

Ford Motor Company

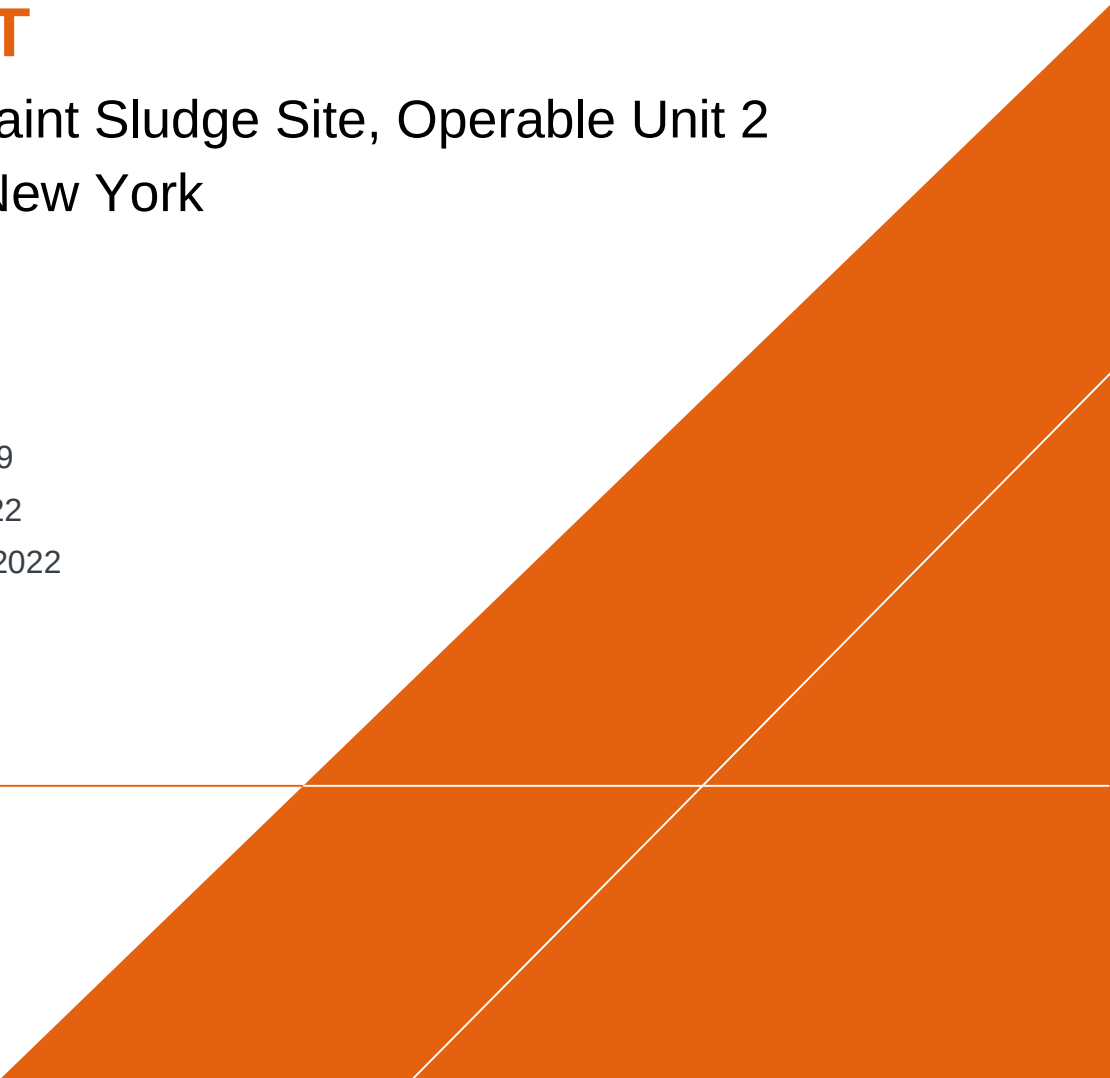
CONSTRUCTION COMPLETION REPORT

Ramapo Paint Sludge Site, Operable Unit 2
Ramapo, New York

Original: April 2019

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A large, solid orange geometric shape, resembling a stylized triangle or a section of a larger triangle, is positioned in the bottom right corner of the page. It is composed of two overlapping triangles, creating a complex, angular form that extends from the bottom edge towards the top right corner.



James McLaughlin
Project Manager



Krista Hankins Mastrocola, NY P.E. 092498
Senior Project Engineer

CONSTRUCTION COMPLETION REPORT

Ramapo Paint Sludge Site, Operable
Unit 2, Ramapo, New York

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CERTIFICATIONS

These authorizations are signed as required by the NYSDEC. Documentation authorizing signature on behalf of the Town of Ramapo is provided in **Appendix A**.

- *I, Krista Hankins Mastrocola, am currently a registered professional engineer licensed by the State of New York, I had primary direct responsibility for implementation of the remedial program activities, and I certify that the Remedial Design was implemented and that all construction activities were completed in substantial conformance with the Department-approved Remedial Design.*
- *I certify that all documents generated in support of this report have been submitted in accordance with the DER's electronic submission protocols and have been accepted by the Department.*
- *I certify that all data generated in support of this report have been submitted in accordance with the Department's electronic data deliverable and have been accepted by the Department.*
- *I certify that all use restrictions, Institutional Controls, Engineering Controls, and/or any operation and maintenance requirements applicable to the Site are contained in an environmental easement created and recorded pursuant ECL 71-3605 and that all affected local governments, as defined in ECL 71-3603, have been notified that such easement has been recorded.*
- *I certify that a Site Management Plan will be submitted for the continual and proper operation, maintenance, and monitoring of all Engineering Controls employed at the Site, including the proper maintenance of all remaining monitoring wells.*
- *I certify that all information and statements in this certification form are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law. I, Krista Hankins Mastrocola, of Arcadis, 44 South Broadway - 12th Floor, White Plains, New York 10601, am certifying as Owner's Designated Site Representative; and, I have been authorized and designated by all site owners to sign this certification for the site.*



A handwritten signature in black ink that reads "Krista Hankins Mastrocola".

Krista Hankins Mastrocola, NY P.E. 092498
Senior Project Engineer

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VERSION CONTROL

Issue	Date Issued	Description	Reviewed by
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ACRONYMS AND ABBREVIATIONS

Accutest	Accutest Laboratories Inc.
Arcadis	Arcadis of New York, P.C.
ASGECI	Amy S. Greene Environmental Consultants, Inc.
Bgs	below ground surface
Borbas	Borbas Surveying and Mapping LLC.
CAMP	Community Air Monitoring Program
CCR	Construction Completion Report
CLP	contract laboratory program
ConEdison	Consolidated Edison
DER-10	Technical Guidance for Site Investigation and Remediation
DGA	dense graded aggregate
DRO	diesel range organics
EDD	electronic data deliverable
Ford	Ford Motor Company
Gpm	gallons per minute
GW	Groundwater
KT Wildlife	KT Wildlife Inc.
mg/kg	milligram per kilogram
MSA	material staging area
NYSDEC	New York State Department of Conservation
OC/AS	Order on Consent/Administrative Settlement
OU-2	Operable Unit 2
PAHs	polyaromatic hydrocarbons
PCBs	polychlorinated biphenyl
PID	photoionization detector
O&R	Orange & Rockland
QA/QC	quality assurance/quality control
RA	remedial action
RAO	remedial action objective
RD	remedial design
RDI	remedial design investigation
ROD	record of decision
SCO	soil cleanup objective

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SESC	soil erosion and sediment control
SMP	Site Management Plan
SVOCs	semi volatile organic compound
SWPPP	Stormwater Pollution Prevention Plan
TAL	total analyte list
TCLP	toxicity characteristic leaching procedure
the Site	OU-2 of the Ramapo Paint Sludge Site located in Ramapo, New York
TOGS	Technical and Operation Guidance Series
TOR	Town of Ramapo
ug/kg	micrograms per kilogram
USEPA	United States Environmental Protection Agency
Viasant	Viasant LLC.
VOCs	volatile organic compound
Wickes	Wickes/Arborist™
WWTP	wastewater treatment plant
XRF	x-ray fluorescence unit

1 INTRODUCTION

On behalf of Ford Motor Company (Ford), Arcadis of New York, Inc. (Arcadis) has prepared this Construction Completion Report (CCR) for the Remedial Action (RA) conducted at the Torne Valley Road Area designated as Operable Unit 2 (OU-2) of the Ramapo Paint Sludge Site located in the Town of Ramapo (TOR), Rockland County, New York (the Site, Figure 1). OU-2 is an approximately one-mile long, discontinuous parcel of land bounded by the Ramapo River, Torne Brook and Torne Valley Road (Figure 2).

1.1 Project Overview

Remedial activities performed at OU-2 included the targeted removal and disposal of paint sludge with embankment excavation. Open excavations were backfilled with imported clean fill materials and restored to match existing conditions to the extent practical. All work performed at the Site and the information provided herein was conducted in accordance with the following documents issued by the New York State Department of Environmental Conservation (NYSDEC):

- Order on Consent and Administrative Settlement (OC/AS) for the Site dated March 2006;
- Technical Guidance for Site Investigation and Remediation (DER-10) issued May 2, 2010; and,
- Record of Decision (ROD) for the Site dated March 2014.

1.2 Report Organization

This CCR documents the completed RA in accordance with the July 2015 Final Remedial Design (RD) approved by the NYSDEC on July 13, 2015 (Appendix A). The CCR is organized as follows:

- Section 2 presents the Background and Previous Investigatory Work;
- Section 3 presents the Remedial Action Objectives (RAOs);
- Section 4 presents the RA and associated Documentation;
- Section 5 presents the Field Changes;
- Section 6 presents the Institutional and Engineering Controls;
- Section 7 presents the Conclusion; and,
- Section 8 presents the References used in this report.

Data to supplement these sections is presented in the tables, figures and appendices attached.

2 SITE DESCRIPTION AND PREVIOUS INVESTIGATORY WORK

The Ramapo Paint Sludge Site consists of 3 separate areas within southern Rockland County, New York, where paint sludge was historically disposed.

- The North of Ramapo Well Field area designated as OU-1;
- The Torne Valley Road area designated as OU-2; and,
- The Camp Hill Road area designated as OU-3.

On March 23, 2005, representatives of the NYDEC and the Rockland County Department of Health visited the area to evaluate reports of paint sludge being present. The NYDEC subsequently issued an OC/AS to Ford, dated March 16, 2006, outlining requirements for the investigation and corrective actions of the operable units. Ford voluntarily agreed to initiate the investigative efforts. The NYSDEC issued the Record of Decision (ROD) for the site in March 2014.

2.1 Site Location and Access

The Torne Valley Road area is located in the Town of Ramapo, Rockland County, New York. The Site consists of approximately 16.1 acres of valley side and river flat areas, extending approximately one mile along the bottom of Torne Valley Road in a north/south direction. The majority of OU-2 (approximately 15.4 acres) is located west of Torne Valley Road (OU-2 North) with an additional area (approximately 0.7 acres) located east of Torne Valley Road (OU-2 South), approximately 3,800 feet from OU-2 North.

The Site is generally bound to the west by Torne Brook; to the north by a Consolidated-Edison (ConEdison) Sub Station; to the east by Torne Valley Road; and to the south by Torne Brook and a wooded area owned by the Town of Ramapo (Figure 2).

2.1.1 Town of Ramapo

OU-2, as formerly identified by the NYSDEC as Ramapo Land Company Site No. 3-44-015, is currently owned by the TOR. The TOR entered an access agreement with Ford on October 5, 2012 to complete the RA on Section 39.19: Block 1, Lot 2 and Lot 7.2 identified as OU-2 South and OU-2 North, respectively. In accordance with the access agreement, a restrictive covenant for the Site (File No. 2014-00010781) was recorded with the Rockland County Clerk by the TOR on April 24, 2014 to restrict the use of the Site to "Restricted Residential". The restrictive covenant included a detailed metes and bound description and survey for Section 39.19: Block 1, Lot 7.2 associated with OU-2 North (Appendix A).

Based on the restrictive covenant, Section 39.19: Block 1, Lot 7.2 (OU-2 North) was remediated to the NYSDEC Restricted Residential Use Soil Clean-up Objectives (SCOs) and institutional and engineering controls will be implemented as detailed in Section 7. Section 39.19: Block 1, Lot 2 (OU-2 South) was remediated to Unrestricted SCOs; therefore, no institutional or engineering controls are required.

2.1.2 Utility Easements

Orange and Rockland (O&R) transmission lines run approximately southwest to northeast along the western bank of Torne Brook, adjacent to the limit of OU-2 North (Figure 2). An easement extending from these transmission lines transects the northwest portion of OU-2 North. An abandoned utility easement consisting of abandoned utility poles with a downed cable runs in a southwest to northeast alignment along the eastern bank of Torne Brook toward the ConEdison Sub Station.

O&R approved tree felling activities at the utility easement through a no objection letter dated December 10, 2014 (Appendix A). In this letter, O&R noted that the remediation could not progress until the remediation contractor [Viasant LLC (Viasant)], located in Media, Pennsylvania] provided O&R with a Work Plan including equipment to be used for the project. The requested Work Plan was submitted to O&R on March 12, 2015 and approval was granted on July 27, 2015.

2.2 Previous Investigatory Work

Arcadis was retained by Ford in 2006 and initiated site investigations for the 3 operable units that included the review of historic aerial photographs, the performance of detailed field reconnaissance surveys and the collection of surface water, groundwater, sediment and soil samples.

The initial work was conducted from 2006 through 2007. Arcadis subsequently conducted subsurface soil investigations in 2009, 2012, and 2014 to further delineate the extent of paint sludge. The analytical data associated with these activities is included in Tables 1 through 5.

2.2.1 Waste Characterization of Paint Sludge

Five waste characterization samples (PS-OU2-TB, TP-01, WC-TS-01, WC-TS-02, WC-TS-03) were collected from OU-2 during the site characterization activities performed in September and October 2006. One sample (PS-OU2-TB) was composed of paint sludge collected from Torne Brook during site characterization activities. The remaining samples were composite samples taken of impacted soil and paint sludge collected from test pitting activities and stockpiles associated with construction of the Joseph T. St. Lawrence Community Center.

The results of the toxicity characteristic leaching procedure (TCLP) analysis indicated that the paint sludge was non-hazardous for all five waste characterization samples. A summary of the waste characterization results is provided in Table 1.

2.2.2 Surface Water and Sediment

Five sediment samples (SED-TB-01 through SED-TB-05) and five surface water samples (SW-TB-01 through SW-TB-05) were collected from Torne Brook during the investigation activities performed in the fall of 2006 (Figures 3 and 4). Two sediment samples (SED-TB-01 and SED-TB-04) were not analyzed due to the gravel and the coarse nature of the sample material.

Based on the sediment analytical results, one sample had detections above the NYSDEC Sediment Cleanup Criteria, Lowest Effect Level for constituents associated with paint sludge. Sediment sample, SED-

TB-02, had detections of arsenic, copper and lead (Table 2). Surface water had no impacts above the New York State Class B Groundwater Standards for constituents associated with paint sludge (Table 3).

2.2.3 Test Pits

Sixteen test pits (SWTP-01, SWTP-02, SWTP-02A, SWTP-02B, SWTP-02C, SWTP-02D, SWTP-03, SWTP-03A, SWTP-03B, SWTP-04, SWTP-05, SWTP-05A, SWTP-05B, SWTP-06, SWTP-07 and SWTP-15) were excavated within OU-2 North in the spring of 2007. The locations of the test pits and test pit logs are presented on Figure 3 and Appendix B.

Based on visual observations performed during the test pit activities, the paint sludge was found to be present in both continuous flows and intermingled with fill.

2.2.4 Groundwater

Groundwater samples were collected from 6 shallow monitoring wells (MW-OB4, MW-OB5, MW-OB6, MW-OS-1, MW-OS-2, MW-OS-4) located in OU-2 North during the investigation activities performed in the fall of 2007. Using low-flow sampling methods, the groundwater samples were analyzed for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs) and Target Analyte List (TAL) metal analyses. The groundwater results are provided in Table 4 and the groundwater contours are presented on Figure 4.

Based on the groundwater analytical results, it was determined that the site-related constituents are not impacting groundwater.

2.2.5 Supplemental Soil Investigation

In the spring of 2012, 54 soil samples were collected during a supplemental soil investigation. A surface and subsurface sample was collected within the upper 6 inches of the ground surface and from 18 to 24 inches below ground surface (bgs) in each soil boring, respectively. The intent of the supplemental soil investigation was to determine if further remediation was required in areas where paint sludge was not previously observed within the boundaries of OU-2.

Twenty soil borings (OU-2-SB1 through OU-2-SB20) were advanced around OU-2 North, and 7 soil borings (OU-2-SB21 through OU-2-SB27) were taken around OU-2 South. Soil sample results indicated that VOCs, SVOCs, pesticides, polychlorinated biphenyl (PCBs), and metals concentrations did not exceed the Restricted Residential SCOs for these sample locations (Figure 3 and Table 5).

2.3 Remedial Design Investigation

A remedial design investigation (RDI) was conducted in June 2014 to assist in the preparation of the remedial design for the selected remedy. The RDI was approved by the NYSDEC on June 6, 2014. As part of the RDI, Borbas Surveying and Mapping, LLC (Borbas), located in Boonton, New Jersey, with the assistance of Arcadis field staff, surveyed and staked the outer limits of the contaminated source areas as identified by the ROD. Additionally, Borbas surveyed the property boundary, utility easements, and other design concerns associated with the proposed RA.

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Following the site survey, Creamer Environmental, Inc. and Arcadis field staff, trained in the visual recognition of paint sludge, advanced a total of 56 test pits within the limits of OU-2 North from June 10 to June 17, 2014. Test pits were strategically positioned along the outer limits of nine contaminant source areas (Area A, Area B, Area C, Area D, Area E, Area G, Area H, Area I and Area J) within OU-2 North to confirm the horizontal and vertical limits of source areas.

Test pits were identified based on the area they were taken from within OU-2 North and numbered consecutively as such: TP-A1 through TP-A9; TP-B1 through TP-B9; TP-C1 through TP-C9; TP-D1 through TP-D4; TP-E1 through TP-E9; TP-G1 through TP-G4; TP-H1 through TP-H4; TP-I1 through TP-I4, and TP-J1 through TP-J3. No test pits were excavated along the limits of OU-2 South due to shallow bedrock and equipment access issues. The locations of the 2014 test pits and test pit logs are presented on Figure 3 and Appendix B, respectively.

3 REMEDIAL ACTION OBJECTIVES

No site-related groundwater or surface water contaminants of concern were identified during previous site investigations; therefore, the RA for OU-2 was associated with soil and sediment. The RAOs associated with the RA for soil and sediment include:

RAOs for Public Health Protection

- Prevent ingestions/direct contact with contaminated soil.
- Prevent inhalation of or exposure from contaminants volatilizing from contaminants in soils.

RAOs for Environmental Protection

- Prevent migration of contaminants that would result in groundwater or surface water contamination.

4 REMEDIAL ACTION CONSTRUCTION AND DOCUMENTATION

The RA was implemented from July 2015 through May 2016. Photographic documentation of the RA is provided as Appendix C. In general, the major milestones associated with the RA consisted of the following:

- Pre-Construction Activities;
- Site Preparation;
- Remedial Excavation;
- Material Handling and Waste Management;
- Excavation Backfill; and,
- Reporting.

4.1 Pre-Construction Activities

Prior to the start of excavation activities, various site preparation activities were performed at the Site. The site preparation activities are identified and discussed in the sections below.

4.1.1 Applicable Permits

The RA was performed in accordance with the ROD issued by the NYSDEC; therefore, Ford was exempt from several state permits. Prior to the initial mobilization, Arcadis on behalf of Ford, prepared permit packages or equivalences to meet the requirements of different permitting agencies. A general list of federal, state and local permits and the associated approvals are as follows (Appendix D):

- A Jurisdictional Determination, NWP38 and a Section 401 Water Quality Certification for physically disturbing the bed or banks of Torne Brook.

In addition, Arcadis submitted and obtained approval to complete work along Torne Valley Road in accordance with a Rockland County Road Right-of-Way permit.

4.1.2 Health and Safety

All activities on this project were performed in compliance with Arcadis' Health and Safety Standards, and the Occupational Safety and Health Administration's Hazardous Waste Operations, and Emergency Response regulation (29 CFR 1910.120). All work was conducted in accordance with the Site-Specific Health and Safety Plan (HASP) dated November 2014 which was provided to the NYSDEC as part of the Final RD.

4.1.3 Utility Clearance

Three lines of evidence were utilized to determine the presence of overhead and underground utilities. The New York State One Call was notified of the planned activities, a geophysical survey of the work zone limits was conducted, and historic figures associated with the Site were reviewed prior to commencement of the work. Utilities are depicted on Figure 2. There were no utility strikes during the work.

4.1.4 Felling of Trees

The cutting of trees was initiated at OU-2 North in January 2015 under a separate scope of work. Trees within the 100-year flood plain and OU-2 South were not cleared during that time and they were incorporated later into the RA work. Wickes/Arborist™ (Wickes) was contracted to complete the tree felling activities within the uplands area of OU-2 North, prior to mobilization of the remediation contractor (Viasant).

Prior to any felling of trees, Wickes installed straw waddle around the limit of disturbance to delineate the area of vegetation to be cleared and prevent the migration of soil and sediment from stormwater runoff. Following the clearing activities, the felled trees were left on-site for chipping/sizing by Viasant prior to on-site reuse and/or off-site disposal, as approved by the NYSDEC and Ford.

4.2 Site Preparation and Monitoring

Viasant mobilized to the Site in July 2015, following the receipt of an approved Final RD from the NYSDEC. In addition to Viasant, Ford retained the services of KT Wildlife Inc. (KT Wildlife) and Amy S. Greene Environmental Consultants Inc. (ASGECI) at the Site to mitigate hazards to threatened and endangered species and restore vegetation, respectively.

4.2.1 Erosion and Sediment Controls

Soil erosion and sediment control (SESC) work was completed in accordance with NYSDEC SPDES General Permit for Stormwater Discharges from Construction Activity (Permit No. GP-0-15-002) and the New York State Erosion and Sediment Controls standards since the area of disturbance was greater than 5,000 square feet. Prior to any land disturbance, SESCOs were implemented in accordance with the site-specific Stormwater Pollution Prevention Plan (SWPPP). The following SESCOs were implemented in accordance with the SWPPP:

- Orange construction fence was installed to establish tree protection limits and protect vegetation outside of the limits of excavation.
- Straw waddle was installed to prevent sediment migration from stormwater runoff.
- Stabilized construction entrances were installed to control construction traffic and site security.
- Material staging area (MSA) was established for stockpiling of paint sludge and impacted soil for waste characterization prior to off-site disposal.

- Decontamination pads were established for vehicle and equipment decontamination prior to leaving the Site.
- Dust suppression was completed using a water truck along access roads and within work zones.
- A sandbag dam was installed within Torne Brook to redirect the brook during excavation of the embankment and preventing contaminants from being in contact with surface water.

Weekly inspections of the SESCOs were conducted around the Site and any issues that arose throughout the duration of the project were documented. Areas needing repairs were assessed and promptly repaired by Viasant. Following stabilization of approximately 80% of the surface area through vegetation, the SESCOs were removed by Viasant in May 2016.

4.2.2 Mitigation Measures

OU-2 is considered a NYSDEC designated sensitive area for the state-listed endangered species, Timber rattlesnake. As a precaution, Viasant installed a snake barrier around the Site perimeter and limit of disturbance in OU-2 North. Snake barrier was not required in OU-2 South as the scope of work was performed between November 1 and March 31 (dormant period).

The snake barrier was approximately 48 inches high and consisted of a quarter-inch square wire mesh anchored into the ground with reinforcement bards placed approximately 6 feet apart. The temporary barrier was anchored into the ground at least 6 inches. Prior to installation of the snake barrier, KT Wildlife had a full-time snake monitor on-site to ensure the safety of the rattlesnake and the proper installation of the snake barrier. KT Wildlife was then retained for the remainder of the project on an as needed basis when a rattlesnake was identified on-Site. KT Wildlife was notified for a single snake encounter where a rattle snake was identified on the outside perimeter of the snake barrier. Upon encountering the rattlesnake, Viasant and Arcadis stopped work within the area where the snake was encountered and followed the steps outlined in the Threatened and Endangered Species Mitigation Plan submitted under the NYSDEC approved Final RD.

4.2.3 Clearing and Grubbing

Many fallen trees were chipped, mulched, and grinded. The material was then used for sub-base within the MSA and beneath the access roads. Select trees were staged around the perimeter of the Site to be randomly scattered throughout OU-2 during Site restoration. All stumps and root balls were staged within the MSA for checking for visible paint sludge before being mulched and grinded for off-site disposal.

Trees within the 100-year flood plain and OU-2 South were not cleared during January 2015 tree felling work, as directed by the NYSDEC in a letter dated October 17, 2014 (Appendix A). Tree cutting within these footprints were implemented during the RA and was limited to those trees requiring removal to perform the required work.

4.2.4 Breaking and Relocation of Boulders

A portion of OU-2 North contained isolated boulders as large as 12 feet in diameter. To facilitate the RD, Viasant excavated around these boulders to the extent feasible. Boulders that were buried below grade were left in place, and the RA was implemented around the boulders, unless paint sludge and impacted material was observed to extend beneath these boulders.

Boulders known or observed to have paint sludge and impacted soil beneath, were relocated to the MSA. Boulders that were unable to be relocated by mechanical means (greater than 5-foot diameter) were split by utilizing a hammer attachment mounted to heavy equipment before relocation.

Following decontamination, boulders meeting the visual inspection requirements for on-site reuse were staged for restoration. Boulder debris not meeting the visual inspection requirements were re-sized, staged in a specific bin within the MSA, and comingled with soil for off-site disposal. Boulders deemed clean via visual inspection were strategically placed during site restoration to stabilize the toe of the streambank (as necessary) and re-establish ecological habitat.

4.3 Remedial Excavation

Viasant utilized traditional construction equipment to excavate and remove paint sludge and impacted soil to the horizontal and vertical limits of excavation as defined by the ROD and confirmed in the field by Arcadis (Figures 5 through 10). All visible paint sludge and surficial soils were excavated to the applicable NYSDEC SCOs (Table 6).

4.3.1 OU-2 North

Excavation of OU-2 North included all visible paint sludge and surficial soils exceeding the more stringent of the Restricted Residential SCOs and Protection of Groundwater SCOs (Figure 5 through 8). Soil containing paint sludge, in addition to soils from zero to 2 feet bgs were excavated in all areas and transported to the MSA prior to off-site transportation and disposal. Following the 2-foot cut, excavation continued where paint sludge and soil containing paint sludge was identified. The limits of excavation completed in OU-2 North as part of this generated the following volumes of paint sludge and impacted soil:

- Area A – 46,886 square feet to a maximum depth of 9 feet bgs resulting in 6,100 cubic yards.
- Area B – 33,836 square feet to a maximum depth of 3 feet bgs resulting in 3,294 cubic yards.
- Area C – 56,355 square feet to a maximum depth of 8 feet bgs resulting in 6,124 cubic yards.
- Area D – 49,763 square feet to a maximum depth of 5 feet bgs resulting in 6,305 cubic yards.
- Area E – 63,717 square feet to a maximum depth of 12 feet bgs resulting in 9,146 cubic yards.
- Area G – 5,474 square feet to a maximum depth of 8 feet bgs resulting in 865 cubic yards.
- Area H – 10,093 square feet to a maximum depth of 8 feet bgs resulting in 1,245 cubic yards.

- Area I – 3,906 square feet to a maximum depth of 2 feet bgs resulting in 282 cubic yards.
- Area J – 8,296 square feet to a maximum depth of 2 feet bgs resulting in 630 cubic yards.

A portion of Area D requiring excavation was located within the 100-year floodplain and streambank, hereafter referred to as the Area D Embankment. Excavation within the Area D Embankment was subject to the NYSDEC's Sediment Standards, Criteria and Guidance, and the remaining footprint within the 100-year floodplain was subject to the lower of the Restricted Residential SCOs or the Protection of Ecological Resource SCOs (Figure 5).

During implementation of the RA within Area D Embankment, trees were protected to the furthest extent possible and all efforts were made to minimize disturbance. An impoundment structure (i.e., DamBag System) was constructed in Torne Brook, approximately 5 feet from the toe of the slope. The impoundment structure was installed parallel to the embankment and designed to keep the paint sludge and impacted soil from falling into Torne Brook and to prevent water from entering the open cut impeding excavation activities. The impoundment structure temporarily enclosed approximately 1,250 square feet from the streambed associated with Torne Brook.

4.3.1.1 Areas K, L and M – Excavation within the 100-Year Floodplain

Paint sludge previously identified within the 100-year floodplain was removed to the extent feasible during Site Characterization conducted in September 2006. Based on observations made during the Site Characterization and mobilization for this phase of work, Arcadis prepared a Final RD Addendum for Reconnaissance, Investigation and Remedial Action of Areas K, L and M (Final RD Addendum) dated September 18, 2015 to further investigate Areas K, L and M to determine if excavation was required. The Final RD Addendum was approved by the NYSDEC on October 16, 2015.

Following approval of the Final RD Addendum, Arcadis completed a visual reconnaissance of Areas K, L and M and collected additional soil samples to confirm a 2-foot clean cap. Results of soil sampling are provided in Table 7.

The data associated with Table 7 was submitted through the NYSDEC's electronic data deliverable (EDD) system for recordkeeping purposes on July 26, 2022 and accepted on August 17, 2022. A copy of the transmittal is included in Appendix A.

Based on the findings, Arcadis submitted a Final RD Addendum Report documenting the absence of paint sludge and no exceedances of the Restricted Residential SCOs and Protection of Groundwater SCOs within the 2-foot clean cap; therefore, no further action for these areas was warranted. These details were outlined within a Final RD Addendum Report which was approved by the NYSDEC on December 1, 2015 (Appendix A).

4.3.2 OU-2 South

Excavation of OU-2 South, designated as Area F, included all visible paint sludge and surficial soil exceeding Unrestricted Use SCOs (Figures 9 and 10). Excavation continued until bedrock was encountered. Paint sludge and impacted soil were excavated within a 4,349-square foot area to a maximum

depth of 3 feet bgs with a generated volume of 347 cubic yards. The excavated material was direct loaded into department of transportation-approved triaxle trucks for off-site transportation and disposal.

4.3.3 Material Staging Area

In addition to excavation of the removal areas, a surface scrape to a depth of 1-foot bgs was completed within the MSA footprint upon completion of the RA (Figure 6). Excavated material was pre-characterized and direct loaded for off-site disposal. The total volume of material excavated was 1,310 cubic yards over a 26,567-square foot area.

4.3.4 Off-Site Deposits

During preparation and implementation of the RA, paint sludge was observed outside of the established site boundaries.

4.3.4.1 Torne Valley Road – Area A

During the implementation of the RD, paint sludge within Area A was observed to extend beneath Torne Valley Road. Paint sludge was excavated and removed to the extent possible, as not to affect the structural stability of the Torne Valley Road.

The observed paint sludge remaining beneath the Torne Valley Road in Area A was visually delineated to the extent feasible for future reference (Figure 11). The paint sludge is an approximate 0.5-foot-thick deposit located approximately 1 to 2-foot bgs. Results of post-excavation samples collected associated with the paint sludge deposit are discussed in Section 4.5.1.1.1.

The impermeable asphalt pavement along Torne Valley Road presents an engineering control to prevent direct contact with the remaining paint sludge and impacted soil; therefore, the remaining paint sludge under the road does not pose a significant risk to human health or the environment.

4.3.4.2 Torne Valley Road - Area E

During the implementation of the RD, paint sludge within Area E was observed to extend deeper than an existing on-site utility pole and catch basin and extend beneath Torne Valley Road. Paint sludge was excavated and removed to the extent possible, as not to affect the structural stability of the utility pole and catch basin as well as Torne Valley Road.

The observed paint sludge adjacent to the catch basin was delineated to the extent practical for future reference. The paint sludge thickness is unknown; however, it starts at a depth of approximately 11 feet bgs as presented on Figure 12. Results of samples collected at or adjacent to this location are discussed in Section 4.5.1.5.1.

The observed paint sludge beneath the Torne Valley Road in Area E was visually delineated to the extent feasible for future reference (Figure 12). The paint sludge deposit varies in thickness with a minimum thickness of 0.5-foot wide approximately 1-ft bgs at the northern end (near PE-E-S6) expanding to an unknown thickness starting at approximately 5-ft bgs on the southern end (near PE-E-S5). Results of post-excavation samples collected within the vicinity of the paint sludge are discussed in Section 4.5.1.5.1.

The 2-foot soil cap within Area E and impermeable asphalt pavement along Torne Valley Road present an engineering control to prevent direct contact with the remaining paint sludge. Furthermore, a demarcation layer was installed along the sidewall and base within these locations to denote the location of remaining impacts (Figure 12). Thus, the remaining paint sludge at depth located adjacent to the utility pole and catch basin and the remaining paint sludge under the road do not pose a significant risk to human health or the environment.

4.3.4.3 Orange & Rockland Substation

Prior to mobilizing to the Site for the performance of the RA work, surficial paint sludge was observed on a parcel of land located north of OU-2 North and owned and operated by O&R as a ConEdison substation. To meet the requirements of the ROD, a RD Addendum for Off-Site Deposits of Paint Sludge (RD Addendum No. 1) was prepared on October 15, 2015 to delineate and remediate the off-site paint sludge deposits on the ConEdison property and was approved by the NYSDEC on December 28, 2015 (Appendix A). Completion of the remediation work and any additional scope associated with the O&R Substation will be reported under a separate cover.

4.4 Air Monitoring

A Community Air Monitoring Plan (CAMP) was used to ensure that the public working or recreating near the Site were protected from exposure to site impacts during the implementation of the RA. In general, air monitors were setup in accordance with the CAMP dated February 2015 and the Site-Specific HASP, which were approved by the NYSDEC as part of the Final RD. Air monitoring included real-time monitoring within the work area for particulates and total VOCs using photoionization detectors (PIDs) and a particulate monitor and continuous monitoring at stationary locations along the Site perimeter using PIDs and particulate monitors.

Excavation and material handling/stockpiling activities ceased and corrective actions were implemented when VOCs and/or levels of particulates exceeded the action levels identified within the CAMP (5 ppm and/or 100 $\mu\text{g}/\text{m}^3$, sustained for 5 minutes). The corrective actions included temporarily backfilling the excavation with cover materials or applying long duration odor suppression agent to cover impacted soils, as necessary. The long duration odor suppression agent was a water-soluble, non-toxic, non-reactive, and non-volatile foam applied in accordance with the manufacturer's specifications. All air monitoring records and mitigation actions were documented in the weekly CAMP Reports (Appendix E).

4.5 Confirmatory Soil Sampling

Post-excavation confirmatory soil samples were collected following the completion of paint sludge and impacted soil removal activities to assure that all paint sludge and impacted soils had been removed. Post-excavation confirmatory soil samples were collected in accordance with the DER-10.

To confirm that Viasant completed the removal of paint sludge and impacted soil, Arcadis used visual identification of paint sludge (or the lack thereof) in conjunction with the use of a field X-ray Fluorescence (XRF) unit to assess the concentrations of total metals within the base of the excavation. Metals of concern included lead and copper. These metals were targeted as potential indicator metals for the presence of paint sludge. Following visual identification and use of the field XRF, post-excavation samples were

collected at the frequency of 1 sample for every 50 linear feet of sidewall and 1 sample from every 1,000 square feet of excavation floor.

Post-excavation confirmatory samples were analyzed for VOCs using United States Environmental Protection Agency (USEPA) SW-846, Method 8260B, SVOCs using USEPA SW-846, Method 8270C, PCBs using USEPA SW-846, Method 8082, and TAL metals using USEPA SW-846, Methods 6010 and 7471 (Tables 8 through 18). All samples were submitted to Accutest Laboratories Inc. (Accutest), a USEPA accredited laboratory, pursuant to the New York State Department of Health Environmental Laboratory Accreditation Program for the category of parameters analyzed.

4.5.1 OU-2 North

Post-excavation sample results for OU-2 North were compared to Restricted-Residential SCOs for samples taken from zero to 2 feet below ground surface and Protection of Groundwater SCOs for samples greater than 2 feet below ground surface. Post-excavation sample locations for OU-2 North are presented on Figures 5 and 6 and the analytical results are presented in Tables 8 through 16.

The data associated with Tables 8 through 18 was submitted through the NYSDEC's EDD system for recordkeeping purposes on July 26, 2022 and accepted on August 17, 2022. A copy of the transmittal is included in Appendix A.

4.5.1.1 Area A

A total of 49 base and 19 sidewall soil samples were collected from Area A. One sidewall sample (PE-A-S6(1.0-1.5)) was restricted based on the proximity to Torne Valley Road (refer to Section 4.3.4.1). Results associated with this sample and subsequent delineation samples are presented in Section 4.5.1.1.1.

The analytical results associated with the remainder of the base and sidewall samples for Area A indicated that PCBs and TAL Metals were below the Restricted-Residential SCOs and Protection of Groundwater SCOs (Table 8). The analytical results also indicated that VOCs and SVOCs were below the Restricted-Residential SCOs and Protection of Groundwater SCOs, with the exception of the following samples that were left in place:

- Acetone was detected in 4 samples (PE-A-S5 (1.0-1.5), PE-A-S11 (3.5-4.0), PE-A-C2 (2.0-2.5) and PE-A-E2 (9.0-9.5)) ranging from 53 to 131 micrograms per kilogram ($\mu\text{g}/\text{kg}$), in excess of the Protection of Groundwater SCO of 50 $\mu\text{g}/\text{kg}$.
- Benzo(a)anthracene was detected in PE-A-S12A (1.0-1.5) at 2,160 ug/kg , exceeding the Restricted Residential and Protection of Groundwater SCO of 1,000 ug/kg .
- Benzo(a)pyrene was detected in PE-A-S12A (1.0-1.5) at 2,230 ug/kg , exceeding the Restricted Residential SCO of 1,000 ug/kg .
- Benzo(b)fluoranthene was detected in PE-A-S12A (1.0-1.5) at 2,410 ug/kg , exceeding the Restricted Residential and Protection of Groundwater SCO of 1,000 ug/kg .

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- Chrysene was detected in PE-A-S12A (1.0-1.5) at 2,520 ug/kg, exceeding the Protection of Groundwater SCO of 1,000 ug/kg.
- Dibenzo(a,h)anthracene was detected in PE-A-S12A (1.0-1.5) at 356 ug/kg, exceeding the Restricted Residential SCO of 330 ug/kg.
- Indeno(1,2,3,-cd)pyrene was detected in PE-A-S12A (1.0-1.5) at 1,640 ug/kg, exceeding the Restricted Residential SCO of 500 ug/kg.

Acetone is a constituent of concern for the Site and was detected above the most stringent SCO for Area A (Protection of Groundwater). Due to the strict Protection of Groundwater SCO, Arcadis requested a variance for meeting the Protection of Groundwater SCO for these samples as the concentrations were significantly lower than the Restricted Residential SCO. The NYSDEC approved of this request and allowed the commencement of backfill on November 6, 2015.

Polyaromatic hydrocarbons (PAHs) were identified in PE-A-S12A (1.0-1.5) above the most stringent SCOs for Area A. At this time, excavation cannot extend any further to the south due to the concrete slab associated with a building. As PAHs are not a known constituent of concern for the Site, Arcadis requested approval to allow these exceedances to remain in place. The NYSDEC approved the request on February 2, 2016.

4.5.1.1.1 Torne Valley Road – Area A

Two sidewall soil samples were collected from Area A based on the limits of paint sludge observed to be extending beneath Torne Valley Road (Figure 11 and Table 9). Analytical results for these samples indicated that PCBs and SVOCs were below the Restricted-Residential SCOs and Protection of Groundwater SCOs. The analytical results also indicated that VOCs and TAL Metals were below the Restricted-Residential SCOs and Protection of Groundwater SCOs, with the exception of the following that was left in place:

- Ethylbenzene was detected in PE-A-S6 (1.0-1.5) at 5,090 ug/kg, exceeding the Protection of Groundwater SCO of 1,000 ug/kg.
- Total Xylenes was detected in PE-A-S6 (1.0-1.5) at 35,100 ug/kg, exceeding the Protection of Groundwater SCO of 1,600 ug/kg.
- Barium was detected in PE-A-S6 (1.0-1.5) at 2,780 milligrams per kilogram (mg/kg), exceeding the Restricted-Residential SCO of 400 mg/kg.
- Lead was detected in PE-A-S6 (1.0-1.5) at 1,030 mg/kg, exceeding the Restricted-Residential SCO of 400 mg/kg.

Further excavation of paint sludge and soil at PE-A-S6 (1.0-1.5) was restricted by the proximity to Torne Valley Road.

4.5.1.2 Area B

A total of 33 base and 19 sidewall samples were collected from Area B (Table 10). The analytical results of the soil samples collected from Area B indicated that VOCs, SVOCs, PCBs and TAL metals were below the laboratory reported detection limits or below the Restricted-Residential SCOs and Protection of Groundwater SCOs.

4.5.1.3 Area C

A total of 54 base and 20 sidewall samples were collected from Area C (Table 11). The analytical results of the soil samples collected from Area C indicated that VOCs, SVOCs, PCBs and TAL metals were below the laboratory reported detection limits or below the Restricted-Residential SCOs and Protection of Groundwater SCOs.

4.5.1.4 Area D

A total of 52 base and 20 sidewall samples were collected from Area D (Table 12). The analytical results of the soil samples collected from Area D indicated that SVOCs, PCBs and TAL metals were below the laboratory reported detection limits or below the Restricted-Residential SCOs and Protection of Ecological Resource SCOs. The analytical results of the soil samples collected from Area D indicated that VOCs were below the Restricted-Residential SCOs and Protection of Ecological Resource SCOs, with the exception of the following that were left in place:

- Acetone was detected in 18 samples (PE-D-B2 (2.0-2.5), PE-D-B3 (2.0-2.5), PE-D-C1 (2.0-2.5), PE-D-C2 (2.0-2.5), PE-D-C3 (2.0-2.5), PE-D-D4 (2.0-2.5), PE-D-D6 (2.0-2.5), PE-D-D6(2.0-2.5), PE-D-E6 (2.0-2.5), PE-D-F8 (2.0-2.5), PE-D-G4 (2.0-2.5), PE-D-G5 (2.0-2.5), PE-D-G8 (2.0-2.5), PE-D-G9 (2.0-2.5), PE-D-G10 (2.0-2.5), PE-D-H9 (2.0-2.5) and PE-D-H10 (2.0-2.5), PE-D-S4 (1.5-2.0), and PE-D-S4(1.5-2.0)) ranging from 53.8 to 736 µg/kg, in excess of the Protection of Groundwater SCO of 50 µg/kg.

Acetone is a constituent of concern for the Site and was detected above the most stringent SCO for Area D (Protection of Groundwater). Due to the strict Protection of Groundwater SCO, Arcadis requested a variance for meeting the Protection of Groundwater SCO for these samples as the concentrations were significantly lower than the Restricted Residential SCO. NYSDEC approved of this request and allowed the commencement of backfill on January 21, 2016.

4.5.1.5 Area E

A total of 64 base and 19 sidewall samples were collected from Area E. One base sample (PE-E-F4(11.0-11.5)) and three sidewall samples (PE-E-S6 (1.5-2.0), PE-E-S4 (6.0-6.5), and PE-E-S5 (5.0-5.5)) were restricted based on the proximity to a utility pole and Torne Valley Road (refer to Section 4.3.4.2). Results associated with these samples are presented in Section 4.5.1.5.1.

The analytical results of the soil samples associated with the remainder of the base and sidewall samples collected from Area E indicated that SVOCs and PCBs were below the laboratory reported detection limits or below the Restricted-Residential SCOs and Protection of Groundwater SCOs (Table 13). Analytical results of the soil samples collected from Area E indicated that VOCs and TAL metals were below the

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Restricted-Residential SCOs and Protection of Groundwater SCOs, with the exception of the following samples that were left in place:

- Acetone was detected in 8 samples (PE-E-B3 (4.0-4.5), PE-E-C6 (2.0-2.5), PE-E-C7 (2.0-2.5), PE-E-D3 (5.0-5.5), PE-E-D9 (2.0-2.5), PE-E-F4 (11.0-11.5), PE-E-F8 (2.0-2.5) and PE-E-F10 (2.0-2.5)) ranging from 51 to 950 µg/kg, in excess of the Protection of Groundwater SCO of 50 µg/kg.
- 2-butanone (MEK) were detected in 2 samples (PE-E-D9 (2.0-2.5) and PE-E-F10 (2.0-2.5)) concentrations ranging from 149 to 176 µg/kg, exceeding the Protection of Groundwater SCO of 120 µg/kg.
- Copper was detected in PE-E-C6 (2.0-2.5) at a concentration of 506 mg/kg, exceeding the Restricted-Residential SCO of 270 mg/kg.
- Manganese was detected in PE-E-E8 (2.0-2.5) at a concentration of 2,220 mg/kg, exceeding the Restricted-Residential SCO and Protection of Groundwater SCO of 2,000 mg/kg.

Acetone is a constituent of concern for the Site and was detected above the most stringent SCOs for Area E (Protection of Groundwater). Due to the strict Protection of Groundwater SCO, Arcadis requested a variance for meeting the Protection of Groundwater SCO for these samples as the concentrations were significantly lower than the Restricted Residential SCO. The NYSDEC approved of this request and allowed the commencement of backfill on March 21, 2016 and April 22, 2016.

Copper and manganese were detected above the most stringent SCOs; however, these are not constituents of concern for the Site and are below the 2-foot soil cap; therefore, Arcadis requested that the NYSDEC allow the exceedances in Area E to remain in place. The NYSDEC approved of this request on April 22 and 25, 2016.

4.5.1.5.1 Area E – Torne Valley Road

One base sample and three sidewall samples were collected from Area E where paint sludge was observed at depth adjacent to the utility pole and catch basin and where paint sludge was observed to be extending beneath Torne Valley Road (Figure 12 and Table 14). Analytical results for these samples indicated that PCBs and SVOCs were below the Restricted-Residential SCOs and Protection of Groundwater SCOs. The analytical results also indicated that VOCs and TAL Metals were below the Restricted-Residential SCOs and Protection of Groundwater SCOs, with the exception of the following that were left in place:

- Ethylbenzene was detected in 3 samples (PE-E-S4 (6.0-6.5), SE-E-S5 (5.0-5.5) and PE-E-F4 (11.0-11.5)) ranging from 3,540 to 23,900 ug/kg, exceeding the Protection of Groundwater SCO of 1,000 ug/kg.
- Toluene was detected in PE-E-S4 (6.0-6.5) at 8,710 µg/kg, exceeding the Protection of Groundwater SCO of 700 µg/kg.

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- Total Xylenes were detected in 3 samples (PE-E-S4 (6.0-6.5), SE-E-S5 (5.0-5.5) and PE-E-F4 (11.0-11.5)) ranging from 26,300 to 117,000 mg/kg, exceeding the Restricted Residential SCO of 100,000 ug/kg and Protection of Groundwater SCO of 1,000 ug/kg.
- Barium was detected in 4 samples (PE-E-S6 (1.5-2.0), PE-E-S4 (6.0-6.5), SE-E-S5 (5.0-5.5) and PE-E-F4 (11.0-11.5)) ranging from 1,800 to 2,890 mg/kg, exceeding the Restricted-Residential SCO of 400 mg/kg and Protection of Groundwater SCO of 820 mg/kg.
- Cadmium was detected in SE-E-S5 (5.0-5.5) at 5.2 mg/kg, exceeding the Restricted-Residential SCO of 4.3 of mg/kg.
- Lead was detected in 4 samples (PE-E-S6 (1.5-2.0), PE-E-S4 (6.0-6.5), SE-E-S5 (5.0-5.5) and PE-E-F4 (11.0-11.5)) ranging from 499 to 1,250 mg/kg, exceeding the Restricted-Residential SCO of 400 mg/kg and Protection of Groundwater SCO of 450 mg/kg.

Further excavation of paint sludge and soil at PE-E-F4 (11.0-11.5) was restricted by the proximity the utility pole and catch basin. Additionally, further excavation of paint sludge and soil at PE-E-S6 (1.5-2.0), PE-E-S4 (6.0-6.5), and PE-E-S5 (5.0-5.5) was restricted by the proximity to Torne Valley Road

4.5.1.6 Area G

A total of 6 base and 6 sidewall samples were collected from Area G (Table 15). The analytical results of the soil samples collected from Area G indicated that VOCs, SVOCs, and PCBs were below the laboratory reported detection limits or below the Restricted-Residential SCOs and Protection of Groundwater SCOs. Analytical results of the soil samples collected from Area G indicated that TAL metals were below the most stringent SCOs, with the exception of the following that were left in place:

- Arsenic was detected in PE-G-S5A (5.0-5.5) at a concentration of 21.1 mg/kg, exceeding the Restricted-Residential and Protection of Groundwater SCO of 16 mg/kg.
- Barium was detected in two samples (PE-G-S5A (5.0-5.5) and PE-G-S6A (5.0-5.5)) at 2660 mg/kg and 618 mg/kg, exceeding the Restricted Residential SCO of 400 mg/kg.
- Cadmium was detected in PE-G-S5A (5.0-5.5) at a concentration of 14.2 mg/kg, exceeding the Restricted-Residential SCO of 4.3 mg/kg and Protection of Groundwater SCOs of 7.5 mg/kg.
- Copper was detected in PE-G-S5A (5.0-5.5) at a concentration of 401 mg/kg, exceeding the Restricted-Residential SCO of 270 mg/kg.
- Lead was detected in two samples (PE-G-S4A (5.0-5.5) and PE-G-S5A(5.0-5.5)) at a concentration of 701 and 2,690 mg/kg, exceeding the Restricted-Residential SCO of 400 mg/kg and Protection of Groundwater SCOs 450 mg/kg.
- Nickel was detected in PE-G-S5A (5.0-5.5) at a concentration of 185 mg/kg, exceeding the Protection of Groundwater SCOs of 130 mg/kg.

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- Selenium was detected in PE-G-S5A (5.0-5.5) at a concentration of 7.2 mg/kg, exceeding the Protection of Groundwater SCO of 4 mg/kg.
- Zinc was detected in PE-G-S5A (2.0-2.5) at a concentration of 2,690 mg/kg, exceeding the Protection of Groundwater SCO of 2,480 mg/kg.

The NYSDEC observed the sidewalls where the exceedances were identified, and no paint sludge was observed at depth and the proposed remedial action did not require the chasing of construction and demolition debris below the 2-foot soil cap. Arcadis requested that the NYSDEC allow the exceedances in Area G to remain in place. The NYSDEC approved of this request and allowed the commencement of backfill on February 12, 2016.

4.5.1.7 Area H

A total of 9 base and 9 sidewall samples were collected from Area H (Table 16). The analytical results of the soil samples collected from Area H indicated that PCBs were below the laboratory reported detection limits or below the Restricted-Residential SCOs and Protection of Groundwater SCOs. Analytical results of the soil samples collected from Area H indicated that VOCs, SVOCs and TAL metals were below the most stringent SCOs, with the exception of the following that were left in place:

- Acetone was detected in 2 samples (PE-H-B2 (2.0-2.5) and PE-H-C2 (8.0-8.5)) measuring 70.8 and 51.3 ug/kg, respectively, exceeding the Protection of Groundwater SCO of 50 mg/kg.
- Indeno(1,2,3-cd)pyrene was detected at PE-H-A4 (2.0-2.5) at a concentration of 532 µg/kg, exceeding the Restricted-Residential SCO of 500 µg/kg.
- Barium was detected at PE-H-C1 (2.0-2.5) at a concentration of 507 mg/kg, exceeding the Restricted-Residential SCO of 400 mg/kg.
- Silver was detected in 2 samples (PE-H-B1 (8.0-8.5) and PE-H-C2 (8.0-8.5)) at 14 and 9.5 mg/kg, respectively, exceeding the Protection of Groundwater SCO of 8.3 mg/kg.

Acetone is a constituent of concern for the Site and was detected above the most stringent SCOs for Area H (Protection of Groundwater). Due to the strict Protection of Groundwater SCO, Arcadis requested a variance for meeting the Protection of Groundwater SCO for these samples as the concentrations were significantly lower than the Restricted Residential SCO. The NYSDEC approved of this request and allowed the commencement of backfill on April 5, 2016.

No paint sludge was observed at depth and the proposed remedial action did not require the chasing of construction and demolition debris below the 2 foot soil cap where Indeno(1,2,3-cd)pyrene, barium and silver were observed to exceed the most stringent SCOs; therefore, Arcadis requested that the NYSDEC allow the exceedances in Area H to remain in place. The NYSDEC approved of this request on April 5, 2016.

4.5.1.8 Area I

A total of 4 base and 6 sidewall samples were collected from Area I (Table 17). The analytical results of the soil samples collected from Area I indicated that VOCs, SVOCs, PCBs and TAL metals were below the

laboratory reported detection limits or below the Restricted-Residential SCOs and Protection of Groundwater SCOs.

4.5.1.9 Area J

A total of 8 base and 8 sidewall samples were collected from Area J (Table 18). The analytical results of the soil samples collected from Area I indicated that SVOCs, PCBs and TAL metals were below the laboratory reported detection limits or below the Restricted-Residential SCOs and Protection of Groundwater SCOs. The analytical results of the soil samples collected from Area J indicated that VOCs were below the laboratory reported detection limits or below the Restricted-Residential SCOs and Protection of Groundwater SCOs, with the exception of the following sample that was left in place:

- Acetone was detected in 2 samples (PE-J-C2 (2.0-2.5) and PE-J-S5 (1.5-2.0) at a concentration of 54.9 µg/kg and 91.4 µg/kg, exceeding the Protection of Groundwater SCO of 50 µg/kg.

Acetone is a constituent of concern for the Site and was detected above the most stringent SCOs for Area J (Protection of Groundwater). Due to the strict Protection of Groundwater SCO, Arcadis requested a variance for meeting the Protection of Groundwater SCO for these samples as the concentrations were significantly lower than the Restricted Residential SCO. The NYSDEC approved of this request and allowed the commencement of backfill on April 11, 2016.

4.5.2 OU-2 South

Post-excavation sample results for OU-2 South (Area F) were compared to the Unrestricted Use SCOs (Figure 9). The analytical results are presented on Table 19 (4 base samples and 5 sidewalls).

The data associated with Table 19 was submitted through the NYSDEC's EDD system for recordkeeping purposes on July 26, 2022 and accepted on August 17, 2022. A copy of the transmittal is included in Appendix A.

The analytical results of the soil samples collected from Area F indicated that VOCs, SVOCs, and PCBs were below the laboratory reported detection limits or below the most stringent SCOs for Area F. The analytical results of the soil samples collected from Area F indicated that TAL metals were below the laboratory reported detection limits or below the Unrestricted Use SCOs, with the exception of PE-F-S5 (1.0-1.5). The concentration of nickel at PE-F-S5 (1.0-1.5) was detected at 30.8 mg/kg, in excess of the Unrestricted Use SCO of 30 mg/kg.

The Unrestricted Use SCO is predicated by the Protection of Ecological Resource SCO for this constituent. Since Area F is outside the ecologically sensitive area, Arcadis requested the NYSDEC allow this marginal exceedance to be left in place and the NYSDEC approved on December 22, 2015.

4.5.3 Material Staging Area

Following completion of the surface scrape within the MSA, post-excavation confirmation samples were collected and compared to the Restricted-Residential SCOs and Protection of Groundwater SCOs within the uplands (Figure 6). The analytical results for the MSA are provided on Table 20 (28 base samples).

The data associated with Tables 20 was submitted through the NYSDEC's EDD system for recordkeeping purposes on July 26, 2022 and accepted on August 17, 2022. A copy of the transmittal is included in Appendix A.

The analytical results of the soil samples collected from the MSA indicated that SVOCs and PCBs were below the laboratory reported detection limits or below the most stringent SCO for the MSA. The analytical results of the soil samples collected from the MSA indicated that VOCs and TAL metals were below the laboratory reported detection limits or below the most stringent SCO for the MSA, with the exception of the following:

- Acetone was detected in 4 samples (PE-MSA-M12 (0.5-1.0), PE-MSA-M13 (0.5-1.0), PE-MSA-M20 (0.5-1.0) and PE-MSA-M23 (0.5-1.0)) at concentrations ranging from 51.7 to 731 ug/kg, exceeding the Protection of Groundwater SCO of 50 ug/kg.
- 2-Butanone (MEK) was detected at PE-MSA-M20 (0.5-1.0) at a concentration of 153 ug/kg, exceeding the Protection of Groundwater SCO of 120 ug/kg.
- Manganese was detected at PE-MSA-M1 (0.5-1.0) at a concentration of 2,140 mg/kg, exceeding the Restricted Residential SCO and Protection of Groundwater of 2,000 mg/kg.

Manganese is not a constituent of concern for the Site; therefore, Arcadis requested the NYSDEC to allow the exceedance in the MSA to remain in place. The NYSDEC approved of this request on April 19, 2016.

Acetone is a constituent of concern for the Site and was detected above the most stringent SCO for the MSA (Protection of Groundwater). Due to the strict Protection of Groundwater SCO, Arcadis requested a variance for meeting the Protection of Groundwater SCO for these samples as the concentrations were significantly lower than the Restricted Residential SCO. The NYSDEC approved of these requests and allowed the commencement of backfill on April 19, 2016.

4.5.4 Data Quality and Validation

Field protocols, sampling and analytical methods, and quality assurance measures were conducted in accordance with the Quality Assurance/ Quality Control (QA/QC) Plan. Analytical data was validated by Arcadis. Data validation was performed on all post-excavation confirmation samples to evaluate laboratory method compliance and identify potentially irregular data results.

4.5.4.1 Data Validation

Analytical data associated with OU-2 was collected between September 2015 and April 2016. The data was generated in 32 Sample Delivery Groups evaluated by Arcadis using USEPA Method. The data validation process addresses data quality and completeness for site samples and QC samples (associated field and laboratory samples). Data impacted by noted excursions from the QA/QC criteria were qualified based on professional judgment and guidance provided in the following documents: *EPA Contract Laboratory Program (CLP) National Functional Guidelines for Organic Data Review (USEPA 1999/2005); and, EPA CLP National Functional Guidelines for Inorganic Data Review (USEPA 2002/2004).*

Data validation resulted in a number of detect/non-detect sample results being qualified as estimated (J/UJ) respectively due to minor QC deviations and qualified as non-detect (UB) due to associated QA blanks (i.e., method, trip and field blanks) contamination with the exception of 29 individual analyte results associated with 9 samples qualified as rejected (R) and unusable due to matrix spike/matrix spike duplicate percent recoveries less than 10%. The rejected sample results are summarized in Table 21.

Completeness is defined as the percentage of measurements that are judged to be valid or usable to meet the prescribed data quality objectives. The completeness criterion is essentially the same for all data uses -- the generation of a sufficient amount of valid data. A total of 77,277 sample results were generated during the sampling events. Of that total, 29 individual analyte results (or 0.0004 or 0.04%) were qualified as rejected. The actual completeness of this analytical data set had an overall usability greater than 99.9%.

All laboratory data was reviewed and validated by Arcadis as being acceptable for the intended purpose with comments and observations being noted in the Data Validation Data Usability Summary Reports (Appendix F).

4.6 Construction Water Management and Off-Site Disposal

Water collected during the dewatering of the excavation and the surface water runoff collected from the MSA was staged in frac tanks and treated through a mobile waste water treatment plant (WWTP) staged on-site. The WWTP consisted of:

- Two 21,000-gallon frac tanks with secondary containment (1 influent & 1 post-treatment);
- One 18,000-gallon weir tank with secondary containment;
- One duplex electric submersible pump skid consisting of 2 full capacity pumps (1 operating, 1 installed standby), each capable of 100 gallons per minute (gpm);
- One enclosed treatment trailer equipped with electric lights, ventilation fan and heater and the following major treatment components:
 - One 1,000-gallon poly pump suction tank;
 - One duplex electric transfer pump skid. The skid contains 2 full capacity pumps (1 operating and 1 installed standby), each capable of 100 gpm;
 - One duplex bag filter skid consisting of two 1-bag filter housings plumbed in parallel, complete with face piping, valves, pressure gauges and sample taps;
 - One duplex cartridge filter skid consisting of two 6-cartridge filter housings plumbed in parallel, complete with face piping, valves, pressure gauges and sample taps;
 - Two non-Code carbon absorbers plumbed in series, each pre-loaded with 2,000 lbs of virgin carbon media; and,
 - One 3-inch diameter flow meter with totalizer, 35 to 250 gpm range.

Following treatment, samples were collected from the treated water and were compared to the New York Technical and Operations Guidance Series (TOGS) Class GA Groundwater (GW) Standards. Samples from the initial batch of treated water exceeded the New York TOGS Class GA GW Standards for total metals (Table 22); therefore, flocculant logs were incorporated into the WWTP to assist in the separation of suspended particles in solution (i.e., total metals).

After re-treating the treated water, the resulting samples still exceeded the New York TOGS Class GA GW Standards for total metals; therefore, the treated water and all additional wastewater collected was pre-characterized and profiled for off-site disposal. A total of 91,681 gallons of non-hazardous treated water/wastewater collected during the excavation work at OU-2 North was transported via tanker trucks for off-site treatment and final disposal at the following facilities:

- Clean Water of New York, Inc. located in Staten Island, New York for disposal (73,081 gallons, 15 total truck loads); and,
- Lorco Petroleum Services located in Elizabeth, New Jersey (18,600 gallons, 3 total truck loads).

Profiles established for the wastewater are provided in Appendix G. Analytical Data associated with characterization of the non-hazardous wastewater is provided as Appendix H. Bills of Lading associated with disposal of the non-hazardous wastewater are provided in Appendix I.

4.7 Material Handling and Waste Management

During excavation activities, measures were implemented to ensure the proper classification, movement and off-site transportation and disposal of paint sludge and impacted soil from the Site. Cobbles/rock, paint sludge and impacted soil were staged in the MSA. These materials were segregated to the extent feasible.

4.7.1 Material Staging Area

The MSA was constructed on the western portion of OU-2 North and measured 400 by 130 feet (Figure 6). After subgrade was prepared in the area, a 6-mil high-density polyethylene liner was installed along the entire base, followed by a layer of 6-ounce geotextile fabric, and 8 inches of dense graded aggregate (DGA). Concrete bin blocks were placed along the perimeter of the MSA and 5 stockpile bin areas were constructed for sorting and segregating excavation waste streams.

The MSA location was selected based on site logistics and access to Torne Valley Road. This location allowed Site access for the on-road Department of Transportation approved tri-axle dump trucks and end-dump tractor trailers used for material disposal. Trucks followed a specific site traffic pattern and were loaded with impacted soil and paint sludge for off-site transportation and disposal in compliance with Federal and State requirements. Final disposal was determined in the field by Viasant through waste characterization results and approved by Arcadis.

4.7.1.1 Sorting and Segregating

Based on visual observation during excavation, Arcadis directed loaded off-road dump trucks to various stockpiles within the MSA:

- No visual paint sludge;
- Paint sludge intermingled with cobble/rock and soil for segregating; and,
- Paint sludge only.

For stockpiles where cobbles/rock and paint sludge were intermingled with soil, a screener or other mechanical means was used to screen and segregate the materials. Segregated cobbles/rock were staged in a dedicated portion of the MSA for subsequent decontamination through pressure washing/rinsing and reuse on-site.

4.7.2 Waste Characterization Sampling and Off-Site Disposal

Waste characterization samples were collected at a frequency of 1 sample per every 500 tons of excavated materials. Waste characterization samples were analyzed for full TCLP, ignitability, corrosivity, and reactivity. Waste characterization samples were collected on a 72-hour turnaround time to avoid paint sludge and impacted material being staged on-site for extended periods of time.

A total of 58 waste characterization samples were collected from the Site. The waste characterization samples indicated that the paint sludge and impacted soil could be segregated into 5 waste streams (Table 23):

- Non-hazardous materials (TCLP Lead less than 2.5 mg/L.);
- Hazardous materials for metals treatment and Subtitle "D" landfilling (TCLP Lead greater than 2.5 mg/L);
- Hazardous materials for disposal of PCBs (PCBs greater than 1 mg/kg);
- Hazardous materials for disposal of diesel-impacted soils (Total Petroleum Hydrocarbons greater than 3,500 mg/kg); and,
- Hazardous materials for thermal treatment and landfilling (TCLP Lead greater than 5 mg/L and Total VOCs greater than 500 mg/kg).

Waste profiles are provided in Appendix G. The Laboratory Analytical Reports associated with the 58 waste characterization samples are presented in Appendix J.

4.7.2.1 Non-Hazardous Material Disposal

A total of 41,992.32 tons of non-hazardous material was transported from OU-2 North for off-site disposal. No non-hazardous soil was disposed of from OU-2 South. Non-hazardous materials were transported by tri-axle trailers for use as daily cover or direct landfilling to one of the following approved off-site disposal facilities (Appendix K):

- Middlesex County Landfill located in East Brunswick, New Jersey for use as daily cover (36,082.70 Tons, 1,227 total truck loads); and,

- Ontario County Landfill located in Stanley, New York for Subtitle “D” landfilling (5,909.62 Tons, 170 total truck loads).

4.7.2.2 Hazardous Material Disposal

A total of 14,545.15 tons of hazardous material was transported for off-site disposal, including 14,266.35 tons removed from OU-2 North, and 278.80 tons removed from OU-2 South. Hazardous materials were transported by tri-axle trailers for treatment prior to landfilling. The hazardous materials were transported to the following facilities (Appendix L and M):

- Republic Environmental Systems (PA), LLC located in Hatfield, Pennsylvania for treatment of lead impacted soil (2,841.51 Tons, 120 total truck loads);
- Envirote of Pennsylvania, Inc. located in York, Pennsylvania for treatment of lead impacted soil (7,401.29 Tons, 316 total truck loads);
- Wayne Disposal, Inc. Site #2 Landfill located in Belleville, Michigan for disposal of PCB impacted soil (938.14 Tons, 40 total truck loads);
- Clean Earth located in Carteret, New Jersey for disposal of diesel impacted soil (288.09 Tons, 9 total truck loads); and,
- Heritage Thermal Services, Inc. located in East Liverpool, Ohio for incineration of paint sludge and lead impacted soil (3,076.12 Tons, 143 total truck loads).

4.8 Excavation Backfill

Open excavations were backfilled with certified clean fill, screenings (by-product of processing stone at the quarry), DGA and/or topsoil approved by the NYSDEC (Figure 7, 8, and 10 through 13). Prior to placement of backfill, a visual demarcation layer of geotextile fabric was placed between the excavated soil surface and backfilled areas within OU-2 North. Due to OU-2 South being excavated down to bedrock, no demarcation layer was installed.

4.8.1 Certified Clean Fill

The certified clean fill was comprised of natural mineral soil, void of debris. All imported clean fill was required to meet the SCOs established for a given Work area as presented in Section 4.3 (Remedial Excavation).

4.8.1.1 Dense Graded Aggregate, Screenings and Certified Clean Fill

A total of 19,989.89 tons of general fill (DGA, screenings and certified clean fill) was furnished on-site to backfill open excavations in OU-2 North. No certified clean fill was used in OU-2 South. Viasant imported general fill from Van Orden Sand & Gravel in Ringwood, New Jersey:

- DGA (5,055.20 tons, 196 total truck loads);
- Stone Screenings (12,681.04 tons, 511 total truck loads); and,
- Certified Clean Fill (2,253.65 tons, 88 total truck loads).

The analytical parameters for the approved general fill are provided in Appendix N. Fill logs and weight tickets are provided in Appendix O.

4.8.2 Topsoil

A total of 32,200 cubic yards of topsoil was furnished on-site to restore the excavated/disturbed areas to original grade. Of this volume, approximately 250 cubic yards were used in OU-2 South and 31,950 cubic yards were used in OU-2 North.

Approximately 3,300 cubic yards of silty sand was blended with mulch at the facility to meet the organic content required of topsoil for the Site. All imported topsoil was provided by RER Supply located in Wantage, New Jersey. The analytical parameters for the approved topsoil are provided in Appendix P. Fill logs and weight tickets are provided in Appendix Q.

4.9 Site Restoration

Upon completion of the excavation and backfilling, all areas were contour-graded to tie into the existing topography at the limit of excavation. Final grading was completed to match the surrounding topography (Figures 13 through 15). Final grades were adjusted in the field based on the extent of excavation, limitations from boulders left in place and creating safe slopes.

At a minimum, a 2-foot topsoil cover was installed within each removal area. After the topsoil was placed, the surface was hydroseeded with a temporary seed mixture and mulch. Biodegradable erosion mat was installed on approximately 76,092 square feet of the Site for covering slopes greater than 25%.

4.9.1 Permanent Seeding and Plantings

Following completion of the excavation, backfilling and temporary stabilization, the disturbed footprint within OU-2 was restored by ASGECI through the planting of various species of trees and shrubbery. A total of 12.67 acres were disturbed in OU-2 (12.36 acres were associated with OU-2 North and 0.31 acres in OU-2 South).

In general, the temporary disturbance impacted 11.63 acres of upland forest, 0.10 acres of forested streambank (approximately 550 linear feet), and 0.94 acres of upland meadow. The area was restored with 10.12 acres of upland forest, 0.10 acres of streambank, 2.13 acres upland meadow, and 0.32 acres of gravel access areas. The project area was planted entirely with native species, similar to those that were removed as a result of the remediation process. Details regarding the types of plantings and installation are presented in Appendix R. In general, plants were installed in a random pattern, with groups of similar species clustered together.

4.9.2 Monitoring Program

Following completion of the planting/seeding within the restored project areas, monitoring will be used to determine if the requirements of the approved site restoration plan are met, and if additional maintenance and monitoring is necessary to meet the goals of the project. Monitoring commenced in the summer of 2016 and will continue until 2020. Monitoring will be documented in annual inspection reports submitted to the NYSDEC.

During the monitoring period, planted species and any additional "volunteer" species will be identified. The average percent coverage of vegetation will be estimated and noted. Invasive weed species and the overall health and vigor of the plantings will be evaluated and herbivory will be evaluated to determine if it is resulting in plant mortality. In addition, maintenance activities (such as hand weeding, application of a pesticide or other approved method for the removal of invasive/noxious species in the restoration site) will be identified and performed as required.

4.10 Reporting

Arcadis documented progress of excavation and backfill through daily activity reports. The daily activity reports are provided in Appendix S.

Borbas was contracted for documenting daily progress of the excavations and preparation of as-built documentation. The as-built documentation provides spot elevations illustrating the depth of excavation and final elevation contours. A copy of the as-built documentation is provided in Appendix T.

5 FIELD CHANGES

During construction, field changes had to be made based on Site conditions. Major changes were documented through Final RD Addenda and Reports which were approved by the NYSDEC. Minor changes were documented in the daily reports (Appendix S). Some of the key field changes are as follows:

- Areas K, L & M (located within the 100-year flood plain) were re-evaluated and sampled during the implementation of the Final RD. Based on sampling results, a 2-foot clean soil cap was already in place; therefore, no further action was required.
- Water captured from the MSA and stormwater run-off was containerized and characterized for off-site disposal in lieu of on-site treatment and reuse for dust suppression.
- On February 25, 2016, a topsoil truck spilled approximately 100 gallons of diesel on-site at a location just north of the Area D swale. The spill was reported by Viasant and provided an incident number of 1511302 by the NYSDEC.
 - The diesel fuel spill resulted in the excavation of approximately 288.09 tons of impacted soil that was shipped to Clean Earth of Carteret. The waste profile and waste characterization laboratory reports are presented in Appendix G. The waste manifests are included in Appendix L.
 - FSD-1 through 4 represent four base samples collected for diesel range organics (DRO) and VOCs from the diesel fuel spill area. The location of these samples is presented on Figure 5. The analytical results identified no exceedances of the Restricted Residential of Protection of Groundwater SCOs for DRO and VOCs. The analytical results and the associated laboratory report are provided in Appendix U.
- A portion of the Site was restored as a meadow to provide learning opportunities in association with the Ramapo Salt Box Environmental Research Center.
- The snake basking structures were removed from the Site Restoration Plan due to the proximity to Torne Valley Road (an active county highway).

Field changes were conducted under the direction of Arcadis, on behalf of Ford, and as approved by the NYSDEC (Appendix A).

6 INSTITUTIONAL AND ENGINEERING CONTROLS

In accordance with the ROD, institutional and engineering controls were required to address paint sludge and impacted soil within OU-2 North following implementation of the RA. The extent of institutional and engineering controls are presented on Figures 16 and 17.

6.1 Institutional Controls

A site management plan (SMP) will be established to address remaining paint sludge and impacted soil within OU-2 North. The SMP will stipulate the long-term operation, monitoring, and maintenance of the final engineering controls established for the Site.

As part of the SMP, an environment easement will be recorded with Rockland County. The environmental easement will utilize the metes and bounds description and survey which were included in the previously recorded restrictive covenant (File No. 2014-00010781) recorded with Rockland County on April 24, 2014. A copy of the restrictive covenant (including metes and bounds) is presented in Appendix A.

6.2 Engineering Controls

Engineering controls established for the Site consist of a minimum 2-ft-thick soil cover. The soil cover consists of certified clean fill, screenings (by-product of processing stone at the quarry), DGA and/or topsoil approved by the NYSDEC. Prior to placement of backfill, a visual demarcation layer of geotextile fabric was placed between the excavated soil surface and backfilled areas within OU-2 North.

The extent of the soil cover is illustrated on Figures 16 and 17.

7 CONCLUSIONS

This CCR provides a description and documentation of the work conducted at the OU-2 of the Ramapo Paint Sludge Site from August 3, 2015 to April 22, 2016, with the final site restoration taking place in April and May 2016. Targeted removal and disposal of paint sludge with embankment excavation was performed successfully on-site. Removal and disposal of off-site deposits on the ConEdison property was performed from September 11, 2018 through November 16, 2018 in 2018 and details will be submitted under a separate OU-2 Offsite CCR.

As discussed above, the next steps will include development of a SMP to address the long-term operation, monitoring, and maintenance of the final engineering controls established for the Site. Additionally, a final engineering report will be prepared to summarize all CCRs completed in accordance with the OC/AS. Details regarding the schedule of these documents are presented in Appendix V.

Construction observations and monitoring were conducted under the conditions stated above. Conclusions made in this report were based on these observations and the data obtained from field and laboratory tests conducted.

8 REFERENCES

ARCADIS. 2007. Site Characterization Report, Ramapo Paint Sludge Site, Town of Ramapo, Rockland County, New York, Site #34404 (June 2007)

ARCADIS. 2008. Ramapo River Investigation, Site #3-44-04, Ramapo Paint Sludge Site, Rockland County, New York (October 2008)

ARCADIS. 2010. Remedial Investigation Report, Ramapo Paint Sludge Site, Town of Ramapo, Rockland County, New York, Operable Units 1 & 2 (September 2010).

ARCADIS. 2013. Feasibility Study, Ramapo Paint Sludge Site, Operable Unit No. 2, Town of Ramapo, Rockland County, New York, Site #34404 (June 2013).

ARCADIS. 2014. Remedial Design Work Plan, Ramapo Paint Sludge Site Operable Unit No. 2, Town of Ramapo, Rockland County, New York, Site #344014 (September 2014)

ARCADIS. 2015a. Final Remedial Design, Ramapo Paint Sludge Site Operable Unit No. 2, Town of Ramapo, Rockland County, New York, Site #344014 (July 2015).

ARCADIS. 2015b. Stormwater Pollution Prevention Plan (SWPPP), Ramapo Paint Sludge Site, Operable Unit No. 2, Town of Ramapo, Rockland County, New York, Site #344064 (July 2015)

NYSDEC. 2010. DER-10 Technical Guidance for Site Investigation and Remediation (May 2010).

NYSDEC. 2014. Record of Decision, Ramapo Paint Sludge Site, Operable Unit No. 2, Town of Ramapo, Rockland County, New York, Site #34404 (March 2014).

NYSDEC. 2015. DRAFT – Final Remedial Design, Ramapo Paint Sludge Site, Operable Unit 2, Town of Ramapo, Rockland County (July 13, 2015).

NYSDEC. 2015. Final Remedial Design – Addendum, November 24, 2015, Reconnaissance and Remedial Investigation Results for Areas K, L & M, Ramapo Paint Sludge Site, Operable Unit 2, Town of Ramapo, Rockland County (December 1, 2015).

Rockland County Clerk. Corrected Restrictive Covenant. Instr Number #2014-00010781, County of Rockland, State of New York (April 2014).

TABLES



Tables

Table 1. Historical Waste Characterization Data
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Sample ID Sample Date Validation Status	Maximum TCLP Concentration	PS-OU2-TB ¹ 9/28/2006 Not Validated	TP-01 ² 10/10/2006 Not Validated	WC-TS-01 ³ 10/31/2006 Not Validated	WC-TS-02 ³ 10/31/2006 Not Validated	WC-TS-03 ³ 10/31/2006 Not Validated
VOCs TCLP Leachate						
1,1-Dichloroethene	0.7	< 0.0016	< 0.0016	< 0.0016	< 0.0016	< 0.0016
1,2-Dichloroethane	0.5	< 0.0015	< 0.0015	< 0.0015	< 0.0015	< 0.0015
1,4-Dichlorobenzene	7.5	< 0.0012	< 0.0012	< 0.0012	< 0.0012	< 0.0012
2-Butanone (MEK)	200	< 0.013	< 0.013	< 0.013	< 0.013	< 0.013
Benzene	0.5	< 0.0011	< 0.0011	< 0.0011	< 0.0011	< 0.0011
Carbon tetrachloride	0.5	< 0.0015	< 0.0015	< 0.0015	< 0.0015	< 0.0015
Chlorobenzene	100	< 0.0011	< 0.0011	< 0.0011	< 0.0011	< 0.0011
Chloroform	6	< 0.0011	0.0443	< 0.0011	< 0.0011	< 0.0011
Tetrachloroethene	0.7	< 0.0014	< 0.0014	< 0.0014	< 0.0014	< 0.0014
Trichloroethene	0.5	< 0.0014	< 0.0014	< 0.0014	< 0.0014	< 0.0014
Vinyl chloride	0.2	< 0.0014	< 0.0014	< 0.0014	< 0.0014	< 0.0014
SVOCs TCLP Leachate						
1,4-Dichlorobenzene	7.5	< 0.0018	< 0.0018	< 0.0018	< 0.0018	< 0.0018
2,4,5-Trichlorophenol	400	< 0.019	< 0.019	< 0.019	< 0.019	< 0.019
2,4,6-Trichlorophenol	2	< 0.013	< 0.013	< 0.013	< 0.013	< 0.013
2,4-Dinitrotoluene	0.13	< 0.0086	< 0.0086	< 0.0086	< 0.0086	< 0.0086
2-Methylphenol	200	< 0.014	< 0.014	< 0.014	< 0.014	< 0.014
3&4-Methylphenol	200	< 0.013	< 0.013	< 0.013	< 0.013	< 0.013
Hexachlorobenzene	0.13	< 0.0054	< 0.0054	< 0.0054	< 0.0054	< 0.0054
Hexachlorobutadiene	0.5	< 0.0018	< 0.0018	< 0.0018	< 0.0018	< 0.0018
Hexachloroethane	3	< 0.0028	< 0.0028	< 0.0028	< 0.0028	< 0.0028
Nitrobenzene	2	< 0.0042	< 0.0042	< 0.0042	< 0.0042	< 0.0042
Pentachlorophenol	100	< 0.019	< 0.019	< 0.019	< 0.019	< 0.019
PYRIDINE	5	< 0.0064	< 0.0064	< 0.0064	< 0.0064	< 0.0064
Pesticide TCLP Leachate						
1,1,1-Trichloro-2,2-bis (p-methoxyphenyl)-ethane	10	< 0.000012	< 0.00012	< 0.00012	< 0.00012	< 0.00012
Camphenchlor	0.5	< 0.00025	< 0.0025	< 0.0025	< 0.0025	< 0.0025
Chlordane	0.03	< 0.000092	< 0.00092	< 0.00092	< 0.00092	< 0.00092
Endrin	0.02	< 0.000011	< 0.00011	< 0.00011	< 0.00011	< 0.00011
gamma-BHC (Lindane)	0.4	< 0.0000026	< 0.000026	< 0.000026	< 0.000026	< 0.000026
Heptachlor	0.008	< 0.0000059	< 0.000059	< 0.000059	< 0.000059	< 0.000059
Heptachlor Epoxide	0.008	< 0.000011	< 0.00011	< 0.00011	< 0.00011	< 0.00011
Herbicide TCLP Leachate						
2,4,5-TP (Silvex)	1	< 0.00034	< 0.00034	< 0.00034	< 0.00034	< 0.00034
2,4-D	10	< 0.0033	< 0.0033	< 0.0033	< 0.0033	< 0.0033
PCBs (mg/kg)						
Aroclor 1016	NS	< 0.026	< 0.0073	< 0.0074	< 0.0075	< 0.0075
Aroclor 1221	NS	< 0.083	< 0.023	< 0.023	< 0.024	< 0.024
Aroclor 1232	NS	< 0.075	< 0.021	< 0.021	< 0.022	< 0.021
Aroclor 1242	NS	< 0.044	< 0.012	< 0.012	< 0.013	< 0.013
Aroclor 1248	NS	< 0.048	< 0.013	< 0.013	< 0.014	< 0.014
Aroclor 1254	NS	< 0.066	< 0.018	< 0.018	< 0.019	< 0.019
Aroclor 1260	NS	< 0.028	< 0.0077	< 0.0078	< 0.008	< 0.0079
Metals TCLP Leachate						
Arsenic	5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Barium	100	3	< 1	< 1	< 1	< 1
Cadmium	1	< 0.005	0.008	0.0082	0.0092	0.0079
Chromium	5	0.031	< 0.01	< 0.01	< 0.01	< 0.01
Lead	5	1.3	< 0.5	< 0.5	< 0.5	< 0.5
Mercury	0.2	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Selenium	1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Silver	5	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Other						
Corrosivity as pH	NS	7.8 NC	6.45 NC	6.38 NC	6.49 NC	6.59 NC
Cyanide Reactivity (mg/kg)	NS	< 7.3	< 5.8	< 5.8	< 6	< 6
Ignitability (Flashpoint) (Deg. F)	NS	>200	>200	>200	>200	>200
Sulfide Reactivity (mg/kg)	NS	< 150	< 120	< 120	< 120	< 120
TPH-GRO (C6-C10) (mg/kg)	NS	NA	NA	< 3	< 2.8	< 2.8
TPH-DRO (C10-C28) (mg/kg)	NS	NA	NA	17.2	26.7	22.6
Solids, Percent	NS	68.2	86.6	85.8	83.5	83.1
Petroleum Hydrocarbons (mg/kg)	NS	8540	53.5	NA	NA	NA

Notes

Results are presented in milligrams per liter (mg/l) unless otherwise noted.

mg/kg Milligrams per kilogram.

< Not Detected

NA Not Analyzed

SVOC Semi-volatile organic compound.

VOC Volatile organic compound.

PCB Polychlorinated biphenyls.

TCLP Toxicity characteristic leaching procedure.

No Data No data available for WC-TS-04

Shade Value is above the Maximum Concentration for TCLP value, 40 CFR 261.24.

1 - Paint sludge sample collected from Torne Brook at OU-2.

2 - Composite sample collected from Test Pit - 01 at OU-2.

3 - Composite waste characterization sample from top soil scraped from Torne Valley Recreational Center Area prior to construction.

Table 2. Historical Analytical Sediment Data
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



VOC	Sample Name	NYSDEC Sediment Criteria		Derived Sediment Criteria	SED-TB-02	SED-TB-03	SED-TB-05
	Sample Date Validation	Lowest Effect Level	Severe Effect Level		11/30/2006 Final	11/30/2006 Final	11/30/2006 Final
1,1,1-Trichloroethane		--	--	--	< 0.00083	< 0.00083	< 0.00073
1,1,2,2-Tetrachloroethane		--	--	--	< 0.0008	< 0.0008	< 0.00071
1,1,2-Trichloroethane		--	--	--	< 0.00075	< 0.00075	< 0.00066
1,1-Dichloroethane		--	--	--	< 0.00067	< 0.00067	< 0.00059
1,1-Dichloroethene		--	--	--	< 0.00096	< 0.00096	< 0.00084
1,2,4-Trichlorobenzene		--	--	--	< 0.00049	< 0.00049	< 0.00043
1,2-Dibromo-3-chloropropane		--	--	--	< 0.003	< 0.003	< 0.0026
1,2-Dibromoethane		--	--	--	< 0.00079	< 0.00079	< 0.00069
1,2-Dichlorobenzene		--	--	--	< 0.00064	< 0.00064	< 0.00056
1,2-Dichloroethane		--	--	--	< 0.00076	< 0.00076	< 0.00067
1,2-Dichloropropane		--	--	--	< 0.00078	< 0.00077	< 0.00068
1,3-Dichlorobenzene		--	--	--	< 0.00068	< 0.00068	< 0.0006
1,4-Dichlorobenzene		--	--	--	< 0.00064	< 0.00064	< 0.00057
2-Butanone (MEK)		--	--	--	< 0.0038	< 0.0038	< 0.0034
2-Hexanone		--	--	--	< 0.0019	< 0.0019	< 0.0017
4-Methyl-2-pentanone(MIBK)		--	--	--	< 0.0028	< 0.0028	< 0.0024
Acetone		--	--	--	< 0.004	< 0.004	< 0.0035
Benzene		--	--	--	< 0.00067	< 0.00067	< 0.00059
Bromodichloromethane		--	--	--	< 0.00064	< 0.00064	< 0.00056
Bromoform		--	--	--	< 0.00061	< 0.00061	< 0.00053
Bromomethane		--	--	--	< 0.00052	< 0.00052	< 0.00045
Carbon disulfide		--	--	--	< 0.00077	< 0.00077	< 0.00068
Carbon tetrachloride		--	--	--	< 0.0013	< 0.0013	< 0.0012
Chlorobenzene		--	--	--	< 0.00061	< 0.00061	< 0.00053
Chloroethane		--	--	--	< 0.0024	< 0.0024	< 0.0021
Chloroform		--	--	--	< 0.00082	< 0.00081	< 0.00072
Chloromethane		--	--	--	< 0.00065	< 0.00064	< 0.00057
cis-1,2-Dichloroethene		--	--	--	< 0.00094	< 0.00094	< 0.00083
cis-1,3-Dichloropropene		--	--	--	< 0.00058	< 0.00058	< 0.00051
Cyclohexane		--	--	--	< 0.0018	< 0.0018	< 0.0016
Dibromochloromethane		--	--	--	< 0.00077	< 0.00077	< 0.00068
Dichlorodifluoromethane		--	--	--	< 0.0011	< 0.0011	< 0.00098
Ethylbenzene		--	--	--	< 0.00063	< 0.00063	< 0.00055
Freon 113		--	--	--	< 0.0012	< 0.0012	< 0.0011
Isopropylbenzene		--	--	--	< 0.00065	< 0.00065	< 0.00057
m,p-Xylene		--	--	--	< 0.0012	< 0.0012	< 0.0011
Methyl Acetate		--	--	--	< 0.002	< 0.002	< 0.0017
Methyl Tert Butyl Ether		--	--	--	< 0.00078	< 0.00078	< 0.00069
Methylcyclohexane		--	--	--	< 0.0009	< 0.0009	< 0.00079
Methylene chloride		--	--	--	< 0.00097	< 0.00097	< 0.00085
o-Xylene		--	--	--	< 0.00069	< 0.00069	< 0.00061
Styrene		--	--	--	< 0.00046	< 0.00046	< 0.0004
Tetrachloroethene		--	--	--	< 0.0012	< 0.0012	< 0.001
Toluene		--	--	--	< 0.00076	< 0.00076	< 0.00067
trans-1,2-Dichloroethene		--	--	--	< 0.00096	< 0.00095	< 0.00084
trans-1,3-Dichloropropene		--	--	--	< 0.00055	< 0.00055	< 0.00048
Trichloroethene		--	--	--	< 0.00073	< 0.00073	< 0.00064
Trichlorofluoromethane		--	--	--	< 0.001	< 0.001	< 0.0009
Vinyl chloride		--	--	--	< 0.00091	< 0.0009	< 0.00079
Xylene (total)		--	--	--	< 0.00069	< 0.00069	< 0.00061

See Notes on Last Page

Table 2. Historical Analytical Sediment Data
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



SVOC	Sample Name Sample Date Validation	NYSDEC Sediment Criteria		Derived Sediment Criteria	SED-TB-02 11/30/2006 Final	SED-TB-03 11/30/2006 Final	SED-TB-05 11/30/2006 Final
		Lowest Effect Level	Severe Effect Level				
1,1'-Biphenyl		--	--	--	< 0.023	< 0.022	< 0.021
2,4,5-Trichlorophenol		--	--	--	< 0.072	< 0.068	< 0.064
2,4,6-Trichlorophenol		--	--	--	< 0.041 R	< 0.038 R	< 0.036 R
2,4-Dichlorophenol		--	--	--	< 0.081	< 0.076	< 0.071
2,4-Dimethylphenol		--	--	--	< 0.12	< 0.12	< 0.11
2,4-Dinitrophenol		--	--	--	< 0.073	< 0.069	< 0.065
2,4-Dinitrotoluene		--	--	--	< 0.056	< 0.053	< 0.049
2,6-Dinitrotoluene		--	--	--	< 0.055	< 0.052	< 0.049
2-Chloronaphthalene		--	--	--	< 0.068	< 0.064	< 0.06
2-Chlorophenol		--	--	--	< 0.041	< 0.039	< 0.036
2-Methylnaphthalene		--	--	--	< 0.031	< 0.03	< 0.028
2-Methylphenol		--	--	--	< 0.047	< 0.045	< 0.042
2-Nitroaniline		--	--	--	< 0.031	< 0.029	< 0.027
2-Nitrophenol		--	--	--	< 0.06	< 0.056	< 0.053
3&4-Methylphenol		--	--	--	< 0.069	< 0.065	< 0.061
3,3'-Dichlorobenzidine		--	--	--	< 0.046	< 0.043	< 0.041
3-Nitroaniline		--	--	--	< 0.037	< 0.035	< 0.033
4,6-Dinitro-o-cresol		--	--	--	< 0.042	< 0.04	< 0.037
4-Bromophenyl phenyl ether		--	--	--	< 0.025	< 0.023	< 0.022
4-Chloro-3-methyl phenol		--	--	--	< 0.061	< 0.058	< 0.054
4-Chloroaniline		--	--	--	< 0.03	< 0.028	< 0.026
4-Chlorophenyl phenyl ether		--	--	--	< 0.023	< 0.021	< 0.02
4-Nitroaniline		--	--	--	< 0.033	< 0.031	< 0.029
4-Nitrophenol		--	--	--	< 0.066	< 0.062	< 0.058
Acenaphthene		--	--	--	< 0.025	< 0.023	< 0.022
Acenaphthylene		--	--	--	< 0.02	< 0.018	< 0.017
Acetophenone		--	--	--	< 0.03	< 0.029	< 0.027
Anthracene		--	--	4.28	< 0.019	< 0.018	0.0251 J
Atrazine		--	--	--	< 0.042	< 0.039	< 0.037
Benzaldehyde		--	--	--	< 0.053	< 0.05	< 0.047
Benzo(a)anthracene		--	--	0.052	< 0.023	< 0.022	0.0832 J
Benzo(a)pyrene		--	--	0.052	< 0.017	< 0.016	0.0828 J
Benzo(b)fluoranthene		--	--	0.052	< 0.022	< 0.021	0.064 J
Benzo(g,h,i)perylene		--	--	NS	< 0.026	< 0.025	0.0349 J
Benzo(k)fluoranthene		--	--	0.05	< 0.036	< 0.034	0.0968
bis(2-Chloroethoxy)methane		--	--	--	< 0.031	< 0.029	< 0.027
bis(2-Chloroethyl)ether		--	--	--	< 0.024	< 0.023	< 0.021
bis(2-Chloroisopropyl)ether		--	--	--	< 0.036	< 0.034	< 0.032
bis(2-Ethylhexyl)phthalate		--	--	--	< 0.062	< 0.058	< 0.055
Butyl benzyl phthalate		--	--	--	< 0.036	< 0.034	< 0.032
Caprolactam		--	--	--	< 0.046	< 0.044	< 0.041
Carbazole		--	--	--	< 0.02	< 0.018	< 0.017
Chrysene		--	--	0.052	< 0.018	< 0.017	0.096
Dibenzo(a,h)anthracene		--	--	--	< 0.025	< 0.024	< 0.022
Dibenzofuran		--	--	--	< 0.022	< 0.021	< 0.02
Diethyl phthalate		--	--	--	< 0.021	< 0.019	< 0.018
Dimethyl phthalate		--	--	--	< 0.021	< 0.02	< 0.018
Di-n-butyl phthalate		--	--	--	< 0.031	< 0.029	< 0.027
Di-n-octyl phthalate		--	--	--	< 0.041	< 0.039	< 0.036
Fluoranthene		--	--	40.8	< 0.017	< 0.016	0.178
Fluorene		--	--	--	< 0.019	< 0.018	< 0.017
Hexachlorobenzene		--	--	--	< 0.028	< 0.026	< 0.025
Hexachlorobutadiene		--	--	--	< 0.032	< 0.03	< 0.028
Hexachlorocyclopentadiene		--	--	--	< 0.035 J	< 0.033 J	< 0.031 J

See Notes on Last Page

Table 2. Historical Analytical Sediment Data
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Sample Name Sample Date Validation	NYSDEC Sediment Criteria		Derived Sediment Criteria	SED-TB-02	SED-TB-03	SED-TB-05
	Lowest Effect Level	Severe Effect Level		11/30/2006 Final	11/30/2006 Final	11/30/2006 Final
SVOC						
Hexachloroethane	--	--	--	< 0.024	< 0.023	< 0.021
Indeno(1,2,3-cd)pyrene	--	--	0.052	< 0.031	< 0.029	0.0327 J
Isophorone	--	--	--	< 0.024	< 0.023	< 0.021
Naphthalene	--	--	--	< 0.027	< 0.026	< 0.024
Nitrobenzene	--	--	--	< 0.034	< 0.032	< 0.03
N-Nitroso-di-n-propylamine	--	--	--	< 0.031	< 0.029	< 0.027
N-Nitrosodiphenylamine	--	--	--	< 0.02	< 0.019	< 0.018
Pentachlorophenol	--	--	--	< 0.054	< 0.051	< 0.048
Phenanthrene	--	--	4.8	< 0.021	< 0.02	0.105
Phenol	--	--	--	< 0.06	< 0.056	< 0.053
Pyrene	--	--	38.44	< 0.017	< 0.016	0.156
Metals						
Aluminum	NS	NS	--	4770	5040	6790
Antimony	2	25	--	< 2.8 J*	< 2.7 J*	< 2.5 J*
Arsenic	6	33	--	6.2	< 2.7	< 2.5
Barium	NS	NS	--	37.1	< 27	38.6
Beryllium	NS	NS	--	< 0.69	0.79	< 0.61
Cadmium	0.6	9	--	< 0.69*	< 0.68*	< 0.61*
Calcium	NS	NS	--	1740	1180	1260
Chromium	26	110	--	15.7	8.3	11
Cobalt	NS	NS	--	< 6.9	< 6.8	< 6.1
Copper	16	110	--	25.3	6.3	14.2
Iron	2.00%	4.00%	--	17500 J	14800 J	13400 J
Lead	31	110	--	67.4	7.7	13.4
Magnesium	NS	NS	--	1970	2470	2100
Manganese	460	1,100	--	626	318	191
Mercury	0.15	1.3	--	0.044	< 0.044	0.048
Nickel	16	50	--	10.1	7.7	8.9
Potassium	NS	NS	--	< 690 J	< 680 J	666 J
Selenium	NS	NS	--	< 2.8	< 2.7	< 2.5
Silver	1	2.2	--	< 1.4*	< 1.4*	< 1.2*
Sodium	NS	NS	--	< 1400	< 1400	< 1200
Thallium	NS	NS	--	< 1.4	< 1.4	< 1.2
Vanadium	NS	NS	--	17	12.8	18.8
Zinc	120	270	--	86.5	40.6	49.4
Other			--			
Solids, Percent			--	68.6	73	78.2

Notes

All results are reported in milligrams per kilogram (mg/kg).

