the LNAPL at Cell 6 were discussed in detail in **Sections 2.2.1** and **2.2.3,** respectively. For both areas, significant NAPL remediation has been conducted with the objective of source (mass) removal and toxicity reduction. Complete details of NAPL delineation and removal activities are provided in *CPA Delineation Final Report* (ARM, 2024b), *Parcel B11 1st Half 2024 Semi-Annual NAPL Update Letter* (ARM, 2024a)), *Container Terminal Interim Status Updates* (ARM, 2024m, 2024i, 2024e), and *COA Summary of Documents and Comment Responses* (ARM, 2024c). However, a brief summary of these activities is included below.

As shown on **Figure S4**, there were six visual observations of NAPL in soil at the Site during the Container Terminal Phase II (CT-004-SB, CT-006-SB, CT-007-SB, CT-010-SB, CT-017-SB, and CT-018-SB). NAPL piezometers were advanced at CT-007-SB, CT-010-SB, CT-017-SB; no NAPL was identified.

Test pits were advanced at CT-004-SB and CT-006-SB for NAPL delineation (refer to **Section 3.2.1**; NAPL was immediately identified in test pit CT-006-TP; initially, no NAPL was identified in test pit CT-004-TP when it was completed on November 28, 2023, however NAPL was subsequently identified in the test pit (first on April 23, 2024). NAPL was detected in several monitoring wells within the proposed development area, with measurable NAPL in B11-026-MWS and CO05D-PZM, and trace / periodic NAPL in CO04-PZM004, CO05B-PZM, CO08A-PZM, CO20-PZM004, and CO212B-PZM.

Multiple phases of NAPL delineation have been conducted, including:

- B11-026-MWS: NAPL originally identified in the B11-026-SB during the Parcel B11 Phase II; NAPL was subsequently identified in B11-026-PZ/MWS in October 2020. NAPL delineation piezometers (B11-026A-PZ, B11-026B-PZ, and B11-026C-PZ) were installed in February 2021; no NAPL has been identified in the delineation piezometers. B11-026-MWS is regularly gauged, with NAPL removal via bailing or absorbent sock as needed.

Source excavation will be performed to remove residual NAPL identified at well B11-026-MWS, and further reduce the potential for NAPL migration. Refer to **Figure 5**.

- CO04-PZM004: NAPL originally identified in 2015. CT-004-SB was advanced in the vicinity and NAPL was observed in the soil boring. Subsequent delineation test pits (including COA-008-TP, COA-009-TP, and COA-018-TP) did not identify NAPL in the test pits. To the east, monitoring well CO05A-PZM did not identify NAPL. Enhanced fluid recovery (EFR) events were conducted at CO04-PZM004 in April and May 2022; NAPL recovery was minimal, and it was determined that the NAPL in the vicinity of CO04-PZM004 is not recoverable / mobile. Passive NAPL removal (bailing, absorbent socks) is being conducted as needed at CO04-PZM004. Refer to **Figure 7**.
- CO05D-PZM: NAPL originally identified in April 2021. Transmissivity testing was conducted in November and December 2021, following the manual skimming field method described in ASTM International standard E2856-13. NAPL transmissivity at CO05D-PZM was calculated to be 0.059 ft^2/day. Based on the Interstate Technology and Regulatory Council guidance, this is below the range for practical active recovery. Trace NAPL was also identified in adjacent well CO05B-PZM in 2021; but it has not been gauged recently. Since 2022, passive NAPL removal (bailing, absorbent socks) is being conducted as needed at CO05D-PZM. Soil boring CT-006-SB was advanced in the vicinity and NAPL was observed in the soil boring. Subsequent delineation test pits identified trace or minor NAPL in multiple test pits (CT-006-SB, COA-019-TP, COA-021-TP, and COA-022-TP). The NAPL at CO05D-PZM is delineated to the east by CT-007-PZ (which was later excavated) and to the north by COA-010-TP. Due to refusal when completing test pit COA-011-TP, delineation to the northeast of CO05D-PZM is provided by soil borings B18-004-SB and B18-075-SB (refer to **Figure 7**).
- CO08A-PZM: NAPL originally identified in April 2021. Maximum NAPL thickness observed in April 2021 (0.08 ft). NAPL gauging conducted since February 2022 has not identified any NAPL; no NAPL removal has been required to date. Refer to **Figure 7** for well location.
- CO20-PZM004: Trace DNAPL was reported in the *Coke Point Pre-Design Investigation Summary Report, Former Coke Oven Area* (Key Environmental, 2015). However, no additional gauging results are available to confirm the observation; the well has since been destroyed. Refer to **Figure 7** for well location.
- CO212B-PZM: DNAPL originally identified in May 2021. DNAPL is at a depth of approximately 20 ft below top of the well casing; it has high viscosity and cannot be removed. Delineation of NAPL observed at CO212B-PZM is provided by monitoring well CO212-MWS to the northwest, CO08B-PZM to the west, soil boring CT-012-SB to the northeast, and CO12-PZM008 to the southeast. Refer to **Figure 7** for well and soil boring locations.
- Cell 6 South: test pits were advanced to determine if NAPL was present between Cell 6 and CO08A-PZM. Excavation COA-007-TP was advanced in August 2022 and significant

NAPL was identified. Between September 7 and June 28, 2023, approximately 705 gallons of NAPL was removed from the open test pit COA-007-TP. In August 2023, a recovery sump was installed in the COA-007-TP test pit. Absorbent socks and EFR events have been used since August 2023 for NAPL removal. Additional test pits have been advanced for NAPL delineation. NAPL was also identified in COA-015-TP and COA-026-TP. However, the NAPL has been delineated to the west (COA-016-TP and COA-020-TP), to the east (COA-017-TP), and to the south by wells containing no NAPL. Refer to **Figure 7**.

The NAPL identified at B11-026-MWS and CO04-PZM006 appears to be limited in extent with minimal NAPL recovery. The DNAPL identified at CO212B-PZM is highly viscous and not mobile. NAPL is no longer observed at CO08A-PZM.

The remaining NAPL identified in the northern portion of the Container Terminal LOD is predominantly in two distinct locations: the Eastern Area NAPL (CO05D-PZM, CT-006-SB/TP area) and the Western Area NAPL (COA-007-TP, to the south of Cell 6). For both areas, NAPL delineation has been completed within the footprint of the Container Terminal LOD. NAPL gauging / removal as needed is ongoing at CO05D-PZM, COA-007-TP, and several test pits. In addition, NAPL delineation and removal activities are ongoing to the northwest of Cell 6 (outside of the Container Terminal LOD) as part of the separate Cell 6 remedial action (refer to **Section 2.2.3**).

NAPL delineation activities and results are discussed in more detail in the following reports:

- *CPA Combined Delineation Interim Report (*ARM, 2023a)
- *Coke Point Container Terminal Interim Status Update* (ARM, 2024m)
- *Coke Point Container Terminal Interim Status Update* (ARM, 2024i)
- *Coke Point Container Terminal Interim Status Update* (ARM, 2024e)
- *CPA Delineation Final Report* (ARM, 2024b)

3.3 OFFSHORE SAMPLING

Multiple rounds of surface water, pore water, and offshore sediment sampling have been conducted throughout the Coke Point Peninsula. Activities and results are included in the following reports:

- *Southeast Area Sediment Assessment, Second Round of Sample Collection* (Weston, 2018): includes offshore sediment sampling, work completed for USEPA;
- *Assessment of Current Groundwater to Surface Water Discharges from the Coke Point Area* (ARM, 2018): Surface water and groundwater sampling;
- *Final Trip Report* (Weston, 2020): includes offshore sediment sampling, work completed for USEPA; and
- *Former Coke Oven Area Interim Measures Supplemental Investigation Report* (ARM, 2019): Groundwater sampling and pore water sampling.

3.3.1 Surface Water Sampling

In May 2018, 15 surface water samples were collected from 5 locations offshore from the Container Terminal area as part of the *Assessment of Current Groundwater to Surface Water Discharges from the Coke Point Area* (ARM, 2018). The *Assessment of Current Groundwater to Surface Water Discharges from the Coke Point Area* (ARM, 2018) concluded that "current discharges of groundwater are not causing any exceedances of Maryland surface water quality standards, nor any impacts to surface water quality that would be expected to adversely affect aquatic organisms or human health". Between March and July 2019, additional surface water sampling was conducted offshore of the CPA (*Former Coke Oven Area Interim Measures Supplemental Investigation Report*, ARM, 2019), including 16 surface water samples collected offshore from Cell 5. Refer to **Appendix B-1** for a comparison of the 2018 and 2019 surface water sampling results with the applicable screening levels for ecological receptors. Surface water screening levels for marine or saltwater aquatic life, and for chronic exposure, were selected. If no marine or saltwater screening level was available, then freshwater screening levels were utilized as a conservative option. For the 2018 surface water sampling results, there was one point of exceedance along the eastern perimeter of the Container Terminal: SW-10 (benzo[a]pyrene, fluoranthene, indeno[1,2,3-c,d]pyrene, and pyrene), located offshore from Cell 5 (refer to the figure in **Appendix B-1**). In 2019, only naphthalene was analyzed in surface water samples as it was determined that naphthalene was the only constituent in groundwater with the potential to impact surface water. There were no naphthalene exceedances along the eastern perimeter of the Container Terminal during the 2019 surface water sampling.

In addition, since the surface water samples were collected, the primary source of Site groundwater impacts (DNAPL in Cell 4, refer to **Section 2.2.1**) has been excavated to further reduce the migration of contaminants in groundwater.

3.3.2 Pore Water Sampling

The *Former Coke Oven Area Interim Measures Supplemental Investigation Report* (ARM, 2019) included pore water sampling conducted offshore of Cell 2, Cell 3, and Cell 5. Where possible, samples were collected from depths of 9-inches and 3-ft below the sediment-water interface. All nine pore water samples collected from seven locations along the shoreline adjacent to Cell 5 were analyzed for naphthalene. The pore water results are compared to surface water screening levels for ecological receptors (marine or saltwater aquatic life, chronic exposure) (refer to **Appendix B-2**). For the sampled parameters, all results were compared to the USEPA guidance on "Developing Sediment Remediation Goals at Superfund Sites Based on Pore Water for the Protection of Benthic Organisms from Direct Toxicity to Non-ionic Organic Contaminants" (USEPA, October 2017). There were multiple exceedances for naphthalene offshore from Cell 5, with a maximum concentration of 9,230 µg/L in CO-074-PW-1 (vs. the pore water screening value of 193.5 µg/L

for naphthalene). Refer to **Appendix B-2** for the tabulated pore water results and for a figure showing the pore water sampling locations.

In addition, since the pore water samples were collected, the primary source of the groundwater impacts (DNAPL in Cell 4) has been excavated to further reduce the migration of contaminants in groundwater. Groundwater monitoring is ongoing downgradient of Cell 4 and Cell 5, with variable but generally decreasing concentrations for most of the wells downgradient of Cell 5.

3.3.3 Sediment Sampling

Offshore sediment sampling was conducted as part of the *Southeast Area Sediment Assessment, Second Round of Sample Collection* (Weston, 2018) and the *Final Trip Report* (Weston, 2020). The *Assessment of Current Groundwater to Surface Water Discharges from the Coke Point Area* (ARM, 2018) compared contaminants of concern (COCs) identified in the 2018 sediment data with those same COCs in groundwater. It concluded that naphthalene was the only constituent in groundwater with the potential to impact pore water in offshore sediments, and that other PAH impacts identified in offshore sediment were related to offshore sources and not site groundwater.

In addition, offshore sediment samples were collected from 24 locations in April and May 2024 as part of the proposed dredging activities. Refer to **Appendix B-3** for the offshore sediment sample locations. Of those 24 locations, discussion of the sediment sample data from three of the locations (DU26, DU27, and DU28) is applicable in this report given their locations offshore from Cell 5. Discrete sediment samples were collected from DU26, DU27, and DU28 from -50 to -52 ft mean lower low water (MLLW) elevation (proposed final bottom of the channel is -50 ft MLLW) in conjunction with dredging related sampling. A total of seven sediment samples from DU26, DU27, and DU28 were analyzed for VOCs, SVOCs, and PAHs. Refer to **Appendix B-3** for the analytical results from these collected sediment samples. For purposes of this RADWP, the deep sediment samples (the -50 to -52 ft MLLW elevation) were compared to applicable ecological criteria, as this depth represents the shallow sediment conditions once the dredging is complete. Results were compared to the USEPA Region 4 Sediment Screening Values for Hazardous Waste Sites, Table 2A for Non-Narcotic Modes of Action (marine) and Table 2B for Narcotic Modes of Action (marine) (Ecological Risk Assessment Supplemental Guidance, March 2018) and the USEPA Region III Biological Assistance Technical Group (BTAG) Marine Screening Benchmarks (July 2006). There were no exceedances of the applicable ecological criteria in the deep sediment samples. In addition, naphthalene was not detected above the quantitation limit in any of the co-located sediment samples from the -50 to -52 ft MLLW elevation. Sediment samples collected to characterize sediment within the proposed new channel confirm that impacted groundwater is not migrating to the -50 ft MLLW elevation.

3.4 GEOTECHNICAL SOIL BORINGS

Between January 10, 2024 and May 23, 2024, 14 soil borings were completed along the proposed future wharf. These soil borings contributed towards the evaluation of geotechnical conditions along the eastern CPA shoreline. **Appendix B-4** shows the locations of the 14 soil borings (with IDs of CT-030-SB, CT-032-SB, CT-034-SB, CT-035-SB, CT-037-SB, CT-038-SB, CT-039-SB, CT-040-SB, CT-041-SB, CT-043-SB, CT-045-SB, CT-046-SB, CT-047-SB, and CT-048-SB). **Appendix B-4** also includes the boring logs, a figure showing the depth to clay based on the 2024 investigation, and a cross section generated from the 2024 soil borings. Slag was encountered from the ground surface to between 13.5 feet bgs (northern end) to 46 feet bgs (southern end). The slag is underlain by sands and silts in some locations, with an underlying clay unit varying between approximately -10 ft AMSL towards the northern end of the proposed Container Terminal to -35 ft AMSL along the southern half of the proposed Container Terminal.

3.5 HUMAN HEALTH SCREENING LEVEL RISK ASSESSMENT

3.5.1 Analysis Process

A human health SLRA has been completed based on the analytical data obtained from the characterization of surface and subsurface soils. The SLRA was conducted to evaluate the existing soil conditions to determine if any response measures are necessary.

The SLRA included the following evaluation process:

Identification of Exposure Units (EUs): The Composite Worker and Construction Worker SLRA was evaluated using three Exposure Units (EU1, EU2, and EU3), each with an area of 54.9 acres. The Site was broken into three equal EUs based on the size. As shown on **Figure 8**, EU1 corresponds with the northern portion of the proposed development area, EU2 corresponds to the central portion, and EU3 corresponds with the southern portion. Note that the EUs only include currently existing land (approximately 165 acres out of the planned 168 acre development) and do not include area that is proposed to be developed but is currently underwater.

Three test pit excavations were completed at soil boring locations CT-004-SB, CT-006-SB, and CT-007-SB to achieve additional risk and toxicity reduction. Soil sample data associated with the original soil borings were removed from the SLRA, including CT-004-SB-1, CT-004-SB-9, CT-004-SB-10, CT-006-SB-1, CT-006-SB-6, CT-006-SB-10, CT-007-SB-1 and CT-007-SB-3. Confirmation samples were taken from the sidewalls and bottom of the excavations. The CT-006 excavation was expanded, so sidewall samples CT-006-TP-S1 and CT-006-TP-S4 were also removed from the SLRA. All excavated samples are included in **Tables 1 and 2**, but marked as excavated.

Table 1 and **Table 2** also include data from all confirmation samples: CT-004-TP-S1, CT-004-TP-S2, CT-004-TP-S3, CT-004-TP-S4, CT-006-TP-S2, CT-006-TP-S3, TP-006-NORTHWALL-EAST, TP-006-NWall-East-East, TP-006-WEST, CT-007-TP-S1, CT-007-TP-S2, CT-007-TP-S3, CT-007-TP-S4, and CT-007-TP-B1. However, not all of the remaining confirmation samples were used in the SLRA to not over-represent the excavation areas. For each excavation area, only the confirmation sample with the maximum COPC results or higher number of maximum COPC results was selected for inclusion in the SLRA: CT-004-TP-S2, TP-006-NWall-East-East, and CT-007-TP-B1 (some maximum concentrations were identified at CT-007-TP-S2, but overall the B1 confirmation sample had more maximum concentrations).

It should be noted that industrial fill including processed slag aggregate sourced from the TPA property will be used within the Site; therefore, regardless of the findings of the Composite Worker baseline SLRA, the Site will be subject to surface engineering controls (i.e., capping) unless separate approvals are received from the Agencies following appropriate laboratory testing of the industrial fill materials.

Identification of Constituents of Potential Concern (COPCs): For the project-specific SLRA, COPC screening was completed assuming a Target Risk of 1E-6 and THQ of 0.1. The initial screening also identified parameters detected at a frequency greater than 5%. Based on that data set, parameters were identified as COPCs if:

- The compound was detected in soil at a frequency of greater than 5%; and
- The maximum detection exceeded the USEPA's Composite Worker Soil Regional Screening Levels (RSLs) (November 2024).

A COPC screening analysis is provided in **Table 6** to identify all compounds above the relevant screening levels.

All aroclor mixtures (e.g., Aroclor 1248 and Aroclor 1260) are taken into account for the reported concentrations of total PCBs. For carcinogenic risks, the Composite Worker carcinogenic RSL for high risk PCBs was utilized for the SLRA calculations. For the non-carcinogenic risks, the Composite Worker RSL for Aroclor 1254 (in the absence of high risk PCBs was utilized for the SLRA calculations

associated with the RBSL The total PCBs concentrations are used to evaluate the carcinogenic risk associated with PCBs.

Exposure Point Concentrations (EPCs): The COPC soil datasets for each EU were divided into surface (0 to 1 ft bgs or adjusted to be between 0 and 1 ft bgs because of stockpiling in EU2), subsurface (greater than 1 ft bgs), and pooled depths (all sample results) for estimation of potential EPCs. Thus, there are three soil datasets associated with

each EU. If there were less than 10 sample results, the maximum detected value was used as the soil EPC. If there were 10 or more sample results in the dataset, then a statistical analysis was performed using the ProUCL software (version 5.1) developed by the USEPA to determine representative reasonable maximum exposure values for the EPC for each constituent. The reasonable maximum exposure value is typically the 95% Upper Confidence Limit (UCL) of the mean. For lead, the arithmetic mean for each depth was calculated for comparison to the Adult Lead Model (ALM)-based values (presented in **Table 7**).

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

For the Construction Worker, site-specific risk-based evaluations were completed using an interactive process for a range of potential exposure frequencies to determine the maximum allowable exposure frequency for each EU that would result in risk ratios equivalent to a cumulative cancer risk of 1E-5 or HI of 1 for the individual target organs. This analysis indicated that the allowable exposure frequency before additional worker protections or more detailed job safety evaluations might be needed is 2 days for EU1, 60 days for EU2, and 55 days for EU3.

There is no potential for direct human exposure to groundwater for a Composite Worker since groundwater is not used on the TPA property (and is not proposed to be utilized). In the event that construction/excavation leads to a potential Construction Worker exposure to groundwater during development, health and safety plans and management procedures shall be followed to limit exposure risk. A complete assessment of groundwater risks to potential receptors is included in the CPA Corrective Measures Study (CMS) (being completed as a separate submittal).

Assessment of Lead: For lead, the arithmetic mean (average) concentrations for surface soils, subsurface soils, and pooled soils for the EUs were compared to the applicable RSL (800 mg/kg) as an initial screening. If the mean concentrations for the EUs were below the applicable RSL, the EU was identified as requiring no further action for lead. If a mean concentration exceeded the RSL, the mean values were compared to calculated ALM

values (ALM Version dated 6/21/2009 updated with the 5/17/2017 OLEM Directive) with inputs of 1.8 for the geometric standard deviation and a blood baseline lead level of 0.6 micrograms lead per deciliter (ug/dL) of blood. The ALM calculation generates a soil lead concentration of 1,050 mg/kg, which represents the concentrations such that there would be no more than a 5% probability that fetuses exposed to lead would exceed a blood lead of 5 µg/dL (*Updated Residential Soil Lead Guidance for CERCLA Sites and RCRA Corrective Action Facilities*, USEPA, January 17, 2024). If the arithmetic mean concentrations for the EUs were both below 1,050 mg/kg, both EUs were identified as requiring no further action for lead. The lead averages are presented for surface, subsurface, and pooled soils in **Table 7**. Neither surface, subsurface, nor pooled soils exceeded an average lead concentration of 800 mg/kg.

Assessment of TPH/Oil & Grease: EPCs were not calculated for TPH/Oil & Grease. Instead, the individual results were compared to the PAL set to a HQ of 1 (6,200 mg/kg). Soil sample locations where the PAL for TPH or Oil & Grease was exceeded include B11-026-SB, CT-003-SB, CT-004-SB, CT-006-SB, and CT-007-SB. In addition, NAPL is present at several locations throughout the Site (refer to **Section 3.2.4**). Contingency measures to address the potential presence of NAPL which could be encountered during construction are addressed in subsequent sections of this RADWP.

Risk Characterization Approach: Generally, if the baseline risk ratio for each non-carcinogenic COPC or cumulative target organ does not exceed 1, and the sum of the risk ratios for the carcinogenic COPCs does not exceed a cumulative cancer risk of 1E-5, then a NFA determination will be recommended. If the baseline estimate of cumulative cancer risk exceeds 1E-5 but is less than or equal to 1E-4, then capping of the EU will be considered to be an acceptable remedy for the Composite Worker. The efficacy of capping for elevated non-cancer hazard will be evaluated in terms of the magnitude of exceedance and other factors such as bioavailability. For the Construction Worker, cumulative cancer risks exceeding 1E-5 (but less than or equal to 1E-4) or HI values exceeding 1 will be mitigated via site-specific health and safety requirements.

It should be noted that industrial fill including processed slag aggregate will be used at the Site; therefore, regardless of the findings of the Composite Worker baseline assessment, the Site will be subject to surface engineering controls (i.e., capping) unless separate approvals are received from the Agencies following appropriate laboratory testing of the industrial fill materials. The goal of the SLRA is therefore to determine whether additional response actions beyond capping may be needed due to current conditions at the Site.

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

remedy. The magnitude of any non-carcinogen HI exceedances and bioavailability of the COPC will also dictate further analysis of site conditions including consideration of toxicity reduction in any proposal for a remedy.

3.5.2 SLRA Results and Risk Characterization

Soil data were divided into three datasets (surface, subsurface, and pooled) for the Container Terminal to evaluate potential exposure scenarios. EPCs were calculated for each soil dataset (i.e., surface, subsurface, and pooled soils) in each EU. ProUCL output tables (with computed UCLs) derived from the data for each COPC in soils are provided as electronic attachments, with computations presented and EPCs calculated for COPCs within each of the datasets. The ProUCL input tables are also included as electronic attachments. The results were evaluated to identify any samples that may require additional assessment or special management based on the risk characterization approach. The calculated EPCs for the surface, subsurface, and pooled exposure scenarios are provided in **Table 8**.

As indicated above, the EPCs for lead are the average (i.e., arithmetic mean) values for each dataset. A lead evaluation spreadsheet, providing the computations to determine lead averages for each dataset, is also included as an electronic attachment. The average and maximum lead concentrations are presented for each dataset in **Table 7**, which indicates that neither surface, subsurface, nor pooled soils exceeded an average lead concentration of 800 mg/kg.

Composite Worker Assessment:

Risk ratios for the estimates of potential EPCs for the Composite Worker baseline scenario prior to the placement of industrial fill at the Site are shown in **Table 9** (surface), **Table 10** (subsurface), and **Table 11** (pooled). The results are summarized in the following table:

Worker Scenario	Exposure Unit	Medium	Hazard Index (>1)	Total Cancer Risk
Composite Worker	EU1 (54.9 acres)	Surface Soil	none	7E-6
		Subsurface Soil	none	9.8E-5
		Pooled Soil	none	6E-5
	EU2 (54.9 acres)	Surface Soil	Dermal = 2	6E-6
		Subsurface Soil	Dermal = 2	6E-6
		Pooled Soil	none	7E-6
	EU3 (54.9 acres)	Surface Soil	Dermal = 2	6E-6
		Subsurface Soil	Dermal = 4	8E-6
		Pooled Soil	Dermal = 2	6E-6

Based on the risk ratios for the Container Terminal, capping is an appropriate remedy to be protective of future Composite Workers for the surface, subsurface, and pooled exposure scenarios. The subsurface and pooled soils exceeded the cancer risk value 1E-5 for EU1, but did not exceed the cancer risk value of 1E-4. Non-carcinogenic HI values exceeded 1 for the dermal

system, driven by thallium. Slag aggregate will be used as the primary fill material and pavement subbase at the Site. Therefore, environmental capping will be required to be protective of future Composite Workers.

Subsurface NAPL within the Site poses an unquantified risk to the potential future Composite Worker. Since potential exposure to NAPL cannot be quantified, it was not included in the risk assessment and the risks presented above may be biased low. However, since there is no potential for direct human exposure to groundwater (as it is not used on the TPA property), that risk is minimal.

Construction Worker Assessment:

Ground intrusive activities which could result in potential Construction Worker exposures are expected to be limited primarily to utility installation tasks performed by specific work crews. Construction Worker risks were evaluated for several different exposure scenarios to determine the maximum exposure frequency for each EU that would result in risk ratios equivalent to a cumulative cancer risk of 1E-5 or HI of 1 for any individual target organ. Risk ratios for the Construction Worker scenario using the selected durations (2 days for EU1, 60 days for EU2, and 55 days for EU3) are shown in **Table 12** (surface), **Table 13** (subsurface), and **Table 14** (pooled). The variables entered for calculation of the site-specific Construction Worker SSLs (EU area, input assumptions, and exposure frequency) are indicated as noted on the tables. The spreadsheet used for computation of the site-specific Construction Worker SSLs is included as **Appendix C**. The results are summarized in the following table:

Worker Scenario	Exposure Unit	Medium	Hazard Index (>1)	Total Cancer Risk
Construction Worker	EU1 (54.9 acres) (2 exposure days)	Surface Soil	none	3E-8
		Subsurface Soil	none	3E-6
		Pooled Soil	none	1E-6
	EU2 (54.9 acres) (60 exposure days)	Surface Soil	none	3E-7
		Subsurface Soil	none	3E-7
		Pooled Soil	none	3E-7
	EU3 (54.9 acres) (55 exposure days)	Surface Soil	none	5E-7
		Subsurface Soil	none	8E-7
		Pooled Soil	none	5E-7

Using the selected exposure durations for EU1, EU2, and EU3 (2 days, 60 days, and 55 days, respectively), the carcinogenic risks were all less than 1E-5, and none of the non-carcinogens caused a cumulative HI to exceed 1 for any target organ system. Based on the selected exposure durations, the risk levels meet the acceptable criteria established by the Agencies and no further protection would be required. However, subsurface NAPL within the Site poses an unquantified risk to the potential future Construction Worker due to potential direct contact exposure during

construction activities. Since potential exposure to NAPL cannot be quantified, it was not included in the risk assessment and the risks presented above may be biased low. This evaluation indicates that additional site-specific health and safety requirements (beyond standard Level D protection) would be required only if the allowable exposure duration of 2 days for EU1, 60 days for EU2, and 55 days for EU3 were to be exceeded for an individual worker.

Development activities will exceed the allowable duration. Construction Worker risks will be mitigated via additional site-specific health and safety requirements to be protective of workers. Upgraded Personal Protective Equipment (PPE) beyond standard Level D protection will be used for the entire scope of intrusive work covered by this RADWP as a protective measure to ensure that there are no unacceptable exposures for Construction Workers during project implementation. The modified Level D PPE requirements which will be applied immediately and throughout this project, including specific PPE details, planning, tracking/supervision, enforcement, and documentation, are outlined in the PPE Standard Operational Procedure provided as **Appendix D**. Additional health and safety controls include conducting air monitoring for organic vapors during ground intrusive works (refer to **Section 5.1.2** of this RADWP and Section 7.1.2 of the Health and Safety Plan [HASP]).

Institutional controls will be established for the protection of future Construction Workers in the event of any future long-term construction projects which could include intrusive activities. The anticipated institutional controls, including notification requirements, health and safety requirements, and materials management requirements, are specified in **Section 5.4**.

3.5.3 Proposed Remedy

The proposed remedy for this Site will include several components, as included below. Please note, this remedy addresses risks to Construction and Composite workers based on the existing Site conditions and proposed development plan. Potential risks to human health from groundwater are being addressed in the CPA CMS under a separate submittal.

- Previously Performed Onsite Source (NAPL) Removal:
    - Cell 4 DNAPL Excavation: approximately 18,165 tons of impacted material (approximately 336,000 pounds of naphthalene) were removed and disposed at Greys Landfill;
    - Cell 5 DPE System: Approximately 2,404 pounds of VOCs have been removed since system startup in 2014;
    - Cell 6 NAPL Removal: Since mid-2010, approximately 34,603 gallons of LNAPL have been recovered from Cell 6 (through the end of 2023) via manual skimming and bailing, the MPE system, CO173, and multiple test pits and recovery sumps;
    - Cell 6 NAPL Excavation and Treatment: approximately 628 CY of LNAPL impacted material was excavated, treated (if needed based on initial sampling results), and transported to Greys Landfill for disposal;

  - NAPL removal activities continue at Cell 6;
- Offsite Source Removal: As part of the wharf development (refer to **Section 4.2.7**), approximately 4.2 million cubic yards (mcy) of material will be dredged from the existing Sparrows Point access channel and turning basin.
  - Excavation of the existing shoreline at a 2.5:1 slope. Landside slag will be screened, with any impacted material segregated pursuant to the Sparrows Point Materials Management Plan;

- Onsite Environmental Capping: the SLRA identified risks to the Composite Workers from onsite soils. TPA will be using industrial fill (including processed slag aggregate) throughout the Site. Therefore, environmental capping (concrete floor slab of building, asphalt pavement, and/or soil cap) is required within the 168-acre development area to mitigate potential Composite Worker risks;
- Offsite Capping: As part of the wharf development (refer to **Section 4.2.7**), the revetment slope will be capped with concrete with a minimum thickness of 5.9-inches. This concrete revetment cap will prevent exposure of aquatic organisms to the underlying subbase, and will minimize groundwater flux to the surface water and further restrict the groundwater flux rate to the offshore environment;
- Sub-Slab Vapor Barrier: a potential risk to Composite Workers was also identified based on the exceedances of the Vapor Intrusion Screening Levels (VISLs) and the presence of NAPL. Installation of sub-slab vapor barriers are proposed for the three buildings to be constructed at the northern edge of the Site. The primary purpose of the proposed vapor barriers is to prevent potential vapors from entering the buildings;
- Site-specific health and safety controls will be implemented to mitigate Construction Worker risks within the Container Terminal. This includes using modified Level D PPE and conducting air monitoring for organic vapors during ground intrusive works (refer to **Section 5.1.2** of this RADWP and Section 7.1.2 of the HASP). The modified Level D PPE requirements will be implemented throughout the project duration in accordance with the PPE Standard Operating Procedure (SOP) provided as **Appendix D**;

- NAPL Impacted Soil Management during development activities:
  - NAPL impacted soil that may be encountered during utility installation will be excavated, segregated, and removed from the site;
  - Low permeability backfill and/or trench plugs will be utilized to prevent preferential NAPL migration that may be encountered along utilities that pass through the areas of NAPL contamination; and

- Institutional controls: to be established for the protection of future Composite and Construction Workers. Long-term property use restrictions, inspection and maintenance of the cap and vapor barriers, indoor air and subslab sampling for completed buildings, and groundwater monitoring will be implemented to ensure that the controls remain effective.

The proposed wharf and revetment will relocate the ecological receptor to the toe of the revetment and bottom of the new channel (-50 ft MLLW and approximately 120 ft off the proposed shoreline). **Appendix B-5** includes a typical cross section of the wharf design, with the approximate locations of current and future pore water and sediment receptor locations.

Monitoring wells near the eastern shoreline indicate that groundwater impacts are limited to the shallow zone, well above the proposed new channel bottom elevation of -50 ft MLLW. The discharge of potentially impacted groundwater will be reduced by the 5.9-inch thick (minimum) concrete cap on the revetment, and groundwater discharge to the offshore ecological receptors is not an exposure pathway of concern, as detailed further in the subsequent sections.

The proposed dredging in the Turning Basin will remove the zone where impacted sediment and pore water samples were previously collected (refer to **Sections 3.3.2** and **3.3.3**). The 2024 sediment samples collected from the -50 to -52 ft MLLW elevation (proposed final bottom of the channel is -50 ft MLLW) will now represent the future sediment receptor, located at the toe of the revetment and bottom of the new channel (-50 ft MLLW and approximately 120 ft off the proposed shoreline) (refer to the cross section in **Appendix B-5**). There were no exceedances of the applicable ecological criteria in the deep sediment samples, indicating that site groundwater impacts are not impacting the sediment at the proposed new channel depth. If groundwater to sediment is not an exposure pathway of concern, then groundwater to pore water is also not an exposure pathway of concern.

As discussed in **Section 3.3.1**, surface water sampling conducted in 2018 and 2019 did not identify any naphthalene (main COC in groundwater at the Site) exceedances of applicable surface water screening levels. In addition, since the surface water samples were collected, the primary source of the groundwater impacts (DNAPL in Cell 4) has been excavated to further reduce the migration of contaminants in groundwater. Groundwater monitoring is ongoing downgradient of Cell 4 and Cell 5, with variable but generally decreasing concentrations for most of the wells downgradient of Cell 5. In addition, the existing clay layer will prevent downward migration and potential groundwater discharge will be mitigated by the 5.9-inch thick (minimum) concrete revetment cap prior to reaching the surface water. The limited groundwater rising through the revetment wall would diffuse and be flushed by wave and tidal action. Therefore, groundwater discharge to surface water is not an exposure pathway of concern.

3.5.4 Evaluation of RCRA Criteria

The proposed VCP capping remedy with vapor barriers, 5.9-inch thick (minimum) concrete revetment cap, onsite source (NAPL) removal, offsite source (impacted sediment) removal via dredging, site-specific health and safety controls, material management, and institutional controls was evaluated for consistency with the RCRA Threshold Criteria and Balancing Criteria. The Threshold Criteria assess the overall protection of human health and the environment, as well as achievement of media cleanup objectives and control of sources of releases at the Site. The

Balancing Criteria assess long-term effectiveness and permanence; reduction of toxicity, mobility or volume; short-term effectiveness; implementability; cost effectiveness; and community and State acceptance.

Threshold Criteria:

Protect Human Health and the Environment: The assessment against this criterion evaluates how the remedy, as a whole, protects and maintains protection of human health and the environment. This criterion is satisfied when response actions are complete. The purpose of this remedy is to provide a protective barrier between human site users and impacted materials, and to protect the environment by preventing surface water from contacting potentially impacted materials in place. The capping and institutional control remedy would eliminate risk to current and future industrial workers by preventing exposure to areas of the Site where processed slag aggregate has been placed or where soil concentrations exceed a cancer risk of 1E-5 or a HI of 1. Groundwater does not present a direct human health hazard since there is no groundwater use on the property. The vapor barriers would eliminate risks to future composite workers by preventing vapor intrusion from impacted groundwater or NAPL into future buildings. Implementation of the proposed use restrictions will address the residual risk and will also protect future workers by eliminating or controlling potential exposure pathways, thus, reducing potential intake and contact of soil/groundwater COPCs by human receptors. The existing clay layer will prevent migration to the new channel bottom and ensure that any groundwater flux will occur within the revetment slope. The concrete revetment cap will prevent exposure of aquatic organisms to the underlying subbase and will also serve to diffuse the remaining discharge of groundwater into surface water. NAPL removal already completed, as well as proposed offshore dredging, will further reduce groundwater concentrations and contaminant flux over time.

Achieve Media Cleanup Objective: The assessment against this criterion describes how the remedy meets the cleanup objective, which is risk reduction, appropriate for the expected current and reasonably anticipated future land use. The NAPL hot spot removals at Cell 4, Cell 6, and multiple test pits and wells have resulted in a significant reduction in source (mass), which also results in a risk reduction. The Cell 5 IM was installed to treat the downgradient (from Cell 4) dissolved phase groundwater plume. The objective is to protect current/future Composite Workers and Construction Workers from potential exposures to COPCs present in soil or groundwater at levels that may result in risks of adverse health effects. Given the controlled access and use restrictions, the proposed remedy (e.g., capping, vapor barriers) will attain soil and groundwater objectives. The activity use restrictions will eliminate current and future unacceptable exposures to both soil and groundwater.

Control the Source of Releases: In its RCRA Corrective Action proposed remedies, USEPA seeks to eliminate or reduce further releases of hazardous wastes or hazardous constituents that may pose a threat to human health and the environment. Controlling the sources of contamination relates to the ability of the proposed remedy to reduce or eliminate, to the maximum extent practicable, further releases. The NAPL hot spot removals at Cell 4, Cell 6, and multiple test pits and wells have resulted in a significant reduction in source (mass). The dredging activities will result in removal of impacted sediment in the Turning Basin, providing additional offshore source removal (and prevent transfer of contaminants from impacted sediment to pore water and surface water). The control measures included in the proposed remedy, such as Materials Management Plan requirements and groundwater use restrictions, provide a mechanism to control and reduce potential further releases of COPCs. This is achieved by eliminating the potential for groundwater use and requiring proper planning for intrusive activities.

Balancing Criteria:

Long-Term Reliability and Effectiveness: The assessment against this criterion evaluates the long-term effectiveness of the remedy in maintaining protection of human health and the environment after the response objectives have been met. The primary focus of this criterion is the extent and effectiveness of the controls that may be required to manage the risk posed by slag aggregate, treatment residuals, and/or untreated wastes. The proposed capping and vapor control measures have been proven to be effective in the long-term at similar sites with similar conditions. The capping remedy (including onshore environmental capping and the 5.9-inch thick (minimum) concrete revetment cap) will permanently contain the slag aggregate and other potentially contaminated media in place. The vapor barriers will prevent vapor intrusion from impacted groundwater into future buildings. Regular inspections will be performed of the environmental cap and the vapor barriers, pursuant to the Institutional Control Operations and Maintenance Plan (O&M Plan).

Institutional controls will be implemented to protect future Composite and Construction Workers against inadvertent contact with potentially impacted media. The anticipated institutional controls are specified in **Section 5.4**. The proposed remedy will maintain protection of human health and the environment over time by controlling exposures to the hazardous constituents potentially remaining in slag aggregate or existing on-site media. The long-term effectiveness is high, as use restrictions are readily implementable and easily maintained. Given the historical, heavily industrial uses of the Site and the surrounding area, including the presence of landfills, land and groundwater use restrictions are expected to continue in the long term.

Reduction of Toxicity, Mobility, or Volume of Waste: The assessment against this criterion evaluates the anticipated performance of specific technologies that a remedial

action alternative may employ. There has already been a significant reduction in toxicity, mobility, and volume of waste via the Cell 4, Cell 5, and Cell 6 IMs, as well as NAPL removal from multiple test pits and wells. Treatment at Cell 5 and Cell 6 is ongoing; this will result in a further reduction in the toxicity, mobility, and volume of waste. NAPL (if present) will continue to be removed from test pits and monitoring wells via bailer, absorbent socks, and/or EFR events, which will reduce the overall volume of NAPL in the subsurface. Impacted soil encountered during installation of utilities and construction of the revetment slope will be excavated and removed from the site, further reducing the mass of NAPL and contaminants in impacted soils. The removal of impacted sediment in the Turning Basin associated with the dredging activities will result in a further reduction in the toxicity, mobility, and volume of waste. The planned cap and vapor migration controls (such as the use of low permeability backfill and/or trench plugs) will help reduce potential contaminant mobility by reducing infiltration through the unsaturated zone, preventing migration along utility corridors, and preventing the generation of dust. Thus, the mobility of contaminants will be further reduced by the capping and containment portions of the remedy.

Short-term Effectiveness: The assessment against this criterion examines how well the proposed remedy protects human health and the environment during the construction and implementation until response objectives have been met. This criterion also includes an estimate of the time required to achieve protection for either the entire site or individual elements associated with specific site areas or threats. This cap and vapor barriers can be quickly implemented with minimal short-term exposure risks; any potential risks to the Construction Worker are mitigated by executing the modified Level D PPE requirements outlined in **Appendix D**. The short-term risk to site workers following these upgraded health and safety measures during implementation of the remedy will be low, leading to a high level of short-term effectiveness for protection of future site users and the environment. The NAPL removal will increase short-term risks to onsite workers due to potential exposure to the contaminated soils. Any such short-term exposure risks would be mitigated through the implementation of site-specific health and safety controls to be executed by Occupational Safety and Health Administration Hazardous Waste Operations and Emergency Response trained workers.

Short-term effectiveness in protecting on-site workers and the environment will be achieved through establishing appropriate management, construction, health and safety, and security procedures. Proper water management protocols will be implemented to prevent discharges offsite. Security will be used to maintain controlled access during construction.

Implementability: The assessment against this criterion evaluates the technical and administrative feasibility, including the availability of trained and experienced personnel,

materials, and equipment. Technical feasibility includes the ability to construct and operate the technology, the reliability of the technology, and the ability to effectively monitor the technology. Administrative feasibility includes the capability of obtaining permits, meeting permit requirements, and coordinating activities of governmental agencies. The proposed VCP capping remedy with vapor barriers, 5.9-inch thick (minimum) concrete revetment cap, hot spot NAPL removal, dredging, and institutional controls will use readily available, typically acceptable, and proven technologies.

Cost Effectiveness: The assessment against this criterion evaluates the capital costs, annual O&M costs, and the net present value of this remedy relative to alternatives. The capping remedy remedial costs would be incurred as part of the proposed site development, regardless of the findings of the SLRA. The costs associated with installation of the vapor barriers needed to mitigate vapor intrusion risks within the three proposed buildings will be minimal in comparison to the overall cost associated with site development (which includes the dredging and installation of the revetment cap).

State Support / Agency Acceptance: The Agencies have been involved throughout the Site investigation process. The proposed use restrictions included in the proposed remedy are generally recognized as commonly employed measures for long-term stewardship. This alternative is expected to be acceptable because it meets the remedial action objectives and can be implemented in a manner consistent with all anticipated regulatory and permitting requirements.

A VCP capping remedy with vapor barriers, 5.9-inch thick (minimum) concrete revetment cap, onsite source (NAPL) removal, offsite source (impacted sediment) removal via dredging, site-specific health and safety controls, material management, and institutional controls would satisfy the Comprehensive Environmental Response, Compensation, and Liability Act Threshold Criteria and the Balancing Criteria and would do so in a manner that ensures reliable implementation and effectiveness. The remedy is cost-effective and consistent with the proposed development plan for the Site.

4.0 PROPOSED SITE DEVELOPMENT PLAN

TPA is proposing the construction of a Container Terminal. The proposed development will include permanent improvements on approximately 168 acres located within Parcels B10, B11, B12, and B18. The proposed future use of the Container Terminal is Tier 3 – Industrial. The remainder of Parcel B10, Parcels B10, B11, B12, and B18 will be addressed in separate development plans in accordance with the requirements of the ACO that will include RADWPs, if necessary.

The proposed Sparrows Point Container Terminal project includes the construction of a new terminal on the east side of the Coke Point peninsula in the Patapsco River, Baltimore County, Maryland. The proposed facility consists of a ±3,000-ft (ft) wharf with cranes, a container yard, gate complex, Intermodal/Rail Yard, and various support structures. To provide container vessel access to the wharf, the project also includes dredging and placement of an approximate 4.2 mcy of dredged material for the required widening and deepening of the existing Sparrows Point access channel and turning basin.

The proposed remedy for this Site includes the planned development activities and will addresses risks to Construction and Composite workers as well as offsite receptors, including:

- Onsite Source (NAPL) Removal:
  - To reduce potential risks to future construction workers (via direct contact)
  - To reduce potential risks to future composite workers (via vapor inhalation in buildings)
  - To reduce potential leaching to a dissolved phase in groundwater
- Offsite Source Removal:
  - To reduce risks to offshore ecological receptors
- Onsite Environmental Capping
  - To protect future Composite Workers from potential contact with surface soils (based on the SLRA results) or slag aggregate (to be used as fill material and pavement subbase)
  - To reduce infiltration and leaching of potential impacts (from NAPL or soil) to groundwater
- Offsite Capping (along the revetment)
  - To protect offshore ecological receptors from onsite groundwater impacts
- Sub-Slab Vapor Barrier below three buildings:
  - To mitigate potential risk to Composite Workers based on VISL exceedances and the presence of NAPL.
- Site-specific Health and Safety Controls / Material Management
  - To mitigate Construction Worker risks from contact with surface and subsurface soils and groundwater during construction activities

- Institutional controls:
  - Groundwater Use Restriction to protect future Composite Workers from potential direct exposures
  - Long-term property use restrictions to protect future Composite and Construction Workers
  - Inspection and maintenance of the environmental cap and vapor barriers to ensure that the controls remain effective.

The development plan for the Site is shown on **Figure 2**. Detailed development plan drawings are included as **Appendix E**. The process of constructing the proposed Container Terminal will involve the tasks listed below. Documentation of the outlined tasks and procedures will be provided in a Container Terminal Development Completion Report.

4.1 RESPONSE PHASE – GROUNDWATER NETWORK MODIFICATION

Numerous monitoring wells are located throughout the Site. A subset of these wells will be retained for long term groundwater monitoring which will be established as part of the CPA CMS. Any wells which will need to be abandoned as part of the Container Terminal development will be abandoned in accordance with COMAR 26.04.04.34 through 36. A monitoring well abandonment letter (or similar) will be submitted to the Agencies preceding abandonment of any existing monitoring wells within the Site. Abandonment records will be provided with the Container Terminal Development Completion Report following the conclusion of all development activities at the Site. It is understood that the agencies may require the installation of additional permanent monitoring wells in the future following site development.

4.2 DEVELOPMENT PHASE

4.2.1 Erosion and Sediment Control Installation

Erosion and sediment controls will be installed prior to the commencement of grading work in accordance with the requirements of the 2011 Maryland Standards and Specifications for Soil Erosion and Sediment Control. Any soils which are disturbed during the installation of erosion and sediment controls will be placed on-site below the cap.

4.2.2 Grading and Site Preparation

Grading activities including both cut and fill will occur within the Container Terminal boundary. Any material that is not suitable for compaction will be excavated and replaced with subbase material, although it is not anticipated that poor soils will be encountered. Borrow materials will be obtained from Agency-approved sources and will be documented prior to transport to the Site. Processed slag aggregate sourced from the TPA property will be used as fill within the Site. Other materials approved by the Agencies for industrial use may also be used as fill, but the placement of materials other than approved clean fill will necessitate that the Site will be subject to surface

engineering controls (i.e., capping). Fill sources shall be free of organic material, frozen material, or other deleterious material. In the case that there is excess material (not anticipated), the spoils will be stockpiled at a suitable location and dealt with in accordance with the Materials Management Plan for the Sparrows Point Facility (Jenkins Environmental, Inc., August 17, 2021). This work will be coordinated with the Agencies accordingly. No excess material will leave the 3,100-acre property without prior approval from Agencies.

4.2.3 Installation of Structures and Underground Utilities

The underground utility infrastructure associated with the development of the Container Terminal will be installed as shown on **Figure U1**. Soils relocated or removed during construction or utility trenches may be replaced on-site below the cap based on field observations by the Environmental Professional (EP). Additional protocols for soil monitoring during the installation of utilities at the Site are provided in **Section 5.1.2**. Any water removed will be sampled (if necessary) as described in **Section 5.2** and (if acceptable) may be sent to the on-site Humphrey Creek Wastewater Treatment Plant (HCWWTP). Other potential options for water disposal include discharge to the Baltimore County sanitary sewer system, discharge locally in accordance with the requirements of Special Condition AF, Section 2, Mobile Dewatering Collection and Treatment Unit of National Pollutant Discharge Elimination System (NPDES) Permit No. 90-DP-0064, and off-site disposal.

4.2.4 Floor Slabs and Paving

As shown on **Figure 9** a significant portion of the Site will be covered with paving, with a small portion of the Site covered with floor slabs associated with the three proposed buildings. The floor slabs and paved areas will receive a layer of subbase material which will consist of compacted aggregate base, which may include processed slag aggregate sourced from the TPA property. The placement of processed slag aggregate or materials other than Agency-approved clean fill will necessitate that the Site will be subject to surface engineering controls (i.e., capping).

The required minimum thicknesses of all site-wide pavement sections which will serve as surface engineering controls are shown in the minimum capping section details provided in **Appendix F**. All paved areas at the Site will be installed with a minimum of 4 inches of compacted aggregate base and a minimum of 4 inches of overlying pavement surface (asphalt or concrete), which meet these required minimum thicknesses.

4.2.5 Sub-Slab Vapor Barriers

As noted earlier, sub-slab vapor barriers will be installed below the concrete floor slab of the three buildings to prevent the intrusion of VOC/SVOC vapors to indoor air. The installation of the vapor barriers will address the potential for unacceptable VI risks/hazards resulting from the known presence of VOCs/SVOCs and NAPL at the Site.

The vapor barriers will be chemically resistant to the anticipated VOC vapors, and will be sealed at all penetrations, seams, and edges. Specifications on the type of vapor barriers to be used will be submitted to the Agencies prior to installation. Alternate system materials may be used in place of the specified materials if approved in advance by the Agencies.

The Agencies must be notified at least four business days prior to the installation of the vapor barriers on-site. The vapor barrier will consist of a polyethylene membrane at least 15-mils thick (or equivalent) that has been proven to be effective for similar applications. The barrier will be chemically resistant to the anticipated vapor concentrations, and will be sealed at all penetrations, seams, and edges. The installation of the vapor barrier will be performed pursuant to the manufacturer's specification and direction. Daily oversight during installation will be provided by the EP providing oversight on the project. Following installation of a vapor barrier, and prior to concrete placement, a smoke test will be performed to confirm that the barrier is properly sealed at all penetrations, seams, and edges. The Agencies must be notified at least four business days prior to conducting a smoke test on-site.

A monitoring program is proposed to ensure sub-slab soil gas and indoor air are monitored following the installation of the vapor barriers. Details on the configuration of the sub-slab soil gas and indoor air monitoring points, installation specifications for the sub-slab monitoring points, sampling protocols and analyte list, and the proposed sampling schedule are included in the Sub-Slab Soil Gas & Indoor Air Monitoring Plan provided as **Appendix G**.

4.2.6 Stormwater Management

New stormwater infrastructure will be installed throughout the Site and will discharge to the south of the Site. As shown on **Figure 10**, the site-wide shallow groundwater elevations range from approximately 0 ft amsl to 7 ft amsl. This is approximately 7 to 14 ft below the final graded surface of the Site (of 14 ft amsl). Utility excavations are expected to reach depths of approximately 2 ft amsl. Based on the shallow groundwater elevation measurements collected during the site-wide groundwater elevation investigation, excavations may encounter groundwater. Water removed for dewatering will be managed as described in **Section 5.2**.

The stormwater management systems for each parcel are reviewed and approved by Baltimore County for each individual development project at the TPA property.

4.2.7 Wharf Development Plans

Appendix B-5 shows the proposed alignment of the wharf and deepwater channel, as well as the Sparrows Point Channel segments with the proposed channel expansion and deepening. The existing shoreline will be excavated at a 2.5:1 slope and the bottom sediments will be dredged from the current elevation (up to 0' AMSL) to a final bottom elevation of -50 ft MLLW. Approximately 330,000 CY of slag will be recovered during the construction of the revetment (along the full length of the wharf). Staging areas will be established adjacent to, and proximate to,

the excavation activities. The staging areas will be moved along the wharf front as the revetment progresses. The slag is porous and will not hold water; it will be allowed to drain as it is excavated.

To control erosion and stabilize the slope, it will be capped with a 5.9-inch thick (minimum) concrete revetment. This concrete revetment cap will prevent exposure of aquatic organisms to the underlying subbase and will relocate the point of potential ecological exposures from the existing channel base to the open water above the stone revetment and the sediments at the toe of the revetment and bottom of the new channel at -50 ft MLLW and approximately 120 ft off the proposed shoreline (refer to the cross section of the proposed wharf and channel design in **Appendix B-5**). An impervious clay unit also retards the potential for vertical migration of groundwater and the potential to impact the porewater at this location. The sediment removed to form the new channel will be characterized, excavated and properly managed at an approved Dredged Material Containment Facility (DMCF). Landside slag that is excavated for this project will be separated from the dredged material, screened, and beneficially reused on-site pursuant to the Sparrows Point Materials Management Plan.

The proposed wharf and revetment will relocate the ecological receptor to the toe of the revetment and bottom of the new channel (-50 ft MLLW and approximately 120 ft off the proposed shoreline). **Appendix B-5** includes a typical cross section of the wharf design, but additional details have been added including the landside subsurface geologic details based on soil boring CT-037-SB (in the vicinity of the maximum shoreline groundwater concentrations and the offshore pore water impacts), and the approximate locations of current and future pore water and sediment receptor locations.

5.0 DEVELOPMENT IMPLEMENTATION PROTOCOLS

5.1 DEVELOPMENT PHASE

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

Several PAL exceedances were identified in soil samples across the Site. The PALs are set based on USEPA's RSLs for industrial soils, or other direct guidance from the Agencies. Because PAL exceedances can present potential risks to human health and the environment at certain concentrations, this plan presents material management and other protocols to be followed during the work to adequately mitigate potential risks from such materials remaining on-site during the development phase. There were no locations in the proposed Site boundary with soil exceedances of the special management criteria for PCBs (50 mg/kg), and lead (10,000 mg/kg). However, there are five locations where TPH/Oil & Grease exceeded the special management criteria (6,200 mg/kg): B11-026-SB, CT-003-SB, CT-004-SB, CT-006-SB, and CT-007-SB. NAPL was also detected on the water table at various locations as discussed in **Section 3.2.4**.

Following completion of the SLRA, the findings of the Construction Worker evaluation indicated that using the site-specific exposure frequencies for each EU, the screening level estimates of Construction Worker cancer risk were less than 1E-5 and no HI values above 1 were identified for any target organ system (the acceptable thresholds for no further action). Development activities at the Site will exceed the allowable duration of 2 days for EU1 and may exceed the allowable duration of 60 days for EU2 and 55 days for EU3; however, Construction Worker risks will be mitigated to facilitate the proposed construction. Upgraded PPE beyond standard Level D protection will be used in conjunction with the HASP for the entire scope of intrusive work covered by this RADWP as a protective measure to ensure that there are no unacceptable exposures for Construction Workers during project implementation. The modified Level D PPE requirements which will be applied throughout this project, including specific PPE details, planning, tracking/supervision, enforcement, and documentation, are outlined in the PPE SOP provided as **Appendix D**.

Based on the characterization of surface and subsurface soils and the associated SLRA findings, surface engineering controls are an acceptable remedy to be protective of future adult Composite Workers. TPA has proposed the use of processed slag aggregate as the primary fill material and pavement subbase within the Site. The placement of materials other than approved clean fill, such as slag aggregate, requires the installation of surface engineering controls (i.e., capping) regardless of the existing soil conditions. The proposed capping sections will meet the required minimum thicknesses for surface engineering controls, which are provided in **Appendix F**.

5.1.1 Erosion/Sediment Control

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

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

5.1.2 Soil Excavation and Utility Trenching

A pre-excavation meeting shall be held to address proper operating procedures for working on-site and monitoring excavations and utility trenching in potentially contaminated material. This meeting shall include the construction manager and the EP providing oversight on the project. During the meeting, the construction manager and the EP shall review the proposed excavation/trenching locations and any associated utility invert elevations. The construction manager will be responsible for conveying all relevant information regarding excavation/grading and/or utility work to the workers who will be involved with these activities. Evidence of NAPL has been observed in multiple areas within the development LOD based on prior investigations (as summarized in **Figure U1**). The Utility Excavation NAPL Contingency Plan (discussed below) must also be reviewed during the pre-excavation meeting. The HASP and PPE SOP for the project shall also be reviewed and discussed.

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

The EP will also be responsible for monitoring organic vapor concentrations in the worker breathing zone within utility trenches and excavations to determine whether any increased level of health and safety protection is required. Routine air monitoring will include attaching tubing to the sample port of the photo-ionization detector (PID) and the lowering of the tubing into the utility or excavation trench. If the PID readings are greater than 5 parts per million (ppm) above background in the breathing zone for a 3-minute period, personnel will stop work, retreat from the work area, and allow time (at least 15 minutes) for vapors to dissipate. If monitoring indicates that concentrations still exceed 5 ppm after 15 minutes, ARM will advise that work not continue without further evaluation. Refer to Section 7.1.2 of the TPA HASP for additional details.

To the extent practical, all excavation activities should be conducted in a manner to minimize double or extra handling of materials. Stockpiles shall be stored in a location that is not subjected to concentrated stormwater runoff. Stockpiles shall be managed as necessary to prevent the erosion and off-site migration of stockpiled materials, and in accordance with the applicable provisions of the 2011 Maryland Standards and Specifications for Soil Erosion and Sediment Control. Soil designated for replacement on-site which does not otherwise exhibit evidence of contamination (as determined by the EP) may be managed in large stockpiles (no size restriction) as long as they remain within the erosion and sediment controls.

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

All utility corridors which pass through areas containing NAPL impacts and that have the potential to preferentially transmit contaminated vapors or groundwater along the utility line shall be plugged using 1) low permeability backfill material; or 2) trench plugs in accordance with the details shown on the utility trench plug detail within the Utility Excavation NAPL Contingency Plan. **Figure U1** highlights areas which have already been identified with NAPL based on prior investigations (**Figure U1** does not reflect ongoing NAPL recovery efforts). Areas where trench plugs may be needed based on NAPL observations include the area to the southeast of Cell 6, along the northeastern portion of the Container Terminal footprint, in the Cell 4 vicinity, and at B11-026-PZ. However, based on the depth of the NAPL and the proposed utility lines, and recent hot spot excavations, trench plugs may not be needed. For example, the DNAPL remaining in the Cell 4 vicinity is located at more than 15 feet bgs; all utilities in the area will be well above that depth. NAPL removal and/or hot spot excavation has been conducted (or is proposed) to the southeast of Cell 6, at B11-026-PZ, and at the CO05D-PZM / CT-006-PZ area. These areas will be monitored closely by the EP during utility trenching. The need for trench plugs will be determined in the field based on NAPL observations.

The EP will monitor all soil excavation and utility trenching activities for signs of potential contamination. In particular, soils will be monitored with a hand-held PID for potential VOCs and will also be visually inspected for the presence of staining, petroleum waste materials, or other indications of significant contamination. If there are no visual indications of potential contamination and no elevated PID detections, material removed from excavations/trenching can be re-used as backfill on-site. If screening of excavated materials by the EP indicates the presence of conditions of potential concern (i.e., sustained PID readings greater than 10 ppm, visual staining,

unsuitable waste materials, etc.), such materials shall be segregated for additional sampling and special management.

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

5.1.3 Soil Sampling and Disposal

Excavated materials that are determined by the EP to warrant sampling and analysis because of elevated PID readings or other indications of potential contamination shall be sampled and analyzed to determine how the materials should be managed. If excavated and stockpiled, such materials shall be placed on a polyethylene or equivalent tarp to minimize potential exposures and erosion. All stockpiled soil may be considered for use as fill under surface engineering controls at this Site or on other areas of the TPA property depending on the analytical results.

Any soil that is generated from excavations/trenching that is not proposed (or suitable) for reuse within the subject parcel will be sampled to determine the suitability of the material for disposal. Soil material that is determined to be non-hazardous may be taken to an appropriate non-hazardous landfill (which may include Greys Landfill if approved by TPA) for proper disposal. Soil material that is determined to be a hazardous waste shall be shipped off-site in accordance with applicable regulations to an appropriate and permitted RCRA disposal facility. A summary of sampling including a description of the material, estimated volume, and sampling parameters will be submitted to the Agencies. The quantities of all materials that require disposal, if any, will be recorded and identified in the Development Completion Report.

5.1.4 Fill

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

All excavated utility trenches will be backfilled with material approved by the Agencies for industrial use. Backfill may include material removed from utility trenches unless such materials are identified by the EP as unsuitable due to elevated PID readings or other indications of potential contamination. As with structural fill, processed slag aggregate and other materials approved for

industrial use can be used as backfill in utility trenches on the Site if the area will be covered by a VCP cap. Utility backfill which will extend into the cap (i.e., top 2 ft of backfill in landscaped areas) must meet the VCP clean fill requirements, and a geotextile marker fabric will be placed between the VCP clean fill and any underlying material. A general utility detail drawing is provided as **Appendix H**. Material imported to the Site will be screened according to MDE guidance for suitability.

All utility corridors which pass through areas containing NAPL or elevated chemical impacts and that have the potential to preferentially transmit contaminated vapors or groundwater along the utility line (as defined on **Figures U1** through **U4**) shall be plugged using 1) low permeability backfill material (less than or equal to the permeability of the existing subgrade); or 2) trench plugs in accordance with the details shown in the Utility Excavation NAPL Contingency Plan (**Appendix I**).

5.1.5 Dust Control

General construction operations, including grading, will be performed at the Site. These activities are anticipated to be performed in areas of soil impacted with COPCs. Best management practices should be undertaken at the TPA property as a whole to prevent the generation of dust which could impact other areas of the property outside of the immediate work zone. To limit worker exposure to contaminants borne in dust and windblown particulates, dust monitoring will be performed during dust-generating activities.

The EP will be responsible for the Site dust monitoring program. This will consist of both monitoring for visible dust as well as real-time dust monitoring. If sustained visible dust is observed, the General Contractor will implement dust suppression methods to address dust levels at the Site. Such methods may include an increase in the frequency of water trucks spraying vehicle routes, covering of material piles with plastic sheeting, or decreasing drop heights of material from excavation equipment.

Real-time dust monitoring will be implemented using Met One Instruments, Inc. E-Sampler dust monitors or equivalent real-time air monitoring devices will be utilized. Continuous dust monitoring will be performed in the work area as well as perimeter monitors at upwind and downwind locations based on the prevailing wind direction predicted for that day. The prevailing wind direction will be assessed during the day, and the positions of the perimeter monitors may be adjusted if there is a substantial shift in prevailing wind direction.

The action level for determining the need for implementing additional dust suppression methodologies is 3.0 milligrams per cubic meter (mg/m^3). The lowest of the site-specific dust action levels, Occupational Safety and Health Administration Permissible Exposure Limit, and American Conference of Governmental Industrial Hygienists Threshold Limit Value was selected. If sustained dust concentrations exceed the action level (3.0 mg/m^3) at monitoring locations as a

result of conditions occurring at the Site, operations will be stopped temporarily until additional dust suppression can be implemented. Operations may resume once monitoring indicates that dust concentrations are below the action level.

Once all dust-generating activities are complete, the dust monitoring program may be discontinued.

5.2 WATER MANAGEMENT

This plan presents the protocols for handling any groundwater or surface water that needs to be removed to facilitate construction of the proposed Container Terminal development.

5.2.1 Groundwater PAL Exceedances

Groundwater samples were collected as part of the ongoing evaluation of groundwater in the CPA. Aqueous PAL exceedances in groundwater in the vicinity of the development LOD included both inorganics and organic compounds. The aqueous PAL exceedances are summarized on **Figure GW1** through **Figure GW4**. Potential VI risks/hazards at the Site are summarized in **Table 5**.

While the concentrations of PAL exceedances are not deemed to be a significant human health hazard for future workers since there is no on-site groundwater use which could lead to direct exposures, proper water management is required during construction to prevent unacceptable discharges or risks to Construction Workers.

5.2.2 Dewatering

Dewatering may be necessary to facilitate the placement and compaction of structural fill as well as during ground intrusive work such as the installation of underground utilities or within excavations/trenches. **Figure 10** displays the groundwater elevations underlying the Site for the shallow aquifer zone, based on prior investigation data. If dewatering is required during construction, it shall be done in accordance with all local, state, and federal regulations. Water that collects in excavations/trenches due to intrusion of groundwater, stormwater, and/or dust control waters will be managed via one of the following options:

- Transported to be treated at the HCWWTP, following any pretreatment necessary and discharged in accordance with NPDES Permit No. 90-DP-0064; Special Conditions; A.1, A.4, or A.6 (whichever is currently in effect); Effluent Limitations and Monitoring Requirements;
- Discharged to the Baltimore County sanitary sewer system;
- Discharged locally in accordance with the requirements of Special Condition AF, Section 2, Mobile Dewatering Collection and Treatment Unit of NPDES Permit No. 90-DP-0064; or

- Off-site disposal.

The Agencies will be notified which option is selected prior to the generation of groundwater. If water is sent to the HCWWTP via the Tin Mill Canal, trucking, or direct discharge to a drainage system that flows to the HCWWTP, applicable outfall dewatering fluids will be evaluated pursuant to the HCWWTP Constituent Threshold Limits for Dewatering Activities related to Remediation, Development, and Capping Protocol listed below. Water discharged to the Tin Mill Canal will also be pumped through a filter bag, weir frac tank, or equivalent to remove suspended solids prior to discharge.

Analysis	Threshold Levels
Total metals by USEPA Method 6020A	1,000 ppm
PCBs by USEPA Method 8082	>Non-Detect
SVOCs by USEPA Method 8270C	1 ppm
VOCs by USEPA Method 8260B	1 ppm
Oil & Grease by USEPA Method 1664	200 ppm
TPH-DRO by USEPA Method 8015B	200 ppm
TPH-GRO by USEPA Method 8015B	200 ppm

The EP will inspect water that collects in the excavations/trenches. If the water exhibits indications of significant contamination (e.g., sheen, odor, discoloration, presence of product), the water may also be sampled to confirm conditions. If the results of the analyses are above the threshold levels listed above, groundwater at the Site will be further evaluated to confirm acceptable treatment by the HCWWTP, or will be evaluated to design an appropriate pre-treatment option. Alternatively, the water may be disposed of at an appropriate off-site facility.

Documentation of water testing and the selected disposal option will be reported to the Agencies in the Development Completion Report. Associated permits or permit modifications related to dewatering will also be provided in the Development Completion Report.

5.3 HEALTH AND SAFETY

A property-wide HASP has been developed and is provided with this RADWP (as an electronic attachment) to present the minimum requirements for worker health and safety protection for all development projects. All contractors working on the Site may elect to adopt the property-wide HASP or may prepare their own HASP that provides a level of protection at least as much as that provided by the attached HASP.

General health and safety controls (level D protection) are adequate to mitigate potential risk to Construction Workers conducting ground intrusive activities for a duration of up to 2 exposure

days for EU1, 60 exposure days for EU2, and 55 exposure days for EU3. However, certain ground intrusive activities at the Site (utility installations for specific crews) will likely exceed the allowable duration for one or more of the EUs. Therefore, modified Level D PPE will be used for the entire scope of intrusive work covered by this RADWP as a protective measure to ensure that there are no unacceptable exposures for Construction Workers during project implementation. Health and safety controls outlined in the HASP and PPE SOP will mitigate any potential risk to Construction Workers from contacting impacted soil and groundwater during development. The modified Level D PPE requirements planned for this development project, including specific PPE details, planning, tracking/supervision, enforcement, and documentation, are outlined in the PPE SOP provided as **Appendix D**. The EP will be responsible for monitoring organic vapor concentrations in the worker breathing zone within the utility trenches and excavations to determine whether any increased level of health and safety protection (including engineering controls and/or PPE) is required.

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

5.4 INSTITUTIONAL CONTROLS (FUTURE LAND USE CONTROLS)

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

- A restriction prohibiting the use of groundwater for any purpose at the Site and a requirement to characterize, containerize, and properly dispose of groundwater in the event of excavations encountering groundwater.
- Notice to the Agencies at least 30 days prior to any future soil disturbances that are expected to breach the approved capping remedy (i.e., through the pavement cap or marker fabric in landscaped areas).
- Notice to the USEPA at least 30 days prior to any future soil disturbances that are expected to breach the approved capping remedy, only if the proposed duration of ground intrusive activity would exceed the allowable exposure duration determined in the SLRA and the contractor will not use the modified Level D PPE specified in the approved SOP.
- Requirement for a HASP in the event of any future excavations at the Site.
- Complete appropriate characterization and disposal of any material excavated/pumped at the Site in accordance with applicable local, state, and federal requirements.
- Requirement to further evaluate vapor control measures if another enclosed structure is proposed in the future on the Site.

- Implementation of inspection procedures and maintenance of the containment remedies.

The owner/operator will file the above deed restrictions as defined by the VCP in the NFA and Certificate of Completion.

5.5 POST REMEDIATION REQUIREMENTS

Post remediation requirements will include compliance with the conditions specified in the NFA, Certificate of Completion, and the deed restrictions recorded for the Site. Deed restrictions will be recorded within 30 days after receipt of the final NFA. In addition, the Agencies will be provided with a written notice of any future excavations (as applicable). Written notice of planned excavation activities will include the proposed date(s) for the excavation, location of the excavation, health and safety protocols (as required), clean fill source (as required), and proposed characterization and disposal requirements. Written notice may consist of email correspondence and/or hard copy correspondence.

Additional requirements will include inspection procedures and maintenance of the containment remedies to minimize degradation which could lead to future exposures, as well as continued perimeter groundwater monitoring. An O&M Plan will be submitted for Agency approval and will include long-term inspection and maintenance requirements for the capped areas of the Site as well as the vapor barriers. The responsible party will perform cap inspections, perform maintenance of the cap, and retain inspection records, as required by the O&M Plan. The O&M Plan must include specific requirements for the repair of any future penetrations of the vapor barriers below the floor slabs.

5.6 CONSTRUCTION OVERSIGHT

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

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

Daily inspections, as necessary, will be performed during general site grading and cap construction activities. The EP will verify that the vapor barriers are installed in accordance with the manufacturer's specifications and any seams or penetrations are sealed properly, appropriate fill materials are being used (as described in **Section 5.1.4**; Fill), dust monitoring and control measures are being implemented as appropriate (as described in **Section 5.1.5**; Dust Control), the requirements of the HASP and the PPE SOP are being enforced by the designated Site Safety Officer (as described in **Section 5.3**; Health and Safety), and surface engineering controls are being installed with the appropriate thicknesses (shown on in **Appendix F**). Oversight by an EP will not be required during construction activities which do not have a significant environmental component, such as above-grade construction.

Records will be developed by the EP to document:

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

6.0 PERMITS, NOTIFICATIONS AND CONTINGENCIES

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

A grading permit is required if the proposed grading disturbs over 5,000 ft^2 of surface area or over 100 CY of earth. A grading permit is required for any grading activities in any watercourse, floodplain, wetland area, buffers (stream and within 100 ft of tidal water), habitat protection areas or forest buffer areas (includes forest conservation areas). Based on the scope of proposed earth disturbance, a grading permit will be acquired as part of this development project. Erosion and Sediment Control Plans will be submitted to, and approved by, the Agencies prior to initiation of land disturbance for development.

Contingency measures will include the following:

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

- Any significant change to the implementation schedule will be noted in the progress reports to Agencies.

- Modified Level D PPE will be used for the entire scope of ground intrusive work covered by this RADWP as a protective measure to ensure that there are no unacceptable exposures for Construction Workers during project implementation. The modified Level D PPE requirements which will be applied during this project are outlined in the PPE SOP provided as **Appendix D**. If it is not possible to implement the PPE SOP as provided, the agencies will be notified and a RADWP Addendum will be submitted to detail any appropriate mitigative measures.

7.0 IMPLEMENTATION SCHEDULE

Progress reports will be submitted to the Agencies on a monthly basis, no later than 30 days after the end of the reporting period. Each monthly progress report will include, at a minimum, a discussion of the following information regarding tasks completed during the specified month:

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

The proposed implementation schedule is shown in the following table:

Task	Proposed Start Date
Anticipated RADWP Approval	September 2025
Development	
Installation of Erosion and Sediment Controls	October 2025
Slag (or Alternative Fill) Delivery and Placement	October 2025
Site Preparation / Grading	October 2025
Utility Installations	October 2025
Construction of Building	July 2026
Installation of Pavements	July 2026
Pre-Occupancy Sub-Slab Soil Gas Monitoring	July 2027
Post-Occupancy Indoor Air & Sub-Slab Soil Gas Monitoring (cooling season)	August 2027
Post-Occupancy Indoor Air & Sub-Slab Soil Gas Monitoring (heating season)	January 2028
Completion	June 2028
Submittal of Development Completion Report/ Notice of Completion of Response Actions*	December 2028
Request for NFA from the Agencies	December 2028

Recordation of institutional controls in the land records office of Baltimore County	Within 30 days of receiving the approval of NFA from the Agencies
Submit proof of recordation with Baltimore County	Upon receipt from Baltimore County

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

8.0 REFERENCES

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ARM, 2024c. *COA Summary of Documents and Comment Responses*. August 28, 2024.

ARM, 2024d. *Cell 6 Final Treatment Report*. August 16, 2024.

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FIGURES

LEGEND

- Container Terminal Site Boundary
- Site Boundary
- Parcel Boundaries
- Private Property

Parcel A9
Parcel A13
Parcel A5
Parcel A7
Parcel A14
Parcel A11
Parcel A8
Parcel A12
Parcel A15
Parcel A2
Parcel A17
Parcel A18
Parcel A16
Parcel A6
Parcel A10
Parcel A4
Parcel A3
Parcel A1
Parcel B6
Parcel B8
Parcel B14
Parcel B21
Parcel B22
Parcel B16
Parcel B24
Parcel B15
Parcel B23
Parcel B7
Parcel B25
Parcel B1
Parcel B2
Parcel B3
Parcel B17
Parcel B19
Parcel B4
Parcel B5
Parcel B9
Parcel B18
Parcel B10
Parcel B13
Parcel B20
Container Terminal
Parcel B11
Parcel B12

Tradepoint Atlantic
Area A and Area B Parcels
July 17, 2025

Figure 1

ARM Group LLC
Engineers and Scientists

0 500 1,000 2,000 Feet

Tradepoint Atlantic
Sparrows Point
Baltimore County, MD
ARM Project 21010210

P:\EnviroAnalytics Group\160443M EAG_TPA Redevelopment\GIS\Site-wide Figures.mxd

LEGEND
Site Boundary
Building
Parcel Boundary
Container Terminal
Proposed Site Plan
July 17, 2025
Figure
2
ARM Group LLC
Engineers and Scientists
0 125 250 500
Feet
Tradepoint Atlantic
Sparrows Point
Baltimore County, MD
ARM Project 21010210
Source: E
P:\EnviroAnalytics Group\160443M EAG_TPA Redevelopment\GIS\Container Terminal RADWP.mxd

Container Terminal
Soil Boring Locations
June 14, 2024

Figure 3

ARM Group LLC
Engineers and Scientists

Tradepoint Atlantic
Sparrows Point

Baltimore County, MD
ARM Project 21010210

P:\EnviroAnalytics Group\160443M EAG_TPA Redevelopment\GIS\Container Terminal RADWP.mxd

B18-061-SB-1
B18-061-SB-4
CT-001-SB-3
B18-076-SB-1
CT-002-SB-1
CT-002-SB-4
CT-002-SB-10
B18-007-SB-1
B18-075-SB-2
CT-007-SB-1
CT-007-SB-3
Benzene: 14.0
CT-007-SB-10
CT-006-SB-1
CT-006-SB-6
Benzene: 17.0
Ethylbenzene: 340
CT-006-SB-10
Benzene: 16.0
Ethylbenzene: 130
CT-004-SB-9
CT-004-SB-10
Benzene: 9.2
CT-003-SB-3
CT-003-SB-10
CT-013-SB-1
CT-013-SB-7
CT-013-SB-10
CT-014-SB-4
CT-014-SB-10
CT-011-SB-4
CT-015-SB-1
CT-015-SB-3
CT-015-SB-10
CT-019-SB-1
CT-019-SB-8
CT-009-SB-3
CT-010-SB-7
CT-010-SB-10
CT-016-SB-8
CT-016-SB-10
CT-017-SB-1
CT-017-SB-9
CT-017-SB-10
CT-020-SB-10
CT-018-SB-9
CT-021-SB-8
CT-021-SB-10
B11-011-SB-2
B11-011-SB-9
B11-010-SB-2
B11-010-SB-6
B11-013-SB-4
B11-009-SB-4
B11-009-SB-8
B11-025-SB-1
B11-025-SB-4
B11-025-SB-10
B11-012-SB-2
B11-012-SB-8
B11-005-SB-5
B11-006-SB-7
B11-026-SB-9
B11-026-SB-10
B11-004-SB-1
B11-004-SB-4
B11-018-SB-8
B11-016-SB-4
B11-016-SB-10
CT-023-SB-8
CT-024-SB-1
B11-022-SB-1
B11-022-SB-5
B11-021-SB-1
B11-021-SB-4
B11-024-SB-5

LEGEND

- Soil Boring
- Former COA IM Cell
- Container Terminal LOD
- Parcel Boundary

Note:
- All units are shown in mg/kg.
- Soil borings where no VOC sample was collected (due to PID readings below 10 ppm) are unlabeled.

Source: E

Container Terminal
VOC Soil PAL Exceedances

July 29, 2025

Figure
S1

ARM Group LLC
Engineers and Scientists

0 125 250 500 Feet

Tradepoint Atlantic
Sparrows Point

Baltimore County, MD
ARM Project 21010210

P:\EnviroAnalytics Group\160443M EAG_TPA Redevelopment\GIS\Container Terminal Phase II Figures PALs VOCs.mxd

CT-004-SB-1
CT-004-SB-9
Benz[a]anthracene: 350
Benzo[a]pyrene: 200
Benzo[b]fluoranthene: 200
Dibenz[a,h]anthracene: 22.0
Indeno[1,2,3-c,d]pyrene: 150
Naphthalene: 2,400
CT-004-SB-10
Benz[a]anthracene: 130
Benzo[a]pyrene: 73.0
Benzo[b]fluoranthene: 72.0
Dibenz[a,h]anthracene: 8.0
Indeno[1,2,3-c,d]pyrene: 52.0
Naphthalene: 1,100
B18-011-SB-1
B18-011-SB-4
Benz[a]anthracene: 135
Benzo[a]pyrene: 126
Benzo[b]fluoranthene: 135
Dibenz[a,h]anthracene: 5.7
Indeno[1,2,3-c,d]pyrene: 49.0
Naphthalene: 140
B18-076-SB-1
B18-012-SB-1
B18-006-SB-1
B18-004-SB-1
B18-025-SB-1
B18-025-SB-5
CT-001-SB-1
CT-001-SB-3
B18-061-SB-1
B18-061-SB-4
B18-002-SB-1
B18-003-SB-1
B18-075-SB-2
Benzo[a]pyrene: 2.3
B18-075-SB-5.5
Benzo[a]pyrene: 7.1
B18-075-SB-10
Benz[a]anthracene: 101
Benzo[a]pyrene: 78.9
Benzo[b]fluoranthene: 150
Dibenz[a,h]anthracene: 12.4
Indeno[1,2,3-c,d]pyrene: 43.2
B18-008-SB-1
B18-007-SB-1
B18-007-SB-4
B18-005-SB-1
CT-002-SB-1
CT-002-SB-4
CT-002-SB-10
CT-013-SB-1
CT-013-SB-7
Benzo[a]pyrene: 17.0
Benzo[b]fluoranthene: 22.0
Dibenz[a,h]anthracene: 2.4
CT-013-SB-10
CT-006-SB-1
CT-006-SB-6
Benz[a]anthracene: 42.0
Benzo[a]pyrene: 35.0
Benzo[b]fluoranthene: 34.0
Dibenz[a,h]anthracene: 4.8
Indeno[1,2,3-c,d]pyrene: 24.0
Naphthalene: 1,300
CT-006-SB-10
Benzo[a]pyrene: 4.1
Naphthalene: 410
CT-007-SB-1
CT-007-SB-3
Benz[a]anthracene: 820
Benzo[a]pyrene: 460
Benzo[b]fluoranthene: 490
Dibenz[a,h]anthracene: 58.0
Indeno[1,2,3-c,d]pyrene: 310
Naphthalene: 3,200
CT-007-SB-10
Benz[a]anthracene: 34.0
Benzo[a]pyrene: 25.0
Benzo[b]fluoranthene: 29.0
Dibenz[a,h]anthracene: 3.6
Naphthalene: 86.0
CT-003-SB-1
CT-003-SB-3
CT-003-SB-10
CT-005-SB-1
CT-005-SB-3
CT-015-SB-1
Benzo[a]pyrene: 6.0
CT-015-SB-3
Benzo[a]pyrene: 14.0
Dibenz[a,h]anthracene: 2.7
CT-015-SB-10
Benzo[a]pyrene: 2.1
CT-011-SB-1
CT-011-SB-4
CT-012-SB-1
CT-012-SB-9
CT-016-SB-1
CT-016-SB-8
CT-016-SB-10
CT-014-SB-1
CT-014-SB-4
CT-014-SB-10
CT-009-SB-1
CT-009-SB-3
Benzo[a]pyrene: 2.8
CT-009-SB-10
CT-010-SB-1
Benzo[a]pyrene: 2.9
CT-010-SB-7
Benzo[a]pyrene: 7.4
CT-010-SB-10
Benzo[a]pyrene: 8.4
CT-017-SB-1
Naphthalene: 12.0
CT-017-SB-9
CT-017-SB-10
CT-019-SB-1
CT-019-SB-8
Benzo[a]pyrene: 2.9
CT-019-SB-10
Benzo[a]pyrene: 2.4
CT-008-SB-1
Benzo[a]pyrene: 3.6
CT-008-SB-3
CT-018-SB-1
CT-018-SB-9
B11-010-SB-2
Benzo[a]pyrene: 2.6
B11-010-SB-6
CT-021-SB-1
CT-021-SB-8
CT-021-SB-10
B11-011-SB-2
B11-011-SB-9
B11-007-SB-1
B11-007-SB-5
CT-020-SB-1
CT-020-SB-9
CT-020-SB-10
B11-013-SB-1
B11-013-SB-4
B11-013-SB-10
B11-009-SB-4
B11-009-SB-8
B11-025-SB-1
B11-025-SB-4
B11-025-SB-10
B11-012-SB-2
B11-012-SB-8
B11-008-SB-2
B11-008-SB-6
B11-015-SB-3
B11-006-SB-7
B11-005-SB-2
B11-005-SB-5
Benzo[a]pyrene: 5.2
B11-015-SB-1
B11-015-SB-5
B11-014-SB-1
B11-014-SB-5
B11-003-SB-1
B11-003-SB-5
Benzo[a]pyrene: 2.6
B11-019-SB-1
B11-019-SB-5
B11-004-SB-1
B11-004-SB-4
B11-026-SB-1
Benz[a]anthracene: 21.0
Benzo[a]pyrene: 14.0
Naphthalene: 40.0
B11-026-SB-9
Benzo[a]pyrene: 3.1 J
Naphthalene: 61.0
B11-026-SB-10
CT-022-SB-1
CT-022-SB-9
B11-017-SB-1
Benzo[a]pyrene: 8.4
B11-017-SB-5
B11-018-SB-1
B11-018-SB-8
B11-002-SB-1
B11-002-SB-5
B11-001-SB-1
Benzo[a]pyrene: 2.9
B11-001-SB-5
Benzo[a]pyrene: 5.6
CT-023-SB-1
CT-023-SB-8
CT-024-SB-1
Benzo[a]pyrene: 8.3
Naphthalene: 19.0
CT-024-SB-9
B11-020-SB-1
B11-020-SB-4.5
B11-022-SB-1
Benzo[a]pyrene: 2.6
B11-022-SB-5
B11-016-SB-1
Benzo[a]pyrene: 4.5
B11-016-SB-4
Benzo[a]pyrene: 6.6
B11-601-SB-10
B11-021-SB-1
B11-021-SB-4
B11-023-SB-1
B11-023-SB-5
B11-024-SB-1
B11-024-SB-5
LEGEND
Soil Boring
Former COA IM Cell
Container Terminal LOD
Parcel Boundary
Note:
- All units are shown in mg/kg.
Source: E
Container Terminal
SVOC Soil PAL Exceedances
July 25, 2025
Figure
S2
ARM Group LLC
Engineers and Scientists
0 125 250 500
Feet
Tradepoint Atlantic
Sparrows Point
Baltimore County, MD
ARM Project 21010210
P:\EnviroAnalytics Group\1604443M EAG_TPA Redevelopment\GIS\Container Terminal Phase II Figures PALs SVOCs.mxd

B18-012-SB-1
B18-011-SB-1
B18-004-SB-1
B18-025-SB-1
CT-001-SB-1
B18-076-SB-1
B18-002-SB-1
B18-061-SB-1
B18-003-SB-1
B18-006-SB-1
B18-008-SB-1
B18-007-SB-1
B18-075-SB-2
B18-005-SB-1
CT-002-SB-1
CT-004-SB-1
CT-007-SB-1
CT-006-SB-1
CT-005-SB-1
CT-003-SB-1
CT-013-SB-1
CT-014-SB-1
CT-011-SB-1
CT-012-SB-1
CT-015-SB-1
CT-019-SB-1
CT-010-SB-1
PCBs (total): 1.05
CT-009-SB-1
CT-016-SB-1
CT-017-SB-1
CT-008-SB-1
CT-020-SB-1
CT-018-SB-1
CT-021-SB-1
B11-011-SB-2
B11-007-SB-1
B11-013-SB-1
B11-010-SB-2
B11-009-SB-4
B11-025-SB-1
B11-012-SB-2
B11-005-SB-2
B11-015-SB-3
B11-008-SB-1
B11-015-SB-1
B11-026-SB-1
B11-014-SB-1
B11-003-SB-1
B11-004-SB-1
B11-019-SB-1
CT-022-SB-1
B11-017-SB-1
B11-018-SB-1
B11-002-SB-1
B11-016-SB-1
B11-001-SB-1
CT-023-SB-1
B11-020-SB-1
B11-022-SB-1
CT-024-SB-1
B11-021-SB-1
B11-024-SB-1
B11-023-SB-1

LEGEND

- Soil Boring
- Former COA IM Cell
- Container Terminal LOD
- Parcel Boundary

Note:
- All units are shown in mg/kg.

Source: E

Container Terminal
PCB Soil PAL Exceedances
July 25, 2025

Figure
S3

ARM Group LLC
Engineers and Scientists

0 125 250 500 Feet

Tradepoint Atlantic
Sparrows Point

Baltimore County, MD
ARM Project 21010210

P:\EnviroAnalytics Group\160443M EAG_TPA Redevelopment\GIS\Container Terminal Phase II Figures PALs PCBs.mxd

B18-004-SB-1
B18-011-SB-1
B18-011-SB-4
B18-025-SB-1
B18-025-SB-5
B18-076-SB-1
B18-012-SB-1
B18-006-SB-1
B18-061-SB-1
B18-061-SB-4
B18-007-SB-1
B18-007-SB-4
CT-001-SB-1
CT-001-SB-3
B18-002-SB-1
B18-003-SB-1
B18-075-SB-2
B18-075-SB-5.5
B18-075-SB-10
B18-008-SB-1
B18-005-SB-1
CT-002-SB-1
CT-002-SB-4
CT-002-SB-10
CT-005-SB-1
CT-005-SB-3
CT-006-SB-1
CT-006-SB-6
Diesel Range Organics: 17,000
Oil and Grease: 28,000
CT-006-SB-10
Diesel Range Organics: 9,400
Oil and Grease: 15,500
CT-007-SB-1
CT-007-SB-3
Diesel Range Organics: 26,000
Oil and Grease: 36,200
CT-007-SB-10
CT-004-SB-1
CT-004-SB-9
Diesel Range Organics: 13,000
Oil and Grease: 10,100
CT-004-SB-10
Diesel Range Organics: 9,600
Oil and Grease: 7,210
CT-003-SB-1
Oil and Grease: 7,860
CT-003-SB-3
CT-003-SB-10
CT-014-SB-1
CT-014-SB-4
CT-014-SB-10
CT-011-SB-1
CT-011-SB-4
CT-012-SB-1
CT-012-SB-9
CT-015-SB-1
CT-015-SB-3
CT-015-SB-10
CT-013-SB-1
CT-013-SB-7
CT-013-SB-10
CT-019-SB-1
CT-019-SB-8
CT-010-SB-1
CT-010-SB-7
CT-010-SB-10
CT-009-SB-1
CT-009-SB-3
CT-008-SB-1
CT-008-SB-3
CT-016-SB-1
CT-016-SB-8
CT-016-SB-10
CT-018-SB-1
CT-018-SB-9
CT-020-SB-1
CT-020-SB-9
CT-020-SB-10
CT-017-SB-1
CT-017-SB-9
CT-017-SB-10
CT-021-SB-1
CT-021-SB-8
CT-021-SB-10
B11-011-SB-2
B11-011-SB-9
B11-007-SB-1
B11-007-SB-5
B11-013-SB-1
B11-013-SB-4
B11-009-SB-4
B11-009-SB-8
B11-010-SB-2
B11-010-SB-6
B11-025-SB-1
B11-025-SB-4
B11-012-SB-2
B11-012-SB-8
B11-008-SB-1
B11-008-SB-6
B11-014-SB-1
B11-014-SB-5
B11-005-SB-2
B11-005-SB-5
B11-015-SB-3
B11-006-SB-7
B11-015-SB-1
B11-015-SB-5
B11-019-SB-1
B11-019-SB-5
B11-004-SB-1
B11-004-SB-4
B11-003-SB-1
B11-003-SB-5
CT-022-SB-1
CT-022-SB-9
B11-026-SB-1
B11-026-SB-9
Diesel Range Organics: 21,400
Oil and Grease: 24,800
B11-026-SB-10
Diesel Range Organics: 24,500
Oil and Grease: 23,300
B11-002-SB-1
B11-002-SB-5
B11-018-SB-1
B11-018-SB-8
B11-017-SB-1
B11-017-SB-5
B11-001-SB-1
B11-001-SB-5
CT-023-SB-1
CT-023-SB-8
B11-016-SB-1
B11-016-SB-4
B11-016-SB-10
B11-020-SB-1
B11-020-SB-4.5
B11-022-SB-1
B11-022-SB-5
B11-021-SB-1
B11-021-SB-5
CT-024-SB-1
CT-024-SB-9
B11-023-SB-1
B11-023-SB-5
B11-024-SB-1
B11-024-SB-5

LEGEND

- Soil Boring
- Soil Boring (NAPL Observed)
- Former COA IM Cell
- Container Terminal LOD
- Parcel Boundary

Note:
- All units are shown in mg/kg.

Source: E

Container Terminal
TPH/OG Soil PAL Exceedances
July 25, 2025

Figure
S4

ARM Group LLC
Engineers and Scientists

0 125 250 500 Feet

Tradepoint Atlantic
Sparrows Point

Baltimore County, MD
ARM Project 21010210

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Container Terminal
Inorganic Soil PAL Exceedances

July 25, 2025

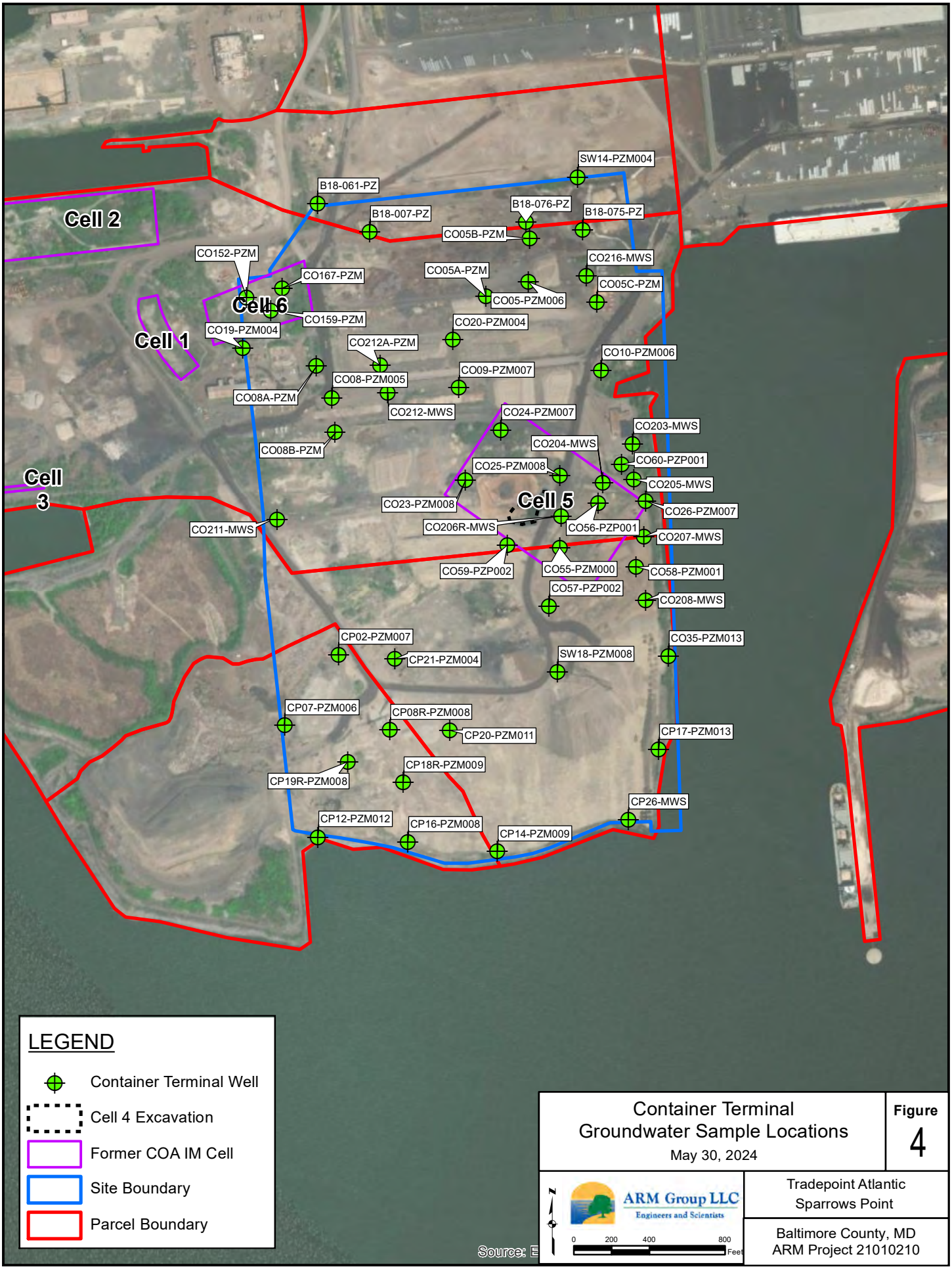
Figure
S5

ARM Group LLC
Engineers and Scientists

Tradepoint Atlantic
Sparrows Point

Baltimore County, MD
ARM Project 21010210

P:\EnviroAnalytics Group\1604\43M EAG_TPA Redevelopment\GIS\Container Terminal Phase II Figures PALs Inorganics.mxd



Container Terminal
Groundwater Sample Locations
May 30, 2024

Figure
4

ARM Group LLC
Engineers and Scientists

Tradepoint Atlantic
Sparrows Point

Baltimore County, MD
ARM Project 21010210

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Container Terminal
NAPL Locations
July 17, 2025

Figure 5

ARM Group LLC
Engineers and Scientists

Tradepoint Atlantic
Sparrows Point

Baltimore County, MD
ARM Project 21010210

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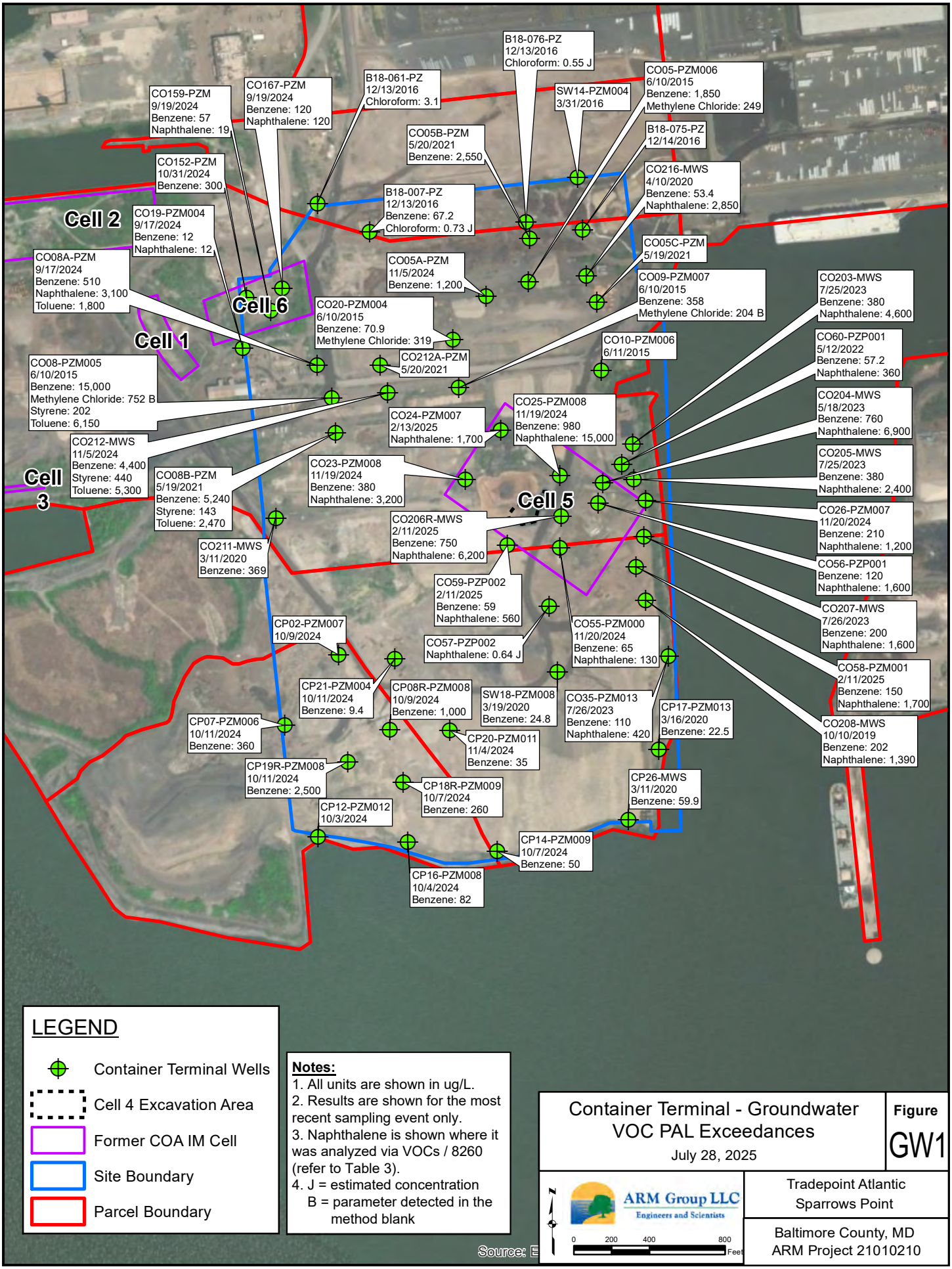


Container Terminal - Groundwater
VOC PAL Exceedances
July 28, 2025

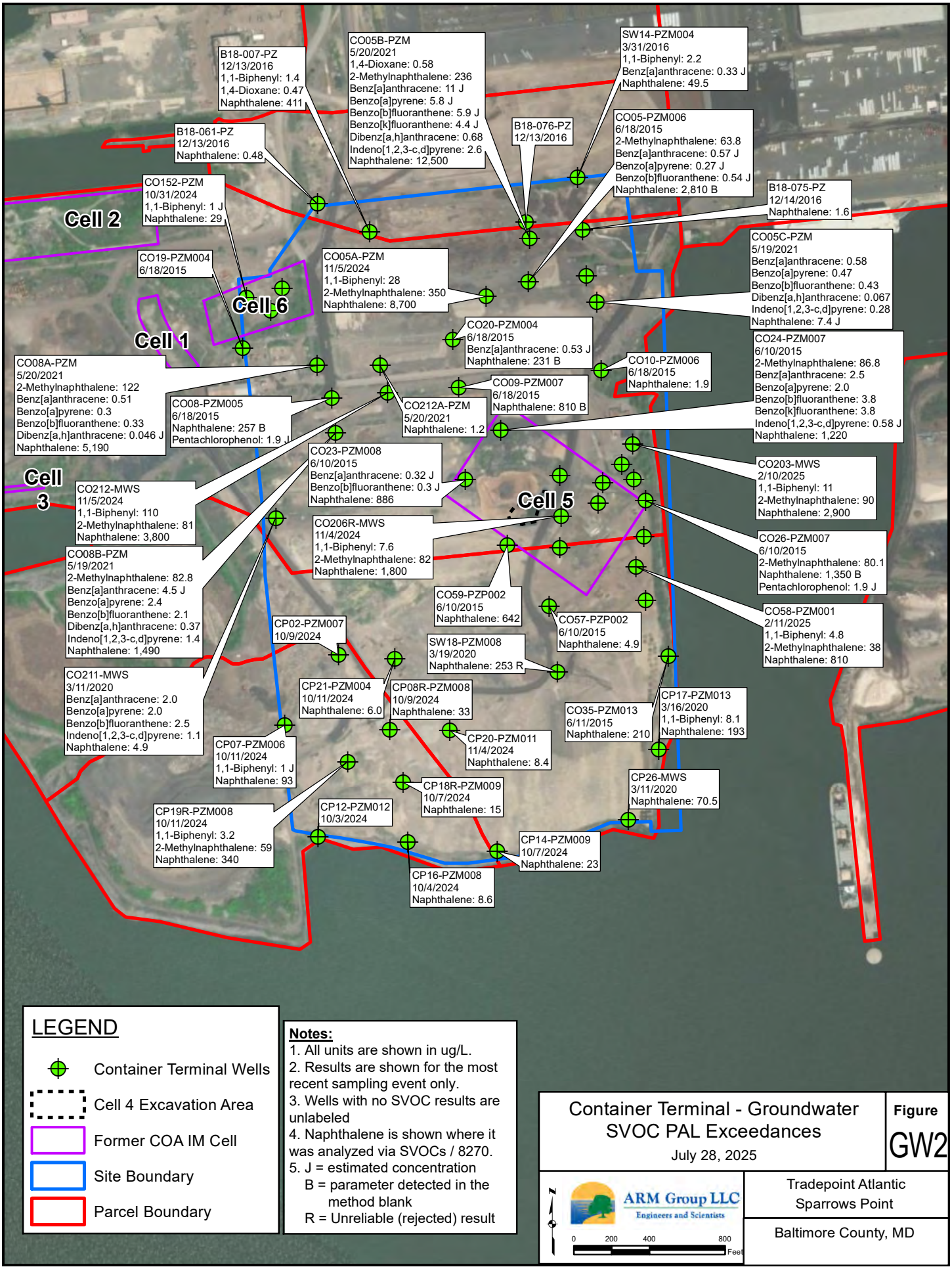
Figure
GW1

ARM Group LLC
Engineers and Scientists

Tradepoint Atlantic
Sparrows Point

Baltimore County, MD
ARM Project 21010210

P:\EnviroAnalytics Group\160443M EAG_TPA Redevelopment\GIS\Container Terminal GW PALs VOC.mxd


B18-007-PZ
12/13/2016
1,1-Biphenyl: 1.4
1,4-Dioxane: 0.47
Naphthalene: 411
CO05B-PZM
5/20/2021
1,4-Dioxane: 0.58
2-Methylnaphthalene: 236
Benz[a]anthracene: 11 J
Benzo[a]pyrene: 5.8 J
Benzo[b]fluoranthene: 5.9 J
Benzo[k]fluoranthene: 4.4 J
Dibenz[a,h]anthracene: 0.68
Indeno[1,2,3-c,d]pyrene: 2.6
Naphthalene: 12,500
SW14-PZM004
3/31/2016
1,1-Biphenyl: 2.2
Benz[a]anthracene: 0.33 J
Naphthalene: 49.5
B18-061-PZ
12/13/2016
Naphthalene: 0.48
B18-076-PZ
12/13/2016
CO05-PZM006
6/18/2015
2-Methylnaphthalene: 63.8
Benz[a]anthracene: 0.57 J
Benzo[a]pyrene: 0.27 J
Benzo[b]fluoranthene: 0.54 J
Naphthalene: 2,810 B
CO152-PZM
10/31/2024
1,1-Biphenyl: 1 J
Naphthalene: 29
B18-075-PZ
12/14/2016
Naphthalene: 1.6
Cell 2
CO19-PZM004
6/18/2015
CO05A-PZM
11/5/2024
1,1-Biphenyl: 28
2-Methylnaphthalene: 350
Naphthalene: 8,700
CO05C-PZM
5/19/2021
Benz[a]anthracene: 0.58
Benzo[a]pyrene: 0.47
Benzo[b]fluoranthene: 0.43
Dibenz[a,h]anthracene: 0.067
Indeno[1,2,3-c,d]pyrene: 0.28
Naphthalene: 7.4 J
Cell 6
Cell 1
CO20-PZM004
6/18/2015
Benz[a]anthracene: 0.53 J
Naphthalene: 231 B
CO24-PZM007
6/10/2015
2-Methylnaphthalene: 86.8
Benz[a]anthracene: 2.5
Benzo[a]pyrene: 2.0
Benzo[b]fluoranthene: 3.8
Benzo[k]fluoranthene: 3.8
Indeno[1,2,3-c,d]pyrene: 0.58 J
Naphthalene: 1,220
CO08A-PZM
5/20/2021
2-Methylnaphthalene: 122
Benz[a]anthracene: 0.51
Benzo[a]pyrene: 0.3
Benzo[b]fluoranthene: 0.33
Dibenz[a,h]anthracene: 0.046 J
Naphthalene: 5,190
CO10-PZM006
6/18/2015
Naphthalene: 1.9
CO09-PZM007
6/18/2015
Naphthalene: 810 B
CO08-PZM005
6/18/2015
Naphthalene: 257 B
Pentachlorophenol: 1.9 J
CO212A-PZM
5/20/2021
Naphthalene: 1.2
CO23-PZM008
6/10/2015
Benz[a]anthracene: 0.32 J
Benzo[b]fluoranthene: 0.3 J
Naphthalene: 886
CO203-MWS
2/10/2025
1,1-Biphenyl: 11
2-Methylnaphthalene: 90
Naphthalene: 2,900
Cell 3
CO212-MWS
11/5/2024
1,1-Biphenyl: 110
2-Methylnaphthalene: 81
Naphthalene: 3,800
Cell 5
CO206R-MWS
11/4/2024
1,1-Biphenyl: 7.6
2-Methylnaphthalene: 82
Naphthalene: 1,800
CO26-PZM007
6/10/2015
2-Methylnaphthalene: 80.1
Naphthalene: 1,350 B
Pentachlorophenol: 1.9 J
CO08B-PZM
5/19/2021
2-Methylnaphthalene: 82.8
Benz[a]anthracene: 4.5 J
Benzo[a]pyrene: 2.4
Benzo[b]fluoranthene: 2.1
Dibenz[a,h]anthracene: 0.37
Indeno[1,2,3-c,d]pyrene: 1.4
Naphthalene: 1,490
CO59-PZP002
6/10/2015
Naphthalene: 642
CO57-PZP002
6/10/2015
Naphthalene: 4.9
CO58-PZM001
2/11/2025
1,1-Biphenyl: 4.8
2-Methylnaphthalene: 38
Naphthalene: 810
CP02-PZM007
10/9/2024
SW18-PZM008
3/19/2020
Naphthalene: 253 R
CO211-MWS
3/11/2020
Benz[a]anthracene: 2.0
Benzo[a]pyrene: 2.0
Benzo[b]fluoranthene: 2.5
Indeno[1,2,3-c,d]pyrene: 1.1
Naphthalene: 4.9
CP21-PZM004
10/11/2024
Naphthalene: 6.0
CP08R-PZM008
10/9/2024
Naphthalene: 33
CO35-PZM013
6/11/2015
Naphthalene: 210
CP17-PZM013
3/16/2020
1,1-Biphenyl: 8.1
Naphthalene: 193
CP20-PZM011
11/4/2024
Naphthalene: 8.4
CP07-PZM006
10/11/2024
1,1-Biphenyl: 1 J
Naphthalene: 93
CP18R-PZM009
10/7/2024
Naphthalene: 15
CP26-MWS
3/11/2020
Naphthalene: 70.5
CP19R-PZM008
10/11/2024
1,1-Biphenyl: 3.2
2-Methylnaphthalene: 59
Naphthalene: 340
CP12-PZM012
10/3/2024
CP14-PZM009
10/7/2024
Naphthalene: 23
CP16-PZM008
10/4/2024
Naphthalene: 8.6
LEGEND
Container Terminal Wells
Cell 4 Excavation Area
Former COA IM Cell
Site Boundary
Parcel Boundary
Notes:
1. All units are shown in ug/L.
2. Results are shown for the most recent sampling event only.
3. Wells with no SVOC results are unlabeled
4. Naphthalene is shown where it was analyzed via SVOCs / 8270.
5. J = estimated concentration
B = parameter detected in the method blank
R = Unreliable (rejected) result
Container Terminal - Groundwater
SVOC PAL Exceedances
July 28, 2025
Figure
GW2
ARM Group LLC
Engineers and Scientists
0 200 400 800
Feet
Tradepoint Atlantic
Sparrows Point
Baltimore County, MD
P:\EnviroAnalytics Group\160443M EAG_TPA Redevelopment\GIS\Container Terminal GW PALs SVOC.mxd

Container Terminal - Groundwater
TPH/OG PAL Exceedances
July 28, 2025

Figure
GW3

ARM Group LLC
Engineers and Scientists

Tradepoint Atlantic
Sparrows Point

Baltimore County, MD
ARM Project 21010210

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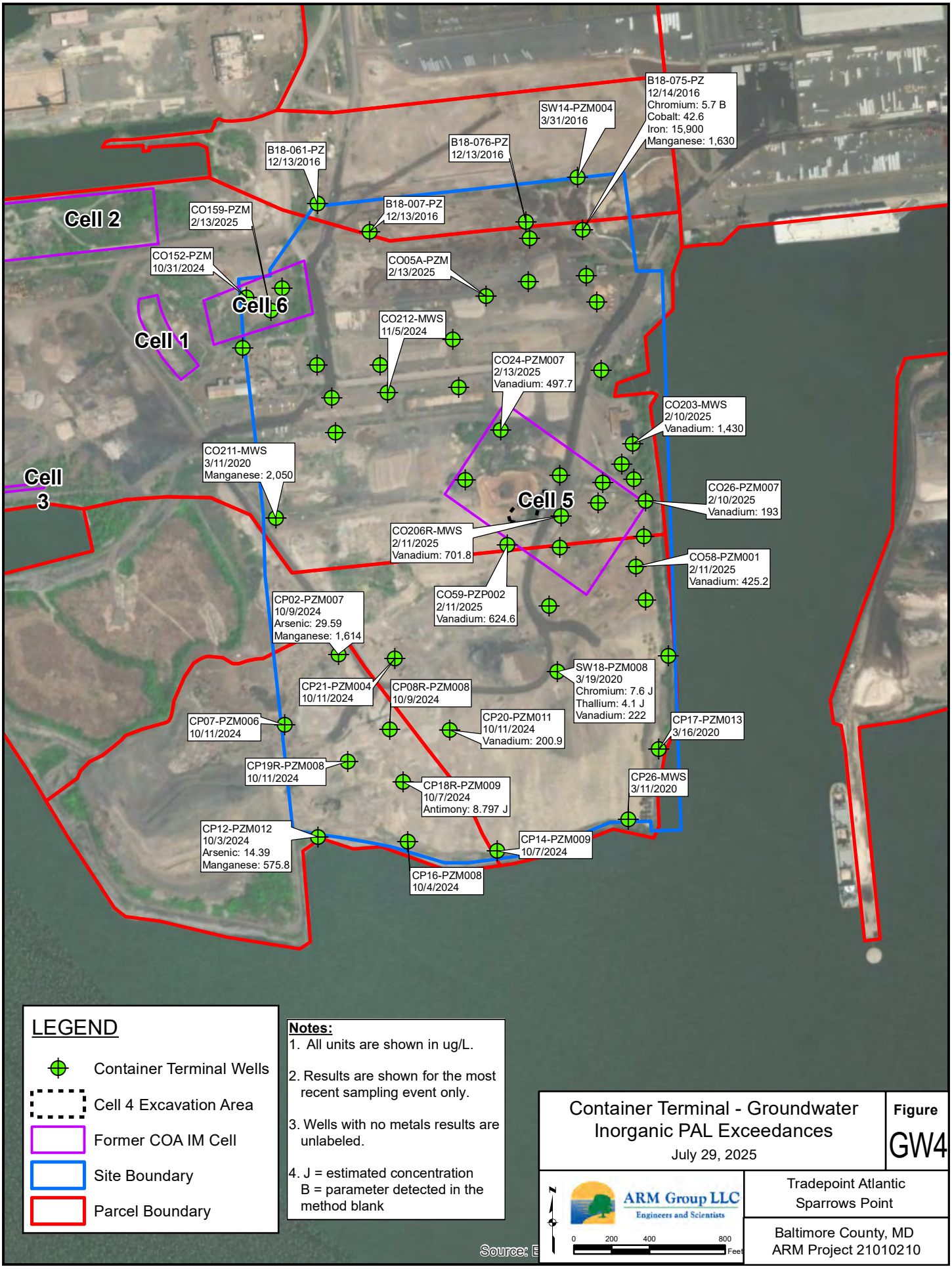