< Not detected.

NA Not analyzed.

NS No standard.

VOC Volatile organic compounds.

SVOC Semi Volatile organic compounds.

J Estimated result.

R Rejected value.

Value detected

Bold and Shaded Value is above the most stringent NYSDEC Sediment Criteria

* Detection limit is above the lowest criteria value

NYSDEC New York State Department of Environmental Conservation

Sediment Standards as specified for New York (Technical Guidance for Screening Contaminated Sediments, January 1999).

Table 3. Historical Analytical Surface Water Data
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Sample Location Sample Name Sample Date	GWQS Class	Torne Brook Surface Water				
		SW-TB-01 11/30/2006	SW-TB-02 11/30/2006	SW-TB-03 11/30/2006	SW-TB-04 11/30/2006	SW-TB-05 11/30/2006
Validation Status	B	Final	Final	Final	Final	Final
VOCs						
1,1,1-Trichloroethane	NS	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28
1,1,2,2-Tetrachloroethane	NS	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28
1,1,2-Trichloroethane	NS	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32
1,1-Dichloroethane	NS	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23
1,1-Dichloroethene	NS	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
1,2,4-Trichlorobenzene	5	< 0.16	< 0.16	< 0.16	< 0.16	< 0.16
1,2-Dibromo-3-chloropropane	NS	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1
1,2-Dibromoethane	NS	< 0.52	< 0.52	< 0.52	< 0.52	< 0.52
1,2-Dichlorobenzene	NS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
1,2-Dichloroethane	NS	< 0.29	< 0.29	< 0.29	< 0.29	< 0.29
1,2-Dichloropropane	NS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
1,3-Dichlorobenzene	20	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32
1,4-Dichlorobenzene	30	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24
2-Butanone (MEK)	NS	< 2.6 R	< 2.6 R	< 2.6 R	< 2.6 R	< 2.6 R
2-Hexanone	NS	< 1.3	< 1.3	< 1.3 J	< 1.3 J	< 1.3 J
4-Methyl-2-pentanone(MIBK)	NS	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1
Acetone	NS	< 2.4	< 2.4	< 2.4 J	< 2.4 J	< 2.4 J
Benzene	10	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21
Bromodichloromethane	NS	< 0.17	< 0.17	< 0.17	< 0.17	< 0.17
Bromoform	NS	< 0.54	< 0.54	< 0.54	< 0.54	< 0.54
Bromomethane	NS	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22
Carbon disulfide	NS	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21
Carbon tetrachloride	NS	< 0.29	< 0.29	< 0.29	< 0.29	< 0.29
Chlorobenzene	5	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22
Chloroethane	NS	< 0.56	< 0.56	< 0.56	< 0.56	< 0.56
Chloroform	NS	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22
Chloromethane	NS	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35
cis-1,2-Dichloroethene	NS	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18
cis-1,3-Dichloropropene	NS	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15
Cyclohexane	NS	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Dibromochloromethane	NS	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19
Dichlorodifluoromethane	NS	< 0.75	< 0.75	< 0.75	< 0.75	< 0.75
Ethylbenzene	NS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Freon 113	NS	< 0.69 J	< 0.69 J	< 0.69	< 0.69	< 0.69
Isopropylbenzene	NS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
m,p-Xylene	NS	< 0.42	< 0.42	< 0.42	< 0.42	< 0.42
Methyl Acetate	NS	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
Methyl Tert Butyl Ether	NS	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31
Methylcyclohexane	NS	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18
Methylene chloride	200	< 0.27	< 0.27	< 0.27	< 0.27	< 0.27
o-Xylene	NS	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31
Styrene	NS	< 0.16	< 0.16	< 0.16	< 0.16	< 0.16
Tetrachloroethene	NS	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28
Toluene	6000	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
trans-1,2-Dichloroethene	NS	< 0.42	< 0.42	< 0.42	< 0.42	< 0.42
trans-1,3-Dichloropropene	NS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Trichloroethene	NS	< 0.29	< 0.29	< 0.29	< 0.29	< 0.29
Trichlorofluoromethane	NS	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25
Vinyl chloride	NS	< 0.29	< 0.29	< 0.29	< 0.29	< 0.29
Xylene (total)	NS	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31

See Notes on Last Page

Table 3. Historical Analytical Surface Water Data
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Sample Location Sample Name Sample Date	GWQS Class	Torne Brook Surface Water				
		SW-TB-01 11/30/2006	SW-TB-02 11/30/2006	SW-TB-03 11/30/2006	SW-TB-04 11/30/2006	SW-TB-05 11/30/2006
Validation Status	B	Final	Final	Final	Final	Final
SVOCs						
1,1'-Biphenyl	NS	< 0.33 R	< 0.33 R	< 0.33 R	< 0.33 R	< 0.33 R
2,4,5-Trichlorophenol	NS	< 1.9	< 1.9	< 1.9	< 1.9	< 1.9
2,4,6-Trichlorophenol	NS	< 1.3 R	< 1.3 R	< 1.3 R	< 1.3 R	< 1.3 R
2,4-Dichlorophenol	1	< 1.6*	< 1.6*	< 1.6*	< 1.6*	< 1.6*
2,4-Dimethylphenol	1	< 1.6*	< 1.6*	< 1.6*	< 1.6*	< 1.6*
2,4-Dinitrophenol	1	< 0.89	< 0.89	< 0.89	< 0.89	< 0.89 J
2,4-Dinitrotoluene	NS	< 0.86	< 0.86	< 0.86	< 0.86	< 0.86
2,6-Dinitrotoluene	NS	< 0.56	< 0.56	< 0.56	< 0.56	< 0.56
2-Chloronaphthalene	NS	< 0.98 R	< 0.98 R	< 0.98 R	< 0.98 R	< 0.98 R
2-Chlorophenol	NS	< 0.95	< 0.95	< 0.95	< 0.95	< 0.95
2-Methylnaphthalene	NS	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41
2-Methylphenol	NS	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4
2-Nitroaniline	NS	< 0.66	< 0.66	< 0.66	< 0.66	< 0.66
2-Nitrophenol	NS	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
3&4-Methylphenol	NS	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3
3,3'-Dichlorobenzidine	NS	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2
3-Nitroaniline	NS	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3
4,6-Dinitro-o-cresol	NS	< 0.72	< 0.72	< 0.72	< 0.72	< 0.72
4-Bromophenyl phenyl ether	NS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
4-Chloro-3-methyl phenol	NS	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2
4-Chloroaniline	NS	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4
4-Chlorophenyl phenyl ether	NS	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43
4-Nitroaniline	NS	< 0.72	< 0.72	< 0.72	< 0.72	< 0.72
4-Nitrophenol	NS	< 0.84	< 0.84	< 0.84	< 0.84	< 0.84
Acenaphthene	NS	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35
Acenaphthylene	NS	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38
Acetophenone	NS	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37
Anthracene	NS	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4
Atrazine	NS	< 0.16	< 0.16	< 0.16	< 0.16	< 0.16
Benzaldehyde	NS	< 0.27	< 0.27	< 0.27	< 0.27	< 0.27
Benzo(a)anthracene	NS	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36
Benzo(a)pyrene	NS	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37
Benzo(b)fluoranthene	NS	< 0.59	< 0.59	< 0.59	< 0.59	< 0.59
Benzo(g,h,i)perylene	NS	< 0.42	< 0.42	< 0.42	< 0.42	< 0.42
Benzo(k)fluoranthene	NS	< 0.42	< 0.42	< 0.42	< 0.42	< 0.42
bis(2-Chloroethoxy)methane	NS	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65
bis(2-Chloroethyl)ether	NS	< 0.53	< 0.53	< 0.53	< 0.53	< 0.53
bis(2-Chloroisopropyl)ether	NS	< 0.74	< 0.74	< 0.74	< 0.74	< 0.74
bis(2-Ethylhexyl)phthalate	0.6	< 0.66*	< 0.66*	< 0.66*	< 0.66*	< 0.66*
Butyl benzyl phthalate	NS	< 0.59	< 0.59	< 0.59	< 0.59	< 0.59
Caprolactam	NS	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32
Carbazole	NS	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36
Chrysene	NS	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25
Dibenzo(a,h)anthracene	NS	< 0.54	< 0.54	< 0.54	< 0.54	< 0.54
Dibenzofuran	NS	< 0.34 R	< 0.34 R	< 0.34 R	< 0.34 R	< 0.34 R
Diethyl phthalate	NS	< 0.39	< 0.39	< 0.39	< 0.39	< 0.39
Dimethyl phthalate	NS	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Di-n-butyl phthalate	NS	< 0.59	< 0.59	< 0.59	< 0.59	< 0.59
Di-n-octyl phthalate	NS	< 0.57	< 0.57	< 0.57	< 0.57	< 0.57
Fluoranthene	NS	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25
Fluorene	NS	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45
Hexachlorobenzene	0.00003	< 0.54*	< 0.54*	< 0.54*	< 0.54*	< 0.54*
Hexachlorobutadiene	0.01	< 0.18 R*	< 0.18 R*	< 0.18 R*	< 0.18 R*	< 0.18 R*
Hexachlorocyclopentadiene	0.45	< 0.41	< 0.41 J	< 0.41 J	< 0.41 J	< 0.41 J
Hexachloroethane	0.6	< 0.28 R	< 0.28 R	< 0.28 R	< 0.28 R	< 0.28 R
Indeno(1,2,3-cd)pyrene	NS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3

See Notes on Last Page

Table 3. Historical Analytical Surface Water Data
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Sample Location Sample Name Sample Date	GWQS Class	Torne Brook Surface Water				
		SW-TB-01 11/30/2006	SW-TB-02 11/30/2006	SW-TB-03 11/30/2006	SW-TB-04 11/30/2006	SW-TB-05 11/30/2006
Validation Status	B	Final	Final	Final	Final	Final
SVOCs						
Isophorone	NS	< 0.59	< 0.59	< 0.59	< 0.59	< 0.59
Naphthalene	NS	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32
Nitrobenzene	NS	< 0.42	< 0.42	< 0.42	< 0.42	< 0.42
N-Nitroso-di-n-propylamine	NS	< 0.47	< 0.47	< 0.47	< 0.47	< 0.47
N-Nitrosodiphenylamine	NS	< 0.52	< 0.52	< 0.52	< 0.52	< 0.52
Pentachlorophenol	1	< 1.9*	< 1.9*	< 1.9*	< 1.9*	< 1.9*
Phenanthrene	NS	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36
freon 113	1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Pyrene	NS	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34
SVOCs BY SIM						
Acenaphthene	NS	NA	NA	NA	NA	NA
Acenaphthylene	NS	NA	NA	NA	NA	NA
Anthracene	NS	NA	NA	NA	NA	NA
Benzo(a)anthracene	NS	NA	NA	NA	NA	NA
Benzo(a)pyrene	NS	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NS	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene	NS	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NS	NA	NA	NA	NA	NA
Chrysene	NS	NA	NA	NA	NA	NA
Dibenzo(a,h)anthracene	NS	NA	NA	NA	NA	NA
Fluoranthene	NS	NA	NA	NA	NA	NA
Fluorene	NS	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene	NS	NA	NA	NA	NA	NA
Naphthalene	NS	NA	NA	NA	NA	NA
Phenanthrene	NS	NA	NA	NA	NA	NA
Pyrene	NS	NA	NA	NA	NA	NA
Metals						
Aluminum	100	< 200*	< 200*	< 200*	< 200*	< 200*
Antimony	NS	< 6	< 6	< 6	< 6	< 6
Arsenic	NS	< 8	< 8	< 8	< 8	< 8
Barium	NS	< 200	< 200	< 200	< 200	< 200
Beryllium	11	< 1	< 1	< 1	< 1	< 1
Cadmium	NS	< 4	< 4	< 4	< 4	< 4
Calcium	NS	< 5000	< 5000	< 5000	< 5000	< 5000
Chromium	NS	< 10	< 10	< 10	< 10	< 10
Cobalt	5	< 50*	< 50*	< 50*	< 50*	< 50*
Copper	NS	< 25	< 25	< 25	< 25	< 25
Iron	300	< 100	< 100	< 100	< 100	< 100
Lead	NS	< 3	< 3	< 3	< 3	< 3
Magnesium	NS	< 5000	< 5000	< 5000	< 5000	< 5000
Manganese	NS	< 15	< 15	19.4	< 15	< 15
Mercury	NS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Nickel	NS	< 40	< 40	< 40	< 40	< 40
Potassium	NS	< 5000	< 5000	< 5000	< 5000	< 5000
Selenium	NS	< 10	< 10	< 10	< 10	< 10
Silver	NS	< 10	< 10	< 10	< 10	< 10
Sodium	NS	< 10000	< 10000	< 10000	< 10000	< 10000
Thallium	8	< 10*	< 10*	< 10*	< 10*	< 10*
Vanadium	14	< 50*	< 50*	< 50*	< 50*	< 50*
Zinc	NS	< 20	< 20	< 20	< 20	< 20

Notes:

All results are reported in micrograms per liter (ug/l).

GWQS Groundwater Quality Standards

< Not detected.

NA Not analyzed.

NS No standard.

VOC Volatile organic compounds.

J Estimated result.

R Rejected value.

* Detection limit is above standard

Bold Value detected.

Bold and Shaded Value is above the GWQC Class B Objective

Groundwater Standards as specified for New York (NYCRR Part 703, Aug 1999).

Class B standards are compared to Torne Brook

Table 4. Historical Analytical Groundwater Data
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Sample Name	GWQS	MW-OB4(103007)	MW-OB5(103007)	MW-OB6(103107)	MW-OS1(103007)	MW-OS2(103007)	MW-OS4(103107)
Sample Date	Class	10/30/2007	10/30/2007	10/31/2007	10/30/2007	10/30/2007	10/31/2007
Validation Status	GA	Final	Final	Final	Final	Final	Final
VOCs							
1,1,1-Trichloroethane	5	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
1,1,2,2-Tetrachloroethane	5	< 0.8	< 0.8	< 0.8	< 0.8 J	< 0.8 J	< 0.8
1,1,2-Trichloroethane	1	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49
1,1-Dichloroethane	5	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
1,1-Dichloroethene	5	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28
1,2,4-Trichlorobenzene	5	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41
1,2-Dibromo-3-chloropropane	0.04	< 0.8* J	< 0.8*	< 0.8*	< 0.8*	< 0.8*	< 0.8*
1,2-Dibromoethane	NS	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45
1,2-Dichlorobenzene	3	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
1,2-Dichloroethane	0.6	< 0.29	< 0.29	< 0.29	< 0.29	< 0.29	< 0.29
1,2-Dichloropropane	1	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24
1,3-Dichlorobenzene	3	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21
1,4-Dichlorobenzene	3	< 0.17	< 0.17	< 0.17	< 0.17	< 0.17	< 0.17
2-Butanone (MEK)	NS	< 2.7	< 2.7	< 2.7	< 2.7	< 2.7	< 2.7
2-Hexanone	NS	< 0.94	< 0.94	< 0.94	< 0.94	< 0.94	< 0.94
4-Methyl-2-pentanone(MIBK)	NS	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4
Acetone	NS	< 2.9	< 2.9	< 2.9	< 2.9	< 2.9	< 2.9
Benzene	1	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19
Bromodichloromethane	NS	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15
Bromoform	NS	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34
Bromomethane	5	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38
Carbon disulfide	NS	< 0.14	< 0.14	< 0.14	< 0.14	< 0.14	< 0.14
Carbon tetrachloride	5	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19
Chlorobenzene	5	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19
Chloroethane	5	< 0.67	< 0.67	< 0.67	< 0.67	< 0.67	< 0.67
Chloroform	7	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25
Chloromethane	NS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
cis-1,2-Dichloroethene	5	< 0.27	< 0.27	< 0.27	< 0.27	< 0.27	< 0.27
cis-1,3-Dichloropropene	NS	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13
Cyclohexane	NS	< 0.85	< 0.85	< 0.85	< 0.85	< 0.85	< 0.85
Dibromochloromethane	NS	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28
Dichlorodifluoromethane	5	< 1	< 1	< 1	< 1	< 1	< 1
Ethylbenzene	5	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21
Freon 113	5	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2
Isopropylbenzene	5	< 0.54	< 0.54	< 0.54	< 0.54	< 0.54	< 0.54
m,p-Xylene	5	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35
Methyl Acetate	NS	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6
Methyl Tert Butyl Ether	NS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Methylcyclohexane	NS	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Methylene chloride	5	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21
o-Xylene	5	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Styrene	5	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Tetrachloroethene	5	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28
Toluene	5	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21
trans-1,2-Dichloroethene	5	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32
trans-1,3-Dichloropropene	NS	< 0.17	< 0.17	< 0.17	< 0.17	< 0.17	< 0.17
Trichloroethene	5	< 0.26	< 0.26	< 0.26	< 0.26	< 0.26	< 0.26
Trichlorofluoromethane	5	< 0.26	< 0.26	< 0.26	< 0.26	< 0.26	< 0.26
Vinyl chloride	2	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22
Xylene (total)	5	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
SVOCs							
1,1'-Biphenyl	5	< 0.25	< 0.22	< 0.25	< 0.23	< 0.24	< 0.26
2,4,5-Trichlorophenol	NS	< 1.2	< 1.1	< 1.3	< 1.2	< 1.2	< 1.3
2,4,6-Trichlorophenol	NS	< 1.1	< 1	< 1.2	< 1.1	< 1.1	< 1.2
2,4-Dichlorophenol	1	< 1.6*	< 1.4*	< 1.6*	< 1.5*	< 1.5*	< 1.7*
2,4-Dimethylphenol	NS	< 1.8	< 1.7	< 1.9	< 1.7	< 1.8	< 2
2,4-Dinitrophenol	NS	< 1.2 J	< 1.1 J	< 1.3	< 1.2 J	< 1.2 J	< 1.3
2,4-Dinitrotoluene	5	< 0.6	< 0.54	< 0.63	< 0.57	< 0.6	< 0.64
2,6-Dinitrotoluene	5	< 0.56	< 0.5	< 0.58	< 0.53	< 0.55	< 0.59
2-Chloronaphthalene	NS	< 0.22	< 0.2	< 0.23	< 0.21	< 0.22	< 0.23
2-Chlorophenol	NS	< 0.97	< 0.87	< 1	< 0.92	< 0.96	< 1
2-Methylnaphthalene	NS	< 0.85	< 0.76	< 0.88	< 0.8	< 0.84	< 0.9
2-Methylphenol	NS	< 1.2	< 1	< 1.2	< 1.1	< 1.1	< 1.2
2-Nitroaniline	NS	< 0.55	< 0.5	< 0.57	< 0.52	< 0.55	< 0.58
2-Nitrophenol	NS	< 1.7	< 1.5	< 1.7	< 1.6	< 1.6	< 1.8
See Last Page for Notes							

Table 4. Historical Analytical Groundwater Data
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Sample Name	GWQS	MW-OB4(103007)	MW-OB5(103007)	MW-OB6(103107)	MW-OS1(103007)	MW-OS2(103007)	MW-OS4(103107)
Sample Date	Class	10/30/2007	10/30/2007	10/31/2007	10/30/2007	10/30/2007	10/31/2007
Validation Status	GA	Final	Final	Final	Final	Final	Final
SVOCs							
3&4-Methylphenol	NS	< 1.2	< 1.1	< 1.3	< 1.2	< 1.2	< 1.3
3,3'-Dichlorobenzidine	5	< 1.1	< 0.97	< 1.1	< 1	< 1.1	< 1.1
3-Nitroaniline	NS	< 0.36	< 0.32	< 0.37	< 0.34	< 0.36	< 0.38
4,6-Dinitro-o-cresol	NS	< 2.5	< 2.2	< 2.6	< 2.3	< 2.5	< 2.6
4-Bromophenyl phenyl ether	NS	< 0.41	< 0.37	< 0.43	< 0.39	< 0.41	< 0.44
4-Chloro-3-methyl phenol	NS	< 1.3	< 1.2	< 1.4	< 1.3	< 1.3	< 1.4
4-Chloroaniline	5	< 0.39	< 0.35	< 0.4	< 0.37	< 0.38	< 0.41
4-Chlorophenyl phenyl ether	NS	< 0.32	< 0.29	< 0.33	< 0.31	< 0.32	< 0.34
4-Nitroaniline	NS	< 0.66	< 0.59	< 0.68	< 0.62	< 0.65	< 0.69
4-Nitrophenol	NS	< 1.8	< 1.6	< 1.8	< 1.7	< 1.7	< 1.9 J
Acenaphthene	NS	< 0.28	< 0.25	< 0.29	< 0.26	< 0.27	< 0.29
Acenaphthylene	NS	< 0.34	< 0.31	< 0.36	< 0.33	< 0.34	< 0.36
Acetophenone	NS	< 0.4	< 0.36	< 0.41	< 0.38	< 0.4	< 0.42
Anthracene	NS	< 0.37	< 0.33	< 0.38	< 0.35	< 0.37	< 0.39
Atrazine	7.5	< 0.31	< 0.28	< 0.33	< 0.3	< 0.31	< 0.33
Benzaldehyde	NS	< 0.85	< 0.76	< 0.87	< 0.8	< 0.84	< 0.9
Benzo(a)anthracene	NS	< 0.39	< 0.35	< 0.4	< 0.37	< 0.38	< 0.41
Benzo(a)pyrene	NS	< 0.86	< 0.78	< 0.89	< 0.82	< 0.85	< 0.92
Benzo(b)fluoranthene	NS	< 0.83	< 0.75	< 0.86	< 0.78	< 0.82	< 0.88
Benzo(g,h,i)perylene	NS	< 0.4	< 0.36	< 0.42	< 0.38	< 0.4	< 0.43
Benzo(k)fluoranthene	NS	< 0.75	< 0.68	< 0.78	< 0.71	< 0.74	< 0.8
bis(2-Chloroethoxy)methane	5	< 0.35	< 0.32	< 0.37	< 0.33	< 0.35	< 0.37
bis(2-Chloroethyl)ether	1	< 0.75	< 0.67	< 0.77	< 0.71	< 0.74	< 0.79
bis(2-Chloroisopropyl)ether	NS	< 0.64	< 0.58	< 0.66	< 0.61	< 0.64	< 0.68
bis(2-Ethylhexyl)phthalate	5	< 0.98	< 0.88	< 1	< 0.92	1.4 J	< 1
Butyl benzyl phthalate	NS	< 0.71	< 0.64	< 0.73	< 0.67	< 0.7	< 0.75
Caprolactam	NS	< 0.55	< 0.49	< 0.57	< 0.52	< 0.54	< 0.58
Carbazole	NS	< 0.44	< 0.4	< 0.46	< 0.42	< 0.44	< 0.47
Chrysene	NS	< 0.49	< 0.45	< 0.51	< 0.47	< 0.49	< 0.52
Dibenzo(a,h)anthracene	NS	< 0.54	< 0.48	< 0.56	< 0.51	< 0.53	< 0.57
Dibenzofuran	NS	< 0.25	< 0.23	< 0.26	< 0.24	< 0.25	< 0.27
Diethyl phthalate	NS	< 0.38	< 0.34	< 0.4	< 0.36	< 0.38	< 0.4
Dimethyl phthalate	NS	< 0.37	< 0.34	< 0.39	< 0.35	< 0.37	< 0.4
Di-n-butyl phthalate	NS	< 0.44	< 0.4	< 0.46	< 0.42	< 0.44	< 0.47
Di-n-octyl phthalate	NS	< 0.53	< 0.48	< 0.55	< 0.5	< 0.53	< 0.56
Fluoranthene	NS	< 0.4	< 0.36	< 0.41	< 0.38	< 0.39	< 0.42
Fluorene	NS	< 0.4	< 0.36	< 0.41	< 0.38	< 0.4	< 0.42
Hexachlorobenzene	0.00003	< 0.34*	< 0.31*	< 0.35*	< 0.32*	< 0.34*	< 0.36*
Hexachlorobutadiene	0.5	< 0.14	< 0.13	< 0.15	< 0.13	< 0.14	< 0.15
Hexachlorocyclopentadiene	NS	< 0.11	< 0.1	< 0.12	< 0.11	< 0.11	< 0.12
Hexachloroethane	5	< 0.18	< 0.16	< 0.19	< 0.17	< 0.18	< 0.19
Indeno(1,2,3-cd)pyrene	NS	< 0.88	< 0.79	< 0.91	< 0.83	< 0.87	< 0.93
Isophorone	NS	< 0.54	< 0.49	< 0.56	< 0.51	< 0.54	< 0.58
Naphthalene	NS	< 0.2	< 0.18	< 0.21	< 0.19	< 0.2	< 0.21
Nitrobenzene	0.4	< 0.78*	< 0.71*	< 0.81*	< 0.74*	< 0.77*	< 0.83*
N-Nitroso-di-n-propylamine	NS	< 0.42	< 0.38	< 0.44	< 0.4	< 0.42	< 0.45
N-Nitrosodiphenylamine	NS	< 0.46	< 0.41	< 0.48	< 0.44	< 0.45	< 0.49
Pentachlorophenol	1	< 1	< 0.93	< 1.1*	< 0.98	< 1	< 1.1*
Phenanthrene	NS	< 0.31	< 0.28	< 0.32	< 0.29	< 0.31	< 0.33
Phenol	1	< 0.76	< 0.68	< 0.79	< 0.72	< 0.75	< 0.8
Pyrene	NS	< 0.41	< 0.37	< 0.43	< 0.39	< 0.41	< 0.44
Metals - Total							
Aluminum	NS	< 200	553.00	< 200	< 200 J	< 200	< 200
Antimony	3	< 6*	< 6*	< 6*	< 6*	< 6*	< 6*
Arsenic	25	< 8	< 8	< 8	< 8	< 8	< 8
Barium	1000	< 200	< 200	< 200 J	< 200	< 200	< 200 J
Beryllium	NS	< 1	< 1	< 1	< 1 J	< 1	< 1
Cadmium	5	< 4	< 4	< 4	< 4	< 4	< 4
Calcium	NS	86,100.00	65,700.00	7,050.00	59300 J	91,800.00	54,400.00
Chromium	50	< 10	< 10	< 10	14.80	< 10	< 10
Cobalt	NS	< 50	< 50	< 50	< 50 J	< 50	< 50
Copper	200	< 25	< 25	< 25	< 25	< 25	< 25
Iron	300	< 100	1,960.00	< 100	558 J	< 100	< 100
Lead	25	< 3	< 3	< 3	< 3	< 3	< 3
Magnesium	NS	20,800.00	19,000.00	< 5000	9050 J	15,200.00	17,100.00
Manganese	300	2,040.00	759.00	< 15	346 J	158.00	1,340.00
Mercury	0.7	< 0.2	< 0.2	< 0.2 J	< 0.2	< 0.2	< 0.2 J
Nickel	100	< 40	< 40	< 40	< 40 J	< 40	< 40
Potassium	NS	< 10000	< 10000	< 10000	< 10000 J	< 10000	< 10000
Selenium	10	< 10	< 10	< 10	< 10	< 10	< 10
Silver	50	< 10	< 10	< 10	< 10 J	< 10	< 10
Sodium	20000	25,700	12,800	< 10000 J	56200 J	10,200	24700 J
Thallium	NS	< 10	< 10	< 10	< 10	< 10	< 10
Vanadium	NS	< 50	< 50	< 50	< 50	< 50	< 50
Zinc	NS	< 20	< 20	< 20	< 20 J	< 20	< 20
Metals - Dissolved							
Aluminum	NS	< 200	< 200	< 200	< 200	< 200	< 200
Antimony	3	< 6*	< 6*	< 6*	< 6*	< 6*	< 6*

Table 4. Historical Analytical Groundwater Data
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Sample Name	GWQS	MW-OB4(103007)	MW-OB5(103007)	MW-OB6(103107)	MW-OS1(103007)	MW-OS2(103007)	MW-OS4(103107)
Sample Date	Class	10/30/2007	10/30/2007	10/31/2007	10/30/2007	10/30/2007	10/31/2007
Validation Status	GA	Final	Final	Final	Final	Final	Final
Arsenic	25	< 8	< 8	< 8	< 8	< 8	< 8
Barium	1000	< 200	< 200	< 200 J	< 200	< 200	< 200 J
Beryllium	NS	< 1	< 1	< 1	< 1	< 1	< 1
Cadmium	5	< 4	< 4	< 4	< 4	< 4	< 4
Calcium	NS	83,500.00	62,300.00	6,870.00	55,700.00	88,100.00	54,100.00
Chromium	50	< 10	< 10	< 10	< 10	< 10	< 10
Cobalt	NS	< 50	< 50	< 50	< 50	< 50	< 50
Copper	200	< 25	< 25	< 25	< 25	< 25	< 25
Iron	300	< 100	< 100	< 100	< 100	< 100	< 100

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Metals - Dissolved

Lead	25	< 3	< 3	< 3	< 3	< 3	< 3
Magnesium	NS	20,100.00	17,800.00	< 5000	8,820.00	14,700.00	16,900.00
Manganese	300	1,980	697	< 15	333	135	1,330
Mercury	0.7	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Nickel	100	< 40	< 40	< 40	< 40	< 40	< 40
Potassium	NS	< 10000	< 10000	< 10000	< 10000	< 10000	< 10000
Selenium	10	< 10	< 10	< 10	< 10	< 10	< 10
Silver	50	< 10	< 10	< 10	< 10	< 10	< 10
Sodium	20000	24,700	11,800	10000 J	51,900	< 10000	24300 J
Thallium	NS	< 10	< 10	< 10	< 10	< 10	< 10
Vanadium	NS	< 50	< 50	< 50	< 50	< 50	< 50
Zinc	NS	< 20	< 20	< 20	< 20	< 20	< 20

Notes

Results are presented in micrograms per liter (ug/l).

GWQS Ground Water Quality Standard

< Not detected.

NA Not analyzed.

NS No standard.

J Estimated result.

* Detection limit is above standard

SVOC Semi-volatile organic compound.

VOC Volatile organic compound.

Bold Detection

Bold Exceedance above GWQS

Groundwater Standards as specified for New York (6 NYCRR Part 703, Aug 1999).

Class GA waters are fresh groundwaters.

Table 5. Historical Analytical Soil Data
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Location ID	375-6.8(b)	375-6.8(b)	OU2-SB-1	OU2-SB-1	OU2-SB-2	OU2-SB-2	OU2-SB-3	OU2-SB-3	OU2-SB-4	OU2-SB-4	OU2-SB-5	OU2-SB-5
Sample ID	Residential	Restricted	OU2-SB-1 (0.0-0.6)	OU2-SB-1 (1.5-2.0)	OU2-SB-2(0.0-0.6)	OU2-SB-2(1.5-2.0)	OU2-SB-3 (0.0-0.6)	OU2-SB-3 (1.5-2.0)	OU2-SB-4(0.0-0.6)	OU2-SB-4(1.5-2.0)	OU2-SB-5(0.0-0.6)	OU2-SB-5(1.5-2.0)
Sample Date		Residential	5/21/2012	5/21/2012	5/22/2012	5/22/2012	5/21/2012	5/21/2012	5/22/2012	5/22/2012	5/22/2012	5/22/2012
Depth Interval			0.0 - 0.6	1.5 - 2.0	0.0 - 0.6	1.5 - 2.0	0.0 - 0.6	1.5 - 2.0	0.0 - 0.6	1.5 - 2.0	0.0 - 0.6	1.5 - 2.0
VOCs												
1,1,1-Trichloroethane	100	100	< 0.00032	< 0.00041	< 0.00093	< 0.00026	< 0.0003	< 0.00026	< 0.00024	< 0.00023	< 0.00025	< 0.000099
1,1,2,2-Tetrachloroethane	NS	NS	< 0.00024	< 0.0003	< 0.00069	< 0.00019	< 0.00022	< 0.00019	< 0.00018	< 0.00017	< 0.00019	< 0.00012
1,1,2-Trichloroethane	NS	NS	< 0.00057	< 0.00073	< 0.0017	< 0.00047	< 0.00054	< 0.00046	< 0.00043	< 0.00041	< 0.00045	< 0.00016
1,1-Dichloroethane	19	26	< 0.00029	< 0.00037	< 0.00085	< 0.00024	< 0.00027	< 0.00023	< 0.00022	< 0.00021	< 0.00023	< 0.00013
1,1-Dichloroethene	100	100	< 0.00081	< 0.001	< 0.0024	< 0.00067	< 0.00076	< 0.00066	< 0.00061	< 0.00059	< 0.00064	< 0.00024
1,2,4-Trichlorobenzene	NS	NS	< 0.00045	< 0.00057	< 0.0013	< 0.00037	< 0.00043	< 0.00037	< 0.00034	< 0.00033	< 0.00036	< 0.00013
1,2-Dibromo-3-chloropropane	NS	NS	< 0.002	< 0.0025	< 0.0059	< 0.0016	< 0.0019	< 0.0016	< 0.0015	< 0.0014	< 0.0016	< 0.00083
1,2-Dibromoethane	NS	NS	< 0.00031	< 0.0004	< 0.00092	< 0.00026	< 0.0003	< 0.00026	< 0.00024	< 0.00023	< 0.00025	< 0.00012
1,2-Dichlorobenzene	100	100	< 0.00036	< 0.00047	< 0.0011	< 0.0003	< 0.00035	< 0.0003	< 0.00028	< 0.00026	< 0.00029	< 0.00018
1,2-Dichloroethane	2.3	3.1	< 0.00024	< 0.00031	< 0.00071	< 0.0002	< 0.00023	< 0.0002	< 0.00018	< 0.00017	< 0.00019	< 0.00013
1,2-Dichloropropane	NS	NS	< 0.00035	< 0.00045	< 0.001	< 0.00029	< 0.00033	< 0.00029	< 0.00027	< 0.00025	< 0.00028	< 0.00014
1,3-Dichlorobenzene	17	49	< 0.00025	< 0.00032	< 0.00074	< 0.00021	< 0.00024	< 0.00021	< 0.00019	< 0.00018	< 0.0002	< 0.00018
1,4-Dichlorobenzene	9.8	13	< 0.00022	< 0.00029	< 0.00066	< 0.00018	< 0.00021	< 0.00018	< 0.00017	< 0.00016	< 0.00018	< 0.00017
2-Butanone (MEK)	100	100	< 0.0057	< 0.0073	< 0.0047	< 0.017	< 0.0047	< 0.0046	< 0.0043	< 0.0041	< 0.0045	< 0.0022
2-Hexanone	NS	NS	< 0.0033	< 0.0042	< 0.0096	< 0.0027	< 0.0031	< 0.0027	< 0.0025	< 0.0024	< 0.0026	< 0.00058
4-Methyl-2-pentanone(MIBK)	NS	NS	< 0.0035	< 0.0044	< 0.01	< 0.0029	< 0.0033	< 0.0028	< 0.0026	< 0.0025	< 0.0027	< 0.0007
Acetone	100	100	0.175	0.3	< 0.026	0.0128	< 0.0083	< 0.0071	< 0.0066	< 0.0063	< 0.0069	< 0.0016
Benzene	2.9	4.8	< 0.00017	< 0.00022	< 0.00052	< 0.00014	< 0.00017	< 0.00014	< 0.00013	< 0.00013	< 0.00014	< 0.00011
Bromodichloromethane	NS	NS	< 0.00029	< 0.00038	< 0.00087	< 0.00024	< 0.00028	< 0.00024	< 0.00022	< 0.00021	< 0.00023	< 0.000099
Bromoform	NS	NS	< 0.00099	< 0.0013	< 0.0029	< 0.00082	< 0.00094	< 0.00081	< 0.00075	< 0.00072	< 0.00079	< 0.00014
Bromomethane	NS	NS	< 0.00052	< 0.00066	< 0.0015	< 0.00043	< 0.00049	< 0.00042	< 0.00039	< 0.00038	< 0.00041	< 0.00026
Carbon disulfide	NS	NS	< 0.00026	< 0.00033	< 0.00076	0.0016 J	< 0.00024	< 0.00021	< 0.0002	< 0.00019	< 0.0002	< 0.00011
Carbon tetrachloride	1.4	2.4	< 0.00045	< 0.00058	< 0.0013	< 0.00038	< 0.00043	< 0.00037	< 0.00034	< 0.00033	< 0.00036	< 0.00012
Chlorobenzene	100	100	< 0.00042	< 0.00054	< 0.0012	< 0.00035	< 0.0004	< 0.00035	< 0.00032	< 0.00031	< 0.00034	< 0.0001
Chloroethane	NS	NS	< 0.00054	< 0.00069	< 0.0016	< 0.00044	< 0.00051	< 0.00044	< 0.00041	< 0.00039	< 0.00043	< 0.00021
Chloroform	10	49	< 0.00063	< 0.00081	< 0.0019	< 0.00053	< 0.0006	< 0.00052	< 0.00048	< 0.00046	< 0.00051	< 0.000077
Chloromethane	NS	NS	< 0.00082	< 0.001	< 0.0024	< 0.00068	< 0.00078	< 0.00067	< 0.00062	< 0.0006	< 0.00065	< 0.00017
cis-1,2-Dichloroethene	59	100	< 0.00042	< 0.00054	< 0.0012	< 0.00035	< 0.0004	< 0.00035	< 0.00032	< 0.00031	< 0.00034	< 0.00017
cis-1,3-Dichloropropene	NS	NS	< 0.0002	< 0.00026	< 0.00059	< 0.00017	< 0.00019	< 0.00016	< 0.00015	< 0.00015	< 0.00016	< 0.00013
Cyclohexane	NS	NS	< 0.0005	< 0.00064	< 0.0015	< 0.00041	< 0.00047	< 0.00041	< 0.00038	< 0.00041	< 0.00036	< 0.00012
Dibromochloromethane	NS	NS	< 0.00022	< 0.00028	< 0.00065	< 0.00018	< 0.00021	< 0.00018	< 0.00017	< 0.00016	< 0.00018	< 0.00015
Dichlorodifluoromethane	NS	NS	< 0.00042	< 0.00054	< 0.0012	< 0.00035	< 0.0004	< 0.00034	< 0.00032	< 0.00031	< 0.00034	< 0.00021
Ethylbenzene	30	41	< 0.00019	< 0.00025	< 0.00057	< 0.00016	< 0.00018	< 0.00016	< 0.00015	< 0.00014	< 0.00015	< 0.00025
Freon 113	NS	NS	< 0.00094	< 0.0012	< 0.0028	< 0.00078	< 0.00089	< 0.00077	< 0.00071	< 0.00068	< 0.00075	< 0.0004
Isopropylbenzene	NS	NS	< 0.00018	< 0.00023	< 0.00053	< 0.00015	< 0.00017	< 0.00015	< 0.00014	< 0.00013	< 0.00014	< 0.00007
Methyl Acetate	NS	NS	< 0.0029	< 0.0037	< 0.0086	< 0.0024	< 0.0028	< 0.0024	< 0.0022	< 0.0021	< 0.0023	< 0.0024
Methyl Tert Butyl Ether	62	100	< 0.00024	< 0.0003	< 0.00069	< 0.00019	< 0.00022	< 0.00019	< 0.00018	< 0.00017	< 0.00019	< 0.00022
Methylcyclohexane	NS	NS	< 0.00032	< 0.00041	< 0.00095	< 0.00027	< 0.00031	< 0.00026	< 0.00024	< 0.00023	< 0.00026	< 0.00016
Methylene chloride	51	100	< 0.0003	< 0.00039	< 0.00089	< 0.00025	< 0.00029	< 0.00025	< 0.00023	< 0.00022	< 0.00024	< 0.0012
Styrene	NS	NS	< 0.00024	< 0.00031	< 0.00072	< 0.00031	< 0.00072	< 0.00023	< 0.0002	< 0.00018	< 0.00018	< 0.000086
Tetrachloroethene	5.5	19	< 0.00025	< 0.00032	< 0.00074	< 0.00021	< 0.00024	< 0.00021	< 0.00019	< 0.00018	< 0.0002	< 0.00016
Toluene	100	100	< 0.0005	< 0.00064	< 0.0015	< 0.00041	< 0.00047	< 0.00041	< 0.00038	< 0.00036	< 0.0004	0.00041 J
trans-1,2-Dichloroethene	100	100	< 0.00056	< 0.00071	< 0.0016	< 0.00046	< 0.00053	< 0.00046	< 0.00042	< 0.0004	< 0.00044	< 0.00022
trans-1,3-Dichloropropene	NS	NS	< 0.00044	< 0.00056	< 0.0013	< 0.00037	< 0.00042	< 0.00036	< 0.00033	< 0.00032	< 0.00035	< 0.00015
Trichloroethene	10	21	< 0.00032	< 0.00042	< 0.00096	< 0.00027	< 0.00031	< 0.00027	< 0.00025	< 0.00024	< 0.00026	< 0.00016
Trichlorofluoromethane	NS	NS	< 0.00063	< 0.00081	< 0.0019	< 0.00052	< 0.0006	< 0.00052	< 0.00048	< 0.00046	< 0.0005	< 0.00028
Vinyl chloride	0.21	0.9	< 0.00061	< 0.00077	< 0.0018	< 0.0005	< 0.00057	< 0.00049	< 0.00046	< 0.00044	< 0.00048	< 0.00014
Xylene (total)	100	100	< 0.00024	< 0.00031	< 0.00071	< 0.0002	< 0.00023	< 0.0002	< 0.00018	< 0.00018	< 0.00019	0.00026 J
Total TIC, Volatile	NS	NS	0.0137 JN	0.088 JN	0.028 JN	0	0	0.0162 JN	0	0	0	0

See Notes on Last Page

Table 5. Historical Analytical Soil Data
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Location ID	375-6.8(b)	375-6.8(b)	OU2-SB-1	OU2-SB-1	OU2-SB-2	OU2-SB-2	OU2-SB-3	OU2-SB-3	OU2-SB-4	OU2-SB-4	OU2-SB-5	OU2-SB-5
Sample ID	Residential	Restricted	OU2-SB-1 (0.0-0.6)	OU2-SB-1 (1.5-2.0)	OU2-SB-2(0.0-0.6)	OU2-SB-2(1.5-2.0)	OU2-SB-3 (0.0-0.6)	OU2-SB-3 (1.5-2.0)	OU2-SB-4(0.0-0.6)	OU2-SB-4(1.5-2.0)	OU2-SB-5(0.0-0.6)	OU2-SB-5(1.5-2.0)
Sample Date		Residential	5/21/2012	5/21/2012	5/22/2012	5/22/2012	5/21/2012	5/21/2012	5/22/2012	5/22/2012	5/22/2012	5/22/2012
Depth Interval			0.0 - 0.6	1.5 - 2.0	0.0 - 0.6	1.5 - 2.0	0.0 - 0.6	1.5 - 2.0	0.0 - 0.6	1.5 - 2.0	0.0 - 0.6	1.5 - 2.0
SVOCs												
1,1'-Biphenyl	NS	NS	NA	NA	NA	NA	< 0.0043	< 0.0039	NA	NA	NA	NA
2,4,5-Trichlorophenol	NS	NS	NA	NA	NA	NA	< 0.043	< 0.039	NA	NA	NA	NA
2,4,6-Trichlorophenol	NS	NS	NA	NA	NA	NA	< 0.034	< 0.032	NA	NA	NA	NA
2,4-Dichlorophenol	NS	NS	NA	NA	NA	NA	< 0.059	< 0.054	NA	NA	NA	NA
2,4-Dimethylphenol	NS	NS	NA	NA	NA	NA	< 0.062	< 0.057	NA	NA	NA	NA
2,4-Dinitrophenol	NS	NS	NA	NA	NA	NA	< 0.045	< 0.041	NA	NA	NA	NA
2,4-Dinitrotoluene	NS	NS	NA	NA	NA	NA	< 0.016	< 0.015	NA	NA	NA	NA
2,6-Dinitrotoluene	NS	NS	NA	NA	NA	NA	< 0.014	< 0.013	NA	NA	NA	NA
2-Chloronaphthalene	NS	NS	NA	NA	NA	NA	< 0.011	< 0.01	NA	NA	NA	NA
2-Chlorophenol	NS	NS	NA	NA	NA	NA	< 0.037	< 0.034	NA	NA	NA	NA
2-Methylnaphthalene	NS	NS	NA	NA	NA	NA	< 0.02	< 0.019	NA	NA	NA	NA
2-Methylphenol	100	100	NA	NA	NA	NA	< 0.042	< 0.038	NA	NA	NA	NA
2-Nitroaniline	NS	NS	NA	NA	NA	NA	< 0.016	< 0.015	NA	NA	NA	NA
2-Nitrophenol	NS	NS	NA	NA	NA	NA	< 0.039	< 0.036	NA	NA	NA	NA
3&4-Methylphenol	NS	NS	NA	NA	NA	NA	< 0.047	< 0.043	NA	NA	NA	NA
3,3'-Dichlorobenzidine	NS	NS	NA	NA	NA	NA	< 0.0093	< 0.0086	NA	NA	NA	NA
3-Nitroaniline	NS	NS	NA	NA	NA	NA	< 0.015	< 0.013	NA	NA	NA	NA
4,6-Dinitro-o-cresol	NS	NS	NA	NA	NA	NA	< 0.045	< 0.041	NA	NA	NA	NA
4-Bromophenyl phenyl ether	NS	NS	NA	NA	NA	NA	< 0.013	< 0.012	NA	NA	NA	NA
4-Chloro-3-methyl phenol	NS	NS	NA	NA	NA	NA	< 0.037	< 0.034	NA	NA	NA	NA
4-Chloroaniline	NS	NS	NA	NA	NA	NA	< 0.012	< 0.011	NA	NA	NA	NA
4-Chlorophenyl phenyl ether	NS	NS	NA	NA	NA	NA	< 0.011	< 0.01	NA	NA	NA	NA
4-Nitroaniline	NS	NS	NA	NA	NA	NA	< 0.014	< 0.013	NA	NA	NA	NA
4-Nitrophenol	NS	NS	NA	NA	NA	NA	< 0.062 J	< 0.057 J	NA	NA	NA	NA
Acenaphthene	100	100	NA	NA	NA	NA	< 0.011	< 0.0098	NA	NA	NA	NA
Acenaphthylene	100	100	NA	NA	NA	NA	< 0.012	< 0.011	NA	NA	NA	NA
Acetophenone	NS	NS	NA	NA	NA	NA	< 0.0064	< 0.0059	NA	NA	NA	NA
Anthracene	100	100	NA	NA	NA	NA	< 0.013	< 0.012	NA	NA	NA	NA
Atrazine	NS	NS	NA	NA	NA	NA	< 0.0072	< 0.0066	NA	NA	NA	NA
Benzaldehyde	NS	NS	NA	NA	NA	NA	< 0.0084	< 0.0078	NA	NA	NA	NA
Benzo(a)anthracene	1	1	NA	NA	NA	NA	< 0.012	< 0.011	NA	NA	NA	NA
Benzo(a)pyrene	1	1	NA	NA	NA	NA	< 0.011	< 0.01	NA	NA	NA	NA
Benzo(b)fluoranthene	1	1	NA	NA	NA	NA	< 0.012	< 0.011	NA	NA	NA	NA
Benzo(g,h,i)perylene	100	100	NA	NA	NA	NA	< 0.014	< 0.013	NA	NA	NA	NA
Benzo(k)fluoranthene	1	3.9	NA	NA	NA	NA	< 0.014	< 0.013	NA	NA	NA	NA
bis(2-Chloroethoxy)methane	NS	NS	NA	NA	NA	NA	< 0.015	< 0.014	NA	NA	NA	NA
bis(2-Chloroethyl)ether	NS	NS	NA	NA	NA	NA	< 0.011	< 0.01	NA	NA	NA	NA
bis(2-Chloroisopropyl)ether	NS	NS	NA	NA	NA	NA	< 0.011	< 0.01	NA	NA	NA	NA
bis(2-Ethylhexyl)phthalate	NS	NS	NA	NA	NA	NA	< 0.032	< 0.03	NA	NA	NA	NA
Butyl benzyl phthalate	NS	NS	NA	NA	NA	NA	< 0.021	< 0.02	NA	NA	NA	NA
Caprolactam	NS	NS	NA	NA	NA	NA	< 0.012	< 0.011	NA	NA	NA	NA
Carbazole	NS	NS	NA	NA	NA	NA	< 0.017	< 0.016	NA	NA	NA	NA
Chrysene	1	3.9	NA	NA	NA	NA	< 0.012	< 0.011	NA	NA	NA	NA
Dibenzo(a,h)anthracene	0.33	0.33	NA	NA	NA	NA	< 0.012	< 0.012	NA	NA	NA	NA
Dibenzofuran	14	59	NA	NA	NA	NA	< 0.011	< 0.01	NA	NA	NA	NA
Diethyl phthalate	NS	NS	NA	NA	NA	NA	< 0.012	< 0.012	NA	NA	NA	NA
Dimethyl phthalate	NS	NS	NA	NA	NA	NA	0.0555 J	0.0353 J	NA	NA	NA	NA
Di-n-butyl phthalate	NS	NS	NA	NA	NA	NA	< 0.0081	< 0.0075	NA	NA	NA	NA
Di-n-octyl phthalate	NS	NS	NA	NA	NA	NA	< 0.018	< 0.016	NA	NA	NA	NA
Fluoranthene	100	100	NA	NA	NA	NA	< 0.016	< 0.015	NA	NA	NA	NA
Fluorene	100	100	NA	NA	NA	NA	< 0.012	< 0.011	NA	NA	NA	NA
Hexachlorobenzene	0.33	1.2	NA	NA	NA	NA	< 0.012	< 0.011	NA	NA	NA	NA
Hexachlorobutadiene	NS	NS	NA	NA	NA	NA	< 0.01	< 0.0094	NA	NA	NA	NA
Hexachlorocyclopentadiene	NS	NS	NA	NA	NA	NA	< 0.037	< 0.034	NA	NA	NA	NA
Hexachloroethane	NS	NS	NA	NA	NA	NA	< 0.01	< 0.0094	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene	0.5	0.5	NA	NA	NA	NA	< 0.013	< 0.012	NA	NA	NA	NA
Isophorone	NS	NS	NA	NA	NA	NA	< 0.0099	< 0.0091	NA	NA	NA	NA
Naphthalene	100	100	NA	NA	NA	NA	< 0.01	< 0.0092	NA	NA	NA	NA
Nitrobenzene	NS	NS	NA	NA	NA	NA	< 0.011	< 0.0097	NA	NA	NA	NA
N-Nitroso-di-n-propylamine	NS	NS	NA	NA	NA	NA	< 0.0089	< 0.0082	NA	NA	NA	NA
N-Nitrosodiphenylamine	NS	NS	NA	NA	NA	NA	< 0.022	< 0.02	NA	NA	NA	NA
Pentachlorophenol	2.4	6.7	NA	NA	NA	NA	< 0.063 J	< 0.058 J	NA	NA	NA	NA
Phenanthrene	100	100	NA	NA	NA	NA	< 0.017	< 0.015	NA	NA	NA	NA
Phenol	100	100	NA	NA	NA	NA	< 0.038	< 0.035	NA	NA	NA	NA
Pyrene	100	100	NA	NA	NA	NA	< 0.014	< 0.013	NA	NA	NA	NA
Total TIC, Semi-Volatile	NS	NS	NA	NA	NA	NA	0.37 JN	0.29 JN	NA	NA	NA	NA

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Table 5. Historical Analytical Soil Data
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Location ID Sample ID Sample Date Depth Interval	375-6.8(b)	375-6.8(b)	OU2-SB-1	OU2-SB-1	OU2-SB-2	OU2-SB-2	OU2-SB-3	OU2-SB-3	OU2-SB-4	OU2-SB-4	OU2-SB-5	OU2-SB-5
	Residential	Restricted	OU2-SB-1 (0.0-0.6)	OU2-SB-1 (1.5-2.0)	OU2-SB-2(0.0-0.6)	OU2-SB-2(1.5-2.0)	OU2-SB-3 (0.0-0.6)	OU2-SB-3 (1.5-2.0)	OU2-SB-4(0.0-0.6)	OU2-SB-4(1.5-2.0)	OU2-SB-5(0.0-0.6)	OU2-SB-5(1.5-2.0)
		Residential	5/21/2012	5/21/2012	5/22/2012	5/22/2012	5/21/2012	5/21/2012	5/22/2012	5/22/2012	5/22/2012	5/22/2012
			0.0 - 0.6	1.5 - 2.0	0.0 - 0.6	1.5 - 2.0	0.0 - 0.6	1.5 - 2.0	0.0 - 0.6	1.5 - 2.0	0.0 - 0.6	1.5 - 2.0
Pesticides												
4,4'-DDD	2.6	13	NA	NA	NA	NA	< 0.00042	< 0.0004	NA	NA	NA	NA
4,4'-DDE	1.8	8.9	NA	NA	NA	NA	0.0121	0.0071	NA	NA	NA	NA
4,4'-DDT	1.7	7.9	NA	NA	NA	NA	0.0149	0.0076	NA	NA	NA	NA
Aldrin	0.019	0.097	NA	NA	NA	NA	< 0.00041	< 0.00039	NA	NA	NA	NA
alpha-BHC	0.097	0.48	NA	NA	NA	NA	< 0.00062	< 0.00058	NA	NA	NA	NA
alpha-Chlordane	0.91	4.2	NA	NA	NA	NA	< 0.00054	< 0.0005	NA	NA	NA	NA
Beta-BHC	0.072	0.36	NA	NA	NA	NA	< 0.00058	< 0.00054	NA	NA	NA	NA
Camphechlor	NS	NS	NA	NA	NA	NA	< 0.01	< 0.0097	NA	NA	NA	NA
Delta-BHC	100	100	NA	NA	NA	NA	< 0.00048	< 0.00045	NA	NA	NA	NA
Pesticides												
Dieldrin	0.039	0.2	NA	NA	NA	NA	< 0.00064	< 0.0006	NA	NA	NA	NA
Endosulfan I	4.8	24	NA	NA	NA	NA	< 0.0004	< 0.00037	NA	NA	NA	NA
Endosulfan II	4.8	24	NA	NA	NA	NA	< 0.00054	< 0.00051	NA	NA	NA	NA
Endosulfan Sulfate	4.8	24	NA	NA	NA	NA	< 0.00075	< 0.0007	NA	NA	NA	NA
Endrin	2.2	11	NA	NA	NA	NA	< 0.00042	< 0.00039	NA	NA	NA	NA
Endrin Aldehyde	NS	NS	NA	NA	NA	NA	< 0.00078	< 0.00073	NA	NA	NA	NA
Endrin Ketone	NS	NS	NA	NA	NA	NA	< 0.00054	< 0.0005	NA	NA	NA	NA
gamma-BHC (Lindane)	0.28	1.3	NA	NA	NA	NA	< 0.00038	< 0.00035	NA	NA	NA	NA
Gamma-Chlordane	NS	NS	NA	NA	NA	NA	< 0.00042	< 0.00039	NA	NA	NA	NA
Heptachlor	0.42	2.1	NA	NA	NA	NA	< 0.00051	< 0.00047	NA	NA	NA	NA
Heptachlor Epoxide	NS	NS	NA	NA	NA	NA	< 0.00041	< 0.00038	NA	NA	NA	NA
Methoxychlor	NS	NS	NA	NA	NA	NA	< 0.00058	< 0.00054	NA	NA	NA	NA
Polychlorinated Biphenyls												
Aroclor 1016	1	1	NA	NA	NA	NA	< 0.011	< 0.01	NA	NA	NA	NA
Aroclor 1221	1	1	NA	NA	NA	NA	< 0.025	< 0.023	NA	NA	NA	NA
Aroclor 1232	1	1	NA	NA	NA	NA	< 0.021	< 0.02	NA	NA	NA	NA
Aroclor 1242	1	1	NA	NA	NA	NA	0.0529	0.075	NA	NA	NA	NA
Aroclor 1248	1	1	NA	NA	NA	NA	< 0.013	< 0.012	NA	NA	NA	NA
Aroclor 1254	1	1	NA	NA	NA	NA	< 0.019	< 0.018	NA	NA	NA	NA
Aroclor 1260	1	1	NA	NA	NA	NA	< 0.014	< 0.013	NA	NA	NA	NA

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Table 5. Historical Analytical Soil Data
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Location ID Sample ID Sample Date Depth Interval	375-6.8(b)	375-6.8(b)	OU2-SB-1	OU2-SB-1	OU2-SB-2	OU2-SB-2	OU2-SB-3	OU2-SB-3	OU2-SB-4	OU2-SB-4	OU2-SB-5	OU2-SB-5
	Residential	Restricted	OU2-SB-1 (0.0-0.6)	OU2-SB-1 (1.5-2.0)	OU2-SB-2(0.0-0.6)	OU2-SB-2(1.5-2.0)	OU2-SB-3 (0.0-0.6)	OU2-SB-3 (1.5-2.0)	OU2-SB-4(0.0-0.6)	OU2-SB-4(1.5-2.0)	OU2-SB-5(0.0-0.6)	OU2-SB-5(1.5-2.0)
		Residential	5/21/2012	5/21/2012	5/22/2012	5/22/2012	5/21/2012	5/21/2012	5/22/2012	5/22/2012	5/22/2012	5/22/2012
			0.0 - 0.6	1.5 - 2.0	0.0 - 0.6	1.5 - 2.0	0.0 - 0.6	1.5 - 2.0	0.0 - 0.6	1.5 - 2.0	0.0 - 0.6	1.5 - 2.0
Metals												
Aluminum	NS	NS	7930	10600	11500	14000	10500	13800	11100	14300	6950	8710
Antimony	NS	NS	< 2.8	< 3.1	< 5.6	< 2.7	< 2.6	< 2.4	< 2.4	< 2.4	< 2.6	< 2.4
Arsenic	16	16	6	4.8	< 5.6	< 2.7	< 2.6	< 2.4	3.1	4.1	< 2.6	2.6
Barium	350	400	46.2	< 31	91.1	40.3	38.9	39.5	69.7	83.7	57.4	36.2
Beryllium	14	72	0.44	0.41	1.5	0.64	0.55	0.56	0.65	0.78	0.5	0.48
Cadmium	2.5	4.3	< 0.69	< 0.77	< 1.4	< 0.68	< 0.64	< 0.6	< 0.6	< 0.61	< 0.64	< 0.61
Calcium	NS	NS	< 690	< 770	5170	1240	2380	1720	4180	6250	10400	3110
Chromium	NS	NS	10.7	12.8	15.5	16.6	17.2	17.3	16.4	23.1	13.6	17.1
Cobalt	NS	NS	< 6.9	< 7.7	< 14	< 6.8	7.2	7.6	6.5	7.8	< 6.4	< 6.1
Copper	270	270	20.6	11.5	20.5	11.5	18.2	19.8	23.5	29.3	20.7	14.4
Iron	NS	NS	9390	16200	15500	12000	18700	18400	19700	22700	16900	16400
Lead	400	400	165	92.9	78.8	144	22.2	8.2	20.8	36.4	20.2	15.7
Magnesium	NS	NS	< 690	930	2110	2060	3190	2830	4380	5660	7950	2720
Manganese	2000	2000	42.6	42.7	1080	65.2	240	137	387	451	498	238
Mercury	0.81	0.81	0.19	< 0.069 UB	0.17	0.044	< 0.04	< 0.037	0.036	0.097	< 0.037	< 0.038
Nickel	140	310	10.8	6.5	14.1	9.9	12.6	13.8	14.6	19.2	11.6	12.5
Potassium	NS	NS	< 1400	< 1500	< 2800	< 1400	< 1300	< 1200	1380	1480	< 1300	< 1200
Selenium	36	180	< 2.8	< 3.1	< 5.6	< 2.7	< 2.6	< 2.4	< 2.4	< 2.4	< 2.6	< 2.4
Silver	36	180	< 0.69	< 0.77	< 1.4	0.8	< 0.64	< 0.6	1.2	2.4	< 0.64	< 0.61
Sodium	NS	NS	< 1400	< 1500	< 2800	< 1400	< 1300	< 1200	< 1200	< 1200	< 1300	< 1200
Thallium	NS	NS	< 1.4	< 1.5	< 2.8	< 1.4	< 1.3	< 1.2	< 1.2	< 1.2	< 1.3	< 1.2
Vanadium	NS	NS	28.2	34.5	29.5	27.1	31.4	30.7	27.6	33.1	23.9	24.1
Zinc	2200	10000	28.4	23.5	155	41.7	35.4	29.1	60.5	82.1	41.5	40.9
Other												
Cyanide	27	27	NA	NA	NA	NA	< 0.31	< 0.27	NA	NA	NA	NA
Solids, Percent	NS	NS	71.8	66.1	35.8	77.9	77.1	84.7	85	83.1	79.7	84.6

Notes:
Results reported in milligrams per kilogram (mg/kg).
Field Blank and Trip Blank reported in micrograms per liter (ug/l).

NS	No standard
NA	Not analyzed
J	Estimated result
JN	Estimated result
R	Rejected result
UB	Analyte considered non-detect at the listed value due to associated blank contamination
Bold	Result exceeds 375-6.8(b) residential use soil cleanup objective.
Shade	Result exceeds 375-6.8(b) restricted residential use soil cleanup objective.

Table 5. Historical Analytical Soil Data
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Location ID	375-6.8(b)	375-6.8(b)	OU2-SB-6	OU2-SB-6	OU2-SB-7	OU2-SB-7	OU2-SB-8	OU2-SB-8	OU2-SB-9	OU2-SB-9	OU2-SB-10	OU2-SB-10
Sample ID	Residential	Restricted	OU2-SB-6(0.0-0.6)	OU2-SB-6(1.5-2.0)	OU2-SB-7(0.0-0.6)	OU2-SB-7(1.5-2.0)	OU2-SB-8(0.0-0.6)	OU2-SB-8(1.5-2.0)	OU2-SB-9(0.0-0.6)	OU2-SB-9(1.5-2.0)	OU2-SB-10(0.0-0.6)	OU2-SB-10(1.5-2.0)
Sample Date		Residential	5/22/2012	5/22/2012	5/22/2012	5/22/2012	5/22/2012	5/22/2012	5/23/2012	5/23/2012	5/23/2012	5/23/2012
Depth Interval			0.0 - 0.6	1.5 - 2.0	0.0 - 0.6	1.5 - 2.0	0.0 - 0.6	1.5 - 2.0	0.0 - 0.6	1.5 - 2.0	0.0 - 0.6	1.5 - 2.0
VOCs												
1,1,1-Trichloroethane	100	100	< 0.00025	< 0.00026	< 0.0077	< 0.00025	< 0.00026	< 0.00026	< 0.00012	< 0.0001	< 0.00015	< 0.00014
1,1,2,2-Tetrachloroethane	NS	NS	< 0.00018	< 0.00019	< 0.0096	< 0.00018	< 0.00019	< 0.00019	< 0.00015	< 0.00013	< 0.00019	< 0.00018
1,1,2-Trichloroethane	NS	NS	< 0.00044	< 0.00046	< 0.013	< 0.00045	< 0.00046	< 0.00047	< 0.0002	< 0.00017	< 0.00025	< 0.00023
1,1-Dichloroethane	19	26	< 0.00022	< 0.00023	< 0.0099	< 0.00022	< 0.00023	< 0.00023	< 0.00016	< 0.00013	< 0.0002	< 0.00018
1,1-Dichloroethene	100	100	< 0.00062	< 0.00065	< 0.019	< 0.00063	< 0.00066	< 0.00066	< 0.00029	< 0.00025	< 0.00037	< 0.00034
1,2,4-Trichlorobenzene	NS	NS	< 0.00035	< 0.00036	< 0.01	< 0.00035	< 0.00037	< 0.00037	< 0.00016	< 0.00013	< 0.0002	< 0.00019
1,2-Dibromo-3-chloropropane	NS	NS	< 0.0015	< 0.0016	< 0.064	< 0.0016	< 0.0016	< 0.0016	< 0.001	< 0.00085	< 0.0013	< 0.0012
1,2-Dibromoethane	NS	NS	< 0.00024	< 0.00025	< 0.0092	< 0.00024	< 0.00025	< 0.00026	< 0.00015	< 0.00012	< 0.00018	< 0.00017
1,2-Dichlorobenzene	100	100	< 0.00028	< 0.0003	< 0.014	< 0.00028	< 0.0003	< 0.0003	< 0.00022	< 0.00018	< 0.00027	< 0.00025
1,2-Dichloroethane	2.3	3.1	< 0.00019	< 0.00019	< 0.0098	< 0.00019	< 0.00019	< 0.0002	< 0.00015	< 0.00013	< 0.00019	< 0.00018
1,2-Dichloropropane	NS	NS	< 0.00027	< 0.00028	< 0.011	< 0.00027	< 0.00028	< 0.00029	< 0.00018	< 0.00015	< 0.00022	< 0.00021
1,3-Dichlorobenzene	17	49	< 0.0002	< 0.0002	< 0.014	< 0.0002	< 0.00021	< 0.00021	< 0.00021	< 0.00018	< 0.00027	< 0.00025
1,4-Dichlorobenzene	9.8	13	< 0.00017	< 0.00018	< 0.013	< 0.00017	< 0.00018	< 0.00018	< 0.0002	< 0.00017	< 0.00025	< 0.00024
2-Butanone (MEK)	100	100	< 0.0044	< 0.0046	< 0.17	< 0.0045	< 0.0046	< 0.0046	< 0.0027	< 0.0023	< 0.0034	< 0.0032
2-Hexanone	NS	NS	< 0.0025	< 0.0026	< 0.045	< 0.0026	< 0.0027	< 0.0027	< 0.00071	< 0.00059	< 0.00089	< 0.00083
4-Methyl-2-pentanone(MIBK)	NS	NS	< 0.0027	< 0.0028	< 0.054	< 0.0027	< 0.0028	< 0.0028	< 0.00086	< 0.00072	< 0.0011	< 0.001
Acetone	100	100	< 0.0067	< 0.0071	< 0.12	< 0.0071	< 0.0071	< 0.0071	< 0.0019	< 0.0016	R	< 0.0023
Benzene	2.9	4.8	< 0.00014	< 0.00014	< 0.0086	< 0.00014	< 0.00014	< 0.00014	< 0.00014	< 0.00011	< 0.00017	< 0.00016
Bromodichloromethane	NS	NS	< 0.00023	< 0.00024	< 0.0076	< 0.00023	< 0.00024	< 0.00024	< 0.00012	< 0.0001	< 0.00015	< 0.00014
Bromoform	NS	NS	< 0.00077	< 0.0008	< 0.011	< 0.00078	< 0.00081	< 0.00081	< 0.00014	< 0.00017	< 0.00022	< 0.0002
Bromomethane	NS	NS	< 0.0004	< 0.00042	< 0.02	< 0.00041	< 0.00042	< 0.00042	< 0.00031	< 0.00026	< 0.00039	< 0.00037
Carbon disulfide	NS	NS	< 0.0002	< 0.00021	< 0.0085	< 0.0002	< 0.00021	< 0.00021	< 0.00013	< 0.00011	< 0.00017	< 0.00016
Carbon tetrachloride	1.4	2.4	< 0.00035	< 0.00037	< 0.0096	< 0.00036	< 0.00037	< 0.00037	< 0.00015	< 0.00013	< 0.00019	< 0.00018
Chlorobenzene	100	100	< 0.00033	< 0.00034	< 0.0078	< 0.00033	< 0.00034	< 0.00035	< 0.00012	< 0.0001	< 0.00016	< 0.00014
Chloroethane	NS	NS	< 0.00042	< 0.00043	< 0.016	< 0.00042	< 0.00044	< 0.00044	< 0.00026	< 0.00022	< 0.00033	< 0.0003
Chloroform	10	49	< 0.00049	< 0.00051	< 0.006	< 0.0005	< 0.00052	< 0.00052	< 0.000095	< 0.000079	< 0.00012	< 0.00011
Chloromethane	NS	NS	< 0.00063	< 0.00067	< 0.013	< 0.00064	< 0.00067	< 0.00067	< 0.00021	< 0.00018	< 0.00027	< 0.00025
cis-1,2-Dichloroethene	59	100	< 0.00033	< 0.00034	< 0.013	< 0.00033	< 0.00034	< 0.00035	< 0.00021	< 0.00017	< 0.00026	< 0.00024
cis-1,3-Dichloropropene	NS	NS	< 0.00015	< 0.00016	< 0.01	< 0.00016	< 0.00016	< 0.00016	< 0.00016	< 0.00013	< 0.0002	< 0.00019
Cyclohexane	NS	NS	< 0.00039	< 0.0004	< 0.009	< 0.00039	< 0.00041	< 0.00041	< 0.00014	< 0.00012	< 0.00018	< 0.00017
Dibromochloromethane	NS	NS	< 0.00017	< 0.00018	< 0.012	< 0.00017	< 0.00018	< 0.00018	< 0.00019	< 0.00016	< 0.00024	< 0.00022
Dichlorodifluoromethane	NS	NS	< 0.00033	< 0.00034	< 0.016	< 0.00033	< 0.00034	< 0.00035	< 0.00026	< 0.00022	< 0.00033	< 0.0003
Ethylbenzene	30	41	< 0.00015	< 0.00016	< 0.019	< 0.00015	< 0.00016	< 0.00016	< 0.0003	< 0.00025	< 0.00038	< 0.00035
Freon 113	NS	NS	< 0.00073	< 0.00076	< 0.031	< 0.00074	< 0.00077	< 0.00077	< 0.00049	< 0.00041	< 0.00062	< 0.00058
Isopropylbenzene	NS	NS	< 0.00014	< 0.00015	< 0.0054	< 0.00014	< 0.00015	< 0.00015	< 0.000085	< 0.000071	< 0.00011	< 0.000099
Methyl Acetate	NS	NS	< 0.0023	< 0.0024	< 0.19	< 0.0023	< 0.0024	< 0.0024	< 0.003	< 0.0025	< 0.0037	< 0.0035
Methyl Tert Butyl Ether	62	100	< 0.00018	< 0.00019	< 0.017	< 0.00018	< 0.00019	< 0.00019	< 0.00027	< 0.00022	< 0.00034	< 0.00031
Methylcyclohexane	NS	NS	< 0.00025	< 0.00026	< 0.012	< 0.00025	< 0.00026	< 0.00026	< 0.00019	< 0.00016	< 0.00024	< 0.00023
Methylene chloride	51	100	< 0.00023	< 0.00025	< 0.092	< 0.00024	< 0.00025	< 0.00025	< 0.0015	< 0.0012	< 0.0018	< 0.0017
Styrene	NS	NS	< 0.00019	< 0.0002	< 0.0066	< 0.00019	< 0.0002	< 0.0002	< 0.0001	< 0.000088	< 0.00013	< 0.00012
Tetrachloroethene	5.5	19	< 0.00019	< 0.0002	< 0.012	< 0.0002	< 0.0002	< 0.00021	< 0.0002	< 0.00016	< 0.00025	< 0.00023
Toluene	100	100	< 0.00038	< 0.0004	< 0.0076	< 0.00039	< 0.0004	< 0.00041	< 0.00012	< 0.0001	< 0.00015	< 0.00014
trans-1,2-Dichloroethene	100	100	< 0.00043	< 0.00045	< 0.017	< 0.00044	< 0.00045	< 0.00046	< 0.00027	< 0.00023	< 0.00034	< 0.00032
trans-1,3-Dichloropropene	NS	NS	< 0.00034	< 0.00036	< 0.011	< 0.00035	< 0.00036	< 0.00036	< 0.00018	< 0.00015	< 0.00022	< 0.00021
Trichloroethene	10	21	< 0.00025	< 0.00026	< 0.013	< 0.00025	< 0.00026	< 0.00027	< 0.0002	< 0.00017	< 0.00025	< 0.00023
Trichlorofluoromethane	NS	NS	< 0.00049	< 0.00051	< 0.022	< 0.0005	< 0.00052	< 0.00052	< 0.00034	< 0.00028	< 0.00043	< 0.0004
Vinyl chloride	0.21	0.9	< 0.00047	< 0.00049	< 0.01	< 0.00047	< 0.00049	< 0.0005	< 0.00016	< 0.00014	< 0.00021	< 0.00019
Xylene (total)	100	100	< 0.00019	< 0.0002	< 0.01	< 0.00019	< 0.0002	< 0.0002	< 0.00016	< 0.00013	< 0.0002	< 0.00019
Total TIC, Volatile	NS	NS	0	0	27.6 JN	0.0353 JN	0	0	0	0	0	0

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Table 5. Historical Analytical Soil Data
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Location ID	375-6.8(b)	375-6.8(b)	OU2-SB-6	OU2-SB-6	OU2-SB-7	OU2-SB-7	OU2-SB-8	OU2-SB-8	OU2-SB-9	OU2-SB-9	OU2-SB-10	OU2-SB-10
Sample ID	Residential	Restricted	OU2-SB-6(0.0-0.6)	OU2-SB-6(1.5-2.0)	OU2-SB-7(0.0-0.6)	OU2-SB-7(1.5-2.0)	OU2-SB-8(0.0-0.6)	OU2-SB-8(1.5-2.0)	OU2-SB-9(0.0-0.6)	OU2-SB-9(1.5-2.0)	OU2-SB-10(0.0-0.6)	OU2-SB-10(1.5-2.0)
Sample Date		Residential	5/22/2012	5/22/2012	5/22/2012	5/22/2012	5/22/2012	5/22/2012	5/23/2012	5/23/2012	5/23/2012	5/23/2012
Depth Interval			0.0 - 0.6	1.5 - 2.0	0.0 - 0.6	1.5 - 2.0	0.0 - 0.6	1.5 - 2.0	0.0 - 0.6	1.5 - 2.0	0.0 - 0.6	1.5 - 2.0
SVOCs												
1,1'-Biphenyl	NS	NS	< 0.0039	< 0.004	NA	NA	NA	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	NS	NS	< 0.039	< 0.04	NA	NA	NA	NA	NA	NA	NA	NA
2,4,6-Trichlorophenol	NS	NS	< 0.031	< 0.032	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dichlorophenol	NS	NS	< 0.054	< 0.056	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dimethylphenol	NS	NS	< 0.056	< 0.058	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrophenol	NS	NS	< 0.041 J	< 0.042 J	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrotoluene	NS	NS	< 0.015	< 0.015	NA	NA	NA	NA	NA	NA	NA	NA
2,6-Dinitrotoluene	NS	NS	< 0.013	< 0.013	NA	NA	NA	NA	NA	NA	NA	NA
2-Chloronaphthalene	NS	NS	< 0.01	< 0.011	NA	NA	NA	NA	NA	NA	NA	NA
2-Chlorophenol	NS	NS	< 0.034	< 0.035	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene	NS	NS	< 0.019	< 0.019	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylphenol	100	100	< 0.038	< 0.039	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitroaniline	NS	NS	< 0.015	< 0.015	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitrophenol	NS	NS	< 0.035	< 0.037	NA	NA	NA	NA	NA	NA	NA	NA
3&4-Methylphenol	NS	NS	< 0.042	< 0.044	NA	NA	NA	NA	NA	NA	NA	NA
3,3'-Dichlorobenzidine	NS	NS	< 0.0085	< 0.0088	NA	NA	NA	NA	NA	NA	NA	NA
3-Nitroaniline	NS	NS	< 0.013	< 0.014	NA	NA	NA	NA	NA	NA	NA	NA
4,6-Dinitro-o-cresol	NS	NS	< 0.041	< 0.042	NA	NA	NA	NA	NA	NA	NA	NA
4-Bromophenyl phenyl ether	NS	NS	< 0.012	< 0.013	NA	NA	NA	NA	NA	NA	NA	NA
4-Chloro-3-methyl phenol	NS	NS	< 0.033	< 0.035	NA	NA	NA	NA	NA	NA	NA	NA
4-Chloroaniline	NS	NS	< 0.011	< 0.011	NA	NA	NA	NA	NA	NA	NA	NA
4-Chlorophenyl phenyl ether	NS	NS	< 0.01	< 0.01	NA	NA	NA	NA	NA	NA	NA	NA
4-Nitroaniline	NS	NS	< 0.013	< 0.013	NA	NA	NA	NA	NA	NA	NA	NA
4-Nitrophenol	NS	NS	< 0.057 J	< 0.058 J	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthene	100	100	< 0.0097	< 0.01	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	100	100	< 0.011	0.0138 J	NA	NA	NA	NA	NA	NA	NA	NA
Acetophenone	NS	NS	< 0.0059	< 0.0061	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene	100	100	0.021 J	0.0206 J	NA	NA	NA	NA	NA	NA	NA	NA
Atrazine	NS	NS	< 0.0066	< 0.0068	NA	NA	NA	NA	NA	NA	NA	NA
Benzaldehyde	NS	NS	< 0.0077	< 0.0079	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	1	1	0.0943	0.082	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	1	1	0.0952	0.085	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	1	1	0.096	0.0863	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene	100	100	0.0661	0.0671	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	1	3.9	0.0734	0.0722	NA	NA	NA	NA	NA	NA	NA	NA
bis(2-Chloroethoxy)methane	NS	NS	< 0.014	< 0.014	NA	NA	NA	NA	NA	NA	NA	NA
bis(2-Chloroethyl)ether	NS	NS	< 0.01	< 0.01	NA	NA	NA	NA	NA	NA	NA	NA
bis(2-Chloroisopropyl)ether	NS	NS	< 0.0099	< 0.01	NA	NA	NA	NA	NA	NA	NA	NA
bis(2-Ethylhexyl)phthalate	NS	NS	< 0.03	< 0.03	NA	NA	NA	NA	NA	NA	NA	NA
Butyl benzyl phthalate	NS	NS	< 0.019	0.039 J	NA	NA	NA	NA	NA	NA	NA	NA
Caprolactam	NS	NS	< 0.011	< 0.011	NA	NA	NA	NA	NA	NA	NA	NA
Carbazole	NS	NS	< 0.015	< 0.016	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene	1	3.9	0.103	0.111	NA	NA	NA	NA	NA	NA	NA	NA
Dibenzo(a,h)anthracene	0.33	0.33	0.0324 J	0.0309 J	NA	NA	NA	NA	NA	NA	NA	NA
Dibenzofuran	14	59	< 0.0099	< 0.01	NA	NA	NA	NA	NA	NA	NA	NA
Diethyl phthalate	NS	NS	< 0.011	< 0.012	NA	NA	NA	NA	NA	NA	NA	NA
Dimethyl phthalate	NS	NS	< 0.012	< 0.012	NA	NA	NA	NA	NA	NA	NA	NA
Di-n-butyl phthalate	NS	NS	< 0.0074	< 0.0077	NA	NA	NA	NA	NA	NA	NA	NA
Di-n-octyl phthalate	NS	NS	< 0.016	< 0.017	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	100	100	0.162	0.263	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	100	100	< 0.011	< 0.011	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorobenzene	0.33	1.2	< 0.011	< 0.011	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorobutadiene	NS	NS	< 0.0093	< 0.0096	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorocyclopentadiene	NS	NS	< 0.034	< 0.035	NA	NA	NA	NA	NA	NA	NA	NA
Hexachloroethane	NS	NS	< 0.0093	< 0.0096	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene	0.5	0.5	0.0634	0.0603	NA	NA	NA	NA	NA	NA	NA	NA
Isophorone	NS	NS	< 0.009	< 0.0093	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	100	100	< 0.0091	< 0.0094	NA	NA	NA	NA	NA	NA	NA	NA
Nitrobenzene	NS	NS	< 0.0097	< 0.01	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitroso-di-n-propylamine	NS	NS	< 0.0082	< 0.0084	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitrosodiphenylamine	NS	NS	< 0.02	< 0.021	NA	NA	NA	NA	NA	NA	NA	NA
Pentachlorophenol	2.4	6.7	< 0.057	< 0.059	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	100	100	0.0672	0.154	NA	NA	NA	NA	NA	NA	NA	NA
Phenol	100	100	< 0.035	< 0.036	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	100	100	0.136	0.189	NA	NA	NA	NA	NA	NA	NA	NA
Total TIC, Semi-Volatile	NS	NS	0.9 JN	3.03 JN	NA	NA	NA	NA	NA	NA	NA	NA

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Table 5. Historical Analytical Soil Data
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Location ID Sample ID Sample Date Depth Interval	375-6.8(b)	375-6.8(b)	OU2-SB-6	OU2-SB-6	OU2-SB-7	OU2-SB-7	OU2-SB-8	OU2-SB-8	OU2-SB-9	OU2-SB-9	OU2-SB-10	OU2-SB-10
	Residential	Restricted	OU2-SB-6(0.0-0.6)	OU2-SB-6(1.5-2.0)	OU2-SB-7(0.0-0.6)	OU2-SB-7(1.5-2.0)	OU2-SB-8(0.0-0.6)	OU2-SB-8(1.5-2.0)	OU2-SB-9(0.0-0.6)	OU2-SB-9(1.5-2.0)	OU2-SB-10(0.0-0.6)	OU2-SB-10(1.5-2.0)
		Residential	5/22/2012	5/22/2012	5/22/2012	5/22/2012	5/22/2012	5/22/2012	5/23/2012	5/23/2012	5/23/2012	5/23/2012
			0.0 - 0.6	1.5 - 2.0	0.0 - 0.6	1.5 - 2.0	0.0 - 0.6	1.5 - 2.0	0.0 - 0.6	1.5 - 2.0	0.0 - 0.6	1.5 - 2.0
Pesticides												
4,4'-DDD	2.6	13	< 0.00041	< 0.00041	NA	NA	NA	NA	NA	NA	NA	NA
4,4'-DDE	1.8	8.9	< 0.00047	0.16	NA	NA	NA	NA	NA	NA	NA	NA
4,4'-DDT	1.7	7.9	0.00097 J	< 0.00058	NA	NA	NA	NA	NA	NA	NA	NA
Aldrin	0.019	0.097	< 0.0004	< 0.0004	NA	NA	NA	NA	NA	NA	NA	NA
alpha-BHC	0.097	0.48	< 0.0006	< 0.00059	NA	NA	NA	NA	NA	NA	NA	NA
alpha-Chlordane	0.91	4.2	0.0014 JN	< 0.00052	NA	NA	NA	NA	NA	NA	NA	NA
Beta-BHC	0.072	0.36	< 0.00056	< 0.00056	NA	NA	NA	NA	NA	NA	NA	NA
Camphechlor	NS	NS	< 0.01	< 0.01	NA	NA	NA	NA	NA	NA	NA	NA
Delta-BHC	100	100	< 0.00046	< 0.00046	NA	NA	NA	NA	NA	NA	NA	NA
Pesticides												
Dieldrin	0.039	0.2	0.0012	0.128	NA	NA	NA	NA	NA	NA	NA	NA
Endosulfan I	4.8	24	< 0.00038	< 0.00038	NA	NA	NA	NA	NA	NA	NA	NA
Endosulfan II	4.8	24	< 0.00052	< 0.00052	NA	NA	NA	NA	NA	NA	NA	NA
Endosulfan Sulfate	4.8	24	< 0.00072	< 0.00072	NA	NA	NA	NA	NA	NA	NA	NA
Endrin	2.2	11	< 0.00041	< 0.00041	NA	NA	NA	NA	NA	NA	NA	NA
Endrin Aldehyde	NS	NS	< 0.00075	< 0.00075	NA	NA	NA	NA	NA	NA	NA	NA
Endrin Ketone	NS	NS	< 0.00052	< 0.00052	NA	NA	NA	NA	NA	NA	NA	NA
gamma-BHC (Lindane)	0.28	1.3	< 0.00036	< 0.00036	NA	NA	NA	NA	NA	NA	NA	NA
Gamma-Chlordane	NS	NS	< 0.00041	< 0.00041	NA	NA	NA	NA	NA	NA	NA	NA
Heptachlor	0.42	2.1	< 0.00049	< 0.00049	NA	NA	NA	NA	NA	NA	NA	NA
Heptachlor Epoxide	NS	NS	< 0.00039	< 0.00039	NA	NA	NA	NA	NA	NA	NA	NA
Methoxychlor	NS	NS	< 0.00056	< 0.00056	NA	NA	NA	NA	NA	NA	NA	NA
Polychlorinated Biphenyls												
Aroclor 1016	1	1	< 0.01	< 0.01	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor 1221	1	1	< 0.023	< 0.023	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor 1232	1	1	< 0.019	< 0.02	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor 1242	1	1	< 0.012	< 0.012	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor 1248	1	1	< 0.012	< 0.012	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor 1254	1	1	< 0.018	< 0.018	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor 1260	1	1	< 0.013	< 0.013	NA	NA	NA	NA	NA	NA	NA	NA

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Table 5. Historical Analytical Soil Data
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



	Location ID	375-6.8(b)	375-6.8(b)	OU2-SB-6	OU2-SB-6	OU2-SB-7	OU2-SB-7	OU2-SB-8	OU2-SB-8	OU2-SB-9	OU2-SB-9	OU2-SB-10	OU2-SB-10
	Sample ID	Residential	Restricted	OU2-SB-6(0.0-0.6)	OU2-SB-6(1.5-2.0)	OU2-SB-7(0.0-0.6)	OU2-SB-7(1.5-2.0)	OU2-SB-8(0.0-0.6)	OU2-SB-8(1.5-2.0)	OU2-SB-9(0.0-0.6)	OU2-SB-9(1.5-2.0)	OU2-SB-10(0.0-0.6)	OU2-SB-10(1.5-2.0)
	Sample Date		Residential	5/22/2012	5/22/2012	5/22/2012	5/22/2012	5/22/2012	5/22/2012	5/23/2012	5/23/2012	5/23/2012	5/23/2012
	Depth Interval			0.0 - 0.6	1.5 - 2.0	0.0 - 0.6	1.5 - 2.0	0.0 - 0.6	1.5 - 2.0	0.0 - 0.6	1.5 - 2.0	0.0 - 0.6	1.5 - 2.0
Metals													
Aluminum		NS	NS	11600	14100	14000	15000	5190	6150	6370 J	7530 J	23700 J	19000 J
Antimony		NS	NS	< 2.4	< 2.5	< 2.6	< 2.4	< 2.4	< 2.4	< 2.5 J	< 2.5 J	< 2.8 J	< 2.8 J
Arsenic		16	16	3.7	3.3	3.2	3	< 2.4	< 2.4	3.3	3.4	5.7	4.7
Barium		350	400	64.7	87.5	43.8	44.3	30.3	27.3	278 J	256 J	58.9 J	51.5 J
Beryllium		14	72	0.68	0.6	0.59	0.62	0.35	0.42	0.41	0.51	1.1	0.7
Cadmium		2.5	4.3	< 0.6	< 0.63	< 0.64	< 0.59	< 0.6	< 0.6	2.7	1.3	< 0.7	< 0.69
Calcium		NS	NS	3410	3610	2210	1660	2000	1840	3000	2920	823	857
Chromium		NS	NS	17.3	16.8	17.2	17.2	11.3	12.3	15.7	19.4	23.3	20
Cobalt		NS	NS	7.2	< 6.3	< 6.4	< 5.9	< 6	< 6	< 6.3	6.5	8.4	< 6.9
Copper		270	270	23.9	18.8	16.2	14.7	10.7	12.9	28.8 J	29.5 J	11.6 J	11.2 J
Iron		NS	NS	20500	18100	17400	18300	12800	14900	13900 J	16900 J	25500 J	18200 J
Lead		400	400	22.2	44.8	11.8	11.1	12	17.3	140	117	16.8	25.4
Magnesium		NS	NS	3820	2780	2690	2800	2220	2270	2680 J	2720 J	1990 J	1980 J
Manganese		2000	2000	410	204	197	186	196	237	348	444	1180	185
Mercury		0.81	0.81	0.053	0.063	< 0.041	0.038	< 0.037	< 0.037	< 0.041	< 0.039	0.092	0.073
Nickel		140	310	16.1	11.9	11.3	11.5	8.4	9.1	12.6	13.9	12.4	11.7
Potassium		NS	NS	1220	< 1300	< 1300	< 1200	< 1200	< 1200	< 1300 J	< 1200 J	< 1400 J	< 1400 J
Selenium		36	180	< 2.4	< 2.5	< 2.6	< 2.4	< 2.4	< 2.4	< 2.5	< 2.5	< 2.8	< 2.8
Silver		36	180	1.2	0.65	< 0.64	< 0.59	< 0.6	< 0.6	1	0.95	< 0.7	0.83
Sodium		NS	NS	< 1200	< 1300	< 1300	< 1200	< 1200	< 1200	< 1300	< 1200	< 1400	< 1400
Thallium		NS	NS	< 1.2	< 1.3	< 1.3	< 1.2	< 1.2	< 1.2	< 1.3	< 1.2	< 1.4	< 1.4
Vanadium		NS	NS	29.7	26.4	28.1	29.9	17.6	18.4	18	23.4	46.1	32.9
Zinc		2200	10000	60.3	163	39.9	36.8	31.2	29.6	273	212	49.6	42.8
Other													
Cyanide		27	27	< 0.28	< 0.3	NA	NA	NA	NA	NA	NA	NA	NA
Solids, Percent		NS	NS	83.3	82.3	78.7	86.8	86.5	83	78	81.7	72.4	73.3

Notes:
Results reported in milligrams per kilogram (mg/kg).
Field Blank and Trip Blank reported in micrograms per liter (ug/l).

NS	No standard
NA	Not analyzed
J	Estimated result
JN	Estimated result
R	Rejected result
UB	Analyte considered non-detect at the listed value due to associated blank contamination
Bold	Result exceeds 375-6.8(b) residential use soil cleanup objective.
Shade	Result exceeds 375-6.8(b) restricted residential use soil cleanup objective.

Table 5. Historical Analytical Soil Data
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Location ID	375-6.8(b)	375-6.8(b)	OU2-SB-11	OU2-SB-11	OU2-SB-12	OU2-SB-12	OU2-SB-13	OU2-SB-13	OU2-SB-14	OU2-SB-14	OU2-SB-15	OU2-SB-15
Sample ID	Residential	Restricted	OU2-SB-11(0.0-0.6)	OU2-SB-11(1.5-2.0)	OU2-SB-12(0.0-0.6)	OU2-SB-12(1.5-2.0)	OU2-SB-13(0.0-0.6)	OU2-SB-13(1.5-2.0)	OU2-SB-14(0.0-0.6)	OU2-SB-14(1.5-2.0)	OU2-SB-15(0.0-0.6)	OU2-SB-15(1.5-2.0)
Sample Date		Residential	5/23/2012	5/23/2012	5/23/2012	5/23/2012	5/23/2012	5/23/2012	5/23/2012	5/23/2012	5/23/2012	5/23/2012
Depth Interval			0.0 - 0.6	1.5 - 2.0	0.0 - 0.6	1.5 - 2.0	0.0 - 0.6	1.5 - 2.0	0.0 - 0.6	1.5 - 2.0	0.0 - 0.6	1.5 - 2.0
VOCs												
1,1,1-Trichloroethane	100	100	< 0.00013	< 0.00011	< 0.000098	< 0.00013	< 0.00013	< 0.00013	< 0.00018	< 0.00012	< 0.00011	< 0.00012
1,1,2,2-Tetrachloroethane	NS	NS	< 0.00016	< 0.00014	< 0.00012	< 0.00016	< 0.00016	< 0.00016	< 0.00022	< 0.00015	< 0.00014	< 0.00015
1,1,2-Trichloroethane	NS	NS	< 0.00021	< 0.00018	< 0.00016	< 0.00021	< 0.00021	< 0.00021	< 0.00029	< 0.0002	< 0.00018	< 0.0002
1,1-Dichloroethane	19	26	< 0.00016	< 0.00014	< 0.00013	< 0.00016	< 0.00016	< 0.00017	< 0.00023	< 0.00016	< 0.00014	< 0.00016
1,1-Dichloroethene	100	100	< 0.00031	< 0.00027	< 0.00024	< 0.00031	< 0.00031	< 0.00032	< 0.00043	< 0.0003	< 0.00027	< 0.00029
1,2,4-Trichlorobenzene	NS	NS	< 0.00017	< 0.00015	< 0.00013	< 0.00017	< 0.00017	< 0.00017	< 0.00023	< 0.00016	< 0.00015	< 0.00016
1,2-Dibromo-3-chloropropane	NS	NS	< 0.0011	< 0.00094	< 0.00083	< 0.0011	< 0.0011	< 0.0011	< 0.0015	< 0.001	< 0.00094	< 0.001
1,2-Dibromoethane	NS	NS	< 0.00015	< 0.00013	< 0.00012	< 0.00015	< 0.00015	< 0.00016	< 0.00021	< 0.00015	< 0.00013	< 0.00014
1,2-Dichlorobenzene	100	100	< 0.00023	< 0.0002	< 0.00018	< 0.00022	< 0.00023	< 0.00023	< 0.00031	< 0.00022	< 0.0002	< 0.00021
1,2-Dichloroethane	2.3	3.1	< 0.00016	< 0.00014	< 0.00013	< 0.00016	< 0.00016	< 0.00017	< 0.00022	< 0.00016	< 0.00014	< 0.00015
1,2-Dichloropropane	NS	NS	< 0.00018	< 0.00016	< 0.00014	< 0.00018	< 0.00019	< 0.00019	< 0.00026	< 0.00018	< 0.00016	< 0.00017
1,3-Dichlorobenzene	17	49	< 0.00022	< 0.0002	< 0.00017	< 0.00022	< 0.00022	< 0.00023	< 0.00031	< 0.00022	< 0.0002	< 0.00021
1,4-Dichlorobenzene	9.8	13	< 0.00021	< 0.00019	< 0.00016	< 0.00021	< 0.00021	< 0.00022	< 0.00029	< 0.0002	< 0.00019	< 0.0002
2-Butanone (MEK)	100	100	< 0.0029	< 0.0025	< 0.0022	< 0.0022	< 0.0028	< 0.0029	< 0.004	< 0.0028	< 0.0025	< 0.0027
2-Hexanone	NS	NS	< 0.00074	< 0.00065	< 0.00058	< 0.00074	< 0.00075	< 0.00076	< 0.001	< 0.00072	< 0.00066	< 0.0007
4-Methyl-2-pentanone(MIBK)	NS	NS	< 0.0009	< 0.00079	< 0.0007	< 0.00089	< 0.0009	< 0.00092	< 0.0012	< 0.00087	< 0.00079	< 0.00085
Acetone	100	100	< 0.002	< 0.0018	< 0.0016	< 0.0021	< 0.002	< 0.0021	< 0.0028	< 0.002	< 0.0018	< 0.0019
Benzene	2.9	4.8	< 0.00014	< 0.00013	< 0.00011	< 0.00014	< 0.00014	< 0.00015	< 0.0002	< 0.00014	< 0.00013	< 0.00013
Bromodichloromethane	NS	NS	< 0.00013	< 0.00011	< 0.000098	< 0.00012	< 0.00013	< 0.00013	< 0.00017	< 0.00012	< 0.00011	< 0.00012
Bromoform	NS	NS	< 0.00018	< 0.00016	< 0.00014	< 0.00018	< 0.00018	< 0.00019	< 0.00025	< 0.00018	< 0.00016	< 0.00017
Bromomethane	NS	NS	< 0.00033	< 0.00029	< 0.00025	< 0.00032	< 0.00033	< 0.00033	< 0.00045	< 0.00032	< 0.00029	< 0.00031
Carbon disulfide	NS	NS	< 0.00014	< 0.00012	< 0.00011	< 0.00014	< 0.00014	< 0.00014	< 0.00019	< 0.00014	< 0.00012	< 0.00013
Carbon tetrachloride	1.4	2.4	< 0.00016	< 0.00014	< 0.00012	< 0.00016	< 0.00016	< 0.00016	< 0.00022	< 0.00015	< 0.00014	< 0.00015
Chlorobenzene	100	100	< 0.00013	< 0.00011	< 0.0001	< 0.00013	< 0.00013	< 0.00013	< 0.00018	< 0.00013	< 0.00011	< 0.00012
Chloroethane	NS	NS	< 0.00027	< 0.00024	< 0.00021	< 0.00027	< 0.00027	< 0.00028	< 0.00038	< 0.00026	< 0.00024	< 0.00026
Chloroform	10	49	< 0.000099	< 0.000087	< 0.000077	< 0.000098	< 0.000099	< 0.0001	< 0.00014	< 0.000096	< 0.000087	< 0.000093
Chloromethane	NS	NS	< 0.00022	< 0.0002	< 0.00017	< 0.00022	< 0.00022	< 0.00023	< 0.00022	< 0.00031	< 0.00022	< 0.00021
cis-1,2-Dichloroethene	59	100	< 0.00022	< 0.00019	< 0.00017	< 0.00022	< 0.00022	< 0.00022	< 0.0002	< 0.00021	< 0.00019	< 0.00021
cis-1,3-Dichloropropene	NS	NS	< 0.00017	< 0.00015	< 0.00013	< 0.00017	< 0.00017	< 0.00017	< 0.00023	< 0.00016	< 0.00015	< 0.00016
Cyclohexane	NS	NS	< 0.00015	< 0.00013	< 0.00012	< 0.00015	< 0.00015	< 0.00015	< 0.00021	< 0.00014	< 0.00013	< 0.00014
Dibromochloromethane	NS	NS	< 0.0002	< 0.00017	< 0.00015	< 0.00019	< 0.0002	< 0.0002	< 0.00027	< 0.00019	< 0.00017	< 0.00019
Dichlorodifluoromethane	NS	NS	< 0.00027	< 0.00024	< 0.00021	< 0.00027	< 0.00027	< 0.00028	< 0.00038	< 0.00026	< 0.00024	< 0.00026
Ethylbenzene	30	41	< 0.00031	< 0.00028	< 0.00024	< 0.00031	< 0.00032	< 0.00032	< 0.00044	< 0.00031	< 0.00028	< 0.0003
Freon 113	NS	NS	< 0.00051	< 0.00045	< 0.0004	< 0.00051	< 0.00052	< 0.00053	< 0.00071	< 0.0005	< 0.00045	< 0.00049
Isopropylbenzene	NS	NS	< 0.000089	< 0.000078	< 0.000069	< 0.000088	< 0.000089	< 0.000091	< 0.00012	< 0.000086	< 0.000078	< 0.000084
Methyl Acetate	NS	NS	< 0.0031	< 0.0027	< 0.0024	< 0.0031	< 0.0032	< 0.0032	< 0.0043	< 0.003	< 0.0027	< 0.0029
Methyl Tert Butyl Ether	62	100	< 0.00028	< 0.00025	< 0.00022	< 0.00028	< 0.00028	< 0.00029	< 0.00039	< 0.00027	< 0.00025	< 0.00027
Methylcyclohexane	NS	NS	< 0.0002	< 0.00018	< 0.00016	< 0.0002	< 0.0002	< 0.00021	< 0.00028	< 0.0002	< 0.00018	< 0.00019
Methylene chloride	51	100	< 0.0015	< 0.0013	< 0.0012	< 0.0015	< 0.0015	< 0.0016	< 0.0021	< 0.0015	< 0.0013	< 0.0014
Styrene	NS	NS	< 0.00011	< 0.000096	< 0.000085	< 0.00011	< 0.00011	< 0.00011	< 0.00015	< 0.00011	< 0.000097	< 0.0001
Tetrachloroethene	5.5	19	< 0.00021	< 0.00018	< 0.00016	< 0.0002	< 0.00021	< 0.00021	< 0.00029	< 0.0002	< 0.00018	< 0.00019
Toluene	100	100	< 0.00013	< 0.00011	< 0.000098	< 0.00012	< 0.00013	< 0.00013	< 0.00017	< 0.00012	< 0.00011	< 0.00012
trans-1,2-Dichloroethene	100	100	< 0.00028	< 0.00025	< 0.00022	< 0.00028	< 0.00029	< 0.00029	< 0.0004	< 0.00028	< 0.00025	< 0.00027
trans-1,3-Dichloropropene	NS	NS	< 0.00019	< 0.00016	< 0.00014	< 0.00018	< 0.00019	< 0.00019	< 0.00026	< 0.00018	< 0.00016	< 0.00018
Trichloroethene	10	21	< 0.00021	< 0.00018	< 0.00016	< 0.00021	< 0.00021	< 0.00021	< 0.00029	< 0.0002	< 0.00018	< 0.0002
Trichlorofluoromethane	NS	NS	< 0.00036	< 0.00031	< 0.00028	< 0.00035	< 0.00036	< 0.00037	< 0.0005	< 0.00035	< 0.00031	< 0.00034
Vinyl chloride	0.21	0.9	< 0.00017	< 0.00015	< 0.00013	< 0.00017	< 0.00017	< 0.00018	< 0.00024	< 0.00017	< 0.00015	< 0.00016
Xylene (total)	100	100	< 0.00017	< 0.00015	< 0.00013	< 0.00017	< 0.00017	< 0.00017	< 0.00023	< 0.00016	< 0.00015	< 0.00016
Total TIC, Volatile	NS	NS	0	0	0	0	0	0	0	0	0	0

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Table 5. Historical Analytical Soil Data
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Location ID	375-6.8(b)	375-6.8(b)	OU2-SB-11	OU2-SB-11	OU2-SB-12	OU2-SB-12	OU2-SB-13	OU2-SB-13	OU2-SB-14	OU2-SB-14	OU2-SB-15	OU2-SB-15
Sample ID	Residential	Restricted	OU2-SB-11(0.0-0.6)	OU2-SB-11(1.5-2.0)	OU2-SB-12(0.0-0.6)	OU2-SB-12(1.5-2.0)	OU2-SB-13(0.0-0.6)	OU2-SB-13(1.5-2.0)	OU2-SB-14(0.0-0.6)	OU2-SB-14(1.5-2.0)	OU2-SB-15(0.0-0.6)	OU2-SB-15(1.5-2.0)
Sample Date		Residential	5/23/2012	5/23/2012	5/23/2012	5/23/2012	5/23/2012	5/23/2012	5/23/2012	5/23/2012	5/23/2012	5/23/2012
Depth Interval			0.0 - 0.6	1.5 - 2.0	0.0 - 0.6	1.5 - 2.0	0.0 - 0.6	1.5 - 2.0	0.0 - 0.6	1.5 - 2.0	0.0 - 0.6	1.5 - 2.0
SVOCs												
1,1'-Biphenyl	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4,6-Trichlorophenol	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dichlorophenol	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dimethylphenol	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrophenol	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrotoluene	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,6-Dinitrotoluene	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Chloronaphthalene	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Chlorophenol	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylphenol	100	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitroaniline	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitrophenol	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3&4-Methylphenol	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3,3'-Dichlorobenzidine	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3-Nitroaniline	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4,6-Dinitro-o-cresol	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Bromophenyl phenyl ether	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chloro-3-methyl phenol	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chloroaniline	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chlorophenyl phenyl ether	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Nitroaniline	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Nitrophenol	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthene	100	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	100	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acetophenone	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene	100	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Atrazine	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzaldehyde	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene	100	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	1	3.9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
bis(2-Chloroethoxy)methane	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
bis(2-Chloroethyl)ether	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
bis(2-Chloroisopropyl)ether	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
bis(2-Ethylhexyl)phthalate	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Butyl benzyl phthalate	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Caprolactam	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbazole	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene	1	3.9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenzo(a,h)anthracene	0.33	0.33	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenzofuran	14	59	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Diethyl phthalate	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dimethyl phthalate	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Di-n-butyl phthalate	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Di-n-octyl phthalate	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	100	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	100	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorobenzene	0.33	1.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorobutadiene	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorocyclopentadiene	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachloroethane	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene	0.5	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Isophorone	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	100	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrobenzene	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitroso-di-n-propylamine	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitrosodiphenylamine	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pentachlorophenol	2.4	6.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	100	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenol	100	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	100	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total TIC, Semi-Volatile	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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Table 5. Historical Analytical Soil Data
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



	Location ID	375-6.8(b)	375-6.8(b)	OU2-SB-11	OU2-SB-11	OU2-SB-12	OU2-SB-12	OU2-SB-13	OU2-SB-13	OU2-SB-14	OU2-SB-14	OU2-SB-15	OU2-SB-15
	Sample ID	Residential	Restricted	OU2-SB-11(0.0-0.6)	OU2-SB-11(1.5-2.0)	OU2-SB-12(0.0-0.6)	OU2-SB-12(1.5-2.0)	OU2-SB-13(0.0-0.6)	OU2-SB-13(1.5-2.0)	OU2-SB-14(0.0-0.6)	OU2-SB-14(1.5-2.0)	OU2-SB-15(0.0-0.6)	OU2-SB-15(1.5-2.0)
	Sample Date		Residential	5/23/2012	5/23/2012	5/23/2012	5/23/2012	5/23/2012	5/23/2012	5/23/2012	5/23/2012	5/23/2012	5/23/2012
	Depth Interval			0.0 - 0.6	1.5 - 2.0	0.0 - 0.6	1.5 - 2.0	0.0 - 0.6	1.5 - 2.0	0.0 - 0.6	1.5 - 2.0	0.0 - 0.6	1.5 - 2.0
Pesticides													
4,4'-DDD		2.6	13	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4,4'-DDE		1.8	8.9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4,4'-DDT		1.7	7.9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aldrin		0.019	0.097	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
alpha-BHC		0.097	0.48	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
alpha-Chlordane		0.91	4.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Beta-BHC		0.072	0.36	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Camphechlor		NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Delta-BHC		100	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pesticides													
Dieldrin		0.039	0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Endosulfan I		4.8	24	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Endosulfan II		4.8	24	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Endosulfan Sulfate		4.8	24	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Endrin		2.2	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Endrin Aldehyde		NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Endrin Ketone		NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
gamma-BHC (Lindane)		0.28	1.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Gamma-Chlordane		NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Heptachlor		0.42	2.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Heptachlor Epoxide		NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methoxychlor		NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Polychlorinated Biphenyls													
Aroclor 1016		1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor 1221		1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor 1232		1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor 1242		1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor 1248		1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor 1254		1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor 1260		1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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Table 5. Historical Analytical Soil Data
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



	Location ID	375-6.8(b)	375-6.8(b)	OU2-SB-11	OU2-SB-11	OU2-SB-12	OU2-SB-12	OU2-SB-13	OU2-SB-13	OU2-SB-14	OU2-SB-14	OU2-SB-15	OU2-SB-15
	Sample ID	Residential	Restricted	OU2-SB-11(0.0-0.6)	OU2-SB-11(1.5-2.0)	OU2-SB-12(0.0-0.6)	OU2-SB-12(1.5-2.0)	OU2-SB-13(0.0-0.6)	OU2-SB-13(1.5-2.0)	OU2-SB-14(0.0-0.6)	OU2-SB-14(1.5-2.0)	OU2-SB-15(0.0-0.6)	OU2-SB-15(1.5-2.0)
	Sample Date		Residential	5/23/2012	5/23/2012	5/23/2012	5/23/2012	5/23/2012	5/23/2012	5/23/2012	5/23/2012	5/23/2012	5/23/2012
	Depth Interval			0.0 - 0.6	1.5 - 2.0	0.0 - 0.6	1.5 - 2.0	0.0 - 0.6	1.5 - 2.0	0.0 - 0.6	1.5 - 2.0	0.0 - 0.6	1.5 - 2.0
Metals													
Aluminum		NS	NS	13800 J	13800 J	6170 J	7010 J	8600 J	18200 J	9300 J	7580 J	12400 J	13300 J
Antimony		NS	NS	< 2.4 J	< 2.5 J	< 2.2 J	< 2.5 J	< 2.5 J	< 2.7 J	< 3.1 J	< 2.8 J	< 2.5 J	< 2.5 J
Arsenic		16	16	3.9	< 2.5	2.3	2.5	4.4	5.9	< 3.1	3.4	< 2.5	3
Barium		350	400	62 J	58.1 J	50.3 J	45.6 J	53.1 J	80.1 J	57.7 J	< 28 J	51.3 J	59 J
Beryllium		14	72	0.66	0.66	0.4	0.5	0.49	0.9	0.59	0.37	0.57	0.67
Cadmium		2.5	4.3	< 0.61	< 0.64	< 0.55	< 0.62	< 0.61	< 0.69	< 0.77	< 0.69	< 0.62	< 0.63
Calcium		NS	NS	2410	1770	3040	4290	2130	1290	< 770	1020	947	1340
Chromium		NS	NS	17.5	17.8	11.1	14.3	15.4	24.2	13.1	11.4	16.1	17.3
Cobalt		NS	NS	6.4	< 6.4	< 5.5	6.3	< 6.1	17.2	< 7.7	< 6.9	< 6.2	< 6.3
Copper		270	270	16 J	6.4 J	12.7 J	13.3 J	15.8 J	12.4 J	< 3.9 J	8.6 J	6.6 J	9.2 J
Iron		NS	NS	19500 J	16500 J	14000 J	16300 J	19300 J	27200 J	13100 J	12500 J	15300 J	17000 J
Lead		400	400	52	7.7	4.4	5.4	43.5	15.1	3.2	43.2	10.5	23.3
Magnesium		NS	NS	2520 J	2800 J	2640 J	3380 J	2270 J	2460 J	1070 J	1100 J	1960 J	2130 J
Manganese		2000	2000	340	169	806	409	460	1530	54.7	79	147	201
Mercury		0.81	0.81	0.058	< 0.042	< 0.035	< 0.041	0.066	< 0.047	< 0.048	0.081	< 0.039	0.05
Nickel		140	310	12.1	10.4	9.2	10.6	10.8	12.3	< 6.2	< 5.6	9	10.1
Potassium		NS	NS	< 1200 J	< 1300 J	< 1100 J	< 1200 J	< 1200 J	< 1400 J	< 1500 J	< 1400 J	< 1200 J	< 1300 J
Selenium		36	180	< 2.4	< 2.5	< 2.2	< 2.5	< 2.5	< 2.7	< 3.1	< 2.8	< 2.5	< 2.5
Silver		36	180	0.83	0.97	1.1	0.96	1.1	1.5	0.86	0.94	1	0.82
Sodium		NS	NS	< 1200	< 1300	< 1100	< 1200	< 1200	< 1400	< 1500	< 1400	< 1200	< 1300
Thallium		NS	NS	< 1.2	< 1.3	< 1.1	< 1.2	< 1.2	< 1.4	< 1.5	< 1.4	< 1.2	< 1.3
Vanadium		NS	NS	29.7	26.4	17.7	21.6	23.8	40.9	16.6	19.6	21.3	23.3
Zinc		2200	10000	79.1	39.3	24.2	31.7	66.5	49.3	23	22.2	36.7	45.2
Other													
Cyanide		27	27	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Solids, Percent		NS	NS	80.3	77.9	89.7	79.4	81.6	71.5	65.4	74.3	83.1	78.9

Notes:
Results reported in milligrams per kilogram (mg/kg).
Field Blank and Trip Blank reported in micrograms per liter (ug/l).
NS No standard
NA Not analyzed
J Estimated result
JN Estimated result
R Rejected result
UB Analyte considered non-detect at the listed value due to associated blank contamination
Bold Result exceeds 375-6.8(b) residential use soil cleanup objective.
Shade Result exceeds 375-6.8(b) restricted residential use soil cleanup objective.

Table 5. Historical Analytical Soil Data
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Location ID	375-6.8(b)	375-6.8(b)	OU2-SB-16	OU2-SB-16	OU2-SB-17	OU2-SB-17	OU2-SB-17	OU2-SB-17	OU2-SB-18	OU2-SB-18	OU2-SB-19
Sample ID	Residential	Restricted	OU2-SB-16(0.0-1.6)	OU2-SB-16(1.5-2.0)	OU2-SB-17(0.0-0.6)	OU2-DUP20120524(0.0-0.6)	OU2-SB-17(1.5-2.0)	OU2-DUP20120524(1.5-2.0)	OU2-SB-18(0.0-0.6)	OU2-SB-18(1.5-2.0)	OU2-SB-19(0.0-0.6)
Sample Date		Residential	5/24/2012	5/24/2012	5/24/2012	5/24/2012	5/24/2012	5/24/2012	5/24/2012	5/24/2012	5/24/2012
Depth Interval			0.0 - 0.6	1.5 - 2.0	0.0 - 0.6	1.5 - 2.0	0.0 - 0.6	1.5 - 2.0	1.5 - 2.0	1.5 - 2.0	0.0 - 0.6
VOCs											
1,1,1-Trichloroethane	100	100	< 0.0003	< 0.00025	< 0.00029	< 0.00031	< 0.00026	< 0.00025	< 0.0003	< 0.00028	< 0.0001
1,1,2,2-Tetrachloroethane	NS	NS	< 0.00022	< 0.00018	< 0.00022	< 0.00023	< 0.00019	< 0.00019	< 0.00022	< 0.00021	< 0.00012
1,1,2-Trichloroethane	NS	NS	< 0.00053	< 0.00044	< 0.00053	< 0.00056	< 0.00047	< 0.00045	< 0.00054	< 0.00051	< 0.00016
1,1-Dichloroethane	19	26	< 0.00027	< 0.00022	< 0.00027	< 0.00028	< 0.00024	< 0.00023	< 0.00027	< 0.00026	< 0.00013
1,1-Dichloroethene	100	100	< 0.00075	< 0.00062	< 0.00075	< 0.00079	< 0.00067	< 0.00064	< 0.00076	< 0.00072	< 0.00024
1,2,4-Trichlorobenzene	NS	NS	< 0.00042	< 0.00035	< 0.00042	< 0.00044	< 0.00037	< 0.00036	< 0.00042	< 0.0004	< 0.00013
1,2-Dibromo-3-chloropropane	NS	NS	< 0.0019	< 0.0015	< 0.0018	< 0.0019	< 0.0016	< 0.0016	< 0.0019	< 0.0018	< 0.00084
1,2-Dibromoethane	NS	NS	< 0.00029	< 0.00024	< 0.00029	< 0.00031	< 0.00026	< 0.00025	< 0.0003	< 0.00028	< 0.00012
1,2-Dichlorobenzene	100	100	< 0.00034	< 0.00028	< 0.00034	< 0.00036	< 0.0003	< 0.00029	< 0.00035	< 0.00032	< 0.00018
1,2-Dichloroethane	2.3	3.1	< 0.00022	< 0.00019	< 0.00022	< 0.00023	< 0.0002	< 0.00019	< 0.00023	< 0.00021	< 0.00013
1,2-Dichloropropane	NS	NS	< 0.00033	< 0.00027	< 0.00032	< 0.00034	< 0.00029	< 0.00028	< 0.00033	< 0.00031	< 0.00015
1,3-Dichlorobenzene	17	49	< 0.00024	< 0.0002	< 0.00023	< 0.00025	< 0.00021	< 0.0002	< 0.00024	< 0.00022	< 0.00018
1,4-Dichlorobenzene	9.8	13	< 0.00021	< 0.00017	< 0.00021	< 0.00022	< 0.00018	< 0.00018	< 0.00021	< 0.0002	< 0.00017
2-Butanone (MEK)	100	100	< 0.0053	< 0.0044	< 0.0053	< 0.0056	< 0.0047	< 0.0045	< 0.0054	< 0.0051	< 0.0023
2-Hexanone	NS	NS	< 0.0031	< 0.0025	< 0.003	< 0.0032	< 0.0027	< 0.0026	< 0.0031	< 0.0029	< 0.00059
4-Methyl-2-pentanone(MIBK)	NS	NS	< 0.0032	< 0.0027	< 0.0032	< 0.0034	< 0.0029	< 0.0027	< 0.0033	< 0.0031	< 0.00071
Acetone	100	100	< 0.0082	< 0.0067	< 0.0081	< 0.0085	< 0.0072	< 0.0069	< 0.119	< 0.138	< 0.0016
Benzene	2.9	4.8	< 0.00016	< 0.00014	< 0.00016	< 0.00017	< 0.00014	< 0.00014	< 0.00017	< 0.00016	< 0.00011
Bromodichloromethane	NS	NS	< 0.00028	< 0.00023	< 0.00027	< 0.00029	< 0.00024	< 0.00023	< 0.00028	< 0.00026	< 0.000099
Bromoform	NS	NS	< 0.00093	< 0.00077	< 0.00092	< 0.00097	< 0.00082	< 0.00079	< 0.00094	< 0.00088	< 0.00014
Bromomethane	NS	NS	< 0.00049	< 0.0004	< 0.00048	< 0.00051	< 0.00043	< 0.00041	< 0.00049	< 0.00046	< 0.00026
Carbon disulfide	NS	NS	< 0.00024	< 0.0002	< 0.00024	< 0.00025	< 0.00021	< 0.0002	< 0.00024	< 0.00023	< 0.00011
Carbon tetrachloride	1.4	2.4	< 0.00043	< 0.00035	< 0.00042	< 0.00045	< 0.00038	< 0.00036	< 0.00043	< 0.00041	< 0.00013
Chlorobenzene	100	100	< 0.0004	< 0.00033	< 0.00039	< 0.00041	< 0.00035	< 0.00034	< 0.0004	< 0.00038	< 0.0001
Chloroethane	NS	NS	< 0.0005	< 0.00041	< 0.0005	< 0.00053	< 0.00044	< 0.00043	< 0.00051	< 0.00048	< 0.00021
Chloroform	10	49	< 0.00059	< 0.00049	< 0.00059	< 0.00062	< 0.00053	< 0.0005	< 0.0006	< 0.00057	< 0.000078
Chloromethane	NS	NS	< 0.00077	< 0.00063	< 0.00076	< 0.0008	< 0.00068	< 0.00065	< 0.00078	< 0.00073	< 0.00018
cis-1,2-Dichloroethene	59	100	< 0.0004	< 0.00033	< 0.00039	< 0.00041	< 0.00035	< 0.00034	< 0.0004	< 0.00038	< 0.00017
cis-1,3-Dichloropropene	NS	NS	< 0.00019	< 0.00015	< 0.00019	< 0.0002	< 0.00017	< 0.00016	< 0.00019	< 0.00018	< 0.00013
Cyclohexane	NS	NS	< 0.00047	< 0.00039	< 0.00046	< 0.00049	< 0.00041	< 0.0004	< 0.00047	< 0.00044	< 0.00012
Dibromochloromethane	NS	NS	< 0.00021	< 0.00017	< 0.00021	< 0.00022	< 0.00018	< 0.00018	< 0.00021	< 0.0002	< 0.00015
Dichlorodifluoromethane	NS	NS	< 0.0004	< 0.00033	< 0.00039	< 0.00041	< 0.00035	< 0.00034	< 0.0004	< 0.00038	< 0.00022
Ethylbenzene	30	41	< 0.00018	< 0.00015	< 0.00018	< 0.00019	< 0.00016	< 0.00015	< 0.00018	< 0.00017	< 0.00025
Freon 113	NS	NS	< 0.00088	< 0.00073	< 0.00088	< 0.00092	< 0.00078	< 0.00075	< 0.00089	< 0.00084	< 0.00041
Isopropylbenzene	NS	NS	< 0.00017	< 0.00014	< 0.00017	< 0.00018	< 0.00015	< 0.00014	< 0.00017	< 0.00016	< 0.00007
Methyl Acetate	NS	NS	< 0.0027	< 0.0023	< 0.0027	< 0.0029	< 0.0024	< 0.0023	< 0.0028	< 0.0026	< 0.0025
Methyl Tert Butyl Ether	62	100	< 0.00022	< 0.00018	< 0.00022	< 0.00023	< 0.00019	< 0.00019	< 0.00022	< 0.00021	< 0.00022
Methylcyclohexane	NS	NS	< 0.0003	< 0.00025	< 0.0003	< 0.00032	< 0.00027	< 0.00026	< 0.00031	< 0.00029	< 0.00016
Methylene chloride	51	100	< 0.00028	< 0.00023	< 0.00028	< 0.0003	< 0.00025	< 0.00024	< 0.00029	< 0.00027	< 0.0012
Styrene	NS	NS	< 0.00023	< 0.00019	< 0.00023	< 0.00024	< 0.0002	< 0.00019	< 0.00023	< 0.00022	< 0.000087
Tetrachloroethene	5.5	19	< 0.00024	< 0.00019	< 0.00023	< 0.00025	< 0.00021	< 0.0002	< 0.00024	< 0.00022	< 0.00016
Toluene	100	100	< 0.00047	< 0.00038	< 0.00046	< 0.00049	< 0.00041	< 0.00039	< 0.00047	< 0.00044	< 0.000099
trans-1,2-Dichloroethene	100	100	< 0.00052	< 0.00043	< 0.00052	< 0.00055	< 0.00046	< 0.00044	< 0.00053	< 0.0005	< 0.00022
trans-1,3-Dichloropropene	NS	NS	< 0.00041	< 0.00034	< 0.00041	< 0.00043	< 0.00037	< 0.00035	< 0.00042	< 0.00039	< 0.00015
Trichloroethene	10	21	< 0.0003	< 0.00025	< 0.0003	< 0.00032	< 0.00027	< 0.00026	< 0.00031	< 0.00029	< 0.00016
Trichlorofluoromethane	NS	NS	< 0.00059	< 0.00049	< 0.00059	< 0.00062	< 0.00052	< 0.0005	< 0.0006	< 0.00056	< 0.00028
Vinyl chloride	0.21	0.9	< 0.00057	< 0.00047	< 0.00056	< 0.00059	< 0.0005	< 0.00048	< 0.00057	< 0.00054	< 0.00014
Xylene (total)	100	100	< 0.00023	< 0.00019	< 0.00022	< 0.00024	< 0.0002	< 0.00019	< 0.00023	< 0.00022	< 0.00013
Total TIC, Volatile	NS	NS	0	0	0	0	0	0	0	0	0

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Table 5. Historical Analytical Soil Data
Ramapo Paint Sludge Site - Operable Unit 2
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Location ID	375-6.8(b)	375-6.8(b)	OU2-SB-16	OU2-SB-16	OU2-SB-17	OU2-SB-17	OU2-SB-17	OU2-SB-17	OU2-SB-18	OU2-SB-18	OU2-SB-19
Sample ID	Residential	Restricted	OU2-SB-16(0.0-1.6)	OU2-SB-16(1.5-2.0)	OU2-SB-17(0.0-0.6)	OU2-DUP20120524(0.0-0.6)	OU2-SB-17(1.5-2.0)	OU2-DUP20120524(1.5-2.0)	OU2-SB-18(0.0-0.6)	OU2-SB-18(1.5-2.0)	OU2-SB-19(0.0-0.6)
Sample Date		Residential	5/24/2012	5/24/2012	5/24/2012	5/24/2012	5/24/2012	5/24/2012	5/24/2012	5/24/2012	5/24/2012
Depth Interval			0.0 - 0.6	1.5 - 2.0	0.0 - 0.6	1.5 - 2.0	0.0 - 0.6	1.5 - 2.0	1.5 - 2.0	1.5 - 2.0	0.0 - 0.6
SVOCs											
1,1'-Biphenyl	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4,6-Trichlorophenol	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dichlorophenol	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dimethylphenol	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrophenol	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrotoluene	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,6-Dinitrotoluene	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Chloronaphthalene	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Chlorophenol	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylphenol	100	100	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitroaniline	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitrophenol	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
3&4-Methylphenol	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
3,3'-Dichlorobenzidine	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
3-Nitroaniline	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
4,6-Dinitro-o-cresol	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Bromophenyl phenyl ether	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chloro-3-methyl phenol	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chloroaniline	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chlorophenyl phenyl ether	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Nitroaniline	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Nitrophenol	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthene	100	100	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	100	100	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acetophenone	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene	100	100	NA	NA	NA	NA	NA	NA	NA	NA	NA
Atrazine	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzaldehyde	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene	100	100	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	1	3.9	NA	NA	NA	NA	NA	NA	NA	NA	NA
bis(2-Chloroethoxy)methane	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
bis(2-Chloroethyl)ether	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
bis(2-Chloroisopropyl)ether	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
bis(2-Ethylhexyl)phthalate	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
Butyl benzyl phthalate	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
Caprolactam	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbazole	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene	1	3.9	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenzo(a,h)anthracene	0.33	0.33	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenzofuran	14	59	NA	NA	NA	NA	NA	NA	NA	NA	NA
Diethyl phthalate	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dimethyl phthalate	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
Di-n-butyl phthalate	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
Di-n-octyl phthalate	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	100	100	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	100	100	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorobenzene	0.33	1.2	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorobutadiene	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorocyclopentadiene	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachloroethane	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene	0.5	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA
Isophorone	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	100	100	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrobenzene	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitroso-di-n-propylamine	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitrosodiphenylamine	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pentachlorophenol	2.4	6.7	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	100	100	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenol	100	100	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	100	100	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total TIC, Semi-Volatile	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
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Ramapo Paint Sludge Site - Operable Unit 2
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Location ID Sample ID Sample Date Depth Interval	375-6.8(b)	375-6.8(b)	OU2-SB-16	OU2-SB-16	OU2-SB-17	OU2-SB-17	OU2-SB-17	OU2-SB-17	OU2-SB-18	OU2-SB-18	OU2-SB-19
	Residential	Restricted	OU2-SB-16(0.0-1.6)	OU2-SB-16(1.5-2.0)	OU2-SB-17(0.0-0.6)	OU2-DUP20120524(0.0-0.6)	OU2-SB-17(1.5-2.0)	OU2-DUP20120524(1.5-2.0)	OU2-SB-18(0.0-0.6)	OU2-SB-18(1.5-2.0)	OU2-SB-19(0.0-0.6)
		Residential	5/24/2012	5/24/2012	5/24/2012	5/24/2012	5/24/2012	5/24/2012	5/24/2012	5/24/2012	5/24/2012
			0.0 - 0.6	1.5 - 2.0	0.0 - 0.6	1.5 - 2.0	0.0 - 0.6	1.5 - 2.0	1.5 - 2.0	1.5 - 2.0	0.0 - 0.6
Pesticides											
4,4'-DDD	2.6	13	NA	NA	NA	NA	NA	NA	NA	NA	NA
4,4'-DDE	1.8	8.9	NA	NA	NA	NA	NA	NA	NA	NA	NA
4,4'-DDT	1.7	7.9	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aldrin	0.019	0.097	NA	NA	NA	NA	NA	NA	NA	NA	NA
alpha-BHC	0.097	0.48	NA	NA	NA	NA	NA	NA	NA	NA	NA
alpha-Chlordane	0.91	4.2	NA	NA	NA	NA	NA	NA	NA	NA	NA
Beta-BHC	0.072	0.36	NA	NA	NA	NA	NA	NA	NA	NA	NA
Camphechlor	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
Delta-BHC	100	100	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pesticides											
Dieldrin	0.039	0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA
Endosulfan I	4.8	24	NA	NA	NA	NA	NA	NA	NA	NA	NA
Endosulfan II	4.8	24	NA	NA	NA	NA	NA	NA	NA	NA	NA
Endosulfan Sulfate	4.8	24	NA	NA	NA	NA	NA	NA	NA	NA	NA
Endrin	2.2	11	NA	NA	NA	NA	NA	NA	NA	NA	NA
Endrin Aldehyde	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
Endrin Ketone	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
gamma-BHC (Lindane)	0.28	1.3	NA	NA	NA	NA	NA	NA	NA	NA	NA
Gamma-Chlordane	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
Heptachlor	0.42	2.1	NA	NA	NA	NA	NA	NA	NA	NA	NA
Heptachlor Epoxide	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methoxychlor	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
Polychlorinated Biphenyls											
Aroclor 1016	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor 1221	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor 1232	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor 1242	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor 1248	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor 1254	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor 1260	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA

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	Location ID	375-6.8(b)	375-6.8(b)	OU2-SB-16	OU2-SB-16	OU2-SB-17	OU2-SB-17	OU2-SB-17	OU2-SB-17	OU2-SB-18	OU2-SB-18	OU2-SB-19
	Sample ID	Residential	Restricted	OU2-SB-16(0.0-1.6)	OU2-SB-16(1.5-2.0)	OU2-SB-17(0.0-0.6)	OU2-DUP20120524(0.0-0.6)	OU2-SB-17(1.5-2.0)	OU2-DUP20120524(1.5-2.0)	OU2-SB-18(0.0-0.6)	OU2-SB-18(1.5-2.0)	OU2-SB-19(0.0-0.6)
	Sample Date		Residential	5/24/2012	5/24/2012	5/24/2012	5/24/2012	5/24/2012	5/24/2012	5/24/2012	5/24/2012	5/24/2012
	Depth Interval			0.0 - 0.6	1.5 - 2.0	0.0 - 0.6	1.5 - 2.0	0.0 - 0.6	1.5 - 2.0	1.5 - 2.0	1.5 - 2.0	0.0 - 0.6
Metals												
Aluminum		NS	NS	5230	7590	22300	21900	22600	20700	14000	12400	9170
Antimony		NS	NS	< 2.4 J	< 2.5 J	< 2.6 J	< 2.5 J	< 2.4 J	< 2.4 J	< 2.4 J	< 2.3 J	< 2.2 J
Arsenic		16	16	< 2.4	3.6	4.4	4.4	4.5	3.8	3.3	3.2	2.6
Barium		350	400	< 24	37.3	53.1	53.1	61.7	63.6	36.8	35.4	34.4
Beryllium		14	72	0.38	0.66	0.83	0.83	0.75	0.65	0.73	0.7	0.54
Cadmium		2.5	4.3	< 0.61	< 0.64	< 0.66	< 0.64	< 0.6	< 0.61	< 0.6	< 0.58	< 0.56
Calcium		NS	NS	4840 J	3290 J	R	R	R	R	1120 J	1370 J	2050 J
Chromium		NS	NS	18.1	18	21.8	21.4	23.8	21.3	19.7	17	17.2
Cobalt		NS	NS	< 6.1	< 6.4	< 6.6	< 6.4	< 6	< 6.1	< 6	< 5.8	< 5.6
Copper		270	270	11.1	14.6	9.5	9.2	11.9	9.3	12.1	12.2	14.7
Iron		NS	NS	16200 J	13600 J	21700 J	21200 J	25300 J	22600 J	19200	17600	17800
Lead		400	400	7.5	87.7	16.3	20.2	8.7	7.7	15.5	20.7	10.1
Magnesium		NS	NS	3480 J	2540 J	2320 J	2240 J	3000 J	2480 J	2530 J	2370 J	2700 J
Manganese		2000	2000	186	279	176	180	158	125	195	242	319
Mercury		0.81	0.81	0.052	0.089	0.065	0.047	< 0.037	< 0.037	0.047	0.051	< 0.033
Nickel		140	310	8.5	11	11.3	11.1	12.8	10.8	12.5	10.9	11.5
Potassium		NS	NS	< 1200	< 1300	< 1300	< 1300	< 1200	< 1200	< 1200	< 1200	< 1100
Selenium		36	180	< 2.4	< 2.5	< 2.6	< 2.5	< 2.4	< 2.4	< 2.4	< 2.3	< 2.2
Silver		36	180	< 0.61	< 0.64	0.67	0.7	0.68	0.63	0.68	< 0.58	0.57
Sodium		NS	NS	< 1200	< 1300	< 1300	< 1300	< 1200	< 1200	< 1200	< 1200	< 1100
Thallium		NS	NS	< 1.2	< 1.3	< 1.3	< 1.3	< 1.2	< 1.2	< 1.2	< 1.2	< 1.1
Vanadium		NS	NS	31.9	22.5	37.6	37.4	39.9	36.6	30.5	28.8	28.6
Zinc		2200	10000	25.1	47.7	56.1	55.1	53.1	50.3	43.1	41	35.6
Other												
Cyanide		27	27	NA	NA	NA	NA	NA	NA	NA	NA	NA
Solids, Percent		NS	NS	81.2	79.3	77.3	79.3	82.1	81.1	83.6	83.7	88.2

Notes:
Results reported in milligrams per kilogram (mg/kg).
Field Blank and Trip Blank reported in micrograms per liter (ug/l).
NS No standard
NA Not analyzed
J Estimated result
JN Estimated result
R Rejected result
UB Analyte considered non-detect at the listed value due to associated blank contamination
Bold Result exceeds 375-6.8(b) residential use soil cleanup objective.
Shade Result exceeds 375-6.8(b) restricted residential use soil cleanup objective.

Table 5. Historical Analytical Soil Data
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Location ID	375-6.8(b)	375-6.8(b)	OU2-SB-19	OU2-SB-20	OU2-SB-20	OU2-SB-21	OU2-SB-21	OU2-SB-22	OU2-SB-22	OU2-SB-23	OU2-SB-23
Sample ID	Residential	Restricted	OU2-SB-19(1.5-2.0)	OU2-SB-20(0.0-0.6)	OU2-SB-20(1.5-2.0)	OU2-SB-21 (0.0-0.6)	OU2-SB-21 (1.5-2.0)	OU2-SB-22 (0.0-0.6)	OU2-SB-22 (1.5-2.0)	OU2-SB-23 (0.0-0.6)	OU2-SB-23 (1.5-2.0)
Sample Date		Residential	5/24/2012	5/24/2012	5/24/2012	5/25/2012	5/25/2012	5/25/2012	5/25/2012	5/25/2012	5/25/2012
Depth Interval			1.5 - 2.0	0.0 - 0.6	1.5 - 2.0	0.0 - 0.6	1.5 - 2.0	0.0 - 0.6	1.5 - 2.0	0.0 - 0.6	1.5 - 2.0
VOCs											
1,1,1-Trichloroethane	100	100	< 0.000099	< 0.00011	< 0.0001	< 0.000095	< 0.0001	< 0.00011	< 0.000093	< 0.00012	< 0.00011
1,1,2,2-Tetrachloroethane	NS	NS	< 0.00012	< 0.00014	< 0.00013	< 0.00012	< 0.00013	< 0.00014	< 0.00012	< 0.00015	< 0.00014
1,1,2-Trichloroethane	NS	NS	< 0.00016	< 0.00019	< 0.00017	< 0.00016	< 0.00017	< 0.00018	< 0.00015	< 0.0002	< 0.00019
1,1-Dichloroethane	19	26	< 0.00013	< 0.00015	< 0.00013	< 0.00012	< 0.00013	< 0.00014	< 0.00012	< 0.00016	< 0.00015
1,1-Dichloroethene	100	100	< 0.00024	< 0.00028	< 0.00025	< 0.00023	< 0.00025	< 0.00027	< 0.00023	< 0.00029	< 0.00027
1,2,4-Trichlorobenzene	NS	NS	< 0.00013	< 0.00015	< 0.00014	< 0.00012	< 0.00013	< 0.00015	< 0.00012	< 0.00016	< 0.00015
1,2-Dibromo-3-chloropropane	NS	NS	< 0.00083	< 0.00096	< 0.00087	< 0.0008	< 0.00086	< 0.00094	< 0.00078	< 0.001	< 0.00095
1,2-Dibromoethane	NS	NS	< 0.00012	< 0.00014	< 0.00012	< 0.00011	< 0.00012	< 0.00013	< 0.00011	< 0.00014	< 0.00014
1,2-Dichlorobenzene	100	100	< 0.00018	< 0.0002	< 0.00018	< 0.00017	< 0.00018	< 0.0002	< 0.00017	< 0.00022	< 0.0002
1,2-Dichloroethane	2.3	3.1	< 0.00013	< 0.00015	< 0.00013	< 0.00012	< 0.00013	< 0.00014	< 0.00012	< 0.00015	< 0.00014
1,2-Dichloropropane	NS	NS	< 0.00014	< 0.00017	< 0.00015	< 0.00014	< 0.00015	< 0.00016	< 0.00014	< 0.00018	< 0.00016
1,3-Dichlorobenzene	17	49	< 0.00017	< 0.0002	< 0.00018	< 0.00017	< 0.00018	< 0.0002	< 0.00016	< 0.00021	< 0.0002
1,4-Dichlorobenzene	9.8	13	< 0.00016	< 0.00019	< 0.00017	< 0.00016	< 0.00017	< 0.00019	< 0.00015	< 0.0002	< 0.00019
2-Butanone (MEK)	100	100	< 0.0022	< 0.0026	< 0.0023	< 0.0021	< 0.0023	< 0.0025	< 0.0021	< 0.0027	< 0.0026
2-Hexanone	NS	NS	< 0.00058	< 0.00067	< 0.00061	< 0.00056	< 0.0006	< 0.00066	< 0.00055	< 0.00071	< 0.00066
4-Methyl-2-pentanone(MIBK)	NS	NS	< 0.0007	< 0.00081	< 0.00073	< 0.00067	< 0.00072	< 0.00079	< 0.00066	< 0.00085	< 0.0008
Acetone	100	100	< 0.0016	< 0.0018	< 0.0017	< 0.0017 J	< 0.0016	0.062	< 0.0016	< 0.0019	< 0.0018
Benzene	2.9	4.8	< 0.00011	< 0.00013	< 0.00012	< 0.00011	< 0.00011	< 0.00013	< 0.0001	< 0.00014	< 0.00013
Bromodichloromethane	NS	NS	< 0.000098	< 0.00011	< 0.0001	< 0.000094	< 0.0001	< 0.00011	< 0.000092	< 0.00012	< 0.00011
Bromoform	NS	NS	< 0.00014	< 0.00016	< 0.00015	< 0.00014	< 0.00015	< 0.00016	< 0.00013	< 0.00017	< 0.00016
Bromomethane	NS	NS	< 0.00026	< 0.00029	< 0.00027	< 0.00024	< 0.00026	< 0.00029	< 0.00024	< 0.00031	< 0.00029
Carbon disulfide	NS	NS	< 0.00011	< 0.00013	< 0.00011	< 0.0001	< 0.00011	< 0.00012	< 0.0001	< 0.00013	< 0.00013
Carbon tetrachloride	1.4	2.4	< 0.00012	< 0.00014	< 0.00013	< 0.00012	< 0.00013	< 0.00014	< 0.00012	< 0.00015	< 0.00014
Chlorobenzene	100	100	< 0.0001	< 0.00012	< 0.0001	< 0.000097	< 0.0001	< 0.00011	< 0.000095	< 0.00012	< 0.00012
Chloroethane	NS	NS	< 0.00021	< 0.00024	< 0.00022	< 0.0002	< 0.00022	< 0.00024	< 0.0002	< 0.00026	< 0.00024
Chloroform	10	49	< 0.000077	< 0.000089	< 0.000081	< 0.000074	< 0.00008	< 0.000087	< 0.000073	< 0.000094	< 0.000088
Chloromethane	NS	NS	< 0.00017	< 0.0002	< 0.00018	< 0.00017	< 0.00018	< 0.0002	< 0.00016	< 0.00021	< 0.0002
cis-1,2-Dichloroethene	59	100	< 0.00017	< 0.0002	< 0.00018	< 0.00016	< 0.00018	< 0.00019	< 0.00016	< 0.00021	< 0.0002
cis-1,3-Dichloropropene	NS	NS	< 0.00013	< 0.00015	< 0.00014	< 0.00012	< 0.00013	< 0.00015	< 0.00012	< 0.00016	< 0.00015
Cyclohexane	NS	NS	< 0.00012	< 0.00013	< 0.00012	< 0.00011	< 0.00012	< 0.00013	< 0.00011	< 0.00014	< 0.00013
Dibromochloromethane	NS	NS	< 0.00015	< 0.00018	< 0.00016	< 0.00015	< 0.00016	< 0.00017	< 0.00014	< 0.00019	< 0.00018
Dichlorodifluoromethane	NS	NS	< 0.00021	< 0.00024	< 0.00022	< 0.0002	< 0.00022	< 0.00024	< 0.0002	< 0.00026	< 0.00024
Ethylbenzene	30	41	< 0.00025	< 0.00028	< 0.00026	< 0.00024	< 0.00025	< 0.00028	< 0.00023	< 0.0003	< 0.00028
Freon 113	NS	NS	< 0.0004	< 0.00046	< 0.00042	< 0.00039	< 0.00041	< 0.00045	< 0.00038	< 0.00049	< 0.00046
Isopropylbenzene	NS	NS	< 0.00007	< 0.00008	< 0.000073	< 0.000067	< 0.000072	< 0.000078	< 0.000065	< 0.000085	< 0.000079
Methyl Acetate	NS	NS	< 0.0024	< 0.0028	< 0.0025	< 0.0023	< 0.0025	< 0.0027	< 0.0023	< 0.003	< 0.0028
Methyl Tert Butyl Ether	62	100	< 0.00022	0.0003 J	< 0.00023	< 0.00021	< 0.00023	< 0.00025	< 0.00021	< 0.00027	< 0.00025
Methylcyclohexane	NS	NS	< 0.00016	< 0.00018	< 0.00017	< 0.00015	< 0.00016	< 0.00018	< 0.00015	< 0.00019	< 0.00018
Methylene chloride	51	100	< 0.0012	< 0.0014	< 0.0012	< 0.0011	< 0.0012	< 0.0013	< 0.0011	< 0.0014	< 0.0014
Styrene	NS	NS	< 0.000086	< 0.000099	< 0.00009	< 0.000082	< 0.000088	< 0.000097	< 0.00008	< 0.0001	< 0.000098
Tetrachloroethene	5.5	19	< 0.00016	< 0.00018	< 0.00017	< 0.00015	< 0.00017	< 0.00018	< 0.00015	< 0.0002	< 0.00018
Toluene	100	100	0.0013	0.0013	< 0.0001	0.00056 J	< 0.0001	0.00087 J	0.00041 J	< 0.00012	< 0.00011
trans-1,2-Dichloroethene	100	100	< 0.00022	< 0.00026	< 0.00023	< 0.00021	< 0.00023	< 0.00025	< 0.00021	< 0.00027	< 0.00025
trans-1,3-Dichloropropene	NS	NS	< 0.00015	< 0.00017	< 0.00015	< 0.00014	< 0.00015	< 0.00016	< 0.00014	< 0.00018	< 0.00017
Trichloroethene	10	21	< 0.00016	< 0.00019	< 0.00017	< 0.00016	< 0.00017	< 0.00018	< 0.00015	< 0.0002	< 0.00019
Trichlorofluoromethane	NS	NS	< 0.00028	< 0.00032	< 0.00029	< 0.00027	< 0.00029	< 0.00031	< 0.00026	< 0.00034	< 0.00032
Vinyl chloride	0.21	0.9	< 0.00013	< 0.00015	< 0.00014	< 0.00013	< 0.00014	< 0.00015	< 0.00013	< 0.00016	< 0.00015
Xylene (total)	100	100	< 0.00013	< 0.00015	< 0.00014	< 0.00012	< 0.00013	< 0.00015	< 0.00012	< 0.00016	< 0.00015
Total TIC, Volatile	NS	NS	0	0	0	0	0	0.52 JN	0	0	0

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Table 5. Historical Analytical Soil Data
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Location ID	375-6.8(b)	375-6.8(b)	OU2-SB-19	OU2-SB-20	OU2-SB-20	OU2-SB-21	OU2-SB-21	OU2-SB-22	OU2-SB-22	OU2-SB-23	OU2-SB-23
Sample ID	Residential	Restricted	OU2-SB-19(1.5-2.0)	OU2-SB-20(0.0-0.6)	OU2-SB-20(1.5-2.0)	OU2-SB-21 (0.0-0.6)	OU2-SB-21 (1.5-2.0)	OU2-SB-22 (0.0-0.6)	OU2-SB-22 (1.5-2.0)	OU2-SB-23 (0.0-0.6)	OU2-SB-23 (1.5-2.0)
Sample Date		Residential	5/24/2012	5/24/2012	5/24/2012	5/25/2012	5/25/2012	5/25/2012	5/25/2012	5/25/2012	5/25/2012
Depth Interval			1.5 - 2.0	0.0 - 0.6	1.5 - 2.0	0.0 - 0.6	1.5 - 2.0	0.0 - 0.6	1.5 - 2.0	0.0 - 0.6	1.5 - 2.0
SVOCs											
1,1'-Biphenyl	NS	NS	NA	NA	NA	NA	NA	< 0.0043	< 0.0039	NA	NA
2,4,5-Trichlorophenol	NS	NS	NA	NA	NA	NA	NA	< 0.043	< 0.039	NA	NA
2,4,6-Trichlorophenol	NS	NS	NA	NA	NA	NA	NA	< 0.035	< 0.031	NA	NA
2,4-Dichlorophenol	NS	NS	NA	NA	NA	NA	NA	< 0.06	< 0.054	NA	NA
2,4-Dimethylphenol	NS	NS	NA	NA	NA	NA	NA	< 0.062	< 0.056	NA	NA
2,4-Dinitrophenol	NS	NS	NA	NA	NA	NA	NA	< 0.045	< 0.041	NA	NA
2,4-Dinitrotoluene	NS	NS	NA	NA	NA	NA	NA	< 0.016	< 0.015	NA	NA
2,6-Dinitrotoluene	NS	NS	NA	NA	NA	NA	NA	< 0.014	< 0.013	NA	NA
2-Chloronaphthalene	NS	NS	NA	NA	NA	NA	NA	< 0.012	< 0.01	NA	NA
2-Chlorophenol	NS	NS	NA	NA	NA	NA	NA	< 0.038	< 0.034	NA	NA
2-Methylnaphthalene	NS	NS	NA	NA	NA	NA	NA	< 0.021	< 0.019	NA	NA
2-Methylphenol	100	100	NA	NA	NA	NA	NA	< 0.042	< 0.038	NA	NA
2-Nitroaniline	NS	NS	NA	NA	NA	NA	NA	< 0.016	< 0.015	NA	NA
2-Nitrophenol	NS	NS	NA	NA	NA	NA	NA	< 0.039	< 0.035	NA	NA
3&4-Methylphenol	NS	NS	NA	NA	NA	NA	NA	< 0.047	< 0.043	NA	NA
3,3'-Dichlorobenzidine	NS	NS	NA	NA	NA	NA	NA	< 0.0094	< 0.0085	NA	NA
3-Nitroaniline	NS	NS	NA	NA	NA	NA	NA	< 0.015	< 0.013	NA	NA
4,6-Dinitro-o-cresol	NS	NS	NA	NA	NA	NA	NA	< 0.045	< 0.041	NA	NA
4-Bromophenyl phenyl ether	NS	NS	NA	NA	NA	NA	NA	< 0.013	< 0.012	NA	NA
4-Chloro-3-methyl phenol	NS	NS	NA	NA	NA	NA	NA	< 0.037	< 0.033	NA	NA
4-Chloroaniline	NS	NS	NA	NA	NA	NA	NA	< 0.012	< 0.011	NA	NA
4-Chlorophenyl phenyl ether	NS	NS	NA	NA	NA	NA	NA	< 0.011	< 0.01	NA	NA
4-Nitroaniline	NS	NS	NA	NA	NA	NA	NA	< 0.014	< 0.013	NA	NA
4-Nitrophenol	NS	NS	NA	NA	NA	NA	NA	< 0.063	< 0.057	NA	NA
Acenaphthene	100	100	NA	NA	NA	NA	NA	< 0.011	< 0.0097	NA	NA
Acenaphthylene	100	100	NA	NA	NA	NA	NA	< 0.012	< 0.011	NA	NA
Acetophenone	NS	NS	NA	NA	NA	NA	NA	< 0.0065	< 0.0059	NA	NA
Anthracene	100	100	NA	NA	NA	NA	NA	< 0.013	< 0.012	NA	NA
Atrazine	NS	NS	NA	NA	NA	NA	NA	< 0.0073	< 0.0066	NA	NA
Benzaldehyde	NS	NS	NA	NA	NA	NA	NA	< 0.0086	< 0.0077	NA	NA
Benzo(a)anthracene	1	1	NA	NA	NA	NA	NA	< 0.012	< 0.011	NA	NA
Benzo(a)pyrene	1	1	NA	NA	NA	NA	NA	< 0.011	< 0.01	NA	NA
Benzo(b)fluoranthene	1	1	NA	NA	NA	NA	NA	< 0.012	< 0.011	NA	NA
Benzo(g,h,i)perylene	100	100	NA	NA	NA	NA	NA	< 0.014	< 0.012	NA	NA
Benzo(k)fluoranthene	1	3.9	NA	NA	NA	NA	NA	< 0.014	< 0.013	NA	NA
bis(2-Chloroethoxy)methane	NS	NS	NA	NA	NA	NA	NA	< 0.015	< 0.014	NA	NA
bis(2-Chloroethyl)ether	NS	NS	NA	NA	NA	NA	NA	< 0.011	< 0.01	NA	NA
bis(2-Chloroisopropyl)ether	NS	NS	NA	NA	NA	NA	NA	< 0.011	< 0.0099	NA	NA
bis(2-Ethylhexyl)phthalate	NS	NS	NA	NA	NA	NA	NA	< 0.033	< 0.03	NA	NA
Butyl benzyl phthalate	NS	NS	NA	NA	NA	NA	NA	< 0.022	< 0.019	NA	NA
Caprolactam	NS	NS	NA	NA	NA	NA	NA	< 0.012	< 0.011	NA	NA
Carbazole	NS	NS	NA	NA	NA	NA	NA	< 0.017	< 0.016	NA	NA
Chrysene	1	3.9	NA	NA	NA	NA	NA	< 0.013	< 0.011	NA	NA
Dibenzo(a,h)anthracene	0.33	0.33	NA	NA	NA	NA	NA	< 0.013	< 0.011	NA	NA
Dibenzofuran	14	59	NA	NA	NA	NA	NA	< 0.011	< 0.0099	NA	NA
Diethyl phthalate	NS	NS	NA	NA	NA	NA	NA	< 0.013	< 0.011	NA	NA
Dimethyl phthalate	NS	NS	NA	NA	NA	NA	NA	0.0963	0.186	NA	NA
Di-n-butyl phthalate	NS	NS	NA	NA	NA	NA	NA	< 0.0083	< 0.0074	NA	NA
Di-n-octyl phthalate	NS	NS	NA	NA	NA	NA	NA	< 0.018	< 0.016	NA	NA
Fluoranthene	100	100	NA	NA	NA	NA	NA	< 0.016	< 0.015	NA	NA
Fluorene	100	100	NA	NA	NA	NA	NA	< 0.012	< 0.011	NA	NA
Hexachlorobenzene	0.33	1.2	NA	NA	NA	NA	NA	< 0.012	< 0.011	NA	NA
Hexachlorobutadiene	NS	NS	NA	NA	NA	NA	NA	< 0.01	< 0.0093	NA	NA
Hexachlorocyclopentadiene	NS	NS	NA	NA	NA	NA	NA	< 0.038	< 0.034	NA	NA
Hexachloroethane	NS	NS	NA	NA	NA	NA	NA	< 0.01	< 0.0093	NA	NA
Indeno(1,2,3-cd)pyrene	0.5	0.5	NA	NA	NA	NA	NA	< 0.013	< 0.012	NA	NA
Isophorone	NS	NS	NA	NA	NA	NA	NA	< 0.01	< 0.009	NA	NA
Naphthalene	100	100	NA	NA	NA	NA	NA	< 0.01	< 0.0091	NA	NA
Nitrobenzene	NS	NS	NA	NA	NA	NA	NA	< 0.011	< 0.0097	NA	NA
N-Nitroso-di-n-propylamine	NS	NS	NA	NA	NA	NA	NA	< 0.0091	< 0.0082	NA	NA
N-Nitrosodiphenylamine	NS	NS	NA	NA	NA	NA	NA	< 0.022	< 0.02	NA	NA
Pentachlorophenol	2.4	6.7	NA	NA	NA	NA	NA	< 0.064 J	< 0.057 J	NA	NA
Phenanthrene	100	100	NA	NA	NA	NA	NA	< 0.017	< 0.015	NA	NA
Phenol	100	100	NA	NA	NA	NA	NA	< 0.039	< 0.035	NA	NA
Pyrene	100	100	NA	NA	NA	NA	NA	< 0.014	< 0.013	NA	NA
Total TIC, Semi-Volatile	NS	NS	NA	NA	NA	NA	NA	0.85 JN	0.17 JN	NA	NA

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Table 5. Historical Analytical Soil Data
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Location ID Sample ID Sample Date Depth Interval	375-6.8(b)	375-6.8(b)	OU2-SB-19	OU2-SB-20	OU2-SB-20	OU2-SB-21	OU2-SB-21	OU2-SB-22	OU2-SB-22	OU2-SB-23	OU2-SB-23
	Residential	Restricted	OU2-SB-19(1.5-2.0)	OU2-SB-20(0.0-0.6)	OU2-SB-20(1.5-2.0)	OU2-SB-21 (0.0-0.6)	OU2-SB-21 (1.5-2.0)	OU2-SB-22 (0.0-0.6)	OU2-SB-22 (1.5-2.0)	OU2-SB-23 (0.0-0.6)	OU2-SB-23 (1.5-2.0)
		Residential	5/24/2012	5/24/2012	5/24/2012	5/25/2012	5/25/2012	5/25/2012	5/25/2012	5/25/2012	5/25/2012
			1.5 - 2.0	0.0 - 0.6	1.5 - 2.0	0.0 - 0.6	1.5 - 2.0	0.0 - 0.6	1.5 - 2.0	0.0 - 0.6	1.5 - 2.0
Pesticides											
4,4'-DDD	2.6	13	NA	NA	NA	NA	NA	< 0.00039	< 0.00036	NA	NA
4,4'-DDE	1.8	8.9	NA	NA	NA	NA	NA	< 0.00045	< 0.00041	NA	NA
4,4'-DDT	1.7	7.9	NA	NA	NA	NA	NA	< 0.00056	< 0.00051	NA	NA
Aldrin	0.019	0.097	NA	NA	NA	NA	NA	< 0.00038	< 0.00035	NA	NA
alpha-BHC	0.097	0.48	NA	NA	NA	NA	NA	< 0.00057	< 0.00052	NA	NA
alpha-Chlordane	0.91	4.2	NA	NA	NA	NA	NA	< 0.0005	< 0.00045	NA	NA
Beta-BHC	0.072	0.36	NA	NA	NA	NA	NA	< 0.00054	< 0.00049	NA	NA
Camphechlor	NS	NS	NA	NA	NA	NA	NA	< 0.0096	< 0.0088	NA	NA
Delta-BHC	100	100	NA	NA	NA	NA	NA	< 0.00045	< 0.00041	NA	NA
Pesticides											
Dieldrin	0.039	0.2	NA	NA	NA	NA	NA	< 0.00059	< 0.00054	NA	NA
Endosulfan I	4.8	24	NA	NA	NA	NA	NA	< 0.00037	< 0.00034	NA	NA
Endosulfan II	4.8	24	NA	NA	NA	NA	NA	< 0.0005	< 0.00046	NA	NA
Endosulfan Sulfate	4.8	24	NA	NA	NA	NA	NA	< 0.00069	< 0.00063	NA	NA
Endrin	2.2	11	NA	NA	NA	NA	NA	< 0.00039	< 0.00036	NA	NA
Endrin Aldehyde	NS	NS	NA	NA	NA	NA	NA	< 0.00072	< 0.00066	NA	NA
Endrin Ketone	NS	NS	NA	NA	NA	NA	NA	< 0.0005	< 0.00045	NA	NA
gamma-BHC (Lindane)	0.28	1.3	NA	NA	NA	NA	NA	< 0.00035	< 0.00032	NA	NA
Gamma-Chlordane	NS	NS	NA	NA	NA	NA	NA	< 0.00039	< 0.00036	NA	NA
Heptachlor	0.42	2.1	NA	NA	NA	NA	NA	< 0.00047	< 0.00043	NA	NA
Heptachlor Epoxide	NS	NS	NA	NA	NA	NA	NA	< 0.00038	< 0.00034	NA	NA
Methoxychlor	NS	NS	NA	NA	NA	NA	NA	< 0.00054	< 0.00049	NA	NA
Polychlorinated Biphenyls											
Aroclor 1016	1	1	NA	NA	NA	NA	NA	< 0.011	< 0.0098	NA	NA
Aroclor 1221	1	1	NA	NA	NA	NA	NA	< 0.024	< 0.023	NA	NA
Aroclor 1232	1	1	NA	NA	NA	NA	NA	< 0.021	< 0.019	NA	NA
Aroclor 1242	1	1	NA	NA	NA	NA	NA	< 0.013	< 0.012	NA	NA
Aroclor 1248	1	1	NA	NA	NA	NA	NA	< 0.012	< 0.011	NA	NA
Aroclor 1254	1	1	NA	NA	NA	NA	NA	< 0.019	< 0.018	NA	NA
Aroclor 1260	1	1	NA	NA	NA	NA	NA	< 0.013	< 0.012	NA	NA

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Table 5. Historical Analytical Soil Data
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



	Location ID	375-6.8(b)	375-6.8(b)	OU2-SB-19	OU2-SB-20	OU2-SB-20	OU2-SB-21	OU2-SB-21	OU2-SB-22	OU2-SB-22	OU2-SB-23	OU2-SB-23
	Sample ID	Residential	Restricted	OU2-SB-19(1.5-2.0)	OU2-SB-20(0.0-0.6)	OU2-SB-20(1.5-2.0)	OU2-SB-21 (0.0-0.6)	OU2-SB-21 (1.5-2.0)	OU2-SB-22 (0.0-0.6)	OU2-SB-22 (1.5-2.0)	OU2-SB-23 (0.0-0.6)	OU2-SB-23 (1.5-2.0)
	Sample Date		Residential	5/24/2012	5/24/2012	5/24/2012	5/25/2012	5/25/2012	5/25/2012	5/25/2012	5/25/2012	5/25/2012
	Depth Interval			1.5 - 2.0	0.0 - 0.6	1.5 - 2.0	0.0 - 0.6	1.5 - 2.0	0.0 - 0.6	1.5 - 2.0	0.0 - 0.6	1.5 - 2.0
Metals												
Aluminum		NS	NS	9270	7220	5790	13700	13000	10900	8810	6060	5810
Antimony		NS	NS	< 2.3 J	< 2.5 J	< 2.2 J	< 2.5	< 2.4	< 2.5	< 2.2	< 2.3	< 2.2
Arsenic		16	16	2.7	< 2.5	< 2.2	3.8	3.4	3	2.4	2.4	< 2.2
Barium		350	400	36.1	45	29.7	49.7	51.3	56.2	40.8	31.8	24.6
Beryllium		14	72	0.59	0.48	0.39	0.76	0.73	0.7	0.63	0.56	0.48
Cadmium		2.5	4.3	< 0.56	< 0.63	< 0.54	< 0.63	< 0.6	< 0.63	< 0.56	< 0.56	< 0.56
Calcium		NS	NS	2370 J	2440 J	2320 J	1870	1940	2240	2340	1620	1460
Chromium		NS	NS	17.1	18.2	18.3	23.5	25.5	20.6	18.9	26.6	17.1
Cobalt		NS	NS	5.9	< 6.3	< 5.4	7.8	7.9	6.6	5.7	< 5.6	< 5.6
Copper		270	270	15.6	16.9	15.4	25.3	101	22	17.3	16.1	14.4
Iron		NS	NS	19300	17900	14800	24100	22700	21200	18200	17000	18300
Lead		400	400	6.2	12.3	10.5	21.8	31.2	16.8	7.3	26.1	97.4
Magnesium		NS	NS	3190 J	3030 J	2590 J	4000	3910	3510	2950	2520	2440
Manganese		2000	2000	365	288	237	363	416	406	296	429	385
Mercury		0.81	0.81	< 0.037	< 0.038	< 0.035	0.059	0.071	0.055	< 0.038	0.055	< 0.036
Nickel		140	310	11.9	11.9	11.3	17.3	17.8	15	13.8	11	10.1
Potassium		NS	NS	< 1100	1560	< 1100	< 1300	< 1200	1350	< 1100	< 1100	< 1100
Selenium		36	180	< 2.3	< 2.5	< 2.2	< 2.5	< 2.4	< 2.5	< 2.2	< 2.3	< 2.2
Silver		36	180	< 0.56	< 0.63	< 0.54	< 0.63	0.74	< 0.63	< 0.56	0.99	0.86
Sodium		NS	NS	< 1100	< 1300	< 1100	< 1300	< 1200	< 1300	< 1100	< 1100	< 1100
Thallium		NS	NS	< 1.1	< 1.3	< 1.1	< 1.3	< 1.2	< 1.3	< 1.1	< 1.1	< 1.1
Vanadium		NS	NS	28.1	33.7	29.5	38.3	35.5	33	28.3	25	27.2
Zinc		2200	10000	34.2	35.9	29.9	54	97.5	50.2	38.6	64.5	43.3
Other												
Cyanide		27	27	NA	NA	NA	NA	NA	< 0.29	< 0.26	NA	NA
Solids, Percent		NS	NS	86.2	83.1	91.3	80.8	85	80.3	86.3	89.7	90

Notes:
Results reported in milligrams per kilogram (mg/kg).
Field Blank and Trip Blank reported in micrograms per liter (ug/l).
NS No standard
NA Not analyzed
J Estimated result
JN Estimated result
R Rejected result
UB Analyte considered non-detect at the listed value due to associated blank contamination
Bold Result exceeds 375-6.8(b) residential use soil cleanup objective.
Shade Result exceeds 375-6.8(b) restricted residential use soil cleanup objective.

Table 5. Historical Analytical Soil Data
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Location ID	375-6.8(b)	375-6.8(b)	OU2-SB-24	OU2-SB-24	OU2-SB-25	OU2-SB-25	OU2-SB-26	OU2-SB-26	OU2-SB-27	OU2-SB-27
Sample ID	Residential	Restricted	OU2-SB-24 (0.0-0.6)	OU2-SB-24 (1.5-2.0)	OU2-SB-25 (0.0-0.6)	OU2-SB-25 (1.5-2.0)	OU2-SB-26 (0.0-0.6)	OU2-SB-26 (1.5-2.0)	OU2-SB-27 (0.0-0.6)	OU2-SB-27 (1.5-2.0)
Sample Date		Residential	5/25/2012	5/25/2012	5/25/2012	5/25/2012	5/25/2012	5/25/2012	5/25/2012	5/25/2012
Depth Interval			0.0 - 0.6	1.5 - 2.0	0.0 - 0.6	1.5 - 2.0	0.0 - 0.6	1.5 - 2.0	0.0 - 0.6	1.5 - 2.0
VOCs										
1,1,1-Trichloroethane	100	100	< 0.00016	< 0.00016	< 0.00014	< 0.00019	< 0.00014	< 0.00014	< 0.00015	< 0.00015
1,1,2,2-Tetrachloroethane	NS	NS	< 0.0002	< 0.0002	< 0.00017	< 0.00024	< 0.00017	< 0.00018	< 0.00019	< 0.00018
1,1,2-Trichloroethane	NS	NS	< 0.00027	< 0.00026	< 0.00023	< 0.00031	< 0.00023	< 0.00024	< 0.00025	< 0.00024
1,1-Dichloroethane	19	26	< 0.00021	< 0.0002	< 0.00018	< 0.00024	< 0.00018	< 0.00019	< 0.0002	< 0.00019
1,1-Dichloroethene	100	100	< 0.00039	< 0.00038	< 0.00033	< 0.00046	< 0.00034	< 0.00035	< 0.00037	< 0.00036
1,2,4-Trichlorobenzene	NS	NS	< 0.00021	< 0.00021	< 0.00018	< 0.00025	< 0.00018	< 0.00019	< 0.0002	< 0.00019
1,2-Dibromo-3-chloropropane	NS	NS	< 0.0014	< 0.0013	< 0.0012	< 0.0016	< 0.0012	< 0.0012	< 0.0013	< 0.0012
1,2-Dibromoethane	NS	NS	< 0.0002	< 0.00019	< 0.00017	< 0.00023	< 0.00017	< 0.00017	< 0.00018	< 0.00018
1,2-Dichlorobenzene	100	100	< 0.00029	< 0.00028	< 0.00025	< 0.00034	< 0.00025	< 0.00026	< 0.00027	< 0.00026
1,2-Dichloroethane	2.3	3.1	< 0.00021	< 0.0002	< 0.00018	< 0.00024	< 0.00018	< 0.00018	< 0.00019	< 0.00019
1,2-Dichloropropane	NS	NS	< 0.00024	< 0.00023	< 0.0002	< 0.00027	< 0.0002	< 0.00021	< 0.00022	< 0.00022
1,3-Dichlorobenzene	17	49	< 0.00029	< 0.00028	< 0.00024	< 0.00033	< 0.00025	< 0.00025	< 0.00027	< 0.00026
1,4-Dichlorobenzene	9.8	13	< 0.00027	< 0.00026	< 0.00023	< 0.00031	< 0.00023	< 0.00024	< 0.00025	< 0.00025
2-Butanone (MEK)	100	100	< 0.0037	< 0.0036	< 0.0031	< 0.0036	< 0.0031	< 0.0032	< 0.0034	< 0.0033
2-Hexanone	NS	NS	< 0.00096	< 0.00093	< 0.00081	< 0.0011	< 0.00082	< 0.00084	< 0.00089	< 0.00087
4-Methyl-2-pentanone(MIBK)	NS	NS	< 0.0012	< 0.0011	< 0.00098	< 0.0013	< 0.00099	< 0.001	< 0.0011	< 0.0011
Acetone	100	100	< 0.0026	< 0.0025	0.0365	0.0971	< 0.0022	< 0.0023	< 0.0024	< 0.0024
Benzene	2.9	4.8	< 0.00018	< 0.00018	< 0.00015	< 0.00021	< 0.00016	< 0.00016	< 0.00017	< 0.00017
Bromodichloromethane	NS	NS	< 0.00016	< 0.00016	< 0.00014	< 0.00019	< 0.00014	< 0.00014	< 0.00015	< 0.00015
Bromoform	NS	NS	< 0.00023	< 0.00023	< 0.0002	< 0.00027	< 0.0002	< 0.00021	< 0.00022	< 0.00021
Bromomethane	NS	NS	< 0.00042	< 0.00041	< 0.00036	< 0.00049	< 0.00036	< 0.00037	< 0.00039	< 0.00038
Carbon disulfide	NS	NS	< 0.00018	< 0.00017	< 0.00015	< 0.00021	< 0.00015	< 0.00016	< 0.00017	< 0.00016
Carbon tetrachloride	1.4	2.4	< 0.0002	< 0.0002	< 0.00017	< 0.00024	< 0.00017	< 0.00018	< 0.00019	< 0.00019
Chlorobenzene	100	100	< 0.00017	< 0.00016	< 0.00014	< 0.00019	< 0.00014	< 0.00015	< 0.00015	< 0.00015
Chloroethane	NS	NS	< 0.00035	< 0.00034	< 0.0003	< 0.0004	< 0.0003	< 0.00031	< 0.00032	< 0.00032
Chloroform	10	49	< 0.00013	< 0.00012	< 0.00011	< 0.00015	< 0.00011	< 0.00011	< 0.00012	< 0.00012
Chloromethane	NS	NS	< 0.00029	< 0.00028	< 0.00024	< 0.00033	< 0.00024	< 0.00025	< 0.00027	< 0.00026
cis-1,2-Dichloroethene	59	100	< 0.00028	< 0.00027	< 0.00024	< 0.00033	< 0.00024	< 0.00025	< 0.00026	< 0.00026
cis-1,3-Dichloropropene	NS	NS	< 0.00021	< 0.00021	< 0.00018	< 0.00025	< 0.00018	< 0.00019	< 0.0002	< 0.00019
Cyclohexane	NS	NS	< 0.00019	< 0.00019	< 0.00016	< 0.00022	< 0.00016	< 0.00017	< 0.00018	< 0.00017
Dibromochloromethane	NS	NS	< 0.00025	< 0.00024	< 0.00021	< 0.00029	< 0.00022	< 0.00022	< 0.00023	< 0.00023
Dichlorodifluoromethane	NS	NS	< 0.00035	< 0.00034	< 0.0003	< 0.00041	< 0.0003	< 0.00031	< 0.00033	< 0.00032
Ethylbenzene	30	41	< 0.0004	< 0.00039	< 0.00034	< 0.00047	< 0.00035	< 0.00036	< 0.00038	< 0.00037
Freon 113	NS	NS	< 0.00066	< 0.00064	< 0.00056	< 0.00077	< 0.00057	< 0.00058	< 0.00062	< 0.0006
Isopropylbenzene	NS	NS	< 0.00011	< 0.00011	< 0.000097	< 0.00013	< 0.000098	< 0.0001	< 0.00011	< 0.0001
Methyl Acetate	NS	NS	< 0.004	< 0.0039	< 0.0034	< 0.0046	< 0.0034	< 0.0035	< 0.0037	< 0.0036
Methyl Tert Butyl Ether	62	100	< 0.00036	< 0.00035	< 0.00031	< 0.00042	< 0.00031	< 0.00032	< 0.00034	< 0.00033
Methylcyclohexane	NS	NS	< 0.00026	< 0.00025	< 0.00022	< 0.0003	< 0.00022	< 0.00023	< 0.00024	< 0.00024
Methylene chloride	51	100	< 0.002	< 0.0019	< 0.0017	< 0.0023	0.0042 J	< 0.0017	< 0.0018	< 0.0018
Styrene	NS	NS	< 0.00014	< 0.00014	< 0.00012	< 0.00016	< 0.00012	< 0.00012	< 0.00013	< 0.00013
Tetrachloroethene	5.5	19	< 0.00026	< 0.00026	< 0.00022	< 0.00031	< 0.00023	< 0.00023	< 0.00025	< 0.00024
Toluene	100	100	0.00038 J	0.00045 J	0.00035 J	< 0.00019	0.002	< 0.00014	0.00034 J	< 0.00015
trans-1,2-Dichloroethene	100	100	< 0.00037	< 0.00036	< 0.00031	< 0.00042	< 0.00031	< 0.00032	< 0.00034	< 0.00033
trans-1,3-Dichloropropene	NS	NS	< 0.00024	< 0.00023	< 0.0002	< 0.00028	< 0.0002	< 0.00021	< 0.00022	< 0.00022
Trichloroethene	10	21	< 0.00027	< 0.00026	< 0.00023	< 0.00031	< 0.00023	< 0.00024	< 0.00025	< 0.00024
Trichlorofluoromethane	NS	NS	< 0.00046	< 0.00044	< 0.00039	< 0.00053	< 0.00039	< 0.0004	< 0.00043	< 0.00042
Vinyl chloride	0.21	0.9	< 0.00022	< 0.00022	< 0.00019	< 0.00026	< 0.00019	< 0.0002	< 0.00021	< 0.0002
Xylene (total)	100	100	< 0.00021	< 0.00021	< 0.00018	< 0.00025	< 0.00018	< 0.00019	< 0.0002	< 0.00019
Total TIC, Volatile	NS	NS	0	0	0	0	0	0	0	0

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Table 5. Historical Analytical Soil Data
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Location ID	375-6.8(b)	375-6.8(b)	OU2-SB-24	OU2-SB-24	OU2-SB-25	OU2-SB-25	OU2-SB-26	OU2-SB-26	OU2-SB-27	OU2-SB-27
Sample ID	Residential	Restricted	OU2-SB-24 (0.0-0.6)	OU2-SB-24 (1.5-2.0)	OU2-SB-25 (0.0-0.6)	OU2-SB-25 (1.5-2.0)	OU2-SB-26 (0.0-0.6)	OU2-SB-26 (1.5-2.0)	OU2-SB-27 (0.0-0.6)	OU2-SB-27 (1.5-2.0)
Sample Date		Residential	5/25/2012	5/25/2012	5/25/2012	5/25/2012	5/25/2012	5/25/2012	5/25/2012	5/25/2012
Depth Interval			0.0 - 0.6	1.5 - 2.0	0.0 - 0.6	1.5 - 2.0	0.0 - 0.6	1.5 - 2.0	0.0 - 0.6	1.5 - 2.0
SVOCs										
1,1'-Biphenyl	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA
2,4,6-Trichlorophenol	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dichlorophenol	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dimethylphenol	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrophenol	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrotoluene	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA
2,6-Dinitrotoluene	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA
2-Chloronaphthalene	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA
2-Chlorophenol	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylphenol	100	100	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitroaniline	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitrophenol	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA
3&4-Methylphenol	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA
3,3'-Dichlorobenzidine	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA
3-Nitroaniline	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA
4,6-Dinitro-o-cresol	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA
4-Bromophenyl phenyl ether	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA
4-Chloro-3-methyl phenol	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA
4-Chloroaniline	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA
4-Chlorophenyl phenyl ether	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA
4-Nitroaniline	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA
4-Nitrophenol	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthene	100	100	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	100	100	NA	NA	NA	NA	NA	NA	NA	NA
Acetophenone	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene	100	100	NA	NA	NA	NA	NA	NA	NA	NA
Atrazine	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA
Benzaldehyde	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	1	1	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	1	1	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	1	1	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene	100	100	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	1	3.9	NA	NA	NA	NA	NA	NA	NA	NA
bis(2-Chloroethoxy)methane	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA
bis(2-Chloroethyl)ether	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA
bis(2-Chloroisopropyl)ether	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA
bis(2-Ethylhexyl)phthalate	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA
Butyl benzyl phthalate	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA
Caprolactam	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA
Carbazole	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene	1	3.9	NA	NA	NA	NA	NA	NA	NA	NA
Dibenzo(a,h)anthracene	0.33	0.33	NA	NA	NA	NA	NA	NA	NA	NA
Dibenzofuran	14	59	NA	NA	NA	NA	NA	NA	NA	NA
Diethyl phthalate	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA
Dimethyl phthalate	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA
Di-n-butyl phthalate	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA
Di-n-octyl phthalate	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	100	100	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	100	100	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorobenzene	0.33	1.2	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorobutadiene	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorocyclopentadiene	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA
Hexachloroethane	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene	0.5	0.5	NA	NA	NA	NA	NA	NA	NA	NA
Isophorone	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	100	100	NA	NA	NA	NA	NA	NA	NA	NA
Nitrobenzene	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitroso-di-n-propylamine	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitrosodiphenylamine	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA
Pentachlorophenol	2.4	6.7	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	100	100	NA	NA	NA	NA	NA	NA	NA	NA
Phenol	100	100	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	100	100	NA	NA	NA	NA	NA	NA	NA	NA
Total TIC, Semi-Volatile	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA
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Table 5. Historical Analytical Soil Data
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Location ID Sample ID Sample Date Depth Interval	375-6.8(b)	375-6.8(b)	OU2-SB-24	OU2-SB-24	OU2-SB-25	OU2-SB-25	OU2-SB-26	OU2-SB-26	OU2-SB-27	OU2-SB-27
	Residential	Restricted	OU2-SB-24 (0.0-0.6)	OU2-SB-24 (1.5-2.0)	OU2-SB-25 (0.0-0.6)	OU2-SB-25 (1.5-2.0)	OU2-SB-26 (0.0-0.6)	OU2-SB-26 (1.5-2.0)	OU2-SB-27 (0.0-0.6)	OU2-SB-27 (1.5-2.0)
		Residential	5/25/2012	5/25/2012	5/25/2012	5/25/2012	5/25/2012	5/25/2012	5/25/2012	5/25/2012
			0.0 - 0.6	1.5 - 2.0	0.0 - 0.6	1.5 - 2.0	0.0 - 0.6	1.5 - 2.0	0.0 - 0.6	1.5 - 2.0
Pesticides										
4,4'-DDD	2.6	13	NA	NA	NA	NA	NA	NA	NA	NA
4,4'-DDE	1.8	8.9	NA	NA	NA	NA	NA	NA	NA	NA
4,4'-DDT	1.7	7.9	NA	NA	NA	NA	NA	NA	NA	NA
Aldrin	0.019	0.097	NA	NA	NA	NA	NA	NA	NA	NA
alpha-BHC	0.097	0.48	NA	NA	NA	NA	NA	NA	NA	NA
alpha-Chlordane	0.91	4.2	NA	NA	NA	NA	NA	NA	NA	NA
Beta-BHC	0.072	0.36	NA	NA	NA	NA	NA	NA	NA	NA
Camphechlor	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA
Delta-BHC	100	100	NA	NA	NA	NA	NA	NA	NA	NA
Pesticides										
Dieldrin	0.039	0.2	NA	NA	NA	NA	NA	NA	NA	NA
Endosulfan I	4.8	24	NA	NA	NA	NA	NA	NA	NA	NA
Endosulfan II	4.8	24	NA	NA	NA	NA	NA	NA	NA	NA
Endosulfan Sulfate	4.8	24	NA	NA	NA	NA	NA	NA	NA	NA
Endrin	2.2	11	NA	NA	NA	NA	NA	NA	NA	NA
Endrin Aldehyde	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA
Endrin Ketone	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA
gamma-BHC (Lindane)	0.28	1.3	NA	NA	NA	NA	NA	NA	NA	NA
Gamma-Chlordane	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA
Heptachlor	0.42	2.1	NA	NA	NA	NA	NA	NA	NA	NA
Heptachlor Epoxide	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA
Methoxychlor	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA
Polychlorinated Biphenyls										
Aroclor 1016	1	1	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor 1221	1	1	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor 1232	1	1	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor 1242	1	1	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor 1248	1	1	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor 1254	1	1	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor 1260	1	1	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on Last Page

Table 5. Historical Analytical Soil Data
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



	Location ID	375-6.8(b)	375-6.8(b)	OU2-SB-24	OU2-SB-24	OU2-SB-25	OU2-SB-25	OU2-SB-26	OU2-SB-26	OU2-SB-27	OU2-SB-27
	Sample ID	Residential	Restricted	OU2-SB-24 (0.0-0.6)	OU2-SB-24 (1.5-2.0)	OU2-SB-25 (0.0-0.6)	OU2-SB-25 (1.5-2.0)	OU2-SB-26 (0.0-0.6)	OU2-SB-26 (1.5-2.0)	OU2-SB-27 (0.0-0.6)	OU2-SB-27 (1.5-2.0)
	Sample Date		Residential	5/25/2012	5/25/2012	5/25/2012	5/25/2012	5/25/2012	5/25/2012	5/25/2012	5/25/2012
	Depth Interval			0.0 - 0.6	1.5 - 2.0	0.0 - 0.6	1.5 - 2.0	0.0 - 0.6	1.5 - 2.0	0.0 - 0.6	1.5 - 2.0
Metals											
Aluminum		NS	NS	12200	12300	21000	34000	30000	32400	15100	14600
Antimony		NS	NS	< 2.8	< 2.7	< 3	< 3	< 2.7	< 2.9	< 2.8	< 2.9
Arsenic		16	16	6.1	7	7.1	7.8	6	6.3	3.4	< 2.9
Barium		350	400	79.9	80.5	74.9	89.4	54.5	110	33.7	41.2
Beryllium		14	72	1.1	1.2	0.62	0.84	0.6	0.62	0.54	0.5
Cadmium		2.5	4.3	< 0.69	< 0.67	< 0.74	< 0.75	< 0.66	< 0.72	< 0.71	< 0.71
Calcium		NS	NS	2570	2570	1010	< 750	< 660	< 720	875	1200
Chromium		NS	NS	33.1	32.2	31.2	44.3	30.1	37.6	23.9	22.8
Cobalt		NS	NS	9	9.5	7.8	13.6	9	9.7	< 7.1	< 7.1
Copper		270	270	38.7	40.2	31.1	38.9	20.9	20.7	15.3	10.7
Iron		NS	NS	23600	24100	24600	30300	26300	30000	19300	14900
Lead		400	400	99	110	91.6	42.8	12.5	16.3	26	11.8
Magnesium		NS	NS	3370	3410	3590	3540	2580	4630	2960	3180
Manganese		2000	2000	1010	1030	180	225	128	136	92.9	86.6
Mercury		0.81	0.81	0.28	0.3	0.11	0.1	0.12	0.11	0.25	0.074
Nickel		140	310	18.4	19.4	20.5	30.7	23.7	24.4	12.9	12.6
Potassium		NS	NS	< 1400	< 1300	< 1500	< 1500	< 1300	3010	< 1400	< 1400
Selenium		36	180	< 2.8	< 2.7	< 3	< 3	< 2.7	< 2.9	< 2.8	< 2.9
Silver		36	180	0.76	1.5	1	1.2	0.76	< 0.72	< 0.71	0.74
Sodium		NS	NS	< 1400	< 1300	< 1500	< 1500	< 1300	< 1400	< 1400	< 1400
Thallium		NS	NS	< 1.4	< 1.3	< 1.5	< 1.5	< 1.3	< 1.4	< 1.4	< 1.4
Vanadium		NS	NS	43	40	50.6	60.1	50.4	78.2	38.4	34.3
Zinc		2200	10000	104	112	53.6	73.1	56.6	67.3	46.4	48.1
Other											
Cyanide		27	27	NA	NA	NA	NA	NA	NA	NA	NA
Solids, Percent		NS	NS	72.3	72.8	69.8	65.2	74.6	70.8	72.8	71.4

Notes:
Results reported in milligrams per kilogram (mg/kg).
Field Blank and Trip Blank reported in micrograms per liter (ug/l).
NS No standard
NA Not analyzed
J Estimated result
JN Estimated result
R Rejected result
UB Analyte considered non-detect at the listed value due to associated blank contamination
Bold Result exceeds 375-6.8(b) residential use soil cleanup objective.
Shade Result exceeds 375-6.8(b) restricted residential use soil cleanup objective.