Container Terminal - Groundwater Inorganic PAL Exceedances

July 29, 2025

Figure

GW4

ARM Group LLC
Engineers and Scientists

Tradepoint Atlantic
Sparrows Point

Baltimore County, MD
ARM Project 21010210

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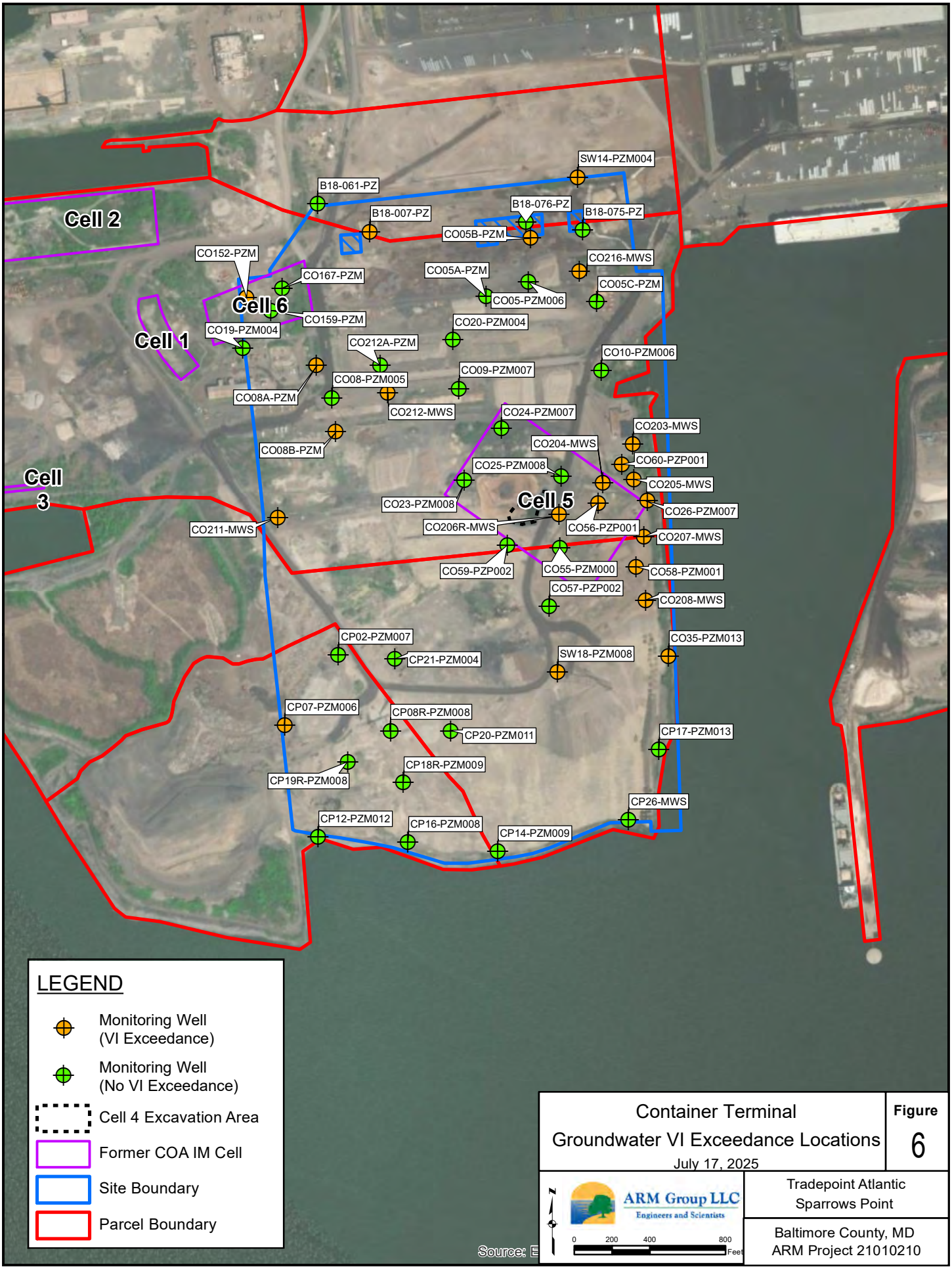

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Container Terminal
Groundwater VI Exceedance Locations

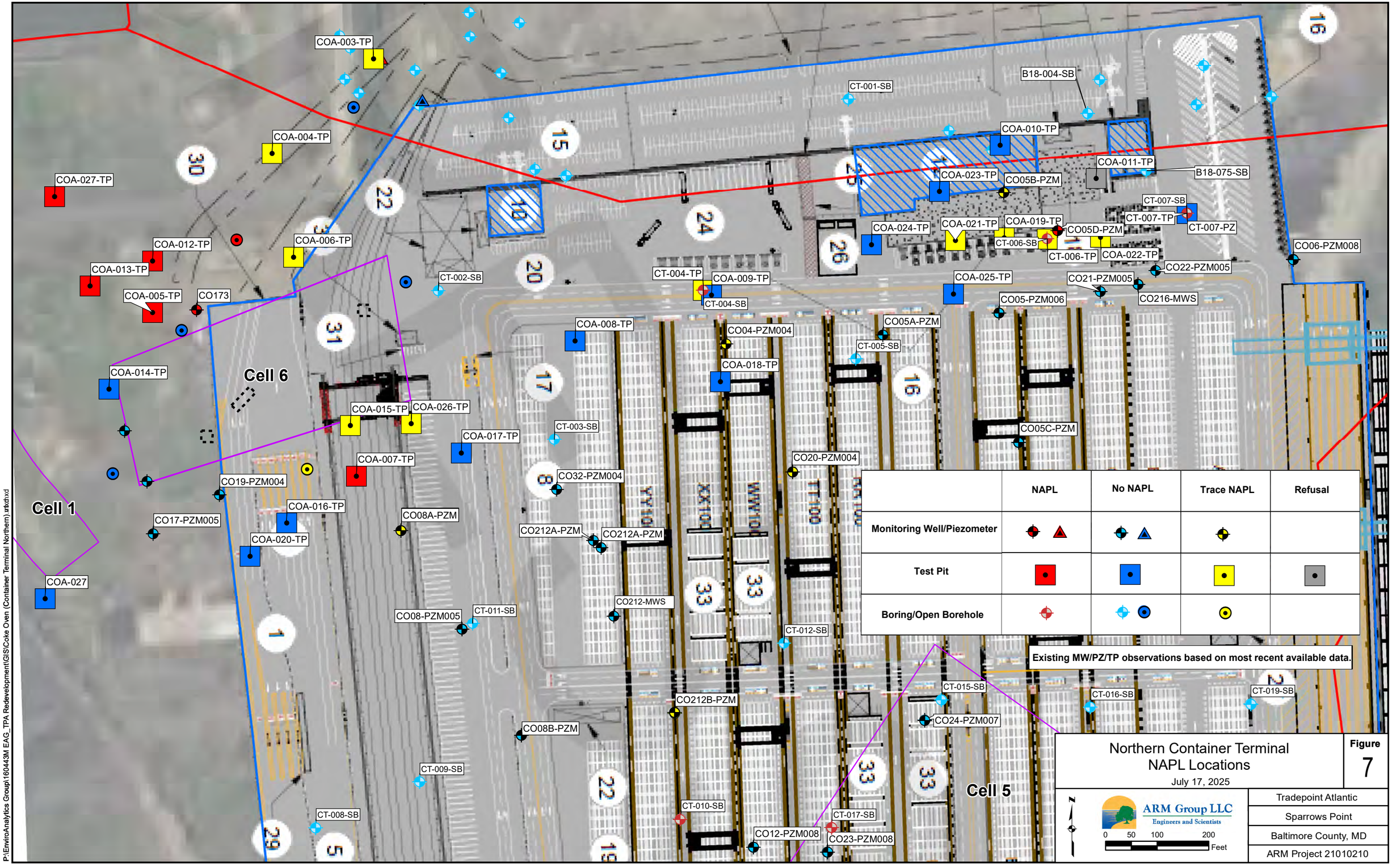
July 17, 2025

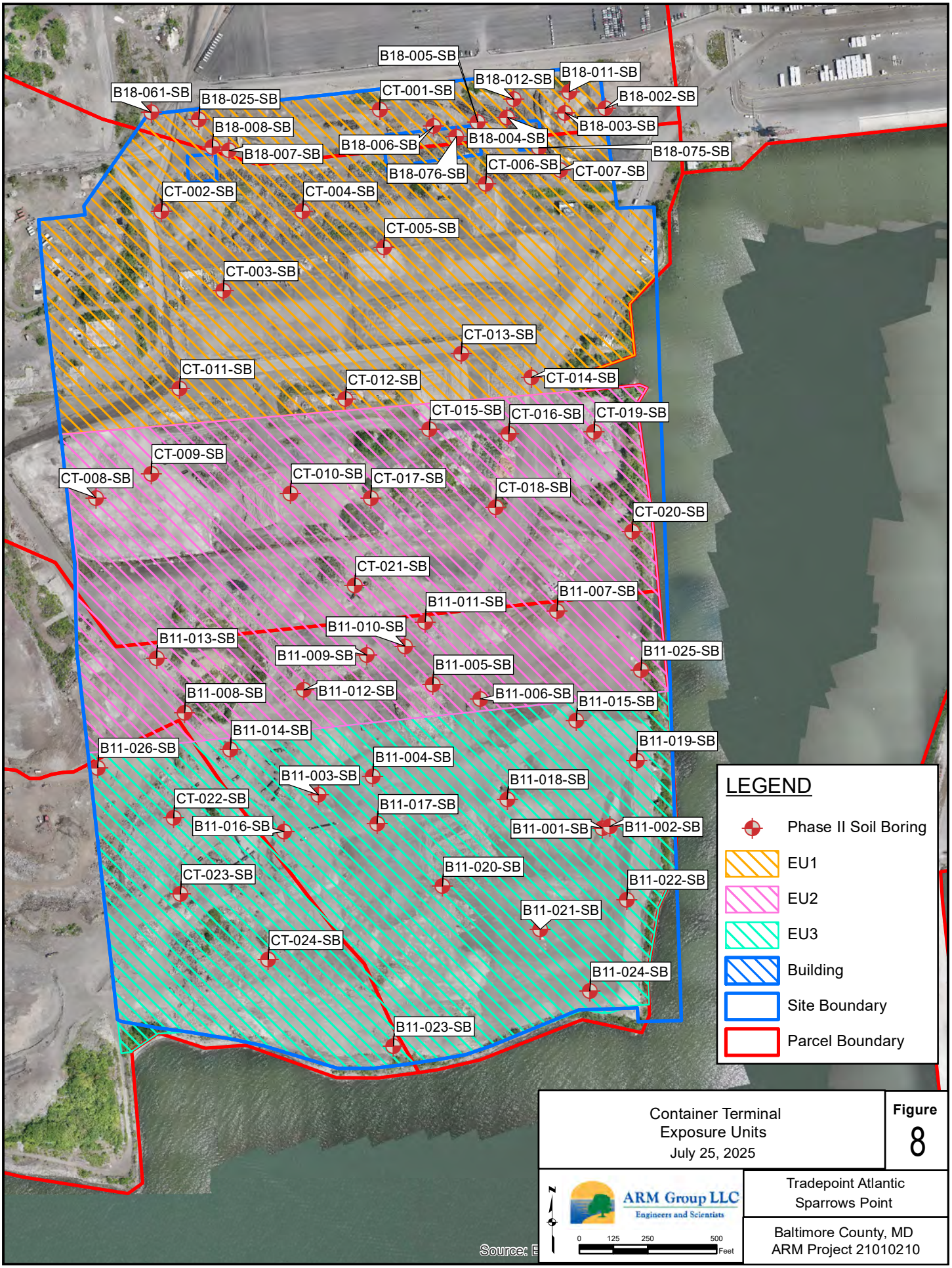
Figure 6

ARM Group LLC
Engineers and Scientists

Tradepoint Atlantic
Sparrows Point

Baltimore County, MD
ARM Project 21010210


COA-003-TP
COA-004-TP
COA-027-TP
COA-012-TP
COA-013-TP
COA-005-TP
CO173
COA-006-TP
CT-002-SB
COA-014-TP
Cell 6
COA-015-TP
COA-026-TP
COA-017-TP
CT-003-SB
COA-007-TP
CO19-PZM004
COA-016-TP
CO17-PZM005
COA-020-TP
CO08A-PZM
COA-027
CO08-PZM005
CT-011-SB
Cell 1
CT-001-SB
B18-004-SB
COA-010-TP
COA-011-TP
B18-075-SB
COA-023-TP
CO05B-PZM
CT-007-SB
CT-007-TP
CT-007-PZ
COA-024-TP
COA-021-TP
COA-019-TP
CO05D-PZM
CT-006-SB
CT-006-TP
COA-022-TP
CO06-PZM008
CO22-PZM005
CT-004-TP
COA-009-TP
CT-004-SB
COA-025-TP
CO21-PZM005
CO216-MWS
CO05-PZM006
COA-008-TP
CO04-PZM004
CO05A-PZM
CT-005-SB
COA-018-TP
CO05C-PZM
CO20-PZM004
CO32-PZM004
CO212A-PZM
CO212A-PZM
CO212-MWS
CT-012-SB
CO212B-PZM
CO08B-PZM
CT-009-SB
CT-008-SB
CT-010-SB
CT-017-SB
CO12-PZM008
CO23-PZM008
CT-015-SB
CO24-PZM007
CT-016-SB
CT-019-SB
Cell 5
YY10
XX10
WW10
TT10
Existing MW/PZ/TP observations based on most recent available data.
NAPL
No NAPL
Trace NAPL
Refusal
Monitoring Well/Piezometer
Test Pit
Boring/Open Borehole
Northern Container Terminal
NAPL Locations
July 17, 2025
Figure
7
ARM Group LLC
Engineers and Scientists
0 50 100 200
Feet
Tradepoint Atlantic
Sparrows Point
Baltimore County, MD
ARM Project 21010210
P:\EnviroAnalytics Group\160443M EAG_TPA Redevelopment\GIS\Coke Oven (Container Terminal Northern).mxd



Container Terminal
Exposure Units
July 25, 2025

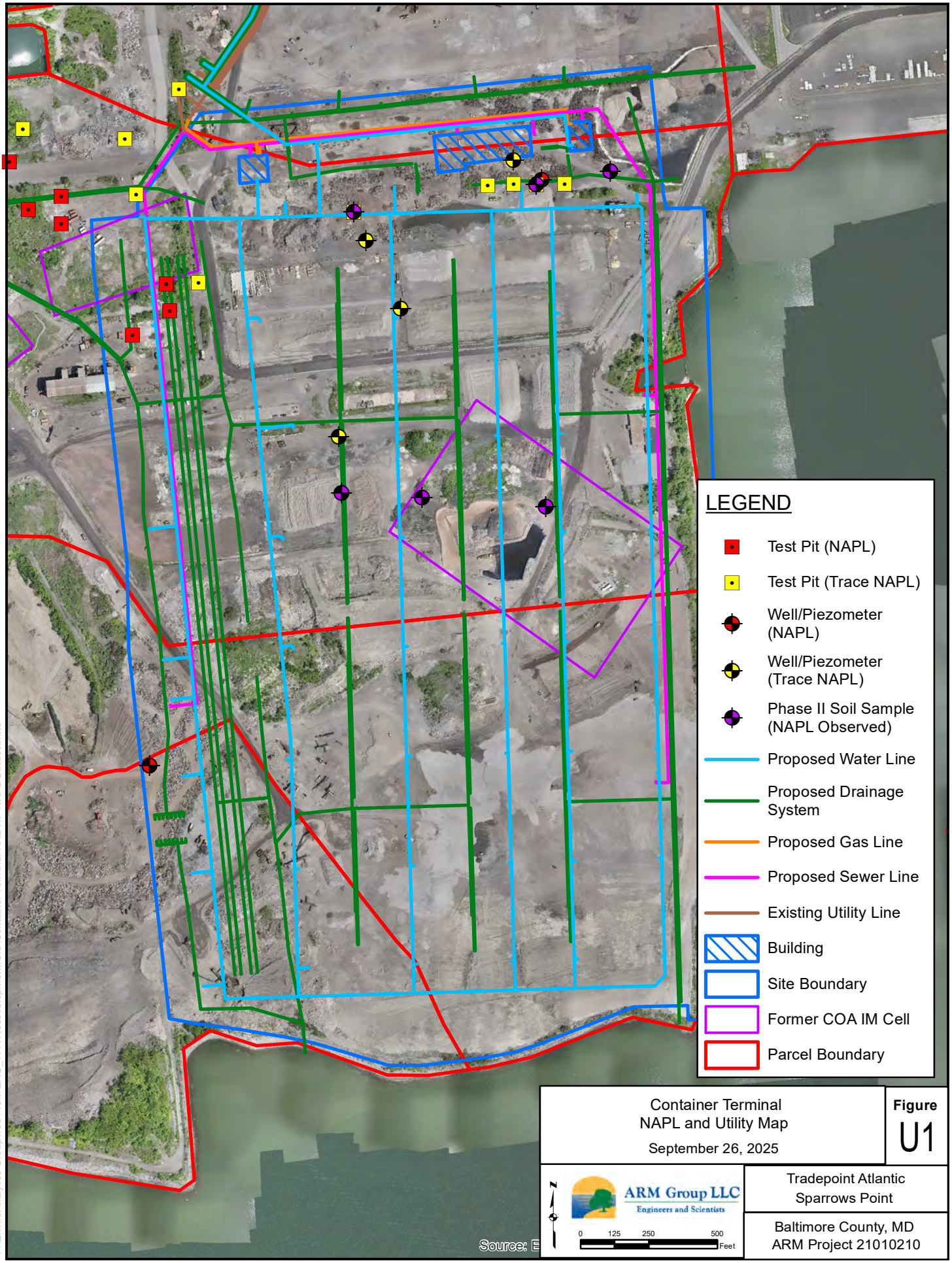
Figure
8

ARM Group LLC
Engineers and Scientists

Tradepoint Atlantic
Sparrows Point

Baltimore County, MD
ARM Project 21010210

P:\EnviroAnalytics Group\160443M EAG_TPA Redevelopment\GIS\Container Terminal RADWP.mxd



Container Terminal
NAPL and Utility Map

September 26, 2025

Figure
U1

ARM Group LLC
Engineers and Scientists

Tradepoint Atlantic
Sparrows Point

Baltimore County, MD
ARM Project 21010210

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Container Terminal
Proposed Capping Plan
July 29, 2025

Figure
9

ARM Group LLC
Engineers and Scientists

Tradepoint Atlantic
Sparrows Point

Baltimore County, MD
ARM Project 21010210

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LEGEND

- Shallow Monitoring Well
- Groundwater Contour (Shallow Zone, ft AMSL)
- Site Boundary
- Parcel Boundary

Note:
- "NM"= Not Measured
- "NC"= Not Contoured
- Synoptic gauging was completed on February 27, 2024 as part of the CPA CMS.

Source: E

Coke Point Area Shallow Groundwater Elevation

July 25, 2025

Figure 10

ARM Group LLC
Engineers and Scientists

0 150 300 600 Feet

Tradepoint Atlantic
Sparrows Point

Baltimore County, MD
ARM Project 21010210

P:\EnviroAnalytics Group\160443M EAG_TPA Redevelopment\GIS\Container Terminal Synoptic GW.mxd

TABLES

Table 1 - Container Terminal
Summary of Organics Detected in Soil

Parameter	Units	PAL	B11-001-SB-1*	B11-001-SB-5*	B11-002-SB-1*	B11-002-SB-5*	B11-003-SB-1	B11-003-SB-5	B11-004-SB-1	B11-004-SB-4	B11-005-SB-2*	B11-005-SB-5*	B11-006-SB-3
			8/13/2020	8/13/2020	8/13/2020	8/13/2020	8/11/2020	8/11/2020	8/11/2020	8/11/2020	8/13/2020	10/7/2020	8/17/2020
Volatile Organic Compounds													
1,1,1-Trichloroethane	mg/kg	36,000	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*0.0043 U*	*0.0046 U*	*N/A*	*0.0044 U*	*N/A*
1,1-Dichloroethane	mg/kg	16	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*0.0043 U*	*0.0046 U*	*N/A*	*0.0044 U*	*N/A*
1,2-Dichlorobenzene	mg/kg	9,300	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*0.0043 U*	*0.0046 U*	*N/A*	*0.0044 U*	*N/A*
2-Butanone (MEK)	mg/kg	190,000	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*0.0086 UJ*	*0.0092 UJ*	*N/A*	*0.0088 U*	*N/A*
Acetone	mg/kg	670,000	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*0.0086 U*	*0.0092 U*	*N/A*	**0.01**	*N/A*
Benzene	mg/kg	5.1	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*0.0043 U*	*0.0046 U*	*N/A*	*0.0044 U*	*N/A*
Bromomethane	mg/kg	30	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*0.0043 U*	*0.0046 U*	*N/A*	*0.0044 U*	*N/A*
Carbon disulfide	mg/kg	3,500	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*0.0043 U*	*0.0046 U*	*N/A*	**0.0019 J**	*N/A*
Chloroform	mg/kg	1.4	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*0.0043 U*	*0.0046 U*	*N/A*	*0.0044 U*	*N/A*
Cyclohexane	mg/kg	27,000	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*0.0086 U*	*0.0092 U*	*N/A*	*0.0088 U*	*N/A*
Ethylbenzene	mg/kg	25	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*0.0043 U*	*0.0046 U*	*N/A*	*0.0044 U*	*N/A*
Isopropylbenzene	mg/kg	9,900	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*0.0043 U*	*0.0046 U*	*N/A*	*0.0044 U*	*N/A*
Methyl Acetate	mg/kg	1,200,000	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*0.043 U*	*0.046 U*	*N/A*	*0.044 U*	*N/A*
Styrene	mg/kg	35,000	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*0.0043 U*	*0.0046 U*	*N/A*	*0.0044 U*	*N/A*
Tetrachloroethene	mg/kg	100	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*0.0043 U*	*0.0046 U*	*N/A*	*0.0044 U*	*N/A*
Toluene	mg/kg	47,000	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*0.0043 U*	*0.0046 U*	*N/A*	*0.0044 U*	*N/A*
Xylenes	mg/kg	2,800	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*0.013 U*	*0.014 U*	*N/A*	*0.013 U*	*N/A*
Semi-Volatile Organic Compounds^													
1,1-Biphenyl	mg/kg	200	**0.24 J**	**0.23 J**	**0.17 J**	*0.072 U*	*0.72 U*	**0.2 J**	**0.078**	*0.74 U*	**0.028 J**	**0.022 J**	**0.038 J**
1,2,4,5-Tetrachlorobenzene	mg/kg	350	*0.74 U*	*0.74 U*	*0.36 U*	*0.072 U*	*0.72 U*	*0.75 U*	*0.073 U*	*0.74 U*	*0.071 U*	*0.073 U*	*0.073 U*
2,4-Dimethylphenol	mg/kg	16,000	*0.74 U*	*0.74 U*	*0.36 U*	*0.072 U*	*0.72 U*	*0.75 U*	**0.073 R**	*0.74 U*	*0.071 U*	*0.073 U*	*0.073 UJ*
2,4-Dinitrophenol	mg/kg	1,600	*1.9 U*	*1.9 U*	*0.9 U*	*0.18 U*	*1.8 U*	*1.9 U*	**0.18 R**	*1.9 U*	*0.18 U*	*0.18 U*	**0.18 R**
2,4-Dinitrotoluene	mg/kg	7.4	*0.74 U*	*0.74 U*	*0.36 U*	*0.072 U*	*0.72 U*	*0.75 U*	*0.073 U*	*0.74 U*	*0.071 U*	*0.073 U*	*0.073 U*
2,6-Dinitrotoluene	mg/kg	1.5	*0.74 U*	*0.74 U*	*0.36 U*	*0.072 U*	*0.72 U*	*0.75 U*	*0.073 U*	*0.74 U*	*0.071 U*	*0.073 U*	*0.073 U*
2-Chloronaphthalene	mg/kg	60,000	*0.74 U*	*0.74 U*	*0.36 U*	*0.072 U*	*0.72 U*	*0.75 U*	*0.073 U*	*0.74 U*	*0.071 U*	*0.073 U*	*0.073 U*
2-Chlorophenol	mg/kg	5,800	*0.74 U*	*0.74 U*	*0.36 U*	*0.072 U*	*0.72 U*	*0.75 U*	**0.073 R**	*0.74 U*	*0.071 U*	*0.073 U*	*0.073 UJ*
2-Methylnaphthalene	mg/kg	3,000	**1.9**	**2.1**	**0.32**	**0.023**	**0.036**	**0.12**	**0.059**	**0.02**	**0.43**	**0.092**	**0.4**
2-Methylphenol	mg/kg	41,000	*0.74 U*	*0.74 U*	*0.36 U*	*0.072 U*	*0.72 U*	*0.75 U*	**0.073 R**	*0.74 U*	*0.071 U*	*0.073 U*	*0.073 UJ*
3&4-Methylphenol(m&p Cresol)	mg/kg	41,000	*1.5 U*	*1.5 U*	*0.72 U*	*0.14 U*	*1.4 U*	*1.5 U*	**0.15 R**	*1.5 U*	*0.14 U*	*0.15 U*	*0.15 UJ*
3,3'-Dichlorobenzidine	mg/kg	5.1	*0.74 U*	*0.74 U*	*0.36 U*	*0.072 U*	*0.72 U*	*0.75 U*	*0.073 U*	*0.74 UJ*	*0.071 U*	*0.073 U*	*0.073 U*
Acenaphthene	mg/kg	45,000	**0.13**	**0.15**	**0.041**	*0.0085 U*	**0.019**	**0.039**	**0.014**	**0.0018 J**	**0.0032 J**	**0.078**	**0.16**
Acenaphthylene	mg/kg	45,000	**0.56**	**1.6**	**0.16**	**0.0043 J**	**0.023**	**0.12**	**0.094**	**0.019**	**0.017**	**1.5**	**0.24**
Acetophenone	mg/kg	120,000	*0.74 U*	*0.74 U*	*0.36 U*	*0.072 U*	*0.72 U*	*0.75 U*	**0.034 J**	*0.74 U*	**0.018 J**	*0.073 U*	**0.031 J**
Anthracene	mg/kg	230,000	**0.68**	**1.7**	**0.27**	**0.004 J**	**0.034**	**0.16**	**0.49**	**0.02**	**0.021**	**1.2**	**0.78**
Benz[a]anthracene	mg/kg	21	**2.5**	**5.7**	**0.76**	**0.049**	**0.36**	**1.6**	**0.71**	**0.15**	**0.072**	**3.1**	**0.22**
Benzaldehyde	mg/kg	120,000	*0.74 U*	*0.74 U*	*0.36 U*	**0.021 J**	*0.72 U*	*0.75 U*	**0.028 J**	*0.74 U*	**0.019 J**	*0.073 U*	**0.025 J**
Benzo[a]pyrene	mg/kg	2.1	**2.9**	**5.6**	**0.71**	**0.015**	**0.61**	**2.6**	**0.52**	**0.11**	**0.05**	**5.2**	**0.11**
Benzo[b]fluoranthene	mg/kg	21	**3.5**	**6.7**	**1.1**	**0.03**	**0.7**	**2.8**	**0.75**	**0.15**	**0.058**	**5.6**	**0.16**
Benzo[g,h,i]perylene	mg/kg		**2.0**	**3.7**	**0.48**	**0.014**	**0.43**	**1.7**	**0.32**	**0.064**	**0.029**	**4.8**	**0.058 J**
Benzo[k]fluoranthene	mg/kg	210	**1.3**	**2.6**	**0.37**	**0.0094**	**0.21**	**0.62**	**0.24**	**0.049**	**0.027**	**2.1**	**0.066 J**
bis(2-Ethylhexyl)phthalate	mg/kg	160	*0.74 U*	*0.74 U*	*0.36 U*	*0.072 U*	*0.72 U*	*0.75 U*	*0.024 B*	*0.74 UJ*	**0.039 J**	**0.03 J**	*0.049 B*
Caprolactam	mg/kg	400,000	*1.9 U*	*1.9 U*	*0.9 U*	*0.18 U*	*1.8 U*	*1.9 U*	*0.18 U*	*1.9 U*	*0.18 U*	*0.18 U*	*0.18 U*
Carbazole	mg/kg		**0.32 J**	**0.36 J**	**0.12 J**	*0.072 U*	*0.72 U*	**0.26 J**	**0.11**	*0.74 U*	*0.071 U*	**0.094**	**0.019 J**

Table 1 - Container Terminal
Summary of Organics Detected in Soil

Parameter	Units	PAL	B11-001-SB-1*	B11-001-SB-5*	B11-002-SB-1*	B11-002-SB-5*	B11-003-SB-1	B11-003-SB-5	B11-004-SB-1	B11-004-SB-4	B11-005-SB-2*	B11-005-SB-5*	B11-006-SB-3
			8/13/2020	8/13/2020	8/13/2020	8/13/2020	8/11/2020	8/11/2020	8/11/2020	8/11/2020	8/13/2020	10/7/2020	8/17/2020
Chrysene	mg/kg	2,100	**2.6**	**5.1**	**0.84**	**0.04**	**0.33**	**1.7**	**0.53**	**0.099**	**0.055**	**3.1**	**0.23**
Dibenz[a,h]anthracene	mg/kg	2.1	**0.62**	**0.92**	**0.12**	**0.0032 J**	**0.093**	**0.27**	**0.086**	**0.018**	**0.0066 J**	**0.83**	**0.015 J**
Di-n-butylphthalate	mg/kg	82,000	*0.74 U*	**0.21 J**	*0.36 U*	*0.072 U*	*0.72 U*	*0.75 U*	*0.073 U*	*0.2 B*	**0.076**	**0.021 J**	*0.073 U*
Di-n-ocytlphthalate	mg/kg	8,200	*0.74 U*	*0.74 U*	*0.36 U*	*0.072 U*	*0.72 U*	*0.75 U*	*0.073 UJ*	*0.74 UJ*	*0.071 U*	*0.073 U*	*0.073 U*
Fluoranthene	mg/kg	30,000	**4.0**	**12**	**1.9**	**0.028**	**0.24**	**1.6**	**0.94**	**0.15**	**0.072**	**7.1**	**1.9**
Fluorene	mg/kg	30,000	**0.19**	**0.56**	**0.054**	*0.0085 U*	**0.0079**	**0.038**	**0.068**	**0.0024 J**	**0.011**	**0.4**	**0.23**
Hexachloroethane	mg/kg	8.0	*0.74 U*	*0.74 U*	*0.36 U*	*0.072 U*	*0.72 U*	*0.75 U*	*0.073 U*	*0.74 U*	*0.071 U*	*0.073 U*	*0.073 U*
Indeno[1,2,3-c,d]pyrene	mg/kg	21	**2.0**	**3.9**	**0.44**	**0.011**	**0.36**	**1.7**	**0.3**	**0.058**	**0.023**	**5.7**	**0.061 J**
Isophorone	mg/kg	2,400	*0.74 U*	*0.74 U*	*0.36 U*	*0.072 U*	*0.72 U*	*0.75 U*	*0.073 U*	*0.74 U*	*0.071 U*	*0.073 U*	*0.073 U*
Naphthalene	mg/kg	8.6	**2.5**	**3.5**	**1.7**	**0.024**	**0.084**	**0.43**	**0.15**	**0.018**	**0.44**	**0.21**	**0.6**
Nitrobenzene	mg/kg	22	*0.74 U*	*0.74 U*	*0.36 U*	*0.072 U*	*0.72 U*	*0.75 U*	*0.073 U*	*0.74 U*	*0.071 U*	*0.073 U*	*0.073 U*
N-Nitrosodiphenylamine	mg/kg	470	*0.74 U*	*0.74 U*	*0.36 U*	*0.072 U*	*0.72 U*	*0.75 U*	*0.073 U*	*0.74 U*	*0.071 U*	*0.073 U*	*0.073 U*
Pentachlorophenol	mg/kg	4.0	*1.9 U*	*1.9 U*	*0.9 U*	*0.18 U*	*1.8 U*	*1.9 U*	**0.18 R**	*1.9 U*	*0.18 U*	*0.18 U*	**0.18 R**
Phenanthrene	mg/kg		**2.9**	**7.7**	**1.5**	**0.016**	**0.093**	**0.51**	**0.3**	**0.045**	**0.15**	**3.4**	**2.8**
Phenol	mg/kg	250,000	*0.74 U*	*0.74 U*	*0.36 U*	*0.072 U*	*0.72 U*	*0.75 U*	**0.073 R**	*0.74 U*	*0.071 U*	*0.073 U*	*0.073 UJ*
Pyrene	mg/kg	23,000	**3.6**	**10**	**1.5**	**0.026**	**0.26**	**1.8**	**0.79**	**0.14**	**0.062**	**6.8**	**1.5**
PCBs													
Aroclor 1242	mg/kg	0.97	*0.092 U*	*N/A*	*0.018 U*	*N/A*	*0.089 U*	*N/A*	*0.018 U*	*N/A*	*0.018 U*	*N/A*	*0.018 U*
Aroclor 1248	mg/kg	0.94	*0.092 U*	*N/A*	*0.018 U*	*N/A*	*0.089 UJ*	*N/A*	*0.018 UJ*	*N/A*	**0.017 J**	*N/A*	*0.018 U*
Aroclor 1254	mg/kg	0.97	*0.092 U*	*N/A*	*0.018 U*	*N/A*	*0.089 U*	*N/A*	*0.018 U*	*N/A*	*0.018 U*	*N/A*	*0.018 U*
Aroclor 1260	mg/kg	0.99	*0.092 U*	*N/A*	*0.018 U*	*N/A*	*0.089 U*	*N/A*	*0.018 U*	*N/A*	*0.018 U*	*N/A*	*0.018 U*
Aroclor 1268	mg/kg		*0.092 U*	*N/A*	*0.018 U*	*N/A*	*0.089 U*	*N/A*	*0.018 U*	*N/A*	*0.018 U*	*N/A*	*0.018 U*
PCBs (total)	mg/kg	0.97	*0.83 U*	*N/A*	*0.16 U*	*N/A*	*0.8 U*	*N/A*	*0.16 U*	*N/A*	*0.16 U*	*N/A*	*0.17 U*
TPH/Oil & Grease													
Diesel Range Organics	mg/kg	6,200	**367**	**323**	**220**	**42.8**	**93.8**	**205**	**125**	**93.9**	**52**	**182**	**50**
Gasoline Range Organics	mg/kg	6,200	*11.8 U*	**7.7 J**	*9.3 U*	*11.1 U*	*10.7 U*	*10.3 U*	*11.1 U*	*10.7 U*	*10.1 U*	*9.2 U*	*11 U*
Oil & Grease	mg/kg	6,200	**708**	**317**	**1,510**	*215 U*	**418**	**278**	**523**	**1,370**	*214 U*	**365**	**122 J-**

Bold indicates detection
Values in red indicate a detection exceedance of the Project Action Limit (PAL)
* Indicates non-validated data
^ PAH compounds were analyzed via SIM
N/A: This parameter was not analyzed for this sample.
Soil Sample Excavated

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

Table 1 - Container Terminal
Summary of Organics Detected in Soil

Parameter	Units	PAL	B11-006-SB-7	B11-007-SB-1	B11-007-SB-5	B11-008-SB-2	B11-008-SB-6	B11-009-SB-4*	B11-009-SB-8*	B11-010-SB-2*	B11-010-SB-6*	B11-011-SB-2*	B11-011-SB-9*
			8/17/2020	8/18/2020	8/18/2020	8/17/2020	8/17/2020	10/7/2020	10/7/2020	10/7/2020	10/7/2020	10/6/2020	10/6/2020
Volatile Organic Compounds													
1,1,1-Trichloroethane	mg/kg	36,000	*0.005 U*	*N/A*	*N/A*	*N/A*	*N/A*	*0.0043 U*	*0.0048 U*	*0.0044 U*	*0.0062 U*	*0.0036 U*	*0.0034 U*
1,1-Dichloroethane	mg/kg	16	*0.005 U*	*N/A*	*N/A*	*N/A*	*N/A*	*0.0043 U*	*0.0048 U*	*0.0044 U*	*0.0062 U*	*0.0036 U*	*0.0034 U*
1,2-Dichlorobenzene	mg/kg	9,300	*0.005 U*	*N/A*	*N/A*	*N/A*	*N/A*	*0.0043 U*	*0.0048 U*	*0.0044 U*	*0.0062 U*	*0.0036 U*	*0.0034 U*
2-Butanone (MEK)	mg/kg	190,000	*0.01 U*	*N/A*	*N/A*	*N/A*	*N/A*	*0.0086 U*	*0.0097 U*	*0.0089 U*	*0.012 U*	*0.0072 U*	*0.0068 U*
Acetone	mg/kg	670,000	*0.021 B*	*N/A*	*N/A*	*N/A*	*N/A*	**0.0075 J**	**0.011**	**0.015**	**0.014**	**0.0082**	**0.0099**
Benzene	mg/kg	5.1	*0.005 U*	*N/A*	*N/A*	*N/A*	*N/A*	*0.0043 U*	*0.0048 U*	*0.0044 U*	*0.0062 U*	*0.0036 U*	*0.0034 U*
Bromomethane	mg/kg	30	*0.005 U*	*N/A*	*N/A*	*N/A*	*N/A*	*0.0043 U*	*0.0048 U*	*0.0044 U*	*0.0062 U*	*0.0036 U*	*0.0034 U*
Carbon disulfide	mg/kg	3,500	*0.005 UJ*	*N/A*	*N/A*	*N/A*	*N/A*	**0.0015 J**	**0.0022 J**	*0.0044 U*	**0.003 J**	**0.0018 J**	**0.002 J**
Chloroform	mg/kg	1.4	*0.005 U*	*N/A*	*N/A*	*N/A*	*N/A*	*0.0043 U*	*0.0048 U*	*0.0044 U*	*0.0062 U*	*0.0036 U*	*0.0034 U*
Cyclohexane	mg/kg	27,000	*0.01 UJ*	*N/A*	*N/A*	*N/A*	*N/A*	*0.0086 U*	*0.0097 U*	**0.0017 J**	*0.012 U*	*0.0072 U*	*0.0068 U*
Ethylbenzene	mg/kg	25	*0.005 U*	*N/A*	*N/A*	*N/A*	*N/A*	*0.0043 U*	*0.0048 U*	*0.0044 U*	*0.0062 U*	*0.0036 U*	*0.0034 U*
Isopropylbenzene	mg/kg	9,900	*0.005 U*	*N/A*	*N/A*	*N/A*	*N/A*	*0.0043 U*	*0.0048 U*	*0.0044 U*	*0.0062 U*	*0.0036 U*	*0.0034 U*
Methyl Acetate	mg/kg	1,200,000	**0.0033 J**	*N/A*	*N/A*	*N/A*	*N/A*	*0.043 U*	*0.048 U*	*0.044 U*	*0.062 U*	*0.036 U*	*0.034 U*
Styrene	mg/kg	35,000	*0.005 U*	*N/A*	*N/A*	*N/A*	*N/A*	*0.0043 U*	*0.0048 U*	*0.0044 U*	*0.0062 U*	*0.0036 U*	*0.0034 U*
Tetrachloroethene	mg/kg	100	*0.005 U*	*N/A*	*N/A*	*N/A*	*N/A*	*0.0043 U*	*0.0048 U*	*0.0044 U*	*0.0062 U*	*0.0036 U*	*0.0034 U*
Toluene	mg/kg	47,000	*0.005 U*	*N/A*	*N/A*	*N/A*	*N/A*	*0.0043 U*	*0.0048 U*	*0.0044 U*	*0.0062 U*	*0.0036 U*	*0.0034 U*
Xylenes	mg/kg	2,800	*0.015 U*	*N/A*	*N/A*	*N/A*	*N/A*	*0.013 U*	*0.015 U*	*0.013 U*	*0.019 U*	*0.011 U*	*0.01 U*
Semi-Volatile Organic Compounds^													
1,1-Biphenyl	mg/kg	200	**0.04 J**	**0.04 J**	*0.074 U*	*0.7 U*	*0.68 U*	*0.072 U*	*0.07 U*	*0.72 U*	**0.027 J**	*0.069 U*	**0.035 J**
1,2,4,5-Tetrachlorobenzene	mg/kg	350	**0.042 J**	*0.075 U*	*0.074 U*	*0.7 U*	*0.68 U*	*0.072 U*	*0.07 U*	*0.72 U*	*0.096 U*	*0.069 U*	*0.068 U*
2,4-Dimethylphenol	mg/kg	16,000	**0.074 R**	*0.075 UJ*	**0.074 R**	*0.7 U*	*0.68 U*	*0.072 U*	*0.07 U*	*0.72 U*	*0.096 U*	*0.069 U*	*0.068 U*
2,4-Dinitrophenol	mg/kg	1,600	**0.18 R**	*0.19 UJ*	**0.19 R**	*1.7 U*	*1.7 UJ*	*0.18 U*	*0.18 U*	*1.8 U*	*0.24 U*	*0.17 U*	*0.17 U*
2,4-Dinitrotoluene	mg/kg	7.4	*0.074 U*	*0.075 U*	*0.074 U*	*0.7 U*	*0.68 U*	*0.072 U*	*0.07 U*	*0.72 U*	*0.096 U*	*0.069 U*	*0.068 U*
2,6-Dinitrotoluene	mg/kg	1.5	*0.074 U*	*0.075 U*	*0.074 U*	*0.7 U*	*0.68 U*	*0.072 U*	*0.07 U*	*0.72 U*	*0.096 U*	*0.069 U*	*0.068 U*
2-Chloronaphthalene	mg/kg	60,000	*0.074 U*	*0.075 U*	*0.074 U*	*0.7 U*	*0.68 U*	*0.072 U*	*0.07 U*	*0.72 U*	*0.096 U*	*0.069 U*	*0.068 U*
2-Chlorophenol	mg/kg	5,800	**0.074 R**	*0.075 UJ*	**0.074 R**	*0.7 U*	*0.68 U*	*0.072 U*	*0.07 U*	*0.72 U*	*0.096 U*	*0.069 U*	*0.068 U*
2-Methylnaphthalene	mg/kg	3,000	**0.068**	**0.57**	**0.028**	**0.09**	**0.11**	**0.035**	**0.064**	**0.95**	**0.065**	**0.019**	**0.019**
2-Methylphenol	mg/kg	41,000	**0.074 R**	*0.075 UJ*	**0.074 R**	*0.7 U*	*0.68 U*	*0.072 U*	*0.07 U*	*0.72 U*	*0.096 U*	*0.069 U*	*0.068 U*
3&4-Methylphenol(m&p Cresol)	mg/kg	41,000	**0.15 R**	*0.15 UJ*	**0.15 R**	*1.4 U*	*1.4 U*	*0.14 U*	*0.14 U*	*1.4 U*	*0.19 U*	*0.14 U*	*0.14 U*
3,3'-Dichlorobenzidine	mg/kg	5.1	*0.074 U*	*0.075 U*	*0.074 U*	*0.7 U*	*0.68 U*	*0.072 U*	*0.07 U*	*0.72 U*	*0.096 U*	*0.069 U*	*0.068 U*
Acenaphthene	mg/kg	45,000	**0.031**	**0.04**	**0.0081**	**0.049**	**0.0066 J**	**0.0052 J**	**0.015**	**0.078**	**0.083**	**0.0063 J**	**0.0037 J**
Acenaphthylene	mg/kg	45,000	**0.022**	**0.052**	**0.034**	**0.035 J**	**0.037**	**0.0065 J**	**0.014**	**0.93**	**0.072**	**0.0054 J**	**0.0098**
Acetophenone	mg/kg	120,000	*0.074 U*	**0.021 J**	*0.074 U*	*0.7 U*	*0.68 U*	*0.072 U*	*0.07 U*	*0.72 U*	*0.096 U*	*0.069 U*	*0.068 U*
Anthracene	mg/kg	230,000	**0.051**	**0.12**	**0.048**	**0.046**	**0.039**	**0.027**	**0.11**	**1.5**	**0.59**	**0.011**	**0.0089**
Benz[a]anthracene	mg/kg	21	**0.21**	**0.78**	**0.23**	**0.78**	**0.21**	**0.081**	**0.4**	**2.6**	**1.6**	**0.03**	**0.02**
Benzaldehyde	mg/kg	120,000	**0.024 J**	**0.023 J**	**0.029 J**	*0.7 U*	*0.68 U*	*0.072 U*	*0.07 U*	*0.72 U*	*0.096 U*	*0.069 U*	**0.015 J**
Benzo[a]pyrene	mg/kg	2.1	**0.22**	**0.88**	**0.23**	**1.6**	**0.16**	**0.053**	**0.38**	**2.6**	**1.4**	**0.034**	**0.024**
Benzo[b]fluoranthene	mg/kg	21	**0.22**	**0.74**	**0.24**	**1.8**	**0.27**	**0.11**	**0.5**	**3.3**	**1.8**	**0.043**	**0.033**
Benzo[g,h,i]perylene	mg/kg		**0.16**	**0.37**	**0.14**	**0.92**	**0.13**	**0.043**	**0.25**	**1.8**	**0.81**	**0.023**	**0.019**
Benzo[k]fluoranthene	mg/kg	210	**0.078**	**0.2**	**0.078**	**0.48**	**0.078**	**0.044**	**0.19**	**1.2**	**0.68**	**0.017**	**0.011**
bis(2-Ethylhexyl)phthalate	mg/kg	160	*0.074 U*	**0.036 J**	*0.021 B*	*0.7 U*	*0.68 U*	*0.072 U*	**0.02 J**	*0.72 U*	**0.035 J**	**0.017 J**	**0.024 J**
Caprolactam	mg/kg	400,000	*0.18 U*	**0.047 J**	*0.19 U*	*1.7 U*	*1.7 U*	*0.18 U*	**0.021 J**	*1.8 U*	**0.053 J**	*0.17 U*	*0.17 U*
Carbazole	mg/kg		*0.074 U*	**0.038 J**	*0.074 U*	*0.7 U*	*0.68 U*	**0.045 J**	**0.036 J**	**0.18 J**	**0.13**	*0.069 U*	*0.068 U*

Table 1 - Container Terminal
Summary of Organics Detected in Soil

Parameter	Units	PAL	B11-006-SB-7	B11-007-SB-1	B11-007-SB-5	B11-008-SB-2	B11-008-SB-6	B11-009-SB-4*	B11-009-SB-8*	B11-010-SB-2*	B11-010-SB-6*	B11-011-SB-2*	B11-011-SB-9*
			8/17/2020	8/18/2020	8/18/2020	8/17/2020	8/17/2020	10/7/2020	10/7/2020	10/7/2020	10/7/2020	10/6/2020	10/6/2020
Chrysene	mg/kg	2,100	**0.18**	**0.71**	**0.18**	**0.87**	**0.19**	**0.11**	**0.41**	**2.5**	**1.6**	**0.035**	**0.024**
Dibenz[a,h]anthracene	mg/kg	2.1	**0.036**	**0.13**	**0.034**	**0.2**	**0.034**	**0.012**	**0.065**	**0.44**	**0.24**	**0.0052 J**	**0.004 J**
Di-n-butylphthalate	mg/kg	82,000	*0.074 U*	*0.075 U*	*0.074 U*	*0.7 U*	*0.68 U*	*0.072 U*	**0.018 J**	*0.72 U*	**0.032 J**	*0.069 U*	**0.028 J**
Di-n-ocytlphthalate	mg/kg	8,200	*0.074 U*	*0.075 U*	*0.074 U*	*0.7 U*	*0.68 U*	*0.072 U*	*0.07 U*	*0.72 U*	*0.096 U*	*0.069 U*	*0.068 U*
Fluoranthene	mg/kg	30,000	**0.29**	**0.56**	**0.3**	**0.67**	**0.23**	**0.23**	**0.89**	**5.7**	**3.7**	**0.067**	**0.038**
Fluorene	mg/kg	30,000	**0.0099**	**0.027**	**0.0088**	**0.012 J**	**0.0074**	**0.0037 J**	**0.019**	**0.2**	**0.08**	**0.0046 J**	**0.0042 J**
Hexachloroethane	mg/kg	8.0	*0.074 U*	*0.075 U*	*0.074 U*	*0.7 U*	*0.68 U*	*0.072 U*	*0.07 U*	*0.72 U*	*0.096 U*	*0.069 U*	*0.068 U*
Indeno[1,2,3-c,d]pyrene	mg/kg	21	**0.1**	**0.31**	**0.11**	**0.96**	**0.11**	**0.05**	**0.33**	**2.2**	**1.2**	**0.025**	**0.02**
Isophorone	mg/kg	2,400	*0.074 U*	*0.075 U*	*0.074 U*	*0.7 U*	*0.68 U*	*0.072 U*	*0.07 U*	*0.72 U*	*0.096 U*	*0.069 U*	*0.068 U*
Naphthalene	mg/kg	8.6	**0.16**	**0.42**	**0.056**	**0.15**	**0.16**	**0.05**	**0.075**	**1.4**	**0.18**	**0.051**	**0.1**
Nitrobenzene	mg/kg	22	*0.074 U*	*0.075 U*	*0.074 U*	*0.7 U*	*0.68 U*	*0.072 U*	*0.07 U*	*0.72 U*	*0.096 U*	*0.069 U*	*0.068 U*
N-Nitrosodiphenylamine	mg/kg	470	*0.074 U*	*0.075 U*	*0.074 U*	*0.7 U*	*0.68 U*	*0.072 U*	*0.07 U*	*0.72 U*	*0.096 U*	*0.069 U*	*0.068 U*
Pentachlorophenol	mg/kg	4.0	**0.18 R**	*0.19 UJ*	**0.19 R**	*1.7 U*	*1.7 U*	*0.18 U*	*0.18 U*	*1.8 U*	*0.24 U*	*0.17 U*	*0.17 U*
Phenanthrene	mg/kg		**0.2**	**0.53**	**0.15**	**0.17**	**0.19**	**0.11**	**0.4**	**3.8**	**1.8**	**0.057**	**0.035**
Phenol	mg/kg	250,000	**0.074 R**	*0.075 UJ*	**0.074 R**	*0.7 U*	*0.68 U*	*0.072 U*	*0.07 U*	*0.72 U*	*0.096 U*	*0.069 U*	**0.039 J**
Pyrene	mg/kg	23,000	**0.25**	**0.98**	**0.28**	**0.77**	**0.18**	**0.19**	**0.72**	**4.7**	**2.9**	**0.06**	**0.041**
PCBs													
Aroclor 1242	mg/kg	0.97	*N/A*	*0.095 U*	*N/A*	*0.085 U*	*N/A*	*0.018 U*	*N/A*	*0.09 U*	*N/A*	*0.017 U*	*N/A*
Aroclor 1248	mg/kg	0.94	*N/A*	**0.057 J**	*N/A*	*0.085 U*	*N/A*	*0.018 U*	*N/A*	**0.063 J**	*N/A*	*0.017 U*	*N/A*
Aroclor 1254	mg/kg	0.97	*N/A*	*0.095 U*	*N/A*	*0.085 U*	*N/A*	*0.018 U*	*N/A*	*0.09 U*	*N/A*	**0.0071 J**	*N/A*
Aroclor 1260	mg/kg	0.99	*N/A*	*0.095 U*	*N/A*	*0.085 U*	*N/A*	*0.018 U*	*N/A*	*0.09 U*	*N/A*	*0.017 U*	*N/A*
Aroclor 1268	mg/kg		*N/A*	*0.095 U*	*N/A*	*0.085 U*	*N/A*	*0.018 U*	*N/A*	*0.09 U*	*N/A*	*0.017 U*	*N/A*
PCBs (total)	mg/kg	0.97	*N/A*	*0.85 U*	*N/A*	*0.77 U*	*N/A*	*0.018 U*	*N/A*	**0.063 J**	*N/A*	**0.0071 J**	*N/A*
TPH/Oil & Grease													
Diesel Range Organics	mg/kg	6,200	**80.9**	**99.4**	**135**	**105**	**67.3 J**	**47.4**	**123**	**205**	**258**	**90.5**	**173**
Gasoline Range Organics	mg/kg	6,200	*9.7 U*	*11.2 U*	*12.5 U*	*8.7 U*	*8 U*	*9.3 U*	*18.5 U*	*9.1 U*	*12.9 U*	*7.6 U*	*6.5 U*
Oil & Grease	mg/kg	6,200	**517 J-**	**257 J-**	**246 J-**	**413 J-**	**456 J-**	**131 J**	**250**	**572**	**620**	**157 J**	**419**

Bold indicates detection
Values in red indicate a detection exceedance of the Project Action Limit (PAL)
* Indicates non-validated data
^ PAH compounds were analyzed via SIM
N/A: This parameter was not analyzed for this sample.
Soil Sample Excavated

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

Table 1 - Container Terminal
Summary of Organics Detected in Soil

Parameter	Units	PAL	B11-012-SB-2*	B11-012-SB-8*	B11-013-SB-1	B11-013-SB-4*	B11-013-SB-10*	B11-014-SB-1	B11-014-SB-5	B11-015-SB-1*	B11-015-SB-5*	B11-016-SB-1	B11-016-SB-4*
			10/7/2020	10/7/2020	8/11/2020	10/5/2020	10/5/2020	8/11/2020	8/11/2020	8/13/2020	8/13/2020	8/11/2020	10/6/2020
Volatile Organic Compounds													
1,1,1-Trichloroethane	mg/kg	36,000	*0.0047 U*	*0.0043 U*	*N/A*	*0.0041 U*	*0.0043 U*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*0.005 U*
1,1-Dichloroethane	mg/kg	16	*0.0047 U*	*0.0043 U*	*N/A*	*0.0041 U*	*0.0043 U*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*0.005 U*
1,2-Dichlorobenzene	mg/kg	9,300	*0.0047 U*	*0.0043 U*	*N/A*	*0.0041 U*	*0.0043 U*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*0.005 U*
2-Butanone (MEK)	mg/kg	190,000	*0.0094 U*	*0.0087 U*	*N/A*	*0.0081 U*	*0.0086 U*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*0.01 U*
Acetone	mg/kg	670,000	**0.013**	**0.0062 J**	*N/A*	**0.0091**	**0.018**	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	**0.0078 J**
Benzene	mg/kg	5.1	*0.0047 U*	*0.0043 U*	*N/A*	*0.0041 U*	*0.0043 U*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	**0.28**
Bromomethane	mg/kg	30	*0.0047 U*	*0.0043 U*	*N/A*	*0.0041 U*	*0.0043 U*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*0.005 U*
Carbon disulfide	mg/kg	3,500	**0.0016 J**	*0.0043 U*	*N/A*	**0.0016 J**	*0.0043 U*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	**0.0044 J**
Chloroform	mg/kg	1.4	*0.0047 U*	*0.0043 U*	*N/A*	*0.0041 U*	*0.0043 U*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*0.005 U*
Cyclohexane	mg/kg	27,000	**0.0026 J**	*0.0087 U*	*N/A*	*0.0081 U*	*0.0086 U*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*0.01 U*
Ethylbenzene	mg/kg	25	*0.0047 U*	*0.0043 U*	*N/A*	*0.0041 U*	*0.0043 U*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*0.005 U*
Isopropylbenzene	mg/kg	9,900	*0.0047 U*	*0.0043 U*	*N/A*	*0.0041 U*	*0.0043 U*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*0.005 U*
Methyl Acetate	mg/kg	1,200,000	*0.047 U*	*0.043 U*	*N/A*	*0.041 U*	*0.043 U*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*0.05 U*
Styrene	mg/kg	35,000	*0.0047 U*	*0.0043 U*	*N/A*	*0.0041 U*	*0.0043 U*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*0.005 U*
Tetrachloroethene	mg/kg	100	*0.0047 U*	*0.0043 U*	*N/A*	*0.0041 U*	*0.0043 U*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*0.005 U*
Toluene	mg/kg	47,000	**0.0011 J**	*0.0043 U*	*N/A*	*0.0041 U*	*0.0043 U*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	**0.0087**
Xylenes	mg/kg	2,800	*0.014 U*	*0.013 U*	*N/A*	*0.012 U*	*0.013 U*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*0.015 U*
Semi-Volatile Organic Compounds^													
1,1-Biphenyl	mg/kg	200	**0.13**	*0.74 U*	**0.032 J**	*0.071 U*	**0.089**	*0.74 U*	**0.047 J**	*0.75 U*	*0.77 U*	*0.77 U*	*0.72 U*
1,2,4,5-Tetrachlorobenzene	mg/kg	350	*0.07 U*	*0.74 U*	*0.074 U*	*0.071 U*	*0.068 U*	*0.74 U*	*0.072 U*	*0.75 U*	*0.77 U*	*0.77 U*	*0.72 U*
2,4-Dimethylphenol	mg/kg	16,000	**0.025 J**	*0.74 U*	*0.074 UJ*	*0.071 U*	*0.068 U*	*0.74 U*	*0.072 U*	*0.75 U*	*0.77 U*	*0.77 U*	*0.72 U*
2,4-Dinitrophenol	mg/kg	1,600	*0.18 U*	*1.9 U*	*0.19 UJ*	*0.18 U*	*0.17 U*	*1.9 U*	*0.18 U*	*1.9 U*	*1.9 U*	*1.9 U*	*1.8 U*
2,4-Dinitrotoluene	mg/kg	7.4	**0.061 J**	*0.74 U*	*0.074 U*	*0.071 U*	**0.02 J**	*0.74 U*	*0.072 U*	*0.75 U*	*0.77 U*	*0.77 U*	*0.72 U*
2,6-Dinitrotoluene	mg/kg	1.5	*0.07 U*	*0.74 U*	*0.074 U*	*0.071 U*	*0.068 U*	*0.74 U*	*0.072 U*	*0.75 U*	*0.77 U*	*0.77 U*	*0.72 U*
2-Chloronaphthalene	mg/kg	60,000	*0.07 U*	*0.74 U*	*0.074 U*	*0.071 U*	*0.068 U*	*0.74 U*	*0.072 U*	*0.75 U*	*0.77 U*	*0.77 U*	*0.72 U*
2-Chlorophenol	mg/kg	5,800	*0.07 U*	*0.74 U*	*0.074 UJ*	*0.071 U*	*0.068 U*	*0.74 U*	*0.072 U*	*0.75 U*	*0.77 U*	*0.77 U*	*0.72 U*
2-Methylnaphthalene	mg/kg	3,000	**0.86**	**0.12**	**0.044**	**0.0071 J**	**0.26**	**0.055**	**0.031**	**0.2**	**0.75**	**0.081**	**0.036 J**
2-Methylphenol	mg/kg	41,000	*0.07 U*	*0.74 U*	*0.074 UJ*	*0.071 U*	*0.068 U*	*0.74 U*	*0.072 U*	*0.75 U*	*0.77 U*	*0.77 U*	*0.72 U*
3&4-Methylphenol(m&p Cresol)	mg/kg	41,000	*0.14 U*	*1.5 U*	*0.15 UJ*	*0.14 U*	*0.14 U*	*1.5 U*	*0.14 U*	*1.5 U*	*1.5 U*	*1.5 U*	*1.4 U*
3,3'-Dichlorobenzidine	mg/kg	5.1	*0.07 U*	*0.74 U*	*0.074 U*	*0.071 U*	*0.068 U*	*0.74 U*	*0.072 U*	*0.75 U*	*0.77 U*	*0.77 U*	*0.72 U*
Acenaphthene	mg/kg	45,000	**0.01 J**	**0.011**	**0.0043 J**	*0.021 U*	*0.007 U*	**0.029**	**0.039**	**0.04**	**0.35**	**0.048**	**0.41**
Acenaphthylene	mg/kg	45,000	**0.032 J**	**0.024**	**0.082**	*0.021 U*	**0.045**	**0.15**	**0.018**	**0.048**	**0.034**	**0.021**	**0.019 J**
Acetophenone	mg/kg	120,000	**0.1**	*0.74 U*	*0.074 U*	*0.071 U*	**0.029 J**	*0.74 U*	*0.072 U*	*0.75 U*	*0.77 U*	*0.77 U*	*0.72 U*
Anthracene	mg/kg	230,000	**0.092**	**0.034**	**0.072**	**0.0075 J**	**0.1**	**0.23**	**0.039**	**0.16**	**0.14**	**0.069**	**0.29**
Benz[a]anthracene	mg/kg	21	**0.1**	**0.14**	**0.43**	**0.035**	**0.34**	**0.78**	**0.72**	**0.68**	**0.21**	**2**	**2.7**
Benzaldehyde	mg/kg	120,000	**0.072**	*0.74 U*	**0.024 J**	*0.071 U*	**0.025 J**	*0.74 U*	*0.072 U*	*0.75 U*	*0.77 U*	*0.77 U*	*0.72 U*
Benzo[a]pyrene	mg/kg	2.1	**0.086**	**0.19**	**0.27**	**0.026**	**0.22**	**0.66**	**1.3**	**0.81**	**0.17**	**4.5**	**6.6**
Benzo[b]fluoranthene	mg/kg	21	**0.12**	**0.25**	**0.36**	**0.06**	**0.45**	**0.83**	**1.4**	**1**	**0.22**	**5.1**	**6.6**
Benzo[g,h,i]perylene	mg/kg		**0.059**	**0.12**	**0.17**	**0.032**	**0.27**	**0.42**	**0.96**	**0.48**	**0.095**	**3.1**	**5**
Benzo[k]fluoranthene	mg/kg	210	**0.052**	**0.095**	**0.11**	**0.024**	**0.13**	**0.27**	**0.45**	**0.35**	**0.088**	**1.3**	**2.3**
bis(2-Ethylhexyl)phthalate	mg/kg	160	**0.026 J**	*0.74 U*	*0.022 B*	*0.071 U*	**0.047 J**	*0.74 U*	*0.023 B*	*0.75 U*	*0.77 U*	*0.77 U*	*0.72 U*
Caprolactam	mg/kg	400,000	**0.2**	*1.9 U*	*0.19 U*	*0.18 U*	**0.043 J**	*1.9 U*	*0.18 U*	*1.9 U*	*1.9 U*	*1.9 U*	*1.8 U*
Carbazole	mg/kg		**0.069 J**	*0.74 U*	*0.074 U*	*0.071 U*	**0.049 J**	*0.74 U*	**0.083**	*0.75 U*	*0.77 U*	*0.77 U*	**0.33 J**

Table 1 - Container Terminal
Summary of Organics Detected in Soil

Parameter	Units	PAL	B11-012-SB-2*	B11-012-SB-8*	B11-013-SB-1	B11-013-SB-4*	B11-013-SB-10*	B11-014-SB-1	B11-014-SB-5	B11-015-SB-1*	B11-015-SB-5*	B11-016-SB-1	B11-016-SB-4*
			10/7/2020	10/7/2020	8/11/2020	10/5/2020	10/5/2020	8/11/2020	8/11/2020	8/13/2020	8/13/2020	8/11/2020	10/6/2020
Chrysene	mg/kg	2,100	**0.14**	**0.17**	**0.25**	**0.051**	**0.34**	**0.6**	**0.68**	**0.67**	**0.19**	**2.3**	**2.8**
Dibenz[a,h]anthracene	mg/kg	2.1	**0.015 J**	**0.028**	**0.042**	**0.0085 J**	**0.061**	**0.094**	**0.2**	**0.11**	**0.022**	**0.66**	**1**
Di-n-butylphthalate	mg/kg	82,000	**0.024 J**	*0.74 U*	*0.074 U*	*0.071 U*	*0.068 U*	*0.74 U*	*0.072 U*	*0.75 U*	*0.77 U*	*0.77 U*	*0.72 U*
Di-n-ocytlphthalate	mg/kg	8,200	*0.07 U*	*0.74 U*	*0.074 U*	*0.071 U*	*0.068 U*	*0.74 U*	*0.072 U*	*0.75 U*	*0.77 U*	*0.77 U*	*0.72 U*
Fluoranthene	mg/kg	30,000	**0.3**	**0.19**	**0.53**	**0.1**	**0.4**	**1.7**	**0.47**	**0.57**	**0.29**	**1.3**	**2.6**
Fluorene	mg/kg	30,000	*0.037 U*	**0.012**	**0.0079**	*0.021 U*	**0.014**	**0.064**	**0.01**	**0.016**	**0.096**	**0.012**	**0.078**
Hexachloroethane	mg/kg	8.0	**0.058 J**	*0.74 U*	*0.074 U*	*0.071 U*	*0.068 U*	*0.74 U*	*0.072 U*	*0.75 U*	*0.77 U*	*0.77 U*	*0.72 U*
Indeno[1,2,3-c,d]pyrene	mg/kg	21	**0.072**	**0.14**	**0.16**	**0.04**	**0.3**	**0.36**	**0.98**	**0.4**	**0.087**	**3.1**	**6**
Isophorone	mg/kg	2,400	*0.07 U*	*0.74 U*	*0.074 U*	*0.071 U*	*0.068 U*	*0.74 U*	*0.072 U*	*0.75 U*	*0.77 U*	*0.77 U*	*0.72 U*
Naphthalene	mg/kg	8.6	**1.5**	**0.17**	**0.12**	**0.036**	**0.36**	**0.26**	**0.08**	**0.27**	**1.7**	**0.14**	**0.071 J**
Nitrobenzene	mg/kg	22	*0.07 U*	*0.74 U*	*0.074 U*	*0.071 U*	*0.068 U*	*0.74 U*	*0.072 U*	*0.75 U*	*0.77 U*	*0.77 U*	*0.72 U*
N-Nitrosodiphenylamine	mg/kg	470	**0.1**	*0.74 U*	*0.074 U*	*0.071 U*	**0.018 J**	*0.74 U*	*0.072 U*	*0.75 U*	*0.77 U*	*0.77 U*	*0.72 U*
Pentachlorophenol	mg/kg	4.0	*0.18 U*	*1.9 U*	*0.19 UJ*	*0.18 U*	*0.17 U*	*1.9 U*	*0.18 U*	*1.9 U*	*1.9 U*	*1.9 U*	*1.8 U*
Phenanthrene	mg/kg		**0.44**	**0.15**	**0.21**	**0.044**	**0.55**	**0.84**	**0.13**	**0.32**	**0.44**	**0.24**	**0.62**
Phenol	mg/kg	250,000	*0.07 U*	*0.74 U*	*0.074 UJ*	*0.071 U*	*0.068 U*	*0.74 U*	*0.072 U*	*0.75 U*	*0.77 U*	*0.77 U*	*0.72 U*
Pyrene	mg/kg	23,000	**0.23**	**0.17**	**0.42**	**0.081**	**0.41**	**1.7**	**0.56**	**0.6**	**0.23**	**1.7**	**2.7**
PCBs													
Aroclor 1242	mg/kg	0.97	*0.088 U*	*N/A*	*0.019 U*	*N/A*	*N/A*	*0.094 U*	*N/A*	*0.019 U*	*N/A*	*0.019 U*	*N/A*
Aroclor 1248	mg/kg	0.94	*0.088 U*	*N/A*	*0.019 UJ*	*N/A*	*N/A*	**0.14 J**	*N/A*	*0.019 U*	*N/A*	**0.034**	*N/A*
Aroclor 1254	mg/kg	0.97	*0.088 U*	*N/A*	*0.019 U*	*N/A*	*N/A*	*0.094 U*	*N/A*	*0.019 U*	*N/A*	*0.019 U*	*N/A*
Aroclor 1260	mg/kg	0.99	**0.14**	*N/A*	*0.019 U*	*N/A*	*N/A*	**0.23**	*N/A*	*0.019 U*	*N/A*	**0.026**	*N/A*
Aroclor 1268	mg/kg		*0.088 U*	*N/A*	*0.019 U*	*N/A*	*N/A*	*0.094 U*	*N/A*	*0.019 U*	*N/A*	*0.019 U*	*N/A*
PCBs (total)	mg/kg	0.97	**0.14**	*N/A*	*0.17 U*	*N/A*	*N/A*	**0.37 J**	*N/A*	*0.17 U*	*N/A*	**0.06 J**	*N/A*
TPH/Oil & Grease													
Diesel Range Organics	mg/kg	6,200	**316**	**117**	**62.1**	**34.8**	**123**	**186**	**114**	**153**	**69**	**149**	**180**
Gasoline Range Organics	mg/kg	6,200	**8.5 J**	**6.6 J**	*12.1 U*	*9.7 U*	*10.7 U*	*9.9 U*	*10.4 U*	*13.1 U*	*9.5 U*	*12.3 U*	**6.4 J**
Oil & Grease	mg/kg	6,200	**372**	**466**	**136 J**	*218 U*	**151 J**	**789**	**461**	**154 J**	**660**	**415**	**1,170**

Bold indicates detection
Values in red indicate a detection exceedance of the Project Action Limit (PAL)
* Indicates non-validated data
^ PAH compounds were analyzed via SIM
N/A: This parameter was not analyzed for this sample.
Soil Sample Excavated

J: The positive result reported for this analyte is a quantitative estimate.
J-: The positive result reported for this analyte is a quantitative estimate but may be biased low.
R: The result for this analyte is unreliable. Additional data is needed ot confirm or disprove the presence of this compound/analyte in the sample.
B: Analyte not detected substantially above the level of the associated method blank/preparation or field blank.
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Summary of Organics Detected in Soil

Parameter	Units	PAL	B11-016-SB-10*	B11-017-SB-1	B11-017-SB-5	B11-018-SB-1*	B11-018-SB-8*	B11-019-SB-1*	B11-019-SB-5*	B11-020-SB-1	B11-020-SB-4.5	B11-021-SB-1*	B11-021-SB-4*
			10/6/2020	8/11/2020	8/11/2020	8/12/2020	8/12/2020	8/12/2020	8/12/2020	8/11/2020	8/11/2020	8/12/2020	8/12/2020
Volatile Organic Compounds													
1,1,1-Trichloroethane	mg/kg	36,000	*0.0036 U*	*N/A*	*N/A*	*N/A*	*0.0041 U*	*N/A*	*N/A*	*N/A*	*N/A*	*0.0045 U*	*0.004 U*
1,1-Dichloroethane	mg/kg	16	*0.0036 U*	*N/A*	*N/A*	*N/A*	*0.0041 U*	*N/A*	*N/A*	*N/A*	*N/A*	*0.0045 U*	*0.004 U*
1,2-Dichlorobenzene	mg/kg	9,300	*0.0036 U*	*N/A*	*N/A*	*N/A*	*0.0041 U*	*N/A*	*N/A*	*N/A*	*N/A*	*0.0045 U*	*0.004 U*
2-Butanone (MEK)	mg/kg	190,000	*0.0073 U*	*N/A*	*N/A*	*N/A*	*0.0082 U*	*N/A*	*N/A*	*N/A*	*N/A*	*0.009 U*	*0.0081 U*
Acetone	mg/kg	670,000	**0.0064 J**	*N/A*	*N/A*	*N/A*	*0.0051 B*	*N/A*	*N/A*	*N/A*	*N/A*	*0.009 U*	*0.0081 U*
Benzene	mg/kg	5.1	**0.026**	*N/A*	*N/A*	*N/A*	*0.0041 U*	*N/A*	*N/A*	*N/A*	*N/A*	*0.0045 U*	*0.004 U*
Bromomethane	mg/kg	30	*0.0036 U*	*N/A*	*N/A*	*N/A*	*0.0041 U*	*N/A*	*N/A*	*N/A*	*N/A*	*0.0045 U*	*0.004 U*
Carbon disulfide	mg/kg	3,500	*0.0036 U*	*N/A*	*N/A*	*N/A*	*0.0041 U*	*N/A*	*N/A*	*N/A*	*N/A*	*0.0045 U*	*0.004 U*
Chloroform	mg/kg	1.4	*0.0036 U*	*N/A*	*N/A*	*N/A*	*0.0041 U*	*N/A*	*N/A*	*N/A*	*N/A*	*0.0045 U*	*0.004 U*
Cyclohexane	mg/kg	27,000	*0.0073 U*	*N/A*	*N/A*	*N/A*	*0.0082 U*	*N/A*	*N/A*	*N/A*	*N/A*	*0.009 U*	*0.0081 U*
Ethylbenzene	mg/kg	25	*0.0036 U*	*N/A*	*N/A*	*N/A*	*0.0041 U*	*N/A*	*N/A*	*N/A*	*N/A*	*0.0045 U*	*0.004 U*
Isopropylbenzene	mg/kg	9,900	*0.0036 U*	*N/A*	*N/A*	*N/A*	*0.0041 U*	*N/A*	*N/A*	*N/A*	*N/A*	*0.0045 U*	*0.004 U*
Methyl Acetate	mg/kg	1,200,000	*0.036 U*	*N/A*	*N/A*	*N/A*	**0.0032 J**	*N/A*	*N/A*	*N/A*	*N/A*	**0.0018 J**	**0.0032 J**
Styrene	mg/kg	35,000	*0.0036 U*	*N/A*	*N/A*	*N/A*	*0.0041 U*	*N/A*	*N/A*	*N/A*	*N/A*	*0.0045 U*	*0.004 U*
Tetrachloroethene	mg/kg	100	*0.0036 U*	*N/A*	*N/A*	*N/A*	*0.0041 U*	*N/A*	*N/A*	*N/A*	*N/A*	*0.0045 U*	*0.004 U*
Toluene	mg/kg	47,000	**0.0082**	*N/A*	*N/A*	*N/A*	*0.0041 U*	*N/A*	*N/A*	*N/A*	*N/A*	*0.0045 U*	*0.004 U*
Xylenes	mg/kg	2,800	**0.0045 J**	*N/A*	*N/A*	*N/A*	*0.012 U*	*N/A*	*N/A*	*N/A*	*N/A*	*0.014 U*	*0.012 U*
Semi-Volatile Organic Compounds^													
1,1-Biphenyl	mg/kg	200	*0.069 U*	**0.036 J**	*0.067 U*	**0.1**	**0.041 J**	*0.34 U*	*0.073 U*	**0.22 J**	*0.075 U*	**0.22**	*0.068 U*
1,2,4,5-Tetrachlorobenzene	mg/kg	350	*0.069 U*	*0.07 U*	*0.067 U*	*0.072 U*	*0.066 U*	*0.34 U*	*0.073 U*	*0.71 U*	*0.075 U*	**0.019 J**	**0.018 J**
2,4-Dimethylphenol	mg/kg	16,000	*0.069 U*	**0.07 R**	*0.067 U*	*0.072 U*	*0.066 U*	*0.34 U*	*0.073 U*	*0.71 U*	**0.075 R**	*0.07 U*	*0.068 U*
2,4-Dinitrophenol	mg/kg	1,600	*0.17 U*	**0.17 R**	**0.17 R**	*0.18 U*	*0.17 U*	*0.85 U*	*0.18 U*	*1.8 U*	**0.19 R**	*0.18 U*	*0.17 U*
2,4-Dinitrotoluene	mg/kg	7.4	*0.069 U*	*0.07 U*	*0.067 U*	*0.072 U*	*0.066 U*	*0.34 U*	*0.073 U*	*0.71 U*	*0.075 U*	*0.07 U*	*0.068 U*
2,6-Dinitrotoluene	mg/kg	1.5	*0.069 U*	*0.07 U*	*0.067 U*	*0.072 U*	*0.066 U*	*0.34 U*	*0.073 U*	*0.71 U*	*0.075 U*	*0.07 U*	*0.068 U*
2-Chloronaphthalene	mg/kg	60,000	*0.069 U*	*0.07 U*	*0.067 U*	*0.072 U*	*0.066 U*	*0.34 U*	*0.073 U*	*0.71 U*	*0.075 U*	*0.07 U*	*0.068 U*
2-Chlorophenol	mg/kg	5,800	*0.069 U*	**0.07 R**	*0.067 U*	*0.072 U*	*0.066 U*	*0.34 U*	*0.073 U*	*0.71 U*	**0.075 R**	*0.07 U*	*0.068 U*
2-Methylnaphthalene	mg/kg	3,000	**0.0061 J**	**0.69**	**0.005 J**	**0.25**	**0.92**	**0.13**	**0.038**	**0.15**	**0.0062 J**	**0.15**	**0.0022 J**
2-Methylphenol	mg/kg	41,000	*0.069 U*	**0.07 R**	*0.067 U*	*0.072 U*	*0.066 U*	*0.34 U*	*0.073 U*	*0.71 U*	**0.075 R**	*0.07 U*	*0.068 U*
3&4-Methylphenol(m&p Cresol)	mg/kg	41,000	*0.14 U*	**0.14 R**	*0.13 U*	*0.14 U*	*0.13 U*	*0.68 U*	*0.15 U*	*1.4 U*	**0.15 R**	**0.025 J**	*0.14 U*
3,3'-Dichlorobenzidine	mg/kg	5.1	*0.069 U*	*0.07 U*	*0.067 U*	*0.072 U*	*0.066 U*	*0.34 U*	*0.073 U*	*0.71 UJ*	*0.075 U*	*0.07 U*	*0.068 U*
Acenaphthene	mg/kg	45,000	**0.0023 J**	**0.3**	*0.007 U*	**0.033**	*0.014 U*	**0.48**	**0.0024 J**	**0.019**	*0.0072 U*	**0.092**	**0.0018 J**
Acenaphthylene	mg/kg	45,000	*0.0078 U*	**3.1**	**0.0086**	**0.073**	*0.014 U*	**0.03**	**0.028**	**0.086**	**0.0034 J**	**0.03**	*0.0072 U*
Acetophenone	mg/kg	120,000	*0.069 U*	**0.019 J**	*0.067 U*	*0.072 U*	*0.066 U*	*0.34 U*	*0.073 U*	*0.71 U*	*0.075 U*	**0.029 J**	*0.068 U*
Anthracene	mg/kg	230,000	**0.0017 J**	**6.3**	**0.0061 J**	**0.17**	*0.014 U*	**0.17**	**0.031**	**0.14**	**0.0037 J**	**0.25**	**0.0019 J**
Benz[a]anthracene	mg/kg	21	**0.0092**	**8.9**	**0.041**	**0.61**	**0.0097 J**	**0.86**	**0.27**	**0.67**	**0.019**	**0.75**	**0.012**
Benzaldehyde	mg/kg	120,000	*0.069 U*	**0.018 J**	*0.067 U*	*0.072 U*	*0.066 U*	*0.34 U*	*0.073 U*	*0.71 U*	*0.075 U*	**0.038 J**	*0.068 U*
Benzo[a]pyrene	mg/kg	2.1	**0.014**	**8.4**	**0.015**	**0.5**	**0.0028 J**	**1.5**	**0.27**	**0.6**	**0.013**	**1.3**	**0.028**
Benzo[b]fluoranthene	mg/kg	21	**0.016**	**11**	**0.02**	**0.48**	**0.0066 J**	**1.6**	**0.38**	**0.96**	**0.017**	**1.2**	**0.029**
Benzo[g,h,i]perylene	mg/kg		**0.0073 J**	**4.9**	**0.016**	**0.38**	**0.0047 J**	**1.1**	**0.15**	**0.4**	**0.0096**	**1.3**	**0.028**
Benzo[k]fluoranthene	mg/kg	210	**0.0057 J**	**3.2**	**0.0084**	**0.24**	**0.0029 J**	**0.65**	**0.13**	**0.22**	**0.0064 J**	**0.52**	**0.016**
bis(2-Ethylhexyl)phthalate	mg/kg	160	**0.015 J**	*0.02 B*	**0.073 J**	**0.015 J**	*0.066 U*	**0.073 J**	*0.073 U*	*0.71 UJ*	**0.018 J**	**0.048 J**	*0.068 U*
Caprolactam	mg/kg	400,000	*0.17 U*	*0.17 U*	*0.17 U*	*0.18 U*	*0.17 U*	*0.85 U*	*0.18 U*	*1.8 U*	*0.19 U*	*0.18 U*	*0.17 U*
Carbazole	mg/kg		*0.069 U*	**0.022 J**	*0.067 U*	**0.051 J**	*0.066 U*	*0.34 U*	*0.073 U*	*0.71 U*	*0.075 U*	**0.14**	*0.068 U*

Table 1 - Container Terminal
Summary of Organics Detected in Soil

Parameter	Units	PAL	B11-016-SB-10*	B11-017-SB-1	B11-017-SB-5	B11-018-SB-1*	B11-018-SB-8*	B11-019-SB-1*	B11-019-SB-5*	B11-020-SB-1	B11-020-SB-4.5	B11-021-SB-1*	B11-021-SB-4*
			10/6/2020	8/11/2020	8/11/2020	8/12/2020	8/12/2020	8/12/2020	8/12/2020	8/11/2020	8/11/2020	8/12/2020	8/12/2020
Chrysene	mg/kg	2,100	**0.011**	**8.4**	**0.012**	**0.54**	**0.01 J**	**0.67**	**0.31**	**0.53**	**0.011**	**0.67**	**0.014**
Dibenz[a,h]anthracene	mg/kg	2.1	**0.0016 J**	**1.2**	**0.0028 J**	**0.092**	*0.014 U*	**0.44**	**0.042**	**0.092**	**0.0021 J**	**0.3**	**0.0052 J**
Di-n-butylphthalate	mg/kg	82,000	*0.069 U*	*0.07 U*	**0.091 J**	*0.072 U*	*0.066 U*	*0.34 U*	*0.073 U*	*0.71 U*	*0.075 U*	*0.07 U*	*0.068 U*
Di-n-ocytlphthalate	mg/kg	8,200	*0.069 U*	*0.07 U*	*0.067 UJ*	*0.072 U*	*0.066 U*	*0.34 U*	*0.073 U*	*0.71 UJ*	*0.075 U*	*0.07 U*	*0.068 U*
Fluoranthene	mg/kg	30,000	**0.015**	**24**	**0.016**	**0.7**	**0.023**	**0.7**	**0.22**	**1.2**	**0.023**	**0.81**	**0.012**
Fluorene	mg/kg	30,000	**0.0043 J**	**4.1**	**0.0011 J**	**0.028**	*0.014 U*	**0.062**	**0.0036 J**	**0.019**	*0.0072 U*	**0.065**	*0.0072 U*
Hexachloroethane	mg/kg	8.0	*0.069 U*	*0.07 U*	*0.067 U*	*0.072 U*	*0.066 U*	*0.34 U*	*0.073 U*	*0.71 U*	*0.075 U*	*0.07 U*	*0.068 U*
Indeno[1,2,3-c,d]pyrene	mg/kg	21	**0.0075 J**	**5.6**	**0.011**	**0.33**	**0.0031 J**	**1.0**	**0.14**	**0.34**	**0.0079**	**0.95**	**0.023**
Isophorone	mg/kg	2,400	*0.069 U*	*0.07 U*	*0.067 U*	*0.072 U*	*0.066 U*	*0.34 U*	*0.073 U*	*0.71 U*	*0.075 U*	*0.07 U*	*0.068 U*
Naphthalene	mg/kg	8.6	**0.064**	**4.0**	**0.0092**	**0.88**	**0.14**	**0.21**	**0.075**	**1.3**	**0.025**	**0.5**	**0.0058 J**
Nitrobenzene	mg/kg	22	*0.069 U*	*0.07 U*	*0.067 U*	*0.072 U*	*0.066 U*	*0.34 U*	*0.073 U*	*0.71 U*	*0.075 U*	*0.07 U*	*0.068 U*
N-Nitrosodiphenylamine	mg/kg	470	*0.069 U*	*0.07 U*	*0.067 U*	*0.072 U*	**0.25**	*0.34 U*	*0.073 U*	*0.71 U*	*0.075 U*	*0.07 U*	*0.068 U*
Pentachlorophenol	mg/kg	4.0	*0.17 U*	**0.17 R**	*0.17 U*	*0.18 U*	*0.17 U*	*0.85 U*	*0.18 U*	*1.8 U*	**0.19 R**	*0.18 U*	*0.17 U*
Phenanthrene	mg/kg		**0.0091**	**28**	**0.011**	**0.62**	**0.31**	**0.55**	**0.071**	**1.0**	**0.018**	**0.52**	**0.0062 J**
Phenol	mg/kg	250,000	*0.069 U*	**0.07 R**	*0.067 U*	*0.072 U*	*0.066 U*	*0.34 U*	*0.073 U*	*0.71 U*	**0.075 R**	**0.028 J**	*0.068 U*
Pyrene	mg/kg	23,000	**0.014**	**17**	**0.014**	**0.53**	**0.021**	**0.65**	**0.33**	**1.0**	**0.018**	**0.8**	**0.01**
PCBs													
Aroclor 1242	mg/kg	0.97	*N/A*	*0.018 U*	*N/A*	*0.018 U*	*N/A*	*0.086 U*	*N/A*	*0.018 U*	*N/A*	*0.018 U*	*N/A*
Aroclor 1248	mg/kg	0.94	*N/A*	*0.018 UJ*	*N/A*	**0.032**	*N/A*	*0.086 U*	*N/A*	*0.018 UJ*	*N/A*	*0.018 U*	*N/A*
Aroclor 1254	mg/kg	0.97	*N/A*	*0.018 U*	*N/A*	*0.018 U*	*N/A*	*0.086 U*	*N/A*	*0.018 U*	*N/A*	*0.018 U*	*N/A*
Aroclor 1260	mg/kg	0.99	*N/A*	*0.018 U*	*N/A*	*0.018 U*	*N/A*	*0.086 U*	*N/A*	*0.018 U*	*N/A*	**0.15**	*N/A*
Aroclor 1268	mg/kg		*N/A*	*0.018 U*	*N/A*	*0.018 U*	*N/A*	*0.086 U*	*N/A*	*0.018 U*	*N/A*	*0.018 U*	*N/A*
PCBs (total)	mg/kg	0.97	*N/A*	*0.16 U*	*N/A*	*0.16 U*	*N/A*	*0.78 U*	*N/A*	*0.16 U*	*N/A*	**0.15 J**	*N/A*
TPH/Oil & Grease													
Diesel Range Organics	mg/kg	6,200	**31.5**	**73.3**	**58**	**81.7**	**1,060**	**134**	**38.6**	**112**	**21.7**	**296**	**17.2**
Gasoline Range Organics	mg/kg	6,200	*8.3 U*	*7.5 U*	*6.8 U*	*11.3 U*	*10.9 U*	*9.6 U*	*11.4 U*	*10.6 U*	*5.3 U*	*9.7 U*	*9.6 U*
Oil & Grease	mg/kg	6,200	*211 U*	**582**	**1,740**	**145 J**	**364**	**650**	**121 J**	**194 J**	*227 U*	**286**	*208 U*

Bold indicates detection
Values in red indicate a detection exceedance of the Project Action Limit (PAL)
* Indicates non-validated data
^ PAH compounds were analyzed via SIM
N/A: This parameter was not analyzed for this sample.
Soil Sample Excavated

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

Table 1 - Container Terminal
Summary of Organics Detected in Soil

Parameter	Units	PAL	B11-022-SB-1*	B11-022-SB-5*	B11-023-SB-1	B11-023-SB-5	B11-024-SB-1*	B11-024-SB-5*	B11-025-SB-1*	B11-025-SB-4*	B11-025-SB-10*	B11-026-SB-1	B11-026-SB-9*
			8/12/2020	8/12/2020	8/18/2020	8/18/2020	8/12/2020	10/19/2020	8/12/2020	10/6/2020	10/6/2020	8/18/2020	10/19/2020
Volatile Organic Compounds													
1,1,1-Trichloroethane	mg/kg	36,000	*0.0044 U*	*0.0048 U*	*N/A*	*N/A*	*N/A*	*0.0037 U*	*0.0049 U*	*0.0038 U*	*0.006 U*	*N/A*	**0.046**
1,1-Dichloroethane	mg/kg	16	*0.0044 U*	*0.0048 U*	*N/A*	*N/A*	*N/A*	*0.0037 U*	*0.0049 U*	*0.0038 U*	*0.006 U*	*N/A*	**0.0072**
1,2-Dichlorobenzene	mg/kg	9,300	*0.0044 U*	*0.0048 U*	*N/A*	*N/A*	*N/A*	*0.0037 U*	*0.0049 U*	*0.0038 U*	*0.006 U*	*N/A*	*0.0048 U*
2-Butanone (MEK)	mg/kg	190,000	*0.0088 U*	*0.0096 U*	*N/A*	*N/A*	*N/A*	*0.0074 U*	*0.0097 U*	*0.0077 U*	*0.012 U*	*N/A*	**0.006 J**
Acetone	mg/kg	670,000	*0.0096 B*	*0.0095 B*	*N/A*	*N/A*	*N/A*	**0.0028 J**	*0.0097 U*	**0.0087**	**0.015**	*N/A*	**0.064**
Benzene	mg/kg	5.1	*0.0044 U*	*0.0048 U*	*N/A*	*N/A*	*N/A*	*0.0037 U*	*0.0049 U*	**0.014**	*0.006 U*	*N/A*	**0.0092**
Bromomethane	mg/kg	30	*0.0044 U*	*0.0048 U*	*N/A*	*N/A*	*N/A*	*0.0037 U*	*0.0049 U*	*0.0038 U*	*0.006 U*	*N/A*	*0.0048 U*
Carbon disulfide	mg/kg	3,500	*0.0044 U*	*0.0048 U*	*N/A*	*N/A*	*N/A*	**0.0018 J**	*0.0049 U*	**0.0014 J**	**0.0046 J**	*N/A*	*0.0048 U*
Chloroform	mg/kg	1.4	*0.0044 U*	*0.0048 U*	*N/A*	*N/A*	*N/A*	*0.0037 U*	*0.0049 U*	*0.0038 U*	*0.006 U*	*N/A*	*0.0048 U*
Cyclohexane	mg/kg	27,000	*0.0088 U*	*0.0096 U*	*N/A*	*N/A*	*N/A*	*0.0074 U*	*0.0097 U*	*0.0077 U*	*0.012 U*	*N/A*	**0.0042 J**
Ethylbenzene	mg/kg	25	*0.0044 U*	*0.0048 U*	*N/A*	*N/A*	*N/A*	*0.0037 U*	*0.0049 U*	*0.0038 U*	*0.006 U*	*N/A*	**0.0067**
Isopropylbenzene	mg/kg	9,900	*0.0044 U*	*0.0048 U*	*N/A*	*N/A*	*N/A*	*0.0037 U*	*0.0049 U*	*0.0038 U*	*0.006 U*	*N/A*	*0.0048 U*
Methyl Acetate	mg/kg	1,200,000	**0.0042 J**	**0.006 J**	*N/A*	*N/A*	*N/A*	*0.037 U*	*0.049 U*	*0.038 U*	*0.06 U*	*N/A*	*0.048 U*
Styrene	mg/kg	35,000	*0.0044 U*	*0.0048 U*	*N/A*	*N/A*	*N/A*	*0.0037 U*	*0.0049 U*	*0.0038 U*	*0.006 U*	*N/A*	*0.0048 U*
Tetrachloroethene	mg/kg	100	*0.0044 U*	*0.0048 U*	*N/A*	*N/A*	*N/A*	*0.0037 U*	*0.0049 U*	*0.0038 U*	*0.006 U*	*N/A*	*0.0048 U*
Toluene	mg/kg	47,000	*0.0044 U*	*0.0048 U*	*N/A*	*N/A*	*N/A*	*0.0037 U*	*0.0049 U*	**0.0029 J**	*0.006 U*	*N/A*	**0.025**
Xylenes	mg/kg	2,800	*0.013 U*	*0.014 U*	*N/A*	*N/A*	*N/A*	*0.011 U*	*0.015 U*	*0.011 U*	*0.018 U*	*N/A*	**0.036**
Semi-Volatile Organic Compounds^													
1,1-Biphenyl	mg/kg	200	**0.15 J**	**0.21 J**	**0.21**	*0.71 U*	**0.068 J**	*0.71 U*	**0.072**	**0.12**	*0.073 U*	**0.077 J**	**63**
1,2,4,5-Tetrachlorobenzene	mg/kg	350	*0.7 U*	*0.72 U*	*0.072 U*	*0.71 U*	*0.07 U*	*0.71 U*	**0.098**	*0.073 U*	*0.073 U*	*0.073 U*	*3.8 U*
2,4-Dimethylphenol	mg/kg	16,000	*0.7 U*	*0.72 U*	**0.072 R**	*0.71 U*	*0.07 U*	*0.71 U*	*0.071 U*	**0.022 J**	*0.073 U*	*0.073 UJ*	**4.2**
2,4-Dinitrophenol	mg/kg	1,600	*1.8 U*	*1.8 U*	**0.18 R**	*1.8 U*	*0.18 U*	*1.8 U*	*0.18 U*	*0.18 U*	*0.18 U*	**0.18 R**	*9.6 U*
2,4-Dinitrotoluene	mg/kg	7.4	*0.7 U*	*0.72 U*	*0.072 U*	*0.71 U*	*0.07 U*	*0.71 U*	*0.071 U*	*0.073 U*	*0.073 U*	*0.073 U*	*3.8 U*
2,6-Dinitrotoluene	mg/kg	1.5	*0.7 U*	*0.72 U*	*0.072 U*	*0.71 U*	*0.07 U*	*0.71 U*	*0.071 U*	*0.073 U*	*0.073 U*	*0.073 U*	*3.8 U*
2-Chloronaphthalene	mg/kg	60,000	*0.7 U*	*0.72 U*	*0.072 U*	*0.71 U*	*0.07 U*	*0.71 U*	**0.23**	*0.073 U*	*0.073 U*	*0.073 U*	*3.8 U*
2-Chlorophenol	mg/kg	5,800	*0.7 U*	*0.72 U*	**0.072 R**	*0.71 U*	*0.07 U*	*0.71 U*	**0.052 J**	*0.073 U*	*0.073 U*	*0.073 UJ*	*3.8 U*
2-Methylnaphthalene	mg/kg	3,000	**0.46**	**0.14**	**0.08**	**0.092**	**0.044**	**0.014 J**	**0.26**	**0.31**	**0.032**	**10**	**60**
2-Methylphenol	mg/kg	41,000	*0.7 U*	*0.72 U*	**0.072 R**	*0.71 U*	*0.07 U*	*0.71 U*	*0.071 U*	**0.016 J**	*0.073 U*	*0.073 UJ*	**1.6 J**
3&4-Methylphenol(m&p Cresol)	mg/kg	41,000	*1.4 U*	*1.4 U*	**0.022 J**	*1.4 U*	*0.14 U*	*1.4 U*	*0.14 U*	**0.025 J**	**0.02 J**	**0.035 J**	**3 J**
3,3'-Dichlorobenzidine	mg/kg	5.1	*0.7 U*	*0.72 U*	*0.072 U*	*0.71 U*	*0.07 U*	*0.71 U*	*0.071 U*	*0.073 U*	*0.073 U*	*0.073 U*	*3.8 U*
Acenaphthene	mg/kg	45,000	**0.28**	**0.2**	**0.039**	**0.049**	**0.0054 J**	**0.016 J**	**0.012**	**0.17**	**0.21**	**0.7**	**110**
Acenaphthylene	mg/kg	45,000	**0.68**	**0.098**	**0.019**	**0.028**	**0.037**	**0.0044 J**	**0.14**	**0.062**	**0.0028 J**	**7.1**	**2.8 J**
Acetophenone	mg/kg	120,000	*0.7 U*	*0.72 U*	*0.072 U*	*0.71 U*	*0.07 U*	*0.71 U*	**0.065 J**	**0.055 J**	*0.073 U*	*0.073 U*	*3.8 U*
Anthracene	mg/kg	230,000	**0.48**	**0.19**	**0.062**	**0.15**	**0.083**	**0.015 J**	**0.13**	**0.085**	**0.025**	**14**	**91**
Benz[a]anthracene	mg/kg	21	**3.0**	**1.1**	**0.34**	**0.57**	**0.7**	**0.68**	**0.6**	**0.29**	**0.26**	**21**	**18**
Benzaldehyde	mg/kg	120,000	*0.7 U*	*0.72 U*	*0.072 U*	*0.71 U*	*0.07 U*	*0.71 U*	**0.18**	**0.054 J**	*0.073 U*	*0.073 UJ*	*3.8 U*
Benzo[a]pyrene	mg/kg	2.1	**2.6**	**1.5**	**0.42**	**0.48**	**0.52**	**1.3**	**0.4**	**0.59**	**0.53**	**14**	**3.1 J**
Benzo[b]fluoranthene	mg/kg	21	**3.4**	**1.8**	**0.49**	**0.67**	**0.86**	**1.5**	**0.58**	**0.6**	**0.55**	**17**	**4.5 J**
Benzo[g,h,i]perylene	mg/kg		**1.8**	**1.1**	**0.29**	**0.31**	**0.63**	**1.0**	**0.28**	**0.45**	**0.39**	**4**	**0.8 J**
Benzo[k]fluoranthene	mg/kg	210	**1.5**	**0.74**	**0.18**	**0.19**	**0.44**	**0.46**	**0.17**	**0.23**	**0.17**	**7.1**	**1 J**
bis(2-Ethylhexyl)phthalate	mg/kg	160	*0.7 U*	*0.72 U*	**0.089**	*0.71 U*	**0.025 J**	*0.71 U*	**0.018 J**	**0.037 J**	**0.021 J**	**0.022 J**	**0.98 J**
Caprolactam	mg/kg	400,000	*1.8 U*	*1.8 U*	*0.18 U*	*1.8 U*	*0.18 U*	*1.8 U*	*0.18 U*	**0.039 J**	*0.18 U*	*0.18 U*	*9.6 U*
Carbazole	mg/kg		**0.24 J**	**0.26 J**	**3.6**	*0.71 U*	**0.065 J**	*0.71 U*	*0.071 U*	**0.21**	**0.064 J**	**0.76 J**	**28**

Table 1 - Container Terminal
Summary of Organics Detected in Soil

Parameter	Units	PAL	B11-022-SB-1*	B11-022-SB-5*	B11-023-SB-1	B11-023-SB-5	B11-024-SB-1*	B11-024-SB-5*	B11-025-SB-1*	B11-025-SB-4*	B11-025-SB-10*	B11-026-SB-1	B11-026-SB-9*
			8/12/2020	8/12/2020	8/18/2020	8/18/2020	8/12/2020	10/19/2020	8/12/2020	10/6/2020	10/6/2020	8/18/2020	10/19/2020
Chrysene	mg/kg	2,100	**2.2**	**0.95**	**0.3**	**0.46**	**0.54**	**0.74**	**0.38**	**0.3**	**0.2**	**15**	**14**
Dibenz[a,h]anthracene	mg/kg	2.1	**0.41**	**0.39**	**0.067**	**0.069**	**0.19**	**0.18**	**0.07**	**0.11**	**0.087**	**2.0**	*7.6 U*
Di-n-butylphthalate	mg/kg	82,000	*0.7 U*	*0.72 U*	*0.072 U*	*0.71 U*	*0.07 U*	*0.71 U*	*0.071 U*	**0.041 J**	*0.073 U*	*0.073 U*	*3.8 U*
Di-n-ocytlphthalate	mg/kg	8,200	*0.7 U*	*0.72 U*	*0.072 UJ*	*0.71 UJ*	*0.07 U*	*0.71 U*	*0.071 U*	*0.073 U*	*0.073 U*	*0.073 U*	*3.8 U*
Fluoranthene	mg/kg	30,000	**4.1**	**1.0**	**0.46**	**0.93**	**0.54**	**0.65**	**0.62**	**0.37**	**0.18**	**43**	**86**
Fluorene	mg/kg	30,000	**0.16**	**0.039**	**0.01**	**0.024**	**0.0039 J**	*0.035 U*	**0.024**	**0.059**	**0.021**	**10**	**120**
Hexachloroethane	mg/kg	8.0	*0.7 U*	*0.72 U*	*0.072 U*	*0.71 U*	*0.07 U*	*0.71 U*	*0.071 U*	*0.073 U*	*0.073 U*	*0.073 U*	*3.8 U*
Indeno[1,2,3-c,d]pyrene	mg/kg	21	**1.6**	**0.95**	**0.24**	**0.25**	**0.47**	**1.1**	**0.25**	**0.58**	**0.46**	**6.3**	*7.6 U*
Isophorone	mg/kg	2,400	*0.7 U*	*0.72 U*	*0.072 U*	*0.71 U*	*0.07 U*	*0.71 U*	*0.071 U*	*0.073 U*	*0.073 U*	*0.073 U*	*3.8 U*
Naphthalene	mg/kg	8.6	**1.1**	**0.53**	**0.084**	**0.15**	**0.24**	**0.048**	**0.49**	**3.6**	**0.049**	**40**	**61**
Nitrobenzene	mg/kg	22	*0.7 U*	*0.72 U*	*0.072 U*	*0.71 U*	*0.07 U*	*0.71 U*	**0.038 J**	*0.073 U*	*0.073 U*	*0.073 U*	*3.8 U*
N-Nitrosodiphenylamine	mg/kg	470	*0.7 U*	*0.72 U*	*0.072 U*	*0.71 U*	*0.07 U*	*0.71 U*	*0.071 U*	**0.015 J**	*0.073 U*	*0.073 U*	*3.8 U*
Pentachlorophenol	mg/kg	4.0	*1.8 U*	*1.8 U*	**0.18 R**	*1.8 U*	*0.18 U*	*1.8 U*	*0.18 U*	*0.18 U*	*0.18 U*	**0.18 R**	*9.6 U*
Phenanthrene	mg/kg		**1.6**	**0.65**	**0.29**	**0.68**	**0.38**	**0.12**	**0.55**	**0.23**	**0.099**	**46**	**500**
Phenol	mg/kg	250,000	*0.7 U*	*0.72 U*	**0.06 J**	*0.71 U*	*0.07 U*	*0.71 U*	**0.041 J**	*0.073 U*	*0.073 U*	**0.027 J**	**1.7 J**
Pyrene	mg/kg	23,000	**3.6**	**1.1**	**0.39**	**0.81**	**0.52**	**0.73**	**0.5**	**0.33**	**0.19**	**28**	**95**
PCBs													
Aroclor 1242	mg/kg	0.97	*0.089 U*	*N/A*	*0.09 U*	*N/A*	*0.018 U*	*N/A*	*0.088 U*	*N/A*	*N/A*	*0.094 U*	*N/A*
Aroclor 1248	mg/kg	0.94	*0.089 U*	*N/A*	*0.09 UJ*	*N/A*	*0.018 U*	*N/A*	*0.088 U*	*N/A*	*N/A*	*0.094 UJ*	*N/A*
Aroclor 1254	mg/kg	0.97	*0.089 U*	*N/A*	*0.09 U*	*N/A*	**0.24**	*N/A*	*0.088 U*	*N/A*	*N/A*	*0.094 U*	*N/A*
Aroclor 1260	mg/kg	0.99	*0.089 U*	*N/A*	*0.09 U*	*N/A*	*0.018 U*	*N/A*	*0.088 U*	*N/A*	*N/A*	*0.094 U*	*N/A*
Aroclor 1268	mg/kg		*0.089 U*	*N/A*	*0.09 U*	*N/A*	*0.018 U*	*N/A*	*0.088 U*	*N/A*	*N/A*	*0.094 U*	*N/A*
PCBs (total)	mg/kg	0.97	*0.8 U*	*N/A*	*0.81 U*	*N/A*	**0.24**	*N/A*	*0.79 U*	*N/A*	*N/A*	*0.85 U*	*N/A*
TPH/Oil & Grease													
Diesel Range Organics	mg/kg	6,200	**391**	**309**	**193**	**398**	**58.2**	**348**	**127**	**179**	**77.9**	**128**	**21,400**
Gasoline Range Organics	mg/kg	6,200	*10.3 U*	*10.5 U*	*10.3 U*	*10.4 U*	*10.7 U*	*8.4 U*	*10.7 U*	*8.6 U*	*9.9 U*	*8.1 U*	**14 J**
Oil & Grease	mg/kg	6,200	**955**	**886**	**351 J-**	**1,400 J-**	*213 U*	**1,210**	**154 J**	**185 J**	*225 U*	**295 J-**	**24,800**

Bold indicates detection
Values in red indicate a detection exceedance of the Project Action Limit (PAL)
* Indicates non-validated data
^ PAH compounds were analyzed via SIM
N/A: This parameter was not analyzed for this sample.
Soil Sample Excavated

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

Table 1 - Container Terminal
Summary of Organics Detected in Soil

Parameter	Units	PAL	B11-026-SB-10*	B18-002-SB-1*	B18-003-SB-1*	B18-004-SB-1*	B18-005-SB-1*	B18-006-SB-1	B18-007-SB-1*	B18-007-SB-4*	B18-008-SB-1	B18-011-SB-1*	B18-011-SB-4*
			10/19/2020	10/25/2016	10/26/2016	10/26/2016	10/27/2016	10/17/2016	10/27/2016	10/27/2016	10/19/2016	10/25/2016	10/25/2016
Volatile Organic Compounds													
1,1,1-Trichloroethane	mg/kg	36,000	**0.01**	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*0.006 U*	*N/A*	*N/A*	*N/A*	*N/A*
1,1-Dichloroethane	mg/kg	16	*0.0055 U*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*0.006 U*	*N/A*	*N/A*	*N/A*	*N/A*
1,2-Dichlorobenzene	mg/kg	9,300	*0.0055 U*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*0.006 U*	*N/A*	*N/A*	*N/A*	*N/A*
2-Butanone (MEK)	mg/kg	190,000	*0.011 U*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*0.012 U*	*N/A*	*N/A*	*N/A*	*N/A*
Acetone	mg/kg	670,000	**0.019**	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*0.02 B*	*N/A*	*N/A*	*N/A*	*N/A*
Benzene	mg/kg	5.1	**0.0043 J**	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*0.006 U*	*N/A*	*N/A*	*N/A*	*N/A*
Bromomethane	mg/kg	30	*0.0055 U*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*0.006 U*	*N/A*	*N/A*	*N/A*	*N/A*
Carbon disulfide	mg/kg	3,500	*0.0055 U*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*0.006 U*	*N/A*	*N/A*	*N/A*	*N/A*
Chloroform	mg/kg	1.4	*0.0055 U*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*0.006 U*	*N/A*	*N/A*	*N/A*	*N/A*
Cyclohexane	mg/kg	27,000	*0.011 U*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*0.012 U*	*N/A*	*N/A*	*N/A*	*N/A*
Ethylbenzene	mg/kg	25	*0.0055 U*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*0.006 U*	*N/A*	*N/A*	*N/A*	*N/A*
Isopropylbenzene	mg/kg	9,900	**0.0016 J**	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*0.006 U*	*N/A*	*N/A*	*N/A*	*N/A*
Methyl Acetate	mg/kg	1,200,000	*0.055 U*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*0.06 U*	*N/A*	*N/A*	*N/A*	*N/A*
Styrene	mg/kg	35,000	*0.0055 U*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*0.006 U*	*N/A*	*N/A*	*N/A*	*N/A*
Tetrachloroethene	mg/kg	100	*0.0055 U*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*0.006 U*	*N/A*	*N/A*	*N/A*	*N/A*
Toluene	mg/kg	47,000	*0.0055 U*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*0.006 U*	*N/A*	*N/A*	*N/A*	*N/A*
Xylenes	mg/kg	2,800	*0.017 U*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*0.018 U*	*N/A*	*N/A*	*N/A*	*N/A*
Semi-Volatile Organic Compounds^													
1,1-Biphenyl	mg/kg	200	**74.7**	*0.07 U*	*0.074 U*	*0.072 U*	**0.038 J**	*0.068 U*	*0.069 U*	**0.43**	*0.07 U*	**0.045 J**	*0.81 U*
1,2,4,5-Tetrachlorobenzene	mg/kg	350	*7.7 U*	*0.07 U*	*0.074 U*	*0.072 U*	*0.073 U*	*0.068 U*	*0.069 U*	*0.076 U*	*0.07 U*	*0.075 U*	*0.081 U*
2,4-Dimethylphenol	mg/kg	16,000	*7.7 U*	*0.07 U*	*0.074 U*	*0.072 U*	*0.073 U*	**0.068 R**	*0.069 U*	*0.076 U*	**0.07 R**	**0.015 J**	**1.4**
2,4-Dinitrophenol	mg/kg	1,600	*19.2 U*	*0.18 U*	*0.18 U*	*0.18 U*	*0.18 U*	**0.17 R**	*0.17 U*	*0.19 U*	**0.18 R**	*0.19 U*	*0.2 U*
2,4-Dinitrotoluene	mg/kg	7.4	*7.7 U*	*0.07 U*	*0.074 U*	*0.072 U*	*0.073 U*	*0.068 U*	*0.069 U*	*0.076 U*	*0.07 U*	*0.075 U*	*0.081 U*
2,6-Dinitrotoluene	mg/kg	1.5	*7.7 U*	*0.07 U*	*0.074 U*	*0.072 U*	*0.073 U*	*0.068 U*	*0.069 U*	*0.076 U*	*0.07 U*	*0.075 U*	*0.081 U*
2-Chloronaphthalene	mg/kg	60,000	*7.7 U*	*0.07 U*	*0.074 U*	*0.072 U*	*0.073 U*	*0.068 U*	*0.069 U*	*0.076 U*	*0.07 U*	*0.075 U*	*0.081 U*
2-Chlorophenol	mg/kg	5,800	*7.7 U*	*0.07 U*	*0.074 U*	*0.072 U*	*0.073 U*	**0.068 R**	*0.069 U*	*0.076 U*	**0.07 R**	*0.075 U*	*0.081 U*
2-Methylnaphthalene	mg/kg	3,000	**16**	**0.052**	**0.23**	**0.0048 J**	**0.071**	**0.015**	**0.019**	**7.1**	**0.033**	**0.36**	**49**
2-Methylphenol	mg/kg	41,000	*7.7 U*	*0.07 U*	*0.074 U*	*0.072 U*	*0.073 U*	**0.068 R**	*0.069 U*	**0.017 J**	**0.07 R**	*0.075 U*	**1.5**
3&4-Methylphenol(m&p Cresol)	mg/kg	41,000	*15.3 U*	*0.14 U*	*0.15 U*	*0.14 U*	*0.15 U*	**0.14 R**	*0.14 U*	**0.027 J**	**0.14 R**	**0.019 J**	**4.6**
3,3'-Dichlorobenzidine	mg/kg	5.1	*7.7 U*	*0.07 U*	*0.074 U*	*0.072 U*	*0.073 U*	*0.068 U*	*0.069 U*	*0.076 U*	*0.07 U*	*0.075 U*	*0.081 U*
Acenaphthene	mg/kg	45,000	**45**	**0.0063 J**	**0.003 J**	*0.0072 U*	**0.0035 J**	**0.0012 J**	**0.00098 J**	**0.1**	**0.00076 J**	**0.01**	**13.1**
Acenaphthylene	mg/kg	45,000	**0.96 J**	**0.0098**	**0.022**	**0.00088 J**	**0.068**	**0.0051 J**	**0.017**	**0.22**	**0.011**	**0.019**	**125**
Acetophenone	mg/kg	120,000	*7.7 U*	*0.07 U*	*0.074 U*	*0.072 U*	*0.073 U*	*0.068 U*	*0.069 U*	**0.34**	*0.07 U*	*0.075 U*	*0.081 U*
Anthracene	mg/kg	230,000	**39**	**0.023**	**0.031**	**0.0018 J**	**0.14**	**0.0083**	**0.011**	**0.3**	**0.013**	**0.019**	**155**
Benz[a]anthracene	mg/kg	21	**7.5**	**0.068**	**0.085**	**0.0055 J**	**0.46**	**0.022**	**0.039**	**0.93**	**0.039**	**0.061**	**135**
Benzaldehyde	mg/kg	120,000	*7.7 U*	*0.07 U*	**0.018 J**	*0.072 U*	*0.073 U*	*0.068 U*	**0.017 J**	**0.49**	**0.067 J**	**0.089**	*0.081 U*
Benzo[a]pyrene	mg/kg	2.1	**1.1 J**	**0.073**	**0.071**	**0.0036 J**	**0.44**	**0.019**	**0.036**	**0.78**	**0.026**	**0.066**	**126**
Benzo[b]fluoranthene	mg/kg	21	**1.6 J**	**0.12**	**0.15**	**0.0091**	**0.72**	**0.042**	**0.07**	**1.3**	**0.079**	**0.1**	**135**
Benzo[g,h,i]perylene	mg/kg		**0.42 J**	**0.042**	**0.056**	**0.0033 J**	**0.32**	**0.015**	**0.04**	**0.61**	**0.026**	**0.041**	**45.3**
Benzo[k]fluoranthene	mg/kg	210	**0.4 J**	**0.046**	**0.12**	**0.0073**	**0.23**	**0.04**	**0.024**	**0.47**	**0.071**	**0.03**	**53.3**
bis(2-Ethylhexyl)phthalate	mg/kg	160	*7.7 U*	*0.07 U*	**0.026 J**	*0.072 U*	*0.073 U*	*0.068 U*	*0.069 U*	**0.041 J**	*0.015 B*	*0.075 U*	*0.081 U*
Caprolactam	mg/kg	400,000	*19.2 U*	*0.18 U*	**0.024 J**	*0.18 U*	*0.18 U*	*0.17 U*	*0.17 U*	**0.69**	*0.18 U*	**0.066 J**	*0.2 U*
Carbazole	mg/kg		**24.7**	*0.07 U*	*0.074 U*	*0.072 U*	**0.089**	**0.03 J**	*0.069 U*	**0.11**	*0.07 U*	**0.03 J**	**76.7**