Table 6. NYSDEC Applicable Soil Cleanup Objectives
Ramapo Paint Sludge Site - Operable Unit 2
Ramapo, Rockland County, New York



	Units	375-6.8(a) NYS Unrestricted	375-6.8(b) NYS Restricted Residential	375-6.8(b) NYS Protection of Groundwater	375-6.8(b) NYS Protection of Ecological Resources
VOCs					
1,1,1-Trichloroethane	ug/kg	680	100000	680	NS
1,1,2,2-Tetrachloroethane	ug/kg	NS	NS	NS	NS
1,1,2-Trichloroethane	ug/kg	NS	NS	NS	NS
1,1-Dichloroethane	ug/kg	270	26000	270	NS
1,1-Dichloroethene	ug/kg	330	100000	330	NS
1,2,4-Trichlorobenzene	ug/kg	NS	NS	NS	NS
1,2-Dibromo-3-chloropropane	ug/kg	NS	NS	NS	NS
1,2-Dibromoethane	ug/kg	NS	NS	NS	NS
1,2-Dichlorobenzene	ug/kg	1100	100000	1100	NS
1,2-Dichloroethane	ug/kg	20	3100	20	10000
1,2-Dichloropropane	ug/kg	NS	NS	NS	NS
1,3-Dichlorobenzene	ug/kg	2400	49000	2400	NS
1,4-Dichlorobenzene	ug/kg	1800	13000	1800	20000
2-Butanone (MEK)	ug/kg	120	100000	120	100000
2-Hexanone	ug/kg	NS	NS	NS	NS
4-Methyl-2-pentanone(MIBK)	ug/kg	NS	NS	NS	NS
Acetone	ug/kg	50	100000	50	2200
Benzene	ug/kg	60	4800	60	70000
Bromodichloromethane	ug/kg	NS	NS	NS	NS
Bromoform	ug/kg	NS	NS	NS	NS
Bromomethane	ug/kg	NS	NS	NS	NS
Carbon disulfide	ug/kg	NS	NS	NS	NS
Carbon tetrachloride	ug/kg	760	2400	760	NS
Chlorobenzene	ug/kg	1100	100000	1100	40000
Chloroethane	ug/kg	NS	NS	NS	NS
Chloroform	ug/kg	370	49000	370	12000
Chloromethane	ug/kg	NS	NS	NS	NS
cis-1,2-Dichloroethene	ug/kg	250	100000	250	NS
cis-1,3-Dichloropropene	ug/kg	NS	NS	NS	NS
Cyclohexane	ug/kg	NS	NS	NS	NS
Dibromochloromethane	ug/kg	NS	NS	NS	NS
Dichlorodifluoromethane	ug/kg	NS	NS	NS	NS
Ethylbenzene	ug/kg	1000	41000	1000	NS
Freon 113	ug/kg	NS	NS	NS	NS
Isopropylbenzene	ug/kg	NS	NS	NS	NS
Methyl Acetate	ug/kg	NS	NS	NS	NS
Methyl Tert Butyl Ether	ug/kg	930	100000	930	NS
Methylcyclohexane	ug/kg	NS	NS	NS	NS
Methylene chloride	ug/kg	50	100000	50	12000
Styrene	ug/kg	NS	NS	NS	NS
Tetrachloroethene	ug/kg	1300	19000	1300	2000
Toluene	ug/kg	700	100000	700	36000
trans-1,2-Dichloroethene	ug/kg	190	100000	190	NS
trans-1,3-Dichloropropene	ug/kg	NS	NS	NS	NS
Trichloroethene	ug/kg	470	21000	470	2000
Trichlorofluoromethane	ug/kg	NS	NS	NS	NS
Vinyl chloride	ug/kg	20	900	20	NS
Xylene (total)	ug/kg	260	100000	1600	260

Table 6. NYSDEC Applicable Soil Cleanup Objectives
Ramapo Paint Sludge Site - Operable Unit 2
Ramapo, Rockland County, New York



	Units	375-6.8(a) NYS Unrestricted	375-6.8(b) NYS Restricted Residential	375-6.8(b) NYS Protection of Groundwater	375-6.8(b) NYS Protection of Ecological Resources
SVOCs					
1,1'-Biphenyl	ug/kg	NS	NS	NS	NS
2,4,5-Trichlorophenol	ug/kg	NS	NS	NS	NS
2,4,6-Trichlorophenol	ug/kg	NS	NS	NS	NS
2,4-Dichlorophenol	ug/kg	NS	NS	NS	NS
2,4-Dimethylphenol	ug/kg	NS	NS	NS	NS
2,4-Dinitrophenol	ug/kg	NS	NS	NS	NS
2,4-Dinitrotoluene	ug/kg	NS	NS	NS	NS
2,6-Dinitrotoluene	ug/kg	NS	NS	NS	NS
2-Chloronaphthalene	ug/kg	NS	NS	NS	NS
2-Chlorophenol	ug/kg	NS	NS	NS	NS
2-Methylnaphthalene	ug/kg	NS	NS	NS	NS
2-Methylphenol	ug/kg	NS	NS	NS	NS
2-Nitroaniline	ug/kg	NS	NS	NS	NS
2-Nitrophenol	ug/kg	NS	NS	NS	NS
3&4-Methylphenol	ug/kg	NS	NS	NS	NS
3,3'-Dichlorobenzidine	ug/kg	NS	NS	NS	NS
3-Nitroaniline	ug/kg	NS	NS	NS	NS
4,6-Dinitro-o-cresol	ug/kg	NS	NS	NS	NS
4-Bromophenyl phenyl ether	ug/kg	NS	NS	NS	NS
4-Chloro-3-methyl phenol	ug/kg	NS	NS	NS	NS
4-Chloroaniline	ug/kg	NS	NS	NS	NS
4-Chlorophenyl phenyl ether	ug/kg	NS	NS	NS	NS
4-Nitroaniline	ug/kg	NS	NS	NS	NS
4-Nitrophenol	ug/kg	NS	NS	NS	NS
Acenaphthene	ug/kg	20000	100000	98000	20000
Acenaphthylene	ug/kg	100000	100000	107000	NS
Acetophenone	ug/kg	NS	NS	NS	NS
Anthracene	ug/kg	100000	100000	1000000	NS
Atrazine	ug/kg	NS	NS	NS	NS
Benzaldehyde	ug/kg	NS	NS	NS	NS
Benzo(a)anthracene	ug/kg	1000	1000	1000	NS
Benzo(a)pyrene	ug/kg	1000	1000	22000	2600
Benzo(b)fluoranthene	ug/kg	1000	1000	1700	NS
Benzo(g,h,i)perylene	ug/kg	100000	100000	1000000	NS
Benzo(k)fluoranthene	ug/kg	800	3900	1700	NS
bis(2-Chloroethoxy)methane	ug/kg	NS	NS	NS	NS
bis(2-Chloroethyl)ether	ug/kg	NS	NS	NS	NS
bis(2-Chloroisopropyl)ether	ug/kg	NS	NS	NS	NS
bis(2-Ethylhexyl)phthalate	ug/kg	NS	NS	NS	NS
Butyl benzyl phthalate	ug/kg	NS	NS	NS	NS
Caprolactam	ug/kg	NS	NS	NS	NS
Carbazole	ug/kg	NS	NS	NS	NS
Chrysene	ug/kg	1000	3900	1000	NS
Dibenzo(a,h)anthracene	ug/kg	330	330	1000000	NS
Dibenzofuran	ug/kg	NS	NS	NS	NS
Diethyl phthalate	ug/kg	NS	NS	NS	NS
Dimethyl phthalate	ug/kg	NS	NS	NS	NS
Di-n-butyl phthalate	ug/kg	NS	NS	NS	NS
Di-n-octyl phthalate	ug/kg	NS	NS	NS	NS
Fluoranthene	ug/kg	100000	100000	1000000	NS
Fluorene	ug/kg	30000	100000	386000	30000
Hexachlorobenzene	ug/kg	NS	NS	NS	NS
Hexachlorobutadiene	ug/kg	NS	NS	NS	NS
Hexachlorocyclopentadiene	ug/kg	NS	NS	NS	NS
Hexachloroethane	ug/kg	NS	NS	NS	NS

Table 6. NYSDEC Applicable Soil Cleanup Objectives
Ramapo Paint Sludge Site - Operable Unit 2
Ramapo, Rockland County, New York



	Units	375-6.8(a) NYS Unrestricted	375-6.8(b) NYS Restricted Residential	375-6.8(b) NYS Protection of Groundwater	375-6.8(b) NYS Protection of Ecological Resources
SVOCs continued					
Indeno(1,2,3-cd)pyrene	ug/kg	500	500	8200	NS
Isophorone	ug/kg	NS	NS	NS	NS
Naphthalene	ug/kg	12000	100000	12000	NS
Nitrobenzene	ug/kg	NS	NS	NS	NS
N-Nitroso-di-n-propylamine	ug/kg	NS	NS	NS	NS
N-Nitrosodiphenylamine	ug/kg	NS	NS	NS	NS
Pentachlorophenol	ug/kg	800	6700	800	800
Phenanthrene	ug/kg	100000	100000	1000000	NS
Phenol	ug/kg	330	100000	330	30000
Pyrene	ug/kg	100000	100000	1000000	NS
PCBs					
Aroclor 1016	ug/kg	100	1000	3200	1000
Aroclor 1221	ug/kg	100	1000	3200	1000
Aroclor 1232	ug/kg	100	1000	3200	1000
Aroclor 1242	ug/kg	100	1000	3200	1000
Aroclor 1248	ug/kg	100	1000	3200	1000
Aroclor 1254	ug/kg	100	1000	3200	1000
Aroclor 1260	ug/kg	100	1000	3200	1000
Aroclor 1262	ug/kg	100	1000	3200	1000
Aroclor 1268	ug/kg	100	1000	3200	1000
Metals					
Aluminum	mg/kg	NS	NS	NS	NS
Antimony	mg/kg	NS	NS	NS	NS
Arsenic	mg/kg	13	16	16	13
Barium	mg/kg	350	400	820	433
Beryllium	mg/kg	7.2	72	47	10
Cadmium	mg/kg	2.5	4.3	7.5	4
Calcium	mg/kg	NS	NS	NS	NS
Chromium	mg/kg	NS	NS	NS	NS
Cobalt	mg/kg	NS	NS	NS	NS
Copper	mg/kg	50	270	1720	50
Iron	mg/kg	NS	NS	NS	NS
Lead	mg/kg	63	400	450	63
Magnesium	mg/kg	NS	NS	NS	NS
Manganese	mg/kg	1600	2000	2000	1600
Mercury	mg/kg	0.18	0.81	0.73	0.18
Nickel	mg/kg	30	310	130	30
Potassium	mg/kg	NS	NS	NS	NS
Selenium	mg/kg	3.9	180	4	3.9
Silver	mg/kg	2	180	8.3	2
Sodium	mg/kg	NS	NS	NS	NS
Thallium	mg/kg	NS	NS	NS	NS
Vanadium	mg/kg	NS	NS	NS	NS
Zinc	mg/kg	109	10000	2480	109
Other					
Cyanide	mg/kg	27	27	40	NS
Solids, Percent	mg/kg	NS	NS	NS	NS

Notes:

ug/kg micrograms per kilogram

mg/kg milligram per kilogram

NS No standard

Table 7. Streambank Analytical Results Areas K, L and M
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Location ID	375-6.8(b)	375-6.8(b)		CS-K-1	CS-K-1	CS-K-2	CS-K-2	CS-K-3	CS-K-3	CS-K-4	CS-K-4	CS-K-5	CS-K-5	CS-K-6	CS-K-6	CS-L-1	CS-L-1
Sample ID	Restricted	Protection of		CS-K-1 (0 - 0.5)	CS-K-1 (1.5 - 2)	CS-K-2 (0 - 0.5)	CS-K-2 (1.5 - 2)	CS-K-3 (0 - 0.5)	CS-K-3 (1.5 - 2)	CS-K-4 (0 - 0.5)	CS-K-4 (1.5 - 2)	CS-K-5 (0 - 0.5)	CS-K-5 (1.5 - 2)	CS-K-6 (0 - 0.5)	CS-K-6 (1.5 - 2)	CS-L-1 (0 - 0.5)	CS-L-1 (1.5 - 2)
Sample Date	Residential	Ecological	Units	10/22/2015	10/22/2015	10/22/2015	10/22/2015	10/22/2015	10/22/2015	10/22/2015	10/22/2015	10/22/2015	10/22/2015	10/22/2015	10/22/2015	10/22/2015	10/22/2015
Depth Interval		Resource		0.0 - 0.6	1.5 - 2	0 - 0.5	1.5 - 2	0 - 0.5	1.5 - 2	0 - 0.5	1.5 - 2	0 - 0.5	1.5 - 2	0 -0.5	1.5 - 2	0 - 0.5	1.5 - 2
VOCs																	
1,1,1-Trichloroethane	100000	NS	ug/kg	3.1 U	2.4 U	2.7 U	2.4 U	2.7 U	2.5 U	2.9 U	2.4 U	2.3 U	2.5 U	2.8 U	2.8 U	3.2 U	3.2 U
1,1,2,2-Tetrachloroethane	NS	NS	ug/kg	3.1 U	2.4 U	2.7 U	2.4 U	2.7 U	2.5 U	2.9 U	2.4 U	2.3 U	2.5 U	2.8 U	2.8 U	3.2 U	3.2 U
1,1,2-trichloro-1,2,2-trifluoroethane	NS	NS	ug/kg	7.7 U	5.9 U	6.8 U	6 U	6.7 U	6.1 U	7.2 U	5.9 U	5.8 U	6.3 U	7 U	7.1 U	8 U	7.9 U
1,1,2-Trichloroethane	NS	NS	ug/kg	3.1 U	2.4 U	2.7 U	2.4 U	2.7 U	2.5 U	2.9 U	2.4 U	2.3 U	2.5 U	2.8 U	2.8 U	3.2 U	3.2 U
1,1-Dichloroethane	26000	NS	ug/kg	1.5 U	1.2 U	1.4 U	1.2 U	1.3 U	1.2 U	1.4 U	1.2 U	1.2 U	1.3 U	1.4 U	1.4 U	1.6 U	1.6 U
1,1-Dichloroethene	100000	NS	ug/kg	1.5 U	1.2 U	1.4 U	1.2 U	1.3 U	1.2 U	1.4 U	1.2 U	1.2 U	1.3 U	1.4 U	1.4 U	1.6 U	1.6 U
1,2,4-Trichlorobenzene	NS	NS	ug/kg	7.7 U	5.9 U	6.8 U	6 U	6.7 U	6.1 U	7.2 U	5.9 U	5.8 U	6.3 U	7 U	7.1 U	8 U	7.9 U
1,2-Dibromo-3-chloropropane	NS	NS	ug/kg	3.1 U	2.4 U	2.7 U	2.4 U	2.7 U	2.5 U	2.9 U	2.4 U	2.3 U	2.5 U	2.8 U	2.8 U	3.2 U	3.2 U
1,2-Dibromoethane	NS	NS	ug/kg	1.5 U	1.2 U	1.4 U	1.2 U	1.3 U	1.2 U	1.4 U	1.2 U	1.2 U	1.3 U	1.4 U	1.4 U	1.6 U	1.6 U
1,2-Dichlorobenzene	100000	NS	ug/kg	1.5 U	1.2 U	1.4 U	1.2 U	1.3 U	1.2 U	1.4 U	1.2 U	1.2 U	1.3 U	1.4 U	1.4 U	1.6 U	1.6 U
1,2-Dichloroethane	3100	10000	ug/kg	1.5 U	1.2 U	1.4 U	1.2 U	1.3 U	1.2 U	1.4 U	1.2 U	1.2 U	1.3 U	1.4 U	1.4 U	1.6 U	1.6 U
1,2-Dichloropropane	NS	NS	ug/kg	3.1 U	2.4 U	2.7 U	2.4 U	2.7 U	2.5 U	2.9 U	2.4 U	2.3 U	2.5 U	2.8 U	2.8 U	3.2 U	3.2 U
1,3-Dichlorobenzene	49000	NS	ug/kg	1.5 U	1.2 U	1.4 U	1.2 U	1.3 U	1.2 U	1.4 U	1.2 U	1.2 U	1.3 U	1.4 U	1.4 U	1.6 U	1.6 U
1,4-Dichlorobenzene	13000	20000	ug/kg	1.5 U	1.2 U	1.4 U	1.2 U	1.3 U	1.2 U	1.4 U	1.2 U	1.2 U	1.3 U	1.4 U	1.4 U	1.6 U	1.6 U
2-Butanone (MEK)	100000	100000	ug/kg	15 U	12 U	14 U	12 U	13 U	12 U	14 U	12 U	12 U	13 U	14 U	14 U	16 U	16 U
4-Methyl-2-Pentanone	NS	NS	ug/kg	7.7 U	5.9 U	6.8 U	6 U	6.7 U	6.1 U	7.2 U	5.9 U	5.8 U	6.3 U	7 U	7.1 U	8 U	7.9 U
Acetone	100000	2200	ug/kg	228 J	261 E	63.6	24.5	174	201	14 U	19.3	12 U	300 E	262 J	121	293	78.1
Bromodichloromethane	NS	NS	ug/kg	3.1 U	2.4 U	2.7 U	2.4 U	2.7 U	2.5 U	2.9 U	2.4 U	2.3 U	2.5 U	2.8 U	2.8 U	3.2 U	3.2 U
Bromoform	NS	NS	ug/kg	7.7 U	5.9 U	6.8 U	6 U	6.7 U	6.1 U	7.2 U	5.9 U	5.8 U	6.3 U	7 U	7.1 U	8 U	7.9 U
Bromomethane	NS	NS	ug/kg	7.7 U	5.9 U	6.8 U	6 U	6.7 U	6.1 U	7.2 U	5.9 U	5.8 U	6.3 U	7 U	7.1 U	8 U	7.9 U
Carbon Disulfide	NS	NS	ug/kg	3.1 U	2.4 U	2.7 U	2.4 U	2.7 U	2.5 U	2.9 U	2.4 U	2.3 U	2.5 U	2.8 U	2.8 U	3.2 U	3.2 U
Carbon Tetrachloride	2400	NS	ug/kg	3.1 U	2.4 U	2.7 U	2.4 U	2.7 U	2.5 U	2.9 U	2.4 U	2.3 U	2.5 U	2.8 U	2.8 U	3.2 U	3.2 U
CFC-11	NS	NS	ug/kg	7.7 U	5.9 U	6.8 U	6 U	6.7 U	6.1 U	7.2 U	5.9 U	5.8 U	6.3 U	7 U	7.1 U	8 U	7.9 U
CFC-12	NS	NS	ug/kg	7.7 U	5.9 U	6.8 U	6 U	6.7 U	6.1 U	7.2 U	5.9 U	5.8 U	6.3 U	7 U	7.1 U	8 U	7.9 U
Chlorobenzene	100000	40000	ug/kg	3.1 U	2.4 U	2.7 U	2.4 U	2.7 U	2.5 U	2.9 U	2.4 U	2.3 U	2.5 U	2.8 U	2.8 U	3.2 U	3.2 U
Chlorodibromomethane	NS	NS	ug/kg	3.1 U	2.4 U	2.7 U	2.4 U	2.7 U	2.5 U	2.9 U	2.4 U	2.3 U	2.5 U	2.8 U	2.8 U	3.2 U	3.2 U
Chloroethane	NS	NS	ug/kg	7.7 U	5.9 U	6.8 U	6 U	6.7 U	6.1 U	7.2 U	5.9 U	5.8 U	6.3 U	7 U	7.1 U	8 U	7.9 U
Chloroform	49000	12000	ug/kg	3.1 U	3.1	2.7 U	2.4 U	2.7 U	2.5 U	2.9 U	2.4 U	2.3 U	2.5 U	2.8 U	2.8 U	3.2 U	3.2 U
Chloromethane	NS	NS	ug/kg	7.7 U	5.9 U	6.8 U	6 U	6.7 U	6.1 U	7.2 U	5.9 U	5.8 U	6.3 U	7 U	7.1 U	8 U	7.9 U
cis-1,2-Dichloroethene	100000	NS	ug/kg	1.5 U	1.2 U	1.4 U	1.2 U	1.3 U	1.2 U	1.4 U	1.2 U	1.2 U	1.3 U	1.4 U	1.4 U	1.6 U	1.6 U
cis-1,3-Dichloropropene	NS	NS	ug/kg	3.1 U	2.4 U	2.7 U	2.4 U	2.7 U	2.5 U	2.9 U	2.4 U	2.3 U	2.5 U	2.8 U	2.8 U	3.2 U	3.2 U
Cyclohexane	NS	NS	ug/kg	3.1 U	2.4 U	2.7 U	2.4 U	2.7 U	2.5 U	2.9 U	2.4 U	2.3 U	2.5 U	2.8 U	2.8 U	3.2 U	3.2 U
Dichloromethane	NS	NS	ug/kg	7.7 U	5.9 U	6.8 U	6 U	6.7 U	6.1 U	7.2 U	5.9 U	5.8 U	6.3 U	7 U	7.1 U	8 U	7.9 U
Isopropylbenzene	NS	NS	ug/kg	3.1 U	2.4 U	2.7 U	2.4 U	2.7 U	2.5 U	2.9 U	2.4 U	2.3 U	2.5 U	2.8 U	2.8 U	3.2 U	3.2 U
Methyl Acetate	NS	NS	ug/kg	7.7 U	5.9 U	6.8 U	6 U	6.7 U	6.1 U	7.2 U	5.9 U	5.8 U	6.3 U	7 U	7.1 U	8 U	7.9 U
Methyl N-Butyl Ketone (2-Hexanone)	100000	NS	ug/kg	7.7 U	5.9 U	6.8 U	6 U	6.7 U	6.1 U	7.2 U	5.9 U	5.8 U	6.3 U	7 U	7.1 U	8 U	7.9 U
Methylcyclohexane	NS	NS	ug/kg	3.1 U	2.4 U	2.7 U	2.4 U	2.7 U	2.5 U	2.9 U	2.4 U	2.3 U	2.5 U	2.8 U	2.8 U	3.2 U	3.2 U
Styrene (Monomer)	NS	NS	ug/kg	3.1 U	2.4 U	2.7 U	2.4 U	2.7 U	2.5 U	2.9 U	2.4 U	2.3 U	2.5 U	2.8 U	2.8 U	3.2 U	3.2 U
Tetrachloroethene	19000	2000	ug/kg	3.1 U	2.4 U	2.7 U	2.4 U	2.7 U	2.5 U	2.9 U	2.4 U	2.3 U	2.5 U	2.8 U	2.8 U	3.2 U	3.2 U
trans-1,2-Dichloroethene	100000	NS	ug/kg	1.5 U	1.2 U	1.4 U	1.2 U	1.3 U	1.2 U	1.4 U	1.2 U	1.2 U	1.3 U	1.4 U	1.4 U	1.6 U	1.6 U
trans-1,3-Dichloropropene	NS	NS	ug/kg	3.1 U	2.4 U	2.7 U	2.4 U	2.7 U	2.5 U	2.9 U	2.4 U	2.3 U	2.5 U	2.8 U	2.8 U	3.2 U	3.2 U
Trichloroethene	21000	2000	ug/kg	1.5 U	1.2 U	1.4 U	1.2 U	1.3 U	1.2 U	1.4 U	1.2 U	1.2 U	1.3 U	1.4 U	1.4 U	1.6 U	1.6 U
Vinyl chloride	900	NS	ug/kg	3.1 U	2.4 U	2.7 U	2.4 U	2.7 U	2.5 U	2.9 U	2.4 U	2.3 U	2.5 U	2.8 U	2.8 U	3.2 U	3.2 U
Benzene	4800	70000	ug/kg	0.77 U	0.59 U	0.68 U	0.6 U	0.67 U	0.61 U	0.72 U	0.59 U	0.58 U	0.63 U	0.7 U	0.71 U	0.8 U	0.79 U
Toluene	100000	36000	ug/kg	1.5 U	1.2 U	1.4 U	1.2 U	1.3 U	1.2 U	1.4 U	1.2 U	1.2 U	0.51 J	1.3 U	1.4 U	1.6 U	1.6 U
Ethylbenzene	100000	260	ug/kg	1.5 U	1.2 U	1.4 U	1.2 U	1.3 U	1.2 U	1.4 U	1.2 U	0.6 J	1.3 U	1.4 U	0.34 J	1.6 U	1.6 U
Total Xylenes	NS	NS	ug/kg	1.5 U	1.2	1.4 U	1.2 U	1.3 U	1.2 U	1.4 U	1.2 U	3.7	1.3 U	1.4 U	1.9	1.6 U	1.1 J
Methyl-tert-butylether	100000	NS	ug/kg	1.5 U	1.2 U	1.4 U	1.2 U	1.3 U	1.2 U	1.4 U	1.2 U	1.2 U	1.3 U	1.4 U	1.4 U	1.6 U	1.6 U

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Table 7. Streambank Analytical Results Areas K, L and M
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Location ID	375-6.8(b)	375-6.8(b)		CS-K-1	CS-K-1	CS-K-2	CS-K-2	CS-K-3	CS-K-3	CS-K-4	CS-K-4	CS-K-5	CS-K-5	CS-K-6	CS-K-6	CS-L-1	CS-L-1
Sample ID	Restricted	Protection of		CS-K-1 (0 - 0.5)	CS-K-1 (1.5 - 2)	CS-K-2 (0 - 0.5)	CS-K-2 (1.5 - 2)	CS-K-3 (0 - 0.5)	CS-K-3 (1.5 - 2)	CS-K-4 (0 - 0.5)	CS-K-4 (1.5 - 2)	CS-K-5 (0 - 0.5)	CS-K-5 (1.5 - 2)	CS-K-6 (0 - 0.5)	CS-K-6 (1.5 - 2)	CS-L-1 (0 - 0.5)	CS-L-1 (1.5 - 2)
Sample Date	Residential	Ecological	Units	10/22/2015	10/22/2015	10/22/2015	10/22/2015	10/22/2015	10/22/2015	10/22/2015	10/22/2015	10/22/2015	10/22/2015	10/22/2015	10/22/2015	10/22/2015	10/22/2015
Depth Interval		Resource		0.0 - 0.6	1.5 - 2	0 - 0.5	1.5 - 2	0 - 0.5	1.5 - 2	0 - 0.5	1.5 - 2	0 - 0.5	1.5 - 2	0 -0.5	1.5 - 2	0 - 0.5	1.5 - 2
SVOCs																	
1,1-Biphenyl	NS	NS	ug/kg	74 U	70 U	78 U	76 U	73 U	73 U	76 U	72 U	68 U	71 U	75 U	70 U	74 U	76 U
2,2-Oxybis(1-Chloropropane)	NS	NS	ug/kg	74 U	70 U	78 U	76 U	73 U	73 U	76 U	72 U	68 U	71 U	75 U	70 U	74 U	76 U
2,4,5-Trichlorophenol	NS	NS	ug/kg	180 U	170 U	190 U	190 U	180 U	180 U	190 U	180 U	170 U	180 U	190 U	170 U	190 U	190 U
2,4,6-Trichlorophenol	NS	NS	ug/kg	180 U	170 U	190 U	190 U	180 U	180 U	190 U	180 U	170 U	180 U	190 U	170 U	190 U	190 U
2,4-Dichlorophenol	NS	NS	ug/kg	180 U	170 U	190 U	190 U	180 U	180 U	190 U	180 U	170 U	180 U	190 U	170 U	190 U	190 U
2,4-Dimethylphenol	NS	NS	ug/kg	180 U	170 U	190 U	190 U	180 U	180 U	190 U	180 U	170 U	180 U	190 U	170 U	190 U	190 U
2,4-Dinitrophenol	NS	NS	ug/kg	180 U	170 U	190 U	190 U	180 U	180 U	190 U	180 U	170 U	180 U	190 U	170 U	190 U	190 U
2,4-Dinitrotoluene	NS	NS	ug/kg	37 U	35 U	39 U	38 U	37 U	37 U	38 U	36 U	34 U	35 U	37 U	35 U	37 U	38 U
2,6-Dinitrotoluene	NS	NS	ug/kg	37 U	35 U	39 U	38 U	37 U	37 U	38 U	36 U	34 U	35 U	37 U	35 U	37 U	38 U
2-Chloronaphthalene	NS	NS	ug/kg	74 U	70 U	78 U	76 U	73 U	73 U	76 U	72 U	68 U	71 U	75 U	70 U	74 U	76 U
2-Chlorophenol	NS	NS	ug/kg	74 U	70 U	78 U	76 U	73 U	73 U	76 U	72 U	68 U	71 U	75 U	70 U	74 U	76 U
2-Methyl-4,6-dinitrophenol	NS	NS	ug/kg	180 U	170 U	190 U	190 U	180 U	180 U	190 U	180 U	170 U	180 U	190 U	170 U	190 U	190 U
2-Methylnaphthalene	NS	NS	ug/kg	74 U	70 U	78 U	76 U	73 U	73 U	76 U	72 U	68 U	71 U	75 U	70 U	74 U	76 U
2-Methylphenol	NS	NS	ug/kg	74 U	70 U	78 U	76 U	73 U	73 U	76 U	72 U	68 U	71 U	75 U	70 U	74 U	76 U
2-Nitroaniline	NS	NS	ug/kg	180 U	170 U	190 U	190 U	180 U	180 U	190 U	180 U	170 U	180 U	190 U	170 U	190 U	190 U
2-Nitrophenol	NS	NS	ug/kg	180 U	170 U	190 U	190 U	180 U	180 U	190 U	180 U	170 U	180 U	190 U	170 U	190 U	190 U
3,3-Dichlorobenzidine	NS	NS	ug/kg	74 U	70 U	78 U	76 U	73 U	73 U	76 U	72 U	68 U	71 U	75 U	70 U	74 U	76 U
3-Methylphenol, 4-Methylphenol	NS	NS	ug/kg	74 U	70 U	78 U	76 U	73 U	73 U	76 U	72 U	68 U	71 U	75 U	70 U	74 U	76 U
3-Nitroaniline	NS	NS	ug/kg	180 U	170 U	190 U	190 U	180 U	180 U	190 U	180 U	170 U	180 U	190 U	170 U	190 U	190 U
4-Bromophenyl phenyl ether	NS	NS	ug/kg	74 U	70 U	78 U	76 U	73 U	73 U	76 U	72 U	68 U	71 U	75 U	70 U	74 U	76 U
4-Chloro-3-Methylphenol	NS	NS	ug/kg	180 U	170 U	190 U	190 U	180 U	180 U	190 U	180 U	170 U	180 U	190 U	170 U	190 U	190 U
4-Chlorophenyl phenyl ether	NS	NS	ug/kg	74 U	70 U	78 U	76 U	73 U	73 U	76 U	72 U	68 U	71 U	75 U	70 U	74 U	76 U
4-Nitroaniline	NS	NS	ug/kg	180 U	170 U	190 U	190 U	180 U	180 U	190 U	180 U	170 U	180 U	190 U	170 U	190 U	190 U
4-Nitrophenol	NS	NS	ug/kg	370 U	350 U	390 U	380 U	370 U	370 U	380 U	360 U	340 U	350 U	370 U	350 U	370 U	380 U
Acenaphthene	100000	20000	ug/kg	37 U	35 U	39 U	38 U	37 U	37 U	38 U	36 U	34 U	35 U	37 U	35 U	37 U	38 U
Acenaphthylene	100000	NS	ug/kg	37 U	35 U	39 U	38 U	37 U	37 U	38 U	36 U	34 U	35 U	37 U	35 U	37 U	38 U
Acetophenone	NS	NS	ug/kg	180 U	170 U	190 U	190 U	180 U	180 U	190 U	180 U	170 U	180 U	190 U	170 U	190 U	190 U
Anthracene	100000	NS	ug/kg	37 U	35 U	39 U	38 U	37 U	37 U	38 U	36 U	34 U	35 U	37 U	35 U	37 U	38 U
Atrazine	NS	NS	ug/kg	74 U	70 U	78 U	76 U	73 U	73 U	76 U	72 U	68 U	71 U	75 U	70 U	74 U	76 U
Benzaldehyde	NS	NS	ug/kg	180 U	170 U	190 U	190 U	180 U	180 U	190 U	180 U	170 U	180 U	190 U	170 U	190 U	190 U
Benzo(a)anthracene	1000	NS	ug/kg	15.7 J	35 U	29.8 J	38 U	37 U	37 U	20.7 J	36 U	34 U	35 U	20.2 J	35 U	37 U	38 U
Benzo(a)pyrene	1000	2600	ug/kg	37 U	35 U	30 J	38 U	37 U	37 U	22.6 J	36 U	34 U	35 U	37 U	35 U	37 U	38 U
Benzo(b)fluoranthene	1000	NS	ug/kg	22 J	35 U	45	38 U	37 U	37 U	28.9 J	36 U	34 U	35 U	20.9 J	35 U	37 U	38 U
Benzo(g,h,i)perylene	100000	NS	ug/kg	37 U	35 U	23.6 J	38 U	37 U	37 U	15.7 J	36 U	34 U	35 U	37 U	35 U	37 U	38 U
Benzo(k)fluoranthene	3900	NS	ug/kg	37 U	35 U	20 J	38 U	37 U	37 U	38 U	36 U	34 U	35 U	37 U	35 U	37 U	38 U
bis(2-Chloroethoxy)methane	NS	NS	ug/kg	74 U	70 U	78 U	76 U	73 U	73 U	76 U	72 U	68 U	71 U	75 U	70 U	74 U	76 U
bis(2-Chloroethyl)ether	NS	NS	ug/kg	74 U	70 U	78 U	76 U	73 U	73 U	76 U	72 U	68 U	71 U	75 U	70 U	74 U	76 U
bis(2-Ethylhexyl)phthalate	NS	NS	ug/kg	74 U	70 U	78 U	76 U	73 U	73 U	76 U	72 U	68 U	71 U	75 U	70 U	74 U	76 U
Butyl benzyl phthalate	NS	NS	ug/kg	74 U	70 U	78 U	76 U	73 U	73 U	76 U	72 U	68 U	71 U	75 U	70 U	74 U	76 U
Caprolactam	NS	NS	ug/kg	74 U	70 U	78 U	76 U	73 U	73 U	76 U	72 U	68 U	71 U	75 U	70 U	74 U	76 U
Carbazole	NS	NS	ug/kg	74 U	70 U	78 U	76 U	73 U	73 U	76 U	72 U	68 U	71 U	75 U	70 U	74 U	76 U
Chrysene	3900	NS	ug/kg	17 J	35 U	38.7 J	38 U	37 U	37 U	23.6 J	36 U	34 U	35 U	22.6 J	35 U	37 U	38 U
Dibenzo(a,h)anthracene	330	NS	ug/kg	37 U	35 U	39 U	38 U	37 U	37 U	38 U	36 U	34 U	35 U	37 U	35 U	37 U	38 U
Dibenzofuran	NS	NS	ug/kg	74 U	70 U	78 U	76 U	73 U	73 U	76 U	72 U	68 U	71 U	75 U	70 U	74 U	76 U
Diethyl phthalate	NS	NS	ug/kg	74 U	70 U	78 U	76 U	73 U	73 U	76 U	72 U	68 U	71 U	75 U	70 U	74 U	76 U
Dimethyl phthalate	NS	NS	ug/kg	74 U	70 U	78 U	76 U	73 U	73 U	76 U	72 U	68 U	71 U	75 U	70 U	74 U	76 U
Di-n-butyl phthalate	NS	NS	ug/kg	74 U	70 U	78 U	76 U	73 U	73 U	76 U	72 U	68 U	71 U	75 U	70 U	74 U	76 U
Di-n-octyl phthalate	NS	NS	ug/kg	74 U	70 U	78 U	76 U	73 U	73 U	76 U	72 U	68 U	71 U	75 U	70 U	74 U	76 U
Fluoranthene	100000	NS	ug/kg	26.6 J	35 U	56.2	38 U	20.5 J	37 U	40.5	36 U	34 U	35 U	22.7 J	35 U	37 U	38 U
Fluorene	100000	30000	ug/kg	37 U	35 U	39 U	38 U	37 U	37 U	38 U	36 U	34 U	35 U	37 U	35 U	37 U	38 U
Hexachloro-1,3-butadiene	NS	NS	ug/kg	37 U	35 U	39 U	38 U	37 U	37 U	38 U	36 U	34 U	35 U	37 U	35 U	37 U	38 U
Hexachlorobenzene	NS	NS	ug/kg	74 U	70 U	78 U	76 U	73 U	73 U	76 U	72 U	68 U	71 U	75 U	70 U	74 U	76 U
Hexachlorocyclopentadiene	NS	NS	ug/kg	370 U	350 U	390 U	380 U	370 U	370 U	380 U	360 U	340 U	350 U	370 U	350 U	370 U	380 U
Hexachloroethane	NS	NS	ug/kg	180 U	170 U	190 U	190 U	180 U	180 U	190 U	180 U	170 U	180 U	190 U	170 U	190 U	190 U

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Table 7. Streambank Analytical Results Areas K, L and M
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Location ID	375-6.8(b)	375-6.8(b)		CS-K-1	CS-K-1	CS-K-2	CS-K-2	CS-K-3	CS-K-3	CS-K-4	CS-K-4	CS-K-5	CS-K-5	CS-K-6	CS-K-6	CS-L-1	CS-L-1
Sample ID	Restricted	Protection of		CS-K-1 (0 - 0.5)	CS-K-1 (1.5 - 2)	CS-K-2 (0 - 0.5)	CS-K-2 (1.5 - 2)	CS-K-3 (0 - 0.5)	CS-K-3 (1.5 - 2)	CS-K-4 (0 - 0.5)	CS-K-4 (1.5 - 2)	CS-K-5 (0 - 0.5)	CS-K-5 (1.5 - 2)	CS-K-6 (0 - 0.5)	CS-K-6 (1.5 - 2)	CS-L-1 (0 - 0.5)	CS-L-1 (1.5 - 2)
Sample Date	Residential	Ecological	Units	10/22/2015	10/22/2015	10/22/2015	10/22/2015	10/22/2015	10/22/2015	10/22/2015	10/22/2015	10/22/2015	10/22/2015	10/22/2015	10/22/2015	10/22/2015	10/22/2015
Depth Interval		Resource		0.0 - 0.6	1.5 - 2	0 - 0.5	1.5 - 2	0 - 0.5	1.5 - 2	0 - 0.5	1.5 - 2	0 - 0.5	1.5 - 2	0 -0.5	1.5 - 2	0 - 0.5	1.5 - 2
SVOCs cont.																	
Indeno(1,2,3-cd)pyrene	500	NS	ug/kg	37 U	35 U	34.8 J	38 U	37 U	37 U	38 U	36 U	34 U	35 U	37 U	35 U	37 U	38 U
Isophorone	NS	NS	ug/kg	74 U	47.5 J	78 U	76 U	73 U	73 U	76 U	72 U	68 U	71 U	75 U	70 U	74 U	76 U
Naphthalene	100000	NS	ug/kg	37 U	35 U	39 U	38 U	37 U	37 U	38 U	36 U	34 U	35 U	37 U	35 U	37 U	38 U
Nitrobenzene	NS	NS	ug/kg	74 U	70 U	78 U	76 U	73 U	73 U	76 U	72 U	68 U	71 U	75 U	70 U	74 U	76 U
n-Nitrosodi-n-propylamine	NS	NS	ug/kg	74 U	70 U	78 U	76 U	73 U	73 U	76 U	72 U	68 U	71 U	75 U	70 U	74 U	76 U
N-nitrosodiphenylamine	NS	NS	ug/kg	180 U	170 U	190 U	190 U	180 U	180 U	190 U	180 U	170 U	180 U	190 U	170 U	190 U	190 U
p-Chloroaniline	NS	NS	ug/kg	180 U	170 U	190 U	190 U	180 U	180 U	190 U	180 U	170 U	180 U	190 U	170 U	190 U	190 U
Pentachlorophenol	6700	800	ug/kg	180 U	170 U	190 U	190 U	180 U	180 U	190 U	180 U	170 U	180 U	190 U	170 U	190 U	190 U
Phenanthrene	100000	NS	ug/kg	37 U	35 U	29 J	38 U	37 U	37 U	24 J	36 U	34 U	35 U	22.8 J	35 U	37 U	38 U
Phenol	100000	30000	ug/kg	74 U	70 U	78 U	76 U	73 U	73 U	76 U	72 U	68 U	71 U	75 U	70 U	74 U	76 U
Pyrene	100000	NS	ug/kg	27.6 J	35 U	52.2	38 U	20.6 J	37 U	39.6	36 U	34 U	35 U	40.6	35 U	37 U	38 U
PCBs																	
Aroclor 1016	1000	1000	ug/kg	36 U	35 U	40 U	38 U	34 U	37 U	34 U	35 U	31 U	35 U	37 U	32 U	36 U	36 U
Aroclor 1221	1000	1000	ug/kg	36 U	35 U	40 U	38 U	34 U	37 U	34 U	35 U	31 U	35 U	37 U	32 U	36 U	36 U
Aroclor 1232	1000	1000	ug/kg	36 U	35 U	40 U	38 U	34 U	37 U	34 U	35 U	31 U	35 U	37 U	32 U	36 U	36 U
Aroclor 1242	1000	1000	ug/kg	36 U	35 U	40 U	38 U	34 U	37 U	34 U	35 U	31 U	35 U	37 U	32 U	36 U	36 U
Aroclor 1248	1000	1000	ug/kg	36 U	35 U	40 U	38 U	34 U	37 U	34 U	35 U	31 U	35 U	37 U	32 U	36 U	36 U
Aroclor 1254	1000	1000	ug/kg	36 U	35 U	40 U	38 U	34 U	37 U	34 U	35 U	31 U	35 U	37 U	32 U	36 U	36 U
Aroclor 1260	1000	1000	ug/kg	36 U	35 U	40 U	38 U	34 U	37 U	34 U	35 U	31 U	35 U	37 U	32 U	36 U	36 U
Aroclor 1262	1000	1000	ug/kg	36 U	35 U	40 U	38 U	34 U	37 U	34 U	35 U	31 U	35 U	37 U	32 U	36 U	36 U
Aroclor 1268	1000	1000	ug/kg	36 U	35 U	40 U	38 U	34 U	37 U	34 U	35 U	31 U	35 U	37 U	32 U	36 U	36 U
Total PCBs (Max DL)			ug/kg	36 U	35 U	40 U	38 U	34 U	37 U	34 U	35 U	31 U	35 U	37 U	32 U	36 U	36 U
Metals																	
Aluminum	NS	NS	mg/kg	9,810	9,710	9,280	8,670	7,310	8,560	7,750	7,430	5,030	6,760	8,100	7,990	14,000	15,800
Antimony	NS	NS	mg/kg	2.2 U	2.1 U	1.2 B	2.2 U	2.2 U	2.2 U	2.3 U	2.1 U	2 U	2.1 U	2.2 U	2.1 U	2.2 U	2.2 U
Arsenic	16	13	mg/kg	4.4	3.1	13.9	5	3.7	2.2	4.9	2 B	2.6	3.1	6.3	5.3	4.8	3.4
Barium	400	433	mg/kg	26.1	32.9	19.6 B	23.4	23.3	22.6	21.1 B	30.8	23.7	17.6 B	23.4	24.7	48	46.7
Beryllium	72	10	mg/kg	0.63	0.81	0.38	0.44	0.58	0.5	0.44	0.56	0.56	0.33	0.41	0.58	0.46	0.54
Cadmium	4.3	4	mg/kg	0.13 B	0.13 B	0.59 U	0.55 U	0.54 U	0.54 U	0.57 U	0.53 U	0.51 U	0.54 U	0.54 U	0.52 U	0.15 B	0.56 U
Calcium	NS	NS	mg/kg	1,230	1,260	1,040	1,440	1,080	726	1,130	1,320	1,250	907	1,680	2,000	750	692
Chromium	NS	NS	mg/kg	13.3	12.8	13.1	11.4	10.7	9.8	10.7	8.4	8.5	10	11.1	12.6	13.9	16.2
Cobalt	NS	NS	mg/kg	4.3 B	4.7 B	2.7 B	3.8 B	4.4 B	3.5 B	3.1 B	5.7	6.1	3.2 B	3.2 B	5.6	4.2 B	4.9 B
Copper	270	50	mg/kg	8.1	6.6	13.5	9.9	7.8	4.3	11.9	3.7	7.4	6.2	9.4	14.3	10.6	8.5
Iron	NS	NS	mg/kg	14,200	14,200	15,000	14,300	12,100	12,100	12,100	11,200	11,100	12,300	12,600	19,200	15,200	17,500
Lead	400	63	mg/kg	28	11.1	142	31.1	21.5	6.5	46.1	3.1	8.1	10.3	60.1	19.2	25.6	8.7
Magnesium	NS	NS	mg/kg	1,870	1,800	1,410	1,800	1,580	1,280	1,630	1,120	1,620	1,470	1,560	2,070	1,570	2,030
Manganese	2000	1600	mg/kg	132	151	65.9	99.6	151	97.7	81.9	330	280	111	75.9	172	76.4	100
Mercury	0.81	0.18	mg/kg	0.067	0.062	0.18	0.076	0.056	0.047	0.087	0.038	0.02 B	0.054	0.14	0.046	0.11	0.078
Nickel	310	30	mg/kg	7.6	6.7	6.5	6.5	6.2	7.7	5.9	4.8	6	4.9	6.3	6.2	8.3	9.5
Potassium	NS	NS	mg/kg	587 B	471 B	397 B	530 B	457 B	338 B	433 B	382 B	577 B	404 B	517 B	648 B	420 B	425 B
Selenium	180	3.9	mg/kg	0.99 B	0.71 B	1.3 B	0.52 B	0.5 B	0.54 B	0.68 B	0.33 B	2 U	0.6 B	0.58 B	0.84 B	1 B	0.7 B
Silver	180	2	mg/kg	0.49 B	0.29 B	0.59 U	0.55 U	0.54 U	0.54 U	0.57 U	11.8	0.51 U	0.54 U	0.54 U	0.52 U	0.55 U	0.56 U
Sodium	NS	NS	mg/kg	111 B	109 B	113 B	130 B	103 B	80.8 B	107 B	104 B	99.7 B	89.8 B	104 B	167 B	77.3 B	79.8 B
Thallium	NS	NS	mg/kg	1.1 U	1.1 U	0.58 B	0.31 B	0.36 B	0.33 B	0.24 B	0.37 B	0.39 B	0.56 B	0.33 B	0.37 B	0.49 B	0.69 B
Vanadium	NS	NS	mg/kg	24.7	20	25.2	19.6	19.5	16.5	24.3	14.9	14.6	17.7	23.7	22	24.3	25.4
Zinc	10000	109	mg/kg	35.7	33.3	26.6	24.8	34.3	27.1	24.7	20.4	37.8	20.9	26.7	29.5	41.4	37.2
General Chemistry																	
Percent Solids	- -	- -	%	90.1	93.4	83.3	88.3	89.1	88.5	86.8	90.3	98.5	91.6	89.4	95.3	89.6	87.9
Notes																	
NS	No standard																
NA	Not analyzed																
J	Estimated result																
JN	Estimated result																
R	Rejected result																
UB	Analyte considered non-detect at the listed value due to associated blank contamination																
<i>Italic</i>	Result exceeds 375-6.8(b) protection of ecological resources soil cleanup objective.																
Shade	Result exceeds 375-6.8(b) restricted residential use soil cleanup objective.																

Table 7. Streambank Analytical Results Areas K, L and M
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Location ID	375-6.8(b)	375-6.8(b)		CS-L-2	CS-L-2	CS-L-3	CS-L-3	CS-L-4	CS-L-4	CS-L-5	CS-L-5	CS-L-6	CS-L-6	CS-M-1	CS-M-1	CS-M-2	CS-M-2
Sample ID	Restricted	Protection of		CS-L-2 (0 - 0.5)	CS-L-S (1.5 - 2)	CS-L-3 (0 - 0.5)	CS-L-3 (1.5 - 2)	CS-L-4 (0 - 0.5)	CS-L-4 (1.5 - 2)	CS-L-5 (0 - 0.5)	CS-L-5 (1.5 - 2)	CS-L-6 (0 - 0.5)	CS-L-6 (1.5 - 2)	CS-M-1 (0 - 0.5)	CS-M-1 (1.5 - 2)	CSM-2 (0 - 0.5)	CS-M-2 (1.5 - 2)
Sample Date	Residential	Ecological	Units	10/22/2015	10/22/2015	10/22/2015	10/22/2015	10/22/2015	10/22/2015	10/22/2015	10/22/2015	10/21/2015	10/21/2015	10/21/2015	10/21/2015	10/21/2015	10/21/2015
Depth Interval		Resource		0 -0.5	1.5 - 2	0 - 0.5	1.5 - 2	0 - 0.5	1.2 - 2	0 - 0.5	1.5 - 2	0 - 0.5	1.5 - 2	0 - 0.5	1.5 - 2	0 - 0.5	1.5 - 2
VOCs																	
1,1,1-Trichloroethane	100000	NS	ug/kg	4.4 U	3 U	3.2 U	2.5 U	3.2 U	2.7 U	2.3 U	2.5 U	2.6 U	2.6 U	3.4 U	2.1 U	3.6 U	2.1 U
1,1,2,2-Tetrachloroethane	NS	NS	ug/kg	4.4 U	3 U	3.2 U	2.5 U	3.2 U	2.7 U	2.3 U	2.5 U	2.6 U	2.6 U	3.4 U	2.1 U	3.6 U	2.1 U
1,1,2-trichloro-1,2,2-trifluoroethane	NS	NS	ug/kg	11 U	7.4 U	8.1 U	6.3 U	7.9 U	6.8 U	5.8 U	6.2 U	6.6 U	6.4 U	8.5 U	5.1 U	9.1 U	5.4 U
1,1,2-Trichloroethane	NS	NS	ug/kg	4.4 U	3 U	3.2 U	2.5 U	3.2 U	2.7 U	2.3 U	2.5 U	2.6 U	2.6 U	3.4 U	2.1 U	3.6 U	2.1 U
1,1-Dichloroethane	26000	NS	ug/kg	2.2 U	1.5 U	1.6 U	1.3 U	1.6 U	1.4 U	1.2 U	1.2 U	1.3 U	1.3 U	1.7 U	1 U	1.8 U	1.1 U
1,1-Dichloroethene	100000	NS	ug/kg	2.2 U	1.5 U	1.6 U	1.3 U	1.6 U	1.4 U	1.2 U	1.2 U	1.3 U	1.3 U	1.7 U	1 U	1.8 U	1.1 U
1,2,4-Trichlorobenzene	NS	NS	ug/kg	11 U	7.4 U	8.1 U	6.3 U	7.9 U	6.8 U	5.8 U	6.2 U	6.6 U	6.4 U	8.5 U	5.1 U	9.1 U	5.4 U
1,2-Dibromo-3-chloropropane	NS	NS	ug/kg	4.4 U	3 U	3.2 U	2.5 U	3.2 U	2.7 U	2.3 U	2.5 U	2.6 U	2.6 U	3.4 U	2.1 U	3.6 U	2.1 U
1,2-Dibromoethane	NS	NS	ug/kg	2.2 U	1.5 U	1.6 U	1.3 U	1.6 U	1.4 U	1.2 U	1.2 U	1.3 U	1.3 U	1.7 U	1 U	1.8 U	1.1 U
1,2-Dichlorobenzene	100000	NS	ug/kg	2.2 U	1.5 U	1.6 U	1.3 U	1.6 U	1.4 U	1.2 U	1.2 U	1.3 U	1.3 U	1.7 U	1 U	1.8 U	1.1 U
1,2-Dichloroethane	3100	10000	ug/kg	2.2 U	1.5 U	1.6 U	1.3 U	1.6 U	1.4 U	1.2 U	1.2 U	1.3 U	1.3 U	1.7 U	1 U	1.8 U	1.1 U
1,2-Dichloropropane	NS	NS	ug/kg	4.4 U	3 U	3.2 U	2.5 U	3.2 U	2.7 U	2.3 U	2.5 U	2.6 U	2.6 U	3.4 U	2.1 U	3.6 U	2.1 U
1,3-Dichlorobenzene	49000	NS	ug/kg	2.2 U	1.5 U	1.6 U	1.3 U	1.6 U	1.4 U	1.2 U	1.2 U	1.3 U	1.3 U	1.7 U	1 U	1.8 U	1.1 U
1,4-Dichlorobenzene	13000	20000	ug/kg	2.2 U	1.5 U	1.6 U	1.3 U	1.6 U	1.4 U	1.2 U	1.2 U	1.3 U	1.3 U	1.7 U	1 U	1.8 U	1.1 U
2-Butanone (MEK)	100000	100000	ug/kg	22 U	15 U	16 U	13 U	16 U	14 U	12 U	12 U	13 U	13 U	17 U	10 U	18 U	11 U
4-Methyl-2-Pentanone	NS	NS	ug/kg	11 U	7.4 U	8.1 U	6.3 U	7.9 U	6.8 U	5.8 U	6.2 U	6.6 U	6.4 U	8.5 U	5.1 U	9.1 U	5.4 U
Acetone	100000	2200	ug/kg	987 J	631 E	194	13 U	67.1	28.3	12 U	12 U	13 U	41.7	17 U	10 U	46	11 U
Bromodichloromethane	NS	NS	ug/kg	4.4 U	3 U	3.2 U	2.5 U	3.2 U	2.7 U	2.3 U	2.5 U	2.6 U	2.6 U	3.4 U	2.1 U	3.6 U	2.1 U
Bromoform	NS	NS	ug/kg	11 U	7.4 U	8.1 U	6.3 U	7.9 U	6.8 U	5.8 U	6.2 U	6.6 U	6.4 U	8.5 U	5.1 U	9.1 U	5.4 U
Bromomethane	NS	NS	ug/kg	11 U	7.4 U	8.1 U	6.3 U	7.9 U	6.8 U	5.8 U	6.2 U	6.6 U	6.4 U	8.5 U	5.1 U	9.1 U	5.4 U
Carbon Disulfide	NS	NS	ug/kg	4.4 U	3 U	3.2 U	2.5 U	3.2 U	2.7 U	2.3 U	2.5 U	2.6 U	2.6 U	3.4 U	2.1 U	3.6 U	2.1 U
Carbon Tetrachloride	2400	NS	ug/kg	4.4 U	3 U	3.2 U	2.5 U	3.2 U	2.7 U	2.3 U	2.5 U	2.6 U	2.6 U	3.4 U	2.1 U	3.6 U	2.1 U
CFC-11	NS	NS	ug/kg	11 U	7.4 U	8.1 U	6.3 U	7.9 U	6.8 U	5.8 U	6.2 U	6.6 U	6.4 U	8.5 U	5.1 U	9.1 U	5.4 U
CFC-12	NS	NS	ug/kg	11 U	7.4 U	8.1 U	6.3 U	7.9 U	6.8 U	5.8 U	6.2 U	6.6 U	6.4 U	8.5 U	5.1 U	9.1 U	5.4 U
Chlorobenzene	100000	40000	ug/kg	4.4 U	3 U	3.2 U	2.5 U	3.2 U	2.7 U	2.3 U	2.5 U	2.6 U	2.6 U	3.4 U	2.1 U	3.6 U	2.1 U
Chlorodibromomethane	NS	NS	ug/kg	4.4 U	3 U	3.2 U	2.5 U	3.2 U	2.7 U	2.3 U	2.5 U	2.6 U	2.6 U	3.4 U	2.1 U	3.6 U	2.1 U
Chloroethane	NS	NS	ug/kg	11 U	7.4 U	8.1 U	6.3 U	7.9 U	6.8 U	5.8 U	6.2 U	6.6 U	6.4 U	8.5 U	5.1 U	9.1 U	5.4 U
Chloroform	49000	12000	ug/kg	4.4 U	3 U	3.2 U	2.5 U	3.2 U	2.7 U	2.3 U	2.5 U	2.6 U	2.6 U	3.4 U	2.1 U	3.6 U	2.1 U
Chloromethane	NS	NS	ug/kg	11 U	7.4 U	8.1 U	6.3 U	7.9 U	6.8 U	5.8 U	6.2 U	6.6 U	6.4 U	8.5 U	5.1 U	9.1 U	5.4 U
cis-1,2-Dichloroethene	100000	NS	ug/kg	2.2 U	1.5 U	1.6 U	1.3 U	1.6 U	1.4 U	1.2 U	1.2 U	1.3 U	1.3 U	1.7 U	1 U	1.8 U	1.1 U
cis-1,3-Dichloropropene	NS	NS	ug/kg	4.4 U	3 U	3.2 U	2.5 U	3.2 U	2.7 U	2.3 U	2.5 U	2.6 U	2.6 U	3.4 U	2.1 U	3.6 U	2.1 U
Cyclohexane	NS	NS	ug/kg	4.4 U	3 U	3.2 U	2.5 U	3.2 U	2.7 U	2.3 U	2.5 U	2.6 U	2.6 U	3.4 U	2.1 U	3.6 U	2.1 U
Dichloromethane	NS	NS	ug/kg	11 U	7.4 U	8.1 U	6.3 U	7.9 U	6.8 U	5.8 U	6.2 U	6.6 U	6.4 U	8.5 U	5.1 U	9.1 U	5.4 U
Isopropylbenzene	NS	NS	ug/kg	4.4 U	3 U	3.2 U	2.5 U	3.2 U	2.7 U	2.3 U	2.5 U	2.6 U	2.6 U	3.4 U	2.1 U	3.6 U	2.1 U
Methyl Acetate	NS	NS	ug/kg	11 U	7.4 U	8.1 U	6.3 U	7.9 U	6.8 U	5.8 U	6.2 U	6.6 U	6.4 U	8.5 U	5.1 U	9.1 U	5.4 U
Methyl N-Butyl Ketone (2-Hexanone)	100000	NS	ug/kg	11 U	7.4 U	8.1 U	6.3 U	7.9 U	6.8 U	5.8 U	6.2 U	6.6 U	6.4 U	8.5 U	5.1 U	9.1 U	5.4 U
Methylcyclohexane	NS	NS	ug/kg	4.4 U	3 U	3.2 U	2.5 U	3.2 U	2.7 U	2.3 U	2.5 U	2.6 U	2.6 U	3.4 U	2.1 U	3.6 U	2.1 U
Styrene (Monomer)	NS	NS	ug/kg	4.4 U	3 U	3.2 U	2.5 U	3.2 U	2.7 U	2.3 U	2.5 U	2.6 U	2.6 U	3.4 U	2.1 U	3.6 U	2.1 U
Tetrachloroethene	19000	2000	ug/kg	4.4 U	3 U	3.2 U	2.5 U	3.2 U	2.7 U	2.3 U	2.5 U	2.6 U	2.6 U	3.4 U	2.1 U	3.6 U	2.1 U
trans-1,2-Dichloroethene	100000	NS	ug/kg	2.2 U	1.5 U	1.6 U	1.3 U	1.6 U	1.4 U	1.2 U	1.2 U	1.3 U	1.3 U	1.7 U	1 U	1.8 U	1.1 U
trans-1,3-Dichloropropene	NS	NS	ug/kg	4.4 U	3 U	3.2 U	2.5 U	3.2 U	2.7 U	2.3 U	2.5 U	2.6 U	2.6 U	3.4 U	2.1 U	3.6 U	2.1 U
Trichloroethene	21000	2000	ug/kg	2.2 U	1.5 U	1.6 U	1.3 U	1.6 U	1.4 U	1.2 U	1.2 U	1.3 U	1.3 U	1.7 U	1 U	1.8 U	1.1 U
Vinyl chloride	900	NS	ug/kg	4.4 U	3 U	3.2 U	2.5 U	3.2 U	2.7 U	2.3 U	2.5 U	2.6 U	2.6 U	3.4 U	2.1 U	3.6 U	2.1 U
Benzene	4800	70000	ug/kg	1.1 U	0.74 U	0.81 U	0.63 U	0.79 U	0.68 U	0.58 U	0.62 U	0.66 U	0.64 U	0.85 U	0.51 U	0.91 U	0.54 U
Toluene	100000	36000	ug/kg	2.2 U	1.5 U	1.6 U	1.3 U	1.6 U	1.4 U	1.2 U	1.2 U	1.3 U	1.3 U	1.7 U	1 U	1.8 U	1.1 U
Ethylbenzene	100000	260	ug/kg	2.2 U	1.5 U	1.6 U	1.3 U	0.38 J	1.4 U	1.2 U	1.2 U	1.3 U	1.3 U	1.7 U	1 U	1.8 U	1.1 U
Total Xylenes	NS	NS	ug/kg	2.2 U	1.5 U	1.6 U	1.3 U	3.1	1.2 J	1.2 U	1.2 U	1.3 U	1.3 U	1.7 U	1 U	1.8 U	1.1 U
Methyl-tert-butylether	100000	NS	ug/kg	2.2 U	1.5 U	1.6 U	1.3 U	1.6 U	1.4 U	1.2 U	1.2 U	1.3 U	1.3 U	1.7 U	1 U	1.8 U	1.1 U

See Notes on Last Page.

Table 7. Streambank Analytical Results Areas K, L and M
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Location ID	375-6.8(b)	375-6.8(b)		CS-L-2	CS-L-2	CS-L-3	CS-L-3	CS-L-4	CS-L-4	CS-L-5	CS-L-5	CS-L-6	CS-L-6	CS-M-1	CS-M-1	CS-M-2	CS-M-2
Sample ID	Restricted	Protection of		CS-L-2 (0 - 0.5)	CS-L-S (1.5 - 2)	CS-L-3 (0 - 0.5)	CS-L-3 (1.5 - 2)	CS-L-4 (0 - 0.5)	CS-L-4 (1.5 - 2)	CS-L-5 (0 - 0.5)	CS-L-5 (1.5 - 2)	CS-L-6 (0 - 0.5)	CS-L-6 (1.5 - 2)	CS-M-1 (0 - 0.5)	CS-M-1 (1.5 - 2)	CSM-2 (0 - 0.5)	CS-M-2 (1.5 - 2)
Sample Date	Residential	Ecological	Units	10/22/2015	10/22/2015	10/22/2015	10/22/2015	10/22/2015	10/22/2015	10/22/2015	10/22/2015	10/21/2015	10/21/2015	10/21/2015	10/21/2015	10/21/2015	10/21/2015
Depth Interval		Resource		0 -0.5	1.5 - 2	0 - 0.5	1.5 - 2	0 - 0.5	1.2 - 2	0 - 0.5	1.5 - 2	0 - 0.5	1.5 - 2	0 - 0.5	1.5 - 2	0 - 0.5	1.5 - 2
SVOCs																	
1,1-Biphenyl	NS	NS	ug/kg	81 U	77 U	80 U	75 U	77 U	78 U	78 U	72 U	76 U	74 U	96 U	72 U	96 U	76 U
2,2-Oxybis(1-Chloropropane)	NS	NS	ug/kg	81 U	77 U	80 U	75 U	77 U	78 U	78 U	72 U	76 U	74 U	96 U	72 U	96 U	76 U
2,4,5-Trichlorophenol	NS	NS	ug/kg	200 U	190 U	200 U	190 U	190 U	190 U	200 U	180 U	190 U	190 U	240 U	180 U	240 U	190 U
2,4,6-Trichlorophenol	NS	NS	ug/kg	200 U	190 U	200 U	190 U	190 U	190 U	200 U	180 U	190 U	190 U	240 U	180 U	240 U	190 U
2,4-Dichlorophenol	NS	NS	ug/kg	200 U	190 U	200 U	190 U	190 U	190 U	200 U	180 U	190 U	190 U	240 U	180 U	240 U	190 U
2,4-Dimethylphenol	NS	NS	ug/kg	200 U	190 U	200 U	190 U	190 U	190 U	200 U	180 U	190 U	190 U	240 U	180 U	240 U	190 U
2,4-Dinitrophenol	NS	NS	ug/kg	200 U	190 U	200 U	190 U	190 U	190 U	200 U	180 U	190 U	190 U	240 U	180 U	240 U	190 U
2,4-Dinitrotoluene	NS	NS	ug/kg	41 U	38 U	40 U	38 U	38 U	39 U	39 U	36 U	38 U	37 U	48 U	36 U	48 U	38 U
2,6-Dinitrotoluene	NS	NS	ug/kg	41 U	38 U	40 U	38 U	38 U	39 U	39 U	36 U	38 U	37 U	48 U	36 U	48 U	38 U
2-Chloronaphthalene	NS	NS	ug/kg	81 U	77 U	80 U	75 U	77 U	78 U	78 U	72 U	76 U	74 U	96 U	72 U	96 U	76 U
2-Chlorophenol	NS	NS	ug/kg	81 U	77 U	80 U	75 U	77 U	78 U	78 U	72 U	76 U	74 U	96 U	72 U	96 U	76 U
2-Methyl-4,6-dinitrophenol	NS	NS	ug/kg	200 U	190 U	200 U	190 U	190 U	190 U	200 U	180 U	190 U	190 U	240 U	180 U	240 U	190 U
2-Methylnaphthalene	NS	NS	ug/kg	81 U	77 U	80 U	75 U	77 U	78 U	78 U	72 U	76 U	74 U	96 U	72 U	96 U	76 U
2-Methylphenol	NS	NS	ug/kg	81 U	77 U	80 U	75 U	77 U	78 U	78 U	72 U	76 U	74 U	96 U	72 U	96 U	76 U
2-Nitroaniline	NS	NS	ug/kg	200 U	190 U	200 U	190 U	190 U	190 U	200 U	180 U	190 U	190 U	240 U	180 U	240 U	190 U
2-Nitrophenol	NS	NS	ug/kg	200 U	190 U	200 U	190 U	190 U	190 U	200 U	180 U	190 U	190 U	240 U	180 U	240 U	190 U
3,3-Dichlorobenzidine	NS	NS	ug/kg	81 U	77 U	80 U	75 U	77 U	78 U	78 U	72 U	76 U	74 U	96 U	72 U	96 U	76 U
3-Methylphenol, 4-Methylphenol	NS	NS	ug/kg	81 U	77 U	80 U	75 U	77 U	78 U	78 U	72 U	76 U	74 U	96 U	72 U	96 U	76 U
3-Nitroaniline	NS	NS	ug/kg	200 U	190 U	200 U	190 U	190 U	190 U	200 U	180 U	190 U	190 U	240 U	180 U	240 U	190 U
4-Bromophenyl phenyl ether	NS	NS	ug/kg	81 U	77 U	80 U	75 U	77 U	78 U	78 U	72 U	76 U	74 U	96 U	72 U	96 U	76 U
4-Chloro-3-Methylphenol	NS	NS	ug/kg	200 U	190 U	200 U	190 U	190 U	190 U	200 U	180 U	190 U	190 U	240 U	180 U	240 U	190 U
4-Chlorophenyl phenyl ether	NS	NS	ug/kg	81 U	77 U	80 U	75 U	77 U	78 U	78 U	72 U	76 U	74 U	96 U	72 U	96 U	76 U
4-Nitroaniline	NS	NS	ug/kg	200 U	190 U	200 U	190 U	190 U	190 U	200 U	180 U	190 U	190 U	240 U	180 U	240 U	190 U
4-Nitrophenol	NS	NS	ug/kg	410 U	380 U	400 U	380 U	380 U	390 U	390 U	360 U	380 U	370 U	480 U	360 U	480 U	380 U
Acenaphthene	100000	20000	ug/kg	41 U	38 U	40 U	38 U	38 U	39 U	39 U	36 U	38 U	37 U	48 U	36 U	48 U	38 U
Acenaphthylene	100000	NS	ug/kg	41 U	38 U	40 U	38 U	38 U	39 U	39 U	36 U	38 U	37 U	48 U	36 U	48 U	38 U
Acetophenone	NS	NS	ug/kg	200 U	190 U	200 U	190 U	190 U	190 U	200 U	180 U	190 U	190 U	240 U	180 U	240 U	190 U
Anthracene	100000	NS	ug/kg	41 U	38 U	40 U	38 U	38 U	39 U	39 U	36 U	38 U	37 U	42.7 J	36 U	48 U	38 U
Atrazine	NS	NS	ug/kg	81 U	77 U	80 U	75 U	77 U	78 U	78 U	72 U	76 U	74 U	96 U	72 U	96 U	76 U
Benzaldehyde	NS	NS	ug/kg	200 U	190 U	200 U	190 U	190 U	190 U	200 U	180 U	190 U	190 U	96.6 J	180 U	47 J	190 U
Benzo(a)anthracene	1000	NS	ug/kg	31.8 J	38 U	40 U	38 U	22.2 J	39 U	18.4 J	36 U	24 J	37 U	119	36 U	24.1 J	38 U
Benzo(a)pyrene	1000	2600	ug/kg	31.1 J	38 U	15.8 J	38 U	38 U	39 U	39 U	36 U	25.3 J	37 U	120	36 U	22.1 J	38 U
Benzo(b)fluoranthene	1000	NS	ug/kg	34.9 J	38 U	18.5 J	38 U	34.9 J	39 U	20.5 J	36 U	47.1	37 U	169	36 U	29.7 J	38 U
Benzo(g,h,i)perylene	100000	NS	ug/kg	25.5 J	38 U	40 U	38 U	22.1 J	39 U	39 U	36 U	24.3 J	37 U	107	36 U	48 U	38 U
Benzo(k)fluoranthene	3900	NS	ug/kg	41 U	38 U	40 U	38 U	38 U	39 U	39 U	36 U	15.8 J	37 U	60.7	36 U	48 U	38 U
bis(2-Chloroethoxy)methane	NS	NS	ug/kg	81 U	77 U	80 U	75 U	77 U	78 U	78 U	72 U	76 U	74 U	96 U	72 U	96 U	76 U
bis(2-Chloroethyl)ether	NS	NS	ug/kg	81 U	77 U	80 U	75 U	77 U	78 U	78 U	72 U	76 U	74 U	96 U	72 U	96 U	76 U
bis(2-Ethylhexyl)phthalate	NS	NS	ug/kg	81 U	77 U	80 U	75 U	77 U	78 U	78 U	72 U	76 U	74 U	96 U	72 U	96 U	76 U
Butyl benzyl phthalate	NS	NS	ug/kg	81 U	77 U	80 U	75 U	77 U	78 U	78 U	72 U	76 U	74 U	96 U	72 U	96 U	76 U
Caprolactam	NS	NS	ug/kg	81 U	77 U	80 U	75 U	77 U	78 U	78 U	72 U	76 U	74 U	96 U	72 U	96 U	76 U
Carbazole	NS	NS	ug/kg	81 U	77 U	80 U	75 U	77 U	78 U	78 U	72 U	76 U	74 U	34.6 J	72 U	96 U	76 U
Chrysene	3900	NS	ug/kg	36.9 J	38 U	17 J	38 U	31.5 J	18.5 J	17 J	36 U	28 J	37 U	115	36 U	21.2 J	38 U
Dibenzo(a,h)anthracene	330	NS	ug/kg	41 U	38 U	40 U	38 U	38 U	39 U	39 U	36 U	38 U	37 U	48 U	36 U	48 U	38 U
Dibenzofuran	NS	NS	ug/kg	81 U	77 U	80 U	75 U	77 U	78 U	78 U	72 U	76 U	74 U	96 U	72 U	96 U	76 U
Diethyl phthalate	NS	NS	ug/kg	81 U	77 U	80 U	75 U	77 U	78 U	78 U	72 U	76 U	74 U	96 U	72 U	96 U	76 U
Dimethyl phthalate	NS	NS	ug/kg	81 U	77 U	80 U	75 U	77 U	78 U	78 U	72 U	76 U	74 U	96 U	72 U	96 U	76 U
Di-n-butyl phthalate	NS	NS	ug/kg	81 U	77 U	80 U	75 U	77 U	78 U	78 U	72 U	76 U	74 U	96 U	72 U	96 U	76 U
Di-n-octyl phthalate	NS	NS	ug/kg	81 U	77 U	80 U	75 U	77 U	78 U	78 U	72 U	76 U	74 U	96 U	72 U	96 U	76 U
Fluoranthene	100000	NS	ug/kg	35.8 J	38 U	16.1 J	38 U	26.6 J	18.1 J	23.2 J	36 U	43.1	37 U	270	36 U	27.5 J	38 U
Fluorene	100000	30000	ug/kg	41 U	38 U	40 U	38 U	38 U	39 U	39 U	36 U	38 U	37 U	21.4 J	36 U	48 U	38 U
Hexachloro-1,3-butadiene	NS	NS	ug/kg	41 U	38 U	40 U	38 U	38 U	39 U	39 U	36 U	38 U	37 U	48 U	36 U	48 U	38 U
Hexachlorobenzene	NS	NS	ug/kg	81 U	77 U	80 U	75 U	77 U	78 U	78 U	72 U	76 U	74 U	96 U	72 U	96 U	76 U
Hexachlorocyclopentadiene	NS	NS	ug/kg	410 U	380 U	400 U	380 U	380 U	390 U	390 U	360 U	380 U	370 U	480 U	360 U	480 U	380 U
Hexachloroethane	NS	NS	ug/kg	200 U	190 U	200 U	190 U	190 U	190 U	200 U	180 U	190 U	190 U	240 U	180 U	240 U	190 U

See Notes on Last Page.

Table 7. Streambank Analytical Results Areas K, L and M
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Location ID	375-6.8(b)	375-6.8(b)		CS-L-2	CS-L-2	CS-L-3	CS-L-3	CS-L-4	CS-L-4	CS-L-5	CS-L-5	CS-L-6	CS-L-6	CS-M-1	CS-M-1	CS-M-2	CS-M-2
Sample ID	Restricted	Protection of		CS-L-2 (0 - 0.5)	CS-L-S (1.5 - 2)	CS-L-3 (0 - 0.5)	CS-L-3 (1.5 - 2)	CS-L-4 (0 - 0.5)	CS-L-4 (1.5 - 2)	CS-L-5 (0 - 0.5)	CS-L-5 (1.5 - 2)	CS-L-6 (0 - 0.5)	CS-L-6 (1.5 - 2)	CS-M-1 (0 - 0.5)	CS-M-1 (1.5 - 2)	CSM-2 (0 - 0.5)	CS-M-2 (1.5 - 2)
Sample Date	Residential	Ecological	Units	10/22/2015	10/22/2015	10/22/2015	10/22/2015	10/22/2015	10/22/2015	10/22/2015	10/22/2015	10/21/2015	10/21/2015	10/21/2015	10/21/2015	10/21/2015	10/21/2015
Depth Interval		Resource		0 -0.5	1.5 - 2	0 - 0.5	1.5 - 2	0 - 0.5	1.2 - 2	0 - 0.5	1.5 - 2	0 - 0.5	1.5 - 2	0 - 0.5	1.5 - 2	0 - 0.5	1.5 - 2
SVOCs cont.																	
Indeno(1,2,3-cd)pyrene	500	NS	ug/kg	24.5 J	38 U	40 U	38 U	38 U	39 U	39 U	36 U	21.1 J	37 U	97.1	36 U	48 U	38 U
Isophorone	NS	NS	ug/kg	81 U	77 U	80 U	75 U	77 U	78 U	78 U	72 U	76 U	74 U	96 U	72 U	96 U	76 U
Naphthalene	100000	NS	ug/kg	41 U	38 U	40 U	38 U	38 U	39 U	39 U	36 U	38 U	37 U	48 U	36 U	48 U	38 U
Nitrobenzene	NS	NS	ug/kg	81 U	77 U	80 U	75 U	77 U	78 U	78 U	72 U	76 U	74 U	96 U	72 U	96 U	76 U
n-Nitrosodi-n-propylamine	NS	NS	ug/kg	81 U	77 U	80 U	75 U	77 U	78 U	78 U	72 U	76 U	74 U	96 U	72 U	96 U	76 U
N-nitrosodiphenylamine	NS	NS	ug/kg	200 U	190 U	200 U	190 U	190 U	190 U	200 U	180 U	190 U	190 U	240 U	180 U	240 U	190 U
p-Chloroaniline	NS	NS	ug/kg	200 U	190 U	200 U	190 U	190 U	190 U	200 U	180 U	190 U	190 U	240 U	180 U	240 U	190 U
Pentachlorophenol	6700	800	ug/kg	200 U	190 U	200 U	190 U	190 U	190 U	200 U	180 U	190 U	190 U	240 U	180 U	240 U	190 U
Phenanthrene	100000	NS	ug/kg	38.2 J	38 U	16.9 J	38 U	31.3 J	39 U	39 U	36 U	22.6 J	37 U	191	36 U	48 U	38 U
Phenol	100000	30000	ug/kg	81 U	77 U	80 U	75 U	77 U	78 U	78 U	72 U	76 U	74 U	96 U	72 U	96 U	76 U
Pyrene	100000	NS	ug/kg	62.7	38 U	32.9 J	38 U	48.8	35.3 J	50.5	36 U	38.5	37 U	217	36 U	26.7 J	38 U
PCBs																	
Aroclor 1016	1000	1000	ug/kg	41 U	37 U	39 U	38 U	39 U	38 U	39 U	37 U	38 U	36 U	50 U	34 U	48 U	37 U
Aroclor 1221	1000	1000	ug/kg	41 U	37 U	39 U	38 U	39 U	38 U	39 U	37 U	38 U	36 U	50 U	34 U	48 U	37 U
Aroclor 1232	1000	1000	ug/kg	41 U	37 U	39 U	38 U	39 U	38 U	39 U	37 U	38 U	36 U	50 U	34 U	48 U	37 U
Aroclor 1242	1000	1000	ug/kg	41 U	37 U	39 U	38 U	39 U	38 U	39 U	37 U	38 U	36 U	50 U	34 U	48 U	37 U
Aroclor 1248	1000	1000	ug/kg	41 U	37 U	39 U	38 U	39 U	38 U	39 U	37 U	38 U	36 U	50 U	34 U	48 U	37 U
Aroclor 1254	1000	1000	ug/kg	41 U	37 U	39 U	38 U	39 U	38 U	39 U	37 U	38 U	36 U	50 U	34 U	48 U	37 U
Aroclor 1260	1000	1000	ug/kg	41 U	37 U	39 U	38 U	39 U	38 U	39 U	37 U	38 U	36 U	50 U	34 U	48 U	37 U
Aroclor 1262	1000	1000	ug/kg	41 U	37 U	39 U	38 U	39 U	38 U	39 U	37 U	38 U	36 U	50 U	34 U	48 U	37 U
Aroclor 1268	1000	1000	ug/kg	41 U	37 U	39 U	38 U	39 U	38 U	39 U	37 U	38 U	36 U	50 U	34 U	48 U	37 U
Total PCBs (Max DL)			ug/kg	41 U	37 U	39 U	38 U	39 U	38 U	39 U	37 U	38 U	36 U	50 U	34 U	48 U	37 U
Metals																	
Aluminum	NS	NS	mg/kg	7,130	13,800	8,120	11,100	8,220	8,450	11,800	10,400	9,970	18,200	10,900	9,890	17,200	12,000
Antimony	NS	NS	mg/kg	1.1 B	2.3 U	0.43 B	2.2 U	0.67 B	0.65 B	0.4 B	2.2 U	0.41 B	2.2 U	0.54 B	2.2 U	2.8 U	2.2 U
Arsenic	16	13	mg/kg	9.3	3.1	4.3	2.5	4.7	4.8	5.1	2.1 B	3.6	2.7	3.8	3.4	2.8	2 B
Barium	400	433	mg/kg	12.6 B	16.2 B	18.8 B	34	32.7	29.7	69.2	42	34.5	82.3	76.9	52.2	47	61
Beryllium	72	10	mg/kg	0.24	0.53	0.29	0.4	0.34	0.3	0.54	0.41	0.3	0.81	0.72	0.56	0.44	0.4
Cadmium	4.3	4	mg/kg	0.6 U	0.57 U	0.07 B	0.56 U	0.15 B	0.093 B	0.26 B	0.55 U	0.23 B	0.23 B	0.57 B	0.19 B	0.3 B	0.11 B
Calcium	NS	NS	mg/kg	1,040	592	919	1,010	1,460	1,220	2,610	1,320	1,810	1,980	5,210	2,140	1,110	1,470
Chromium	NS	NS	mg/kg	9.2	11.6	9.6	12.9	10.4	10.3	16.2	14.5	10.4	18.6	16.5	18.3	13.5	14.1
Cobalt	NS	NS	mg/kg	2.2 B	2.7 B	3.1 B	4.3 B	3 B	2.8 B	6.4	5.6	2.9 B	10	8.5	7.8	3.2 B	5.7
Copper	270	50	mg/kg	6.5	5.4	8.6	5.3	10.2	9.6	17.4	5.3	8.3	10.4	17.7	10.6	7.8	4.3
Iron	NS	NS	mg/kg	11,600	13,300	12,300	12,900	11,100	11,500	17,000	13,900	12,800	23,000	16,900	15,200	16,500	12,500
Lead	400	63	mg/kg	69	9.4	35.8	9.7	69.3	64.4	42.4	5.1	29.4	7.6	38.6	6.3	17.6	4.3
Magnesium	NS	NS	mg/kg	907	860	1,120	1,650	1,320	1,260	2,670	2,090	1,400	3,580	2,750	2,950	1,580	2,400
Manganese	2000	1600	mg/kg	35.9	33.7	67	140	102	87	414	281	92.1	226	861	264	51.7	378
Mercury	0.81	0.18	mg/kg	0.14	0.1	0.11	0.035	0.12	0.1	0.091	0.032 B	0.066	0.035	0.066	0.005 B	0.13	0.016 B
Nickel	310	30	mg/kg	5	5.6	4.7	6.9	6.3	5.9	11.6	6.5	6.8	12.7	13	11.6	9.1	9.9
Potassium	NS	NS	mg/kg	430 B	279 B	317 B	353 B	559 B	498 B	1,220	811 B	504 B	1,300	1,250 B	1,230	494 B	628 B
Selenium	180	3.9	mg/kg	1.3 B	1 B	0.92 B	0.78 B	0.58 B	0.68 B	0.99 B	0.6 B	0.62 B	0.62 B	0.8 B	0.29 B	0.82 B	0.39 B
Silver	180	2	mg/kg	0.6 U	0.57 U	0.58 U	0.56 U	0.56 U	0.58 U	0.58 U	0.55 U	0.44 B	0.35 B	0.49 B	0.24 B	0.42 B	0.25 B
Sodium	NS	NS	mg/kg	80.9 B	69.6 B	65.3 B	81.5 B	85.4 B	86.8 B	134 B	94.1 B	81.5 B	167 B	213 B	133 B	111 B	117 B
Thallium	NS	NS	mg/kg	0.64 B	0.6 B	0.42 B	0.53 B	0.32 B	0.49 B	0.55 B	0.81 B	1.1 U	2.2 U	1.4 U	1.1 U	1.4 U	1.1 U
Vanadium	NS	NS	mg/kg	28.4	20	21.2	21.9	22.8	23.5	28.9	20.9	20.6	29.3	27.3	28.5	27.8	19.6
Zinc	10000	109	mg/kg	22.1	37.2	28.9	32.7	41	38.4	72.6	34	37.2	53	76.4	31	37	31.6
General Chemistry																	
Percent Solids	- -	- -	%	81.8	84.7	83.3	87.5	85.1	85.7	85	89.3	86.1	88.5	65.7	90.2	68.8	87.8
Notes																	
NS	No standard																
NA	Not analyzed																
J	Estimated result																
JN	Estimated result																
R	Rejected result																
UB	Analyte considered non-detect at the listed value due to associated blank contamination																
<i>Italic</i>	Result exceeds 375-6.8(b) protection of ecological resources soil cleanup objective.																
Shade	Result exceeds 375-6.8(b) restricted residential use soil cleanup objective.																

Table 7. Streambank Analytical Results Areas K, L and M
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Location ID	375-6.8(b)	375-6.8(b)		CS-M-3	CS-M-3	CS-M-4	CS-M-4	CS-M-5	CS-M-5
Sample ID	Restricted	Protection of		CS-M-3 (0 - 0.5)	CS-M-3(1.5 - 2)	CS-M-4 (0 - 0.5)	CS-M-4 (1.5 - 2)	CS-M-5 (0 - 0.5)	CS-M-5 (1.5 -
Sample Date	Residential	Ecological	Units	10/21/2015	10/21/2015	10/21/2015	10/21/2015	10/21/2015	10/21/2015
Depth Interval		Resource		0 - 0.5	1.5 - 2	0 - 0.5	1.5 - 2	0 - 0.5	1.5 - 2
VOCs									
1,1,1-Trichloroethane	100000	NS	ug/kg	3 U	2.5 U	3.7 U	5.1 U	3.6 U	3.4 U
1,1,2,2-Tetrachloroethane	NS	NS	ug/kg	3 U	2.5 U	3.7 U	5.1 U	3.6 U	3.4 U
1,1,2-trichloro-1,2,2-trifluoroethane	NS	NS	ug/kg	7.6 U	6.3 U	9.1 U	13 U	9 U	8.4 U
1,1,2-Trichloroethane	NS	NS	ug/kg	3 U	2.5 U	3.7 U	5.1 U	3.6 U	3.4 U
1,1-Dichloroethane	26000	NS	ug/kg	1.5 U	1.3 U	1.8 U	2.5 U	1.8 U	1.7 U
1,1-Dichloroethene	100000	NS	ug/kg	1.5 U	1.3 U	1.8 U	2.5 U	1.8 U	1.7 U
1,2,4-Trichlorobenzene	NS	NS	ug/kg	7.6 U	6.3 U	9.1 U	13 U	9 U	8.4 U
1,2-Dibromo-3-chloropropane	NS	NS	ug/kg	3 U	2.5 U	3.7 U	5.1 U	3.6 U	3.4 U
1,2-Dibromoethane	NS	NS	ug/kg	1.5 U	1.3 U	1.8 U	2.5 U	1.8 U	1.7 U
1,2-Dichlorobenzene	100000	NS	ug/kg	1.5 U	1.3 U	1.8 U	2.5 U	1.8 U	1.7 U
1,2-Dichloroethane	3100	10000	ug/kg	1.5 U	1.3 U	1.8 U	2.5 U	1.8 U	1.7 U
1,2-Dichloropropane	NS	NS	ug/kg	3 U	2.5 U	3.7 U	5.1 U	3.6 U	3.4 U
1,3-Dichlorobenzene	49000	NS	ug/kg	1.5 U	1.3 U	1.8 U	2.5 U	1.8 U	1.7 U
1,4-Dichlorobenzene	13000	20000	ug/kg	1.5 U	1.3 U	1.8 U	2.5 U	1.8 U	1.7 U
2-Butanone (MEK)	100000	100000	ug/kg	15 U	13 U	18 U	25 U	18.9	17 U
4-Methyl-2-Pentanone	NS	NS	ug/kg	7.6 U	6.3 U	9.1 U	13 U	9 U	8.4 U
Acetone	100000	2200	ug/kg	15 U	13 U	91.1	244	468 E	174
Bromodichloromethane	NS	NS	ug/kg	3 U	2.5 U	3.7 U	5.1 U	3.6 U	3.4 U
Bromoform	NS	NS	ug/kg	7.6 U	6.3 U	9.1 U	13 U	9 U	8.4 U
Bromomethane	NS	NS	ug/kg	7.6 U	6.3 U	9.1 U	13 U	9 U	8.4 U
Carbon Disulfide	NS	NS	ug/kg	3 U	2.5 U	3.7 U	5.1 U	3.6 U	3.4 U
Carbon Tetrachloride	2400	NS	ug/kg	3 U	2.5 U	3.7 U	5.1 U	3.6 U	3.4 U
CFC-11	NS	NS	ug/kg	7.6 U	6.3 U	9.1 U	13 U	9 U	8.4 U
CFC-12	NS	NS	ug/kg	7.6 U	6.3 U	9.1 U	13 U	9 U	8.4 U
Chlorobenzene	100000	40000	ug/kg	3 U	2.5 U	3.7 U	5.1 U	3.6 U	3.4 U
Chlorodibromomethane	NS	NS	ug/kg	3 U	2.5 U	3.7 U	5.1 U	3.6 U	3.4 U
Chloroethane	NS	NS	ug/kg	7.6 U	6.3 U	9.1 U	13 U	9 U	8.4 U
Chloroform	49000	12000	ug/kg	3 U	2.5 U	12.1	5.1 U	3.6 U	3.4 U
Chloromethane	NS	NS	ug/kg	7.6 U	6.3 U	9.1 U	13 U	9 U	8.4 U
cis-1,2-Dichloroethene	100000	NS	ug/kg	1.5 U	1.3 U	1.8 U	2.5 U	1.8 U	1.7 U
cis-1,3-Dichloropropene	NS	NS	ug/kg	3 U	2.5 U	3.7 U	5.1 U	3.6 U	3.4 U
Cyclohexane	NS	NS	ug/kg	3 U	2.5 U	3.7 U	5.1 U	3.6 U	3.4 U
Dichloromethane	NS	NS	ug/kg	7.6 U	6.3 U	9.1 U	2.8 J	9 U	8.4 U
Isopropylbenzene	NS	NS	ug/kg	3 U	2.5 U	3.7 U	5.1 U	3.6 U	0.51 J
Methyl Acetate	NS	NS	ug/kg	7.6 U	6.3 U	9.1 U	13 U	9 U	8.4 U
Methyl N-Butyl Ketone (2-Hexanone)	100000	NS	ug/kg	7.6 U	6.3 U	9.1 U	13 U	9 U	8.4 U
Methylcyclohexane	NS	NS	ug/kg	3 U	2.5 U	3.7 U	5.1 U	3.6 U	3.4 U
Styrene (Monomer)	NS	NS	ug/kg	3 U	2.5 U	3.7 U	5.1 U	3.6 U	3.4 U
Tetrachloroethene	19000	2000	ug/kg	3 U	2.5 U	3.7 U	5.1 U	3.6 U	3.4 U
trans-1,2-Dichloroethene	100000	NS	ug/kg	1.5 U	1.3 U	1.8 U	2.5 U	1.8 U	1.7 U
trans-1,3-Dichloropropene	NS	NS	ug/kg	3 U	2.5 U	3.7 U	5.1 U	3.6 U	3.4 U
Trichloroethene	21000	2000	ug/kg	1.5 U	1.3 U	1.8 U	2.5 U	1.8 U	1.7 U
Vinyl chloride	900	NS	ug/kg	3 U	2.5 U	3.7 U	5.1 U	3.6 U	3.4 U
Benzene	4800	70000	ug/kg	0.76 U	0.63 U	0.91 U	1.3 U	0.9 U	0.84 U
Toluene	100000	36000	ug/kg	1.5 U	1.3 U	1.8 U	2.5 U	1.8 U	1.7 U
Ethylbenzene	100000	260	ug/kg	1.5 U	1.3 U	1.8 U	2.5 U	1.8 U	1.7 U
Total Xylenes	NS	NS	ug/kg	1.5 U	1.3 U	1.8 U	2.5 U	1.8 U	1.7 U
Methyl-tert-butylether	100000	NS	ug/kg	1.5 U	1.3 U	1.8 U	2.5 U	1.8 U	1.7 U
See Notes on Last Page.									

Table 7. Streambank Analytical Results Areas K, L and M
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Location ID	375-6.8(b)	375-6.8(b)		CS-M-3	CS-M-3	CS-M-4	CS-M-4	CS-M-5	CS-M-5
Sample ID	Restricted	Protection of		CS-M-3 (0 - 0.5)	CS-M-3(1.5 - 2)	CS-M-4 (0 - 0.5)	CS-M-4 (1.5 - 2)	CS-M-5 (0 - 0.5)	CS-M-5 (1.5 -
Sample Date	Residential	Ecological	Units	10/21/2015	10/21/2015	10/21/2015	10/21/2015	10/21/2015	10/21/2015
Depth Interval		Resource		0 - 0.5	1.5 - 2	0 - 0.5	1.5 - 2	0 - 0.5	1.5 - 2
SVOCs									
1,1-Biphenyl	NS	NS	ug/kg	86 U	79 U	80 U	70 U	78 U	74 U
2,2-Oxybis(1-Chloropropane)	NS	NS	ug/kg	86 U	79 U	80 U	70 U	78 U	74 U
2,4,5-Trichlorophenol	NS	NS	ug/kg	210 U	200 U	200 U	170 U	190 U	190 U
2,4,6-Trichlorophenol	NS	NS	ug/kg	210 U	200 U	200 U	170 U	190 U	190 U
2,4-Dichlorophenol	NS	NS	ug/kg	210 U	200 U	200 U	170 U	190 U	190 U
2,4-Dimethylphenol	NS	NS	ug/kg	210 U	200 U	200 U	170 U	190 U	190 U
2,4-Dinitrophenol	NS	NS	ug/kg	210 U	200 U	200 U	170 U	190 U	190 U
2,4-Dinitrotoluene	NS	NS	ug/kg	43 U	39 U	40 U	35 U	39 U	37 U
2,6-Dinitrotoluene	NS	NS	ug/kg	43 U	39 U	40 U	35 U	39 U	37 U
2-Chloronaphthalene	NS	NS	ug/kg	86 U	79 U	80 U	70 U	78 U	74 U
2-Chlorophenol	NS	NS	ug/kg	86 U	79 U	80 U	70 U	78 U	74 U
2-Methyl-4,6-dinitrophenol	NS	NS	ug/kg	210 U	200 U	200 U	170 U	190 U	190 U
2-Methylnaphthalene	NS	NS	ug/kg	86 U	79 U	80 U	70 U	78 U	74 U
2-Methylphenol	NS	NS	ug/kg	86 U	79 U	80 U	70 U	78 U	74 U
2-Nitroaniline	NS	NS	ug/kg	210 U	200 U	200 U	170 U	190 U	190 U
2-Nitrophenol	NS	NS	ug/kg	210 U	200 U	200 U	170 U	190 U	190 U
3,3-Dichlorobenzidine	NS	NS	ug/kg	86 U	79 U	80 U	70 U	78 U	74 U
3-Methylphenol, 4-Methylphenol	NS	NS	ug/kg	86 U	79 U	80 U	70 U	78 U	74 U
3-Nitroaniline	NS	NS	ug/kg	210 U	200 U	200 U	170 U	190 U	190 U
4-Bromophenyl phenyl ether	NS	NS	ug/kg	86 U	79 U	80 U	70 U	78 U	74 U
4-Chloro-3-Methylphenol	NS	NS	ug/kg	210 U	200 U	200 U	170 U	190 U	190 U
4-Chlorophenyl phenyl ether	NS	NS	ug/kg	86 U	79 U	80 U	70 U	78 U	74 U
4-Nitroaniline	NS	NS	ug/kg	210 U	200 U	200 U	170 U	190 U	190 U
4-Nitrophenol	NS	NS	ug/kg	430 U	390 U	400 U	350 U	390 U	370 U
Acenaphthene	100000	20000	ug/kg	43 U	39 U	40 U	35 U	39 U	37 U
Acenaphthylene	100000	NS	ug/kg	43 U	39 U	40 U	35 U	39 U	37 U
Acetophenone	NS	NS	ug/kg	210 U	200 U	200 U	170 U	190 U	190 U
Anthracene	100000	NS	ug/kg	43 U	39 U	40 U	35 U	39 U	37 U
Atrazine	NS	NS	ug/kg	86 U	79 U	80 U	70 U	78 U	74 U
Benzaldehyde	NS	NS	ug/kg	33.5 J	23.6 J	60.7 J	170 U	190 U	190 U
Benzo(a)anthracene	1000	NS	ug/kg	36.8 J	39 U	26.4 J	35 U	39 U	17.4 J
Benzo(a)pyrene	1000	2600	ug/kg	43.2	39 U	29 J	35 U	19.2 J	16.1 J
Benzo(b)fluoranthene	1000	NS	ug/kg	65.8	20 J	52.8	17.3 J	27.3 J	19.2 J
Benzo(g,h,i)perylene	100000	NS	ug/kg	32.3 J	39 U	28.2 J	35 U	39 U	37 U
Benzo(k)fluoranthene	3900	NS	ug/kg	22.3 J	39 U	40 U	35 U	39 U	15.6 J
bis(2-Chloroethoxy)methane	NS	NS	ug/kg	86 U	79 U	80 U	70 U	78 U	74 U
bis(2-Chloroethyl)ether	NS	NS	ug/kg	86 U	79 U	80 U	70 U	78 U	74 U
bis(2-Ethylhexyl)phthalate	NS	NS	ug/kg	86 U	79 U	80 U	70 U	78 U	74 U
Butyl benzyl phthalate	NS	NS	ug/kg	86 U	79 U	80 U	70 U	78 U	74 U
Caprolactam	NS	NS	ug/kg	86 U	79 U	80 U	70 U	78 U	74 U
Carbazole	NS	NS	ug/kg	86 U	79 U	80 U	70 U	78 U	74 U
Chrysene	3900	NS	ug/kg	44	39 U	34.9 J	35 U	39 U	37 U
Dibenzo(a,h)anthracene	330	NS	ug/kg	43 U	39 U	40 U	35 U	39 U	37 U
Dibenzofuran	NS	NS	ug/kg	86 U	79 U	80 U	70 U	78 U	74 U
Diethyl phthalate	NS	NS	ug/kg	86 U	79 U	80 U	70 U	78 U	74 U
Dimethyl phthalate	NS	NS	ug/kg	86 U	79 U	80 U	70 U	78 U	74 U
Di-n-butyl phthalate	NS	NS	ug/kg	86 U	79 U	80 U	70 U	78 U	74 U
Di-n-octyl phthalate	NS	NS	ug/kg	86 U	79 U	80 U	70 U	78 U	74 U
Fluoranthene	100000	NS	ug/kg	72.4	19 J	45.5	35 U	21.8 J	16.4 J
Fluorene	100000	30000	ug/kg	43 U	39 U	40 U	35 U	39 U	37 U
Hexachloro-1,3-butadiene	NS	NS	ug/kg	43 U	39 U	40 U	35 U	39 U	37 U
Hexachlorobenzene	NS	NS	ug/kg	86 U	79 U	80 U	70 U	78 U	74 U
Hexachlorocyclopentadiene	NS	NS	ug/kg	430 U	390 U	400 U	350 U	390 U	370 U
Hexachloroethane	NS	NS	ug/kg	210 U	200 U	200 U	170 U	190 U	190 U

See Notes on Last Page.

Table 7. Streambank Analytical Results Areas K, L and M
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Location ID	375-6.8(b)	375-6.8(b)		CS-M-3	CS-M-3	CS-M-4	CS-M-4	CS-M-5	CS-M-5
Sample ID	Restricted	Protection of		CS-M-3 (0 - 0.5)	CS-M-3(1.5 - 2)	CS-M-4 (0 - 0.5)	CS-M-4 (1.5 - 2)	CS-M-5 (0 - 0.5)	CS-M-5 (1.5 -
Sample Date	Residential	Ecological	Units	10/21/2015	10/21/2015	10/21/2015	10/21/2015	10/21/2015	10/21/2015
Depth Interval		Resource		0 - 0.5	1.5 - 2	0 - 0.5	1.5 - 2	0 - 0.5	1.5 - 2
SVOCs cont.									
Indeno(1,2,3-cd)pyrene	500	NS	ug/kg	31.7 J	39 U	34.2 J	35 U	39 U	37 U
Isophorone	NS	NS	ug/kg	86 U	79 U	80 U	70 U	78 U	74 U
Naphthalene	100000	NS	ug/kg	43 U	39 U	40 U	35 U	39 U	37 U
Nitrobenzene	NS	NS	ug/kg	86 U	79 U	80 U	70 U	78 U	74 U
n-Nitrosodi-n-propylamine	NS	NS	ug/kg	86 U	79 U	80 U	70 U	78 U	74 U
N-nitrosodiphenylamine	NS	NS	ug/kg	210 U	200 U	200 U	170 U	190 U	190 U
p-Chloroaniline	NS	NS	ug/kg	210 U	200 U	200 U	170 U	190 U	190 U
Pentachlorophenol	6700	800	ug/kg	210 U	200 U	200 U	170 U	190 U	190 U
Phenanthrene	100000	NS	ug/kg	35.9 J	39 U	33.5 J	35 U	39 U	37 U
Phenol	100000	30000	ug/kg	86 U	79 U	80 U	70 U	78 U	74 U
Pyrene	100000	NS	ug/kg	64.1	19.5 J	50.2	35 U	21 J	16 J
PCBs									
Aroclor 1016	1000	1000	ug/kg	42 U	41 U	40 U	37 U	39 U	36 U
Aroclor 1221	1000	1000	ug/kg	42 U	41 U	40 U	37 U	39 U	36 U
Aroclor 1232	1000	1000	ug/kg	42 U	41 U	40 U	37 U	39 U	36 U
Aroclor 1242	1000	1000	ug/kg	42 U	41 U	40 U	37 U	39 U	36 U
Aroclor 1248	1000	1000	ug/kg	42 U	41 U	40 U	37 U	39 U	36 U
Aroclor 1254	1000	1000	ug/kg	42 U	41 U	40 U	37 U	39 U	36 U
Aroclor 1260	1000	1000	ug/kg	42 U	41 U	40 U	37 U	39 U	36 U
Aroclor 1262	1000	1000	ug/kg	42 U	41 U	40 U	37 U	39 U	36 U
Aroclor 1268	1000	1000	ug/kg	42 U	41 U	40 U	37 U	39 U	36 U
Total PCBs (Max DL)			ug/kg	42 U	41 U	40 U	37 U	39 U	36 U
Metals									
Aluminum	NS	NS	mg/kg	17,000	25,100	16,100	21,000	17,700	16,700
Antimony	NS	NS	mg/kg	0.4 B	2.4 U	0.73 B	2.2 U	2.4 U	2.2 U
Arsenic	16	13	mg/kg	5.8	6.4	7.1	2.7	4.1	3.3
Barium	400	433	mg/kg	112	126	19.2 B	44.6	17.6 B	32.4
Beryllium	72	10	mg/kg	0.91	1.3	0.21 B	0.48	0.33	0.45
Cadmium	4.3	4	mg/kg	0.73	0.46 B	0.25 B	0.2 B	0.22 B	0.21 B
Calcium	NS	NS	mg/kg	3,460	2,870	434 B	573	393 B	475 B
Chromium	NS	NS	mg/kg	23	29.6	12.8	17.6	15.3	16.4
Cobalt	NS	NS	mg/kg	14.1	17.9	2.1 B	4.6 B	2.9 B	3.5 B
Copper	270	50	mg/kg	23.8	13.3	8.9	9.3	10.5	7.1
Iron	NS	NS	mg/kg	23,600	28,700	14,400	14,700	15,400	14,500
Lead	400	63	mg/kg	56.9	24.6	47.4	11	74.4	23.7
Magnesium	NS	NS	mg/kg	3,720	3,180	910	1,930	787	1,030
Manganese	2000	1600	mg/kg	2,150	2,560	30.2	58.3	44.2	57.3
Mercury	0.81	0.18	mg/kg	0.1	0.076	0.092	0.1	0.15	0.068
Nickel	310	30	mg/kg	19.1	16.8	5.5	9.8	6.6	8.5
Potassium	NS	NS	mg/kg	1,610	1,310	322 B	442 B	329 B	401 B
Selenium	180	3.9	mg/kg	1.2 B	1.6 B	1.4 B	0.83 B	1.2 B	1.1 B
Silver	180	2	mg/kg	0.4 B	0.32 B	0.52 B	0.55 U	0.45 B	0.52 B
Sodium	NS	NS	mg/kg	212 B	136 B	55 B	73 B	64.2 B	73.5 B
Thallium	NS	NS	mg/kg	2.6 U	3.7 U	1.2 U	1.1 U	1.2 U	1.1 U
Vanadium	NS	NS	mg/kg	38	52.9	36.6	29.7	26.6	26.3
Zinc	10000	109	mg/kg	103	78.9	27.3	45.9	28	35.2
General Chemistry									
Percent Solids	- -	- -	%	76.4	81	82.8	90	84	87.6

Notes		
NS	No standard	
NA	Not analyzed	
J	Estimated result	
JN	Estimated result	
R	Rejected result	
UB	Analyte considered non-detect at the listed value due to associated blank contamination	
<i>Italic</i>	Result exceeds 375-6.8(b) protection of ecological resources soil cleanup objective.	
Shade	Result exceeds 375-6.8(b) restricted residential use soil cleanup objective.	

Table 8. Confirmatory Soil Sample Results Area A
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Location: ID	TABLE 375-6: RESTRIC. RES. USE SCO	TABLE 375-6: PROTECTION OF GW SCO		PE-A-A1	PE-A-A2	PE-A-A3	PE-A-A4	PE-A-A5	PE-A-A7	PE-A-A8	PE-A-B1	PE-A-B2	PE-A-B3	PE-A-B4	PE-A-B5	PE-A-B6	PE-A-B7
Sample Depth:				2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2.5-3	2.5-3	2-2.5	2-2.5	2-2.5	2-2.5
Date Collected:			Units	11/3/2015	11/3/2015	11/3/2015	11/4/2015	11/4/2015	11/3/2015	11/3/2015	10/29/2015	11/3/2015	11/3/2015	11/4/2015	11/4/2015	11/4/2015	11/4/2015
VOCs																	
1,1,1-Trichloroethane	100000	680	ug/kg	2.7 U	1.9 U	1.9 U	1.8 U	2 U	2.5 U	2.3 U	2.2 U	2.1 U	2 U	1.9 U	1.9 U	2.2 U	2.1 U
1,1,2,2-Tetrachloroethane	NS	NS	ug/kg	2.7 U	1.9 U	1.9 U	1.8 U	2 U	2.5 U	2.3 U	2.2 U	2.1 U	2 U	1.9 U	1.9 U	2.2 U	2.1 U
1,1,2-trichloro-1,2,2-trifluoroethane	NS	NS	ug/kg	6.8 U	4.8 U	4.8 U	4.5 U	5.1 U	6.3 U	5.9 U	5.6 U	5.2 U	5 U	4.7 U	4.8 U	5.4 U	5.3 U
1,1,2-Trichloroethane	NS	NS	ug/kg	2.7 U	1.9 U	1.9 U	1.8 U	2 U	2.5 U	2.3 U	2.2 U	2.1 U	2 U	1.9 U	1.9 U	2.2 U	2.1 U
1,1-Dichloroethane	26000	270	ug/kg	1.4 U	0.96 U	0.96 U	0.89 U	1 U	1.3 U	1.2 U	1.1 U	1 U	1 U	0.94 U	0.95 U	1.1 U	1.1 U
1,1-Dichloroethene	100000	330	ug/kg	1.4 U	0.96 U	0.96 U	0.89 U	1 U	1.3 U	1.2 U	1.1 U	1 U	1 U	0.94 U	0.95 U	1.1 U	1.1 U
1,2,4-Trichlorobenzene	NS	NS	ug/kg	6.8 U	4.8 U	4.8 U	4.5 U	5.1 U	6.3 U	5.9 U	5.6 U	5.2 U	5 U	4.7 U	4.8 U	5.4 U	5.3 U
1,2-Dibromo-3-chloropropane	NS	NS	ug/kg	2.7 U	1.9 U	1.9 U	1.8 U	2 U	2.5 U	2.3 U	2.2 U	2.1 U	2 U	1.9 U	1.9 U	2.2 U	2.1 U
1,2-Dibromoethane	NS	NS	ug/kg	1.4 U	0.96 U	0.96 U	0.89 U	1 U	1.3 U	1.2 U	1.1 U	1 U	1 U	0.94 U	0.95 U	1.1 U	1.1 U
1,2-Dichlorobenzene	100000	1100	ug/kg	1.4 U	0.96 U	0.96 U	0.89 U	1 U	1.3 U	1.2 U	1.1 U	1 U	1 U	0.94 U	0.95 U	1.1 U	1.1 U
1,2-Dichloroethane	3100	20	ug/kg	1.4 U	0.96 U	0.96 U	0.89 U	1 U	1.3 U	1.2 U	1.1 U	1 U	1 U	0.94 U	0.95 U	1.1 U	1.1 U
1,2-Dichloropropane	NS	NS	ug/kg	2.7 U	1.9 U	1.9 U	1.8 U	2 U	2.5 U	2.3 U	2.2 U	2.1 U	2 U	1.9 U	1.9 U	2.2 U	2.1 U
1,3-Dichlorobenzene	49000	2400	ug/kg	1.4 U	0.96 U	0.96 U	0.89 U	1 U	1.3 U	1.2 U	1.1 U	1 U	1 U	0.94 U	0.95 U	1.1 U	1.1 U
1,4-Dichlorobenzene	13000	1800	ug/kg	1.4 U	0.96 U	0.96 U	0.89 U	1 U	1.3 U	1.2 U	1.1 U	1 U	1 U	0.94 U	0.95 U	1.1 U	1.1 U
2-Butanone (MEK)	100000	120	ug/kg	14 U	9.6 U	9.6 U	8.9 U	10 U	13 U	12 U	11 U	10 U	10 U	9.4 U	9.5 U	11 U	11 U
4-Methyl-2-Pentanone	NS	NS	ug/kg	6.8 U	4.8 U	4.8 U	4.5 U	5.1 U	6.3 U	5.9 U	5.6 U	5.2 U	5 U	4.7 U	4.8 U	5.4 U	5.3 U
Acetone	100000	50	ug/kg	14 U	9.6 U	9.6 U	8.9 U	10 U	13 U	12 U	11 U	10 U	10 U	9.4 U	9.5 U	11 U	11 U
Benzene	4800	60	ug/kg	0.68 U	0.48 U	0.48 U	0.45 U	0.51 U	0.63 U	0.59 U	0.56 U	0.52 U	0.5 U	0.47 U	0.48 U	0.54 U	0.53 U
Bromodichloromethane	NS	NS	ug/kg	2.7 U	1.9 U	1.9 U	1.8 U	2 U	2.5 U	2.3 U	2.2 U	2.1 U	2 U	1.9 U	1.9 U	2.2 U	2.1 U
Bromoform	NS	NS	ug/kg	6.8 U	4.8 U	4.8 U	4.5 U	5.1 U	6.3 U	5.9 U	5.6 U	5.2 U	5 U	4.7 U	4.8 U	5.4 U	5.3 U
Bromomethane	NS	NS	ug/kg	6.8 U	4.8 U	4.8 U	4.5 U	5.1 U	6.3 U	5.9 U	5.6 U	5.2 U	5 U	4.7 U	4.8 U	5.4 U	5.3 U
Carbon Disulfide	NS	NS	ug/kg	2.7 U	1.9 U	1.9 U	1.8 U	2 U	2.5 U	2.3 U	2.2 U	2.1 U	2 U	1.9 U	1.9 U	2.2 U	2.1 U
Carbon Tetrachloride	2400	760	ug/kg	2.7 U	1.9 U	1.9 U	1.8 U	2 U	2.5 U	2.3 U	2.2 U	2.1 U	2 U	1.9 U	1.9 U	2.2 U	2.1 U
CFC-11	NS	NS	ug/kg	6.8 U	4.8 U	4.8 U	4.5 U	5.1 U	6.3 U	5.9 U	5.6 U	5.2 U	5 U	4.7 U	4.8 U	5.4 U	5.3 U
CFC-12	NS	NS	ug/kg	6.8 U	4.8 U	4.8 U	4.5 U	5.1 U	6.3 U	5.9 U	5.6 U	5.2 U	5 U	4.7 U	4.8 U	5.4 U	5.3 U
Chlorobenzene	100000	1100	ug/kg	2.7 U	1.9 U	1.9 U	1.8 U	2 U	2.5 U	2.3 U	2.2 U	2.1 U	2 U	1.9 U	1.9 U	2.2 U	2.1 U
Chlorodibromomethane	NS	NS	ug/kg	2.7 U	1.9 U	1.9 U	1.8 U	2 U	2.5 U	2.3 U	2.2 U	2.1 U	2 U	1.9 U	1.9 U	2.2 U	2.1 U
Chloroethane	NS	NS	ug/kg	6.8 U	4.8 U	4.8 U	4.5 U	5.1 U	6.3 U	5.9 U	5.6 U	5.2 U	5 U	4.7 U	4.8 U	5.4 U	5.3 U
Chloroform	49000	370	ug/kg	2.7 U	1.9 U	1.9 U	1.8 U	2 U	2.5 U	2.3 U	2.2 U	2.1 U	2 U	1.9 U	1.9 U	2.2 U	2.1 U
Chloromethane	NS	NS	ug/kg	6.8 U	4.8 U	4.8 U	4.5 U	5.1 U	6.3 U	5.9 U	5.6 U	5.2 U	5 U	4.7 U	4.8 U	5.4 U	5.3 U
cis-1,2-Dichloroethene	100000	250	ug/kg	1.4 U	0.96 U	0.96 U	0.89 U	1 U	1.3 U	1.2 U	1.1 U	1 U	1 U	0.94 U	0.95 U	1.1 U	1.1 U
cis-1,3-Dichloropropene	NS	NS	ug/kg	2.7 U	1.9 U	1.9 U	1.8 U	2 U	2.5 U	2.3 U	2.2 U	2.1 U	2 U	1.9 U	1.9 U	2.2 U	2.1 U
Cyclohexane	NS	NS	ug/kg	2.7 U	1.9 U	1.9 U	1.8 U	2 U	2.5 U	2.3 U	2.2 U	2.1 U	2 U	1.9 U	1.9 U	2.2 U	2.1 U
Dichloromethane	NS	NS	ug/kg	6.8 U	4.8 U	4.8 U	4.5 U	5.1 U	6.3 U	5.9 U	5.6 U	5.2 U	5 U	4.7 U	4.8 U	5.4 U	5.3 U
Ethylbenzene	41000	1000	ug/kg	1.4 U	0.96 U	0.96 U	0.89 U	1 U	1.3 U	1.2 U	1.1 U	1 U	1 U	0.94 U	0.95 U	1.1 U	1.1 U
Isopropylbenzene	NS	NS	ug/kg	2.7 U	1.9 U	1.9 U	1.8 U	2 U	2.5 U	2.3 U	2.2 U	2.1 U	2 U	1.9 U	1.9 U	2.2 U	2.1 U
Methyl Acetate	NS	NS	ug/kg	6.8 U	4.8 U	4.8 U	4.5 U	5.1 U	6.3 U	5.9 U	5.6 U	5.2 U	5 U	4.7 U	4.8 U	5.4 U	5.3 U
Methyl N-Butyl Ketone (2-Hexanone)	NS	NS	ug/kg	6.8 U	4.8 U	4.8 U	4.5 U	5.1 U	6.3 U	5.9 U	5.6 U	5.2 U	5 U	4.7 U	4.8 U	5.4 U	5.3 U
Methylcyclohexane	NS	NS	ug/kg	2.7 U	1.9 U	1.9 U	1.8 U	2 U	2.5 U	2.3 U	2.2 U	2.1 U	2 U	1.9 U	1.9 U	2.2 U	2.1 U
Methyl-tert-butylether	100000	930	ug/kg	1.4 U	0.96 U	0.96 U	0.89 U	1 U	1.3 U	1.2 U	1.1 U	1 U	1 U	0.94 U	0.95 U	1.1 U	1.1 U
Styrene (Monomer)	NS	NS	ug/kg	2.7 U	1.9 U	1.9 U	1.8 U	2 U	2.5 U	2.3 U	2.2 U	2.1 U	2 U	0.48 J	1.9 U	2.2 U	2.1 U
Tetrachloroethene	19000	1300	ug/kg	2.7 U	1.9 U	1.9 U	1.8 U	2 U	2.5 U	2.3 U	2.2 U	2.1 U	2 U	1.9 U	1.9 U	2.2 U	2.1 U
Toluene	100000	700	ug/kg	1.4 U	0.96 U	0.96 U	0.89 U	1 U	1.3 U	1.2 U	1.1 U	1 U	1 U	0.94 U	0.95 U	1.1 U	1.1 U
Total Xylenes	100000	1600	ug/kg	1.4 U	0.96 U	0.96 U	0.89 U	1 U	1.3 U	1.2 U	1.1 U	1 U	1 U	0.94 U	0.95 U	1.1 U	1.1 U
trans-1,2-Dichloroethene	100000	190	ug/kg	1.4 U	0.96 U	0.96 U	0.89 U	1 U	1.3 U	1.2 U	1.1 U	1 U	1 U	0.94 U	0.95 U	1.1 U	1.1 U
trans-1,3-Dichloropropene	NS	NS	ug/kg	2.7 U	1.9 U	1.9 U	1.8 U	2 U	2.5 U	2.3 U	2.2 U	2.1 U	2 U	1.9 U	1.9 U	2.2 U	2.1 U
Trichloroethene	21000	470	ug/kg	1.4 U	0.96 U	0.96 U	0.89 U	1 U	1.3 U	1.2 U	1.1 U	1 U	1 U	0.94 U	0.95 U	1.1 U	1.1 U
Vinyl chloride	900	20	ug/kg	2.7 U	1.9 U	1.9 U	1.8 U	2 U	2.5 U	2.3 U	2.2 U	2.1 U	2 U	1.9 U	1.9 U	2.2 U	2.1 U

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Table 8. Confirmatory Soil Sample Results Area A
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Location: ID	TABLE 375-6: RESTRIC. RES. USE SCO	TABLE 375-6: PROTECTION OF GW SCO		PE-A-A1	PE-A-A2	PE-A-A3	PE-A-A4	PE-A-A5	PE-A-A7	PE-A-A8	PE-A-B1	PE-A-B2	PE-A-B3	PE-A-B4	PE-A-B5	PE-A-B6	PE-A-B7
Sample Depth:				2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2.5-3	2.5-3	2-2.5	2-2.5	2-2.5	2-2.5
Date Collected:			Units	11/3/2015	11/3/2015	11/3/2015	11/4/2015	11/4/2015	11/3/2015	11/3/2015	10/29/2015	11/3/2015	11/3/2015	11/4/2015	11/4/2015	11/4/2015	11/4/2015
SVOCs																	
1,1-Biphenyl	NS	NS	ug/kg	82 U	72 U	75 U	72 U	77 U	83 U	72 U	79 U	77 U	73 U	73 U	73 U	73 U	74 U
2,2-Oxybis(1-Chloropropane)	NS	NS	ug/kg	82 U	72 U	75 U	72 U	77 U	83 U	72 U	79 U	77 U	73 U	73 U	73 U	73 U	74 U
2,4,5-Trichlorophenol	NS	NS	ug/kg	210 U	180 U	190 U	180 U	190 U	210 U	180 U	200 U	190 U	180 U	180 U	180 U	180 U	180 U
2,4,6-Trichlorophenol	NS	NS	ug/kg	210 U	180 U	190 U	180 U	190 U	180 U	180 U	200 U	190 U	180 U	180 U	180 U	180 U	180 U
2,4-Dichlorophenol	NS	NS	ug/kg	210 U	180 U	190 U	180 U	190 U	210 U	180 U	200 U	190 U	180 U	180 U	180 U	180 U	180 U
2,4-Dimethylphenol	NS	NS	ug/kg	210 U	180 U	190 U	180 U	190 U	210 U	180 U	200 U	190 U	180 U	180 U	180 U	180 U	180 U
2,4-Dinitrophenol	NS	NS	ug/kg	210 U	180 UJ	190 U	180 U	190 U	210 U	180 U	200 U	190 U	180 U	180 U	180 U	180 U	180 U
2,4-Dinitrotoluene	NS	NS	ug/kg	41 U	36 UJ	37 U	36 U	38 U	41 U	36 U	40 U	38 U	37 U	37 U	37 U	36 U	37 U
2,6-Dinitrotoluene	NS	NS	ug/kg	41 U	36 U	37 U	36 U	38 U	41 U	36 U	40 U	38 U	37 U	37 U	37 U	36 U	37 U
2-Chloronaphthalene	NS	NS	ug/kg	82 U	72 U	75 U	72 U	77 U	83 U	72 U	79 U	77 U	73 U	73 U	73 U	73 U	74 U
2-Chlorophenol	NS	NS	ug/kg	82 U	72 U	75 U	72 U	77 U	83 U	72 U	79 U	77 U	73 U	73 U	73 U	73 U	74 U
2-Methyl-4,6-dinitrophenol	NS	NS	ug/kg	210 U	180 U	190 U	180 U	190 U	210 U	180 U	200 U	190 U	180 U	180 U	180 U	180 U	180 U
2-Methylnaphthalene	NS	NS	ug/kg	82 U	72 U	75 U	72 U	77 U	83 U	72 U	79 U	77 U	73 U	73 U	73 U	73 U	74 U
2-Methylphenol	NS	NS	ug/kg	82 U	72 U	75 U	72 U	77 U	83 U	72 U	79 U	77 U	73 U	73 U	73 U	73 U	74 U
2-Nitroaniline	NS	NS	ug/kg	210 U	180 U	190 U	180 U	190 U	210 U	180 U	200 U	190 U	180 U	180 U	180 U	180 U	180 U
2-Nitrophenol	NS	NS	ug/kg	210 U	180 U	190 U	180 U	190 U	210 U	180 U	200 U	190 U	180 U	180 U	180 U	180 U	180 U
3,3-Dichlorobenzidine	NS	NS	ug/kg	82 U	72 U	75 U	72 U	77 U	83 U	72 U	79 U	77 U	73 U	73 U	73 U	73 U	74 U
3-Methylphenol, 4-Methylphenol	NS	NS	ug/kg	82 U	72 U	75 U	72 U	77 U	83 U	72 U	79 U	77 U	73 U	73 U	73 U	73 U	74 U
3-Nitroaniline	NS	NS	ug/kg	210 U	180 U	190 U	180 U	190 U	210 U	180 U	200 U	190 U	180 U	180 U	180 U	180 U	180 U
4-Bromophenyl phenyl ether	NS	NS	ug/kg	82 U	72 U	75 U	72 U	77 U	83 U	72 U	79 U	77 U	73 U	73 U	73 U	73 U	74 U
4-Chloro-3-Methylphenol	NS	NS	ug/kg	210 U	180 U	190 U	180 U	190 U	210 U	180 U	200 U	190 U	180 U	180 U	180 U	180 U	180 U
4-Chlorophenyl phenyl ether	NS	NS	ug/kg	82 U	72 U	75 U	72 U	77 U	83 U	72 U	79 U	77 U	73 U	73 U	73 U	73 U	74 U
4-Nitroaniline	NS	NS	ug/kg	210 U	180 U	190 U	180 U	190 U	210 U	180 U	200 UJ	190 U	180 U	180 U	180 U	180 U	180 U
4-Nitrophenol	NS	NS	ug/kg	410 U	360 U	370 U	360 U	380 U	410 U	360 U	400 U	380 U	370 U	370 U	370 U	360 U	370 U
Acenaphthene	100000	98000	ug/kg	41 U	36 U	37 U	36 U	38 U	41 U	36 U	40 U	38 U	37 U	37 U	37 U	36 U	37 U
Acenaphthylene	100000	107000	ug/kg	41 U	36 U	37 U	36 U	38 U	41 U	36 U	40 U	38 U	37 U	37 U	37 U	36 U	37 U
Acetophenone	NS	NS	ug/kg	210 U	180 U	190 U	180 U	190 U	210 U	180 U	200 U	190 U	180 U	180 U	180 U	180 U	180 U
Anthracene	100000	1000000	ug/kg	41 U	36 U	37 U	36 U	38 U	41 U	36 U	40 U	38 U	37 U	37 U	37 U	36 U	37 U
Atrazine	NS	NS	ug/kg	82 U	72 U	75 U	72 U	77 U	83 U	72 U	79 U	77 U	73 U	73 U	73 U	73 U	74 U
Benzaldehyde	NS	NS	ug/kg	210 U	180 U	190 U	180 U	190 U	210 U	180 U	200 U	190 U	180 U	180 U	180 U	180 U	180 U
Benzo(a)anthracene	1000	1000	ug/kg	41 U	36 U	37 U	36 U	38 U	41 U	36 U	40 U	38 U	37 U	37 U	42.3	22.1 J	37 U
Benzo(a)pyrene	1000	22000	ug/kg	41 U	36 U	37 U	36 U	38 U	41 U	36 U	40 U	38 U	37 U	37 U	98.6	23.1 J	37 U
Benzo(b)fluoranthene	1000	1700	ug/kg	41 U	36 U	37 U	36 U	38 U	41 U	36 U	40 U	38 U	37 U	37 U	110	28.9 J	37 U
Benzo(g,h,i)perylene	100000	1000000	ug/kg	41 U	36 U	37 U	36 U	38 U	41 U	36 U	40 U	38 U	37 U	37 U	59	16.7 J	37 U
Benzo(k)fluoranthene	3900	1700	ug/kg	41 U	36 U	37 U	36 U	38 U	41 U	36 U	40 U	38 U	37 U	37 U	42.3	36 U	37 U
bis(2-Chloroethoxy)methane	NS	NS	ug/kg	82 U	72 U	75 U	72 U	77 U	83 U	72 U	79 U	77 U	73 U	73 U	73 U	73 U	74 U
bis(2-Chloroethyl)ether	NS	NS	ug/kg	82 U	72 U	75 U	72 U	77 U	83 U	72 U	79 U	77 U	73 U	73 U	73 U	73 U	74 U
bis(2-Ethylhexyl)phthalate	NS	NS	ug/kg	82 U	72 U	75 U	72 U	77 U	83 U	72 U	79 U	77 U	73 U	73 U	73 U	73 U	74 U
Butyl benzyl phthalate	NS	NS	ug/kg	82 U	72 U	75 U	72 U	77 U	83 U	72 U	79 U	77 U	73 UJ	73 U	73 U	73 U	74 U
Caprolactam	NS	NS	ug/kg	82 U	72 U	75 U	72 U	77 U	83 U	72 U	79 UJ	77 U	73 U	73 U	73 U	73 U	74 U
Carbazole	NS	NS	ug/kg	82 U	72 U	75 U	72 U	77 U	83 U	72 U	79 U	77 U	73 U	73 U	73 U	73 U	74 U
Chrysene	3900	1000	ug/kg	41 U	36 U	37 U	36 U	38 U	41 U	36 U	40 U	38 U	37 U	37 U	55	25.1 J	37 U
Dibenzo(a,h)anthracene	330	1000000	ug/kg	41 U	36 U	37 U	36 U	38 U	41 U	36 U	40 U	38 U	37 U	37 U	15.8 J	36 U	37 U
Dibenzofuran	NS	NS	ug/kg	82 U	72 U	75 U	72 U	77 U	83 U	72 U	79 U	77 U	73 U	73 U	73 U	73 U	74 U
Diethyl phthalate	NS	NS	ug/kg	82 U	72 U	75 U	72 U	77 U	83 U	72 U	79 U	77 U	73 U	73 U	73 U	73 U	74 U
Dimethyl phthalate	NS	NS	ug/kg	82 U	72 U	75 U	72 U	77 U	83 U	72 U	79 U	77 U	73 U	73 U	73 U	73 U	74 U
Di-n-butyl phthalate	NS	NS	ug/kg	82 U	72 U	75 U	72 U	77 U	83 U	72 U	79 U	77 U	73 U	73 U	73 U	73 U	74 U
Di-n-octyl phthalate	NS	NS	ug/kg	82 UJ	72 UJ	75 UJ	72 UJ	77 UJ	83 UJ	72 UJ	79 U	77 UJ	73 UJ	73 UJ	73 UJ	73 UJ	74 UJ
Fluoranthene	100000	1000000	ug/kg	41 U	36 U	37 U	36 U	38 U	41 U	36 U	40 U	38 U	37 U	37 U	44.7	29.2 J	37 U
Fluorene	100000	386000	ug/kg	41 U	36 U	37 U	36 U	38 U	41 U	36 U	40 U	38 U	37 U	37 U	37 U	36 U	37 U
Hexachloro-1,3-butadiene	NS	NS	ug/kg	41 U	36 U	37 U	36 U	38 U	41 U	36 U	40 U	38 U	37 U	37 U	37 U	36 U	37 U
Hexachlorobenzene	NS	NS	ug/kg	82 U	72 U	75 U	72 U	77 U	83 U	72 U	79 U	77 U	73 U	73 U	73 U	73 U	74 U

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Table 8. Confirmatory Soil Sample Results Area A
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Location: ID	TABLE 375-6: RESTRIC. RES. USE SCO	TABLE 375-6: PROTECTION OF GW SCO		PE-A-A1	PE-A-A2	PE-A-A3	PE-A-A4	PE-A-A5	PE-A-A7	PE-A-A8	PE-A-B1	PE-A-B2	PE-A-B3	PE-A-B4	PE-A-B5	PE-A-B6	PE-A-B7
Sample Depth:				2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2.5-3	2.5-3	2-2.5	2-2.5	2-2.5	2-2.5
Date Collected:			Units	11/3/2015	11/3/2015	11/3/2015	11/4/2015	11/4/2015	11/3/2015	11/3/2015	10/29/2015	11/3/2015	11/3/2015	11/4/2015	11/4/2015	11/4/2015	11/4/2015
SVOCs cont.																	
Hexachlorocyclopentadiene	NS	NS	ug/kg	410 UJ	360 U	370 UJ	360 U	380 U	410 UJ	360 UJ	400 U	380 UJ	370 U	370 U	370 U	360 U	370 U
Hexachloroethane	NS	NS	ug/kg	210 U	180 U	190 U	180 U	190 U	210 U	180 U	200 U	190 U	180 U	180 U	180 U	180 U	180 U
Indeno(1,2,3-cd)pyrene	500	8200	ug/kg	41 U	36 U	37 U	36 U	38 U	41 U	36 U	40 U	38 U	37 U	37 U	59.3	36 U	37 U
Isophorone	NS	NS	ug/kg	82 U	72 U	75 U	72 U	77 U	83 U	72 U	79 U	77 U	73 U	73 U	73 U	73 U	74 U
Naphthalene	100000	12000	ug/kg	41 U	36 U	37 U	66.9	38 U	41 U	36 U	40 U	38 U	37 U	37 U	37 U	36 U	37 U
Nitrobenzene	NS	NS	ug/kg	82 U	72 U	75 U	72 U	77 U	83 U	72 U	79 U	77 U	73 U	73 U	73 U	73 U	74 U
n-Nitrosodi-n-propylamine	NS	NS	ug/kg	82 U	72 U	75 U	72 U	77 U	83 U	72 U	79 U	77 U	73 U	73 U	73 U	73 U	74 U
N-nitrosodiphenylamine	NS	NS	ug/kg	210 U	180 U	190 U	180 U	190 U	210 U	180 U	200 U	190 U	180 U	180 U	180 U	180 U	180 U
p-Chloroaniline	NS	NS	ug/kg	210 U	180 U	190 U	180 U	190 U	210 U	180 U	200 U	190 U	180 U	180 U	180 U	180 U	180 U
Pentachlorophenol	6700	800	ug/kg	210 U	180 U	190 U	180 U	190 U	210 U	180 U	200 U	190 U	180 U	180 U	180 U	180 U	180 U
Phenanthrene	100000	1000000	ug/kg	41 U	36 U	37 U	36 U	21.2 J	41 U	36 U	40 U	38 U	37 U	37 U	22.6 J	36 U	37 U
Phenol	100000	330	ug/kg	82 U	72 U	75 U	72 U	77 U	83 U	72 U	79 U	77 U	73 U	73 U	73 U	73 U	74 U
Pyrene	100000	1000000	ug/kg	41 U	36 U	37 U	36 U	18.9 J	41 U	36 U	40 U	38 U	37 U	37 U	50.5	29 J	37 U
PCBs																	
Aroclor 1016	1000	3200	ug/kg	42 U	35 U	36 U	34 U	37 U	35 U	36 U	38 U	35 U	33 U	35 U	32 U	37 U	37 U
Aroclor 1221	1000	3200	ug/kg	42 U	35 U	36 U	34 U	37 U	35 U	36 U	38 U	35 U	33 U	35 U	32 U	37 U	37 U
Aroclor 1232	1000	3200	ug/kg	42 U	35 U	36 U	34 U	37 U	35 U	36 U	38 U	35 U	33 U	35 U	32 U	37 U	37 U
Aroclor 1242	1000	3200	ug/kg	42 U	35 U	36 U	34 U	37 U	35 U	36 U	38 U	35 U	33 U	35 U	32 U	37 U	37 U
Aroclor 1248	1000	3200	ug/kg	42 U	35 U	36 U	34 U	37 U	35 U	36 U	38 U	35 U	33 U	35 U	32 U	37 U	37 U
Aroclor 1254	1000	3200	ug/kg	42 U	35 U	36 U	34 U	37 U	35 U	36 U	38 U	35 U	33 U	35 U	32 U	37 U	37 U
Aroclor 1260	1000	3200	ug/kg	42 U	35 U	36 U	34 U	37 U	35 U	36 U	38 U	35 U	33 U	35 U	32 U	37 U	37 U
Aroclor 1262	1000	3200	ug/kg	42 U	35 U	36 U	34 U	37 U	35 U	36 U	38 U	35 U	33 U	35 U	32 U	37 U	37 U
Aroclor 1268	1000	3200	ug/kg	42 U	35 U	36 U	34 U	37 U	35 U	36 U	38 U	35 U	33 U	35 U	32 U	37 U	37 U
Metals																	
Aluminum	NS	NS	mg/kg	22400 J	10600 J	7710 J	7830	15700	8110 J	9700 J	30200	13100 J	9600 J	9620	10600	8270	9330
Antimony	NS	NS	mg/kg	2.4 UJ	2.2 UJ	2.2 UJ	2.3 U	2.4 U	2.4 UJ	2.2 UJ	2.4 U	2.3 UJ	2.2 UJ	2.1 U	2.2 U	0.42 B	2.2 U
Arsenic	16	16	mg/kg	4	2.9	2.6	2.4	3.8	1.9 B	2.5	5.3	3.5	2.9	4.1	3.5	2.8	2.6
Barium	400	820	mg/kg	60.6	32.2	32.2	39	40.3	26.5	23.9	90.5	54.2	42.5	45.1	73.2	86.6	34.6
Beryllium	72	47	mg/kg	0.45	0.57	0.56	0.43	0.54	0.48	0.47	0.75	0.57	0.55	0.61	0.54	0.51	0.41
Cadmium	4.3	7.5	mg/kg	0.61 UB	0.54 U	0.56 U	0.56 U	0.13 B	0.6 U	0.55 U	0.16 B	0.57 UB	0.55 U	0.54 U	0.22 B	0.38 B	0.078 B
Calcium	NS	NS	mg/kg	194 B	2110	1580	1690	1250	2160	1660	538 B	1870	1230	2080	1760	2330	1920
Chromium	NS	NS	mg/kg	21	10	10.5	10.8	15.7	8.9	13.1	26.4	16.1	14.5	11.1	12.9	12.2	14.4
Cobalt	NS	NS	mg/kg	6.5	5.6	5.6	7.9	6	8	7.8	7.5	6.3	7.3	6.8	6.3	5.9	6.1
Copper	270	1720	mg/kg	13.7	10.3	10.6	10.4	10.6	13.3	16.6	15.2	15.4	14.2	15.5	13.9	16.4	11.8
Iron	NS	NS	mg/kg	13900	15200	15100	15900	18500	15800	17500	24700	16300	16400	18800	18300	14600	15300
Lead	400	450	mg/kg	10.4	6.6	5.5	3.7	15.9	2.6	4.9	11.7	12.9	4.5	3.8	16.3	51.3	5.9
Magnesium	NS	NS	mg/kg	3540	2660	2080	2360	2640	2440	2910	2790	2810	2470	3030	2890	2460	2780
Manganese	2000	2000	mg/kg	108	103	294	175	307	253	190	132	93.7	116	293	227	216	176
Mercury	NS	NS	mg/kg	0.045	0.021 B	0.0024 B	0.036 UB	0.043	0.0065 B	0.018 B	0.052	0.02 B	0.0091 B	0.033 UB	0.036 UB	0.038 UB	0.037 UB
Nickel	310	130	mg/kg	15.4	8.9	8	9.5	11.5	9.6	12.3	15.4	12.2	11.7	10.2	10.9	9.8	10.4
Potassium	NS	NS	mg/kg	918 B	1000 B	1100	1090 B	880 B	882 B	847 B	929 B	1030 B	996 B	1610	1460	1140 B	1150
Selenium	180	4	mg/kg	0.34 B	0.41 B	1 B	2.3 U	0.48 B	2.2 U	0.78 B	0.72 B	0.72 B	0.46 B	2.1 U	2.2 U	2.4 U	2.2 U
Silver	180	8.3	mg/kg	0.61 U	0.32 B	0.25 B	0.35 B	0.54 B	0.31 B	0.33 B	1.4	0.44 B	0.4 B	0.37 B	0.46 B	0.35 B	0.28 B
Sodium	NS	NS	mg/kg	1200 UB	191 B	133 B	127 B	112 B	158 B	143 B	66.2 B	175 B	122 B	155 B	128 B	170 B	177 B
Thallium	NS	NS	mg/kg	1.2 U	1.1 U	1.1 U	1.1 U	1.2 U	1.1 U	1.2 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.2 U	1.1 U
Vanadium	NS	NS	mg/kg	28.6	20.9	22.5	20.9	29.5	18.7	24.6	46.8	29	26.7	21.6	20.5	20.3	20.7
Zinc	10000	2480	mg/kg	34.9 J	26.2 J	20.7 J	24	40.4	19.2 J	25.1 J	36.5	52.4 J	25.6 J	28	44.8	84.5	22.9
General Chemistry																	
Percent Solids			%	79.9	90.2	88.5	90.2	85.8	80.6	90.8	79.7	87	90.9	90.5	88.8	85.4	89.9

Notes		
NS	No standard	
NA	Not analyzed	
R	Rejected Result	
B	Indicates an estimated value between the instrument detection limit and the Reporting Limit (RL).	
E	Serial dilution results not within 10%. Applicable only if analyte concentration is at least 50X the IDL in original sample.	
J/JN	Indicates an estimated value.	
UB	The compound was analyzed for but not detected. The associated value is the compound quantitation limit.	
Shade	Exceeds NYSDEC Table 375-6: Restricted Residential Use Soil Cleanup Objective	
Bold	Exceeds NYSDEC Table 375-6: Protection of Groundwater Soil Cleanup Objective	

Table 8. Confirmatory Soil Sample Results Area A
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Location: ID	TABLE 375-6: RESTRIC. RES. USE SCO	TABLE 375-6: PROTECTION OF GW SCO		PE-A-B8	PE-A-B9	PE-A-C1	PE-A-C2	PE-A-C3	PE-A-C4	PE-A-C4	PE-A-C5	PE-A-C6	PE-A-C7	PE-A-C8	PE-A-C9	PE-A-C10	PE-A-D2
Sample Depth:				2-2.5	2.5-3	2-2.5	2-2.5	4-4.5	2.5-3	2.5-3	2.5-3	2.5-3	2-2.5	2-2.5	3.5-4	5-5.5	2-2.5
Date Collected:			Units	9/29/2015	9/29/2015	10/22/2015	10/22/2015	10/29/2015	11/2/2015	11/2/2015	11/2/2015	11/2/2015	11/3/2015	11/3/2015	9/29/2015	9/29/2015	10/28/2015
VOCs																	
1,1,1-Trichloroethane	100000	680	ug/kg	2 U	2.3 U	1.9 U	2 U	1.7 U	1.8 U	1.8 U	1.8 U	2 U	2 U	2.1 U	1.9 U	2.3 U	1.9 U
1,1,2,2-Tetrachloroethane	NS	NS	ug/kg	2 U	2.3 U	1.9 U	2 U	1.7 U	1.8 U	1.8 U	1.8 U	2 U	2 U	2.1 U	1.9 U	2.3 U	1.9 U
1,1,2-trichloro-1,2,2-trifluoroethane	NS	NS	ug/kg	5 U	5.8 U	4.7 U	4.9 U	4.3 U	4.4 U	4.5 U	4.6 U	5 U	5.1 U	5.3 U	4.7 U	5.7 U	4.8 U
1,1,2-Trichloroethane	NS	NS	ug/kg	2 U	2.3 U	1.9 U	2 U	1.7 U	1.8 U	1.8 U	1.8 U	2 U	2 U	2.1 U	1.9 U	2.3 U	1.9 U
1,1-Dichloroethane	26000	270	ug/kg	1 U	1.2 U	0.94 U	0.98 U	0.86 U	0.89 U	0.91 U	0.91 U	0.99 U	1 U	1.1 U	0.93 U	1.1 U	0.97 U
1,1-Dichloroethene	100000	330	ug/kg	1 U	1.2 U	0.94 U	0.98 U	0.86 U	0.89 U	0.91 U	0.91 U	0.99 U	1 U	1.1 U	0.93 U	1.1 U	0.97 U
1,2,4-Trichlorobenzene	NS	NS	ug/kg	5 U	5.8 U	4.7 U	4.9 U	4.3 U	4.4 U	4.5 U	4.6 U	5 U	5.1 U	5.3 U	4.7 U	5.7 U	4.8 U
1,2-Dibromo-3-chloropropane	NS	NS	ug/kg	2 U	2.3 U	1.9 U	2 U	1.7 U	1.8 U	1.8 U	1.8 U	2 U	2 U	2.1 U	1.9 U	2.3 U	1.9 U
1,2-Dibromoethane	NS	NS	ug/kg	1 U	1.2 U	0.94 U	0.98 U	0.86 U	0.89 U	0.91 U	0.91 U	0.99 U	1 U	1.1 U	0.93 U	1.1 U	0.97 U
1,2-Dichlorobenzene	100000	1100	ug/kg	1 U	1.2 U	0.94 U	0.98 U	0.86 U	0.89 U	0.91 U	0.91 U	0.99 U	1 U	1.1 U	0.93 U	1.1 U	0.97 U
1,2-Dichloroethane	3100	20	ug/kg	1 U	1.2 U	0.94 U	0.98 U	0.86 U	0.94 U	0.91 U	0.91 U	0.99 U	1 U	1.1 U	0.93 U	1.1 U	0.97 U
1,2-Dichloropropane	NS	NS	ug/kg	2 U	2.3 U	1.9 U	2 U	1.7 U	1.8 U	1.8 U	1.8 U	2 U	2 U	2.1 U	1.9 U	2.3 U	1.9 U
1,3-Dichlorobenzene	49000	2400	ug/kg	1 U	1.2 U	0.94 U	0.98 U	0.86 U	0.89 U	0.91 U	0.91 U	0.99 U	1 U	1.1 U	0.93 U	1.1 U	0.97 U
1,4-Dichlorobenzene	13000	1800	ug/kg	1 U	1.2 U	0.94 U	0.98 U	0.86 U	0.94 U	0.91 U	0.91 U	0.99 U	1 U	1.1 U	0.93 U	1.1 U	0.97 U
2-Butanone (MEK)	100000	120	ug/kg	10 U	12 U	9.4 U	6.8 J	8.6 U	8.9 U	9.1 U	9.1 U	9.9 U	10 U	11 U	9.3 U	11 U	9.7 U
4-Methyl-2-Pentanone	NS	NS	ug/kg	5 U	5.8 U	4.7 U	4.9 U	4.3 U	4.4 U	4.5 U	4.6 U	5 U	5.1 U	5.3 U	4.7 U	5.7 U	4.8 U
Acetone	100000	50	ug/kg	5.8 J	12 U	5.3 J	53	9.2	8.9 U	9.1 U	9.1 U	9.9 U	10 U	11 U	9.3 U	11 U	9.7 U
Benzene	4800	60	ug/kg	0.5 U	0.58 U	0.47 U	0.49 U	0.43 U	0.44 U	0.45 U	0.46 U	0.5 U	0.51 U	0.53 U	0.47 U	0.57 U	0.48 U
Bromodichloromethane	NS	NS	ug/kg	2 U	2.3 U	1.9 U	2 U	1.7 U	1.8 U	1.8 U	1.8 U	2 U	2 U	2.1 U	1.9 U	2.3 U	1.9 U
Bromoform	NS	NS	ug/kg	5 U	5.8 U	4.7 U	4.9 U	4.3 U	4.4 U	4.5 U	4.6 U	5 U	5.1 U	5.3 U	4.7 U	5.7 U	4.8 U
Bromomethane	NS	NS	ug/kg	5 U	5.8 U	4.7 U	4.9 U	4.3 U	4.4 U	4.5 U	4.6 U	5 U	5.1 U	5.3 U	4.7 U	5.7 U	4.8 U
Carbon Disulfide	NS	NS	ug/kg	2 U	2.3 U	1.9 U	2 U	1.7 U	1.8 U	1.8 U	1.8 U	2 U	2 U	2.1 U	1.9 U	2.3 U	1.9 U
Carbon Tetrachloride	2400	760	ug/kg	2 U	2.3 U	1.9 U	2 U	1.7 U	1.8 U	1.8 U	1.8 U	2 U	2 U	2.1 U	1.9 U	2.3 U	1.9 U
CFC-11	NS	NS	ug/kg	5 U	5.8 U	4.7 U	4.9 U	4.3 U	4.4 U	4.5 U	4.6 U	5 U	5.1 U	5.3 U	4.7 U	5.7 U	4.8 U
CFC-12	NS	NS	ug/kg	5 U	5.8 U	4.7 U	4.9 U	4.3 U	4.4 U	4.5 U	4.6 U	5 U	5.1 U	5.3 U	4.7 U	5.7 U	4.8 U
Chlorobenzene	100000	1100	ug/kg	2 U	2.3 U	1.9 U	2 U	1.7 U	1.8 U	1.8 U	1.8 U	2 U	2 U	2.1 U	1.9 U	2.3 U	1.9 U
Chlorodibromomethane	NS	NS	ug/kg	2 U	2.3 U	1.9 U	2 U	1.7 U	1.8 U	1.8 U	1.8 U	2 U	2 U	2.1 U	1.9 U	2.3 U	1.9 U
Chloroethane	NS	NS	ug/kg	5 U	5.8 U	4.7 U	4.9 UJ	4.3 U	4.4 U	4.5 U	4.6 U	5 U	5.1 U	5.3 UJ	4.7 U	5.7 U	4.8 U
Chloroform	49000	370	ug/kg	2 U	2.3 U	1.9 U	2 U	1.7 U	1.8 U	1.8 U	1.8 U	2 U	2 U	2.1 U	1.9 U	2.3 U	1.9 U
Chloromethane	NS	NS	ug/kg	5 U	5.8 U	4.7 U	4.9 U	4.3 U	4.4 U	4.5 U	4.6 U	5 U	5.1 U	5.3 U	4.7 U	5.7 U	4.8 U
cis-1,2-Dichloroethene	100000	250	ug/kg	1 U	1.2 U	0.94 U	0.98 U	0.86 U	0.89 U	0.91 U	0.91 U	0.99 U	1 U	1.1 U	0.93 U	1.1 U	0.97 U
cis-1,3-Dichloropropene	NS	NS	ug/kg	2 U	2.3 U	1.9 U	2 U	1.7 U	1.8 U	1.8 U	1.8 U	2 U	2 U	2.1 U	1.9 U	2.3 U	1.9 U
Cyclohexane	NS	NS	ug/kg	2 U	2.3 U	1.9 U	2 U	1.7 U	1.8 U	1.8 U	1.8 U	2 U	2 U	2.1 U	1.9 U	2.3 U	1.9 U
Dichloromethane	NS	NS	ug/kg	5 U	5.8 U	4.7 U	4.9 U	4.3 U	4.4 U	4.5 U	4.6 U	5 U	5.1 U	5.3 U	4.7 U	5.7 U	4.8 U
Ethylbenzene	41000	1000	ug/kg	1 U	1.2 U	0.15 J	0.22 J	0.86 U	0.89 U	0.91 U	0.91 U	0.99 U	1 U	2.2	0.93 U	1.1 U	0.97 U
Isopropylbenzene	NS	NS	ug/kg	2 U	2.3 U	1.9 U	2 U	1.7 U	1.8 U	1.8 U	1.8 U	2 U	2 U	1.3 J	1.9 U	2.3 U	1.9 U
Methyl Acetate	NS	NS	ug/kg	5 UJ	5.8 UJ	4.7 U	4.9 U	4.3 U	4.4 U	4.5 U	4.6 U	5 U	5.1 U	5.3 U	4.7 U	5.7 U	4.8 U
Methyl N-Butyl Ketone (2-Hexanone)	NS	NS	ug/kg	5 U	5.8 U	4.7 UJ	4.9 U	4.3 U	4.4 U	4.5 U	4.6 U	5 U	5.1 U	5.3 U	4.7 U	5.7 U	4.8 U
Methylcyclohexane	NS	NS	ug/kg	2 U	2.3 U	1.9 U	2 U	1.7 U	1.8 U	1.8 U	1.8 U	2 U	2 U	2.1 U	1.9 U	2.3 U	1.9 U
Methyl-tert-butylether	100000	930	ug/kg	1 U	1.2 U	0.94 U	0.98 U	0.86 U	0.89 U	0.91 U	0.91 U	0.99 U	1 U	1.1 U	0.93 U	1.1 U	0.97 U
Styrene (Monomer)	NS	NS	ug/kg	2 U	2.3 U	1.9 U	2 U	1.7 U	1.8 U	1.8 U	1.8 U	2 U	2 U	2.1 U	1.9 U	2.3 U	1.9 U
Tetrachloroethene	19000	1300	ug/kg	2 U	2.3 U	1.9 U	2 U	1.7 U	1.8 U	1.8 U	1.8 U	2 U	2 U	2.1 U	1.9 U	2.3 U	1.9 U
Toluene	100000	700	ug/kg	1 U	1.2 U	0.23 J	0.3 J	0.86 U	0.89 U	0.91 U	0.91 U	0.99 U	1 U	1.1 U	0.93 U	1.1 U	0.97 U
Total Xylenes	100000	1600	ug/kg	1 U	1.2 U	0.61 J	1.5	0.86 U	0.89 U	0.91 U	0.91 U	0.43 J	1 U	23.5	0.93 U	1.1 U	0.97 U
trans-1,2-Dichloroethene	100000	190	ug/kg	1 U	1.2 U	0.94 U	0.98 U	0.86 U	0.89 U	0.91 U	0.91 U	0.99 U	1 U	1.1 U	0.93 U	1.1 U	0.97 U
trans-1,3-Dichloropropene	NS	NS	ug/kg	2 U	2.3 U	1.9 U	2 U	1.7 U	1.8 U	1.8 U	1.8 U	2 U	2 U	2.1 U	1.9 U	2.3 U	1.9 U
Trichloroethene	21000	470	ug/kg	1 U	1.2 U	0.94 U	0.98 U	0.86 U	0.89 U	0.91 U	0.91 U	0.99 U	1 U	1.1 U	0.93 U	1.1 U	0.97 U
Vinyl chloride	900	20	ug/kg	2 U	2.3 U	1.9 U	2 U	1.7 U	1.8 U	1.8 U	1.8 U	2 U	2 U	2.1 U	1.9 U	2.3 U	1.9 U

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Table 8. Confirmatory Soil Sample Results Area A
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Location: ID	TABLE 375-6: RESTRIC. RES. USE SCO	TABLE 375-6: PROTECTION OF GW SCO		PE-A-B8	PE-A-B9	PE-A-C1	PE-A-C2	PE-A-C3	PE-A-C4	PE-A-C4	PE-A-C5	PE-A-C6	PE-A-C7	PE-A-C8	PE-A-C9	PE-A-C10	PE-A-D2
Sample Depth:				2-2.5	2.5-3	2-2.5	2-2.5	4-4.5	2.5-3	2.5-3	2.5-3	2.5-3	2-2.5	2-2.5	3.5-4	5-5.5	2-2.5
Date Collected:			Units	9/29/2015	9/29/2015	10/22/2015	10/22/2015	10/29/2015	11/2/2015	11/2/2015	11/2/2015	11/2/2015	11/3/2015	11/3/2015	9/29/2015	9/29/2015	10/28/2015
SVOCs																	
1,1-Biphenyl	NS	NS	ug/kg	68 U	76 U	78 U	69 U	73 U	75 U	72 U	74 U	73 U	76 U	81 U	67 U	75 U	74 U
2,2-Oxybis(1-Chloropropane)	NS	NS	ug/kg	68 U	76 U	78 UJ	69 UJ	73 U	75 U	72 U	74 U	73 U	76 U	81 U	67 U	75 U	74 U
2,4,5-Trichlorophenol	NS	NS	ug/kg	170 U	190 U	190 U	170 U	180 U	190 U	180 U	190 U	180 U	190 U	200 U	170 U	190 U	180 U
2,4,6-Trichlorophenol	NS	NS	ug/kg	170 U	190 U	190 U	180 U	180 U	190 U	180 U	190 U	180 U	190 U	200 U	170 U	190 U	180 U
2,4-Dichlorophenol	NS	NS	ug/kg	170 U	190 U	190 U	170 U	180 U	190 U	180 U	190 U	180 U	190 U	200 U	170 U	190 U	180 U
2,4-Dimethylphenol	NS	NS	ug/kg	170 U	190 U	190 U	170 U	180 U	190 U	180 U	190 U	180 U	190 U	200 U	170 U	190 U	180 U
2,4-Dinitrophenol	NS	NS	ug/kg	170 U	190 U	190 U	170 U	180 U	190 UJ	180 U	190 U	180 U	190 U	200 U	170 U	190 U	180 U
2,4-Dinitrotoluene	NS	NS	ug/kg	34 U	38 U	39 U	35 U	37 U	37 U	36 U	37 U	36 U	38 U	40 U	34 U	38 U	37 U
2,6-Dinitrotoluene	NS	NS	ug/kg	34 U	38 U	39 U	35 U	37 U	37 U	36 U	37 U	36 U	38 U	40 U	34 U	38 U	37 U
2-Chloronaphthalene	NS	NS	ug/kg	68 U	76 U	78 U	69 U	73 U	75 U	72 U	74 U	73 U	76 U	81 U	67 U	75 U	74 U
2-Chlorophenol	NS	NS	ug/kg	68 U	76 U	78 U	69 U	73 U	75 U	72 U	74 U	73 U	76 U	81 U	67 U	75 U	74 U
2-Methyl-4,6-dinitrophenol	NS	NS	ug/kg	170 U	190 U	190 U	170 U	180 U	190 UJ	180 U	190 U	180 U	190 U	200 U	170 U	190 U	180 U
2-Methylnaphthalene	NS	NS	ug/kg	68 U	76 U	78 U	69 U	73 U	75 U	72 U	74 U	73 U	76 U	171	67 U	75 U	74 U
2-Methylphenol	NS	NS	ug/kg	68 U	76 U	78 U	69 U	73 U	75 U	72 U	74 U	73 U	76 U	81 U	67 U	75 U	74 U
2-Nitroaniline	NS	NS	ug/kg	170 U	190 U	190 UJ	170 UJ	180 U	190 U	180 U	190 U	180 U	190 U	200 U	170 U	190 U	180 U
2-Nitrophenol	NS	NS	ug/kg	170 U	190 U	190 U	170 U	180 U	190 U	180 U	190 U	180 U	190 U	200 U	170 U	190 U	180 U
3,3-Dichlorobenzidine	NS	NS	ug/kg	68 U	76 U	78 U	69 U	73 U	75 U	72 U	74 U	73 U	76 U	81 U	67 U	75 U	74 U
3-Methylphenol, 4-Methylphenol	NS	NS	ug/kg	68 U	76 U	78 U	69 U	73 U	75 U	72 U	74 U	73 U	76 U	81 U	67 U	75 U	74 U
3-Nitroaniline	NS	NS	ug/kg	170 U	190 U	190 U	170 U	180 U	190 U	180 U	190 U	180 U	190 U	200 U	170 U	190 U	180 U
4-Bromophenyl phenyl ether	NS	NS	ug/kg	68 U	76 U	78 U	69 U	73 U	75 U	72 U	74 U	73 U	76 U	81 U	67 U	75 U	74 U
4-Chloro-3-Methylphenol	NS	NS	ug/kg	170 U	190 U	190 U	170 U	180 U	190 U	180 U	190 U	180 U	190 U	200 U	170 U	190 U	180 U
4-Chlorophenyl phenyl ether	NS	NS	ug/kg	68 U	76 U	78 U	69 U	73 U	75 U	72 U	74 U	73 U	76 U	81 U	67 U	75 U	74 U
4-Nitroaniline	NS	NS	ug/kg	170 U	190 U	190 U	170 U	180 U	190 U	180 U	190 U	180 U	190 U	200 U	170 U	190 U	180 UJ
4-Nitrophenol	NS	NS	ug/kg	340 U	380 U	390 U	350 U	370 U	370 U	360 U	370 U	360 U	380 U	370 U	340 U	380 U	370 U
Acenaphthene	100000	98000	ug/kg	34 U	38 U	39 U	35 U	37 U	37 U	36 U	37 U	36 U	38 U	40 U	34 U	38 U	37 U
Acenaphthylene	100000	107000	ug/kg	34 U	38 U	39 U	35 U	29.8 J	37 U	36 U	37 U	36 U	38 U	40 U	34 U	38 U	62.3
Acetophenone	NS	NS	ug/kg	170 U	190 U	190 U	170 U	180 U	190 U	180 U	190 U	180 U	190 U	200 U	170 U	190 U	180 U
Anthracene	100000	1000000	ug/kg	34 U	38 U	39 U	35 U	16.8 J	37 U	36 U	37 U	36 U	38 U	40 U	34 U	38 U	66.5
Atrazine	NS	NS	ug/kg	68 U	76 U	78 U	69 U	73 U	75 U	72 U	74 UJ	73 UJ	76 U	81 U	67 U	75 U	74 U
Benzaldehyde	NS	NS	ug/kg	170 U	190 U	190 U	170 U	180 U	190 U	180 U	190 U	180 U	190 U	200 U	170 U	190 U	180 U
Benzo(a)anthracene	1000	1000	ug/kg	34 U	38 U	39 U	30.9 J	43.7	37 U	38 U	37 U	36 U	38 U	40 U	34 U	38 U	227
Benzo(a)pyrene	1000	22000	ug/kg	34 U	38 U	39 U	32.8 J	44.7	37 U	36 U	37 U	36 U	38 U	40 U	34 U	38 U	274
Benzo(b)fluoranthene	1000	1700	ug/kg	34 U	38 U	39 U	45.6	48.1	37 U	36 U	37 U	36 U	38 U	40 U	34 U	38 U	319
Benzo(g,h,i)perylene	100000	1000000	ug/kg	34 U	38 U	39 U	24.9 J	27.9 J	37 U	36 U	37 U	36 U	38 U	40 U	34 U	38 U	193
Benzo(k)fluoranthene	3900	1700	ug/kg	34 U	38 U	39 U	15.3 J	37 U	37 U	36 U	37 U	36 U	38 U	40 U	34 U	38 U	133
bis(2-Chloroethoxy)methane	NS	NS	ug/kg	68 U	76 U	78 U	69 U	73 U	75 U	72 U	74 U	73 U	76 U	81 U	67 U	75 U	74 U
bis(2-Chloroethyl)ether	NS	NS	ug/kg	68 U	76 U	78 U	69 U	73 U	75 U	72 U	74 U	73 U	76 U	81 U	67 U	75 U	74 U
bis(2-Ethylhexyl)phthalate	NS	NS	ug/kg	68 U	76 U	78 U	69 U	73 U	75 U	72 U	74 UJ	73 UJ	76 U	81 U	67 U	75 U	74 U
Butyl benzyl phthalate	NS	NS	ug/kg	68 U	76 U	78 U	69 U	73 U	75 U	72 U	74 U	73 U	76 U	81 U	67 U	75 U	74 U
Caprolactam	NS	NS	ug/kg	68 U	76 U	78 UJ	69 UJ	73 UJ	75 U	72 U	74 U	73 U	76 U	81 U	67 U	75 U	74 UJ
Carbazole	NS	NS	ug/kg	68 U	76 U	78 U	69 U	73 U	75 U	72 U	74 U	73 U	76 U	81 U	67 U	75 U	23.3 J
Chrysene	3900	1000	ug/kg	34 U	38 U	39 U	28.5 J	40.7	37 U	36 U	37 U	36 U	38 U	40 U	34 U	38 U	245
Dibenzo(a,h)anthracene	330	1000000	ug/kg	34 U	38 U	39 U	35 U	37 U	37 U	36 U	37 U	36 U	38 U	40 U	34 U	38 U	54.1
Dibenzofuran	NS	NS	ug/kg	68 U	76 U	78 U	69 U	73 U	75 U	72 U	74 U	73 U	76 U	81 U	67 U	75 U	74 U
Diethyl phthalate	NS	NS	ug/kg	68 U	76 U	78 U	69 U	73 U	75 U	72 U	74 U	73 U	76 U	81 U	67 U	75 U	74 U
Dimethyl phthalate	NS	NS	ug/kg	68 U	76 U	78 U	69 U	73 U	75 U	72 U	74 U	73 U	76 U	81 U	67 U	75 U	74 U
Di-n-butyl phthalate	NS	NS	ug/kg	68 U	76 U	78 U	69 U	73 U	75 U	72 U	74 U	73 U	76 U	81 U	67 U	75 U	74 U
Di-n-octyl phthalate	NS	NS	ug/kg	68 U	76 U	78 U	69 U	73 U	75 U	72 U	74 UJ	73 UJ	76 UJ	81 UJ	67 U	75 U	74 U
Fluoranthene	100000	1000000	ug/kg	34 U	38 U	39 U	57.4	74.2	37 U	36 U	37 U	36 U	38 U	40 U	34 U	38 U	404
Fluorene	100000	386000	ug/kg	34 U	38 U	39 U	35 U	37 U	37 U	36 U	37 U	36 U	38 U	40 U	34 U	38 U	21.1 J
Hexachloro-1,3-butadiene	NS	NS	ug/kg	34 U	38 U	39 U	35 U	37 U	37 U	36 U	37 U	36 U	38 U	40 U	34 U	38 U	37 U
Hexachlorobenzene	NS	NS	ug/kg	68 U	76 U	78 U	69 U	73 U	75 U	72 U	74 U	73 U	76 U	81 U	67 U	75 U	74 U

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Table 8. Confirmatory Soil Sample Results Area A
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Location: ID	TABLE 375-6: RESTRIC. RES. USE SCO	TABLE 375-6: PROTECTION OF GW SCO		PE-A-B8	PE-A-B9	PE-A-C1	PE-A-C2	PE-A-C3	PE-A-C4	PE-A-C4	PE-A-C5	PE-A-C6	PE-A-C7	PE-A-C8	PE-A-C9	PE-A-C10	PE-A-D2
Sample Depth:				2-2.5	2.5-3	2-2.5	2-2.5	4-4.5	2.5-3	2.5-3	2.5-3	2.5-3	2-2.5	2-2.5	3.5-4	5-5.5	2-2.5
Date Collected:			Units	9/29/2015	9/29/2015	10/22/2015	10/22/2015	10/29/2015	11/2/2015	11/2/2015	11/2/2015	11/2/2015	11/3/2015	11/3/2015	9/29/2015	9/29/2015	10/28/2015
SVOCs cont.																	
Hexachlorocyclopentadiene	NS	NS	ug/kg	340 U	380 U	390 U	350 U	370 U	370 UJ	360 U	370 U	360 U	380 UJ	400 UJ	340 U	380 U	370 U
Hexachloroethane	NS	NS	ug/kg	170 U	190 U	190 U	170 U	180 U	190 U	180 U	190 U	180 U	190 U	200 U	170 U	190 U	180 U
Indeno(1,2,3-cd)pyrene	500	8200	ug/kg	34 U	38 U	39 U	23.4 J	30.6 J	37 U	36 U	37 U	36 U	38 U	40 U	34 U	38 U	208
Isophorone	NS	NS	ug/kg	68 U	76 U	78 U	69 U	73 U	75 U	72 U	74 U	73 U	76 U	81 U	67 U	75 U	74 U
Naphthalene	100000	12000	ug/kg	34 U	38 U	39 U	35 U	37 U	37 U	15.6 J	37 U	36 U	38 U	645	34 U	38 U	17.2 J
Nitrobenzene	NS	NS	ug/kg	68 U	76 U	78 U	69 U	73 U	75 U	72 U	74 U	73 U	76 U	81 U	67 U	75 U	74 U
n-Nitrosodi-n-propylamine	NS	NS	ug/kg	68 U	76 U	78 U	69 U	73 U	75 U	72 U	74 U	73 U	76 U	81 U	67 U	75 U	74 U
N-nitrosodiphenylamine	NS	NS	ug/kg	170 U	190 U	190 U	170 U	180 U	190 U	180 U	190 U	180 U	190 U	200 U	170 U	190 U	180 U
p-Chloroaniline	NS	NS	ug/kg	170 U	190 U	190 U	170 U	180 U	190 U	180 U	190 U	180 U	190 U	200 U	170 U	190 U	180 U
Pentachlorophenol	6700	800	ug/kg	170 U	190 U	190 U	170 U	180 U	190 U	180 U	190 U	180 U	190 U	200 U	170 U	190 U	180 U
Phenanthrene	100000	1000000	ug/kg	34 U	38 U	39 U	25.3 J	41.6	37 U	36 U	37 U	36 U	38 U	40 U	34 U	38 U	184
Phenol	100000	330	ug/kg	68 U	76 U	78 U	69 U	73 U	75 U	72 U	74 U	73 U	76 U	81 U	67 U	75 U	74 U
Pyrene	100000	1000000	ug/kg	34 U	38 U	39 U	45.8	77.3	37 U	36 U	37 U	36 U	38 U	40 U	34 U	38 U	409
PCBs																	
Aroclor 1016	1000	3200	ug/kg	35 U	38 U	39 U	37 U	36 U	36 U	36 U	37 U	35 U	37 U	35 U	36 U	38 U	35 U
Aroclor 1221	1000	3200	ug/kg	35 U	38 U	39 U	37 U	36 U	36 U	36 U	37 U	35 U	37 U	35 U	36 U	38 U	35 U
Aroclor 1232	1000	3200	ug/kg	35 U	38 U	39 U	37 U	36 U	36 U	36 U	37 U	35 U	37 U	35 U	36 U	38 U	35 U
Aroclor 1242	1000	3200	ug/kg	35 U	38 U	39 U	37 U	36 U	36 U	36 U	37 U	35 U	37 U	35 U	36 U	38 U	35 U
Aroclor 1248	1000	3200	ug/kg	35 U	38 U	39 U	37 U	36 U	36 U	36 U	37 U	35 U	37 U	35 U	36 U	38 U	35 U
Aroclor 1254	1000	3200	ug/kg	35 U	38 U	39 U	37 U	36 U	36 U	36 U	37 U	35 U	37 U	35 U	36 U	38 U	35 U
Aroclor 1260	1000	3200	ug/kg	35 U	38 U	39 U	37 U	36 U	36 U	36 U	37 U	35 U	37 U	35 U	36 U	38 U	35 U
Aroclor 1262	1000	3200	ug/kg	35 U	38 U	39 U	37 U	36 U	36 U	36 U	37 U	35 U	37 U	35 U	36 U	38 U	35 U
Aroclor 1268	1000	3200	ug/kg	35 U	38 U	39 U	37 U	36 U	36 U	36 U	37 U	35 U	37 U	35 U	36 U	38 U	35 U
Metals																	
Aluminum	NS	NS	mg/kg	7870	14400	18400	15700	7320	10400	10100	12100	10800	9810 J	10200 J	6460 J	13100 J	14000
Antimony	NS	NS	mg/kg	2.1 U	4.7 U	0.35 B	0.37 B	2.2 U	2.2 U	2.2 U	2.2 U	2.1 U	0.44 J	0.59 J	2.2 UJ	2.3 UJ	2.3 U
Arsenic	16	16	mg/kg	2 B	3.1	2.8	3.8	2.6	3	3.2	3	2.8	3.4	3.1	1.8 B	3	3.9
Barium	400	820	mg/kg	40.4	37.8	34.4	41.6	147	66.6	81.8	69.3	42.8	124	223	38.3	45.3	42.9
Beryllium	72	47	mg/kg	0.42	0.63	0.6	0.59	0.39	0.56	0.55	0.62	0.5	0.6	0.57	0.43	0.52	0.52
Cadmium	4.3	7.5	mg/kg	0.082 B	0.59 U	0.21 B	0.27 B	0.15 B	0.22 B	0.29 B	0.26 B	0.17 B	0.51 B	0.47 B	0.067 B	0.079 B	0.15 B
Calcium	NS	NS	mg/kg	2310	1530	817	1390	1640	2070	2480	3030	2260	2450	2450	2930	1250	2800
Chromium	NS	NS	mg/kg	10	30.9	13.8	14.4	11	16.2	16.8	15.6	16	15.4	18.7	10.9	16.6	13.1
Cobalt	NS	NS	mg/kg	5.8	9.2 B	5.8	6.9	5.1 B	6.9	6.8	7.1	6.3	6.6	7.2	6	6.2	6.7
Copper	270	1720	mg/kg	11.2	16.4	10	14	10.8	13.1	14.6	15	14.3	21.2	21	12.8	9.5	22
Iron	NS	NS	mg/kg	12900	21900	19600	17100	13900	18000	19000	20400	17600	21400	17900	14600	17000	16800
Lead	400	450	mg/kg	16.5	5.4	6.1	18.9	8.5	7.5 J	27.4 J	12.8	8.4	57.7	75.1	3.9	7.4	34.6
Magnesium	NS	NS	mg/kg	2830	3850	2290	2410	2060	3070	3230	4450	2850	3010	2900	2520 J	2860 J	2430
Manganese	2000	2000	mg/kg	152	177	78.8	181	192	267	287	237	276	223	223	165	153	200
Mercury	NS	NS	mg/kg	0.031 UB	0.03 B	0.047 UB	0.056	0.035 UB	0.0096 B	0.012 B	0.011 B	0.019 B	0.0087 B	0.024 B	0.036 UB	0.027 B	0.072
Nickel	310	130	mg/kg	7.3	18	9.8	11	8.5	11.9	11.6	13.6	10.9	12.8	11.9	6.8	8.5	10.9
Potassium	NS	NS	mg/kg	1160	776 B	562 B	895 B	1120	1160	1230	1540	1080 B	1190	1270	1260	1480	799 B
Selenium	180	4	mg/kg	2.1 U	2.4 U	2.2 U	2.3 U	0.58 B	2.2 U	2.2 U	2.2 U	2.1 U	0.41 B	0.45 B	2.2 U	2.3 U	0.31 B
Silver	180	8.3	mg/kg	0.51 U	0.38 B	0.53 B	0.42 B	0.75	0.54 U	0.54 U	0.54 U	0.54 U	0.48 B	0.31 B	0.56 U	0.56 U	0.58 U
Sodium	NS	NS	mg/kg	162 B	222 B	71.7 B	136 B	116 B	197 B	222 B	211 B	174 B	162 B	204 B	203 B	119 B	204 B
Thallium	NS	NS	mg/kg	0.56 B	0.85 B	1.1 U	1.1 U	0.24 B	0.24 B	1.1 U	0.54 B	0.36 B	1.1 U	1.2 U	0.71 B	0.96 B	1.2 U
Vanadium	NS	NS	mg/kg	20.1	44.3	31.9	27.2	20	26.7	27.3	30.6	26	24.4	23.9	21.7	25.6	29.3
Zinc	10000	2480	mg/kg	22	20.5	30.5	38.2	160	39.1	54.9	42.5	31.9	160 J	83.7 J	20.6	25.6	50.5
General Chemistry																	
Percent Solids			%	94.3	87.7	85.6	88.4	90.8	89.4	90.2	88.6	91.6	86.6	82.6	91	87.9	86

Notes		
NS	No standard	
NA	Not analyzed	
R	Rejected Result	
B	Indicates an estimated value between the instrument detection limit and the Reporting Limit (RL).	
E	Serial dilution results not within 10%. Applicable only if analyte concentration is at least 50X the IDL in original sample.	
J/JN	Indicates an estimated value.	
UB	The compound was analyzed for but not detected. The associated value is the compound quantitation limit.	
Shade	Exceeds NYSDEC Table 375-6: Restricted Residential Use Soil Cleanup Objective	
Bold	Exceeds NYSDEC Table 375-6: Protection of Groundwater Soil Cleanup Objective	

Table 8. Confirmatory Soil Sample Results Area A
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Location: ID	TABLE 375-6: RESTRIC. RES. USE SCO	TABLE 375-6: PROTECTION OF GW SCO		PE-A-D3	PE-A-D4A	PE-A-D5	PE-A-D6	PE-A-D7	PE-A-D8	PE-A-D9	PE-A-D10	PE-A-D11	PE-A-E2	PE-A-E3	PE-A-E4	PE-A-E5	PE-A-E6A
Sample Depth:				7.5-8	6.5-7	4-4.5	6-6.5	5.5-6	2.5-3	4-4.5	4.5-5	2-2.5	9-9.5	7-7.5	5.5-6	5-5.5	3-3.5
Date Collected:			Units	10/29/2015	11/6/2015	10/29/2015	11/2/2015	11/3/2015	11/2/2015	10/13/2015	9/29/2015	9/29/2015	10/27/2015	10/27/2015	10/30/2015	10/29/2015	10/22/2015
VOCs																	
1,1,1-Trichloroethane	100000	680	ug/kg	1.7 U	NA	1.7 U	1.8 U	1.9 U	1.7 U	2.1 U	1.9 U	2.3 U	2 U	1.9 U	1.8 U	1.6 U	NA
1,1,2,2-Tetrachloroethane	NS	NS	ug/kg	1.7 U	NA	1.7 U	1.8 U	1.9 U	1.7 U	2.1 U	1.9 U	2.3 U	2 U	1.9 U	1.8 U	1.6 U	NA
1,1,2-trichloro-1,2,2-trifluoroethane	NS	NS	ug/kg	4.4 U	NA	4.3 U	4.6 U	4.7 U	4.4 U	5.2 U	4.9 U	5.7 U	5.1 U	4.7 U	4.5 U	4.1 U	NA
1,1,2-Trichloroethane	NS	NS	ug/kg	1.7 U	NA	1.7 U	1.8 U	1.9 U	1.7 U	2.1 UJ	1.9 U	2.3 U	2 U	1.9 U	1.8 U	1.6 U	NA
1,1-Dichloroethane	26000	270	ug/kg	0.87 U	NA	0.86 U	0.91 U	0.95 U	0.87 U	1 U	0.97 U	1.1 U	1 U	0.94 U	0.9 U	0.81 U	NA
1,1-Dichloroethene	100000	330	ug/kg	0.87 U	NA	0.86 U	0.91 U	0.95 U	0.87 U	1 U	0.97 U	1.1 U	1 U	0.94 U	0.9 U	0.81 U	NA
1,2,4-Trichlorobenzene	NS	NS	ug/kg	4.4 U	NA	4.3 U	4.6 U	4.7 U	4.4 U	5.2 U	4.9 U	5.7 U	5.1 U	4.7 U	4.5 U	4.1 U	NA
1,2-Dibromo-3-chloropropane	NS	NS	ug/kg	1.7 U	NA	1.7 U	1.8 U	1.9 U	1.7 U	2.1 U	1.9 U	2.3 U	2 U	1.9 U	1.8 U	1.6 U	NA
1,2-Dibromoethane	NS	NS	ug/kg	0.87 U	NA	0.86 U	0.91 U	0.95 U	0.87 U	1 U	0.97 U	1.1 U	1 U	0.94 U	0.9 U	0.81 U	NA
1,2-Dichlorobenzene	100000	1100	ug/kg	0.87 U	NA	0.86 U	0.91 U	0.95 U	0.87 U	1 U	0.97 U	1.1 U	1 U	0.94 U	0.9 U	0.81 U	NA
1,2-Dichloroethane	3100	20	ug/kg	0.87 U	NA	0.86 U	0.91 U	0.95 U	0.87 U	1 U	0.97 U	1.1 U	1 U	0.94 U	0.9 U	0.81 U	NA
1,2-Dichloropropane	NS	NS	ug/kg	1.7 U	NA	1.7 U	1.8 U	1.9 U	1.7 U	2.1 U	1.9 U	2.3 U	2 U	1.9 U	1.8 U	1.6 U	NA
1,3-Dichlorobenzene	49000	2400	ug/kg	0.87 U	NA	0.86 U	0.91 U	0.95 U	0.87 U	1 U	0.97 U	1.1 U	1 U	0.94 U	0.9 U	0.81 U	NA
1,4-Dichlorobenzene	13000	1800	ug/kg	0.87 U	NA	0.86 U	0.91 U	0.95 U	0.87 U	1 U	0.97 U	1.1 U	1 U	0.94 U	0.9 U	0.81 U	NA
2-Butanone (MEK)	100000	120	ug/kg	8.7 U	NA	8.6 U	9.1 U	9.5 U	8.7 U	10 U	9.7 U	11 U	19.2	9.4 U	9 U	8.1 U	NA
4-Methyl-2-Pentanone	NS	NS	ug/kg	1 J	NA	4.3 U	4.6 U	4.7 U	4.4 U	5.2 UJ	4.9 U	5.7 U	28	9.4	4.5 U	4.1 U	NA
Acetone	100000	50	ug/kg	15.1	NA	6.3 J	9.1 U	9.5 U	8.7 U	10 U	5 J	11 U	131	49.6	5.2 J	19.3	NA
Benzene	4800	60	ug/kg	0.44 U	NA	0.43 U	0.46 U	0.47 U	0.44 U	0.52 U	0.49 U	0.57 U	0.51 U	0.47 U	0.45 U	0.41 U	NA
Bromodichloromethane	NS	NS	ug/kg	1.7 U	NA	1.7 U	1.8 U	1.9 U	1.7 U	2.1 U	1.9 U	2.3 U	2 U	1.9 U	1.8 U	1.6 U	NA
Bromoform	NS	NS	ug/kg	4.4 U	NA	4.3 U	4.6 U	4.7 U	4.4 U	5.2 U	4.9 U	5.7 U	5.1 U	4.7 U	4.5 U	4.1 U	NA
Bromomethane	NS	NS	ug/kg	4.4 U	NA	4.3 U	4.6 U	4.7 U	4.4 U	5.2 U	4.9 U	5.7 U	5.1 U	4.7 U	4.5 U	4.1 U	NA
Carbon Disulfide	NS	NS	ug/kg	0.23 JN	NA	1.7 U	1.8 U	1.9 U	1.7 U	2.1 U	1.9 U	2.3 U	2 U	1.9 U	1.8 U	1.6 U	NA
Carbon Tetrachloride	2400	760	ug/kg	1.7 U	NA	1.7 U	1.8 U	1.9 U	1.7 U	2.1 U	1.9 U	2.3 U	2 U	1.9 U	1.8 U	1.6 U	NA
CFC-11	NS	NS	ug/kg	4.4 U	NA	4.3 U	4.6 U	4.7 U	4.4 U	5.2 U	4.9 U	5.7 U	5.1 U	4.7 U	4.5 U	4.1 U	NA
CFC-12	NS	NS	ug/kg	4.4 U	NA	4.3 U	4.6 U	4.7 U	4.4 U	5.2 U	4.9 U	5.7 U	5.1 U	4.7 U	4.5 U	4.1 UJ	NA
Chlorobenzene	100000	1100	ug/kg	1.7 U	NA	1.7 U	1.8 U	1.9 U	1.7 U	2.1 U	1.9 U	2.3 U	2 U	1.9 U	1.8 U	1.6 U	NA
Chlorodibromomethane	NS	NS	ug/kg	1.7 U	NA	1.7 U	1.8 U	1.9 U	1.7 U	2.1 U	1.9 U	2.3 U	2 U	1.9 U	1.8 U	1.6 U	NA
Chloroethane	NS	NS	ug/kg	4.4 U	NA	4.3 U	4.6 U	4.7 U	4.4 U	5.2 U	4.9 U	5.7 U	5.1 U	4.7 U	4.5 U	4.1 U	NA
Chloroform	49000	370	ug/kg	1.7 U	NA	1.7 U	1.8 U	1.9 U	1.7 U	2.1 U	1.9 U	2.3 U	2 U	1.9 U	1.8 U	1.6 U	NA
Chloromethane	NS	NS	ug/kg	4.4 U	NA	4.3 U	4.6 U	4.7 U	4.4 U	5.2 U	4.9 U	5.7 U	5.1 U	4.7 U	4.5 U	4.1 U	NA
cis-1,2-Dichloroethene	100000	250	ug/kg	0.87 U	NA	0.86 U	0.91 U	0.95 U	0.87 U	1 U	0.97 U	1.1 U	1 U	0.94 U	0.9 U	0.81 U	NA
cis-1,3-Dichloropropene	NS	NS	ug/kg	1.7 U	NA	1.7 U	1.8 U	1.9 U	1.7 U	2.1 UJ	1.9 U	2.3 U	2 U	1.9 U	1.8 U	1.6 U	NA
Cyclohexane	NS	NS	ug/kg	1.7 U	NA	1.7 U	1.8 U	1.9 U	1.7 U	2.1 U	1.9 U	2.3 U	2 U	1.9 U	1.8 U	1.6 U	NA
Dichloromethane	NS	NS	ug/kg	4.4 U	NA	4.3 U	4.6 U	4.7 U	4.4 U	5.2 U	4.9 U	5.7 U	5.1 U	4.7 U	4.5 U	4.1 U	NA
Ethylbenzene	41000	1000	ug/kg	1.7	NA	0.86 U	0.15 J	0.95 U	0.87 U	1 U	0.97 U	1.1 U	1.3	3	0.9 U	0.81 U	NA
Isopropylbenzene	NS	NS	ug/kg	0.18 J	NA	1.7 U	1.8 U	1.9 U	1.7 U	2.1 U	1.9 U	2.3 U	2 U	0.46 J	1.8 U	1.6 U	NA
Methyl Acetate	NS	NS	ug/kg	4.4 U	NA	4.3 U	4.6 U	4.7 U	4.4 U	5.2 U	4.9 U	5.7 U	5.1 U	4.7 U	4.5 U	4.1 U	NA
Methyl N-Butyl Ketone (2-Hexanone)	NS	NS	ug/kg	4.4 U	NA	4.3 U	4.6 U	4.7 U	4.4 U	5.2 UJ	4.9 U	5.7 U	5.1 U	4.7 U	4.5 U	4.1 U	NA
Methylcyclohexane	NS	NS	ug/kg	1.7 U	NA	1.7 U	1.8 U	1.9 U	1.7 U	2.1 U	1.9 U	2.3 U	2 U	1.9 U	0.37 J	1.6 U	NA
Methyl-tert-butylether	100000	930	ug/kg	0.87 U	NA	0.86 U	0.91 U	0.95 U	0.87 U	1 U	0.97 U	1.1 U	1 U	0.94 U	0.9 U	0.81 U	NA
Styrene (Monomer)	NS	NS	ug/kg	1.7 U	NA	0.21 J	0.49 J	1.9 U	1.7 U	2.1 U	1.9 U	2.3 U	2 U	1.9 U	1.8 U	0.38 J	NA
Tetrachloroethene	19000	1300	ug/kg	1.7 U	NA	1.7 U	1.8 U	1.9 U	1.7 U	2.1 U	1.9 U	2.3 U	2 U	1.9 U	1.8 U	1.6 U	NA
Toluene	100000	700	ug/kg	0.87	NA	0.86 U	0.91 U	0.95 U	0.87 U	1 U	0.97 U	1.1 U	0.78 J	1.1	0.9 U	0.81 U	NA
Total Xylenes	100000	1600	ug/kg	17	NA	0.86 U	0.91 U	0.95 U	0.87 U	1 U	0.97 U	1.1 U	6.5	21.4	3.7	0.81 U	NA
trans-1,2-Dichloroethene	100000	190	ug/kg	0.87 U	NA	0.86 U	0.91 U	0.95 U	0.87 U	1 U	0.97 U	1.1 U	1 U	0.94 U	0.9 U	0.81 U	NA
trans-1,3-Dichloropropene	NS	NS	ug/kg	1.7 U	NA	1.7 U	1.8 U	1.9 U	1.7 U	2.1 UJ	1.9 U	2.3 U	2 U	1.9 U	1.8 U	1.6 U	NA
Trichloroethene	21000	470	ug/kg	0.87 U	NA	0.86 U	0.91 U	0.95 U	0.87 U	1 U	0.97 U	1.1 U	1 U	0.94 U	0.9 U	0.81 U	NA
Vinyl chloride	900	20	ug/kg	1.7 U	NA	1.7 U	1.8 U	1.9 U	1.7 U	2.1 U	1.9 U	2.3 U	2 U	1.9 U	1.8 U	1.6 U	NA

See Notes on Last Page

Table 8. Confirmatory Soil Sample Results Area A
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Location: ID	TABLE 375-6: RESTRIC. RES. USE SCO	TABLE 375-6: PROTECTION OF GW SCO		PE-A-D3	PE-A-D4A	PE-A-D5	PE-A-D6	PE-A-D7	PE-A-D8	PE-A-D9	PE-A-D10	PE-A-D11	PE-A-E2	PE-A-E3	PE-A-E4	PE-A-E5	PE-A-E6A
Sample Depth:				7.5-8	6.5-7	4-4.5	6-6.5	5.5-6	2.5-3	4-4.5	4.5-5	2-2.5	9-9.5	7-7.5	5.5-6	5-5.5	3-3.5
Date Collected:			Units	10/29/2015	11/6/2015	10/29/2015	11/2/2015	11/3/2015	11/2/2015	10/13/2015	9/29/2015	9/29/2015	10/27/2015	10/27/2015	10/30/2015	10/29/2015	10/22/2015
SVOCs																	
1,1-Biphenyl	NS	NS	ug/kg	15 J	NA	69 U	74 U	69 U	74 U	70 U	66 U	71 U	69 U	71 U	76 U	72 U	NA
2,2-Oxybis(1-Chloropropane)	NS	NS	ug/kg	74 U	NA	69 U	74 U	69 U	74 U	70 U	66 U	71 U	69 U	71 U	76 U	72 U	NA
2,4,5-Trichlorophenol	NS	NS	ug/kg	180 U	NA	170 U	190 U	170 U	190 U	170 U	170 U	180 U	170 U	180 U	190 U	180 U	NA
2,4,6-Trichlorophenol	NS	NS	ug/kg	180 U	NA	170 U	170 U	170 U	170 U	170 U	170 U	180 U	170 U	180 U	190 U	180 U	NA
2,4-Dichlorophenol	NS	NS	ug/kg	180 U	NA	170 U	190 U	170 U	190 U	170 U	170 U	180 U	170 U	180 U	190 U	180 U	NA
2,4-Dimethylphenol	NS	NS	ug/kg	180 U	NA	170 U	190 U	170 U	190 U	170 U	170 U	180 U	170 U	180 U	190 U	180 U	NA
2,4-Dinitrophenol	NS	NS	ug/kg	180 U	NA	170 U	190 U	170 UJ	190 U	170 U	170 U	180 U	170 U	180 U	190 U	180 U	NA
2,4-Dinitrotoluene	NS	NS	ug/kg	37 U	NA	35 U	37 U	34 UJ	37 U	35 U	33 U	36 U	35 U	36 U	38 U	36 U	NA
2,6-Dinitrotoluene	NS	NS	ug/kg	37 U	NA	35 U	37 U	34 U	37 U	35 U	33 U	36 U	35 U	36 U	38 U	36 U	NA
2-Chloronaphthalene	NS	NS	ug/kg	74 U	NA	69 U	74 U	69 U	74 U	70 U	66 U	71 U	69 U	71 U	76 U	72 U	NA
2-Chlorophenol	NS	NS	ug/kg	74 U	NA	69 U	74 U	69 U	74 U	70 U	66 U	71 U	69 U	71 U	76 U	72 U	NA
2-Methyl-4,6-dinitrophenol	NS	NS	ug/kg	180 U	NA	170 U	190 U	170 U	190 U	170 U	170 U	180 U	170 U	180 U	190 U	180 U	NA
2-Methylnaphthalene	NS	NS	ug/kg	114	NA	69 U	74 U	69 U	74 U	70 U	66 U	71 U	69 U	116	53.6 J	72 U	NA
2-Methylphenol	NS	NS	ug/kg	74 U	NA	69 U	74 U	69 U	74 U	70 U	66 U	71 U	69 U	71 U	76 U	72 U	NA
2-Nitroaniline	NS	NS	ug/kg	180 U	NA	170 U	190 U	170 U	190 U	170 UJ	170 U	180 U	170 U	180 U	190 U	180 U	NA
2-Nitrophenol	NS	NS	ug/kg	180 U	NA	170 U	190 U	170 U	190 U	170 U	170 U	180 U	170 U	180 U	190 U	180 U	NA
3,3-Dichlorobenzidine	NS	NS	ug/kg	74 U	NA	69 U	74 U	69 U	74 U	70 U	66 U	71 U	69 U	71 U	76 U	72 U	NA
3-Methylphenol, 4-Methylphenol	NS	NS	ug/kg	74 U	NA	69 U	74 U	69 U	74 U	70 U	66 U	71 U	69 U	71 U	76 U	72 U	NA
3-Nitroaniline	NS	NS	ug/kg	180 U	NA	170 U	190 U	170 U	190 U	170 U	170 U	180 U	170 U	180 U	190 U	180 U	NA
4-Bromophenyl phenyl ether	NS	NS	ug/kg	74 U	NA	69 U	74 U	69 U	74 U	70 U	66 U	71 U	69 U	71 U	76 U	72 U	NA
4-Chloro-3-Methylphenol	NS	NS	ug/kg	180 U	NA	170 U	190 U	170 U	190 U	170 U	170 U	180 U	170 U	180 U	190 U	180 U	NA
4-Chlorophenyl phenyl ether	NS	NS	ug/kg	74 U	NA	69 U	74 U	69 U	74 U	70 U	66 U	71 U	69 U	71 U	76 U	72 U	NA
4-Nitroaniline	NS	NS	ug/kg	180 UJ	NA	170 U	190 U	170 U	190 U	170 U	170 U	180 U	170 UJ	180 U	190 U	180 U	NA
4-Nitrophenol	NS	NS	ug/kg	370 U	NA	350 U	370 U	340 U	370 U	350 UJ	330 U	360 U	350 U	360 U	380 U	360 UJ	NA
Acenaphthene	100000	98000	ug/kg	37 U	NA	35 U	37 U	34 U	37 U	35 U	33 U	36 U	35 U	36 U	38 U	36 U	36 U
Acenaphthylene	100000	107000	ug/kg	37 U	NA	17.6 J	37 U	34 U	37 U	35 U	33 U	36 U	35 U	36 U	38 U	36 U	36 U
Acetophenone	NS	NS	ug/kg	180 U	NA	170 U	190 U	170 U	190 U	170 U	170 U	180 U	170 U	180 U	190 U	180 U	NA
Anthracene	100000	1000000	ug/kg	37 U	NA	35 U	37 U	34 U	37 U	35 U	33 U	36 U	35 U	36 U	38 U	36 U	36 U
Atrazine	NS	NS	ug/kg	74 U	NA	69 U	74 UJ	69 U	74 U	70 U	66 U	71 U	69 U	71 U	76 U	72 U	NA
Benzaldehyde	NS	NS	ug/kg	180 U	NA	170 U	190 U	170 U	190 U	170 U	170 U	180 U	170 U	180 U	190 U	180 U	NA
Benzo(a)anthracene	1000	1000	ug/kg	14.9 J	NA	35 U	37 U	34 U	37 U	35 U	33 U	36 U	35 U	36 U	38 U	36 U	36 U
Benzo(a)pyrene	1000	22000	ug/kg	37 U	NA	35 U	37 U	34 U	37 U	35 U	33 U	36 U	35 U	36 U	38 U	36 U	36 U
Benzo(b)fluoranthene	1000	1700	ug/kg	37 U	NA	35 U	37 U	34 U	37 U	35 U	33 U	36 U	35 U	36 U	38 U	36 U	36 U
Benzo(g,h,i)perylene	100000	1000000	ug/kg	37 U	NA	35 U	37 U	34 U	37 U	35 U	33 U	36 U	35 U	36 U	38 U	36 U	36 U
Benzo(k)fluoranthene	3900	1700	ug/kg	37 U	NA	35 U	37 U	34 U	37 U	35 U	33 U	36 U	35 U	36 U	38 U	36 U	36 U
bis(2-Chloroethoxy)methane	NS	NS	ug/kg	74 U	NA	69 U	74 U	69 U	74 U	70 U	66 U	71 U	69 U	71 U	76 U	72 U	NA
bis(2-Chloroethyl)ether	NS	NS	ug/kg	74 U	NA	69 U	74 U	69 U	74 U	70 U	66 U	71 U	69 U	71 U	76 U	72 U	NA
bis(2-Ethylhexyl)phthalate	NS	NS	ug/kg	70.2 J	NA	69 U	74 UJ	69 U	74 U	70 UJ	66 U	71 U	69 U	124	41.3 J	72 U	NA
Butyl benzyl phthalate	NS	NS	ug/kg	74 U	NA	69 U	74 U	69 U	74 U	70 UJ	66 U	71 U	69 U	71 U	76 U	72 U	NA
Caprolactam	NS	NS	ug/kg	74 UJ	NA	69 UJ	74 U	69 U	74 U	70 U	66 U	71 U	69 UJ	71 U	76 U	72 U	NA
Carbazole	NS	NS	ug/kg	74 U	NA	69 U	74 U	69 U	74 U	70 U	66 U	71 U	69 U	71 U	76 U	72 U	NA
Chrysene	3900	1000	ug/kg	14.8 J	NA	35 U	37 U	34 U	37 U	35 U	33 U	36 U	35 U	36 U	38 U	36 U	36 U
Dibenzo(a,h)anthracene	330	1000000	ug/kg	37 U	NA	35 U	37 U	34 U	37 U	35 U	33 U	36 U	35 U	36 U	38 U	36 U	36 U
Dibenzofuran	NS	NS	ug/kg	74 U	NA	69 U	74 U	69 U	74 U	70 U	66 U	71 U	69 U	71 U	76 U	72 U	NA
Diethyl phthalate	NS	NS	ug/kg	74 U	NA	69 U	74 U	69 U	74 U	70 U	66 U	71 U	69 U	71 U	76 U	72 U	NA
Dimethyl phthalate	NS	NS	ug/kg	74 U	NA	69 U	74 U	69 U	74 U	70 U	66 U	71 U	69 U	71 U	76 U	72 U	NA
Di-n-butyl phthalate	NS	NS	ug/kg	74 U	NA	69 U	74 U	69 U	74 U	70 U	66 U	71 U	69 U	71 U	76 U	72 U	NA
Di-n-octyl phthalate	NS	NS	ug/kg	74 U	NA	69 U	74 UJ	69 UJ	74 U	70 UJ	66 U	71 U	69 U	71 U	76 U	72 U	NA
Fluoranthene	100000	1000000	ug/kg	20.2 J	NA	35 U	37 U	34 U	37 U	35 U	33 U	36 U	35 U	47.3	38 U	36 U	36 U
Fluorene	100000	386000	ug/kg	37 U	NA	35 U	37 U	34 U	37 U	35 U	33 U	36 U	35 U	36 U	38 U	36 U	36 U
Hexachloro-1,3-butadiene	NS	NS	ug/kg	37 U	NA	35 U	37 U	34 U	37 U	35 U	33 U	36 U	35 U	36 U	38 U	36 UJ	NA
Hexachlorobenzene	NS	NS	ug/kg	74 U	NA	69 U	74 U	69 U	74 U	70 U	66 U	71 U	69 U	71 UJ	76 U	72 U	NA