Table 1 - Container Terminal
Summary of Organics Detected in Soil

Parameter	Units	PAL	B11-026-SB-10*	B18-002-SB-1*	B18-003-SB-1*	B18-004-SB-1*	B18-005-SB-1*	B18-006-SB-1	B18-007-SB-1*	B18-007-SB-4*	B18-008-SB-1	B18-011-SB-1*	B18-011-SB-4*
			10/19/2020	10/25/2016	10/26/2016	10/26/2016	10/27/2016	10/17/2016	10/27/2016	10/27/2016	10/19/2016	10/25/2016	10/25/2016
Chrysene	mg/kg	2,100	**5.9**	**0.077**	**0.094**	**0.0058 J**	**0.54**	**0.027**	**0.044**	**1.2**	**0.056**	**0.076**	*0.081 U*
Dibenz[a,h]anthracene	mg/kg	2.1	*3.8 U*	**0.013**	**0.017**	*0.0072 U*	**0.075**	**0.0038 J**	**0.0082**	**0.21**	**0.0082**	**0.012**	**5.7**
Di-n-butylphthalate	mg/kg	82,000	*7.7 U*	*0.07 U*	*0.074 U*	*0.072 U*	*0.073 U*	*0.068 U*	*0.069 U*	*0.076 U*	*0.07 U*	*0.075 U*	**2.1**
Di-n-ocytlphthalate	mg/kg	8,200	*7.7 U*	*0.07 U*	*0.074 U*	*0.072 U*	*0.073 U*	*0.033 B*	*0.069 U*	*0.076 U*	*0.027 B*	*0.075 U*	*0.081 U*
Fluoranthene	mg/kg	30,000	**34**	**0.14**	**0.18**	**0.012**	**1.3**	**0.058**	**0.07**	**1.6**	**0.096**	**0.11**	**355**
Fluorene	mg/kg	30,000	**47**	**0.014**	**0.01**	*0.0072 U*	**0.0036 J**	**0.0019 J**	**0.0016 J**	**0.15**	**0.0017 J**	**0.019**	**147**
Hexachloroethane	mg/kg	8.0	*7.7 U*	*0.07 U*	*0.074 U*	*0.072 U*	*0.073 U*	*0.068 U*	*0.069 U*	*0.076 U*	*0.07 U*	*0.075 U*	*0.081 U*
Indeno[1,2,3-c,d]pyrene	mg/kg	21	*3.8 U*	**0.038**	**0.047**	**0.0026 J**	**0.28**	**0.012**	**0.035**	**0.51**	**0.022**	**0.032**	**49**
Isophorone	mg/kg	2,400	*7.7 U*	*0.07 U*	*0.074 U*	*0.072 U*	*0.073 U*	*0.068 U*	*0.069 U*	*0.076 U*	*0.07 U*	*0.075 U*	*0.081 U*
Naphthalene	mg/kg	8.6	**7.4**	**0.085**	**0.23**	**0.0075**	**0.36**	**0.026**	**0.039**	**5.7**	**0.067**	**0.32**	**140**
Nitrobenzene	mg/kg	22	*7.7 U*	*0.07 U*	*0.074 U*	*0.072 U*	*0.073 U*	*0.068 U*	*0.069 U*	*0.076 U*	*0.07 U*	*0.075 U*	*0.081 U*
N-Nitrosodiphenylamine	mg/kg	470	**32**	*0.07 U*	*0.074 U*	*0.072 U*	*0.073 U*	*0.068 U*	*0.069 U*	*0.076 U*	*0.07 U*	*0.075 U*	*0.81 U*
Pentachlorophenol	mg/kg	4.0	*19.2 U*	*0.18 U*	*0.18 U*	*0.18 U*	*0.18 U*	**0.17 R**	*0.17 U*	*0.19 U*	**0.18 R**	*0.19 U*	*2 U*
Phenanthrene	mg/kg		**200**	**0.14**	**0.19**	**0.016**	**1.2**	**0.067**	**0.045**	**3.8**	**0.076**	**0.21**	**498**
Phenol	mg/kg	250,000	*7.7 U*	*0.07 U*	*0.074 U*	*0.072 U*	*0.073 U*	**0.068 R**	*0.069 U*	**0.018 J**	**0.07 R**	*0.075 U*	**5**
Pyrene	mg/kg	23,000	**40**	**0.12**	**0.15**	**0.0093**	**0.98**	**0.047**	**0.06**	**1.4**	**0.072**	**0.11**	**258**
PCBs													
Aroclor 1242	mg/kg	0.97	*N/A*	*0.0528 U*	*0.0556 U*	*0.0575 U*	*0.056 U*	*0.0541 U*	*0.0564 U*	*N/A*	*0.0611 U*	*0.0577 U*	*N/A*
Aroclor 1248	mg/kg	0.94	*N/A*	*0.0528 U*	*0.0556 U*	*0.0575 U*	*0.056 U*	*0.0541 U*	*0.0564 U*	*N/A*	*0.0611 U*	*0.0577 U*	*N/A*
Aroclor 1254	mg/kg	0.97	*N/A*	*0.0528 U*	*0.0556 U*	*0.0575 U*	*0.056 U*	*0.0541 U*	*0.0564 U*	*N/A*	**0.215**	*0.0577 U*	*N/A*
Aroclor 1260	mg/kg	0.99	*N/A*	*0.0528 U*	*0.0556 U*	*0.0575 U*	*0.056 U*	*0.0541 U*	*0.0564 U*	*N/A*	**0.331**	*0.0577 U*	*N/A*
Aroclor 1268	mg/kg		*N/A*	*0.0528 U*	*0.0556 U*	*0.0575 U*	*0.056 U*	*0.0541 U*	*0.0564 U*	*N/A*	*0.0611 U*	*0.0577 U*	*N/A*
PCBs (total)	mg/kg	0.97	*N/A*	*0.0528 U*	*0.0556 U*	*0.0575 U*	*0.056 U*	*0.0541 U*	*0.0564 U*	*N/A*	**0.546**	*0.0577 U*	*N/A*
TPH/Oil & Grease													
Diesel Range Organics	mg/kg	6,200	**24,500**	**45.9**	**48.3**	**17.3**	**47.9**	**21.6 J**	**23.1**	**326**	**69.2**	**65.9**	**4,190**
Gasoline Range Organics	mg/kg	6,200	*9.8 U*	*8.2 U*	*12.4 U*	*11.3 U*	*9.2 U*	*9.6 U*	*10.5 U*	**13.7**	*10.3 U*	*16.1 U*	*15.3 U*
Oil & Grease	mg/kg	6,200	**23,300**	*457 B*	*180 B*	*245 B*	**384**	**302**	*206 B*	**571**	**317**	*354 B*	**5,700**

Bold indicates detection
Values in red indicate a detection exceedance of the Project Action Limit (PAL)
* Indicates non-validated data
^ PAH compounds were analyzed via SIM
N/A: This parameter was not analyzed for this sample.
Soil Sample Excavated

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

Table 1 - Container Terminal
Summary of Organics Detected in Soil

Parameter	Units	PAL	B18-012-SB-1*	B18-025-SB-1	B18-025-SB-5	B18-061-SB-1*	B18-061-SB-4*	B18-075-SB-2*	B18-075-SB-5.5*	B18-075-SB-10*	B18-076-SB-1	CT-001-SB-1	CT-001-SB-3
			10/25/2016	10/19/2016	10/19/2016	10/26/2016	10/26/2016	10/27/2016	12/1/2016	12/1/2016	10/17/2016	9/11/2023	9/11/2023
Volatile Organic Compounds													
1,1,1-Trichloroethane	mg/kg	36,000	*N/A*	*N/A*	*N/A*	*0.0065 U*	*0.0091 U*	*N/A*	*0.0057 U*	*0.0052 U*	*N/A*	*N/A*	*0.00083 U*
1,1-Dichloroethane	mg/kg	16	*N/A*	*N/A*	*N/A*	*0.0065 U*	*0.0091 U*	*N/A*	*0.0057 U*	*0.0052 U*	*N/A*	*N/A*	*0.0016 U*
1,2-Dichlorobenzene	mg/kg	9,300	*N/A*	*N/A*	*N/A*	*0.0065 U*	*0.0091 U*	*N/A*	*0.0057 U*	*0.0052 U*	*N/A*	*N/A*	*0.0033 U*
2-Butanone (MEK)	mg/kg	190,000	*N/A*	*N/A*	*N/A*	*0.013 U*	*0.018 U*	*N/A*	*0.011 U*	*0.01 U*	*N/A*	*N/A*	*0.016 U*
Acetone	mg/kg	670,000	*N/A*	*N/A*	*N/A*	*0.029 B*	*0.036 B*	*N/A*	*0.011 U*	*0.01 U*	*N/A*	*N/A*	*0.041 U*
Benzene	mg/kg	5.1	*N/A*	*N/A*	*N/A*	*0.0065 U*	*0.0091 U*	*N/A*	*0.0057 U*	*0.0052 U*	*N/A*	*N/A*	**0.00055 J**
Bromomethane	mg/kg	30	*N/A*	*N/A*	*N/A*	*0.0065 U*	*0.0091 U*	*N/A*	*0.0057 U*	*0.0052 U*	*N/A*	*N/A*	*0.0033 U*
Carbon disulfide	mg/kg	3,500	*N/A*	*N/A*	*N/A*	*0.0065 U*	*0.0091 U*	*N/A*	*0.0057 U*	*0.0052 U*	*N/A*	*N/A*	*0.016 U*
Chloroform	mg/kg	1.4	*N/A*	*N/A*	*N/A*	**0.013**	*0.0091 U*	*N/A*	*0.0057 U*	*0.0052 U*	*N/A*	*N/A*	*0.0025 U*
Cyclohexane	mg/kg	27,000	*N/A*	*N/A*	*N/A*	*0.013 U*	*0.018 U*	*N/A*	*0.011 U*	*0.01 U*	*N/A*	*N/A*	*0.016 U*
Ethylbenzene	mg/kg	25	*N/A*	*N/A*	*N/A*	*0.0065 U*	*0.0091 U*	*N/A*	*0.0057 U*	*0.0052 U*	*N/A*	*N/A*	*0.0016 U*
Isopropylbenzene	mg/kg	9,900	*N/A*	*N/A*	*N/A*	*0.0065 U*	*0.0091 U*	*N/A*	*0.0057 U*	*0.0052 U*	*N/A*	*N/A*	*0.0016 U*
Methyl Acetate	mg/kg	1,200,000	*N/A*	*N/A*	*N/A*	*0.065 U*	*0.091 U*	*N/A*	*0.057 U*	*0.052 U*	*N/A*	*N/A*	*0.0066 U*
Styrene	mg/kg	35,000	*N/A*	*N/A*	*N/A*	*0.0065 U*	*0.0091 U*	*N/A*	*0.0057 U*	*0.0052 U*	*N/A*	*N/A*	*0.0016 U*
Tetrachloroethene	mg/kg	100	*N/A*	*N/A*	*N/A*	*0.0065 U*	*0.0091 U*	*N/A*	*0.0057 U*	*0.0052 U*	*N/A*	*N/A*	*0.00083 U*
Toluene	mg/kg	47,000	*N/A*	*N/A*	*N/A*	*0.0065 U*	*0.0091 U*	*N/A*	*0.0057 U*	*0.0052 U*	*N/A*	*N/A*	*0.0016 U*
Xylenes	mg/kg	2,800	*N/A*	*N/A*	*N/A*	*0.019 U*	*0.027 U*	*N/A*	*0.017 U*	*0.015 U*	*N/A*	*N/A*	**0.0005 J**
Semi-Volatile Organic Compounds^													
1,1-Biphenyl	mg/kg	200	*0.078 U*	**0.024 J**	*0.1 U*	*0.077 U*	*0.093 U*	**0.24**	*0.08 U*	*0.081 U*	*0.069 U*	*0.47 U*	*0.42 U*
1,2,4,5-Tetrachlorobenzene	mg/kg	350	*0.078 U*	*0.069 U*	*0.1 U*	*0.077 U*	*0.093 U*	*0.071 U*	*0.08 U*	*0.081 U*	*0.069 U*	*0.2 U*	*0.18 U*
2,4-Dimethylphenol	mg/kg	16,000	*0.078 U*	*0.069 U*	*0.1 U*	*0.077 U*	*0.093 U*	*0.071 U*	*0.08 U*	*0.081 U*	**0.069 R**	*0.2 U*	*0.18 U*
2,4-Dinitrophenol	mg/kg	1,600	*0.2 U*	*0.17 UJ*	*0.26 UJ*	**0.076 J**	*0.23 U*	*0.18 U*	*0.2 U*	*0.2 U*	**0.17 R**	*0.98 U*	*0.88 UJ*
2,4-Dinitrotoluene	mg/kg	7.4	*0.078 U*	*0.069 U*	*0.1 U*	*0.077 U*	*0.093 U*	*0.071 U*	*0.08 U*	*0.081 U*	*0.069 U*	*0.2 U*	*0.18 U*
2,6-Dinitrotoluene	mg/kg	1.5	*0.078 U*	*0.069 U*	*0.1 U*	**0.16**	*0.093 U*	*0.071 U*	*0.08 U*	*0.081 U*	*0.069 U*	*0.2 U*	*0.18 U*
2-Chloronaphthalene	mg/kg	60,000	*0.078 U*	*0.069 U*	*0.1 U*	*0.077 U*	*0.093 U*	*0.071 U*	*0.08 U*	*0.081 U*	*0.069 U*	*0.2 U*	*0.18 U*
2-Chlorophenol	mg/kg	5,800	*0.078 U*	*0.069 U*	*0.1 U*	*0.077 U*	*0.093 U*	*0.071 U*	*0.08 U*	*0.081 U*	**0.069 R**	*0.2 U*	*0.18 U*
2-Methylnaphthalene	mg/kg	3,000	**0.017**	**0.097**	**0.0033 J**	**1.3**	**0.15**	**0.41**	**0.3**	**0.41**	**0.014**	**0.023**	**0.18**
2-Methylphenol	mg/kg	41,000	*0.078 U*	*0.069 U*	*0.1 U*	*0.077 U*	*0.093 U*	*0.071 U*	**0.018 J**	*0.081 U*	**0.069 R**	*0.2 U*	*0.18 U*
3&4-Methylphenol(m&p Cresol)	mg/kg	41,000	*0.16 U*	*0.14 U*	*0.21 U*	*0.15 U*	*0.18 U*	*0.14 U*	**0.055 J**	**0.048 J**	**0.14 R**	*0.3 U*	*0.26 U*
3,3'-Dichlorobenzidine	mg/kg	5.1	*0.078 U*	*0.069 U*	*0.1 U*	*0.077 U*	**0.037 J**	*0.071 U*	*0.08 U*	*0.081 U*	*0.069 U*	*0.2 U*	*0.18 U*
Acenaphthene	mg/kg	45,000	**0.00083 J**	**0.0054 J**	*0.011 U*	**0.056 J**	**0.019**	**0.022**	**0.019 J**	**0.91**	**0.0038 J**	*0.0082 U*	**0.021**
Acenaphthylene	mg/kg	45,000	**0.0069 J**	**0.04**	**0.0022 J**	**0.97**	**0.056**	**0.51**	**1.8**	**9.9**	**0.05**	**0.0032 J**	**0.017**
Acetophenone	mg/kg	120,000	*0.078 U*	*0.069 U*	*0.1 U*	*0.077 U*	*0.093 U*	**0.018 J**	**0.025 J**	**0.023 J**	*0.069 U*	*0.2 U*	*0.18 U*
Anthracene	mg/kg	230,000	**0.008**	**0.038**	**0.0022 J**	**0.54**	**0.1**	**0.44**	**2.7**	**46.6**	**0.064**	**0.0034 J**	**0.054**
Benz[a]anthracene	mg/kg	21	**0.018**	**0.11**	**0.0064 J**	**1.6**	**0.57**	**3.3**	**9.3**	**101**	**0.18**	**0.016**	**0.098**
Benzaldehyde	mg/kg	120,000	*0.078 U*	**0.02 J**	**0.1 R**	*0.077 U*	*0.093 U*	**0.024 J**	**0.033 J**	**0.034 J**	*0.069 U*	*0.27 U*	*0.24 U*
Benzo[a]pyrene	mg/kg	2.1	**0.017**	**0.084**	**0.0039 J**	**1.3**	**0.52**	**2.3**	**7.1**	**78.9**	**0.18**	**0.015**	**0.07**
Benzo[b]fluoranthene	mg/kg	21	**0.045**	**0.26**	**0.008 J**	**3.9**	**1.1**	**4.7**	**12.9**	**150**	**0.3**	**0.018**	**0.11**
Benzo[g,h,i]perylene	mg/kg		**0.012**	**0.082**	**0.0025 J**	**0.92**	**0.17**	**1.0**	**3.5**	**40.9**	**0.12**	**0.0095**	**0.044**
Benzo[k]fluoranthene	mg/kg	210	**0.038**	**0.24**	**0.0072 J**	**3.1**	**0.9**	**1.8**	**12.3**	**143**	**0.29**	**0.0068 J**	**0.038**
bis(2-Ethylhexyl)phthalate	mg/kg	160	*0.078 U*	*0.069 U*	*0.1 U*	*0.077 U*	*0.093 U*	*0.071 U*	**0.055 J**	*0.081 U*	*0.069 U*	*0.2 U*	*0.18 U*
Caprolactam	mg/kg	400,000	*0.2 U*	*0.17 U*	*0.26 U*	*0.19 U*	*0.23 U*	*0.18 U*	*0.2 U*	*0.2 U*	*0.17 U*	*0.2 U*	*0.18 U*
Carbazole	mg/kg		**0.02 J**	*0.069 U*	*0.1 U*	**0.075 J**	*0.093 U*	**0.42**	**0.56**	*0.081 U*	**0.032 J**	*0.2 U*	**0.031 J**

Table 1 - Container Terminal
Summary of Organics Detected in Soil

Parameter	Units	PAL	B18-012-SB-1*	B18-025-SB-1	B18-025-SB-5	B18-061-SB-1*	B18-061-SB-4*	B18-075-SB-2*	B18-075-SB-5.5*	B18-075-SB-10*	B18-076-SB-1	CT-001-SB-1	CT-001-SB-3
			10/25/2016	10/19/2016	10/19/2016	10/26/2016	10/26/2016	10/27/2016	12/1/2016	12/1/2016	10/17/2016	9/11/2023	9/11/2023
Chrysene	mg/kg	2,100	**0.02**	**0.16**	**0.0055 J**	**1.7**	**0.51**	**3.5**	**8.3**	**93.4**	**0.18**	**0.014**	**0.088**
Dibenz[a,h]anthracene	mg/kg	2.1	**0.0038 J**	**0.027**	*0.011 U*	**0.36**	**0.087**	**0.32**	**1.3**	**12.4**	**0.029**	**0.0022 J**	**0.014**
Di-n-butylphthalate	mg/kg	82,000	*0.078 U*	*0.069 U*	*0.1 U*	*0.077 U*	*0.093 U*	*0.071 U*	*0.08 U*	**0.072 J**	*0.069 U*	*0.2 U*	*0.18 U*
Di-n-ocytlphthalate	mg/kg	8,200	*0.078 U*	*0.069 U*	*0.035 B*	*0.077 U*	*0.093 U*	*0.071 U*	*0.08 U*	**0.12**	*0.035 B*	*0.2 U*	*0.18 U*
Fluoranthene	mg/kg	30,000	**0.037**	**0.28**	**0.0084 J**	**2.8**	**0.8**	**10.5**	**21.6**	**526**	**0.58**	**0.028**	**0.25**
Fluorene	mg/kg	30,000	**0.004 J**	**0.011**	*0.011 U*	**0.095**	**0.037**	**0.046**	**0.39**	**14**	**0.021**	**0.0017 J**	**0.032**
Hexachloroethane	mg/kg	8.0	*0.078 U*	*0.069 U*	*0.1 U*	*0.077 U*	*0.093 U*	*0.071 U*	*0.08 U*	*0.081 U*	*0.069 U*	*0.16 U*	*0.15 U*
Indeno[1,2,3-c,d]pyrene	mg/kg	21	**0.011**	**0.081**	**0.0022 J**	**0.91**	**0.18**	**1.0**	**3.7**	**43.2**	**0.1**	**0.012**	**0.056**
Isophorone	mg/kg	2,400	*0.078 U*	*0.069 U*	*0.1 U*	**0.03 J**	*0.093 U*	*0.071 U*	*0.08 U*	*0.081 U*	*0.069 U*	*0.18 U*	*0.16 U*
Naphthalene	mg/kg	8.6	**0.026**	**0.16**	*0.0073 B*	**1.5**	**0.3**	**2.6**	**0.9**	**1.1**	**0.054**	**0.026**	**0.17**
Nitrobenzene	mg/kg	22	*0.078 U*	*0.069 U*	*0.1 U*	*0.077 U*	*0.093 U*	*0.071 U*	*0.08 U*	*0.081 U*	*0.069 U*	*0.18 U*	*0.16 U*
N-Nitrosodiphenylamine	mg/kg	470	*0.078 U*	*0.069 U*	*0.1 U*	*0.077 U*	*0.093 U*	*0.071 U*	*0.08 U*	**0.13**	*0.069 U*	*0.16 U*	*0.15 U*
Pentachlorophenol	mg/kg	4.0	*0.2 U*	*0.17 U*	*0.26 U*	*0.19 U*	*0.23 U*	*0.18 U*	*0.2 U*	**0.053 J**	**0.17 R**	*0.16 U*	*0.15 U*
Phenanthrene	mg/kg		**0.034**	**0.22**	*0.0085 B*	**2.1**	**0.47**	**13.2**	**8**	**118**	**0.51**	**0.015**	**0.25**
Phenol	mg/kg	250,000	*0.078 U*	*0.069 U*	*0.1 U*	*0.077 U*	*0.093 U*	*0.071 U*	**0.052 J**	**0.074 J**	**0.069 R**	*0.2 U*	*0.18 U*
Pyrene	mg/kg	23,000	**0.032**	**0.21**	**0.0066 J**	**2.3**	**0.69**	**7.7**	**15.9**	**364**	**0.45**	**0.025**	**0.19**
PCBs													
Aroclor 1242	mg/kg	0.97	*0.0559 U*	*0.0509 U*	*N/A*	*0.079 U*	*N/A*	*0.0547 U*	*N/A*	*N/A*	*0.0604 U*	*0.0633 U*	*N/A*
Aroclor 1248	mg/kg	0.94	*0.0559 U*	*0.0509 U*	*N/A*	*0.079 U*	*N/A*	*0.0547 U*	*N/A*	*N/A*	*0.0604 U*	*0.0633 U*	*N/A*
Aroclor 1254	mg/kg	0.97	*0.0559 U*	*0.0509 U*	*N/A*	*0.079 U*	*N/A*	*0.0547 U*	*N/A*	*N/A*	*0.0604 U*	*0.0633 U*	*N/A*
Aroclor 1260	mg/kg	0.99	*0.0559 U*	*0.0509 U*	*N/A*	*0.079 U*	*N/A*	*0.0547 U*	*N/A*	*N/A*	*0.0604 U*	*0.0633 U*	*N/A*
Aroclor 1268	mg/kg		*0.0559 U*	*0.0509 U*	*N/A*	**0.0811**	*N/A*	*0.0547 U*	*N/A*	*N/A*	*0.0604 U*	*0.0633 U*	*N/A*
PCBs (total)	mg/kg	0.97	*0.0559 U*	*0.0509 U*	*N/A*	**0.0811**	*N/A*	*0.0547 U*	*N/A*	*N/A*	*0.0604 U*	*0.0633 U*	*N/A*
TPH/Oil & Grease													
Diesel Range Organics	mg/kg	6,200	**4.5 J**	**37**	**10.1 J**	**197**	**31**	**200**	**178**	**472**	**25.4 J**	**12 J**	**33 J**
Gasoline Range Organics	mg/kg	6,200	*16 U*	*6.2 U*	*19.7 U*	*14.1 U*	*14.5 U*	*11.7 U*	*12.9 U*	*10.1 U*	*9.6 U*	*1 B*	*1.9 B*
Oil & Grease	mg/kg	6,200	*337 B*	**430**	**453**	**2,720**	*479 B*	**462**	**1,100**	**566**	**336**	**296**	*222 U*

Bold indicates detection
Values in red indicate a detection exceedance of the Project Action Limit (PAL)
* Indicates non-validated data
^ PAH compounds were analyzed via SIM
N/A: This parameter was not analyzed for this sample.
Soil Sample Excavated

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

Table 1 - Container Terminal
Summary of Organics Detected in Soil

Parameter	Units	PAL	CT-002-SB-1*	CT-002-SB-4*	CT-002-SB-10*	CT-003-SB-1*	CT-003-SB-3*	CT-003-SB-10*	CT-004-SB-1*	CT-004-SB-9*	CT-004-SB-10*	CT-004-TP-S1	CT-004-TP-S2
			10/16/2023	10/16/2023	10/16/2023	10/16/2023	10/16/2023	10/16/2023	10/13/2023	10/13/2023	10/13/2023	12/7/2023	12/7/2023
Volatile Organic Compounds													
1,1,1-Trichloroethane	mg/kg	36,000	*0.0005 U*	*0.0006 U*	*0.0006 U*	*N/A*	*0.00067 U*	**0.00085**	*N/A*	*0.32 U*	*0.3 U*	*0.0011 U*	*0.0008 U*
1,1-Dichloroethane	mg/kg	16	*0.001 U*	*0.0012 U*	*0.0012 U*	*N/A*	*0.0013 U*	*0.0016 U*	*N/A*	*0.63 U*	*0.59 U*	*0.0021 U*	*0.0016 U*
1,2-Dichlorobenzene	mg/kg	9,300	*0.002 U*	*0.0024 U*	*0.0024 U*	*N/A*	*0.0027 U*	*0.0031 U*	*N/A*	*1.3 U*	*1.2 U*	*0.0043 U*	*0.0032 U*
2-Butanone (MEK)	mg/kg	190,000	*0.01 U*	*0.012 U*	*0.012 U*	*N/A*	*0.013 U*	*0.016 U*	*N/A*	*6.3 U*	*5.9 U*	*0.021 U*	*0.016 U*
Acetone	mg/kg	670,000	*0.025 U*	**0.015 J**	*0.03 U*	*N/A*	*0.033 U*	*0.039 U*	*N/A*	*6.3 U*	*5.9 U*	*0.053 U*	*0.04 U*
Benzene	mg/kg	5.1	*0.0005 U*	*0.0006 U*	*0.0006 U*	*N/A*	**0.00025 J**	**0.00062 J**	*N/A*	**0.47**	**9.2**	*0.0011 U*	*0.0008 U*
Bromomethane	mg/kg	30	*0.002 U*	*0.0024 U*	*0.0024 U*	*N/A*	*0.0027 U*	*0.0031 U*	*N/A*	*1.3 U*	*1.2 U*	*0.0043 U*	*0.0032 U*
Carbon disulfide	mg/kg	3,500	*0.01 U*	*0.012 U*	*0.012 U*	*N/A*	*0.013 U*	*0.016 U*	*N/A*	*6.3 U*	*5.9 U*	*0.021 U*	*0.016 U*
Chloroform	mg/kg	1.4	*0.0015 U*	*0.0018 U*	*0.0018 U*	*N/A*	*0.002 U*	**0.00068 J**	*N/A*	*0.95 U*	*0.88 U*	*0.0032 U*	*0.0024 U*
Cyclohexane	mg/kg	27,000	*0.01 U*	*0.012 U*	**0.0024 J**	*N/A*	*0.013 U*	**0.0054 J**	*N/A*	*6.3 U*	*5.9 U*	*0.021 U*	*0.016 U*
Ethylbenzene	mg/kg	25	*0.001 U*	*0.0012 U*	**0.016**	*N/A*	*0.0013 U*	*0.0016 U*	*N/A*	**0.61 J**	**0.8**	*0.0021 U*	*0.0016 U*
Isopropylbenzene	mg/kg	9,900	*0.001 U*	*0.0012 U*	**0.024**	*N/A*	*0.0013 U*	*0.0016 U*	*N/A*	*0.63 U*	**0.078 J**	*0.0021 U*	*0.0016 U*
Methyl Acetate	mg/kg	1,200,000	*0.004 U*	*0.0048 U*	*0.0048 U*	*N/A*	*0.0053 U*	*0.0062 U*	*N/A*	*2.5 U*	*2.4 U*	*0.0086 U*	*0.0064 U*
Styrene	mg/kg	35,000	*0.001 U*	*0.0012 U*	*0.0012 U*	*N/A*	*0.0013 U*	*0.0016 U*	*N/A*	**2.1**	**2.1**	*0.0021 U*	*0.0016 U*
Tetrachloroethene	mg/kg	100	*0.0005 U*	*0.0006 U*	*0.0006 U*	*N/A*	*0.00067 U*	*0.00078 U*	*N/A*	*0.32 U*	*0.3 U*	*0.0011 U*	*0.0008 U*
Toluene	mg/kg	47,000	*0.001 U*	*0.0012 U*	*0.0012 U*	*N/A*	*0.0013 U*	**0.0016**	*N/A*	**1.7**	**12**	*0.0021 U*	*0.0016 U*
Xylenes	mg/kg	2,800	*0.001 U*	*0.0012 U*	**0.096**	*N/A*	*0.0013 U*	**0.0018 J**	*N/A*	**8.1**	**16**	*0.0021 U*	*0.0016 U*
Semi-Volatile Organic Compounds^													
1,1-Biphenyl	mg/kg	200	*0.44 U*	*0.4 U*	**0.12 J**	*2 U*	**0.1 J**	**0.069 J**	*0.4 U*	**26**	**46**	**0.28 J**	*8.3 U*
1,2,4,5-Tetrachlorobenzene	mg/kg	350	*0.19 U*	*0.18 U*	*0.21 U*	*0.88 U*	*0.19 U*	*0.21 U*	*0.18 U*	*4.7 U*	*4.3 U*	*0.18 U*	*3.6 U*
2,4-Dimethylphenol	mg/kg	16,000	*0.19 U*	*0.18 U*	*0.21 U*	*0.88 U*	*0.19 U*	*0.21 U*	*0.18 U*	*4.7 U*	*4.3 U*	*0.18 U*	*3.6 U*
2,4-Dinitrophenol	mg/kg	1,600	*0.93 U*	*0.85 U*	*1 U*	*4.2 U*	*0.91 U*	*1 U*	*0.84 U*	*23 U*	*20 U*	*0.88 U*	*18 U*
2,4-Dinitrotoluene	mg/kg	7.4	*0.19 U*	*0.18 U*	*0.21 U*	*0.88 U*	*0.19 U*	*0.21 U*	*0.18 U*	*4.7 U*	*4.3 U*	*0.18 U*	*3.6 U*
2,6-Dinitrotoluene	mg/kg	1.5	*0.19 U*	*0.18 U*	*0.21 U*	*0.88 U*	*0.19 U*	*0.21 U*	*0.18 U*	*4.7 U*	*4.3 U*	*0.18 U*	*3.6 U*
2-Chloronaphthalene	mg/kg	60,000	*0.19 U*	*0.18 U*	*0.21 U*	*0.88 U*	*0.19 U*	*0.21 U*	*0.18 U*	*4.7 U*	*4.3 U*	*0.18 U*	*3.6 U*
2-Chlorophenol	mg/kg	5,800	*0.19 U*	*0.18 U*	*0.21 U*	*0.88 U*	*0.19 U*	*0.21 U*	*0.18 U*	*4.7 U*	*4.3 U*	*0.18 U*	*3.6 U*
2-Methylnaphthalene	mg/kg	3,000	**0.012**	**0.026**	**3.2**	**0.095**	**0.39**	**0.51**	**0.071**	**190**	**88**	**0.67**	**0.6 J**
2-Methylphenol	mg/kg	41,000	*0.19 U*	*0.18 U*	*0.21 U*	*0.88 U*	*0.19 U*	**0.033 J**	*0.18 U*	*4.7 U*	*4.3 U*	**0.094 J**	*3.6 U*
3&4-Methylphenol(m&p Cresol)	mg/kg	41,000	*0.28 U*	*0.26 U*	*0.3 U*	*1.3 U*	**0.031 J**	**0.1 J**	*0.25 U*	*6.8 U*	*6.2 U*	**0.3**	*5.3 U*
3,3'-Dichlorobenzidine	mg/kg	5.1	*0.19 U*	*0.18 U*	*0.21 U*	*0.88 U*	*0.19 U*	*0.21 U*	*0.18 U*	*4.7 U*	*4.3 U*	*0.18 U*	*3.6 U*
Acenaphthene	mg/kg	45,000	*0.0076 U*	**0.0022 J**	**0.23**	*0.035 U*	**0.087**	**0.0017 J**	**0.014**	**33**	**12**	**0.069 J**	**0.48 J**
Acenaphthylene	mg/kg	45,000	**0.0014 J**	**0.0012 J**	**0.12**	**0.14**	**0.062**	**0.036**	**0.16**	**460**	**160**	**1.7**	**15**
Acetophenone	mg/kg	120,000	*0.19 U*	*0.18 U*	*0.21 U*	*0.88 U*	*0.19 U*	*0.21 U*	*0.18 U*	*4.7 U*	*4.3 U*	*0.18 U*	*3.6 U*
Anthracene	mg/kg	230,000	**0.0034 J**	**0.0013 J**	**0.098**	**0.11**	**0.36**	**0.058**	**0.14**	**210**	**66**	**0.73**	**21**
Benz[a]anthracene	mg/kg	21	**0.0095**	**0.0022 J**	**0.02**	**0.77**	**1.7**	**0.8**	**0.69**	**350**	**130**	**3.2**	**65**
Benzaldehyde	mg/kg	120,000	*0.25 U*	**0.3**	*0.28 U*	*1.2 U*	*0.25 U*	*0.27 U*	*0.23 U*	*6.2 U*	*5.6 U*	*0.24 U*	*4.8 U*
Benzo[a]pyrene	mg/kg	2.1	**0.007 J**	**0.0022 J**	**0.0082 J**	**0.52**	**1.6**	**0.77**	**0.64**	**200**	**73**	**4.0**	**67**
Benzo[b]fluoranthene	mg/kg	21	**0.0095**	**0.0024 J**	**0.014**	**0.67**	**2.4**	**1.1**	**1.2**	**200**	**72**	**5.5**	**84**
Benzo[g,h,i]perylene	mg/kg		**0.0053 J**	**0.0013 J**	**0.0061 J**	**0.46**	**1.6**	**0.65**	**0.43**	**130**	**45**	**3.2**	**44**
Benzo[k]fluoranthene	mg/kg	210	**0.0032 J**	**0.00065 J**	**0.0036 J**	**0.21**	**0.7**	**0.23**	**0.24**	**59**	**22**	**1.5**	**25**
bis(2-Ethylhexyl)phthalate	mg/kg	160	*0.19 U*	*0.18 U*	*0.21 U*	*0.88 U*	*0.19 U*	*0.21 U*	*0.18 U*	*4.7 U*	*4.3 U*	*0.18 U*	*3.6 U*
Caprolactam	mg/kg	400,000	*0.19 U*	*0.18 U*	*0.21 U*	*0.88 U*	*0.19 U*	*0.21 U*	*0.18 U*	*4.7 U*	*4.3 U*	*0.18 U*	*3.6 U*
Carbazole	mg/kg		*0.19 U*	*0.18 U*	*0.21 U*	**0.097 J**	**0.091 J**	*0.21 U*	**0.083 J**	**32**	**60**	**0.55**	**7.8**

Table 1 - Container Terminal
Summary of Organics Detected in Soil

Parameter	Units	PAL	CT-002-SB-1*	CT-002-SB-4*	CT-002-SB-10*	CT-003-SB-1*	CT-003-SB-3*	CT-003-SB-10*	CT-004-SB-1*	CT-004-SB-9*	CT-004-SB-10*	CT-004-TP-S1	CT-004-TP-S2
			10/16/2023	10/16/2023	10/16/2023	10/16/2023	10/16/2023	10/16/2023	10/13/2023	10/13/2023	10/13/2023	12/7/2023	12/7/2023
Chrysene	mg/kg	2,100	**0.0085**	**0.0027 J**	**0.035**	**0.55**	**1.8**	**0.6**	**0.64**	**150**	**57**	**2.6**	**53**
Dibenz[a,h]anthracene	mg/kg	2.1	**0.0011 J**	*0.0072 U*	**0.0018 J**	**0.077**	**0.35**	**0.15**	**0.1**	**22**	**8.0**	**0.64**	**8.6**
Di-n-butylphthalate	mg/kg	82,000	*0.19 U*	*0.18 U*	*0.21 U*	*0.88 U*	*0.19 U*	*0.21 U*	*0.18 U*	*4.7 U*	*4.3 U*	*0.18 U*	*3.6 U*
Di-n-ocytlphthalate	mg/kg	8,200	*0.19 U*	*0.18 U*	*0.21 U*	*0.88 U*	*0.19 U*	*0.21 U*	*0.18 U*	*4.7 U*	*4.3 U*	*0.18 U*	*3.6 U*
Fluoranthene	mg/kg	30,000	**0.022**	**0.0038 J**	**0.018**	**1.1**	**2.8**	**0.58**	**1.9**	**630**	**220**	**5.8**	**160**
Fluorene	mg/kg	30,000	**0.00095 J**	**0.0036 J**	**0.4**	**0.019 J**	**0.065**	**0.0076 J**	**0.069**	**220**	**82**	**0.31**	**6**
Hexachloroethane	mg/kg	8.0	*0.15 U*	*0.14 U*	*0.17 U*	*0.71 U*	*0.15 U*	*0.17 U*	*0.14 U*	*3.8 U*	*3.4 U*	*0.15 U*	*2.9 U*
Indeno[1,2,3-c,d]pyrene	mg/kg	21	**0.0062 J**	**0.0013 J**	**0.0074 J**	**0.5**	**1.7**	**0.81**	**0.54**	**150**	**52**	**3.9**	**52**
Isophorone	mg/kg	2,400	*0.17 U*	*0.16 U*	*0.19 U*	*0.8 U*	*0.17 U*	*0.19 U*	*0.16 U*	*4.2 U*	*3.8 U*	*0.16 U*	*3.3 U*
Naphthalene	mg/kg	8.6	**0.027**	**0.014**	**0.24**	**0.18**	**0.6**	**0.31**	**0.44**	**2,400**	**1,100**	**5.3**	**3.1**
Nitrobenzene	mg/kg	22	*0.17 U*	*0.16 U*	*0.19 U*	*0.8 U*	*0.17 U*	*0.19 U*	*0.16 U*	*4.2 U*	*3.8 U*	*0.16 U*	*3.3 U*
N-Nitrosodiphenylamine	mg/kg	470	*0.15 U*	*0.14 U*	*0.17 U*	*0.71 U*	*0.15 U*	*0.17 U*	*0.14 U*	*3.8 U*	*3.4 U*	*0.15 U*	*2.9 U*
Pentachlorophenol	mg/kg	4.0	*0.15 U*	*0.14 U*	*0.17 U*	*0.71 U*	*0.15 U*	*0.17 U*	*0.14 U*	*3.8 U*	*3.4 U*	*0.15 U*	*2.9 U*
Phenanthrene	mg/kg		**0.024**	**0.012**	**1.0**	**0.51**	**1.7**	**1.2**	**0.59**	**830**	**280**	**2.2**	**79**
Phenol	mg/kg	250,000	*0.19 U*	*0.18 U*	*0.21 U*	*0.88 U*	*0.19 U*	**0.21**	*0.18 U*	*4.7 U*	**0.94 J**	**0.32**	*3.6 U*
Pyrene	mg/kg	23,000	**0.018**	**0.0044 J**	**0.12**	**0.93**	**2.3**	**0.58**	**1.5**	**500**	**170**	**5.2**	**130**
PCBs													
Aroclor 1242	mg/kg	0.97	*0.0574 U*	*N/A*	*N/A*	*0.0515 U*	*N/A*	*N/A*	*0.0492 U*	*N/A*	*N/A*	*N/A*	*N/A*
Aroclor 1248	mg/kg	0.94	*0.0574 U*	*N/A*	*N/A*	*0.0515 U*	*N/A*	*N/A*	*0.0492 U*	*N/A*	*N/A*	*N/A*	*N/A*
Aroclor 1254	mg/kg	0.97	*0.0574 U*	*N/A*	*N/A*	**0.013 J**	*N/A*	*N/A*	*0.0492 U*	*N/A*	*N/A*	*N/A*	*N/A*
Aroclor 1260	mg/kg	0.99	*0.0574 U*	*N/A*	*N/A*	*0.0515 U*	*N/A*	*N/A*	*0.0492 U*	*N/A*	*N/A*	*N/A*	*N/A*
Aroclor 1268	mg/kg		*0.0574 U*	*N/A*	*N/A*	**0.0112 J**	*N/A*	*N/A*	*0.0492 U*	*N/A*	*N/A*	*N/A*	*N/A*
PCBs (total)	mg/kg	0.97	*0.0574 U*	*N/A*	*N/A*	**0.0242 J**	*N/A*	*N/A*	*0.0492 U*	*N/A*	*N/A*	*N/A*	*N/A*
TPH/Oil & Grease													
Diesel Range Organics	mg/kg	6,200	**3.3 J**	**23 J**	**3,000**	**260**	**120**	**130**	**18 J**	**13,000**	**9,600**	**140**	**1,600**
Gasoline Range Organics	mg/kg	6,200	*1.9 U*	**4.5**	**280**	**2.8**	**4**	**8.8**	*2.3 U*	**1,800**	**750**	**9.7**	*4.5 U*
Oil & Grease	mg/kg	6,200	**256**	**859**	**1,620**	**7,860**	**546**	*254 U*	*214 U*	**10,100**	**7,210**	**461**	**4,100**

Bold indicates detection
Values in red indicate a detection exceedance of the Project Action Limit (PAL)
* Indicates non-validated data
^ PAH compounds were analyzed via SIM
N/A: This parameter was not analyzed for this sample.
Soil Sample Excavated

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

Table 1 - Container Terminal
Summary of Organics Detected in Soil

Parameter	Units	PAL	CT-004-TP-S3	CT-004-TP-S4	CT-005-SB-1	CT-005-SB-3	CT-006-SB-1*	CT-006-SB-6*	CT-006-SB-10*	CT-006-TP-S1	CT-006-TP-S2	CT-006-TP-S3	CT-006-TP-S4
			12/7/2023	12/7/2023	9/11/2023	9/11/2023	10/13/2023	10/13/2023	10/13/2023	2/9/2024	2/9/2024	2/9/2024	2/9/2024
Volatile Organic Compounds													
1,1,1-Trichloroethane	mg/kg	36,000	*0.00074 U*	*0.00075 U*	*N/A*	*N/A*	*0.00048 U*	*0.47 U*	*0.19 U*	*1 U*	*0.039 U*	*0.036 U*	*0.29 U*
1,1-Dichloroethane	mg/kg	16	*0.0015 U*	*0.0015 U*	*N/A*	*N/A*	*0.00095 U*	*0.93 U*	*0.39 U*	*2.1 U*	*0.078 U*	*0.073 U*	*0.58 U*
1,2-Dichlorobenzene	mg/kg	9,300	*0.0029 U*	*0.003 U*	*N/A*	*N/A*	*0.0019 U*	*1.9 U*	*0.78 U*	*4.2 U*	*0.16 U*	*0.14 U*	*1.2 U*
2-Butanone (MEK)	mg/kg	190,000	*0.015 U*	*0.015 U*	*N/A*	*N/A*	*0.0095 U*	*9.3 U*	*3.9 U*	*21 U*	*0.78 U*	*0.73 U*	*5.8 U*
Acetone	mg/kg	670,000	*0.037 U*	*0.037 U*	*N/A*	*N/A*	*0.024 U*	**5.1 J**	**2 J**	*21 U*	*0.78 U*	*0.73 U*	*5.8 U*
Benzene	mg/kg	5.1	*0.00074 U*	*0.00075 U*	*N/A*	*N/A*	**0.0014**	**17**	**16**	**45**	**0.91**	**3.4**	**6.9**
Bromomethane	mg/kg	30	*0.0029 U*	*0.003 U*	*N/A*	*N/A*	*0.0019 U*	*1.9 U*	*0.78 U*	*4.2 U*	*0.15 JB*	*0.12 JB*	*1.2 U*
Carbon disulfide	mg/kg	3,500	*0.015 U*	*0.015 U*	*N/A*	*N/A*	*0.0095 U*	*9.3 U*	*3.9 U*	*21 U*	*0.78 U*	*0.73 U*	*5.8 U*
Chloroform	mg/kg	1.4	*0.0022 U*	*0.0022 U*	*N/A*	*N/A*	*0.0014 U*	*1.4 U*	*0.58 U*	*3.1 U*	*0.12 U*	*0.11 U*	*0.87 U*
Cyclohexane	mg/kg	27,000	*0.015 U*	*0.015 U*	*N/A*	*N/A*	*0.0095 U*	*9.3 U*	*3.9 U*	*21 U*	*0.78 U*	*0.73 U*	*5.8 U*
Ethylbenzene	mg/kg	25	*0.0015 U*	*0.0015 U*	*N/A*	*N/A*	**0.0022**	**340**	**130**	**520**	**7.7**	**5.3**	**220**
Isopropylbenzene	mg/kg	9,900	*0.0015 U*	*0.0015 U*	*N/A*	*N/A*	**0.00017 J**	**23**	**13**	**26**	**1.3**	**0.43**	**20**
Methyl Acetate	mg/kg	1,200,000	*0.0059 U*	*0.006 U*	*N/A*	*N/A*	*0.0038 U*	*3.7 U*	*1.6 U*	*8.4 U*	**0.23 J**	**0.69**	*2.3 U*
Styrene	mg/kg	35,000	*0.0015 U*	*0.0015 U*	*N/A*	*N/A*	*0.00095 U*	**2.6**	**0.74**	**2.1**	**0.073 J**	**0.13**	**1.3**
Tetrachloroethene	mg/kg	100	*0.00074 U*	*0.00075 U*	*N/A*	*N/A*	*0.00048 U*	*0.47 U*	*0.19 U*	*1 U*	*0.039 U*	*0.036 U*	*0.29 U*
Toluene	mg/kg	47,000	*0.0015 U*	*0.0015 U*	*N/A*	*N/A*	*0.00095 U*	**9.1**	**4.5**	**8.7**	**0.09**	**0.7**	**5.1**
Xylenes	mg/kg	2,800	*0.0015 U*	*0.0015 U*	*N/A*	*N/A*	**0.00068 J**	**97**	**26**	**180**	**1.4**	**0.92**	**70**
Semi-Volatile Organic Compounds^													
1,1-Biphenyl	mg/kg	200	**0.17 J**	**0.16 J**	*0.45 U*	*0.42 U*	**0.075 J**	**48**	**9.5 J**	**23**	**1.3 J**	**1.8 J**	**24**
1,2,4,5-Tetrachlorobenzene	mg/kg	350	*0.18 U*	*0.18 U*	*0.2 U*	*0.18 U*	*0.18 U*	*4.2 U*	*4.3 U*	*2.1 U*	*1.1 U*	*1.1 U*	*5.5 U*
2,4-Dimethylphenol	mg/kg	16,000	*0.18 U*	*0.18 U*	*0.2 U*	*0.18 U*	*0.18 U*	*4.2 U*	*4.3 U*	*2.1 U*	*1.1 U*	*1.1 U*	*5.5 U*
2,4-Dinitrophenol	mg/kg	1,600	*0.89 U*	*0.88 U*	*0.94 U*	*0.88 U*	*0.86 U*	*20 U*	*21 U*	*10 U*	*5.4 U*	*5.1 U*	*26 U*
2,4-Dinitrotoluene	mg/kg	7.4	*0.18 U*	*0.18 U*	*0.2 U*	*0.18 U*	*0.18 U*	*4.2 U*	*4.3 U*	*2.1 U*	*1.1 U*	*1.1 U*	*5.5 U*
2,6-Dinitrotoluene	mg/kg	1.5	*0.18 U*	*0.18 U*	*0.2 U*	*0.18 U*	*0.18 U*	*4.2 U*	*4.3 U*	*2.1 U*	*1.1 U*	*1.1 U*	*5.5 U*
2-Chloronaphthalene	mg/kg	60,000	*0.18 U*	*0.18 U*	*0.2 U*	*0.18 U*	*0.18 U*	*4.2 U*	*4.3 U*	*2.1 U*	*1.1 U*	*1.1 U*	*5.5 U*
2-Chlorophenol	mg/kg	5,800	*0.18 U*	*0.18 U*	*0.2 U*	*0.18 U*	*0.18 U*	*4.2 U*	*4.3 U*	*2.1 U*	*1.1 U*	*1.1 U*	*5.5 U*
2-Methylnaphthalene	mg/kg	3,000	**0.45**	**0.5 J**	**0.0069 J**	*0.0073 U*	**0.28**	**130**	**42**	**100**	**12**	**2.9**	**74**
2-Methylphenol	mg/kg	41,000	**0.066 J**	**0.028 J**	*0.2 U*	*0.18 U*	*0.18 U*	*4.2 U*	*4.3 U*	**0.75 J**	*1.1 U*	**0.52 J**	*5.5 U*
3&4-Methylphenol(m&p Cresol)	mg/kg	41,000	**0.18 J**	**0.086 J**	*0.28 U*	*0.26 U*	*0.26 U*	*6.1 U*	*6.2 U*	**1.2 J**	*1.6 U*	**1.3 J**	*8 U*
3,3'-Dichlorobenzidine	mg/kg	5.1	*0.18 U*	*0.18 U*	*0.2 U*	*0.18 U*	*0.18 U*	*4.2 U*	*4.3 U*	*2.1 U*	*1.1 U*	*1.1 U*	*5.5 U*
Acenaphthene	mg/kg	45,000	**0.11 J**	**0.26 J**	**0.003 J**	*0.0073 U*	**0.019**	**80**	**32**	**72**	**20**	**16**	**33**
Acenaphthylene	mg/kg	45,000	**2.3**	**2.3**	**0.00098 J**	*0.0073 U*	**0.3**	**33**	**6**	**16**	**9.4**	**16**	**24**
Acetophenone	mg/kg	120,000	*0.18 U*	*0.18 U*	*0.2 U*	*0.18 U*	**0.12 J**	*4.2 U*	*4.3 U*	**4**	**0.25 J**	**1.8**	*5.5 U*
Anthracene	mg/kg	230,000	**2.0**	**4.8**	**0.084**	**0.00081 J**	**0.17**	**18**	**12**	**7.8**	**3.6**	**3.0**	**4.4**
Benz[a]anthracene	mg/kg	21	**5.4**	**20**	**0.0052 J**	**0.0032 J**	**1.4**	**42**	**6.6**	**5.5**	**1.1**	**1.4**	**2.8**
Benzaldehyde	mg/kg	120,000	*0.24 U*	*0.24 U*	*0.26 U*	*0.24 U*	*0.24 U*	*5.6 U*	*5.7 U*	*2.8 U*	*1.5 U*	*1.4 U*	*7.3 U*
Benzo[a]pyrene	mg/kg	2.1	**5.8**	**16**	**0.004 J**	**0.0024 J**	**0.58**	**35**	**4.1**	**5.3**	**0.99**	**1.5**	**2.8**
Benzo[b]fluoranthene	mg/kg	21	**7.6**	**22**	**0.0053 J**	**0.003 J**	**1.3**	**34**	**4.8**	**7.4**	**1.3**	**2.0**	**3.4**
Benzo[g,h,i]perylene	mg/kg		**4**	**8.5**	**0.0024 J**	**0.0016 J**	**0.38**	**18**	**1.8**	**3.2**	**0.54**	**1.1**	**1.5**
Benzo[k]fluoranthene	mg/kg	210	**2.5**	**7.0**	**0.0019 J**	**0.00099 J**	**0.28**	**15**	**1.7**	**2**	**0.38**	**0.68**	**1.1**
bis(2-Ethylhexyl)phthalate	mg/kg	160	*0.18 U*	*0.18 U*	*0.2 U*	*0.18 U*	*0.18 U*	*4.2 U*	*4.3 U*	*2.1 U*	*1.1 U*	**15**	*5.5 U*
Caprolactam	mg/kg	400,000	*0.18 U*	*0.18 U*	*0.2 U*	*0.18 U*	*0.18 U*	*4.2 U*	*4.3 U*	*2.1 U*	*1.1 U*	*1.1 U*	*5.5 U*
Carbazole	mg/kg		**0.76**	**2.0**	**0.028 J**	*0.18 U*	**0.086 J**	**2.5 J**	**2.2 J**	**2.4**	**1.4**	**1.1**	*5.5 U*

Table 1 - Container Terminal
Summary of Organics Detected in Soil

Parameter	Units	PAL	CT-004-TP-S3	CT-004-TP-S4	CT-005-SB-1	CT-005-SB-3	CT-006-SB-1*	CT-006-SB-6*	CT-006-SB-10*	CT-006-TP-S1	CT-006-TP-S2	CT-006-TP-S3	CT-006-TP-S4
			12/7/2023	12/7/2023	9/11/2023	9/11/2023	10/13/2023	10/13/2023	10/13/2023	2/9/2024	2/9/2024	2/9/2024	2/9/2024
Chrysene	mg/kg	2,100	**4.8**	**16**	**0.0048 J**	**0.0025 J**	**1.1**	**30**	**5.3**	**5.6**	**1.1**	**1.4**	**2.4**
Dibenz[a,h]anthracene	mg/kg	2.1	**0.84**	**2.2**	*0.0079 U*	*0.0073 U*	**0.1**	**4.8**	**0.78**	**0.96**	**0.18**	**0.27**	**0.43**
Di-n-butylphthalate	mg/kg	82,000	*0.18 U*	*0.18 U*	*0.2 U*	*0.18 U*	*0.18 U*	*4.2 U*	*4.3 U*	*2.1 U*	*1.1 U*	*1.1 U*	*5.5 U*
Di-n-ocytlphthalate	mg/kg	8,200	*0.18 U*	*0.18 U*	*0.2 U*	*0.18 U*	*0.18 U*	*4.2 U*	*4.3 U*	*2.1 U*	*1.1 U*	*1.1 U*	*5.5 U*
Fluoranthene	mg/kg	30,000	**12**	**45**	**0.016**	**0.0068 J**	**2.4**	**45**	**18**	**17**	**3.8**	**4.2**	**8.3**
Fluorene	mg/kg	30,000	**0.95**	**0.88**	**0.03**	*0.0073 U*	**0.024**	**48**	**21**	**25**	**13**	**10**	**22**
Hexachloroethane	mg/kg	8.0	*0.15 U*	*0.15 U*	*0.16 U*	*0.15 U*	*0.14 U*	*3.4 U*	*3.4 U*	*1.7 U*	*0.89 U*	*0.86 U*	*4.4 U*
Indeno[1,2,3-c,d]pyrene	mg/kg	21	**4.9**	**11**	**0.003 J**	**0.0021 J**	**0.53**	**24**	**2.7**	**4.0**	**0.71**	**1.3**	**1.9**
Isophorone	mg/kg	2,400	*0.17 U*	*0.16 U*	*0.18 U*	*0.16 U*	*0.16 U*	*3.8 U*	*3.9 U*	*1.9 U*	*1 U*	*0.96 U*	*5 U*
Naphthalene	mg/kg	8.6	**2.8**	**2.6**	**0.012**	**0.0026 J**	**0.69**	**1,300**	**410**	**1,000**	**300**	**57**	**750**
Nitrobenzene	mg/kg	22	*0.17 U*	*0.16 U*	*0.18 U*	*0.16 U*	*0.16 U*	*3.8 U*	*3.9 U*	*1.9 U*	*1 U*	*0.96 U*	*5 U*
N-Nitrosodiphenylamine	mg/kg	470	*0.15 U*	*0.15 U*	*0.16 U*	*0.15 U*	*0.14 U*	*3.4 U*	*3.4 U*	*1.7 U*	*0.89 U*	*0.86 U*	*4.4 U*
Pentachlorophenol	mg/kg	4.0	*0.15 U*	*0.15 U*	*0.32 U*	*0.15 U*	*0.14 U*	*3.4 U*	*3.4 U*	*1.7 U*	*0.89 U*	*0.86 U*	*4.4 U*
Phenanthrene	mg/kg		**6.9**	**14**	**0.084**	**0.0038 J**	**0.66**	**60**	**38**	**36**	**14**	**12**	**29**
Phenol	mg/kg	250,000	**0.18**	**0.082 J**	*0.2 U*	*0.18 U*	*0.18 U*	*4.2 U*	*4.3 U*	**1.3 J**	*1.1 U*	**1.4**	*5.5 U*
Pyrene	mg/kg	23,000	**10**	**36**	**0.011**	**0.0055 J**	**2.3**	**37**	**13**	**14**	**2.9**	**3.6**	**6.2**
PCBs													
Aroclor 1242	mg/kg	0.97	*N/A*	*N/A*	*0.0595 U*	*N/A*	*0.0504 U*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*
Aroclor 1248	mg/kg	0.94	*N/A*	*N/A*	*0.0595 U*	*N/A*	*0.0504 U*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*
Aroclor 1254	mg/kg	0.97	*N/A*	*N/A*	*0.0595 U*	*N/A*	*0.0504 U*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*
Aroclor 1260	mg/kg	0.99	*N/A*	*N/A*	*0.0595 U*	*N/A*	*0.0504 U*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*
Aroclor 1268	mg/kg		*N/A*	*N/A*	*0.0595 U*	*N/A*	*0.0504 U*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*
PCBs (total)	mg/kg	0.97	*N/A*	*N/A*	*0.0595 U*	*N/A*	*0.0504 U*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*
TPH/Oil & Grease													
Diesel Range Organics	mg/kg	6,200	**260**	**1,800**	**5.4 J**	**3.4 J**	**74**	**17,000**	**9,400**	**20,000**	**6,300**	**7,900**	**13,000**
Gasoline Range Organics	mg/kg	6,200	**4 J**	**5**	*0.74 B*	*0.69 B*	*2.6 U*	**2,000**	**510**	**2,300**	**270**	**78**	**1,400**
Oil & Grease	mg/kg	6,200	**579**	**1,510**	**286**	*224 U*	**1,540**	**28,000**	**15,500**	**34,400**	**7,970**	**16,800**	**22,200**

Bold indicates detection
Values in red indicate a detection exceedance of the Project Action Limit (PAL)
* Indicates non-validated data
^ PAH compounds were analyzed via SIM
N/A: This parameter was not analyzed for this sample.
Soil Sample Excavated

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

Table 1 - Container Terminal
Summary of Organics Detected in Soil

Parameter	Units	PAL	TP-006-NORTHWALL-EAST	TP-006-NWALL-EAST-EAST	TP-006-WEST	CT-007-SB-1*	CT-007-SB-3*	CT-007-SB-10*	CT-007-TP-B1*	CT-007-TP-S1*	CT-007-TP-S2*	CT-007-TP-S3*
			9/20/2024	9/20/2024	9/20/2024	10/13/2023	10/13/2023	10/13/2023	12/1/2023	12/1/2023	12/1/2023	12/1/2023
Volatile Organic Compounds												
1,1,1-Trichloroethane	mg/kg	36,000	*0.47 U*	*0.72 U*	*0.055 U*	*0.00042 U*	*0.05 U*	*0.048 U*	*0.038 U*	*0.00051 U*	*0.059 U*	*0.038 U*
1,1-Dichloroethane	mg/kg	16	*0.95 U*	*1.4 U*	*0.11 U*	*0.00084 U*	*0.1 U*	*0.095 U*	*0.075 U*	*0.001 U*	*0.12 U*	*0.077 U*
1,2-Dichlorobenzene	mg/kg	9,300	*1.9 U*	*2.9 U*	*0.22 U*	*0.0017 U*	*0.2 U*	*0.19 U*	*0.15 U*	*0.002 U*	*0.24 U*	*0.15 U*
2-Butanone (MEK)	mg/kg	190,000	*9.5 U*	*14 U*	*1.1 U*	*0.0084 U*	*1 U*	*0.95 U*	*0.75 U*	**0.005 J**	*1.2 U*	*0.77 U*
Acetone	mg/kg	670,000	*9.5 U*	*14 U*	*1.1 U*	*0.021 U*	*1 U*	*0.95 U*	*0.75 U*	**0.032**	*1.2 U*	*0.77 U*
Benzene	mg/kg	5.1	**23**	**67**	**4.4**	**0.00043**	**14**	**4.1**	**1.9**	**0.0014**	**2.8**	**1.5**
Bromomethane	mg/kg	30	*1.9 U*	*2.9 U*	*0.22 U*	*0.0017 U*	*0.2 U*	*0.19 U*	*0.15 U*	*0.002 U*	*0.24 U*	*0.15 U*
Carbon disulfide	mg/kg	3,500	*9.5 U*	*14 U*	*1.1 U*	*0.0084 U*	*1 U*	*0.95 U*	*0.75 U*	*0.01 U*	*1.2 U*	*0.77 U*
Chloroform	mg/kg	1.4	*1.4 U*	*2.1 U*	*0.17 U*	*0.0012 U*	*0.15 U*	*0.14 U*	*0.11 U*	*0.0015 U*	*0.18 U*	*0.12 U*
Cyclohexane	mg/kg	27,000	*9.5 U*	*14 U*	*1.1 U*	*0.0084 U*	**0.17 J**	*0.95 U*	*0.75 U*	*0.01 U*	*1.2 U*	*0.77 U*
Ethylbenzene	mg/kg	25	**27**	**43**	**5.7**	*0.00084 U*	**1.6**	**0.93**	**0.43**	**0.00096 J**	**0.63**	**0.28**
Isopropylbenzene	mg/kg	9,900	**16**	**24**	**0.21**	*0.00084 U*	**0.17**	**0.041 J**	**0.022 J**	**0.00058 J**	**0.028 J**	**0.013 J**
Methyl Acetate	mg/kg	1,200,000	*3.8 U*	*5.7 U*	**0.88**	*0.0033 U*	**0.34 J**	*0.38 U*	**0.14 J**	*0.004 U*	**0.24 J**	**0.18 J**
Styrene	mg/kg	35,000	**0.75 J**	**1.1 J**	**0.11**	*0.00084 U*	**1.9**	**0.59**	**1.1**	**0.0023**	**0.93**	**0.84**
Tetrachloroethene	mg/kg	100	*0.47 U*	*0.72 U*	*0.055 U*	*0.00042 U*	*0.05 U*	*0.048 U*	*0.038 U*	*0.00051 U*	*0.059 U*	*0.038 U*
Toluene	mg/kg	47,000	**2.1**	**10**	**0.69**	*0.00084 U*	**7.2**	**2.2**	**1.4**	**0.00083 J**	**2**	**1**
Xylenes	mg/kg	2,800	**14**	**24**	**1.8**	*0.00084 U*	**20**	**3**	**3.7**	**0.0018 J**	**3.7**	**2.8**
Semi-Volatile Organic Compounds^												
1,1-Biphenyl	mg/kg	200	**2.4 J**	**4.3 J**	**1.7 J**	**0.13 J**	**61**	**2.4**	**14**	**0.21 J**	**3.7**	**2.8**
1,2,4,5-Tetrachlorobenzene	mg/kg	350	*12 U*	*32 U*	*2 U*	*0.18 U*	*5.3 U*	*0.56 U*	*4.8 U*	*0.19 U*	*1 U*	*1 U*
2,4-Dimethylphenol	mg/kg	16,000	*12 U*	*32 U*	*2 U*	*0.18 U*	**3.6 J**	**0.2 J**	*4.8 U*	*0.19 U*	*1 U*	*1 U*
2,4-Dinitrophenol	mg/kg	1,600	*60 U*	*160 U*	*9.6 U*	*0.86 U*	*25 U*	*2.7 U*	*23 U*	*0.9 U*	*4.8 U*	*4.8 U*
2,4-Dinitrotoluene	mg/kg	7.4	*12 U*	*32 U*	*2 U*	*0.18 U*	*5.3 U*	*0.56 U*	*4.8 U*	*0.19 U*	*1 U*	*1 U*
2,6-Dinitrotoluene	mg/kg	1.5	*12 U*	*32 U*	*2 U*	*0.18 U*	*5.3 U*	*0.56 U*	*4.8 U*	*0.19 U*	*1 U*	*1 U*
2-Chloronaphthalene	mg/kg	60,000	*12 U*	*32 U*	*2 U*	*0.18 U*	*5.3 U*	*0.56 U*	*4.8 U*	*0.19 U*	*1 U*	*1 U*
2-Chlorophenol	mg/kg	5,800	*12 U*	*32 U*	*2 U*	*0.18 U*	*5.3 U*	*0.56 U*	*4.8 U*	*0.19 U*	*1 U*	*1 U*
2-Methylnaphthalene	mg/kg	3,000	**34**	**73**	**5.8**	**0.094**	**470**	**12**	**52**	**0.33**	**10**	**5.2**
2-Methylphenol	mg/kg	41,000	*12 U*	*32 U*	*2 U*	*0.18 U*	**4.8 J**	**0.43 J**	*4.8 U*	*0.19 U*	**0.36 J**	*1 U*
3&4-Methylphenol(m&p Cresol)	mg/kg	41,000	*18 U*	*47 U*	*2.9 U*	*0.26 U*	**9.9**	**0.87**	**1.3 J**	*0.27 U*	**0.73 J**	*1.4 U*
3,3'-Dichlorobenzidine	mg/kg	5.1	*12 U*	*32 U*	*2 U*	*0.18 U*	*5.3 U*	*0.56 U*	*4.8 U*	*0.19 U*	*1 U*	*1 U*
Acenaphthene	mg/kg	45,000	**29**	**61**	**4.1**	**0.02 J**	**51**	**9.4**	**8.5**	**0.13**	**2.5**	**1.0**
Acenaphthylene	mg/kg	45,000	**12**	**28**	**4.4**	**0.25**	**600**	**12**	**61**	**1.2**	**47**	**13**
Acetophenone	mg/kg	120,000	*12 U*	*32 U*	*2 U*	*0.18 U*	**0.95 J**	*0.56 U*	**1.1 J**	**0.098 J**	**0.59 J**	**0.24 J**
Anthracene	mg/kg	230,000	**25**	**51**	**1.2**	**0.24**	**430**	**11**	**36**	**0.77**	**14**	**8.4**
Benz[a]anthracene	mg/kg	21	**25**	**49**	**1.9**	**0.78**	**820**	**34**	**90**	**2.3**	**79**	**24**
Benzaldehyde	mg/kg	120,000	*17 U*	*43 U*	*2.6 U*	*0.24 U*	*7 U*	*0.74 U*	*6.4 U*	**0.061 J**	*1.3 U*	*1.3 U*
Benzo[a]pyrene	mg/kg	2.1	**19**	**43**	**2.2**	**0.46**	**460**	**25**	**76**	**2.1**	**80**	**17**
Benzo[b]fluoranthene	mg/kg	21	**26**	**59**	**3.0**	**0.57**	**490**	**29**	**92**	**2.7**	**96**	**22**
Benzo[g,h,i]perylene	mg/kg		**11**	**29**	**1.5 J**	**0.28**	**240**	**12**	**46**	**1.4**	**55**	**10**
Benzo[k]fluoranthene	mg/kg	210	**7.8**	**18 J**	**0.86 J**	**0.19**	**170**	**9.0**	**29**	**0.97**	**27**	**6.1**
bis(2-Ethylhexyl)phthalate	mg/kg	160	*12 U*	*32 U*	*2 U*	*0.18 U*	**1.8 J**	*0.56 U*	*4.8 U*	*0.19 U*	*1 U*	*1 U*
Caprolactam	mg/kg	400,000	*12 U*	*32 U*	*2 U*	*0.18 U*	*5.3 U*	*0.56 U*	*4.8 U*	*0.19 U*	*1 U*	*1 U*
Carbazole	mg/kg		**6.9 J**	**20 J**	*2 U*	**0.36**	**130**	**7.2**	**11**	*0.19 U*	**4.2**	**4.2**

Table 1 - Container Terminal
Summary of Organics Detected in Soil

Parameter	Units	PAL	TP-006-NORTHWALL-EAST	TP-006-NWALL-EAST-EAST	TP-006-WEST	CT-007-SB-1*	CT-007-SB-3*	CT-007-SB-10*	CT-007-TP-B1*	CT-007-TP-S1*	CT-007-TP-S2*	CT-007-TP-S3*
			9/20/2024	9/20/2024	9/20/2024	10/13/2023	10/13/2023	10/13/2023	12/1/2023	12/1/2023	12/1/2023	12/1/2023
Chrysene	mg/kg	2,100	**21**	**45**	**1.9**	**0.44**	**400**	**21**	**58**	**1.7**	**46**	**14**
Dibenz[a,h]anthracene	mg/kg	2.1	**2.9 J**	**6.9 J**	**0.38 J**	**0.067**	**58**	**3.6**	**12**	**0.35**	**14**	**2.9**
Di-n-butylphthalate	mg/kg	82,000	*12 U*	*32 U*	*2 U*	*0.18 U*	*5.3 U*	*0.56 U*	*4.8 U*	*0.19 U*	*1 U*	*1 U*
Di-n-ocytlphthalate	mg/kg	8,200	*12 U*	*32 U*	*2 U*	*0.18 U*	*5.3 U*	*0.56 U*	*4.8 U*	*0.19 U*	*1 U*	*1 U*
Fluoranthene	mg/kg	30,000	**72**	**140**	**4.3**	**1.4**	**1,600**	**63**	**140**	**4.9**	**81**	**38**
Fluorene	mg/kg	30,000	**30**	**62**	**2.6**	**0.13**	**590**	**16**	**36**	**0.16**	**13**	**8.1**
Hexachloroethane	mg/kg	8.0	*10 U*	*26 U*	*1.6 U*	*0.14 U*	*4.2 U*	*0.45 U*	*3.8 U*	*0.15 U*	*0.8 U*	*0.8 U*
Indeno[1,2,3-c,d]pyrene	mg/kg	21	**12**	**29**	**1.6**	**0.36**	**310**	**17**	**63**	**1.9**	**73**	**14**
Isophorone	mg/kg	2,400	*11 U*	*29 U*	*1.8 U*	*0.16 U*	*4.8 U*	*0.5 U*	*4.3 U*	*0.17 U*	*0.91 U*	*0.9 U*
Naphthalene	mg/kg	8.6	**250**	**580**	**67**	**0.46**	**3,200**	**86**	**510**	**2.2**	**110**	**30**
Nitrobenzene	mg/kg	22	*11 U*	*29 U*	*1.8 U*	*0.16 U*	*4.8 U*	*0.5 U*	*4.3 U*	*0.17 U*	*0.91 U*	*0.9 U*
N-Nitrosodiphenylamine	mg/kg	470	*10 U*	*26 U*	*1.6 U*	*0.14 U*	*4.2 U*	*0.45 U*	*3.8 U*	*0.15 U*	*0.8 U*	*0.8 U*
Pentachlorophenol	mg/kg	4.0	*10 U*	*26 U*	*1.6 U*	*0.14 U*	*4.2 U*	*0.45 U*	*3.8 U*	*0.15 U*	*0.8 U*	*0.8 U*
Phenanthrene	mg/kg		**98**	**210**	**4.7**	**0.93**	**1,800**	**41**	**100**	**5.4**	**39**	**28**
Phenol	mg/kg	250,000	*12 U*	*32 U*	*2 U*	*0.18 U*	**9.8**	**1.3**	**2 J**	*0.19 U*	**0.92 J**	*1 U*
Pyrene	mg/kg	23,000	**49**	**95**	**4.0**	**1.1**	**1,100**	**44**	**100**	**4.0**	**71**	**28**
PCBs												
Aroclor 1242	mg/kg	0.97	*N/A*	*N/A*	*N/A*	*0.0525 U*	*N/A*	*N/A*	*0.0557 U*	*0.056 U*	*0.0605 U*	*0.0593 U*
Aroclor 1248	mg/kg	0.94	*N/A*	*N/A*	*N/A*	*0.0525 U*	*N/A*	*N/A*	*0.0557 U*	*0.056 U*	*0.0605 U*	*0.0593 U*
Aroclor 1254	mg/kg	0.97	*N/A*	*N/A*	*N/A*	*0.0525 U*	*N/A*	*N/A*	*0.0557 U*	*0.056 U*	*0.0605 U*	*0.0593 U*
Aroclor 1260	mg/kg	0.99	*N/A*	*N/A*	*N/A*	*0.0525 U*	*N/A*	*N/A*	*0.0557 U*	*0.056 U*	*0.0605 U*	*0.0593 U*
Aroclor 1268	mg/kg		*N/A*	*N/A*	*N/A*	*0.0525 U*	*N/A*	*N/A*	*0.0557 U*	*0.056 U*	*0.0605 U*	*0.0593 U*
PCBs (total)	mg/kg	0.97	*N/A*	*N/A*	*N/A*	*0.0525 U*	*N/A*	*N/A*	*0.0557 U*	*0.056 U*	*0.0605 U*	*0.0593 U*
TPH/Oil & Grease												
Diesel Range Organics	mg/kg	6,200	*N/A*	*N/A*	*N/A*	**76**	**26,000**	**930**	**11,000**	**2,900**	**8,200**	**7,500**
Gasoline Range Organics	mg/kg	6,200	*N/A*	*N/A*	*N/A*	**2 J**	**3,200**	**280**	**410**	**4.2**	**170**	**210**
Oil & Grease	mg/kg	6,200	*N/A*	*N/A*	*N/A*	*218 U*	**36,200**	**1,860**	**15,700**	**3,720**	**9,470**	**7,100**

Bold indicates detection
Values in red indicate a detection exceedance of the Project Action Limit (PAL)
* Indicates non-validated data
^ PAH compounds were analyzed via SIM
N/A: This parameter was not analyzed for this sample.
Soil Sample Excavated

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

Table 1 - Container Terminal
Summary of Organics Detected in Soil

Parameter	Units	PAL	CT-007-TP-S4*	CT-008-SB-1	CT-008-SB-3	CT-009-SB-1*	CT-009-SB-3*	CT-009-SB-10*	CT-010-SB-1*	CT-010-SB-7*	CT-010-SB-10*	CT-011-SB-1*	CT-011-SB-4*
			12/1/2023	10/11/2023	10/11/2023	10/12/2023	10/12/2023	10/12/2023	10/12/2023	10/12/2023	10/12/2023	10/12/2023	10/12/2023
Volatile Organic Compounds													
1,1,1-Trichloroethane	mg/kg	36,000	*0.037 U*	*N/A*	*N/A*	*N/A*	*0.00066 U*	*N/A*	*N/A*	**0.003**	**0.00049 J**	*N/A*	*0.00052 U*
1,1-Dichloroethane	mg/kg	16	*0.075 U*	*N/A*	*N/A*	*N/A*	*0.0013 U*	*N/A*	*N/A*	**0.00027 J**	*0.0011 U*	*N/A*	*0.001 U*
1,2-Dichlorobenzene	mg/kg	9,300	*0.15 U*	*N/A*	*N/A*	*N/A*	*0.0026 U*	*N/A*	*N/A*	*0.0023 U*	*0.0022 U*	*N/A*	*0.0021 U*
2-Butanone (MEK)	mg/kg	190,000	*0.75 U*	*N/A*	*N/A*	*N/A*	*0.013 U*	*N/A*	*N/A*	*0.012 U*	*0.011 U*	*N/A*	**0.0042 J**
Acetone	mg/kg	670,000	*0.75 U*	*N/A*	*N/A*	*N/A*	**0.021 J**	*N/A*	*N/A*	**0.044**	**0.026 J**	*N/A*	**0.2**
Benzene	mg/kg	5.1	**1.3**	*N/A*	*N/A*	*N/A*	**0.0067**	*N/A*	*N/A*	**0.046**	**0.048**	*N/A*	**0.0047**
Bromomethane	mg/kg	30	*0.15 U*	*N/A*	*N/A*	*N/A*	*0.0026 U*	*N/A*	*N/A*	*0.0023 U*	*0.0022 U*	*N/A*	*0.0021 U*
Carbon disulfide	mg/kg	3,500	*0.75 U*	*N/A*	*N/A*	*N/A*	*0.013 U*	*N/A*	*N/A*	*0.012 U*	*0.011 U*	*N/A*	*0.01 U*
Chloroform	mg/kg	1.4	*0.11 U*	*N/A*	*N/A*	*N/A*	*0.002 U*	*N/A*	*N/A*	*0.0018 U*	*0.0016 U*	*N/A*	*0.0016 U*
Cyclohexane	mg/kg	27,000	*0.75 U*	*N/A*	*N/A*	*N/A*	**0.0019 J**	*N/A*	*N/A*	**0.0037 J**	**0.0011 J**	*N/A*	**0.0024 J**
Ethylbenzene	mg/kg	25	**0.26**	*N/A*	*N/A*	*N/A*	**0.0003 J**	*N/A*	*N/A*	**0.0016**	**0.00055 J**	*N/A*	**0.0066**
Isopropylbenzene	mg/kg	9,900	**0.018 J**	*N/A*	*N/A*	*N/A*	*0.0013 U*	*N/A*	*N/A*	**0.00025 J**	*0.0011 U*	*N/A*	**0.0005 J**
Methyl Acetate	mg/kg	1,200,000	**0.1 J**	*N/A*	*N/A*	*N/A*	*0.0053 U*	*N/A*	*N/A*	*0.0047 U*	*0.0043 U*	*N/A*	*0.0041 U*
Styrene	mg/kg	35,000	**0.62**	*N/A*	*N/A*	*N/A*	**0.00083 J**	*N/A*	*N/A*	**0.0023**	**0.0011**	*N/A*	**0.00068 J**
Tetrachloroethene	mg/kg	100	*0.037 U*	*N/A*	*N/A*	*N/A*	*0.00066 U*	*N/A*	*N/A*	*0.00059 U*	*0.00054 U*	*N/A*	*0.00052 U*
Toluene	mg/kg	47,000	**0.91**	*N/A*	*N/A*	*N/A*	**0.0036**	*N/A*	*N/A*	**0.027**	**0.021**	*N/A*	**0.0037**
Xylenes	mg/kg	2,800	**2.2**	*N/A*	*N/A*	*N/A*	**0.0024 J**	*N/A*	*N/A*	**0.019**	**0.0094**	*N/A*	**0.045**
Semi-Volatile Organic Compounds^													
1,1-Biphenyl	mg/kg	200	**9.3**	*0.48 U*	**0.077 J**	**0.049 J**	**0.054 J**	*N/A*	**0.078 J**	**0.097 J**	**0.046 J**	*0.47 U*	**0.1 J**
1,2,4,5-Tetrachlorobenzene	mg/kg	350	*0.96 U*	*0.21 U*	*0.19 U*	*0.18 U*	*0.18 U*	*N/A*	*0.19 U*	*0.18 U*	*0.18 U*	*0.2 U*	*0.18 U*
2,4-Dimethylphenol	mg/kg	16,000	*0.96 U*	*0.21 U*	*0.19 U*	*0.18 U*	*0.18 U*	*N/A*	*0.19 U*	*0.18 U*	*0.18 U*	*0.2 U*	*0.18 U*
2,4-Dinitrophenol	mg/kg	1,600	*4.6 U*	*1 U*	*0.9 U*	*0.89 U*	*0.89 U*	*N/A*	*0.91 U*	*0.88 U*	*0.86 U*	*0.98 U*	*0.89 U*
2,4-Dinitrotoluene	mg/kg	7.4	*0.96 U*	*0.21 U*	*0.19 U*	*0.18 U*	*0.18 U*	*N/A*	*0.19 U*	*0.18 U*	*0.18 U*	*0.2 U*	*0.18 U*
2,6-Dinitrotoluene	mg/kg	1.5	*0.96 U*	*0.21 U*	*0.19 U*	*0.18 U*	*0.18 U*	*N/A*	*0.19 U*	*0.18 U*	*0.18 U*	*0.2 U*	*0.18 U*
2-Chloronaphthalene	mg/kg	60,000	*0.96 U*	*0.21 U*	*0.19 U*	*0.18 U*	*0.18 U*	*N/A*	*0.19 U*	*0.18 U*	*0.18 U*	*0.2 U*	*0.18 U*
2-Chlorophenol	mg/kg	5,800	*0.96 U*	*0.21 U*	*0.19 U*	*0.18 U*	*0.18 U*	*N/A*	*0.19 U*	*0.18 U*	*0.18 U*	*0.2 U*	*0.18 U*
2-Methylnaphthalene	mg/kg	3,000	**39**	**0.037**	**0.086**	**0.078**	**0.13**	*N/A*	**0.26**	**0.58**	**0.25**	**0.0028 J**	**0.92**
2-Methylphenol	mg/kg	41,000	**0.37 J**	*0.21 U*	*0.19 U*	*0.18 U*	*0.18 U*	*N/A*	*0.19 U*	*0.18 U*	*0.18 U*	*0.2 U*	*0.18 U*
3&4-Methylphenol(m&p Cresol)	mg/kg	41,000	**0.59 J**	*0.3 U*	*0.27 U*	*0.27 U*	*0.27 U*	*N/A*	*0.27 U*	**0.034 J**	**0.03 J**	*0.3 U*	**0.029 J**
3,3'-Dichlorobenzidine	mg/kg	5.1	*0.96 U*	*0.21 U*	*0.19 U*	*0.18 U*	*0.18 U*	*N/A*	*0.19 U*	*0.18 U*	*0.18 U*	*0.2 U*	*0.18 U*
Acenaphthene	mg/kg	45,000	**4.3**	**0.04**	**0.099**	**0.036**	**0.17**	*N/A*	**0.13 J**	**0.76**	**0.47**	*0.0082 U*	**0.14**
Acenaphthylene	mg/kg	45,000	**42**	**0.032**	**0.016**	**0.019**	**0.12**	*N/A*	**0.27**	**0.32**	**0.25**	**0.0054 J**	**0.48**
Acetophenone	mg/kg	120,000	**0.95 J**	*0.21 UJ*	*0.19 U*	*0.18 U*	*0.18 U*	*N/A*	*0.19 U*	**0.057 J**	**0.034 J**	*0.2 U*	*0.18 U*
Anthracene	mg/kg	230,000	**12**	**0.36**	**0.31**	**0.064**	**0.71**	*N/A*	**0.78**	**2.2**	**2.1**	**0.0031 J**	**1.2**
Benz[a]anthracene	mg/kg	21	**45**	**2.8**	**1.4**	**0.27**	**3.1**	*N/A*	**3.8**	**6.3**	**7.8**	**0.0093**	**2.5**
Benzaldehyde	mg/kg	120,000	*1.3 U*	*0.28 UJ*	*0.25 U*	*0.24 U*	*0.24 U*	*N/A*	*0.25 U*	*0.24 U*	*0.24 U*	*0.27 U*	*0.24 U*
Benzo[a]pyrene	mg/kg	2.1	**44**	**3.6**	**1.4**	**0.2**	**2.8**	**0.6**	**2.9**	**7.4**	**8.4**	**0.008 J**	**1.9**
Benzo[b]fluoranthene	mg/kg	21	**53**	**5**	**1.8**	**0.33**	**3.7**	*N/A*	**3.8**	**9.2**	**10**	**0.011**	**2.3**
Benzo[g,h,i]perylene	mg/kg		**31**	**2.2**	**0.68**	**0.12**	**1.2**	*N/A*	**1.7**	**4.6**	**4.4**	**0.0046 J**	**0.73**
Benzo[k]fluoranthene	mg/kg	210	**14**	**1.3**	**0.44**	**0.09**	**1.1**	*N/A*	**1.3**	**2.9**	**3.2**	**0.0029 J**	**0.81**
bis(2-Ethylhexyl)phthalate	mg/kg	160	**0.44 J**	*0.21 UJ*	*0.19 U*	*0.18 U*	*0.18 U*	*N/A*	*0.19 U*	*0.18 U*	*0.18 U*	*0.2 U*	*0.18 U*
Caprolactam	mg/kg	400,000	*0.96 U*	*0.21 UJ*	*0.19 U*	*0.18 U*	*0.18 U*	*N/A*	*0.19 U*	*0.18 U*	*0.18 U*	*0.2 U*	*0.18 U*
Carbazole	mg/kg		**5.2**	**0.18 J**	**0.27**	**0.082 J**	**0.45**	*N/A*	**0.26**	**0.58**	**0.3**	*0.2 U*	**0.56**

Table 1 - Container Terminal
Summary of Organics Detected in Soil

Parameter	Units	PAL	CT-007-TP-S4*	CT-008-SB-1	CT-008-SB-3	CT-009-SB-1*	CT-009-SB-3*	CT-009-SB-10*	CT-010-SB-1*	CT-010-SB-7*	CT-010-SB-10*	CT-011-SB-1*	CT-011-SB-4*
			12/1/2023	10/11/2023	10/11/2023	10/12/2023	10/12/2023	10/12/2023	10/12/2023	10/12/2023	10/12/2023	10/12/2023	10/12/2023
Chrysene	mg/kg	2,100	**25**	**2.6**	**1.2**	**0.25**	**2.7**	*N/A*	**3.1**	**5.7**	**6.8**	**0.0077 J**	**1.9**
Dibenz[a,h]anthracene	mg/kg	2.1	**7.4**	**0.69**	**0.21**	**0.028**	**0.4**	*N/A*	**0.45**	**1.1**	**1.1**	**0.0013 J**	**0.26**
Di-n-butylphthalate	mg/kg	82,000	*0.96 U*	*0.21 U*	*0.19 U*	*0.18 U*	*0.18 U*	*N/A*	*0.19 U*	*0.18 U*	*0.18 U*	*0.2 U*	*0.18 U*
Di-n-ocytlphthalate	mg/kg	8,200	*0.96 U*	*0.21 UJ*	*0.19 U*	*0.18 U*	*0.18 U*	*N/A*	*0.19 U*	*0.18 U*	*0.18 U*	*0.2 U*	*0.18 U*
Fluoranthene	mg/kg	30,000	**49**	**3.5**	**2.6**	**0.6**	**5**	*N/A*	**6.1**	**11**	**14**	**0.014**	**4.4**
Fluorene	mg/kg	30,000	**17**	**0.022**	**0.059**	**0.027**	**0.17**	*N/A*	**0.13 J**	**0.74**	**0.44**	**0.0016 J**	**0.83**
Hexachloroethane	mg/kg	8.0	*0.77 U*	*0.17 U*	*0.15 U*	*0.15 U*	*0.15 U*	*N/A*	*0.15 U*	*0.15 U*	*0.14 U*	*0.16 U*	*0.15 U*
Indeno[1,2,3-c,d]pyrene	mg/kg	21	**41**	**3.0**	**0.86**	**0.14**	**1.8**	*N/A*	**2.2**	**5.9**	**6.2**	**0.0062 J**	**1.1**
Isophorone	mg/kg	2,400	*0.86 U*	*0.19 U*	*0.17 U*	*0.17 U*	*0.17 U*	*N/A*	*0.17 U*	*0.16 U*	*0.16 U*	*0.18 U*	*0.17 U*
Naphthalene	mg/kg	8.6	**290**	**0.094**	**0.33**	**0.11**	**0.26**	*N/A*	**0.49**	**4.4**	**0.91**	**0.004 J**	**1.7**
Nitrobenzene	mg/kg	22	*0.86 U*	*0.19 UJ*	*0.17 U*	*0.17 U*	*0.17 U*	*N/A*	*0.17 U*	*0.16 U*	*0.16 U*	*0.18 U*	*0.17 U*
N-Nitrosodiphenylamine	mg/kg	470	*0.77 U*	*0.17 U*	*0.15 U*	*0.15 U*	*0.15 U*	*N/A*	*0.15 U*	*0.15 U*	*0.14 U*	*0.16 U*	*0.15 U*
Pentachlorophenol	mg/kg	4.0	*0.77 U*	*0.17 U*	*0.15 U*	*0.15 U*	*0.15 U*	*N/A*	*0.15 U*	*0.15 U*	*0.14 U*	*0.16 U*	*0.15 U*
Phenanthrene	mg/kg		**43**	**1.4**	**0.98**	**0.41**	**2.8**	*N/A*	**2.5**	**7.2**	**7.4**	**0.011**	**4.5**
Phenol	mg/kg	250,000	**0.57 J**	*0.21 U*	*0.19 U*	*0.18 U*	*0.18 U*	*N/A*	*0.19 U*	*0.18 U*	*0.18 U*	*0.2 U*	*0.18 U*
Pyrene	mg/kg	23,000	**40**	**2.9**	**2.0**	**0.47**	**4.0**	*N/A*	**5.7**	**8.6**	**11**	**0.012**	**3.2**
PCBs													
Aroclor 1242	mg/kg	0.97	*0.0565 U*	*0.0621 U*	*N/A*	**0.0283 J**	*N/A*	*N/A*	**0.548**	*N/A*	*N/A*	*0.0612 U*	*N/A*
Aroclor 1248	mg/kg	0.94	*0.0565 U*	*0.0621 U*	*N/A*	*0.0545 U*	*N/A*	*N/A*	*0.0526 U*	*N/A*	*N/A*	*0.0612 U*	*N/A*
Aroclor 1254	mg/kg	0.97	*0.0565 U*	*0.0621 U*	*N/A*	**0.0122 J**	*N/A*	*N/A*	**0.265**	*N/A*	*N/A*	*0.0612 U*	*N/A*
Aroclor 1260	mg/kg	0.99	*0.0565 U*	*0.0621 U*	*N/A*	**0.015 J**	*N/A*	*N/A*	**0.157**	*N/A*	*N/A*	*0.0612 U*	*N/A*
Aroclor 1268	mg/kg		*0.0565 U*	*0.0621 U*	*N/A*	**0.0111 J**	*N/A*	*N/A*	**0.0828**	*N/A*	*N/A*	*0.0612 U*	*N/A*
PCBs (total)	mg/kg	0.97	*0.0565 U*	*0.0621 U*	*N/A*	**0.0666 J**	*N/A*	*N/A*	**1.05**	*N/A*	*N/A*	*0.0612 U*	*N/A*
TPH/Oil & Grease													
Diesel Range Organics	mg/kg	6,200	**11,000**	**110**	**240**	**100**	**46**	*N/A*	**140**	**330**	**160**	**6.9 J**	**130**
Gasoline Range Organics	mg/kg	6,200	**220**	*3.2 U*	*2.8 U*	*2.5 U*	**4**	*N/A*	*2.8 U*	**14**	**13**	*3 U*	**22**
Oil & Grease	mg/kg	6,200	**13,800**	**376 J-**	**795 J-**	**1,040**	**1,090**	*N/A*	**2,710**	**714**	**630**	**1,370**	**576**

Bold indicates detection
Values in red indicate a detection exceedance of the Project Action Limit (PAL)
* Indicates non-validated data
^ PAH compounds were analyzed via SIM
N/A: This parameter was not analyzed for this sample.
Soil Sample Excavated

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

Table 1 - Container Terminal
Summary of Organics Detected in Soil

Parameter	Units	PAL	CT-012-SB-1*	CT-012-SB-9*	CT-013-SB-1*	CT-013-SB-7*	CT-013-SB-10*	CT-014-SB-1*	CT-014-SB-4*	CT-014-SB-10*	CT-015-SB-1*	CT-015-SB-3*	CT-015-SB-10*
			10/12/2023	10/12/2023	10/12/2023	10/12/2023	10/12/2023	10/13/2023	10/13/2023	10/13/2023	10/16/2023	10/16/2023	10/16/2023
Volatile Organic Compounds													
1,1,1-Trichloroethane	mg/kg	36,000	*N/A*	*N/A*	*0.00057 U*	*0.00048 U*	*0.00041 U*	*N/A*	*0.00047 U*	*0.00062 U*	*0.00054 U*	*0.00059 U*	*0.0005 U*
1,1-Dichloroethane	mg/kg	16	*N/A*	*N/A*	*0.0011 U*	*0.00096 U*	*0.00082 U*	*N/A*	*0.00094 U*	*0.0012 U*	*0.0011 U*	*0.0012 U*	*0.001 U*
1,2-Dichlorobenzene	mg/kg	9,300	*N/A*	*N/A*	*0.0023 U*	*0.0019 U*	*0.0016 U*	*N/A*	*0.0019 U*	*0.0025 U*	*0.0022 U*	*0.0024 U*	*0.002 U*
2-Butanone (MEK)	mg/kg	190,000	*N/A*	*N/A*	*0.011 U*	*0.0096 U*	**0.0081 J**	*N/A*	*0.0094 U*	*0.012 U*	*0.011 U*	*0.012 U*	*0.01 U*
Acetone	mg/kg	670,000	*N/A*	*N/A*	*0.028 U*	**0.014 J**	**0.016 J**	*N/A*	*0.024 U*	*0.031 U*	*0.027 U*	*0.03 U*	*0.025 U*
Benzene	mg/kg	5.1	*N/A*	*N/A*	**0.0032**	**0.0016**	**0.00087**	*N/A*	*0.00047 U*	**0.00072**	**0.00021 J**	**0.00059**	**0.00061**
Bromomethane	mg/kg	30	*N/A*	*N/A*	*0.0023 U*	*0.0019 U*	*0.0016 U*	*N/A*	*0.0019 U*	*0.0025 U*	*0.0022 U*	*0.0024 U*	*0.002 U*
Carbon disulfide	mg/kg	3,500	*N/A*	*N/A*	*0.011 U*	*0.0096 U*	*0.0082 U*	*N/A*	*0.0094 U*	*0.012 U*	*0.011 U*	*0.012 U*	*0.01 U*
Chloroform	mg/kg	1.4	*N/A*	*N/A*	*0.0017 U*	*0.0014 U*	*0.0012 U*	*N/A*	**0.00025 J**	**0.0063**	*0.0016 U*	*0.0018 U*	*0.0015 U*
Cyclohexane	mg/kg	27,000	*N/A*	*N/A*	**0.002 J**	**0.0022 J**	**0.0028 J**	*N/A*	*0.0094 U*	*0.012 U*	*0.011 U*	*0.012 U*	*0.01 U*
Ethylbenzene	mg/kg	25	*N/A*	*N/A*	**0.0012**	**0.00017 J**	**0.00017 J**	*N/A*	*0.00094 U*	*0.0012 U*	*0.0011 U*	*0.0012 U*	**0.00038 J**
Isopropylbenzene	mg/kg	9,900	*N/A*	*N/A*	**0.0006 J**	*0.00096 U*	*0.00082 U*	*N/A*	*0.00094 U*	*0.0012 U*	*0.0011 U*	*0.0012 U*	*0.001 U*
Methyl Acetate	mg/kg	1,200,000	*N/A*	*N/A*	*0.0046 U*	*0.0038 U*	*0.0033 U*	*N/A*	*0.0038 U*	*0.005 U*	*0.0044 U*	*0.0048 U*	*0.004 U*
Styrene	mg/kg	35,000	*N/A*	*N/A*	**0.00073 J**	*0.00096 U*	*0.00082 U*	*N/A*	*0.00094 U*	*0.0012 U*	*0.0011 U*	*0.0012 U*	*0.001 U*
Tetrachloroethene	mg/kg	100	*N/A*	*N/A*	*0.00057 U*	*0.00048 U*	*0.00041 U*	*N/A*	*0.00047 U*	*0.00062 U*	*0.00054 U*	*0.00059 U*	*0.0005 U*
Toluene	mg/kg	47,000	*N/A*	*N/A*	**0.0076**	**0.0017**	**0.0007 J**	*N/A*	*0.00094 U*	*0.0012 U*	*0.0011 U*	*0.0012 U*	*0.001 U*
Xylenes	mg/kg	2,800	*N/A*	*N/A*	**0.007**	**0.0011 J**	*0.00082 U*	*N/A*	*0.00094 U*	*0.0012 U*	*0.0011 U*	*0.0012 U*	**0.0018 J**
Semi-Volatile Organic Compounds^													
1,1-Biphenyl	mg/kg	200	**0.28 J**	**0.028 J**	**0.13 J**	**0.31 J**	**0.03 J**	*2.3 U*	**0.043 J**	*0.46 U*	**0.18 J**	**0.12 J**	**0.056 J**
1,2,4,5-Tetrachlorobenzene	mg/kg	350	*0.17 U*	*0.18 U*	*0.18 U*	*0.87 U*	*0.18 U*	*1 U*	*0.19 U*	*0.2 U*	*0.19 U*	*0.19 U*	*0.18 U*
2,4-Dimethylphenol	mg/kg	16,000	*0.17 U*	*0.18 U*	*0.18 U*	*0.87 U*	*0.18 U*	*1 U*	*0.19 U*	*0.2 U*	*0.19 U*	*0.19 U*	*0.18 U*
2,4-Dinitrophenol	mg/kg	1,600	*0.83 U*	*0.84 U*	*0.84 U*	*4.2 U*	*0.84 U*	*4.8 U*	*0.92 U*	*0.96 U*	*0.9 U*	*0.91 U*	*0.85 U*
2,4-Dinitrotoluene	mg/kg	7.4	*0.17 U*	*0.18 U*	*0.18 U*	*0.87 U*	*0.18 U*	*1 U*	*0.19 U*	*0.2 U*	*0.19 U*	*0.19 U*	*0.18 U*
2,6-Dinitrotoluene	mg/kg	1.5	*0.17 U*	*0.18 U*	*0.18 U*	*0.87 U*	*0.18 U*	*1 U*	*0.19 U*	*0.2 U*	*0.19 U*	*0.19 U*	*0.18 U*
2-Chloronaphthalene	mg/kg	60,000	*0.17 U*	*0.18 U*	*0.18 U*	*0.87 U*	*0.18 U*	*1 U*	*0.19 U*	*0.2 U*	*0.19 U*	*0.19 U*	*0.18 U*
2-Chlorophenol	mg/kg	5,800	*0.17 U*	*0.18 U*	*0.18 U*	*0.87 U*	*0.18 U*	*1 U*	*0.19 U*	*0.2 U*	*0.19 U*	*0.19 U*	*0.18 U*
2-Methylnaphthalene	mg/kg	3,000	**0.56**	**0.065**	**0.38**	**2.3**	**0.062**	**0.049**	**0.11**	**0.0048 J**	**0.63**	**0.6**	**0.21**
2-Methylphenol	mg/kg	41,000	*0.17 U*	*0.18 U*	*0.18 U*	*0.87 U*	**0.028 J**	*1 U*	*0.19 U*	*0.2 U*	**0.043 J**	*0.19 U*	*0.18 U*
3&4-Methylphenol(m&p Cresol)	mg/kg	41,000	*0.25 U*	*0.25 U*	**0.028 J**	**0.24 J**	**0.066 J**	*1.4 U*	*0.28 U*	*0.29 U*	**0.087 J**	**0.088 J**	*0.26 U*
3,3'-Dichlorobenzidine	mg/kg	5.1	*0.17 U*	*0.18 U*	*0.18 U*	*0.87 U*	*0.18 U*	*1 U*	*0.19 U*	*0.2 U*	*0.19 U*	*0.19 U*	*0.18 U*
Acenaphthene	mg/kg	45,000	*0.07 U*	**0.0022 J**	**0.013**	**0.58**	**0.012**	**0.0088 J**	**0.013**	*0.008 U*	**0.1 J**	**0.5**	**0.078**
Acenaphthylene	mg/kg	45,000	**0.091**	**0.0076**	**0.041**	**4.4**	**0.044**	**0.0076 J**	**0.2**	**0.0017 J**	**2.8**	**3.3**	**0.11**
Acetophenone	mg/kg	120,000	**0.095 J**	*0.18 U*	*0.18 U*	*0.87 U*	*0.18 U*	*1 U*	**0.032 J**	*0.2 U*	*0.19 U*	*0.19 U*	*0.18 U*
Anthracene	mg/kg	230,000	**0.11**	**0.0087**	**0.11**	**5.4**	**0.086**	**0.019 J**	**0.22**	**0.0018 J**	**1.6**	**4.1**	**0.38**
Benz[a]anthracene	mg/kg	21	**0.98**	**0.05**	**0.18**	**19**	**0.2**	**0.078**	**1.6**	**0.0047 J**	**8.0**	**16**	**2.0**
Benzaldehyde	mg/kg	120,000	**0.13 J**	*0.23 U*	*0.23 U*	*1.1 U*	*0.23 U*	*1.3 U*	*0.25 U*	*0.26 U*	*0.25 U*	*0.25 U*	*0.23 U*
Benzo[a]pyrene	mg/kg	2.1	**0.75**	**0.062**	**0.14**	**17**	**0.19**	**0.096**	**0.61**	**0.0061 J**	**6.0**	**14**	**2.1**
Benzo[b]fluoranthene	mg/kg	21	**1.8**	**0.18**	**0.24**	**22**	**0.27**	**0.13**	**1.3**	**0.01**	**7.6**	**17**	**2.6**
Benzo[g,h,i]perylene	mg/kg		**0.68**	**0.082**	**0.085**	**7.2**	**0.12**	**0.09**	**0.4**	**0.0056 J**	**5.0**	**8.9**	**1.6**
Benzo[k]fluoranthene	mg/kg	210	**0.42**	**0.039**	**0.057**	**5.9**	**0.074**	**0.033 J**	**0.26**	**0.0035 J**	**2.8**	**6.2**	**0.85**
bis(2-Ethylhexyl)phthalate	mg/kg	160	*0.17 U*	*0.18 U*	*0.18 U*	*0.87 U*	*0.18 U*	*1 U*	*0.19 U*	*0.2 U*	*0.19 U*	*0.19 U*	*0.18 U*
Caprolactam	mg/kg	400,000	*0.17 U*	*0.18 U*	*0.18 U*	*0.87 U*	*0.18 U*	*1 U*	*0.19 U*	*0.2 U*	*0.19 U*	*0.19 U*	*0.18 U*
Carbazole	mg/kg		**0.16 J**	**0.027 J**	**0.14 J**	**0.81 J**	**0.072 J**	**0.17 J**	**0.058 J**	*0.2 U*	**0.61**	**0.97**	**0.17 J**

Table 1 - Container Terminal
Summary of Organics Detected in Soil

Parameter	Units	PAL	CT-012-SB-1*	CT-012-SB-9*	CT-013-SB-1*	CT-013-SB-7*	CT-013-SB-10*	CT-014-SB-1*	CT-014-SB-4*	CT-014-SB-10*	CT-015-SB-1*	CT-015-SB-3*	CT-015-SB-10*
			10/12/2023	10/12/2023	10/12/2023	10/12/2023	10/12/2023	10/13/2023	10/13/2023	10/13/2023	10/16/2023	10/16/2023	10/16/2023
Chrysene	mg/kg	2,100	**1.1**	**0.17**	**0.2**	**15**	**0.18**	**0.19**	**1.2**	**0.0058 J**	**5.4**	**13**	**1.7**
Dibenz[a,h]anthracene	mg/kg	2.1	**0.18**	**0.024**	**0.021**	**2.4**	**0.027**	**0.021 J**	**0.079**	**0.0012 J**	**0.97**	**2.7**	**0.37**
Di-n-butylphthalate	mg/kg	82,000	*0.17 U*	*0.18 U*	*0.18 U*	*0.87 U*	*0.18 U*	*1 U*	*0.19 U*	*0.2 U*	*0.19 U*	*0.19 U*	*0.18 U*
Di-n-ocytlphthalate	mg/kg	8,200	*0.17 U*	*0.18 U*	*0.18 U*	*0.87 U*	*0.18 U*	*1 U*	*0.19 U*	*0.2 U*	*0.19 U*	*0.19 U*	*0.18 U*
Fluoranthene	mg/kg	30,000	**2.2**	**0.34**	**0.47**	**33**	**0.4**	**0.15**	**2.9**	**0.0076 J**	**13**	**22**	**3.3**
Fluorene	mg/kg	30,000	*0.07 U*	*0.007 U*	**0.021**	**1.6**	**0.025**	**0.016 J**	**0.026**	*0.008 U*	**0.33**	**1.2**	**0.066 J**
Hexachloroethane	mg/kg	8.0	*0.14 U*	*0.14 U*	*0.14 U*	*0.7 U*	*0.14 U*	*0.8 U*	*0.15 U*	*0.16 U*	*0.15 U*	*0.15 U*	*0.14 U*
Indeno[1,2,3-c,d]pyrene	mg/kg	21	**0.9**	**0.093**	**0.1**	**10**	**0.14**	**0.067**	**0.48**	**0.0068 J**	**6.0**	**12**	**2**
Isophorone	mg/kg	2,400	*0.16 U*	*0.16 U*	*0.16 U*	*0.78 U*	*0.16 U*	*0.9 U*	*0.17 U*	*0.18 U*	*0.17 U*	*0.17 U*	*0.16 U*
Naphthalene	mg/kg	8.6	**8.2**	**0.4**	**0.37**	**4.8**	**0.15**	**0.061**	**0.25**	**0.012**	**3.6**	**2.1**	**0.66**
Nitrobenzene	mg/kg	22	*0.16 U*	*0.16 U*	*0.16 U*	*0.78 U*	*0.16 U*	*0.9 U*	*0.17 U*	*0.18 U*	*0.17 U*	*0.17 U*	*0.16 U*
N-Nitrosodiphenylamine	mg/kg	470	*0.14 U*	*0.14 U*	*0.14 U*	*0.7 U*	*0.14 U*	*0.8 U*	*0.15 U*	*0.16 U*	*0.15 U*	*0.15 U*	*0.14 U*
Pentachlorophenol	mg/kg	4.0	*0.14 U*	*0.14 U*	*0.14 U*	*0.7 U*	*0.14 U*	*0.8 U*	*0.15 U*	*0.16 U*	*0.15 U*	*0.15 U*	*0.14 U*
Phenanthrene	mg/kg		**2.3**	**0.4**	**0.37**	**19**	**0.26**	**0.14**	**1.3**	**0.0077 J**	**6.0**	**12**	**1.3**
Phenol	mg/kg	250,000	*0.17 U*	*0.18 U*	*0.18 U*	**0.37 J**	**0.041 J**	*1 U*	*0.19 U*	*0.2 U*	**0.07 J**	**0.083 J**	*0.18 U*
Pyrene	mg/kg	23,000	**1.4**	**0.1**	**0.38**	**26**	**0.34**	**0.16**	**2.5**	**0.0053 J**	**12**	**18**	**2.8**
PCBs													
Aroclor 1242	mg/kg	0.97	*0.0494 U*	*N/A*	**0.0168 JP**	*N/A*	*N/A*	*0.0592 U*	*N/A*	*N/A*	**0.0453 J**	*N/A*	*N/A*
Aroclor 1248	mg/kg	0.94	*0.0494 U*	*N/A*	*0.0503 U*	*N/A*	*N/A*	*0.0592 U*	*N/A*	*N/A*	*0.0568 U*	*N/A*	*N/A*
Aroclor 1254	mg/kg	0.97	**0.017 J**	*N/A*	**0.0288 J**	*N/A*	*N/A*	*0.0592 U*	*N/A*	*N/A*	**0.348**	*N/A*	*N/A*
Aroclor 1260	mg/kg	0.99	**0.0221 J**	*N/A*	**0.0173 J**	*N/A*	*N/A*	*0.0592 U*	*N/A*	*N/A*	**0.102**	*N/A*	*N/A*
Aroclor 1268	mg/kg		**0.025 J**	*N/A*	**0.0112 J**	*N/A*	*N/A*	*0.0592 U*	*N/A*	*N/A*	**0.0366 J**	*N/A*	*N/A*
PCBs (total)	mg/kg	0.97	**0.0641 J**	*N/A*	**0.0741 J**	*N/A*	*N/A*	*0.0592 U*	*N/A*	*N/A*	**0.532 J**	*N/A*	*N/A*
TPH/Oil & Grease													
Diesel Range Organics	mg/kg	6,200	**220**	**110**	**69**	**350**	**18 J**	**470**	**44**	**4.3 J**	**550**	**160**	**180**
Gasoline Range Organics	mg/kg	6,200	**4.7**	**1.9 J**	**4.9**	**4.8**	**2.2 J**	**1.7 J**	**5.8**	**2.5 J**	**4.2**	**3 J**	**4**
Oil & Grease	mg/kg	6,200	**842**	**404**	**280**	**1,400**	**246**	**358**	**1,010**	**818**	**738**	**1,260**	**1,470**

Bold indicates detection
Values in red indicate a detection exceedance of the Project Action Limit (PAL)
* Indicates non-validated data
^ PAH compounds were analyzed via SIM
N/A: This parameter was not analyzed for this sample.
Soil Sample Excavated