See Notes on Last Page

Table 8. Confirmatory Soil Sample Results Area A
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Location: ID	TABLE 375-6: RESTRIC. RES. USE SCO	TABLE 375-6: PROTECTION OF GW SCO		PE-A-D3	PE-A-D4A	PE-A-D5	PE-A-D6	PE-A-D7	PE-A-D8	PE-A-D9	PE-A-D10	PE-A-D11	PE-A-E2	PE-A-E3	PE-A-E4	PE-A-E5	PE-A-E6A
Sample Depth:				7.5-8	6.5-7	4-4.5	6-6.5	5.5-6	2.5-3	4-4.5	4.5-5	2-2.5	9-9.5	7-7.5	5.5-6	5-5.5	3-3.5
Date Collected:			Units	10/29/2015	11/6/2015	10/29/2015	11/2/2015	11/3/2015	11/2/2015	10/13/2015	9/29/2015	9/29/2015	10/27/2015	10/27/2015	10/30/2015	10/29/2015	10/22/2015
SVOCs cont.																	
Hexachlorocyclopentadiene	NS	NS	ug/kg	370 U	NA	350 U	370 U	340 U	370 U	350 U	330 U	360 U	350 U	360 U	380 U	360 U	NA
Hexachloroethane	NS	NS	ug/kg	180 U	NA	170 U	190 U	170 U	190 U	170 U	170 U	180 U	170 U	180 U	190 U	180 U	NA
Indeno(1,2,3-cd)pyrene	500	8200	ug/kg	37 U	NA	35 U	37 U	34 U	37 U	35 U	33 U	36 U	35 U	23.9 J	38 U	36 U	36 U
Isophorone	NS	NS	ug/kg	74 U	NA	69 U	74 U	69 U	74 U	74 U	66 U	71 U	69 U	71 U	76 U	72 U	NA
Naphthalene	100000	12000	ug/kg	537	NA	35 U	37 U	34 U	37 U	35 U	33 U	36 U	19.2 J	411	139	36 U	36 U
Nitrobenzene	NS	NS	ug/kg	74 U	NA	69 U	74 U	69 U	74 U	70 U	66 U	71 U	69 U	71 U	76 U	72 U	NA
n-Nitrosodi-n-propylamine	NS	NS	ug/kg	74 U	NA	69 U	74 U	69 U	74 U	70 UJ	66 U	71 U	69 U	71 U	76 U	72 U	NA
N-nitrosodiphenylamine	NS	NS	ug/kg	180 U	NA	170 U	190 U	170 U	190 U	170 U	170 U	180 U	170 U	180 U	190 U	180 U	NA
p-Chloroaniline	NS	NS	ug/kg	180 U	NA	170 U	190 U	170 U	190 U	170 U	170 U	180 U	170 U	180 U	190 U	180 U	NA
Pentachlorophenol	6700	800	ug/kg	180 U	NA	170 U	190 U	170 U	190 U	170 U	170 U	180 U	170 U	180 U	190 U	180 U	NA
Phenanthrene	100000	1000000	ug/kg	20.2 J	NA	35 U	37 U	35 U	37 U	35 U	33 U	36 U	35 U	35.1 J	38 U	36 U	36 U
Phenol	100000	330	ug/kg	74 U	NA	69 U	74 U	69 U	74 U	70 U	66 U	71 U	69 U	71 U	76 U	72 U	NA
Pyrene	100000	1000000	ug/kg	20.9 J	NA	35 U	37 U	34 U	37 U	35 U	33 U	36 U	35 U	45.4	38 U	36 U	36 U
PCBs																	
Aroclor 1016	1000	3200	ug/kg	38 U	NA	33 U	37 U	32 U	36 U	35 U	35 U	37 U	33 U	34 U	37 U	35 U	NA
Aroclor 1221	1000	3200	ug/kg	38 U	NA	33 U	37 U	32 U	36 U	35 U	35 U	37 U	33 U	34 U	37 U	35 U	NA
Aroclor 1232	1000	3200	ug/kg	38 U	NA	33 U	37 U	32 U	36 U	35 U	35 U	37 U	33 U	34 U	37 U	35 U	NA
Aroclor 1242	1000	3200	ug/kg	38 U	NA	33 U	37 U	32 U	36 U	35 U	35 U	37 U	33 U	34 U	37 U	35 U	NA
Aroclor 1248	1000	3200	ug/kg	38 U	NA	33 U	37 U	32 U	36 U	35 U	35 U	37 U	33 U	34 U	37 U	35 U	NA
Aroclor 1254	1000	3200	ug/kg	38 U	NA	33 U	37 U	32 U	36 U	35 U	35 U	37 U	33 U	34 U	37 U	35 U	NA
Aroclor 1260	1000	3200	ug/kg	38 U	NA	33 U	37 U	32 U	36 U	35 U	35 U	37 U	33 U	34 U	37 U	35 U	NA
Aroclor 1262	1000	3200	ug/kg	38 U	NA	33 U	37 U	32 U	36 U	35 U	35 U	37 U	33 U	34 U	37 U	35 U	NA
Aroclor 1268	1000	3200	ug/kg	38 U	NA	33 U	37 U	32 U	36 U	35 U	35 U	37 U	33 U	34 U	37 U	35 U	NA
Metals																	
Aluminum	NS	NS	mg/kg	10400	7270 J	8670	9820	7550 J	9260	7880	6610 J	18500 J	9370 J	8730	7150	9420	NA
Antimony	NS	NS	mg/kg	2.4 U	2.2 UJ	2.2 U	2.2 U	2.1 UJ	2.2 U	2.1 U	2.1 UJ	2.3 UJ	2.1 UJ	0.95 B	0.48 B	2.1 U	NA
Arsenic	16	16	mg/kg	3.6	2.7	2.9	2.4	2.5	2.9	3.3	1.9 B	3.4	2.3	3.1	2.5	3.3	NA
Barium	400	820	mg/kg	46.8	28.7	36.9	56.4	33.1	40.8	31.3	39.2	40.8	37.9	213	84	48.5	NA
Beryllium	72	47	mg/kg	0.67	0.41 J	0.5	0.56	0.43	0.5	0.38	0.43	0.66	0.55	0.42	0.41	0.51	NA
Cadmium	4.3	7.5	mg/kg	0.12 B	0.12 B	0.076 B	0.18 B	0.54 UB	0.18 B	0.062 B	0.064 B	0.1 B	0.085 B	0.54 U	0.14 B	0.074 B	NA
Calcium	NS	NS	mg/kg	1970	2300 J	3170	2980	2550	3290	2310	3880	777	2170 J	3130	3120	4490	NA
Chromium	NS	NS	mg/kg	17.1	13.7	15.1	13.8	13.1	19.2	12.5	11.9	19.8	13.5	14.9	13.3	14.9	NA
Cobalt	NS	NS	mg/kg	7.7	7.2	7.7	6.6	6.7	8.1	6	5.4	7.9	8.3	7.4	7	8.1	NA
Copper	270	1720	mg/kg	14.2	13.2	13.1	13.7	13.3	15.5	11	10.2	12	15.3	13.3	14.1	17.4	NA
Iron	NS	NS	mg/kg	19000	17400	18300	18400	16900	19700	15000	13500	18600	18600	18100	15800	21300	NA
Lead	400	450	mg/kg	8.1	3.3	4.1	5	5.5	4.7	4.7	3.6	6.9	7.5	37.8	29	3.9	NA
Magnesium	NS	NS	mg/kg	3000	2760 J	3140	3570	2510	3460	2360	2890 J	2560 J	3060	2980	2960	3330	NA
Manganese	2000	2000	mg/kg	391	193	241	348	271	303	238	232	139	479 J	464	348	309	NA
Mercury	NS	NS	mg/kg	0.037 UB	0.036 UB	0.035 UB	0.008 B	0.0022 B	0.0084 B	0.015 B	0.033 UB	0.034 B	0.034 UB	0.015 B	0.0023 B	0.036 UB	NA
Nickel	310	130	mg/kg	12.6	12	11.4	10.9	11.4	14	8.8	7.9	12	13.2	12.5	11.3	12.3	NA
Potassium	NS	NS	mg/kg	1230	953 B	1220	1900	995 B	1390	921 B	1420	672 B	933 B	1350	1180	1500	NA
Selenium	180	4	mg/kg	0.56 B	2.2 U	0.34 B	2.2 U	0.34 B	2.1 U	2.1 U	2.1 U	2.3 U	0.46 B	2.2 U	0.41 B	2.1 U	NA
Silver	180	8.3	mg/kg	0.94	0.55 U	0.84	0.55 U	0.32 B	0.54 U	0.3 B	0.53 U	0.57 U	0.22 B	0.54 U	0.5 B	0.87	NA
Sodium	NS	NS	mg/kg	198 B	148 B	186 B	215 B	180 B	223 B	153 B	151 B	102 B	569 BJ	479 B	293 B	309 B	NA
Thallium	NS	NS	mg/kg	1.2 U	1.1 UB	1.1 U	0.28 B	1.1 U	0.23 B	1 U	0.81 B	0.33 B	1.1 U	1.1 U	1.1 U	1.1 U	NA
Vanadium	NS	NS	mg/kg	29.6	23.5	26.3	22.9	24	28.2	21	18.8	29.7	32.2	23.9	23.6	28.2	NA
Zinc	10000	2480	mg/kg	29.2	24.2	26.8	28.8	29.1 J	29.2	29.8	19.5	25.1	35.9	45.6	35.3	28.3	NA
General Chemistry																	
Percent Solids			%	86.8	87.7	90.6	88.6	92.5	89.6	93.5	93.4	89.8	92.1	93.8	85.8	90.4	92.2
Notes																	
NS	No standard																
NA	Not analyzed																
R	Rejected Result																
B	Indicates an estimated value between the instrument detection limit and the Reporting Limit (RL).																
E	Serial dilution results not within 10%. Applicable only if analyte concentration is at least 50X the IDL in original sample.																
J/JN	Indicates an estimated value.																
UB	The compound was analyzed for but not detected. The associated value is the compound quantitation limit.																
Shade	Exceeds NYSDEC Table 375-6: Restricted Residential Use Soil Cleanup Objective																
Bold	Exceeds NYSDEC Table 375-6: Protection of Groundwater Soil Cleanup Objective																

Table 8. Confirmatory Soil Sample Results Area A
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Location: ID	TABLE 375-6: RESTRIC. RES. USE SCO	TABLE 375-6: PROTECTION OF GW SCO		PE-A-E7	PE-A-E8	PE-A-E9	PE-A-E10	PE-A-E10	PE-A-F2	PE-A-F3	PE-A-F6	PE-A-S1	PE-A-S2	PE-A-S3	PE-A-S4	PE-A-S5	PE-A-S7
Sample Depth:				2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	6.5-7	5.5-6	2-2.5	1-1.5	1-1.5	1-1.5	2-2.5	1-1.5	1-1.5
Date Collected:			Units	10/15/2015	10/13/2015	10/15/2015	9/29/2015	9/29/2015	10/30/2015	10/30/2015	10/15/2015	9/22/2015	9/23/2015	9/28/2015	9/28/2015	10/13/2015	10/16/2015
VOCs																	
1,1,1-Trichloroethane	100000	680	ug/kg	2 U	1.8 U	1.9 U	2.1 U	1.9 U	1.7 U	1.6 U	1.9 U	1.7 U	2.3 U	2.5 U	2.1 U	4.2 U	2 U
1,1,2,2-Tetrachloroethane	NS	NS	ug/kg	2 U	1.8 U	1.9 U	2.1 U	1.9 U	1.7 U	1.6 U	1.9 U	1.7 U	2.3 U	2.5 U	2.1 U	4.2 U	2 U
1,1,2-trichloro-1,2,2-trifluoroethane	NS	NS	ug/kg	5.1 U	4.4 U	4.8 U	5.2 U	4.7 U	4.2 U	4.1 U	4.8 U	4.2 U	5.7 U	6.2 U	5.3 U	10 U	5.1 U
1,1,2-Trichloroethane	NS	NS	ug/kg	2 U	1.8 UJ	1.9 U	2.1 U	1.9 U	1.7 U	1.6 U	1.9 U	1.7 U	2.3 U	2.5 U	2.1 U	4.2 U	2 U
1,1-Dichloroethane	26000	270	ug/kg	1 U	0.88 U	0.95 U	1 U	0.94 U	0.85 U	0.82 U	0.96 U	0.84 U	1.1 U	1.2 U	1.1 U	2.1 U	1 U
1,1-Dichloroethene	100000	330	ug/kg	1 U	0.88 U	0.95 U	1 U	0.94 U	0.85 U	0.82 U	0.96 U	0.84 U	1.1 U	1.2 U	1.1 U	2.1 U	1 U
1,2,4-Trichlorobenzene	NS	NS	ug/kg	5.1 U	4.4 U	4.8 U	5.2 U	4.7 U	4.2 U	4.1 U	4.8 U	0.19 J	5.7 U	6.2 U	5.3 U	10 U	5.1 U
1,2-Dibromo-3-chloropropane	NS	NS	ug/kg	2 U	1.8 U	1.9 U	2.1 U	1.9 U	1.7 U	1.6 U	1.9 U	1.7 U	2.3 U	2.5 U	2.1 U	4.2 U	2 U
1,2-Dibromoethane	NS	NS	ug/kg	1 U	0.88 U	0.95 U	1 U	0.94 U	0.85 U	0.82 U	0.96 U	0.84 U	1.1 U	1.2 U	1.1 U	2.1 U	1 U
1,2-Dichlorobenzene	100000	1100	ug/kg	1 U	0.88 U	0.95 U	1 U	0.94 U	0.85 U	0.82 U	0.96 U	0.84 U	1.1 U	1.2 U	1.1 U	2.1 U	1 U
1,2-Dichloroethane	3100	20	ug/kg	1 U	0.88 U	0.95 U	1 U	0.94 U	0.85 U	0.82 U	0.96 U	0.84 U	1.1 U	1.2 U	1.1 U	2.1 U	1 U
1,2-Dichloropropane	NS	NS	ug/kg	2 U	1.8 U	1.9 U	2.1 U	1.9 U	1.7 U	1.6 U	1.9 U	1.7 U	2.3 U	2.5 U	2.1 U	4.2 U	2 U
1,3-Dichlorobenzene	49000	2400	ug/kg	1 U	0.88 U	0.95 U	1 U	0.94 U	0.85 U	0.82 U	0.96 U	0.84 U	1.1 U	1.2 U	1.1 U	2.1 U	1 U
1,4-Dichlorobenzene	13000	1800	ug/kg	1 U	0.88 U	0.95 U	1 U	0.94 U	0.85 U	0.82 U	0.96 U	0.84 U	1.1 U	1.2 U	1.1 U	2.1 U	1 U
2-Butanone (MEK)	100000	120	ug/kg	10 U	8.8 U	9.5 U	10 U	9.4 U	8.5 U	8.2 U	9.6 U	8.4 U	11 U	12 U	11 U	21 U	10 U
4-Methyl-2-Pentanone	NS	NS	ug/kg	5.1 U	4.4 UJ	4.8 U	5.2 U	4.7 U	4.2 U	4.1 U	4.8 U	4.2 U	5.7 U	6.2 U	5.3 U	10 U	5.1 U
Acetone	100000	50	ug/kg	10 U	8.8 U	9.5 U	10 U	9.4 U	8.5 U	8.2 U	9.6 U	8.4 UJ	11 U	10.3 J	11 U	64.4	10 U
Benzene	4800	60	ug/kg	0.51 U	0.44 U	0.48 U	0.52 U	0.47 U	0.42 U	0.41 U	0.48 U	0.42 U	0.57 U	0.62 U	0.53 U	1 U	0.51 U
Bromodichloromethane	NS	NS	ug/kg	2 U	1.8 U	1.9 U	2.1 U	1.9 U	1.7 U	1.6 U	1.9 U	1.7 U	2.3 U	2.5 U	2.1 U	4.2 U	2 U
Bromoform	NS	NS	ug/kg	5.1 UJ	4.4 U	4.8 UJ	5.2 U	4.7 U	4.2 U	4.1 U	4.8 UJ	4.2 U	5.7 U	6.2 U	5.3 U	10 U	5.1 U
Bromomethane	NS	NS	ug/kg	5.1 U	4.4 U	4.8 U	5.2 U	4.7 U	4.2 U	4.1 U	4.8 U	4.2 U	5.7 U	6.2 U	5.3 U	10 U	5.1 U
Carbon Disulfide	NS	NS	ug/kg	2 U	1.8 U	1.9 U	2.1 U	1.9 U	1.7 U	1.6 U	1.9 U	1.7 U	2.3 U	2.5 U	2.1 U	4.2 U	2 U
Carbon Tetrachloride	2400	760	ug/kg	2 U	1.8 U	1.9 U	2.1 U	1.9 U	1.7 U	1.6 U	1.9 U	1.7 U	2.3 U	2.5 U	2.1 U	4.2 U	2 U
CFC-11	NS	NS	ug/kg	5.1 U	4.4 U	4.8 U	5.2 U	4.7 U	4.2 U	4.1 U	4.8 U	4.2 U	5.7 U	6.2 U	5.3 U	10 U	5.1 U
CFC-12	NS	NS	ug/kg	5.1 U	4.4 U	4.8 U	5.2 U	4.7 U	4.2 U	4.1 U	4.8 U	4.2 UJ	5.7 U	6.2 U	5.3 U	10 U	5.1 U
Chlorobenzene	100000	1100	ug/kg	2 U	1.8 U	1.9 U	2.1 U	1.9 U	1.7 U	1.6 U	1.9 U	1.7 U	2.3 U	2.5 U	2.1 U	4.2 U	2 U
Chlorodibromomethane	NS	NS	ug/kg	2 UJ	1.8 U	1.9 UJ	2.1 U	1.9 U	1.7 U	1.6 U	1.9 UJ	1.7 U	2.3 U	2.5 U	2.1 U	4.2 U	2 U
Chloroethane	NS	NS	ug/kg	5.1 U	4.4 U	4.8 U	5.2 U	4.7 U	4.2 U	4.1 U	4.8 U	4.2 U	5.7 U	6.2 U	5.3 U	10 UJ	5.1 UJ
Chloroform	49000	370	ug/kg	2 U	1.8 U	1.9 U	2.1 U	1.9 U	1.7 U	1.6 U	1.9 U	1.7 U	2.3 U	2.5 U	2.1 U	4.2 U	2 U
Chloromethane	NS	NS	ug/kg	5.1 U	4.4 U	4.8 U	5.2 U	4.7 U	4.2 U	4.1 U	4.8 U	4.2 U	5.7 U	6.2 U	5.3 U	10 U	5.1 U
cis-1,2-Dichloroethene	100000	250	ug/kg	1 U	0.88 U	0.95 U	1 U	0.94 U	0.85 U	0.82 U	0.96 U	0.84 U	1.1 U	1.2 U	1.1 U	2.1 U	1 U
cis-1,3-Dichloropropene	NS	NS	ug/kg	2 U	1.8 UJ	1.9 U	2.1 U	1.9 U	1.7 U	1.6 U	1.9 U	1.7 U	2.3 U	2.5 U	2.1 U	4.2 U	2 U
Cyclohexane	NS	NS	ug/kg	2 U	1.8 U	1.9 U	2.1 U	1.9 U	1.7 U	1.6 U	1.9 U	1.7 U	2.3 U	2.5 U	2.1 U	4.2 U	2 U
Dichloromethane	NS	NS	ug/kg	5.1 U	4.4 U	4.8 U	5.2 U	4.7 U	4.2 U	4.1 U	4.8 U	4.2 U	5.7 U	6.2 U	5.3 U	10 U	5.1 U
Ethylbenzene	41000	1000	ug/kg	1 U	0.76 J	0.95 U	1 U	0.94 U	0.82 J	0.59 J	0.57 J	0.84 U	1.1 U	1.2 U	1.1 U	2.1 U	1 U
Isopropylbenzene	NS	NS	ug/kg	2 U	1.8 U	1.9 U	2.1 U	1.9 U	1.7 U	1.6 U	1.9 U	1.7 U	2.3 U	2.5 U	2.1 U	4.2 U	2 U
Methyl Acetate	NS	NS	ug/kg	5.1 U	4.4 U	4.8 U	5.2 U	4.7 U	4.2 U	4.1 U	4.8 U	4.2 U	5.7 U	6.2 U	5.3 U	10 U	5.1 U
Methyl N-Butyl Ketone (2-Hexanone)	NS	NS	ug/kg	5.1 UJ	4.4 UJ	4.8 U	5.2 U	4.7 U	4.2 U	4.1 U	4.8 U	4.2 U	5.7 U	6.2 U	5.3 U	10 UJ	5.1 U
Methylcyclohexane	NS	NS	ug/kg	2 U	1.8 U	1.9 U	2.1 U	1.9 U	1.7 U	1.6 U	1.9 U	1.7 U	2.3 U	2.5 U	2.1 U	4.2 U	2 U
Methyl-tert-butylether	100000	930	ug/kg	1 U	0.88 U	0.95 U	1 U	0.94 U	0.85 U	0.82 U	0.96 U	0.84 U	1.1 U	1.2 U	1.1 U	2.1 U	1 U
Styrene (Monomer)	NS	NS	ug/kg	2 U	2	1.9 U	2.1 U	1.9 U	0.26 J	0.66 J	1.4 J	1.7 U	2.3 U	2.5 U	2.1 U	4.2 U	0.48 J
Tetrachloroethene	19000	1300	ug/kg	2 U	1.8 U	1.9 U	2.1 U	1.9 U	1.7 U	1.6 U	1.9 U	1.7 U	2.3 U	2.5 U	2.1 U	4.2 U	2 U
Toluene	100000	700	ug/kg	1 U	0.88 U	0.95 U	1 U	0.94 U	0.85 U	0.17 J	0.32 J	0.84 U	1.1 U	1.2 U	1.1 U	2.1 U	1 U
Total Xylenes	100000	1600	ug/kg	1 U	0.88 U	0.95 U	1 U	0.94 U	2.1	4.6	0.96 U	0.84 U	1.1 U	1.2 U	1.1 U	2.1 U	1 U
trans-1,2-Dichloroethene	100000	190	ug/kg	1 U	0.88 U	0.95 U	1 U	0.94 U	0.85 U	0.82 U	0.96 U	0.84 U	1.1 U	1.2 U	1.1 U	2.1 U	1 U
trans-1,3-Dichloropropene	NS	NS	ug/kg	2 U	1.8 UJ	1.9 U	2.1 U	1.9 U	1.7 U	1.6 U	1.9 U	1.7 U	2.3 U	2.5 U	2.1 U	4.2 U	2 U
Trichloroethene	21000	470	ug/kg	1 U	0.88 U	0.95 U	1 U	0.94 U	0.85 U	0.82 U	0.96 U	0.84 U	1.1 U	1.2 U	1.1 U	2.1 U	1 U
Vinyl chloride	900	20	ug/kg	2 U	1.8 U	1.9 U	2.1 U	1.9 U	1.7 U	1.6 U	1.9 U	1.7 U	2.3 U	2.5 U	2.1 U	4.2 U	2 U

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Table 8. Confirmatory Soil Sample Results Area A
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Location: ID	TABLE 375-6: RESTRIC. RES. USE SCO	TABLE 375-6: PROTECTION OF GW SCO		PE-A-E7	PE-A-E8	PE-A-E9	PE-A-E10	PE-A-E10	PE-A-F2	PE-A-F3	PE-A-F6	PE-A-S1	PE-A-S2	PE-A-S3	PE-A-S4	PE-A-S5	PE-A-S7
Sample Depth:				2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	6.5-7	5.5-6	2-2.5	1-1.5	1-1.5	1-1.5	2-2.5	1-1.5	1-1.5
Date Collected:			Units	10/15/2015	10/13/2015	10/15/2015	9/29/2015	9/29/2015	10/30/2015	10/30/2015	10/15/2015	9/22/2015	9/23/2015	9/28/2015	9/28/2015	10/13/2015	10/16/2015
SVOCs																	
1,1-Biphenyl	NS	NS	ug/kg	73 U	66 U	77 U	71 U	70 U	73 U	75 U	69 U	66 U	76 U	68 U	67 U	140 U	66 U
2,2-Oxybis(1-Chloropropane)	NS	NS	ug/kg	73 U	66 U	77 U	71 U	70 U	73 U	75 U	69 U	66 U	76 U	68 U	67 U	140 U	66 U
2,4,5-Trichlorophenol	NS	NS	ug/kg	180 U	170 U	190 U	180 U	180 U	180 U	190 U	170 U	170 U	190 U	170 U	170 U	340 U	170 U
2,4,6-Trichlorophenol	NS	NS	ug/kg	180 U	170 U	190 U	180 U	180 U	180 U	190 U	170 U	170 U	190 U	170 U	170 U	340 U	170 U
2,4-Dichlorophenol	NS	NS	ug/kg	180 U	170 U	190 U	180 U	180 U	180 U	190 U	170 U	170 U	190 U	170 U	170 U	340 U	170 U
2,4-Dimethylphenol	NS	NS	ug/kg	180 U	170 U	190 U	180 U	180 U	180 U	190 U	170 U	170 U	190 U	170 U	170 U	340 U	170 U
2,4-Dinitrophenol	NS	NS	ug/kg	180 U	170 U	190 U	180 U	180 U	180 U	190 U	170 U	170 U	190 U	170 U	170 U	340 U	170 U
2,4-Dinitrotoluene	NS	NS	ug/kg	36 U	33 U	39 U	35 U	35 U	36 U	37 U	35 U	33 U	38 U	34 U	33 U	68 U	33 U
2,6-Dinitrotoluene	NS	NS	ug/kg	36 U	33 U	39 U	35 U	35 U	36 U	37 U	35 U	33 U	38 U	34 U	33 U	68 U	33 U
2-Chloronaphthalene	NS	NS	ug/kg	73 UJ	66 U	77 U	71 U	70 U	73 U	75 U	69 U	66 U	76 U	68 U	67 U	140 U	66 U
2-Chlorophenol	NS	NS	ug/kg	73 U	66 U	77 U	71 U	70 U	73 U	75 U	69 U	66 U	76 U	68 U	67 U	140 U	66 U
2-Methyl-4,6-dinitrophenol	NS	NS	ug/kg	180 U	170 U	190 U	180 U	180 U	180 U	190 U	170 U	170 U	190 U	170 U	170 U	340 U	170 U
2-Methylnaphthalene	NS	NS	ug/kg	73 U	66 U	77 U	71 U	70 U	73 U	75 U	69 U	66 U	76 U	68 U	67 U	140 U	66 U
2-Methylphenol	NS	NS	ug/kg	73 U	66 U	77 U	71 U	70 U	73 U	75 U	69 U	66 U	76 U	68 U	67 U	140 U	66 U
2-Nitroaniline	NS	NS	ug/kg	180 U	170 UJ	190 U	180 U	180 U	180 U	190 U	170 U	170 U	190 U	170 U	170 U	340 UJ	170 U
2-Nitrophenol	NS	NS	ug/kg	180 U	170 U	190 U	180 U	180 U	180 U	190 U	170 U	170 U	190 U	170 U	170 U	340 U	170 U
3,3-Dichlorobenzidine	NS	NS	ug/kg	73 U	66 U	77 U	71 U	70 U	73 U	75 U	69 U	66 U	76 U	68 U	67 U	140 U	66 U
3-Methylphenol, 4-Methylphenol	NS	NS	ug/kg	73 U	66 U	77 U	71 U	70 U	73 U	75 U	69 U	66 U	76 U	68 U	67 U	140 U	66 U
3-Nitroaniline	NS	NS	ug/kg	180 U	170 U	190 U	180 U	180 U	180 U	190 U	170 U	170 U	190 U	170 U	170 U	340 U	170 U
4-Bromophenyl phenyl ether	NS	NS	ug/kg	73 UJ	66 U	77 U	71 U	70 U	73 U	75 U	69 U	66 U	76 U	68 U	67 U	140 U	66 U
4-Chloro-3-Methylphenol	NS	NS	ug/kg	180 U	170 U	190 U	180 U	180 U	180 U	190 U	170 U	170 U	190 U	170 U	170 U	340 U	170 U
4-Chlorophenyl phenyl ether	NS	NS	ug/kg	73 UJ	66 U	77 U	71 U	70 U	73 U	75 U	69 U	66 U	76 U	68 U	67 U	140 U	66 U
4-Nitroaniline	NS	NS	ug/kg	180 U	170 U	190 U	180 U	180 U	180 U	190 U	170 U	170 U	190 U	170 U	170 U	340 U	170 U
4-Nitrophenol	NS	NS	ug/kg	360 U	330 UJ	390 U	350 U	350 U	360 U	370 U	350 U	330 U	380 U	340 U	330 U	680 UJ	330 U
Acenaphthene	100000	98000	ug/kg	36 U	33 U	39 U	35 U	35 U	36 U	37 U	35 U	33 U	38 U	34 U	33 U	68 U	33 U
Acenaphthylene	100000	107000	ug/kg	36 U	33 U	39 U	35 U	35 U	36 U	37 U	35 U	33 U	38 U	34 U	33 U	68 U	33 U
Acetophenone	NS	NS	ug/kg	180 U	170 U	190 U	180 U	180 U	180 U	190 U	170 U	170 U	190 U	170 U	170 U	340 U	170 U
Anthracene	100000	1000000	ug/kg	36 U	33 U	39 U	35 U	35 U	36 U	37 U	35 U	33 U	38 U	34 U	33 U	68 U	33 U
Atrazine	NS	NS	ug/kg	73 U	66 U	77 U	71 U	70 U	73 U	75 U	69 U	66 U	76 U	68 U	67 U	140 U	66 U
Benzaldehyde	NS	NS	ug/kg	180 U	170 U	190 U	180 U	180 U	180 U	190 U	170 U	170 U	190 U	170 U	170 U	340 U	170 U
Benzo(a)anthracene	1000	1000	ug/kg	36 U	33 U	39 U	35 U	35 U	36 U	37 U	35 U	33 U	38.5	34 U	33 U	68 U	33 U
Benzo(a)pyrene	1000	22000	ug/kg	36 U	33 U	39 U	35 U	35 U	36 U	37 U	35 U	33 U	41.3	34 U	33 U	68 U	33 U
Benzo(b)fluoranthene	1000	1700	ug/kg	36 U	33 U	39 U	35 U	35 U	36 U	37 U	35 U	33 U	62.2	34 U	33 U	68 U	33 U
Benzo(g,h,i)perylene	100000	1000000	ug/kg	36 U	33 U	39 U	35 U	35 U	36 U	37 U	35 U	33 U	32.1 J	34 U	33 U	68 U	33 U
Benzo(k)fluoranthene	3900	1700	ug/kg	36 U	33 U	39 U	35 U	35 U	36 U	37 U	35 U	33 U	38 U	34 U	33 U	68 U	33 U
bis(2-Chloroethoxy)methane	NS	NS	ug/kg	73 U	66 U	77 U	71 U	70 U	73 U	75 U	69 U	66 U	76 U	68 U	67 U	140 U	66 U
bis(2-Chloroethyl)ether	NS	NS	ug/kg	73 U	66 U	77 U	71 U	70 U	73 U	75 U	69 U	66 U	76 U	68 U	67 U	140 U	66 U
bis(2-Ethylhexyl)phthalate	NS	NS	ug/kg	73 U	66 UJ	77 U	71 U	70 U	73 U	75 U	69 U	66 U	76 U	68 U	67 U	140 UJ	66 U
Butyl benzyl phthalate	NS	NS	ug/kg	73 U	66 UJ	77 U	71 U	70 U	73 U	75 U	69 U	66 U	76 U	68 U	67 U	140 UJ	66 U
Caprolactam	NS	NS	ug/kg	73 U	66 U	77 U	71 U	70 U	73 U	75 U	69 U	66 U	76 U	68 U	67 U	140 U	66 U
Carbazole	NS	NS	ug/kg	73 U	66 U	77 U	71 U	70 U	73 U	75 U	69 U	66 U	76 U	68 U	67 U	140 U	66 U
Chrysene	3900	1000	ug/kg	36 U	33 U	39 U	35 U	35 U	36 U	37 U	35 U	33 U	37.3 J	34 U	33 U	68 U	33 U
Dibenzo(a,h)anthracene	330	1000000	ug/kg	36 U	33 U	39 U	35 U	35 U	36 U	37 U	35 U	33 U	38 U	34 U	33 U	68 U	33 U
Dibenzofuran	NS	NS	ug/kg	73 U	66 U	77 U	71 U	70 U	73 U	75 U	69 U	66 U	76 U	68 U	67 U	140 U	66 U
Diethyl phthalate	NS	NS	ug/kg	73 UJ	66 U	77 U	71 U	70 U	73 U	75 U	69 U	66 U	76 U	68 U	67 U	140 U	66 U
Dimethyl phthalate	NS	NS	ug/kg	73 UJ	66 U	77 U	71 U	70 U	73 U	75 U	69 U	66 U	76 U	68 U	67 U	140 U	66 U
Di-n-butyl phthalate	NS	NS	ug/kg	73 U	66 U	77 U	71 U	70 U	73 U	75 U	69 U	66 U	76 U	68 U	67 U	140 U	66 U
Di-n-octyl phthalate	NS	NS	ug/kg	73 U	66 UJ	77 U	71 U	70 U	73 U	75 U	69 U	66 U	76 U	68 U	67 U	140 UJ	66 U
Fluoranthene	100000	1000000	ug/kg	36 U	33 U	39 U	35 U	35 U	36 U	37 U	35 U	33 U	75	34 U	33 U	68 U	33 U
Fluorene	100000	386000	ug/kg	36 U	33 U	39 U	35 U	35 U	36 U	37 U	35 U	33 U	38 U	34 U	33 U	68 U	33 U
Hexachloro-1,3-butadiene	NS	NS	ug/kg	36 U	33 U	39 U	35 U	35 U	36 U	37 U	35 U	33 UJ	38 U	34 U	33 U	68 U	33 U
Hexachlorobenzene	NS	NS	ug/kg	73 UJ	66 U	77 U	71 U	70 U	73 U	75 U	69 U	66 U	76 U	68 U	67 U	140 U	66 U

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Table 8. Confirmatory Soil Sample Results Area A
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Location: ID	TABLE 375-6: RESTRIC. RES. USE SCO	TABLE 375-6: PROTECTION OF GW SCO		PE-A-E7	PE-A-E8	PE-A-E9	PE-A-E10	PE-A-E10	PE-A-F2	PE-A-F3	PE-A-F6	PE-A-S1	PE-A-S2	PE-A-S3	PE-A-S4	PE-A-S5	PE-A-S7
Sample Depth:				2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	6.5-7	5.5-6	2-2.5	1-1.5	1-1.5	1-1.5	2-2.5	1-1.5	1-1.5
Date Collected:			Units	10/15/2015	10/13/2015	10/15/2015	9/29/2015	9/29/2015	10/30/2015	10/30/2015	10/15/2015	9/22/2015	9/23/2015	9/28/2015	9/28/2015	10/13/2015	10/16/2015
SVOCs cont.																	
Hexachlorocyclopentadiene	NS	NS	ug/kg	360 U	330 U	390 U	350 U	350 U	360 U	370 U	350 U	330 U	380 U	340 U	330 U	680 U	330 U
Hexachloroethane	NS	NS	ug/kg	180 U	170 U	190 U	180 U	180 U	180 U	190 U	170 U	170 U	190 U	170 U	170 U	340 U	170 U
Indeno(1,2,3-cd)pyrene	500	8200	ug/kg	36 U	33 U	39 U	35 U	35 U	36 U	37 U	35 U	33 U	28.6 J	34 U	33 U	68 U	33 U
Isophorone	NS	NS	ug/kg	73 U	66 U	77 U	71 U	70 U	73 U	75 U	69 U	66 U	76 U	68 U	67 U	140 U	66 U
Naphthalene	100000	12000	ug/kg	36 U	33 U	39 U	35 U	35 U	24.3 J	37 U	35 U	33 U	38 U	34 U	33 U	68 U	33 U
Nitrobenzene	NS	NS	ug/kg	73 U	66 U	77 U	71 U	70 U	73 U	75 U	69 U	66 U	76 U	68 U	67 U	140 U	66 U
n-Nitrosodi-n-propylamine	NS	NS	ug/kg	73 U	66 UJ	77 U	71 U	70 U	73 U	75 U	69 U	66 U	76 U	68 U	67 U	140 UJ	66 U
N-nitrosodiphenylamine	NS	NS	ug/kg	180 U	180 U	190 U	180 U	180 U	180 U	190 U	170 U	170 U	190 U	170 U	170 U	340 U	170 U
p-Chloroaniline	NS	NS	ug/kg	180 U	170 U	190 U	180 U	180 U	180 U	190 U	170 U	170 U	190 U	170 U	170 U	340 U	170 U
Pentachlorophenol	6700	800	ug/kg	180 U	170 U	190 U	180 U	180 U	180 U	190 U	170 U	170 U	190 UJ	170 U	170 U	340 U	170 U
Phenanthrene	100000	1000000	ug/kg	36 U	33 U	39 U	35 U	35 U	36 U	37 U	35 U	33 U	34.5 J	33 U	33 U	68 U	33 U
Phenol	100000	330	ug/kg	73 U	66 U	77 U	71 U	70 U	73 U	75 U	69 U	66 U	76 U	68 U	67 U	140 U	66 U
Pyrene	100000	1000000	ug/kg	36 U	33 U	39 U	35 U	35 U	36 U	37 U	35 U	33 U	57.9	34 U	33 U	68 U	33 U
PCBs																	
Aroclor 1016	1000	3200	ug/kg	33 U	34 U	38 U	35 U	35 U	35 U	37 U	34 U	35 U	38 U	35 U	35 U	63 U	34 U
Aroclor 1221	1000	3200	ug/kg	33 U	34 U	38 U	35 U	35 U	35 U	37 U	34 U	35 U	38 U	35 U	35 U	63 U	34 U
Aroclor 1232	1000	3200	ug/kg	33 U	34 U	38 U	35 U	35 U	35 U	37 U	34 U	35 U	38 U	35 U	35 U	63 U	34 U
Aroclor 1242	1000	3200	ug/kg	33 U	34 U	38 U	35 U	35 U	35 U	37 U	34 U	35 U	38 U	35 U	35 U	63 U	34 U
Aroclor 1248	1000	3200	ug/kg	33 U	34 U	38 U	35 U	35 U	35 U	37 U	34 U	35 U	38 U	35 U	35 U	63 U	34 U
Aroclor 1254	1000	3200	ug/kg	33 U	34 U	38 U	35 U	35 U	35 U	37 U	34 U	35 U	38 U	35 U	35 U	63 U	34 U
Aroclor 1260	1000	3200	ug/kg	33 U	34 U	38 U	35 U	35 U	35 U	37 U	34 U	35 U	38 U	35 U	35 U	63 U	34 U
Aroclor 1262	1000	3200	ug/kg	33 U	34 U	38 U	35 U	35 U	35 U	37 U	34 U	35 U	38 U	35 U	35 U	63 U	34 U
Aroclor 1268	1000	3200	ug/kg	33 U	34 U	38 U	35 U	35 U	35 U	37 U	34 U	35 U	38 U	35 U	35 U	63 U	34 U
Metals																	
Aluminum	NS	NS	mg/kg	8570 J	6330	10500 J	9950 J	10800 J	7060	6990	6960 J	8850 J	10800	18200	13700	29000	8490
Antimony	NS	NS	mg/kg	2.1 UJ	2.2 U	2.3 UJ	2.2 UJ	2.1 UJ	2.2 UJ	2.2 UJ	2.1 UJ	2.1 UJ	2.2 U	2.2 U	2 UBJ	4.2 U	0.61 B
Arsenic	16	16	mg/kg	2.9	2.5	3.6	2.8	3.1	2.1 B	2.2 UB	2.8	3	2.2	3.4	3.3	5.9	4.8
Barium	400	820	mg/kg	52.2 J	30.8	48.1 J	30.8	33.2	34.1	45.1	44 J	38.5	47.8	43.6	35.2	57.8	46.3
Beryllium	72	47	mg/kg	0.43	0.37	0.46	0.48	0.5	0.37	0.37	0.38	0.4	0.55	0.67	0.56 J	0.86	0.47
Cadmium	4.3	7.5	mg/kg	0.53 U	0.076 B	0.59 U	0.065 B	0.064 B	0.076 B	0.55 U	0.54 U	0.2 B	0.13 B	0.55 UB	0.27 B	0.15 B	0.28 B
Calcium	NS	NS	mg/kg	3230 J	2870	1690 J	1140	1350	2880	2860	9020 J	2140	2650	1110	1050	1580	5910
Chromium	NS	NS	mg/kg	20.5 J	12	14.1 J	13.4	14.1	15.6 J	12.8 J	14.2 J	13.1	15.9	19.5	17.8	31.7	23.7
Cobalt	NS	NS	mg/kg	6.7 J	6.3	6.3 J	6	7	7.8	6.7	7.1 J	6.8	5.9	8	7.2	11.5	8.6
Copper	270	1720	mg/kg	14.3 J	10.8	13.3 J	12.1	12.8	14.2	11.9	14.6 J	11.8	18.8	14.7	11.7 J	19.5	15.7
Iron	NS	NS	mg/kg	16000 J	14600	16300 J	14300	16300	17300	16500	17100 J	15600	14500	19600	17300	31100	19200
Lead	400	450	mg/kg	15 J	3	17.8 J	5.7	6.2	4.2	3.7	9.3 J	5.7	12.6	8.4	5.9 J	17.1	6.4
Magnesium	NS	NS	mg/kg	3430 J	2320	2580 J	2120 J	2680 J	3240	3010	3860 J	2490	2790	2840	2790	5720	5470
Manganese	2000	2000	mg/kg	260 J	240	253 J	187	202	357 J	565 J	303 J	256 J	104	182	163	285	293
Mercury	NS	NS	mg/kg	0.034 UB	0.009 B	0.039 UB	0.032 UB	0.029 B	0.033 UB	0.037 UB	0.034 UB	0.035 U	0.036 UB	0.046	0.038	0.092	0.034 UB
Nickel	310	130	mg/kg	12.7 J	9.5	11.5 J	9.9	11.5	12.9	10.9	11.9 J	9.8	12.5	13.7	10.9	20.7	18.6
Potassium	NS	NS	mg/kg	1090 J	1030 B	882 J	777 B	785 B	1090 B	1260	1310 J	945 B	1200	870 B	753 B	1270 B	1560
Selenium	180	4	mg/kg	0.3 B	0.35 B	0.34 B	2.2 U	2.1 U	0.6 B	2.2 U	0.33 B	0.78 B	2.2 U	0.45 B	2 U	0.61 B	2.1 U
Silver	180	8.3	mg/kg	0.53 U	0.43 B	0.59 U	0.54 U	0.53 U	0.39 B	1.1	0.54 U	0.53 UB	0.5 B	0.55 U	0.5 U	0.99 B	0.25 B
Sodium	NS	NS	mg/kg	234 J	181 B	198 J	104 B	99.4 B	253 B	280 B	234 J	166 B	495 B	122 B	125 B	194 B	303 B
Thallium	NS	NS	mg/kg	0.78 B	0.2 B	0.66 B	0.57 B	0.49 B	1.1 U	1.1 U	0.67 B	1.1 U	1.1 U	1.1 U	1 U	0.57 B	1 U
Vanadium	NS	NS	mg/kg	23.3 J	21.2	23.5 J	21.2	23	26.2 J	23.9 J	26.1 J	21.8	24	34.1	28.2	50	24.2
Zinc	10000	2480	mg/kg	44.6 J	31.7	42 J	23.1	25.8	26.9	26.9	29.6 J	23.8	38	30.5	24.9	47.4	30
General Chemistry																	
Percent Solids			%	91.1	92.7	86.2	93.3	93.1	90.6	88	95	92.7	87.9	94.2	94.8	47.7	94.1
Notes																	
NS	No standard																
NA	Not analyzed																
R	Rejected Result																
B	Indicates an estimated value between the instrument detection limit and the Reporting Limit (RL).																
E	Serial dilution results not within 10%. Applicable only if analyte concentration is at least 50X the IDL in original sample.																
J/JN	Indicates an estimated value.																
UB	The compound was analyzed for but not detected. The associated value is the compound quantitation limit.																
Shade	Exceeds NYSDEC Table 375-6: Restricted Residential Use Soil Cleanup Objective																
Bold	Exceeds NYSDEC Table 375-6: Protection of Groundwater Soil Cleanup Objective																

Table 8. Confirmatory Soil Sample Results Area A
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Location: ID	TABLE 375-6: RESTRIC. RES. USE SCO	TABLE 375-6: PROTECTION OF GW SCO		PE-A-S8	PE-A-S9A	PE-A-S9B	PE-A-S10	PE-A-S11	PE-A-S12A	PE-A-S13	PE-A-S14	PE-A-S15	PE-A-S15	PE-A-S16	PE-A-S17	PE-A-S18	PE-A-S19
Sample Depth:				2-2.5	2.5-3	2.5-3	2-2.5	3.5-4	1-1.5	1-1.5	1-1.5	1-1.5	1-1.5	1-1.5	1-1.5	1-1.5	1-1.5
Date Collected:			Units	10/26/2015	1/6/2016	1/6/2016	10/27/2015	10/27/2015	1/6/2016	10/28/2015	10/30/2015	11/3/2015	11/3/2015	11/3/2015	11/4/2015	11/4/2015	11/4/2015
VOCs																	
1,1,1-Trichloroethane	100000	680	ug/kg	1.8 U	NA	NA	1.7 U	1.9 U	NA	2.2 U	1.9 U	2.4 U	2.2 U	2.1 U	1.9 U	2.1 U	2 U
1,1,2,2-Tetrachloroethane	NS	NS	ug/kg	1.8 U	NA	NA	1.7 U	1.9 U	NA	2.2 U	1.9 U	2.4 U	2.2 U	2.1 U	1.9 U	2.1 U	2 U
1,1,2-trichloro-1,2,2-trifluoroethane	NS	NS	ug/kg	4.4 U	NA	NA	4.2 U	4.8 U	NA	5.4 U	4.8 U	5.9 U	5.5 U	5.3 U	4.8 U	5.3 U	5.1 U
1,1,2-Trichloroethane	NS	NS	ug/kg	1.8 U	NA	NA	1.7 U	1.9 U	NA	2.2 U	1.9 U	2.4 U	2.2 U	2.1 U	1.9 U	2.1 U	2 U
1,1-Dichloroethane	26000	270	ug/kg	0.88 U	NA	NA	0.84 U	0.95 U	NA	1.1 U	0.96 U	1.2 U	1.1 U	1.1 U	0.95 U	1.1 U	1 U
1,1-Dichloroethene	100000	330	ug/kg	0.88 U	NA	NA	0.84 U	0.95 U	NA	1.1 U	0.96 U	1.2 U	1.1 U	1.1 U	0.95 U	1.1 U	1 U
1,2,4-Trichlorobenzene	NS	NS	ug/kg	4.4 U	NA	NA	4.2 U	4.8 U	NA	5.4 U	4.8 U	5.9 U	5.5 U	5.3 U	4.8 U	5.3 U	5.1 U
1,2-Dibromo-3-chloropropane	NS	NS	ug/kg	1.8 U	NA	NA	1.7 U	1.9 U	NA	2.2 U	1.9 U	2.4 U	2.2 U	2.1 U	1.9 U	2.1 U	2 U
1,2-Dibromoethane	NS	NS	ug/kg	0.88 U	NA	NA	0.84 U	0.95 U	NA	1.1 U	0.96 U	1.2 U	1.1 U	1.1 U	0.95 U	1.1 U	1 U
1,2-Dichlorobenzene	100000	1100	ug/kg	0.88 U	NA	NA	0.84 U	0.95 U	NA	1.1 U	0.96 U	1.2 U	1.1 U	1.1 U	0.95 U	1.1 U	1 U
1,2-Dichloroethane	3100	20	ug/kg	0.88 U	NA	NA	0.84 U	0.95 U	NA	1.1 U	0.96 U	1.2 U	1.1 U	1.1 U	0.95 U	1.1 U	1 U
1,2-Dichloropropane	NS	NS	ug/kg	1.8 U	NA	NA	1.7 U	1.9 U	NA	2.2 U	1.9 U	2.4 U	2.2 U	2.1 U	1.9 U	2.1 U	2 U
1,3-Dichlorobenzene	49000	2400	ug/kg	0.88 U	NA	NA	0.84 U	0.95 U	NA	1.1 U	0.96 U	1.2 U	1.1 U	1.1 U	0.95 U	1.1 U	1 U
1,4-Dichlorobenzene	13000	1800	ug/kg	0.88 U	NA	NA	0.84 U	0.95 U	NA	1.1 U	0.96 U	1.2 U	1.1 U	1.1 U	0.95 U	1.1 U	1 U
2-Butanone (MEK)	100000	120	ug/kg	8.8 U	NA	NA	8.4 U	12.6	NA	11 U	9.6 U	12 U	11 U	11 U	9.5 U	11 U	10 U
4-Methyl-2-Pentanone	NS	NS	ug/kg	4.4 U	NA	NA	4.2 U	4.8 U	NA	5.4 U	4.8 U	5.9 U	5.5 U	5.3 U	4.8 U	5.3 U	5.1 U
Acetone	100000	50	ug/kg	8.8 U	NA	NA	8.4 U	86.5	NA	11 U	9.6 U	12 U	11 U	11 U	9.5 U	11 U	10 U
Benzene	4800	60	ug/kg	0.44 U	NA	NA	0.42 U	0.18 J	NA	0.54 U	0.48 U	0.59 U	0.55 U	0.53 U	0.48 U	0.53 U	0.51 U
Bromodichloromethane	NS	NS	ug/kg	1.8 U	NA	NA	1.7 U	1.9 U	NA	2.2 U	1.9 U	2.4 U	2.2 U	2.1 U	1.9 U	2.1 U	2 U
Bromoform	NS	NS	ug/kg	4.4 U	NA	NA	4.2 U	4.8 U	NA	5.4 U	4.8 U	5.9 U	5.5 U	5.3 U	4.8 U	5.3 U	5.1 U
Bromomethane	NS	NS	ug/kg	4.4 U	NA	NA	4.2 U	4.8 U	NA	5.4 U	4.8 U	5.9 U	5.5 U	5.3 U	4.8 U	5.3 U	5.1 U
Carbon Disulfide	NS	NS	ug/kg	1.8 U	NA	NA	1.7 U	0.28 J	NA	2.2 U	1.9 U	2.4 U	2.2 U	2.1 U	1.9 U	2.1 U	2 U
Carbon Tetrachloride	2400	760	ug/kg	1.8 U	NA	NA	1.7 U	1.9 U	NA	2.2 U	1.9 U	2.4 U	2.2 U	2.1 U	1.9 U	2.1 U	2 U
CFC-11	NS	NS	ug/kg	4.4 U	NA	NA	4.4 U	4.8 U	NA	5.4 U	4.8 U	5.9 U	5.5 U	5.3 U	4.8 U	5.3 U	5.1 U
CFC-12	NS	NS	ug/kg	4.4 UJ	NA	NA	4.2 U	4.8 U	NA	5.4 U	4.8 U	5.9 U	5.5 U	5.3 U	4.8 U	5.3 U	5.1 U
Chlorobenzene	100000	1100	ug/kg	1.8 U	NA	NA	1.7 U	1.9 U	NA	2.2 U	1.9 U	2.4 U	2.2 U	2.1 U	1.9 U	2.1 U	2 U
Chlorodibromomethane	NS	NS	ug/kg	1.8 U	NA	NA	1.7 U	1.9 U	NA	2.2 U	1.9 U	2.4 U	2.2 U	2.1 U	1.9 U	2.1 U	2 U
Chloroethane	NS	NS	ug/kg	4.4 UJ	NA	NA	4.2 U	4.8 U	NA	5.4 U	4.8 U	5.9 UJ	5.5 U	5.3 UJ	4.8 U	5.3 U	5.1 U
Chloroform	49000	370	ug/kg	1.8 U	NA	NA	1.7 U	1.9 U	NA	2.2 U	1.9 U	2.4 U	2.2 U	2.1 U	1.9 U	2.1 U	2 U
Chloromethane	NS	NS	ug/kg	4.4 U	NA	NA	4.2 U	4.8 U	NA	5.4 U	4.8 U	5.9 U	5.5 U	5.3 U	4.8 U	5.3 U	5.1 U
cis-1,2-Dichloroethene	100000	250	ug/kg	0.88 U	NA	NA	0.84 U	0.95 U	NA	1.1 U	0.96 U	1.2 U	1.1 U	1.1 U	0.95 U	1.1 U	1 U
cis-1,3-Dichloropropene	NS	NS	ug/kg	1.8 U	NA	NA	1.7 U	1.9 U	NA	2.2 U	1.9 U	2.4 U	2.2 U	2.1 U	1.9 U	2.1 U	2 U
Cyclohexane	NS	NS	ug/kg	1.8 U	NA	NA	1.7 U	1.9 U	NA	2.2 U	1.9 U	2.4 U	2.2 U	2.1 U	1.9 U	2.1 U	2 U
Dichloromethane	NS	NS	ug/kg	4.4 U	NA	NA	4.2 U	4.8 U	NA	5.4 U	4.8 U	5.9 U	5.5 U	5.3 U	4.8 U	5.3 U	5.1 U
Ethylbenzene	41000	1000	ug/kg	0.88 U	NA	NA	0.84 U	0.26 J	NA	1.1 U	0.2 J	1.2 U	1.1 U	1.1 U	0.95 U	0.28 J	1 U
Isopropylbenzene	NS	NS	ug/kg	1.8 U	NA	NA	1.7 U	1.9 U	NA	2.2 U	1.9 U	2.4 U	2.2 U	2.1 U	1.9 U	2.1 U	2 U
Methyl Acetate	NS	NS	ug/kg	4.4 U	NA	NA	4.2 U	4.8 U	NA	5.4 U	4.8 U	5.9 U	5.5 U	5.3 U	4.8 U	5.3 U	5.1 U
Methyl N-Butyl Ketone (2-Hexanone)	NS	NS	ug/kg	4.4 U	NA	NA	4.2 U	4.8 U	NA	5.4 U	4.8 U	5.9 U	5.5 U	5.3 U	4.8 U	5.3 U	5.1 U
Methylcyclohexane	NS	NS	ug/kg	1.8 U	NA	NA	1.7 U	1.9 U	NA	2.2 U	1.9 U	2.4 U	2.2 U	2.1 U	1.9 U	2.1 U	2 U
Methyl-tert-butylether	100000	930	ug/kg	0.88 U	NA	NA	0.84 U	0.95 U	NA	1.1 U	0.96 U	1.2 U	1.1 U	1.1 U	0.95 U	1.1 U	1 U
Styrene (Monomer)	NS	NS	ug/kg	0.22 J	NA	NA	1.7 U	1.9 U	NA	2.2 U	0.44 J	2.4 U	2.2 U	2.1 U	1.9 U	2.1 U	2 U
Tetrachloroethene	19000	1300	ug/kg	1.8 U	NA	NA	1.7 U	1.9 U	NA	2.2 U	1.9 U	2.4 U	2.2 U	2.1 U	1.9 U	2.1 U	2 U
Toluene	100000	700	ug/kg	0.88 U	NA	NA	0.84 U	0.24 J	NA	1.1 U	0.96 U	1.2 U	1.1 U	1.1 U	0.95 U	1.1 U	1 U
Total Xylenes	100000	1600	ug/kg	0.88 U	NA	NA	0.55 J	1.7	NA	1.1 U	0.96 U	1.2 U	1.1 U	1.1 U	0.95 U	1.8	1 U
trans-1,2-Dichloroethene	100000	190	ug/kg	0.88 U	NA	NA	0.84 U	0.95 U	NA	1.1 U	0.96 U	1.2 U	1.1 U	1.1 U	0.95 U	1.1 U	1 U
trans-1,3-Dichloropropene	NS	NS	ug/kg	1.8 U	NA	NA	1.7 U	1.9 U	NA	2.2 U	1.9 U	2.4 U	2.2 U	2.1 U	1.9 U	2.1 U	2 U
Trichloroethene	21000	470	ug/kg	0.88 U	NA	NA	0.84 U	0.95 U	NA	1.1 U	0.96 U	1.2 U	1.1 U	1.1 U	0.95 U	1.1 U	1 U
Vinyl chloride	900	20	ug/kg	1.8 UJ	NA	NA	1.7 U	1.9 U	NA	2.2 U	1.9 U	2.4 U	2.2 U	2.1 U	1.9 U	2.1 U	2 U

See Notes on Last Page

Table 8. Confirmatory Soil Sample Results Area A
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Location: ID	TABLE 375-6: RESTRIC. RES. USE SCO	TABLE 375-6: PROTECTION OF GW SCO		PE-A-S8	PE-A-S9A	PE-A-S9B	PE-A-S10	PE-A-S11	PE-A-S12A	PE-A-S13	PE-A-S14	PE-A-S15	PE-A-S15	PE-A-S16	PE-A-S17	PE-A-S18	PE-A-S19
Sample Depth:				2-2.5	2.5-3	2.5-3	2-2.5	3.5-4	1-1.5	1-1.5	1-1.5	1-1.5	1-1.5	1-1.5	1-1.5	1-1.5	1-1.5
Date Collected:			Units	10/26/2015	1/6/2016	1/6/2016	10/27/2015	10/27/2015	1/6/2016	10/28/2015	10/30/2015	11/3/2015	11/3/2015	11/3/2015	11/4/2015	11/4/2015	11/4/2015
SVOCs																	
1,1-Biphenyl	NS	NS	ug/kg	77 U	NA	NA	70 U	73 U	NA	77 U	78 U	81 U	77 U	71 U	71 U	73 U	67 U
2,2-Oxybis(1-Chloropropane)	NS	NS	ug/kg	77 UJ	NA	NA	70 U	73 U	NA	77 U	78 U	81 U	77 U	71 U	71 U	73 U	67 U
2,4,5-Trichlorophenol	NS	NS	ug/kg	190 U	NA	NA	170 U	180 U	NA	190 U	200 U	200 U	190 U	180 U	180 U	180 U	170 U
2,4,6-Trichlorophenol	NS	NS	ug/kg	190 U	NA	NA	170 U	180 U	NA	190 U	200 U	200 U	190 U	180 U	180 U	180 U	170 U
2,4-Dichlorophenol	NS	NS	ug/kg	190 U	NA	NA	170 U	180 U	NA	190 U	200 U	200 U	190 U	180 U	180 U	180 U	170 U
2,4-Dimethylphenol	NS	NS	ug/kg	190 U	NA	NA	170 U	180 U	NA	190 U	200 U	200 U	190 U	180 U	180 U	180 U	170 U
2,4-Dinitrophenol	NS	NS	ug/kg	190 U	NA	NA	170 U	180 U	NA	190 U	200 U	200 U	190 U	180 U	180 U	180 U	170 U
2,4-Dinitrotoluene	NS	NS	ug/kg	39 U	NA	NA	35 U	36 U	NA	38 U	39 U	40 U	38 U	36 U	36 U	37 U	33 U
2,6-Dinitrotoluene	NS	NS	ug/kg	39 U	NA	NA	35 U	36 U	NA	38 U	39 U	40 U	38 U	36 U	36 U	37 U	33 U
2-Chloronaphthalene	NS	NS	ug/kg	77 U	NA	NA	70 U	73 U	NA	77 U	78 U	81 U	77 U	71 U	71 U	73 U	67 U
2-Chlorophenol	NS	NS	ug/kg	77 U	NA	NA	70 U	73 U	NA	77 U	78 U	81 U	77 U	71 U	71 U	73 U	67 U
2-Methyl-4,6-dinitrophenol	NS	NS	ug/kg	190 U	NA	NA	170 U	180 U	NA	190 U	200 U	200 U	190 U	180 U	180 U	180 U	170 U
2-Methylnaphthalene	NS	NS	ug/kg	77 U	NA	NA	70 U	73 U	NA	77 U	78 U	81 U	77 U	71 U	71 U	73 U	67 U
2-Methylphenol	NS	NS	ug/kg	77 U	NA	NA	70 U	73 U	NA	77 U	78 U	81 U	77 U	71 U	71 U	73 U	67 U
2-Nitroaniline	NS	NS	ug/kg	190 UJ	NA	NA	170 U	180 U	NA	190 U	200 U	200 U	190 U	180 U	180 U	180 U	170 U
2-Nitrophenol	NS	NS	ug/kg	190 U	NA	NA	170 U	180 U	NA	190 U	200 U	200 U	190 U	180 U	180 U	180 U	170 U
3,3-Dichlorobenzidine	NS	NS	ug/kg	77 U	NA	NA	70 U	73 U	NA	77 U	R	81 U	77 U	71 U	71 U	73 U	67 U
3-Methylphenol, 4-Methylphenol	NS	NS	ug/kg	77 U	NA	NA	70 U	73 U	NA	77 U	78 U	81 U	77 U	71 U	71 U	73 U	67 U
3-Nitroaniline	NS	NS	ug/kg	190 U	NA	NA	170 U	180 U	NA	190 U	200 UJ	200 U	190 U	180 U	180 U	180 U	170 U
4-Bromophenyl phenyl ether	NS	NS	ug/kg	77 U	NA	NA	70 U	73 U	NA	77 U	78 U	81 U	77 U	71 U	71 U	73 U	67 U
4-Chloro-3-Methylphenol	NS	NS	ug/kg	190 U	NA	NA	170 U	180 U	NA	190 U	200 U	200 U	190 U	180 U	180 U	180 U	170 U
4-Chlorophenyl phenyl ether	NS	NS	ug/kg	77 U	NA	NA	70 U	73 U	NA	77 U	78 U	81 U	77 U	71 U	71 U	73 U	67 U
4-Nitroaniline	NS	NS	ug/kg	190 U	NA	NA	170 UJ	180 UJ	NA	190 UJ	200 UJ	200 U	190 U	180 U	180 U	180 U	170 U
4-Nitrophenol	NS	NS	ug/kg	390 U	NA	NA	350 U	360 U	NA	380 U	390 U	400 U	380 U	360 U	360 U	370 U	330 U
Acenaphthene	100000	98000	ug/kg	39 U	NA	NA	35 U	36 U	64.6	38 U	39 U	40 U	38 U	36 U	36 U	37 U	33 U
Acenaphthylene	100000	107000	ug/kg	39 U	NA	NA	35 U	36 U	285	38 U	39 U	40 U	38 U	36 U	36 U	37 U	33 U
Acetophenone	NS	NS	ug/kg	190 U	NA	NA	170 U	180 U	NA	190 U	200 U	200 U	190 U	180 U	180 U	180 U	170 U
Anthracene	100000	1000000	ug/kg	39 U	NA	NA	35 U	36 U	676	38 U	39 U	40 U	38 U	36 U	36 U	37 U	33 U
Atrazine	NS	NS	ug/kg	77 U	NA	NA	70 U	73 U	NA	77 U	78 U	81 U	77 U	71 U	71 U	73 U	67 U
Benzaldehyde	NS	NS	ug/kg	190 U	NA	NA	170 U	180 U	NA	190 U	200 U	200 U	190 U	180 U	180 U	180 U	170 U
Benzo(a)anthracene	1000	1000	ug/kg	39 U	NA	NA	35 U	36 U	2160	38 U	39 U	40 U	38 U	36 U	36 U	37 U	15.5 J
Benzo(a)pyrene	1000	22000	ug/kg	39 U	NA	NA	35 U	36 U	2230	38 U	39 U	40 U	38 U	36 U	36 U	37 U	33 U
Benzo(b)fluoranthene	1000	1700	ug/kg	39 U	NA	NA	35 U	36 U	2410	38 U	39 U	40 U	38 U	36 U	36 U	37 U	33 U
Benzo(g,h,i)perylene	100000	1000000	ug/kg	39 U	NA	NA	35 U	36 U	1510	38 U	39 U	40 U	38 U	36 U	36 U	37 U	33 U
Benzo(k)fluoranthene	3900	1700	ug/kg	39 U	NA	NA	35 U	36 U	975	38 U	39 U	40 U	38 U	36 U	36 U	37 U	33 U
bis(2-Chloroethoxy)methane	NS	NS	ug/kg	77 U	NA	NA	70 U	73 U	NA	77 U	78 U	81 U	77 U	71 U	71 U	73 U	67 U
bis(2-Chloroethyl)ether	NS	NS	ug/kg	77 U	NA	NA	70 U	73 U	NA	77 U	78 U	81 U	77 U	71 U	71 U	73 U	67 U
bis(2-Ethylhexyl)phthalate	NS	NS	ug/kg	77 U	NA	NA	70 U	73 U	NA	77 U	78 U	81 U	77 U	71 U	71 U	73 U	67 U
Butyl benzyl phthalate	NS	NS	ug/kg	77 U	NA	NA	70 U	73 U	NA	77 U	78 U	81 U	77 U	71 U	71 U	73 U	67 U
Caprolactam	NS	NS	ug/kg	77 UJ	NA	NA	70 UJ	73 UJ	NA	77 UJ	78 U	81 U	77 U	71 U	71 U	73 U	67 U
Carbazole	NS	NS	ug/kg	77 U	NA	NA	70 U	73 U	NA	77 U	78 U	81 U	77 U	71 U	71 U	73 U	67 U
Chrysene	3900	1000	ug/kg	39 U	NA	NA	35 U	36 U	2520	38 U	39 U	40 U	38 U	36 U	36 U	37 U	19.7 J
Dibenzo(a,h)anthracene	330	1000000	ug/kg	39 U	NA	NA	35 U	36 U	356	38 U	39 U	40 U	38 U	36 U	36 U	37 U	33 U
Dibenzofuran	NS	NS	ug/kg	77 U	NA	NA	70 U	73 U	NA	77 U	78 U	81 U	77 U	71 U	71 U	73 U	67 U
Diethyl phthalate	NS	NS	ug/kg	77 U	NA	NA	70 U	73 U	NA	77 U	78 U	81 U	77 U	71 U	71 U	73 U	67 U
Dimethyl phthalate	NS	NS	ug/kg	77 U	NA	NA	70 U	73 U	NA	77 U	78 U	81 U	77 U	71 U	71 U	73 U	67 U
Di-n-butyl phthalate	NS	NS	ug/kg	77 U	NA	NA	70 U	73 U	NA	77 U	78 U	81 U	77 U	71 U	71 U	73 U	67 U
Di-n-octyl phthalate	NS	NS	ug/kg	77 UJ	NA	NA	70 U	73 U	NA	77 U	78 U	81 UJ	77 UJ	71 UJ	71 U	73 U	67 U
Fluoranthene	100000	1000000	ug/kg	39 U	NA	NA	35 U	19.8 J	3700	38 U	39 U	40 U	38 U	36 U	16 J	37 U	32.3 J
Fluorene	100000	386000	ug/kg	39 U	NA	NA	35 U	36 U	299	38 U	39 U	40 U	38 U	36 U	36 U	37 U	33 U
Hexachloro-1,3-butadiene	NS	NS	ug/kg	39 U	NA	NA	35 U	36 U	NA	38 U	39 U	40 U	38 U	36 U	36 U	37 U	33 U
Hexachlorobenzene	NS	NS	ug/kg	77 U	NA	NA	70 U	73 U	NA	77 U	78 U	81 U	77 U	71 U	71 U	73 U	67 U

See Notes on Last Page

Table 8. Confirmatory Soil Sample Results Area A
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Location: ID	TABLE 375-6: RESTRIC. RES. USE SCO	TABLE 375-6: PROTECTION OF GW SCO		PE-A-S8	PE-A-S9A	PE-A-S9B	PE-A-S10	PE-A-S11	PE-A-S12A	PE-A-S13	PE-A-S14	PE-A-S15	PE-A-S15	PE-A-S16	PE-A-S17	PE-A-S18	PE-A-S19
Sample Depth:				2-2.5	2.5-3	2.5-3	2-2.5	3.5-4	1-1.5	1-1.5	1-1.5	1-1.5	1-1.5	1-1.5	1-1.5	1-1.5	1-1.5
Date Collected:			Units	10/26/2015	1/6/2016	1/6/2016	10/27/2015	10/27/2015	1/6/2016	10/28/2015	10/30/2015	11/3/2015	11/3/2015	11/3/2015	11/4/2015	11/4/2015	11/4/2015
SVOCs cont.																	
Hexachlorocyclopentadiene	NS	NS	ug/kg	390 U	NA	NA	350 U	360 U	NA	380 U	390 U	400 UJ	380 UJ	360 UJ	360 U	370 U	330 U
Hexachloroethane	NS	NS	ug/kg	190 U	NA	NA	170 U	180 U	NA	190 U	200 U	200 U	190 U	180 U	180 U	180 U	170 U
Indeno(1,2,3-cd)pyrene	500	8200	ug/kg	39 U	NA	NA	35 U	36 U	1640	38 U	39 U	40 U	38 U	36 U	36 U	37 U	33 U
Isophorone	NS	NS	ug/kg	77 U	NA	NA	70 U	73 U	NA	77 U	78 U	81 U	77 U	71 U	71 U	73 U	67 U
Naphthalene	100000	12000	ug/kg	39 U	NA	NA	35 U	36 U	70	38 U	39 U	40 U	38 U	36 U	36 U	37 U	33 U
Nitrobenzene	NS	NS	ug/kg	77 U	NA	NA	70 U	73 U	NA	77 U	78 U	81 U	77 U	71 U	71 U	73 U	67 U
n-Nitrosodi-n-propylamine	NS	NS	ug/kg	77 UJ	NA	NA	70 U	73 U	NA	77 U	78 U	81 U	77 U	71 U	71 U	73 U	67 U
N-nitrosodiphenylamine	NS	NS	ug/kg	190 U	NA	NA	170 U	180 U	NA	190 U	200 U	200 U	190 U	180 U	180 U	180 U	170 U
p-Chloroaniline	NS	NS	ug/kg	190 U	NA	NA	170 U	180 U	NA	190 U	200 UJ	200 U	190 U	180 U	180 U	180 U	170 U
Pentachlorophenol	6700	800	ug/kg	190 U	NA	NA	170 U	180 U	NA	190 U	200 U	200 U	190 U	180 U	180 U	180 U	170 U
Phenanthrene	100000	1000000	ug/kg	39 U	NA	NA	35 U	36 U	2720	38 U	39 U	40 U	38 U	36 U	36 U	37 U	54.6
Phenol	100000	330	ug/kg	77 U	NA	NA	70 U	73 U	NA	77 U	78 U	81 U	77 U	71 U	71 U	73 U	67 U
Pyrene	100000	1000000	ug/kg	39 U	NA	NA	35 U	15.1 J	4790 D	38 U	39 U	40 U	38 U	36 U	18 J	37 U	33.9
PCBs																	
Aroclor 1016	1000	3200	ug/kg	38 U	NA	NA	34 U	38 U	NA	38 U	39 U	41 U	37 U	35 U	36 U	36 U	34 U
Aroclor 1221	1000	3200	ug/kg	38 U	NA	NA	34 U	38 U	NA	38 U	39 U	41 U	37 U	35 U	36 U	36 U	34 U
Aroclor 1232	1000	3200	ug/kg	38 U	NA	NA	34 U	38 U	NA	38 U	39 U	41 U	37 U	35 U	36 U	36 U	34 U
Aroclor 1242	1000	3200	ug/kg	38 U	NA	NA	34 U	38 U	NA	38 U	39 U	41 U	37 U	35 U	36 U	36 U	34 U
Aroclor 1248	1000	3200	ug/kg	38 U	NA	NA	34 U	38 U	NA	38 U	39 U	41 U	37 U	35 U	83.7	36 U	34 U
Aroclor 1254	1000	3200	ug/kg	38 U	NA	NA	34 U	38 U	NA	38 U	39 U	41 U	37 U	35 U	36 U	36 U	34 U
Aroclor 1260	1000	3200	ug/kg	38 U	NA	NA	34 U	38 U	NA	38 U	39 U	41 U	37 U	35 U	36 U	36 U	34 U
Aroclor 1262	1000	3200	ug/kg	38 U	NA	NA	34 U	38 U	NA	38 U	39 U	41 U	37 U	35 U	36 U	36 U	34 U
Aroclor 1268	1000	3200	ug/kg	38 U	NA	NA	34 U	38 U	NA	38 U	39 U	41 U	37 U	35 U	36 U	36 U	34 U
Metals																	
Aluminum	NS	NS	mg/kg	6880	7770	7660	7380	13500	NA	17200	23700	27500 J	25300 J	9280 J	11200 J	17200 J	8690 J
Antimony	NS	NS	mg/kg	2.2 U	2.1 U	2 U	0.41 B	0.35 B	NA	2.6 U	2.3 UJ	2.4 UJ	2.2 UJ	2.2 UJ	2.2 UJ	2.2 UJ	2.2 UJ
Arsenic	16	16	mg/kg	2.7	3.1	2.9	2.3	3.1	NA	3.9	4.5	6.3	5.9	2.3	2.7	3.3	1.6 B
Barium	400	820	mg/kg	43.7	84	46.4	43.2	36.4	NA	38.7	52.4	78.4	72.2	20.3 B	50.7	39.7	20.1 B
Beryllium	72	47	mg/kg	0.41	0.37	0.42	0.37	0.52	NA	0.73	0.71	0.82	0.75	0.54	0.6 J	0.5 J	0.35 J
Cadmium	4.3	7.5	mg/kg	0.078 B	0.32 B	0.22 B	0.27 B	0.3 B	NA	0.21 B	0.13 B	0.6 U	0.56 U	0.54 UB	0.13 B	0.1 B	0.54 UB
Calcium	NS	NS	mg/kg	11600	8570	10200	8790	1300	NA	2220	689	915	793	1610	1810 J	1100 J	1370 J
Chromium	NS	NS	mg/kg	13	14.4	15	11.7	16.6	NA	16.6	23.6 J	21.7	20	11.8	12.2	16.4	10.1
Cobalt	NS	NS	mg/kg	6.5	7.4	6.6	6.2	7.4	NA	7.3	10.7	10.4	10.3	5.5	6.3	7	7
Copper	270	1720	mg/kg	13.2	13.8	12.9	13.8 J	13.4 J	NA	13.7	12.7	18.7	17.6	10.3	13.3	9.6	9.9
Iron	NS	NS	mg/kg	16000	17500	17800	16700 J	16300 J	NA	19100	23300	30400	29700	14800	16800	17100	14000
Lead	400	450	mg/kg	8	30.4	8.5	4.9	21	NA	40.2	7	10.4	10.5	3	7.6	9.1	2.6
Magnesium	NS	NS	mg/kg	4680	4080	4110	3950	2620	NA	2670	3390	3370	3070	2200	2380 J	2100 J	2220 J
Manganese	2000	2000	mg/kg	265	249	255	291	171	NA	171	185 J	231	208	98.4	140	112	173
Mercury	NS	NS	mg/kg	0.039 UB	0.034 UB	0.035 UB	0.034 UB	0.03 B	NA	0.04 UB	0.037 UB	0.042	0.038	0.0089 B	0.032 UB	0.042	0.032 UB
Nickel	310	130	mg/kg	10.9	12.3	12.1	10.3	11.2	NA	12	15.1	14.8	14.2	8.9	9.7	11.2	9.1
Potassium	NS	NS	mg/kg	1150	1500	1270	1800	744 B	NA	967 B	838 B	1040 B	928 B	796 B	1010 B	671 B	835 B
Selenium	180	4	mg/kg	2.2 U	2.1 UB	2 UB	0.68 B	0.45 B	NA	0.35 B	0.73 B	0.84 B	0.41 B	0.27 B	2.2 U	2.2 U	2.2 U
Silver	180	8.3	mg/kg	0.55 U	0.38 B	0.36 B	0.61	0.48 B	NA	0.65 U	0.82	0.66	0.56 U	0.33 B	0.32 B	0.61	0.28 B
Sodium	NS	NS	mg/kg	203 B	242 B	205 B	174 B	110 B	NA	139 B	95.9 B	106 B	97.8 B	155 B	160 B	211 B	127 B
Thallium	NS	NS	mg/kg	1.1 U	1.1 U	1 U	1 U	0.21 B	NA	1.3 U	1.2 UJ	1.2 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
Vanadium	NS	NS	mg/kg	23.2	23.7	23	22.2 J	27.9 J	NA	30.3	39.4	41.5	37	21	25.3	27.1	20.3
Zinc	10000	2480	mg/kg	28.1	40.7	34.1	27.9	33.6	NA	31	28	39 J	36.9 J	18.6 J	32.2	29.1	20
General Chemistry																	
Percent Solids			%	85.9	93.9	94.2	93.4	86	85	79.3	85.4	80.2	86.4	92.2	90.3	89.6	94.9
Notes																	
NS	No standard																
NA	Not analyzed																
R	Rejected Result																
B	Indicates an estimated value between the instrument detection limit and the Reporting Limit (RL).																
E	Serial dilution results not within 10%. Applicable only if analyte concentration is at least 50X the IDL in original sample.																
J/JN	Indicates an estimated value.																
UB	The compound was analyzed for but not detected. The associated value is the compound quantitation limit.																
Shade	Exceeds NYSDEC Table 375-6: Restricted Residential Use Soil Cleanup Objective																
Bold	Exceeds NYSDEC Table 375-6: Protection of Groundwater Soil Cleanup Objective																

Table 9. Soil Sample Results Torne Valley Road Area A
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Location: ID Sample Depth:	TABLE 375-6: RESTRIC. RES. USE SCO	TABLE 375-6: PROTECTION OF GW SCO	Units	PE-A-S6 1-1.5 10/15/2015	PE-A-SX2 1.5-2 10/16/2015
VOCs					
1,1,1-Trichloroethane	100000	680	ug/kg	110 U	2 U
1,1,2,2-Tetrachloroethane	NS	NS	ug/kg	110 U	2 U
1,1,2-trichloro-1,2,2-trifluoroethane	NS	NS	ug/kg	280 U	4.9 U
1,1,2-Trichloroethane	NS	NS	ug/kg	110 U	2 U
1,1-Dichloroethane	26000	270	ug/kg	56 U	0.98 U
1,1-Dichloroethene	100000	330	ug/kg	56 U	0.98 U
1,2,4-Trichlorobenzene	NS	NS	ug/kg	280 U	4.9 U
1,2-Dibromo-3-chloropropane	NS	NS	ug/kg	110 U	2 U
1,2-Dibromoethane	NS	NS	ug/kg	56 U	0.98 U
1,2-Dichlorobenzene	100000	1100	ug/kg	56 U	0.98 U
1,2-Dichloroethane	3100	20	ug/kg	56 U	0.98 U
1,2-Dichloropropane	NS	NS	ug/kg	110 U	2 U
1,3-Dichlorobenzene	49000	2400	ug/kg	56 U	0.98 U
1,4-Dichlorobenzene	13000	1800	ug/kg	56 U	0.98 U
2-Butanone (MEK)	100000	120	ug/kg	560 U	9.8 U
4-Methyl-2-Pentanone	NS	NS	ug/kg	280 U	4.9 U
Acetone	100000	50	ug/kg	560 U	9.8 U
Benzene	4800	60	ug/kg	28 U	0.49 U
Bromodichloromethane	NS	NS	ug/kg	110 U	2 U
Bromoform	NS	NS	ug/kg	280 U	4.9 U
Bromomethane	NS	NS	ug/kg	280 U	4.9 U
Carbon Disulfide	NS	NS	ug/kg	110 U	2 U
Carbon Tetrachloride	2400	760	ug/kg	110 U	2 U
CFC-11	NS	NS	ug/kg	280 U	4.9 U
CFC-12	NS	NS	ug/kg	280 U	4.9 U
Chlorobenzene	100000	1100	ug/kg	110 U	2 U
Chlorodibromomethane	NS	NS	ug/kg	110 U	2 U
Chloroethane	NS	NS	ug/kg	280 U	4.9 U
Chloroform	49000	370	ug/kg	110 U	2 U
Chloromethane	NS	NS	ug/kg	280 U	4.9 U
cis-1,2-Dichloroethene	100000	250	ug/kg	56 U	0.98 U
cis-1,3-Dichloropropene	NS	NS	ug/kg	110 U	2 U
Cyclohexane	NS	NS	ug/kg	110 U	2 U
Dichloromethane	NS	NS	ug/kg	280 U	4.9 U
Ethylbenzene	41000	1000	ug/kg	5090	0.24 J
Isopropylbenzene	NS	NS	ug/kg	2730	2 U
Methyl Acetate	NS	NS	ug/kg	280 U	4.9 U
Methyl N-Butyl Ketone (2-Hexanone)	NS	NS	ug/kg	280 U	4.9 U
Methylcyclohexane	NS	NS	ug/kg	78.7 J	2 U
Methyl-tert-butylether	100000	930	ug/kg	56 U	0.98 U
Styrene (Monomer)	NS	NS	ug/kg	110 U	0.78 J
Tetrachloroethene	19000	1300	ug/kg	110 U	2 U
Toluene	100000	700	ug/kg	16.1 J	0.98 U
Total Xylenes	100000	1600	ug/kg	35100	0.98 U
trans-1,2-Dichloroethene	100000	190	ug/kg	56 U	0.98 U
trans-1,3-Dichloropropene	NS	NS	ug/kg	110 U	2 U
Trichloroethene	21000	470	ug/kg	56 U	0.98 U
Vinyl chloride	900	20	ug/kg	110 U	2 U

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Table 9. Soil Sample Results Torne Valley Road Area A
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Location: ID Sample Depth:	TABLE 375-6: RESTRIC. RES. USE SCO	TABLE 375-6: PROTECTION OF GW SCO	Units	PE-A-S6 1-1.5 10/15/2015	PE-A-SX2 1.5-2 10/16/2015
Date Collected:					
SVOCs					
1,1-Biphenyl	NS	NS	ug/kg	28.9 J	75 U
2,2-Oxybis(1-Chloropropane)	NS	NS	ug/kg	77 U	75 U
2,4,5-Trichlorophenol	NS	NS	ug/kg	190 U	190 U
2,4,6-Trichlorophenol	NS	NS	ug/kg	190 U	190 U
2,4-Dichlorophenol	NS	NS	ug/kg	190 U	190 U
2,4-Dimethylphenol	NS	NS	ug/kg	190 U	190 U
2,4-Dinitrophenol	NS	NS	ug/kg	190 U	190 U
2,4-Dinitrotoluene	NS	NS	ug/kg	38 U	37 U
2,6-Dinitrotoluene	NS	NS	ug/kg	38 U	37 U
2-Chloronaphthalene	NS	NS	ug/kg	77 U	75 U
2-Chlorophenol	NS	NS	ug/kg	77 U	75 U
2-Methyl-4,6-dinitrophenol	NS	NS	ug/kg	190 U	190 U
2-Methylnaphthalene	NS	NS	ug/kg	1060	75 U
2-Methylphenol	NS	NS	ug/kg	77 U	75 U
2-Nitroaniline	NS	NS	ug/kg	190 U	190 U
2-Nitrophenol	NS	NS	ug/kg	190 U	190 U
3,3-Dichlorobenzidine	NS	NS	ug/kg	77 U	75 U
3-Methylphenol, 4-Methylphenol	NS	NS	ug/kg	77 U	75 U
3-Nitroaniline	NS	NS	ug/kg	190 U	190 U
4-Bromophenyl phenyl ether	NS	NS	ug/kg	77 U	75 U
4-Chloro-3-Methylphenol	NS	NS	ug/kg	190 U	190 U
4-Chlorophenyl phenyl ether	NS	NS	ug/kg	77 U	75 U
4-Nitroaniline	NS	NS	ug/kg	190 U	190 U
4-Nitrophenol	NS	NS	ug/kg	380 U	370 U
Acenaphthene	100000	98000	ug/kg	38 U	37 U
Acenaphthylene	100000	107000	ug/kg	38 U	37 U
Acetophenone	NS	NS	ug/kg	190 U	190 U
Anthracene	100000	1000000	ug/kg	38 U	37 U
Atrazine	NS	NS	ug/kg	77 U	75 U
Benzaldehyde	NS	NS	ug/kg	190 U	190 U
Benzo(a)anthracene	1000	1000	ug/kg	38 U	37 U
Benzo(a)pyrene	1000	22000	ug/kg	17.5 J	37 U
Benzo(b)fluoranthene	1000	1700	ug/kg	19.2 J	37 U
Benzo(g,h,i)perylene	100000	1000000	ug/kg	38 U	37 U
Benzo(k)fluoranthene	3900	1700	ug/kg	38 U	37 U
bis(2-Chloroethoxy)methane	NS	NS	ug/kg	77 U	75 U
bis(2-Chloroethyl)ether	NS	NS	ug/kg	77 U	75 U
bis(2-Ethylhexyl)phthalate	NS	NS	ug/kg	390	75 U
Butyl benzyl phthalate	NS	NS	ug/kg	77 U	75 U
Caprolactam	NS	NS	ug/kg	77 U	75 U
Carbazole	NS	NS	ug/kg	77 U	75 U
Chrysene	3900	1000	ug/kg	24.4 J	37 U
Dibenzo(a,h)anthracene	330	1000000	ug/kg	38 U	37 U
Dibenzofuran	NS	NS	ug/kg	77 U	75 U
Diethyl phthalate	NS	NS	ug/kg	77 U	75 U
Dimethyl phthalate	NS	NS	ug/kg	77 U	75 U
Di-n-butyl phthalate	NS	NS	ug/kg	77 U	75 U
Di-n-octyl phthalate	NS	NS	ug/kg	77 U	75 U
Fluoranthene	100000	1000000	ug/kg	26.8 J	37 U
Fluorene	100000	386000	ug/kg	38 U	37 U
Hexachloro-1,3-butadiene	NS	NS	ug/kg	38 U	37 U
Hexachlorobenzene	NS	NS	ug/kg	77 U	75 U
See Notes on Last Page					

Table 9. Soil Sample Results Torne Valley Road Area A
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Location: ID Sample Depth:	TABLE 375-6: RESTRIC. RES. USE SCO	TABLE 375-6: PROTECTION OF GW SCO	Units	PE-A-S6 1-1.5 10/15/2015	PE-A-SX2 1.5-2 10/16/2015
Date Collected:					
SVOCs cont.					
Hexachlorocyclopentadiene	NS	NS	ug/kg	380 U	370 U
Hexachloroethane	NS	NS	ug/kg	190 U	190 U
Indeno(1,2,3-cd)pyrene	500	8200	ug/kg	38 U	37 U
Isophorone	NS	NS	ug/kg	77 U	75 U
Naphthalene	100000	12000	ug/kg	3310	37 U
Nitrobenzene	NS	NS	ug/kg	77 U	75 U
n-Nitrosodi-n-propylamine	NS	NS	ug/kg	77 U	75 U
N-nitrosodiphenylamine	NS	NS	ug/kg	33.9 J	190 U
p-Chloroaniline	NS	NS	ug/kg	190 U	190 U
Pentachlorophenol	6700	800	ug/kg	190 U	190 U
Phenanthrene	100000	1000000	ug/kg	43.5	37 U
Phenol	100000	330	ug/kg	77 U	75 U
Pyrene	100000	1000000	ug/kg	36 J	37 U
PCBs					
Aroclor 1016	1000	3200	ug/kg	38 U	38 U
Aroclor 1221	1000	3200	ug/kg	38 U	38 U
Aroclor 1232	1000	3200	ug/kg	38 U	38 U
Aroclor 1242	1000	3200	ug/kg	38 U	38 U
Aroclor 1248	1000	3200	ug/kg	38 U	38 U
Aroclor 1254	1000	3200	ug/kg	79.7	38 U
Aroclor 1260	1000	3200	ug/kg	38 U	38 U
Aroclor 1262	1000	3200	ug/kg	38 U	38 U
Aroclor 1268	1000	3200	ug/kg	38 U	38 U
Metals					
Aluminum	NS	NS	mg/kg	8010 J	6900
Antimony	NS	NS	mg/kg	16.6 J	1.3 B
Arsenic	16	16	mg/kg	13.2	3.3
Barium	400	820	mg/kg	2780 J	111
Beryllium	72	47	mg/kg	0.46	0.42
Cadmium	4.3	7.5	mg/kg	3.8	0.45 B
Calcium	NS	NS	mg/kg	5300 J	4450
Chromium	NS	NS	mg/kg	47.9 J	14.5
Cobalt	NS	NS	mg/kg	7.3 J	6.9
Copper	270	1720	mg/kg	59.1 J	16.6
Iron	NS	NS	mg/kg	20300 J	20200
Lead	400	450	mg/kg	1030 J	43.5
Magnesium	NS	NS	mg/kg	3470 J	3570
Manganese	2000	2000	mg/kg	307 J	306
Mercury	NS	NS	mg/kg	0.038 UB	0.036 UB
Nickel	310	130	mg/kg	24.8 J	11.6
Potassium	NS	NS	mg/kg	1250 J	1190
Selenium	180	4	mg/kg	0.46 B	2.2 U
Silver	180	8.3	mg/kg	0.4 B	0.38 B
Sodium	NS	NS	mg/kg	383 J	292 B
Thallium	NS	NS	mg/kg	0.35 B	1.1 U
Vanadium	NS	NS	mg/kg	26.3 J	24.9
Zinc	10000	2480	mg/kg	521 J	50
General Chemistry					
Percent Solids			%	86.8	88.1

Notes

NS	No standard
NA	Not analyzed
R	Rejected Result
B	Indicates an estimated value between the instrument detection limit and the Reporting Limit (RL).
E	Serial dilution results not within 10%. Applicable only if analyte concentration is at least 50X the IDL in original sample.
J/JN	Indicates an estimated value.
UB	The compound was analyzed for but not detected. The associated value is the compound quantitation limit.
Shade	Exceeds NYSDEC Table 375-6: Restricted Residential Use Soil Cleanup Objective
Bold	Exceeds NYSDEC Table 375-6: Protection of Groundwater Soil Cleanup Objective