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

Table 1 - Container Terminal
Summary of Organics Detected in Soil

Parameter	Units	PAL	CT-016-SB-1	CT-016-SB-8	CT-016-SB-10	CT-017-SB-1	CT-017-SB-9	CT-017-SB-10	CT-018-SB-1	CT-018-SB-9	CT-019-SB-1*	CT-019-SB-8*	CT-019-SB-10*
			9/29/2023	9/29/2023	9/29/2023	10/17/2023	10/17/2023	10/17/2023	10/17/2023	10/17/2023	10/16/2023	10/16/2023	10/16/2023
Volatile Organic Compounds													
1,1,1-Trichloroethane	mg/kg	36,000	*N/A*	*0.00051 U*	*0.00037 U*	*0.00057 UJ*	*0.00048 U*	*0.00042 U*	*N/A*	*0.00038 U*	*0.00062 U*	*0.00061 U*	*N/A*
1,1-Dichloroethane	mg/kg	16	*N/A*	*0.001 U*	*0.00074 U*	*0.0011 U*	*0.00095 U*	*0.00084 U*	*N/A*	*0.00075 U*	*0.0012 U*	*0.0012 U*	*N/A*
1,2-Dichlorobenzene	mg/kg	9,300	*N/A*	*0.002 U*	*0.0015 U*	*0.0023 U*	*0.0019 U*	*0.0017 U*	*N/A*	*0.0015 U*	*0.0025 U*	*0.0024 U*	*N/A*
2-Butanone (MEK)	mg/kg	190,000	*N/A*	*0.01 U*	**0.0022 J**	*0.011 UJ*	*0.0095 UJ*	*0.0084 UJ*	*N/A*	*0.0075 UJ*	*0.012 U*	*0.012 U*	*N/A*
Acetone	mg/kg	670,000	*N/A*	**0.024 J**	**0.0079 J**	*0.028 U*	**0.01 J**	**0.0097 J**	*N/A*	*0.019 UJ*	*0.031 U*	*0.03 U*	*N/A*
Benzene	mg/kg	5.1	*N/A*	*0.00051 U*	**0.0024**	**0.0038**	**0.00074**	**0.0011**	*N/A*	**0.00022 J**	*0.00062 U*	**0.00047 J**	*N/A*
Bromomethane	mg/kg	30	*N/A*	*0.002 U*	*0.0015 UJ*	*0.0023 UJ*	*0.0019 UJ*	*0.0017 UJ*	*N/A*	*0.0015 UJ*	*0.0025 U*	*0.0024 U*	*N/A*
Carbon disulfide	mg/kg	3,500	*N/A*	*0.01 U*	*0.0074 U*	*0.011 U*	*0.0095 U*	*0.0084 U*	*N/A*	*0.0075 U*	*0.012 U*	*0.012 U*	*N/A*
Chloroform	mg/kg	1.4	*N/A*	*0.0015 U*	*0.0011 U*	*0.0017 UJ*	*0.0014 UJ*	*0.0013 UJ*	*N/A*	*0.0011 UJ*	*0.0018 U*	*0.0018 U*	*N/A*
Cyclohexane	mg/kg	27,000	*N/A*	*0.01 U*	*0.0074 UJ*	**0.00099 J**	*0.0095 U*	*0.0084 U*	*N/A*	*0.0075 U*	*0.012 U*	*0.012 U*	*N/A*
Ethylbenzene	mg/kg	25	*N/A*	*0.001 U*	**0.00036 J**	**0.0041**	**0.0017**	**0.00049 J**	*N/A*	**0.00012 J**	*0.0012 U*	*0.0012 U*	*N/A*
Isopropylbenzene	mg/kg	9,900	*N/A*	*0.001 U*	*0.00074 U*	**0.0015**	**0.00036 J**	*0.00084 U*	*N/A*	*0.00075 U*	*0.0012 U*	*0.0012 U*	*N/A*
Methyl Acetate	mg/kg	1,200,000	*N/A*	*0.0041 U*	*0.0029 U*	**0.0017 J**	*0.0038 UJ*	*0.0034 UJ*	*N/A*	*0.003 UJ*	*0.0049 U*	*0.0049 U*	*N/A*
Styrene	mg/kg	35,000	*N/A*	*0.001 U*	*0.00074 U*	*0.00095 B*	*0.00095 U*	*0.00084 U*	*N/A*	*0.00075 U*	*0.0012 U*	*0.0012 U*	*N/A*
Tetrachloroethene	mg/kg	100	*N/A*	*0.00051 U*	*0.00037 U*	**0.00098**	*0.00048 U*	*0.00042 U*	*N/A*	*0.00038 U*	*0.00062 U*	*0.00061 U*	*N/A*
Toluene	mg/kg	47,000	*N/A*	*0.001 U*	**0.0015**	**0.0047**	**0.0021**	**0.0012**	*N/A*	*0.00075 U*	*0.0012 U*	*0.0012 U*	*N/A*
Xylenes	mg/kg	2,800	*N/A*	*0.001 U*	*0.00074 U*	**0.016**	**0.0018 J**	**0.00034 J**	*N/A*	**0.00076 J**	*0.0012 U*	*0.0012 U*	*N/A*
Semi-Volatile Organic Compounds^													
1,1-Biphenyl	mg/kg	200	**0.059 J**	**0.035 J**	*0.42 U*	**0.42 J**	*0.42 U*	**0.033 J**	**0.22 J**	*0.41 U*	*0.47 U*	**0.23 J**	*N/A*
1,2,4,5-Tetrachlorobenzene	mg/kg	350	*0.2 U*	*0.18 U*	*0.18 U*	*0.19 U*	*0.18 U*	*0.18 UJ*	*0.18 UJ*	*0.18 U*	*0.21 U*	*0.92 U*	*N/A*
2,4-Dimethylphenol	mg/kg	16,000	*0.2 U*	*0.18 U*	*0.18 U*	**0.067 J**	*0.18 UJ*	*0.18 U*	*0.18 U*	*0.18 U*	*0.21 U*	*0.92 U*	*N/A*
2,4-Dinitrophenol	mg/kg	1,600	*0.99 U*	*0.85 U*	*0.88 U*	*0.92 U*	*0.88 U*	*0.87 UJ*	**0.88 R**	*0.87 U*	*1 U*	*4.4 U*	*N/A*
2,4-Dinitrotoluene	mg/kg	7.4	*0.2 U*	*0.18 U*	*0.18 U*	*0.19 U*	*0.18 U*	*0.18 UJ*	*0.18 UJ*	*0.18 U*	*0.21 U*	*0.92 U*	*N/A*
2,6-Dinitrotoluene	mg/kg	1.5	*0.2 U*	*0.18 U*	*0.18 U*	*0.19 U*	*0.18 U*	*0.18 UJ*	*0.18 UJ*	*0.18 U*	*0.21 U*	*0.92 U*	*N/A*
2-Chloronaphthalene	mg/kg	60,000	*0.2 U*	*0.18 U*	*0.18 U*	*0.19 U*	*0.18 U*	*0.18 U*	*0.18 U*	*0.18 U*	*0.21 U*	*0.92 U*	*N/A*
2-Chlorophenol	mg/kg	5,800	*0.2 U*	*0.18 U*	*0.18 U*	*0.19 U*	*0.18 U*	*0.18 U*	*0.18 U*	*0.18 U*	*0.21 U*	*0.92 U*	*N/A*
2-Methylnaphthalene	mg/kg	3,000	**0.17**	**0.17**	**0.016**	**0.49**	**0.082**	**0.066**	**3.2**	**0.095**	**0.15**	**2.1**	*N/A*
2-Methylphenol	mg/kg	41,000	*0.2 U*	*0.18 U*	*0.18 U*	*0.19 U*	*0.18 U*	*0.18 U*	*0.18 U*	*0.18 U*	*0.21 U*	*0.92 U*	*N/A*
3&4-Methylphenol(m&p Cresol)	mg/kg	41,000	*0.3 U*	*0.26 U*	*0.26 U*	**0.69**	*0.26 U*	*0.26 U*	*0.26 U*	*0.26 U*	*0.3 U*	*1.3 U*	*N/A*
3,3'-Dichlorobenzidine	mg/kg	5.1	*0.2 U*	*0.18 U*	*0.18 U*	*0.19 U*	*0.18 U*	*0.18 U*	*0.18 UJ*	*0.18 U*	*0.21 U*	*0.92 U*	*N/A*
Acenaphthene	mg/kg	45,000	**0.035**	*0.0071 U*	*0.0073 U*	**0.15**	**0.0061 J**	**0.0056 J**	**0.011**	**0.1**	**0.0034 J**	**0.071 J**	*N/A*
Acenaphthylene	mg/kg	45,000	**0.19**	**0.032**	**0.0026 J**	**0.083**	**0.0068 J**	**0.004 J**	**0.053**	**0.056 J**	**0.036**	**0.48**	*N/A*
Acetophenone	mg/kg	120,000	*0.2 U*	*0.18 U*	*0.18 U*	**0.048 J**	*0.18 U*	*0.18 U*	**0.3**	*0.18 U*	*0.21 U*	*0.92 U*	*N/A*
Anthracene	mg/kg	230,000	**0.2**	**0.036**	**0.0035 J**	**0.19**	**0.035**	**0.016**	**0.041**	**0.62**	**0.023**	**1.2**	*N/A*
Benz[a]anthracene	mg/kg	21	**0.73**	**0.076**	**0.0034 J**	**0.34**	**0.12**	**0.022**	**0.21**	**1.9**	**0.12**	**4.1**	*N/A*
Benzaldehyde	mg/kg	120,000	*0.27 U*	*0.23 U*	*0.24 U*	*0.25 U*	*0.24 U*	*0.24 U*	*0.24 U*	*0.24 U*	*0.27 U*	*1.2 U*	*N/A*
Benzo[a]pyrene	mg/kg	2.1	**0.7**	**0.071**	**0.0025 J**	**0.33**	**0.097**	**0.015**	**0.17**	**1.5**	**0.091**	**2.9**	**2.4**
Benzo[b]fluoranthene	mg/kg	21	**0.93**	**0.09**	**0.0051 J**	**0.43**	**0.19**	**0.026**	**0.26**	**2.3**	**0.11**	**3.4**	*N/A*
Benzo[g,h,i]perylene	mg/kg		**0.48**	**0.046**	**0.0028 J**	**0.15**	**0.078**	**0.011**	**0.1**	**1.0**	**0.061**	**1.4**	*N/A*
Benzo[k]fluoranthene	mg/kg	210	**0.3**	**0.025**	**0.0016 J**	**0.11**	**0.056**	**0.008**	**0.064**	**0.68**	**0.039**	**1.1**	*N/A*
bis(2-Ethylhexyl)phthalate	mg/kg	160	*0.2 U*	*0.18 U*	*0.18 U*	*0.19 U*	*0.18 U*	*0.18 U*	*0.18 U*	*0.18 U*	*0.21 U*	*0.92 U*	*N/A*
Caprolactam	mg/kg	400,000	*0.2 U*	*0.18 U*	*0.18 U*	*0.19 U*	*0.18 UJ*	*0.18 U*	*0.18 U*	*0.18 U*	*0.21 U*	*0.92 U*	*N/A*
Carbazole	mg/kg		**0.14 J**	**0.036 J**	*0.18 U*	**0.23**	*0.18 U*	*0.18 U*	**0.054 J**	**0.17 J**	*0.21 U*	**0.56 J**	*N/A*

Table 1 - Container Terminal
Summary of Organics Detected in Soil

Parameter	Units	PAL	CT-016-SB-1	CT-016-SB-8	CT-016-SB-10	CT-017-SB-1	CT-017-SB-9	CT-017-SB-10	CT-018-SB-1	CT-018-SB-9	CT-019-SB-1*	CT-019-SB-8*	CT-019-SB-10*
			9/29/2023	9/29/2023	9/29/2023	10/17/2023	10/17/2023	10/17/2023	10/17/2023	10/17/2023	10/16/2023	10/16/2023	10/16/2023
Chrysene	mg/kg	2,100	**0.67**	**0.074**	**0.0058 J**	**0.3**	**0.17**	**0.028**	**0.3**	**1.8**	**0.078**	**2.6**	*N/A*
Dibenz[a,h]anthracene	mg/kg	2.1	**0.099**	**0.011**	**0.00095 J**	**0.045**	**0.022**	**0.003 J**	**0.035**	**0.29**	**0.014**	**0.49**	*N/A*
Di-n-butylphthalate	mg/kg	82,000	*0.2 U*	*0.18 U*	*0.18 U*	*0.19 U*	*0.18 U*	*0.18 U*	*0.18 U*	*0.18 U*	*0.21 U*	*0.92 U*	*N/A*
Di-n-ocytlphthalate	mg/kg	8,200	*0.2 U*	*0.18 U*	*0.18 U*	*0.19 U*	*0.18 U*	*0.18 U*	*0.18 U*	*0.18 U*	*0.21 U*	*0.92 U*	*N/A*
Fluoranthene	mg/kg	30,000	**1.9**	**0.16**	**0.0077**	**0.68**	**0.23**	**0.062**	**0.21**	**4.0**	**0.17**	**5.0**	*N/A*
Fluorene	mg/kg	30,000	**0.085**	**0.02**	**0.0012 J**	**0.18**	**0.0045 J**	**0.0096**	*0.0074 U*	**0.096**	**0.007 J**	**0.48**	*N/A*
Hexachloroethane	mg/kg	8.0	*0.16 U*	*0.14 U*	*0.14 U*	*0.15 U*	*0.15 U*	*0.14 U*	*0.15 U*	*0.14 U*	*0.16 U*	*0.74 U*	*N/A*
Indeno[1,2,3-c,d]pyrene	mg/kg	21	**0.61**	**0.057**	**0.0036 J**	**0.21**	**0.089**	**0.012**	**0.1**	**1.4**	**0.076**	**2.1**	*N/A*
Isophorone	mg/kg	2,400	*0.18 U*	*0.16 U*	*0.16 U*	*0.17 U*	*0.16 U*	*0.16 U*	*0.16 U*	*0.16 U*	*0.19 U*	*0.83 U*	*N/A*
Naphthalene	mg/kg	8.6	**0.28**	**0.3**	**0.032**	**12**	**0.16**	**0.29**	**2.2**	**0.25**	**0.15**	**2.3**	*N/A*
Nitrobenzene	mg/kg	22	*0.18 U*	*0.16 U*	*0.16 U*	*0.17 U*	*0.16 U*	*0.16 U*	*0.16 U*	*0.16 U*	*0.19 U*	*0.83 U*	*N/A*
N-Nitrosodiphenylamine	mg/kg	470	*0.16 U*	*0.14 U*	*0.14 U*	*0.15 U*	*0.15 U*	*0.14 U*	*0.15 U*	*0.14 U*	*0.16 U*	*0.74 U*	*N/A*
Pentachlorophenol	mg/kg	4.0	*0.16 U*	*0.14 U*	*0.14 U*	*0.15 U*	*0.15 U*	*0.14 UJ*	*0.15 UJ*	*0.14 U*	*0.16 U*	*0.74 U*	*N/A*
Phenanthrene	mg/kg		**1.5**	**0.17**	**0.018**	**0.66**	**0.19**	**0.089**	**1.0**	**2.8**	**0.11**	**4.1**	*N/A*
Phenol	mg/kg	250,000	*0.2 U*	*0.18 U*	*0.18 U*	**0.06 J**	*0.18 U*	*0.18 U*	*0.18 U*	*0.18 U*	*0.21 U*	*0.92 U*	*N/A*
Pyrene	mg/kg	23,000	**1.5**	**0.14**	**0.0058 J**	**0.49**	**0.23**	**0.066**	**0.22**	**3.7**	**0.14**	**3.6**	*N/A*
PCBs													
Aroclor 1242	mg/kg	0.97	*0.0624 U*	*N/A*	*N/A*	*0.0579 U*	*N/A*	*N/A*	*0.0523 U*	*N/A*	*0.0586 U*	*N/A*	*N/A*
Aroclor 1248	mg/kg	0.94	*0.0624 U*	*N/A*	*N/A*	*0.0579 U*	*N/A*	*N/A*	*0.0523 U*	*N/A*	*0.0586 U*	*N/A*	*N/A*
Aroclor 1254	mg/kg	0.97	**0.015 J**	*N/A*	*N/A*	**0.0341 J**	*N/A*	*N/A*	**0.109**	*N/A*	**0.589**	*N/A*	*N/A*
Aroclor 1260	mg/kg	0.99	*0.0624 U*	*N/A*	*N/A*	**0.0523 J**	*N/A*	*N/A*	*0.0523 U*	*N/A*	*0.0586 U*	*N/A*	*N/A*
Aroclor 1268	mg/kg		*0.0624 U*	*N/A*	*N/A*	**0.0193 J**	*N/A*	*N/A*	*0.0523 U*	*N/A*	*0.0586 U*	*N/A*	*N/A*
PCBs (total)	mg/kg	0.97	**0.015 J**	*N/A*	*N/A*	**0.106 J**	*N/A*	*N/A*	**0.109**	*N/A*	**0.589**	*N/A*	*N/A*
TPH/Oil & Grease													
Diesel Range Organics	mg/kg	6,200	*30 B*	**110**	**69**	**530**	**92**	**190**	**84**	**260**	**56**	**120**	*N/A*
Gasoline Range Organics	mg/kg	6,200	*1.4 B*	**10**	**4.2**	**30**	**6.2**	**4.3**	**8.2**	*2.9 U*	**7.2**	**6**	*N/A*
Oil & Grease	mg/kg	6,200	**291 J-**	**794 J-**	**1,320 J-**	**1,050 J-**	*224 UJ*	**479 J-**	**785 J-**	**1,300 J-**	**534**	**724**	*N/A*

Bold indicates detection
Values in red indicate a detection exceedance of the Project Action Limit (PAL)
* Indicates non-validated data
^ PAH compounds were analyzed via SIM
N/A: This parameter was not analyzed for this sample.
Soil Sample Excavated

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

Table 1 - Container Terminal
Summary of Organics Detected in Soil

Parameter	Units	PAL	CT-020-SB-1	CT-020-SB-9	CT-020-SB-10	CT-021-SB-1*	CT-021-SB-8*	CT-021-SB-10*	CT-022-SB-1	CT-022-SB-9	CT-023-SB-1	CT-023-SB-8	CT-024-SB-1*	CT-024-SB-9*
			9/29/2023	9/29/2023	9/29/2023	10/16/2023	10/16/2023	10/16/2023	9/29/2023	9/29/2023	10/11/2023	10/11/2023	9/21/2023	9/21/2023
Volatile Organic Compounds														
1,1,1-Trichloroethane	mg/kg	36,000	*N/A*	*N/A*	*0.00054 U*	*N/A*	*0.00039 U*	*0.00039 U*	*N/A*	*N/A*	*N/A*	*0.00044 U*	*0.00054 U*	*N/A*
1,1-Dichloroethane	mg/kg	16	*N/A*	*N/A*	*0.0011 U*	*N/A*	*0.00078 U*	*0.00079 U*	*N/A*	*N/A*	*N/A*	*0.00087 U*	*0.0011 U*	*N/A*
1,2-Dichlorobenzene	mg/kg	9,300	*N/A*	*N/A*	*0.0021 U*	*N/A*	*0.0016 U*	*0.0016 U*	*N/A*	*N/A*	*N/A*	*0.0017 U*	**0.00021 J**	*N/A*
2-Butanone (MEK)	mg/kg	190,000	*N/A*	*N/A*	*0.011 U*	*N/A*	*0.0078 U*	*0.0079 U*	*N/A*	*N/A*	*N/A*	*0.0087 U*	*0.011 U*	*N/A*
Acetone	mg/kg	670,000	*N/A*	*N/A*	*0.027 U*	*N/A*	**0.014 J**	*0.02 U*	*N/A*	*N/A*	*N/A*	**0.029**	**0.022 J**	*N/A*
Benzene	mg/kg	5.1	*N/A*	*N/A*	*0.00054 U*	*N/A*	**0.0003 J**	**0.00026 J**	*N/A*	*N/A*	*N/A*	**0.00093**	**0.00029 J**	*N/A*
Bromomethane	mg/kg	30	*N/A*	*N/A*	*0.0021 U*	*N/A*	*0.0016 U*	*0.0016 U*	*N/A*	*N/A*	*N/A*	*0.0017 U*	*0.0022 U*	*N/A*
Carbon disulfide	mg/kg	3,500	*N/A*	*N/A*	*0.011 U*	*N/A*	**0.0071 J**	*0.0079 U*	*N/A*	*N/A*	*N/A*	*0.0087 U*	**0.007 J**	*N/A*
Chloroform	mg/kg	1.4	*N/A*	*N/A*	*0.0016 U*	*N/A*	*0.0012 U*	*0.0012 U*	*N/A*	*N/A*	*N/A*	*0.0013 U*	*0.0016 U*	*N/A*
Cyclohexane	mg/kg	27,000	*N/A*	*N/A*	*0.011 U*	*N/A*	*0.0078 U*	*0.0079 U*	*N/A*	*N/A*	*N/A*	*0.0087 U*	*0.011 U*	*N/A*
Ethylbenzene	mg/kg	25	*N/A*	*N/A*	*0.0011 U*	*N/A*	**0.0027**	**0.00018 J**	*N/A*	*N/A*	*N/A*	*0.00087 U*	*0.0011 U*	*N/A*
Isopropylbenzene	mg/kg	9,900	*N/A*	*N/A*	*0.0011 U*	*N/A*	**0.0013**	*0.00079 U*	*N/A*	*N/A*	*N/A*	*0.00087 U*	*0.0011 U*	*N/A*
Methyl Acetate	mg/kg	1,200,000	*N/A*	*N/A*	*0.0043 U*	*N/A*	*0.0031 U*	*0.0031 U*	*N/A*	*N/A*	*N/A*	*0.0035 U*	*0.0043 U*	*N/A*
Styrene	mg/kg	35,000	*N/A*	*N/A*	*0.0011 U*	*N/A*	**0.00064 J**	*0.00079 U*	*N/A*	*N/A*	*N/A*	*0.00087 U*	*0.0011 U*	*N/A*
Tetrachloroethene	mg/kg	100	*N/A*	*N/A*	*0.00054 U*	*N/A*	*0.00039 U*	*0.00039 U*	*N/A*	*N/A*	*N/A*	*0.00044 U*	*0.00054 U*	*N/A*
Toluene	mg/kg	47,000	*N/A*	*N/A*	*0.0011 U*	*N/A*	**0.00074 J**	*0.00079 U*	*N/A*	*N/A*	*N/A*	**0.0011**	*0.0011 U*	*N/A*
Xylenes	mg/kg	2,800	*N/A*	*N/A*	*0.0011 U*	*N/A*	**0.013**	**0.00078 J**	*N/A*	*N/A*	*N/A*	**0.00091 J**	*0.0011 U*	*N/A*
Semi-Volatile Organic Compounds^														
1,1-Biphenyl	mg/kg	200	**0.024 J**	**0.08 J**	*0.4 U*	*0.42 U*	**0.032 J**	**0.14 J**	*0.41 U*	*0.39 U*	**0.16 J**	**0.11 J**	**1.6**	*1.2 U*
1,2,4,5-Tetrachlorobenzene	mg/kg	350	*0.18 U*	*0.18 U*	*0.17 U*	*0.19 U*	*0.18 U*	*0.17 U*	*0.18 U*	*0.17 U*	*0.18 U*	*0.18 U*	*0.19 U*	*0.53 U*
2,4-Dimethylphenol	mg/kg	16,000	*0.18 U*	*0.18 U*	*0.17 U*	*0.19 U*	*0.18 U*	*0.17 U*	*0.18 U*	*0.17 U*	**0.18 R**	*0.18 U*	*0.19 U*	*0.53 U*
2,4-Dinitrophenol	mg/kg	1,600	*0.87 U*	*0.88 U*	*0.84 U*	*0.9 U*	*0.84 U*	*0.83 U*	*0.86 U*	*0.83 U*	**0.86 R**	*0.87 U*	*0.92 U*	*2.6 U*
2,4-Dinitrotoluene	mg/kg	7.4	*0.18 U*	*0.18 UJ*	*0.17 UJ*	*0.19 U*	*0.18 U*	*0.17 U*	*0.18 U*	*0.17 U*	*0.18 U*	*0.18 U*	*0.19 U*	*0.53 U*
2,6-Dinitrotoluene	mg/kg	1.5	*0.18 U*	*0.18 U*	*0.17 U*	*0.19 U*	*0.18 U*	*0.17 U*	*0.18 U*	*0.17 U*	*0.18 U*	*0.18 U*	*0.19 U*	*0.53 U*
2-Chloronaphthalene	mg/kg	60,000	*0.18 U*	*0.18 U*	*0.17 U*	*0.19 U*	*0.18 U*	*0.17 U*	*0.18 U*	*0.17 U*	*0.18 U*	*0.18 U*	*0.19 U*	*0.53 U*
2-Chlorophenol	mg/kg	5,800	*0.18 U*	*0.18 U*	*0.17 U*	*0.19 U*	*0.18 U*	*0.17 U*	*0.18 U*	*0.17 U*	**0.18 R**	*0.18 U*	*0.19 U*	*0.53 U*
2-Methylnaphthalene	mg/kg	3,000	**0.3**	**0.56**	**0.0099**	**0.073**	**0.93**	**1.2**	*0.0072 U*	*0.0069 U*	**0.21**	**0.17**	**8.6**	**0.04**
2-Methylphenol	mg/kg	41,000	*0.18 U*	*0.18 U*	*0.17 U*	*0.19 U*	*0.18 U*	*0.17 U*	*0.18 U*	*0.17 U*	**0.18 R**	*0.18 U*	*0.19 U*	*0.53 U*
3&4-Methylphenol(m&p Cresol)	mg/kg	41,000	*0.26 U*	**0.05 J**	*0.25 U*	*0.27 U*	*0.25 U*	*0.25 U*	*0.26 U*	*0.25 U*	**0.26 R**	*0.26 U*	**0.12 J**	*0.77 U*
3,3'-Dichlorobenzidine	mg/kg	5.1	*0.18 U*	*0.18 U*	*0.17 U*	*0.19 U*	*0.18 U*	*0.17 U*	*0.18 U*	*0.17 U*	*0.18 U*	*0.18 U*	*0.19 U*	*0.53 U*
Acenaphthene	mg/kg	45,000	**0.07**	**0.033**	*0.007 U*	**0.029**	**0.35**	**0.53**	*0.0072 U*	*0.0069 U*	**0.1**	**0.024**	**1.7**	**0.0022 J**
Acenaphthylene	mg/kg	45,000	**0.36**	**0.26**	**0.0033 J**	**0.11**	**0.05**	**0.089**	*0.0072 U*	*0.0069 U*	**0.12**	**0.082**	**5.2**	**0.0044 J**
Acetophenone	mg/kg	120,000	*0.18 U*	*0.18 UJ*	*0.17 UJ*	*0.19 U*	*0.18 U*	*0.17 U*	*0.18 U*	*0.17 U*	**0.038 J**	**0.027 J**	**0.031 J**	*0.53 U*
Anthracene	mg/kg	230,000	**0.41**	**0.25**	**0.004 J**	**0.17**	**0.61**	**1.0**	*0.0072 U*	*0.0069 U*	**0.44**	**0.073**	**5.3**	**0.0067 J**
Benz[a]anthracene	mg/kg	21	**1.3**	**0.97**	**0.016**	**0.7**	**0.29**	**0.31**	**0.015**	**0.00083 J**	**1.0**	**0.61**	**10**	**0.015**
Benzaldehyde	mg/kg	120,000	*0.24 U*	*0.24 UJ*	*0.23 UJ*	*0.25 U*	*0.23 U*	*0.23 U*	*0.24 U*	*0.23 U*	*0.24 U*	*0.24 U*	*0.25 U*	*0.7 U*
Benzo[a]pyrene	mg/kg	2.1	**1.3**	**1.0**	**0.018**	**0.49**	**0.2**	**0.088**	**0.026**	*0.0069 U*	**0.91**	**1.0**	**8.3**	**0.014**
Benzo[b]fluoranthene	mg/kg	21	**1.7**	**1.4**	**0.028**	**0.6**	**0.25**	**0.13**	**0.029**	**0.00072 J**	**1.2**	**1.2**	**9.8**	**0.017**
Benzo[g,h,i]perylene	mg/kg		**0.75**	**0.56**	**0.013**	**0.29**	**0.11**	**0.047**	**0.02**	*0.0069 U*	**0.49**	**0.56**	**3.4**	**0.0088**
Benzo[k]fluoranthene	mg/kg	210	**0.55**	**0.43**	**0.0077**	**0.21**	**0.082**	**0.04**	**0.01**	*0.0069 U*	**0.45**	**0.4**	**3.9**	**0.0079**
bis(2-Ethylhexyl)phthalate	mg/kg	160	*0.18 U*	*0.18 UJ*	*0.17 UJ*	*0.19 U*	*0.18 U*	*0.17 U*	*0.18 U*	*0.17 U*	*0.18 U*	*0.18 U*	*0.19 U*	*0.53 U*
Caprolactam	mg/kg	400,000	*0.18 U*	*0.18 U*	*0.17 U*	*0.19 U*	*0.18 U*	*0.17 U*	*0.18 U*	*0.17 U*	*0.18 UJ*	*0.18 U*	*0.19 U*	*0.53 U*
Carbazole	mg/kg		**0.037 J**	**0.075 J**	*0.17 U*	*0.19 U*	**0.026 J**	**0.04 J**	*0.18 U*	*0.17 U*	**0.11 J**	**0.21**	**3.5**	*0.53 U*

Table 1 - Container Terminal
Summary of Organics Detected in Soil

Parameter	Units	PAL	CT-020-SB-1	CT-020-SB-9	CT-020-SB-10	CT-021-SB-1*	CT-021-SB-8*	CT-021-SB-10*	CT-022-SB-1	CT-022-SB-9	CT-023-SB-1	CT-023-SB-8	CT-024-SB-1*	CT-024-SB-9*
			9/29/2023	9/29/2023	9/29/2023	10/16/2023	10/16/2023	10/16/2023	9/29/2023	9/29/2023	10/11/2023	10/11/2023	9/21/2023	9/21/2023
Chrysene	mg/kg	2,100	**1.2**	**0.9**	**0.017**	**0.46**	**0.27**	**0.31**	**0.018**	**0.00062 J**	**0.88**	**0.68**	**9.2**	**0.015**
Dibenz[a,h]anthracene	mg/kg	2.1	**0.16**	**0.16**	**0.0034 J**	**0.089**	**0.035**	**0.015**	**0.0041 J**	*0.0069 U*	**0.18**	**0.15**	**0.78**	**0.0014 J**
Di-n-butylphthalate	mg/kg	82,000	*0.18 U*	*0.18 U*	*0.17 U*	*0.19 U*	*0.18 U*	*0.17 U*	*0.18 U*	*0.17 U*	*0.18 U*	*0.18 U*	*0.19 U*	*0.53 U*
Di-n-ocytlphthalate	mg/kg	8,200	*0.18 U*	*0.18 UJ*	*0.17 UJ*	*0.19 U*	*0.18 U*	*0.17 U*	*0.18 U*	*0.17 U*	*0.18 U*	*0.18 U*	*0.19 U*	*0.53 U*
Fluoranthene	mg/kg	30,000	**3.4**	**1.5**	**0.017**	**0.9**	**0.85**	**1.1**	**0.021**	**0.0021 J**	**2.0**	**0.68**	**27**	**0.028**
Fluorene	mg/kg	30,000	**0.22**	**0.055**	**0.0015 J**	**0.051**	**0.44**	**0.55**	*0.0072 U*	*0.0069 U*	**0.087**	**0.016**	**16**	**0.0063 J**
Hexachloroethane	mg/kg	8.0	*0.14 U*	*0.15 U*	*0.14 U*	*0.15 U*	*0.14 U*	*0.14 U*	*0.14 U*	*0.14 U*	*0.14 U*	*0.14 U*	*0.15 U*	*0.43 U*
Indeno[1,2,3-c,d]pyrene	mg/kg	21	**0.82**	**0.74**	**0.016**	**0.38**	**0.16**	**0.061**	**0.024**	*0.0069 U*	**0.65**	**0.7**	**4.1**	**0.0081**
Isophorone	mg/kg	2,400	*0.16 U*	*0.16 U*	*0.16 U*	*0.17 U*	*0.16 U*	*0.16 U*	*0.16 U*	*0.16 U*	*0.16 U*	*0.16 U*	*0.17 U*	*0.48 U*
Naphthalene	mg/kg	8.6	**0.6**	**1.1**	**0.013**	**0.29**	**0.34**	**0.24**	**0.0048 J**	*0.0069 U*	**0.4**	**0.74**	**19**	**0.069**
Nitrobenzene	mg/kg	22	*0.16 U*	*0.16 U*	*0.16 U*	*0.17 U*	*0.16 U*	*0.16 U*	*0.16 U*	*0.16 U*	*0.16 U*	*0.16 U*	*0.17 U*	*0.48 U*
N-Nitrosodiphenylamine	mg/kg	470	*0.14 U*	*0.15 U*	*0.14 U*	*0.15 U*	*0.14 U*	*0.14 U*	*0.14 U*	*0.14 U*	*0.14 U*	*0.14 U*	*0.15 U*	*0.43 U*
Pentachlorophenol	mg/kg	4.0	*0.14 U*	*0.15 U*	*0.14 U*	*0.15 U*	*0.14 U*	*0.14 U*	*0.14 U*	*0.14 U*	**0.14 R**	*0.14 U*	*3 U*	*0.43 U*
Phenanthrene	mg/kg		**2.3**	**0.79**	**0.015**	**0.48**	**2.4**	**5.7**	**0.027**	**0.0075**	**1.1**	**0.57**	**43**	**0.044**
Phenol	mg/kg	250,000	*0.18 U*	*0.18 U*	*0.17 U*	*0.19 U*	*0.18 U*	*0.17 U*	*0.18 U*	*0.17 U*	**0.18 R**	*0.18 U*	*0.19 U*	*0.53 U*
Pyrene	mg/kg	23,000	**2.6**	**1.2**	**0.016**	**0.77**	**1.0**	**1.8**	**0.019**	**0.0013 J**	**1.7**	**0.68**	**19**	**0.02**
PCBs														
Aroclor 1242	mg/kg	0.97	*0.0531 U*	*N/A*	*N/A*	**0.0254 J**	*N/A*	*N/A*	*0.0516 U*	*N/A*	**0.0318 J**	*N/A*	*0.0564 U*	*N/A*
Aroclor 1248	mg/kg	0.94	*0.0531 U*	*N/A*	*N/A*	*0.0532 U*	*N/A*	*N/A*	*0.0516 U*	*N/A*	*0.0528 U*	*N/A*	*0.0564 U*	*N/A*
Aroclor 1254	mg/kg	0.97	*0.0531 U*	*N/A*	*N/A*	**0.0308 J**	*N/A*	*N/A*	**0.0105 J**	*N/A*	**0.0592**	*N/A*	*0.0564 U*	*N/A*
Aroclor 1260	mg/kg	0.99	**0.0529 J**	*N/A*	*N/A*	**0.0442 J**	*N/A*	*N/A*	*0.0516 U*	*N/A*	**0.0502 J**	*N/A*	*0.0564 U*	*N/A*
Aroclor 1268	mg/kg		*0.0531 U*	*N/A*	*N/A*	**0.0872**	*N/A*	*N/A*	*0.0516 U*	*N/A*	**0.0424 J**	*N/A*	*0.0564 U*	*N/A*
PCBs (total)	mg/kg	0.97	**0.0529 J**	*N/A*	*N/A*	**0.188 J**	*N/A*	*N/A*	**0.0105 J**	*N/A*	**0.184 J**	*N/A*	*0.0564 U*	*N/A*
TPH/Oil & Grease														
Diesel Range Organics	mg/kg	6,200	**140**	**74**	*4.2 B*	**47**	**160**	**330**	*5.3 B*	*4.6 B*	**98**	**90**	**450**	**3.5 J**
Gasoline Range Organics	mg/kg	6,200	*1.9 B*	*0.8 B*	*0.76 B*	*2.7 U*	**11**	**1.8 J**	*1.8 B*	*0.82 B*	*2.7 U*	**1.6 J**	**5.7**	*0.82 B*
Oil & Grease	mg/kg	6,200	**663 J-**	**820 J-**	**237 J-**	**570**	**940**	**412**	*220 UJ*	*212 UJ*	**771 J-**	**408 J-**	**969**	**266**

Bold indicates detection
Values in red indicate a detection exceedance of the Project Action Limit (PAL)
* Indicates non-validated data
^ PAH compounds were analyzed via SIM
N/A: This parameter was not analyzed for this sample.
Soil Sample Excavated

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

Table 2 - Container Terminal
Summary of Inorganics Detected in Soil

Parameter	Units	PAL	B11-001-SB-1* 8/13/2020	B11-001-SB-5* 8/13/2020	B11-002-SB-1* 8/13/2020	B11-002-SB-5* 8/13/2020	B11-003-SB-1 8/11/2020	B11-003-SB-5 8/11/2020	B11-004-SB-1 8/11/2020	B11-004-SB-4 8/11/2020	B11-005-SB-2* 8/13/2020	B11-005-SB-5* 10/7/2020	B11-006-SB-3 8/17/2020	B11-006-SB-7 8/17/2020
Metals														
Aluminum	mg/kg	1,100,000	**6,530**	**7,410**	**7,890**	**4,490**	**10,400 J**	**14,100 J**	**20,500 J**	**27,500 J**	**6,080**	**29,000**	**7,020**	**9,970**
Antimony	mg/kg	470	**6.4**	**5.3**	**3.8**	**4.7**	*2.7 U*	**2.3 J**	*2.7 U*	**3**	*2.5 U*	*2.6 U*	*2.6 UJ*	*2.7 UJ*
Arsenic	mg/kg	3.0	*2.3 U*	**5.0**	**9.0**	*2.2 U*	**5.5 J**	**10.4 J**	**4.2 J**	**5.7 J**	*2.1 U*	*2.2 U*	**2.8**	**6.6**
Barium	mg/kg	220,000	**80.7**	**64.7**	**68.3**	**40.4**	**129**	**172**	**87.1**	**262**	**36.5**	**91.9**	**51 J**	**75.4 J**
Beryllium	mg/kg	2,300	**0.65 J**	**0.79 J**	**0.55 J**	**1.1**	**1.1**	**0.97**	**0.47 J**	**3.6**	**0.24 J**	**0.71 J**	**0.38 J**	**0.27 J**
Cadmium	mg/kg	100	**0.73 J**	**0.91 J**	**0.91 J**	**0.74 J**	**2.9**	**1.4**	**1.4**	**2**	**0.34 J**	**0.89 J**	**5.4**	**0.64 J**
Chromium	mg/kg	1,800,000	**929**	**862**	**535**	**1,090**	**617 J**	**226 J**	**606 J**	**58.2 J**	**24.6**	**365**	**140**	**377**
Chromium VI	mg/kg	6.3	*1.1 U*	*1.1 U*	*1.1 U*	*1.1 U*	*0.98 B*	*0.9 B*	*0.97 B*	*0.83 B*	*1.1 U*	*1.1 U*	*0.7 B*	*0.74 B*
Cobalt	mg/kg	350	**4.6**	**6.4**	**6.6**	*4.4 U*	**7.9**	**14**	**5**	**5.4**	**1.9 J**	**6.4**	**2.8 J**	**6.9**
Copper	mg/kg	47,000	**52.9**	**64.7**	**63.3**	**85.3**	**80.3**	**134**	**48.8**	**47.6**	**5.9**	**41.1**	**25 J**	**36.7 J**
Iron	mg/kg	820,000	**147,000**	**176,000**	**279,000**	**163,000**	**151,000 J**	**114,000 J**	**188,000 J**	**27,200 J**	**9,490**	**89,900**	**42,200**	**234,000**
Lead	mg/kg	800	**69.6**	**63.4**	**47.9**	**33.3**	**120**	**136**	**93.3**	**264**	**16.9**	**205**	**75 J**	**20.9 J**
Manganese	mg/kg	26,000	**23,900**	**16,900**	**13,400**	**36,400**	**22,700**	**6,330**	**15,800**	**2,070**	**470**	**10,400**	**3,010**	**11,400**
Mercury	mg/kg	350	**0.18**	**0.14**	**0.15**	**0.0065 J**	**0.059 J**	**0.074 J**	**0.049 J**	**0.096 J**	**0.0064 J**	**0.064 J**	**0.058 J**	**0.056 J**
Nickel	mg/kg	22,000	**23.6**	**37.5**	**51.3**	**11.4**	**35.3**	**44**	**45**	**19**	**13.1**	**66.2**	**21.7**	**83.4**
Selenium	mg/kg	5,800	*3.7 U*	*3.5 U*	*3.4 U*	*3.5 U*	*3.6 U*	*3.6 U*	*3.7 U*	*3.6 U*	*3.4 U*	*3.5 U*	*3.5 U*	*3.6 U*
Silver	mg/kg	5,800	*2.7 U*	*2.6 U*	*2.6 U*	*2.7 U*	*2.7 U*	*2.7 U*	*2.7 U*	*2.7 U*	*2.5 U*	*2.6 U*	*2.6 U*	**0.68 J**
Thallium	mg/kg	12	**26.5**	**16.5**	**6.2 J**	**70.1**	**21.1**	**4.6 J**	**10.3**	*9.1 U*	*8.4 U*	*8.8 U*	*8.7 UJ*	**4.3 J-**
Vanadium	mg/kg	5,800	**1,850**	**1,010**	**314**	**5,530**	**1,440 J**	**247 J**	**469 J**	**79.8 J**	**21.9**	**198**	**96.9**	**209**
Zinc	mg/kg	350,000	**363**	**331**	**184**	**163**	**416**	**314**	**220**	**529**	**75.7**	**179**	**22,100**	**236**
Other														
Cyanide	mg/kg	150	**2.3**	**2.4**	**1.5**	**0.22 J**	**0.64 J**	**1.8**	**0.28 J-**	**2.4**	**0.16 J**	**0.97 J**	**0.19 J-**	**1 J-**

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Table 2 - Container Terminal
Summary of Inorganics Detected in Soil

Parameter	Units	PAL	B11-006-SB-12	B11-007-SB-1	B11-007-SB-5	B11-008-SB-2	B11-008-SB-6	B11-009-SB-4*	B11-009-SB-8*	B11-010-SB-2*	B11-010-SB-6*	B11-011-SB-2*	B11-011-SB-9*	B11-012-SB-2*
			8/17/2020	8/18/2020	8/18/2020	8/17/2020	8/17/2020	10/7/2020	10/7/2020	10/7/2020	10/7/2020	10/6/2020	10/6/2020	10/7/2020
Metals														
Aluminum	mg/kg	1,100,000	*N/A*	**16,100**	**21,200**	**10,100**	**11,500**	**8,410**	**11,300**	**17,900**	**13,500**	**8,350**	**4,640**	**15,700**
Antimony	mg/kg	470	*N/A*	*2.7 UJ*	*2.7 UJ*	*2.5 UJ*	*2.5 UJ*	**16.1**	**15.5**	**2.8**	**13.2**	**16.3**	*2.5 U*	**6.2**
Arsenic	mg/kg	3.0	*2.4 U*	**6.5**	**2.9**	**4.2**	**4.3**	*2.2 U*	*2.1 U*	**11.4**	**13.7**	*2.1 U*	**4.4**	**5.3**
Barium	mg/kg	220,000	*N/A*	**202 J**	**124 J**	**95.8 J**	**97.4 J**	**205**	**280**	**283**	**266**	**268**	**70.4**	**242**
Beryllium	mg/kg	2,300	*N/A*	**2.1**	**0.45 J**	**0.99**	**0.73 J**	**1.1**	**1.5**	**1.8**	**1.6**	**2.8**	**0.37 J**	**1.6**
Cadmium	mg/kg	100	*N/A*	**8.4**	**3.6**	**0.86 J**	**1.5**	**2.1**	**3.3**	**1.8**	**4.3**	**0.72 J**	**0.49 J**	**2.3**
Chromium	mg/kg	1,800,000	*N/A*	**296**	**663**	**604**	**797**	**1,460**	**1,390**	**407**	**1,750**	**2,210**	**358**	**693**
Chromium VI	mg/kg	6.3	*N/A*	**1.1 R**	**1.2 R**	*1 UJ*	*0.82 B*	**0.98 J**	**1 J**	*1.1 U*	**1.1 J**	**0.72 J**	*1.1 U*	*1.1 U*
Cobalt	mg/kg	350	*N/A*	**8.4**	**8.8**	**9.6**	**5.9**	**9.1**	**13.5**	**19.9**	**45.9**	**3.9 J**	**19**	**28.9**
Copper	mg/kg	47,000	*N/A*	**38.5 J**	**65.1 J**	**59.7 J**	**63.2 J**	**72.4**	**149**	**110**	**509**	**75.4**	**185**	**115**
Iron	mg/kg	820,000	*N/A*	**185,000**	**158,000**	**146,000**	**188,000**	**134,000**	**173,000**	**120,000**	**473,000**	**177,000**	**260,000**	**143,000**
Lead	mg/kg	800	*N/A*	**85.2 J**	**148 J**	**55.9 J**	**103 J**	**118**	**344**	**80.2**	**448**	**28.8**	**27.5**	**144**
Manganese	mg/kg	26,000	*N/A*	**7,650**	**18,000**	**12,800**	**18,600**	**25,300**	**36,400**	**15,700**	**38,700**	**64,800**	**6,220**	**22,200**
Mercury	mg/kg	350	*N/A*	**0.05 J**	**0.16**	**0.097 J**	**0.052 J**	**0.026 J**	**0.043 J**	**0.35**	**0.14**	*0.1 U*	**0.011 J**	**0.05 J**
Nickel	mg/kg	22,000	*N/A*	**61.4**	**87.6**	**25.1**	**47.7**	**28.5**	**46.2**	**86.2**	**234**	**26.7**	**93.7**	**51.8**
Selenium	mg/kg	5,800	*N/A*	*3.6 U*	*3.6 U*	*3.3 U*	*3.3 U*	*3.5 U*	*3.4 U*	*3.4 U*	*4.5 U*	*3.3 U*	*3.3 U*	*3.4 U*
Silver	mg/kg	5,800	*N/A*	*2.7 U*	**0.61 J**	*2.5 U*	*2.5 U*	*2.6 U*	*2.5 U*	*2.5 U*	*3.3 U*	*2.5 U*	*2.5 U*	*2.5 U*
Thallium	mg/kg	12	*N/A*	**3.3 J-**	**8.1 J-**	**10.9 J**	**19.3 J**	**13.1**	**14.7**	*8.5 U*	**20.5**	**7.6 J**	*8.3 U*	*8.4 U*
Vanadium	mg/kg	5,800	*N/A*	**153**	**362**	**681**	**1,270**	**4,610**	**5,840**	**230**	**5,570**	**9,980**	**380**	**1,230**
Zinc	mg/kg	350,000	*N/A*	**233**	**599**	**171**	**485**	**297**	**504**	**314**	**709**	**103**	**55.7**	**524**
Other														
Cyanide	mg/kg	150	*N/A*	**1.2 J-**	**2.3 J-**	**2.3 J-**	**0.83 J-**	**1.2**	**0.44 J**	**2.5**	**1.2**	**0.63 J**	**0.57 J**	**1.5**

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Table 2 - Container Terminal
Summary of Inorganics Detected in Soil

Parameter	Units	PAL	B11-012-SB-8* 10/7/2020	B11-013-SB-1 8/11/2020	B11-013-SB-4* 10/5/2020	B11-014-SB-1 8/11/2020	B11-014-SB-5 8/11/2020	B11-015-SB-1* 8/13/2020	B11-015-SB-5* 8/13/2020	B11-016-SB-1 8/11/2020	B11-016-SB-4* 10/6/2020	B11-017-SB-1 8/11/2020	B11-017-SB-5 8/11/2020	B11-018-SB-1* 8/12/2020
Metals														
Aluminum	mg/kg	1,100,000	**10,500**	**11,500 J**	**7,390**	**18,200 J**	**11,000 J**	**8,330**	**4,710**	**8,520 J**	**20,300**	**16,000 J**	**1,260 J**	**13,200**
Antimony	mg/kg	470	**13.7**	**4.6**	**6.7**	*2.8 U*	*2.7 U*	**5.8**	**4.6**	*2.9 U*	*2.7 U*	*2.6 U*	**13.1**	*2.6 U*
Arsenic	mg/kg	3.0	**4.2**	**10.2 J**	*2.1 U*	**4.3 J**	**9 J**	**13.4**	**25.9**	*2.4 U*	*2.3 U*	**4.2 J**	**14.1 J**	*2.1 U*
Barium	mg/kg	220,000	**192**	**37.9**	**113**	**199**	**148**	**80.9**	**40.6**	**41.8**	**175**	**55.5**	**73.1**	**195**
Beryllium	mg/kg	2,300	**1.2**	**0.36 J**	**1.7**	**1.9**	**1.1**	**0.6 J**	**0.22 J**	**0.22 J**	**2.8**	**0.29 J**	*0.85 U*	**1.1**
Cadmium	mg/kg	100	**3.2**	**0.66 J**	**1.5**	**1.1 J**	**3.5**	**0.67 J**	**0.58 J**	**0.65 J**	**0.34 J**	**0.74 J**	**0.3 J**	**1.1 J**
Chromium	mg/kg	1,800,000	**1,330**	**417 J**	**1,080**	**225 J**	**936 J**	**338**	**321**	**1,080 J**	**51.7**	**719 J**	**245 J**	**1,390**
Chromium VI	mg/kg	6.3	**0.91 J**	*1.1 B*	**0.76 J**	*0.83 B*	*0.92 B*	*1.1 U*	*1.2 U*	*1 B*	**1 J**	**1.2 J-**	*0.67 B*	**0.74 J**
Cobalt	mg/kg	350	**21.2**	**7.7**	**6.8**	**5.3**	**58.9**	**9.0**	**8.9**	**2.5 J**	**2.6 J**	**7.0**	**17.1**	**3.1 J**
Copper	mg/kg	47,000	**130**	**40.5**	**65.5**	**42.1**	**227**	**67.8**	**59.7**	**33.4**	**18.5**	**60.8**	**115**	**50**
Iron	mg/kg	820,000	**191,000**	**311,000 J**	**144,000**	**78,500 J**	**164,000 J**	**330,000**	**386,000**	**192,000 J**	**41,200**	**300,000 J**	**542,000 J**	**163,000**
Lead	mg/kg	800	**217**	**12**	**87.4**	**146**	**155**	**32.7**	**13.6**	**15.7**	**9.5**	**15.6**	*2.1 U*	**36.5**
Manganese	mg/kg	26,000	**25,200**	**12,900**	**22,400**	**11,200**	**43,600**	**9,940**	**10,700**	**20,200**	**2,070**	**17,100**	**2,760**	**25,400**
Mercury	mg/kg	350	**0.082 J**	**0.044 J**	**0.032 J**	**1.4**	**0.055 J**	**0.073 J**	**0.0096 J**	**0.027 J**	**0.015 J**	**0.016 J**	**0.0065 J**	**0.022 J**
Nickel	mg/kg	22,000	**114**	**60.3**	**18.3**	**19.5**	**29.8**	**60.5**	**69.7**	**24.9**	**5.7 J**	**57.7**	**136**	**35.8**
Selenium	mg/kg	5,800	*3.5 U*	*3.8 U*	*3.4 U*	*3.7 U*	*3.6 U*	*3.5 U*	*3.7 U*	*3.8 U*	*3.6 U*	*3.4 U*	**3.1 J**	*3.4 U*
Silver	mg/kg	5,800	*2.6 U*	*2.8 U*	*2.5 U*	*2.8 U*	*2.7 U*	*2.6 U*	*2.8 U*	*2.9 U*	*2.7 U*	*2.6 U*	**1.7 J**	*2.6 U*
Thallium	mg/kg	12	**10.9**	**8.2 J**	**6 J**	**6.5 J**	**37**	**5.8 J**	**4.4 J**	**11.2**	*9 U*	**11.1**	*8.5 U*	**15.5**
Vanadium	mg/kg	5,800	**3,940**	**457 J**	**4,820**	**361 J**	**2,270 J**	**264**	**203**	**487 J**	**133**	**627 J**	**21.7 J**	**651**
Zinc	mg/kg	350,000	**608**	**68.2**	**270**	**259**	**938**	**129**	**79.5**	**92.5**	**25.1**	**180**	**50**	**158**
Other														
Cyanide	mg/kg	150	**0.64 J**	**0.81 J-**	**0.77 J**	**1.3 J-**	**0.41 J-**	**0.84 J**	**0.93**	**1.4 J-**	**2.1**	**0.86 J-**	**0.22 J-**	**0.89 J**

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Table 2 - Container Terminal
Summary of Inorganics Detected in Soil

Parameter	Units	PAL	B11-018-SB-8* 8/12/2020	B11-018-SB-10* 8/12/2020	B11-019-SB-1* 8/12/2020	B11-019-SB-5* 8/12/2020	B11-020-SB-1 8/11/2020	B11-020-SB-4.5 8/11/2020	B11-021-SB-1* 8/12/2020	B11-021-SB-4* 8/12/2020	B11-022-SB-1* 8/12/2020	B11-022-SB-5* 8/12/2020	B11-023-SB-1 8/18/2020	B11-023-SB-5 8/18/2020
Metals														
Aluminum	mg/kg	1,100,000	**6,240**	*N/A*	**9,380**	**8,510**	**9,690 J**	**20,500 J**	**6,750**	**5,830**	**8,140**	**9,010**	**16,200**	**9,290**
Antimony	mg/kg	470	*2.4 U*	*N/A*	*2.4 U*	*2.6 U*	*2.6 U*	*2.7 U*	*2.4 U*	*2.4 U*	*2.6 U*	*2.7 U*	*2.5 UJ*	*2.6 UJ*
Arsenic	mg/kg	3.0	*2 U*	*N/A*	**2.0**	*2.2 U*	*2.2 U*	*2.3 U*	*2 U*	**4.0**	**3.0**	*2.3 U*	**3.4**	**7.7**
Barium	mg/kg	220,000	**94.1**	*N/A*	**85.4**	**72.6**	**103**	**42.3**	**117**	**93.2**	**80.5**	**69.2**	**124 J**	**94.4 J**
Beryllium	mg/kg	2,300	**1.9**	*N/A*	**1.3**	**1.4**	**0.54 J**	**0.26 J**	**1.1**	**1.2**	**0.79 J**	**0.7 J**	**1.5**	**0.68 J**
Cadmium	mg/kg	100	**0.63 J**	*N/A*	**0.73 J**	**0.81 J**	**0.74 J**	**0.47 J**	**0.83 J**	**1.3**	**1.1 J**	**1.1 J**	**0.84 J**	**0.71 J**
Chromium	mg/kg	1,800,000	**1,600**	*N/A*	**787**	**969**	**967 J**	**955 J**	**987**	**1,960**	**725**	**1,080**	**587**	**272**
Chromium VI	mg/kg	6.3	**1.0**	*N/A*	**0.76 J**	**1.1 J**	*0.8 B*	*0.83 B*	**0.67 J**	**1.8**	*1.1 U*	*1.1 U*	*0.78 B*	*0.74 B*
Cobalt	mg/kg	350	**0.84 J**	*N/A*	**3.4 J**	**1.1 J**	**2.6 J**	**0.59 J**	**2.2 J**	**3.7 J**	**6.1**	**5.4**	**3.4 J**	**6.9**
Copper	mg/kg	47,000	**60.6**	*N/A*	**40.5**	**30.3**	**37.1**	**17.1**	**52**	**58.2**	**2,280**	**86**	**125 J**	**115 J**
Iron	mg/kg	820,000	**189,000**	*N/A*	**176,000**	**187,000**	**203,000 J**	**141,000 J**	**185,000**	**196,000**	**186,000**	**168,000**	**102,000**	**160,000**
Lead	mg/kg	800	**7.9**	*N/A*	**42.6**	**31.1**	**32.4**	**4.4**	**22.4**	**47.3**	**294**	**256**	**56.3 J**	**61.6 J**
Manganese	mg/kg	26,000	**60,000**	**42,500**	**28,700**	**37,700**	**20,400**	**22,300**	**32,400**	**39,000**	**18,500**	**17,500**	**21,200**	**9,490**
Mercury	mg/kg	350	*0.095 U*	*N/A*	**0.033 J**	**0.018 J**	**0.04 J**	*0.11 U*	*0.1 U*	*0.1 U*	**0.059 J**	**0.044 J**	**0.085 J**	**1**
Nickel	mg/kg	22,000	**14.5**	*N/A*	**16.5**	**10.4**	**25.7**	**12.8**	**15.9**	**20.4**	**51.2**	**48.6**	**22**	**46.7**
Selenium	mg/kg	5,800	*3.2 U*	*N/A*	*3.3 U*	*3.5 U*	*3.5 U*	*3.6 U*	*3.3 U*	*3.2 U*	*3.4 U*	*3.7 U*	*3.4 U*	*3.4 U*
Silver	mg/kg	5,800	*2.4 U*	*N/A*	*2.4 U*	*2.6 U*	*2.6 U*	*2.7 U*	*2.4 U*	*2.4 U*	*2.6 U*	*2.7 U*	*2.5 U*	*2.6 U*
Thallium	mg/kg	12	**85.4**	**11.5**	**32.6**	**48.5**	**14.1**	**15.6**	**36.5**	**52.9**	**18.3**	**18.2**	**11 J**	**4.7 J-**
Vanadium	mg/kg	5,800	**8,110**	**3,890**	**2,470**	**5,050**	**774 J**	**748 J**	**3,290**	**4,690**	**1,520**	**1,570**	**457**	**225**
Zinc	mg/kg	350,000	**41.4**	*N/A*	**127**	**67.5**	**205**	**45.9**	**137**	**249**	**255**	**330**	**350**	**248**
Other														
Cyanide	mg/kg	150	**0.35 J**	*N/A*	**1.1**	**0.27 J**	**1.2**	**0.32 J**	**1.2**	**1.4**	**2.0**	**1.8**	**0.93 J-**	**0.95 J-**

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Table 2 - Container Terminal
Summary of Inorganics Detected in Soil

Parameter	Units	PAL	B11-024-SB-1* 8/12/2020	B11-024-SB-5* 10/19/2020	B11-025-SB-1* 8/12/2020	B11-025-SB-4* 10/6/2020	B11-025-SB-10* 10/6/2020	B11-026-SB-1 8/18/2020	B11-026-SB-9* 10/19/2020	B11-026-SB-10* 10/19/2020	B18-002-SB-1* 10/25/2016	B18-003-SB-1* 10/26/2016	B18-004-SB-1* 10/26/2016	B18-005-SB-1* 10/27/2016
Metals														
Aluminum	mg/kg	1,100,000	**4,270**	**7,200**	**6,400**	**9,120**	*N/A*	**18,600**	**8,360**	*N/A*	**4,830**	**9,650**	**18,500**	**6,470**
Antimony	mg/kg	470	*2.6 U*	*2.5 U*	*2.6 U*	**10.5**	*N/A*	*2.7 UJ*	*2.8 U*	*N/A*	*2.4 U*	*2.7 U*	*2.6 U*	*2.6 U*
Arsenic	mg/kg	3.0	*2.1 U*	**3.6**	*2.2 U*	*2.3 U*	*N/A*	**6.5**	**6.5**	**9.0**	**7.9**	*2.2 U*	**6.1**	*2.1 U*
Barium	mg/kg	220,000	**44.6**	**158**	**52.9**	**74.2**	*N/A*	**179 J**	**113**	*N/A*	**152**	**39**	**168**	**59.3**
Beryllium	mg/kg	2,300	**0.22 J**	**0.52 J**	**1.2**	**1.3**	*N/A*	**2.2**	**0.82 J**	*N/A*	**0.68 J**	*0.89 U*	*0.86 U*	*0.85 U*
Cadmium	mg/kg	100	**0.7 J**	**0.75 J**	**0.66 J**	**1.3 J**	*N/A*	**0.68 J**	**1 J**	*N/A*	**0.36 J**	**0.35 J**	**0.98 J**	*0.92 B*
Chromium	mg/kg	1,800,000	**311**	**954**	**1,010**	**1,390**	*N/A*	**405**	**23.1**	*N/A*	**144**	**632**	**396**	**857**
Chromium VI	mg/kg	6.3	*1 U*	*1.1 U*	*1 U*	*1.1 U*	*N/A*	**1.1 R**	*1.1 U*	*N/A*	*0.3 B*	*0.36 B*	**42.5**	*0.48 B*
Cobalt	mg/kg	350	**2 J**	**6.4**	**1.5 J**	**1.8 J**	*N/A*	**4.9**	**10.1**	*N/A*	**5.8**	*4.4 U*	**5.6**	**2.8 J**
Copper	mg/kg	47,000	**36.5**	**81.1**	**40.4**	**48**	*N/A*	**33 J**	**28.7**	*N/A*	**42.9**	**10.8**	**42.6**	**63.8**
Iron	mg/kg	820,000	**86,000**	**213,000**	**160,000**	**169,000**	*N/A*	**149,000**	**17,500**	*N/A*	**190,000**	**96,500**	**38,400**	**215,000**
Lead	mg/kg	800	**39.4**	**42.5**	**38.3**	**141**	*N/A*	**115 J**	**84.6**	*N/A*	**15.6**	**38.6**	**30.5**	**6.5**
Manganese	mg/kg	26,000	**6,490**	**16,500**	**35,900**	**40,500**	**18,900**	**11,500**	**335**	*N/A*	**2,900**	**15,900**	**5,330**	**25,500**
Mercury	mg/kg	350	**0.01 J**	**0.0064 J**	**0.026 J**	**0.022 J**	*N/A*	**0.036 J**	**0.056 J**	*N/A*	**0.012 J**	**0.16**	*0.1 U*	**0.037 J**
Nickel	mg/kg	22,000	**12.9**	**114**	**16.5**	**10.4**	*N/A*	**32.2**	**12.9**	*N/A*	**56.3**	**8.7 J**	**29**	**57.6**
Selenium	mg/kg	5,800	*3.4 U*	*3.3 U*	*3.5 U*	*3.7 U*	*N/A*	*3.6 U*	*3.7 U*	*N/A*	*3.1 U*	*3.5 U*	*3.5 U*	*3.4 U*
Silver	mg/kg	5,800	*2.6 U*	*2.5 U*	*2.6 U*	*2.7 U*	*N/A*	*2.7 U*	*2.8 U*	*N/A*	**2.2 J**	*2.7 U*	*2.6 U*	**2.3 J**
Thallium	mg/kg	12	**4.7 J**	**8.5**	**50.4**	**3.1 J**	*N/A*	**6.4 J-**	*9.2 U*	*N/A*	*7.9 U*	*8.9 U*	**3.7 J**	**5.5 J**
Vanadium	mg/kg	5,800	**249**	**366**	**4,080**	**3,610**	*N/A*	**298**	**32.8**	*N/A*	**74.3**	**277**	**145**	**454**
Zinc	mg/kg	350,000	**274**	**367**	**103**	**138**	*N/A*	**123**	**244**	*N/A*	**244**	**46.3**	**811**	**735**
Other														
Cyanide	mg/kg	150	**0.68 J**	**0.61 J**	**0.32 J**	**2.1**	*N/A*	**1.8 J-**	**1 J**	*N/A*	**0.25 J**	**0.3 J**	**0.12 J**	**1.6**

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Soil Sample Excavated
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J: The positive result reported for this analyte is a quantitative estimate.
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J+: The positive result reported for this analyte is a quantitative estimate but may be biased high.
B: This analyte was not detected substantially above the level of the associated method blank/preparation or field blank.
R: The result for this analyte is unreliable. Additional data is needed to confirm or disprove the presence of this analyte.

Table 2 - Container Terminal
Summary of Inorganics Detected in Soil

Parameter	Units	PAL	B18-006-SB-1 10/17/2016	B18-007-SB-1* 10/27/2016	B18-007-SB-4* 10/27/2016	B18-008-SB-1 10/19/2016	B18-011-SB-1* 10/25/2016	B18-011-SB-4* 10/25/2016	B18-012-SB-1* 10/25/2016	B18-025-SB-1 10/19/2016	B18-025-SB-5 10/19/2016	B18-061-SB-1* 10/26/2016	B18-061-SB-4* 10/26/2016	B18-075-SB-2* 10/27/2016
Metals														
Aluminum	mg/kg	1,100,000	**6,380**	**6,920**	**2,280**	**10,400**	**5,790**	**7,560**	**4,580**	**5,140**	**43,700**	**8,380**	**37,100**	**14,700**
Antimony	mg/kg	470	*2.3 UJ*	*2.5 U*	*2.9 U*	*2.3 UJ*	*2.6 U*	*3 U*	*2.5 U*	*2.6 UJ*	*3.8 UJ*	*2.7 U*	*3.5 U*	*2.6 U*
Arsenic	mg/kg	3.0	*1.9 U*	*2.1 U*	**4.1**	*1.9 U*	*2.1 U*	**14**	*2.1 U*	*2.2 U*	**15.1**	**22.5**	**3.7**	*2.1 U*
Barium	mg/kg	220,000	**31.3 J**	**23.2**	**43.1**	**69.1 J**	**27.9**	**150**	**25.4**	**215 J**	**555 J**	**179**	**581**	**73.5**
Beryllium	mg/kg	2,300	*0.78 U*	*0.83 U*	**0.52 J**	*0.76 U*	*0.86 U*	**0.74 J**	**0.18 J**	*0.88 U*	**3.1**	**0.84 J**	**5.9**	*0.86 U*
Cadmium	mg/kg	100	**1.4**	**5.0**	*0.89 B*	**24.8**	**0.44 J**	**1.5**	*1.3 U*	*1.3 B*	**0.39 J**	**3.0**	*1.8 U*	*0.43 B*
Chromium	mg/kg	1,800,000	**966**	**1,140**	**23.9**	**1,290**	**673**	**158**	**12.4**	**485**	**4.0**	**102**	**7.6**	**680**
Chromium VI	mg/kg	6.3	**1.2 J-**	**7.2**	*0.5 B*	**93.2 J-**	*0.81 B*	*0.44 B*	*0.74 B*	**1 J-**	*0.44 B*	*0.56 B*	*0.5 B*	**3.2**
Cobalt	mg/kg	350	**12.9**	*4.2 U*	**3.2 J**	**1.9 J**	**0.54 J**	**12.5**	**0.98 J**	**5.1**	**0.74 J**	**20.3**	**1.7 J**	**1.9 J**
Copper	mg/kg	47,000	**23.9**	**32**	**15.3**	**66.1 J**	**22**	**264**	**4.3**	**71.9 J**	**39.3 J**	**134**	**28.5**	**26.5**
Iron	mg/kg	820,000	**154,000**	**129,000**	**9,560**	**145,000**	**113,000**	**90,500**	**3,130**	**284,000**	**10,200**	**35,500**	**5,700**	**129,000**
Lead	mg/kg	800	**19.6**	**15.9**	**116**	**170 J**	**26.2**	**961**	**10.9**	**29.8 J**	**16.6 J**	**215**	**16.9**	**18.8**
Manganese	mg/kg	26,000	**22,100**	**31,300**	**397**	**29,700**	**14,500**	**1,640**	**207**	**15,300**	**2,770**	**1,680**	**1,110**	**17,300**
Mercury	mg/kg	350	**0.0072 J**	**0.0046 J**	**0.69**	**0.015 J**	**0.01 J**	**0.36**	*0.11 U*	**0.018 J**	*0.15 U*	**0.41**	**0.019 J**	**0.29**
Nickel	mg/kg	22,000	**265**	**12.5**	**10.5**	**33.4**	**15.9**	**119**	**4.2 J**	**48.3**	*12.6 U*	**123**	**5.5 J**	**22.4**
Selenium	mg/kg	5,800	*3.1 UJ*	*3.3 U*	*3.9 U*	*3.1 U*	*3.4 U*	**3.6 J**	*3.4 U*	*3.5 U*	**3.3 J**	*3.6 U*	**4 J**	*3.4 U*
Silver	mg/kg	5,800	**2.9**	**1.1 J**	*2.9 U*	**3.6**	**0.7 J**	**0.99 J**	*2.5 U*	**2.8**	*3.8 U*	*2.7 U*	*3.5 U*	**1.1 J**
Thallium	mg/kg	12	**4.8 J**	**9.4**	*9.7 U*	**10.3**	**5.3 J**	*10 U*	*8.5 U*	**12.8**	*10.1 U*	*9.1 U*	*11.7 U*	**4.7 J**
Vanadium	mg/kg	5,800	**377**	**522**	**15.3**	**543**	**314**	**48**	**10.3**	**902**	**9.5**	**41**	**7.0**	**328**
Zinc	mg/kg	350,000	**3,030**	**5,270**	**1,080**	**90,500 J**	**365**	**640**	**34.7**	**950 J**	**115 J**	**448**	**42.3**	**93.1**
Other														
Cyanide	mg/kg	150	**0.27 J-**	**0.97**	**0.37 J**	**0.93 J-**	**0.54 J**	**2.8**	**0.18 J**	**0.38 J-**	**2.6 J-**	**0.21 J**	**0.86**	**6.7**

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Soil Sample Excavated
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Table 2 - Container Terminal
Summary of Inorganics Detected in Soil

Parameter	Units	PAL	B18-075-SB-5.5* 12/1/2016	B18-075-SB-10* 12/1/2016	B18-076-SB-1 10/17/2016	CT-001-SB-1 9/11/2023	CT-001-SB-3 9/11/2023	CT-002-SB-1* 10/16/2023	CT-002-SB-4* 10/16/2023	CT-003-SB-1* 10/16/2023	CT-003-SB-3* 10/16/2023	CT-003-SB-10* 10/16/2023	CT-004-SB-1* 10/13/2023	CT-004-SB-9* 10/13/2023
Metals														
Aluminum	mg/kg	1,100,000	**22,500**	**19,700**	**12,200**	**7,440**	**3,440**	**13,300**	**16,500**	**12,200**	**26,100**	*N/A*	**5,210**	**34,300**
Antimony	mg/kg	470	*2.9 U*	*2.7 U*	*2.3 UJ*	*4.89 U*	*4.28 U*	*4.59 U*	*4.27 U*	*4.22 U*	*4.54 U*	*N/A*	*4.24 U*	*4.55 U*
Arsenic	mg/kg	3.0	**4.2**	**5.2**	*1.9 U*	*0.494 B*	**1.77**	**2.71**	**1.41**	**1.75**	**6.34**	**21.7**	**1.31**	*0.91 U*
Barium	mg/kg	220,000	**404**	**78.2**	**28 J**	**24.8**	**37.7**	**31**	**167**	**76.8**	**42.1**	*N/A*	**25**	**231**
Beryllium	mg/kg	2,300	**1.1**	**0.44 J**	*0.77 U*	*0.489 U*	**0.068 J**	**0.316 J**	**1.5**	**2.0**	**0.665**	*N/A*	**0.172 J**	**2.34**
Cadmium	mg/kg	100	*0.52 B*	*1.3 U*	*0.78 B*	**8.54 J+**	**0.18 J+**	**0.606 J**	*0.854 U*	*0.844 U*	**0.303 J**	*N/A*	*0.847 U*	*0.91 U*
Chromium	mg/kg	1,800,000	**43.9**	**29.8**	**1,070**	**811**	**7.76**	**1,160**	**12.5**	**94.3**	**29.2**	*N/A*	**19.9**	**1.71**
Chromium VI	mg/kg	6.3	*0.55 B*	*0.42 B*	**1.1 J-**	**12.2 J-**	**0.244 J-**	**7.88**	*0.87 U*	**5.58**	*0.938 U*	*N/A*	*0.856 U*	*0.928 U*
Cobalt	mg/kg	350	**5.0**	**4.5**	*3.9 U*	**0.168 J**	**0.396 J**	*1.83 U*	**1 J**	**1.07 J**	**3.29**	*N/A*	**3.6**	*1.82 U*
Copper	mg/kg	47,000	**31.6**	**13.1**	**10.9**	**61.4 J-**	**7.34 J-**	**7.62**	**9.22**	**17.3**	**26.5**	*N/A*	**16.6**	**40.2**
Iron	mg/kg	820,000	**22,700**	**20,400**	**159,000**	**103,000**	**3,150**	**158,000**	**5,710**	**11,500**	**35,400**	*N/A*	**7,820**	**2,050**
Lead	mg/kg	800	**50.7**	**18.2**	**5.2**	**51.9**	**40.4**	**5.08**	**3.96 J**	**19.8**	**46**	*N/A*	**12.9**	*4.55 U*
Manganese	mg/kg	26,000	**3,290**	**177**	**29,100**	**17,600**	**40.3**	**22,800**	**2,030**	**2,500**	**670**	*N/A*	**160**	**2,540**
Mercury	mg/kg	350	**0.051 J**	**0.039 J**	*0.099 U*	*0.098 U*	*0.075 U*	*0.078 U*	*0.074 U*	**0.059 J**	**0.117**	*N/A*	*0.072 U*	*0.075 U*
Nickel	mg/kg	22,000	**17.6**	**13.5**	**9.5**	**39.9 J-**	**2.8 J-**	**6.69**	**2.56**	**8.38**	**19.7**	*N/A*	**10.2**	**0.375 J**
Selenium	mg/kg	5,800	*3.9 U*	*3.5 U*	*3.1 UJ*	*1.96 U*	*1.71 U*	*1.83 U*	**0.781 J**	**0.818 J**	**2.79**	*N/A*	*1.69 U*	**4.4**
Silver	mg/kg	5,800	*2.9 U*	*2.7 U*	**3.0**	*1.22 U*	*0.428 U*	**1.93**	**0.612**	**0.612**	**0.319 J**	*N/A*	*0.424 U*	*0.455 U*
Thallium	mg/kg	12	*9.7 U*	*8.9 U*	**8.4**	*1.96 UJ*	*0.76 B*	**0.412 J**	*1.71 U*	**0.436 J**	**0.724 J**	*N/A*	*1.69 U*	*1.82 U*
Vanadium	mg/kg	5,800	**77.7**	**38.9**	**680**	**370**	**8.55**	**782**	**11.6**	**101**	**27.1**	*N/A*	**7.14**	**15.7**
Zinc	mg/kg	350,000	**158**	**50.2**	**331**	**33,800**	**30.2**	**30.2**	**6.61**	**155**	**64**	*N/A*	**65.4**	**2.37 J**
Other														
Cyanide	mg/kg	150	**1.4**	**0.28 J**	**0.5 J-**	**0.93 J+**	**1.2 J+**	**3.6**	**0.49 J**	**1.5**	**1.8**	*N/A*	**1.4**	**89**

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Table 2 - Container Terminal
Summary of Inorganics Detected in Soil

Parameter	Units	PAL	CT-004-SB-10* 10/13/2023	CT-004-TP-S1 12/7/2023	CT-004-TP-S2 12/7/2023	CT-004-TP-S3 12/7/2023	CT-004-TP-S4 12/7/2023	CT-004-SB-13* 10/13/2023	CT-004-SB-14* 10/13/2023	CT-005-SB-1 9/11/2023	CT-005-SB-3 9/11/2023	CT-006-SB-1* 10/13/2023	CT-006-SB-6* 10/13/2023	CT-006-SB-10* 10/13/2023
Metals														
Aluminum	mg/kg	1,100,000	**32,500**	**15,900**	**16,100**	**15,700**	**17,600**	**34,200**	**30,200**	**22,500**	**13,200**	**9,890**	**15,200**	*N/A*
Antimony	mg/kg	470	*4.14 U*	*4.16 U*	*4.47 U*	*4.48 U*	*4.36 U*	*5.03 U*	*4.55 U*	**0.596 J**	**0.8 J**	*4.15 U*	**3.35 J**	*N/A*
Arsenic	mg/kg	3.0	**3.47**	**0.98**	**0.41 J**	**2.86**	**0.453 J**	**1.72**	**1.62**	*0.955 U*	*7.58 B*	**6.03**	**6.59**	**6.66**
Barium	mg/kg	220,000	**182**	**76.5**	**114**	**103**	**112**	**125**	**143**	**30.6**	**29**	**36.7**	**147**	*N/A*
Beryllium	mg/kg	2,300	**2.15**	**2.74**	**2.54**	**2.17**	**2.97**	**2.38**	**2.19**	*0.477 U*	*0.43 U*	**0.164 J**	**1.34**	*N/A*
Cadmium	mg/kg	100	*0.827 U*	**0.752 J**	**0.279 J**	**3.78**	*0.873 U*	*1 U*	*0.909 U*	**4.87 J+**	**8.86 J+**	**0.126 J**	*0.982 U*	*N/A*
Chromium	mg/kg	1,800,000	**3.41**	**24.4**	**71.1**	**47.3**	**8.3**	**0.595 J**	**0.462 J**	**638**	**879**	**1,030**	**64.9**	*N/A*
Chromium VI	mg/kg	6.3	*0.838 U*	*0.879 U*	*0.897 U*	*0.912 U*	**0.27 J**	*1.02 U*	**0.558 J**	**4.02 J-**	**9.28 J-**	**7.5**	*5.2 U*	*N/A*
Cobalt	mg/kg	350	**4.2**	**0.504 J**	*1.79 U*	**1.61 J**	*1.75 U*	*2.01 U*	*1.82 U*	*1.91 U*	*1.72 U*	**1.38 J**	**11.1**	*N/A*
Copper	mg/kg	47,000	**155**	**12**	**17.5**	**60.1**	**5.4**	**17.8**	**20.5**	**7.4 J-**	**13.2 J-**	**35.3**	**112**	*N/A*
Iron	mg/kg	820,000	**49,200**	**20,200**	**14,600**	**27,500**	**3,360**	**2,250**	**2,450**	**116,000**	**173,000**	**166,000**	**34,600**	*N/A*
Lead	mg/kg	800	*4.14 U*	**71.7**	**44.9**	**160**	**12.1**	**0.659 J**	**0.465 J**	**6.14**	**4.73**	**4.59**	**230**	*N/A*
Manganese	mg/kg	26,000	**2,710**	**1,690**	**2,160**	**1,820**	**1,390**	**851**	**440**	**24,400**	**31,400**	**26,600**	**1,420**	*N/A*
Mercury	mg/kg	350	*0.071 U*	**0.074 J**	**0.601**	**1.45**	**0.131**	*0.084 U*	*0.086 U*	*0.092 U*	*0.084 U*	*0.075 U*	**0.339**	*N/A*
Nickel	mg/kg	22,000	**0.91 J**	**6.88**	**5.12**	**17.4**	**1.06 J**	**0.373 J**	**0.401 J**	**7.06 J-**	**12.9 J-**	**24.1**	**49.4**	*N/A*
Selenium	mg/kg	5,800	**5.36**	**1.87**	**1.74 J**	**1.78 J**	**2.87**	**6.79**	**5.36**	*1.91 U*	*1.72 U*	*1.66 U*	**3.45**	*N/A*
Silver	mg/kg	5,800	*0.414 U*	*0.416 U*	*0.447 U*	**0.349 J**	*0.436 U*	**0.708**	**0.609**	*4.77 U*	*4.3 U*	**2.83**	**0.322 J**	*N/A*
Thallium	mg/kg	12	*1.65 U*	*1.66 U*	**0.625 J**	*1.79 U*	*1.75 U*	**0.552 J**	**0.558 J**	**3.03 J-**	**3.72 J-**	*8.29 U*	**0.819 J**	*N/A*
Vanadium	mg/kg	5,800	**32.4**	**14.9**	**112**	**19.6**	**6.97**	**2.28**	**1.77**	**428**	**590**	**437**	**20.1**	*N/A*
Zinc	mg/kg	350,000	**1.88 J**	**1,280**	**1,650**	**25,100**	**522**	**3.49 J**	**2.58 J**	**639**	**25.1**	**28.2**	**469**	*N/A*
Other														
Cyanide	mg/kg	150	**16**	**5.3**	**5.4**	**4.6**	**6.6**	**26**	**11**	**0.65 J+**	*1.1 U*	**0.72 J**	**6.4**	*N/A*

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Table 2 - Container Terminal
Summary of Inorganics Detected in Soil

Parameter	Units	PAL	CT-006-TP-S1	CT-006-TP-S2	CT-006-TP-S3	CT-006-TP-S4	TP-006-NORTHWALL-EAST	TP-006-NWALL-EAST-EAST	TP-006-WEST	CT-007-SB-1*	CT-007-SB-3*	CT-007-SB-10*
			2/9/2024	2/9/2024	2/9/2024	2/9/2024	9/20/2024	9/20/2024	9/20/2024	10/13/2023	10/13/2023	10/13/2023
Metals												
Aluminum	mg/kg	1,100,000	**15,500**	**10,300**	**6,540**	**26,100**	**22,200**	**8,000**	**16,000**	**9,170**	**4,920**	*N/A*
Antimony	mg/kg	470	**1.16 J**	**1.83 J**	**4.42 J**	**1.83 J**	*10 U*	**3.01 J**	*23.6 U*	*4.37 U*	*5.11 U*	*N/A*
Arsenic	mg/kg	3.0	**12.5**	**4.02**	**5.48**	**9.02**	**7.38**	**15.3**	**8.22**	**4.37**	**14.2**	**13.4**
Barium	mg/kg	220,000	**191**	**45.6**	**50.6**	**188**	**154**	**92.1**	**139**	**34**	**25.2**	*N/A*
Beryllium	mg/kg	2,300	**0.853**	**0.484 J**	**0.113 J**	**3.42**	**2.74**	**0.556 J**	**1.62 J**	**0.202 J**	**0.621**	*N/A*
Cadmium	mg/kg	100	*1 U*	*1.03 U*	*1.01 U*	*1.03 U*	*2 U*	**0.446 J**	**0.673 J**	*0.874 U*	**1.13**	*N/A*
Chromium	mg/kg	1,800,000	**165**	**22**	**493**	**45.6**	**28.6**	**54.8**	**178**	**904**	**88.7**	*N/A*
Chromium VI	mg/kg	6.3	**0.551 J**	*1.08 U*	**0.22 J**	*1.06 U*	*N/A*	*N/A*	*N/A*	**14**	*1.03 U*	*N/A*
Cobalt	mg/kg	350	**12.6**	**4.37**	**9.37**	**6.91**	**2.43 J**	**7.08**	**6.38 J**	**1.61 J**	**35.9**	*N/A*
Copper	mg/kg	47,000	**69.6**	**16.9**	**108**	**79.7**	**44.7**	**55.3**	**96**	**24.4**	**109**	*N/A*
Iron	mg/kg	820,000	**40,900**	**22,900**	**118,000**	**43,300**	**20,200**	**105,000**	**43,600**	**144,000**	**85,500**	*N/A*
Lead	mg/kg	800	**243**	**26.4**	**652**	**88.7**	**115**	**127**	**105**	**2.41 J**	**172**	*N/A*
Manganese	mg/kg	26,000	**1,320**	**259**	**12,900**	**1,670**	**2,410**	**4,020**	**4,910**	**23,500**	**1,070**	*N/A*
Mercury	mg/kg	350	**2.15**	**0.846**	**16.7**	**0.25**	**1.87**	**1.56**	**0.414**	*0.073 U*	**0.186**	*N/A*
Nickel	mg/kg	22,000	**84.9**	**10.8**	**48.7**	**42**	**8.98**	**25.1**	**32.1**	**17.6**	**25.9**	*N/A*
Selenium	mg/kg	5,800	**0.666 J**	*2.06 U*	*2.03 U*	**1.59 J**	**2.24 J**	**0.958 J**	*9.43 U*	*1.75 U*	**3**	*N/A*
Silver	mg/kg	5,800	**0.291 J**	*0.516 U*	**0.436 J**	*0.514 U*	*1 U*	*1.08 U*	*2.36 U*	**2.51**	**0.762**	*N/A*
Thallium	mg/kg	12	**1.01 J**	*2.06 U*	**10.1 J**	**0.875 J**	*4 U*	*4.33 U*	*9.43 U*	*8.74 U*	*2.04 U*	*N/A*
Vanadium	mg/kg	5,800	**21.7**	**41.4**	**242**	**12.4**	**16.6**	**34.5**	**112**	**356**	**103**	*N/A*
Zinc	mg/kg	350,000	**387**	**51.2**	**5,850**	**264**	**190**	**416**	**3,540**	**22.2**	**624**	*N/A*
Other												
Cyanide	mg/kg	150	**2.2**	**2.8**	**2.7**	**2.5**	*N/A*	*N/A*	*N/A*	**0.35 J**	**4.8**	*N/A*

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Table 2 - Container Terminal
Summary of Inorganics Detected in Soil

Parameter	Units	PAL	CT-007-TP-B1* 12/1/2023	CT-007-TP-S1* 12/1/2023	CT-007-TP-S2* 12/1/2023	CT-007-TP-S3* 12/1/2023	CT-007-TP-S4* 12/1/2023	CT-008-SB-1 10/11/2023	CT-008-SB-3 10/11/2023	CT-008-SB-10* 10/11/2023	CT-009-SB-1* 10/12/2023	CT-009-SB-3* 10/12/2023	CT-009-SB-10* 10/12/2023	CT-010-SB-1* 10/12/2023
Metals														
Aluminum	mg/kg	1,100,000	**14,300**	**4,290**	**19,700**	**13,300**	**12,200**	**5,250**	**8,020**	*N/A*	**20,000**	**14,500**	*N/A*	**15,400**
Antimony	mg/kg	470	**3.32 J**	**4.05 J**	**3.32 J**	**4.07 J**	**3.38 J**	**1.41 J**	*4.26 U*	*N/A*	*4.32 U*	**0.564 J**	*N/A*	**0.756 J**
Arsenic	mg/kg	3.0	**28.8**	**0.314 J**	**21**	**13.2**	**17.5**	**6.35**	**4.98**	**4.24**	**7.46**	**8.48**	**3.12**	**12.5**
Barium	mg/kg	220,000	**151**	**68.6**	**194**	**95.7**	**111**	**76.6**	**119**	*N/A*	**132**	**167**	*N/A*	**186**
Beryllium	mg/kg	2,300	**1.58**	**2.18**	**2.53**	**1.79**	**1.94**	**0.613**	**0.81**	*N/A*	**2.73**	**1.33**	*N/A*	**1.37**
Cadmium	mg/kg	100	**1.17**	**0.611 J**	**1.15**	**1.84**	**0.724 J**	**4.88**	**2.72**	*N/A*	**0.869**	**3.79**	*N/A*	**1.58**
Chromium	mg/kg	1,800,000	**223**	**784**	**130**	**752**	**291**	**660**	**1,230**	*N/A*	**56.7**	**540**	*N/A*	**350**
Chromium VI	mg/kg	6.3	*0.949 U*	**1.18**	*0.994 U*	**1.52**	*0.943 U*	**4 J-**	**1.34 J-**	*N/A*	**0.26 J**	**0.844 J**	*N/A*	**0.262 J**
Cobalt	mg/kg	350	**10.1**	**0.588 J**	**12.1**	**5.28**	**7.8**	**7.7**	**6.41**	*N/A*	**36.4**	**12.1**	*N/A*	**5.84**
Copper	mg/kg	47,000	**77.9**	**32.3**	**78.2**	**48.2**	**48.4**	**173 J**	**88.5 J**	*N/A*	**77.2**	**116**	*N/A*	**70.5**
Iron	mg/kg	820,000	**66,400**	**142,000**	**37,800**	**114,000**	**87,400**	**99,600**	**132,000**	*N/A*	**21,400**	**128,000**	*N/A*	**74,600**
Lead	mg/kg	800	**252**	**10.4**	**319**	**140**	**140**	**206 J**	**205 J**	*N/A*	**42.6**	**205**	*N/A*	**211**
Manganese	mg/kg	26,000	**7,580**	**20,000**	**3,170**	**16,000**	**7,540**	**25,500**	**31,700**	**23,400**	**3,380**	**16,900**	*N/A*	**7,280**
Mercury	mg/kg	350	**0.288**	**0.086**	**0.848**	**0.567**	**0.225**	*0.082 U*	*0.072 U*	*N/A*	**0.092**	**0.194**	*N/A*	**0.239**
Nickel	mg/kg	22,000	**57.3**	**22.4**	**52.8**	**35.9**	**47.4**	**31.2 J**	**35.8 J**	*N/A*	**9.16**	**31.5**	*N/A*	**32**
Selenium	mg/kg	5,800	**1.21 J**	**0.599 J**	**1.2 J**	**1.6 J**	**0.28 J**	*1.97 UJ*	*1.7 UJ*	*N/A*	**7.19**	**1.15 J**	*N/A*	**0.357 J**
Silver	mg/kg	5,800	**1.66**	**1.94**	**0.721**	**1.96**	**1.1**	**2.26**	**2.89**	*N/A*	**1.01**	**1.65**	*N/A*	**1.22**
Thallium	mg/kg	12	**3.43**	**7.05**	**1.73 J**	**6.1**	**3.33**	*1.97 UJ*	*1.7 UJ*	*N/A*	**0.614 J**	**2.02**	*N/A*	**1.2 J**
Vanadium	mg/kg	5,800	**111**	**556**	**81.2**	**300**	**232**	**3,530**	**5,860**	**5,100**	**222**	**1,490**	*N/A*	**658**
Zinc	mg/kg	350,000	**847**	**30.8**	**526**	**1,550**	**375**	**731**	**470**	*N/A*	**179**	**574**	*N/A*	**662**
Other														
Cyanide	mg/kg	150	**5.5**	**33**	**6.0**	**4.5**	**4.4**	*1.3 U*	**3.7**	*N/A*	**0.88 J**	**2.2**	*N/A*	**4.1**

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Table 2 - Container Terminal
Summary of Inorganics Detected in Soil

Parameter	Units	PAL	CT-010-SB-7* 10/12/2023	CT-010-SB-10* 10/12/2023	CT-011-SB-1* 10/12/2023	CT-011-SB-4* 10/12/2023	CT-011-SB-10* 10/12/2023	CT-012-SB-1* 10/12/2023	CT-012-SB-9* 10/12/2023	CT-012-SB-10* 10/12/2023	CT-013-SB-1* 10/12/2023	CT-013-SB-7* 10/12/2023	CT-013-SB-10* 10/12/2023	CT-014-SB-1* 10/13/2023
Metals														
Aluminum	mg/kg	1,100,000	**10,100**	*N/A*	**40,000**	**24,900**	*N/A*	**8,600**	**9,770**	*N/A*	**18,700**	**16,700**	*N/A*	**8,410**
Antimony	mg/kg	470	**16.8**	*N/A*	**0.378 J**	*4.36 U*	*N/A*	**9.94**	**4.52**	*N/A*	*4.15 U*	**0.736 J**	*N/A*	*4.88 U*
Arsenic	mg/kg	3.0	**12.4**	**6.09**	**1.41**	**3.91**	*0.429 U*	**7.15**	**8.99**	**1.14**	**3.15**	**5.47**	*8.28 U*	*0.976 U*
Barium	mg/kg	220,000	**192**	*N/A*	**364**	**263**	*N/A*	**168**	**198**	*N/A*	**175**	**197**	*N/A*	**22.3**
Beryllium	mg/kg	2,300	**1.34**	*N/A*	**6.46**	**2.04**	*N/A*	**0.815**	**0.877**	*N/A*	**1.53**	**1.28**	*N/A*	**0.213 J**
Cadmium	mg/kg	100	**8.62**	*N/A*	*0.965 U*	**0.371 J**	*N/A*	**5.04**	**10.8**	*N/A*	**3.4**	**3.89**	*N/A*	**0.2 J**
Chromium	mg/kg	1,800,000	**522**	*N/A*	**0.885 J**	**306**	*N/A*	**610**	**559**	*N/A*	**575**	**513**	*N/A*	**35.9**
Chromium VI	mg/kg	6.3	**1.01**	*N/A*	*0.998 U*	*0.893 U*	*N/A*	**0.535 J**	**1.21**	*N/A*	**0.184 J**	**0.301 J**	*N/A*	*0.988 U*
Cobalt	mg/kg	350	**17.7**	*N/A*	*1.93 U*	**1.6 J**	*N/A*	**9.04**	**17.7**	*N/A*	**1.61 J**	**5.4**	*N/A*	**4.06**
Copper	mg/kg	47,000	**133**	*N/A*	**7.5**	**14.1**	*N/A*	**84.8**	**105**	*N/A*	**25.1**	**62.8**	*N/A*	**25.2**
Iron	mg/kg	820,000	**122,000**	*N/A*	**855**	**66,200**	*N/A*	**95,200**	**196,000**	*N/A*	**121,000**	**99,700**	*N/A*	**10,500**
Lead	mg/kg	800	**825**	**356**	**4.79 J**	**11.6**	*N/A*	**679**	**211**	*N/A*	**23.7**	**111**	*N/A*	**9.62**
Manganese	mg/kg	26,000	**16,000**	*N/A*	**3,650**	**7,840**	*N/A*	**19,200**	**17,900**	*N/A*	**16,000**	**12,300**	*N/A*	**866**
Mercury	mg/kg	350	**3.57**	*N/A*	*0.08 U*	*0.072 U*	*N/A*	**0.211**	**0.07**	*N/A*	**0.061 J**	**0.233**	*N/A*	*0.087 U*
Nickel	mg/kg	22,000	**27.8**	*N/A*	**0.61 J**	**7.67**	*N/A*	**25.3**	**41**	*N/A*	**16.3**	**38.2**	*N/A*	**10.7**
Selenium	mg/kg	5,800	*1.74 U*	*N/A*	**4.25**	**2.02**	*N/A*	*1.67 U*	**0.275 J**	*N/A*	*1.66 U*	*1.64 U*	*N/A*	*1.95 U*
Silver	mg/kg	5,800	**3.25**	*N/A*	**1.26**	**1.28**	*N/A*	**2.33**	**0.843**	*N/A*	**1.33**	**1.6**	*N/A*	*0.488 U*
Thallium	mg/kg	12	**4.64**	*N/A*	*1.93 U*	*1.74 U*	*N/A*	**3.9**	**3.48**	*N/A*	*1.66 U*	**0.602 J**	*N/A*	*1.95 U*
Vanadium	mg/kg	5,800	**2,800**	*N/A*	**4.5**	**228**	*N/A*	**2,620**	**2,970**	*N/A*	**420**	**534**	*N/A*	**148**
Zinc	mg/kg	350,000	**1,720**	*N/A*	**1.61 J**	**1,070**	*N/A*	**1,040**	**840**	*N/A*	**7,580**	**7,760**	*N/A*	**505**
Other														
Cyanide	mg/kg	150	**1.3**	*N/A*	**4.8**	**8.1**	*N/A*	**0.97 J**	**0.83 J**	*N/A*	**3.8**	**3.5**	*N/A*	*1.2 U*

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Table 2 - Container Terminal
Summary of Inorganics Detected in Soil

Parameter	Units	PAL	CT-014-SB-4* 10/13/2023	CT-014-SB-10* 10/13/2023	CT-015-SB-1* 10/16/2023	CT-015-SB-3* 10/16/2023	CT-015-SB-10* 10/16/2023	CT-016-SB-1 9/29/2023	CT-016-SB-8 9/29/2023	CT-016-SB-10* 9/29/2023	CT-017-SB-1 10/17/2023	CT-017-SB-9 10/17/2023	CT-017-SB-10 10/17/2023	CT-018-SB-1 10/17/2023
Metals														
Aluminum	mg/kg	1,100,000	**10,900**	*N/A*	**11,100**	**11,100**	*N/A*	**9,230**	**7,380**	*N/A*	**9,560**	**8,620**	*N/A*	**6,570**
Antimony	mg/kg	470	*4.59 U*	*N/A*	**41.2**	**4.22 J**	*N/A*	*5.01 U*	*4.32 U*	*N/A*	*4.63 U*	*2.22 B*	*N/A*	*4.44 U*
Arsenic	mg/kg	3.0	**5.32**	**1.86**	**19.2**	**12.2**	**5.51**	**3.3**	**4.92**	**6.54**	**4.26 J**	**9.61 J**	**6.65 J**	**9.96 J**
Barium	mg/kg	220,000	**61.8**	*N/A*	**198**	**100**	*N/A*	**49.5**	**119**	*N/A*	**47.3**	**173**	*N/A*	**85.1**
Beryllium	mg/kg	2,300	**0.909**	*N/A*	**1.2**	**1.08**	*N/A*	**0.444 J**	**0.804**	*N/A*	**0.348 J**	**0.646**	*N/A*	**0.911**
Cadmium	mg/kg	100	*0.918 U*	*N/A*	**0.887 J**	**8.71**	*N/A*	**0.442 J**	**1.01**	*N/A*	**1**	**1.6**	*N/A*	**0.156 J**
Chromium	mg/kg	1,800,000	**756**	*N/A*	**370**	**585**	*N/A*	**1,200**	**404**	*N/A*	**731 J**	**426 J**	*N/A*	**24.4 J**
Chromium VI	mg/kg	6.3	**3.65**	*N/A*	**0.205 J**	**2.3**	*N/A*	**12.6 J-**	**1.02 J-**	*N/A*	**0.385 J**	**0.258 J**	*N/A*	**0.303 J**
Cobalt	mg/kg	350	**1.34 J**	*N/A*	**17.4**	**14.3**	*N/A*	**0.238 J**	**4.21**	*N/A*	**2.32**	**11.2**	*N/A*	**13**
Copper	mg/kg	47,000	**26.8**	*N/A*	**343**	**326**	*N/A*	**17.6**	**43.4**	*N/A*	**81.2 J**	**106 J**	*N/A*	**39.3 J**
Iron	mg/kg	820,000	**148,000**	*N/A*	**109,000**	**161,000**	*N/A*	**159,000**	**79,300**	*N/A*	**97,900**	**132,000**	*N/A*	**19,700**
Lead	mg/kg	800	**4.2 J**	*N/A*	**2,600**	**523**	*N/A*	**6.13**	**107**	*N/A*	**47.2 J**	**130 J**	*N/A*	**19.1 J**
Manganese	mg/kg	26,000	**20,000**	*N/A*	**15,800**	**14,000**	*N/A*	**21,300**	**15,000**	*N/A*	**14,000**	**16,600**	*N/A*	**432**
Mercury	mg/kg	350	**0.096**	*N/A*	**0.796**	**0.176**	*N/A*	**0.118**	**0.395**	*N/A*	**0.315**	**0.726**	*N/A*	**0.087**
Nickel	mg/kg	22,000	**18.1**	*N/A*	**33.1**	**62.3**	*N/A*	**12.7**	**13.6**	*N/A*	**16.6 J**	**32.5 J**	*N/A*	**19.2 J**
Selenium	mg/kg	5,800	*1.84 U*	*N/A*	**42.2**	**0.306 J**	*N/A*	*2 U*	*1.73 U*	*N/A*	*1.85 U*	*1.72 U*	*N/A*	*1.78 U*
Silver	mg/kg	5,800	**1.81**	*N/A*	**1.69**	**1.38**	*N/A*	**2.23**	**1.72**	*N/A*	**1.53**	**1.72**	*N/A*	*0.444 U*
Thallium	mg/kg	12	*9.18 U*	*N/A*	**0.448 J**	**3.73**	*N/A*	**0.727 J**	**2.43**	*N/A*	**0.831 J**	**3.23**	*N/A*	**0.566 J**
Vanadium	mg/kg	5,800	**608**	*N/A*	**286**	**2,230**	*N/A*	**923**	**2,040**	*N/A*	**512**	**2,430**	*N/A*	**44.1**
Zinc	mg/kg	350,000	**44.1**	*N/A*	**406**	**1,100**	*N/A*	**856**	**1,230**	*N/A*	**152 J**	**778 J**	*N/A*	**52.5 J**
Other														
Cyanide	mg/kg	150	**0.49 J**	*N/A*	**5.1**	**1.4**	*N/A*	**0.92 J**	**0.54 J**	*N/A*	**3.5**	**3.6**	*N/A*	**0.33 J**

Bold indicates detection
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N/A: This parameter was not analyzed for this sample.
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Soil Sample Excavated
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B: This analyte was not detected substantially above the level of the associated method blank/preparation or field blank.
R: The result for this analyte is unreliable. Additional data is needed to confirm or disprove the presence of this analyte.

Table 2 - Container Terminal
Summary of Inorganics Detected in Soil

Parameter	Units	PAL	CT-018-SB-9 10/17/2023	CT-018-SB-10* 10/17/2023	CT-019-SB-1* 10/16/2023	CT-019-SB-8* 10/16/2023	CT-019-SB-10* 10/16/2023	CT-020-SB-1 9/29/2023	CT-020-SB-9 9/29/2023	CT-020-SB-10* 9/29/2023	CT-021-SB-1* 10/16/2023	CT-021-SB-8* 10/16/2023	CT-021-SB-10* 10/16/2023	CT-022-SB-1 9/29/2023
Metals														
Aluminum	mg/kg	1,100,000	**6,460**	*N/A*	**24,100**	**10,200**	*N/A*	**6,560**	**7,920**	*N/A*	**17,100**	**7,860**	*N/A*	**4,620**
Antimony	mg/kg	470	**8.45**	*N/A*	*5.01 U*	**1.05 J**	*N/A*	*4.16 U*	*4.44 U*	*N/A*	*4.45 U*	**30.4**	*N/A*	*4.23 U*
Arsenic	mg/kg	3.0	**12.4 J**	**12.1**	**3.97**	**6.81**	**13.4**	**4.43**	**10.3**	**5.64**	**5.84**	**5.64**	**2.87**	**2.7**
Barium	mg/kg	220,000	**93.4**	*N/A*	**164**	**166**	*N/A*	**83.5**	**114**	*N/A*	**93.4**	**172**	*N/A*	**62.4**
Beryllium	mg/kg	2,300	**0.616**	*N/A*	**3.59**	**0.65**	*N/A*	**0.633**	**0.748**	*N/A*	**0.51**	**0.793**	*N/A*	**0.348 J**
Cadmium	mg/kg	100	**5.6**	*N/A*	**0.699 J**	**3.12**	*N/A*	**0.399 J**	**0.552 J**	*N/A*	**0.386 J**	**2.06**	*N/A*	**0.39 J**
Chromium	mg/kg	1,800,000	**694 J**	*N/A*	**143**	**808**	*N/A*	**406**	**57.7**	*N/A*	**690**	**1,080**	*N/A*	**1,520**
Chromium VI	mg/kg	6.3	**8.32 J**	**8.33 J**	**0.293 J**	**1.54**	*N/A*	**0.354 J-**	*0.894 UJ*	*N/A*	*0.914 U*	**16.2 J**	**2.86 J**	**2.25 J-**
Cobalt	mg/kg	350	**11.1**	*N/A*	**2.48**	**4.5**	*N/A*	**4.27**	**17.4**	*N/A*	**4.03**	**5.87**	*N/A*	*1.69 U*
Copper	mg/kg	47,000	**120 J**	*N/A*	**22.6**	**64.8**	*N/A*	**39.4**	**66.2**	*N/A*	**29.9**	**71.2**	*N/A*	**14.7**
Iron	mg/kg	820,000	**119,000**	*N/A*	**24,200**	**87,200**	*N/A*	**139,000**	**92,300**	*N/A*	**109,000**	**135,000**	*N/A*	**142,000**
Lead	mg/kg	800	**298 J**	*N/A*	**64.7**	**744**	*N/A*	**18.5**	**95.5**	*N/A*	**27**	**233**	*N/A*	**9.07**
Manganese	mg/kg	26,000	**17,800**	*N/A*	**4,910**	**17,000**	*N/A*	**12,300**	**2,580**	*N/A*	**20,500**	**28,000**	**46,100**	**26,600**
Mercury	mg/kg	350	**0.08**	*N/A*	**0.146**	**0.18**	*N/A*	*0.078 U*	**0.069 J**	*N/A*	**0.128**	**0.056 J**	*N/A*	*0.07 U*
Nickel	mg/kg	22,000	**67.8 J**	*N/A*	**6.27**	**32.9**	*N/A*	**19.1**	**11**	*N/A*	**12.3**	**22.9**	*N/A*	**2.88**
Selenium	mg/kg	5,800	*8.35 U*	*N/A*	**0.905 J**	*1.78 U*	*N/A*	*1.66 U*	**1.05 J**	*N/A*	*1.78 U*	*1.66 U*	*N/A*	*1.69 U*
Silver	mg/kg	5,800	**1.73**	*N/A*	**1.04**	**1.67**	*N/A*	**0.901**	**1.33**	*N/A*	**1.83**	**2.14**	*N/A*	**2.65**
Thallium	mg/kg	12	**6.83**	*N/A*	*2 U*	**6.14**	*N/A*	**0.697 J**	**0.928 J**	*N/A*	*1.78 U*	**8.13**	*N/A*	**4.19**
Vanadium	mg/kg	5,800	**3,890**	*N/A*	**97.7**	**3,380**	*N/A*	**455**	**141**	*N/A*	**341**	**4,810**	*N/A*	**2,330**
Zinc	mg/kg	350,000	**1,210 J**	*N/A*	**207**	**590**	*N/A*	**102**	**835**	*N/A*	**73.2**	**457**	*N/A*	**21.2**
Other														
Cyanide	mg/kg	150	**0.35 J**	*N/A*	**1 J**	**0.46 J**	*N/A*	**0.52 J**	**2.6**	*N/A*	**1.5**	**0.6 J**	*N/A*	*1.1 UJ*

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Table 2 - Container Terminal
Summary of Inorganics Detected in Soil

Parameter	Units	PAL	CT-022-SB-9 9/29/2023	CT-022-SB-10* 9/29/2023	CT-023-SB-1 10/11/2023	CT-023-SB-8 10/11/2023	CT-023-SB-10* 10/11/2023	CT-024-SB-1* 9/21/2023	CT-024-SB-9* 9/21/2023	CT-024-SB-10* 9/21/2023
Metals										
Aluminum	mg/kg	1,100,000	**5,700**	*N/A*	**5,660**	**7,570**	*N/A*	**6,580**	**7,400**	*N/A*
Antimony	mg/kg	470	*4.16 U*	*N/A*	*4.14 U*	*4.17 U*	*N/A*	*4.52 U*	*4.23 U*	*N/A*
Arsenic	mg/kg	3.0	**3.01**	**5.75**	**3.05**	**2.47**	*N/A*	**4.72**	**2.82**	*N/A*
Barium	mg/kg	220,000	**41.3**	*N/A*	**49.2**	**71.9**	*N/A*	**70.4**	**73.8**	*N/A*
Beryllium	mg/kg	2,300	**0.438**	*N/A*	**0.683**	**0.787**	*N/A*	**0.507**	**0.654**	*N/A*
Cadmium	mg/kg	100	**0.135 J**	*N/A*	**0.588 J**	**0.336 J**	*N/A*	**0.28 J**	**0.343 J**	*N/A*
Chromium	mg/kg	1,800,000	**1,190**	*N/A*	**1,010**	**877**	*N/A*	**819**	**1,500**	*N/A*
Chromium VI	mg/kg	6.3	**2.61 J-**	*N/A*	**6.38 J-**	**7.62 J-**	**6.44**	*0.923 U*	**4.17**	*N/A*
Cobalt	mg/kg	350	**1.62 J**	*N/A*	**3.77**	**3.07**	*N/A*	**1.26 J**	**0.207 J**	*N/A*
Copper	mg/kg	47,000	**10.1**	*N/A*	**31.8 J**	**32.8 J**	*N/A*	**15.3**	**12.2**	*N/A*
Iron	mg/kg	820,000	**167,000**	*N/A*	**154,000**	**122,000**	*N/A*	**108,000**	**166,000**	*N/A*
Lead	mg/kg	800	**6.95**	*N/A*	**46.8 J**	**35.6 J**	*N/A*	**51.1**	**4.95**	*N/A*
Manganese	mg/kg	26,000	**35,100**	**23,600**	**21,400**	**18,600**	*N/A*	**18,100**	**34,000**	**7,960**
Mercury	mg/kg	350	*0.073 U*	*N/A*	**0.063 J**	*0.071 U*	*N/A*	*0.072 U*	*0.068 U*	*N/A*
Nickel	mg/kg	22,000	**6.6**	*N/A*	**42.4 J**	**35.2 J**	*N/A*	**5.99**	**4.61**	*N/A*
Selenium	mg/kg	5,800	*1.66 U*	*N/A*	*4.14 UJ*	*1.67 UJ*	*N/A*	**6.38**	**8.28**	*N/A*
Silver	mg/kg	5,800	**2.05**	*N/A*	**1.74**	**1.4**	*N/A*	**0.77**	**1.04**	*N/A*
Thallium	mg/kg	12	**5.74**	*N/A*	*1.66 UJ*	*1.67 UJ*	*N/A*	**11.8**	**15.7**	**9.61**
Vanadium	mg/kg	5,800	**3,450**	*N/A*	**1,030**	**1,390**	*N/A*	**496**	**735**	*N/A*
Zinc	mg/kg	350,000	**19.4**	*N/A*	**105**	**136**	*N/A*	**261**	**18.3**	*N/A*
Other										
Cyanide	mg/kg	150	*0.99 UJ*	*N/A*	**1.2**	*1.1 U*	*N/A*	**0.24 J**	*1 U*	*N/A*

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Table 3
Summary of Organics Detected in Groundwater
Container Terminal

Parameter	Units	PAL	B18-007-PZ	B18-061-PZ	B18-075-PZ	B18-076-PZ	CO05A-PZM		CO05B-PZM	CO05C-PZM	CO05-PZM006		CO08A-PZM		CO08B-PZM	CO08-PZM005
			12/13/2016	12/13/2016	12/14/2016	12/13/2016	5/19/2021	11/5/2024	5/20/2021	5/19/2021	6/10/2015	6/18/2015	5/20/2021	9/17/2024	5/19/2021	6/10/2015
Volatile Organic Compounds																
1,1-Dichloroethane	µg/L	2.7	*1 U*	*1 U*	*1 U*	*1 U*	*1 U*	*38 U*	*10 U*	*1 U*	*25 U*	N/A	*10 U*	N/A	*1 U*	*125 U*
1,2-Dichlorobenzene	µg/L	600	*1 U*	*1 U*	*1 U*	*1 U*	*1 U*	*120 U*	*10 U*	*1 U*	N/A	N/A	*10 U*	N/A	*1 U*	N/A
1,3-Dichlorobenzene	µg/L		*1 U*	*1 U*	*1 U*	*1 U*	*1 U*	*120 U*	*10 U*	*1 U*	N/A	N/A	*10 U*	N/A	*1 U*	N/A
1,4-Dichlorobenzene	µg/L	75	*1 U*	*1 U*	*1 U*	*1 U*	*1 U*	*120 U*	*10 U*	*1 U*	N/A	N/A	*10 U*	N/A	*1 U*	N/A
1,4-Dioxane	µg/L	0.46	N/A	N/A	N/A	N/A	N/A	*150 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2-Butanone (MEK)	µg/L	5,600	*10 U*	*10 U*	*10 U*	*10 U*	*10 U*	*250 U*	*100 U*	*10 U*	*125 U*	N/A	*100 U*	N/A	*10 U*	*625 U*
4-Methyl-2-pentanone (MIBK)	µg/L	1,200	*10 U*	*10 U*	*10 U*	*10 U*	*10 U*	*250 U*	*100 U*	*10 U*	*125 U*	N/A	*100 U*	N/A	*10 U*	*625 U*
Acetone	µg/L	14,000	**3.8 J**	**1.9 J**	**2.5 J**	**2.8 J**	**7.9 J**	*250 U*	*100 U*	**14.1**	**396 J**	N/A	*100 U*	N/A	*10 U*	*3,120 U*
Benzene	µg/L	5	**67.2**	*1 U*	*1 U*	*1 U*	**1,330**	**1,200**	**2,550**	**3.8**	**1,850**	N/A	**452**	**510**	**5,240**	**15,000**
Bromomethane	µg/L	7.5	*1 U*	*1 U*	*1 UJ*	*1 U*	*1 U*	*50 U*	*10 U*	*1 U*	*50 U*	N/A	*10 U*	N/A	*1 U*	*250 U*
Carbon disulfide	µg/L	810	*1 U*	*1 U*	*1 U*	*1 U*	**0.93 J**	*250 U*	*10 U*	**0.86 J**	*50 U*	N/A	*10 U*	N/A	*1 U*	*250 U*
Chlorobenzene	µg/L	100	*1 U*	*1 U*	*1 U*	*1 U*	*1 U*	*25 U*	*10 U*	*1 U*	*25 U*	N/A	*10 U*	N/A	*1 U*	*125 U*
Chloroform	µg/L	0.22	**0.73 J**	**3.1**	*1 U*	**0.55 J**	*1 U*	*38 U*	*10 U*	*1 U*	*25 U*	N/A	*10 U*	N/A	*1 U*	*125 U*
Chloromethane	µg/L	190	*1 U*	*1 U*	*1 UJ*	*1 U*	*1 U*	*120 U*	*10 U*	*1 U*	*25 U*	N/A	*10 U*	N/A	*1 U*	*125 U*
Cyclohexane	µg/L	13,000	*10 U*	*10 U*	*10 U*	*10 U*	**1.1 J**	*500 U*	*100 U*	*10 U*	N/A	N/A	*100 U*	N/A	**1.6 J**	N/A
Ethylbenzene	µg/L	700	**1.8**	*1 U*	*1 U*	*1 U*	**71.8**	**53**	**163**	**1.0**	**109**	N/A	**342**	**240**	**211**	**198**
Isopropylbenzene	µg/L	450	**0.25 J**	*1 U*	*1 U*	*1 U*	**6.2**	**10 J**	**5 J**	*1 U*	N/A	N/A	**22.2**	N/A	**6.6**	N/A
m&p-Xylene	µg/L		**21.2**	*2 U*	*2 U*	*2 U*	**774**	**420**	**189**	*2 U*	N/A	N/A	**5,590**	**2,800**	**969**	N/A
Methyl Acetate	µg/L	20,000	*5 U*	*5 U*	*5 U*	**0.32 J**	*5 U*	*100 U*	*50 U*	*5 U*	N/A	N/A	*50 U*	N/A	*5 U*	N/A
Methyl tert-butyl ether (MTBE)	µg/L	14	*1 U*	**0.47 J**	*1 U*	*1 U*	*1 U*	*50 U*	*10 U*	*1 U*	*25 U*	N/A	*10 U*	N/A	*1 U*	*125 U*
Methylene Chloride	µg/L	5	*1 U*	*1 U*	*1 U*	*1 U*	*1 U*	*120 U*	*10 U*	*1 U*	**249**	N/A	*10 U*	N/A	*1 U*	**752 B**
Naphthalene	µg/L	0.12	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**3,100**	N/A	N/A
o-Xylene	µg/L		**8.1**	*1 U*	*1 U*	*1 U*	**308**	**180**	**107**	*1 U*	N/A	N/A	**2,450**	**1,300**	**506**	N/A
Styrene	µg/L	100	**2.1**	*1 U*	*1 U*	*1 U*	**152**	**70**	**5.2 J**	*1 U*	**32.6**	N/A	**159**	N/A	**143**	**202**
Toluene	µg/L	1,000	**30.1**	*1 U*	*1 U*	*1 U*	**597**	**420**	**176**	**0.47 J**	**464**	N/A	**2,590**	**1,800**	**2,470**	**6,150**
Xylenes	µg/L	10,000	**29.3**	*3 U*	*3 U*	*3 U*	**1,080**	**600**	**296**	*3 U*	**483**	N/A	**8,040**	**4,100**	**1,480**	**2,760**
Semivolatile Organic Compounds																
1,1-Biphenyl	µg/L	0.83	**1.4**	*1 U*	*1 U*	*1 U*	N/A	**28**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1,2-Dichlorobenzene	µg/L	600	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*1 U*	N/A	N/A	N/A	N/A
1,3-Dichlorobenzene	µg/L		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*1 U*	N/A	N/A	N/A	N/A
1,4-Dichlorobenzene	µg/L	75	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*1 U*	N/A	N/A	N/A	N/A
1,4-Dioxane	µg/L	0.46	**0.47**	**0.33**	**0.29**	**0.29**	*0.095 U*	N/A	**0.58**	**0.29**	N/A	N/A	*0.095 U*	N/A	*0.095 U*	N/A
2,4,5-Trichlorophenol	µg/L	1,200	*2.5 U*	*2.5 U*	*2.5 U*	*2.6 U*	N/A	*5 U*	N/A	N/A	N/A	*2.6 U*	N/A	N/A	N/A	N/A
2,4-Dimethylphenol	µg/L	360	**4.1**	*1 U*	*1 U*	*1 U*	N/A	**100**	N/A	N/A	N/A	**116**	N/A	N/A	N/A	N/A
2,4-Dinitrotoluene	µg/L	0.24	*1 U*	*1 U*	*1 U*	*1 U*	N/A	*5 U*	N/A	N/A	N/A	*1 U*	N/A	N/A	N/A	N/A
2-Chloronaphthalene	µg/L	750	*1 U*	*1 U*	*1 U*	*1 U*	N/A	*2 U*	N/A	N/A	N/A	*1 U*	N/A	N/A	N/A	N/A
2-Methylnaphthalene	µg/L	36	**11.5**	*1 U*	*1 U*	*1 U*	**506**	**350**	**236**	*9.4 U*	N/A	**63.8**	**122**	N/A	**82.8**	N/A
2-Methylphenol	µg/L	930	**2.9**	*1 U*	*1 U*	*1 U*	N/A	**130**	N/A	N/A	N/A	**53.9**	N/A	N/A	N/A	N/A
3&4-Methylphenol(m&p Cresol)	µg/L	930	**4.9**	*2 U*	*2 U*	*2 U*	N/A	**91**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4-Chloro-3-methylphenol	µg/L		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**1.3**	N/A	N/A	N/A	N/A
Acenaphthene	µg/L	530	**1.2**	*1 U*	*1 U*	*1 U*	**33.4 J**	**72**	**60.4 J**	**1.1**	N/A	**17.4**	**0.66**	N/A	**23.6**	N/A
Acenaphthylene	µg/L	530	**1.2**	*1 U*	*1 U*	*1 U*	**170**	**120**	**14.2 J**	**0.35**	N/A	**16.7**	**10.5**	N/A	**50.2**	N/A
Acetophenone	µg/L	1,900	**0.35 J**	*1 U*	*1 U*	*1 U*	N/A	*5 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Table 3
Summary of Organics Detected in Groundwater
Container Terminal

Parameter	Units	PAL	B18-007-PZ	B18-061-PZ	B18-075-PZ	B18-076-PZ	CO05A-PZM		CO05B-PZM	CO05C-PZM	CO05-PZM006		CO08A-PZM		CO08B-PZM	CO08-PZM005
			12/13/2016	12/13/2016	12/14/2016	12/13/2016	5/19/2021	11/5/2024	5/20/2021	5/19/2021	6/10/2015	6/18/2015	5/20/2021	9/17/2024	5/19/2021	6/10/2015
Aniline	µg/L		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*2.6 U*	N/A	N/A	N/A	N/A
Anthracene	µg/L	1,800	**0.51**	*1 U*	**0.38**	*1 U*	**21.1 J**	**12**	**31.8 J**	**1.0**	N/A	**7.8**	**1.1**	N/A	**20.7**	N/A
Benz[a]anthracene	µg/L	0.03	*1 U*	*1 U*	*1 U*	*1 U*	*94.8 U*	*5 U*	**11 J**	**0.58**	N/A	**0.57 J**	**0.51**	N/A	**4.5 J**	N/A
Benzaldehyde	µg/L	1,900	*1 U*	*1 U*	*1 U*	*1 U*	N/A	*5 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Benzo[a]pyrene	µg/L	0.2	*1 U*	*1 U*	*1 U*	*1 U*	**2.5**	*2 U*	**5.8 J**	**0.47**	N/A	**0.27 J**	**0.3**	N/A	**2.4**	N/A
Benzo[b]fluoranthene	µg/L	0.25	*1 U*	*1 U*	*1 U*	*1 U*	**2.1**	*5 U*	**5.9 J**	**0.43**	N/A	**0.54 J**	**0.33**	N/A	**2.1**	N/A
Benzo[g,h,i]perylene	µg/L		*1 U*	*1 U*	*1 U*	*1 U*	**0.93**	*2 U*	**1.7**	**0.24**	N/A	*1 U*	**0.14**	N/A	**1.1**	N/A
Benzo[k]fluoranthene	µg/L	2.5	*1 U*	*1 U*	*1 U*	*1 U*	**2.0**	*2 U*	**4.4 J**	**0.4**	N/A	**0.28 J**	**0.29**	N/A	**2.0**	N/A
bis(2-chloroethoxy)methane	µg/L	59	*1 U*	*1 U*	*1 U*	*1 U*	N/A	*5 U*	N/A	N/A	N/A	*1 U*	N/A	N/A	N/A	N/A
bis(2-Chloroethyl)ether	µg/L	0.014	*1 U*	*1 U*	*1 U*	*1 U*	N/A	*2 U*	N/A	N/A	N/A	*1 U*	N/A	N/A	N/A	N/A
bis(2-Ethylhexyl)phthalate	µg/L	6.0	*1 U*	*1 U*	*1 U*	**0.22 J**	N/A	*3 U*	N/A	N/A	N/A	**0.29 J**	N/A	N/A	N/A	N/A
Butylbenzylphthalate	µg/L		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*1 U*	N/A	N/A	N/A	N/A
Caprolactam	µg/L	9,900	*2.5 U*	*2.5 U*	**0.23 J**	*2.6 U*	N/A	*10 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Carbazole	µg/L		**17.3**	*1 U*	**1.2**	*1 U*	N/A	**300**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Chrysene	µg/L	25	*1 U*	*1 U*	*1 U*	*1 U*	*94.8 U*	*10 U*	**7.5 J**	**0.55**	N/A	**0.42 J**	**0.61**	N/A	**4.2 J**	N/A
Dibenz[a,h]anthracene	µg/L	0.025	*1 U*	*1 U*	*1 U*	*1 U*	**0.33**	*5 U*	**0.68**	**0.067**	N/A	*1 U*	**0.046 J**	N/A	**0.37**	N/A
Dibenzofuran	µg/L		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**32.1**	N/A	N/A	N/A	N/A
Diethylphthalate	µg/L	15,000	*1 U*	**0.33 J**	**0.31 J**	**0.42 J**	N/A	*5 U*	N/A	N/A	N/A	*1 U*	N/A	N/A	N/A	N/A
Di-n-butylphthalate	µg/L	900	*1 U*	*1 U*	*1 U*	*1 U*	N/A	*5 U*	N/A	N/A	N/A	*1 U*	N/A	N/A	N/A	N/A
Fluoranthene	µg/L	800	**0.69**	*1 U*	*1 U*	*1 U*	**19.1 J**	**8.8 J**	**48.1 J**	**1.4**	N/A	**8.6**	**2.1**	N/A	**26.2**	N/A
Fluorene	µg/L	290	**5.4**	*1 U*	**0.63**	*1 U*	**94 J**	**79**	**102**	**0.76**	N/A	**35**	**36**	N/A	**80.2**	N/A
Indeno[1,2,3-c,d]pyrene	µg/L	0.25	*1 U*	*1 U*	*1 U*	*1 U*	**1.2**	*2 U*	**2.6**	**0.28**	N/A	*1 U*	**0.17**	N/A	**1.4**	N/A
Naphthalene	µg/L	0.12	**411**	**0.48**	**1.6**	*1 U*	**16,600**	**8,700**	**12,500**	**7.4 J**	N/A	**2,810 B**	**5,190**	N/A	**1,490**	N/A
N-Nitrosodiphenylamine	µg/L	12	*1 U*	*1 U*	*1 U*	*1 U*	N/A	*2 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pentachlorophenol	µg/L	1.0	**0.75 J**	*2.5 U*	*2.5 U*	*2.6 U*	N/A	*10 U*	N/A	N/A	N/A	*2.6 U*	N/A	N/A	N/A	N/A
Phenanthrene	µg/L		**6.5**	*1 U*	**1.3**	*1 U*	**97.8**	**87**	**152**	**1.1**	N/A	**43.3**	**10**	N/A	**113**	N/A
Phenol	µg/L	5,800	**4.0**	*1 U*	*1 U*	*1 U*	N/A	**27**	N/A	N/A	N/A	**36.4**	N/A	N/A	N/A	N/A
Pyrene	µg/L	120	**0.5**	*1 U*	**0.58**	*1 U*	**11.8 J**	**4.8 J**	**29.5 J**	**1.1**	N/A	**5.9**	**1.6**	N/A	**15.7**	N/A
Pyridine	µg/L		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**6.3**	N/A	N/A	N/A	N/A
Total Petroleum Hydrocarbons																
Diesel Range Organics	µg/L	47	**866**	**346**	**370 J**	**251**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Gasoline Range Organics	µg/L	47	**294**	*200 U*	*200 U*	*200 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Oil and Grease	µg/L	47	*4,900 U*	**35,900**	*4,800 U*	*4,850 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Detection in bold
Values highlighted in yellow indicate an exceedance of the Project Action Limit (PAL)
N/A indicates that the parameter was not analyzed for this sample

J: The positive result reported for this analyte is a quantitative estimate.
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.
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 3
Summary of Organics Detected in Groundwater
Container Terminal

Parameter	Units	PAL	CO08-PZM005	CO09-PZM007		CO10-PZM006		CO152-PZM			CO159-PZM		CO167-PZM		CO19-PZM004		
			6/18/2015	6/10/2015	6/18/2015	6/11/2015	6/18/2015	4/10/2020	9/19/2024	10/31/2024	4/10/2020	9/19/2024	4/10/2020	9/19/2024	6/10/2015	6/18/2015	9/17/2024
Volatile Organic Compounds																	
1,1-Dichloroethane	µg/L	2.7	N/A	*25 U*	N/A	*1 U*	N/A	*5 U*	N/A	*7.5 U*	*5 U*	N/A	*5 U*	N/A	*4 U*	N/A	N/A
1,2-Dichlorobenzene	µg/L	600	N/A	N/A	N/A	N/A	N/A	*5 U*	N/A	*25 U*	*5 U*	N/A	*5 U*	N/A	N/A	N/A	N/A
1,3-Dichlorobenzene	µg/L		N/A	N/A	N/A	N/A	N/A	N/A	N/A	*25 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1,4-Dichlorobenzene	µg/L	75	N/A	N/A	N/A	N/A	N/A	*5 U*	N/A	*25 U*	*5 U*	N/A	*5 U*	N/A	N/A	N/A	N/A
1,4-Dioxane	µg/L	0.46	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*30 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2-Butanone (MEK)	µg/L	5,600	N/A	*125 U*	N/A	*5 U*	N/A	*50 U*	N/A	*50 U*	*50 U*	N/A	*50 U*	N/A	*20 U*	N/A	N/A
4-Methyl-2-pentanone (MIBK)	µg/L	1,200	N/A	*125 U*	N/A	*5 U*	N/A	*50 U*	N/A	*50 U*	*50 U*	N/A	*50 U*	N/A	*20 U*	N/A	N/A
Acetone	µg/L	14,000	N/A	*625 U*	N/A	*25 U*	N/A	*50 U*	N/A	*50 U*	*50 U*	N/A	*50 U*	N/A	**100**	N/A	N/A
Benzene	µg/L	5	N/A	**358**	N/A	**0.32 J**	N/A	**1,520**	**440**	**300**	**64.7**	**57**	**5.6**	**120**	**409**	N/A	**12**
Bromomethane	µg/L	7.5	N/A	*50 U*	N/A	*2 U*	N/A	*5 U*	N/A	*10 U*	*5 U*	N/A	*5 U*	N/A	*8 U*	N/A	N/A
Carbon disulfide	µg/L	810	N/A	*50 U*	N/A	*2 U*	N/A	*5 U*	N/A	*50 U*	*5 U*	N/A	*5 U*	N/A	*8 U*	N/A	N/A
Chlorobenzene	µg/L	100	N/A	*25 U*	N/A	*1 U*	N/A	*5 U*	N/A	*5 U*	*5 U*	N/A	*5 U*	N/A	*4 U*	N/A	N/A
Chloroform	µg/L	0.22	N/A	*25 U*	N/A	**0.21 J**	N/A	*5 U*	N/A	*7.5 U*	*5 U*	N/A	*5 U*	N/A	*4 U*	N/A	N/A
Chloromethane	µg/L	190	N/A	*25 U*	N/A	*1 U*	N/A	*5 U*	N/A	*25 U*	*5 U*	N/A	*5 U*	N/A	*4 U*	N/A	N/A
Cyclohexane	µg/L	13,000	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*100 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ethylbenzene	µg/L	700	N/A	**21.9 J**	N/A	*1 U*	N/A	**9.8**	**1.3 J**	*5 U*	**8.4**	**5.1**	**2.3 J**	**2.4**	**7.9**	N/A	**0.92**
Isopropylbenzene	µg/L	450	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*5 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A
m&p-Xylene	µg/L		N/A	N/A	N/A	N/A	N/A	N/A	**1.6 J**	*10 U*	N/A	**2.8**	N/A	**9.3**	N/A	N/A	**8.8**
Methyl Acetate	µg/L	20,000	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*20 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Methyl tert-butyl ether (MTBE)	µg/L	14	N/A	*25 U*	N/A	*1 U*	N/A	*5 U*	N/A	*10 U*	*5 U*	N/A	*5 U*	N/A	*4 U*	N/A	N/A
Methylene Chloride	µg/L	5	N/A	**204 B**	N/A	**2.2 B**	N/A	*5 U*	N/A	*25 U*	*5 U*	N/A	*5 U*	N/A	**47.5**	N/A	N/A
Naphthalene	µg/L	0.12	N/A	N/A	N/A	N/A	N/A	**37.3**	**69**	N/A	**54.6**	**19**	**82.6**	**120**	N/A	N/A	**12**
o-Xylene	µg/L		N/A	N/A	N/A	N/A	N/A	N/A	*4 U*	*10 U*	N/A	**1.3 J**	N/A	**5.1**	N/A	N/A	**3.8**
Styrene	µg/L	100	N/A	**17.1 J**	N/A	*1 U*	N/A	*5 U*	N/A	*10 U*	*5 U*	N/A	*5 U*	N/A	*4 U*	N/A	N/A
Toluene	µg/L	1,000	N/A	**279**	N/A	*1 U*	N/A	**2.7 J**	**4.2**	*7.5 U*	*5 U*	**3.0**	**5.6**	**9.2**	**2.4 J**	N/A	**4.5**
Xylenes	µg/L	10,000	N/A	**401**	N/A	*2 U*	N/A	*15 U*	**1.6 J**	*10 U*	**8.4 J**	**4.1 J**	**13.8 J**	**14**	*8 U*	N/A	**13**
Semivolatile Organic Compounds																	
1,1-Biphenyl	µg/L	0.83	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**1 J**	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1,2-Dichlorobenzene	µg/L	600	*1 U*	N/A	*1 U*	N/A	*1 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*1 U*	N/A
1,3-Dichlorobenzene	µg/L		*1 U*	N/A	*1 U*	N/A	*1 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*1 U*	N/A
1,4-Dichlorobenzene	µg/L	75	*1 U*	N/A	*1 U*	N/A	*1 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*1 U*	N/A
1,4-Dioxane	µg/L	0.46	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2,4,5-Trichlorophenol	µg/L	1,200	*2.6 U*	N/A	*2.6 U*	N/A	*2.6 U*	N/A	N/A	*5 U*	N/A	N/A	N/A	N/A	N/A	*2.6 U*	N/A
2,4-Dimethylphenol	µg/L	360	**2.6**	N/A	**26.1**	N/A	*1 U*	N/A	N/A	*5 U*	N/A	N/A	N/A	N/A	N/A	*1 U*	N/A
2,4-Dinitrotoluene	µg/L	0.24	*1 U*	N/A	*1 U*	N/A	*1 U*	N/A	N/A	*5 U*	N/A	N/A	N/A	N/A	N/A	*1 U*	N/A
2-Chloronaphthalene	µg/L	750	*1 U*	N/A	*1 U*	N/A	*1 U*	N/A	N/A	*2 U*	N/A	N/A	N/A	N/A	N/A	*1 U*	N/A
2-Methylnaphthalene	µg/L	36	**8.7**	N/A	**32.1**	N/A	*1 U*	N/A	N/A	*2 U*	N/A	N/A	N/A	N/A	N/A	*1 U*	N/A
2-Methylphenol	µg/L	930	**3.6**	N/A	**22.5**	N/A	*1 U*	N/A	N/A	*5 U*	N/A	N/A	N/A	N/A	N/A	*1 U*	N/A
3&4-Methylphenol(m&p Cresol)	µg/L	930	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*5 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4-Chloro-3-methylphenol	µg/L		*1 U*	N/A	*1 U*	N/A	*1 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*1 U*	N/A
Acenaphthene	µg/L	530	**0.49 J**	N/A	**1.9**	N/A	*1 U*	N/A	N/A	**5.6**	N/A	N/A	N/A	N/A	N/A	**1.2**	N/A
Acenaphthylene	µg/L	530	**1.3**	N/A	**7**	N/A	*1 U*	N/A	N/A	**1.9**	N/A	N/A	N/A	N/A	N/A	*1 U*	N/A
Acetophenone	µg/L	1,900	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*5 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Table 3
Summary of Organics Detected in Groundwater
Container Terminal

Parameter	Units	PAL	CO08-PZM005	CO09-PZM007		CO10-PZM006		CO152-PZM			CO159-PZM		CO167-PZM		CO19-PZM004		
			6/18/2015	6/10/2015	6/18/2015	6/11/2015	6/18/2015	4/10/2020	9/19/2024	10/31/2024	4/10/2020	9/19/2024	4/10/2020	9/19/2024	6/10/2015	6/18/2015	9/17/2024
Aniline	µg/L		*2.6 U*	N/A	**6.8**	N/A	*2.6 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*2.6 U*	N/A
Anthracene	µg/L	1,800	**0.27 J**	N/A	**1.7**	N/A	*1 U*	N/A	N/A	*2 U*	N/A	N/A	N/A	N/A	N/A	*1 U*	N/A
Benz[a]anthracene	µg/L	0.03	*1 U*	N/A	*1 U*	N/A	*1 U*	N/A	N/A	*2 U*	N/A	N/A	N/A	N/A	N/A	*1 U*	N/A
Benzaldehyde	µg/L	1,900	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*5 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Benzo[a]pyrene	µg/L	0.2	*1 U*	N/A	*1 U*	N/A	*1 U*	N/A	N/A	*2 U*	N/A	N/A	N/A	N/A	N/A	*1 U*	N/A
Benzo[b]fluoranthene	µg/L	0.25	*1 U*	N/A	*1 U*	N/A	*1 U*	N/A	N/A	*2 U*	N/A	N/A	N/A	N/A	N/A	*1 U*	N/A
Benzo[g,h,i]perylene	µg/L		*1 U*	N/A	*1 U*	N/A	*1 U*	N/A	N/A	*2 U*	N/A	N/A	N/A	N/A	N/A	*1 U*	N/A
Benzo[k]fluoranthene	µg/L	2.5	*1 U*	N/A	*1 U*	N/A	*1 U*	N/A	N/A	*2 U*	N/A	N/A	N/A	N/A	N/A	*1 U*	N/A
bis(2-chloroethoxy)methane	µg/L	59	*1 U*	N/A	*1 U*	N/A	*1 U*	N/A	N/A	*5 U*	N/A	N/A	N/A	N/A	N/A	*1 U*	N/A
bis(2-Chloroethyl)ether	µg/L	0.014	*1 U*	N/A	*1 U*	N/A	*1 U*	N/A	N/A	*2 U*	N/A	N/A	N/A	N/A	N/A	*1 U*	N/A
bis(2-Ethylhexyl)phthalate	µg/L	6.0	**0.32 J**	N/A	*1 U*	N/A	*1 U*	N/A	N/A	*3 U*	N/A	N/A	N/A	N/A	N/A	**0.23 J**	N/A
Butylbenzylphthalate	µg/L		*1 U*	N/A	*1 U*	N/A	*1 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*1 U*	N/A
Caprolactam	µg/L	9,900	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*10 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Carbazole	µg/L		N/A	N/A	N/A	N/A	N/A	N/A	N/A	*2 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Chrysene	µg/L	25	*1 U*	N/A	*1 U*	N/A	*1 U*	N/A	N/A	*1.5 U*	N/A	N/A	N/A	N/A	N/A	*1 U*	N/A
Dibenz[a,h]anthracene	µg/L	0.025	*1 U*	N/A	*1 U*	N/A	*1 U*	N/A	N/A	*2 U*	N/A	N/A	N/A	N/A	N/A	*1 U*	N/A
Dibenzofuran	µg/L		**1.1**	N/A	**10**	N/A	*1 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**0.53 J**	N/A
Diethylphthalate	µg/L	15,000	*1 U*	N/A	*1 U*	N/A	*1 U*	N/A	N/A	*5 U*	N/A	N/A	N/A	N/A	N/A	*1 U*	N/A
Di-n-butylphthalate	µg/L	900	*1 U*	N/A	*1 U*	N/A	*1 U*	N/A	N/A	*5 U*	N/A	N/A	N/A	N/A	N/A	*1 U*	N/A
Fluoranthene	µg/L	800	**0.43 J**	N/A	**3**	N/A	*1 U*	N/A	N/A	*2 U*	N/A	N/A	N/A	N/A	N/A	*1 U*	N/A
Fluorene	µg/L	290	**1.3**	N/A	**10.4**	N/A	*1 U*	N/A	N/A	*2 U*	N/A	N/A	N/A	N/A	N/A	**0.65 J**	N/A
Indeno[1,2,3-c,d]pyrene	µg/L	0.25	*1 U*	N/A	*1 U*	N/A	*1 U*	N/A	N/A	*2 U*	N/A	N/A	N/A	N/A	N/A	*1 U*	N/A
Naphthalene	µg/L	0.12	**257 B**	N/A	**810 B**	N/A	**1.9**	N/A	N/A	**29**	N/A	N/A	N/A	N/A	N/A	*1 U*	N/A
N-Nitrosodiphenylamine	µg/L	12	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*2 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pentachlorophenol	µg/L	1.0	**1.9 J**	N/A	*2.6 U*	N/A	*2.6 U*	N/A	N/A	*10 U*	N/A	N/A	N/A	N/A	N/A	*2.6 U*	N/A
Phenanthrene	µg/L		**2.4**	N/A	**16.7**	N/A	*1 U*	N/A	N/A	*2 U*	N/A	N/A	N/A	N/A	N/A	*1 U*	N/A
Phenol	µg/L	5,800	**7.9**	N/A	**26.8**	N/A	*1 U*	N/A	N/A	**2.2 J**	N/A	N/A	N/A	N/A	N/A	**3.2**	N/A
Pyrene	µg/L	120	**0.29 J**	N/A	**1.8**	N/A	*1 U*	N/A	N/A	**0.86**	N/A	N/A	N/A	N/A	N/A	*1 U*	N/A
Pyridine	µg/L		**0.38 J**	N/A	**4.2**	N/A	*1 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*1 U*	N/A
Total Petroleum Hydrocarbons																	
Diesel Range Organics	µg/L	47	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Gasoline Range Organics	µg/L	47	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Oil and Grease	µg/L	47	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Detection in bold
Values highlighted in yellow indicate an exceedance of the Project Action Limit (PAL)
N/A indicates that the parameter was not analyzed for this sample

J: The positive result reported for this analyte is a quantitative estimate.
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.
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 3
Summary of Organics Detected in Groundwater
Container Terminal

Parameter	Units	PAL	CO203-MWS		CO204-MWS	CO205-MWS	CO206R-MWS			CO206R-MWS			CO207-MWS	CO208-MWS	CO20-PZM004	
			7/25/2023	2/10/2025	5/18/2023	7/25/2023	2/15/2024	6/7/2024	8/20/2024	11/4/2024	11/19/2024	2/11/2025	7/26/2023	10/10/2019	6/10/2015	6/18/2015
Volatile Organic Compounds																
1,1-Dichloroethane	µg/L	2.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*1.9 U*	N/A	N/A	N/A	*5 U*	*25 U*	N/A
1,2-Dichlorobenzene	µg/L	600	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*6.2 U*	N/A	N/A	N/A	*5 U*	N/A	N/A
1,3-Dichlorobenzene	µg/L		N/A	N/A	N/A	N/A	N/A	N/A	N/A	*6.2 U*	N/A	N/A	N/A	N/A	N/A	N/A
1,4-Dichlorobenzene	µg/L	75	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*6.2 U*	N/A	N/A	N/A	*5 U*	N/A	N/A
1,4-Dioxane	µg/L	0.46	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*7.5 U*	N/A	N/A	N/A	N/A	N/A	N/A
2-Butanone (MEK)	µg/L	5,600	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*12 U*	N/A	N/A	N/A	*50 U*	*125 U*	N/A
4-Methyl-2-pentanone (MIBK)	µg/L	1,200	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*12 U*	N/A	N/A	N/A	*50 U*	*125 U*	N/A
Acetone	µg/L	14,000	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*12 U*	N/A	N/A	N/A	*50 U*	*625 U*	N/A
Benzene	µg/L	5	**380**	N/A	**760**	**380**	**140**	**230**	**260**	**440**	**260**	**750**	**200**	**202**	**70.9**	N/A
Bromomethane	µg/L	7.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*2.5 U*	N/A	N/A	N/A	*5 U*	*50 U*	N/A
Carbon disulfide	µg/L	810	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*12 U*	N/A	N/A	N/A	*5 U*	*50 U*	N/A
Chlorobenzene	µg/L	100	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*1.2 U*	N/A	N/A	N/A	*5 U*	*25 U*	N/A
Chloroform	µg/L	0.22	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*1.9 U*	N/A	N/A	N/A	*5 U*	*25 U*	N/A
Chloromethane	µg/L	190	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*6.2 U*	N/A	N/A	N/A	*5 U*	*25 U*	N/A
Cyclohexane	µg/L	13,000	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*25 U*	N/A	N/A	N/A	N/A	N/A	N/A
Ethylbenzene	µg/L	700	**9.8 J**	N/A	**17 J**	**10**	**7.9**	**8.5 J**	**10**	**14**	**8.2 J**	**17 J**	**9.7**	**9.9**	*25 U*	N/A
Isopropylbenzene	µg/L	450	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*1.2 U*	N/A	N/A	N/A	N/A	N/A	N/A
m&p-Xylene	µg/L		**160**	N/A	**320**	**170**	**150**	**140**	**150**	**240**	**120**	**310**	**130**	N/A	N/A	N/A
Methyl Acetate	µg/L	20,000	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*5 U*	N/A	N/A	N/A	N/A	N/A	N/A
Methyl tert-butyl ether (MTBE)	µg/L	14	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*2.5 U*	N/A	N/A	N/A	*5 U*	*25 U*	N/A
Methylene Chloride	µg/L	5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*6.2 U*	N/A	N/A	N/A	*5 U*	**319**	N/A
Naphthalene	µg/L	0.12	**4,600**	N/A	**6,900**	**2,400**	**2,900**	**2,300**	**1,800**	N/A	**1,800**	**6,200**	**1,600**	**1,390**	N/A	N/A
o-Xylene	µg/L		**54**	N/A	**120**	**60**	**52**	**52**	**60**	**94**	**48**	**100**	**54**	N/A	N/A	N/A
Styrene	µg/L	100	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**91**	N/A	N/A	N/A	**22.9**	*25 U*	N/A
Toluene	µg/L	1,000	**99**	N/A	**460**	**110**	**51**	**87**	**110**	**260**	**120**	**520**	**93**	**76.7**	*25 U*	N/A
Xylenes	µg/L	10,000	**210**	N/A	**440**	**230**	**200**	**190**	**210**	**330**	**170**	**410**	**180**	**153**	*50 U*	N/A
Semivolatile Organic Compounds																
1,1-Biphenyl	µg/L	0.83	N/A	**11**	N/A	N/A	N/A	N/A	N/A	**7.6**	N/A	N/A	N/A	N/A	N/A	N/A
1,2-Dichlorobenzene	µg/L	600	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*1 U*
1,3-Dichlorobenzene	µg/L		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*1 U*
1,4-Dichlorobenzene	µg/L	75	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*1 U*
1,4-Dioxane	µg/L	0.46	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2,4,5-Trichlorophenol	µg/L	1,200	N/A	*5 U*	N/A	N/A	N/A	N/A	N/A	*5 U*	N/A	N/A	N/A	N/A	N/A	*2.6 U*
2,4-Dimethylphenol	µg/L	360	N/A	**17**	N/A	N/A	N/A	N/A	N/A	**23**	N/A	N/A	N/A	N/A	N/A	**2.7**
2,4-Dinitrotoluene	µg/L	0.24	N/A	*5 U*	N/A	N/A	N/A	N/A	N/A	*5 U*	N/A	N/A	N/A	N/A	N/A	**0.22 J**
2-Chloronaphthalene	µg/L	750	N/A	*2 U*	N/A	N/A	N/A	N/A	N/A	*2 U*	N/A	N/A	N/A	N/A	N/A	*1 U*
2-Methylnaphthalene	µg/L	36	N/A	**90**	N/A	N/A	N/A	N/A	N/A	**82**	N/A	N/A	N/A	N/A	N/A	**12.1**
2-Methylphenol	µg/L	930	N/A	**43**	N/A	N/A	N/A	N/A	N/A	**26**	N/A	N/A	N/A	N/A	N/A	**1.5 R**
3&4-Methylphenol(m&p Cresol)	µg/L	930	N/A	**52**	N/A	N/A	N/A	N/A	N/A	**31**	N/A	N/A	N/A	N/A	N/A	N/A
4-Chloro-3-methylphenol	µg/L		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*1 U*
Acenaphthene	µg/L	530	N/A	**5.7**	N/A	N/A	N/A	N/A	N/A	**4.4**	N/A	N/A	N/A	N/A	N/A	**15.3**
Acenaphthylene	µg/L	530	N/A	**71**	N/A	N/A	N/A	N/A	N/A	**65**	N/A	N/A	N/A	N/A	N/A	**5**
Acetophenone	µg/L	1,900	N/A	**2.8 J**	N/A	N/A	N/A	N/A	N/A	*5 U*	N/A	N/A	N/A	N/A	N/A	N/A

Table 3
Summary of Organics Detected in Groundwater
Container Terminal

Parameter	Units	PAL	CO203-MWS		CO204-MWS	CO205-MWS	CO206R-MWS			CO206R-MWS			CO207-MWS	CO208-MWS	CO20-PZM004	
			7/25/2023	2/10/2025	5/18/2023	7/25/2023	2/15/2024	6/7/2024	8/20/2024	11/4/2024	11/19/2024	2/11/2025	7/26/2023	10/10/2019	6/10/2015	6/18/2015
Aniline	µg/L		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**0.79 J**
Anthracene	µg/L	1,800	N/A	**3.5**	N/A	N/A	N/A	N/A	N/A	**3.4**	N/A	N/A	N/A	N/A	N/A	**4.0**
Benz[a]anthracene	µg/L	0.03	N/A	*2 U*	N/A	N/A	N/A	N/A	N/A	*2 U*	N/A	N/A	N/A	N/A	N/A	**0.53 J**
Benzaldehyde	µg/L	1,900	N/A	*5 U*	N/A	N/A	N/A	N/A	N/A	*5 U*	N/A	N/A	N/A	N/A	N/A	N/A
Benzo[a]pyrene	µg/L	0.2	N/A	*2 U*	N/A	N/A	N/A	N/A	N/A	*2 U*	N/A	N/A	N/A	N/A	N/A	*1 U*
Benzo[b]fluoranthene	µg/L	0.25	N/A	*2 U*	N/A	N/A	N/A	N/A	N/A	*2 U*	N/A	N/A	N/A	N/A	N/A	**0.19 J**
Benzo[g,h,i]perylene	µg/L		N/A	*2 U*	N/A	N/A	N/A	N/A	N/A	*2 U*	N/A	N/A	N/A	N/A	N/A	*1 U*
Benzo[k]fluoranthene	µg/L	2.5	N/A	*2 U*	N/A	N/A	N/A	N/A	N/A	*2 U*	N/A	N/A	N/A	N/A	N/A	*1 U*
bis(2-chloroethoxy)methane	µg/L	59	N/A	*5 U*	N/A	N/A	N/A	N/A	N/A	*5 U*	N/A	N/A	N/A	N/A	N/A	*1 U*
bis(2-Chloroethyl)ether	µg/L	0.014	N/A	*2 U*	N/A	N/A	N/A	N/A	N/A	*2 U*	N/A	N/A	N/A	N/A	N/A	*1 U*
bis(2-Ethylhexyl)phthalate	µg/L	6.0	N/A	*3 U*	N/A	N/A	N/A	N/A	N/A	*3 U*	N/A	N/A	N/A	N/A	N/A	*1 U*
Butylbenzylphthalate	µg/L		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**1 J**
Caprolactam	µg/L	9,900	N/A	*10 U*	N/A	N/A	N/A	N/A	N/A	*10 U*	N/A	N/A	N/A	N/A	N/A	N/A
Carbazole	µg/L		N/A	**75**	N/A	N/A	N/A	N/A	N/A	**49**	N/A	N/A	N/A	N/A	N/A	N/A
Chrysene	µg/L	25	N/A	*1.5 U*	N/A	N/A	N/A	N/A	N/A	*1.5 U*	N/A	N/A	N/A	N/A	N/A	**0.34 J**
Dibenz[a,h]anthracene	µg/L	0.025	N/A	*2 U*	N/A	N/A	N/A	N/A	N/A	*2 U*	N/A	N/A	N/A	N/A	N/A	*1 U*
Dibenzofuran	µg/L		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**16.3**
Diethylphthalate	µg/L	15,000	N/A	*5 U*	N/A	N/A	N/A	N/A	N/A	*5 U*	N/A	N/A	N/A	N/A	N/A	*1 U*
Di-n-butylphthalate	µg/L	900	N/A	**1.2 J**	N/A	N/A	N/A	N/A	N/A	*5 U*	N/A	N/A	N/A	N/A	N/A	*1 U*
Fluoranthene	µg/L	800	N/A	**3**	N/A	N/A	N/A	N/A	N/A	**3.7**	N/A	N/A	N/A	N/A	N/A	**9.7**
Fluorene	µg/L	290	N/A	**23**	N/A	N/A	N/A	N/A	N/A	**16**	N/A	N/A	N/A	N/A	N/A	**16.9 R**
Indeno[1,2,3-c,d]pyrene	µg/L	0.25	N/A	*2 U*	N/A	N/A	N/A	N/A	N/A	*2 U*	N/A	N/A	N/A	N/A	N/A	*1 U*
Naphthalene	µg/L	0.12	N/A	**2,900**	N/A	N/A	N/A	N/A	N/A	**1,800**	N/A	N/A	N/A	N/A	N/A	**231 B**
N-Nitrosodiphenylamine	µg/L	12	N/A	*2 U*	N/A	N/A	N/A	N/A	N/A	*2 U*	N/A	N/A	N/A	N/A	N/A	N/A
Pentachlorophenol	µg/L	1.0	N/A	*10 U*	N/A	N/A	N/A	N/A	N/A	*10 U*	N/A	N/A	N/A	N/A	N/A	*2.6 U*
Phenanthrene	µg/L		N/A	**22**	N/A	N/A	N/A	N/A	N/A	**19**	N/A	N/A	N/A	N/A	N/A	**35.9 R**
Phenol	µg/L	5,800	N/A	**18**	N/A	N/A	N/A	N/A	N/A	**5.8**	N/A	N/A	N/A	N/A	N/A	*1 U*
Pyrene	µg/L	120	N/A	**1.7**	N/A	N/A	N/A	N/A	N/A	**2.2**	N/A	N/A	N/A	N/A	N/A	**5.5**
Pyridine	µg/L		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*1 U*
Total Petroleum Hydrocarbons																
Diesel Range Organics	µg/L	47	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Gasoline Range Organics	µg/L	47	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Oil and Grease	µg/L	47	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Detection in bold
Values highlighted in yellow indicate an exceedance of the Project Action Limit (PAL)
N/A indicates that the parameter was not analyzed for this sample

J: The positive result reported for this analyte is a quantitative estimate.
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.
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 3
Summary of Organics Detected in Groundwater
Container Terminal

Parameter	Units	PAL	CO211-MWS	CO212A-PZM	CO212-MWS		CO216-MWS	CO23-PZM008							CO24-PZM007		
			3/11/2020	5/20/2021	2/6/2020	11/5/2024	4/10/2020	6/10/2015	8/15/2023	11/15/2023	3/5/2024	6/7/2024	8/20/2024	11/19/2024	6/10/2015	8/15/2023	11/15/2023
Volatile Organic Compounds																	
1,1-Dichloroethane	µg/L	2.7	*1 U*	*1 U*	*5 U*	*30 U*	*5 U*	*0.93 U*	N/A	N/A	N/A	N/A	N/A	N/A	*0.19 U*	N/A	N/A
1,2-Dichlorobenzene	µg/L	600	**0.5 J**	*1 U*	*5 U*	*100 U*	*5 U*	*0.94 U*	N/A	N/A	N/A	N/A	N/A	N/A	*0.19 U*	N/A	N/A
1,3-Dichlorobenzene	µg/L		*1 U*	*1 U*	N/A	*100 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1,4-Dichlorobenzene	µg/L	75	*1 U*	*1 U*	*5 U*	*100 U*	*5 U*	*1.2 U*	N/A	N/A	N/A	N/A	N/A	N/A	*0.24 U*	N/A	N/A
1,4-Dioxane	µg/L	0.46	N/A	N/A	N/A	*120 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2-Butanone (MEK)	µg/L	5,600	*10 U*	*10 U*	*50 U*	*200 U*	*50 U*	*12 U*	N/A	N/A	N/A	N/A	N/A	N/A	*2.4 U*	N/A	N/A
4-Methyl-2-pentanone (MIBK)	µg/L	1,200	*10 U*	*10 U*	*50 U*	*200 U*	*50 U*	*2.8 U*	N/A	N/A	N/A	N/A	N/A	N/A	*0.57 U*	N/A	N/A
Acetone	µg/L	14,000	*10 U*	*10 U*	**32.1 J**	*200 U*	*50 U*	*11.4 U*	N/A	N/A	N/A	N/A	N/A	N/A	*2.3 U*	N/A	N/A
Benzene	µg/L	5	**369**	*1 U*	**10,600**	**4,400**	**53.4**	**531**	**320**	**320**	**410**	**840**	**390**	**380**	**4.8**	**3.9 J**	**7.7**
Bromomethane	µg/L	7.5	*1 U*	*1 U*	*5 U*	*40 U*	*5 U*	*2.9 U*	N/A	N/A	N/A	N/A	N/A	N/A	*0.58 U*	N/A	N/A
Carbon disulfide	µg/L	810	*1 U*	*1 U*	*5 U*	*200 U*	*5 U*	*1.6 U*	N/A	N/A	N/A	N/A	N/A	N/A	*0.32 U*	N/A	N/A
Chlorobenzene	µg/L	100	*1 U*	*1 U*	**10.7**	**9.2 J**	*5 U*	*0.65 U*	N/A	N/A	N/A	N/A	N/A	N/A	*0.13 U*	N/A	N/A
Chloroform	µg/L	0.22	*1 U*	*1 U*	*5 U*	*30 U*	*5 U*	*0.93 U*	N/A	N/A	N/A	N/A	N/A	N/A	*0.19 U*	N/A	N/A
Chloromethane	µg/L	190	*1 U*	*1 U*	*5 U*	*100 U*	*5 U*	*1.3 U*	N/A	N/A	N/A	N/A	N/A	N/A	*0.26 U*	N/A	N/A
Cyclohexane	µg/L	13,000	*10 U*	*10 U*	N/A	*400 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ethylbenzene	µg/L	700	**0.94 J**	*1 U*	**727**	**580**	**2.4 J**	**22.2**	**20**	**16**	**24**	**24**	**21**	**21**	**7.2**	**4.2 J**	**7**
Isopropylbenzene	µg/L	450	*1 U*	*1 U*	N/A	**22**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
m&p-Xylene	µg/L		*2 U*	*2 U*	N/A	**5,900**	N/A	N/A	**230**	**190**	**280**	**310**	**260**	**250**	N/A	*20 U*	**14**
Methyl Acetate	µg/L	20,000	*5 U*	*5 U*	N/A	*80 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Methyl tert-butyl ether (MTBE)	µg/L	14	*1 U*	*1 U*	*5 U*	*40 U*	*5 U*	*0.87 U*	N/A	N/A	N/A	N/A	N/A	N/A	*0.17 U*	N/A	N/A
Methylene Chloride	µg/L	5	*1 U*	*1 U*	**4.6 J**	*100 U*	*5 U*	**6.6 B**	N/A	N/A	N/A	N/A	N/A	N/A	*0.59 U*	N/A	N/A
Naphthalene	µg/L	0.12	N/A	N/A	**19,000**	N/A	**2,850**	**1,370**	**2,900**	**2,600**	**3,200**	**3,800**	**3,200**	**3,200**	**2,810**	**2,000**	**2,000**
o-Xylene	µg/L		*1 U*	*1 U*	N/A	**2,200**	N/A	N/A	**87**	**75**	**110**	**110**	**100**	**100**	N/A	*20 U*	*10 U*
Styrene	µg/L	100	*1 U*	*1 U*	**664**	**440**	*5 U*	*10.7*	N/A	N/A	N/A	N/A	N/A	N/A	**1.3**	N/A	N/A
Toluene	µg/L	1,000	*1 U*	*1 U*	**7,930**	**5,300**	**4.6 J**	**276**	**70**	**150**	**220**	**540**	**190**	**210**	**4.2**	*15 U*	**5.6 J**
Xylenes	µg/L	10,000	*3 U*	*3 U*	**7,790**	**8,100**	**10.3 J**	**383**	**320**	**270**	**390**	**420**	**360**	**350**	**17**	*20 U*	**14**
Semivolatile Organic Compounds																	
1,1-Biphenyl	µg/L	0.83	*0.98 U*	N/A	N/A	**110**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1,2-Dichlorobenzene	µg/L	600	N/A	N/A	N/A	N/A	N/A	*0.16 U*	N/A	N/A	N/A	N/A	N/A	N/A	*0.16 U*	N/A	N/A
1,3-Dichlorobenzene	µg/L		N/A	N/A	N/A	N/A	N/A	*0.21 U*	N/A	N/A	N/A	N/A	N/A	N/A	*0.21 U*	N/A	N/A
1,4-Dichlorobenzene	µg/L	75	N/A	N/A	N/A	N/A	N/A	*0.18 U*	N/A	N/A	N/A	N/A	N/A	N/A	*0.18 U*	N/A	N/A
1,4-Dioxane	µg/L	0.46	**0.15**	*0.094 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2,4,5-Trichlorophenol	µg/L	1,200	*2.4 U*	N/A	N/A	*5 U*	N/A	*0.16 U*	N/A	N/A	N/A	N/A	N/A	N/A	*0.16 U*	N/A	N/A
2,4-Dimethylphenol	µg/L	360	**2.3**	N/A	N/A	**54**	N/A	**41.1**	N/A	N/A	N/A	N/A	N/A	N/A	**0.53 J**	N/A	N/A
2,4-Dinitrotoluene	µg/L	0.24	*0.98 U*	N/A	N/A	*5 U*	N/A	*0.12 U*	N/A	N/A	N/A	N/A	N/A	N/A	*0.12 U*	N/A	N/A
2-Chloronaphthalene	µg/L	750	*0.98 U*	N/A	N/A	*2 U*	N/A	*0.18 U*	N/A	N/A	N/A	N/A	N/A	N/A	*0.18 U*	N/A	N/A
2-Methylnaphthalene	µg/L	36	*0.98 U*	**0.055 J**	N/A	**81**	N/A	**27.5**	N/A	N/A	N/A	N/A	N/A	N/A	**86.8**	N/A	N/A
2-Methylphenol	µg/L	930	*0.98 U*	N/A	N/A	**66**	N/A	**43.2**	N/A	N/A	N/A	N/A	N/A	N/A	*0.19 U*	N/A	N/A
3&4-Methylphenol(m&p Cresol)	µg/L	930	*2 U*	N/A	N/A	**120**	N/A	**74.4**	N/A	N/A	N/A	N/A	N/A	N/A	*0.36 U*	N/A	N/A
4-Chloro-3-methylphenol	µg/L		N/A	N/A	N/A	N/A	N/A	*0.16 U*	N/A	N/A	N/A	N/A	N/A	N/A	*0.16 U*	N/A	N/A
Acenaphthene	µg/L	530	**2.5**	*0.094 U*	N/A	*2 U*	N/A	**2.4**	N/A	N/A	N/A	N/A	N/A	N/A	**17.9**	N/A	N/A
Acenaphthylene	µg/L	530	**0.75**	**0.02 J**	N/A	**9.0**	N/A	**11**	N/A	N/A	N/A	N/A	N/A	N/A	**58.5**	N/A	N/A
Acetophenone	µg/L	1,900	*0.98 U*	N/A	N/A	**9.6**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Table 3
Summary of Organics Detected in Groundwater
Container Terminal

Parameter	Units	PAL	CO211-MWS	CO212A-PZM	CO212-MWS		CO216-MWS	CO23-PZM008							CO24-PZM007		
			3/11/2020	5/20/2021	2/6/2020	11/5/2024	4/10/2020	6/10/2015	8/15/2023	11/15/2023	3/5/2024	6/7/2024	8/20/2024	11/19/2024	6/10/2015	8/15/2023	11/15/2023
Aniline	µg/L		N/A	N/A	N/A	N/A	N/A	**12.9**	N/A	N/A	N/A	N/A	N/A	N/A	**9.0**	N/A	N/A
Anthracene	µg/L	1,800	**1.9**	**0.011 J**	N/A	**1.2 J**	N/A	**1.6**	N/A	N/A	N/A	N/A	N/A	N/A	**8.9**	N/A	N/A
Benz[a]anthracene	µg/L	0.03	**2.0**	*0.094 U*	N/A	*2 U*	N/A	**0.32 J**	N/A	N/A	N/A	N/A	N/A	N/A	**2.5**	N/A	N/A
Benzaldehyde	µg/L	1,900	*0.98 U*	N/A	N/A	*5 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Benzo[a]pyrene	µg/L	0.2	**2.0**	*0.094 U*	N/A	*2 U*	N/A	*0.063 U*	N/A	N/A	N/A	N/A	N/A	N/A	**2.0**	N/A	N/A
Benzo[b]fluoranthene	µg/L	0.25	**2.5**	*0.094 U*	N/A	*2 U*	N/A	**0.3 J**	N/A	N/A	N/A	N/A	N/A	N/A	**3.8**	N/A	N/A
Benzo[g,h,i]perylene	µg/L		**1.2**	*0.094 U*	N/A	*2 U*	N/A	*0.11 U*	N/A	N/A	N/A	N/A	N/A	N/A	**0.5 J**	N/A	N/A
Benzo[k]fluoranthene	µg/L	2.5	**1.1**	*0.094 U*	N/A	*2 U*	N/A	*0.23 U*	N/A	N/A	N/A	N/A	N/A	N/A	**3.8**	N/A	N/A
bis(2-chloroethoxy)methane	µg/L	59	*0.98 U*	N/A	N/A	*5 U*	N/A	*0.36 U*	N/A	N/A	N/A	N/A	N/A	N/A	*0.36 U*	N/A	N/A
bis(2-Chloroethyl)ether	µg/L	0.014	*0.98 U*	N/A	N/A	*2 U*	N/A	*0.22 U*	N/A	N/A	N/A	N/A	N/A	N/A	*0.22 U*	N/A	N/A
bis(2-Ethylhexyl)phthalate	µg/L	6.0	*0.98 U*	N/A	N/A	*3 U*	N/A	**1.5**	N/A	N/A	N/A	N/A	N/A	N/A	**0.68 J**	N/A	N/A
Butylbenzylphthalate	µg/L		N/A	N/A	N/A	N/A	N/A	*0.16 U*	N/A	N/A	N/A	N/A	N/A	N/A	*0.16 U*	N/A	N/A
Caprolactam	µg/L	9,900	*2.4 U*	N/A	N/A	*10 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Carbazole	µg/L		**0.53 J**	N/A	N/A	**15**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Chrysene	µg/L	25	**2.0**	*0.094 U*	N/A	*1.5 U*	N/A	**0.33 J**	N/A	N/A	N/A	N/A	N/A	N/A	**2.1**	N/A	N/A
Dibenz[a,h]anthracene	µg/L	0.025	*0.98 U*	*0.066 U*	N/A	*2 U*	N/A	*0.11 U*	N/A	N/A	N/A	N/A	N/A	N/A	*0.11 U*	N/A	N/A
Dibenzofuran	µg/L		N/A	N/A	N/A	N/A	N/A	**6.9**	N/A	N/A	N/A	N/A	N/A	N/A	**40.5**	N/A	N/A
Diethylphthalate	µg/L	15,000	*0.98 U*	N/A	N/A	*5 U*	N/A	*0.11 U*	N/A	N/A	N/A	N/A	N/A	N/A	*0.11 U*	N/A	N/A
Di-n-butylphthalate	µg/L	900	*0.98 U*	N/A	N/A	*5 U*	N/A	*0.082 U*	N/A	N/A	N/A	N/A	N/A	N/A	*0.082 U*	N/A	N/A
Fluoranthene	µg/L	800	**16.6**	**0.0096 J**	N/A	**2.2**	N/A	**2.1**	N/A	N/A	N/A	N/A	N/A	N/A	**18**	N/A	N/A
Fluorene	µg/L	290	**0.74**	**0.018 J**	N/A	**8.0**	N/A	**7.8**	N/A	N/A	N/A	N/A	N/A	N/A	**27.6**	N/A	N/A
Indeno[1,2,3-c,d]pyrene	µg/L	0.25	**1.1**	*0.094 U*	N/A	*2 U*	N/A	*0.13 U*	N/A	N/A	N/A	N/A	N/A	N/A	**0.58 J**	N/A	N/A
Naphthalene	µg/L	0.12	**4.9**	**1.2**	N/A	**3,800**	N/A	**886**	N/A	N/A	N/A	N/A	N/A	N/A	**1,220**	N/A	N/A
N-Nitrosodiphenylamine	µg/L	12	*0.98 U*	N/A	N/A	*2 U*	N/A	*0.31 U*	N/A	N/A	N/A	N/A	N/A	N/A	*0.31 U*	N/A	N/A
Pentachlorophenol	µg/L	1.0	*2.4 U*	N/A	N/A	*10 U*	N/A	*0.11 U*	N/A	N/A	N/A	N/A	N/A	N/A	*0.11 U*	N/A	N/A
Phenanthrene	µg/L		**4.0**	**0.029 J**	N/A	**7.9**	N/A	**9.3**	N/A	N/A	N/A	N/A	N/A	N/A	**86.9**	N/A	N/A
Phenol	µg/L	5,800	**0.43 J**	N/A	N/A	**100**	N/A	**41.8**	N/A	N/A	N/A	N/A	N/A	N/A	*0.12 U*	N/A	N/A
Pyrene	µg/L	120	**8.4**	*0.094 U*	N/A	*2 U*	N/A	**1.4**	N/A	N/A	N/A	N/A	N/A	N/A	**10.3**	N/A	N/A
Pyridine	µg/L		N/A	N/A	N/A	N/A	N/A	**8.1**	N/A	N/A	N/A	N/A	N/A	N/A	**22.7**	N/A	N/A
Total Petroleum Hydrocarbons																	
Diesel Range Organics	µg/L	47	**958**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Gasoline Range Organics	µg/L	47	**616**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Oil and Grease	µg/L	47	*4,750 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Detection in bold
Values highlighted in yellow indicate an exceedance of the Project Action Limit (PAL)
N/A indicates that the parameter was not analyzed for this sample

J: The positive result reported for this analyte is a quantitative estimate.
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.
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 3
Summary of Organics Detected in Groundwater
Container Terminal

Parameter	Units	PAL	CO24-PZM007					CO25-PZM008						CO26-PZM007			
			11/15/2023	6/7/2024	8/20/2024	11/19/2024	2/13/2025	11/28/2023	5/18/2023	3/5/2024	6/7/2024	8/20/2024	11/19/2024	6/10/2015	8/14/2023	11/15/2023	3/5/2024
Volatile Organic Compounds																	
1,1-Dichloroethane	µg/L	2.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*25 U*	N/A	N/A	N/A
1,2-Dichlorobenzene	µg/L	600	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*25 U*	N/A	N/A	N/A
1,3-Dichlorobenzene	µg/L		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1,4-Dichlorobenzene	µg/L	75	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*25 U*	N/A	N/A	N/A
1,4-Dioxane	µg/L	0.46	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2-Butanone (MEK)	µg/L	5,600	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*125 U*	N/A	N/A	N/A
4-Methyl-2-pentanone (MIBK)	µg/L	1,200	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*125 U*	N/A	N/A	N/A
Acetone	µg/L	14,000	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*625 U*	N/A	N/A	N/A
Benzene	µg/L	5	**3.5 J**	**1,700**	**3.2 J**	**3.8 J**	**4.4 J**	**1,000**	**1,400**	**950**	**830**	**1,100**	**980**	**406**	**120**	**240**	**39**
Bromomethane	µg/L	7.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*50 U*	N/A	N/A	N/A
Carbon disulfide	µg/L	810	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*50 U*	N/A	N/A	N/A
Chlorobenzene	µg/L	100	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*25 U*	N/A	N/A	N/A
Chloroform	µg/L	0.22	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*25 U*	N/A	N/A	N/A
Chloromethane	µg/L	190	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*25 U*	N/A	N/A	N/A
Cyclohexane	µg/L	13,000	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ethylbenzene	µg/L	700	**2.5 J**	**14**	**3.2 J**	**2.9 J**	**2.5 J**	**25 J**	**32 J**	**28 J**	**24 J**	**36 J**	**32 J**	**14.2 J**	**1.8**	**4.4**	**1.6 J**
Isopropylbenzene	µg/L	450	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
m&p-Xylene	µg/L		*10 U*	**200**	**3.4 J**	*10 U*	*10 U*	**480**	**610**	**510**	**470**	**680**	**600**	N/A	**26**	**65**	**26**
Methyl Acetate	µg/L	20,000	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Methyl tert-butyl ether (MTBE)	µg/L	14	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*25 U*	N/A	N/A	N/A
Methylene Chloride	µg/L	5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**89.5**	N/A	N/A	N/A
Naphthalene	µg/L	0.12	**1,600**	**1,200**	**1,400**	**1,800**	**1,700**	**14,000**	**15,000**	**17,000**	**14,000**	**13,000**	**15,000**	**4,020**	**400**	**660**	**400**
o-Xylene	µg/L		*10 U*	**54**	*10 U*	*10 U*	*10 U*	**160**	**220**	**170**	**170**	**240**	**210**	N/A	**12**	**28**	**9.5**
Styrene	µg/L	100	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**72.1**	N/A	N/A	N/A
Toluene	µg/L	1,000	**2 J**	**940**	*7.5 U*	**2 J**	**2.3 J**	**940**	**1,100**	**870**	**730**	**1,000**	**940**	**262**	**41**	**100**	**23**
Xylenes	µg/L	10,000	*10 U*	**250**	**3.4 J**	*10 U*	*10 U*	**640**	**830**	**680**	**640**	**920**	**810**	**312**	**38**	**93**	**36**
Semivolatile Organic Compounds																	
1,1-Biphenyl	µg/L	0.83	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1,2-Dichlorobenzene	µg/L	600	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*0.16 U*	N/A	N/A	N/A
1,3-Dichlorobenzene	µg/L		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*0.21 U*	N/A	N/A	N/A
1,4-Dichlorobenzene	µg/L	75	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*0.18 U*	N/A	N/A	N/A
1,4-Dioxane	µg/L	0.46	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2,4,5-Trichlorophenol	µg/L	1,200	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**0.28 J**	N/A	N/A	N/A
2,4-Dimethylphenol	µg/L	360	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**41.3**	N/A	N/A	N/A
2,4-Dinitrotoluene	µg/L	0.24	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*0.12 U*	N/A	N/A	N/A
2-Chloronaphthalene	µg/L	750	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*0.19 U*	N/A	N/A	N/A
2-Methylnaphthalene	µg/L	36	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**80.1**	N/A	N/A	N/A
2-Methylphenol	µg/L	930	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**31.6**	N/A	N/A	N/A
3&4-Methylphenol(m&p Cresol)	µg/L	930	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**47.1**	N/A	N/A	N/A
4-Chloro-3-methylphenol	µg/L		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*0.17 U*	N/A	N/A	N/A
Acenaphthene	µg/L	530	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**3.9**	N/A	N/A	N/A
Acenaphthylene	µg/L	530	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**62.8**	N/A	N/A	N/A
Acetophenone	µg/L	1,900	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Table 3
Summary of Organics Detected in Groundwater
Container Terminal

Parameter	Units	PAL	CO24-PZM007					CO25-PZM008						CO26-PZM007			
			11/15/2023	6/7/2024	8/20/2024	11/19/2024	2/13/2025	11/28/2023	5/18/2023	3/5/2024	6/7/2024	8/20/2024	11/19/2024	6/10/2015	8/14/2023	11/15/2023	3/5/2024
Aniline	µg/L		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**29.2**	N/A	N/A	N/A
Anthracene	µg/L	1,800	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**3.8**	N/A	N/A	N/A
Benz[a]anthracene	µg/L	0.03	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*0.11 U*	N/A	N/A	N/A
Benzaldehyde	µg/L	1,900	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Benzo[a]pyrene	µg/L	0.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*0.063 U*	N/A	N/A	N/A
Benzo[b]fluoranthene	µg/L	0.25	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*0.17 U*	N/A	N/A	N/A
Benzo[g,h,i]perylene	µg/L		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*0.11 U*	N/A	N/A	N/A
Benzo[k]fluoranthene	µg/L	2.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*0.24 U*	N/A	N/A	N/A
bis(2-chloroethoxy)methane	µg/L	59	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*0.36 U*	N/A	N/A	N/A
bis(2-Chloroethyl)ether	µg/L	0.014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*0.22 U*	N/A	N/A	N/A
bis(2-Ethylhexyl)phthalate	µg/L	6.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*0.13 U*	N/A	N/A	N/A
Butylbenzylphthalate	µg/L		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*0.16 U*	N/A	N/A	N/A
Caprolactam	µg/L	9,900	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Carbazole	µg/L		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Chrysene	µg/L	25	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*0.13 U*	N/A	N/A	N/A
Dibenz[a,h]anthracene	µg/L	0.025	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*0.11 U*	N/A	N/A	N/A
Dibenzofuran	µg/L		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**17.3**	N/A	N/A	N/A
Diethylphthalate	µg/L	15,000	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*0.11 U*	N/A	N/A	N/A
Di-n-butylphthalate	µg/L	900	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*0.082 U*	N/A	N/A	N/A
Fluoranthene	µg/L	800	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**2.2**	N/A	N/A	N/A
Fluorene	µg/L	290	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**19**	N/A	N/A	N/A
Indeno[1,2,3-c,d]pyrene	µg/L	0.25	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*0.13 U*	N/A	N/A	N/A
Naphthalene	µg/L	0.12	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**1350 B**	N/A	N/A	N/A
N-Nitrosodiphenylamine	µg/L	12	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*0.32 U*	N/A	N/A	N/A
Pentachlorophenol	µg/L	1.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**1.9 J**	N/A	N/A	N/A
Phenanthrene	µg/L		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**28.5**	N/A	N/A	N/A
Phenol	µg/L	5,800	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**19.8**	N/A	N/A	N/A
Pyrene	µg/L	120	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**1.1**	N/A	N/A	N/A
Pyridine	µg/L		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**38.1**	N/A	N/A	N/A
Total Petroleum Hydrocarbons																	
Diesel Range Organics	µg/L	47	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Gasoline Range Organics	µg/L	47	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Oil and Grease	µg/L	47	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Detection in bold
Values highlighted in yellow indicate an exceedance of the Project Action Limit (PAL)
N/A indicates that the parameter was not analyzed for this sample

J: The positive result reported for this analyte is a quantitative estimate.
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.
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 3
Summary of Organics Detected in Groundwater
Container Terminal

Parameter	Units	PAL	CO26-PZM007			CO35-PZM013		CO55-PZM000						CO56-PZP001			
			6/7/2024	8/14/2024	11/20/2024	6/11/2015	7/26/2023	8/10/2023	11/16/2023	3/8/2024	6/7/2024	8/15/2024	11/20/2024	8/10/2023	11/15/2023	3/5/2024	6/7/2024
Volatile Organic Compounds																	
1,1-Dichloroethane	µg/L	2.7	N/A	N/A	N/A	*5 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1,2-Dichlorobenzene	µg/L	600	N/A	N/A	N/A	*5 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1,3-Dichlorobenzene	µg/L		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1,4-Dichlorobenzene	µg/L	75	N/A	N/A	N/A	*5 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1,4-Dioxane	µg/L	0.46	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2-Butanone (MEK)	µg/L	5,600	N/A	N/A	N/A	*25 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4-Methyl-2-pentanone (MIBK)	µg/L	1,200	N/A	N/A	N/A	*25 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Acetone	µg/L	14,000	N/A	N/A	N/A	*125 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Benzene	µg/L	5	**210**	**160**	**210**	**109**	**110**	**2.8**	**48**	*0.5 U*	**6.6**	**1.4**	**65**	**160**	**230**	**100**	**94**
Bromomethane	µg/L	7.5	N/A	N/A	N/A	*10 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Carbon disulfide	µg/L	810	N/A	N/A	N/A	*10 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Chlorobenzene	µg/L	100	N/A	N/A	N/A	*5 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Chloroform	µg/L	0.22	N/A	N/A	N/A	*5 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Chloromethane	µg/L	190	N/A	N/A	N/A	*5 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cyclohexane	µg/L	13,000	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ethylbenzene	µg/L	700	**7.9 J**	**3.7 J**	**5.7**	**2.8 J**	**2.8**	**0.17 J**	**1.1**	*0.5 U*	**0.3 J**	*0.5 U*	**1.6**	**8.0**	**7.5 J**	**6.8**	**5.4**
Isopropylbenzene	µg/L	450	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
m&p-Xylene	µg/L		**140**	**56**	**85**	N/A	**24**	**1.3**	**11**	*1 U*	**2**	**0.42 J**	**14**	**120**	**120**	**110**	**81**
Methyl Acetate	µg/L	20,000	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Methyl tert-butyl ether (MTBE)	µg/L	14	N/A	N/A	N/A	*5 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Methylene Chloride	µg/L	5	N/A	N/A	N/A	**27.9 B**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Naphthalene	µg/L	0.12	**2,600**	**800**	**1,200**	**457**	**420**	**12**	**130**	*1 U*	**24**	**1.2**	**130**	**1,900**	**1,900**	**1,700**	**1,200**
o-Xylene	µg/L		**54**	**23**	**37**	N/A	**14**	**0.64 J**	**5.4**	*1 U*	**0.92 J**	*1 U*	**7.3**	**46**	**45**	**40**	**30**
Styrene	µg/L	100	N/A	N/A	N/A	**3.4 J**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Toluene	µg/L	1,000	**130**	**79**	**110**	**23.5**	**21**	**1.6**	**16**	*0.75 U*	**2**	**0.58 J**	**26**	**73**	**76**	**22**	**9.2**
Xylenes	µg/L	10,000	**190**	**79**	**120**	**38.4**	**38**	**1.9 J**	**16**	*1 U*	**2.9 J**	**0.42 J**	**21**	**170**	**170**	**150**	**110**
Semivolatile Organic Compounds																	
1,1-Biphenyl	µg/L	0.83	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1,2-Dichlorobenzene	µg/L	600	N/A	N/A	N/A	*0.16 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1,3-Dichlorobenzene	µg/L		N/A	N/A	N/A	*0.21 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1,4-Dichlorobenzene	µg/L	75	N/A	N/A	N/A	*0.18 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1,4-Dioxane	µg/L	0.46	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2,4,5-Trichlorophenol	µg/L	1,200	N/A	N/A	N/A	*0.16 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2,4-Dimethylphenol	µg/L	360	N/A	N/A	N/A	**4.5**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2,4-Dinitrotoluene	µg/L	0.24	N/A	N/A	N/A	*0.12 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2-Chloronaphthalene	µg/L	750	N/A	N/A	N/A	*0.18 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2-Methylnaphthalene	µg/L	36	N/A	N/A	N/A	**9.0**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2-Methylphenol	µg/L	930	N/A	N/A	N/A	**5.5**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
3&4-Methylphenol(m&p Cresol)	µg/L	930	N/A	N/A	N/A	**6.6**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4-Chloro-3-methylphenol	µg/L		N/A	N/A	N/A	*0.17 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Acenaphthene	µg/L	530	N/A	N/A	N/A	**2.5**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Acenaphthylene	µg/L	530	N/A	N/A	N/A	**3.0**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Acetophenone	µg/L	1,900	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Table 3
Summary of Organics Detected in Groundwater
Container Terminal

Parameter	Units	PAL	CO26-PZM007			CO35-PZM013		CO55-PZM000						CO56-PZP001			
			6/7/2024	8/14/2024	11/20/2024	6/11/2015	7/26/2023	8/10/2023	11/16/2023	3/8/2024	6/7/2024	8/15/2024	11/20/2024	8/10/2023	11/15/2023	3/5/2024	6/7/2024
Aniline	µg/L		N/A	N/A	N/A	**5.1**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Anthracene	µg/L	1,800	N/A	N/A	N/A	**0.53 J**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Benz[a]anthracene	µg/L	0.03	N/A	N/A	N/A	*0.11 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Benzaldehyde	µg/L	1,900	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Benzo[a]pyrene	µg/L	0.2	N/A	N/A	N/A	*0.063 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Benzo[b]fluoranthene	µg/L	0.25	N/A	N/A	N/A	*0.17 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Benzo[g,h,i]perylene	µg/L		N/A	N/A	N/A	*0.11 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Benzo[k]fluoranthene	µg/L	2.5	N/A	N/A	N/A	*0.23 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
bis(2-chloroethoxy)methane	µg/L	59	N/A	N/A	N/A	*0.36 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
bis(2-Chloroethyl)ether	µg/L	0.014	N/A	N/A	N/A	*0.22 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
bis(2-Ethylhexyl)phthalate	µg/L	6.0	N/A	N/A	N/A	**0.27 J**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Butylbenzylphthalate	µg/L		N/A	N/A	N/A	*0.16 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Caprolactam	µg/L	9,900	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Carbazole	µg/L		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Chrysene	µg/L	25	N/A	N/A	N/A	*0.13 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dibenz[a,h]anthracene	µg/L	0.025	N/A	N/A	N/A	*0.11 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dibenzofuran	µg/L		N/A	N/A	N/A	**2.0**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Diethylphthalate	µg/L	15,000	N/A	N/A	N/A	*0.11 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Di-n-butylphthalate	µg/L	900	N/A	N/A	N/A	*0.082 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Fluoranthene	µg/L	800	N/A	N/A	N/A	**0.72 J**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Fluorene	µg/L	290	N/A	N/A	N/A	**2.4**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Indeno[1,2,3-c,d]pyrene	µg/L	0.25	N/A	N/A	N/A	*0.13 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Naphthalene	µg/L	0.12	N/A	N/A	N/A	**210**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N-Nitrosodiphenylamine	µg/L	12	N/A	N/A	N/A	*0.31 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pentachlorophenol	µg/L	1.0	N/A	N/A	N/A	**0.42 J**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Phenanthrene	µg/L		N/A	N/A	N/A	**3.7**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Phenol	µg/L	5,800	N/A	N/A	N/A	**0.34 J**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pyrene	µg/L	120	N/A	N/A	N/A	**0.66 J**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pyridine	µg/L		N/A	N/A	N/A	**3.1**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Petroleum Hydrocarbons																	
Diesel Range Organics	µg/L	47	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Gasoline Range Organics	µg/L	47	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Oil and Grease	µg/L	47	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Detection in bold
Values highlighted in yellow indicate an exceedance of the Project Action Limit (PAL)
N/A indicates that the parameter was not analyzed for this sample

J: The positive result reported for this analyte is a quantitative estimate.
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.
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 3
Summary of Organics Detected in Groundwater
Container Terminal

Parameter	Units	PAL	CO56-PZP001		CO57-PZP002							CO58-PZM001				
			8/14/2024	11/20/2024	6/10/2015	8/14/2023	11/16/2023	3/8/2024	6/7/2024	8/19/2024	11/19/2024	8/14/2023	11/14/2023	3/5/2024	6/7/2024	8/15/2024
Volatile Organic Compounds																
1,1-Dichloroethane	µg/L	2.7	N/A	N/A	*1 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1,2-Dichlorobenzene	µg/L	600	N/A	N/A	*1 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1,3-Dichlorobenzene	µg/L		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1,4-Dichlorobenzene	µg/L	75	N/A	N/A	*1 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1,4-Dioxane	µg/L	0.46	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2-Butanone (MEK)	µg/L	5,600	N/A	N/A	*5 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4-Methyl-2-pentanone (MIBK)	µg/L	1,200	N/A	N/A	*5 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Acetone	µg/L	14,000	N/A	N/A	*5 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Benzene	µg/L	5	**94**	**120**	**9.7**	**0.16 J**	**0.32 J**	*0.5 U*	**270**	**0.26 J**	**1.8**	**110**	**70**	**36**	**33**	**29**
Bromomethane	µg/L	7.5	N/A	N/A	**10.8**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Carbon disulfide	µg/L	810	N/A	N/A	*1 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Chlorobenzene	µg/L	100	N/A	N/A	*1 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Chloroform	µg/L	0.22	N/A	N/A	*1 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Chloromethane	µg/L	190	N/A	N/A	**5.7**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cyclohexane	µg/L	13,000	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ethylbenzene	µg/L	700	**4.8 J**	**5.4**	*1 U*	*0.5 U*	*0.5 U*	*0.5 U*	**6.3**	*0.5 U*	*0.5 U*	**5.4**	**2.8**	**3.0**	**1.5**	**1.2**
Isopropylbenzene	µg/L	450	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
m&p-Xylene	µg/L		**77**	**82**	N/A	*1 U*	*1 U*	*1 U*	**100**	*1 U*	**0.42 J**	**59**	**31**	**17**	**14**	**16**
Methyl Acetate	µg/L	20,000	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Methyl tert-butyl ether (MTBE)	µg/L	14	N/A	N/A	*1 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Methylene Chloride	µg/L	5	N/A	N/A	**1 B**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Naphthalene	µg/L	0.12	**1,200**	**1,600**	**3.3**	*1 U*	*1 U*	*1 U*	**220**	**0.62 J**	**0.64 J**	**850**	**380**	**220**	**230**	**170**
o-Xylene	µg/L		**29**	**31**	N/A	*1 U*	*1 U*	*1 U*	**33**	*1 U*	*1 U*	**25**	**13**	**10**	**6.9**	**6.6**
Styrene	µg/L	100	N/A	N/A	*1 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Toluene	µg/L	1,000	**28**	**21**	**0.88 J**	*0.75 U*	**0.25 J**	**0.34 J**	**310**	**0.44 J**	**1.5**	**36**	**21**	**4.1**	**2.6**	**3.4**
Xylenes	µg/L	10,000	**110**	**110**	*1 U*	*1 U*	*1 U*	*1 U*	**130**	*1 U*	**0.42 J**	**84**	**44**	**27**	**21**	**23**
Semivolatile Organic Compounds																
1,1-Biphenyl	µg/L	0.83	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1,2-Dichlorobenzene	µg/L	600	N/A	N/A	*1 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1,3-Dichlorobenzene	µg/L		N/A	N/A	*1 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1,4-Dichlorobenzene	µg/L	75	N/A	N/A	*1 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1,4-Dioxane	µg/L	0.46	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2,4,5-Trichlorophenol	µg/L	1,200	N/A	N/A	*2.6 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2,4-Dimethylphenol	µg/L	360	N/A	N/A	*1 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2,4-Dinitrotoluene	µg/L	0.24	N/A	N/A	*1 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2-Chloronaphthalene	µg/L	750	N/A	N/A	*1 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2-Methylnaphthalene	µg/L	36	N/A	N/A	**0.3 J**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2-Methylphenol	µg/L	930	N/A	N/A	*1 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
3&4-Methylphenol(m&p Cresol)	µg/L	930	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4-Chloro-3-methylphenol	µg/L		N/A	N/A	*1 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Acenaphthene	µg/L	530	N/A	N/A	*1 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Acenaphthylene	µg/L	530	N/A	N/A	*1 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Acetophenone	µg/L	1,900	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Table 3
Summary of Organics Detected in Groundwater
Container Terminal

Parameter	Units	PAL	CO56-PZP001		CO57-PZP002							CO58-PZM001				
			8/14/2024	11/20/2024	6/10/2015	8/14/2023	11/16/2023	3/8/2024	6/7/2024	8/19/2024	11/19/2024	8/14/2023	11/14/2023	3/5/2024	6/7/2024	8/15/2024
Aniline	µg/L		N/A	N/A	*2.6 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Anthracene	µg/L	1,800	N/A	N/A	*1 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Benz[a]anthracene	µg/L	0.03	N/A	N/A	*1 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Benzaldehyde	µg/L	1,900	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Benzo[a]pyrene	µg/L	0.2	N/A	N/A	*1 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Benzo[b]fluoranthene	µg/L	0.25	N/A	N/A	*1 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Benzo[g,h,i]perylene	µg/L		N/A	N/A	*1 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Benzo[k]fluoranthene	µg/L	2.5	N/A	N/A	*1 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
bis(2-chloroethoxy)methane	µg/L	59	N/A	N/A	*1 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
bis(2-Chloroethyl)ether	µg/L	0.014	N/A	N/A	*1 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
bis(2-Ethylhexyl)phthalate	µg/L	6.0	N/A	N/A	*1 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Butylbenzylphthalate	µg/L		N/A	N/A	*1 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Caprolactam	µg/L	9,900	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Carbazole	µg/L		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Chrysene	µg/L	25	N/A	N/A	*1 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dibenz[a,h]anthracene	µg/L	0.025	N/A	N/A	*1 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dibenzofuran	µg/L		N/A	N/A	*1 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Diethylphthalate	µg/L	15,000	N/A	N/A	*1 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Di-n-butylphthalate	µg/L	900	N/A	N/A	*1 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Fluoranthene	µg/L	800	N/A	N/A	**0.36 J**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Fluorene	µg/L	290	N/A	N/A	*1 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Indeno[1,2,3-c,d]pyrene	µg/L	0.25	N/A	N/A	*1 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Naphthalene	µg/L	0.12	N/A	N/A	**4.9**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N-Nitrosodiphenylamine	µg/L	12	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pentachlorophenol	µg/L	1.0	N/A	N/A	*2.6 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Phenanthrene	µg/L		N/A	N/A	**0.5 J**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Phenol	µg/L	5,800	N/A	N/A	*1 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pyrene	µg/L	120	N/A	N/A	**0.27 J**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pyridine	µg/L		N/A	N/A	*1 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Petroleum Hydrocarbons																
Diesel Range Organics	µg/L	47	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Gasoline Range Organics	µg/L	47	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Oil and Grease	µg/L	47	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Detection in bold
Values highlighted in yellow indicate an exceedance of the Project Action Limit (PAL)
N/A indicates that the parameter was not analyzed for this sample

J: The positive result reported for this analyte is a quantitative estimate.
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.
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 3
Summary of Organics Detected in Groundwater
Container Terminal

Parameter	Units	PAL	CO58-PZM001		CO59-PZP002					CO59-PZP002			CO60-PZP001	CP02-PZM007		
			11/20/2024	2/11/2025	6/10/2015	8/10/2023	11/16/2023	3/11/2024	6/7/2024	8/19/2024	11/19/2024	2/11/2025	5/12/2022	4/19/2023	10/17/2023	5/16/2024
Volatile Organic Compounds																
1,1-Dichloroethane	µg/L	2.7	N/A	N/A	*1 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*0.75 U*	*0.75 U*	*0.75 U*
1,2-Dichlorobenzene	µg/L	600	N/A	N/A	*1 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*2.5 U*	*2.5 U*	*2.5 U*
1,3-Dichlorobenzene	µg/L		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*2.5 U*	*2.5 U*	*2.5 U*
1,4-Dichlorobenzene	µg/L	75	N/A	N/A	*1 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*2.5 U*	*2.5 U*	*2.5 U*
1,4-Dioxane	µg/L	0.46	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*3 U*	*3 U*
2-Butanone (MEK)	µg/L	5,600	N/A	N/A	*5 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*5 U*	*5 U*	*5 U*
4-Methyl-2-pentanone (MIBK)	µg/L	1,200	N/A	N/A	*5 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*5 U*	*5 U*	*5 U*
Acetone	µg/L	14,000	N/A	N/A	*5 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*5 U*	*5 U*	*5 U*
Benzene	µg/L	5	**150**	**150**	**389**	**2.5**	**5.9**	*0.5 U*	**300**	**0.19 J**	**14**	**59**	**57.2**	**0.28 J**	*0.5 U*	**0.26 J**
Bromomethane	µg/L	7.5	N/A	N/A	**8.7**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*1 U*	*1 U*	*1 U*
Carbon disulfide	µg/L	810	N/A	N/A	**0.43 J**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*5 U*	*5 U*	*5 U*
Chlorobenzene	µg/L	100	N/A	N/A	*1 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*0.5 U*	*0.5 U*	*0.5 U*
Chloroform	µg/L	0.22	N/A	N/A	*1 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*0.75 U*	*0.75 U*	*0.75 U*
Chloromethane	µg/L	190	N/A	N/A	**4.8**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*2.5 U*	*2.5 U*	*2.5 U*
Cyclohexane	µg/L	13,000	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*10 U*	*10 U*	*10 U*
Ethylbenzene	µg/L	700	**8.0**	**6.4**	**20.4**	**1.3**	**0.46 J**	*0.5 U*	**5.1**	*0.5 U*	**1**	**4.2**	**2.2**	*0.5 U*	*0.5 U*	*0.5 U*
Isopropylbenzene	µg/L	450	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*0.5 U*	*0.5 U*	*0.5 U*
m&p-Xylene	µg/L		**97**	**90**	N/A	**2.2**	**3.4**	*1 U*	**84**	*1 U*	**10**	**54**	N/A	*1 U*	*1 U*	*1 U*
Methyl Acetate	µg/L	20,000	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*2 U*	*2 U*	*2 U*
Methyl tert-butyl ether (MTBE)	µg/L	14	N/A	N/A	*1 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*1 U*	*1 U*	*1 U*
Methylene Chloride	µg/L	5	N/A	N/A	**1.2 B**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*2.5 U*	*2.5 U*	*2.5 U*
Naphthalene	µg/L	0.12	**1,700**	**1,700**	**1,630**	**5.7**	**24**	*1 U*	**130**	**0.9 J**	**77**	**560**	**360**	N/A	N/A	N/A
o-Xylene	µg/L		**40**	**34**	N/A	**5.2**	**2**	*1 U*	**24**	*1 U*	**4.8**	**21**	N/A	*1 U*	*1 U*	*1 U*
Styrene	µg/L	100	N/A	N/A	**19.5**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*1 U*	*1 U*	*1 U*
Toluene	µg/L	1,000	**59**	**63**	**241**	**2.8**	**1.2**	*0.75 U*	**280**	*0.75 U*	**2.8**	**22**	**10.1**	*0.75 U*	*0.75 U*	*0.75 U*
Xylenes	µg/L	10,000	**140**	**120**	**321**	**7.4**	**5.4**	*1 U*	**110**	*1 U*	**15**	**75**	**40.1**	*1 U*	*1 U*	*1 U*
Semivolatile Organic Compounds																
1,1-Biphenyl	µg/L	0.83	N/A	**4.8**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*2 U*	*2 U*	*2 U*
1,2-Dichlorobenzene	µg/L	600	N/A	N/A	*1 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1,3-Dichlorobenzene	µg/L		N/A	N/A	*1 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1,4-Dichlorobenzene	µg/L	75	N/A	N/A	*1 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1,4-Dioxane	µg/L	0.46	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2,4,5-Trichlorophenol	µg/L	1,200	N/A	*5 U*	*2.6 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*5 U*	*5 U*	*5 U*
2,4-Dimethylphenol	µg/L	360	N/A	**11**	**30.3**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*5 U*	*5 U*	*5 U*
2,4-Dinitrotoluene	µg/L	0.24	N/A	*5 U*	*1 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*5 U*	*5 U*	*5 U*
2-Chloronaphthalene	µg/L	750	N/A	*2 U*	*1 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*2 U*	*2 U*	*2 U*
2-Methylnaphthalene	µg/L	36	N/A	**38**	**23.7**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*2 U*	*2 U*	*2 U*
2-Methylphenol	µg/L	930	N/A	**17**	**30.4**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*5 U*	*5 U*	*5 U*
3&4-Methylphenol(m&p Cresol)	µg/L	930	N/A	**20**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*5 U*	*5 U*	*5 U*
4-Chloro-3-methylphenol	µg/L		N/A	N/A	*1 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Acenaphthene	µg/L	530	N/A	**3.3**	**3.1**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*2 U*	*2 U*	*2 U*
Acenaphthylene	µg/L	530	N/A	**23**	**10.6**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*2 U*	*2 U*	*2 U*
Acetophenone	µg/L	1,900	N/A	**2.1 J**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*5 U*	*5 U*	*5 U*

Table 3
Summary of Organics Detected in Groundwater
Container Terminal

Parameter	Units	PAL	CO58-PZM001		CO59-PZP002					CO59-PZP002			CO60-PZP001	CP02-PZM007		
			11/20/2024	2/11/2025	6/10/2015	8/10/2023	11/16/2023	3/11/2024	6/7/2024	8/19/2024	11/19/2024	2/11/2025	5/12/2022	4/19/2023	10/17/2023	5/16/2024
Aniline	µg/L		N/A	N/A	**8.7**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Anthracene	µg/L	1,800	N/A	**1.5 J**	**1.2**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*2 U*	*2 U*	*2 U*
Benz[a]anthracene	µg/L	0.03	N/A	*2 U*	*1 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*2 U*	*2 U*	*2 U*
Benzaldehyde	µg/L	1,900	N/A	*5 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*5 U*	*5 U*	*5 U*
Benzo[a]pyrene	µg/L	0.2	N/A	*2 U*	*1 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*2 U*	*2 U*	*2 U*
Benzo[b]fluoranthene	µg/L	0.25	N/A	*2 U*	*1 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*2 U*	*2 U*	*2 U*
Benzo[g,h,i]perylene	µg/L		N/A	*2 U*	*1 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*2 U*	*2 U*	*2 U*
Benzo[k]fluoranthene	µg/L	2.5	N/A	*2 U*	*1 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*2 U*	*2 U*	*2 U*
bis(2-chloroethoxy)methane	µg/L	59	N/A	*5 U*	*1 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*5 U*	*5 U*	*5 U*
bis(2-Chloroethyl)ether	µg/L	0.014	N/A	*2 U*	*1 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*2 U*	*2 U*	*2 U*
bis(2-Ethylhexyl)phthalate	µg/L	6.0	N/A	**2.4 JB**	**0.24 J**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*3 U*	*3 U*	*3 U*
Butylbenzylphthalate	µg/L		N/A	N/A	*1 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Caprolactam	µg/L	9,900	N/A	*10 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*10 U*	*10 U*	*10 U*
Carbazole	µg/L		N/A	**24**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*2 U*	*2 U*	*2 U*
Chrysene	µg/L	25	N/A	*1.5 U*	*1 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*1.4 U*	*1.4 U*	*1.4 U*
Dibenz[a,h]anthracene	µg/L	0.025	N/A	*2 U*	*1 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*2 U*	*2 U*	*2 U*
Dibenzofuran	µg/L		N/A	N/A	**5.4**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Diethylphthalate	µg/L	15,000	N/A	*5 U*	*1 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*5 U*	*5 U*	*5 U*
Di-n-butylphthalate	µg/L	900	N/A	**2.3 JB**	*1 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*5 U*	*5 U*	*5 U*
Fluoranthene	µg/L	800	N/A	**1.4 J**	**0.86 J**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*2 U*	*2 U*	**0.64**
Fluorene	µg/L	290	N/A	**8.5**	**6.4**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**3.1**	*2 U*	**4.1**
Indeno[1,2,3-c,d]pyrene	µg/L	0.25	N/A	*2 U*	*1 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*2 U*	*2 U*	*2 U*
Naphthalene	µg/L	0.12	N/A	**810**	**642**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*2 U*	*2 U*	**1.7**
N-Nitrosodiphenylamine	µg/L	12	N/A	*2 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*2 U*	*2 U*	*2 U*
Pentachlorophenol	µg/L	1.0	N/A	*10 U*	*2.6 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*10 U*	*10 U*	*10 U*
Phenanthrene	µg/L		N/A	**8.7**	**6.8**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*2 U*	*2 U*	*2 U*
Phenol	µg/L	5,800	N/A	**0.67 J**	**13.6**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*5 U*	*5 U*	*5 U*
Pyrene	µg/L	120	N/A	**0.76 J**	**0.51 J**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*2 U*	*2 U*	**0.48**
Pyridine	µg/L		N/A	N/A	**15.3**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Petroleum Hydrocarbons																
Diesel Range Organics	µg/L	47	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Gasoline Range Organics	µg/L	47	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Oil and Grease	µg/L	47	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Detection in bold
Values highlighted in yellow indicate an exceedance of the Project Action Limit (PAL)
N/A indicates that the parameter was not analyzed for this sample

J: The positive result reported for this analyte is a quantitative estimate.
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.
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 3
Summary of Organics Detected in Groundwater
Container Terminal

Parameter	Units	PAL	CP02-PZM007	CP07-PZM006				CP08R-PZM008				CP12-PZM012			
			10/9/2024	4/24/2023	10/23/2023	5/20/2024	10/11/2024	4/25/2023	10/18/2023	5/22/2024	10/9/2024	4/17/2023	10/23/2023	5/22/2024	10/3/2024
Volatile Organic Compounds															
1,1-Dichloroethane	µg/L	2.7	*0.75 U*	**1.1**	**1 J**	**1.2 J**	**1.2**	*15 U*	*7.5 U*	*19 U*	*7.5 U*	*0.75 U*	*0.75 U*	*0.75 U*	*0.75 U*
1,2-Dichlorobenzene	µg/L	600	*2.5 U*	**1.8 J**	**1.6 J**	**1.5 J**	**2.1 J**	*50 U*	*25 U*	*62 U*	*25 U*	*2.5 U*	*2.5 U*	*2.5 U*	*2.5 U*
1,3-Dichlorobenzene	µg/L		*2.5 U*	*2.5 U*	*12 U*	*5 U*	*2.5 U*	*50 U*	*25 U*	*62 U*	*25 U*	*2.5 U*	*2.5 U*	*2.5 U*	*2.5 U*
1,4-Dichlorobenzene	µg/L	75	*2.5 U*	*2.5 U*	*12 U*	*5 U*	*2.5 U*	*50 U*	*25 U*	*62 U*	*25 U*	*2.5 U*	*2.5 U*	*2.5 U*	*2.5 U*
1,4-Dioxane	µg/L	0.46	*3 U*	N/A	*15 U*	*6 U*	*3 U*	N/A	*30 U*	*75 U*	*30 U*	N/A	*3 U*	*3 U*	*3 U*
2-Butanone (MEK)	µg/L	5,600	*5 U*	*5 U*	*25 U*	*10 U*	*5 U*	*100 U*	*50 U*	*120 U*	*50 U*	*5 U*	*5 U*	*5 U*	*5 U*
4-Methyl-2-pentanone (MIBK)	µg/L	1,200	*5 U*	*5 U*	*25 U*	*10 U*	**0.72 J**	*100 U*	*50 U*	*120 U*	*50 U*	*5 U*	*5 U*	*5 U*	*5 U*
Acetone	µg/L	14,000	*5 U*	**2.6 J**	*25 U*	*10 U*	**2.2 J**	*100 U*	*50 U*	*120 U*	*50 U*	**1.5 J**	**2.4 J**	**2.5 J**	*5 U*
Benzene	µg/L	5	**0.16 J**	**390**	**400**	**390**	**360**	**2,100**	**1,500**	**2,700**	**1,000**	**2.4**	**17**	**12**	*0.5 U*
Bromomethane	µg/L	7.5	*1 U*	*1 U*	*5 U*	*2 U*	*1 U*	*20 U*	*10 U*	*25 U*	*10 U*	*1 U*	*1 U*	*1 U*	*1 U*
Carbon disulfide	µg/L	810	*5 U*	*5 U*	*25 U*	*10 U*	*5 U*	*100 U*	*50 U*	*120 U*	*50 U*	*5 U*	*5 U*	*5 U*	*5 U*
Chlorobenzene	µg/L	100	*0.5 U*	*0.5 U*	*2.5 U*	*1 U*	*0.5 U*	*10 U*	*5 U*	*12 U*	*5 U*	*0.5 U*	*0.5 U*	*0.5 U*	*0.5 U*
Chloroform	µg/L	0.22	*0.75 U*	*0.75 U*	*3.8 U*	*1.5 U*	*0.75 U*	*15 U*	*7.5 U*	*19 U*	*7.5 U*	*0.75 U*	*0.75 U*	*0.75 U*	*0.75 U*
Chloromethane	µg/L	190	*2.5 U*	*2.5 U*	*12 U*	*5 U*	*2.5 U*	*50 U*	*25 U*	*62 U*	*25 U*	*2.5 U*	*2.5 U*	*2.5 U*	*2.5 U*
Cyclohexane	µg/L	13,000	*10 U*	**0.3 J**	*50 U*	*20 U*	**0.38 J**	*200 U*	*100 U*	*250 U*	*100 U*	*10 U*	*10 U*	*10 U*	*10 U*
Ethylbenzene	µg/L	700	*0.5 U*	**3.2**	**2.7**	**2.3**	**3.3**	**27**	**46**	**29**	**16**	*0.5 U*	**0.3 J**	**0.26 J**	*0.5 U*
Isopropylbenzene	µg/L	450	*0.5 U*	**0.49 J**	*2.5 U*	*1 U*	**0.52**	**4.1 J**	**7.3**	**5.4 J**	**3.3 J**	*0.5 U*	*0.5 U*	*0.5 U*	*0.5 U*
m&p-Xylene	µg/L		*1 U*	**22**	**17**	**14**	**20**	**360**	**560**	**420**	**190**	**0.48 J**	**2.6**	**1.8**	*1 U*
Methyl Acetate	µg/L	20,000	*2 U*	*2 U*	*10 U*	*4 U*	*2 U*	*40 U*	*20 U*	*50 U*	*20 U*	*2 U*	*2 U*	*2 U*	*2 U*
Methyl tert-butyl ether (MTBE)	µg/L	14	*1 U*	*1 U*	*5 U*	*2 U*	*1 U*	*20 U*	*10 U*	*25 U*	*10 U*	*1 U*	*1 U*	*1 U*	*1 U*
Methylene Chloride	µg/L	5	*2.5 U*	*2.5 U*	*12 U*	*5 U*	*2.5 U*	*50 U*	*25 U*	*62 U*	*25 U*	*2.5 U*	*2.5 U*	*2.5 U*	*2.5 U*
Naphthalene	µg/L	0.12	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
o-Xylene	µg/L		*1 U*	**14**	**11**	**9.7**	**14**	**220**	**320**	**260**	**130**	*1 U*	**1.1**	**1.1**	*1 U*
Styrene	µg/L	100	*1 U*	**0.38 J**	*5 U*	*2 U*	**0.55 J**	*20 U*	*10 U*	*25 U*	*10 U*	*1 U*	*1 U*	*1 U*	*1 U*
Toluene	µg/L	1,000	*0.75 U*	**62**	**65**	**53**	**62**	**790**	**510**	**970**	**350**	**0.43 J**	**2.0**	**2.4**	*0.75 U*
Xylenes	µg/L	10,000	*1 U*	**36**	**28**	**24**	**34**	**580**	**880**	**680**	**320**	**0.48 J**	**3.7**	**2.9**	*1 U*
Semivolatile Organic Compounds															
1,1-Biphenyl	µg/L	0.83	*2 U*	**0.94 J**	**0.56 J**	**0.89 J**	**1 J**	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*
1,2-Dichlorobenzene	µg/L	600	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1,3-Dichlorobenzene	µg/L		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1,4-Dichlorobenzene	µg/L	75	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1,4-Dioxane	µg/L	0.46	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2,4,5-Trichlorophenol	µg/L	1,200	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*
2,4-Dimethylphenol	µg/L	360	*5 U*	**60**	**80**	**130**	**100**	*5 U*	**2.2 J**	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*
2,4-Dinitrotoluene	µg/L	0.24	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*
2-Chloronaphthalene	µg/L	750	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*
2-Methylnaphthalene	µg/L	36	*2 U*	**3.5**	**2.2**	**2.8**	**3.7**	**2.3**	**2.8**	**1.6**	**0.92**	**0.57 J**	**0.99 J**	*2 U*	*2 U*
2-Methylphenol	µg/L	930	*5 U*	**21**	**26**	**32**	**27**	**2.8 J**	**3.3 J**	**2.7 J**	**3.3 J**	*5 U*	*5 U*	*5 U*	*5 U*
3&4-Methylphenol(m&p Cresol)	µg/L	930	*5 U*	**60**	**78**	**83**	**72**	**3.6 J**	**2.6 J**	**3.9 J**	**5.1**	*5 U*	**0.85 J**	*5 U*	*5 U*
4-Chloro-3-methylphenol	µg/L		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Acenaphthene	µg/L	530	*2 U*	**1.3**	**1.1**	**1.3**	**1.8**	**1.8 J**	**1.6 J**	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*
Acenaphthylene	µg/L	530	*2 U*	**1.5**	**0.73 J**	**1 J**	**1.6**	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*
Acetophenone	µg/L	1,900	*5 U*	**1.2 J**	*5 U*	*5 U*	**1.5 J**	**5.9**	**8.1**	**11**	**5.4**	*5 U*	*5 U*	*5 U*	*5 U*

Table 3
Summary of Organics Detected in Groundwater
Container Terminal

Parameter	Units	PAL	CP02-PZM007	CP07-PZM006				CP08R-PZM008				CP12-PZM012			
			10/9/2024	4/24/2023	10/23/2023	5/20/2024	10/11/2024	4/25/2023	10/18/2023	5/22/2024	10/9/2024	4/17/2023	10/23/2023	5/22/2024	10/3/2024
Aniline	µg/L		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Anthracene	µg/L	1,800	*2 U*	*2 U*	*2 U*	**0.52**	*2 U*	**0.36**	**0.36 J**	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*
Benz[a]anthracene	µg/L	0.03	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*
Benzaldehyde	µg/L	1,900	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*
Benzo[a]pyrene	µg/L	0.2	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*
Benzo[b]fluoranthene	µg/L	0.25	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*
Benzo[g,h,i]perylene	µg/L		*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*
Benzo[k]fluoranthene	µg/L	2.5	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*
bis(2-chloroethoxy)methane	µg/L	59	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*
bis(2-Chloroethyl)ether	µg/L	0.014	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*
bis(2-Ethylhexyl)phthalate	µg/L	6.0	*3 U*	*3 U*	*3 U*	*3 U*	*3 U*	*3 U*	*3 U*	*3 U*	*3 U*	*3 U*	*3 U*	*3 U*	*3 U*
Butylbenzylphthalate	µg/L		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Caprolactam	µg/L	9,900	*10 U*	*10 U*	*10 U*	*10 U*	*10 U*	*10 U*	*10 U*	*10 U*	*10 U*	*10 U*	*10 U*	*10 U*	*10 U*
Carbazole	µg/L		*2 U*	**2.7**	**2.8**	**3.3**	**3.9**	**4.9**	**6.4**	**0.8 J**	**0.72 J**	*2 U*	*2 U*	*2 U*	*2 U*
Chrysene	µg/L	25	*1.5 U*	*1.4 U*	*1.4 U*	*1.4 U*	*1.5 U*	*1.4 U*	*1.4 U*	*1.4 U*	*1.5 U*	*1.4 U*	*1.4 U*	*1.4 U*	*1.5 U*
Dibenz[a,h]anthracene	µg/L	0.025	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*
Dibenzofuran	µg/L		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Diethylphthalate	µg/L	15,000	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*
Di-n-butylphthalate	µg/L	900	**3.4 J**	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	**3.3 J**	*5 U*	*5 U*	*5 U*	*5 U*
Fluoranthene	µg/L	800	**0.47**	*2 U*	*2 U*	**0.3 J**	*2 U*	**0.48**	**0.85**	**0.55**	**0.65 J**	**0.49 J**	*2 U*	*2 U*	*2 U*
Fluorene	µg/L	290	**3.1**	**1.2**	**0.83**	**1.0**	**1.6**	**7.0**	**3.9**	**7.3**	**2.6**	*2 U*	*2 U*	*2 U*	*2 U*
Indeno[1,2,3-c,d]pyrene	µg/L	0.25	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*
Naphthalene	µg/L	0.12	*2 U*	**65**	**65**	**79**	**93**	**68**	**85**	**56**	**33**	**3.1**	**9.2**	**2.6**	*2 U*
N-Nitrosodiphenylamine	µg/L	12	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*
Pentachlorophenol	µg/L	1.0	*10 U*	*10 U*	*10 U*	*10 U*	*10 U*	*10 U*	*10 U*	*10 U*	*10 U*	*10 U*	*10 U*	*10 U*	*10 U*
Phenanthrene	µg/L		*2 U*	**1.4 J**	**1.0**	**1.1**	**1.7**	**1.7 J**	**1.7**	**1.4**	**0.71**	*2 U*	*2 U*	*2 U*	*2 U*
Phenol	µg/L	5,800	*5 U*	**6.5**	**1.1 J**	**13**	**1.1 J**	**4 J**	**1.3 J**	**8.2**	**6.2**	*5 U*	**4.4 J**	*5 U*	*5 U*
Pyrene	µg/L	120	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	**0.35**	**0.6**	**0.41**	**0.66**	**0.38 J**	*2 U*	*2 U*	*2 U*
Pyridine	µg/L		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Petroleum Hydrocarbons															
Diesel Range Organics	µg/L	47	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Gasoline Range Organics	µg/L	47	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Oil and Grease	µg/L	47	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Detection in bold
Values highlighted in yellow indicate an exceedance of the Project Action Limit (PAL)
N/A indicates that the parameter was not analyzed for this sample

J: The positive result reported for this analyte is a quantitative estimate.
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.
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 3
Summary of Organics Detected in Groundwater
Container Terminal

Parameter	Units	PAL	CP14-PZM009				CP16-PZM008				CP17-PZM013	CP18R-PZM009			
			4/18/2023	10/17/2023	5/16/2024	10/7/2024	4/19/2023	10/13/2023	5/16/2024	10/4/2024	3/16/2020	4/25/2023	10/19/2023	5/22/2024	10/7/2024
Volatile Organic Compounds															
1,1-Dichloroethane	µg/L	2.7	*0.75 U*	*1.5 U*	*0.75 U*	*0.75 U*	*0.75 U*	*0.75 U*	*0.75 U*	*0.75 U*	*1 U*	*3.8 U*	*0.75 U*	*0.75 U*	*1.5 U*
1,2-Dichlorobenzene	µg/L	600	*2.5 U*	*5 U*	*2.5 U*	*2.5 U*	*2.5 U*	*2.5 U*	*2.5 U*	*2.5 U*	*1 U*	*12 U*	*2.5 U*	*2.5 U*	*5 U*
1,3-Dichlorobenzene	µg/L		*2.5 U*	*5 U*	*2.5 U*	*2.5 U*	*2.5 U*	*2.5 U*	*2.5 U*	*2.5 U*	*1 U*	*12 U*	*2.5 U*	*2.5 U*	*5 U*
1,4-Dichlorobenzene	µg/L	75	*2.5 U*	*5 U*	*2.5 U*	*2.5 U*	*2.5 U*	*2.5 U*	*2.5 U*	*2.5 U*	*1 U*	*12 U*	*2.5 U*	*2.5 U*	*5 U*
1,4-Dioxane	µg/L	0.46	N/A	*6 U*	*3 U*	*3 U*	N/A	*3 U*	*3 U*	*3 U*	N/A	N/A	*3 U*	*3 U*	*6 U*
2-Butanone (MEK)	µg/L	5,600	*5 U*	*5 U*	*5 U*	**2.5 J**	**3.1 J**	*5 U*	*5 U*	**2.6 J**	*10 U*	*25 U*	*5 U*	*5 U*	*10 U*
4-Methyl-2-pentanone (MIBK)	µg/L	1,200	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*10 U*	*25 U*	*5 U*	*5 U*	*10 U*
Acetone	µg/L	14,000	**16**	**13**	**9.6**	**13**	**40**	**31**	**28**	**28**	**8.6 J**	*25 U*	**2.5 J**	**1.8 J**	*10 U*
Benzene	µg/L	5	**45**	**62**	**64**	**50**	**77**	**98**	**57**	**82**	**22.5**	**660**	**180**	**140**	**260**
Bromomethane	µg/L	7.5	*1 U*	*2 U*	*1 U*	*1 U*	*1 U*	*1 U*	*1 U*	*1 U*	*1 U*	*5 U*	*1 U*	*1 U*	*2 U*
Carbon disulfide	µg/L	810	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	**0.71 J**	*25 U*	*5 U*	*5 U*	*10 U*
Chlorobenzene	µg/L	100	*0.5 U*	*1 U*	*0.5 U*	*0.5 U*	*0.5 U*	*0.5 U*	*0.5 U*	*0.5 U*	*1 U*	*2.5 U*	*0.5 U*	*0.5 U*	*1 U*
Chloroform	µg/L	0.22	*0.75 U*	*1.5 U*	*0.75 U*	*0.75 U*	*0.75 U*	*0.75 U*	*0.75 U*	*0.75 U*	*1 U*	*3.8 U*	*0.75 U*	*0.75 U*	*1.5 U*
Chloromethane	µg/L	190	**1.3 J**	*5 U*	*2.5 U*	*2.5 U*	*2.5 U*	**0.92 J**	*2.5 U*	*2.5 U*	*1 U*	*12 U*	*2.5 U*	*2.5 U*	*5 U*
Cyclohexane	µg/L	13,000	**0.32 J**	*20 U*	*10 U*	**0.28 J**	**0.38 J**	**0.27 J**	*10 U*	**0.31 J**	*10 U*	*50 U*	*10 U*	*10 U*	*20 U*
Ethylbenzene	µg/L	700	**0.56**	**0.77 J**	**0.75**	**0.67**	**0.56**	**0.64**	**0.46 J**	**0.59**	**1.8**	**4.4**	**2.0**	**1.7**	**2.2**
Isopropylbenzene	µg/L	450	*0.5 U*	*1 U*	*0.5 U*	*0.5 U*	*0.5 U*	*0.5 U*	*0.5 U*	*0.5 U*	*1 U*	*2.5 U*	**0.25 J**	**0.21 J**	*1 U*
m&p-Xylene	µg/L		**2.0**	**3.4**	**3.0**	**2.9**	**2.7**	**3.4**	**2.3**	**3.2**	**13**	**29**	**13**	**11**	**14**
Methyl Acetate	µg/L	20,000	*2 U*	*4 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*5 U*	*10 U*	*2 U*	*2 U*	*4 U*
Methyl tert-butyl ether (MTBE)	µg/L	14	*1 U*	*2 U*	*1 U*	*1 U*	*1 U*	*1 U*	*1 U*	*1 U*	*1 U*	*5 U*	*1 U*	*1 U*	*2 U*
Methylene Chloride	µg/L	5	*2.5 U*	*5 U*	*2.5 U*	*2.5 U*	*2.5 U*	*2.5 U*	*2.5 U*	*2.5 U*	*1 U*	*12 U*	*2.5 U*	*2.5 U*	*5 U*
Naphthalene	µg/L	0.12	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
o-Xylene	µg/L		**1.1**	**1.7 J**	**1.6**	**1.7**	**2.2**	**2.5**	**1.9**	**2.6**	**8.3**	**13**	**5.4**	**5.1**	**7.1**
Styrene	µg/L	100	*1 U*	*2 U*	*1 U*	*1 U*	*1 U*	*1 U*	*1 U*	*1 U*	**2.3**	*5 U*	*1 U*	*1 U*	*2 U*
Toluene	µg/L	1,000	**3.7**	**5.8**	**5.7**	**4.5**	**8.3**	**9.4**	**6.2**	**8.7**	**8.7**	**76**	**26**	**20**	**32**
Xylenes	µg/L	10,000	**3.1**	**5.1 J**	**4.6**	**4.6**	**4.9**	**5.9**	**4.2**	**5.8**	**21.3**	**42**	**18**	**16**	**21**
Semivolatile Organic Compounds															
1,1-Biphenyl	µg/L	0.83	*2 U*	*2 U*	*2 U*	**0.37 J**	*2 U*	*2 U*	*2 U*	*2 U*	**8.1**	*2 U*	*2 U*	*2 U*	*2 U*
1,2-Dichlorobenzene	µg/L	600	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1,3-Dichlorobenzene	µg/L		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1,4-Dichlorobenzene	µg/L	75	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1,4-Dioxane	µg/L	0.46	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**0.1**	N/A	N/A	N/A	N/A
2,4,5-Trichlorophenol	µg/L	1,200	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*2.5 U*	*5 U*	*5 U*	*5 U*	*5 U*
2,4-Dimethylphenol	µg/L	360	*5 U*	*5 U*	*5 U*	*5 U*	**2.9 J**	**2.7 J**	*5 U*	**2.8 J**	**23.4**	*5 U*	*5 U*	*5 U*	*5 U*
2,4-Dinitrotoluene	µg/L	0.24	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*0.99 U*	*5 U*	*5 U*	*5 U*	*5 U*
2-Chloronaphthalene	µg/L	750	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*0.99 U*	*2 U*	*2 U*	*2 U*	*2 U*
2-Methylnaphthalene	µg/L	36	**0.88 J**	**1.1**	**1.1 J**	**1.4**	**0.77**	**0.92 J**	**0.58**	*2 U*	**5.5**	**0.84**	**0.49 J**	*2 U*	*2 U*
2-Methylphenol	µg/L	930	**0.94 J**	**1.1 J**	**1.2 J**	*5 U*	**1.5 J**	**1.9 J**	**1.3 J**	*5 U*	**16.6**	**1.8 J**	**1 J**	**1.1 J**	*5 U*
3&4-Methylphenol(m&p Cresol)	µg/L	930	**2.7 J**	**2.9 J**	**3.1 J**	**2.7 J**	**8.6**	**7.8**	**5.7**	**4.1 J**	**50.1**	**2.5 J**	**1.8 J**	**2.1 J**	**1.6 J**
4-Chloro-3-methylphenol	µg/L		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Acenaphthene	µg/L	530	**1.1 J**	**1.2 J**	**1.5**	**1.7**	**0.74**	**0.83**	**0.74 J**	*2 U*	**1.3**	**0.73 J**	**0.59 J**	*2 U*	**0.55**
Acenaphthylene	µg/L	530	*2 U*	*2 U*	**0.51**	**0.64**	*2 U*	*2 U*	*2 U*	*2 U*	**7.2**	*2 U*	*2 U*	*2 U*	*2 U*
Acetophenone	µg/L	1,900	**0.66 J**	*5 U*	**0.66 J**	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*0.99 U*	**0.93 J**	**0.62 J**	**0.61 J**	*5 U*

Table 3
Summary of Organics Detected in Groundwater
Container Terminal

Parameter	Units	PAL	CP14-PZM009				CP16-PZM008				CP17-PZM013	CP18R-PZM009			
			4/18/2023	10/17/2023	5/16/2024	10/7/2024	4/19/2023	10/13/2023	5/16/2024	10/4/2024	3/16/2020	4/25/2023	10/19/2023	5/22/2024	10/7/2024
Aniline	µg/L		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Anthracene	µg/L	1,800	*2 U*	**0.5**	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	**0.48**	*2 U*	*2 U*	*2 U*	*2 U*
Benz[a]anthracene	µg/L	0.03	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*0.99 U*	*2 U*	*2 U*	*2 U*	*2 U*
Benzaldehyde	µg/L	1,900	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	**0.44 J**	*5 U*	*5 U*	*5 U*	*5 U*
Benzo[a]pyrene	µg/L	0.2	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*0.99 U*	*2 U*	*2 U*	*2 U*	*2 U*
Benzo[b]fluoranthene	µg/L	0.25	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*0.99 U*	*2 U*	*2 U*	*2 U*	*2 U*
Benzo[g,h,i]perylene	µg/L		*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*0.99 U*	*2 U*	*2 U*	*2 U*	*2 U*
Benzo[k]fluoranthene	µg/L	2.5	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*0.99 U*	*2 U*	*2 U*	*2 U*	*2 U*
bis(2-chloroethoxy)methane	µg/L	59	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*0.99 U*	*5 U*	*5 U*	*5 U*	*5 U*
bis(2-Chloroethyl)ether	µg/L	0.014	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	**3.2**	*2 U*	*2 U*	*2 U*	*2 U*
bis(2-Ethylhexyl)phthalate	µg/L	6.0	*3 U*	*3 U*	*3 U*	*3 U*	*3 U*	*3 U*	*3 U*	*3 U*	*0.99 U*	*3 U*	*3 U*	*3 U*	*3 U*
Butylbenzylphthalate	µg/L		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Caprolactam	µg/L	9,900	*10 U*	*10 U*	*10 U*	*10 U*	*10 U*	*10 U*	*10 U*	*10 U*	*2.5 U*	*10 U*	*10 U*	*10 U*	*10 U*
Carbazole	µg/L		**0.92 J**	**0.91 J**	**1.1 J**	**1.3 J**	**0.72 J**	**0.82 J**	**0.66 J**	**0.7 J**	**7.3**	**1 J**	**0.75 J**	**0.8 J**	**0.86 J**
Chrysene	µg/L	25	*1.4 U*	*1.4 U*	*1.4 U*	*1.5 U*	*1.4 U*	*1.4 U*	*1.4 U*	*1.5 U*	*0.99 U*	*1.4 U*	*1.4 U*	*1.4 U*	*1.5 U*
Dibenz[a,h]anthracene	µg/L	0.025	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*0.99 U*	*2 U*	*2 U*	*2 U*	*2 U*
Dibenzofuran	µg/L		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Diethylphthalate	µg/L	15,000	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*0.99 U*	*5 U*	*5 U*	*5 U*	*5 U*
Di-n-butylphthalate	µg/L	900	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*0.99 U*	*5 U*	*5 U*	*5 U*	*5 U*
Fluoranthene	µg/L	800	**0.47 J**	**0.37 J**	**0.38**	**0.59**	**0.43**	**0.36**	*2 U*	*2 U*	**0.27**	**0.7 J**	**0.51**	**0.62**	**0.53**
Fluorene	µg/L	290	*2 U*	*2 U*	**0.56**	**0.55**	*2 U*	*2 U*	*2 U*	*2 U*	**2.0**	**0.58 J**	*2 U*	*2 U*	*2 U*
Indeno[1,2,3-c,d]pyrene	µg/L	0.25	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*0.99 U*	*2 U*	*2 U*	*2 U*	*2 U*
Naphthalene	µg/L	0.12	**13**	**18**	**20**	**23**	**8.6**	**13**	**7.6**	**8.6**	**193**	**32**	**14**	**8.8**	**15**
N-Nitrosodiphenylamine	µg/L	12	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*0.99 U*	*2 U*	*2 U*	*2 U*	*2 U*
Pentachlorophenol	µg/L	1.0	*10 U*	*10 U*	*10 U*	*10 U*	*10 U*	*10 U*	*10 U*	*10 U*	*2.5 U*	*10 U*	*10 U*	*10 U*	*10 U*
Phenanthrene	µg/L		**1.8 J**	**1.4 J**	**2.1**	**2.5**	**1.3**	**1.5**	**1.1**	**0.8**	**1.8**	**1.6 J**	**1.2**	**1.6**	**1.2**
Phenol	µg/L	5,800	**4.7 J**	**4.5 J**	**4.8 J**	**2.5 J**	**5.5**	**7.0**	**5.2**	**2.3 J**	**21.5**	**3.3 J**	**2.2 J**	**3.7 J**	**1.6 J**
Pyrene	µg/L	120	*2 U*	*2 U*	*2 U*	*2 U*	**0.36**	*2 U*	*2 U*	*2 U*	*0.99 U*	**0.44 J**	**0.3 J**	**0.35**	*2 U*
Pyridine	µg/L		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Petroleum Hydrocarbons															
Diesel Range Organics	µg/L	47	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**1,580**	N/A	N/A	N/A	N/A
Gasoline Range Organics	µg/L	47	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*200 U*	N/A	N/A	N/A	N/A
Oil and Grease	µg/L	47	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**1,100 J**	N/A	N/A	N/A	N/A

Detection in bold
Values highlighted in yellow indicate an exceedance of the Project Action Limit (PAL)
N/A indicates that the parameter was not analyzed for this sample

J: The positive result reported for this analyte is a quantitative estimate.
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.
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 3
Summary of Organics Detected in Groundwater
Container Terminal