Table 10. Confirmatory Soil Sample Results Area B
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Sample ID	TABLE 375-6: RESTRIC. RES. USE SCO	TABLE 375-6: PROTECTION OF GW SCO	Units	PE-B-B2	PE-B-B3	PE-B-B4	PE-B-C1A	PE-B-C2	PE-B-C3	PE-B-C4	PE-B-C5	PE-B-D1	PE-B-D2	PE-B-D3
Sample Depth				2-2.5	2-2.5	2-2.5	2.5-3	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5
Sample Date				42348	42348	42349	42377	12102015	42347	42347	42347	42360	42348	42347
VOCs														
1,1,1-Trichloroethane	100000	680	ug/kg	1.9 U	1.9 U	1.9 U	NA	1.7 U	1.8 U	1.8 U	2.1 U	1.7 U	1.8 U	1.8 U
1,1,2,2-Tetrachloroethane	NS	NS	ug/kg	1.9 U	1.9 U	1.9 U	NA	1.7 U	1.8 U	1.8 U	2.1 U	1.7 U	1.8 U	1.8 U
1,1,2-trichloro-1,2,2-trifluoroethane	NS	NS	ug/kg	4.6 U	4.7 U	4.7 U	NA	4.2 U	4.6 U	4.5 U	5.2 U	4.3 U	4.4 U	4.5 U
1,1,2-Trichloroethane	NS	NS	ug/kg	1.9 U	1.9 U	1.9 U	NA	1.7 U	1.8 U	1.8 U	2.1 U	1.7 U	1.8 U	1.8 U
1,1-Dichloroethane	26000	270	ug/kg	0.93 U	0.94 U	0.94 U	NA	0.83 U	0.91 U	0.9 U	1 U	0.86 U	0.88 U	0.89 U
1,1-Dichloroethene	100000	330	ug/kg	0.93 U	0.94 U	0.94 U	NA	0.83 U	0.91 U	0.9 U	1 U	0.86 U	0.88 U	0.89 U
1,2,4-Trichlorobenzene	NS	NS	ug/kg	4.6 U	4.7 U	4.7 U	NA	4.2 U	4.6 U	4.5 U	5.2 U	4.3 U	4.4 U	4.5 U
1,2-Dibromo-3-chloropropane	NS	NS	ug/kg	1.9 U	1.9 U	1.9 U	NA	1.7 U	1.8 U	1.8 U	2.1 U	1.7 U	1.8 U	1.8 U
1,2-Dibromoethane	NS	NS	ug/kg	0.93 U	0.94 U	0.94 U	NA	0.83 U	0.91 U	0.9 U	1 U	0.86 U	0.88 U	0.89 U
1,2-Dichlorobenzene	100000	1100	ug/kg	0.93 U	0.94 U	0.94 U	NA	0.83 U	0.91 U	0.9 U	1 U	0.86 U	0.88 U	0.89 U
1,2-Dichloroethane	3100	20	ug/kg	0.93 U	0.94 U	0.94 U	NA	0.83 U	0.91 U	0.9 U	1 U	0.86 U	0.88 U	0.89 U
1,2-Dichloropropane	NS	NS	ug/kg	1.9 U	1.9 U	1.9 U	NA	1.7 U	1.8 U	1.8 U	2.1 U	1.7 U	1.8 U	1.8 U
1,3-Dichlorobenzene	49000	2400	ug/kg	0.93 U	0.94 U	0.94 U	NA	0.83 U	0.91 U	0.9 U	1 U	0.86 U	0.88 U	0.89 U
1,4-Dichlorobenzene	13000	1800	ug/kg	0.93 U	0.94 U	0.94 U	NA	0.83 U	0.91 U	0.9 U	1 U	0.86 U	0.88 U	0.89 U
2-Butanone (MEK)	100000	120	ug/kg	9.3 U	9.4 U	9.4 U	NA	8.3 U	9.1 U	9 U	10 U	8.6 U	8.8 U	8.9 U
4-Methyl-2-Pentanone	NS	NS	ug/kg	4.6 U	4.7 U	4.7 U	NA	4.2 U	4.6 U	4.5 U	5.2 U	4.3 U	4.4 U	4.5 U
Acetone	100000	50	ug/kg	9.3 U	9.4 U	9.4 U	NA	8.3 U	9.1 U	9 U	10 U	8.6 UJ	8.8 U	8.9 U
Benzene	4800	60	ug/kg	0.46 U	0.47 U	0.47 U	NA	0.42 U	0.46 U	0.45 U	0.52 U	0.43 U	0.44 U	0.45 U
Bromodichloromethane	NS	NS	ug/kg	1.9 U	1.9 U	1.9 U	NA	1.7 U	1.8 U	1.8 U	2.1 U	1.7 U	1.8 U	1.8 U
Bromoform	NS	NS	ug/kg	4.6 U	4.7 U	4.7 U	NA	4.2 U	4.6 U	4.5 U	5.2 U	4.3 U	4.4 U	4.5 U
Bromomethane	NS	NS	ug/kg	4.6 U	4.7 U	4.7 U	NA	4.2 U	4.6 U	4.5 U	5.2 U	4.3 U	4.4 U	4.5 U
Carbon Disulfide	NS	NS	ug/kg	1.9 U	1.9 U	1.9 U	NA	1.7 U	1.8 U	1.8 U	2.1 U	1.7 U	1.8 U	1.8 U
Carbon Tetrachloride	2400	760	ug/kg	1.9 U	1.9 U	1.9 U	NA	1.7 U	1.8 U	1.8 U	2.1 U	1.7 U	1.8 U	1.8 U
CFC-11	NS	NS	ug/kg	4.6 U	4.7 U	4.7 U	NA	4.2 U	4.6 U	4.5 U	5.2 U	4.3 U	4.4 U	4.5 U
CFC-12	NS	NS	ug/kg	4.6 U	4.7 U	4.7 U	NA	4.2 U	4.6 U	4.5 U	5.2 U	4.3 U	4.4 U	4.5 U
Chlorobenzene	100000	1100	ug/kg	1.9 U	1.9 U	1.9 U	NA	1.7 U	1.8 U	1.8 U	2.1 U	1.7 U	1.8 U	1.8 U
Chlorodibromomethane	NS	NS	ug/kg	1.9 U	1.9 U	1.9 U	NA	1.7 U	1.8 U	1.8 U	2.1 U	1.7 U	1.8 U	1.8 U
Chloroethane	NS	NS	ug/kg	4.6 U	4.7 U	4.7 U	NA	4.2 U	4.6 U	4.5 U	5.2 U	4.3 U	4.4 U	4.5 U
Chloroform	49000	370	ug/kg	1.9 U	1.9 U	1.9 U	NA	1.7 U	1.8 U	1.8 U	2.1 U	1.7 U	1.8 U	1.8 U
Chloromethane	NS	NS	ug/kg	4.6 U	4.7 U	4.7 U	NA	4.2 U	4.6 U	4.5 U	5.2 U	4.3 U	4.4 U	4.5 U
cis-1,2-Dichloroethene	100000	250	ug/kg	0.93 U	0.94 U	0.94 U	NA	0.83 U	0.91 U	0.9 U	1 U	0.86 U	0.88 U	0.89 U
cis-1,3-Dichloropropene	NS	NS	ug/kg	1.9 U	1.9 U	1.9 U	NA	1.7 U	1.8 U	1.8 U	2.1 U	1.7 U	1.8 U	1.8 U
Cyclohexane	NS	NS	ug/kg	1.9 U	1.9 U	1.9 U	NA	1.7 U	1.8 U	1.8 U	2.1 U	1.7 U	1.8 U	1.8 U
Dichloromethane	NS	NS	ug/kg	4.6 U	4.7 U	4.7 U	NA	4.2 U	4.6 U	4.5 U	5.2 U	4.3 U	4.4 U	4.5 U
Ethylbenzene	41000	1000	ug/kg	0.93 U	0.94 U	0.94 U	NA	0.83 U	0.91 U	0.9 U	1 U	0.86 U	0.88 U	0.89 U
Isopropylbenzene	NS	NS	ug/kg	1.9 U	1.9 U	1.9 U	NA	1.7 U	1.8 U	1.8 U	2.1 U	1.7 U	1.8 U	1.8 U
Methyl Acetate	NS	NS	ug/kg	4.6 U	4.7 U	4.7 U	NA	4.2 U	4.6 U	4.5 U	5.2 U	4.3 U	4.4 U	4.5 U
Methyl N-Butyl Ketone (2-Hexanone)	NS	NS	ug/kg	4.6 U	4.7 U	4.7 U	NA	4.2 U	4.6 U	4.5 U	5.2 U	4.3 U	4.4 U	4.5 U
Methylcyclohexane	NS	NS	ug/kg	1.9 U	1.9 U	1.9 U	NA	1.7 U	1.8 U	1.8 U	2.1 U	1.7 U	1.8 U	1.8 U
Methyl-tert-butylether	100000	930	ug/kg	0.93 U	0.94 U	0.94 U	NA	0.83 U	0.91 U	0.9 U	1 U	0.86 U	0.88 U	0.89 U
Styrene (Monomer)	NS	NS	ug/kg	0.27 J	0.68 J	1.9 U	NA	2.6	0.95 J	2.7	0.77 J	1.7 U	0.34 J	0.52 J
Tetrachloroethene	19000	1300	ug/kg	1.9 U	1.9 U	1.9 U	NA	1.7 U	1.8 U	1.8 U	2.1 U	1.7 U	1.8 U	1.8 U
Toluene	100000	700	ug/kg	0.93 U	0.94 U	0.94 U	NA	0.83 U	0.91 U	0.9 U	1 U	0.86 U	0.88 U	0.89 U
Total Xylenes	100000	1600	ug/kg	0.93 U	0.94 U	0.94 U	NA	0.83 U	0.91 U	0.9 U	1 U	0.86 U	0.88 U	0.89 U
trans-1,2-Dichloroethene	100000	190	ug/kg	0.93 U	0.94 U	0.94 U	NA	0.83 U	0.91 U	0.9 U	1 U	0.86 U	0.88 U	0.89 U
trans-1,3-Dichloropropene	NS	NS	ug/kg	1.9 U	1.9 U	1.9 U	NA	1.7 U	1.8 U	1.8 U	2.1 U	1.7 U	1.8 U	1.8 U
Trichloroethene	21000	470	ug/kg	0.93 U	0.94 U	0.94 U	NA	0.83 U	0.91 U	0.9 U	1 U	0.86 U	0.88 U	0.89 U
Vinyl chloride	900	20	ug/kg	1.9 U	1.9 U	1.9 U	NA	1.7 U	1.8 U	1.8 U	2.1 U	1.7 U	1.8 U	1.8 U

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Table 10. Confirmatory Soil Sample Results Area B
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Sample ID	TABLE 375-6: RESTRIC. RES. USE SCO	TABLE 375-6: PROTECTION OF GW SCO	Units	PE-B-B2	PE-B-B3	PE-B-B4	PE-B-C1A	PE-B-C2	PE-B-C3	PE-B-C4	PE-B-C5	PE-B-D1	PE-B-D2	PE-B-D3
Sample Depth				2-2.5	2-2.5	2-2.5	2.5-3	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5
Sample Date				42348	42348	42349	42377	12102015	42347	42347	42347	42360	42348	42347
SVOCs														
1,1-Biphenyl	NS	NS	ug/kg	67 U	73 U	70 U	NA	67 U	72 U	77 U	79 U	74 U	73 U	72 U
2,2-Oxybis(1-Chloropropane)	NS	NS	ug/kg	67 U	73 U	70 U	NA	67 U	72 U	77 U	79 U	74 U	73 U	72 U
2,4,5-Trichlorophenol	NS	NS	ug/kg	170 U	180 U	180 U	NA	170 U	180 U	190 U	200 U	180 U	180 U	180 U
2,4,6-Trichlorophenol	NS	NS	ug/kg	170 U	180 U	180 U	NA	170 U	180 U	190 U	200 U	180 U	180 U	180 U
2,4-Dichlorophenol	NS	NS	ug/kg	170 U	180 U	180 U	NA	170 U	180 U	190 U	200 U	180 U	180 U	180 U
2,4-Dimethylphenol	NS	NS	ug/kg	170 U	180 U	180 U	NA	170 U	180 U	190 U	200 U	180 U	180 U	180 U
2,4-Dinitrophenol	NS	NS	ug/kg	170 U	180 U	180 U	NA	170 U	180 U	190 U	200 U	180 U	180 U	180 U
2,4-Dinitrotoluene	NS	NS	ug/kg	34 U	37 U	35 U	NA	34 U	36 U	39 U	39 U	37 U	37 U	36 U
2,6-Dinitrotoluene	NS	NS	ug/kg	34 U	37 U	35 U	NA	34 U	36 U	39 U	39 U	37 U	37 U	36 U
2-Chloronaphthalene	NS	NS	ug/kg	67 U	73 U	70 U	NA	67 U	72 U	77 U	79 U	74 U	73 U	72 U
2-Chlorophenol	NS	NS	ug/kg	67 U	73 U	70 U	NA	67 U	72 U	77 U	79 U	74 U	73 U	72 U
2-Methyl-4,6-dinitrophenol	NS	NS	ug/kg	170 U	180 U	180 U	NA	170 U	180 U	190 U	200 U	180 U	180 U	180 U
2-Methylnaphthalene	NS	NS	ug/kg	67 U	73 U	70 U	NA	67 U	72 U	77 U	79 U	74 U	73 U	72 U
2-Methylphenol	NS	NS	ug/kg	67 U	73 U	70 U	NA	67 U	72 U	77 U	79 U	74 U	73 U	72 U
2-Nitroaniline	NS	NS	ug/kg	170 U	180 U	180 U	NA	170 U	180 U	190 U	200 U	180 U	180 U	180 U
2-Nitrophenol	NS	NS	ug/kg	170 U	180 U	180 U	NA	170 U	180 U	190 U	200 U	180 U	180 U	180 U
3,3-Dichlorobenzidine	NS	NS	ug/kg	67 U	73 U	70 U	NA	67 U	72 U	77 U	79 U	74 U	73 U	72 U
3-Methylphenol, 4-Methylphenol	NS	NS	ug/kg	67 U	73 U	70 U	NA	67 U	72 U	77 U	79 U	74 U	73 U	72 U
3-Nitroaniline	NS	NS	ug/kg	170 U	180 U	180 U	NA	170 U	180 U	190 U	200 U	180 U	180 U	180 U
4-Bromophenyl phenyl ether	NS	NS	ug/kg	67 U	73 U	70 U	NA	67 U	72 U	77 U	79 U	74 U	73 U	72 U
4-Chloro-3-Methylphenol	NS	NS	ug/kg	170 U	180 U	180 U	NA	170 U	180 U	190 U	200 U	180 U	180 U	180 U
4-Chlorophenyl phenyl ether	NS	NS	ug/kg	67 U	73 U	70 U	NA	67 U	72 U	77 U	79 U	74 U	73 U	72 U
4-Nitroaniline	NS	NS	ug/kg	170 U	180 U	180 U	NA	170 U	180 U	190 U	200 U	180 U	180 U	180 U
4-Nitrophenol	NS	NS	ug/kg	340 U	370 U	350 U	NA	340 U	360 U	390 U	390 U	370 U	370 U	360 U
Acenaphthene	100000	98000	ug/kg	34 U	37 U	35 U	NA	34 U	36 U	39 U	39 U	37 U	37 U	36 U
Acenaphthylene	100000	107000	ug/kg	34 U	37 U	35 U	NA	34 U	36 U	39 U	39 U	37 U	37 U	36 U
Acetophenone	NS	NS	ug/kg	170 U	180 U	180 U	NA	170 U	180 U	190 U	200 U	180 U	180 U	180 U
Anthracene	100000	1000000	ug/kg	34 U	37 U	35 U	NA	34 U	36 U	39 U	39 U	37 U	37 U	36 U
Atrazine	NS	NS	ug/kg	67 U	73 U	70 U	NA	67 U	72 U	77 U	79 U	74 U	73 U	72 U
Benzaldehyde	NS	NS	ug/kg	170 U	180 U	180 U	NA	170 U	180 UJ	190 UJ	200 UJ	180 U	180 U	180 UJ
Benzo(a)anthracene	1000	1000	ug/kg	34 U	37 U	35 U	NA	34 U	36 U	39 U	39 U	37 U	37 U	36 U
Benzo(a)pyrene	1000	22000	ug/kg	34 U	37 U	35 U	NA	34 U	36 U	39 U	39 U	37 U	37 U	36 U
Benzo(b)fluoranthene	1000	1700	ug/kg	34 U	37 U	35 U	NA	34 U	36 U	39 U	39 U	37 U	37 U	36 U
Benzo(g,h,i)perylene	100000	1000000	ug/kg	34 U	37 U	35 U	NA	34 U	36 U	39 U	39 U	37 U	37 U	36 U
Benzo(k)fluoranthene	3900	1700	ug/kg	34 U	37 U	35 U	NA	34 U	36 U	39 U	39 U	37 U	37 U	36 U
bis(2-Chloroethoxy)methane	NS	NS	ug/kg	67 U	73 U	70 U	NA	67 U	72 U	77 U	79 U	74 U	73 U	72 U
bis(2-Chloroethyl)ether	NS	NS	ug/kg	67 U	73 U	70 U	NA	67 U	72 U	77 U	79 U	74 U	73 U	72 U
bis(2-Ethylhexyl)phthalate	NS	NS	ug/kg	67 U	73 U	70 U	NA	67 U	72 U	77 U	79 U	74 U	73 U	72 U
Butyl benzyl phthalate	NS	NS	ug/kg	67 U	73 U	70 U	NA	67 U	72 U	77 U	79 U	74 U	73 U	72 U
Caprolactam	NS	NS	ug/kg	67 U	73 U	70 U	NA	67 U	72 U	77 U	79 U	74 U	73 U	72 U
Carbazole	NS	NS	ug/kg	67 U	73 U	70 U	NA	67 U	72 U	77 U	79 U	74 U	73 U	72 U
Chrysene	3900	1000	ug/kg	34 U	37 U	35 U	NA	34 U	36 U	39 U	39 U	37 U	37 U	36 U
Dibenzo(a,h)anthracene	330	1000000	ug/kg	34 U	37 U	35 U	NA	34 U	36 U	39 U	39 U	37 U	37 U	36 U
Dibenzofuran	NS	NS	ug/kg	67 U	73 U	70 U	NA	67 U	72 U	77 U	79 U	74 U	73 U	72 U
Diethyl phthalate	NS	NS	ug/kg	67 U	73 U	70 U	NA	67 U	72 U	77 U	79 U	74 U	73 U	72 U
Dimethyl phthalate	NS	NS	ug/kg	67 U	73 U	70 U	NA	67 U	72 U	77 U	79 U	74 U	73 U	72 U
Di-n-butyl phthalate	NS	NS	ug/kg	67 U	73 U	70 U	NA	67 U	72 U	77 U	79 U	74 U	73 U	72 U
Di-n-octyl phthalate	NS	NS	ug/kg	67 U	73 U	70 U	NA	67 U	72 U	77 U	79 U	74 UJ	73 U	72 U
Fluoranthene	100000	1000000	ug/kg	34 U	37 U	35 U	NA	34 U	36 U	39 U	39 U	37 U	37 U	36 U
Fluorene	100000	386000	ug/kg	34 U	37 U	35 U	NA	34 U	36 U	39 U	39 U	37 U	37 U	36 U
Hexachloro-1,3-butadiene	NS	NS	ug/kg	34 U	37 U	35 U	NA	34 U	36 U	39 U	39 U	37 U	37 U	36 U
Hexachlorobenzene	NS	NS	ug/kg	67 U	73 U	70 U	NA	67 U	72 U	77 U	79 U	74 U	73 U	72 U
Hexachlorocyclopentadiene	NS	NS	ug/kg	340 U	370 U	350 U	NA	340 U	360 U	390 U	390 U	370 U	370 U	360 U
Hexachloroethane	NS	NS	ug/kg	170 U	180 U	180 U	NA	170 U	180 U	190 U	200 U	180 U	180 U	180 U
Indeno(1,2,3-cd)pyrene	500	8200	ug/kg	34 U	37 U	35 U	NA	34 U	36 U	39 U	39 U	37 U	37 U	36 U

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Table 10. Confirmatory Soil Sample Results Area B
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Sample ID	TABLE 375-6: RESTRIC. RES. USE SCO	TABLE 375-6: PROTECTION OF GW SCO	Units	PE-B-B2	PE-B-B3	PE-B-B4	PE-B-C1A	PE-B-C2	PE-B-C3	PE-B-C4	PE-B-C5	PE-B-D1	PE-B-D2	PE-B-D3
Sample Depth				2-2.5	2-2.5	2-2.5	2.5-3	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5
Sample Date				42348	42348	42349	42377	12102015	42347	42347	42347	42360	42348	42347
SVOCs cont.														
Isophorone	NS	NS	ug/kg	67 U	73 U	70 U	NA	67 U	72 U	77 U	79 U	74 U	73 U	72 U
Naphthalene	100000	12000	ug/kg	34 U	37 U	35 U	NA	34 U	36 U	39 U	39 U	37 U	37 U	36 U
Nitrobenzene	NS	NS	ug/kg	67 U	73 U	70 U	NA	67 U	72 U	77 U	79 U	74 U	73 U	72 U
n-Nitrosodi-n-propylamine	NS	NS	ug/kg	67 U	73 U	70 U	NA	67 U	72 U	77 U	79 U	74 U	73 U	72 U
N-nitrosodiphenylamine	NS	NS	ug/kg	170 U	180 U	180 U	NA	170 U	180 U	190 U	200 U	180 U	180 U	180 U
p-Chloroaniline	NS	NS	ug/kg	170 U	180 U	180 U	NA	170 U	180 U	190 U	200 U	180 U	180 U	180 U
Pentachlorophenol	6700	800	ug/kg	170 U	180 U	180 U	NA	170 U	180 U	190 U	200 U	180 U	180 U	180 U
Phenanthrene	100000	1000000	ug/kg	34 U	37 U	35 U	NA	34 U	36 U	39 U	39 U	37 U	37 U	36 U
Phenol	100000	330	ug/kg	67 U	73 U	70 U	NA	67 U	72 U	77 U	79 U	74 U	73 U	72 U
Pyrene	100000	1000000	ug/kg	34 U	37 U	35 U	NA	34 U	36 U	39 U	39 U	37 U	37 U	36 U
PCBs														
Aroclor 1016	1000	3200	ug/kg	33 U	37 U	36 U	NA	35 U	35 U	38 U	40 U	37 U	36 U	35 U
Aroclor 1221	1000	3200	ug/kg	33 U	37 U	36 U	NA	35 U	35 U	38 U	40 U	37 U	36 U	35 U
Aroclor 1232	1000	3200	ug/kg	33 U	37 U	36 U	NA	35 U	35 U	38 U	40 U	37 U	36 U	35 U
Aroclor 1242	1000	3200	ug/kg	33 U	37 U	36 U	NA	35 U	35 U	38 U	40 U	37 U	36 U	35 U
Aroclor 1248	1000	3200	ug/kg	33 U	37 U	36 U	NA	35 U	35 U	38 U	40 U	37 U	36 U	35 U
Aroclor 1254	1000	3200	ug/kg	33 U	37 U	36 U	NA	35 U	35 U	38 U	40 U	37 U	36 U	35 U
Aroclor 1260	1000	3200	ug/kg	33 U	37 U	36 U	NA	35 U	35 U	38 U	40 U	37 U	36 U	35 U
Aroclor 1262	1000	3200	ug/kg	33 U	37 U	36 U	NA	35 U	35 U	38 U	40 U	37 U	36 U	35 U
Aroclor 1268	1000	3200	ug/kg	33 U	37 U	36 U	NA	35 U	35 U	38 U	40 U	37 U	36 U	35 U
Metals														
Aluminum	NS	NS	mg/kg	10900 J	12200 J	16200 J	7780	6030 J	9090 J	9940 J	7470 J	6360	7770 J	8160 J
Antimony	NS	NS	mg/kg	4.1 UJ	2.2 UB	4.4 UJ	2.1 UJ	2.1 UJ	0.47 J	0.42 J	2.3 UJ	2.2 UB	2.2 UJ	0.47 J
Arsenic	16	16	mg/kg	1.9 B	3.8	3.5	2.8	1.9 B	1.7 B	2.1 B	1.6 B	2.3	2.3	1.9 B
Barium	400	820	mg/kg	34.2	171	60.8	40.9	38.1	43.1 J	50.9 J	36.8 J	38.1	37.5	36.6 J
Beryllium	72	47	mg/kg	0.6	0.92	1.2	0.65	0.26	0.57	0.67	0.43	0.36	0.57	0.52
Cadmium	4.3	7.5	mg/kg	0.35 B	2.1	0.55	0.53 UB	0.19 B	0.23 B	0.26 B	0.21 B	0.22 B	0.17 B	0.3 B
Calcium	NS	NS	mg/kg	4470	5030	5750	5150	2380	2030	2360	2110	7990	4260	2520
Chromium	NS	NS	mg/kg	8.5	13.3	9.7	13.4	12.7	11.5	9.6	12.1	13.7	11	12.3
Cobalt	NS	NS	mg/kg	5.2	6.2	6.4	6.5	7.1	7.1	5.6 B	7.4	6.3	5.9	6.7
Copper	270	1720	mg/kg	4.5	17.4	10.9	14.7	19.6	15.5	11.5	14.2	12.3	8.7	13.7
Iron	NS	NS	mg/kg	22000	23400	26200	18200	14400	16400 J	17700 J	15600 J	16000	18700	16200 J
Lead	400	450	mg/kg	8.8	121	23.5	16.5	2.7	2.3 J	2.2 J	2.3 J	22.7	2.7	7.6 J
Magnesium	NS	NS	mg/kg	3020	3160	3610	3910	2770	3100	2960	3220	3900	3690	3570
Manganese	2000	2000	mg/kg	203	224	247	247	133	195	174	191	286	217	214
Mercury	NS	NS	mg/kg	0.034 U	0.0062 B	0.0042 B	0.035 UB	0.033 U	0.033 U	0.039 U	0.037 U	0.034 UB	0.035 U	0.033 U
Nickel	310	130	mg/kg	4 B	7.4	6.1	9.2	11.1	9.9	6.9	9.8	9.6	7.2	10
Potassium	NS	NS	mg/kg	1110	1760	2210	1600	1390	1410	1670	1060 B	1330	1550	1200
Selenium	180	4	mg/kg	1.2 B	1 B	2.2 U	2.1 UB	0.88 B	2.2 U	2.4 U	2.3 U	2.2 UJ	0.38 B	2.1 U
Silver	180	8.3	mg/kg	0.39 B	1.1 U	0.61 B	0.53 U	0.53	0.54 U	0.59 U	0.58 U	0.57	5.4	0.26 B
Sodium	NS	NS	mg/kg	86.7 B	324 B	535 B	299 B	152 B	171 B	250 B	136 B	209 B	318 B	190 B
Thallium	NS	NS	mg/kg	2 U	2.2 U	2.2 U	1.1 U	1 U	0.22 B	1.2 U	1.2 U	0.46 B	1.1 U	1.1 U
Vanadium	NS	NS	mg/kg	16.3	22.5	24.5	22.8	21.7	23.6	22.5	25.5	21.8	21.3	23
Zinc	10000	2480	mg/kg	37.1	137	44.5	36	20.4	31.6 J	21.8 J	17.8 J	32.1	24.2	26.5 J
General Chemistry														
Percent Solids			%	96.3	89.7	89	90.3	92.6	91.3	85.1	83.8	88.3	89.8	92
Notes														
NS			No standard											
NA			Not analyzed											
J			Estimated result											
JN			Estimated result											
R			Rejected result											
UB			Analyte considered non-detect at the listed value due to associated blank contamination											
Bold			Result exceeds 375-6.8(b) protection of groundwater soil cleanup objective.											
Shade			Result exceeds 375-6.8(b) restricted residential use soil cleanup objective.											

Table 10. Confirmatory Soil Sample Results Area B
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Sample ID	TABLE 375-6: RESTRIC. RES. USE SCO	TABLE 375-6: PROTECTION OF GW SCO	Units	PE-B-D4	PE-B-D5	PE-B-D6	PE-B-E1	PE-B-E2	PE-B-E3	PE-B-E3	PE-B-E4	PE-B-E5	PE-B-F2	PE-B-F3
Sample Depth				2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5
Sample Date				42346	42346	42349	42348	42348	42348	E-DUP-009_2015121	42348	42348	42346	42345
VOCs														
1,1,1-Trichloroethane	100000	680	ug/kg	1.8 U	1.8 U	1.7 U	1.6 U	1.6 U	1.8 U	1.6 U	1.7 U	1.7 U	1.8 U	1.8 U
1,1,2,2-Tetrachloroethane	NS	NS	ug/kg	1.8 U	1.8 U	1.7 U	1.6 U	1.6 U	1.8 U	1.6 U	1.7 U	1.7 U	1.8 U	1.8 U
1,1,2-trichloro-1,2,2-trifluoroethane	NS	NS	ug/kg	4.4 U	4.6 U	4.2 U	4.1 U	3.9 U	4.4 U	4 U	4.1 U	4.4 U	4.4 U	4.4 U
1,1,2-Trichloroethane	NS	NS	ug/kg	1.8 U	1.8 U	1.7 U	1.6 U	1.6 U	1.8 U	1.6 U	1.7 U	1.7 U	1.8 U	1.8 U
1,1-Dichloroethane	26000	270	ug/kg	0.88 U	0.92 U	0.85 U	0.81 U	0.79 U	0.88 U	0.8 U	0.83 U	0.87 U	0.88 U	0.88 U
1,1-Dichloroethene	100000	330	ug/kg	0.88 U	0.92 U	0.85 U	0.81 U	0.79 U	0.88 U	0.8 U	0.83 U	0.87 U	0.88 U	0.88 U
1,2,4-Trichlorobenzene	NS	NS	ug/kg	4.4 U	4.6 U	4.2 U	4.1 U	3.9 U	4.4 U	4 U	4.1 U	4.4 U	4.4 U	4.4 U
1,2-Dibromo-3-chloropropane	NS	NS	ug/kg	1.8 U	1.8 U	1.7 U	1.6 U	1.6 U	1.8 U	1.6 U	1.7 U	1.7 U	1.8 U	1.8 U
1,2-Dibromoethane	NS	NS	ug/kg	0.88 U	0.92 U	0.85 U	0.81 U	0.79 U	0.88 U	0.8 U	0.83 U	0.87 U	0.88 U	0.88 U
1,2-Dichlorobenzene	100000	1100	ug/kg	0.88 U	0.92 U	0.85 U	0.81 U	0.79 U	0.88 U	0.8 U	0.83 U	0.87 U	0.88 U	0.88 U
1,2-Dichloroethane	3100	20	ug/kg	0.88 U	0.92 U	0.85 U	0.81 U	0.79 U	0.88 U	0.8 U	0.83 U	0.87 U	0.88 U	0.88 U
1,2-Dichloropropane	NS	NS	ug/kg	1.8 U	1.8 U	1.7 U	1.6 U	1.6 U	1.8 U	1.6 U	1.7 U	1.7 U	1.8 U	1.8 U
1,3-Dichlorobenzene	49000	2400	ug/kg	0.88 U	0.92 U	0.85 U	0.81 U	0.79 U	0.88 U	0.8 U	0.83 U	0.87 U	0.88 U	0.88 U
1,4-Dichlorobenzene	13000	1800	ug/kg	0.88 U	0.92 U	0.85 U	0.81 U	0.79 U	0.88 U	0.8 U	0.83 U	0.87 U	0.88 U	0.88 U
2-Butanone (MEK)	100000	120	ug/kg	8.8 U	9.2 U	8.5 U	8.1 U	7.9 U	8.8 U	8 U	8.3 U	8.7 U	8.8 U	8.8 U
4-Methyl-2-Pentanone	NS	NS	ug/kg	4.4 U	4.6 U	4.2 U	4.1 U	3.9 U	4.4 U	4 U	4.1 U	4.4 U	4.4 U	4.4 U
Acetone	100000	50	ug/kg	8.8 U	9.2 U	8.5 U	8.1 U	7.9 U	8.8 U	8 U	2.3 J	8.7 U	8.8 U	8.8 U
Benzene	4800	60	ug/kg	0.44 U	0.46 U	0.42 U	0.41 U	0.39 U	0.44 U	0.4 U	0.41 U	0.44 U	0.44 U	0.44 U
Bromodichloromethane	NS	NS	ug/kg	1.8 U	1.8 U	1.7 U	1.6 U	1.6 U	1.8 U	1.6 U	1.7 U	1.7 U	1.8 U	1.8 U
Bromoform	NS	NS	ug/kg	4.4 U	4.6 U	4.2 U	4.1 U	3.9 U	4.4 U	4 U	4.1 U	4.4 U	4.4 U	4.4 U
Bromomethane	NS	NS	ug/kg	4.4 U	4.6 U	4.2 U	4.1 U	3.9 U	4.4 U	4 U	4.1 U	4.4 U	4.4 U	4.4 U
Carbon Disulfide	NS	NS	ug/kg	1.8 U	1.8 U	1.7 U	1.6 U	1.6 U	1.8 U	1.6 U	1.7 U	1.7 U	1.8 U	1.8 U
Carbon Tetrachloride	2400	760	ug/kg	1.8 U	1.8 U	1.7 U	1.6 U	1.6 U	1.8 U	1.6 U	1.7 U	1.7 U	1.8 U	1.8 U
CFC-11	NS	NS	ug/kg	4.4 U	4.6 U	4.2 U	4.1 U	3.9 U	4.4 U	4 U	4.1 U	4.4 U	4.4 U	4.4 U
CFC-12	NS	NS	ug/kg	4.4 U	4.6 U	4.2 U	4.1 U	3.9 U	4.4 U	4 U	4.1 U	4.4 U	4.4 U	4.4 U
Chlorobenzene	100000	1100	ug/kg	1.8 U	1.8 U	1.7 U	1.6 U	1.6 U	1.8 U	1.6 U	1.7 U	1.7 U	1.8 U	1.8 U
Chlorodibromomethane	NS	NS	ug/kg	1.8 U	1.8 U	1.7 U	1.6 U	1.6 U	1.8 U	1.6 U	1.7 U	1.7 U	1.8 U	1.8 U
Chloroethane	NS	NS	ug/kg	4.4 U	4.6 U	4.2 U	4.1 U	3.9 U	4.4 U	4 U	4.1 U	4.4 U	4.4 U	4.4 U
Chloroform	49000	370	ug/kg	1.8 U	1.8 U	1.7 U	1.6 U	1.6 U	1.8 U	1.6 U	1.7 U	1.7 U	1.8 U	1.8 U
Chloromethane	NS	NS	ug/kg	4.4 U	4.6 U	4.2 U	4.1 U	3.9 U	4.4 U	4 U	4.1 U	4.4 U	4.4 U	4.4 U
cis-1,2-Dichloroethene	100000	250	ug/kg	0.88 U	0.92 U	0.85 U	0.81 U	0.79 U	0.88 U	0.8 U	0.83 U	0.87 U	0.88 U	0.88 U
cis-1,3-Dichloropropene	NS	NS	ug/kg	1.8 U	1.8 U	1.7 U	1.6 U	1.6 U	1.8 U	1.6 U	1.7 U	1.7 U	1.8 U	1.8 U
Cyclohexane	NS	NS	ug/kg	1.8 U	1.8 U	1.7 U	1.6 U	1.6 U	1.8 U	1.6 U	1.7 U	1.7 U	1.8 U	1.8 U
Dichloromethane	NS	NS	ug/kg	4.4 U	4.6 U	4.2 U	4.1 U	3.9 U	4.4 U	4 U	4.1 U	4.4 U	4.4 U	4.4 U
Ethylbenzene	41000	1000	ug/kg	0.88 U	0.92 U	0.85 U	0.81 U	0.79 U	0.88 U	0.8 U	0.23 J	0.87 U	0.88 U	0.88 U
Isopropylbenzene	NS	NS	ug/kg	1.8 U	1.8 U	1.7 U	1.6 U	1.6 U	1.8 U	1.6 U	1.7 U	1.7 U	1.8 U	1.8 U
Methyl Acetate	NS	NS	ug/kg	4.4 U	4.6 U	4.2 U	4.1 U	3.9 U	4.4 U	4 U	4.1 U	4.4 U	4.4 U	4.4 U
Methyl N-Butyl Ketone (2-Hexanone)	NS	NS	ug/kg	4.4 U	4.6 U	4.2 U	4.1 U	3.9 U	4.4 U	4 U	4.1 U	4.4 U	4.4 U	4.4 U
Methylcyclohexane	NS	NS	ug/kg	1.8 U	1.8 U	1.7 U	1.6 U	1.6 U	1.8 U	1.6 U	1.7 U	1.7 U	1.8 U	1.8 U
Methyl-tert-butylether	100000	930	ug/kg	0.88 U	0.92 U	0.85 U	0.81 U	0.79 U	0.88 U	0.8 U	0.83 U	0.87 U	0.88 U	0.88 U
Styrene (Monomer)	NS	NS	ug/kg	1.8 U	0.35 J	1.7 U	0.27 J	1.6 U	1.8 U	0.81 J	0.43 J	1.2 J	0.29 J	0.47 J
Tetrachloroethene	19000	1300	ug/kg	1.8 U	1.8 U	1.7 U	1.6 U	1.6 U	1.8 U	1.6 U	1.7 U	1.7 U	1.8 U	1.8 U
Toluene	100000	700	ug/kg	0.88 U	0.92 U	0.85 U	0.81 U	0.79 U	0.88 U	0.8 U	0.83 U	0.87 U	0.88 U	0.88 U
Total Xylenes	100000	1600	ug/kg	0.88 U	0.92 U	0.85 U	0.81 U	0.79 U	0.88 U	0.8 U	0.83 U	0.87 U	0.88 U	0.88 U
trans-1,2-Dichloroethene	100000	190	ug/kg	0.88 U	0.92 U	0.85 U	0.81 U	0.79 U	0.88 U	0.8 U	0.83 U	0.87 U	0.88 U	0.88 U
trans-1,3-Dichloropropene	NS	NS	ug/kg	1.8 U	1.8 U	1.7 U	1.6 U	1.6 U	1.8 U	1.6 U	1.7 U	1.7 U	1.8 U	1.8 U
Trichloroethene	21000	470	ug/kg	0.88 U	0.92 U	0.85 U	0.81 U	0.79 U	0.88 U	0.8 U	0.83 U	0.87 U	0.88 U	0.88 U
Vinyl chloride	900	20	ug/kg	1.8 U	1.8 U	1.7 U	1.6 U	1.6 U	1.8 U	1.6 U	1.7 U	1.7 U	1.8 U	1.8 U

See Notes on Last Page

Table 10. Confirmatory Soil Sample Results Area B
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Sample ID	TABLE 375-6: RESTRIC. RES. USE SCO	TABLE 375-6: PROTECTION OF GW SCO	Units	PE-B-D4	PE-B-D5	PE-B-D6	PE-B-E1	PE-B-E2	PE-B-E3	PE-B-E3	PE-B-E4	PE-B-E5	PE-B-F2	PE-B-F3
Sample Depth				2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5
Sample Date				42346	42346	42349	42348	42348	42348	E-DUP-009_2015121	42348	42348	42346	42345
SVOCs														
1,1-Biphenyl	NS	NS	ug/kg	72 U	67 U	76 U	70 U	73 U	77 U	71 U	72 U	73 U	75 U	76 U
2,2-Oxybis(1-Chloropropane)	NS	NS	ug/kg	72 U	67 U	76 U	70 U	73 U	77 U	71 U	72 U	73 U	75 U	76 U
2,4,5-Trichlorophenol	NS	NS	ug/kg	180 U	170 U	190 U	170 U	180 U	190 U	180 U	180 U	180 U	190 U	190 U
2,4,6-Trichlorophenol	NS	NS	ug/kg	180 U	170 U	190 U	170 U	180 U	190 U	180 U	180 U	180 U	190 U	190 U
2,4-Dichlorophenol	NS	NS	ug/kg	180 U	170 U	190 U	170 U	180 U	190 U	180 U	180 U	180 U	190 U	190 U
2,4-Dimethylphenol	NS	NS	ug/kg	180 U	170 U	190 U	170 U	180 U	190 U	180 U	180 U	180 U	190 U	190 U
2,4-Dinitrophenol	NS	NS	ug/kg	180 U	170 U	190 U	170 U	180 U	190 U	180 U	180 U	180 U	190 U	190 U
2,4-Dinitrotoluene	NS	NS	ug/kg	36 U	33 U	38 U	35 U	37 U	39 U	35 U	36 U	36 U	37 U	38 U
2,6-Dinitrotoluene	NS	NS	ug/kg	36 U	33 U	38 U	35 U	37 U	39 U	35 U	36 U	36 U	37 U	38 U
2-Chloronaphthalene	NS	NS	ug/kg	72 U	67 U	76 U	70 U	73 U	77 U	71 U	72 U	73 U	75 U	76 U
2-Chlorophenol	NS	NS	ug/kg	72 U	67 U	76 U	70 U	73 U	77 U	71 U	72 U	73 U	75 U	76 U
2-Methyl-4,6-dinitrophenol	NS	NS	ug/kg	180 U	170 U	190 U	170 U	180 U	190 U	180 U	180 U	180 U	190 U	190 U
2-Methylnaphthalene	NS	NS	ug/kg	72 U	67 U	76 U	70 U	73 U	77 U	71 U	72 U	73 U	75 U	76 U
2-Methylphenol	NS	NS	ug/kg	72 U	67 U	76 U	70 U	73 U	77 U	71 U	72 U	73 U	75 U	76 U
2-Nitroaniline	NS	NS	ug/kg	180 U	170 U	190 U	170 U	180 U	190 U	180 U	180 U	180 U	190 U	190 U
2-Nitrophenol	NS	NS	ug/kg	180 U	170 U	190 U	170 U	180 U	190 U	180 U	180 U	180 U	190 U	190 U
3,3-Dichlorobenzidine	NS	NS	ug/kg	72 U	67 U	76 U	70 U	73 U	77 U	71 U	72 U	73 U	75 U	76 U
3-Methylphenol, 4-Methylphenol	NS	NS	ug/kg	72 U	67 U	76 U	70 U	73 U	77 U	71 U	72 U	73 U	75 U	76 U
3-Nitroaniline	NS	NS	ug/kg	180 U	170 U	190 U	170 U	180 U	190 U	180 U	180 U	180 U	190 U	190 U
4-Bromophenyl phenyl ether	NS	NS	ug/kg	72 U	67 U	76 U	70 U	73 U	77 U	71 U	72 U	73 U	75 U	76 U
4-Chloro-3-Methylphenol	NS	NS	ug/kg	180 U	170 U	190 U	170 U	180 U	190 U	180 U	180 U	180 U	190 U	190 U
4-Chlorophenyl phenyl ether	NS	NS	ug/kg	72 U	67 U	76 U	70 U	73 U	77 U	71 U	72 U	73 U	75 U	76 U
4-Nitroaniline	NS	NS	ug/kg	180 U	170 U	190 U	170 U	180 U	190 U	180 U	180 U	180 U	190 U	190 U
4-Nitrophenol	NS	NS	ug/kg	360 U	330 U	380 U	350 U	370 U	390 U	350 U	360 U	360 U	370 U	380 U
Acenaphthene	100000	98000	ug/kg	36 U	33 U	38 U	35 U	37 U	39 U	35 U	36 U	36 U	37 U	38 U
Acenaphthylene	100000	107000	ug/kg	36 U	33 U	38 U	35 U	37 U	39 U	35 U	36 U	36 U	37 U	38 U
Acetophenone	NS	NS	ug/kg	180 U	170 U	190 U	170 U	180 U	190 U	180 U	180 U	180 U	190 U	190 U
Anthracene	100000	1000000	ug/kg	36 U	33 U	38 U	35 U	37 U	39 U	35 U	36 U	36 U	37 U	38 U
Atrazine	NS	NS	ug/kg	72 U	67 U	76 U	70 U	73 U	77 U	71 U	72 U	73 U	75 U	76 U
Benzaldehyde	NS	NS	ug/kg	180 U	170 U	190 U	170 U	180 U	190 U	180 U	180 U	180 U	190 U	190 U
Benzo(a)anthracene	1000	1000	ug/kg	36 U	33 U	38 U	35 U	37 U	39 U	35 U	36 U	36 U	37 U	38 U
Benzo(a)pyrene	1000	22000	ug/kg	36 U	33 U	38 U	35 U	37 U	39 U	35 U	36 U	36 U	37 U	38 U
Benzo(b)fluoranthene	1000	1700	ug/kg	36 U	33 U	38 U	35 U	37 U	39 U	35 U	36 U	36 U	37 U	38 U
Benzo(g,h,i)perylene	100000	1000000	ug/kg	36 U	33 U	38 U	35 U	37 U	39 U	35 U	36 U	36 U	37 U	38 U
Benzo(k)fluoranthene	3900	1700	ug/kg	36 U	33 U	38 U	35 U	37 U	39 U	35 U	36 U	36 U	37 U	38 U
bis(2-Chloroethoxy)methane	NS	NS	ug/kg	72 U	67 U	76 U	70 U	73 U	77 U	71 U	72 U	73 U	75 U	76 U
bis(2-Chloroethyl)ether	NS	NS	ug/kg	72 U	67 U	76 U	70 U	73 U	77 U	71 U	72 U	73 U	75 U	76 U
bis(2-Ethylhexyl)phthalate	NS	NS	ug/kg	72 U	67 U	76 U	70 U	73 U	77 U	71 U	72 U	73 U	75 U	76 U
Butyl benzyl phthalate	NS	NS	ug/kg	72 U	67 U	76 U	70 U	73 U	77 U	71 U	72 U	73 U	75 U	76 U
Caprolactam	NS	NS	ug/kg	72 U	67 U	76 U	70 U	73 U	77 U	71 U	72 U	73 U	75 U	76 U
Carbazole	NS	NS	ug/kg	72 U	67 U	76 U	70 U	73 U	77 U	71 U	72 U	73 U	75 U	76 U
Chrysene	3900	1000	ug/kg	36 U	33 U	38 U	35 U	37 U	39 U	35 U	36 U	36 U	37 U	38 U
Dibenzo(a,h)anthracene	330	1000000	ug/kg	36 U	33 U	38 U	35 U	37 U	39 U	35 U	36 U	36 U	37 U	38 U
Dibenzofuran	NS	NS	ug/kg	72 U	67 U	76 U	70 U	73 U	77 U	71 U	72 U	73 U	75 U	76 U
Diethyl phthalate	NS	NS	ug/kg	72 U	67 U	76 U	70 U	73 U	77 U	71 U	72 U	73 U	75 U	76 U
Dimethyl phthalate	NS	NS	ug/kg	72 U	67 U	76 U	70 U	73 U	77 U	71 U	72 U	73 U	75 U	76 U
Di-n-butyl phthalate	NS	NS	ug/kg	72 U	67 U	76 U	70 U	73 U	77 U	71 U	72 U	73 U	75 U	76 U
Di-n-octyl phthalate	NS	NS	ug/kg	72 U	67 U	76 U	70 U	73 U	77 U	71 U	72 U	73 U	75 U	76 U
Fluoranthene	100000	1000000	ug/kg	36 U	33 U	38 U	35 U	37 U	39 U	35 U	36 U	36 U	37 U	38 U
Fluorene	100000	386000	ug/kg	36 U	33 U	38 U	35 U	37 U	39 U	35 U	36 U	36 U	37 U	38 U
Hexachloro-1,3-butadiene	NS	NS	ug/kg	36 U	33 U	38 U	35 U	37 U	39 U	35 U	36 U	36 U	37 U	38 U
Hexachlorobenzene	NS	NS	ug/kg	72 U	67 U	76 U	70 U	73 U	77 U	71 U	72 U	73 U	75 U	76 U
Hexachlorocyclopentadiene	NS	NS	ug/kg	360 U	330 U	380 U	350 U	370 U	390 U	350 U	360 U	360 U	370 U	380 U
Hexachloroethane	NS	NS	ug/kg	180 U	170 U	190 U	170 U	180 U	190 U	180 U	180 U	180 U	190 U	190 U
Indeno(1,2,3-cd)pyrene	500	8200	ug/kg	36 U	33 U	38 U	35 U	37 U	39 U	35 U	36 U	36 U	37 U	38 U

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Table 10. Confirmatory Soil Sample Results Area B
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Sample ID	TABLE 375-6: RESTRIC. RES. USE SCO	TABLE 375-6: PROTECTION OF GW SCO	Units	PE-B-D4	PE-B-D5	PE-B-D6	PE-B-E1	PE-B-E2	PE-B-E3	PE-B-E3	PE-B-E4	PE-B-E5	PE-B-F2	PE-B-F3
Sample Depth				2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5
Sample Date				42346	42346	42349	42348	42348	42348	E-DUP-009_2015121	42348	42348	42346	42345
SVOCs cont.														
Isophorone	NS	NS	ug/kg	72 U	67 U	76 U	70 U	73 U	77 U	71 U	72 U	73 U	75 U	76 U
Naphthalene	100000	12000	ug/kg	36 U	33 U	38 U	35 U	37 U	39 U	35 U	36 U	36 U	37 U	38 U
Nitrobenzene	NS	NS	ug/kg	72 U	67 U	76 U	70 U	73 U	77 U	71 U	72 U	73 U	75 U	76 U
n-Nitrosodi-n-propylamine	NS	NS	ug/kg	72 U	67 U	76 U	70 U	73 U	77 U	71 U	72 U	73 U	75 U	76 U
N-nitrosodiphenylamine	NS	NS	ug/kg	180 U	170 U	190 U	170 U	180 U	190 U	180 U	180 U	180 U	190 U	190 U
p-Chloroaniline	NS	NS	ug/kg	180 U	170 U	190 U	170 U	180 U	190 U	180 U	180 U	180 U	190 U	190 U
Pentachlorophenol	6700	800	ug/kg	180 U	170 U	190 U	170 U	180 U	190 U	180 U	180 U	180 U	190 U	190 UJ
Phenanthrene	100000	1000000	ug/kg	36 U	33 U	38 U	35 U	37 U	39 U	35 U	36 U	36 U	37 U	38 U
Phenol	100000	330	ug/kg	72 U	67 U	76 U	70 U	73 U	77 U	71 U	72 U	73 U	75 U	76 U
Pyrene	100000	1000000	ug/kg	36 U	33 U	38 U	35 U	37 U	39 U	35 U	36 U	36 U	37 U	38 U
PCBs														
Aroclor 1016	1000	3200	ug/kg	32 U	34 U	38 U	36 U	36 U	40 U	35 U	36 U	35 U	40 U	35 U
Aroclor 1221	1000	3200	ug/kg	32 U	34 U	38 U	36 U	36 U	40 U	35 U	36 U	35 U	40 U	35 U
Aroclor 1232	1000	3200	ug/kg	32 U	34 U	38 U	36 U	36 U	40 U	35 U	36 U	35 U	40 U	35 U
Aroclor 1242	1000	3200	ug/kg	32 U	34 U	38 U	36 U	36 U	40 U	35 U	36 U	35 U	40 U	35 U
Aroclor 1248	1000	3200	ug/kg	32 U	34 U	38 U	36 U	36 U	40 U	35 U	36 U	35 U	40 U	35 U
Aroclor 1254	1000	3200	ug/kg	32 U	34 U	38 U	36 U	36 U	40 U	35 U	36 U	35 U	40 U	35 U
Aroclor 1260	1000	3200	ug/kg	32 U	34 U	38 U	36 U	36 U	40 U	35 U	36 U	35 U	40 U	35 U
Aroclor 1262	1000	3200	ug/kg	32 U	34 U	38 U	36 U	36 U	40 U	35 U	36 U	35 U	40 U	35 U
Aroclor 1268	1000	3200	ug/kg	32 U	34 U	38 U	36 U	36 U	40 U	35 U	36 U	35 U	40 U	35 U
Metals														
Aluminum	NS	NS	mg/kg	9630 J	12600 J	17100 J	5890 J	6070 J	7230 J	6870 J	7490 J	9070 J	6840 J	9190 J
Antimony	NS	NS	mg/kg	0.64 J	20.7 J	4 UJ	2.2 UJ	2.1 UJ	2.3 UJ	2.2 UJ	2.1 UJ	4.5 UJ	0.41 J	0.51 J
Arsenic	16	16	mg/kg	3.7	9.4	3.4	2.1 B	3.9	2.2 B	1.7 B	1.9 B	2.4	3	3.2
Barium	400	820	mg/kg	59.2 J	65.1 J	71.4	31.7	23.8	36.2	26.1	40.4	45.6	30 J	70.5 J
Beryllium	72	47	mg/kg	0.5	0.87	0.9	0.28	0.32	0.38	0.35	0.33	0.75	0.34	0.66
Cadmium	4.3	7.5	mg/kg	0.67	0.33 B	0.62	0.21 B	0.14 B	0.21 B	0.17 B	0.2 B	0.22 B	0.26 B	0.52 B
Calcium	NS	NS	mg/kg	3160	4340	3640	7720	8570	7910	7250	3590	4010	2350	4220
Chromium	NS	NS	mg/kg	12.8	11.1	16.3	14.8	13.8	13.8	13.8	7.3	9	14.6	10.4
Cobalt	NS	NS	mg/kg	7.4	7.7	9.8	5.3 B	5.5	6.3	5.7	8.7	5.5 B	6.2	5.9
Copper	270	1720	mg/kg	18	12.6	19.4	9.2	8.7	9.6	8.6	8.7	7.7	13.7	12.3
Iron	NS	NS	mg/kg	18500 J	23300 J	33200	14500	14300	15800	16500	19000	18500	16900 J	20200 J
Lead	400	450	mg/kg	89.8 J	7.2 J	36.9	6.6	3.7	5.9	3	6.5	2.7	22 J	80.6 J
Magnesium	NS	NS	mg/kg	3460	4150	4910	3460	3890	4150	3860	3210	2890	2830	2900
Manganese	2000	2000	mg/kg	247	213	285	289	209	308	240	190	178	293	210
Mercury	NS	NS	mg/kg	0.011 B	0.0089 B	0.0023 B	0.0077 B	0.033 U	0.0036 B	0.033 U	0.034 U	0.034 U	0.01 B	0.035 U
Nickel	310	130	mg/kg	10	7.7	11.1	10.4	10.8	10.8	10.9	8.1	6	10.1	7.3
Potassium	NS	NS	mg/kg	1630	1780	2170	928 B	940 B	1370	996 B	958 B	1680	981 B	1660
Selenium	180	4	mg/kg	2.2 U	2.1 U	1.5 B	0.64 B	0.67 B	0.52 B	0.57 B	0.98 B	0.4 B	2.4 U	2.3 U
Silver	180	8.3	mg/kg	1.5	1.3	0.69 B	0.55	0.45 B	0.58	0.57	0.84	1.1 U	0.59 U	0.57 U
Sodium	NS	NS	mg/kg	246 B	243 B	263 B	139 B	171 B	227 B	167 B	174 B	276 B	176 B	293 B
Thallium	NS	NS	mg/kg	1.1 U	2.1 U	2 U	1.1 U	1.1 U	1.2 U	1.1 U	1.1 U	2.2 U	1.2 U	1.1 U
Vanadium	NS	NS	mg/kg	24	23.3	39.1	20	20.4	22	22.7	30.5	19.8	24.2	22.1
Zinc	10000	2480	mg/kg	74.9 J	30.7 J	78.1	31.9	26.4	26.5	25.3	29.8	23.3	52 J	54.8 J
General Chemistry														
Percent Solids			%	91.2	93.6	87	91.6	90.8	82.6	92	91.8	91.2	82.8	87.9
Notes														
NS			No standard											
NA			Not analyzed											
J			Estimated result											
JN			Estimated result											
R			Rejected result											
UB			Analyte considered non-detect at the listed value due to associated blank contamination											
Bold			Result exceeds 375-6.8(b) protection of groundwater soil cleanup objective.											
Shade			Result exceeds 375-6.8(b) restricted residential use soil cleanup objective.											

Table 10. Confirmatory Soil Sample Results Area B
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Sample ID	TABLE 375-6: RESTRIC. RES. USE SCO	TABLE 375-6: PROTECTION OF GW SCO	Units	PE-B-F4	PE-B-G2A	PE-B-G3	PE-B-G4	PE-B-H3	PE-B-H4	PE-B-H5	PE-B-I3	PE-B-I4	PE-B-I5	PE-B-J4
Sample Depth				2-2.5	3-3.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5
Sample Date				42346	42366	42345	42346	42342	42345	42346	42342	42342	42342	42342
VOCs														
1,1,1-Trichloroethane	100000	680	ug/kg	1.8 U	NA	2 U	2 U	1.7 U	1.8 U	1.8 U	1.8 U	1.8 U	1.9 U	1.9 U
1,1,2,2-Tetrachloroethane	NS	NS	ug/kg	1.8 U	NA	2 U	2 U	1.7 U	1.8 U	1.8 U	1.8 U	1.8 U	1.9 U	1.9 U
1,1,2-trichloro-1,2,2-trifluoroethane	NS	NS	ug/kg	4.5 U	NA	5 U	5 U	4.3 U	4.5 U	4.5 U	4.5 U	4.5 U	4.8 U	4.6 U
1,1,2-Trichloroethane	NS	NS	ug/kg	1.8 U	NA	2 U	2 U	1.7 U	1.8 U	1.8 U	1.8 U	1.8 U	1.9 U	1.9 U
1,1-Dichloroethane	26000	270	ug/kg	0.9 U	NA	1 U	1 U	0.86 U	0.9 U	0.91 U	0.89 U	0.9 U	0.95 U	0.93 U
1,1-Dichloroethene	100000	330	ug/kg	0.9 U	NA	1 U	1 U	0.86 U	0.9 U	0.91 U	0.89 U	0.9 U	0.95 U	0.93 U
1,2,4-Trichlorobenzene	NS	NS	ug/kg	4.5 U	NA	5 U	5 U	4.3 U	4.5 U	4.5 U	4.5 U	4.5 U	4.8 U	4.6 U
1,2-Dibromo-3-chloropropane	NS	NS	ug/kg	1.8 U	NA	2 U	2 U	1.7 U	1.8 U	1.8 U	1.8 U	1.8 U	1.9 U	1.9 U
1,2-Dibromoethane	NS	NS	ug/kg	0.9 U	NA	1 U	1 U	0.86 U	0.9 U	0.91 U	0.89 U	0.9 U	0.95 U	0.93 U
1,2-Dichlorobenzene	100000	1100	ug/kg	0.9 U	NA	1 U	1 U	0.86 U	0.9 U	0.91 U	0.89 U	0.9 U	0.95 U	0.93 U
1,2-Dichloroethane	3100	20	ug/kg	0.9 U	NA	1 U	1 U	0.86 U	0.9 U	0.91 U	0.89 U	0.9 U	0.95 U	0.93 U
1,2-Dichloropropane	NS	NS	ug/kg	1.8 U	NA	2 U	2 U	1.7 U	1.8 U	1.8 U	1.8 U	1.8 U	1.9 U	1.9 U
1,3-Dichlorobenzene	49000	2400	ug/kg	0.9 U	NA	1 U	1 U	0.86 U	0.9 U	0.91 U	0.89 U	0.9 U	0.95 U	0.93 U
1,4-Dichlorobenzene	13000	1800	ug/kg	0.9 U	NA	1 U	1 U	0.86 U	0.9 U	0.91 U	0.89 U	0.9 U	0.95 U	0.93 U
2-Butanone (MEK)	100000	120	ug/kg	9 U	NA	10 U	10 U	8.6 U	9 U	9.1 U	8.9 U	9 U	9.5 U	9.3 U
4-Methyl-2-Pentanone	NS	NS	ug/kg	4.5 U	NA	5 U	5 U	4.3 U	4.5 U	4.5 U	4.5 U	4.5 U	4.8 U	4.6 U
Acetone	100000	50	ug/kg	9 U	NA	10 U	10 U	8.6 U	9 U	9.1 U	8.9 U	9 U	2.4 J	5.8 J
Benzene	4800	60	ug/kg	0.45 U	NA	0.5 U	0.5 U	0.43 U	0.45 U	0.45 U	0.45 U	0.45 U	0.48 U	0.46 U
Bromodichloromethane	NS	NS	ug/kg	1.8 U	NA	2 U	2 U	1.7 U	1.8 U	1.8 U	1.8 U	1.8 U	1.9 U	1.9 U
Bromoform	NS	NS	ug/kg	4.5 U	NA	5 U	5 U	4.3 U	4.5 U	4.5 U	4.5 U	4.5 U	4.8 U	4.6 U
Bromomethane	NS	NS	ug/kg	4.5 U	NA	5 U	5 U	4.3 U	4.5 U	4.5 U	4.5 U	4.5 U	4.8 U	4.6 U
Carbon Disulfide	NS	NS	ug/kg	1.8 U	NA	2 U	2 U	1.7 U	1.8 U	1.8 U	1.8 U	1.8 U	1.9 U	1.9 U
Carbon Tetrachloride	2400	760	ug/kg	1.8 U	NA	2 U	2 U	1.7 U	1.8 U	1.8 U	1.8 U	1.8 U	1.9 U	1.9 U
CFC-11	NS	NS	ug/kg	4.5 U	NA	5 U	5 U	4.3 U	4.5 U	4.5 U	4.5 U	4.5 U	4.8 U	4.6 U
CFC-12	NS	NS	ug/kg	4.5 U	NA	5 U	5 U	4.3 U	4.5 U	4.5 U	4.5 U	4.5 U	4.8 U	4.6 U
Chlorobenzene	100000	1100	ug/kg	1.8 U	NA	2 U	2 U	1.7 U	1.8 U	1.8 U	1.8 U	1.8 U	1.9 U	1.9 U
Chlorodibromomethane	NS	NS	ug/kg	1.8 U	NA	2 U	2 U	1.7 U	1.8 U	1.8 U	1.8 U	1.8 U	1.9 U	1.9 U
Chloroethane	NS	NS	ug/kg	4.5 U	NA	5 U	5 U	4.3 U	4.5 U	4.5 U	4.5 U	4.5 U	4.8 U	4.6 U
Chloroform	49000	370	ug/kg	1.8 U	NA	2 U	2 U	1.7 U	1.8 U	1.8 U	1.8 U	1.8 U	1.9 U	1.9 U
Chloromethane	NS	NS	ug/kg	4.5 U	NA	5 U	5 U	4.3 U	4.5 U	4.5 U	4.5 U	4.5 U	4.8 U	4.6 U
cis-1,2-Dichloroethene	100000	250	ug/kg	0.9 U	NA	1 U	1 U	0.86 U	0.9 U	0.91 U	0.89 U	0.9 U	0.95 U	0.93 U
cis-1,3-Dichloropropene	NS	NS	ug/kg	1.8 U	NA	2 U	2 U	1.7 U	1.8 U	1.8 U	1.8 U	1.8 U	1.9 U	1.9 U
Cyclohexane	NS	NS	ug/kg	1.8 U	NA	2 U	2 U	1.7 U	1.8 U	1.8 U	1.8 U	1.8 U	1.9 U	1.9 U
Dichloromethane	NS	NS	ug/kg	4.5 U	NA	5 U	5 U	4.3 U	4.5 U	4.5 U	4.5 U	4.5 U	4.8 U	4.6 U
Ethylbenzene	41000	1000	ug/kg	0.9 U	NA	1 U	1 U	0.86 U	0.9 U	0.91 U	0.89 U	0.9 U	0.95 U	0.93 U
Isopropylbenzene	NS	NS	ug/kg	1.8 U	NA	2 U	2 U	1.7 U	1.8 U	1.8 U	1.8 U	1.8 U	1.9 U	1.9 U
Methyl Acetate	NS	NS	ug/kg	4.5 U	NA	5 U	5 U	4.3 U	4.5 U	4.5 U	4.5 U	4.5 U	4.8 U	4.6 U
Methyl N-Butyl Ketone (2-Hexanone)	NS	NS	ug/kg	4.5 U	NA	5 U	5 U	4.3 U	4.5 U	4.5 U	4.5 U	4.5 U	4.8 U	4.6 U
Methylcyclohexane	NS	NS	ug/kg	1.8 U	NA	2 U	2 U	1.7 U	1.8 U	1.8 U	1.8 U	1.8 U	1.9 U	1.9 U
Methyl-tert-butylether	100000	930	ug/kg	0.9 U	NA	1 U	1 U	0.86 U	0.9 U	0.91 U	0.89 U	0.9 U	0.95 U	0.93 U
Styrene (Monomer)	NS	NS	ug/kg	0.97 J	NA	0.23 J	0.52 J	1.7 U	1.8 U	0.18 J	1.8 U	0.28 J	1.9 U	1.9 U
Tetrachloroethene	19000	1300	ug/kg	1.8 U	NA	2 U	2 U	1.7 U	1.8 U	1.8 U	1.8 U	1.8 U	1.9 U	1.9 U
Toluene	100000	700	ug/kg	0.9 U	NA	1 U	1 U	0.86 U	0.9 U	0.91 U	0.89 U	0.9 U	0.95 U	0.93 U
Total Xylenes	100000	1600	ug/kg	0.9 U	NA	1 U	1 U	0.86 U	0.9 U	0.91 U	0.89 U	0.9 U	0.95 U	0.93 U
trans-1,2-Dichloroethene	100000	190	ug/kg	0.9 U	NA	1 U	1 U	0.86 U	0.9 U	0.91 U	0.89 U	0.9 U	0.95 U	0.93 U
trans-1,3-Dichloropropene	NS	NS	ug/kg	1.8 U	NA	2 U	2 U	1.7 U	1.8 U	1.8 U	1.8 U	1.8 U	1.9 U	1.9 U
Trichloroethene	21000	470	ug/kg	0.9 U	NA	1 U	1 U	0.86 U	0.9 U	0.91 U	0.89 U	0.9 U	0.95 U	0.93 U
Vinyl chloride	900	20	ug/kg	1.8 U	NA	2 U	2 U	1.7 U	1.8 U	1.8 U	1.8 U	1.8 U	1.9 U	1.9 U

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Table 10. Confirmatory Soil Sample Results Area B
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Sample ID	TABLE 375-6: RESTRIC. RES. USE SCO	TABLE 375-6: PROTECTION OF GW SCO	Units	PE-B-F4	PE-B-G2A	PE-B-G3	PE-B-G4	PE-B-H3	PE-B-H4	PE-B-H5	PE-B-I3	PE-B-I4	PE-B-I5	PE-B-J4
Sample Depth				2-2.5	3-3.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5
Sample Date				42346	42366	42345	42346	42342	42345	42346	42342	42342	42342	42342
SVOCs														
1,1-Biphenyl	NS	NS	ug/kg	70 U	67 U	80 U	69 U	76 U	75 U	72 U	71 U	75 U	73 U	78 U
2,2-Oxybis(1-Chloropropane)	NS	NS	ug/kg	70 U	67 U	80 U	69 U	76 U	75 U	72 U	71 U	75 U	73 U	78 U
2,4,5-Trichlorophenol	NS	NS	ug/kg	180 U	170 U	200 U	170 U	190 U	190 U	180 U	180 U	190 U	180 U	190 U
2,4,6-Trichlorophenol	NS	NS	ug/kg	180 U	170 U	200 U	170 U	190 U	190 U	180 U	180 U	190 U	180 U	190 U
2,4-Dichlorophenol	NS	NS	ug/kg	180 U	170 U	200 U	170 U	190 U	190 U	180 U	180 U	190 U	180 U	190 U
2,4-Dimethylphenol	NS	NS	ug/kg	180 U	170 U	200 U	170 U	190 U	190 U	180 U	180 U	190 U	180 U	190 U
2,4-Dinitrophenol	NS	NS	ug/kg	180 U	170 U	200 U	170 U	190 U	190 U	180 U	180 U	190 U	180 U	190 U
2,4-Dinitrotoluene	NS	NS	ug/kg	35 U	34 U	40 U	35 U	38 U	38 U	36 U	35 U	37 U	36 U	39 U
2,6-Dinitrotoluene	NS	NS	ug/kg	35 U	34 U	40 U	35 U	38 U	38 U	36 U	35 U	37 U	36 U	39 U
2-Chloronaphthalene	NS	NS	ug/kg	70 U	67 U	80 U	69 U	76 U	75 U	72 U	71 U	75 U	73 U	78 U
2-Chlorophenol	NS	NS	ug/kg	70 U	67 U	80 U	69 U	76 U	75 U	72 U	71 U	75 U	73 U	78 U
2-Methyl-4,6-dinitrophenol	NS	NS	ug/kg	180 U	170 U	200 U	170 U	190 U	190 U	180 U	180 U	190 U	180 U	190 U
2-Methylnaphthalene	NS	NS	ug/kg	70 U	67 U	80 U	69 U	76 U	75 U	72 U	71 U	75 U	27.6 J	78 U
2-Methylphenol	NS	NS	ug/kg	70 U	67 U	80 U	69 U	76 U	75 U	72 U	71 U	75 U	73 U	78 U
2-Nitroaniline	NS	NS	ug/kg	180 U	170 U	200 U	170 U	190 U	190 U	180 U	180 U	190 U	180 U	190 U
2-Nitrophenol	NS	NS	ug/kg	180 U	170 U	200 U	170 U	190 U	190 U	180 U	180 U	190 U	180 U	190 U
3,3-Dichlorobenzidine	NS	NS	ug/kg	70 U	67 U	80 U	69 U	76 U	75 U	72 U	71 U	75 U	73 U	78 U
3-Methylphenol, 4-Methylphenol	NS	NS	ug/kg	70 U	67 U	80 U	69 U	76 U	75 U	72 U	71 U	75 U	73 U	78 U
3-Nitroaniline	NS	NS	ug/kg	180 U	170 U	200 U	170 U	190 U	190 U	180 U	180 U	190 U	180 U	190 U
4-Bromophenyl phenyl ether	NS	NS	ug/kg	70 U	67 U	80 U	69 U	76 U	75 U	72 U	71 U	75 U	73 U	78 U
4-Chloro-3-Methylphenol	NS	NS	ug/kg	180 U	170 U	200 U	170 U	190 U	190 U	180 U	180 U	190 U	180 U	190 U
4-Chlorophenyl phenyl ether	NS	NS	ug/kg	70 U	67 U	80 U	69 U	76 U	75 U	72 U	71 U	75 U	73 U	78 U
4-Nitroaniline	NS	NS	ug/kg	180 U	170 U	200 U	170 U	190 U	190 U	180 U	180 U	190 U	180 U	190 U
4-Nitrophenol	NS	NS	ug/kg	350 U	340 UJ	400 U	350 U	380 U	380 U	360 U	350 U	370 U	360 U	390 U
Acenaphthene	100000	98000	ug/kg	35 U	34 U	40 U	35 U	38 U	38 U	36 U	35 U	37 U	36 U	39 U
Acenaphthylene	100000	107000	ug/kg	35 U	34 U	40 U	35 U	38 U	38 U	36 U	35 U	37 U	36 U	39 U
Acetophenone	NS	NS	ug/kg	180 U	170 U	200 U	170 U	190 U	190 U	180 U	180 U	190 U	180 U	190 U
Anthracene	100000	1000000	ug/kg	35 U	34 U	40 U	35 U	38 U	38 U	36 U	35 U	37 U	36 U	39 U
Atrazine	NS	NS	ug/kg	70 U	67 U	80 U	69 U	76 U	75 U	72 U	71 U	75 U	73 U	78 U
Benzaldehyde	NS	NS	ug/kg	180 U	170 U	200 U	170 U	190 U	190 U	180 U	180 U	190 U	180 U	190 U
Benzo(a)anthracene	1000	1000	ug/kg	35 U	34 U	40 U	35 U	38 U	38 U	36 U	35 U	37 U	36 U	39 U
Benzo(a)pyrene	1000	22000	ug/kg	35 U	34 U	40 U	35 U	38 U	38 U	36 U	35 U	37 U	36 U	39 U
Benzo(b)fluoranthene	1000	1700	ug/kg	35 U	34 U	40 U	35 U	38 U	38 U	36 U	35 U	37 U	36 U	39 U
Benzo(g,h,i)perylene	100000	1000000	ug/kg	35 U	34 U	40 U	35 U	38 U	38 U	36 U	35 U	37 U	36 U	39 U
Benzo(k)fluoranthene	3900	1700	ug/kg	35 U	34 U	40 U	35 U	38 U	38 U	36 U	35 U	37 U	36 U	39 U
bis(2-Chloroethoxy)methane	NS	NS	ug/kg	70 U	67 U	80 U	69 U	76 U	75 U	72 U	71 U	75 U	73 U	78 U
bis(2-Chloroethyl)ether	NS	NS	ug/kg	70 U	67 U	80 U	69 U	76 U	75 U	72 U	71 U	75 U	73 U	78 U
bis(2-Ethylhexyl)phthalate	NS	NS	ug/kg	70 U	67 U	80 U	69 U	76 U	75 U	72 U	71 U	75 U	73 U	78 U
Butyl benzyl phthalate	NS	NS	ug/kg	70 U	67 U	80 U	69 U	76 U	75 U	72 U	71 U	75 U	73 U	78 U
Caprolactam	NS	NS	ug/kg	70 U	67 U	80 U	69 U	76 U	75 U	72 U	71 U	75 U	73 U	78 U
Carbazole	NS	NS	ug/kg	70 U	67 U	80 U	69 U	76 U	75 U	72 U	71 U	75 U	73 U	78 U
Chrysene	3900	1000	ug/kg	35 U	34 U	40 U	35 U	38 U	38 U	36 U	35 U	37 U	36 U	39 U
Dibenzo(a,h)anthracene	330	1000000	ug/kg	35 U	34 U	40 U	35 U	38 U	38 U	36 U	35 U	37 U	36 U	39 U
Dibenzofuran	NS	NS	ug/kg	70 U	67 U	80 U	69 U	76 U	75 U	72 U	71 U	75 U	73 U	78 U
Diethyl phthalate	NS	NS	ug/kg	70 U	67 U	80 U	69 U	76 U	75 U	72 U	71 U	75 U	73 U	78 U
Dimethyl phthalate	NS	NS	ug/kg	70 U	67 U	80 U	69 U	76 U	75 U	72 U	71 U	75 U	73 U	78 U
Di-n-butyl phthalate	NS	NS	ug/kg	70 U	67 U	80 U	69 U	76 U	75 U	72 U	71 U	75 U	73 U	78 U
Di-n-octyl phthalate	NS	NS	ug/kg	70 U	67 U	80 U	69 U	76 U	75 U	72 U	71 U	75 U	73 U	78 U
Fluoranthene	100000	1000000	ug/kg	35 U	34 U	40 U	35 U	38 U	38 U	36 U	35 U	37 U	36 U	39 U
Fluorene	100000	386000	ug/kg	35 U	34 U	40 U	35 U	38 U	38 U	36 U	35 U	37 U	36 U	39 U
Hexachloro-1,3-butadiene	NS	NS	ug/kg	35 U	34 U	40 U	35 U	38 UJ	38 U	36 U	35 UJ	37 UJ	36 UJ	39 U
Hexachlorobenzene	NS	NS	ug/kg	70 U	67 U	80 U	69 U	76 UJ	75 U	72 U	71 UJ	75 UJ	73 UJ	78 U
Hexachlorocyclopentadiene	NS	NS	ug/kg	350 U	340 U	400 U	350 U	380 UJ	380 U	360 U	350 UJ	370 UJ	360 UJ	390 U
Hexachloroethane	NS	NS	ug/kg	180 U	170 U	200 U	170 U	190 UJ	190 U	180 U	180 UJ	190 UJ	180 UJ	190 U
Indeno(1,2,3-cd)pyrene	500	8200	ug/kg	35 U	34 U	40 U	35 U	38 U	38 U	36 U	35 U	37 U	36 U	39 U

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Table 10. Confirmatory Soil Sample Results Area B
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Sample ID	TABLE 375-6: RESTRIC. RES. USE SCO	TABLE 375-6: PROTECTION OF GW SCO	Units	PE-B-F4	PE-B-G2A	PE-B-G3	PE-B-G4	PE-B-H3	PE-B-H4	PE-B-H5	PE-B-I3	PE-B-I4	PE-B-I5	PE-B-J4
Sample Depth				2-2.5	3-3.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5
Sample Date				42346	42366	42345	42346	42342	42345	42346	42342	42342	42342	42342
SVOCs cont.														
Isophorone	NS	NS	ug/kg	70 U	67 U	80 U	69 U	76 U	75 U	72 U	71 U	75 U	73 U	78 U
Naphthalene	100000	12000	ug/kg	35 U	34 U	40 U	35 U	38 U	38 U	36 U	35 U	37 U	36 U	39 U
Nitrobenzene	NS	NS	ug/kg	70 U	67 U	80 U	69 U	76 U	75 U	72 U	71 U	75 U	73 U	78 U
n-Nitrosodi-n-propylamine	NS	NS	ug/kg	70 U	67 U	80 U	69 U	76 U	75 U	72 U	71 U	75 U	73 U	78 U
N-nitrosodiphenylamine	NS	NS	ug/kg	180 U	170 U	200 U	170 U	190 U	190 U	180 U	180 U	190 U	180 U	190 U
p-Chloroaniline	NS	NS	ug/kg	180 U	170 U	200 U	170 U	190 U	190 U	180 U	180 U	190 U	180 U	190 U
Pentachlorophenol	6700	800	ug/kg	180 U	170 U	200 UJ	170 U	190 UJ	190 UJ	180 U	180 UJ	190 UJ	180 UJ	190 U
Phenanthrene	100000	1000000	ug/kg	35 U	34 U	40 U	35 U	38 U	38 U	36 U	35 U	37 U	36 U	39 U
Phenol	100000	330	ug/kg	70 U	67 U	80 U	69 U	76 U	75 U	72 U	71 U	75 U	73 U	78 U
Pyrene	100000	1000000	ug/kg	35 U	34 U	40 U	35 U	38 U	38 U	36 U	35 U	37 U	36 U	39 U
PCBs														
Aroclor 1016	1000	3200	ug/kg	32 U	34 U	39 U	34 U	37 U	35 U	33 U	34 U	35 U	37 U	35 U
Aroclor 1221	1000	3200	ug/kg	32 U	34 U	39 U	34 U	37 U	35 U	33 U	34 U	35 U	37 U	35 U
Aroclor 1232	1000	3200	ug/kg	32 U	34 U	39 U	34 U	37 U	35 U	33 U	34 U	35 U	37 U	35 U
Aroclor 1242	1000	3200	ug/kg	32 U	34 U	39 U	34 U	37 U	35 U	33 U	34 U	35 U	37 U	35 U
Aroclor 1248	1000	3200	ug/kg	32 U	34 U	39 U	34 U	37 U	35 U	33 U	34 U	35 U	37 U	35 U
Aroclor 1254	1000	3200	ug/kg	32 U	34 U	39 U	34 U	37 U	35 U	33 U	34 U	35 U	37 U	35 U
Aroclor 1260	1000	3200	ug/kg	32 U	34 U	39 U	34 U	37 U	35 U	33 U	34 U	35 U	37 U	35 U
Aroclor 1262	1000	3200	ug/kg	32 U	34 U	39 U	34 U	37 U	35 U	33 U	34 U	35 U	37 U	35 U
Aroclor 1268	1000	3200	ug/kg	32 U	34 U	39 U	34 U	37 U	35 U	33 U	34 U	35 U	37 U	35 U
Metals														
Aluminum	NS	NS	mg/kg	7750 J	4940	13300 J	13800 J	13400 J	13800 J	11200 J	13800 J	12300 J	16600 J	16000 J
Antimony	NS	NS	mg/kg	1.7 UJ	1.3 B	2.4 UJ	2.1 UJ	2.3 UJ	2.2 UJ	2.1 UJ	2.3 UJ	2.2 UJ	2.3 UJ	2.2 UJ
Arsenic	16	16	mg/kg	2.2	1.9 B	3.5	2.8	3	3.5	3	2.8	2.6	3.5	3.1
Barium	400	820	mg/kg	43.8 J	22.1	44.4 J	65.5 J	32.9 J	29.8 J	43.2 J	33.3 J	29.8 J	37.7 J	37.1
Beryllium	72	47	mg/kg	0.51	0.31	0.47	0.98	0.56	0.53	0.5	0.52	0.5	0.62	0.63
Cadmium	4.3	7.5	mg/kg	0.18 B	0.075 B	0.28 B	0.28 B	0.24 B	0.22 B	0.22 B	0.23 B	0.21 B	0.28 B	0.56 UB
Calcium	NS	NS	mg/kg	3140	1840	2230	4890	1310	1410	2790	1130	1210	1090	2700 J
Chromium	NS	NS	mg/kg	8.9	14.5	16	9.7	14	22.7	11.7	15.4	12	19.1	13.1
Cobalt	NS	NS	mg/kg	5.7	5.2 B	7.3	7.5	7.5	6.6	6.9	7.4	5.7	8.7	7.1
Copper	270	1720	mg/kg	11.8	10.5	13.8	12.6	14	9.8	11.9	10.2	9	12.8	10.1
Iron	NS	NS	mg/kg	16700 J	14000	19000 J	23700 J	18500 J	16800 J	17400 J	16800 J	14800 J	19600 J	20300
Lead	400	450	mg/kg	18.5 J	3.9	5.4 J	3.9 J	7.6 J	6.2 J	5.5 J	6.3 J	6.1 J	6.9 J	5.5
Magnesium	NS	NS	mg/kg	2820	2460	3280	3950	2590	2810	3010	2870	2320	2900	2990
Manganese	2000	2000	mg/kg	173	225	184	224	257	156	171	126	134	216	167
Mercury	NS	NS	mg/kg	0.0054 B	0.034 U	0.012 B	0.008 B	0.024 B	0.019 B	0.014 B	0.027 B	0.023 B	0.026 B	0.016 B
Nickel	310	130	mg/kg	6.2	9.4	11.8	6.9	10.3	13.1	9.7	10.9	8.8	12.7	8.5
Potassium	NS	NS	mg/kg	1440	812 B	1310	2220	852 B	747 B	1200	937 B	730 B	824 B	1240
Selenium	180	4	mg/kg	1.7 U	2.1 U	2.4 U	2.1 U	2.3 U	2.2 U	2.1 U	2.3 U	2.2 U	2.3 U	2.2 U
Silver	180	8.3	mg/kg	0.43 U	0.53 U	0.6 U	0.53 U	0.57 U	0.54 U	0.53 U	0.56 U	0.56 U	0.26 B	0.56 U
Sodium	NS	NS	mg/kg	217 B	155 B	190 B	426 B	114 B	136 B	178 B	124 B	108 B	121 B	260 B
Thallium	NS	NS	mg/kg	1.7 U	0.46 B	1.2 U	2.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	0.23 B	2.2 U
Vanadium	NS	NS	mg/kg	19.7	22.2	28.6	24.7	27.1	24.8	21.3	26.5	21.2	31.2	28
Zinc	10000	2480	mg/kg	26 J	21.6	28.4 J	26.9 J	25 J	22.8 J	25.3 J	28.6 J	23.2 J	26.4 J	34.7
General Chemistry														
Percent Solids			%	92.4	91.2	82.1	91.7	86.8	88.4	90.3	90.5	86.4	87.5	85.7
Notes														
NS			No standard											
NA			Not analyzed											
J			Estimated result											
JN			Estimated result											
R			Rejected result											
UB			Analyte considered non-detect at the listed value due to associated blank contamination											
Bold			Result exceeds 375-6.8(b) protection of groundwater soil cleanup objective.											
Shade			Result exceeds 375-6.8(b) restricted residential use soil cleanup objective.											