Parameter	Units	PAL	CP19R-PZM008				CP20-PZM011					CP21-PZM004				CP26-MWS
			4/24/2023	10/17/2023	5/20/2024	10/11/2024	4/24/2023	10/19/2023	5/22/2024	10/11/2024	11/4/2024	10/12/2022	10/18/2023	5/20/2024	10/11/2024	3/11/2020
Volatile Organic Compounds																
1,1-Dichloroethane	µg/L	2.7	**0.84**	*15 U*	*15 U*	*15 U*	*0.75 U*	*0.75 U*	*0.75 U*	*0.75 U*	*0.75 U*	*0.75 U*	*0.75 U*	*0.75 U*	*0.75 U*	*1 U*
1,2-Dichlorobenzene	µg/L	600	**3.8**	*50 U*	*50 U*	*50 U*	*2.5 U*	*2.5 U*	*2.5 U*	*2.5 U*	*2.5 U*	*2.5 U*	*2.5 U*	*2.5 U*	*2.5 U*	*1 U*
1,3-Dichlorobenzene	µg/L		**0.81 J**	*50 U*	*50 U*	*50 U*	*2.5 U*	*2.5 U*	*2.5 U*	*2.5 U*	*2.5 U*	*2.5 U*	*2.5 U*	*2.5 U*	*2.5 U*	*1 U*
1,4-Dichlorobenzene	µg/L	75	**0.86 J**	*50 U*	*50 U*	*50 U*	*2.5 U*	*2.5 U*	*2.5 U*	*2.5 U*	*2.5 U*	*2.5 U*	*2.5 U*	*2.5 U*	*2.5 U*	*1 U*
1,4-Dioxane	µg/L	0.46	N/A	*60 U*	*60 U*	*60 U*	N/A	*3 U*	*3 U*	*3 U*	*3 U*	*3 U*	*3 U*	*3 U*	*3 U*	N/A
2-Butanone (MEK)	µg/L	5,600	*5 U*	*100 U*	*100 U*	*100 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*10 U*
4-Methyl-2-pentanone (MIBK)	µg/L	1,200	*5 U*	*100 U*	*100 U*	*100 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	**0.77 J**
Acetone	µg/L	14,000	**14**	*100 U*	*100 U*	*100 U*	*5 U*	**1.6 J**	*5 U*	**1.6 J**	**2.2 J**	**3 J**	**2.1 J**	**2.7 J**	**2 J**	**11.8**
Benzene	µg/L	5	**1,400**	**3,000**	**2,300**	**2,500**	**1.5**	**18**	**0.75**	**1.4**	**35**	**5.3**	**11**	**11**	**9.4**	**59.9**
Bromomethane	µg/L	7.5	*1 U*	*20 U*	*20 U*	*20 U*	*1 U*	*1 U*	*1 U*	**0.26 J**	*1 U*	*1 U*	*1 U*	*1 U*	*1 U*	*1 U*
Carbon disulfide	µg/L	810	*5 U*	*100 U*	*100 U*	*100 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*1 U*
Chlorobenzene	µg/L	100	*0.5 U*	*10 U*	*10 U*	*10 U*	*0.5 U*	*0.5 U*	*0.5 U*	*0.5 U*	*0.5 U*	*0.5 U*	*0.5 U*	*0.5 U*	*0.5 U*	*1 U*
Chloroform	µg/L	0.22	*0.75 U*	*15 U*	*15 U*	*15 U*	*0.75 U*	*0.75 U*	*0.75 U*	*0.75 U*	*0.75 U*	*0.75 U*	*0.75 U*	*0.75 U*	*0.75 U*	*1 U*
Chloromethane	µg/L	190	*2.5 U*	*50 U*	*50 U*	*50 U*	*2.5 U*	*2.5 U*	*2.5 U*	*2.5 U*	*2.5 U*	*2.5 U*	*2.5 U*	*2.5 U*	*2.5 U*	*1 U*
Cyclohexane	µg/L	13,000	**0.77 J**	*200 U*	*200 U*	*200 U*	*10 U*	*10 U*	*10 U*	*10 U*	*10 U*	*10 U*	*10 U*	*10 U*	*10 U*	*10 U*
Ethylbenzene	µg/L	700	**16**	**27**	**17**	**24**	*0.5 U*	**0.17 J**	*0.5 U*	*0.5 U*	*0.5 U*	*0.5 U*	**0.28 J**	**0.22 J**	**0.23 J**	**0.72 J**
Isopropylbenzene	µg/L	450	**1.4**	*10 U*	*10 U*	*10 U*	*0.5 U*	*0.5 U*	*0.5 U*	*0.5 U*	*0.5 U*	*0.5 U*	*0.5 U*	*0.5 U*	*0.5 U*	*1 U*
m&p-Xylene	µg/L		**150**	**200**	**120**	**160**	**0.43 J**	**0.83 J**	*1 U*	*1 U*	**0.7 J**	*1 U*	**1**	**0.66 J**	**0.62 J**	**2.7**
Methyl Acetate	µg/L	20,000	*2 U*	*40 U*	*40 U*	*40 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*5 U*
Methyl tert-butyl ether (MTBE)	µg/L	14	*1 U*	*20 U*	*20 U*	*20 U*	*1 U*	*1 U*	*1 U*	*1 U*	*1 U*	*1 U*	*1 U*	*1 U*	*1 U*	*1 U*
Methylene Chloride	µg/L	5	*2.5 U*	*50 U*	*50 U*	*50 U*	*2.5 U*	*2.5 U*	*2.5 U*	*2.5 U*	*2.5 U*	*2.5 U*	*2.5 U*	*2.5 U*	*2.5 U*	*1 U*
Naphthalene	µg/L	0.12	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
o-Xylene	µg/L		**75**	**84**	**56**	**82**	*1 U*	*1 U*	*1 U*	*1 U*	**0.45 J**	*1 U*	**0.85 J**	**0.7 J**	**0.7 J**	**2.8**
Styrene	µg/L	100	**3.6**	*20 U*	*20 U*	*20 U*	*1 U*	*1 U*	*1 U*	*1 U*	*1 U*	*1 U*	*1 U*	*1 U*	*1 U*	*1 U*
Toluene	µg/L	1,000	**250**	**540**	**360**	**410**	**0.21 J**	**1.1**	*0.75 U*	*0.75 U*	**0.63 J**	**0.32 J**	**0.7 J**	**0.6 J**	**0.51 J**	**11**
Xylenes	µg/L	10,000	**230**	**280**	**180**	**240**	**0.43 J**	**0.83 J**	*1 U*	*1 U*	**1.2 J**	*1 U*	**1.9 J**	**1.4 J**	**1.3 J**	**5.5**
Semivolatile Organic Compounds																
1,1-Biphenyl	µg/L	0.83	**3.1**	**2.6**	**2.2**	**3.2**	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*0.98 U*
1,2-Dichlorobenzene	µg/L	600	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1,3-Dichlorobenzene	µg/L		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1,4-Dichlorobenzene	µg/L	75	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1,4-Dioxane	µg/L	0.46	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**0.17**
2,4,5-Trichlorophenol	µg/L	1,200	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	**1.6 J**	**1.5 J**	**1.5 J**	*5 U*	*2.4 U*
2,4-Dimethylphenol	µg/L	360	**29**	**32**	**27**	**36**	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	**3.4**
2,4-Dinitrotoluene	µg/L	0.24	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*0.98 U*
2-Chloronaphthalene	µg/L	750	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	**0.97 J**
2-Methylnaphthalene	µg/L	36	**46**	**39**	**34**	**59**	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	**0.54 J**	*2 U*	**0.46 J**	*2 U*	**1.0**
2-Methylphenol	µg/L	930	**14**	**14**	**10**	**12**	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	**2 J**	**2.6 J**	*5 U*	**1.6**
3&4-Methylphenol(m&p Cresol)	µg/L	930	**34**	**31**	**22**	**27**	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	**7.7**
4-Chloro-3-methylphenol	µg/L		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*2 U*	N/A	N/A	N/A	N/A
Acenaphthene	µg/L	530	**1.6 J**	**1.8**	**1.6 J**	**2.7**	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	**0.66**
Acenaphthylene	µg/L	530	**3.9**	**4**	**3.3**	**6.1**	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	**0.78**
Acetophenone	µg/L	1,900	**3.9 J**	**3.4 J**	**2.6 J**	**3.8 J**	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	**0.79 J**

Table 3
Summary of Organics Detected in Groundwater
Container Terminal

Parameter	Units	PAL	CP19R-PZM008				CP20-PZM011					CP21-PZM004				CP26-MWS
			4/24/2023	10/17/2023	5/20/2024	10/11/2024	4/24/2023	10/19/2023	5/22/2024	10/11/2024	11/4/2024	10/12/2022	10/18/2023	5/20/2024	10/11/2024	3/11/2020
Aniline	µg/L		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Anthracene	µg/L	1,800	**0.42 J**	**0.67**	**0.61**	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*0.98 U*
Benz[a]anthracene	µg/L	0.03	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	**0.1**	*2 U*	*2 U*	*2 U*	*0.98 U*
Benzaldehyde	µg/L	1,900	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*0.98 U*
Benzo[a]pyrene	µg/L	0.2	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	**0.02 J**	*2 U*	*2 U*	*2 U*	*0.98 U*
Benzo[b]fluoranthene	µg/L	0.25	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	**0.05 J**	*2 U*	*2 U*	*2 U*	*0.98 U*
Benzo[g,h,i]perylene	µg/L		*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*0.1 U*	*2 U*	*2 U*	*2 U*	*0.98 U*
Benzo[k]fluoranthene	µg/L	2.5	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	**0.02 J**	*2 U*	*2 U*	*2 U*	*0.98 U*
bis(2-chloroethoxy)methane	µg/L	59	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*0.98 U*
bis(2-Chloroethyl)ether	µg/L	0.014	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*0.1 U*	*2 U*	*2 U*	*2 U*	*0.98 U*
bis(2-Ethylhexyl)phthalate	µg/L	6.0	**18**	*3 U*	*3 U*	*3 U*	*3 U*	*3 U*	*3 U*	*3 U*	*3 U*	*1 U*	*3 U*	*3 U*	*3 U*	*0.98 U*
Butylbenzylphthalate	µg/L		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*5 U*	N/A	N/A	N/A	N/A
Caprolactam	µg/L	9,900	*10 U*	*10 U*	*10 U*	*10 U*	*10 U*	*10 U*	*10 U*	*10 U*	*10 U*	*10 U*	*10 U*	*10 U*	*10 U*	*2.4 U*
Carbazole	µg/L		**2.5**	**3.2**	**2.7**	**4**	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	**0.57 J**	**0.81 J**	**0.73 J**	**0.63 J**	**1.3**
Chrysene	µg/L	25	*1.4 U*	*1.4 U*	*1.4 U*	*1.5 U*	*1.4 U*	*1.4 U*	*1.4 U*	*1.5 U*	*1.5 U*	*1.4 U*	*1.4 U*	*1.4 U*	*1.5 U*	*0.98 U*
Dibenz[a,h]anthracene	µg/L	0.025	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*0.05 U*	*2 U*	*2 U*	*2 U*	*0.98 U*
Dibenzofuran	µg/L		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*2 U*	N/A	N/A	N/A	N/A
Diethylphthalate	µg/L	15,000	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*0.98 U*
Di-n-butylphthalate	µg/L	900	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*0.98 U*
Fluoranthene	µg/L	800	**0.8 J**	**0.62 J**	**0.58 J**	**1.0**	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*0.98 U*
Fluorene	µg/L	290	**2.5**	**2.9**	**2.8**	**4.7**	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*0.98 U*
Indeno[1,2,3-c,d]pyrene	µg/L	0.25	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*0.1 U*	*2 U*	*2 U*	*2 U*	*0.98 U*
Naphthalene	µg/L	0.12	**56**	**400**	**200**	**340**	**5.0**	**1.2 J**	*2 U*	**20**	**8.4**	**17**	**22**	**26**	**6.0**	**70.5**
N-Nitrosodiphenylamine	µg/L	12	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*0.98 U*
Pentachlorophenol	µg/L	1.0	*10 U*	*10 U*	*10 U*	*10 U*	*10 U*	*10 U*	*10 U*	*10 U*	*10 U*	**0.46**	*10 U*	*10 U*	*10 U*	*2.4 U*
Phenanthrene	µg/L		**2.4**	**2.8**	**2.8**	**5.0**	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*0.98 U*
Phenol	µg/L	5,800	**6.0**	**2.9 J**	**2.9 J**	**4.6 J**	*5 U*	**2.2 J**	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	*5 U*	**13.9**
Pyrene	µg/L	120	**0.44 J**	**0.35 J**	**0.33 J**	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*2 U*	*0.98 U*
Pyridine	µg/L		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Petroleum Hydrocarbons																
Diesel Range Organics	µg/L	47	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**1,590**
Gasoline Range Organics	µg/L	47	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**138 J**
Oil and Grease	µg/L	47	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*4,750 U*

Detection in bold
Values highlighted in yellow indicate an exceedance of the Project Action Limit (PAL)
N/A indicates that the parameter was not analyzed for this sample

J: The positive result reported for this analyte is a quantitative estimate.
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.
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 3
Summary of Organics Detected in Groundwater
Container Terminal

Parameter	Units	PAL	SW14-PZM004	SW18-PZM008
			3/31/2016	3/19/2020
Volatile Organic Compounds				
1,1-Dichloroethane	µg/L	2.7	*1 U*	*1 U*
1,2-Dichlorobenzene	µg/L	600	*1 U*	*1 U*
1,3-Dichlorobenzene	µg/L		*1 U*	*1 U*
1,4-Dichlorobenzene	µg/L	75	*1 U*	*1 U*
1,4-Dioxane	µg/L	0.46	N/A	N/A
2-Butanone (MEK)	µg/L	5,600	*10 U*	*10 U*
4-Methyl-2-pentanone (MIBK)	µg/L	1,200	*10 U*	**0.76 J**
Acetone	µg/L	14,000	**10 R**	*10 U*
Benzene	µg/L	5	*1 U*	**24.8**
Bromomethane	µg/L	7.5	*1 U*	*1 U*
Carbon disulfide	µg/L	810	*1 U*	*1 U*
Chlorobenzene	µg/L	100	*1 U*	*1 U*
Chloroform	µg/L	0.22	*1 U*	*1 U*
Chloromethane	µg/L	190	*1 U*	*1 U*
Cyclohexane	µg/L	13,000	*10 U*	*10 U*
Ethylbenzene	µg/L	700	*1 U*	**1.1**
Isopropylbenzene	µg/L	450	*1 U*	*1 U*
m&p-Xylene	µg/L		*2 U*	**7.1**
Methyl Acetate	µg/L	20,000	*5 U*	*5 U*
Methyl tert-butyl ether (MTBE)	µg/L	14	*1 U*	*1 U*
Methylene Chloride	µg/L	5	*1 U*	*1 U*
Naphthalene	µg/L	0.12	N/A	N/A
o-Xylene	µg/L		*1 U*	**3.6**
Styrene	µg/L	100	*1 U*	*1 U*
Toluene	µg/L	1,000	*1 U*	**1.6**
Xylenes	µg/L	10,000	*3 U*	**10.7**
Semivolatile Organic Compounds				
1,1-Biphenyl	µg/L	0.83	**2.2**	**0.54 J**
1,2-Dichlorobenzene	µg/L	600	N/A	N/A
1,3-Dichlorobenzene	µg/L		N/A	N/A
1,4-Dichlorobenzene	µg/L	75	N/A	N/A
1,4-Dioxane	µg/L	0.46	**0.27**	*0.097 U*
2,4,5-Trichlorophenol	µg/L	1,200	*2.6 U*	*2.4 U*
2,4-Dimethylphenol	µg/L	360	*1 U*	**1.7**
2,4-Dinitrotoluene	µg/L	0.24	*1 U*	*0.97 U*
2-Chloronaphthalene	µg/L	750	*1 U*	*0.97 U*
2-Methylnaphthalene	µg/L	36	**13.3**	**4.6 R**
2-Methylphenol	µg/L	930	*1 U*	**2.8**
3&4-Methylphenol(m&p Cresol)	µg/L	930	*2.1 U*	**2.3**
4-Chloro-3-methylphenol	µg/L		N/A	N/A
Acenaphthene	µg/L	530	**25.7**	**0.97 R**
Acenaphthylene	µg/L	530	**0.62 J**	**1.6 R**
Acetophenone	µg/L	1,900	*1 U*	**0.57 J**

Table 3
Summary of Organics Detected in Groundwater
Container Terminal

Parameter	Units	PAL	SW14-PZM004	SW18-PZM008
			3/31/2016	3/19/2020
Aniline	µg/L		N/A	N/A
Anthracene	µg/L	1,800	**3.8**	*0.97 U*
Benz[a]anthracene	µg/L	0.03	**0.33 J**	*0.97 U*
Benzaldehyde	µg/L	1,900	*1 UJ*	*0.97 U*
Benzo[a]pyrene	µg/L	0.2	*1 U*	*0.97 U*
Benzo[b]fluoranthene	µg/L	0.25	*1 U*	*0.97 U*
Benzo[g,h,i]perylene	µg/L		*1 U*	*0.97 U*
Benzo[k]fluoranthene	µg/L	2.5	*1 U*	*0.97 U*
bis(2-chloroethoxy)methane	µg/L	59	*1 U*	*0.97 U*
bis(2-Chloroethyl)ether	µg/L	0.014	*1 U*	*0.97 U*
bis(2-Ethylhexyl)phthalate	µg/L	6.0	*1 U*	*0.97 U*
Butylbenzylphthalate	µg/L		N/A	N/A
Caprolactam	µg/L	9,900	*2.6 UJ*	*2.4 U*
Carbazole	µg/L		**12.1**	**3.2**
Chrysene	µg/L	25	*1 U*	*0.97 U*
Dibenz[a,h]anthracene	µg/L	0.025	*1 U*	*0.97 U*
Dibenzofuran	µg/L		N/A	N/A
Diethylphthalate	µg/L	15,000	*1 U*	*0.97 U*
Di-n-butylphthalate	µg/L	900	*1 U*	*0.97 U*
Fluoranthene	µg/L	800	**7.3**	*0.97 U*
Fluorene	µg/L	290	**12.6**	**1.1 R**
Indeno[1,2,3-c,d]pyrene	µg/L	0.25	*1 U*	*0.97 U*
Naphthalene	µg/L	0.12	**49.5**	**253 R**
N-Nitrosodiphenylamine	µg/L	12	*1 U*	*0.97 U*
Pentachlorophenol	µg/L	1.0	*2.6 U*	*2.4 U*
Phenanthrene	µg/L		**27.5**	**1.2 R**
Phenol	µg/L	5,800	**0.26 J**	**0.68 J**
Pyrene	µg/L	120	**4.4**	*0.97 U*
Pyridine	µg/L		N/A	N/A
Total Petroleum Hydrocarbons				
Diesel Range Organics	µg/L	47	**522 J**	**1,960**
Gasoline Range Organics	µg/L	47	*200 UJ*	*200 U*
Oil and Grease	µg/L	47	N/A	*4,750 U*

Detection in bold
Values highlighted in yellow indicate an exceedance of the Project Action Limit (PAL)
N/A indicates that the parameter was not analyzed for this sample

J: The positive result reported for this analyte is a quantitative estimate.
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.
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 4
Summary of Inorganics Detected in Groundwater
Container Terminal

Parameter	Units	PAL	B18-007-PZ 12/13/2016	B18-061-PZ 12/13/2016	B18-075-PZ 12/14/2016	B18-076-PZ 12/13/2016	CO05A-PZM 11/5/2024	CO05A-PZM 2/13/2025	CO152-PZM 10/31/2024	CO159-PZM 2/13/2025	CO203-MWS 2/10/2025	CO206R-MWS 11/4/2024	CO206R-MWS 2/11/2025
Metals													
Aluminum	µg/L	20,000	**242**	**64.8**	**367**	**180**	N/A	**14**	N/A	**3.47 J**	**110**	N/A	**48.6**
Antimony	µg/L	6.0	*6 U*	*6 U*	*6 U*	*6 U*	N/A	*4 U*	N/A	*4 U*	*4 U*	N/A	*4 U*
Arsenic	µg/L	10	*5 U*	*5 U*	*5 U*	*5 U*	N/A	**9.511**	N/A	**0.27 J**	**1.497**	N/A	**1.992**
Barium	µg/L	2,000	**99.3**	**69.6**	**33.2**	**38.8**	N/A	**54.88**	N/A	**81.1**	**55.23**	N/A	**53.86**
Beryllium	µg/L	4.0	*1 U*	*1 U*	**0.43 J**	*1 U*	N/A	*0.5 U*	N/A	*0.5 U*	*0.5 U*	N/A	*0.5 U*
Cadmium	µg/L	5.0	*3 U*	*3 U*	**0.79 J**	*3 U*	N/A	*0.2 U*	N/A	*0.2 U*	*0.2 U*	N/A	*0.2 U*
Chromium	µg/L	100	**0.92 J**	*5 U*	*5 U*	*5 U*	N/A	**0.3691 J**	N/A	*1 U*	**0.1782 J**	N/A	**0.2361 J**
Chromium VI	µg/L	0.035	*10 U*	*10 U*	**5.7 B**	*10 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cobalt	µg/L	6.0	*5 U*	*5 U*	**42.6**	*5 U*	N/A	**1.543**	N/A	*0.5 U*	**0.7465**	N/A	**0.7205**
Copper	µg/L	1,300	*5 U*	**4.8 J**	*5 U*	*5 U*	N/A	*1 U*	N/A	*1 U*	**0.4362 J**	N/A	*1 U*
Cyanide	µg/L	200	**38**	**11**	**8.8 J**	**110**	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Iron	µg/L	14,000	**36.7 J**	**12.6 J**	**15,900**	**75.1**	**932**	**717**	**153**	**66.3**	**361**	**763**	**145**
Lead	µg/L	15	*5 U*	*5 U*	*5 U*	*5 U*	N/A	*1 U*	N/A	*1 U*	*1 U*	N/A	*1 U*
Manganese	µg/L	430	*5 U*	**4.6 J**	**1,630**	**128**	**20.3**	**25.55**	**51.3**	**56.67**	*10 U*	**199**	**0.6515 J**
Nickel	µg/L	390	*10 U*	**2.9 J**	**47.7**	**4.1 J**	N/A	**0.9048 J**	N/A	*2 U*	**1.772 J**	N/A	**1.4 J**
Selenium	µg/L	50	**7.2 J**	**5.9 J**	*8 U*	**16.9**	N/A	*5 U*	N/A	*5 U*	**2.75 J**	N/A	*5 U*
Silver	µg/L	94	*6 U*	*6 U*	*6 U*	*6 U*	N/A	*0.4 U*	N/A	*0.4 U*	*0.4 U*	N/A	*0.4 U*
Thallium	µg/L	2.0	*10 U*	*10 U*	*10 U*	*10 U*	N/A	*1 U*	N/A	*1 U*	*1 U*	N/A	*1 U*
Vanadium	µg/L	86	**1.2 J**	**3.3 J**	**2.3 B**	**19.2**	N/A	**1.602 J**	N/A	*5 U*	**1,430**	N/A	**701.8**
Zinc	µg/L	6,000	**14.6**	**19.9**	**245**	**38.8**	N/A	*10 U*	N/A	*10 U*	**7.128 J**	N/A	*10 U*

Detection in bold
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Table 4
Summary of Inorganics Detected in Groundwater
Container Terminal

Parameter	Units	PAL	CO211-MWS 3/11/2020	CO212-MWS 11/5/2024	CO24-PZM007 2/13/2025	CO26-PZM007 2/10/2025	CO58-PZM001 2/11/2025	CO59-PZP002 2/11/2025	CP02-PZM007 4/19/2023	CP02-PZM007 10/17/2023	CP02-PZM007 5/16/2024	CP02-PZM007 10/9/2024	CP07-PZM006 10/23/2023
Metals													
Aluminum	µg/L	20,000	*50 U*	N/A	**10.8 J**	**97.2**	**19.1**	**19.1**	*10 U*	**4.54 J**	**11.9**	*100 U*	**44.7**
Antimony	µg/L	6.0	*6 U*	N/A	*4 U*	*4 U*	*4 U*	*4 U*	*4 U*	*4 U*	*4 U*	*40 U*	*4 U*
Arsenic	µg/L	10	**3.2 J**	N/A	**1.072**	**1.097**	**1.103**	**0.9593**	**27.58**	**27.22**	**25.78**	**29.59**	**6.732**
Barium	µg/L	2,000	**26.7**	N/A	**28.53**	**105.4**	**92.55**	**22.64**	**19.78**	**18.57**	**18.64**	**21.13**	**39.52**
Beryllium	µg/L	4.0	*1 U*	N/A	*0.5 U*	*0.5 U*	*0.5 U*	*0.5 U*	*0.5 U*	*0.5 U*	*0.5 U*	*5 U*	*0.5 U*
Cadmium	µg/L	5.0	**0.61 J**	N/A	*0.2 U*	*0.2 U*	*0.2 U*	*0.2 U*	*0.2 U*	*0.2 U*	*0.2 U*	*2 U*	*0.2 U*
Chromium	µg/L	100	**1.3 J**	N/A	*1 U*	*1 U*	**0.7747 J**	**1.45**	**0.2018 J**	**0.4427 J**	*10 U*	*10 U*	**0.3463 J**
Chromium VI	µg/L	0.035	*10 U*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cobalt	µg/L	6.0	*5 U*	N/A	**1.972**	**0.5429**	**0.6001**	**0.3646 J**	**2.427**	**2.982**	**2.657**	**2.396 J**	**0.1923 J**
Copper	µg/L	1,300	*5 U*	N/A	*1 U*	*1 U*	**0.8123 J**	**1**	**3.108**	**5.518**	**6.051**	**6.056 J**	*1 U*
Cyanide	µg/L	200	**150**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Iron	µg/L	14,000	**162**	**30.5 J**	**385**	**157**	**131**	**44.7 J**	**76**	**210**	**325**	**304 J**	**27.3 J**
Lead	µg/L	15	*5 U*	N/A	*1 U*	*1 U*	*1 U*	*1 U*	*1 U*	**0.4349 J**	**1.356**	*10 U*	*1 U*
Manganese	µg/L	430	**2,050**	*10 U*	**38.68**	*1 U*	*1 U*	**0.901 J**	**799.4**	**1,282**	**1,421**	**1,614**	**3.778**
Nickel	µg/L	390	*10 U*	N/A	**1.132 J**	**2.243**	**1.09 J**	**0.8634 J**	**0.6557 J**	**0.9046 J**	*2 U*	*20 U*	**4.628**
Selenium	µg/L	50	*8 U*	N/A	*5 U*	**1.77 J**	*5 U*	**2.36 J**	**10.1**	**20.8**	**17.8**	**20.4 J**	*5 U*
Silver	µg/L	94	*6 U*	N/A	*0.4 U*	*0.4 U*	*0.4 U*	*0.4 U*	*0.4 U*	**0.289 J**	**0.2801 J**	*4 U*	*0.4 U*
Thallium	µg/L	2.0	*10 U*	N/A	*1 U*	*1 U*	*1 U*	*1 U*	*1 U*	*1 U*	*1 U*	*10 U*	*1 U*
Vanadium	µg/L	86	**7.3**	N/A	**497.7**	**193**	**425.2**	**624.6**	**29.4**	**38.42**	**30.65 J**	**21.98 J**	**12.04**
Zinc	µg/L	6,000	**2.4 J**	N/A	*10 U*	*10 U*	*10 U*	*10 U*	*10 U*	*10 U*	*10 U*	*100 U*	*10 U*

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Table 4
Summary of Inorganics Detected in Groundwater
Container Terminal

Parameter	Units	PAL	CP07-PZM006 4/24/2023	CP07-PZM006 5/20/2024	CP07-PZM006 10/11/2024	CP08R-PZM008 4/25/2023	CP08R-PZM008 10/18/2023	CP08R-PZM008 5/22/2024	CP08R-PZM008 10/9/2024	CP12-PZM012 4/17/2023	CP12-PZM012 10/23/2023	CP12-PZM012 5/22/2024	CP12-PZM012 10/3/2024
Metals													
Aluminum	µg/L	20,000	**48.1**	**38.9**	**102**	**68.9**	**11.3**	**20.8**	**62.3 J**	*100 U*	**19.7**	**10.4**	*100 U*
Antimony	µg/L	6.0	*4 U*	*4 U*	*40 U*	*4 U*	*4 U*	*4 U*	*40 U*	*40 U*	*4 U*	*4 U*	*40 U*
Arsenic	µg/L	10	**5.957**	**6.168**	**6.291**	**0.7896**	**0.78**	**0.6153**	*5 U*	*5 U*	**0.5075**	**0.2621 J**	**14.39**
Barium	µg/L	2,000	**41.63**	**35.06**	**37.76**	**82.21**	**34.85**	**88.74**	**107.8**	**94.49**	**123.4**	**51.85**	**119.4**
Beryllium	µg/L	4.0	*0.5 U*	*0.5 U*	*5 U*	*0.5 U*	*0.5 U*	*0.5 U*	*5 U*	*5 U*	*0.5 U*	*0.5 U*	*5 U*
Cadmium	µg/L	5.0	*0.2 U*	*0.2 U*	*2 U*	*0.2 U*	*0.2 U*	*0.2 U*	*2 U*	*2 U*	*0.2 U*	*0.2 U*	*2 U*
Chromium	µg/L	100	**0.7925 J**	*1 U*	*10 U*	**1.842**	**0.2416 J**	**0.2751 J**	**42.5**	**3.356 J**	**0.7111 J**	**0.4587 J**	**3.015 J**
Chromium VI	µg/L	0.035	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cobalt	µg/L	6.0	**0.1664 J**	*0.5 U*	*5 U*	*0.5 U*	*0.5 U*	*0.5 U*	*5 U*	*5 U*	*0.5 U*	*0.5 U*	*5 U*
Copper	µg/L	1,300	*1 U*	*1 U*	*10 U*	*1 U*	*1 U*	**0.4884 J**	*10 U*	*10 U*	**0.4558 J**	*1 U*	*10 U*
Cyanide	µg/L	200	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Iron	µg/L	14,000	**33.2 J**	**19.3 J**	*500 U*	**314**	**33.7 J**	**208**	*500 U*	*500 U*	**108**	**43.1 J**	**1,050**
Lead	µg/L	15	*1 U*	*1 U*	*10 U*	*1 U*	*1 U*	*1 U*	*10 U*	*10 U*	**0.3498 J**	*1 U*	*10 U*
Manganese	µg/L	430	**2.383**	**1.566**	**5.466 J**	**64.65**	**6.04**	**2.603**	**10.65**	*10 U*	**7.267**	**3.641**	**575.8**
Nickel	µg/L	390	**4.347**	**3.693**	*20 U*	**1.373 J**	**0.6531 J**	**1.469 J**	*20 U*	*20 U*	**2.118**	**1.266 J**	*20 U*
Selenium	µg/L	50	*5 U*	*5 U*	*50 U*	*5 U*	*5 U*	*5 U*	*50 U*	*50 U*	*5 U*	*5 U*	*50 U*
Silver	µg/L	94	*0.4 U*	*0.4 U*	*4 U*	*0.4 U*	*0.4 U*	*0.4 U*	*4 U*	*4 U*	*0.4 U*	*0.4 U*	*4 U*
Thallium	µg/L	2.0	*1 U*	*2 U*	*10 U*	*1 U*	*1 U*	*2 U*	*10 U*	*10 U*	*1 U*	*2 U*	*10 U*
Vanadium	µg/L	86	**29.54**	**37.75**	*50 U*	**30.26**	**50.27**	**18.16**	**15.92 J**	*50 U*	**1.897 J**	*5 U*	*50 U*
Zinc	µg/L	6,000	*10 U*	*10 U*	*100 U*	*10 U*	*10 U*	*10 U*	*100 U*	*100 U*	*10 U*	*10 U*	*100 U*

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Table 4
Summary of Inorganics Detected in Groundwater
Container Terminal

Parameter	Units	PAL	CP14-PZM009 4/18/2023	CP14-PZM009 10/17/2023	CP14-PZM009 5/16/2024	CP14-PZM009 10/7/2024	CP16-PZM008 4/19/2023	CP16-PZM008 10/13/2023	CP16-PZM008 5/16/2024	CP16-PZM008 10/4/2024	CP17-PZM013 3/16/2020	CP18R-PZM009 4/25/2023	CP18R-PZM009 10/19/2023
Metals													
Aluminum	µg/L	20,000	**7.03 J**	**11.6**	**10.8**	*100 U*	**17.7**	**10.8**	**11.6**	*200 U*	**137**	**4.6 JB**	**7.57 J**
Antimony	µg/L	6.0	*4 U*	*4 U*	*4 U*	*40 U*	*4 U*	*4 U*	*4 U*	*4 U*	*6 U*	*4 U*	*4 U*
Arsenic	µg/L	10	**1.25**	**1.707**	**1.472**	**2.675 J**	**0.9211**	**1.697**	**1.143**	**0.8652**	**4.6 J**	**1.046**	**1.174**
Barium	µg/L	2,000	**180.9**	**176.7**	**164.3**	**180.7**	**833.5**	**600.1**	**816**	**622.9**	**188**	**63.06**	**81.9**
Beryllium	µg/L	4.0	*5 U*	*0.5 U*	*0.5 U*	*5 U*	*0.5 U*	*0.5 U*	*0.5 U*	*0.5 U*	*1 U*	*0.5 U*	*0.5 U*
Cadmium	µg/L	5.0	*0.2 U*	*0.2 U*	*0.2 U*	*2 U*	*0.2 U*	*0.2 U*	*0.2 U*	*0.2 U*	**0.37 J**	*0.2 U*	*0.2 U*
Chromium	µg/L	100	**0.8856 J**	**0.7983 J**	**1.919 J**	**2.934 J**	**0.2408 J**	*1 U*	*10 U*	**0.2786 J**	**1 J**	*1 U*	**0.2278 J**
Chromium VI	µg/L	0.035	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*10 U*	N/A	N/A
Cobalt	µg/L	6.0	*0.5 U*	*0.5 U*	*0.5 U*	*5 U*	*0.5 U*	*0.5 U*	*0.5 U*	*0.5 U*	*5 U*	**0.1702 J**	*0.5 U*
Copper	µg/L	1,300	*1 U*	*1 U*	*1 U*	*10 U*	*1 U*	*1 U*	*1 U*	*1 U*	*5 U*	*1 U*	*1 U*
Cyanide	µg/L	200	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**8.7 J**	N/A	N/A
Iron	µg/L	14,000	**99.4**	**92.8**	**152**	*500 U*	**38.7 J**	**34.3 J**	**88.9**	**148**	*70 U*	**96**	**104**
Lead	µg/L	15	*1 U*	*1 U*	**1.103**	*10 U*	*1 U*	*1 U*	**0.3643 J**	*1 U*	*5 U*	*1 U*	*1 U*
Manganese	µg/L	430	**9.279**	**14.54**	**10.62**	*10 U*	**3.193**	**2.939**	**2.596**	**5.193**	**2.6 J**	**3.255**	**6.481**
Nickel	µg/L	390	**2.279**	**2.391**	**1.934 J**	*20 U*	**2.157**	**2.212**	**1.821 J**	**1.911 J**	**11**	**0.7083 J**	**1.015 J**
Selenium	µg/L	50	*5 U*	*5 U*	*5 U*	*50 U*	*5 U*	*5 U*	*5 U*	*5 U*	*8 U*	*5 U*	*5 U*
Silver	µg/L	94	*0.4 U*	*0.4 U*	*0.4 U*	*4 U*	*0.4 U*	*0.4 U*	*0.4 U*	*0.4 U*	*6 U*	*0.4 U*	*0.4 U*
Thallium	µg/L	2.0	*1 U*	*1 U*	*1 U*	*10 U*	*1 U*	*1 U*	*1 U*	*1 U*	*10 U*	*1 U*	*1 U*
Vanadium	µg/L	86	*5 U*	*5 U*	*50 U*	*50 U*	*5 U*	*5 U*	*50 U*	*5 U*	**5.1**	**22.91**	**19.8**
Zinc	µg/L	6,000	*10 U*	*10 U*	*10 U*	*100 U*	*10 U*	*10 U*	*10 U*	*10 U*	*10 U*	*10 U*	*10 U*

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Table 4
Summary of Inorganics Detected in Groundwater
Container Terminal

Parameter	Units	PAL	CP18R-PZM009 5/22/2024	CP18R-PZM009 10/7/2024	CP19R-PZM008 4/24/2023	CP19R-PZM008 10/17/2023	CP19R-PZM008 5/20/2024	CP19R-PZM008 10/11/2024	CP20-PZM011 4/24/2023	CP20-PZM011 10/19/2023	CP20-PZM011 5/22/2024	CP20-PZM011 10/11/2024	CP21-PZM004 10/12/2022
Metals													
Aluminum	µg/L	20,000	**26.8**	*100 U*	**18**	**33**	**7.68 J**	**37.1 J**	**276**	**122**	**1,100**	**141**	**35.3**
Antimony	µg/L	6.0	*4 U*	**8.797 J**	*4 U*	*4 U*	*4 U*	*40 U*	*4 U*	**0.6133 J**	**0.8795 J**	*40 U*	*4 U*
Arsenic	µg/L	10	**0.9873**	**2.887 J**	**1.399**	**1.612**	**1.282**	**1.805 J**	**0.7143**	**0.8194**	**1.43**	*5 U*	**5.058**
Barium	µg/L	2,000	**74.66**	**77.88**	**85.48**	**56.75**	**90.46**	**88.68**	**18.54**	**22.93**	**40.83**	**15.66**	**28.06**
Beryllium	µg/L	4.0	*0.5 U*	*5 U*	*0.5 U*	*0.5 U*	*0.5 U*	*5 U*	*0.5 U*	*0.5 U*	*0.5 U*	*5 U*	*0.5 U*
Cadmium	µg/L	5.0	*0.2 U*	*2 U*	*0.2 U*	*0.2 U*	*0.2 U*	*2 U*	*0.2 U*	*0.2 U*	**0.1502 J**	*2 U*	*0.2 U*
Chromium	µg/L	100	**0.6351 J**	**1.846 J**	**0.7723 J**	**1.781**	**1.424**	**7.199 J**	**11.54**	**22.96**	**9.738**	**17.19**	**1.418**
Chromium VI	µg/L	0.035	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cobalt	µg/L	6.0	**0.2196 J**	*5 U*	**0.2977 J**	**0.2608 J**	**0.1735 J**	*5 U*	*0.5 U*	**0.1883 J**	**1.13**	*5 U*	**0.2185 J**
Copper	µg/L	1,300	**1.529**	*10 U*	**1.132**	**1.33**	**1.072**	*10 U*	**1.136**	**1.532**	**8.625**	*10 U*	**0.8957 J**
Cyanide	µg/L	200	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Iron	µg/L	14,000	**148**	**256 J**	**75.2**	**108**	**28.5 J**	*500 U*	**74.4**	**118**	**2,640**	*500 U*	**331**
Lead	µg/L	15	**1.924**	*10 U*	**0.3837 J**	*1 U*	*1 U*	*10 U*	**0.634 J**	**0.9748 J**	**23.18**	*10 U*	**0.6445 J**
Manganese	µg/L	430	**17.53**	**26.57**	**8.706**	**13.17**	**2.183**	**14.92**	**8.294**	**12.79**	**267.8**	**7.813 J**	**307.3**
Nickel	µg/L	390	**0.774 J**	*20 U*	**1.627 J**	**1.562 J**	**1.199 J**	*20 U*	**0.6706 J**	**0.5562 J**	**4.025**	*20 U*	**2.231**
Selenium	µg/L	50	*5 U*	*50 U*	*5 U*	*5 U*	*5 U*	*50 U*	*5 U*	**2.94 J**	**1.91 J**	*50 U*	*5 U*
Silver	µg/L	94	*0.4 U*	*4 U*	*0.4 U*	*0.4 U*	*0.4 U*	*4 U*	*0.4 U*	*0.4 U*	*0.4 U*	*4 U*	*0.4 U*
Thallium	µg/L	2.0	*2 U*	*10 U*	*1 U*	*1 U*	*2 U*	*10 U*	*1 U*	*1 U*	*2 U*	*10 U*	*2 U*
Vanadium	µg/L	86	**16.25**	**19.02 J**	**6.336**	**8.423**	**6.573**	*50 U*	**174.4**	**250.3**	**105**	**200.9**	**10.1**
Zinc	µg/L	6,000	*10 U*	*100 U*	*10 U*	*10 U*	*10 U*	*100 U*	*10 U*	*10 U*	**48.08**	*100 U*	*10 U*

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Table 4
Summary of Inorganics Detected in Groundwater
Container Terminal

Parameter	Units	PAL	CP21-PZM004 10/18/2023	CP21-PZM004 5/20/2024	CP21-PZM004 10/11/2024	CP26-MWS 3/11/2020	SW14-PZM004 3/31/2016	SW18-PZM008 3/19/2020
Metals								
Aluminum	µg/L	20,000	**41.8**	**41.2**	**41.8 J**	**401**	**1,850**	**132**
Antimony	µg/L	6.0	*4 U*	*4 U*	*40 U*	*6 U*	*6 U*	*6 U*
Arsenic	µg/L	10	**5.028**	**5.096**	**4.902 J**	**2.7 J**	**4.7 J**	**2.8 J**
Barium	µg/L	2,000	**25.6**	**22.12**	**22.35**	**1,350**	**164**	**45.6**
Beryllium	µg/L	4.0	*0.5 U*	*0.5 U*	*5 U*	*1 U*	*1 U*	*1 U*
Cadmium	µg/L	5.0	*0.2 U*	*0.2 U*	*2 U*	*3 U*	*3 U*	**0.52 J**
Chromium	µg/L	100	**2.169**	**1.647**	*10 U*	**1.2 J**	**1.7 B**	**5.8**
Chromium VI	µg/L	0.035	N/A	N/A	N/A	*10 U*	*10 U*	**7.6 J**
Cobalt	µg/L	6.0	**0.3098 J**	**0.2976 J**	*5 U*	*5 U*	*5 U*	*5 U*
Copper	µg/L	1,300	*1 U*	**0.8205 J**	*10 U*	*5 U*	*5 U*	*5 U*
Cyanide	µg/L	200	N/A	N/A	N/A	**21**	*10 U*	**15**
Iron	µg/L	14,000	**347**	**430**	**221 J**	*70 U*	**15.6 B**	*70 U*
Lead	µg/L	15	**0.8277 J**	**1.038**	*10 U*	*5 U*	*5 U*	*5 U*
Manganese	µg/L	430	**232.4**	**184.2**	**166.4**	**2.6 J**	*5 U*	**3.3 J**
Nickel	µg/L	390	**3.089**	**2.313**	*20 U*	**12.5**	**3.1 B**	*10 U*
Selenium	µg/L	50	*5 U*	*5 U*	*50 U*	*8 U*	*8 U*	*8 U*
Silver	µg/L	94	*0.4 U*	*0.4 U*	*4 U*	*6 U*	*6 U*	*6 U*
Thallium	µg/L	2.0	*1 U*	**0.2711 J**	*10 U*	*10 U*	*10 U*	**4.1 J**
Vanadium	µg/L	86	**8.639**	**42.3**	*50 U*	**2 J**	**125**	**222**
Zinc	µg/L	6,000	*10 U*	**4.94 J**	*100 U*	**2.4 J**	**0.64 J**	*10 U*

Detection in bold
Values highlighted in yellow indicate an exceedance of the Project Action Limit (PAL)
N/A indicates that the parameter was not analyzed for this sample

J: The positive result reported for this analyte is a quantitative estimate.
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.
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 5 - Container Terminal
Cumulative Vapor Intrusion Comparison

				B18-007-PZ		B18-061-PZ		B18-075-PZ		B18-076-PZ		CO05A-PZM		CO05B-PZM		CO05C-PZM		CO08A-PZM	
				12/13/2016		12/13/2016		12/14/2016		12/13/2016		5/19/2021		5/20/2021		5/19/2021		5/20/2021	
Parameter	Type	Organ System	VI Screening Criteria (µg/L)	Conc. (µg/L)	Risk/ Hazard	Conc. (µg/L)	Risk/ Hazard	Conc. (µg/L)	Risk/ Hazard	Conc. (µg/L)	Risk/ Hazard	Conc. (µg/L)	Risk/ Hazard	Conc. (µg/L)	Risk/ Hazard	Conc. (µg/L)	Risk/ Hazard	Conc. (µg/L)	Risk/ Hazard
Cancer Risk																			
Benzene	VOC		69	67.2	9.7E-06	1 U	0	1 U	0	1 U	0	1,330	1.9E-04	2,550	3.7E-04	3.8	5.5E-07	452	6.6E-05
Ethylbenzene	VOC		150	1.8	1.2E-07	1 U	0	1 U	0	1 U	0	71.8	4.8E-06	163	1.1E-05	1.0	6.7E-08	342	2.3E-05
Naphthalene	SVOC		200	411	2.1E-05	0.48	2.4E-08	1.6	8.0E-08	0.049	2.5E-09	16,600	8.3E-04	12,500	6.3E-04	7.4 J	3.7E-07	N/A	N/A
Cumulative Vapor Intrusion Cancer Risk					3.E-05		2.E-08		8.E-08		2.E-09		1.E-03		1.E-03		1.E-06		9.E-05
Non-Cancer Hazard																			
Xylenes	VOC	Nervous	1,600	29.3	1.8E-02	3 U	0	3 U	0	3 U	0	1,080	6.8E-01	296	1.9E-01	3	1.9E-03	8,040	5.0E+00
Cumulative Vapor Intrusion Hazard Index					0		0		0		0		1		0		0		5

Highlighted values indicate exceedances of the cumulative vapor intrusion criteria: Target Cancer Risk>1E-05 or Hazard Index>1
Conc. = Concentration
N/A: Not Analyzed
U: This analyte was not detected in the sample. The numeric value represents the sample quantitation/detection limit.
J: The positive result reported for this analyte is a quantitative estimate.

Table 5 - Container Terminal
Cumulative Vapor Intrusion Comparison

				CO08B-PZM		CO152-PZM		CO159-PZM		CO167-PZM		CO203-MWS		CO204-MWS		CO205-MWS	
				5/19/2021		4/10/2020		4/10/2020		4/10/2020		10/9/2019		10/9/2019		10/9/2019	
Parameter	Type	Organ System	VI Screening Criteria (µg/L)	Conc. (µg/L)	Risk/ Hazard	Conc. (µg/L)	Risk/ Hazard	Conc. (µg/L)	Risk/ Hazard	Conc. (µg/L)	Risk/ Hazard	Conc. (µg/L)	Risk/ Hazard	Conc. (µg/L)	Risk/ Hazard	Conc. (µg/L)	Risk/ Hazard
Cancer Risk																	
Benzene	VOC		69	5,240	7.6E-04	1,520	2.2E-04	64.7	9.4E-06	5.6	8.1E-07	523	7.6E-05	810	1.2E-04	413	6.0E-05
Ethylbenzene	VOC		150	211	1.4E-05	9.8	6.5E-07	8.4	5.6E-07	2.3 J	1.5E-07	13.7	9.1E-07	20.7	1.4E-06	12.4	8.3E-07
Naphthalene	SVOC		200	1,490	7.5E-05	37.3	1.9E-06	54.6	2.7E-06	82.6	4.1E-06	13,600	6.8E-04	21,600	1.1E-03	11,500	5.8E-04
Cumulative Vapor Intrusion Cancer Risk					8.E-04		2.E-04		1.E-05		5.E-06		8.E-04		1.E-03		6.E-04
Non-Cancer Hazard																	
Xylenes	VOC	Nervous	1,600	1,480	9.3E-01	15 U	0	8.4 J	5.3E-03	13.8 J	8.6E-03	325	2.0E-01	545	3.4E-01	301	1.9E-01
Cumulative Vapor Intrusion Hazard Index					1		0		0		0		0		0		0

Highlighted values indicate exceedances of the cumulative vapor intrusion criteria: Target Cancer Risk>1E-05 or Hazard Index>1
Conc. = Concentration
N/A: Not Analyzed
U: This analyte was not detected in the sample. The numeric value represents the sample quantitation/detection limit.
J: The positive result reported for this analyte is a quantitative estimate.

Table 5 - Container Terminal
Cumulative Vapor Intrusion Comparison

				CO206R-MWS		CO207-MWS		CO208-MWS		CO211-MWS		CO212A-PZM		CO212-MWS		CO216-MWS		CO26-PZM007	
				2/15/2024		10/9/2019		10/10/2019		3/11/2020		5/20/2021		2/6/2020		4/10/2020		11/30/2022	
Parameter	Type	Organ System	VI Screening Criteria (µg/L)	Conc. (µg/L)	Risk/ Hazard	Conc. (µg/L)	Risk/ Hazard	Conc. (µg/L)	Risk/ Hazard	Conc. (µg/L)	Risk/ Hazard	Conc. (µg/L)	Risk/ Hazard	Conc. (µg/L)	Risk/ Hazard	Conc. (µg/L)	Risk/ Hazard	Conc. (µg/L)	Risk/ Hazard
Cancer Risk																			
Benzene	VOC		69	140	4.0E-04	290	4.2E-05	202	2.9E-05	369	5.3E-05	1 U	0	10,600	1.5E-03	53.4	7.7E-06	210	3.0E-05
Ethylbenzene	VOC		150	7.9	2.2E-06	15.4	1.0E-06	9.9	6.6E-07	0.94 J	6.3E-08	1 U	0	727	4.8E-05	2.4 J	1.6E-07	6.1	4.1E-07
Naphthalene	SVOC		200	2,900	1.1E-03	8,010	4.0E-04	1390	7.0E-05	4.9	2.5E-07	1.2	6.0E-08	19,000	9.5E-04	2,850	1.4E-04	1,400	7.0E-05
Cumulative Vapor Intrusion Cancer Risk					1.E-03		4.E-04		1.E-04		5.E-05		6.E-08		3.E-03		2.E-04		1.E-04
Non-Cancer Hazard																			
Xylenes	VOC	Nervous	1,600	200	1.3E-01	259	1.6E-01	153	9.6E-02	3 U	0	3 U	0	7,790	4.9E+00	10.3 J	6.4E-03	140	8.8E-02
Cumulative Vapor Intrusion Hazard Index					0		0		0		0		0		5		0		0

Highlighted values indicate exceedances of the cumulative vapor intrusion criteria: Target Cancer Risk>1E-05 or Hazard Index>1
Conc. = Concentration
N/A: Not Analyzed
U: This analyte was not detected in the sample. The numeric value represents the sample quantitation/detection limit.
J: The positive result reported for this analyte is a quantitative estimate.

Table 5 - Container Terminal
Cumulative Vapor Intrusion Comparison

				CO35-PZM013		CO55-PZM000		CO56-PZP001		CO57-PZP002		CO58-PZM001		CO59-PZP002		CO60-PZP001		CP02-PZM007	
				3/12/2020		12/2/2022		12/2/2022		11/30/2022		11/30/2022		12/1/2022		5/12/2022		10/11/2019	
Parameter	Type	Organ System	VI Screening Criteria (µg/L)	Conc. (µg/L)	Risk/ Hazard	Conc. (µg/L)	Risk/ Hazard	Conc. (µg/L)	Risk/ Hazard	Conc. (µg/L)	Risk/ Hazard	Conc. (µg/L)	Risk/ Hazard	Conc. (µg/L)	Risk/ Hazard	Conc. (µg/L)	Risk/ Hazard	Conc. (µg/L)	Risk/ Hazard
Cancer Risk																			
Benzene	VOC		69	106	1.5E-05	0.17 J	2.5E-08	360	5.2E-05	0.5 U	0	190	2.8E-05	13	1.9E-06	57.2	8.3E-06	1.1	1.6E-07
Ethylbenzene	VOC		150	3.2	2.1E-07	0.5 U	0	11	7.3E-07	0.5 U	0	8.0	5.3E-07	0.62	4.1E-08	2.2	1.5E-07	1 U	0
Naphthalene	SVOC		200	385	1.9E-05	0.49 J	2.5E-08	3,000	1.5E-04	1 U	0	1,600	8.0E-05	58	2.9E-06	360	1.8E-05	0.83 J	4.2E-08
Cumulative Vapor Intrusion Cancer Risk					3.E-05		5.E-08		2.E-04		0		1.E-04		5.E-06		3.E-05		2.E-07
Non-Cancer Hazard																			
Xylenes	VOC	Nervous	1,600	42.4	2.7E-02	1 U	0	260	1.6E-01	1 U	0	1.40E+02	8.8E-02	9.60E+00	6.0E-03	4.01E+01	2.5E-02	3 U	0
Cumulative Vapor Intrusion Hazard Index					0		0		0		0		0		0		0		0

Highlighted values indicate exceedances of the cumulative vapor intrusion criteria: Target Cancer Risk>1E-05 or Hazard Index>1
Conc. = Concentration
N/A: Not Analyzed
U: This analyte was not detected in the sample. The numeric value represents the sample quantitation/detection limit.
J: The positive result reported for this analyte is a quantitative estimate.

Table 5 - Container Terminal
Cumulative Vapor Intrusion Comparison

				CP07-PZM006		CP17-PZM013		CP21-PZM004		CP26-MWS		SW14-PZM004		SW18-PZM008	
				10/10/2022		3/16/2020		10/11/2019		3/11/2020		3/19/2020		3/19/2020	
Parameter	Type	Organ System	VI Screening Criteria (µg/L)	Conc. (µg/L)	Risk/ Hazard	Conc. (µg/L)	Risk/ Hazard	Conc. (µg/L)	Risk/ Hazard	Conc. (µg/L)	Risk/ Hazard	Conc. (µg/L)	Risk/ Hazard	Conc. (µg/L)	Risk/ Hazard
Cancer Risk															
Benzene	VOC		69	390	5.7E-05	22.5	3.3E-06	16	2.3E-06	59.9	8.7E-06	24.8	3.6E-06	24.8	3.6E-06
Ethylbenzene	VOC		150	3.2	2.1E-07	1.8	1.2E-07	1 U	0	0.72 J	4.8E-08	1.1	7.3E-08	1.1	7.3E-08
Naphthalene	SVOC		200	56	2.8E-06	193	9.7E-06	44.3	2.2E-06	70.5	3.5E-06	253	1.3E-05	253	1.3E-05
Cumulative Vapor Intrusion Cancer Risk					6.E-05		1.E-05		5.E-06		1.E-05		2.E-05		2.E-05
Non-Cancer Hazard															
Xylenes	VOC	Nervous	1,600	36	2.3E-02	21.3	1.3E-02	2.5 J	1.6E-03	5.5	3.4E-03	11	6.7E-03	10.7	6.7E-03
Cumulative Vapor Intrusion Hazard Index					0		0		0		0		0		0

Highlighted values indicate exceedances of the cumulative vapor intrusion criteria: Target Cancer Risk>1E-05 or Hazard Index>1
Conc. = Concentration
N/A: Not Analyzed
U: This analyte was not detected in the sample. The numeric value represents the sample quantitation/detection limit.
J: The positive result reported for this analyte is a quantitative estimate.

Table 6 - Container Terminal
COPC Screening Analysis

Parameter	CAS#	Location of Max Result	Max Detection (mg/kg)	Final Flag	Min Detection (mg/kg)	Average Detection (mg/kg)	Total Samples	Frequency of Detection (%)	Cancer TR=1E-06 (mg/kg)	Non-Cancer HQ=0_1 (mg/kg)	COPC?
1,1,1-Trichloroethane	71-55-6	B11-026-SB-9	0.046		0.00049	0.01	67	7.46		3,600	no
1,1-Biphenyl	92-52-4	B11-026-SB-10	74.7		0.022	2.36	132	53.79	410	20	YES (NC)
1,1-Dichloroethane	75-34-3	B11-026-SB-9	0.0072		0.00027	0.004	67	2.99	16	23,000	no
1,2,4,5-Tetrachlorobenzene	95-94-3	B11-025-SB-1	0.098		0.018	0.04	132	3.03		35	no
1,2-Dichlorobenzene	95-50-1	CT-024-SB-1	0.00021	J	0.00021	0.0002	67	1.49		930	no
2,4-Dimethylphenol	105-67-9	B11-026-SB-9	4.2		0.015	0.85	122	5.74		1,600	no
2,4-Dinitrophenol	51-28-5	B18-061-SB-1	0.076	J	0.076	0.08	118	0.85		160	no
2,4-Dinitrotoluene	121-14-2	B11-012-SB-2	0.061	J	0.02	0.04	132	1.52	7.4	160	no
2,6-Dinitrotoluene	606-20-2	B18-061-SB-1	0.16		0.16	0.16	132	0.76	1.5	25	no
2-Butanone (MEK)	78-93-3	CT-013-SB-10	0.0081	J	0.0022	0.01	67	5.97		19,000	no
2-Chloronaphthalene	91-58-7	B11-025-SB-1	0.23		0.23	0.23	132	0.76		6,000	no
2-Chlorophenol	95-57-8	B11-025-SB-1	0.052	J	0.052	0.05	122	0.82		580	no
2-Methylnaphthalene	91-57-6	TP-006-NWALL-EAST-EAST	73		0.0022	2.90	188	92.02		300	no
2-Methylphenol	95-48-7	B11-026-SB-9	1.6	J	0.016	0.41	122	7.38		4,100	no
3,3'-Dichlorobenzidine	91-94-1	B18-061-SB-4	0.037	J	0.037	0.04	132	0.76	5.1		no
Acenaphthene	83-32-9	B11-026-SB-9	110		0.00076	11.7	187	70.05		4,500	no
Acenaphthylene	208-96-8	B18-011-SB-4	125		0.00088	2.03	187	79.14			no
Acetone	67-64-1	CT-011-SB-4	0.2		0.0028	0.02	67	47.76		67,000	no
Acetophenone	98-86-2	CT-007-TP-B1	1.1	J	0.018	0.11	132	18.18		12,000	no
Aluminum	7429-90-5	B18-025-SB-5	43,700		1260	11,865	116	100.00		110,000	no
Anthracene	120-12-7	B18-011-SB-4	155		0.00081	10.2	187	89.30		23,000	no
Antimony	7440-36-0	CT-015-SB-1	41.2		0.378	7.85	116	31.03		47	no
Aroclor 1242	53469-21-9	CT-010-SB-1	0.548		0.0168	0.12	61	9.84	0.95		no
Aroclor 1248	12672-29-6	B11-014-SB-1	0.14	J	0.017	0.06	61	9.84	0.95		no
Aroclor 1254	11097-69-1	CT-019-SB-1	0.589		0.0071	0.12	61	26.23	0.97	1.5	no
Aroclor 1260	11096-82-5	B18-008-SB-1	0.331		0.015	0.10	61	22.95	0.99		no
Arsenic	7440-38-2	CT-007-TP-B1	28.8		0.41	7.18	135	72.59	3	48	YES (C)
Barium	7440-39-3	B18-061-SB-4	581		22.3	123	116	100.00		22,000	no
Benz[a]anthracene	56-55-3	B18-011-SB-4	135		0.00083	4.54	187	98.40	21		YES (C)
Benzaldehyde	100-52-7	B18-007-SB-4	0.49		0.015	0.07	131	19.85	820	12,000	no
Benzene	71-43-2	TP-006-NWALL-EAST-EAST	67		0.00021	2.30	67	47.76	5.1	42	YES (C/NC)
Benzo[a]pyrene	50-32-8	B18-011-SB-4	126		0.0022	4.01	189	97.35	2.1	22	YES (C/NC)
Benzo[b]fluoranthene	205-99-2	B18-075-SB-10	150		0.00072	4.99	187	98.93	21		YES (C)
Benzo[g,h,i]perylene	191-24-2	CT-007-TP-B1	46		0.0013	2.10	187	91.44			no
Benzo[k]fluoranthene	207-08-9	B18-075-SB-10	143		0.00065	2.63	187	98.40	210		no
Beryllium	7440-41-7	CT-011-SB-1	6.46		0.068	1.14	116	87.93	6,900	230	no
bis(2-Ethylhexyl)phthalate	117-81-7	B11-026-SB-9	0.98	J	0.015	0.07	132	18.94	160	1,600	no
Cadmium	7440-43-9	B18-008-SB-1	24.8		0.135	2.08	116	88.79	9,300	10	YES (NC)
Calcium	7440-70-2	CT-005-SB-3	272,000		7410	120,016	45	100.00			no
Caprolactam	105-60-2	B18-007-SB-4	0.69		0.021	0.13	132	6.82		40,000	no
Carbazole	86-74-8	B18-011-SB-4	76.7		0.019	2.52	132	59.09			no
Carbon disulfide	75-15-0	CT-021-SB-8	0.0071	J	0.0014	0.003	67	20.90		350	no
Chloroform	67-66-3	B18-061-SB-1	0.013		0.00025	0.01	67	5.97	1.4	100	no
Chromium†	7440-47-3	B11-011-SB-2	2210		0.885	633.77	116	100.00		180,000	no
Chromium VI	18540-29-9	B18-008-SB-1	93.2	J-	0.184	5.18	115	50.43	6.3	350	YES (C)
Chrysene	218-01-9	B18-075-SB-10	93.4		0.00062	3.35	187	97.86	2,100		no
Cobalt	7440-48-4	B11-014-SB-5	58.9		0.168	7.66	116	91.38	1,900	35	YES (NC)
Copper	7440-50-8	B11-022-SB-1	2,280		4.3	85.77	116	100.00		4,700	no

Table 6 - Container Terminal
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?
Cyanide, Total	57-12-5	CT-011-SB-4	8.1		0.12	1.47	115	93.91		120	no
Cyclohexane	110-82-7	CT-003-SB-10	0.0054	J	0.00099	0.00	67	19.40		2,700	no
Dibenz[a,h]anthracene	53-70-3	B18-075-SB-10	12.4		0.00095	0.58	187	85.56	2.1		YES (C)
Di-n-butylphthalate	84-74-2	B18-011-SB-4	2.1		0.018	0.25	132	8.33		8,200	no
Di-n-ocytlphthalate	117-84-0	B18-075-SB-10	0.12		0.12	0.12	132	0.76		820	no
Ethylbenzene	100-41-4	TP-006-NWALL-EAST-EAST	43		0.00012	2.22	67	29.85	25	2,000	YES (C)
Fluoranthene	206-44-0	B18-075-SB-10	526		0.0021	16.30	189	98.94		3,000	no
Fluorene	86-73-7	B18-011-SB-4	147		0.00095	14.29	187	71.12		3,000	no
Hexachloroethane	67-72-1	B11-012-SB-2	0.058	J	0.058	0.06	132	0.76	8	46	no
Indeno[1,2,3-c,d]pyrene	193-39-5	CT-007-TP-B1	63		0.0013	2.45	187	90.91	21		YES (C)
Iron	7439-89-6	B11-017-SB-5	542,000	J	855	134,379	116	100.00		82,000	YES (NC)
Isophorone	78-59-1	B18-061-SB-1	0.03	J	0.03	0.03	132	0.76	2,400	16,000	no
Isopropylbenzene	98-82-8	TP-006-NWALL-EAST-EAST	24		0.00025	2.19	67	16.42		990	no
Lead^	7439-92-1	CT-015-SB-1	2,600		3.96	132.26	117	99.15		80	YES (NC)
Magnesium	7439-95-4	CT-016-SB-1	58,600		194	24,281	45	100.00			no
Manganese	7439-96-5	B11-011-SB-2	64,800		40.3	17,225	122	100.00		2,600	YES (NC)
Mercury	7439-97-6	CT-010-SB-7	3.57		0.0046	0.20	116	77.59		35	no
Methyl Acetate	79-20-9	CT-007-TP-B1	0.14	J	0.0017	0.02	67	11.94		120,000	no
Naphthalene	91-20-3	TP-006-NWALL-EAST-EAST	580		0.0026	9.17	188	97.34	8.6	59	YES (C/NC)
Nickel	7440-02-0	B18-006-SB-1	265		0.61	36.36	116	99.14	64,000	2,200	no
Nitrobenzene	98-95-3	B11-025-SB-1	0.038	J	0.038	0.04	132	0.76	22	130	no
N-Nitrosodiphenylamine	86-30-6	B11-026-SB-10	32		0.015	5.42	132	4.55	470		no
PCBs (total)	1336-36-3	CT-010-SB-1	1.05		0.0071	0.21	61	37.70	0.94		YES (C)
Pentachlorophenol	87-86-5	B18-075-SB-10	0.053	J	0.053	0.05	120	0.83	4	280	no
Phenanthrene	85-01-8	B11-026-SB-10	4,040		0.0038	41.75	188	97.34			no
Phenol	108-95-2	B18-011-SB-4	5		0.018	0.61	123	15.45		25,000	no
Pyrene	129-00-0	B18-011-SB-4	258		0.0013	14.1	189	99.47		2,300	no
Selenium	7782-49-2	CT-015-SB-1	42.2		0.275	4.39	116	18.97		580	no
Silver	7440-22-4	B18-008-SB-1	3.6		0.319	1.64	116	43.10		580	no
Sodium	7440-23-5	CT-011-SB-1	1650		64.3	501	45	100.00			no
Styrene	100-42-5	CT-007-TP-B1	1.1		0.00064	0.31	67	13.43		3,500	no
Styrene	100-42-5	TP-006-NWALL-EAST-EAST	1.1	J	0.00064	0.31	67	13.43		3,500	no
Tetrachloroethene	127-18-4	CT-017-SB-1	0.00098		0.00098	0.001	67	1.49	100	39	no
Thallium	7440-28-0	B11-018-SB-8	85.4		0.412	11.7	118	70.34		1.2	YES (NC)
Toluene	108-88-3	TP-006-NWALL-EAST-EAST	10		0.0007	0.62	67	32.84		4,700	no
Vanadium	7440-62-2	B11-011-SB-2	9,980		4.5	1,382	118	100.00		580	YES (NC)
Xylenes	1330-20-7	TP-006-NWALL-EAST-EAST	24		0.00034	1.41	67	32.84		250	no
Zinc	7440-66-6	B18-008-SB-1	90,500	J	1.61	1,807	116	100.00		35,000	YES (NC)

Cancer and non-cancer screening levels are based on the USEPA RSLs (May 2024), with TR=1E-6 and THQ=0.1

J: The positive result reported for this analyte is a quantitative estimate.
COPC = Constituent of Potential Concern
TR = Target Risk
HQ = Hazard Quotient
C = Compound was identified as a cancer COPC
NC = Compound was identified as a non-cancer COPC

^Lead is assessed separately through the ALM and IEUBK models.
†Chromium was evaluated against the RSL for chromium (III) insoluble salts

Table 7 - Container Terminal
Assessment of Lead

Exposure Unit	Surface/Sub-Surface	Maximum Concentration (mg/kg)	Arithmetic Mean (mg/kg)
EU1 (54.9 ac.)	Surface	679	66.8
	Sub-Surface	961	120
	Pooled	961	90.5
EU2 (54.9 ac.)	Surface	2,600	195
	Sub-Surface	825	260
	Pooled	2,600	228
EU3 (54.9 ac.)	Surface	294	67.7
	Sub-Surface	264	66.3
	Pooled	294	67.0

Table 8 - Container Terminal
Soil Exposure Point Concentrations

	EU1 (54.9 ac.)					
	EPCs - Surface Soils		**EPCs - Sub-Surface Soils**		**EPCs - Pooled Soils**	
Parameter	EPC Type	EPC (mg/kg)	EPC Type	EPC (mg/kg)	EPC Type	EPC (mg/kg)
1,1-Biphenyl	95% KM (t) UCL	0.11	97.5% KM (Chebyshev) UCL	5.23	95% KM (Chebyshev) UCL	2.07
Arsenic	95% KM (t) UCL	4.99	95% GROS Adjusted Gamma UCL	12.0	95% KM Adjusted Gamma UCL	7.67
Benz[a]anthracene	95% Chebyshev (Mean, Sd) UCL	1.13	95% Adjusted Gamma UCL	63.8	99% Chebyshev (Mean, Sd) UCL	58.0
Benzene	**Maximum Value**	**0.0032**	99% KM (Chebyshev) UCL	44.3	99% KM (Chebyshev) UCL	35.9
Benzo[a]pyrene	95% Adjusted Gamma UCL	0.61	95% Adjusted Gamma UCL	56.4	99% Chebyshev (Mean, Sd) UCL	51.4
Benzo[b]fluoranthene	95% Chebyshev (Mean, Sd) UCL	1.86	95% Adjusted Gamma UCL	73.4	99% Chebyshev (Mean, Sd) UCL	67.9
Cadmium	Gamma Adjusted KM-UCL	7.18	Gamma Adjusted KM-UCL	5.17	95% KM (Chebyshev) UCL	65.5
Chromium VI	Gamma Adjusted KM-UCL	29.2	95% KM (t) UCL	2.22	Gamma Adjusted KM-UCL	15.6
Cobalt	Gamma Adjusted KM-UCL	6.95	95% KM (t) UCL	6.63	Gamma Adjusted KM-UCL	5.99
Dibenz[a,h]anthracene	95% KM (Chebyshev) UCL	0.16	Gamma Adjusted KM-UCL	5.19	97.5% KM (Chebyshev) UCL	4.24
Ethylbenzene	**Maximum Value**	**0.0012**	Gamma Adjusted KM-UCL	24.0	Gamma Adjusted KM-UCL	17.9
Indeno[1,2,3-c,d]pyrene	95% Chebyshev (Mean, Sd) UCL	0.51	95% Adjusted Gamma UCL	33.5	99% Chebyshev (Mean, Sd) UCL	30.3
Iron	95% Student's-t UCL	137,863	95% Adjusted Gamma UCL	112,792	95% Chebyshev (Mean, Sd) UCL	140,189
Manganese	95% Student's-t UCL	19,031	95% Adjusted Gamma UCL	13,840	95% Chebyshev (Mean, Sd) UCL	18,788
Naphthalene	95% Chebyshev (Mean, Sd) UCL	2.42	99% KM (Chebyshev) UCL	402	97.5% KM (Chebyshev) UCL	144
PCBs (total)	95% KM (t) UCL	0.033	NA	NA	95% KM (BCA) UCL	0.033
Thallium	95% KM (t) UCL	5.58	95% KM (Chebyshev) UCL	3.76	95% KM (t) UCL	4.11
Vanadium	95% Adjusted Gamma UCL	750	99% Chebyshev (Mean, Sd) UCL	2,045	95% Adjusted Gamma UCL	599
Zinc	97.5% Chebyshev (Mean, Sd) UCL	34,923	95% Adjusted Gamma UCL	2,043	97.5% Chebyshev (Mean, Sd) UCL	19,884

Bold indicates maximum detected value

NA = no detections
EU = Exposure Unit
EPC = Exposure Point Concentration
UCL = Upper Confidence Limit
Sd = Standard Deviation
KM = Kaplan-Meier

Table 8 - Container Terminal
Soil Exposure Point Concentrations

	EU2 (54.9 ac.)					
	EPCs - Surface Soils		**EPCs - Sub-Surface Soils**		**EPCs - Pooled Soils**	
Parameter	EPC Type	EPC (mg/kg)	EPC Type	EPC (mg/kg)	EPC Type	EPC (mg/kg)
1,1-Biphenyl	95% KM Adjusted Gamma UCL	0.16	95% KM (t) UCL	0.086	95% KM Adjusted Gamma UCL	0.10
Arsenic	95% KM (t) UCL	8.02	95% GROS Adjusted Gamma UCL	7.97	95% GROS Approximate Gamma UCL	7.65
Benz[a]anthracene	95% Adjusted Gamma UCL	2.10	95% Adjusted Gamma UCL	3.26	95% Chebyshev (Mean, Sd) UCL	3.28
Benzene	**Maximum Value**	**0.0038**	95% KM (Chebyshev) UCL	0.017	95% KM (Chebyshev) UCL	0.013
Benzo[a]pyrene	95% Adjusted Gamma UCL	1.95	95% Adjusted Gamma UCL	3.04	95% H-UCL	5.80
Benzo[b]fluoranthene	95% Adjusted Gamma UCL	2.45	95% Adjusted Gamma UCL	3.87	95% Chebyshev (Mean, Sd) UCL	3.79
Cadmium	95% Chebyshev (Mean, Sd) UCL	3.79	95% Student's-t UCL	3.86	95% Adjusted Gamma UCL	3.05
Chromium VI	95% KM (Chebyshev) UCL	4.18	95% KM (Chebyshev) UCL	6.18	KM H-UCL	2.45
Cobalt	95% Adjusted Gamma UCL	14.7	95% Student's-t UCL	15.8	95% Adjusted Gamma UCL	13.7
Dibenz[a,h]anthracene	95% Adjusted Gamma UCL	0.33	95% Adjusted Gamma UCL	0.50	95% Chebyshev (Mean, Sd) UCL	0.52
Ethylbenzene	**Maximum Value**	**0.0041**	Gamma Adjusted KM-UCL	0.0011	Gamma Adjusted KM-UCL	0.0013
Indeno[1,2,3-c,d]pyrene	95% Adjusted Gamma UCL	1.57	97.5% Chebyshev (Mean, Sd) UCL	4.38	95% Chebyshev (Mean, Sd) UCL	2.45
Iron	95% Student's-t UCL	141,903	95% Adjusted Gamma UCL	198,229	95% Chebyshev (Mean, Sd) UCL	195,641
Manganese	95% Student's-t UCL	22,026	95% Student's-t UCL	25,349	95% Student's-t UCL	22,364
Naphthalene	95% Chebyshev (Mean, Sd) UCL	3.81	95% H-UCL	1.64	95% H-UCL	1.46
PCBs (total)	Gamma Adjusted KM-UCL	0.37	NA	NA	Gamma Adjusted KM-UCL	0.37
Thallium	95% KM (Chebyshev) UCL	16.7	95% GROS Adjusted Gamma UCL	10.6	Gamma Adjusted KM-UCL	9.53
Vanadium	95% Chebyshev (Mean, Sd) UCL	3,811	95% Student's-t UCL	3,630	95% Adjusted Gamma UCL	3,099
Zinc	95% Chebyshev (Mean, Sd) UCL	6,132	95% Student's-t UCL	799	95% H-UCL	1,107

Bold indicates maximum detected value

NA = no detections
EU = Exposure Unit
EPC = Exposure Point Concentration
UCL = Upper Confidence Limit
Sd = Standard Deviation
KM = Kaplan-Meier

Table 8 - Container Terminal
Soil Exposure Point Concentrations

	EU3 (54.9 ac.)					
	EPCs - Surface Soils		**EPCs - Sub-Surface Soils**		**EPCs - Pooled Soils**	
Parameter	EPC Type	EPC (mg/kg)	EPC Type	EPC (mg/kg)	EPC Type	EPC (mg/kg)
1,1-Biphenyl	KM H-UCL	0.31	99% KM (Chebyshev) UCL	53.7	97.5% KM (Chebyshev) UCL	18.8
Arsenic	95% GROS Adjusted Gamma UCL	7.65	95% KM (t) UCL	8.20	95% GROS Adjusted Gamma UCL	7.44
Benz[a]anthracene	95% Chebyshev (Mean, Sd) UCL	3.83	95% Adjusted Gamma UCL	4.29	95% Adjusted Gamma UCL	2.67
Benzene	**Maximum Value**	**0.00029**	95% KM Bootstrap t UCL	0.75	95% KM Bootstrap t UCL	0.53
Benzo[a]pyrene	95% Adjusted Gamma UCL	2.67	Gamma Adjusted KM-UCL	2.26	Gamma Adjusted KM-UCL	2.03
Benzo[b]fluoranthene	95% Adjusted Gamma UCL	3.12	95% Adjusted Gamma UCL	2.73	95% Adjusted Gamma UCL	2.38
Cadmium	95% Adjusted Gamma UCL	1.13	95% Student's-t UCL	1.22	95% Adjusted Gamma UCL	1.09
Chromium VI	95% KM (t) UCL	1.74	95% KM (t) UCL	2.53	95% KM Adjusted Gamma UCL	2.10
Cobalt	95% KM (t) UCL	5.20	Gamma Adjusted KM-UCL	18.4	KM H-UCL	9.44
Dibenz[a,h]anthracene	95% Adjusted Gamma UCL	0.30	Gamma Adjusted KM-UCL	0.34	Gamma Adjusted KM-UCL	0.26
Ethylbenzene	NA	NA	**Maximum Value**	**0.0067**	**Maximum Value**	**0.0067**
Indeno[1,2,3-c,d]pyrene	95% Chebyshev (Mean, Sd) UCL	1.72	Gamma Adjusted KM-UCL	1.73	Gamma Adjusted KM-UCL	1.16
Iron	95% Student's-t UCL	201,674	95% Chebyshev (Mean, Sd) UCL	294,656	95% Chebyshev (Mean, Sd) UCL	242,736
Manganese	95% Student's-t UCL	21,900	95% Student's-t UCL	28,183	95% Student's-t UCL	24,156
Naphthalene	99% Chebyshev (Mean, Sd) UCL	11.26	97.5% KM (Chebyshev) UCL	21.7	97.5% KM (Chebyshev) UCL	12.4
PCBs (total)	95% KM (t) UCL	0.17	NA	NA	95% KM (t) UCL	0.17
Thallium	95% GROS Adjusted Gamma UCL	21.4	95% GROS Adjusted Gamma UCL	44.4	KM H-UCL	24.3
Vanadium	95% Adjusted Gamma UCL	1,486	95% Adjusted Gamma UCL	3,724	95% Adjusted Gamma UCL	2,140
Zinc	95% Student's-t UCL	244	95% Student's-t UCL	311	95% Student's-t UCL	260

Bold indicates maximum detected value

NA = no detections
EU = Exposure Unit
EPC = Exposure Point Concentration
UCL = Upper Confidence Limit
Sd = Standard Deviation
KM = Kaplan-Meier

Table 9 - Container Terminal
EU1, Surface Soils
Composite Worker Risk Ratios

Parameter	Target Organs	EU1 (54.9 ac.)				
			Composite Worker			
			RSLs (mg/kg)		Risk Ratios	
		EPC (mg/kg)	Cancer	Non-Cancer	Risk	HQ
1,1-Biphenyl	**Hepatic; Urinary**	0.11	410	200	2.7E-10	0.0006
Arsenic	**Cardiovascular; Dermal**	4.99	3.0	480	1.7E-06	0.01
Benz[a]anthracene		1.13	21		5.4E-08	
Benzene	**Immune**	**0.0032**	5.1	420	6.3E-10	0.000008
Benzo[a]pyrene	**Developmental**	0.61	2.1	220	2.9E-07	0.003
Benzo[b]fluoranthene		1.86	21		8.9E-08	
Cadmium	**Urinary**	7.18	9,300	100	7.7E-10	0.07
Chromium VI	**Gastrointestinal; Respiratory**	29.2	6.3	3,500	4.6E-06	0.008
Cobalt	**Respiratory; Thyroid**	6.95	1,900	350	3.7E-09	0.02
Dibenz[a,h]anthracene		0.16	2.1		7.6E-08	
Ethylbenzene	**Developmental; Hepatic**	**0.0012**	25	17,000	4.8E-11	0.00000007
Indeno[1,2,3-c,d]pyrene		0.51	21		2.4E-08	
Iron	**Gastrointestinal**	137,863		820,000		0.2
Manganese	**Nervous**	19,031		26,000		0.7
Naphthalene	**Body Weight; Respiratory**	2.42	8.6	590	2.8E-07	0.004
PCBs (total)	**Immune; Dermal; Ocular**	0.03	0.94	15	3.5E-08	0.002
Thallium	**Dermal**	5.58		12		0.5
Vanadium	**Dermal; Respiratory**	750		5,800		0.1
Zinc	**Hematologic, Immune**	34,923		350,000		0.1
					7E-06	↓

RSLs were obtained from the EPA Regional Screening Levels for Composite Worker Soil with TR=1E-6 and THQ=1.0
For PCBs, the carcinogenic RSL is based on the high risk PCB value. The non-carcinogenic RSL is based on the Aroclor 1254 value (in the absence of a high risk PCB value).

EPC: Exposure Point Concentration
HQ: Hazard Quotient
HI: Hazard Index

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

Table 9 - Container Terminal
EU2, Surface Soils
Composite Worker Risk Ratios

Parameter	Target Organs	EU2 (54.9 ac.)				
			Composite Worker			
			RSLs (mg/kg)		Risk Ratios	
		EPC (mg/kg)	Cancer	Non-Cancer	Risk	HQ
1,1-Biphenyl	**Hepatic; Urinary**	0.16	410	200	3.9E-10	0.0008
Arsenic	**Cardiovascular; Dermal**	8.02	3.0	480	2.7E-06	0.02
Benz[a]anthracene		2.10	21		1.0E-07	
Benzene	**Immune**	**0.0038**	5.1	420	7.5E-10	0.000009
Benzo[a]pyrene	**Developmental**	1.95	2.1	220	9.3E-07	0.009
Benzo[b]fluoranthene		2.45	21		1.2E-07	
Cadmium	**Urinary**	3.79	9,300	100	4.1E-10	0.04
Chromium VI	**Gastrointestinal; Respiratory**	4.18	6.3	3,500	6.6E-07	0.001
Cobalt	**Respiratory; Thyroid**	14.7	1,900	350	7.7E-09	0.04
Dibenz[a,h]anthracene		0.33	2.1		1.6E-07	
Ethylbenzene	**Developmental; Hepatic**	**0.0041**	25	17,000	1.6E-10	0.0000002
Indeno[1,2,3-c,d]pyrene		1.57	21		7.5E-08	
Iron	**Gastrointestinal**	141,903		820,000		0.2
Manganese	**Nervous**	22,026		26,000		0.8
Naphthalene	**Body Weight; Respiratory**	3.81	8.6	590	4.4E-07	0.006
PCBs (total)	**Immune; Dermal; Ocular**	0.37	0.94	15	3.9E-07	0.02
Thallium	**Dermal**	16.7		12		1
Vanadium	**Dermal; Respiratory**	3,811		5,800		0.7
Zinc	**Hematologic, Immune**	6,132		350,000		0.02
					6E-06	↓

RSLs were obtained from the EPA Regional Screening Levels for Composite Worker Soil with TR=1E-6 and THQ=1.0
For PCBs, the carcinogenic RSL is based on the high risk PCB value. The non-carcinogenic RSL is based on the Aroclor 1254 value (in the absence of a high risk PCB value).

EPC: Exposure Point Concentration
HQ: Hazard Quotient
HI: Hazard Index

Total HI	Body Weight	0
	Cardiovascular	0
	Dermal	2
	Developmental	0
	Gastrointestinal	0
	Hematologic	0
	Hepatic	0
	Immune	0
	Nervous	1
	Ocular	0
	Respiratory	1
	Thyroid	0
	Urinary	0

Table 9 - Container Terminal
EU3, Surface Soils
Composite Worker Risk Ratios

Parameter	Target Organs	EU3 (54.9 ac.)				
			Composite Worker			
			RSLs (mg/kg)		Risk Ratios	
		EPC (mg/kg)	Cancer	Non-Cancer	Risk	HQ
1,1-Biphenyl	**Hepatic; Urinary**	0.31	410	200	7.6E-10	0.002
Arsenic	**Cardiovascular; Dermal**	7.65	3.0	480	2.6E-06	0.02
Benz[a]anthracene		3.83	21		1.8E-07	
Benzene	**Immune**	**0.00029**	5.1	420	5.7E-11	0.0000007
Benzo[a]pyrene	**Developmental**	2.67	2.1	220	1.3E-06	0.01
Benzo[b]fluoranthene		3.12	21		1.5E-07	
Cadmium	**Urinary**	1.13	9,300	100	1.2E-10	0.01
Chromium VI	**Gastrointestinal; Respiratory**	1.74	6.3	3,500	2.8E-07	0.0005
Cobalt	**Respiratory; Thyroid**	5.20	1,900	350	2.7E-09	0.01
Dibenz[a,h]anthracene		0.30	2.1		1.4E-07	
Ethylbenzene	**Developmental; Hepatic**	NA	25	17,000		
Indeno[1,2,3-c,d]pyrene		1.72	21		8.2E-08	
Iron	**Gastrointestinal**	201,674		820,000		0.2
Manganese	**Nervous**	21,900		26,000		0.8
Naphthalene	**Body Weight; Respiratory**	11.26	8.6	590	1.3E-06	0.02
PCBs (total)	**Immune; Dermal; Ocular**	0.17	0.94	15	1.8E-07	0.01
Thallium	**Dermal**	21.4		12		2
Vanadium	**Dermal; Respiratory**	1,486		5,800		0.3
Zinc	**Hematologic, Immune**	244		350,000		0.0007
					6E-06	↓

RSLs were obtained from the EPA Regional Screening Levels for Composite Worker Soil with TR=1E-6 and THQ=1.0
For PCBs, the carcinogenic RSL is based on the high risk PCB value. The non-carcinogenic RSL is based on the Aroclor 1254 value (in the absence of a high risk PCB value).

EPC: Exposure Point Concentration
HQ: Hazard Quotient
HI: Hazard Index

Total HI	Body Weight	0
	Cardiovascular	0
	Dermal	2
	Developmental	0
	Gastrointestinal	0
	Hematologic	0
	Hepatic	0
	Immune	0
	Nervous	1
	Ocular	0
	Respiratory	0
	Thyroid	0
	Urinary	0

Table 10 - Container Terminal
EU1, Sub-Surface Soils
Composite Worker Risk Ratios

Parameter	Target Organs	EU1 (54.9 ac.)				
			Composite Worker			
			RSLs (mg/kg)		Risk Ratios	
		EPC (mg/kg)	Cancer	Non-Cancer	Risk	HQ
1,1-Biphenyl	**Hepatic; Urinary**	5.23	410	200	1.3E-08	0.03
Arsenic	**Cardiovascular; Dermal**	12.0	3.0	480	4.0E-06	0.02
Benz[a]anthracene		63.8	21		3.0E-06	
Benzene	**Immune**	44.3	5.1	420	8.7E-06	0.1
Benzo[a]pyrene	**Developmental**	56.4	2.1	220	2.7E-05	0.3
Benzo[b]fluoranthene		73.4	21		3.5E-06	
Cadmium	**Urinary**	5.17	9,300	100	5.6E-10	0.05
Chromium VI	**Gastrointestinal; Respiratory**	2.22	6.3	3,500	3.5E-07	0.0006
Cobalt	**Respiratory; Thyroid**	6.63	1,900	350	3.5E-09	0.02
Dibenz[a,h]anthracene		5.19	2.1		2.5E-06	
Ethylbenzene	**Developmental; Hepatic**	24.0	25	17,000	9.6E-07	0.001
Indeno[1,2,3-c,d]pyrene		33.5	21		1.6E-06	
Iron	**Gastrointestinal**	112,792		820,000		0.1
Manganese	**Nervous**	13,840		26,000		0.5
Naphthalene	**Body Weight; Respiratory**	402	8.6	590	4.7E-05	0.7
PCBs (total)	**Immune; Dermal; Ocular**	NA	0.94	15		
Thallium	**Dermal**	3.76		12		0.3
Vanadium	**Dermal; Respiratory**	2,045		5,800		0.4
Zinc	**Hematologic, Immune**	2,043		350,000		0.006
					9.8E-05	↓

RSLs were obtained from the EPA Regional Screening Levels for Composite Worker Soil with TR=1E-6 and THQ=1.0
For PCBs, the carcinogenic RSL is based on the high risk PCB value. The non-carcinogenic RSL is based on the Aroclor 1254 value (in the absence of a high risk PCB value).

EPC: Exposure Point Concentration
HQ: Hazard Quotient
HI: Hazard Index

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

Table 10 - Container Terminal
EU2, Sub-Surface Soils
Composite Worker Risk Ratios

Parameter	Target Organs	EU2 (54.9 ac.)				
			Composite Worker			
			RSLs (mg/kg)		Risk Ratios	
		EPC (mg/kg)	Cancer	Non-Cancer	Risk	HQ
1,1-Biphenyl	Hepatic; Urinary	0.086	410	200	2.1E-10	0.0004
Arsenic	Cardiovascular; Dermal	7.97	3.0	480	2.7E-06	0.02
Benz[a]anthracene		3.26	21		1.6E-07	
Benzene	Immune	0.017	5.1	420	3.4E-09	0.00004
Benzo[a]pyrene	Developmental	3.04	2.1	220	1.4E-06	0.01
Benzo[b]fluoranthene		3.87	21		1.8E-07	
Cadmium	Urinary	3.86	9,300	100	4.2E-10	0.04
Chromium VI	Gastrointestinal; Respiratory	6.18	6.3	3,500	9.8E-07	0.002
Cobalt	Respiratory; Thyroid	15.8	1,900	350	8.3E-09	0.05
Dibenz[a,h]anthracene		0.50	2.1		2.4E-07	
Ethylbenzene	Developmental; Hepatic	0.0011	25	17,000	4.3E-11	0.00000006
Indeno[1,2,3-c,d]pyrene		4.38	21		2.1E-07	
Iron	Gastrointestinal	198,229		820,000		0.2
Manganese	Nervous	25,349		26,000		1
Naphthalene	Body Weight; Respiratory	1.64	8.6	590	1.9E-07	0.003
PCBs (total)	Immune; Dermal; Ocular	NA	0.94	15		
Thallium	Dermal	10.6		12		0.9
Vanadium	Dermal; Respiratory	3,630		5,800		0.6
Zinc	Hematologic, Immune	799		350,000		0.002
					6E-06	↓

RSLs were obtained from the EPA Regional Screening Levels for Composite Worker Soil with TR=1E-6 and THQ=1.0
For PCBs, the carcinogenic RSL is based on the high risk PCB value. The non-carcinogenic RSL is based on the Aroclor 1254 value (in the absence of a high risk PCB value).

EPC: Exposure Point Concentration
HQ: Hazard Quotient
HI: Hazard Index

Total HI	Body Weight	0
	Cardiovascular	0
	Dermal	2
	Developmental	0
	Gastrointestinal	0
	Hematologic	0
	Hepatic	0
	Immune	0
	Nervous	1
	Ocular	0
	Respiratory	1
	Thyroid	0
	Urinary	0

Table 10 - Container Terminal
EU3, Sub-Surface Soils
Composite Worker Risk Ratios

Parameter	Target Organs	EU3 (54.9 ac.)				
			Composite Worker			
			RSLs (mg/kg)		Risk Ratios	
		EPC (mg/kg)	Cancer	Non-Cancer	Risk	HQ
1,1-Biphenyl	**Hepatic; Urinary**	53.7	410	200	1.3E-07	0.3
Arsenic	**Cardiovascular; Dermal**	8.20	3.0	480	2.7E-06	0.02
Benz[a]anthracene		4.29	21		2.0E-07	
Benzene	**Immune**	0.75	5.1	420	1.5E-07	0.002
Benzo[a]pyrene	**Developmental**	2.26	2.1	220	1.1E-06	0.01
Benzo[b]fluoranthene		2.73	21		1.3E-07	
Cadmium	**Urinary**	1.22	9,300	100	1.3E-10	0.01
Chromium VI	**Gastrointestinal; Respiratory**	2.53	6.3	3,500	4.0E-07	0.0007
Cobalt	**Respiratory; Thyroid**	18.4	1,900	350	9.7E-09	0.05
Dibenz[a,h]anthracene		0.34	2.1		1.6E-07	
Ethylbenzene	**Developmental; Hepatic**	**0.0067**	25	17,000	2.7E-10	0.0000004
Indeno[1,2,3-c,d]pyrene		1.73	21		8.2E-08	
Iron	**Gastrointestinal**	294,656		820,000		0.4
Manganese	**Nervous**	28,183		26,000		1
Naphthalene	**Body Weight; Respiratory**	21.7	8.6	590	2.5E-06	0.04
PCBs (total)	**Immune; Dermal; Ocular**	NA	0.94	15		
Thallium	**Dermal**	44.4		12		4
Vanadium	**Dermal; Respiratory**	3,724		5,800		0.6
Zinc	**Hematologic, Immune**	311		350,000		0.0009
					8E-06	↓

RSLs were obtained from the EPA Regional Screening Levels for Composite Worker Soil with TR=1E-6 and THQ=1.0
For PCBs, the carcinogenic RSL is based on the high risk PCB value. The non-carcinogenic RSL is based on the Aroclor 1254 value (in the absence of a high risk PCB value).

EPC: Exposure Point Concentration
HQ: Hazard Quotient
HI: Hazard Index

Total HI	Body Weight	0
	Cardiovascular	0
	Dermal	4
	Developmental	0
	Gastrointestinal	0
	Hematologic	0
	Hepatic	0
	Immune	0
	Nervous	1
	Ocular	0
	Respiratory	1
	Thyroid	0
	Urinary	0

Table 11 - Container Terminal
EU1, Pooled Soils
Composite Worker Risk Ratios

Parameter	Target Organs	EU1 (54.9 ac.)				
			Composite Worker			
			RSLs (mg/kg)		Risk Ratios	
		EPC (mg/kg)	Cancer	Non-Cancer	Risk	HQ
1,1-Biphenyl	Hepatic; Urinary	2.07	410	200	5.0E-09	0.01
Arsenic	Cardiovascular; Dermal	7.67	3.0	480	2.6E-06	0.02
Benz[a]anthracene		58.0	21		2.8E-06	
Benzene	Immune	35.9	5.1	420	7.0E-06	0.09
Benzo[a]pyrene	Developmental	51.4	2.1	220	2.4E-05	0.2
Benzo[b]fluoranthene		67.9	21		3.2E-06	
Cadmium	Urinary	65.5	9,300	100	7.0E-09	0.7
Chromium VI	Gastrointestinal; Respiratory	15.6	6.3	3,500	2.5E-06	0.004
Cobalt	Respiratory; Thyroid	5.99	1,900	350	3.2E-09	0.02
Dibenz[a,h]anthracene		4.24	2.1		2.0E-06	
Ethylbenzene	Developmental; Hepatic	17.9	25	17,000	7.2E-07	0.001
Indeno[1,2,3-c,d]pyrene		30.3	21		1.4E-06	
Iron	Gastrointestinal	140,189		820,000		0.2
Manganese	Nervous	18,788		26,000		0.7
Naphthalene	Body Weight; Respiratory	144	8.6	590	1.7E-05	0.2
PCBs (total)	Immune; Dermal; Ocular	0.03	0.94	15	3.2E-08	0.002
Thallium	Dermal	4.11		12		0.3
Vanadium	Dermal; Respiratory	599		5,800		0.1
Zinc	Hematologic, Immune	19,884		350,000		0.06
					6E-05	↓

RSLs were obtained from the EPA Regional Screening Levels for Composite Worker Soil with TR=1E-6 and THQ=1.0
For PCBs, the carcinogenic RSL is based on the high risk PCB value. The non-carcinogenic RSL is based on the Aroclor 1254 value (in the absence of a high risk PCB value).

EPC: Exposure Point Concentration
HQ: Hazard Quotient
HI: Hazard Index

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

Table 11 - Container Terminal
EU2, Pooled Soils
Composite Worker Risk Ratios

Parameter	Target Organs	EU2 (54.9 ac.)				
			Composite Worker			
			RSLs (mg/kg)		Risk Ratios	
		EPC (mg/kg)	Cancer	Non-Cancer	Risk	HQ
1,1-Biphenyl	Hepatic; Urinary	0.10	410	200	2.5E-10	0.001
Arsenic	Cardiovascular; Dermal	7.65	3.0	480	2.6E-06	0.02
Benz[a]anthracene		3.28	21		1.6E-07	
Benzene	Immune	0.013	5.1	420	2.5E-09	0.00003
Benzo[a]pyrene	Developmental	5.80	2.1	220	2.8E-06	0.03
Benzo[b]fluoranthene		3.79	21		1.8E-07	
Cadmium	Urinary	3.05	9,300	100	3.3E-10	0.03
Chromium VI	Gastrointestinal; Respiratory	2.45	6.3	3,500	3.9E-07	0.001
Cobalt	Respiratory; Thyroid	13.7	1,900	350	7.2E-09	0.04
Dibenz[a,h]anthracene		0.52	2.1		2.5E-07	
Ethylbenzene	Developmental; Hepatic	0.0013	25	17,000	5.2E-11	0.0000001
Indeno[1,2,3-c,d]pyrene		2.45	21		1.2E-07	
Iron	Gastrointestinal	195,641		820,000		0.2
Manganese	Nervous	22,364		26,000		0.9
Naphthalene	Body Weight; Respiratory	1.46	8.6	590	1.7E-07	0.002
PCBs (total)	Immune; Dermal; Ocular	0.37	0.94	15	3.9E-07	0.02
Thallium	Dermal	9.53		12		0.8
Vanadium	Dermal; Respiratory	3,099		5,800		0.5
Zinc	Hematologic, Immune	1,107		350,000		0.003
					7E-06	↓

RSLs were obtained from the EPA Regional Screening Levels for Composite Worker Soil with TR=1E-6 and THQ=1.0
For PCBs, the carcinogenic RSL is based on the high risk PCB value. The non-carcinogenic RSL is based on the Aroclor 1254 value (in the absence of a high risk PCB value).

EPC: Exposure Point Concentration
HQ: Hazard Quotient
HI: Hazard Index

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

Table 11 - Container Terminal
EU3, Pooled Soils
Composite Worker Risk Ratios

Parameter	Target Organs	EU3 (54.9 ac.)				
			Composite Worker			
			RSLs (mg/kg)		Risk Ratios	
		EPC (mg/kg)	Cancer	Non-Cancer	Risk	HQ
1,1-Biphenyl	**Hepatic; Urinary**	18.8	410	200	4.6E-08	0.09
Arsenic	**Cardiovascular; Dermal**	7.44	3.0	480	2.5E-06	0.02
Benz[a]anthracene		2.67	21		1.3E-07	
Benzene	**Immune**	0.53	5.1	420	1.0E-07	0.001
Benzo[a]pyrene	**Developmental**	2.03	2.1	220	9.7E-07	0.009
Benzo[b]fluoranthene		2.38	21		1.1E-07	
Cadmium	**Urinary**	1.09	9,300	100	1.2E-10	0.01
Chromium VI	**Gastrointestinal; Respiratory**	2.10	6.3	3,500	3.3E-07	0.0006
Cobalt	**Respiratory; Thyroid**	9.44	1,900	350	5.0E-09	0.03
Dibenz[a,h]anthracene		0.26	2.1		1.2E-07	
Ethylbenzene	**Developmental; Hepatic**	**0.0067**	25	17,000	2.7E-10	0.0000004
Indeno[1,2,3-c,d]pyrene		1.16	21		5.5E-08	
Iron	**Gastrointestinal**	242,736		820,000		0.3
Manganese	**Nervous**	24,156		26,000		0.9
Naphthalene	**Body Weight; Respiratory**	12.4	8.6	590	1.4E-06	0.02
PCBs (total)	**Immune; Dermal; Ocular**	0.17	0.94	15	1.8E-07	0.01
Thallium	**Dermal**	24.3		12		2
Vanadium	**Dermal; Respiratory**	2,140		5,800		0.4
Zinc	**Hematologic, Immune**	260		350,000		0.0007
					6E-06	↓

RSLs were obtained from the EPA Regional Screening Levels for Composite Worker Soil with TR=1E-6 and THQ=1.0
For PCBs, the carcinogenic RSL is based on the high risk PCB value. The non-carcinogenic RSL is based on the Aroclor 1254 value (in the absence of a high risk PCB value).

EPC: Exposure Point Concentration
HQ: Hazard Quotient
HI: Hazard Index

Total HI	Body Weight	0
	Cardiovascular	0
	Dermal	2
	Developmental	0
	Gastrointestinal	0
	Hematologic	0
	Hepatic	0
	Immune	0
	Nervous	1
	Ocular	0
	Respiratory	0
	Thyroid	0
	Urinary	0

Table 12 - Container Terminal
EU1, Surface Soils
Construction Worker Risk Ratios

2 Day		EU1 (54.9 ac.)				
			Construction Worker			
			SSLs (mg/kg)		Risk Ratios	
Parameter	Target Organs	EPC (mg/kg)	Cancer	Non-Cancer	Risk	HQ
1,1-Biphenyl	Hepatic; Urinary	0.11	375,846	1,073	2.9E-13	0.0001
Arsenic	Cardiovascular; Dermal	4.99	1,892	12,068	2.6E-09	0.0004
Benz[a]anthracene		1.13	7,848		1.4E-10	
Benzene	Immune	**0.0032**	74.7	666	4.3E-11	0.000005
Benzo[a]pyrene	Developmental	0.61	1,704	123	3.6E-10	0.005
Benzo[b]fluoranthene		1.86	16,816		1.1E-10	
Cadmium	Urinary	7.18	3,500,708	19,327	2.1E-12	0.0004
Chromium VI	Gastrointestinal; Respiratory	29.2	2,714	100,178	1.1E-08	0.0003
Cobalt	Respiratory; Thyroid	6.95	700,142	120,254	9.9E-12	0.00006
Dibenz[a,h]anthracene		0.16	2,228		7.2E-11	
Ethylbenzene	Developmental; Hepatic	**0.0012**	374	113,870	3.2E-12	0.00000001
Indeno[1,2,3-c,d]pyrene		0.51	19,235		2.7E-11	
Iron	Gastrointestinal	137,863		30,067,667		0.005
Manganese	Nervous	19,031		534,675		0.04
Naphthalene	Body Weight; Respiratory	2.42	222	327	1.1E-08	0.007
PCBs (total)	Immune; Dermal; Ocular	0.03	135	935	2.4E-10	0.00004
Thallium	Dermal	5.58		1,718		0.003
Vanadium	Dermal; Respiratory	750		200,829		0.004
Zinc	Hematologic, Immune	34,923		12,886,143		0.003
					3E-08	↓

SSLs calculated using equations in 2002 EPA Supplemental Guidance
Guidance Equation Input Assumptions:
- 5 cars/day (2 tons/car)
- 5 trucks/day (20 tons/truck)
- 3 meter source depth thickness

EPC: Exposure Point Concentration
HQ: Hazard Quotient
HI: Hazard Index
Bold indicates Maximum Value

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

Table 12 - Container Terminal
EU2, Surface Soils
Construction Worker Risk Ratios

60 Day		EU2 (54.9 ac.)				
			Construction Worker			
			SSLs (mg/kg)		Risk Ratios	
Parameter	Target Organs	EPC (mg/kg)	Cancer	Non-Cancer	Risk	HQ
1,1-Biphenyl	Hepatic; Urinary	0.16	12,528	196	1.3E-11	0.0008
Arsenic	Cardiovascular; Dermal	8.02	63.1	402	1.3E-07	0.02
Benz[a]anthracene		2.10	556		3.8E-09	
Benzene	Immune	**0.0038**	13.6	121	2.8E-10	0.00003
Benzo[a]pyrene	Developmental	1.95	70.3	21.1	2.8E-08	0.09
Benzo[b]fluoranthene		2.45	701		3.5E-09	
Cadmium	Urinary	3.79	116,690	644	3.2E-11	0.006
Chromium VI	Gastrointestinal; Respiratory	4.18	90.5	3,339	4.6E-08	0.001
Cobalt	Respiratory; Thyroid	14.7	23,338	4,008	6.3E-10	0.004
Dibenz[a,h]anthracene		0.33	74.3		4.4E-09	
Ethylbenzene	Developmental; Hepatic	**0.0041**	67.8	16,801	6.0E-11	0.0000002
Indeno[1,2,3-c,d]pyrene		1.57	722		2.2E-09	
Iron	Gastrointestinal	141,903		1,002,256		0.1
Manganese	Nervous	22,026		17,823		1
Naphthalene	Body Weight; Respiratory	3.81	38.5	59.8	9.9E-08	0.06
PCBs (total)	Immune; Dermal; Ocular	0.37	15.9	31	2.3E-08	0.01
Thallium	Dermal	16.7		57.3		0.3
Vanadium	Dermal; Respiratory	3,811		6,694		0.6
Zinc	Hematologic, Immune	6,132		429,538		0.01
					3E-07	↓

SSLs calculated using equations in 2002 EPA Supplemental Guidance
Guidance Equation Input Assumptions:
5 cars/day (2 tons/car)
5 trucks/day (20 tons/truck)
3 meter source depth thickness

EPC: Exposure Point Concentration
HQ: Hazard Quotient
HI: Hazard Index
Bold indicates Maximum Value

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

Table 12 - Container Terminal
EU3, Surface Soils
Construction Worker Risk Ratios

55 Day		EU3 (54.9 ac.)				
			Construction Worker			
			SSLs (mg/kg)		Risk Ratios	
Parameter	Target Organs	EPC (mg/kg)	Cancer	Non-Cancer	Risk	HQ
1,1-Biphenyl	Hepatic; Urinary	0.31	13,667	204	2.3E-11	0.002
Arsenic	Cardiovascular; Dermal	7.65	68.8	439	1.1E-07	0.02
Benz[a]anthracene		3.83	600		6.4E-09	
Benzene	Immune	**0.00029**	14.2	126	2.0E-11	0.000002
Benzo[a]pyrene	Developmental	2.67	76.5	22.1	3.5E-08	0.1
Benzo[b]fluoranthene		3.12	763		4.1E-09	
Cadmium	Urinary	1.13	127,298	703	8.9E-12	0.0016
Chromium VI	Gastrointestinal; Respiratory	1.74	98.7	3,643	1.8E-08	0.0005
Cobalt	Respiratory; Thyroid	5.20	25,460	4,373	2.0E-10	0.001
Dibenz[a,h]anthracene		0.30	81.0		3.7E-09	
Ethylbenzene	Developmental; Hepatic	NA	70.8	17,726		
Indeno[1,2,3-c,d]pyrene		1.72	786		2.2E-09	
Iron	Gastrointestinal	201,674		1,093,370		0.2
Manganese	Nervous	21,900		19,443		1
Naphthalene	Body Weight; Respiratory	11.26	40.3	62.4	2.8E-07	0.2
PCBs (total)	Immune; Dermal; Ocular	0.17	16.9	34	1.0E-08	0.005
Thallium	Dermal	21.4		62.5		0.3
Vanadium	Dermal; Respiratory	1,486		7,303		0.2
Zinc	Hematologic, Immune	244		468,587		0.0005
					5E-07	↓

SSLs calculated using equations in 2002 EPA Supplemental Guidance
Guidance Equation Input Assumptions:
5 cars/day (2 tons/car)
5 trucks/day (20 tons/truck)
3 meter source depth thickness

EPC: Exposure Point Concentration
HQ: Hazard Quotient
HI: Hazard Index
Bold indicates Maximum Value
NA: no detections

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

Table 13 - Container Terminal
EU1, Sub-Surface Soils
Construction Worker Risk Ratios

2 Day		EU1 (54.9 ac.)				
			Construction Worker			
			SSLs (mg/kg)		Risk Ratios	
Parameter	Target Organs	EPC (mg/kg)	Cancer	Non-Cancer	Risk	HQ
1,1-Biphenyl	Hepatic; Urinary	5.23	375,846	1,073	1.4E-11	0.005
Arsenic	Cardiovascular; Dermal	12.0	1,892	12,068	6.3E-09	0.001
Benz[a]anthracene		63.8	7,848		8.1E-09	
Benzene	Immune	44.3	74.7	666	5.9E-07	0.07
Benzo[a]pyrene	Developmental	56.4	1,704	123	3.3E-08	0.5
Benzo[b]fluoranthene		73.4	16,816		4.4E-09	
Cadmium	Urinary	5.17	3,500,708	19,327	1.5E-12	0.0003
Chromium VI	Gastrointestinal; Respiratory	2.22	2,714	100,178	8.2E-10	0.00002
Cobalt	Respiratory; Thyroid	6.63	700,142	120,254	9.5E-12	0.00006
Dibenz[a,h]anthracene		5.19	2,228		2.3E-09	
Ethylbenzene	Developmental; Hepatic	24.0	374	113,870	6.4E-08	0.0002
Indeno[1,2,3-c,d]pyrene		33.5	19,235		1.7E-09	
Iron	Gastrointestinal	112,792		30,067,667		0.004
Manganese	Nervous	13,840		534,675		0.03
Naphthalene	Body Weight; Respiratory	402	222	327	1.8E-06	1
PCBs (total)	Immune; Dermal; Ocular	NA	135	935		
Thallium	Dermal	3.76		1,718		0.002
Vanadium	Dermal; Respiratory	2,045		200,829		0.01
Zinc	Hematologic, Immune	2,043		12,886,143		0.0002
					3E-06	↓

SSLs calculated using equations in 2002 EPA Supplemental Guidance
Guidance Equation Input Assumptions:
- 5 cars/day (2 tons/car)
- 5 trucks/day (20 tons/truck)
- 3 meter source depth thickness

EPC: Exposure Point Concentration
HQ: Hazard Quotient
HI: Hazard Index
Bold indicates Maximum Value
NA: No detections

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

Table 13 - Container Terminal
EU2, Sub-Surface Soils
Construction Worker Risk Ratios

60 Day		EU2 (54.9 ac.)				
			Construction Worker			
			SSLs (mg/kg)		Risk Ratios	
Parameter	Target Organs	EPC (mg/kg)	Cancer	Non-Cancer	Risk	HQ
1,1-Biphenyl	Hepatic; Urinary	0.086	12,528	196	6.9E-12	0.0004
Arsenic	Cardiovascular; Dermal	7.97	63.1	402	1.3E-07	0.02
Benz[a]anthracene		3.26	556		5.9E-09	
Benzene	Immune	0.017	13.6	121	1.3E-09	0.0001
Benzo[a]pyrene	Developmental	3.04	70.3	21.1	4.3E-08	0.1
Benzo[b]fluoranthene		3.87	701		5.5E-09	
Cadmium	Urinary	3.86	116,690	644	3.3E-11	0.006
Chromium VI	Gastrointestinal; Respiratory	6.18	90.5	3,339	6.8E-08	0.002
Cobalt	Respiratory; Thyroid	15.8	23,338	4,008	6.8E-10	0.004
Dibenz[a,h]anthracene		0.50	74.3		6.7E-09	
Ethylbenzene	Developmental; Hepatic	0.0011	67.8	16,801	1.6E-11	0.00000006
Indeno[1,2,3-c,d]pyrene		4.38	722		6.1E-09	
Iron	Gastrointestinal	198,229		1,002,256		0.2
Manganese	Nervous	25,349		17,823		1
Naphthalene	Body Weight; Respiratory	1.64	38.5	59.8	4.3E-08	0.03
PCBs (total)	Immune; Dermal; Ocular	NA	15.9	31		
Thallium	Dermal	10.6		57.3		0.2
Vanadium	Dermal; Respiratory	3,630		6,694		0.5
Zinc	Hematologic, Immune	799		429,538		0.002
					3E-07	↓

SSLs calculated using equations in 2002 EPA Supplemental Guidance
Guidance Equation Input Assumptions:
5 cars/day (2 tons/car)
5 trucks/day (20 tons/truck)
3 meter source depth thickness

EPC: Exposure Point Concentration
HQ: Hazard Quotient
HI: Hazard Index
NA: no detections

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

Table 13 - Container Terminal
EU3, Sub-Surface Soils
Construction Worker Risk Ratios

55 Day		EU3 (54.9 ac.)				
			Construction Worker			
			SSLs (mg/kg)		Risk Ratios	
Parameter	Target Organs	EPC (mg/kg)	Cancer	Non-Cancer	Risk	HQ
1,1-Biphenyl	Hepatic; Urinary	53.7	13,667	204	3.9E-09	0.3
Arsenic	Cardiovascular; Dermal	8.20	68.8	439	1.2E-07	0.02
Benz[a]anthracene		4.29	600		7.2E-09	
Benzene	Immune	0.75	14.2	126	5.3E-08	0.006
Benzo[a]pyrene	Developmental	2.26	76.5	22.1	3.0E-08	0.1
Benzo[b]fluoranthene		2.73	763		3.6E-09	
Cadmium	Urinary	1.22	127,298	703	9.6E-12	0.0017
Chromium VI	Gastrointestinal; Respiratory	2.53	98.7	3,643	2.6E-08	0.0007
Cobalt	Respiratory; Thyroid	18.4	25,460	4,373	7.2E-10	0.004
Dibenz[a,h]anthracene		0.34	81.0		4.2E-09	
Ethylbenzene	Developmental; Hepatic	**0.0067**	70.8	17,726	9.5E-11	0.0000004
Indeno[1,2,3-c,d]pyrene		1.73	786		2.2E-09	
Iron	Gastrointestinal	294,656		1,093,370		0.3
Manganese	Nervous	28,183		19,443		1
Naphthalene	Body Weight; Respiratory	21.7	40.3	62.4	5.4E-07	0.3
PCBs (total)	Immune; Dermal; Ocular	NA	16.9	34		
Thallium	Dermal	44.4		62.5		0.7
Vanadium	Dermal; Respiratory	3,724		7,303		0.5
Zinc	Hematologic, Immune	311		468,587		0.0007
					8E-07	↓

SSLs calculated using equations in 2002 EPA Supplemental Guidance
Guidance Equation Input Assumptions:
5 cars/day (2 tons/car)
5 trucks/day (20 tons/truck)
3 meter source depth thickness

EPC: Exposure Point Concentration
HQ: Hazard Quotient
HI: Hazard Index
Bold indicates maximum value
NA: no detections

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

Table 14 - Container Terminal
EU1, Pooled Soils
Construction Worker Risk Ratios

2 Day		EU1 (54.9 ac.)				
			Construction Worker			
			SSLs (mg/kg)		Risk Ratios	
Parameter	Target Organs	EPC (mg/kg)	Cancer	Non-Cancer	Risk	HQ
1,1-Biphenyl	Hepatic; Urinary	2.07	375,846	1,073	5.5E-12	0.002
Arsenic	Cardiovascular; Dermal	7.67	1,892	12,068	4.1E-09	0.0006
Benz[a]anthracene		58.0	7,848		7.4E-09	
Benzene	Immune	35.9	74.7	666	4.8E-07	0.05
Benzo[a]pyrene	Developmental	51.4	1,704	123	3.0E-08	0.4
Benzo[b]fluoranthene		67.9	16,816		4.0E-09	
Cadmium	Urinary	65.5	3,500,708	19,327	1.9E-11	0.003
Chromium VI	Gastrointestinal; Respiratory	15.6	2,714	100,178	5.7E-09	0.0002
Cobalt	Respiratory; Thyroid	5.99	700,142	120,254	8.6E-12	0.00005
Dibenz[a,h]anthracene		4.24	2,228		1.9E-09	
Ethylbenzene	Developmental; Hepatic	17.9	374	113,870	4.8E-08	0.0002
Indeno[1,2,3-c,d]pyrene		30.3	19,235		1.6E-09	
Iron	Gastrointestinal	140,189		30,067,667		0.005
Manganese	Nervous	18,788		534,675		0.04
Naphthalene	Body Weight; Respiratory	144	222	327	6.5E-07	0.4
PCBs (total)	Immune; Dermal; Ocular	0.03	135	935	2.4E-10	0.00004
Thallium	Dermal	4.11		1,718		0.002
Vanadium	Dermal; Respiratory	599		200,829		0.003
Zinc	Hematologic, Immune	19,884		12,886,143		0.002
					1E-06	↓

SSLs calculated using equations in 2002 EPA Supplemental Guidance
Guidance Equation Input Assumptions:
- 5 cars/day (2 tons/car)
- 5 trucks/day (20 tons/truck)
- 3 meter source depth thickness

EPC: Exposure Point Concentration
HQ: Hazard Quotient
HI: Hazard Index

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

Table 14 - Container Terminal
EU2, Pooled Soils
Construction Worker Risk Ratios

60 Day		EU2 (54.9 ac.)				
			Construction Worker			
			SSLs (mg/kg)		Risk Ratios	
Parameter	Target Organs	EPC (mg/kg)	Cancer	Non-Cancer	Risk	HQ
1,1-Biphenyl	Hepatic; Urinary	0.10	12,528	196	8.1E-12	0.001
Arsenic	Cardiovascular; Dermal	7.65	63.1	402	1.2E-07	0.02
Benz[a]anthracene		3.28	556		5.9E-09	
Benzene	Immune	0.01	13.6	121	9.9E-10	0.0001
Benzo[a]pyrene	Developmental	5.80	70.3	21.1	8.2E-08	0.3
Benzo[b]fluoranthene		3.79	701		5.4E-09	
Cadmium	Urinary	3.05	116,690	644	2.6E-11	0.005
Chromium VI	Gastrointestinal; Respiratory	2.45	90.5	3,339	2.7E-08	0.001
Cobalt	Respiratory; Thyroid	13.7	23,338	4,008	5.9E-10	0.003
Dibenz[a,h]anthracene		0.52	74.3		7.0E-09	
Ethylbenzene	Developmental; Hepatic	0.0013	67.8	16,801	1.9E-11	0.0000001
Indeno[1,2,3-c,d]pyrene		2.45	722		3.4E-09	
Iron	Gastrointestinal	195,641		1,002,256		0.2
Manganese	Nervous	22,364		17,823		1
Naphthalene	Body Weight; Respiratory	1.46	38.5	59.8	3.8E-08	0.02
PCBs (total)	Immune; Dermal; Ocular	0.37	15.9	31	2.3E-08	0.01
Thallium	Dermal	9.53		57.3		0.2
Vanadium	Dermal; Respiratory	3,099		6,694		0.5
Zinc	Hematologic, Immune	1,107		429,538		0.003
					3E-07	↓

SSLs calculated using equations in 2002 EPA Supplemental Guidance
Guidance Equation Input Assumptions:
5 cars/day (2 tons/car)
5 trucks/day (20 tons/truck)
3 meter source depth thickness

EPC: Exposure Point Concentration
HQ: Hazard Quotient
HI: Hazard Index

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

Table 14 - Container Terminal
EU3, Pooled Soils
Construction Worker Risk Ratios

55 Day		EU3 (54.9 ac.)				
			Construction Worker			
			SSLs (mg/kg)		Risk Ratios	
Parameter	Target Organs	EPC (mg/kg)	Cancer	Non-Cancer	Risk	HQ
1,1-Biphenyl	Hepatic; Urinary	18.8	13,667	204	1.4E-09	0.09
Arsenic	Cardiovascular; Dermal	7.44	68.8	439	1.1E-07	0.02
Benz[a]anthracene		2.67	600		4.5E-09	
Benzene	Immune	0.53	14.2	126	3.7E-08	0.004
Benzo[a]pyrene	Developmental	2.03	76.5	22.1	2.7E-08	0.1
Benzo[b]fluoranthene		2.38	763		3.1E-09	
Cadmium	Urinary	1.09	127,298	703	8.6E-12	0.002
Chromium VI	Gastrointestinal; Respiratory	2.10	98.7	3,643	2.1E-08	0.0006
Cobalt	Respiratory; Thyroid	9.44	25,460	4,373	3.7E-10	0.002
Dibenz[a,h]anthracene		0.26	81.0		3.2E-09	
Ethylbenzene	Developmental; Hepatic	**0.0067**	70.8	17,726	9.5E-11	0.0000004
Indeno[1,2,3-c,d]pyrene		1.16	786		1.5E-09	
Iron	Gastrointestinal	242,736		1,093,370		0.2
Manganese	Nervous	24,156		19,443		1
Naphthalene	Body Weight; Respiratory	12.4	40.3	62.4	3.1E-07	0.2
PCBs (total)	Immune; Dermal; Ocular	0.17	16.9	34	1.0E-08	0.005
Thallium	Dermal	24.3		62.5		0.4
Vanadium	Dermal; Respiratory	2,140		7,303		0.3
Zinc	Hematologic, Immune	260		468,587		0.0006
					5E-07	↓

SSLs calculated using equations in 2002 EPA Supplemental Guidance
Guidance Equation Input Assumptions:
- 5 cars/day (2 tons/car)
- 5 trucks/day (20 tons/truck)
- 3 meter source depth thickness

EPC: Exposure Point Concentration
HQ: Hazard Quotient
HI: Hazard Index
Bold indicates maximum value

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

APPENDIX A

May 23, 2024

Maryland Department of Environment
1800 Washington Boulevard
Baltimore MD, 21230
Attention: Ms. Jennifer Sohns

Subject: Request to Enter Temporary CHS Review
Tradepoint Atlantic Sub-Parcel B10-1 (Container Terminal)

Dear Ms. Sohns:

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

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

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

In consultation with the Department, Tradepoint Atlantic affirms that it desires to accelerate the assessment, remediation, and redevelopment of certain sub-parcels within the larger site due to current market conditions. To that end, the Department and Tradepoint Atlantic agree that the Controlled Hazardous Substance (CHS) Act (Section 7-222 of the Environment Article) and the CHS Response Plan (COMAR 26.14.02) shall serve as the governing statutory and regulatory authority for completing the development activities on Sub-Parcel B10-1 and complement the statutory requirements of the Voluntary Cleanup Program (Section 7-501 of the Environment Article). Upon submission of a Site Response and Development Work Plan and completion of the remedial activities for the sub-parcel, the Department shall issue a "No Further Action" letter upon a recordation of an environmental covenant describing any necessary land use controls for the specific sub-parcel. At such time that all the sub-parcels within the larger parcel have completed remedial activities, Tradepoint Atlantic shall submit to the Department a request for issuing a Certificate of Completion (COC) as well as all pertinent information concerning completion of remedial activities conducted on the parcel. Once the VCP has completed its review of the

submitted information it shall issue a COC for the entire parcel described in Tradepoint Atlantic's VCP application.

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

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

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

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

Thank you,

Matthew Newman

Environmental Manager
TRADEPOINT ATLANTIC
6995 Bethlehem Boulevard, Suite 100
Baltimore, Maryland 21219
T 443.649.5063 C 443.791.9046
mnewman@tradepointatlantic.com

APPENDIX B

APPENDIX B-1

Parcel B4
Parcel B5
Parcel B18
Parcel B10
Parcel B11
Parcel B12
Parcel B13
SW-01
SW-02
SW-03
SW-04
SW-05
SW-06
SW-07
SW-08-2
Benzene: 196
Naphthalene: 4.66
SW-08-4.5
Benzene: 125
Naphthalene: 2.79
SW-08-7
Benzo[a]pyrene: 0.0268
Naphthalene: 1.43
SW-09
SW-10-7
Benzo[a]pyrene: 0.0545
Fluoranthene: 0.838
Indeno[1,2,3-c,d]pyrene: 0.0208
Pyrene: 0.487
SW-11
SW-12
SW-13
Surface Water Sample Location
Coke Point
Parcel Boundary
2018 CPA Surface Water
FCV/SCV Exceedances (ug/L)
September 6, 2024
Appx
B
ARM Group LLC
Engineers and Scientists
0 200 400 800
Feet
Tradepoint Atlantic
ARM Project 21010302
Sparrows Point Terminal
Baltimore County, MD
P:\EnviroAnalytics Group\180386M EAG Coke Point Groundwater to Surface Water Assessment\GIS\New PAL Exceedances.mxd

Appendix B-1
May 2018 Surface Water Sampling Results
Container Terminal RADWP, Sparrows Point, Maryland

Parameter	Units	Surface Water TRV (ug/L)	Source	SW-09-2	SW-09-7.5	SW-09-13	SW-10-2	SW-10-7	SW-10-12	SW-11-2	SW-11-11	SW-11-20	SW-12-2	SW-12-7.5
				23-May-18	23-May-18	23-May-18	23-May-18	23-May-18	23-May-18	24-May-18	24-May-18	24-May-18	24-May-18	24-May-18
Volatile Organic Compounds														
2-Butanone (MEK)	µg/L	65,695	EPA Region IV - Saltwater	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Hexanone	µg/L			10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Methyl-2-pentanone (MIBK)	µg/L			10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acetone	µg/L	177,629	EPA Region IV - Saltwater	5.7 B	5.3 B	**32.6**	7.4 B	5.5 B	**44**	10.8 B	5.7 B	7 B	6.6 B	7.4 B
Benzene	µg/L	110	EPA Region IV - Saltwater	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromodichloromethane	µg/L			1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromomethane	µg/L			1 UJ	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U
Carbon disulfide	µg/L			1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
Chlorobenzene	µg/L			1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	µg/L			1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloromethane	µg/L			1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Cyclohexane	µg/L			10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Ethylbenzene	µg/L	25	EPA Region IV - Saltwater	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Isopropylbenzene	µg/L			1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Styrene	µg/L	412	EPA Region IV - Saltwater	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Toluene	µg/L	215	EPA Region IV - Saltwater	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethene	µg/L			1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Xylenes	µg/L	260	EPA Region IV - Saltwater	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Semi-Volatile Organic Compounds														
Acenaphthene	µg/L	15	EPA Region IV - Saltwater	**0.15**	**0.00325 J**	**0.0193**	**0.178**	**1.04**	**0.0573**	**0.0339**	**0.0875**	**0.0135**	**0.0635**	**0.0775**
Acenaphthylene	µg/L	28	EPA Region IV - Saltwater	**0.019**	0.01 U	**0.0131**	**0.0324**	**0.0677**	**0.01**	**0.0154**	**0.00858 J**	0.00952 U	**0.0705**	**0.0384**
Anthracene	µg/L	0.43	EPA Region IV - Saltwater	**0.0296**	**0.00196 J**	**0.00875 J**	**0.0299**	**0.232**	**0.0163**	**0.00725 J**	**0.0174**	**0.0038 J**	**0.0139**	**0.0158**
Benz[a]anthracene	µg/L	0.35	EPA Region IV - Saltwater	**0.0111**	**0.00117 J**	**0.0136**	**0.0125**	**0.121**	**0.0155**	**0.00358 J**	**0.00913 J**	**0.00516 J**	**0.00463 J**	**0.00623 J**
Benzo[a]pyrene	µg/L	0.02	EPA Region IV - Saltwater	**0.00564 J**	**0.00278 J**	**0.0161**	**0.00687 J**	**0.0545**	**0.012**	**0.00285 J**	**0.00526 J**	**0.0041 J**	**0.00249 J**	**0.00322 J**
Benzo[b]fluoranthene	µg/L	0.06	EPA Region IV - Saltwater	**0.00653 J**	**0.00314 J**	**0.016**	**0.00735 J**	**0.0498**	**0.0157**	**0.00364 J**	**0.00994 J**	**0.00556 J**	**0.00528 J**	**0.00586 J**
Benzo[g,h,i]perylene	µg/L	0.012	EPA Region IV - Saltwater	0.01 U	0.01 U	**0.00974 J**	**0.00437 J**	**0.0215**	**0.00702 J**	0.00952 U	**0.00344 J**	**0.00307 J**	0.00952 U	0.00952 U
Chrysene	µg/L	0.35	EPA Region IV - Saltwater	**0.0163**	**0.00336 J**	**0.014**	**0.0143**	**0.118**	**0.0153**	**0.00404 J**	**0.0104**	**0.00563 J**	**0.00526 J**	**0.00709 J**
Fluoranthene	µg/L	0.82	EPA Region IV - Saltwater	**0.148**	**0.00896 J**	**0.0692**	**0.162**	**0.838**	**0.0801**	**0.0364**	**0.0827**	**0.025**	**0.0605**	**0.0784**
Fluorene	µg/L	24	EPA Region IV - Saltwater	**0.134**	**0.00363 J**	**0.0142**	**0.139**	**0.635**	**0.0374**	**0.0285**	**0.0499**	**0.00985**	**0.0695**	**0.0681**
Indeno[1,2,3-c,d]pyrene	µg/L	0.012	EPA Region IV - Saltwater	0.01 U	0.01 U	**0.0091 J**	**0.00369 J**	**0.0208**	**0.006 J**	0.00952 UJ	**0.00313 J**	0.00952 UJ	0.00952 UJ	0.00952 UJ
Naphthalene	µg/L	1.40	EPA Region III - Marine	**0.0203**	**0.0111**	**0.0625**	**0.0481**	**0.039**	**0.0662**	**0.0497**	0.0156 B	0.0125 B	**0.0582**	0.0147 B
Phenanthrene	µg/L	4.6	EPA Region IV - Saltwater	**0.267**	0.00812 B	**0.024**	**0.25**	**1.37**	**0.0649**	**0.0406**	**0.051**	**0.0108**	**0.0916**	**0.0913**
Pyrene	µg/L	0.11	EPA Region IV - Saltwater	**0.0665**	**0.00704 J**	**0.0446**	**0.0749**	**0.487**	**0.051**	**0.019**	**0.0509**	**0.019**	**0.0296**	**0.0415**
Other														
Available Cyanide	µg/L	1.00	NRWQC	2 U	2 U	2 U	0.65 B	0.6 B	0.36 B	0.69 B	0.44 B	0.45 B	1.2 B	2 U
Total Cyanide	µg/L	1.00	NRWQC	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U

BOLD = detection
RED = exceedance

References:
NRWQC = USEPA National Recommended Water Quality Criteria (2014)
EPA Region IV Saltwater = Region 4 Ecological Risk Assessment Supplemental Guidance, March 2018. Table 1a, Region 4 Surface Water Screening Values for Hazardous Waste Sites, Saltwater, Chronic

EPA Region III - Marine = EPA Region III BTAG Marine

Appendix B-1
May 2018 Surface Water Sampling Results
Container Terminal RADWP, Sparrows Point, Maryland

Parameter	Units	Surface Water TRV (ug/L)	Source	SW-12-13	SW-13-2	SW-13-11	SW-13-20
				24-May-18	24-May-18	24-May-18	24-May-18
Volatile Organic Compounds							
2-Butanone (MEK)	µg/L	65,695	EPA Region IV - Saltwater	10 U	10 U	10 U	10 U
2-Hexanone	µg/L			10 U	10 U	10 U	10 U
4-Methyl-2-pentanone (MIBK)	µg/L			10 U	10 U	10 U	10 U
Acetone	µg/L	177,629	EPA Region IV - Saltwater	4.8 B	7.9 B	7.9 B	7.2 B
Benzene	µg/L	110	EPA Region IV - Saltwater	1 U	1 U	1 U	1 U
Bromodichloromethane	µg/L			1 U	1 U	1 U	1 U
Bromomethane	µg/L			1 U	1 U	1 U	1 U
Carbon disulfide	µg/L			1 UJ	1 UJ	1 UJ	1 UJ
Chlorobenzene	µg/L			1 U	1 U	1 U	1 U
Chloroform	µg/L			1 U	1 U	1 U	1 U
Chloromethane	µg/L			1 U	1 U	1 U	1 U
Cyclohexane	µg/L			10 U	10 U	10 U	10 U
Ethylbenzene	µg/L	25	EPA Region IV - Saltwater	1 U	1 U	1 U	1 U
Isopropylbenzene	µg/L			1 U	1 U	1 U	1 U
Styrene	µg/L	412	EPA Region IV - Saltwater	1 U	1 U	1 U	1 U
Toluene	µg/L	215	EPA Region IV - Saltwater	1 U	1 U	1 U	1 U
Trichloroethene	µg/L			1 U	1 U	1 U	1 U
Xylenes	µg/L	260	EPA Region IV - Saltwater	3 U	3 U	3 U	3 U
Semi-Volatile Organic Compounds							
Acenaphthene	µg/L	15	EPA Region IV - Saltwater	**0.0617**	**0.0692**	**0.124**	**0.0446**
Acenaphthylene	µg/L	28	EPA Region IV - Saltwater	**0.0066 J**	**0.0194**	**0.0107**	**0.0042 J**
Anthracene	µg/L	0.43	EPA Region IV - Saltwater	**0.0107**	**0.0122**	**0.0177**	**0.0095 J**
Benz[a]anthracene	µg/L	0.35	EPA Region IV - Saltwater	**0.00969 J**	**0.00514 J**	**0.0115 J**	**0.011 J**
Benzo[a]pyrene	µg/L	0.02	EPA Region IV - Saltwater	**0.00816 J**	**0.00311 J**	**0.00652 J**	**0.00784 J**
Benzo[b]fluoranthene	µg/L	0.06	EPA Region IV - Saltwater	**0.0111 J**	**0.00534 J**	**0.0118 J**	**0.0117 J**
Benzo[g,h,i]perylene	µg/L	0.012	EPA Region IV - Saltwater	**0.00375 J**	0.00952 U	**0.00376 J**	**0.00527 J**
Chrysene	µg/L	0.35	EPA Region IV - Saltwater	**0.0123**	**0.00593 J**	**0.014**	**0.0132**
Fluoranthene	µg/L	0.82	EPA Region IV - Saltwater	**0.0681**	**0.0665**	**0.103**	**0.0603**
Fluorene	µg/L	24	EPA Region IV - Saltwater	**0.0366**	**0.0526**	**0.0723**	**0.0238**
Indeno[1,2,3-c,d]pyrene	µg/L	0.012	EPA Region IV - Saltwater	**0.00375 J**	0.00952 UJ	**0.00354 J**	**0.00415 J**
Naphthalene	µg/L	1.40	EPA Region III - Marine	**0.0211**	0.0151 B	**0.022**	**0.0275**
Phenanthrene	µg/L	4.6	EPA Region IV - Saltwater	**0.0273**	**0.0623**	**0.077**	**0.0178**
Pyrene	µg/L	0.11	EPA Region IV - Saltwater	**0.0431**	**0.0337**	**0.0584**	**0.0403**
Other							
Available Cyanide	µg/L	1.00	NRWQC	2 U	**0.53 J**	**0.33 J**	2 U
Total Cyanide	µg/L	1.00	NRWQC	10 U	10 U	10 U	10 U

N

ARM Group LLC
Engineers and Scientists

1 inch = 170 feet

0 85 170 Feet

2019 Cell 5
Surface Water Sample Locations
Benzene and Naphthalene Results

Appx
B-1

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Appendix D-1
July 2019 Surface Water Sampling Results
Container Terminal RADWP, Sparrows Point, Maryland

Parameter			Naphthalene
Units			µg/L
Surface Water TRV (ug/L)			1.40
Source			EPA Region III - Marine
Sample ID	Location	Date	
CO-073-SW-2	Cell 5	10-Jul-19	**0.5**
CO-073-SW-5	Cell 5	10-Jul-19	**1.1**
CO-074-SW-2	Cell 5	9-Jul-19	**0.051 J**
CO-074-SW-9	Cell 5	9-Jul-19	**0.058 J**
CO-075-SW-2	Cell 5	10-Jul-19	**0.45**
CO-075-SW-5	Cell 5	10-Jul-19	**0.67**
CO-079-SW-2	Cell 5	9-Jul-19	0.1 U
CO-079-SW-8.5	Cell 5	9-Jul-19	**0.064 J**
CO-081-SW-2	Cell 5	10-Jul-19	**0.3**
CO-084-SW-2	Cell 5	10-Jul-19	**0.59**
CO-087-SW-2	Cell 5	10-Jul-19	**0.25**
CO-090-SW-2	Cell 5	10-Jul-19	**0.31**
CO-093-SW-2	Cell 5	10-Jul-19	**0.045 J**
CO-098-SW-2	Cell 5	16-Jul-19	0.1 U
CO-098-SW-4	Cell 5	16-Jul-19	**0.11**
CO-099-SW-1	Cell 5	9-Jul-19	**0.065 J**

References:
EPA Region III - Marine = EPA Region III BTAG Marine

APPENDIX B-2

N

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1 inch = 170 feet

0 85 170 Feet

Former Coke Oven Area - Cell 5
Pore Water Sample Locations
Naphthalene Results

Figure D-2

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Appendix B-2
April 2019 Pore Water Sampling Results
Container Terminal RADWP, Sparrows Point, Maryland

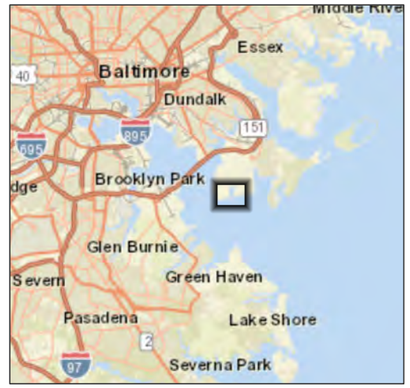
Parameter			Naphthalene
Units			µg/L
Pore Water TRV (ug/L)			193.5
Sample ID	Location	Date	
CO-073-PW-1	Cell 5	11-Apr-19	**1,530**
CO-074-PW-1	Cell 5	16-Apr-19	**9,230**
CO-074-PW-2	Cell 5	16-Apr-19	**8,880**
CO-075-PW	Cell 5	N/A	NS (HB)
CO-076-PW	Cell 5	N/A	NS (HB/LP)
CO-077-PW	Cell 5	N/A	NS (HB)
CO-078-PW	Cell 5	N/A	NS (HB)
CO-079-PW-1	Cell 5	10-Apr-19	**3,680**
CO-080-PW-1	Cell 5	17-Apr-19	**0.41**
CO-081-PW	Cell 5	N/A	NS (HB)
CO-082-PW	Cell 5	N/A	NS (HB)
CO-083-PW	Cell 5	N/A	NS (LP)
CO-084-PW	Cell 5	N/A	NS (HB)
CO-085-PW	Cell 5	N/A	NS (HB)
CO-086-PW-1	Cell 5	17-Apr-19	**0.33**
CO-087-PW	Cell 5	N/A	NS (HB)
CO-088-PW	Cell 5	N/A	NS (HB)
CO-089-PW	Cell 5	N/A	NS (LP)
CO-090-PW	Cell 5	N/A	NS (HB)
CO-091-PW	Cell 5	N/A	NS (HB)
CO-092-PW	Cell 5	N/A	NS (LP)
CO-093-PW	Cell 5	N/A	NS (HB)
CO-094-PW	Cell 5	N/A	NS (HB)
CO-095-PW-1	Cell 5	23-Apr-19	**0.14**
CO-095-PW-2	Cell 5	23-Apr-19	**30.4**
CO-096-PW	Cell 5	N/A	NS (HB)
CO-097-PW	Cell 5	N/A	NS (HB)
CO-098-PW-1	Cell 5	23-Apr-19	**352**
CO-099-PW	Cell 5	N/A	NS (HB)
CO-100-PW	Cell 5	N/A	NS (HB)
CO-101-PW	Cell 5	N/A	NS (30)
CO-102-PW	Cell 5	N/A	NS (HB)

Detections in bold
Values in red indicate an exceedance of the Pore Water levels

NA = Not Analyzed
NS (HB): Not sampled due to hard bottom
NS (LP): Not sampled due to low porosity
NS (30): Not sampled due to <30% difference in specific conductance between pore water and surface water

Pore Water TRV Source: Developing Sediment Remediation Goals at Superfund Sites Based on Pore Water for the Protection of Benthic Organisms from Direct Toxicity to Non-ionic Organic Contaminants (USEPA, 2017)

APPENDIX B-3



Legend

- Remaining Sampling Locations
- Proposed Channel Footprint
- Dredging Unit
- Deepening
- Widening
- Terminal Revetment Area
- Brewerton Channel

Note: Environmental samples were only collected from locations DU26, DU27, and DU28.

0 300 600
Feet

Data Sources: ESRI, Maryland MD iMap
Coordinate System: NAD83 State Plane MD

Sonic Drilling Locations for Widening of West Channel within North Channel Segment (Sediment Surface to -52 ft MLLW)

Appendix B-3
April / May 2024 Deep Sediment Sampling Results
Container Terminal RADWP, Sparrows Point, Maryland

			Table 2A - non-narcotic		Table 2b - narcotic		DU-26		DU-27			DU-28	
ANALYTE	UNITS	EPA Region III BTAG - Marine Sediment	EPA Region IV - Marine Sediment ESV	EPA Region IV - Marine Sediment RSV	EPA Region IV - Marine Sediment ESV	EPA Region IV - Marine Sediment RSV	SPCT24-DU26-B-WW-BOT-SED	SPCT24-DU26-D-WW-BOT-SED	SPCT24-DU27-A-WW-BOT-SED	SPCT24-DU27-B-WW-BOT-SED	SPCT24-DU27-D-WW-BOT-SED	SPCT24-DU28-A-WW-BOT-SED	SPCT24-DU28-B-WW-BOT-SED
							-50 to -52 ft MLLW	-50 to -52 ft MLLW	-50 to -52 ft MLLW	-49.6 to -51.6 ft MLLW	-50 to -52 ft MLLW	-50 to -52 ft MLLW	-50 to -52 ft MLLW
VOCs													
1,1,1-TRICHLOROETHANE	µg/kg	856			--	367	6.5 U	7.4 U	5.8 U	5.5 U	6.5 U	6.1 U	7.1 U
1,1,2,2-TETRACHLOROETHANE	µg/kg	202			13	2320	6.5 U	7.4 U	5.8 U	5.5 U	6.5 U	6.1 U	7.1 U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	µg/kg	--	--	--	--	--	6.5 U	7.4 U	5.8 U	5.5 U	6.5 U	6.1 U	7.1 U
1,1,2-TRICHLOROETHANE	µg/kg	570			--	1545	6.5 U	7.4 U	5.8 U	5.5 U	6.5 U	6.1 U	7.1 U
1,1-DICHLOROETHANE	µg/kg	--			--	1666	6.5 U	7.4 U	5.8 U	5.5 U	6.5 U	6.1 U	7.1 U
1,1-DICHLOROETHENE	µg/kg	2780			2	753	6.5 U	7.4 U	5.8 U	5.5 U	6.5 U	6.1 U	7.1 U
1,2,4-TRICHLOROBENZENE	µg/kg	473			75	485	6.5 U	7.4 U	5.8 U	5.5 U	6.5 U	6.1 U	7.1 U
1,2-DIBROMO-3-CHLOROPROPANE	µg/kg	--	--	--	--	--	6.5 U	7.4 U	5.8 U	5.5 U	6.5 U	6.1 U	7.1 U
1,2-DIBROMOETHANE	µg/kg	--	--	--	--	--	6.5 U	7.4 U	5.8 U	5.5 U	6.5 U	6.1 U	7.1 U
1,2-DICHLOROBENZENE	µg/kg	989			173	477	6.5 U	7.4 U	5.8 U	5.5 U	6.5 U	6.1 U	7.1 U
1,2-DICHLOROETHANE	µg/kg	--			--	1131	6.5 U	7.4 U	5.8 U	5.5 U	6.5 U	6.1 U	7.1 U
1,2-DICHLOROPROPANE	µg/kg	--			--	876	6.5 U	7.4 U	5.8 U	5.5 U	6.5 U	6.1 U	7.1 U
1,3-DICHLOROBENZENE	µg/kg	842			--	468	6.5 U	7.4 U	5.8 U	5.5 U	6.5 U	6.1 U	7.1 U
1,4-DICHLOROBENZENE	µg/kg	460			--	468	6.5 U	7.4 U	5.8 U	5.5 U	6.5 U	6.1 U	7.1 U
2-BUTANONE (MEK)	µg/kg	--			--	22707	32 U	**8.4 J**	29 U	28 U	33 U	31 U	**16 J**
2-HEXANONE	µg/kg	--			--	7598	32 U	37 U	29 U	28 U	33 U	31 U	35 U
4-METHYL-2-PENTANONE (MIBK)	µg/kg	--			--	8165	32 U	37 U	**2.3 J**	**2 J**	33 U	31 U	35 U
ACETONE	µg/kg	--			--	38133	32 U	**53**	29 U	28 U	33 U	31 U	**140**
BENZENE	µg/kg	137			111	2185	6.5 U	7.4 U	5.8 U	5.5 U	6.5 U	6.1 U	7.1 U
DICHLOROBROMOMETHANE	µg/kg	--	2172	--			6.5 U	7.4 U	5.8 U	5.5 U	6.5 U	6.1 U	7.1 U
BROMOFORM	µg/kg	1310	223	--			6.5 U	7.4 U	5.8 U	5.5 U	6.5 U	6.1 U	7.1 U
BROMOMETHANE	µg/kg	--	108	--			6.5 U	7.4 U	5.8 U	5.5 U	6.5 U	6.1 U	7.1 U
CARBON DISULFIDE	µg/kg	--			131	1580	6.5 U	7.4 U	5.8 U	5.5 U	6.5 U	6.1 U	7.1 U
CARBON TETRACHLORIDE	µg/kg	7,240			3.3	706	6.5 U	7.4 U	5.8 U	5.5 U	6.5 U	6.1 U	7.1 U
CHLOROBENZENE	µg/kg	162			66	939	6.5 U	7.4 U	5.8 U	5.5 U	6.5 U	6.1 U	7.1 U
CHLOROETHANE	µg/kg	--			--	1178	6.5 U	7.4 U	5.8 U	5.5 U	6.5 U	6.1 U	7.1 U
CHLOROFORM	µg/kg	--			--	75	6.5 U	7.4 U	5.8 U	5.5 U	6.5 U	6.1 U	7.1 U
CHLOROMETHANE	µg/kg	--	--	--	--	--	6.5 U	7.4 U	5.8 U	5.5 U	6.5 U	6.1 U	7.1 U
CIS-1,2-DICHLOROETHENE	µg/kg	--			--	1135	6.5 U	7.4 U	5.8 U	5.5 U	6.5 U	6.1 U	7.1 U
CIS-1,3-DICHLOROPROPENE	µg/kg	--	34.7	75			6.5 U	7.4 U	5.8 U	5.5 U	6.5 U	6.1 U	7.1 U
CYCLOHEXANE	µg/kg	--	--	278			6.5 U	7.4 U	5.8 U	5.5 U	6.5 U	6.1 U	7.1 U
CHLORODIBROMOMETHANE	µg/kg	--	--	--	--	--	6.5 U	7.4 U	5.8 U	5.5 U	6.5 U	6.1 U	7.1 U
DICHLORODIFLUOROMETHANE	µg/kg	--	--	--	--	--	6.5 U	7.4 U	5.8 U	5.5 U	6.5 U	6.1 U	7.1 U
ETHYLBENZENE	µg/kg	305			119	1467	6.5 U	7.4 U	5.8 U	5.5 U	6.5 U	6.1 U	7.1 U
ISOPROPYLBENZENE	µg/kg	--			--	713	6.5 U	7.4 U	5.8 U	5.5 U	6.5 U	6.1 U	7.1 U

Appendix B-3
April / May 2024 Deep Sediment Sampling Results
Container Terminal RADWP, Sparrows Point, Maryland

			Table 2A - non-narcotic		Table 2b - narcotic		DU-26		DU-27			DU-28	
ANALYTE	UNITS	EPA Region III BTAG - Marine Sediment	EPA Region IV - Marine Sediment ESV	EPA Region IV - Marine Sediment RSV	EPA Region IV - Marine Sediment ESV	EPA Region IV - Marine Sediment RSV	SPCT24-DU26-B-WW-BOT-SED	SPCT24-DU26-D-WW-BOT-SED	SPCT24-DU27-A-WW-BOT-SED	SPCT24-DU27-B-WW-BOT-SED	SPCT24-DU27-D-WW-BOT-SED	SPCT24-DU28-A-WW-BOT-SED	SPCT24-DU28-B-WW-BOT-SED
							-50 to -52 ft MLLW	-50 to -52 ft MLLW	-50 to -52 ft MLLW	-49.6 to -51.6 ft MLLW	-50 to -52 ft MLLW	-50 to -52 ft MLLW	-50 to -52 ft MLLW
METHYL ACETATE	µg/kg	--	--	--	--	--	32 U	37 U	29 U	28 U	33 U	31 U	35 U
METHYL TERT-BUTYL ETHER	µg/kg	--			2081	4433	6.5 U	7.4 U	5.8 U	5.5 U	6.5 U	6.1 U	7.1 U
METHYLCYCLOHEXANE	µg/kg	--	--	--	--	--	6.5 U	7.4 U	5.8 U	5.5 U	6.5 U	6.1 U	7.1 U
METHYLENE CHLORIDE	µg/kg	--			667	2404	6.5 U	7.4 U	5.8 U	5.5 U	6.5 U	6.1 U	7.1 U
STYRENE	µg/kg	7070			--	1621	6.5 U	7.4 U	5.8 U	5.5 U	6.5 U	6.1 U	7.1 U
TETRACHLOROETHENE	µg/kg	190			11	415	6.5 U	7.4 U	5.8 U	5.5 U	6.5 U	6.1 U	7.1 U
TOLUENE	µg/kg	1090			568	2074	6.5 U	7.4 U	5.8 U	5.5 U	6.5 U	6.1 U	7.1 U
TRANS-1,2-DICHLOROETHENE	µg/kg	--			--	1135	6.5 U	7.4 U	5.8 U	5.5 U	6.5 U	6.1 U	7.1 U
TRANS-1,3-DICHLOROPROPENE	µg/kg	--	34.7	75			6.5 U	7.4 U	5.8 U	5.5 U	6.5 U	6.1 U	7.1 U
TRICHLOROETHENE	µg/kg	8950			73	692	6.5 U	7.4 U	5.8 U	5.5 U	6.5 U	6.1 U	7.1 U
TRICHLOROFLUOROMETHANE	µg/kg	--	--	--	--	--	6.5 U	7.4 U	5.8 U	5.5 U	6.5 U	6.1 U	7.1 U
VINYL CHLORIDE	µg/kg	--			--	1178	6.5 U	7.4 U	5.8 U	5.5 U	6.5 U	6.1 U	7.1 U
XYLENES, TOTAL	µg/kg	--			--	1074	13 U	15 U	12 U	11 U	13 U	12 U	14 U
SVOCs													
1,2,4-TRICHLOROBENZENE	µg/kg	473			75	485	23 U	26 U	20 U	19 U	23 U	20 U	25 U
1,2-DICHLOROBENZENE	µg/kg	989			173	477	23 U	26 U	20 U	19 U	23 U	20 U	25 U
1,2-DIPHENYLHYDRAZINE(AS AZOBENZENE)	µg/kg	--	--	106			23 U	26 U	20 U	19 U	23 U	20 U	25 U
1,3-DICHLOROBENZENE	µg/kg	842			--	468	23 U	26 U	20 U	19 U	23 U	20 U	25 U
1,4-DICHLOROBENZENE	µg/kg	460			--	468	23 U	26 U	20 U	19 U	23 U	20 U	25 U
2,2'-OXYBIS[1-CHLOROPROPANE]	µg/kg		--	--	--	--	4.6 U	5.2 U	4.1 U	3.9 U	4.6 U	4.1 U	5 U
2,4,6-TRICHLOROPHENOL	µg/kg	2,650	117	1,964			23 U	26 U	20 U	19 U	23 U	20 U	25 U
2,4-DICHLOROPHENOL	µg/kg	--			--	1,886	4.6 U	5.2 U	4.1 U	3.9 U	4.6 U	4.1 U	5 U
2,4-DIMETHYLPHENOL	µg/kg	--	29	504			23 U	26 U	20 U	19 U	23 U	20 U	25 U
2,4-DINITROPHENOL	µg/kg	--	45	2,961			230 U	260 U	200 U	190 U	230 U	200 U	250 U
2,4-DINITROTOLUENE	µg/kg	--	29	114			23 U	26 U	20 U	19 U	23 U	20 U	25 U
2,6-DINITROTOLUENE	µg/kg	--	--	131			23 U	26 U	20 U	19 U	23 U	20 U	25 U
2-CHLORONAPHTHALENE	µg/kg	--	--	--	--	--	4.6 U	5.2 U	4.1 U	3.9 U	4.6 U	4.1 U	5 U
2-CHLOROPHENOL	µg/kg	344	885	2,302			23 U	26 U	20 U	19 U	23 U	20 U	25 U
2-METHYLPHENOL	µg/kg	--	63	1,773			23 U	26 U	20 U	19 U	23 U	20 U	25 U
2-NITROPHENOL	µg/kg	--	2,070	3,589			23 U	26 U	20 U	19 U	23 U	20 U	25 U
3,3'-DICHLOROBENZIDINE	µg/kg	2,060	--	90			23 U	26 U	20 U	19 U	23 U	20 U	25 U
4,6-DINITRO-2-METHYLPHENOL	µg/kg	--	1,477	2,304			120 U	130 U	100 U	99 U	120 U	100 U	130 U
4-BROMOPHENYL PHENYL ETHER	µg/kg	--			--	62	23 U	26 U	20 U	19 U	23 U	20 U	25 U
4-CHLORO-3-METHYLPHENOL	µg/kg	--	1,257	2,035			23 U	26 U	20 U	19 U	23 U	20 U	25 U
4-CHLOROPHENYL PHENYL ETHER	µg/kg	--					23 U	26 U	20 U	19 U	23 U	20 U	25 U
4-NITROPHENOL	µg/kg	--	1,579	4,105			120 U	130 U	100 U	99 U	120 U	100 U	130 U

Appendix B-3
April / May 2024 Deep Sediment Sampling Results
Container Terminal RADWP, Sparrows Point, Maryland

			Table 2A - non-narcotic		Table 2b - narcotic		DU-26		DU-27			DU-28	
ANALYTE	UNITS	EPA Region III BTAG - Marine Sediment	EPA Region IV - Marine Sediment ESV	EPA Region IV - Marine Sediment RSV	EPA Region IV - Marine Sediment ESV	EPA Region IV - Marine Sediment RSV	SPCT24-DU26-B-WW-BOT-SED -50 to -52 ft MLLW	SPCT24-DU26-D-WW-BOT-SED -50 to -52 ft MLLW	SPCT24-DU27-A-WW-BOT-SED -50 to -52 ft MLLW	SPCT24-DU27-B-WW-BOT-SED -49.6 to -51.6 ft MLLW	SPCT24-DU27-D-WW-BOT-SED -50 to -52 ft MLLW	SPCT24-DU28-A-WW-BOT-SED -50 to -52 ft MLLW	SPCT24-DU28-B-WW-BOT-SED -50 to -52 ft MLLW
BENZIDINE	µg/kg	--	--	17			460 U	520 U	410 U	390 U	460 U	410 U	500 U
BENZOIC ACID	µg/kg	--			--	2,000	120 U	130 U	100 U	99 U	120 U	100 U	130 U
BENZYL ALCOHOL	µg/kg	--			522	6,729	110 U	130 U	100 U	98 U	120 U	100 U	130 U
BIS(2-CHLOROETHOXY)METHANE	µg/kg	--	--	--	--	--	23 U	26 U	20 U	19 U	23 U	20 U	25 U
BIS(2-CHLOROETHYL)ETHER	µg/kg	--	--	8163			4.6 U	5.2 U	4.1 U	3.9 U	4.6 U	4.1 U	5 U
BIS(2-ETHYLHEXYL) PHTHALATE	µg/kg	182			182	2,647	230 U	260 U	200 U	190 U	230 U	200 U	250 U
BUTYL BENZYL PHTHALATE	µg/kg	16,800			--	481	110 U	130 U	100 U	98 U	120 U	100 U	130 U
DIBENZOFURAN	µg/kg	7,300			--	2,313	23 U	26 U	20 U	19 U	23 U	20 U	25 U
DIETHYL PHTHALATE	µg/kg	218			80	1,105	23 U	26 U	20 U	19 U	23 U	20 U	25 U
DIMETHYL PHTHALATE	µg/kg	--			530	2,031	46 U	52 U	41 U	39 U	46 U	41 U	50 U
DI-N-BUTYL PHTHALATE	µg/kg	1,160			--	319	230 U	260 U	200 U	190 U	230 U	200 U	250 U
DI-N-OCTYL PHTHALATE	µg/kg	--			580	45,000	23 U	26 U	20 U	19 U	23 U	20 U	25 U
HEXACHLOROBENZENE	µg/kg	--	10	23			4.6 U	5.2 U	4.1 U	3.9 U	4.6 U	4.1 U	5 U
HEXACHLOROBUTADIENE	µg/kg	--	--	--	--	--	4.6 U	5.2 U	4.1 U	3.9 U	4.6 U	4.1 U	5 U
HEXACHLOROCYCLOPENTADIENE	µg/kg	139	1	130			23 U	26 U	20 U	19 U	23 U	20 U	25 U
HEXACHLOROETHANE	µg/kg	804			--	75	23 U	26 U	20 U	19 U	23 U	20 U	25 U
ISOPHORONE	µg/kg	--			--	948	23 U	26 U	20 U	19 U	23 U	20 U	25 U
METHYLPHENOL, 3 & 4	µg/kg	--	670	714			23 U	26 U	20 U	19 U	23 U	20 U	**15 J**
NITROBENZENE	µg/kg	--			1,853	9,007	45 U	52 U	41 U	39 U	46 U	41 U	50 U
N-NITROSODIMETHYLAMINE	µg/kg	--	--	--	--	--	23 U	26 U	20 U	19 U	23 U	20 U	25 U
N-NITROSODI-N-PROPYLAMINE	µg/kg	--	--	--	--	--	4.6 U	5.2 U	4.1 U	3.9 U	4.6 U	4.1 U	5 U
N-NITROSODIPHENYLAMINE	µg/kg	422,000			211	370	23 U	26 U	20 U	19 U	23 U	20 U	25 U
PENTACHLOROPHENOL	µg/kg	7,970	360	394			120 U	130 U	100 U	99 U	120 U	100 U	130 U
PHENOL	µg/kg	--	63	420			23 U	26 U	20 U	19 U	**13 J**	20 U	**16 J**
LOW MOLECULAR WEIGHT PAHs (LPAH)													
1-METHYLNAPHTHALENE	µg/kg	--			--	--	4.6 U	5.2 U	4.1 U	3.9 U	4.6 U	4.1 U	5 U
2-METHYLNAPHTHALENE	µg/kg	20.2			20.2	--	4.6 U	5.2 U	4.1 U	3.9 U	4.6 U	4.1 U	5 U
ACENAPHTHENE	µg/kg	6.71			6.70	--	4.6 U	5.2 U	4.1 U	3.9 U	4.6 U	4.1 U	5 U
ACENAPHTHYLENE	µg/kg	5.87			5.90	--	4.6 U	5.2 U	4.1 U	3.9 U	4.6 U	4.1 U	5 U
ANTHRACENE	µg/kg	46.9			47.0	--	**3.4 J**	5.2 U	4.1 U	3.9 U	4.6 U	4.1 U	5 U
FLUORENE	µg/kg	21.2			21.0	--	4.6 U	5.2 U	4.1 U	3.9 U	4.6 U	4.1 U	5 U
NAPHTHALENE	µg/kg	34.6			35.0	--	4.6 U	**1.2 J**	4.1 U	3.9 U	4.6 U	4.1 U	5 U
PHENANTHRENE	µg/kg	86.7			87.0	--	**2.4 J**	5.2 U	4.1 U	3.9 U	4.6 U	4.1 U	5 U
TOTAL LPAHs (ND=0)	µg/kg				312.0		**5.8**	**1.2**	0	0	0	0	0
TOTAL LPAHs (ND=1/2RL)	µg/kg				312.0		**19.6**	**19.4**	**16.8**	**16**	**18.4**	**16.8**	**20**
TOTAL LPAHs (ND=RL)	µg/kg				312.0		**33.4**	**37.6**	**32.8**	**31.2**	**36.8**	**32.8**	**40**

Appendix B-3
April / May 2024 Deep Sediment Sampling Results
Container Terminal RADWP, Sparrows Point, Maryland

ANALYTE	UNITS		Table 2A - non-narcotic		Table 2b - narcotic		DU-26		DU-27			DU-28	
		EPA Region III BTAG - Marine Sediment	EPA Region IV - Marine Sediment ESV	EPA Region IV - Marine Sediment RSV	EPA Region IV - Marine Sediment ESV	EPA Region IV - Marine Sediment RSV	SPCT24-DU26-B-WW-BOT-SED	SPCT24-DU26-D-WW-BOT-SED	SPCT24-DU27-A-WW-BOT-SED	SPCT24-DU27-B-WW-BOT-SED	SPCT24-DU27-D-WW-BOT-SED	SPCT24-DU28-A-WW-BOT-SED	SPCT24-DU28-B-WW-BOT-SED
							-50 to -52 ft MLLW	-50 to -52 ft MLLW	-50 to -52 ft MLLW	-49.6 to -51.6 ft MLLW	-50 to -52 ft MLLW	-50 to -52 ft MLLW	-50 to -52 ft MLLW
HIGH MOLECULAR WEIGHT PAHs (HPAH)													
BENZO(A)ANTHRACENE	µg/kg	74.8			75		4.6 U	5.2 U	4.1 U	3.9 U	4.6 U	4.1 U	5 U
BENZO(A)PYRENE	µg/kg	88.8			89		4.6 U	5.2 U	4.1 U	3.9 U	4.6 U	4.1 U	5 U
BENZO(B)FLUORANTHENE	µg/kg	--			--		4.6 U	5.2 U	4.1 U	3.9 U	4.6 U	4.1 U	5 U
BENZO(GHI)PERYLENE	µg/kg	--			310		4.6 U	5.2 U	4.1 U	3.9 U	4.6 U	4.1 U	5 U
BENZO(K)FLUORANTHENE	µg/kg	--			--		4.6 U	5.2 U	4.1 U	3.9 U	4.6 U	4.1 U	5 U
CHRYSENE	µg/kg	108			108		**2.8 J**	5.2 U	4.1 U	3.9 U	4.6 U	4.1 U	5 U
DIBENZO(A,H)ANTHRACENE	µg/kg	6.22			6.2		4.6 U	5.2 U	4.1 U	3.9 U	4.6 U	4.1 U	5 U
FLUORANTHENE	µg/kg	113			113		**3.4 J**	5.2 U	4.1 U	3.9 U	4.6 U	4.1 U	5 U
INDENO(1,2,3-CD)PYRENE	µg/kg	--			340		4.6 U	5.2 U	4.1 U	3.9 U	4.6 U	4.1 U	5 U
PYRENE	µg/kg	153			153		**2.3 J**	5.2 U	4.1 U	3.9 U	4.6 U	4.1 U	5 U
TOTAL HPAHs (ND=0)	µg/kg				655.0		**8.5**	0	0	0	0	0	0
TOTAL HPAHs (ND=1/2RL)	µg/kg				655.0		**24.6**	**26**	**21**	**20**	**23**	**21**	**25**
TOTAL HPAHs (ND=RL)	µg/kg				655		**40.7**	**52**	**41**	**39**	**46**	**41**	**50**
TOTAL PAHs													
TOTAL PAHs (ND=0)	µg/kg				1684		**14.3**	**1.2**	0	0	0	0	0
TOTAL PAHs (ND=1/2RL)	µg/kg				1684		**44.2**	**45.4**	**37.8**	**36**	**41.4**	**37.8**	**45**
TOTAL PAHs (ND=RL)	µg/kg				1684		**74.1**	**89.6**	**73.8**	**70.2**	**82.8**	**73.8**	**90**

Bold values represent detected concentrations.
Red bold values represent exceedances of applicable screening levels.

References:
EPA Region III - Marine = EPA Region III BTAG Marine
EPA Region IV = Region 4 Ecological Risk Assessment Supplemental Guidance, March 2018.
Table 2a, Region 4 Sediment Screening Values for Hazardous Waste Sites, Non-narcotic, Marine
Table 2b, Region 4 Sediment Screening Values for Hazardous Waste Sites, Narcotic, Marine

APPENDIX B-4

Parcel B18

Parcel B5

CO216-MWS
Deeper than -8 ft

A-2
-13 ft

CT-030-SB

MB-01
-22 ft

CT-032-SB

MB-02
-8 ft

CT-034-SB

MB-03
-8 ft

CT-035-SB

Parcel B10

CO-073-PW-1
Naphthalene: 1,530

CT-037-SB

CO203-MWS
Deeper than -14 ft

CO-074-PW-1
Naphthalene: 9,230
CO-074-PW-2
Naphthalene: 8,880

CT-038-SB

A-3
-36 ft

CT-039-SB

CO-079-PW-1
Naphthalene: 3,680

CT-040-SB

CO-080-PW-1
Naphthalene: 0.41

CT-041-SB

MB-05
-15 ft

CO26-PZM007/032
-26.6 ft

CO-086-PW-1
Naphthalene: 0.33

CT-043-SB

CO-095-PW-1
Naphthalene: 0.14
CO-073-PW-2
Naphthalene: 30.4

CO207-MWS
Deeper than -13.28 ft

CT-045-SB

MB-06
-19 ft

CO-098-PW-1
Naphthalene: 352

A-4
-17 ft

CT-046-SB

CO58-PZM001

CT-047-SB

CT-048-SB

MB-07
-95 ft

Parcel B13

CO208-MWS
Deeper than -14 ft

CO35-PZM013/056
-21 ft

MB-08
-71 ft

Parcel B11

MB-09
-69 ft

CP17-PZM013/058
-36 ft

A-5
-37 ft

MB-10
-106 ft

CP26-MWS
-50.4 ft

Parcel B12

LEGEND

- Sheet Pile
- Completed Soil Boring
- Geotech Boring
- Pore Water Sample
- Monitoring Well
- Container Terminal LOD
- Site Boundary
- Parcel Boundaries
- Private Property

Container Terminal
Clay Elevation (ft AMSL)

January 2, 2024

Figure
B-4

N

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0 90 180 360
Feet

Tradepoint Atlantic
Sparrows Point
Baltimore County, MD

Area A: Project 210101
Area B: Project 210102

P:\EnviroAnalytics Group\160443M EAG_TPA Redevelopment\GIS\Container Terminal Depth to Clay.mxd

ARM Group LLC
Engineers and Scientists

Well ID: CT-030-SB

(page 1 of 1)

Project Name	: CT- Cutoff Wall
Project Number	: 21010210
Client	: Tradepoint Atlantic
Site	: Sparrows Point
Borehole Location	: Container Terminal
ARM Representative	: J. Barna P.G.
Checked by	: S. Lowe G.I.T.
Drilling Company	: Connelly
Driller	: Jarred
Drilling Equipment	: Sonic Rig

Northing (ft)	: 562927
Easting (ft)	: 1458009
Date/Time Completed	: 1/10/2024
Depth to Water (ft)	: 8.5
Borehole Diameter (in.)	: 6

Depth (ft.)	%Recovery	PID (ppm)	DESCRIPTION	REMARKS
0–5	100	0.7 1.1 2.2 5.4 7.9	(0-5') FILL Black GRAVEL SLAG with SILT and some SAND, loose, no plastcity, no cohesion (DRY)	
5–10	60	-	(5-7') NO RECOVERY	
		-	(7-8.5') FILL Black GRAVEL SLAG with SILT and some SAND, loose, no plasticity, no cohesion (MOIST)	Wet at 8.5' bgs.
		-	(8.5-10') FILL Black GRAVEL SLAG with SILT and some SAND, loose, no plastcity, no cohesion (WET)	
10–15	80	-	(10-11') NO RECOVERY	
		-	(11-12.5') FILL Black GRAVEL SLAG with SILT and some SAND, loose, no plasticity, no cohesion (WET)	
		-	(12.5-13.5') FILL Brown to light brown SANDY GRAVEL SLAG, no plasticity, no cohesion, loose (WET)	
		-	(13.5-15') FILL Black SILTY SAND, with peat, no plasticity, no cohesion, loose (WET)	
15–20	100	-	(15-15.5) FILL BLACK SANDY SILT, no plasticity, no cohesion, loose, high organic content (WET)	
		-	(15.5-16') NATIVE Grey fine-grained SAND, loose, no plasticity, no cohesion, well sorted (WET)	
		-	(16-19') NATIVE PEAT (WET)	
20–25	100	-	(19-20') NATIVE Grey CLAYEY SILT, low plasticity, low cohesion, hard (WET)	
		-	(20-25') NATIVE Light grey SILTY CLAY , light brown and grey mottling obseved throughout, low plasticity, low cohesion, medium soft to hard at base (25') (WET)	

ags - above ground surface
bgs - below ground surface

ARM Group LLC
Engineers and Scientists

Well ID: CT-032-SB

(page 1 of 1)

Project Name	: CT- Cutoff Wall
Project Number	: 21010210
Client	: Tradepoint Atlantic
Site	: Sparrows Point
Borehole Location	: Container Terminal
ARM Representative	: J. Barna P.G.
Checked by	: S. Lowe G.I.T.
Drilling Company	: Connelly
Driller	: Jarred
Drilling Equipment	: Sonic Rig

Northing (ft)	: 562927
Easting (ft)	: 1458009
Date/Time Completed	: 1/10/2024
Depth to Water (ft)	: 9
Borehole Diameter (in.)	: 6

Depth (ft.)	%Recovery	PID (ppm)	DESCRIPTION	REMARKS
0				
1	80	0	(0-3') FILL Dark brown SLAG GRAVEL with SAND and SILT, loose, no plasticity, no cohesion (DRY)	
2		0		
3		0		
4		-	(3-4') NO RECOVERY	
5		0	(4-5') FILL White CONCRETE (DRY)	
6	60	0.1	(5-7') FILL Green CONCRETE (DRY)	
7		0		
8		-	(7-9') NO RECOVERY	
9		-		Wet at 9' bgs.
10	100	0.7	(9-16') FILL Dark grey GRAVEL SLAG, loose, no plastcity, no cohesion (WET)	
11		0.4		
12		0.7		
13		0.7		
14		0.8		
15		0.9		
16	60	1.4		
17		0.2	(16-17') FILL Grey SAND, fine grained, well sorted no plasticity, no cohesion, loose (WET)	
18		0.3	(17-17.6') NATIVE PEAT (WET)	
19		0.3	(17.6-19) NATIVE Dark grey CLAYEY SILT, low plasticity, low cohesion, firm (WET)	
20		0.4	(19-20') NATIVE Grey SILTY CLAY, low plasticity, low cohesion, firm (WET)	
21		-	(20-25') NATIVE Light brown to grey SILTY CLAY, low plasticity, low cohesion, firm (WET)	
22	100	-		
23		-		
24		-		
25				

ags - above ground surface
bgs - below ground surface

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Well ID: CT-034-SB

(page 1 of 2)

Project Name	: CT- Cutoff Wall
Project Number	: 21010210
Client	: Tradepoint Atlantic
Site	: Sparrows Point
Borehole Location	: Container Terminal
ARM Representative	: S. Lowe G.I.T.
Checked by	: S. Lowe G.I.T.
Drilling Company	: Connelly
Driller	: Jarred
Drilling Equipment	: Sonic Rig

Northing (ft)	: 562927
Easting (ft)	: 1458019
Date/Time Completed	: 1/10/2024
Depth to Water (ft)	: 10
Borehole Diameter (in.)	: 6

Depth (ft.)	%Recovery	PID (ppm)	DESCRIPTION	REMARKS
0				
1	100	0.3	(0-0.5') FILL Dark brown TOPSOIL, organic material present (roots, grass, etc.), well sorted, loose (DRY)	
2		0.3	(0.5-3') FILL Brown GRAVEL SLAG with SAND and some SILT, loose, no plasticity, no cohesion (DRY)	
3		0.3		
4		0.4	(3-4.5') FILL LIght brown to brown GRAVEL SLAG with SAND and trace SILT, loose, no plasticity, no cohesion (DRY)	
5		1.1	(4.5-5') FILL CONCRETE (DRY)	
6	80	-	(5-6') NO RECOVERY	
7		0.6	(6-8') FILL Brown GRAVEL SLAG with SAND and some SILT, loose, no plasticity, no cohesion (DRY)	
8		0.6		
9		0.8	(8-9') FILL Orange to brown, fine grained, SILTY SAND, well sorted, some mottling observed throughout, firm (DRY)	
10		0.5	(9-10') FILL LIght brown GRAVEL SLAG with SAND and some SILT, loose, no plasticity, no cohesion (DRY)	Wet at 10' bgs.
11	80	-	(10-11') NO RECOVERY	
12		0.2	(11-19') FILL Dark brown to grey GRAVEL SLAG with SAND and some SILT, loose(WET)	
13		0.2		
14		0.2		
15		0.3		
16	100	0.4		
17		0.2		
18		0.2		
19		0.1		
20		0.1	(19-20') FILL Black SANDY GRAVEL SLAG, trace SILT observed, loose, very low density, possibly coal (WET)	

ags - above ground surface
bgs - below ground surface

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Well ID: CT-034-SB

(page 2 of 2)

Project Name	: CT- Cutoff Wall
Project Number	: 21010210
Client	: Tradepoint Atlantic
Site	: Sparrows Point
Borehole Location	: Container Terminal
ARM Representative	: S. Lowe G.I.T.
Checked by	: S. Lowe G.I.T.
Drilling Company	: Connelly
Driller	: Jarred
Drilling Equipment	: Sonic Rig

Northing (ft)	: 562927
Easting (ft)	: 1458019
Date/Time Completed	: 1/10/2024
Depth to Water (ft)	: 10
Borehole Diameter (in.)	: 6

Depth (ft.)	%Recovery	PID (ppm)	DESCRIPTION	REMARKS
20		-	(20-26') NO RECOVERY	
21		-		
22	0	-		
23		-		
24		-		
25		-		
26		0.1	(26-29') FILL Black SANDY GRAVEL SLAG, some trace SILT observed, loose (WET)	
27	80	0.1		
28		0.2		
29		0.2	(29-30') NATIVE Grey CLAY with trace SILT, well sorted, low plasticity, low cohesion (WET)	
30		0.1	(30-34') NATIVE Light grey CLAY with trace SILT, well sorted, low plasticity, low cohesion (WET)	
31		0.2		
32	100	0.3		
33		0.5		
34		1.0		
35			(34.5-35') NATIVE Light brown SAND, well sorted, fine-grained, no plasticity, no cohesion (WET)	
36			End of Boring	
37				
38				
39				
40				

ags - above ground surface
bgs - below ground surface

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Engineers and Scientists

Well ID: CT-035-SB

(page 1 of 1)

Project Name	: CT- Cutoff Wall
Project Number	: 21010210
Client	: Tradepoint Atlantic
Site	: Sparrows Point
Borehole Location	: Container Terminal
ARM Representative	: J. Barna, P.G.
Checked by	: S. Lowe, G.I.T.
Drilling Company	: Connelly
Driller	: Jarred
Drilling Equipment	: Sonic Rig

Northing (ft)	: 562368
Easting (ft)	: 1458023
Date Completed	: 1/12/2024
Depth to Water (ft)	: 10
Borehole Diameter (in.)	: 6

Depth (ft.)	%Recovery	PID (ppm)	DESCRIPTION	REMARKS
0				
1	100	0.2	(0-0.5') FILL Top soil, organic material, loose, well sorted	
2		0.2		
3		0.1	(0.5-3') FILL SANDY GRAVEL Slag with trace SILT, black, loose (MOIST)	
4		0.2	(3-3.5') FILL SILTY SAND, very fine, orange-brown, firm, mottling present (DRY)	
5		0.2		
6	100	0.2	(3.5-8') FILL SANDY GRAVEL Slag, trace SILT, brown-black, loose (MOIST)	
7		0.2		
8		0.6		
9		0.2	(8-10') FILL SANDY GRAVEL Slag, black, possibly coal, loose (MOIST)	
10		1.3		Wet at 10' bgs.
11	100	0.2	(10-16') FILL SILTY SANDY GRAVEL Slag, loose, black to brown (WET)	
12		0.2		
13		0.2		
14		0.1		
15		0.1		Trace Sheen at 15' bgs
16	100	0.1		
17		0.1	(16-20') FILL SILTY GRAVEL Slag with trace SAND, black, loose (WET)	
18		0.3		
19		0.1		
20		0.2		
21	100	0.0	(20-29') NATIVE SILTY CLAY, firm, light brown-grey, low plasticity, low cohesion (WET)	
22		0.0		
23		0.1		
24		0.2		
25		0.2		
26	100	0.3		
27		0.2		
28		0.1		
29		0.1		
30		0.0	(29-29.5') NATIVE SILTY CLAY, well sorted, very fine grained orange-brown, firm (WET)	
31			(29.5-30') NATIVE SAND, well sorted, light grey, fine, loose (WET)	
32				

ags - above ground surface
bgs - below ground surface

ARM Group LLC
Engineers and Scientists

Well ID: CT-037-SB

(page 1 of 2)

Project Name	: CT- Cutoff Wall
Project Number	: 21010210
Client	: Tradepoint Atlantic
Site	: Sparrows Point
Borehole Location	: Container Terminal
ARM Representative	: L. Parker
Checked by	: S. Lowe, G.I.T.
Drilling Company	: Connelly
Driller	: Jarred
Drilling Equipment	: Sonic Rig

Northing (ft)	: 562196
Easting (ft)	: 1458030
Date Completed	: 5/23/2024
Depth to Water (ft)	: 10
Borehole Diameter (in.)	: 6

Depth (ft.)	%Recovery	PID (ppm)	DESCRIPTION	REMARKS
0				
1	75	1.8	(0-0.75') FILL Top Soil, brown with organics	
2		4.5	(0.75-9') FILL Layers of SILTY SANDY GRAVEL Slag with brick and concrete, grey and brown, loose (DRY)	
3		4.3		
4		3.7		
5		-		
6	80	0.5		
7		0.7		
8		0.6		
9		1.8		
10		-	(9-10') FILL Layers of SILTY SANDY GRAVEL Slag with brick and concrete, grey and brown, loose (MOIST)	Wet at 10' bgs.
11	80	4.0	(10-20') FILL Layers of SILTY SANDY GRAVEL Slag with brick and concrete, grey and brown, loose (MOIST to WET)	
12		20.8		Mothball odors at 11.5' bgs.
13		3.4		
14		1.4		
15		-		
16	95	1.3		
17		2.7		
18		4.7		
19		8.1		
20		-		
21	40	60.8	(20-25') FILL SILTY SANDY GRAVEL, black, loose (WET)	
22		11.3		
23		-		
24		-		Slight Sheen (24-27' bgs)
25		-		

ags - above ground surface
bgs - below ground surface

ARM Group LLC
Engineers and Scientists

Well ID: CT-037-SB

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Project Name	: CT- Cutoff Wall
Project Number	: 21010210
Client	: Tradepoint Atlantic
Site	: Sparrows Point
Borehole Location	: Container Terminal
ARM Representative	: L. Parker
Checked by	: S. Lowe, G.I.T.
Drilling Company	: Connelly
Driller	: Jarred
Drilling Equipment	: Sonic Rig

Northing (ft)	: 562196
Easting (ft)	: 1458030
Date Completed	: 5/23/2024
Depth to Water (ft)	: 10
Borehole Diameter (in.)	: 6

Depth (ft.)	%Recovery	PID (ppm)	DESCRIPTION	REMARKS
25		56.3	(25-27') FILL SILTY SAND, black, fine, semi-loose (MOIST)	
26		25.6		
27	100	12.0	(27-28') FILL SANDY SILT, dark grey to black, fine, soft, medium dense (MOIST)	
28		11.5	(28-28.5') FILL SILTY SAND with trace SAND and GRAVEL, grey-black, fine to coarse, shell material and wood observed, semi-loose (WET)	
29		1.9	(28.5-29') NATIVE SILT with some SAND, brown, medium dense, low cohesion, no plasticity (DAMP)	
30		-		
31		-		
32	30	0.6	(29-30') NATIVE SILTY SAND, grey, fine to medium, trace corse, some shell and wood fragments, semi-loose (WET)	
33		0.7	(30-37') NATIVE SILT and SILTY SAND, grey and brown-grey, fine to medium, trace shell material and wood, some GRAVEL at top, semi-loose to soft (WET)	
34		0.5		
35		-		
36		-		
37	95	-	(37-50') NATIVE CLAY, brown-grey, soft to medium dense, low cohesion, low plasticity, trace shells and wood (DAMP)	
38		-		
39		-		
40		0.0		
41		0.0		
42	95	0.0		
43		0.0		
44		0.0		
45		0.0		
46		0.0		
47	85	0.0		
48		0.0		
49		0.0		
50				

ags - above ground surface
bgs - below ground surface

ARM Group LLC
Engineers and Scientists

Well ID: CT-038-SB

(page 1 of 2)

Project Name	: CT- Cutoff Wall
Project Number	: 21010210
Client	: Tradepoint Atlantic
Site	: Sparrows Point
Borehole Location	: Container Terminal
ARM Representative	: J. Barna, P.G.
Checked by	: S. Lowe, G.I.T.
Drilling Company	: Connelly
Driller	: Jarred
Drilling Equipment	: Sonic Rig

Northing (ft)	: 562024
Easting (ft)	: 1458034
Date Completed	: 1/12/2024
Depth to Water (ft)	: 10
Borehole Diameter (in.)	: 6

Depth (ft.)	%Recovery	PID (ppm)	DESCRIPTION	REMARKS
0				
1	100	0.1	(0-10') FILL GRAVEL Slag with SAND and some SILT, dark brown, loose (DRY)	
2		0.0		
3		0.2		
4		0.1		
5		0.2		
6	100	0.5		
7		0.4		
8		0.1		
9		0.5		
10		0.0		
11	100	0.1	(10-12') FILL Slag GRAVEL with SAND and more SILT near bottom, brown to dark brown, loose (WET)	Wet at 10' bgs.
12		0.2		
13		2.6	(12-15') FILL Slag GRAVEL with SAND and more SILT near bottom, dark brown, loose (WET)	
14		4.2		
15		1.3		
16	100	3.4	(15-16') FILL Slag GRAVEL with SAND and SILT, dark brown to black, loose (WET)	
17		2.3	(16-20') FILL Slag GRAVEL with light brown SAND and trace SILT, brown to grey, loose (WET)	
18		2.3		
19		2.7		
20		7.9		
21	0	-	(20-26') NO RECOVERY	
22		-		
23		-		
24		-		
25		-		

ags - above ground surface
bgs - below ground surface

ARM Group LLC
Engineers and Scientists

Well ID: CT-038-SB

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Project Name	: CT- Cutoff Wall
Project Number	: 21010210
Client	: Tradepoint Atlantic
Site	: Sparrows Point
Borehole Location	: Container Terminal
ARM Representative	: J. Barna, P.G.
Checked by	: S. Lowe, G.I.T.
Drilling Company	: Connelly
Driller	: Jarred
Drilling Equipment	: Sonic Rig

Northing (ft)	: 562024
Easting (ft)	: 1458034
Date Completed	: 1/12/2024
Depth to Water (ft)	: 10
Borehole Diameter (in.)	: 6

Depth (ft.)	%Recovery	PID (ppm)	DESCRIPTION	REMARKS
25		-		
26		3.9	(26-29.5') FILL Slag GRAVEL with medium to coarse grained SAND, black, loose (WET)	
27	80	0.6		
28		-		
29		-		Slight Petroleum Odor (29.5' bgs) Minor Sheen Observed (29-30' bgs)
30		0.2	(29.5-30') FILL SAND with trace SILT, fine, black, loose, well sorted, high in organics (WET)	
31		0.2	(30-40') NATIVE CLAY with trace SILT, grey, firm, low plasticity, low cohesion (WET)	
32	100	0.3		
33		0.6		
34		1.2		
35		0.2		
36		0.9		
37	100	1.3		
38		0.5		
39		0.8		
40			End of Boring	
41				
42				
43				
44				
45				
46				
47				
48				
49				
50				

ags - above ground surface
bgs - below ground surface

ARM Group LLC
Engineers and Scientists

Well ID: CT-039-SB

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Project Name	: CT- Cutoff Wall
Project Number	: 21010210
Client	: Tradepoint Atlantic
Site	: Sparrows Point
Borehole Location	: Container Terminal
ARM Representative	: J. Barna, P.G.
Checked by	: S. Lowe, G.I.T.
Drilling Company	: Connelly
Driller	: Jarred
Drilling Equipment	: Sonic Rig

Northing (ft)	: 561925
Easting (ft)	: 1458038
Date Completed	: 1/15/2024
Depth to Water (ft)	: 10
Borehole Diameter (in.)	: 6

Depth (ft.)	%Recovery	PID (ppm)	DESCRIPTION	REMARKS
0				
1	80	5.0	(0-1') FILL SILT with trace Slag GRAVEL, firm, brown, no plasticity, no cohesion, some roots (DRY)	
2		3.4		
3		1.1	(1-4') FILL Slag GRAVEL with SILT and SAND, black to dark brown, loose (DRY)	
4		0.5		
5		-	(4-5') NO RECOVERY	
6	100	2.5	(5-8') FILL Slag GRAVEL with SILT and SAND, black to dark brown, loose (DRY)	
7		7.2		
8		1.3		
9		4.1	(8-10') FILL Slag GRAVEL with SILT and SAND, black to dark brown, loose (MOIST)	
10		0.7		
11	100	2.6	(10-20') FILL Slag GRAVEL with SILT and SAND, black to dark brown, loose, wood fragments at 15 ft, brick fragments at 18 ft (WET)	Wet at 10' bgs.
12		10.2		
13		7.3		
14		9.1		
15		4.2		
16	100	14.1		
17		8.2		
18		26.6		
19		3.6		
20		3.4		
21	0	-	(20-25') NO RECOVERY	
22		-		
23		-		
24		-		
25		-		

ags - above ground surface
bgs - below ground surface

ARM Group LLC
Engineers and Scientists

Well ID: CT-039-SB

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Project Name	: CT- Cutoff Wall
Project Number	: 21010210
Client	: Tradepoint Atlantic
Site	: Sparrows Point
Borehole Location	: Container Terminal
ARM Representative	: J. Barna, P.G.
Checked by	: S. Lowe, G.I.T.
Drilling Company	: Connelly
Driller	: Jarred
Drilling Equipment	: Sonic Rig

Northing (ft)	: 561925
Easting (ft)	: 1458038
Date Completed	: 1/15/2024
Depth to Water (ft)	: 10
Borehole Diameter (in.)	: 6

Depth (ft.)	%Recovery	PID (ppm)	DESCRIPTION	REMARKS
25		0.6	(25-29.5') FILL Slag GRAVEL with SAND and SILT, brown, loose (WET)	
26		0.6		
27	100	0.7		
28		2.8		
29		3.1		
30		1.2	(29.5-30') FILL Slag GRAVEL with SAND and SILT, black, loose (WET)	
31		5.5	(30-35') FILL SANDY SILT with trace GRAVEL, very soft, black, (WET)	Slight NAPL Sheen (29.5-35' bgs)
32	100	1.7		
33		3.4		
34		2.1		
35		0.4	(35-39') NATIVE CLAYEY SILT, grey, firm, low plasticity, low cohesion, becomes sandy at base (WET)	
36		0.3		
37	100	0.2		
38		0.3		
39		0.3	(39-40') NATIVE SILTY SAND, light brown, loose, well sorted (WET)	
40		0.2	(40-50') NATIVE CLAYEY SILT, grey, soft, low plasticity, low cohesion (WET)	
41		0.2		
42	100	0.1		
43		0.0		
44		0.1		
45		0.2		
46		0.2		
47	100	0.1		
48		0.2		
49		0.2		
50				

ags - above ground surface
bgs - below ground surface

ARM Group LLC
Engineers and Scientists

Well ID: CT-040-SB

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Project Name	: CT- Cutoff Wall
Project Number	: 21010210
Client	: Tradepoint Atlantic
Site	: Sparrows Point
Borehole Location	: Container Terminal
ARM Representative	: J. Barna, P.G.
Checked by	: S. Lowe, G.I.T.
Drilling Company	: Connelly
Driller	: Jarred
Drilling Equipment	: Sonic Rig

Northing (ft)	: 561839
Easting (ft)	: 1458038
Date Completed	: 1/15/2024
Depth to Water (ft)	: 14
Borehole Diameter (in.)	: 6

Depth (ft.)	%Recovery	PID (ppm)	DESCRIPTION	REMARKS
0				
1	100	0.9	(0-4') FILL Slag GRAVEL with SILT and SAND, black, loose (DRY)	
2		3.7		
3		2.3		
4		0.4		
5		0.7	(4-14') FILL SANDY SILT with trace GRAVEL, black, no plasticity, no cohesion (MOIST)	
6	100	1.3		
7		1.6		Slight Petroleum Odor (5-10' bgs)
8		0.8		
9		0.7		
10		0.5		
11	100	1.2		
12		1.1		
13		5.3		
14		4.4		Wet at 14' bgs.
15		5.4	(14-20') FILL Slag GRAVEL with SILT and SAND, black, loose (WET)	
16	100	1.2		
17		1.5		
18		2.8		
19		5.8		
20		0.2		
21	0	-	(20-29.5') No Recovery	
22		-		
23		-		
24		-		
25		-		

ags - above ground surface
bgs - below ground surface

ARM Group LLC
Engineers and Scientists

Well ID: CT-040-SB

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Project Name	: CT- Cutoff Wall
Project Number	: 21010210
Client	: Tradepoint Atlantic
Site	: Sparrows Point
Borehole Location	: Container Terminal
ARM Representative	: J. Barna, P.G.
Checked by	: S. Lowe, G.I.T.
Drilling Company	: Connelly
Driller	: Jarred
Drilling Equipment	: Sonic Rig

Northing (ft)	: 561839
Easting (ft)	: 1458038
Date Completed	: 1/15/2024
Depth to Water (ft)	: 14
Borehole Diameter (in.)	: 6

Depth (ft.)	%Recovery	PID (ppm)	DESCRIPTION	REMARKS
25	10	-		
26		-		
27		-		
28		-		
29		0.2		
30	100	0.7	(29.5-35') FILL SANDY SILT with trace GRAVEL, black, no plasticity, no cohesion (WET)	
31		0.8		
32		1.2		
33		1.5		
34		3.2		
35	100	0.8	(35-40') NATIVE SAND, well sorted, light grey to orange, very fine to fine, loose (WET)	
36		1.5		
37		1.2		
38		0.2		
39		0.0		
40	100	0.1	(40-44') NATIVE SILTY SAND, light brown, loose (WET)	
41		0.1		
42		0.1		
43		0.2		
44		0.2	(44-45') NATIVE CLAYEY SILT, grey, no plasticity, no cohesion, soft (WET)	
45	100	0.2	(45-50') NATIVE SILTY CLAY, grey, firm, no plasticity, no cohesion (WET)	
46		0.2		
47		0.1		
48		0.2		
49		0.2		
50				

ags - above ground surface
bgs - below ground surface

ARM Group LLC
Engineers and Scientists

Well ID: CT-041-SB

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Project Name	: CT- Cutoff Wall
Project Number	: 21010210
Client	: Tradepoint Atlantic
Site	: Sparrows Point
Borehole Location	: Container Terminal
ARM Representative	: L. Parker
Checked by	: S. Lowe, G.I.T.
Drilling Company	: Connelly
Driller	: Jarred
Drilling Equipment	: Sonic Rig

Northing (ft)	: 561756
Easting (ft)	: 1458042
Date Completed	: 1/17/2024
Depth to Water (ft)	: 10.5
Borehole Diameter (in.)	: 6

Depth (ft.)	%Recovery	PID (ppm)	DESCRIPTION	REMARKS
0–5	70	6.6 4.0 - 9.5 2.9	(0-3.5') FILL SILTY Slag SAND and GRAVEL, brownish black to black, loose (MOIST) (3.5-7.5') FILL Slag GRAVEL with SILT and SAND, black, loose, layer of brown fine sand at 8 ft (DAMP)	
5–10	80	7.5 6.5 2.8 3.7 0.8	(7.5-10') No Recovery	
10–15	70	0.2 0.0 0.0 0.0 -	(10-10.5') FILL SILT, black-brown, stiff, no plasticity, low cohesion (DAMP) (10.5-13.5') FILL Slag GRAVEL with SILT and SAND, dark grey, loose (WET) (13.5-15.5') FILL Slag GRAVEL with trace SILT and SAND, dark grey, loose (WET)	Wet at 10.5' bgs.
15–20	65	6.8 8.3 1.1 - -	(15.5-16.5') FILL Slag SAND with SILT and some GRAVEL, dark grey, loose (WET) (16.5-20') No Recovery	
20–25	20	4.4 - - - -	(20-21') FILL Slag GRAVEL with some SILT and trace SAND, dark grey, loose (WET) (21-25') FILL Slag GRAVEL, some to increased SILT last foot, trace to some SAND, dark grey, loose to medium dense (WET)	
25–30	95	4.8 21.8 3.0 1.7 1.2	(25-25.75') FILL SILTY CLAY, brownish grey, soft, cohesive, low plasticity (DAMP) (25.75-30') No Recovery	

ags - above ground surface
bgs - below ground surface

ARM Group LLC
Engineers and Scientists

Well ID: CT-041-SB

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Project Name	: CT- Cutoff Wall
Project Number	: 21010210
Client	: Tradepoint Atlantic
Site	: Sparrows Point
Borehole Location	: Container Terminal
ARM Representative	: L. Parker
Checked by	: S. Lowe, G.I.T.
Drilling Company	: Connelly
Driller	: Jarred
Drilling Equipment	: Sonic Rig

Northing (ft)	: 561756
Easting (ft)	: 1458042
Date Completed	: 1/17/2024
Depth to Water (ft)	: 10.5
Borehole Diameter (in.)	: 6

Depth (ft.)	%Recovery	PID (ppm)	DESCRIPTION	REMARKS
30				
31		0.8	(30-32') FILL Slag GRAVEL, some to trace SAND, some SILT, dark grey, loose (WET)	
32		0.6		
33	40	-	(32-34.75') FILL Slag GRAVEL with trace SAND, some SILT, less of SILTY CLAY at 33.5', dark grey, loose to medium dense (WET)	
34		-		
35		-		
36		1.9	(34.75-35.75') FILL SILTY CLAY, trace GRAVEL, brownish grey, soft, cohesive, low plasticity (MOIST)	
37	90	2.0	(35.75-37') NATIVE Clean SILTY SAND, grey to brown, fine, loose, low to no cohesion, no plasticity (MOIST)	
38		2.9		
39		1.0		
40		0.5	(37-43') No Recovery	
41		0.0		
42		0.0		
43	60	0.0		
44		-	(43-44.5') NATIVE CLAYEY SILT with trace fine SAND and trace GRAVEL, brownish grey, soft, low cohesion, low to no plasticity (MOIST)	
45		-		
46		0.0	(44.5-47.5') NATIVE SILTY CLAY, brownish grey, soft, cohesive, low plasticity (MOIST)	
47		0.0		
48	80	0.0		
49		0.0	(47.5-50') NATIVE SILTY SAND, grey, fine, medium dense, no cohesion, no plasticity (DAMP)	
50		-	End of Boring	
51				
52				
53				
54				
55				
56				
57				
58				
59				
60				

ags - above ground surface
bgs - below ground surface

ARM Group LLC
Engineers and Scientists

Well ID: CT-043-SB

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Project Name	: CT- Cutoff Wall
Project Number	: 21010210
Client	: Tradepoint Atlantic
Site	: Sparrows Point
Borehole Location	: Container Terminal
ARM Representative	: L. Parker
Checked by	: S. Lowe, G.I.T.
Drilling Company	: Connelly
Driller	: Jarred
Drilling Equipment	: Sonic Rig

Northing (ft)	: 561540
Easting (ft)	: 1458050
Date Completed	: 1/18/2024
Depth to Water (ft)	: 10
Borehole Diameter (in.)	: 6

Depth (ft.)	%Recovery	PID (ppm)	DESCRIPTION	REMARKS
0				
1		9.6	(0-1') FILL Asphalt	
2	80	7.0 13.8	(1-9.25') FILL Slag GRAVEL with SILT and SAND, brown to black, loose (DAMP)	
3		7.9		
4		-		
5		7.0		
6		10.7		
7	85	7.1		
8		7.5		
9		9.0		
10			(9.25-10') No Recovery	Wet at 10' bgs.
11		0.1	(10-13.5') FILL Slag GRAVEL and concete with SILT and SAND, light brown to brown-black, loose (WET)	
12	70	2.8		
13		0.4		
14		1.1	(13.5-21.5') No Recovery	
15		-		
16		-		
17		-		
18	0	-		
19		-		
20		-		
21		-		
22		1.4	(21.5-25') FILL Slag GRAVEL with trace SILT and some SAND, layer of brown SILTY SAND, black, loose (WET)	
23	70	9.6		
24		10.0		
25		1.7		

ags - above ground surface
bgs - below ground surface

ARM Group LLC
Engineers and Scientists

Well ID: CT-043-SB

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Project Name	: CT- Cutoff Wall
Project Number	: 21010210
Client	: Tradepoint Atlantic
Site	: Sparrows Point
Borehole Location	: Container Terminal
ARM Representative	: L. Parker
Checked by	: S. Lowe, G.I.T.
Drilling Company	: Connelly
Driller	: Jarred
Drilling Equipment	: Sonic Rig

Northing (ft)	: 561540
Easting (ft)	: 1458050
Date Completed	: 1/18/2024
Depth to Water (ft)	: 10
Borehole Diameter (in.)	: 6

Depth (ft.)	%Recovery	PID (ppm)	DESCRIPTION	REMARKS
25		6.7	(25-25.5') No Recovery	
26		2.7	(25.5-25.8') FILL Slag GRAVEL, SILT, and SAND, black, medium dense, no plasticity, no cohesion (WET)	
27	90	2.1	(25.8-29.25') FILL SANDY SILT, black, fine to very fine, odorous, medium dense (WET)	
28		1.4		
29		1.5	(29.25-30') FILL SILTY CLAY, dark grey to grey, medium to solft, cohesive, low plasticity (DAMP)	
30		-		
31		-	(30-32.5') No Recovery	
32	55	4.1		
33		5.7	(32.5-35') FILL SILTY Slag GRAVEL, black, odorous, loose (WET)	
34		2.9		
35		-	(35-36') No Recovery	
36		1.7	(36-36.25') FILL Slag GRAVEL with SILT, dark grey, loose (WET)	
37	80	3.6	(36.25-37.5') NATIVE SILTY CLAY, grey, trace GRAVEL at top, trace shells at bottom, medium dense, cohesive, low plasticity (DAMP)	
38		1.0		
39		0.8	(37.5-40') NATIVE SILTY SAND, grey to light brown/grey, fine, medium dense, no cohesion, no plasticity (MOIST)	
40		1.9		
41		5.7	(40-40.75') No Recovery	
42		4.0	(40.75-44.75') NATIVE SAND with some SILT, grey to light brown, lense of GRAVEL at bottom, loose (WET)	
43	85	0.5		
44		0.2		
45		2.5	(44.75-50') NATIVE SILTY CLAY, light grey to grey, stiff with softer lenses, trace brown sand, cohesive, low plasticity (MOIST)	
46		4.9		
47		1.2		
48	100	6.2		
49		8.0		
50				

ags - above ground surface
bgs - below ground surface

ARM Group LLC
Engineers and Scientists

Well ID: CT-045-SB

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Project Name	: CT- Cutoff Wall
Project Number	: 21010210
Client	: Tradepoint Atlantic
Site	: Sparrows Point
Borehole Location	: Container Terminal
ARM Representative	: L. Parker
Checked by	: S. Lowe, G.I.T.
Drilling Company	: Connelly
Driller	: Jarred
Drilling Equipment	: Sonic Rig

Northing (ft)	: 561336
Easting (ft)	: 1458056
Date Completed	: 1/23/2024
Depth to Water (ft)	: 15
Borehole Diameter (in.)	: 6

Depth (ft.)	%Recovery	PID (ppm)	DESCRIPTION	REMARKS
0–5	45	2.7 4.0 - - -	(0-5') FILL SILT, SAND, and GRAVEL Slag, brown to dark brown, dense (MOIST)	
5–10	40	13.3 9.0 - - -	(5-10') FILL Slag GRAVEL with SILT and SAND, black to grey, loose (MOIST)	
10–15	40	6.8 6.1 - - -	(10-14') No Recovery (14-20') FILL Slag GRAVEL with SILT and SAND, black to brown (MOIST to WET)	Wet at 15' bgs.
15–20	80	14.5 30.9 14.4 11.1 -		
20–25	95	2.7 5.7 9.5 3.7 0.7	(20-20.5') No Recovery (20.5-21') FILL SILTY Slag GRAVEL with SAND, black, loose (WET) (21-23') FILL SILTY SAND, black, very fine to fine, odorous, medium dense (MOIST) (23-24.5') FILL CLAYEY SILT with some very fine SAND, black, medium dense, low cohesion, low plasticity (MOIST)	

ags - above ground surface
bgs - below ground surface

ARM Group LLC
Engineers and Scientists

Well ID: CT-045-SB

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Project Name	: CT- Cutoff Wall
Project Number	: 21010210
Client	: Tradepoint Atlantic
Site	: Sparrows Point
Borehole Location	: Container Terminal
ARM Representative	: L. Parker
Checked by	: S. Lowe, G.I.T.
Drilling Company	: Connelly
Driller	: Jarred
Drilling Equipment	: Sonic Rig

Northing (ft)	: 561336
Easting (ft)	: 1458056
Date Completed	: 1/23/2024
Depth to Water (ft)	: 15
Borehole Diameter (in.)	: 6

Depth (ft.)	%Recovery	PID (ppm)	DESCRIPTION	REMARKS
25		1.5		
26		1.7		
27	95	1.7		
28		0.4		
29		3.1		
30		0.9	(30-31.5') NATIVE CLAYEY SILT with some fine SAND, dark grey, lost of shells, medium to soft, low cohesion, low plasticity (MOIST)	
31		3.8		
32	80	0.7	(31.5-36.5') NATIVE SAND with trace SILT, grey to light brown, lenses of shells and gravel, loose (MOIST)	
33		0.7		
34		-		
35		1.5		
36		4.7		
37	90	2.9	(36.5-40') NATIVE SILTY CLAY, trace brown sand and grey GRAVEL, brownish grey, medium stiff, cohesive, low plasticity (DAMP)	
38		5.1		
39		1.0		
40		0.0	(40-50') NATIVE CLAY, grey, medium dense, cohesive, low plasticity (DAMP)	
41		0.0		
42	90	0.0		
43		0.0		
44		0.0		
45		0.2		
46		0.2		
47	90	0.2		
48		0.2		
49		0.3		
50				

ags - above ground surface
bgs - below ground surface

ARM Group LLC
Engineers and Scientists

Well ID: CT-046-SB

(page 1 of 5)

Project Name	: CT- Cutoff Wall
Project Number	: 21010210
Client	: Tradepoint Atlantic
Site	: Sparrows Point
Borehole Location	: Container Terminal
ARM Representative	: J. Barna, P.G.
Checked by	: S. Lowe, G.I.T.
Drilling Company	: Connelly
Driller	: Jarred
Drilling Equipment	: Sonic Rig

Northing (ft)	: 561238
Easting (ft)	: 1458061
Date Completed	: 1/24/2024
Depth to Water (ft)	: 18.5
Borehole Diameter (in.)	: 6

Depth (ft.)	%Recovery	PID (ppm)	DESCRIPTION	REMARKS
0				
1		-	(0-2') No Recovery	
2		0.9		
3	75	8.1	(2-4.6') FILL SILT, SAND, and GRAVEL, brown, loose to dense, stiff, low cohesion, no plasticity (DAMP)	
4		9.7		
5		1.6	(4.6-8.9') FILL Slag GRAVEL with SILT and some SAND, brown to black, loose (DAMP)	
6		8.4		
7	60	1.9		
8		6.9		
9		-	(8.9-11') No Recovery	
10		-		
11		-		
12		9.6	(11-11.75') FILL SILT, SAND, and GRAVEL, brown, loose to dense, stiff, low cohesion, no plasticity (DAMP)	
13	80	16.9	(11.75-15') FILL Slag GRAVEL with SILT and some SAND, very large gravel, grey to blue-grey, loose (DAMP)	
14		8.0		
15		-		

ags - above ground surface
bgs - below ground surface

ARM Group LLC
Engineers and Scientists

Well ID: CT-046-SB

(page 2 of 5)

Project Name	: CT- Cutoff Wall
Project Number	: 21010210
Client	: Tradepoint Atlantic
Site	: Sparrows Point
Borehole Location	: Container Terminal
ARM Representative	: J. Barna, P.G.
Checked by	: S. Lowe, G.I.T.
Drilling Company	: Connelly
Driller	: Jarred
Drilling Equipment	: Sonic Rig

Northing (ft)	: 561238
Easting (ft)	: 1458061
Date Completed	: 1/24/2024
Depth to Water (ft)	: 18.5
Borehole Diameter (in.)	: 6

Depth (ft.)	%Recovery	PID (ppm)	DESCRIPTION	REMARKS
15		7.9	(15-16.25') No Recovery	
16		9.9	(16.25-16.75') FILL Slag GRAVEL with SILT and some SAND, very large gravel, grey to blue-grey, loose (DAMP)	
17	75	6.9	(16.75-17.75') FILL SILTY SAND and GRAVEL, fine to coarse, black, loose (MOIST)	
18		8.9	(17.75-18.5') FILL SAND and GRAVEL with some SILT, black, layers of very light yellow and brown GRAVEL and SAND, loose (MOIST)	Wet at 18.5' bgs.
19		-	(18.5-20') FILL Slag GRAVEL with some SILT, brown, loose (WET)	
20		4.4	(20-21.3') No Recovery	
21		2.0	(21.3-22') FILL Slag GRAVEL with SILT and SAND, brown, loose (WET)	
22	85	1.3	(22-22.6') FILL SILTY SAND with some trace GRAVEL, black, very fine to fine, medium dense, low cohesion, no plasticity (WET)	
23		1.3	(22.6-26.75') FILL SILT and SILTY SAND with trace GRAVEL, black, medium to soft, low cohesion, no plasticity (MOIST)	Sheen and Odor (22-26.75')
24		-		
25		0.5		
26		1.6		
27	90	2.1	(26.75-30') FILL CLAYEY to very CLAYEY SILT, trace shell pieces, dark grey to brownish grey, medium to soft, low cohesion to cohesive, low plasticity (DAMP)	
28		3.8		
29		6.4		
30				

ags - above ground surface
bgs - below ground surface

ARM Group LLC
Engineers and Scientists

Well ID: CT-046-SB

(page 3 of 5)

Project Name	: CT- Cutoff Wall
Project Number	: 21010210
Client	: Tradepoint Atlantic
Site	: Sparrows Point
Borehole Location	: Container Terminal
ARM Representative	: J. Barna, P.G.
Checked by	: S. Lowe, G.I.T.
Drilling Company	: Connelly
Driller	: Jarred
Drilling Equipment	: Sonic Rig

Northing (ft)	: 561238
Easting (ft)	: 1458061
Date Completed	: 1/24/2024
Depth to Water (ft)	: 18.5
Borehole Diameter (in.)	: 6

Depth (ft.)	%Recovery	PID (ppm)	DESCRIPTION	REMARKS
30		-	(30-37') No Recovery	
31		-		
32	0	-		
33		-		
34		-		
35		-		
36		-		
37	60	1.2	(37-38') FILL Slag GRAVEL with trace SAND and SILT, black, loose (WET)	Sheen (37-38')
38		0.3	(38-38.7') FILL Slag GRAVEL with some SILT, trace to some SAND, black to grey, semiloose, low to no cohesion, no plasticity (WET)	
39		0.4	(38.7-40') NATIVE SILTY SAND, gray to light brown, lots of shell piecces, loose, no cohesion, no plasticity (WET)	
40		-	(40-45') No Recovery	
41		-		
42	0	-		
43		-		
44		-		
45		-		

ags - above ground surface
bgs - below ground surface

ARM Group LLC
Engineers and Scientists

Well ID: CT-046-SB

(page 4 of 5)

Project Name	: CT- Cutoff Wall
Project Number	: 21010210
Client	: Tradepoint Atlantic
Site	: Sparrows Point
Borehole Location	: Container Terminal
ARM Representative	: J. Barna, P.G.
Checked by	: S. Lowe, G.I.T.
Drilling Company	: Connelly
Driller	: Jarred
Drilling Equipment	: Sonic Rig

Northing (ft)	: 561238
Easting (ft)	: 1458061
Date Completed	: 1/24/2024
Depth to Water (ft)	: 18.5
Borehole Diameter (in.)	: 6

Depth (ft.)	%Recovery	PID (ppm)	DESCRIPTION	REMARKS
45		0.3	(45-50') NATIVE SAND, light brown, trace SILT, fine, loose, no cohesion, no plasticity (MOIST)	
46		0.2		
47	75	0.2		
48		0.7		
49		-		
50		-	(50-52') No Recovery	
51		2.5		
52	80	7.0	(52-52.5') NATIVE SAND, trace GRAVEL and SILT, light brown, loose (MOIST)	
53		1.0	(52.5-60') NATIVE Alternating SAND and SILT layers, light tan, very stiff, no cohesion, no plasticity (DAMP)	
54		9.4		
55		6.9		
56		1.0		
57	70	1.3		
58		0.4		
59		-		
60				

ags - above ground surface
bgs - below ground surface

ARM Group LLC
Engineers and Scientists

Well ID: CT-046-SB

(page 5 of 5)

Project Name	: CT- Cutoff Wall
Project Number	: 21010210
Client	: Tradepoint Atlantic
Site	: Sparrows Point
Borehole Location	: Container Terminal
ARM Representative	: J. Barna, P.G.
Checked by	: S. Lowe, G.I.T.
Drilling Company	: Connelly
Driller	: Jarred
Drilling Equipment	: Sonic Rig

Northing (ft)	: 561238
Easting (ft)	: 1458061
Date Completed	: 1/24/2024
Depth to Water (ft)	: 18.5
Borehole Diameter (in.)	: 6

Depth (ft.)	%Recovery	PID (ppm)	DESCRIPTION	REMARKS
60		3.1	(60-70') NATIVE SAND with trace SILT, very light gray and brown to very light brown, loose, no cohesion, no plasticity (MOIST)	
61		5.8		
62		2.6		
63		5.5		
64		-		
65		3.9		
66		1.2		
67	60	0.2		
68		-		
69		-		
70		1.0	(70-80') NATIVE SAND with trace SILT, light brown, loose (MOIST)	
71		1.7		
72		0.2		
73	100	2.5		
74		0.2		
75				

ags - above ground surface
bgs - below ground surface

ARM Group LLC
Engineers and Scientists

Well ID: CT-047-SB

(page 1 of 1)

Project Name	: CT- Cutoff Wall
Project Number	: 21010210
Client	: Tradepoint Atlantic
Site	: Sparrows Point
Borehole Location	: Container Terminal
ARM Representative	: J. Barna, P.G.
Checked by	: S. Lowe, G.I.T.
Drilling Company	: Connelly
Driller	: Jarred
Drilling Equipment	: Sonic Rig

Northing (ft)	: 561150
Easting (ft)	: 1458061
Date Completed	: 1/26/2024
Depth to Water (ft)	: 13
Borehole Diameter (in.)	: 6

Depth (ft.)	%Recovery	PID (ppm)	DESCRIPTION	REMARKS
0				
1	100	0.1	(0-7') FILL Slag GRAVEL with SILT and SAND, dark grey to brown, loose to firm (DRY)	
2		0.1		
3		1.3		
4		0.8		
5		0.6		
6	100	0.1		
7		0.2		
8		1.7	(7-10') FILL Slag GRAVEL with SILT and SAND, dark grey to brown, loose (MOIST)	
9		14.6		
10		0.9		
11	40	-	(10-13') No Recovery	
12		-		
13		-		Wet at 13' bgs.
14		0.2	(13-18') FILL Slag GRAVEL with SILT and SAND, dark grey to brown, loose (WET)	
15		0.3		
16	100	0.6		
17		1.1		
18		0.5		
19		0.2	(18-19') FILL Slag GRAVEL with SILT and SAND, blue-grey, loose (WET)	
20		0.6	(19-20') FILL Slag GRAVEL with SILT and SAND, dark blue-grey, loose (WET)	
21	100	0.0	(20-24') FILL Slag GRAVEL with SILT and SAND, dark grey, loose to firm (WET)	
22		0.0		
23		0.0		
24		0.0		
25		0.0	(24-25') FILL CLAYEY SILT, black, soft, no plasticity, no cohesion (WET)	
26		0.0	(25-30') NATIVE CLAYEY SILT, firm, no plasticity, no cohesion (WET)	
27	100	0.0		
28		0.0		
29		0.0		
30		0.0		
31			End of Boring	

ags - above ground surface
bgs - below ground surface

ARM Group LLC
Engineers and Scientists

Well ID: CT-048-SB

(page 1 of 2)

Project Name	: CT- Cutoff Wall
Project Number	: 21010210
Client	: Tradepoint Atlantic
Site	: Sparrows Point
Borehole Location	: Container Terminal
ARM Representative	: J. Barna, P.G.
Checked by	: S. Lowe, G.I.T.
Drilling Company	: Connelly
Driller	: Jarred
Drilling Equipment	: Sonic Rig

Northing (ft)	: 561048
Easting (ft)	: 1458064
Date Completed	: 1/15/2024
Depth to Water (ft)	: 10
Borehole Diameter (in.)	: 6

Depth (ft.)	%Recovery	PID (ppm)	DESCRIPTION	REMARKS
0				
1	100	1.4	(0-4') FILL Slag GRAVEL with SILT and SAND, dark to light brown, loose (MOIST)	
2		0.1		
3		0.0		
4		0.4		
5		0.1	(4-10') FILL Slag GRAVEL with SILT and SAND, dark to light brown, loose (DRY)	
6	100	0.5		
7		0.3		
8		0.5		
9		0.6		
10		4.7		Wet at 10' bgs.
11	100	1.8	(10-30') FILL Slag GRAVEL with SILT and SAND, dark to light brown, loose (WET)	
12		2.1		
13		0.4		
14		1.0		
15		0.3		
16	100	0.5		
17		0.1		
18		0.6		
19		0.9		
20		0.4		
21	100	0.7		
22		0.2		
23		2.4		
24		0.8		
25		0.9		
26	100	1.3		
27		1.8		
28		1.2		
29		0.7		
30		0.5		

ags - above ground surface
bgs - below ground surface

ARM Group LLC
Engineers and Scientists

Well ID: CT-048-SB

(page 2 of 2)

Project Name	: CT- Cutoff Wall
Project Number	: 21010210
Client	: Tradepoint Atlantic
Site	: Sparrows Point
Borehole Location	: Container Terminal
ARM Representative	: J. Barna, P.G.
Checked by	: S. Lowe, G.I.T.
Drilling Company	: Connelly
Driller	: Jarred
Drilling Equipment	: Sonic Rig

Northing (ft)	: 561048
Easting (ft)	: 1458064
Date Completed	: 1/15/2024
Depth to Water (ft)	: 10
Borehole Diameter (in.)	: 6

Depth (ft.)	%Recovery	PID (ppm)	DESCRIPTION	REMARKS
30–35	0	-	(30-40') No Recovery	
35–40	0	-		
40–45	100	-	(40-46') FILL Slag GRAVEL with SILT and SAND, dark to light brown, loose (WET)	
45–50	100	-	(46-50') NATIVE CLAYEY SILT, grey, soft, some shells, no plasticity, no cohesion (WET)	
50–55	0	-	(50-55') No Recovery	
55–60	100	-	(55-60') NATIVE SANDY SILT, very hydrated, grey, soft, no plasticity, no cohesion (WET)	

ags - above ground surface
bgs - below ground surface

A (north)

A' (south)

CT-030-SB CT-032-SB CT-034-SB CT-035-SB CT-037-SB CT-038-SB CT-039-SB CT-040-SB CT-041-SB CT-043-SB CT-045-SB CT-046-SB CT-047-SB CT-048-SB

Sand

N/R

N/R

N/R

N/R

ELEVATION (feet)

20 10 0 -10 -20 -30 -40 -50 -60 -70 -80

0 100 200 300 400 500 600 700 800 900 1000 1100 1200 1300 1400 1500 1600 1700 1800 1900 2000 2100

DISTANCE (feet)

Tradepoint Atlantic
Sparrows Point, MD
ARM Project 21010210

Figure 1

Geologic Cross section

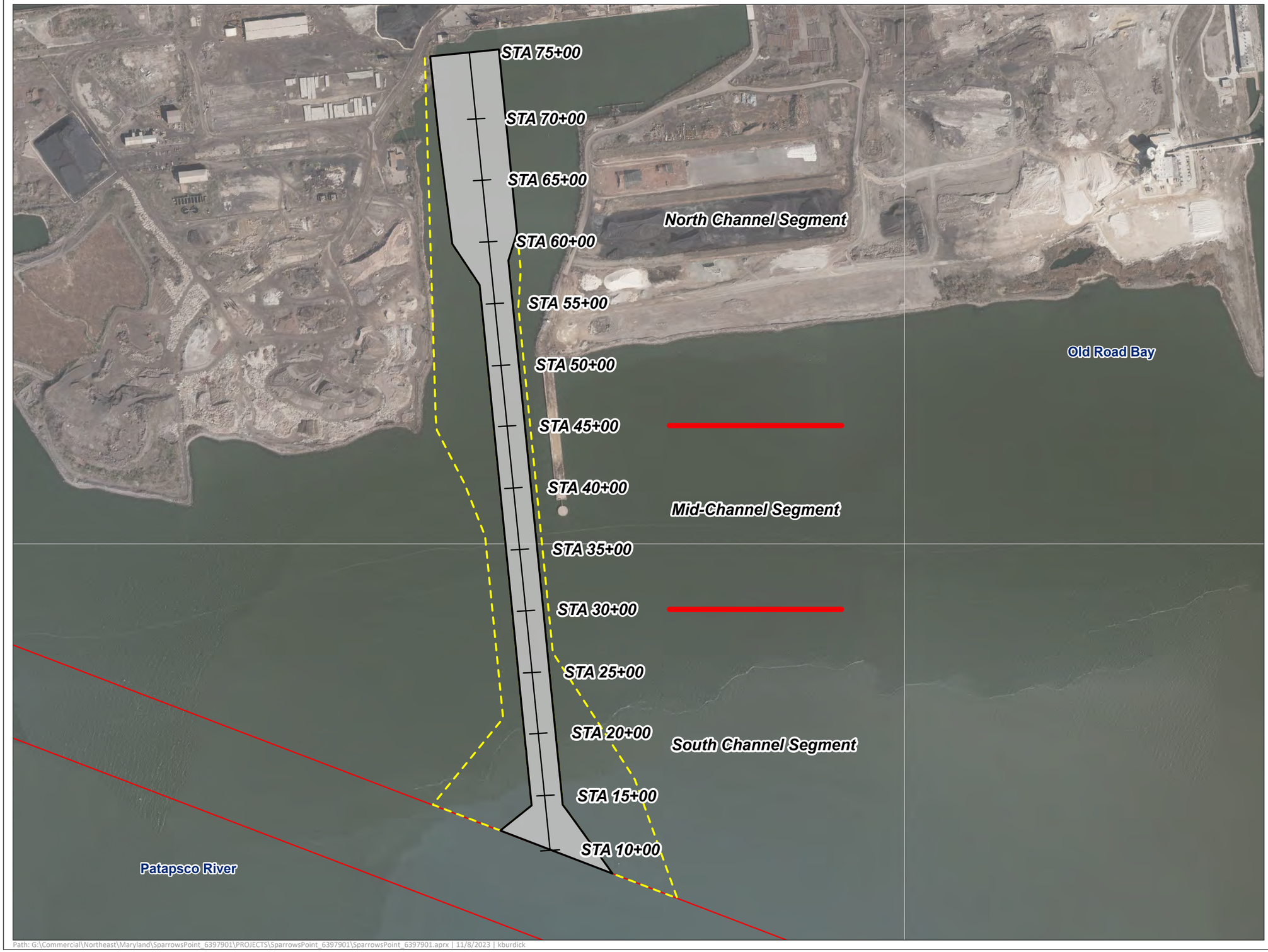
Container Terminal

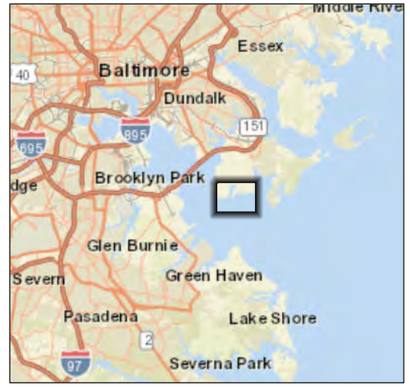
ARM Group LLC
Engineers and Scientists

LEGEND

- Slag
- Sand
- Silt
- Clay
- Peat
- No Recovery

APPENDIX B-5





Legend

- Existing Channel
- Proposed Channel Footprint
- Brewerton Channel
- Deepening
- Widening

0 400 800

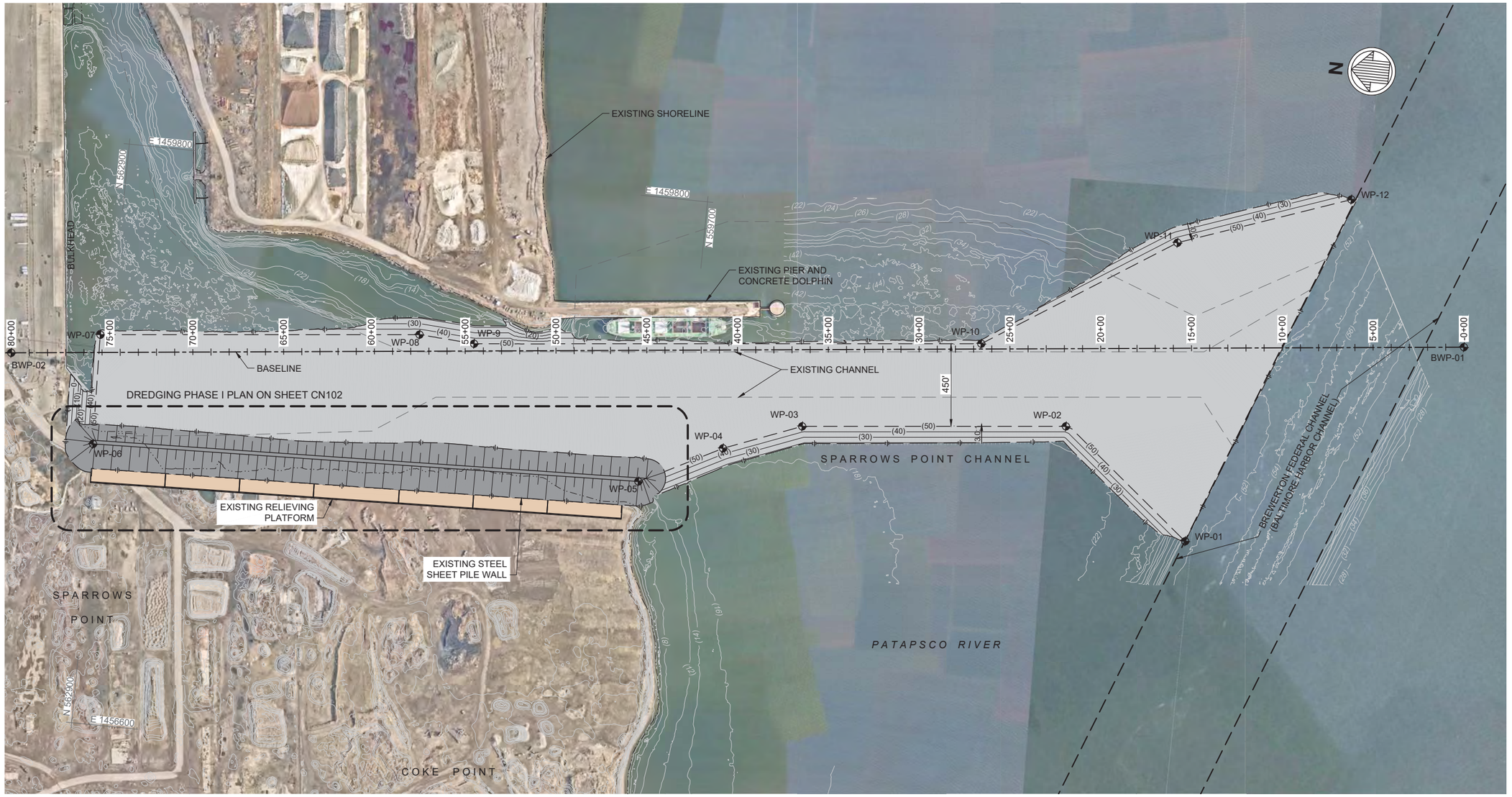
Feet

Data Sources: ESRI, Maryland MD iMap
Coordinate System: NAD83 State Plane MD

Sparrows Point Channel: North, Mid, and South Channel Segment Delineation

Figure 2-1

Path: G:\Commercial\Northeast\Maryland\SparrowsPoint_6397901\PROJECTS\SparrowsPoint_6397901\SparrowsPoint_6397901.aprx | 11/8/2023 | kburdick



B1 / CN101 PLAN - DREDGING GENERAL ARRANGEMENT
SCALE: 1" = 300'

DREDGING CHANNEL WORKING POINTS TABLE		
WP-##	NORTHING	EASTING
WP-01	556896.85	1458202.47
WP-02	557613.46	1458766.30
WP-03	559058.50	1458622.10
WP-04	559480.86	1458458.36
WP-05	559926.17	1458230.66
WP-06	562934.69	1458138.36

DREDGING CHANNEL WORKING POINTS TABLE		
WP-##	NORTHING	EASTING
WP-07	562954.38	1458740.44
WP-08	561205.76	1458915.38
WP-9	560901.83	1458895.46
WP-10	558122.30	1459172.82
WP-11	557102.27	1459832.95
WP-12	556172.88	1460164.75

CHANNEL BASELINE WORKING POINT			
WP-##	NORTHING	EASTING	STATION
BWP-01	555475.65	1459417.84	0+00
BWP-02	563432.98	1458592.66	80+00

LEGEND:

- PHASE 1 DREDGING AREA, AREA TO BE DREDGED TO -50.84 NAVD88, DEPTH WITH SIDE SLOPES AS SHOWN.
- PHASE 2 DREDGING AREA, AREA TO BE DREDGED TO -50.84 NAVD88, DEPTH WITH SIDE SLOPES AS SHOWN.
- (40) DESIGN DEPTH CONTOURS NAVD88
- (34) EXISTING DEPTH CONTOURS NAVD88
- BASELINE

300' 0' 300' 600'
SCALE: 1"=300'

30% DESIGN SUBMITTAL
ISSUED: 2024-01-30
NOT TO BE USED FOR CONSTRUCTION

Mark	Description	Date	Appr.

SPARROWS POINT CONTAINER TERMINAL
TRADEPOINT TIL TERMINAL LLC
BALTIMORE MARYLAND 21219

PLAN - DREDGING GENERAL ARRANGEMENT

Designed by: PWK
Drawn by: ED
Checked by: PGV
Reviewed by: SM
Submitted by: ERIC D. SMITH MOFFATT & NICHOL
Date: 2024-01-30
M&N Project No: 230329
Drawing code:
Drawing Scale:
Plot scale: 1:1 (D SHEET)
Rev:

2780 LIGHTHOUSE POINT EAST, STE. D BALTIMORE, MD 21224 410-563-7300
moffatt & nichol
6906 BETHLEHEM BOULEVARD SUITE 100 BALTIMORE, MD 21219

Sheet Reference No.
CN101
INDEX: 23 OF 242

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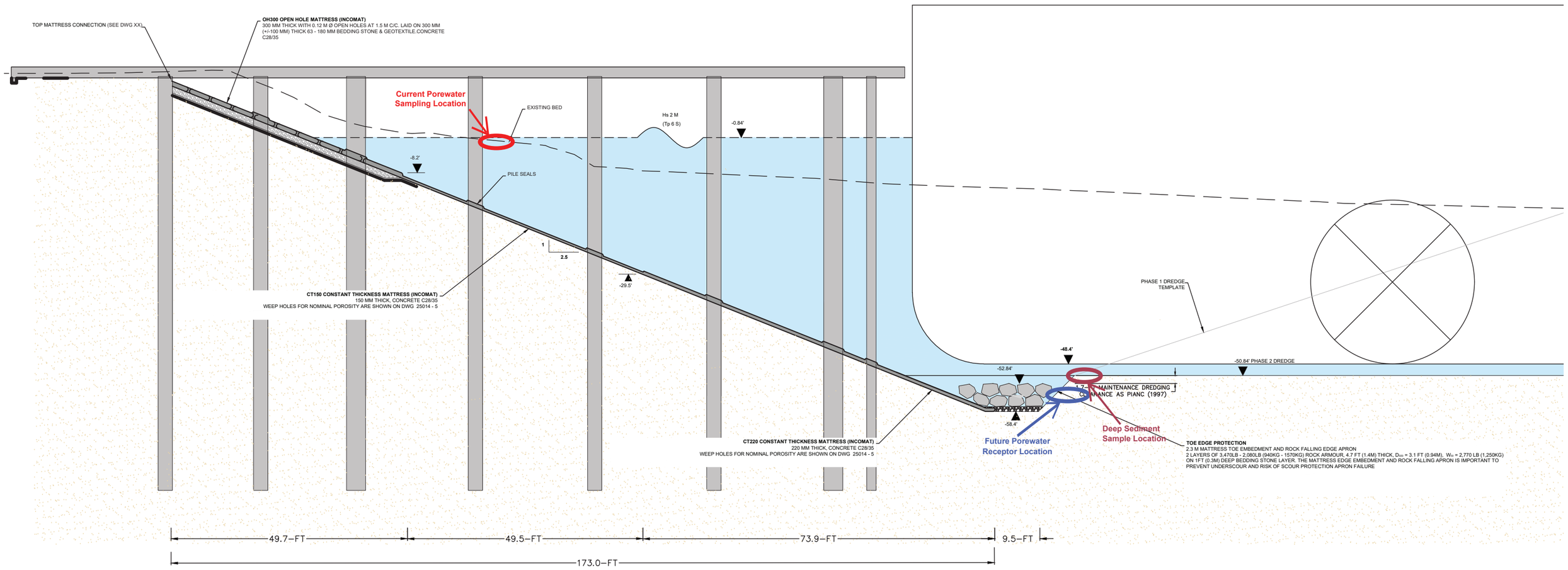
DRAWING SCALES SHOWN BASED ON 22"x34" DRAWING

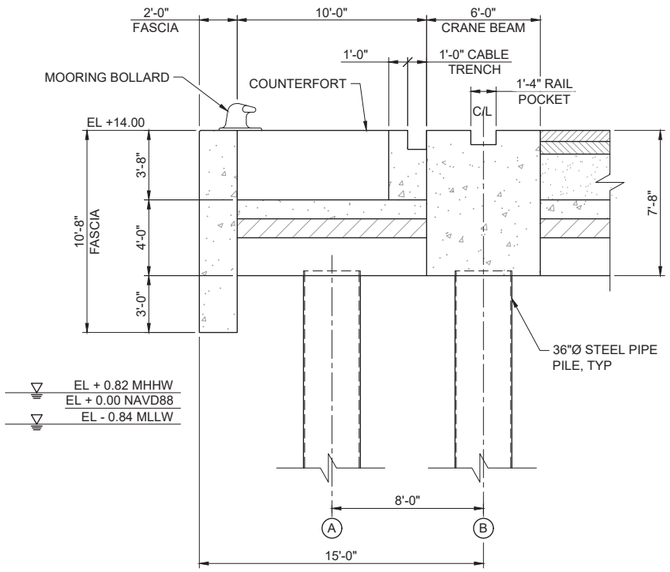


B-B'

SECTION B–B' – NORTH WHARF

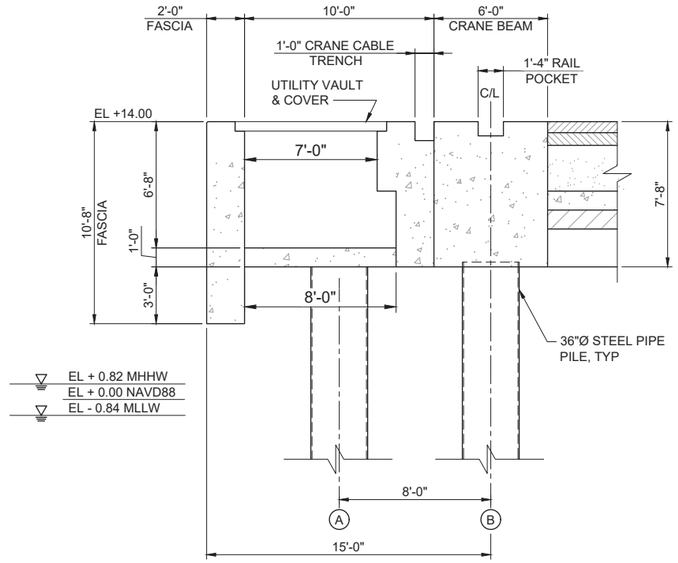
SCALE: 1" = 15'

Container Terminal Wharf Cross Section June 27, 2025	**Appendix** B-5
ARM Group LLC Engineers and Scientists	Tradepoint Atlantic Sparrows Point Baltimore County, MD ARM Project 21010306



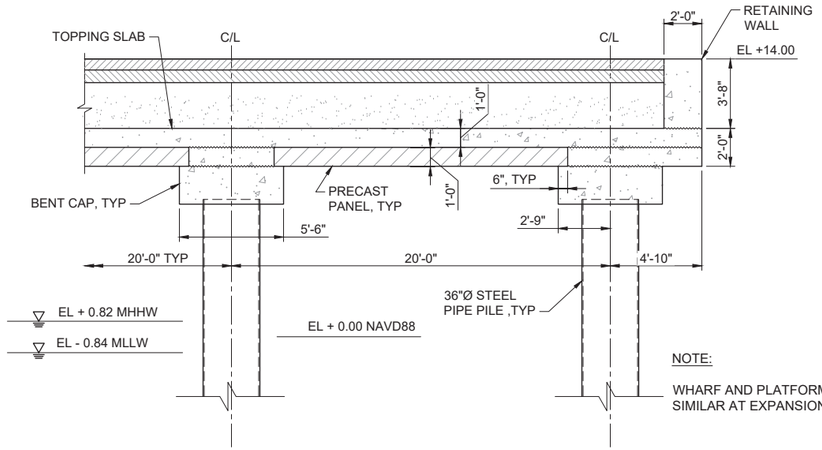
D1 S-302 SECTION - TYPICAL WHARF AT BOLLARD

SCALE: 1/4" = 1'-0"



D3 S-302 SECTION - TYPICAL WHARF AT UTILITY VAULT

SCALE: 1/4" = 1'-0"

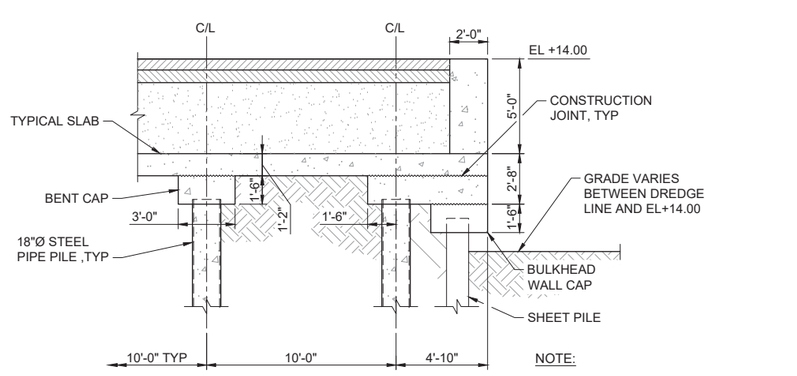


NOTE:

WHARF AND PLATFORM GEOMETRY IS SIMILAR AT EXPANSION JOINT EDGES.

B1 S-302 SECTION - TYPICAL WHARF AT EDGE

SCALE: 1/4" = 1'-0"



NOTE:

WHARF AND PLATFORM GEOMETRY IS SIMILAR AT EXPANSION JOINT EDGES.

B3 S-302 SECTION - TYPICAL RELIEVING PLATFORM AT EDGE

SCALE: 1/4" = 1'-0"

30% DESIGN SUBMITTAL
ISSUED: 2024-01-30
NOT TO BE USED FOR CONSTRUCTION

Mark	Description	Date	Appr.

SPARROWS POINT CONTAINER TERMINAL
TRADEPOINT TIL TERMINAL LLC
BALTIMORE MARYLAND 21219

SECTION - TYPICAL WHARF (SHEET 2 OF 2)

Date: 2024-01-30	Rev.		
M&M Project No. 230329			
Drawing code:			
Drawing Scale:	Plot scale: 1:1 (0 SHEET)		
Designed by: IS	Cad by: IS	Reviewed by: GS	Submitted by: ERIC D. SMITH MOFFATT & NICHOL
Dwn by: RG			

2780 LIGHTHOUSE POINT EAST, STE. D BALTIMORE, MD 21224 410-563-7300

moffatt & nichol

6885 BETHLEHEM BOULEVARD SUITE 100 BALTIMORE,MD 21219

Sheet Reference No.

S-302

INDEX: 165 OF 242

File: Q:\BAL\230329\20 CADD_Active_SheetSet\230329S-302 - Plotted: 1/30/2024 6:27 PM by VOELKER, PAUL - Saved: 1/26/2024 2:14 PM by ROERCH/KOVA

DRAWING SCALES SHOWN BASED ON 22"x34" DRAWING

APPENDIX C

Construction Worker Soil Screening Levels
Maximum Allowable Work Day Exposure
Calculation Spreadsheet - Container Terminal

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

Construction Worker Soil Screening Levels
Maximum Allowable Work Day Exposure
Calculation Spreadsheet - Container Terminal

Area of site (ac)	Ac	54.9	→ EU1
Overall duration of construction (wk/yr)	EW	0.4	
Exposure frequency (day/yr)	EF	**2**	
Cars per day	Ca	5	
Tons per car	CaT	2	
Trucks per day	Tru	5	
Tons per truck	TrT	20	
Mean vehicle weight (tons)	w	**11**	
Derivation of dispersion factor - particulate emission factor (g/m2-s per kg/m3)	Q/Csr	**13.5**	
Overall duration of construction (hr)	tc	**67**	
Overall duration of traffic (s)	Tt	**57,600**	
Surface area (m2)	AR	**222,173**	
Length (m)	LR	**471**	
Distance traveled (km)	ΣVKT	**9**	
Particulate emission factor (m3/kg)	PEFsc	**164,416,801**	
Derivation of dispersion factor - volatilization (g/m2-s per kg/m3)	Q/Csa	**6.49**	
Total time of construction (s)	Tcv	**57,600**	

Input
Calculation

Chemical	RfD & RfC Sources	^Ingestion SF $(mg/kg\text{-}day)^{-1}$	^Inhalation Unit Risk $(ug/m^3)^{-1}$	^Subchronic RfD (mg/kg-day)	^Subchronic RfC (mg/m^3)	^GIABS	Dermally Adjusted RfD (mg/kg-day)	^ABS	^RBA	^Dia	^Diw	^Henry's Law Constant (unitless)	^Kd	^Koc	DA	Volatilization Factor - Unlimited Reservoir (m^3/kg)	Carcinogenic Ingestion/ Dermal SL (SLing/der)	Carcinogenic Inhalation SL (SLinh)	Carcinogenic SL (mg/kg)	Non-Carcinogenic Ingestion/ Dermal SL (SLing/der)	Non-Carcinogenic Inhalation SL (SLinh)	Non-Carcinogenic SL (mg/kg)
1,1-Biphenyl	P	8.00E-03	-	1.00E-01	4.00E-03	1	1.00E-01	0.01	1	4.71E-02	7.56E-06	1.26E-02	3.08E+01	5.13E+03	1.03E-06	4.90E+2	375,846		375,846	4,295,381	1,074	1,073
Arsenic, Inorganic	I/C	1.50E+00	4.30E-03	3.00E-04	1.50E-05	1	3.00E-04	0.03	0.6			-	2.90E+01				1,894.2	1,465,413	1,892	12,177	1,350,273	12,068
Benz[a]anthracene	I	1.00E-01	6.00E-05	-	-	1		0.13	1	2.61E-02	6.75E-06	4.91E-04	1.06E+03	1.77E+05	6.87E-10	1.90E+4	22,280	12,115	7,848			
Benzene	P	5.50E-02	7.80E-06	1.00E-02	8.00E-02	1	1.00E-02	0.01	1	0.0895	0.0000103	2.27E-01	8.75E-01	1.46E+02	1.07E-03	1.52E+1	54,668	74.8	74.7	429,538	667	666
Benzo[a]pyrene	I	1.00E+00	6.00E-04	3.00E-04	2.00E-06	1	3.00E-04	0.13	1	2.55E-02	6.58E-06	1.87E-05	3.52E+03	5.87E+05	1.92E-11	1.14E+5	2,228.0	7,249	1,704	9,549	124.3	123
Benzo[b]fluoranthene	I	1.00E-01	6.00E-05	-	-	1		0.13	1	2.50E-02	6.43E-06	2.69E-05	3.59E+03	5.99E+05	2.14E-11	1.07E+5	22,280	68,566	16,816			
Cadmium	A	-	1.80E-03	5.00E-04	1.00E-05	0.025	1.25E-05	0.001	1			-	7.50E+01					3,500,708	3,500,708	19,751	900,182	19,327
Chromium(VI)	A	5.00E-01	8.40E-02	5.00E-03	3.00E-04	0.025	1.25E-04	0.01	1			-	1.90E+01				2,815	75,015	2,714	100,551	27,005,460	100,178
Cobalt	P	-	9.00E-03	3.00E-03	2.00E-05	1	3.00E-03	0.01	1			-	4.50E+01					700,142	700,142	128,861	1,800,364	120,254
Dibenz[a,h]anthracene	I	1.00E+00	6.00E-04	-	-	1		0.13	1	2.36E-02	6.02E-06	5.76E-06	1.14E+04	1.90E+06	4.01E-12	2.48E+5	2,228.0	10,502,123	2,228			
Ethylbenzene	P	1.10E-02	2.50E-06	5.00E-02	9.00E+00	1	5.00E-02	0.01	1	6.85E-02	8.46E-06	3.22E-01	2.68E+00	4.46E+02	4.15E-04	2.44E+1	273,342	374.1	374	2,147,690	120,245	113,870
Indeno[1,2,3-c,d]pyrene	I	1.00E-01	6.00E-05	-	-	1		0.13	1	2.47E-02	6.37E-06	1.42E-05	1.17E+04	1.95E+06	5.08E-12	2.21E+5	22,280	140,737	19,235			
Iron	P	-	-	7.00E-01	-	1	7.00E-01	0.01	1			-	2.50E+01							30,067,667		30,067,667
Manganese (Non-diet)	I	-	-	2.40E-02	5.00E-05	0.04	9.60E-04	0.01	1			-	6.50E+01							606,753	4,500,910	534,675
Naphthalene	A, I	1.20E-01	3.40E-05	6.00E-01	3.00E-03	1	6.00E-01	0.13	1	6.05E-02	8.38E-06	1.80E-02	9.26E+00	1.50E+03	6.23E-06	1.99E+2	18,567	224.6	222	19,097,449	327.3	327
PCB Total	A	2.00E+00	5.71E-04	3.00E-05	-	1	3.00E-05	0.14	1	2.40E-02	6.30E-06	1.70E-02	4.68E+02	7.80E+04	4.66E-08	2.30E+3	1,090.5	154.6	135	935		935
Thallium (Soluble Salts)	P	-	-	4.00E-05	-	1	4.00E-05	0.01	1			-	7.10E+01							1,718.2		1,718
Vanadium and Compounds	A	-	-	1.00E-02	1.00E-04	0.026	2.60E-04	0.01	1			-	1.00E+03							205,411	9,001,820	200,829
Zinc	I	-	-	3.00E-01	-	1	3.00E-01	0.01	1			-	6.20E+01							12,886,143		12,886,143

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

Construction Worker Soil Screening Levels
Maximum Allowable Work Day Exposure
Calculation Spreadsheet - Container Terminal

Area of site (ac)	Ac	54.9	→ EU2
Overall duration of construction (wk/yr)	EW	12	
Exposure frequency (day/yr)	EF	**60**	
Cars per day	Ca	5	
Tons per car	CaT	2	
Trucks per day	Tru	5	
Tons per truck	TrT	20	
Mean vehicle weight (tons)	w	**11**	
Derivation of dispersion factor - particulate emission factor (g/m2-s per kg/m3)	Q/Csr	**13.5**	
Overall duration of construction (hr)	tc	**2,016**	
Overall duration of traffic (s)	Tt	**1,728,000**	
Surface area (m2)	AR	**222,173**	
Length (m)	LR	**471**	
Distance traveled (km)	ΣVKT	**283**	
Particulate emission factor (m3/kg)	PEFsc	**164,416,801**	
Derivation of dispersion factor - volatilization (g/m2-s per kg/m3)	Q/Csa	**6.49**	
Total time of construction (s)	Tcv	**1,728,000**	

Input
Calculation

Chemical	RfD & RfC Sources	^Ingestion SF $(mg/kg\text{-}day)^{-1}$	^Inhalation Unit Risk $(ug/m^3)^{-1}$	^Subchronic RfD (mg/kg-day)	^Subchronic RfC (mg/m^3)	^GIABS	Dermally Adjusted RfD (mg/kg-day)	^ABS	^RBA	*Dia	*Diw	*Henry's Law Constant (unitless)	*Kd	*Koc	DA	Volatilization Factor - Unlimited Reservoir (m^3/kg)	Carcinogenic Ingestion/ Dermal SL (SLing/der)	Carcinogenic Inhalation SL (SLinh)	Carcinogenic SL (mg/kg)	Non-Carcinogenic Ingestion/ Dermal SL (SLing/der)	Non-Carcinogenic Inhalation SL (SLinh)	Non-Carcinogenic SL (mg/kg)
1,1-Biphenyl	P	8.00E-03	-	1.00E-01	4.00E-03	1	1.00E-01	0.01	1	4.71E-02	7.56E-06	1.26E-02	3.08E+01	5.13E+03	1.03E-06	2.69E+3	12,528		12,528	143,179	196	196
Arsenic, Inorganic	I/C	1.50E+00	4.30E-03	3.00E-04	1.50E-05	1	3.00E-04	0.03	0.6			-	2.90E+01				63.1	48,847	63.1	406	45,009	402
Benz[a]anthracene	I	1.00E-01	6.00E-05	-	-	1		0.13	1	2.61E-02	6.75E-06	4.91E-04	1.06E+03	1.77E+05	6.87E-10	1.04E+5	743	2,211	556			
Benzene	P	5.50E-02	7.80E-06	1.00E-02	8.00E-02	1	1.00E-02	0.01	1	0.0895	0.0000103	2.27E-01	8.75E-01	1.46E+02	1.07E-03	8.34E+1	1,822	13.7	13.6	14,318	122	121
Benzo[a]pyrene	I	1.00E+00	6.00E-04	3.00E-04	2.00E-06	1	3.00E-04	0.13	1	2.55E-02	6.58E-06	1.87E-05	3.52E+03	5.87E+05	1.92E-11	6.22E+5	74.3	1,319	70.3	318	22.6	21.1
Benzo[b]fluoranthene	I	1.00E-01	6.00E-05	-	-	1		0.13	1	2.50E-02	6.43E-06	2.69E-05	3.59E+03	5.99E+05	2.14E-11	5.88E+5	743	12,482	701			
Cadmium	A	-	1.80E-03	5.00E-04	1.00E-05	0.025	1.25E-05	0.001	1			-	7.50E+01					116,690	116,690	658	30,006	644
Chromium(VI)	A	5.00E-01	8.40E-02	5.00E-03	3.00E-04	0.025	1.25E-04	0.01	1			-	1.90E+01				94	2,501	90.5	3,352	900,182	3,339
Cobalt	P	-	9.00E-03	3.00E-03	2.00E-05	1	3.00E-03	0.01	1			-	4.50E+01					23,338	23,338	4,295	60,012	4,008
Dibenz[a,h]anthracene	I	1.00E+00	6.00E-04	-	-	1		0.13	1	2.36E-02	6.02E-06	5.76E-06	1.14E+04	1.90E+06	4.01E-12	1.36E+6	74.3	350,071	74.3			
Ethylbenzene	P	1.10E-02	2.50E-06	5.00E-02	9.00E+00	1	5.00E-02	0.01	1	6.85E-02	8.46E-06	3.22E-01	2.68E+00	4.46E+02	4.15E-04	1.34E+2	9,111	68.3	67.8	71,590	21,954	16,801
Indeno[1,2,3-c,d]pyrene	I	1.00E-01	6.00E-05	-	-	1		0.13	1	2.47E-02	6.37E-06	1.42E-05	1.17E+04	1.95E+06	5.08E-12	1.21E+6	743	25,542	722			
Iron	P	-	-	7.00E-01	-	1	7.00E-01	0.01	1			-	2.50E+01							1,002,256		1,002,256
Manganese (Non-diet)	I	-	-	2.40E-02	5.00E-05	0.04	9.60E-04	0.01	1			-	6.50E+01							20,225	150,030	17,823
Naphthalene	A, I	1.20E-01	3.40E-05	6.00E-01	3.00E-03	1	6.00E-01	0.13	1	6.05E-02	8.38E-06	1.80E-02	9.26E+00	1.50E+03	6.23E-06	1.09E+3	619	41.0	38.5	636,582	59.8	59.8
PCB Total	A	2.00E+00	5.71E-04	3.00E-05	-	1	3.00E-05	0.14	1	2.40E-02	6.30E-06	1.70E-02	4.68E+02	7.80E+04	4.66E-08	1.26E+4	36.3	28.2	15.9	31		31
Thallium (Soluble Salts)	P	-	-	4.00E-05	-	1	4.00E-05	0.01	1			-	7.10E+01							57.3		57.3
Vanadium and Compounds	A	-	-	1.00E-02	1.00E-04	0.026	2.60E-04	0.01	1			-	1.00E+03							6,847	300,061	6,694
Zinc	I	-	-	3.00E-01	-	1	3.00E-01	0.01	1			-	6.20E+01							429,538		429,538

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

Construction Worker Soil Screening Levels
Maximum Allowable Work Day Exposure
Calculation Spreadsheet - Container Terminal

Area of site (ac)	Ac	54.9	→ EU3
Overall duration of construction (wk/yr)	EW	11	
Exposure frequency (day/yr)	EF	**55**	
Cars per day	Ca	5	
Tons per car	CaT	2	
Trucks per day	Tru	5	
Tons per truck	TrT	20	
Mean vehicle weight (tons)	w	**11**	
Derivation of dispersion factor - particulate emission factor (g/m2-s per kg/m3)	Q/Csr	**13.5**	
Overall duration of construction (hr)	tc	**1,848**	
Overall duration of traffic (s)	Tt	**1,584,000**	
Surface area (m2)	AR	**222,173**	
Length (m)	LR	**471**	
Distance traveled (km)	ΣVKT	**259**	
Particulate emission factor (m3/kg)	PEFsc	**164,416,801**	
Derivation of dispersion factor - volatilization (g/m2-s per kg/m3)	Q/Csa	**6.49**	
Total time of construction (s)	Tcv	**1,584,000**	

Input
Calculation

Chemical	RfD & RfC Sources	^Ingestion SF $(mg/kg\text{-}day)^{-1}$	^Inhalation Unit Risk $(ug/m^3)^{-1}$	^Subchronic RfD (mg/kg-day)	^Subchronic RfC (mg/m^3)	^GIABS	Dermally Adjusted RfD (mg/kg-day)	^ABS	^RBA	*Dia	*Diw	*Henry's Law Constant (unitless)	*Kd	*Koc	DA	Volatilization Factor - Unlimited Reservoir (m^3/kg)	Carcinogenic Ingestion/ Dermal SL (SLing/der)	Carcinogenic Inhalation SL (SLinh)	Carcinogenic SL (mg/kg)	Non-Carcinogenic Ingestion/ Dermal SL (SLing/der)	Non-Carcinogenic Inhalation SL (SLinh)	Non-Carcinogenic SL (mg/kg)
1,1-Biphenyl	P	8.00E-03	-	1.00E-01	4.00E-03	1	1.00E-01	0.01	1	4.71E-02	7.56E-06	1.26E-02	3.08E+01	5.13E+03	1.03E-06	2.57E+3	13,667		13,667	156,196	205	204
Arsenic, Inorganic	I/C	1.50E+00	4.30E-03	3.00E-04	1.50E-05	1	3.00E-04	0.03	0.6			-	2.90E+01				68.9	53,288	68.8	443	49,101	439
Benz[a]anthracene	I	1.00E-01	6.00E-05	-	-	1		0.13	1	2.61E-02	6.75E-06	4.91E-04	1.06E+03	1.77E+05	6.87E-10	9.95E+4	810	2,309	600			
Benzene	P	5.50E-02	7.80E-06	1.00E-02	8.00E-02	1	1.00E-02	0.01	1	0.0895	0.0000103	2.27E-01	8.75E-01	1.46E+02	1.07E-03	7.98E+1	1,988	14.3	14.2	15,620	127	126
Benzo[a]pyrene	I	1.00E+00	6.00E-04	3.00E-04	2.00E-06	1	3.00E-04	0.13	1	2.55E-02	6.58E-06	1.87E-05	3.52E+03	5.87E+05	1.92E-11	5.96E+5	81.0	1,378	76.5	347	23.6	22.1
Benzo[b]fluoranthene	I	1.00E-01	6.00E-05	-	-	1		0.13	1	2.50E-02	6.43E-06	2.69E-05	3.59E+03	5.99E+05	2.14E-11	5.63E+5	810	13,039	763			
Cadmium	A	-	1.80E-03	5.00E-04	1.00E-05	0.025	1.25E-05	0.001	1			-	7.50E+01					127,298	127,298	718	32,734	703
Chromium(VI)	A	5.00E-01	8.40E-02	5.00E-03	3.00E-04	0.025	1.25E-04	0.01	1			-	1.90E+01				102	2,728	98.7	3,656	982,017	3,643
Cobalt	P	-	9.00E-03	3.00E-03	2.00E-05	1	3.00E-03	0.01	1			-	4.50E+01					25,460	25,460	4,686	65,468	4,373
Dibenz[a,h]anthracene	I	1.00E+00	6.00E-04	-	-	1		0.13	1	2.36E-02	6.02E-06	5.76E-06	1.14E+04	1.90E+06	4.01E-12	1.30E+6	81.0	381,895	81.0			
Ethylbenzene	P	1.10E-02	2.50E-06	5.00E-02	9.00E+00	1	5.00E-02	0.01	1	6.85E-02	8.46E-06	3.22E-01	2.68E+00	4.46E+02	4.15E-04	1.28E+2	9,940	71.3	70.8	78,098	22,930	17,726
Indeno[1,2,3-c,d]pyrene	I	1.00E-01	6.00E-05	-	-	1		0.13	1	2.47E-02	6.37E-06	1.42E-05	1.17E+04	1.95E+06	5.08E-12	1.16E+6	810	26,686	786			
Iron	P	-	-	7.00E-01	-	1	7.00E-01	0.01	1			-	2.50E+01							1,093,370		1,093,370
Manganese (Non-diet)	I	-	-	2.40E-02	5.00E-05	0.04	9.60E-04	0.01	1			-	6.50E+01							22,064	163,669	19,443
Naphthalene	A, I	1.20E-01	3.40E-05	6.00E-01	3.00E-03	1	6.00E-01	0.13	1	6.05E-02	8.38E-06	1.80E-02	9.26E+00	1.50E+03	6.23E-06	1.05E+3	675	42.8	40.3	694,453	62.4	62.4
PCB Total	A	2.00E+00	5.71E-04	3.00E-05	-	1	3.00E-05	0.14	1	2.40E-02	6.30E-06	1.70E-02	4.68E+02	7.80E+04	4.66E-08	1.21E+4	39.7	29.5	16.9	34		34
Thallium (Soluble Salts)	P	-	-	4.00E-05	-	1	4.00E-05	0.01	1			-	7.10E+01							62.5		62.5
Vanadium and Compounds	A	-	-	1.00E-02	1.00E-04	0.026	2.60E-04	0.01	1			-	1.00E+03							7,470	327,339	7,303
Zinc	I	-	-	3.00E-01	-	1	3.00E-01	0.01	1			-	6.20E+01							468,587		468,587

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

APPENDIX D

Sparrows Point Development - PPE Standard Operational Procedure, Revision 3

Planning, Tracking/Supervision, Enforcement, and Documentation

Planning

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

Tracking/Supervision

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

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

Work Zones Delineation

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

Documentation

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

Enforcement

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

Unknown and/or Unexpected Conditions

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

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

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

Modified Level D PPE

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

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

APPENDIX E

DWG. No. H374437-0000-203-270-0001

KEY NOTES

1. INBOUND OCR
2. INBOUND PROCESSING LANES
3. HOLDING SPOTS
4. ROADABILITY STATION
5. OUTBOUND OCR/RPM
6. OUTBOUND PROCESSING LANES
7. INTERMODAL YARD (IY)
8. FLEXIBLE STACKING AREA
9. CBP TRAILER (TBD)
10. ADMIN BUILDING
11. LONGSHOREMEN BUILDING
12. MAINTENANCE AND REPAIR BUILDING
13. GENSET AREA
14. POV PARKING LONGSHOREMEN CHECK-IN AND M&R (474 SPOTS)
15. POV PARKING ADMIN (164)
16. EQUIPMENT PARKING
17. IY RPM
18. RTG WASH AREA
19. FLEXIBLE STACKING AREA
20. PICK UP TRUCK PARKING (F150 & F250 - TOTAL 90 SPOTS)
21. VENDOR GATE
22. ELECTRICAL EQUIPMENT
23. ROADABILITY INSPECTION
24. REEFERS PTI
25. FIRE LANE
26. FUELING STATION
27. RESTROOMS
28. ROADABILITY TRAILER
29. RPM TROUBLE PARKING
30. MAIN GATE
31. CONE CART PARKING (6 SPOTS)
32. COMPRESSED AIR
33. REEFER TOWERS

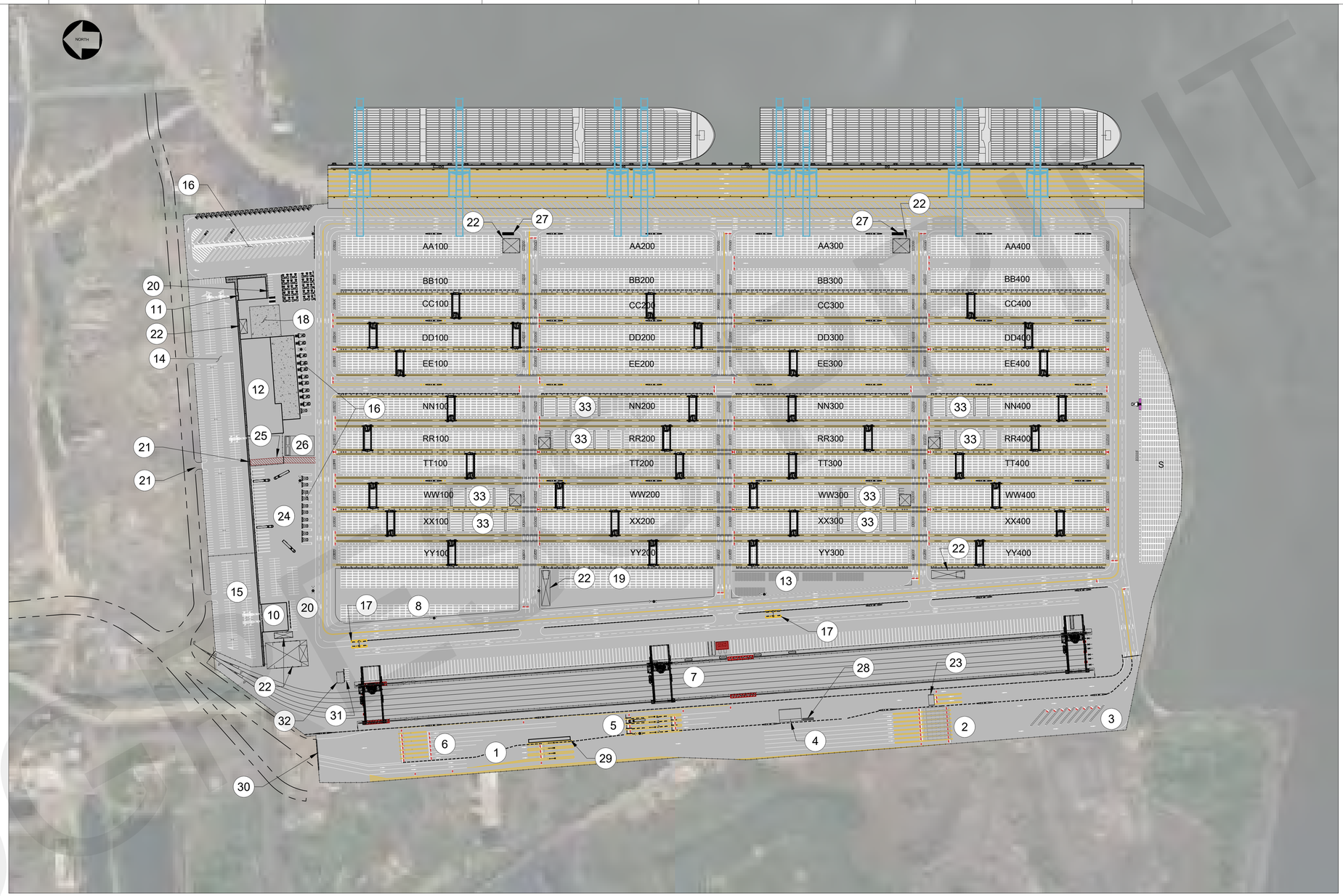
ERTG GROUNDED CONTAINERS - STACK CC TO YY (7046 TGS)

ERTG GROUNDED REEFERS
(259 FGS = 518 TGS)

EMPTY CONTAINERS - STACK S (475 TGS)

EMPTY CONTAINERS - STACK AA AND BB (1707 TGS)

7 WIDE ERTG



1 --- TERMINAL GENERAL ARRANGEMENT PLAN
SCALE: 1" = 200'

0 100 200 300 400
1"=200'-0" SCALE IN FEET

Client DWG. No. SPC001-HTC-GE-AO-DD-2D-General_Arrangement_Plan-R02-S3

THIS DRAWING WAS PREPARED FOR THE EXCLUSIVE USE OF TRADEPOINT TIL TERMINAL, LLC ("CLIENT") AND IS ISSUED PURSUANT TO THE ENGINEERING SERVICES AGREEMENT DATED 2ND AUGUST 2024 BETWEEN CLIENT AND HATCH ASSOCIATES CONSULTANTS, INC. ("HATCH"). UNLESS OTHERWISE AGREED IN WRITING WITH CLIENT OR SPECIFIED ON THIS DRAWING, (A) HATCH DOES NOT ACCEPT AND DISCLAIMS ANY AND ALL LIABILITY OR RESPONSIBILITY ARISING FROM ANY USE OF OR RELIANCE ON THIS DRAWING BY ANY THIRD PARTY OR ANY MODIFICATION OR MISUSE OF THIS DRAWING BY CLIENT, AND (B) THIS DRAWING IS CONFIDENTIAL AND ALL INTELLECTUAL PROPERTY RIGHTS EMBODIED OR REFERENCED IN THIS DRAWING REMAIN THE PROPERTY OF HATCH.

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2	ISSUED FOR 90%	FG	MC	2025-04-18
1	ISSUED FOR 60%	FG	MC	2025-02-14
0	ISSUED FOR USE	PF	FG	2024-11-08

ROLE	NAME	SIGNATURE	DATE
DRAFTSPERSON	AMELIE CROTEAU		2025/04/18
DESIGNER			
CHECKER	MATTHEW COOLEN		2025/04/18
DESIGN COORD.	FRANCISCO GOMES		2025/04/18
RESP. ENG.	FRANCISCO GOMES		2025/04/18
LEAD DISC. ENG.			
ENG. MANAGER	PETER FAIRBROTHER		2025/04/18
PROJ. MANAGER	JOSHUA NELSON		2025/04/18

NAME
SIGNATURE
ENG REG NUMBER
REVISION DATE
ORIGINAL DATE
REG. PROFESSIONAL

DRAWING No. | DRAWING TITLE
- | -
REFERENCE DRAWINGS

DRAWING APPROVAL STATUS: ISSUED FOR USE

SPARROWS POINT CONTAINER TERMINAL

TERMINAL GENERAL ARRANGEMENT PLAN

SCALE NTS OR AS NOTED
DWG. No. H374437-0000-203-270-0001
REV 2

SHEET SIZE: D

$USERNAMES $DATES $FILES $TIMES

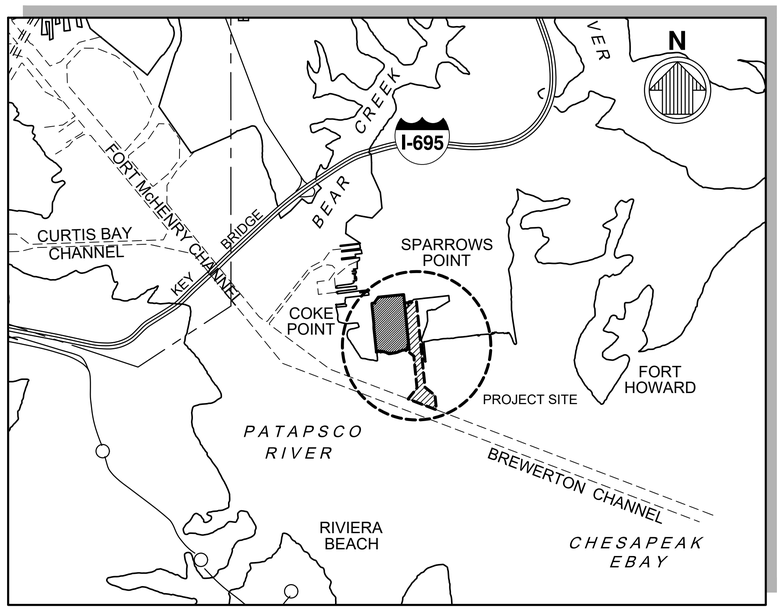
PROOF

TRADEPOINT TIL TERMINAL LLC

SPARROWS POINT CONTAINER TERMINAL

6995 BETHLEHEM BOULEVARD, SUITE 100
BALTIMORE, MD 21219

VICINITY MAP
SCALE: NTS



LOCATION PLAN
SCALE: NTS

30% DESIGN SUBMITTAL
ISSUED: 2024-01-30
NOT TO BE USED FOR CONSTRUCTION

Mark	Description	Date	Appr

SPARROWS POINT CONTAINER TERMINAL
TRADEPOINT TIL TERMINAL LLC
BALTIMORE MARYLAND 21219

COVER SHEET WITH VICINITY AND LOCATION MAPS

Date: 2024-01-30
Rev:
M&N Project No. 230329
Drawing code:
Designed by: M&N
Drn by: M&N
Chd by: JCS
Reviewed by: EDS
Submitted by: ERIC D. SMITH MOFFATT & NICHOL
Drawing Scale:
Plot scale: 1:1 (D SHEET)

2780 LIGHTHOUSE POINT EAST, STE. D BALTIMORE, MD 21224
410-563-7300
moffatt & nichol
6995 BETHLEHEM BOULEVARD SUITE 100 BALTIMORE, MD 21219

Sheet Reference No.
G-001
INDEX: 1 OF 242

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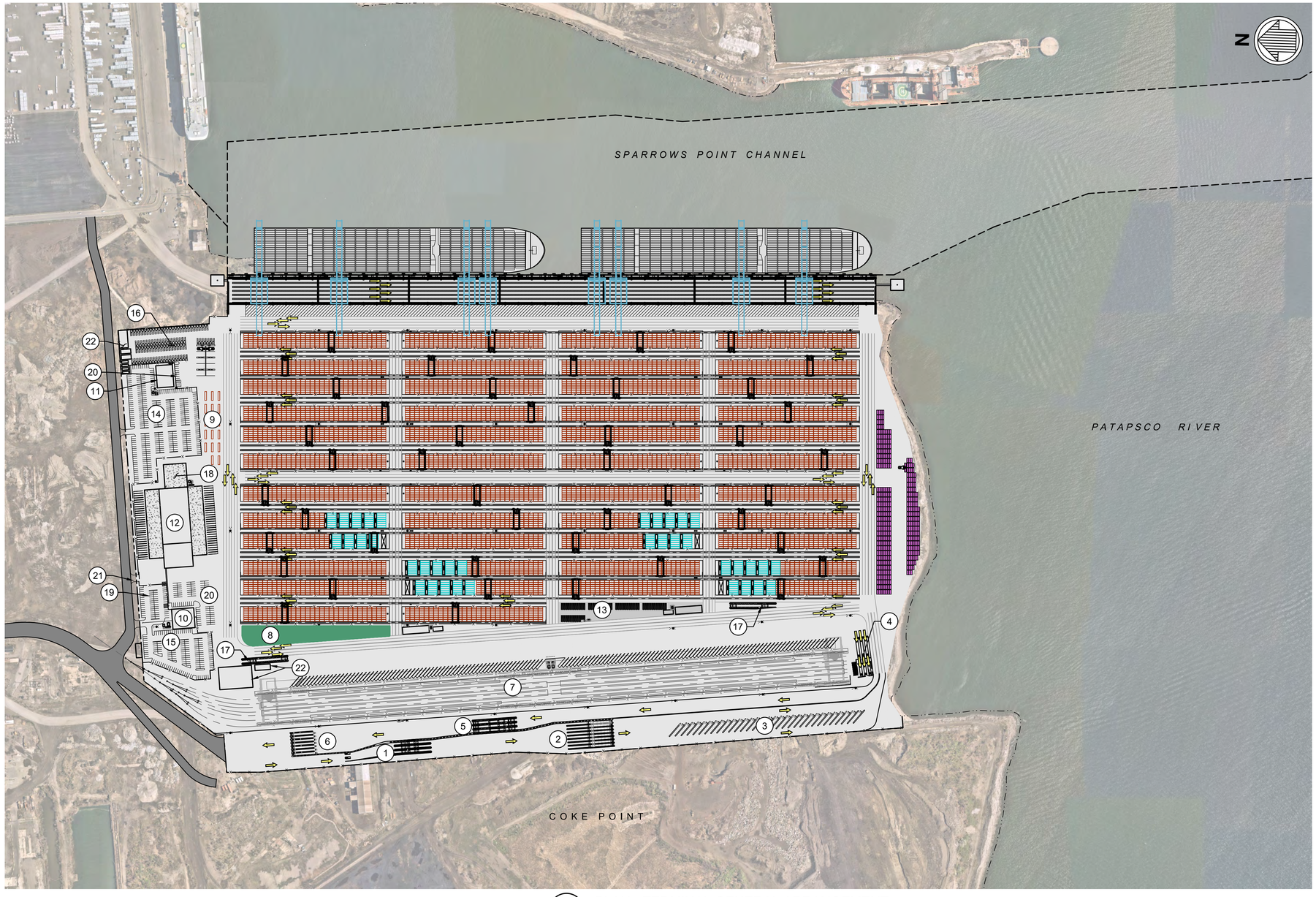
DRAWING SCALES SHOWN BASED ON 22"x34" DRAWING



A1
G-101
PLAN - TERMINAL GENERAL ARRANGEMENT
SCALE: 1" = 250'

SHEET NOTES

1. FOR ABBREVIATIONS, SEE SHEET G-004.
2. FOR GENERAL NOTES, SEE SHEET G-006.

KEY NOTES

1. INBOUND OCR
2. INBOUND PROCESSING LANES
3. HOLDING SPOTS
4. ROADABILITY STATION
5. OUTBOUND OCR/RPM
6. OUTBOUND PROCESSING LANES
7. INTERMODAL YARD (IY)
8. OOG AREA
9. CUSTOMS SCAN AREA
10. ADMIN BUILDING
11. CHECK-IN BUILDING
12. MAINTENANCE AND REPAIR BUILDING
13. GENSET AREA
14. POV PARKING LONGSHORE CHECK-IN (356)
15. POV PARKING ADMIN (156)
16. EQUIPMENT PARKING
17. IY RPM
18. RTG WASH AREA
19. POV PARKING M & R (57)
20. PICK UP TRUCK PARKING (F150 & F250)
21. VENDOR GATE
22. ELECTRICAL EQUIPMENT

LEGEND

- ERTG GROUNDED CONTAINERS (8701 TGS)
- ERTG GROUNDED REEFERS (259 FGS = 518 TGS)
- EMPTY CONTAINERS TOP PICK (394 TGS)
- 7 WIDE ERTG

250' 0' 250' 500'
SCALE: 1"=250'

30% DESIGN SUBMITTAL
ISSUED: 2024-01-30
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Mark	Description	Date	Appr

SPARROWS POINT CONTAINER TERMINAL
TRADEPOINT TIL TERMINAL LLC
BALTIMORE MARYLAND 21219

PLAN - TERMINAL GENERAL ARRANGEMENT

Designed by: M&N
Drawn by: M&N
Cad by: JCS
Reviewed by: EDS
Submitted by: ERIC D. SMITH
MOFFATT & NICHOL
Date: 2024-01-30
Rev:
M&N Project No. 230329
Drawing code:
Drawing Scale:
Plot scale: 1:1 (D SHEET)

2780 LIGHTHOUSE POINT EAST, STE. D BALTIMORE, MD 21224 410-663-7300
moffatt & nichol
6895 BETHLEHEM BOULVARD SUITE 103 BALTIMORE, MD 21219
SPARROWS POINT CONTAINER TERMINAL

Sheet Reference No.
G-101
INDEX: 9 OF 242

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DRAWING SCALES SHOWN BASED ON 22"x34" DRAWING

SHEET NOTES

1. FOR ABBREVIATIONS, SEE SHEET G-004.
2. FOR GENERAL NOTES, SEE SHEET G-006.
3. FOR PROPOSED GRADED AND STORM DRAIN, SEE SHEETS CG101 THROUGH CG131

KEY NOTES

(12) CONNECT TO EXISTING MANHOLE (BY OTHERS)

SCALE: 1" = 200'

BOHLER

901 DULANEY VALLEY ROAD, SUITE 801
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Phone: (410) 821-7900
Fax: (410) 821-7987
MD@BohlerEng.com

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DRAWING SCALES SHOWN BASED ON 22"x34" DRAWING

Mark	Description	Date	Appr

SPARROWS POINT CONTAINER TERMINAL
TRADEPOINT TIL TERMINAL LLC
BALTIMORE MARYLAND 21219

PLAN - GRADING AND DRAINAGE GENERAL ARRANGEMENT AND KEY

Designed by: DMD
Drawn by: DMD
Checked by: MJG
Submitted by: SUBMITTERS NAME MOFFATT & NICHOL
Date: 2024-01-30
Job No. M&N Project No. 230329
Drawing date:
Reviewed by MJG
Drawing Scale: Plot scale: 1:1 (10 SHEET)
Rev.

2780 LIGHTHOUSE POINT EAST, STE. D BALTIMORE, MD 21224 410-585-7300

moffatt & nichol

6906 BETHLEHEM BOULVARD SUITE 100 BALTIMORE,MD 21219

Sheet Reference No.

CG101

INDEX: 50 OF 242

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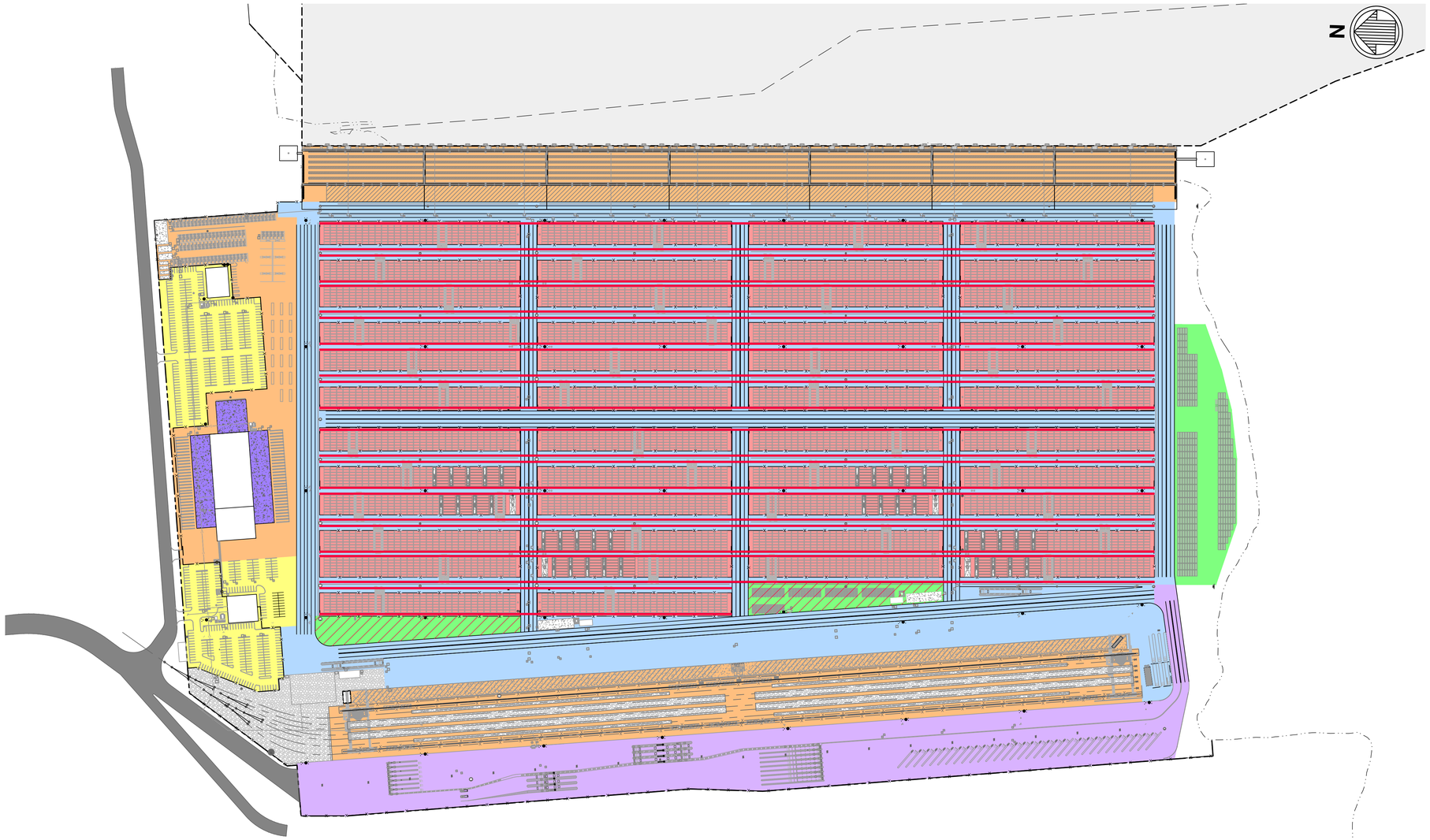

SHEET NOTES

1. FOR ABBREVIATIONS, SEE SHEET G-004.
2. FOR GENERAL NOTES, SEE SHEET G-006.

LEGEND

- ERTG RUNWAY
  64,263 LF - SEE DETAIL D5 SHEET CP301.
- ERTG CONTAINER STORAGE AREA
  47.5 AC - SEE DETAIL D3 SHEET CP301.
- ERTG ROADWAYS
  44.7 AC - SEE DETAIL C1 SHEET CP301.
- EMPTY CONTAINER STORAGE AREA
  3.6 AC - SEE DETAIL C1 SHEET CP301.
- GATE AREA
  13.7 AC - SEE DETAIL D1 SHEET CP301.
- M&R AREA SLABS (PCC)
  1.2 AC - SEE DETAIL C5 SHEET CP301.
- ITCF, M&R & WHARF AREAS (HMA)
  28.5 AC - SEE DETAIL B3 SHEET CP301.
- POV PARKING
  6.2 AC - SEE DETAIL B1 SHEET CP301.
- GRAVEL / BALLAST
  6.3 AC - SEE DETAIL B5 SHEET CP301.
- OOG STORAGE AREA
  2.4 AC - SEE DETAIL C3 SHEET CP301.

A1 / CP101 PLAN - PAVING GENERAL ARRANGEMENT
SCALE: 1" = 200'

200' 0' 200' 400'
SCALE: 1" = 200'

30% DESIGN SUBMITTAL
ISSUED: 2024-01-30
NOT TO BE USED FOR CONSTRUCTION

Mark	Description	Date	Appr

SPARROWS POINT CONTAINER TERMINAL
TRADEPOINT TIL TERMINAL LLC
BALTIMORE MARYLAND 21219

PLAN - PAVING GENERAL ARRANGEMENT

Date: 2024-01-30 | Rev:
M&N Project No. 230329 | Drawing code:
Designed by: TJS | Chkd by: PGV
Drawn by: CS | Reviewed by: TJS
Drawing Scale: | Plot scale: 1:1 (D SHEET)
Submitted by: ERIC D. SMITH MOFFATT & NICHOL

2780 LIGHTHOUSE POINT EAST, STE. D BALTIMORE, MD 21224 410-563-7300
moffatt & nichol
6995 BETHLEHEM BOULEVARD SUITE 103 BALTIMORE, MD 21219

SEAL

I, JOHN E. WALKER JR. P.E. HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.

LICENSE NO. 200931
EXPIRATION DATE: 07/09/2025

Sheet Reference No.
CP101
INDEX: 132 OF 242

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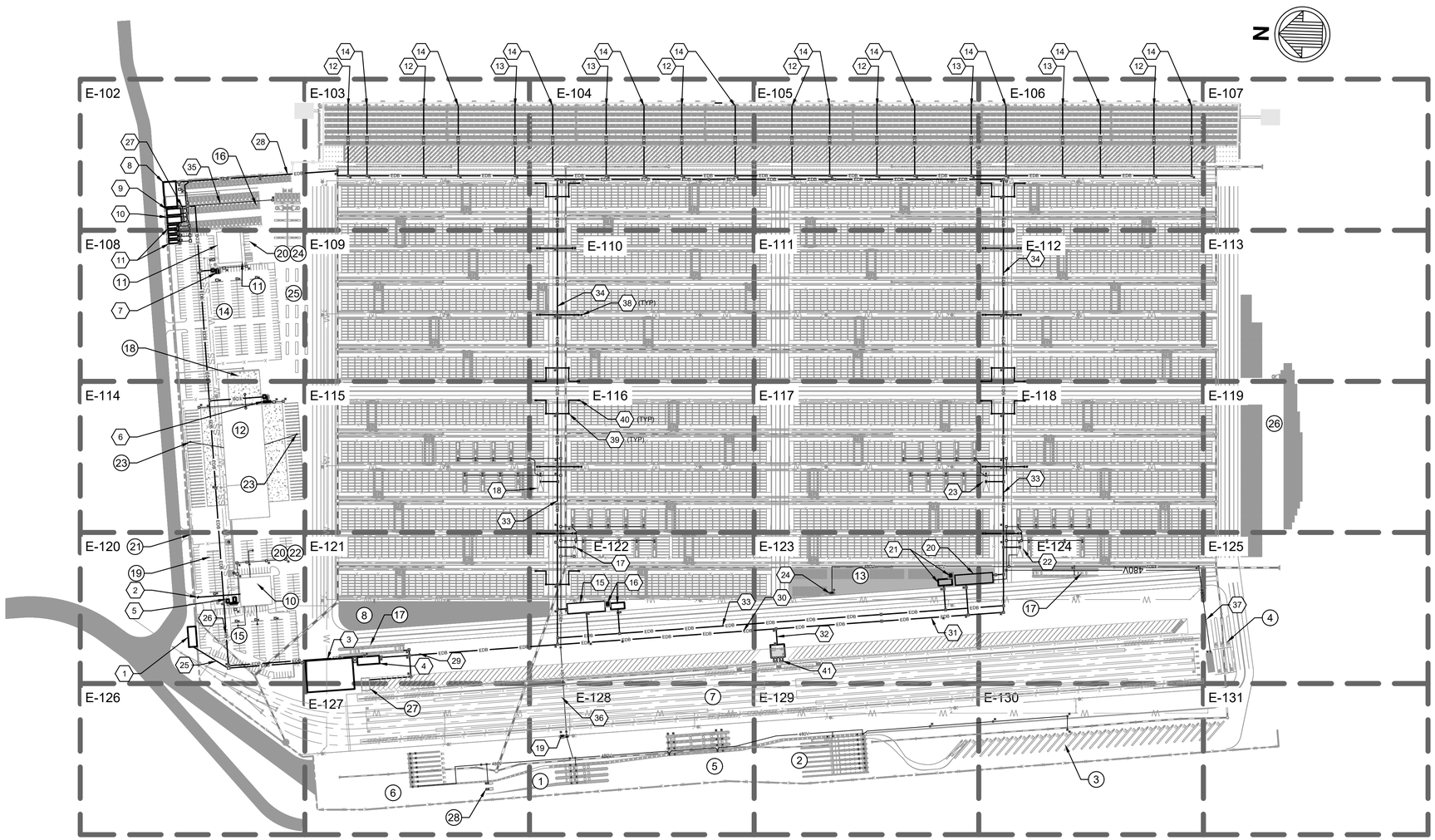

A1 / E-101 — ELECTRICAL SITE PLAN
SCALE: 1" = 200'

ELECTRICAL KEY NOTES

1. POWER UTILITY EQUIPMENT (BY OTHERS)
2. COMMUNICATIONS UTILITY FIBER SERVICE
3. MAIN SUBSTATION
4. MAIN SWITCHGEAR BUILDING
5. ADMIN BLDG, POV & SERVICE VEHICLE CHARGING TRANSFORMER, SWITCHBOARD & GENERATOR
6. M&R BLDG, RTG WASH & SERVICE VECHILE CHARGING TRANSFORMER, SWITCHBOARD & GENERATOR
7. CHECK-IN BLDG & POV CHARGING TRANSFORMER, SWITCHBOARD & GENERATOR
8. SWITCHGEAR BLDG NE
9. UNIT SUBSTATION NE1
10. UNIT SUBSTATION NE2
11. UNIT SUBSTATIONS NE3-NE7 (UTR & EMPTY HANDLER)
12. STS CRANE 1 CONNECTION
13. STS CRANE 2 CONNECTIONS (1 SPARE)
14. SHORE POWER CONNECTION
15. NW SWITCHGEAR BLDG
16. SWBD-NW1 & TRANSFORMER
17. NW REEFER SUBSTATION
18. NE REEFER SUBSTATION
19. GATE SYSTEM DISTRIBUTION RACK & GENERATOR
20. SW SWITCHGEAR BLDG
21. SWBD-SW1 & TRANSFORMER
22. SW REEFER SUBSTATION
23. SE REEFER SUBSTATION
24. REEFER GENSET AREA MINI POWERZONE
25. 34.5KV REDUNDANT FEEDERS - MAIN SUBSTATION
26. 13.8KV LOOP - SWITCHGEAR BLDG NE
    13.8KV LOOP - NORTH AREA BLDGS & VEHICLE CHARGING
27. 13.8KV - UNIT SUBSTATIONS NE1 THRU NE6
28. 13.8KV - STS CRANES
    6.6KV - SHORE POWER CONNECTIONS
29. 13.8KV LOOP - NW & SW SWITCHGEAR BLDGS
30. 13.8KV LOOP - SW SWITCHGEAR BLDG
    13.8KV - RMG PAD MOUNTED SWITCH 1
    13.8KV LOOPS - REEFER SUBSTATIONS
31. 13.8KV LOOP - SW SWITCHGEAR BLDG
    13.8KV - RMG PAD MOUNTED SWITCH 2
    13.8KV LOOPS - REEFER SUBSTATIONS
32. 13.8KV - RMG PAD MOUNTED SWITCHES 1 & 2
33. 13.8KV LOOPS - REEFER SUBSTATIONS
    4.16KV LOOPS - eRTG CONNECTIONS
34. 4.16KV LOOPS - eRTG CONNECTIONS
35. 480V - UTR & EMPTY HANDLER CHARGING
36. 480V - GATE SYSTEM GENERATOR, ATS & SWITCHBOARD
37. 480V - ROADABILITY STATION
38. eRTG CONNECTIONS, TWO SIDE-BY-SIDE
39. eRTG CONNECTION, ONE
40. eRTG TURN OVER ANCHOR PIT, SHOWN ONLY FOR SINGLE eRTG CONNECTION CONCEPT WHERE CONNECTION CAN'T FIT IN UTILITY AISLE.
41. RMG RACKS

AREA DESCRIPTION KEY NOTES

1. INBOUND OCR
2. INBOUND PROCESSING LANES
3. HOLDING SPOTS
4. ROADABILITY STATION
5. OUTBOUND OCR/RPM
6. OUTBOUND PROCESSING LANES
7. INTERMODAL YARD (IY)
8. OOG (OUT OF GAGE) AREA
9. CUSTOMS SCAN AREA
10. ADMIN BUILDING
11. CHECK-IN BUILDING
12. MAINTENANCE AND REPAIR BUILDING (M&R)
13. GENSET AREA
14. POV PARKING LONGSHORE CHECK-IN (356), 78 POV CHARGING
15. POV PARKING ADMIN (156), 33 POV CHARGING
16. EQUIPMENT PARKING, UTR & EMPTY HANDLER CHARGING
17. IY RPM
18. RTG WASH AREA
19. POV PARKING M & R (57), 19 POV CHARGING
20. PICK UP TRUCK PARKING (F150 & F250)/SERVICE VEHICLE CHARGING
21. VENDOR GATE
22. ADMIN SERVICE VEHICLE CHARGING (46)
23. M&R SERVICE VEHICLE CHARGING (62)
24. CHECK-IN SERVICE VEHICLE CHARGING (2)
25. CBP SCAN (SELF-CONTAINED X-RAY TRUCK)
26. EMPTY CONTAINER STORAGE
27. AIR COMPRESSOR BUILDING
28. INBOUND GUARD BOOTHS

GENERAL NOTES

- 480V DISTRIBUTION SHOWN IS LIMITED TO SELECT PORTIONS FOR ILLUSTRATING CONCEPT IN THOSE AREAS. ADDITIONAL POWER, 480V AND BELOW, TO BE PROVIDED TO ALL REQUIRED EQUIPMENT.
- FIBER COMMUNICATION VAULTS SHOWN FOR COORDINATION. FIBER COMMUNICATIONS DISTRIBUTION DUCT BANKS ARE NOT SHOWN AND SHALL BE PROVIDED TO ALL REQUIRED EQUIPMENT.
- eRTG PANZER BELTS TO BE PROVIDED AT ALL EAST-WEST AISLE CROSSINGS.

200' 0' 200' 400'
SCALE: 1" = 200'

30% DESIGN SUBMITTAL
ISSUED: 2024-01-30
NOT TO BE USED FOR CONSTRUCTION

Mark	Description	Date	Appr

SPARROWS POINT CONTAINER TERMINAL
TRADEPOINT TIL TERMINAL LLC
BALTIMORE MARYLAND 21219

ELECTRICAL SITE PLAN

Date: 2024-01-30 | Rev:
M&N Project No: 230329
Drawing code:
Drawing Scale: AS SHWON
Plot scale: 1:1 (D SHEET)
Designed by: MK/MG
Drwn by: DAT/CLN
Chkd by: MK
Reviewed by: DAW
Submitted by: ERIC D. SMITH
MOFFATT & NICHOL

2780 LIGHTHOUSE POINT EAST, STE. D BALTIMORE, MD 21224 410-563-7300
moffatt & nichol
6905 BETH EHEM BOULVARD SUITE 100 BALTIMORE, MD 21219

Sheet Reference No.
E-101
INDEX: 172 OF 242

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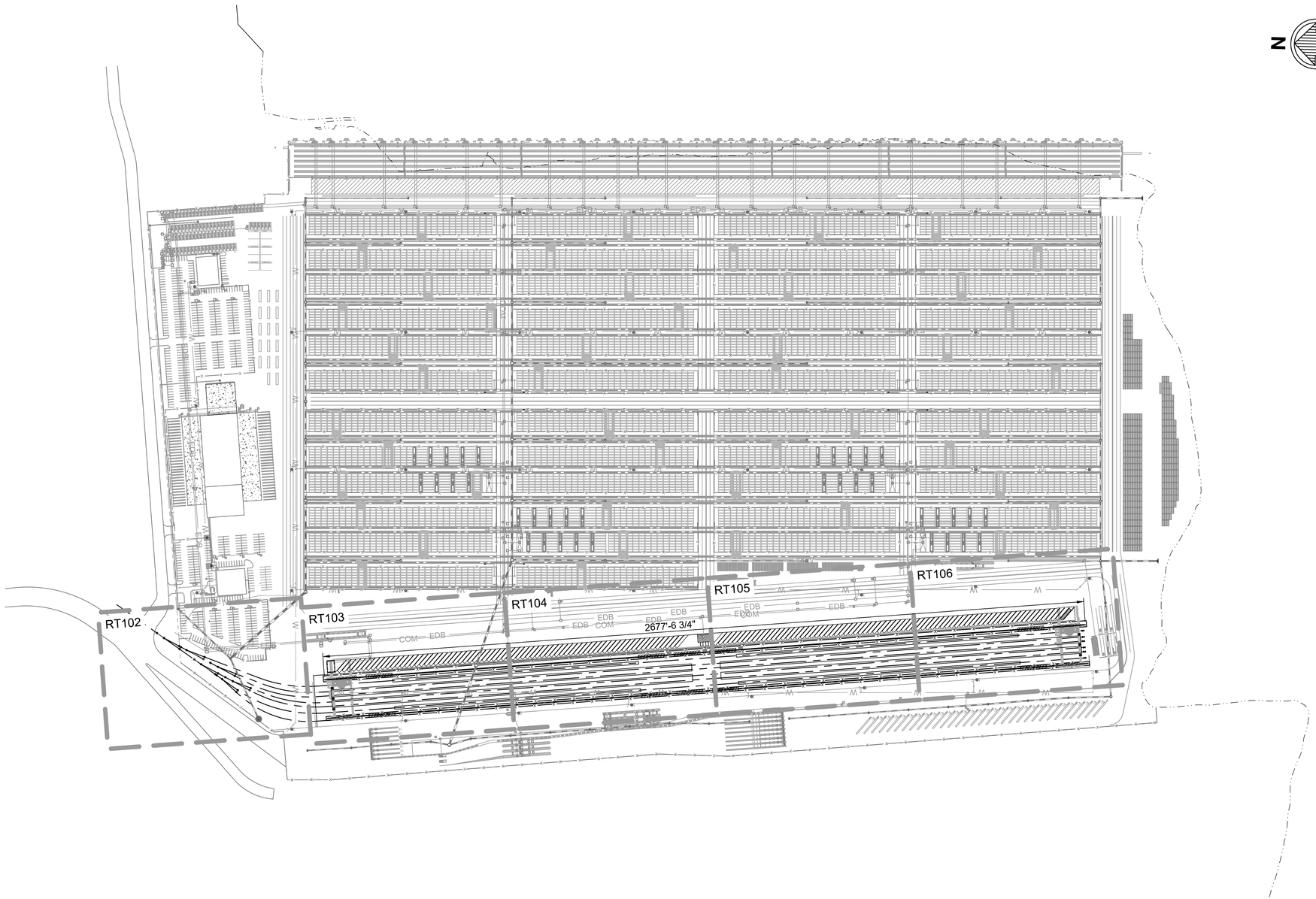
DRAWING SCALES SHOWN BASED ON 22"x34" DRAWING

SHEET NOTES

1. FOR ABBREVIATIONS, SEE SHEET G-004.
2. FOR GENERAL NOTES, SEE SHEET G-006.



A1 / RT101 PLAN - TRACKWORK GENERAL ARRANGEMENT AND KEY
SCALE: 1" = 200'

200' 0' 200' 400'
SCALE: 1" = 200'

30% DESIGN SUBMITTAL
ISSUED: 2024-01-30
NOT TO BE USED FOR CONSTRUCTION

Mark	Description	Date	Appr

SPARROWS POINT CONTAINER TERMINAL
TRADEPOINT TIL TERMINAL LLC
BALTIMORE MARYLAND 21219

PLAN - TRACKWORK GENERAL ARRANGEMENT AND KEY

Date: 2024-01-30 | Rev:
M&N Project No. 230329
Drawing code:
Designed by: DP | Cad by: JCS
Dwn by: CS | Reviewed by: DS
Drawing Scale:
Plot scale: 1:1 (D SHEET)
Submitted by: ERIC D. SMITH MOFFATT & NICHOL

2780 LIGHTHOUSE POINT EAST, STE. D BALTIMORE, MD 21224 410-663-7300
moffatt & nichol
6895 BETHLEHEM BOULEVARD SUITE 103 BALTIMORE, MD 21219

SEAL

I, JOHN E. WALKER JR, P.E. HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.

LICENSE NO. 200931

EXPIRATION DATE: 07/09/2025

Sheet Reference No.
RT101

INDEX: 205 OF 242

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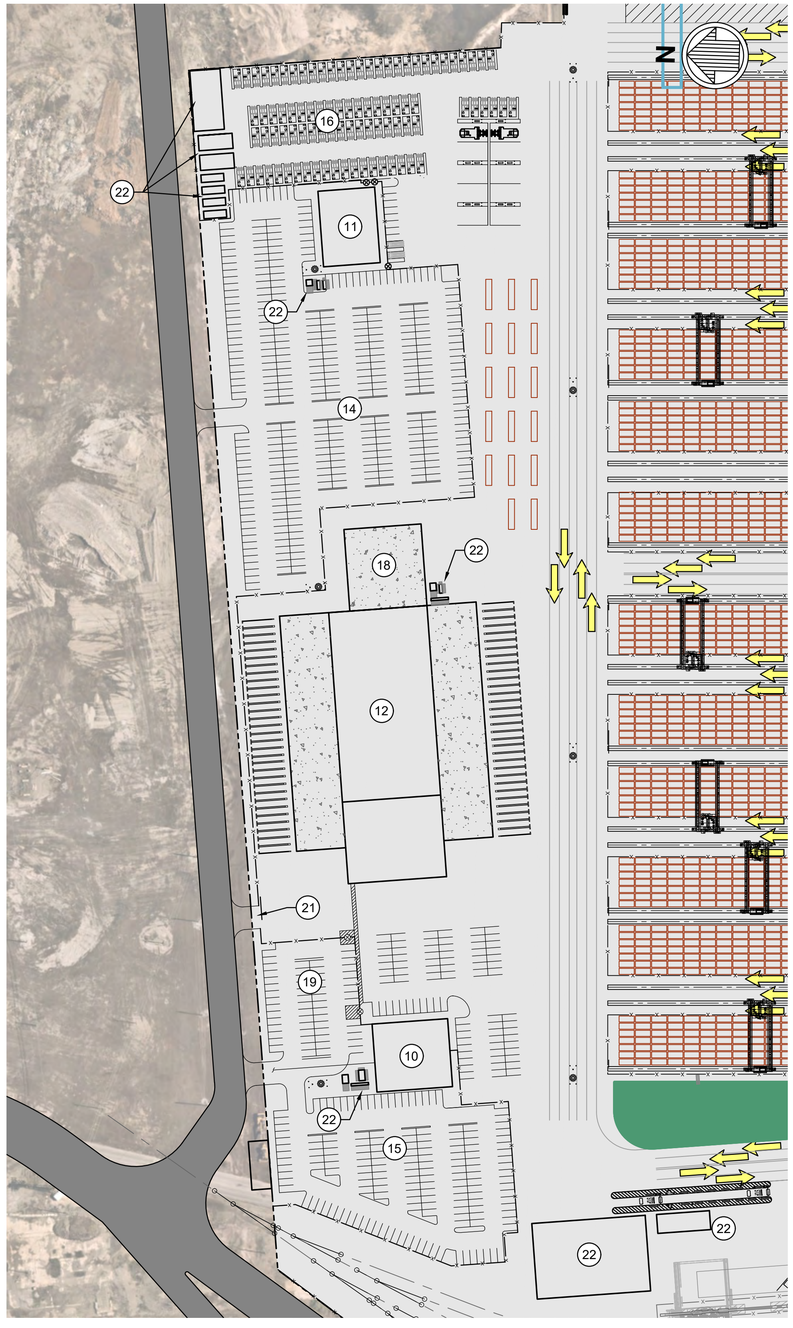
DRAWING SCALES SHOWN BASED ON 22"x34" DRAWING



KEY NOTES

(10) ADMINISTRATION BUILDING, SEE SHEETS AA101 THRU AA901.
(11) CHECK-IN / LONGSHOREMAN BUILDING, SEE SHEETS AL101 THRU AL901
(12) MAINTENANCE AND REPAIR BUILDING, SEE SHEETS AM101 THRU AM901
(14) POV PARKING LONGSHOREMAN CHECK-IN (356)
(15) POV PARKING ADMINISTRATION BLDG (156)
(16) EQUIPMENT PARKING
(18) RTG WASH AREA
(19) POV PARKING M & R BLDG (57)
(21) VENDOR GATE
(22) ELECTRICAL EQUIPMENT, SEE ELECTRICAL SHEETS

SHEET NOTES

1. FOR ABBREVIATIONS, SEE SHEET G-004.
2. FOR GENERAL NOTES, SEE SHEET G-006.

A1 / AO101 PLAN - ARCHITECTURAL GENERAL ARRANGEMENT
SCALE: 1"=100'

100' 0' 100' 200'
SCALE: 1"=100'

30% DESIGN SUBMITTAL
ISSUED: 2024-01-30
NOT TO BE USED FOR CONSTRUCTION

Mark	Description	Date	Appr.

SPARROWS POINT CONTAINER TERMINAL
TRADEPOINT TIL TERMINAL LLC
BALTIMORE MARYLAND 21219

PLAN - ARCHITECTURAL GENERAL ARRANGEMENT

Designed by: BV
Drawn by: PGV
Checked by: PGV
Reviewed by: JCS
Submitted by: ERIC D. SMITH MOFFATT & NICHOL
Date: 2024-01-30
M&N Project No. 230329
Drawing code:
Drawing Scale:
Plot scale: 1:1 (D SHEET)
Rev:

moffatt & nichol
2780 LIGHTHOUSE POINT EAST, STE. D BALTIMORE, MD 21224
410-563-7300

SPARROWS POINT CONTAINER TERMINAL
6995 BETHLEHEM BOULVARD
SUITE 100
BALTIMORE, MD 21219

Sheet Reference No.
AO101
INDEX: 214 OF 242

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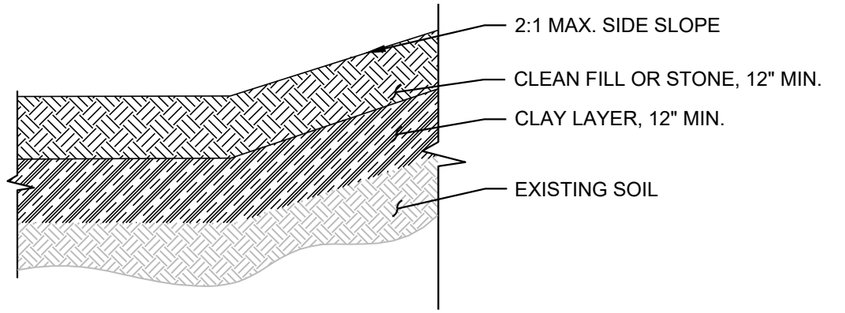
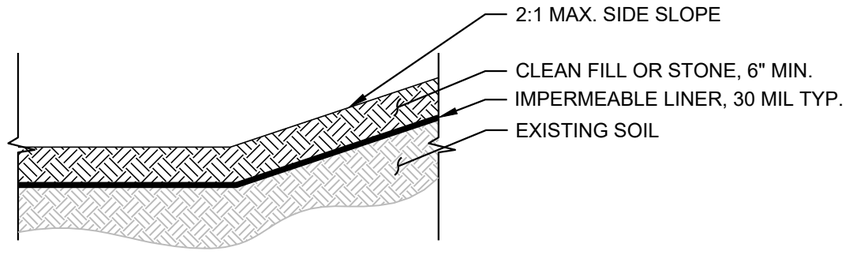
DRAWING SCALES SHOWN BASED ON 22"x34" DRAWING

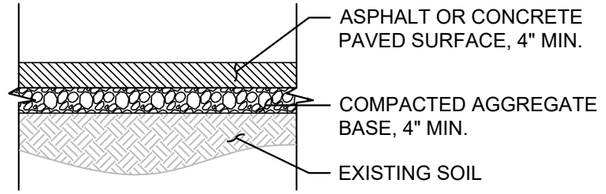
APPENDIX F





TYPICAL POND SECTIONS
NOT TO SCALE

TYPICAL LANDSCAPE SECTION
NOT TO SCALE



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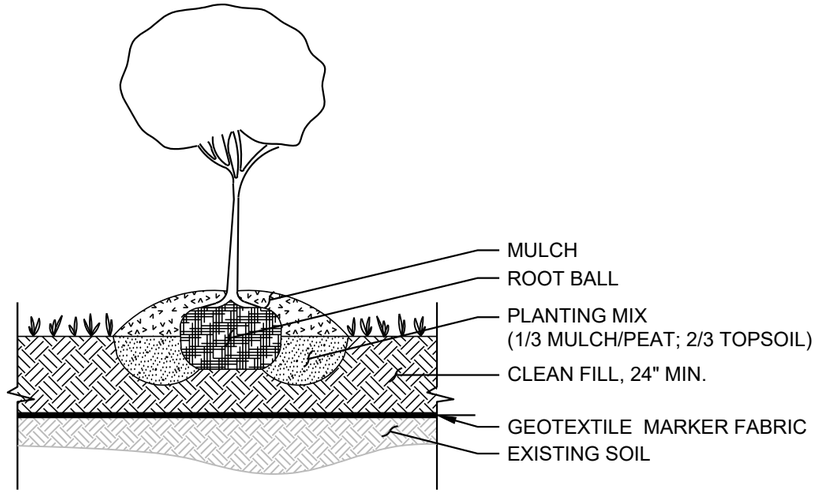


TYPICAL PLANTING SECTION
NOT TO SCALE

GEOTEXTILE MARKER FABRIC SPECIFICATIONS

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

TABLE 1

Mechanical Properties	Test Method	Unit	Minimum Average Roll Value	
			MD	CD
Grab Tensile Strength	ASTM D4632	lbs (N)	120 (534)	120 (534)
Grab Tensile Elongation	ASTM D4632	%	50	50
Trapezoid Tear Strength	ASTM D4533	lbs (N)	50 (223)	50 (223)
CBR Puncture Strength	ASTM D6241	lbs (N)	310 (1380)	
			Maximum Opening Size	
Apparent Opening Size (AOS)	ASTM D4751	U.S. Sieve (mm)	70 (0.212)	
			Minimum Roll Value	
Permittivity	ASTM D4491	sec^{-1}	1.7	
Flow Rate	ASTM D4491	$gal/min/ft^2$ ($l/min/m^2$)	135 (5500)	
			Minimum Test Value	
UV Resistance (at 500 hours)	ASTM D4355	% strength retained	70	

P:\EnviroAnalytics Group\160443M EAG_TPA Redevelopment\Dwg\B6\Production\Figure 6b - Environmental Capping Detail.dwg Plotted: April 9, 2019

ARM Group LLC
Engineers and Scientists

designed RJC
checked TNP
drawn RJC
scale N/A
date 9/8/2020
project no. 160443M

drawing title: MINIMUM CAPPING SECTION DETAILS

project title: SPARROWS POINT TRADEPOINT ATLANTIC

SPARROWS POINT
BALT. COUNTY, MARYLAND

Sheet 1

APPENDIX G

ARM Group LLC
Engineers and Scientists

July 29, 2025

Ms. Jennifer Sohns
Land Restoration Program
Maryland Department of the Environment
1800 Washington Boulevard
Baltimore, MD 21230

Ms. Christine Kimak
USEPA Mid-Atlantic Region
1650 Arch Street
Philadelphia, PA 19103

Re: Sub-Slab Soil Gas & Indoor Air
Monitoring Plan
Revision 1
Area B: Container Terminal
Tradepoint Atlantic
Sparrows Point, MD 21219

Dear Ms. Brown:

ARM Group LLC (ARM), on behalf of Tradepoint Atlantic, is proposing to conduct sub-slab soil gas and indoor air sampling within the Container Terminal (the Site), which is part of Area B of the Tradepoint Atlantic property located in Sparrows Point, Maryland. This plan is being submitted to the Maryland Department of the Environment (MDE) and the United States Environmental Protection Agency (USEPA) to propose pre- and post-occupancy monitoring to assess potential vapor intrusion (VI) risk. This Monitoring Plan provides specifications for the proposed indoor air and soil gas monitoring.

A total of six sub-slab soil gas monitoring points are proposed to be installed between the three support buildings. These support buildings are approximately 7,000 ft^2, 9,000 ft^2, and 47,000 ft^2. The points will be installed and sampled prior to each building's occupancy. The proposed monitoring point locations for both sub-slab soil gas and indoor air are shown on **Figure 1**. Minor adjustments to the final locations of the monitoring points may be necessary following construction based on the final interior layout of the buildings.

Each sub-slab soil gas monitoring point will be installed in accordance with the following procedures. For each installation, a 6-inch diameter pilot-hole will be cored through the concrete floor. The vapor barrier (below the concrete slab) will be carefully cut and peeled back to gain

access to the subsurface. A hammer drill and/or a hand auger will be used to create a shallow borehole that extends through the subgrade to a depth of 12 inches below the bottom of the floor slab. A 6-inch soil gas implant, constructed of double woven stainless-steel wire screen, will be attached to an appropriate length of polyethylene tubing and lowered to the bottom of the borehole. Once the implant and tubing are installed, the tubing will be capped with a three-way valve, and clean sand will be added around the implant to create a permeable layer that extends at least 2 inches above the implant. Bentonite will be added and hydrated to create a seal above the sand pack that extends to the vapor barrier, which will then be folded back into place prior to adding additional hydrated bentonite. Additional bentonite will be added until it is within the pilot-hole and at least 2 inches above the vapor barrier. The monitoring points will be finished with a flush-mount surface completion (manhole) with a concrete collar. Surface completions will be H-20 traffic rated (or equivalent).

Once installed, each sub-slab soil gas monitoring probe will be allowed to equilibrate for at least 24 hours. Following this equilibration period and/or prior to sampling, leak testing will be performed at each location in accordance with the procedures referenced in the Quality Assurance Project Plan (QAPP) Worksheet 21 – Field Standard Operating Procedures (SOPs), SOP No. 002 to confirm no fresh air intrusion.

Pre-occupancy sub-slab sampling will be performed in each building using the new monitoring points following their installation. If the results of the initial results of the sub-slab soil gas sampling are below the Project Action Limits (PALs), then the building will be occupied, and a subsequent post-occupancy indoor air and sub-slab sampling event will be performed within 90 days of occupancy. If the pre-occupancy sub-slab results indicate the presence of a potentially unacceptable VI risk (i.e., exceedances of the PALs), then a subsequent indoor air and sub-slab sampling event will be performed prior to occupancy, and any additional monitoring and/or response measures will be coordinated with the MDE and USEPA as needed. The pre-occupancy sub-slab sampling and the subsequent post-occupancy indoor air and sub-slab sampling noted above for the three buildings will be completed based on the occupancy schedule for each building. Given the current implementation schedule, the pre-occupancy sub-slab soil gas sampling is proposed for July 2027. The post occupancy sub-slab and indoor air sampling will be conducted within 90 days of occupancy (anticipated to be August 2027 based on the current implementation schedule, during the cooling season). The second post-occupancy sub-slab and indoor air sampling event is proposed to be completed in January 2028 during the heating season.

Sub-slab soil gas samples will be collected according to procedures outlined in QAPP Worksheet 21 – Field SOPs, SOP No. 002 – Sub-Slab Soil Gas Sampling. The sub-slab soil gas samples will be collected using 6-liter Summa Canisters set for an 8-hour collection time. The indoor air samples will be collected according to procedures outlined in QAPP Worksheet 21 – Field SOPs, SOP No. 001 – Indoor Air Sampling. The indoor air samples will be collected at the same approximate time as the post-occupancy sub-slab soil gas sampling. The indoor air samples will

also be collected using 6-liter Summa Canisters set for an 8-hour collection time. All samples will be submitted to Pace Analytical Services, Inc. (PACE) and analyzed for VOCs via USEPA Method TO-15. The full list of TO-15 VOCs approved for property-wide investigations is included as **Attachment 1**. Sample containers, preservatives, and holding times for the TO-15 analysis are listed in the QAPP Worksheet 19 & 30 – Sample Containers, Preservation, and Holding Times.

Quality assurance and quality control (QA/QC) samples are collected during field studies for various purposes, among which are to isolate site effects (control samples), to define background conditions (background sample), and to evaluate field/laboratory variability (duplicates, etc.). The following QA/QC samples will be submitted for analysis during each scheduled monitoring event (as appropriate):

- Blind Field Duplicate – 1 sample of air or sub-slab soil gas (selected by field personnel).
- Field Blank – 1 sample of ambient air from an exterior area in the breathing zone during indoor air sampling.
- Equipment Blank – 1 sample of "clean" air provided by the laboratory.

The QA/QC samples will be collected and analyzed in accordance with the QAPP Worksheet 12 – Measurement Performance Criteria, QAPP Worksheet 20 – Field Quality Control, and QAPP Worksheet 28 – Analytical Quality Control and Corrective Action.

Following each monitoring event, a brief Letter Report will be submitted to the MDE and USEPA to document the sample collection procedures and present and interpret the analytical results. All results will be presented in tabular and graphical formats to best summarize the data for future use. Recommendations will be presented for any additional site investigation activities such as supplemental sampling, if warranted.

If you have questions regarding any information covered in this document, please feel free to contact Peter Haid at Tradepoint Atlantic: 443-649-5055.

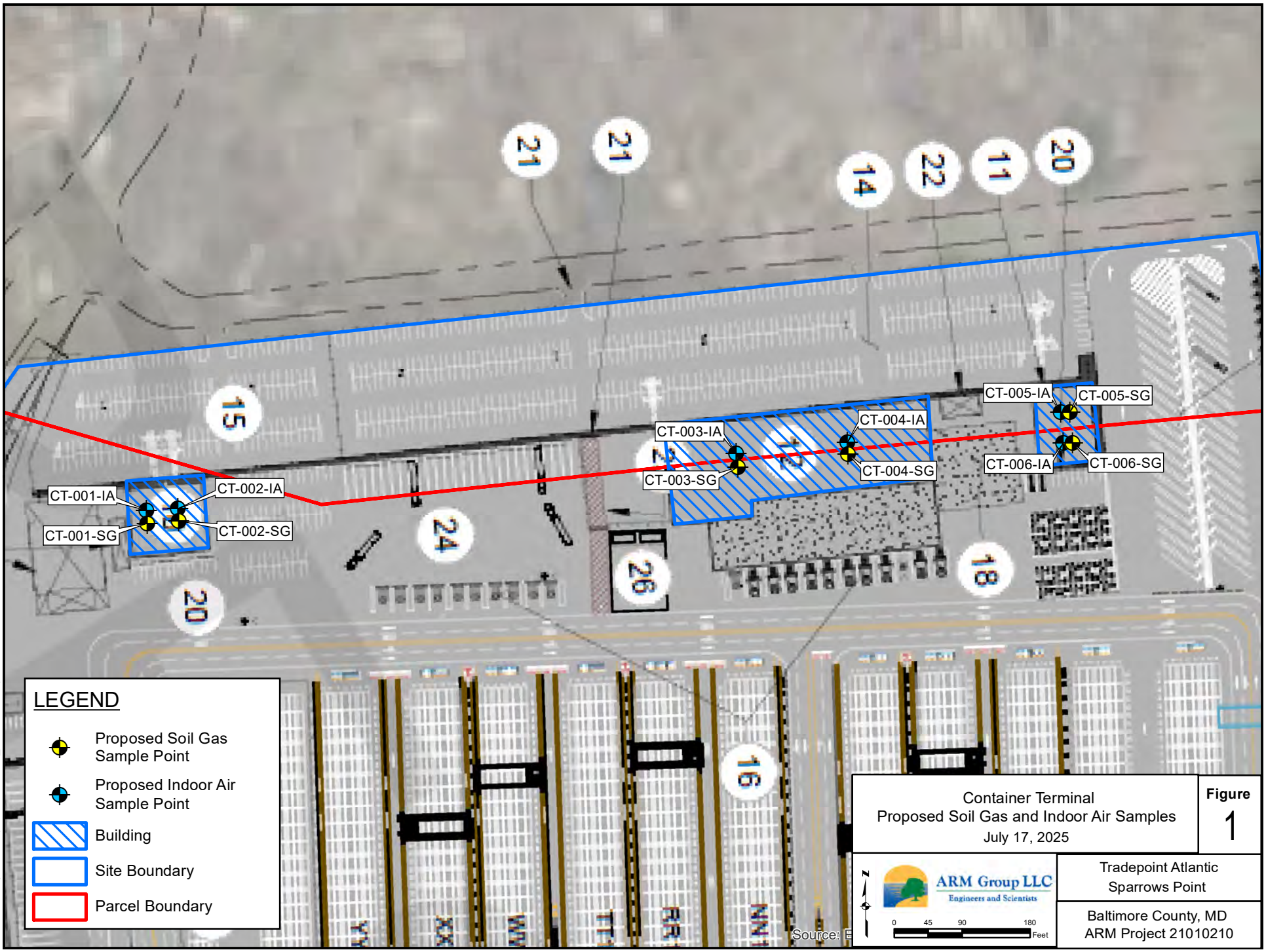
Respectfully Submitted,
ARM Group LLC

Joshua M. Barna, P.G.
Project Geologist II

Kaye Guille, P.E., PMP
Senior Engineer

Attachments:
Figure 1: Proposed Soil Gas and Indoor Air Samples
Attachment 1: TO-15 VOC List

FIGURES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CT-001-SG
CT-002-IA
CT-002-SG
CT-003-IA
CT-003-SG
CT-004-IA
CT-004-SG
CT-005-IA
CT-005-SG
CT-006-IA
CT-006-SG
LEGEND
Proposed Soil Gas Sample Point
Proposed Indoor Air Sample Point
Building
Site Boundary
Parcel Boundary
Container Terminal
Proposed Soil Gas and Indoor Air Samples
July 17, 2025
Figure
1
ARM Group LLC
Engineers and Scientists
Tradepoint Atlantic
Sparrows Point
Baltimore County, MD
ARM Project 21010210
0 45 90 180
Feet
Source:
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ATTACHMENT 1

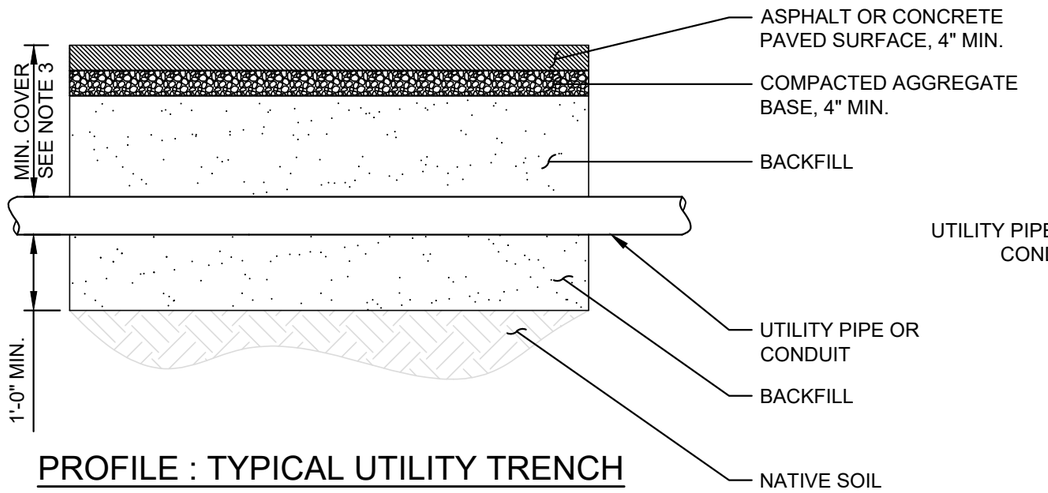
Attachment 1 - Container Terminal
TO-15 VOC List

1,1,1-Trichloroethane
1,1,2,2-Tetrachloroethane
1,1,2-Trichloroethane
1,1,2-Trichlorotrifluoroethane
1,1-Dichloroethane
1,1-Dichloroethene
1,2,3-Trichlorobenzene
1,2,3-Trimethylbenzene
1,2,4-Trichlorobenzene
1,2,4-Trimethylbenzene
1,2-Dibromo-3-chloropropane
1,2-Dibromoethane (EDB)
1,2-Dichlorobenzene
1,2-Dichloroethane
1,2-Dichloroethene (Total)
1,2-Dichloropropane
1,3,5-Trimethylbenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
1,4-Dioxane (p-Dioxane)
2-Butanone (MEK)
2-Hexanone
4-Methyl-2-pentanone (MIBK)
Acetone
Benzene
Bromodichloromethane
Bromoform
Bromomethane
Carbon disulfide
Carbon tetrachloride
Chlorobenzene
Chloroethane
Chloroform
Chloromethane
Cyclohexane
Dibromochloromethane
Dichlorodifluoromethane
Ethylbenzene
Hexachloro-1,3-butadiene
Isopropylbenzene (Cumene)
Methyl-tert-butyl ether
Methylene Chloride
Naphthalene
Styrene
Tetrachloroethene
Toluene
Trichloroethene
Trichlorofluoromethane
Vinyl chloride
Xylene (Total)
cis-1,2-Dichloroethene
cis-1,3-Dichloropropene
trans-1,2-Dichloroethene
trans-1,3-Dichloropropene

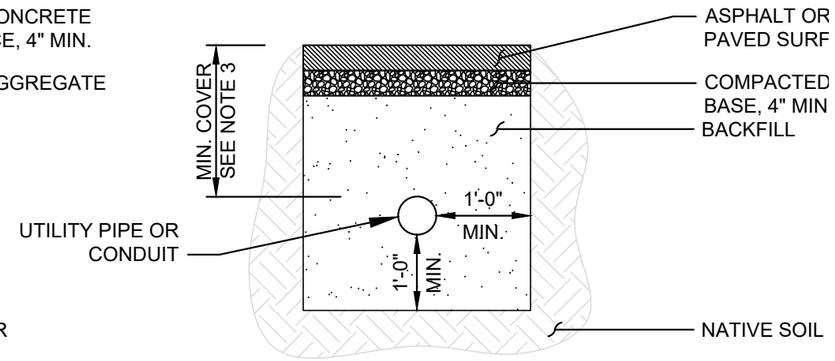
APPENDIX H

GENERAL NOTES:

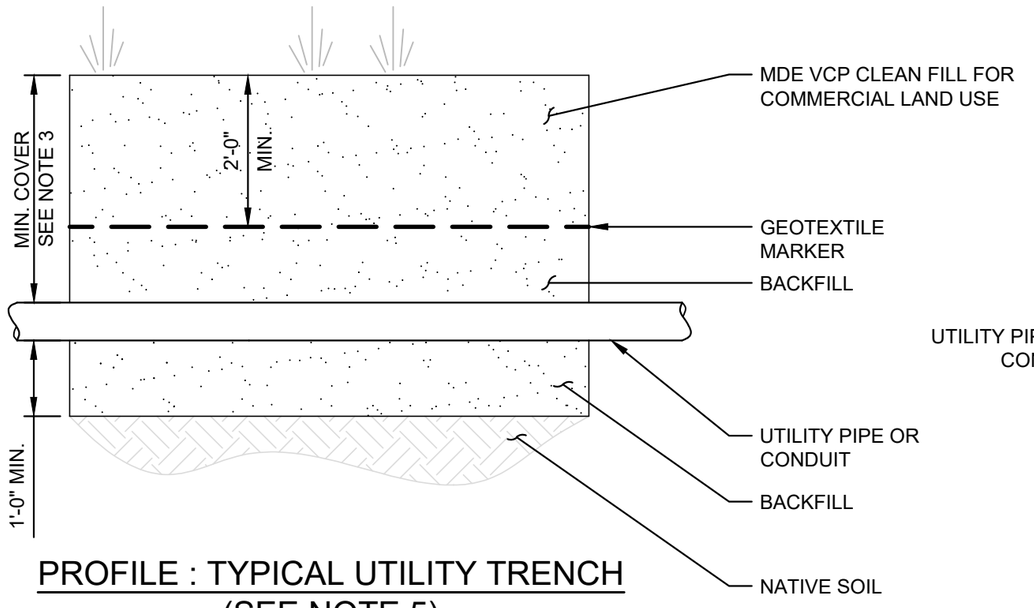
1. ALL PIPES OR CONDUIT SHALL BE LEAK-PROOF AND WATERTIGHT. ALL JOINTS SHALL BE SEALED OR GASKETED.
2. ALL PIPES SHALL BE PROPERLY PLACED AND BEDDED TO PREVENT MISALIGNMENT OR LEAKAGE. PIPE BEDDING SHALL BE INSTALLED IN SUCH A MANNER AS TO MINIMIZE THE POTENTIAL FOR ACCUMULATION OF WATER AND CONCENTRATED INFILTRATION.
3. MINIMUM COVER ABOVE UTILITY SHALL BE BASED ON SPECIFIC UTILITY REQUIREMENTS.
4. TRENCHES SHALL BE BACKFILLED WITH BEDDING AND MATERIALS APPROVED BY MDE.
5. FOR ANY UTILITY SEGMENT WHICH GOES THROUGH AN AREA WHICH IS DESIGNATED TO RECEIVE A LANDSCAPED CAP, THE UPPER 2 FEET OF BACKFILL MUST MEET THE REQUIREMENTS OF MDE VCP CLEAN FILL FOR COMMERCIAL LAND USE. IN THIS CASE THE MDE VCP CLEAN FILL WILL BE UNDERLAIN BY A GEOTEXTILE MARKER FABRIC. UTILITY SEGMENTS WHICH GO THROUGH AREAS WHICH DO NOT REQUIRE CAPPING OR ARE DESIGNATED TO RECEIVED A PAVED CAP WILL BE BACKFILLED WITH MATERIALS APPROVED BY MDE FOR THIS USE.



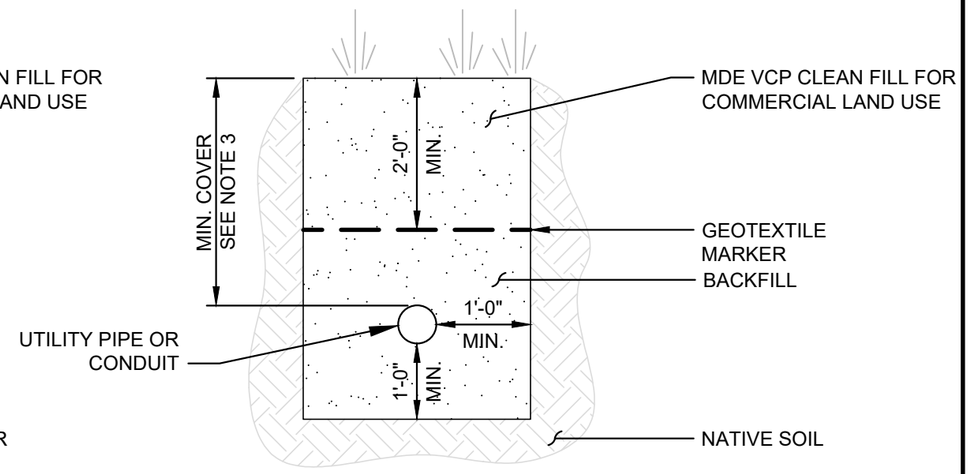
PROFILE : TYPICAL UTILITY TRENCH



SECTION : TYPICAL UTILITY



PROFILE : TYPICAL UTILITY TRENCH (SEE NOTE 5)



SECTION : TYPICAL UTILITY (SEE NOTE 5)

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ARM Group LLC
Engineers and Scientists
www.armgroup.net

TYPICAL UTILITY CROSS SECTIONS
Sparrows Point Site
EnviroAnalytics Group, LLC

June 2024
1/2" = 1'-0"
21010210

Figure 1

P:\EnviroAnalytics Group\160443M EAG_TPA Redevelopment\Dwg\NAPL Contingency\Reference\Utility Cross Section_REV2.dwg Plotted: August 10, 2023

APPENDIX I

Utility Excavation NAPL Contingency Plan

Revision 5 – September 20, 2022

Objectives:

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

1. To ensure identification and proper management of NAPL contaminated soils.
2. To ensure proper worker protection for working in areas of NAPL contamination.
3. To ensure that the installation of new utilities does not create new preferential flow paths for the migration of NAPL or soil vapors.

Identification of Oil & Grease and Petroleum Contaminated Soil:

An Environmental Professional (EP) will be on-site to determine if soils show evidence of the presence of NAPL during installation of utility trenches or other excavation activities completed during development. NAPL-contaminated soils can be identified by the presence of free oil. Free oil (NAPL) is liquid oil which could potentially be drained or otherwise extracted from the soil, and is the focus of this contingency plan, although severe staining accompanied by odors may be addressed via similar contingency measures provided herein (based on the judgement of the EP).

If NAPL is encountered during construction, potentially impacted material from the excavation will be removed and separated on plastic / covered with the same. Additional discussion of removal of material is in the **Soil Excavation, Staging, Sampling and Disposal** section below. If NAPL is encountered in an area where there is no known historical NAPL impact, the MDE will be notified (see **Initial Reporting** section) and the open excavation may be allowed to sit overnight. If after removal of the initial material identified additional NAPL impacted material enters the open excavation, the extent of impacts may be delineated and additional material removed / segregated. .

Soil Excavation, Staging, Sampling and Disposal:

The EP will monitor all utility trenching and excavation activities for signs of potential contamination. In particular, soils will be monitored with a hand-held photoionization detector (PID) for potential volatile organic compounds (VOCs) and will also be visually inspected for the presence of staining, petroleum waste materials, or other indications of NAPL contamination that may be different than what was already characterized.

Soil exhibiting physical evidence of NAPL contamination, which is located within a proposed new utility or subsurface structure (i.e., foundation, sump, electrical vault, underground tank, etc.), will

be excavated and segregated for disposal at the on-site nonhazardous landfill (Greys Landfill) or an off-site facility pending the completion of required analytical testing. If NAPL material continues to enter the open excavation, additional excavation may be continued in the field based on visual screening supplemented by the PID.

Any recovered NAPL impacted material will be segregated and collected for disposal. As required for disposal, samples impacted by NAPL will be collected for profiling/waste characterization and submitted to a fixed laboratory. Upon receipt of any additional characterization analytical results, the stockpiles will be tracked from generation to disposal.

Initial Reporting:

If evidence of NAPL in soil or groundwater is encountered during excavation in an area with no known historic NAPL impact, it will be reported to the MDE. Information regarding the location and characteristics of NAPL contaminated material will be documented as follows:

- Location (Site / Parcel ID with map);
- Approximate extent of contamination (horizontally and vertically – prepare a sketch including dimensions);
- Relative degree of contamination (i.e. free oil with strong odor vs. staining); and
- Visual documentation (take photographs and complete a photograph log)

Utility Installations in Impacted Areas:

Underground piping or conduits installed through areas of known NAPL contamination shall be leak proof and water tight. All joints will be adequately sealed or gasketed, and pipes or conduits will be properly bedded and placed to prevent leakage. Trench backfill will meet the MDE definition of clean fill, or be otherwise approved by the MDE. Bedding must be properly placed and compacted below the haunches of the pipe. Clay, flowable fill, or concrete plugs may be placed every 100 feet across any permeable bedding to minimize the preferential flow and concentration of water along the bedding of such utilities.

If required, each trench plug will be constructed with a 2-foot-thick clay plug or 1-foot-thick flowable fill or concrete plug, perpendicular to the pipe, which extends at least 1 foot in all directions beyond the permeable pipe bedding. The plug acts as an anti-seep collar, and will extend above the top of the pipe. A specification drawing for installation of the trench plug has been provided as **Figure 1**.

GENERAL NOTES:

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

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

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

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

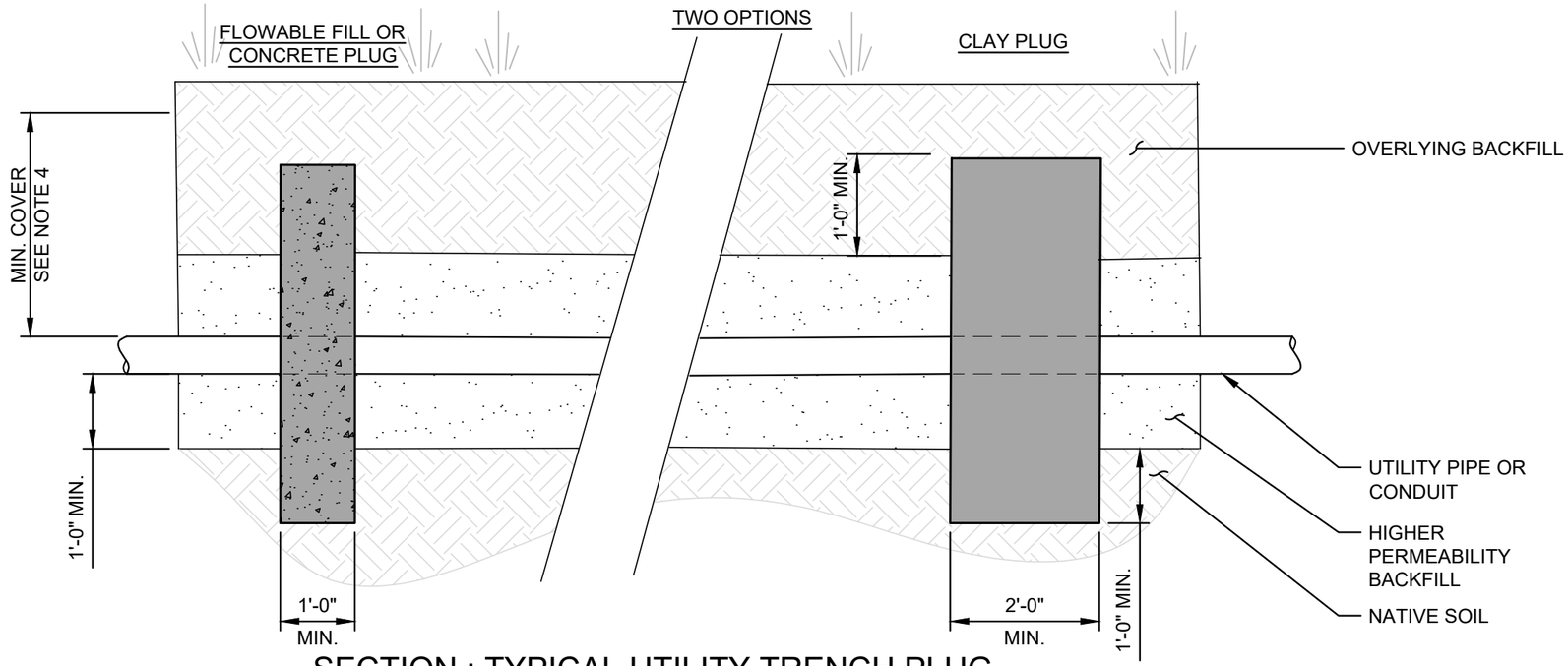
5. TRENCHES SHALL BE BACKFILLED WITH BEDDING AND MATERIALS APPROVED BY MDE.

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

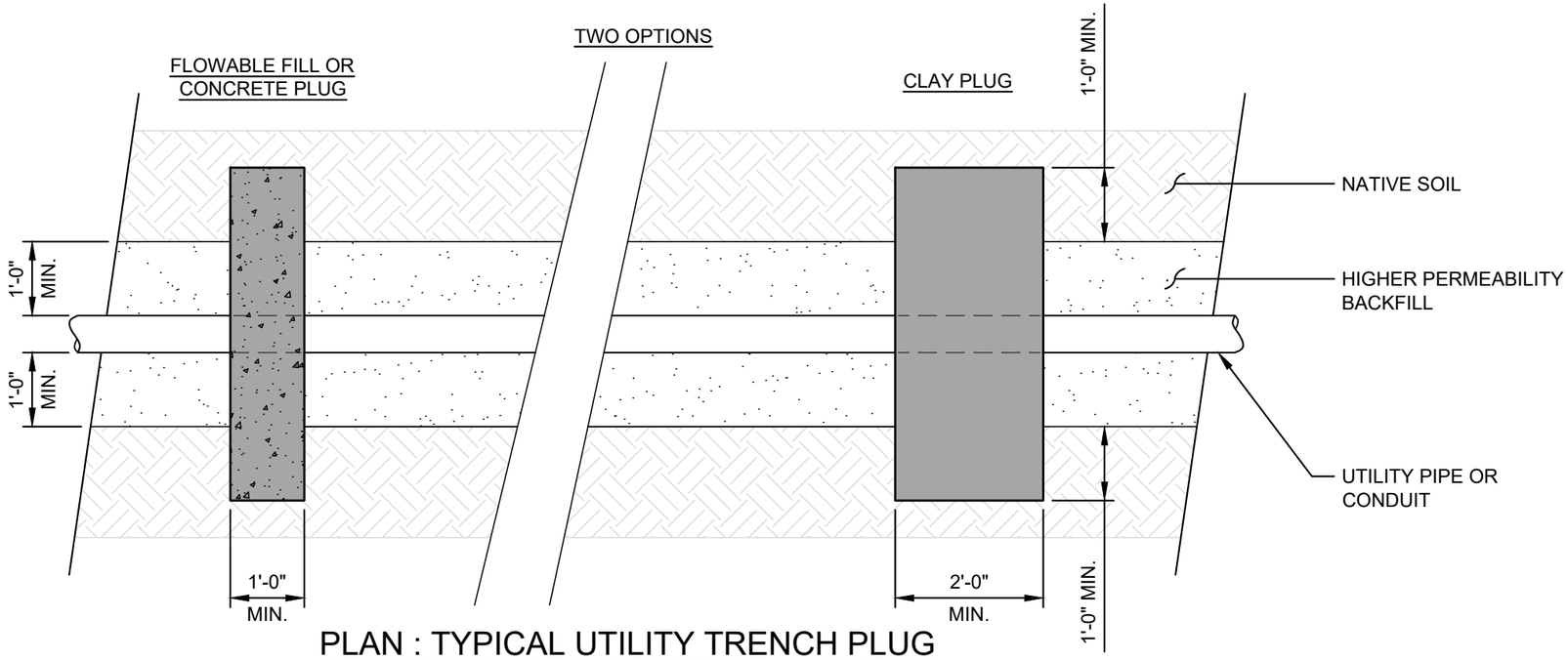
7. ALL UTILITIES INSTALLED THROUGH AREAS CONTAINING NAPL OR ELEVATED CHEMICAL IMPACTS WITH THE POTENTIAL TO TRANSMIT VAPORS ALONG PREFERENTIAL FLOW PATHWAYS SHALL BE EITHER 1) BACKFILLED WITH LOW PERMEABILITY BACKFILL MATERIAL (LESS THAN OR EQUAL TO THE PERMEABILITY OF THE EXISTING SUBGRADE), OR 2) INSTALLED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

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

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



SECTION : TYPICAL UTILITY TRENCH PLUG



PLAN : TYPICAL UTILITY TRENCH PLUG

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ARM Group LLC
Engineers and Scientists

UTILITY TRENCH PLUG
Sparrows Point Site
Tradepoint Atlantic

September 2020	Figure
Not to Scale	1
160443M	

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