Table 10. Confirmatory Soil Sample Results Area B
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Sample ID	TABLE 375-6: RESTRIC. RES. USE SCO	TABLE 375-6: PROTECTION OF GW SCO	Units	PE-B-J5	PE-B-S1	PE-B-S2	PE-B-S3	PE-B-S4A	PE-B-S5	PE-B-S6	PE-B-S7	PE-B-S8	PE-B-S9	PE-B-S10
Sample Depth				2-2.5	1.5-2	1.5-2	1.5-2	1.5-2	1.5-2	1.5-2	1.5-2	1.5-2	1.5-2	1.5-2
Sample Date				42342	42341	42341	42341	42366	42349	42349	42349	42349	42349	42349
VOCs														
1,1,1-Trichloroethane	100000	680	ug/kg	2.1 U	1.9 U	2.4 U	1.9 U	NA	1.8 U	1.9 U	1.7 U	1.9 U	1.9 U	1.6 U
1,1,2,2-Tetrachloroethane	NS	NS	ug/kg	2.1 U	1.9 U	2.4 U	1.9 U	NA	1.8 U	1.9 U	1.7 U	1.9 U	1.9 U	1.6 U
1,1,2-trichloro-1,2,2-trifluoroethane	NS	NS	ug/kg	5.3 U	4.6 U	5.9 U	4.7 U	NA	4.5 U	4.8 U	4.1 U	4.6 U	4.8 U	4.1 U
1,1,2-Trichloroethane	NS	NS	ug/kg	2.1 U	1.9 U	2.4 U	1.9 U	NA	1.8 U	1.9 U	1.7 U	1.9 U	1.9 U	1.6 U
1,1-Dichloroethane	26000	270	ug/kg	1.1 U	0.93 U	1.2 U	0.94 U	NA	0.9 U	0.95 U	0.83 U	0.93 U	0.96 U	0.82 U
1,1-Dichloroethene	100000	330	ug/kg	1.1 U	0.93 U	1.2 U	0.94 U	NA	0.9 U	0.95 U	0.83 U	0.93 U	0.96 U	0.82 U
1,2,4-Trichlorobenzene	NS	NS	ug/kg	5.3 U	4.6 U	5.9 U	4.7 U	NA	4.5 U	4.8 U	4.1 U	4.6 U	4.8 U	4.1 U
1,2-Dibromo-3-chloropropane	NS	NS	ug/kg	2.1 U	1.9 U	2.4 U	1.9 U	NA	1.8 U	1.9 U	1.7 U	1.9 U	1.9 U	1.6 U
1,2-Dibromoethane	NS	NS	ug/kg	1.1 U	0.93 U	1.2 U	0.94 U	NA	0.9 U	0.95 U	0.83 U	0.93 U	0.96 U	0.82 U
1,2-Dichlorobenzene	100000	1100	ug/kg	1.1 U	0.93 U	1.2 U	0.94 U	NA	0.9 U	0.95 U	0.83 U	0.93 U	0.96 U	0.82 U
1,2-Dichloroethane	3100	20	ug/kg	1.1 U	0.93 U	1.2 U	0.94 U	NA	0.9 U	0.95 U	0.83 U	0.93 U	0.96 U	0.82 U
1,2-Dichloropropane	NS	NS	ug/kg	2.1 U	1.9 U	2.4 U	1.9 U	NA	1.8 U	1.9 U	1.7 U	1.9 U	1.9 U	1.6 U
1,3-Dichlorobenzene	49000	2400	ug/kg	1.1 U	0.93 U	1.2 U	0.94 U	NA	0.9 U	0.95 U	0.83 U	0.93 U	0.96 U	0.82 U
1,4-Dichlorobenzene	13000	1800	ug/kg	1.1 U	0.93 U	1.2 U	0.94 U	NA	0.9 U	0.95 U	0.83 U	0.93 U	0.96 U	0.82 U
2-Butanone (MEK)	100000	120	ug/kg	11 U	9.3 U	12 U	9.4 U	NA	9 U	9.5 U	8.3 U	9.3 U	9.6 U	8.2 U
4-Methyl-2-Pentanone	NS	NS	ug/kg	5.3 U	4.6 U	5.9 U	4.7 U	NA	4.5 U	4.8 U	4.1 U	4.6 U	4.8 U	4.1 U
Acetone	100000	50	ug/kg	6.3 J	9.3 U	12 U	9.4 U	NA	41.6	9.5 U	8.3 U	9.3 U	9.6 U	8.2 U
Benzene	4800	60	ug/kg	0.53 U	0.46 U	0.59 U	0.47 U	NA	0.45 U	0.48 U	0.41 U	0.46 U	0.48 U	0.41 U
Bromodichloromethane	NS	NS	ug/kg	2.1 U	1.9 U	2.4 U	1.9 U	NA	1.8 U	1.9 U	1.7 U	1.9 U	1.9 U	1.6 U
Bromoform	NS	NS	ug/kg	5.3 U	4.6 U	5.9 U	4.7 U	NA	4.5 U	4.8 U	4.1 U	4.6 U	4.8 U	4.1 U
Bromomethane	NS	NS	ug/kg	5.3 U	4.6 U	5.9 U	4.7 U	NA	4.5 U	4.8 U	4.1 U	4.6 U	4.8 U	4.1 U
Carbon Disulfide	NS	NS	ug/kg	2.1 U	1.9 U	2.4 U	1.9 U	NA	1.8 U	1.9 U	1.7 U	1.9 U	1.9 U	1.6 U
Carbon Tetrachloride	2400	760	ug/kg	2.1 U	1.9 U	2.4 U	1.9 U	NA	1.8 U	1.9 U	1.7 U	1.9 U	1.9 U	1.6 U
CFC-11	NS	NS	ug/kg	5.3 U	4.6 U	5.9 U	4.7 U	NA	4.5 U	4.8 U	4.1 U	4.6 U	4.8 U	4.1 U
CFC-12	NS	NS	ug/kg	5.3 U	4.6 U	5.9 U	4.7 U	NA	4.5 U	4.8 U	4.1 U	4.6 U	4.8 U	4.1 U
Chlorobenzene	100000	1100	ug/kg	2.1 U	1.9 U	2.4 U	1.9 U	NA	1.8 U	1.9 U	1.7 U	1.9 U	1.9 U	1.6 U
Chlorodibromomethane	NS	NS	ug/kg	2.1 U	1.9 U	2.4 U	1.9 U	NA	1.8 U	1.9 U	1.7 U	1.9 U	1.9 U	1.6 U
Chloroethane	NS	NS	ug/kg	5.3 U	4.6 U	5.9 U	4.7 U	NA	4.5 U	4.8 U	4.1 U	4.6 U	4.8 U	4.1 U
Chloroform	49000	370	ug/kg	2.1 U	1.9 U	2.4 U	1.9 U	NA	1.8 U	1.9 U	1.7 U	1.9 U	1.9 U	1.6 U
Chloromethane	NS	NS	ug/kg	5.3 U	4.6 U	5.9 U	4.7 U	NA	4.5 U	4.8 U	4.1 U	4.6 U	4.8 U	4.1 U
cis-1,2-Dichloroethene	100000	250	ug/kg	1.1 U	0.93 U	1.2 U	0.94 U	NA	0.9 U	0.95 U	0.83 U	0.93 U	0.96 U	0.82 U
cis-1,3-Dichloropropene	NS	NS	ug/kg	2.1 U	1.9 U	2.4 U	1.9 U	NA	1.8 U	1.9 U	1.7 U	1.9 U	1.9 U	1.6 U
Cyclohexane	NS	NS	ug/kg	2.1 U	1.9 U	2.4 U	1.9 U	NA	1.8 U	1.9 U	1.7 U	1.9 U	1.9 U	1.6 U
Dichloromethane	NS	NS	ug/kg	5.3 U	4.6 U	5.9 U	4.7 U	NA	4.5 U	4.8 U	4.1 U	4.6 U	4.8 U	4.1 U
Ethylbenzene	41000	1000	ug/kg	1.1 U	0.93 U	1.2 U	0.94 U	NA	0.9 U	0.95 U	0.83 U	0.93 U	0.96 U	0.82 U
Isopropylbenzene	NS	NS	ug/kg	2.1 U	1.9 U	2.4 U	1.9 U	NA	1.8 U	1.9 U	1.7 U	1.9 U	1.9 U	1.6 U
Methyl Acetate	NS	NS	ug/kg	5.3 U	4.6 U	5.9 U	4.7 U	NA	4.5 U	4.8 U	4.1 U	4.6 U	4.8 U	4.1 U
Methyl N-Butyl Ketone (2-Hexanone)	NS	NS	ug/kg	5.3 U	4.6 U	5.9 U	4.7 U	NA	4.5 U	4.8 U	4.1 U	4.6 U	4.8 U	4.1 U
Methylcyclohexane	NS	NS	ug/kg	2.1 U	1.9 U	2.4 U	1.9 U	NA	1.8 U	1.9 U	1.7 U	1.9 U	1.9 U	1.6 U
Methyl-tert-butylether	100000	930	ug/kg	1.1 U	0.93 U	1.2 U	0.94 U	NA	0.9 U	0.95 U	0.83 U	0.93 U	0.96 U	0.82 U
Styrene (Monomer)	NS	NS	ug/kg	2.1 U	1.9 U	2.4 U	1.9 U	NA	0.26 J	2.2	0.21 J	1.9 U	1 J	1.6 U
Tetrachloroethene	19000	1300	ug/kg	2.1 U	1.9 U	2.4 U	1.9 U	NA	1.8 U	1.9 U	1.7 U	1.9 U	1.9 U	1.6 U
Toluene	100000	700	ug/kg	1.1 U	0.93 U	1.2 U	0.94 U	NA	0.9 U	0.95 U	0.83 U	0.93 U	0.96 U	0.82 U
Total Xylenes	100000	1600	ug/kg	1.1 U	0.93 U	1.2 U	0.94 U	NA	0.9 U	0.95 U	0.83 U	0.93 U	0.96 U	0.82 U
trans-1,2-Dichloroethene	100000	190	ug/kg	1.1 U	0.93 U	1.2 U	0.94 U	NA	0.9 U	0.95 U	0.83 U	0.93 U	0.96 U	0.82 U
trans-1,3-Dichloropropene	NS	NS	ug/kg	2.1 U	1.9 U	2.4 U	1.9 U	NA	1.8 U	1.9 U	1.7 U	1.9 U	1.9 U	1.6 U
Trichloroethene	21000	470	ug/kg	1.1 U	0.93 U	1.2 U	0.94 U	NA	0.9 U	0.95 U	0.83 U	0.93 U	0.96 U	0.82 U
Vinyl chloride	900	20	ug/kg	2.1 U	1.9 U	2.4 U	1.9 U	NA	1.8 U	1.9 U	1.7 U	1.9 U	1.9 U	1.6 U

See Notes on Last Page

Table 10. Confirmatory Soil Sample Results Area B
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Sample ID	TABLE 375-6: RESTRIC. RES. USE SCO	TABLE 375-6: PROTECTION OF GW SCO	Units	PE-B-J5	PE-B-S1	PE-B-S2	PE-B-S3	PE-B-S4A	PE-B-S5	PE-B-S6	PE-B-S7	PE-B-S8	PE-B-S9	PE-B-S10
Sample Depth				2-2.5	1.5-2	1.5-2	1.5-2	1.5-2	1.5-2	1.5-2	1.5-2	1.5-2	1.5-2	1.5-2
Sample Date				42342	42341	42341	42341	42366	42349	42349	42349	42349	42349	42349
SVOCs														
1,1-Biphenyl	NS	NS	ug/kg	82 U	74 U	87 U	77 U	72 U	65 U	72 U	71 U	73 U	76 U	70 U
2,2-Oxybis(1-Chloropropane)	NS	NS	ug/kg	82 U	74 U	87 U	77 U	72 U	65 U	72 U	71 U	73 U	76 U	70 U
2,4,5- Trichlorophenol	NS	NS	ug/kg	210 U	180 U	220 U	190 U	180 U	160 U	180 U	180 U	180 U	190 U	170 U
2,4,6- Trichlorophenol	NS	NS	ug/kg	210 U	180 U	220 U	190 U	180 U	160 U	180 U	180 U	180 U	190 U	170 U
2,4-Dichlorophenol	NS	NS	ug/kg	210 U	180 U	220 U	190 U	180 U	160 U	180 U	180 U	180 U	190 U	170 U
2,4-Dimethylphenol	NS	NS	ug/kg	210 U	180 U	220 U	190 U	180 U	160 U	180 U	180 U	180 U	190 U	170 U
2,4-Dinitrophenol	NS	NS	ug/kg	210 U	180 U	220 U	190 U	180 U	160 U	180 U	180 U	180 U	190 U	170 U
2,4-Dinitrotoluene	NS	NS	ug/kg	41 U	37 U	44 U	39 U	36 U	32 U	36 U	35 U	36 U	38 U	35 U
2,6-Dinitrotoluene	NS	NS	ug/kg	41 U	37 U	44 U	39 U	36 U	32 U	36 U	35 U	36 U	38 U	35 U
2-Chloronaphthalene	NS	NS	ug/kg	82 U	74 U	87 U	77 U	72 U	65 U	72 U	71 U	73 U	76 U	70 U
2-Chlorophenol	NS	NS	ug/kg	82 U	74 U	87 U	77 U	72 U	65 U	72 U	71 U	73 U	76 U	70 U
2-Methyl-4,6-dinitrophenol	NS	NS	ug/kg	210 U	180 U	220 U	190 U	180 U	160 U	180 U	180 U	180 U	190 U	170 U
2-Methylnaphthalene	NS	NS	ug/kg	82 U	74 U	87 U	77 U	72 U	65 U	72 U	71 U	73 U	76 U	70 U
2-Methylphenol	NS	NS	ug/kg	82 U	74 U	87 U	77 U	72 U	65 U	72 U	71 U	73 U	76 U	70 U
2-Nitroaniline	NS	NS	ug/kg	210 U	180 U	220 U	190 U	180 U	160 U	180 U	180 U	180 U	190 U	170 U
2-Nitrophenol	NS	NS	ug/kg	210 U	180 U	220 U	190 U	180 U	160 U	180 U	180 U	180 U	190 U	170 U
3,3-Dichlorobenzidine	NS	NS	ug/kg	82 U	74 U	87 U	77 U	72 U	65 U	72 U	71 U	73 U	76 U	70 U
3-Methylphenol, 4-Methylphenol	NS	NS	ug/kg	82 U	74 U	87 U	77 U	72 U	65 U	72 U	71 U	73 U	76 U	70 U
3-Nitroaniline	NS	NS	ug/kg	210 U	180 U	220 U	190 U	180 U	160 U	180 U	180 U	180 U	190 U	170 U
4-Bromophenyl phenyl ether	NS	NS	ug/kg	82 U	74 U	87 U	77 U	72 U	65 U	72 U	71 U	73 U	76 U	70 U
4-Chloro-3-Methylphenol	NS	NS	ug/kg	210 U	180 U	220 U	190 U	180 U	160 U	180 U	180 U	180 U	190 U	170 U
4-Chlorophenyl phenyl ether	NS	NS	ug/kg	82 U	74 U	87 U	77 U	72 U	65 U	72 U	71 U	73 U	76 U	70 U
4-Nitroaniline	NS	NS	ug/kg	210 U	180 U	220 U	190 U	180 U	160 U	180 U	180 U	180 U	190 U	170 U
4-Nitrophenol	NS	NS	ug/kg	410 U	370 U	440 U	390 U	360 UJ	320 U	360 U	350 U	360 U	380 U	350 U
Acenaphthene	100000	98000	ug/kg	41 U	37 U	44 U	39 U	36 U	32 U	36 U	35 U	36 U	38 U	35 U
Acenaphthylene	100000	107000	ug/kg	41 U	37 U	44 U	39 U	36 U	32 U	36 U	35 U	36 U	38 U	35 U
Acetophenone	NS	NS	ug/kg	210 U	180 U	220 U	190 U	180 U	160 U	180 U	180 U	180 U	190 U	170 U
Anthracene	100000	1000000	ug/kg	41 U	37 U	44 U	39 U	36 U	32 U	36 U	35 U	36 U	38 U	35 U
Atrazine	NS	NS	ug/kg	82 U	74 U	87 U	77 U	72 U	65 U	72 U	71 U	73 U	76 U	70 U
Benzaldehyde	NS	NS	ug/kg	210 U	180 U	220 U	20.8 J	180 U	160 U	180 U	180 U	180 U	190 U	170 U
Benzo(a)anthracene	1000	1000	ug/kg	41 U	37 U	44 U	39 U	36 U	32 U	36 U	35 U	36 U	38 U	35 U
Benzo(a)pyrene	1000	22000	ug/kg	41 U	37 U	44 U	39 U	36 U	32 U	36 U	35 U	36 U	38 U	35 U
Benzo(b)fluoranthene	1000	1700	ug/kg	41 U	37 U	44 U	39 U	36 U	32 U	36 U	35 U	36 U	38 U	35 U
Benzo(g,h,i)perylene	100000	1000000	ug/kg	41 U	37 U	44 U	39 U	36 U	32 U	36 U	35 U	36 U	38 U	35 U
Benzo(k)fluoranthene	3900	1700	ug/kg	41 U	37 U	44 U	39 U	36 U	32 U	36 U	35 U	36 U	38 U	35 U
bis(2-Chloroethoxy)methane	NS	NS	ug/kg	82 U	74 U	87 U	77 U	72 U	65 U	72 U	71 U	73 U	76 U	70 U
bis(2-Chloroethyl)ether	NS	NS	ug/kg	82 U	74 U	87 U	77 U	72 U	65 U	72 U	71 U	73 U	76 U	70 U
bis(2-Ethylhexyl)phthalate	NS	NS	ug/kg	82 U	74 U	87 U	77 U	72 U	65 U	72 U	71 U	73 U	76 U	70 U
Butyl benzyl phthalate	NS	NS	ug/kg	82 U	74 U	87 U	77 U	72 U	65 U	72 U	71 U	73 U	76 U	70 U
Caprolactam	NS	NS	ug/kg	82 U	74 U	87 U	77 U	72 U	65 U	72 U	71 U	73 U	76 U	70 U
Carbazole	NS	NS	ug/kg	82 U	74 U	87 U	77 U	72 U	65 U	72 U	71 U	73 U	76 U	70 U
Chrysene	3900	1000	ug/kg	41 U	37 U	44 U	39 U	36 U	32 U	36 U	35 U	36 U	38 U	35 U
Dibenzo(a,h)anthracene	330	1000000	ug/kg	41 U	37 U	44 U	39 U	36 U	32 U	36 U	35 U	36 U	38 U	35 U
Dibenzofuran	NS	NS	ug/kg	82 U	74 U	87 U	77 U	72 U	65 U	72 U	71 U	73 U	76 U	70 U
Diethyl phthalate	NS	NS	ug/kg	82 U	74 U	87 U	77 U	72 U	65 U	72 U	71 U	73 U	76 U	70 U
Dimethyl phthalate	NS	NS	ug/kg	82 U	74 U	87 U	77 U	72 U	65 U	72 U	71 U	73 U	76 U	70 U
Di-n-butyl phthalate	NS	NS	ug/kg	82 U	74 U	87 U	77 U	72 U	65 U	72 U	71 U	73 U	76 U	70 U
Di-n-octyl phthalate	NS	NS	ug/kg	82 U	74 U	87 U	77 U	72 U	65 U	72 U	71 U	73 U	76 U	70 U
Fluoranthene	100000	1000000	ug/kg	41 U	37 U	44 U	39 U	36 U	32 U	36 U	35 U	36 U	38 U	35 U
Fluorene	100000	386000	ug/kg	41 U	37 U	44 U	39 U	36 U	32 U	36 U	35 U	36 U	38 U	35 U
Hexachloro-1,3-butadiene	NS	NS	ug/kg	41 UJ	37 U	44 U	39 U	36 U	32 U	36 U	35 U	36 U	38 U	35 U
Hexachlorobenzene	NS	NS	ug/kg	82 UJ	74 U	87 U	77 U	72 U	65 U	72 U	71 U	73 U	76 U	70 U
Hexachlorocyclopentadiene	NS	NS	ug/kg	410 UJ	370 U	440 U	390 U	360 U	320 U	360 U	350 U	360 U	380 U	350 U
Hexachloroethane	NS	NS	ug/kg	210 UJ	180 U	220 U	190 U	180 U	160 U	180 U	180 U	180 U	190 U	170 U
Indeno(1,2,3-cd)pyrene	500	8200	ug/kg	41 U	37 U	44 U	39 U	36 U	32 U	36 U	35 U	36 U	38 U	35 U

See Notes on Last Page

Table 10. Confirmatory Soil Sample Results Area B
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Sample ID	TABLE 375-6: RESTRIC. RES. USE SCO	TABLE 375-6: PROTECTION OF GW SCO	Units	PE-B-J5	PE-B-S1	PE-B-S2	PE-B-S3	PE-B-S4A	PE-B-S5	PE-B-S6	PE-B-S7	PE-B-S8	PE-B-S9	PE-B-S10
Sample Depth				2-2.5	1.5-2	1.5-2	1.5-2	1.5-2	1.5-2	1.5-2	1.5-2	1.5-2	1.5-2	1.5-2
Sample Date				42342	42341	42341	42341	42366	42349	42349	42349	42349	42349	42349
SVOCs cont.														
Isophorone	NS	NS	ug/kg	82 U	74 U	87 U	77 U	72 U	65 U	72 U	71 U	73 U	76 U	70 U
Naphthalene	100000	12000	ug/kg	41 U	37 U	44 U	39 U	36 U	32 U	36 U	35 U	36 U	38 U	35 U
Nitrobenzene	NS	NS	ug/kg	82 U	74 U	87 U	77 U	72 U	65 U	72 U	71 U	73 U	76 U	70 U
n-Nitrosodi-n-propylamine	NS	NS	ug/kg	82 U	74 U	87 U	77 U	72 U	65 U	72 U	71 U	73 U	76 U	70 U
N-nitrosodiphenylamine	NS	NS	ug/kg	210 U	180 U	220 U	190 U	180 U	160 U	180 U	180 U	180 U	190 U	170 U
p-Chloroaniline	NS	NS	ug/kg	210 U	180 U	220 U	190 U	180 U	160 U	180 U	180 U	180 U	190 U	170 U
Pentachlorophenol	6700	800	ug/kg	210 UJ	180 U	220 U	190 U	180 U	160 U	180 U	180 U	180 U	190 U	170 U
Phenanthrene	100000	1000000	ug/kg	41 U	37 U	44 U	39 U	36 U	32 U	36 U	35 U	36 U	38 U	35 U
Phenol	100000	330	ug/kg	82 U	74 U	87 U	77 U	72 U	65 U	72 U	71 U	73 U	76 U	70 U
Pyrene	100000	1000000	ug/kg	41 U	37 U	44 U	39 U	36 U	32 U	36 U	35 U	36 U	38 U	35 U
PCBs														
Aroclor 1016	1000	3200	ug/kg	39 U	36 U	43 U	38 U	33 U	35 U	33 U	34 U	38 U	34 U	34 U
Aroclor 1221	1000	3200	ug/kg	39 U	36 U	43 U	38 U	33 U	35 U	33 U	34 U	38 U	34 U	34 U
Aroclor 1232	1000	3200	ug/kg	39 U	36 U	43 U	38 U	33 U	35 U	33 U	34 U	38 U	34 U	34 U
Aroclor 1242	1000	3200	ug/kg	39 U	36 U	43 U	38 U	33 U	35 U	33 U	34 U	38 U	34 U	34 U
Aroclor 1248	1000	3200	ug/kg	39 U	36 U	43 U	38 U	33 U	35 U	33 U	34 U	38 U	34 U	34 U
Aroclor 1254	1000	3200	ug/kg	39 U	36 U	43 U	38 U	33 U	35 U	33 U	34 U	38 U	34 U	34 U
Aroclor 1260	1000	3200	ug/kg	39 U	36 U	43 U	38 U	33 U	35 U	33 U	34 U	38 U	34 U	34 U
Aroclor 1262	1000	3200	ug/kg	39 U	36 U	43 U	38 U	33 U	35 U	33 U	34 U	38 U	34 U	34 U
Aroclor 1268	1000	3200	ug/kg	39 U	36 U	43 U	38 U	33 U	35 U	33 U	34 U	38 U	34 U	34 U
Metals														
Aluminum	NS	NS	mg/kg	14200 J	13200 J	19900 J	13700 J	4890	5460 J	6980 J	7090 J	6840 J	9890 J	14200 J
Antimony	NS	NS	mg/kg	2.5 UJ	1.3 J	1.6 J	2.3 UB	1.6 B	2 UJ	2.1 UJ	2.2 UB	2 UJ	4 UJ	4.4 UJ
Arsenic	16	16	mg/kg	3.2	3.5	4.1	3.3	2.2	1.6 B	2.1	3.4	2.2	2.7	3.9
Barium	400	820	mg/kg	32.5 J	32	41.9	30	23.7	32.8	31.3	52.2	29.2	40.9	64.5
Beryllium	72	47	mg/kg	0.53	0.5	0.69	0.43	0.33	0.35	0.57	0.5	0.85	0.78	1.2
Cadmium	4.3	7.5	mg/kg	0.25 B	0.57 UB	0.67 UB	0.56 UB	0.17 B	0.2 B	0.22 B	0.28 B	0.19 B	0.27 B	0.47 B
Calcium	NS	NS	mg/kg	942	1400 J	1180 J	541 J	1930	2280	4100	5540	4100	4140	5740
Chromium	NS	NS	mg/kg	14.1	15.5	18.7	12.7	12.3	8.6	7.1	15.4	8	11.2	13.3
Cobalt	NS	NS	mg/kg	5.1 B	7	7.5	4.6 B	5.3 B	5.7	5 B	6.1	5.1	6.4	9.1
Copper	270	1720	mg/kg	8.1	10.3	9.9	6.9	10.3	12.3	7.9	9.1	6.8	9.4	11.6
Iron	NS	NS	mg/kg	13400 J	17000	21200	13700	13700	13700	16200	17700	15200	20700	28700
Lead	400	450	mg/kg	9.5 J	5.2	9.3	32.3	16.6	11.3	6.5	8.6	2.6	3.7	12.2
Magnesium	NS	NS	mg/kg	1790	2470	2550	1530	2200	2190	2740	3820	2660	3040	4660
Manganese	2000	2000	mg/kg	86.4	274	195	120	330	145	177	447	198	253	304
Mercury	NS	NS	mg/kg	0.038 B	0.023 B	0.041	0.031 B	0.033 U	0.033 U	0.034 U	0.036 U	0.037 U	0.034 U	0.037 U
Nickel	310	130	mg/kg	8.1	11	11.3	8.5	8.6	6.8	7.9	9.3	5.6	17.6	8.4
Potassium	NS	NS	mg/kg	632 B	748 B	836 B	479 B	825 B	1160	1200	1500	1240	1530	2290
Selenium	180	4	mg/kg	2.5 U	2.3 U	2.7 UB	2.3 U	2.2 U	2 U	2.1 U	2.2 U	2 U	2 U	2.2 U
Silver	180	8.3	mg/kg	0.22 B	0.57 UB	0.67 UB	0.56 UB	0.54 U	0.5 U	0.53 U	0.54 U	0.5 U	0.5 B	0.7 B
Sodium	NS	NS	mg/kg	98.9 B	114 B	121 B	53.9 B	155 B	197 B	305 B	283 B	329 B	352 B	539 B
Thallium	NS	NS	mg/kg	1.2 U	1.1 U	1.3 U	1.1 UB	0.68 B	1 U	1.1 U	1.1 U	0.99 U	2 U	2.2 U
Vanadium	NS	NS	mg/kg	25.7	26.7	33.5	22.2	20.7	19.3	16.3	26.9	17.4	23.8	31.1
Zinc	10000	2480	mg/kg	28.6 J	25.7	32.2	28.7	35.8	21.9	27.2	27	20.6	26.6	51.6
General Chemistry														
Percent Solids			%	80	89.8	74.3	86.1	92.2	95.6	90.7	90	85.6	87.2	89.5
Notes														
NS			No standard											
NA			Not analyzed											
J			Estimated result											
JN			Estimated result											
R			Rejected result											
UB			Analyte considered non-detect at the listed value due to associated blank contamination											
Bold			Result exceeds 375-6.8(b) protection of groundwater soil cleanup objective.											
Shade			Result exceeds 375-6.8(b) restricted residential use soil cleanup objective.											

Table 10. Confirmatory Soil Sample Results Area B
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Sample ID	TABLE 375-6: RESTRIC. RES. USE SCO	TABLE 375-6: PROTECTION OF GW SCO	Units	PE-B-S11A	PE-B-S11B	PE-B-S12	PE-B-S13	PE-B-S14	PE-B-S15	PE-B-S16	PE-B-S17	PE-B-S17	PE-B-S18
Sample Depth				1.5-2	1.5-2	1.5-2	1.5-2	1.5-2	0.5-1	1.5-2	1.5-2	1.5-2	1.5-2
Sample Date				42377	42377	42352	42352	42352	42352	42352	42352	E-DUP-010_2015121	42352
VOCs													
1,1,1-Trichloroethane	100000	680	ug/kg	NA	NA	2.2 U	1.8 U	1.5 U	1.7 U	1.7 U	2.4 U	2.3 U	1.9 U
1,1,2,2-Tetrachloroethane	NS	NS	ug/kg	NA	NA	2.2 U	1.8 U	1.5 U	1.7 U	1.7 U	2.4 U	2.3 U	1.9 U
1,1,2-trichloro-1,2,2-trifluoroethane	NS	NS	ug/kg	NA	NA	5.6 U	4.5 U	3.9 U	4.2 U	4.3 U	6 U	5.7 U	4.7 U
1,1,2-Trichloroethane	NS	NS	ug/kg	NA	NA	2.2 U	1.8 U	1.5 U	1.7 U	1.7 U	2.4 U	2.3 U	1.9 U
1,1-Dichloroethane	26000	270	ug/kg	NA	NA	1.1 U	0.9 U	0.77 U	0.84 U	0.85 U	1.2 U	1.1 U	0.93 U
1,1-Dichloroethene	100000	330	ug/kg	NA	NA	1.1 U	0.9 U	0.77 U	0.84 U	0.85 U	1.2 U	1.1 U	0.93 U
1,2,4-Trichlorobenzene	NS	NS	ug/kg	NA	NA	5.6 U	4.5 U	3.9 U	4.2 U	4.3 U	6 U	5.7 U	4.7 U
1,2-Dibromo-3-chloropropane	NS	NS	ug/kg	NA	NA	2.2 U	1.8 U	1.5 U	1.7 U	1.7 U	2.4 U	2.3 U	1.9 U
1,2-Dibromoethane	NS	NS	ug/kg	NA	NA	1.1 U	0.9 U	0.77 U	0.84 U	0.85 U	1.2 U	1.1 U	0.93 U
1,2-Dichlorobenzene	100000	1100	ug/kg	NA	NA	1.1 U	0.9 U	0.77 U	0.84 U	0.85 U	1.2 U	1.1 U	0.93 U
1,2-Dichloroethane	3100	20	ug/kg	NA	NA	1.1 U	0.9 U	0.77 U	0.84 U	0.85 U	1.2 U	1.1 U	0.93 U
1,2-Dichloropropane	NS	NS	ug/kg	NA	NA	2.2 U	1.8 U	1.5 U	1.7 U	1.7 U	2.4 U	2.3 U	1.9 U
1,3-Dichlorobenzene	49000	2400	ug/kg	NA	NA	1.1 U	0.9 U	0.77 U	0.84 U	0.85 U	1.2 U	1.1 U	0.93 U
1,4-Dichlorobenzene	13000	1800	ug/kg	NA	NA	1.1 U	0.9 U	0.77 U	0.84 U	0.85 U	1.2 U	1.1 U	0.93 U
2-Butanone (MEK)	100000	120	ug/kg	NA	NA	11 U	9 U	7.7 U	8.4 U	8.5 U	12 U	11 U	9.3 U
4-Methyl-2-Pentanone	NS	NS	ug/kg	NA	NA	5.6 U	4.5 U	3.9 U	4.2 U	4.3 U	6 U	5.7 U	4.7 U
Acetone	100000	50	ug/kg	NA	NA	11 U	9 U	7.7 U	8.4 U	8.5 U	12 U	24.7	9.3 U
Benzene	4800	60	ug/kg	NA	NA	0.56 U	0.45 U	0.39 U	0.42 U	0.43 U	0.6 U	0.57 U	0.47 U
Bromodichloromethane	NS	NS	ug/kg	NA	NA	2.2 U	1.8 U	1.5 U	1.7 U	1.7 U	2.4 U	2.3 U	1.9 U
Bromoform	NS	NS	ug/kg	NA	NA	5.6 U	4.5 U	3.9 U	4.2 U	4.3 U	6 U	5.7 U	4.7 U
Bromomethane	NS	NS	ug/kg	NA	NA	5.6 U	4.5 U	3.9 U	4.2 U	4.3 U	6 U	5.7 U	4.7 U
Carbon Disulfide	NS	NS	ug/kg	NA	NA	2.2 U	1.8 U	1.5 U	1.7 U	1.7 U	2.4 U	2.3 U	1.9 U
Carbon Tetrachloride	2400	760	ug/kg	NA	NA	2.2 U	1.8 U	1.5 U	1.7 U	1.7 U	2.4 U	2.3 U	1.9 U
CFC-11	NS	NS	ug/kg	NA	NA	5.6 U	4.5 U	3.9 U	4.2 U	4.3 U	6 U	5.7 U	4.7 U
CFC-12	NS	NS	ug/kg	NA	NA	5.6 U	4.5 U	3.9 U	4.2 U	4.3 U	6 U	5.7 U	4.7 U
Chlorobenzene	100000	1100	ug/kg	NA	NA	2.2 U	1.8 U	1.5 U	1.7 U	1.7 U	2.4 U	2.3 U	1.9 U
Chlorodibromomethane	NS	NS	ug/kg	NA	NA	2.2 U	1.8 U	1.5 U	1.7 U	1.7 U	2.4 U	2.3 U	1.9 U
Chloroethane	NS	NS	ug/kg	NA	NA	5.6 U	4.5 U	3.9 U	4.2 U	4.3 U	6 U	5.7 U	4.7 U
Chloroform	49000	370	ug/kg	NA	NA	2.2 U	1.8 U	1.5 U	1.7 U	1.7 U	2.4 U	2.3 U	1.9 U
Chloromethane	NS	NS	ug/kg	NA	NA	5.6 U	4.5 U	3.9 U	4.2 U	4.3 U	6 U	5.7 U	4.7 U
cis-1,2-Dichloroethene	100000	250	ug/kg	NA	NA	1.1 U	0.9 U	0.77 U	0.84 U	0.85 U	1.2 U	1.1 U	0.93 U
cis-1,3-Dichloropropene	NS	NS	ug/kg	NA	NA	2.2 U	1.8 U	1.5 U	1.7 U	1.7 U	2.4 U	2.3 U	1.9 U
Cyclohexane	NS	NS	ug/kg	NA	NA	2.2 U	1.8 U	1.5 U	1.7 U	1.7 U	2.4 U	2.3 U	1.9 U
Dichloromethane	NS	NS	ug/kg	NA	NA	5.6 U	4.5 U	3.9 U	4.2 U	4.3 U	6 U	5.7 U	4.7 U
Ethylbenzene	41000	1000	ug/kg	NA	NA	1.1 U	0.9 U	0.77 U	0.84 U	0.85 U	1.2 U	1.1 U	0.93 U
Isopropylbenzene	NS	NS	ug/kg	NA	NA	2.2 U	1.8 U	1.5 U	1.7 U	1.7 U	2.4 U	2.3 U	1.9 U
Methyl Acetate	NS	NS	ug/kg	NA	NA	5.6 U	4.5 U	3.9 U	4.2 U	4.3 U	6 U	5.7 U	4.7 U
Methyl N-Butyl Ketone (2-Hexanone)	NS	NS	ug/kg	NA	NA	5.6 U	4.5 U	3.9 U	4.2 U	4.3 U	6 U	5.7 U	4.7 U
Methylcyclohexane	NS	NS	ug/kg	NA	NA	2.2 U	1.8 U	1.5 U	1.7 U	1.7 U	2.4 U	2.3 U	1.9 U
Methyl-tert-butylether	100000	930	ug/kg	NA	NA	1.1 U	0.9 U	0.77 U	0.84 U	0.85 U	1.2 U	1.1 U	0.93 U
Styrene (Monomer)	NS	NS	ug/kg	NA	NA	0.49 J	1.8 U	1.5 U	1.7 U	1.7 U	2.4 U	2.3 U	1.9 U
Tetrachloroethene	19000	1300	ug/kg	NA	NA	2.2 U	1.8 U	1.5 U	1.7 U	1.7 U	2.4 U	2.3 U	1.9 U
Toluene	100000	700	ug/kg	NA	NA	1.1 U	0.9 U	0.77 U	0.84 U	0.85 U	1.2 U	1.1 U	0.93 U
Total Xylenes	100000	1600	ug/kg	NA	NA	1.1 U	0.9 U	0.77 U	0.84 U	0.85 U	1.2 U	1.1 U	0.93 U
trans-1,2-Dichloroethene	100000	190	ug/kg	NA	NA	1.1 U	0.9 U	0.77 U	0.84 U	0.85 U	1.2 U	1.1 U	0.93 U
trans-1,3-Dichloropropene	NS	NS	ug/kg	NA	NA	2.2 U	1.8 U	1.5 U	1.7 U	1.7 U	2.4 U	2.3 U	1.9 U
Trichloroethene	21000	470	ug/kg	NA	NA	1.1 U	0.9 U	0.77 U	0.84 U	0.85 U	1.2 U	1.1 U	0.93 U
Vinyl chloride	900	20	ug/kg	NA	NA	2.2 U	1.8 U	1.5 U	1.7 U	1.7 U	2.4 U	2.3 U	1.9 U

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Table 10. Confirmatory Soil Sample Results Area B
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Sample ID	TABLE 375-6: RESTRIC. RES. USE SCO	TABLE 375-6: PROTECTION OF GW SCO	Units	PE-B-S11A	PE-B-S11B	PE-B-S12	PE-B-S13	PE-B-S14	PE-B-S15	PE-B-S16	PE-B-S17	PE-B-S17	PE-B-S18
Sample Depth				1.5-2	1.5-2	1.5-2	1.5-2	1.5-2	0.5-1	1.5-2	1.5-2	1.5-2	1.5-2
Sample Date				42377	42377	42352	42352	42352	42352	42352	42352	E-DUP-010_2015121	42352
SVOCs													
1,1-Biphenyl	NS	NS	ug/kg	NA	NA	77 U	70 U	70 U	74 U	76 U	69 U	64 U	74 U
2,2-Oxybis(1-Chloropropane)	NS	NS	ug/kg	NA	NA	77 U	70 U	70 U	74 U	76 U	69 U	64 U	74 U
2,4,5-Trichlorophenol	NS	NS	ug/kg	NA	NA	190 U	170 U	180 U	190 U	190 U	170 U	160 U	180 U
2,4,6-Trichlorophenol	NS	NS	ug/kg	NA	NA	190 U	170 U	180 U	190 U	190 U	170 U	160 U	180 U
2,4-Dichlorophenol	NS	NS	ug/kg	NA	NA	190 U	170 U	180 U	190 U	190 U	170 U	160 U	180 U
2,4-Dimethylphenol	NS	NS	ug/kg	NA	NA	190 U	170 U	180 U	190 U	190 U	170 U	160 U	180 U
2,4-Dinitrophenol	NS	NS	ug/kg	NA	NA	190 U	170 U	180 U	190 U	190 U	170 U	160 U	180 U
2,4-Dinitrotoluene	NS	NS	ug/kg	NA	NA	39 U	35 U	35 U	37 U	38 U	34 U	32 U	37 U
2,6-Dinitrotoluene	NS	NS	ug/kg	NA	NA	39 U	35 U	35 U	37 U	38 U	34 U	32 U	37 U
2-Chloronaphthalene	NS	NS	ug/kg	NA	NA	77 U	70 U	70 U	74 U	76 U	69 U	64 U	74 U
2-Chlorophenol	NS	NS	ug/kg	NA	NA	77 U	70 U	70 U	74 U	76 U	69 U	64 U	74 U
2-Methyl-4,6-dinitrophenol	NS	NS	ug/kg	NA	NA	190 U	170 U	180 U	190 U	190 U	170 U	160 U	180 U
2-Methylnaphthalene	NS	NS	ug/kg	NA	NA	77 U	70 U	70 U	74 U	76 U	69 U	64 U	74 U
2-Methylphenol	NS	NS	ug/kg	NA	NA	77 U	70 U	70 U	74 U	76 U	69 U	64 U	74 U
2-Nitroaniline	NS	NS	ug/kg	NA	NA	190 U	170 U	180 U	190 U	190 U	170 U	160 U	180 U
2-Nitrophenol	NS	NS	ug/kg	NA	NA	190 U	170 U	180 U	190 U	190 U	170 U	160 U	180 U
3,3-Dichlorobenzidine	NS	NS	ug/kg	NA	NA	77 U	70 U	70 U	74 U	76 U	69 U	64 U	74 U
3-Methylphenol, 4-Methylphenol	NS	NS	ug/kg	NA	NA	77 U	70 U	70 U	74 U	76 U	69 U	64 U	74 U
3-Nitroaniline	NS	NS	ug/kg	NA	NA	190 U	170 U	180 U	190 U	190 U	170 U	160 U	180 U
4-Bromophenyl phenyl ether	NS	NS	ug/kg	NA	NA	77 U	70 U	70 U	74 U	76 U	69 U	64 U	74 U
4-Chloro-3-Methylphenol	NS	NS	ug/kg	NA	NA	190 U	170 U	180 U	190 U	190 U	170 U	160 U	180 U
4-Chlorophenyl phenyl ether	NS	NS	ug/kg	NA	NA	77 U	70 U	70 U	74 U	76 U	69 U	64 U	74 U
4-Nitroaniline	NS	NS	ug/kg	NA	NA	190 U	170 U	180 U	190 U	190 U	170 U	160 U	180 U
4-Nitrophenol	NS	NS	ug/kg	NA	NA	390 U	350 U	350 U	370 U	380 U	340 U	320 U	370 U
Acenaphthene	100000	98000	ug/kg	NA	NA	39 U	35 U	35 U	37 U	38 U	34 U	32 U	37 U
Acenaphthylene	100000	107000	ug/kg	NA	NA	39 U	35 U	35 U	37 U	38 U	34 U	32 U	37 U
Acetophenone	NS	NS	ug/kg	NA	NA	190 U	170 U	180 U	190 U	190 U	170 U	160 U	180 U
Anthracene	100000	1000000	ug/kg	NA	NA	39 U	35 U	35 U	37 U	38 U	34 U	32 U	37 U
Atrazine	NS	NS	ug/kg	NA	NA	77 U	70 U	70 U	74 U	76 U	69 U	64 U	74 U
Benzaldehyde	NS	NS	ug/kg	NA	NA	36.4 J	170 U	180 U	190 U	190 U	170 U	160 U	180 U
Benzo(a)anthracene	1000	1000	ug/kg	NA	NA	39 U	35 U	35 U	37 U	38 U	34 U	32 U	37 U
Benzo(a)pyrene	1000	22000	ug/kg	NA	NA	39 U	35 U	35 U	37 U	38 U	34 U	32 U	37 U
Benzo(b)fluoranthene	1000	1700	ug/kg	NA	NA	39 U	35 U	35 U	37 U	38 U	34 U	32 U	37 U
Benzo(g,h,i)perylene	100000	1000000	ug/kg	NA	NA	39 U	35 U	35 U	37 U	38 U	34 U	32 U	37 U
Benzo(k)fluoranthene	3900	1700	ug/kg	NA	NA	39 U	35 U	35 U	37 U	38 U	34 U	32 U	37 U
bis(2-Chloroethoxy)methane	NS	NS	ug/kg	NA	NA	77 U	70 U	70 U	74 U	76 U	69 U	64 U	74 U
bis(2-Chloroethyl)ether	NS	NS	ug/kg	NA	NA	77 U	70 U	70 U	74 U	76 U	69 U	64 U	74 U
bis(2-Ethylhexyl)phthalate	NS	NS	ug/kg	NA	NA	77 U	70 U	70 U	74 U	76 U	69 U	64 U	74 U
Butyl benzyl phthalate	NS	NS	ug/kg	NA	NA	77 U	70 U	70 U	74 U	76 U	69 U	64 U	74 U
Caprolactam	NS	NS	ug/kg	NA	NA	77 U	70 U	70 U	74 U	76 U	69 U	64 U	74 U
Carbazole	NS	NS	ug/kg	NA	NA	77 U	70 U	70 U	74 U	76 U	69 U	64 U	74 U
Chrysene	3900	1000	ug/kg	NA	NA	39 U	35 U	35 U	37 U	38 U	34 U	32 U	37 U
Dibenzo(a,h)anthracene	330	1000000	ug/kg	NA	NA	39 U	35 U	35 U	37 U	38 U	34 U	32 U	37 U
Dibenzofuran	NS	NS	ug/kg	NA	NA	77 U	70 U	70 U	74 U	76 U	69 U	64 U	74 U
Diethyl phthalate	NS	NS	ug/kg	NA	NA	77 U	70 U	70 U	74 U	76 U	69 U	64 U	74 U
Dimethyl phthalate	NS	NS	ug/kg	NA	NA	77 U	70 U	70 U	74 U	76 U	69 U	64 U	74 U
Di-n-butyl phthalate	NS	NS	ug/kg	NA	NA	77 U	70 U	70 U	74 U	76 U	69 U	64 U	74 U
Di-n-octyl phthalate	NS	NS	ug/kg	NA	NA	77 U	70 U	70 U	74 U	76 U	69 U	64 U	74 U
Fluoranthene	100000	1000000	ug/kg	NA	NA	39 U	35 U	35 U	37 U	38 U	34 U	32 U	37 U
Fluorene	100000	386000	ug/kg	NA	NA	39 U	35 U	35 U	37 U	38 U	34 U	32 U	37 U
Hexachloro-1,3-butadiene	NS	NS	ug/kg	NA	NA	39 U	35 U	35 U	37 U	38 U	34 U	32 U	37 U
Hexachlorobenzene	NS	NS	ug/kg	NA	NA	77 U	70 U	70 U	74 U	76 U	69 U	64 U	74 U
Hexachlorocyclopentadiene	NS	NS	ug/kg	NA	NA	390 U	350 U	350 U	370 U	380 U	340 U	320 U	370 U
Hexachloroethane	NS	NS	ug/kg	NA	NA	190 U	170 U	180 U	190 U	190 U	170 U	160 U	180 U
Indeno(1,2,3-cd)pyrene	500	8200	ug/kg	NA	NA	39 U	35 U	35 U	37 U	38 U	34 U	32 U	37 U

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Table 10. Confirmatory Soil Sample Results Area B
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Sample ID	TABLE 375-6: RESTRIC. RES. USE SCO	TABLE 375-6: PROTECTION OF GW SCO	Units	PE-B-S11A	PE-B-S11B	PE-B-S12	PE-B-S13	PE-B-S14	PE-B-S15	PE-B-S16	PE-B-S17	PE-B-S17	PE-B-S18
Sample Depth				1.5-2	1.5-2	1.5-2	1.5-2	1.5-2	0.5-1	1.5-2	1.5-2	1.5-2	1.5-2
Sample Date				42377	42377	42352	42352	42352	42352	42352	42352	E-DUP-010_2015121	42352
SVOCs cont.													
Isophorone	NS	NS	ug/kg	NA	NA	77 U	70 U	70 U	74 U	76 U	69 U	64 U	74 U
Naphthalene	100000	12000	ug/kg	NA	NA	39 U	35 U	35 U	37 U	38 U	34 U	32 U	37 U
Nitrobenzene	NS	NS	ug/kg	NA	NA	77 U	70 U	70 U	74 U	76 U	69 U	64 U	74 U
n-Nitrosodi-n-propylamine	NS	NS	ug/kg	NA	NA	77 U	70 U	70 U	74 U	76 U	69 U	64 U	74 U
N-nitrosodiphenylamine	NS	NS	ug/kg	NA	NA	190 U	170 U	180 U	190 U	190 U	170 U	160 U	180 U
p-Chloroaniline	NS	NS	ug/kg	NA	NA	190 U	170 U	180 U	190 U	190 U	170 U	160 U	180 U
Pentachlorophenol	6700	800	ug/kg	NA	NA	190 U	170 U	180 U	190 U	190 U	170 U	160 U	180 U
Phenanthrene	100000	1000000	ug/kg	NA	NA	39 U	35 U	35 U	37 U	38 U	34 U	32 U	37 U
Phenol	100000	330	ug/kg	NA	NA	77 U	70 U	70 U	74 U	76 U	69 U	64 U	74 U
Pyrene	100000	1000000	ug/kg	NA	NA	39 U	35 U	35 U	37 U	38 U	34 U	32 U	37 U
PCBs													
Aroclor 1016	1000	3200	ug/kg	NA	NA	40 U	37 U	34 U	34 U	34 U	35 U	34 U	34 U
Aroclor 1221	1000	3200	ug/kg	NA	NA	40 U	37 U	34 U	34 U	34 U	35 U	34 U	34 U
Aroclor 1232	1000	3200	ug/kg	NA	NA	40 U	37 U	34 U	34 U	34 U	35 U	34 U	34 U
Aroclor 1242	1000	3200	ug/kg	NA	NA	40 U	37 U	34 U	34 U	34 U	35 U	34 U	34 U
Aroclor 1248	1000	3200	ug/kg	NA	NA	40 U	37 U	34 U	34 U	34 U	35 U	34 U	34 U
Aroclor 1254	1000	3200	ug/kg	NA	NA	40 U	37 U	34 U	34 U	34 U	35 U	34 U	34 U
Aroclor 1260	1000	3200	ug/kg	NA	NA	40 U	37 U	34 U	34 U	34 U	35 U	34 U	34 U
Aroclor 1262	1000	3200	ug/kg	NA	NA	40 U	37 U	34 U	34 U	34 U	35 U	34 U	34 U
Aroclor 1268	1000	3200	ug/kg	NA	NA	40 U	37 U	34 U	34 U	34 U	35 U	34 U	34 U
Metals													
Aluminum	NS	NS	mg/kg	22200	15400	17200 J	8130 J	9280 J	11000 J	8490 J	24000 J	21300 J	15900 J
Antimony	NS	NS	mg/kg	2.4 UJ	4.1 UJ	2.6 UJ	2.2 UJ	2.1 UJ	2.4 UJ	2.2 UJ	2.1 UJ	2.1 UJ	2.1 UJ
Arsenic	16	16	mg/kg	3	3.6	3.8	1.6 B	2.9	3.9	2.8	3.8	3.8	3.2
Barium	400	820	mg/kg	47.6	36.4	62	12.9 B	64.2	65.3	49.2	42.4	40.2	35
Beryllium	72	47	mg/kg	0.5	1.7	0.76	0.31	0.58	0.71	0.63	0.64	0.66	0.55
Cadmium	4.3	7.5	mg/kg	0.6 U	1 UB	4.3	0.17 B	0.22 B	0.59 UB	0.56 UB	0.51 UB	0.53 UB	0.53 UB
Calcium	NS	NS	mg/kg	552 B	6590	2640	1080	3210	3500	4170	981	1430	957
Chromium	NS	NS	mg/kg	20.2	9.3	17.2	11	12.9	12	15.3	23.8	22.8	17.3
Cobalt	NS	NS	mg/kg	4.6 B	11.4	7.9	5.3 B	6.1	6.8	6.2	6.3	6.1	6.8
Copper	270	1720	mg/kg	7.8	6.9	20.6	11	15.3 J	10.7 J	14.3 J	9.3 J	10.5 J	9.5 J
Iron	NS	NS	mg/kg	19700	38000	25200	12600	17700	19500	19300	21100	19900	15700
Lead	400	450	mg/kg	5.9	5.8	78.2	1.9 B	54.5	11.4	3	10.4	13.8	8
Magnesium	NS	NS	mg/kg	1910	4830	3450	1850	3020	3150	3010	2260	2260	2010
Manganese	2000	2000	mg/kg	71.5	334	183	59.7	208	279	217	107	98.8	137
Mercury	NS	NS	mg/kg	0.055	0.031 UB	0.034	0.036 UB	0.0075 B	0.011 B	0.0035 B	0.053	0.052	0.032 B
Nickel	310	130	mg/kg	10.7	5.1	12.3	8.3	8.4	8.7	9.9	12.7	11.9	10.6
Potassium	NS	NS	mg/kg	438 B	2080	1270 B	430 B	1450	1960	1770	641 B	672 B	676 B
Selenium	180	4	mg/kg	2.4 UB	4.1 U	2.6 U	2.2 U	2.1 U	0.66 B	0.55 B	1 B	0.52 B	2.1 U
Silver	180	8.3	mg/kg	1.1	2.3	0.35 B	0.32 B	0.52 U	1.2 U	1.1 U	0.51 U	0.53 U	0.53 U
Sodium	NS	NS	mg/kg	61.3 B	436 B	174 B	131 B	215 B	227 B	315 B	110 B	131 B	106 B
Thallium	NS	NS	mg/kg	1.2 U	2 U	1.3 U	1.1 U	1 U	2.4 U	2.2 U	1 U	1.1 U	1.1 U
Vanadium	NS	NS	mg/kg	37.9	30.5	30.3	19	24.6	25.7	30	40.5	37.8	28.5
Zinc	10000	2480	mg/kg	35.1	69.8	77.3	15.6	55.9	32.8	23.9	35.1	32.6	24.9
General Chemistry													
Percent Solids			%	82.1	94.9	78.4	89.3	92.4	88.6	87.3	96.5	97.2	89.5
Notes													
NS			No standard										
NA			Not analyzed										
J			Estimated result										
JN			Estimated result										
R			Rejected result										
UB			Analyte considered non-detect at the listed value due to associated blank contamination										
Bold			Result exceeds 375-6.8(b) protection of groundwater soil cleanup objective.										
Shade			Result exceeds 375-6.8(b) restricted residential use soil cleanup objective.										

Table 11. Confirmatory Soil Sample Results Area C
Ramapo Paint Sludge Site - Operable Unit 2
Rockalnd County, New York



Sample ID	TABLE 375-6: RESTRIC. RES. USE SCO	TABLE 375-6: PROTECTION OF GW SCO	Units	PE-C-B4 12/16/2015	PE-C-B5 12/15/2015	PE-C-B6 12/15/2015	PE-C-B7 12/16/2015	PE-C-B8 12/16/2015	PE-C-B9 12/16/2015	PE-C-B10 12/16/2015	PE-C-C3 12/15/2015	PE-C-C4 12/15/2015	PE-C-C5 12/15/2015	PE-C-C6 12/15/2015	PE-C-C7 12/16/2015
Sample Date				2-2.5	2-2.5	2-2.5	8-8.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5
Sample Depth															
VOCs															
1,1,1-Trichloroethane	100000	680	ug/kg	1.8 U	1.8 U	1.7 U	1.6 U	1.8 U	1.7 U	1.9 U	1.6 U	1.7 U	1.9 U	1.8 U	1.7 U
1,1,2,2-Tetrachloroethane	NS	NS	ug/kg	1.8 U	1.8 U	1.7 U	1.6 U	1.8 U	1.7 U	1.9 U	1.6 U	1.7 U	1.9 U	1.8 U	1.7 U
1,1,2-trichloro-1,2,2-trifluoroethane	NS	NS	ug/kg	4.5 U	4.5 U	4.3 U	3.9 U	4.4 U	4.3 U	4.7 U	4 U	4.4 U	4.8 U	4.4 U	4.3 U
1,1,2-Trichloroethane	NS	NS	ug/kg	1.8 U	1.8 U	1.7 U	1.6 U	1.8 U	1.7 U	1.9 U	1.6 U	1.7 U	1.9 U	1.8 U	1.7 U
1,1-Dichloroethane	26000	270	ug/kg	0.89 U	0.9 U	0.85 U	0.79 U	0.88 U	0.85 U	0.93 U	0.8 U	0.87 U	0.97 U	0.88 U	0.87 U
1,1-Dichloroethene	100000	330	ug/kg	0.89 U	0.9 U	0.85 U	0.79 U	0.88 U	0.85 U	0.93 U	0.8 U	0.87 U	0.97 U	0.88 U	0.87 U
1,2,4-Trichlorobenzene	NS	NS	ug/kg	4.5 U	4.5 U	4.3 U	3.9 U	4.4 U	4.3 U	4.7 U	4 U	4.4 U	4.8 U	4.4 U	4.3 U
1,2-Dibromo-3-chloropropane	NS	NS	ug/kg	1.8 U	1.8 U	1.7 U	1.6 U	1.8 U	1.7 U	1.9 U	1.6 U	1.7 U	1.9 U	1.8 U	1.7 U
1,2-Dibromoethane	NS	NS	ug/kg	0.89 U	0.9 U	0.85 U	0.79 U	0.88 U	0.85 U	0.93 U	0.8 U	0.87 U	0.97 U	0.88 U	0.87 U
1,2-Dichlorobenzene	100000	1100	ug/kg	0.89 U	0.9 U	0.85 U	0.79 U	0.88 U	0.85 U	0.93 U	0.8 U	0.87 U	0.97 U	0.88 U	0.87 U
1,2-Dichloroethane	3100	20	ug/kg	0.89 U	0.9 U	0.85 U	0.79 U	0.88 U	0.85 U	0.93 U	0.8 U	0.87 U	0.97 U	0.88 U	0.87 U
1,2-Dichloropropane	NS	NS	ug/kg	1.8 U	1.8 U	1.7 U	1.6 U	1.8 U	1.7 U	1.9 U	1.6 U	1.7 U	1.9 U	1.8 U	1.7 U
1,3-Dichlorobenzene	49000	2400	ug/kg	0.89 U	0.9 U	0.85 U	0.79 U	0.88 U	0.85 U	0.93 U	0.8 U	0.87 U	0.97 U	0.88 U	0.87 U
1,4-Dichlorobenzene	13000	1800	ug/kg	0.89 U	0.9 U	0.85 U	0.79 U	0.88 U	0.85 U	0.93 U	0.8 U	0.87 U	0.97 U	0.88 U	0.87 U
2-Butanone (MEK)	100000	120	ug/kg	8.9 U	9 U	8.5 U	7.9 U	8.8 U	8.5 U	9.3 U	8 U	8.7 U	9.7 U	8.8 U	8.7 U
4-Methyl-2-Pentanone	NS	NS	ug/kg	4.5 U	4.5 U	4.3 U	3.9 U	4.4 U	4.3 U	4.7 U	4 U	4.4 U	4.8 U	4.4 U	4.3 U
Acetone	100000	50	ug/kg	8.9 U	9 U	8.5 U	10.2	8.8 U	8.5 U	9.3 U	8 U	8.7 U	9.7 U	8.8 U	8.7 U
Benzene	4800	60	ug/kg	0.45 U	0.45 U	0.43 U	0.15 J	0.44 U	0.43 U	0.47 U	0.4 U	0.44 U	0.48 U	0.44 U	0.43 U
Bromodichloromethane	NS	NS	ug/kg	1.8 U	1.8 U	1.7 U	1.6 U	1.8 U	1.7 U	1.9 U	1.6 U	1.7 U	1.9 U	1.8 U	1.7 U
Bromoform	NS	NS	ug/kg	4.5 U	4.5 U	4.3 U	3.9 U	4.4 U	4.3 U	4.7 U	4 U	4.4 U	4.8 U	4.4 U	4.3 U
Bromomethane	NS	NS	ug/kg	4.5 U	4.5 U	4.3 U	3.9 U	4.4 U	4.3 U	4.7 U	4 U	4.4 U	4.8 U	4.4 U	4.3 U
Carbon Disulfide	NS	NS	ug/kg	1.8 U	1.8 U	1.7 U	0.29 J	1.8 U	1.7 U	1.9 U	1.6 U	1.7 U	1.9 U	1.8 U	1.7 U
Carbon Tetrachloride	2400	760	ug/kg	1.8 U	1.8 U	1.7 U	1.6 U	1.8 U	1.7 U	1.9 U	1.6 U	1.7 U	1.9 U	1.8 U	1.7 U
CFC-11	NS	NS	ug/kg	4.5 U	4.5 U	4.3 U	3.9 U	4.4 U	4.3 U	4.7 U	4 U	4.4 U	4.8 U	4.4 U	4.3 U
CFC-12	NS	NS	ug/kg	4.5 U	4.5 U	4.3 U	3.9 U	4.4 U	4.3 U	4.7 U	4 U	4.4 U	4.8 U	4.4 U	4.3 U
Chlorobenzene	100000	1100	ug/kg	1.8 U	1.8 U	1.7 U	1.6 U	1.8 U	1.7 U	1.9 U	1.6 U	1.7 U	1.9 U	1.8 U	1.7 U
Chlorodibromomethane	NS	NS	ug/kg	1.8 U	1.8 U	1.7 U	1.6 U	1.8 U	1.7 U	1.9 U	1.6 U	1.7 U	1.9 U	1.8 U	1.7 U
Chloroethane	NS	NS	ug/kg	4.5 U	4.5 U	4.3 U	3.9 U	4.4 U	4.3 U	4.7 U	4 U	4.4 U	4.8 U	4.4 U	4.3 U
Chloroform	49000	370	ug/kg	1.8 U	1.8 U	1.7 U	1.6 U	1.8 U	1.7 U	1.9 U	1.6 U	1.7 U	1.9 U	1.8 U	1.7 U
Chloromethane	NS	NS	ug/kg	4.5 U	4.5 U	4.3 U	3.9 U	4.4 U	4.3 U	4.7 U	4 U	4.4 U	4.8 U	4.4 U	4.3 U
cis-1,2-Dichloroethene	100000	250	ug/kg	0.89 U	0.9 U	0.85 U	0.79 U	0.88 U	0.85 U	0.93 U	0.8 U	0.87 U	0.97 U	0.88 U	0.87 U
cis-1,3-Dichloropropene	NS	NS	ug/kg	1.8 U	1.8 U	1.7 U	1.6 U	1.8 U	1.7 U	1.9 U	1.6 U	1.7 U	1.9 U	1.8 U	1.7 U
Cyclohexane	NS	NS	ug/kg	1.8 U	1.8 U	1.7 U	1.6 U	1.8 U	1.7 U	1.9 U	1.6 U	1.7 U	1.9 U	1.8 U	1.7 U
Dichloromethane	NS	NS	ug/kg	4.5 U	4.5 U	4.3 U	3.9 U	4.4 U	4.3 U	4.7 U	4 U	4.4 U	4.8 U	4.4 U	4.3 U
Ethylbenzene	41000	1000	ug/kg	0.89 U	0.9 U	0.85 U	5	0.88 U	0.85 U	0.93 U	0.8 U	0.87 U	0.97 U	0.88 U	0.87 U
Isopropylbenzene	NS	NS	ug/kg	1.8 U	1.8 U	1.7 U	0.86 J	1.8 U	1.7 U	1.9 U	1.6 U	1.7 U	1.9 U	1.8 U	1.7 U
Methyl Acetate	NS	NS	ug/kg	4.5 U	4.5 U	4.3 U	3.9 U	4.4 U	4.3 U	4.7 U	4 U	4.4 U	4.8 U	4.4 U	4.3 U
Methyl N-Butyl Ketone (2-Hexanone)	NS	NS	ug/kg	4.5 U	4.5 U	4.3 U	3.9 U	4.4 U	4.3 U	4.7 U	4 U	4.4 U	4.8 U	4.4 U	4.3 U
Methylcyclohexane	NS	NS	ug/kg	1.8 U	1.8 U	1.7 U	1.6 U	1.8 U	1.7 U	1.9 U	1.6 U	1.7 U	1.9 U	1.8 U	1.7 U
Methyl-tert-butylether	100000	930	ug/kg	0.89 U	0.9 U	0.85 U	0.79 U	0.88 U	0.85 U	0.93 U	0.8 U	0.87 U	0.97 U	0.88 U	0.87 U
Styrene (Monomer)	NS	NS	ug/kg	0.27 J	1.8 U	1.7 U	1.6 U	1.8 U	1.7 U	1.9 U	1.6 U	1.7 U	1.9 U	1.8 U	1.7 U
Tetrachloroethene	19000	1300	ug/kg	1.8 U	1.8 U	1.7 U	1.6 U	1.8 U	1.7 U	1.9 U	1.6 U	1.7 U	1.9 U	1.8 U	1.7 U
Toluene	100000	700	ug/kg	0.89 U	0.9 U	0.85 U	0.79 U	0.88 U	0.85 U	0.93 U	0.8 U	0.87 U	0.97 U	0.88 U	0.87 U
Total Xylenes	100000	1600	ug/kg	0.89 U	0.9 U	0.85 U	37.3	0.88 U	0.85 U	0.93 U	0.8 U	0.87 U	0.97 U	0.88 U	0.87 U
trans-1,2-Dichloroethene	100000	190	ug/kg	0.89 U	0.9 U	0.85 U	0.79 U	0.88 U	0.85 U	0.93 U	0.8 U	0.87 U	0.97 U	0.88 U	0.87 U
trans-1,3-Dichloropropene	NS	NS	ug/kg	1.8 U	1.8 U	1.7 U	1.6 U	1.8 U	1.7 U	1.9 U	1.6 U	1.7 U	1.9 U	1.8 U	1.7 U
Trichloroethene	21000	470	ug/kg	0.89 U	0.9 U	0.85 U	0.79 U	0.88 U	0.85 U	0.93 U	0.8 U	0.87 U	0.97 U	0.88 U	0.87 U
Vinyl chloride	900	20	ug/kg	1.8 U	1.8 U	1.7 U	1.6 U	1.8 U	1.7 U	1.9 U	1.6 U	1.7 U	1.9 U	1.8 U	1.7 U

See Notes on Last Page

Table 11. Confirmatory Soil Sample Results Area C
Ramapo Paint Sludge Site - Operable Unit 2
Rockalnd County, New York



Sample ID	TABLE 375-6: RESTRIC. RES. USE SCO	TABLE 375-6: PROTECTION OF GW SCO	Units	PE-C-B4 12/16/2015	PE-C-B5 12/15/2015	PE-C-B6 12/15/2015	PE-C-B7 12/16/2015	PE-C-B8 12/16/2015	PE-C-B9 12/16/2015	PE-C-B10 12/16/2015	PE-C-C3 12/15/2015	PE-C-C4 12/15/2015	PE-C-C5 12/15/2015	PE-C-C6 12/15/2015	PE-C-C7 12/16/2015
Sample Date				2-2.5	2-2.5	2-2.5	8-8.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5
Sample Depth															
SVOCs															
1,1-Biphenyl	NS	NS	ug/kg	73 U	72 U	73 U	67 U	69 U	72 U	80 U	72 U	69 U	72 U	72 U	71 U
2,2-Oxybis(1-Chloropropane)	NS	NS	ug/kg	73 U	72 U	73 U	67 U	69 U	72 U	80 U	72 U	69 U	72 U	72 U	71 U
2,4,5-Trichlorophenol	NS	NS	ug/kg	180 U	180 U	180 U	170 U	170 U	180 U	200 U	180 U	170 U	180 U	180 U	180 U
2,4,6-Trichlorophenol	NS	NS	ug/kg	180 U	180 U	180 U	170 U	170 U	180 U	200 U	180 U	170 U	180 U	180 U	180 U
2,4-Dichlorophenol	NS	NS	ug/kg	180 U	180 U	180 U	170 U	170 U	180 U	200 U	180 U	170 U	180 U	180 U	180 U
2,4-Dimethylphenol	NS	NS	ug/kg	180 U	180 U	180 U	170 U	170 U	180 U	200 U	180 U	170 U	180 U	180 U	180 U
2,4-Dinitrophenol	NS	NS	ug/kg	180 U	180 U	180 U	170 U	170 U	180 U	200 U	180 U	170 U	180 U	180 U	180 U
2,4-Dinitrotoluene	NS	NS	ug/kg	37 U	36 U	37 U	33 U	34 U	36 U	40 U	36 U	35 U	36 U	36 U	36 U
2,6-Dinitrotoluene	NS	NS	ug/kg	37 U	36 U	37 U	33 U	34 U	36 U	40 U	36 U	35 U	36 U	36 U	36 U
2-Chloronaphthalene	NS	NS	ug/kg	73 U	72 U	73 U	67 U	69 U	72 U	80 U	72 U	69 U	72 U	72 U	71 U
2-Chlorophenol	NS	NS	ug/kg	73 U	72 U	73 U	67 U	69 U	72 U	80 U	72 U	69 U	72 U	72 U	71 U
2-Methyl-4,6-dinitrophenol	NS	NS	ug/kg	180 U	180 U	180 U	170 U	170 U	180 U	200 U	180 U	170 U	180 U	180 U	180 U
2-Methylnaphthalene	NS	NS	ug/kg	73 U	72 U	73 U	67 U	69 U	72 U	80 U	72 U	69 U	72 U	72 U	71 U
2-Methylphenol	NS	NS	ug/kg	73 U	72 U	73 U	67 U	69 U	72 U	80 U	72 U	69 U	72 U	72 U	71 U
2-Nitroaniline	NS	NS	ug/kg	180 U	180 U	180 U	170 U	170 U	180 U	200 U	180 U	170 U	180 U	180 U	180 U
2-Nitrophenol	NS	NS	ug/kg	180 U	180 U	180 U	170 U	170 U	180 U	200 U	180 U	170 U	180 U	180 U	180 U
3,3-Dichlorobenzidine	NS	NS	ug/kg	73 U	72 U	73 U	67 U	69 U	72 U	80 U	72 U	69 U	72 U	72 U	71 U
3-Methylphenol, 4-Methylphenol	NS	NS	ug/kg	73 U	72 U	73 U	67 U	69 U	72 U	80 U	72 U	69 U	72 U	72 U	71 U
3-Nitroaniline	NS	NS	ug/kg	180 U	180 U	180 U	170 U	170 U	180 U	200 U	180 U	170 U	180 U	180 U	180 U
4-Bromophenyl phenyl ether	NS	NS	ug/kg	73 U	72 U	73 U	67 U	69 U	72 U	80 U	72 U	69 U	72 U	72 U	71 U
4-Chloro-3-Methylphenol	NS	NS	ug/kg	180 U	180 U	180 U	170 U	170 U	180 U	200 U	180 U	170 U	180 U	180 U	180 U
4-Chlorophenyl phenyl ether	NS	NS	ug/kg	73 U	72 U	73 U	67 U	69 U	72 U	80 U	72 U	69 U	72 U	72 U	71 U
4-Nitroaniline	NS	NS	ug/kg	180 U	180 U	180 U	170 U	170 U	180 U	200 U	180 U	170 U	180 U	180 U	180 U
4-Nitrophenol	NS	NS	ug/kg	370 U	360 U	370 U	330 U	340 U	360 U	400 U	360 U	350 U	360 U	360 U	360 U
Acenaphthene	100000	98000	ug/kg	37 U	36 U	37 U	33 U	34 U	36 U	40 U	36 U	35 U	36 U	36 U	36 U
Acenaphthylene	100000	107000	ug/kg	37 U	36 U	37 U	33 U	34 U	36 U	40 U	36 U	35 U	36 U	36 U	36 U
Acetophenone	NS	NS	ug/kg	180 U	180 U	180 U	170 U	170 U	180 U	200 U	180 U	170 U	180 U	180 U	180 U
Anthracene	100000	1000000	ug/kg	37 U	36 U	37 U	33 U	34 U	36 U	40 U	36 U	35 U	36 U	36 U	36 U
Atrazine	NS	NS	ug/kg	73 U	72 U	73 U	67 U	69 U	72 U	80 U	72 U	69 U	72 U	72 U	71 U
Benzaldehyde	NS	NS	ug/kg	180 U	180 U	180 U	170 U	170 U	180 U	200 U	180 U	170 U	25.1 J	180 U	180 U
Benzo(a)anthracene	1000	1000	ug/kg	37 U	36 U	37 U	33 U	34 U	36 U	40 U	36 U	35 U	36 U	36 U	36 U
Benzo(a)pyrene	1000	22000	ug/kg	37 U	36 U	37 U	33 U	34 U	36 U	40 U	36 U	35 U	16.7 J	36 U	36 U
Benzo(b)fluoranthene	1000	1700	ug/kg	37 U	36 U	37 U	33 U	34 U	36 U	40 U	36 U	35 U	19.8 J	36 U	36 U
Benzo(g,h,i)perylene	100000	1000000	ug/kg	37 U	36 U	37 U	33 U	34 U	36 U	40 U	36 U	35 U	15.7 J	36 U	36 U
Benzo(k)fluoranthene	3900	1700	ug/kg	37 U	36 U	37 U	33 U	34 U	36 U	40 U	36 U	35 U	36 U	36 U	36 U
bis(2-Chloroethoxy)methane	NS	NS	ug/kg	73 U	72 U	73 U	67 U	69 U	72 U	80 U	72 U	69 U	72 U	72 U	71 U
bis(2-Chloroethyl)ether	NS	NS	ug/kg	73 U	72 U	73 U	67 U	69 U	72 U	80 U	72 U	69 U	72 U	72 U	71 U
bis(2-Ethylhexyl)phthalate	NS	NS	ug/kg	73 U	72 U	73 U	67 U	69 U	72 U	80 U	72 U	69 U	111	72 U	71 U
Butyl benzyl phthalate	NS	NS	ug/kg	73 U	72 U	73 U	67 U	69 U	72 U	80 U	72 U	69 U	72 U	72 U	71 U
Caprolactam	NS	NS	ug/kg	73 U	72 U	73 U	67 U	69 U	72 U	80 U	72 U	69 U	72 U	72 U	71 U
Carbazole	NS	NS	ug/kg	73 U	72 U	73 U	67 U	69 U	72 U	80 U	72 U	69 U	72 U	72 U	71 U
Chrysene	3900	1000	ug/kg	37 U	36 U	37 U	33 U	34 U	36 U	40 U	36 U	35 U	36 U	36 U	36 U
Dibenzo(a,h)anthracene	330	1000000	ug/kg	37 U	36 U	37 U	33 U	34 U	36 U	40 U	36 U	35 U	36 U	36 U	36 U
Dibenzofuran	NS	NS	ug/kg	73 U	72 U	73 U	67 U	69 U	72 U	80 U	72 U	69 U	72 U	72 U	71 U
Diethyl phthalate	NS	NS	ug/kg	73 U	72 U	73 U	67 U	69 U	72 U	80 U	72 U	69 U	72 U	72 U	71 U
Dimethyl phthalate	NS	NS	ug/kg	73 U	72 U	73 U	67 U	69 U	72 U	80 U	72 U	69 U	72 U	72 U	71 U
Di-n-butyl phthalate	NS	NS	ug/kg	73 U	72 U	73 U	67 U	69 U	72 U	80 U	72 U	69 U	72 U	72 U	71 U
Di-n-octyl phthalate	NS	NS	ug/kg	73 U	72 U	73 U	67 U	69 U	72 U	80 U	72 U	69 U	72 U	72 U	71 U
Fluoranthene	100000	1000000	ug/kg	37 U	36 U	37 U	33 U	34 U	36 U	40 U	36 U	36	36 U	36 U	36 U
Fluorene	100000	386000	ug/kg	37 U	36 U	37 U	33 U	34 U	36 U	40 U	36 U	35 U	36 U	36 U	36 U
Hexachloro-1,3-butadiene	NS	NS	ug/kg	37 U	36 U	37 U	33 U	34 U	36 U	40 U	36 U	35 U	36 U	36 U	36 U
Hexachlorobenzene	NS	NS	ug/kg	73 U	72 U	73 U	67 U	69 U	72 U	80 U	72 U	69 U	72 U	72 U	71 U
Hexachlorocyclopentadiene	NS	NS	ug/kg	370 U	360 U	370 U	330 U	340 U	360 U	400 U	360 U	350 U	360 U	360 U	360 U
See Notes on Last Page															

Table 11. Confirmatory Soil Sample Results Area C
Ramapo Paint Sludge Site - Operable Unit 2
Rockalnd County, New York



Sample ID Sample Date Sample Depth	TABLE 375-6: RESTRIC. RES. USE SCO	TABLE 375-6: PROTECTION OF GW SCO	Units	PE-C-B4 12/16/2015 2-2.5	PE-C-B5 12/15/2015 2-2.5	PE-C-B6 12/15/2015 2-2.5	PE-C-B7 12/16/2015 8-8.5	PE-C-B8 12/16/2015 2-2.5	PE-C-B9 12/16/2015 2-2.5	PE-C-B10 12/16/2015 2-2.5	PE-C-C3 12/15/2015 2-2.5	PE-C-C4 12/15/2015 2-2.5	PE-C-C5 12/15/2015 2-2.5	PE-C-C6 12/15/2015 2-2.5	PE-C-C7 12/16/2015 2-2.5
SVOCs cont.															
Hexachloroethane	NS	NS	ug/kg	180 U	180 U	180 U	170 U	170 U	180 U	200 U	180 U	170 U	180 U	180 U	180 U
Indeno(1,2,3-cd)pyrene	500	8200	ug/kg	37 U	36 U	37 U	33 U	34 U	36 U	40 U	36 U	35 U	43.8	36 U	36 U
Isophorone	NS	NS	ug/kg	73 U	72 U	73 U	67 U	69 U	72 U	80 U	72 U	69 U	72 U	72 U	71 U
Naphthalene	100000	12000	ug/kg	37 U	36 U	37 U	33 U	34 U	36 U	40 U	36 U	35 U	36 U	36 U	36 U
Nitrobenzene	NS	NS	ug/kg	73 U	72 U	73 U	67 U	69 U	72 U	80 U	72 U	69 U	72 U	72 U	71 U
n-Nitrosodi-n-propylamine	NS	NS	ug/kg	73 U	72 U	73 U	67 U	69 U	72 U	80 U	72 U	69 U	72 U	72 U	71 U
N-nitrosodiphenylamine	NS	NS	ug/kg	180 U	180 U	180 U	170 U	170 U	180 U	200 U	180 U	170 U	180 U	180 U	180 U
p-Chloroaniline	NS	NS	ug/kg	180 U	180 U	180 U	170 U	170 U	180 U	200 U	180 U	170 U	180 U	180 U	180 U
Pentachlorophenol	6700	800	ug/kg	180 U	180 U	180 U	170 U	170 U	180 U	200 U	180 U	170 U	180 U	180 U	180 U
Phenanthrene	100000	1000000	ug/kg	37 U	36 U	37 U	33 U	34 U	36 U	40 U	36 U	44.6	36 U	36 U	36 U
Phenol	100000	330	ug/kg	73 U	72 U	73 U	67 U	69 U	72 U	80 U	72 U	69 U	72 U	72 U	71 U
Pyrene	100000	1000000	ug/kg	37 U	36 U	37 U	33 U	34 U	36 U	40 U	36 U	22.5 J	36 U	36 U	36 U
PCBs															
Aroclor 1016	1000	3200	ug/kg	36 U	36 U	35 U	35 U	34 U	35 U	42 U	34 U	33 U	35 U	36 U	36 U
Aroclor 1221	1000	3200	ug/kg	36 U	36 U	35 U	35 U	34 U	35 U	42 U	34 U	33 U	35 U	36 U	36 U
Aroclor 1232	1000	3200	ug/kg	36 U	36 U	35 U	35 U	34 U	35 U	42 U	34 U	33 U	35 U	36 U	36 U
Aroclor 1242	1000	3200	ug/kg	36 U	36 U	35 U	35 U	34 U	35 U	42 U	34 U	33 U	35 U	36 U	36 U
Aroclor 1248	1000	3200	ug/kg	36 U	36 U	35 U	35 U	34 U	35 U	42 U	34 U	33 U	35 U	36 U	36 U
Aroclor 1254	1000	3200	ug/kg	36 U	36 U	35 U	35 U	34 U	35 U	42 U	34 U	33 U	35 U	36 U	36 U
Aroclor 1260	1000	3200	ug/kg	36 U	36 U	35 U	35 U	34 U	35 U	42 U	34 U	33 U	35 U	36 U	36 U
Aroclor 1262	1000	3200	ug/kg	36 U	36 U	35 U	35 U	34 U	35 U	42 U	34 U	33 U	35 U	36 U	36 U
Aroclor 1268	1000	3200	ug/kg	36 U	36 U	35 U	35 U	34 U	35 U	42 U	34 U	33 U	35 U	36 U	36 U
Metals															
Aluminum	NS	NS	mg/kg	8470 J	5460 J	6240 J	8830 J	7880 J	7110 J	7400 J	9150 J	7840 J	7410 J	6800 J	5990 J
Antimony	NS	NS	mg/kg	2.1 UJ	2.2 UJ	2.3 UJ	2.2 UJ	2.1 UJ	2.2 UJ	2.7 UJ	2.3 UJ	2.2 UJ	2.4 UB	2.3 UJ	2.2 UJ
Arsenic	16	16	mg/kg	3.5	2 B	2.1 B	2.3	2.4	2 B	2.8	4.3	3.3	3.3	2.8	2.7
Barium	400	820	mg/kg	63.4	21.1 B	25.7	44.1	34.3	30.9	36.2	38.7	42.7	54.7	29.7	26.3
Beryllium	72	47	mg/kg	0.44	0.41	0.38	0.48	0.5	0.39	0.44	0.56	0.51	0.48	0.47	0.33
Cadmium	4.3	7.5	mg/kg	0.53 UB	0.55 U	0.57 U	0.54 UB	0.53 UB	0.54 UB	0.094 B	0.15 B	0.17 B	0.31 B	0.58 U	0.55 UB
Calcium	NS	NS	mg/kg	6540	1870	2030	9860	6930	8140	7240	3900	9400	4550	1900	14100
Chromium	NS	NS	mg/kg	17.8	14.6	16.5	16.5	11.2	11.3	12.3	17.6	17.2	17.7	13.5	15.2
Cobalt	NS	NS	mg/kg	7.1	5.1 B	5.8	7.4	8.1	5.3 B	6.3 B	7.8	7.2	6.9	5.9	6.8
Copper	270	1720	mg/kg	18.8 J	9.4 J	10.3 J	12.9 J	18.6 J	8.5 J	10.6 J	17.4 J	14.5 J	18.1 J	11.1 J	13.5 J
Iron	NS	NS	mg/kg	18600	13700	14900	18100	18900	15700	17900	18300	16500	17000	14500	16200
Lead	400	450	mg/kg	44.7	3.9	4.7	3.8	4.1	2.7	3.6	31.1	28	63	5.1	5.9
Magnesium	NS	NS	mg/kg	3420	2200	2340	4530	3670	3180	3450	4250	3730	3400	2420	3680
Manganese	2000	2000	mg/kg	321	273	335	251	263	204	273	541	395	436	307	288
Mercury	NS	NS	mg/kg	0.035 UB	0.0062 B	0.01 B	0.033 UB	0.035 UB	0.036 UB	0.034 UB	0.015 B	0.0032 B	0.015 B	0.014 B	0.034 UB
Nickel	310	130	mg/kg	12.7	10.4	11.7	11.6	8.3	9	7.8	19.6	16.1	29.3	10.9	12.2
Potassium	NS	NS	mg/kg	1610 J	805 B	910 B	1970 J	1220 J	1100 J	1370 J	1310	1390	1270	1090 B	983 J
Selenium	180	4	mg/kg	2.1 U	0.39 B	2.3 U	2.2 U	2.1 U	2.2 U	2.7 U	0.32 B	2.2 U	2.4 U	2.3 U	2.2 U
Silver	180	8.3	mg/kg	0.99	0.55 U	0.57 U	1.2	1.3	0.89	0.71	0.57 U	0.54 U	0.59 U	0.58 U	1.3
Sodium	NS	NS	mg/kg	189 B	140 B	159 B	359 B	293 B	223 B	264 B	115 B	145 B	157 B	128 B	175 B
Thallium	NS	NS	mg/kg	1.1 U	1.1 U	1.1 U	1.1 U	1.1 UB	1.1 UB	0.96 B	1.1 U	1.1 U	1.2 U	1.2 U	1.1 U
Vanadium	NS	NS	mg/kg	29.3	24.9	27	30.5	27.8	18.8	24.2	22.8	24.2	26.9	22.1	23.1
Zinc	10000	2480	mg/kg	55.5	25.1	23.6	27	24.8	22	23.1	55.3	43.9	71.8	33.5	31.8
General Chemistry															
Percent Solids			%	90.6	91.2	88.8	91.9	94.4	90.1	77.9	89	89.6	87.6	89.1	91.4

Notes	
NS	No standard
NA	Not analyzed
J	Estimated result
JN	Estimated result
R	Rejected result
UB	Analyte considered non-detect at the listed value due to associated blank contamination
Bold	Result exceeds 375-6.8(b) protection of groundwater soil cleanup objective.
Shade	Result exceeds 375-6.8(b) restricted residential use soil cleanup objective.

Table 11. Confirmatory Soil Sample Results Area C
Ramapo Paint Sludge Site - Operable Unit 2
Rockalnd County, New York



Sample ID	TABLE 375-6: RESTRIC. RES. USE SCO	TABLE 375-6: PROTECTION OF GW SCO	Units	PE-C-C7 12/16/2015 2-2.5	PE-C-C8 12/16/2015 7.5-8	PE-C-C9 12/16/2015 7.5-8	PE-C-C10 12/16/2015 2-2.5	PE-C-D1 12/16/2015 2-2.5	PE-C-D2 11/20/2015 2-2.5	PE-C-D3 11/20/2015 2-2.5	PE-C-D4 11/20/2015 2-2.5	PE-C-D5 11/20/2015 2-2.5	PE-C-D6 11/20/2015 2-2.5	PE-C-D7 12/15/2015 2-2.5	PE-C-D8 12/16/2015 2-2.5
Sample Date															
Sample Depth															
VOCs															
1,1,1-Trichloroethane	100000	680	ug/kg	1.6 U	1.7 U	1.8 U	1.7 U	1.9 U	1.8 U	1.7 U	1.7 U	1.6 U	1.6 U	1.7 U	1.6 U
1,1,2,2-Tetrachloroethane	NS	NS	ug/kg	1.6 U	1.7 U	1.8 U	1.7 U	1.9 U	1.8 U	1.7 U	1.7 U	1.6 U	1.6 U	1.7 U	1.6 U
1,1,2-trichloro-1,2,2-trifluoroethane	NS	NS	ug/kg	4.1 U	4.2 U	4.6 U	4.2 U	4.6 U	4.5 U	4.3 U	4.3 U	4.1 U	4 U	4.4 U	4 U
1,1,2-Trichloroethane	NS	NS	ug/kg	1.6 U	1.7 U	1.8 U	1.7 U	1.9 U	1.8 U	1.7 U	1.7 U	1.6 U	1.6 U	1.7 U	1.6 U
1,1-Dichloroethane	26000	270	ug/kg	0.81 U	0.83 U	0.91 U	0.83 U	0.93 U	0.9 U	0.86 U	0.85 U	0.82 U	0.8 U	0.87 U	0.81 U
1,1-Dichloroethene	100000	330	ug/kg	0.81 U	0.83 U	0.91 U	0.83 U	0.93 U	0.9 U	0.86 U	0.85 U	0.82 U	0.8 U	0.87 U	0.81 U
1,2,4-Trichlorobenzene	NS	NS	ug/kg	4.1 U	4.2 U	4.6 U	4.2 U	4.6 U	4.5 U	4.3 U	4.3 U	4.1 U	4 U	4.4 U	4 U
1,2-Dibromo-3-chloropropane	NS	NS	ug/kg	1.6 U	1.7 U	1.8 U	1.7 U	1.9 U	1.8 U	1.7 U	1.7 U	1.6 U	1.6 U	1.7 U	1.6 U
1,2-Dibromoethane	NS	NS	ug/kg	0.81 U	0.83 U	0.91 U	0.83 U	0.93 U	0.9 U	0.86 U	0.85 U	0.82 U	0.8 U	0.87 U	0.81 U
1,2-Dichlorobenzene	100000	1100	ug/kg	0.81 U	0.83 U	0.91 U	0.83 U	0.93 U	0.9 U	0.86 U	0.85 U	0.82 U	0.8 U	0.87 U	0.81 U
1,2-Dichloroethane	3100	20	ug/kg	0.81 U	0.83 U	0.91 U	0.83 U	0.93 U	0.9 U	0.86 U	0.85 U	0.82 U	0.8 U	0.87 U	0.81 U
1,2-Dichloropropane	NS	NS	ug/kg	1.6 U	1.7 U	1.8 U	1.7 U	1.9 U	1.8 U	1.7 U	1.7 U	1.6 U	1.6 U	1.7 U	1.6 U
1,3-Dichlorobenzene	49000	2400	ug/kg	0.81 U	0.83 U	0.91 U	0.83 U	0.93 U	0.9 U	0.86 U	0.85 U	0.82 U	0.8 U	0.87 U	0.81 U
1,4-Dichlorobenzene	13000	1800	ug/kg	0.81 U	0.83 U	0.91 U	0.83 U	0.93 U	0.9 U	0.86 U	0.85 U	0.82 U	0.8 U	0.87 U	0.81 U
2-Butanone (MEK)	100000	120	ug/kg	8.1 U	8.3 U	9.1 U	8.3 U	9.3 U	9 U	8.6 U	8.5 U	8.2 U	8 U	8.7 U	8.1 U
4-Methyl-2-Pentanone	NS	NS	ug/kg	4.1 U	4.2 U	4.6 U	4.2 U	4.6 U	4.5 U	4.3 U	4.3 U	4.1 U	4 U	4.4 U	4 U
Acetone	100000	50	ug/kg	8.1 U	4.9 J	9.1 U	8.3 U	9.3 U	9 U	8.6 U	8.5 U	8.2 U	8 U	8.7 U	8.1 U
Benzene	4800	60	ug/kg	0.41 U	0.42 U	0.46 U	0.42 U	0.46 U	0.45 U	0.43 U	0.43 U	0.41 U	0.4 U	0.44 U	0.4 U
Bromodichloromethane	NS	NS	ug/kg	1.6 U	1.7 U	1.8 U	1.7 U	1.9 U	1.8 U	1.7 U	1.7 U	1.6 U	1.6 U	1.7 U	1.6 U
Bromoform	NS	NS	ug/kg	4.1 U	4.2 U	4.6 U	4.2 U	4.6 U	4.5 U	4.3 U	4.3 U	4.1 U	4 U	4.4 U	4 U
Bromomethane	NS	NS	ug/kg	4.1 U	4.2 U	4.6 U	4.2 U	4.6 U	4.5 U	4.3 U	4.3 U	4.1 U	4 U	4.4 U	4 U
Carbon Disulfide	NS	NS	ug/kg	1.6 U	1.7 U	1.8 U	1.7 U	1.9 U	1.8 U	1.7 U	1.7 U	1.6 U	1.6 U	1.7 U	1.6 U
Carbon Tetrachloride	2400	760	ug/kg	1.6 U	1.7 U	1.8 U	1.7 U	1.9 U	1.8 U	1.7 U	1.7 U	1.6 U	1.6 U	1.7 U	1.6 U
CFC-11	NS	NS	ug/kg	4.1 U	4.2 U	4.6 U	4.2 U	4.6 U	4.5 U	4.3 U	4.3 U	4.1 U	4 U	4.4 U	4 U
CFC-12	NS	NS	ug/kg	4.1 U	4.2 U	4.6 U	4.2 U	4.6 U	4.5 U	4.3 U	4.3 U	4.1 U	4 U	4.4 U	4 U
Chlorobenzene	100000	1100	ug/kg	1.6 U	1.7 U	1.8 U	1.7 U	1.9 U	1.8 U	1.7 U	1.7 U	1.6 U	1.6 U	1.7 U	1.6 U
Chlorodibromomethane	NS	NS	ug/kg	1.6 U	1.7 U	1.8 U	1.7 U	1.9 U	1.8 U	1.7 U	1.7 U	1.6 U	1.6 U	1.7 U	1.6 U
Chloroethane	NS	NS	ug/kg	4.1 U	4.2 UJ	4.6 UJ	4.2 U	4.6 U	4.5 U	4.3 U	4.3 U	4.1 U	4 U	4.4 U	4 U
Chloroform	49000	370	ug/kg	1.6 U	1.7 U	1.8 U	1.7 U	1.9 U	1.8 U	1.7 U	1.7 U	1.6 U	1.6 U	1.7 U	1.6 U
Chloromethane	NS	NS	ug/kg	4.1 U	4.2 U	4.6 U	4.2 U	4.6 U	4.5 U	4.3 U	4.3 U	4.1 U	4 U	4.4 U	4 U
cis-1,2-Dichloroethene	100000	250	ug/kg	0.81 U	0.83 U	0.91 U	0.83 U	0.93 U	0.9 U	0.86 U	0.85 U	0.82 U	0.8 U	0.87 U	0.81 U
cis-1,3-Dichloropropene	NS	NS	ug/kg	1.6 U	1.7 U	1.8 U	1.7 U	1.9 U	1.8 U	1.7 U	1.7 U	1.6 U	1.6 U	1.7 U	1.6 U
Cyclohexane	NS	NS	ug/kg	1.6 U	1.7 U	1.8 U	1.7 U	1.9 U	1.8 U	1.7 U	1.7 U	1.6 U	1.6 U	1.7 U	1.6 U
Dichloromethane	NS	NS	ug/kg	4.1 U	4.2 U	4.6 U	4.2 U	4.6 U	4.5 U	4.3 U	4.3 U	4.1 U	4 U	4.4 U	4 U
Ethylbenzene	41000	1000	ug/kg	0.81 U	2.6	0.91 U	0.83 U	0.93 U	0.9 U	0.86 U	0.85 U	0.82 U	0.8 U	0.87 U	0.81 U
Isopropylbenzene	NS	NS	ug/kg	1.6 U	1.8	1.8 U	1.7 U	1.9 U	1.8 U	1.7 U	1.7 U	1.6 U	1.6 U	1.7 U	1.6 U
Methyl Acetate	NS	NS	ug/kg	4.1 U	4.2 U	4.6 U	4.2 U	4.6 U	4.5 U	4.3 U	4.3 U	4.1 U	4 U	4.4 U	4 U
Methyl N-Butyl Ketone (2-Hexanone)	NS	NS	ug/kg	4.1 U	4.2 U	4.6 U	4.2 U	4.6 U	4.5 U	4.3 U	4.3 U	4.1 U	4 U	4.4 U	4 U
Methylcyclohexane	NS	NS	ug/kg	1.6 U	0.53 J	1.8 U	1.7 U	1.9 U	1.8 U	1.7 U	1.7 U	1.6 U	1.6 U	1.7 U	1.6 U
Methyl-tert-butylether	100000	930	ug/kg	0.81 U	0.83 U	0.91 U	0.83 U	0.93 U	0.9 U	0.86 U	0.85 U	0.82 U	0.8 U	0.87 U	0.81 U
Styrene (Monomer)	NS	NS	ug/kg	1.6 U	1.7 U	0.2 J	0.42 J	1.9 U	1.8 U	1.7 U	1.7 U	1.6 U	0.31 J	0.19 J	0.42 J
Tetrachloroethene	19000	1300	ug/kg	1.6 U	1.7 U	1.8 U	1.7 U	1.9 U	1.8 U	1.7 U	1.7 U	1.6 U	1.6 U	1.7 U	1.6 U
Toluene	100000	700	ug/kg	0.81 U	0.83 U	0.91 U	0.83 U	0.93 U	0.9 U	0.86 U	0.85 U	0.82 U	0.8 U	0.87 U	0.81 U
Total Xylenes	100000	1600	ug/kg	0.81 U	22.6	0.91 U	0.83 U	0.93 U	0.9 U	0.86 U	0.85 U	0.82 U	0.8 U	0.87 U	0.81 U
trans-1,2-Dichloroethene	100000	190	ug/kg	0.81 U	0.83 U	0.91 U	0.83 U	0.93 U	0.9 U	0.86 U	0.85 U	0.82 U	0.8 U	0.87 U	0.81 U
trans-1,3-Dichloropropene	NS	NS	ug/kg	1.6 U	1.7 U	1.8 U	1.7 U	1.9 U	1.8 U	1.7 U	1.7 U	1.6 U	1.6 U	1.7 U	1.6 U
Trichloroethene	21000	470	ug/kg	0.81 U	0.83 U	0.91 U	0.83 U	0.93 U	0.9 U	0.86 U	0.85 U	0.82 U	0.8 U	0.87 U	0.81 U
Vinyl chloride	900	20	ug/kg	1.6 U	1.7 U	1.8 U	1.7 U	1.9 U	1.8 U	1.7 U	1.7 U	1.6 U	1.6 U	1.7 U	1.6 U

See Notes on Last Page

Table 11. Confirmatory Soil Sample Results Area C
Ramapo Paint Sludge Site - Operable Unit 2
Rockalnd County, New York



Sample ID	TABLE 375-6: RESTRIC. RES. USE SCO	TABLE 375-6: PROTECTION OF GW SCO	Units	PE-C-C7 12/16/2015 2-2.5	PE-C-C8 12/16/2015 7.5-8	PE-C-C9 12/16/2015 7.5-8	PE-C-C10 12/16/2015 2-2.5	PE-C-D1 12/16/2015 2-2.5	PE-C-D2 11/20/2015 2-2.5	PE-C-D3 11/20/2015 2-2.5	PE-C-D4 11/20/2015 2-2.5	PE-C-D5 11/20/2015 2-2.5	PE-C-D6 11/20/2015 2-2.5	PE-C-D7 12/15/2015 2-2.5	PE-C-D8 12/16/2015 2-2.5
Sample Date															
Sample Depth															
SVOCs															
1,1-Biphenyl	NS	NS	ug/kg	69 U	69 U	77 U	69 U	69 U	74 U	79 U	79 U	73 U	74 U	72 U	72 U
2,2-Oxybis(1-Chloropropane)	NS	NS	ug/kg	69 U	69 U	77 U	69 U	69 U	74 U	79 U	79 U	73 U	74 U	72 U	72 U
2,4,5-Trichlorophenol	NS	NS	ug/kg	170 U	170 U	190 U	170 U	170 U	190 U	200 U	200 U	180 U	190 U	180 U	180 U
2,4,6-Trichlorophenol	NS	NS	ug/kg	170 U	170 U	190 U	170 U	170 U	190 U	200 U	200 U	180 U	190 U	180 U	180 U
2,4-Dichlorophenol	NS	NS	ug/kg	170 U	170 U	190 U	170 U	170 U	190 U	200 U	200 U	180 U	190 U	180 U	180 U
2,4-Dimethylphenol	NS	NS	ug/kg	170 U	170 U	190 U	170 U	170 U	190 U	200 U	200 U	180 U	190 U	180 U	180 U
2,4-Dinitrophenol	NS	NS	ug/kg	170 U	170 U	190 U	170 U	170 U	190 U	200 U	200 U	180 U	190 U	180 U	180 U
2,4-Dinitrotoluene	NS	NS	ug/kg	35 U	34 U	38 U	35 U	34 U	37 U	39 U	39 U	37 U	37 U	36 U	36 U
2,6-Dinitrotoluene	NS	NS	ug/kg	35 U	34 U	38 U	35 U	34 U	37 U	39 U	39 U	37 U	37 U	36 U	36 U
2-Chloronaphthalene	NS	NS	ug/kg	69 U	69 U	77 U	69 U	69 U	74 U	79 U	79 U	73 U	74 U	72 U	72 U
2-Chlorophenol	NS	NS	ug/kg	69 U	69 U	77 U	69 U	69 U	74 U	79 U	79 U	73 U	74 U	72 U	72 U
2-Methyl-4,6-dinitrophenol	NS	NS	ug/kg	170 U	170 U	190 U	170 U	170 U	190 U	200 U	200 U	180 U	190 U	180 U	180 U
2-Methylnaphthalene	NS	NS	ug/kg	69 U	69 U	77 U	69 U	69 U	74 U	79 U	79 U	73 U	74 U	72 U	72 U
2-Methylphenol	NS	NS	ug/kg	69 U	69 U	77 U	69 U	69 U	74 U	79 U	79 U	73 U	74 U	72 U	72 U
2-Nitroaniline	NS	NS	ug/kg	170 U	170 U	190 U	170 U	170 U	190 U	200 U	200 U	180 U	190 U	180 U	180 U
2-Nitrophenol	NS	NS	ug/kg	170 U	170 U	190 U	170 U	170 U	190 U	200 U	200 U	180 U	190 U	180 U	180 U
3,3-Dichlorobenzidine	NS	NS	ug/kg	69 U	69 U	77 U	69 U	69 U	74 U	79 U	79 U	73 U	74 U	72 U	72 U
3-Methylphenol, 4-Methylphenol	NS	NS	ug/kg	69 U	69 U	77 U	69 U	69 U	74 U	79 U	79 U	73 U	74 U	72 U	72 U
3-Nitroaniline	NS	NS	ug/kg	170 U	170 U	190 U	170 U	170 U	190 U	200 U	200 U	180 U	190 U	180 U	180 U
4-Bromophenyl phenyl ether	NS	NS	ug/kg	69 U	69 U	77 U	69 U	69 U	74 U	79 U	79 U	73 U	74 U	72 U	72 U
4-Chloro-3-Methylphenol	NS	NS	ug/kg	170 U	170 U	190 U	170 U	170 U	190 U	200 U	200 U	180 U	190 U	180 U	180 U
4-Chlorophenyl phenyl ether	NS	NS	ug/kg	69 U	69 U	77 U	69 U	69 U	74 U	79 U	79 U	73 U	74 U	72 U	72 U
4-Nitroaniline	NS	NS	ug/kg	170 U	170 U	190 U	170 U	170 U	190 UJ	200 UJ	200 UJ	180 UJ	190 UJ	180 U	180 U
4-Nitrophenol	NS	NS	ug/kg	350 U	340 U	380 U	350 U	340 U	370 U	390 U	390 U	370 U	370 U	360 U	360 U
Acenaphthene	100000	98000	ug/kg	35 U	34 U	38 U	35 U	34 U	37 U	39 U	39 U	37 U	37 U	36 U	36 U
Acenaphthylene	100000	107000	ug/kg	35 U	34 U	38 U	35 U	34 U	37 U	39 U	39 U	37 U	37 U	36 U	36 U
Acetophenone	NS	NS	ug/kg	170 U	170 U	190 U	170 U	170 U	190 U	200 U	200 U	180 U	190 U	180 U	180 U
Anthracene	100000	1000000	ug/kg	35 U	34 U	38 U	35 U	34 U	37 U	39 U	39 U	37 U	37 U	36 U	36 U
Atrazine	NS	NS	ug/kg	69 U	69 U	77 U	69 U	69 U	74 U	79 U	79 U	73 U	74 U	72 U	72 U
Benzaldehyde	NS	NS	ug/kg	170 U	170 U	190 U	170 U	170 U	190 U	200 U	200 U	180 U	190 U	180 U	180 U
Benzo(a)anthracene	1000	1000	ug/kg	35 U	34 U	38 U	35 U	34 U	37 U	39 U	39 U	37 U	37 U	36 U	36 U
Benzo(a)pyrene	1000	22000	ug/kg	35 U	34 U	38 U	35 U	34 U	37 U	39 U	39 U	37 U	37 U	36 U	36 U
Benzo(b)fluoranthene	1000	1700	ug/kg	35 U	34 U	38 U	35 U	34 U	37 U	39 U	39 U	37 U	37 U	36 U	36 U
Benzo(g,h,i)perylene	100000	1000000	ug/kg	35 U	34 U	38 U	35 U	34 U	37 U	39 U	39 U	37 U	37 U	36 U	36 U
Benzo(k)fluoranthene	3900	1700	ug/kg	35 U	34 U	38 U	35 U	34 U	37 U	39 U	39 U	37 U	37 U	36 U	36 U
bis(2-Chloroethoxy)methane	NS	NS	ug/kg	69 U	69 U	77 U	69 U	69 U	74 U	79 U	79 U	73 U	74 U	72 U	72 U
bis(2-Chloroethyl)ether	NS	NS	ug/kg	69 U	69 U	77 U	69 U	69 U	74 U	79 U	79 U	73 U	74 U	72 U	72 U
bis(2-Ethylhexyl)phthalate	NS	NS	ug/kg	69 U	69 U	77 U	69 U	69 U	74 U	79 U	79 U	73 U	74 U	72 U	72 U
Butyl benzyl phthalate	NS	NS	ug/kg	69 U	69 U	77 U	69 U	69 U	74 U	79 U	79 U	73 U	74 U	72 U	72 U
Caprolactam	NS	NS	ug/kg	69 U	69 U	77 U	69 U	69 U	74 U	79 U	79 U	73 U	74 U	72 U	72 U
Carbazole	NS	NS	ug/kg	69 U	69 U	77 U	69 U	69 U	74 U	79 U	79 U	73 U	74 U	72 U	72 U
Chrysene	3900	1000	ug/kg	35 U	34 U	38 U	35 U	34 U	37 U	39 U	39 U	37 U	37 U	36 U	36 U
Dibenzo(a,h)anthracene	330	1000000	ug/kg	35 U	34 U	38 U	35 U	34 U	37 U	39 U	39 U	37 U	37 U	36 U	36 U
Dibenzofuran	NS	NS	ug/kg	69 U	69 U	77 U	69 U	69 U	74 U	79 U	79 U	73 U	74 U	72 U	72 U
Diethyl phthalate	NS	NS	ug/kg	69 U	69 U	77 U	69 U	69 U	74 U	79 U	79 U	73 U	74 U	72 U	72 U
Dimethyl phthalate	NS	NS	ug/kg	69 U	69 U	77 U	69 U	69 U	74 U	79 U	79 U	73 U	74 U	72 U	72 U
Di-n-butyl phthalate	NS	NS	ug/kg	69 U	69 U	77 U	69 U	69 U	74 U	79 U	79 U	73 U	74 U	72 U	72 U
Di-n-octyl phthalate	NS	NS	ug/kg	69 U	69 U	77 U	69 U	69 U	74 U	79 U	79 U	73 U	74 U	72 U	72 U
Fluoranthene	100000	1000000	ug/kg	35 U	34 U	38 U	35 U	34 U	37 U	39 U	39 U	37 U	37 U	36 U	36 U
Fluorene	100000	386000	ug/kg	35 U	34 U	38 U	35 U	34 U	37 U	39 U	39 U	37 U	37 U	36 U	36 U
Hexachloro-1,3-butadiene	NS	NS	ug/kg	35 U	34 U	38 U	35 U	34 U	37 U	39 U	39 U	37 U	37 U	36 U	36 U
Hexachlorobenzene	NS	NS	ug/kg	69 U	69 U	77 U	69 U	69 U	74 U	79 U	79 U	73 U	74 U	72 U	72 U
Hexachlorocyclopentadiene	NS	NS	ug/kg	350 U	340 UJ	380 UJ	350 U	340 U	370 UJ	390 UJ	390 UJ	370 UJ	370 UJ	360 U	360 U
See Notes on Last Page															

Table 11. Confirmatory Soil Sample Results Area C
Ramapo Paint Sludge Site - Operable Unit 2
Rockalnd County, New York



Sample ID Sample Date Sample Depth	TABLE 375-6: RESTRIC. RES. USE SCO	TABLE 375-6: PROTECTION OF GW SCO	Units	PE-C-C7 12/16/2015 2-2.5	PE-C-C8 12/16/2015 7.5-8	PE-C-C9 12/16/2015 7.5-8	PE-C-C10 12/16/2015 2-2.5	PE-C-D1 12/16/2015 2-2.5	PE-C-D2 11/20/2015 2-2.5	PE-C-D3 11/20/2015 2-2.5	PE-C-D4 11/20/2015 2-2.5	PE-C-D5 11/20/2015 2-2.5	PE-C-D6 11/20/2015 2-2.5	PE-C-D7 12/15/2015 2-2.5	PE-C-D8 12/16/2015 2-2.5
SVOCs cont.															
Hexachloroethane	NS	NS	ug/kg	170 U	170 U	190 U	170 U	170 U	190 U	200 U	200 U	180 U	190 U	180 U	180 U
Indeno(1,2,3-cd)pyrene	500	8200	ug/kg	35 U	34 U	38 U	35 U	34 U	37 U	39 U	39 U	37 U	37 U	36 U	36 U
Isophorone	NS	NS	ug/kg	69 U	69 U	77 U	69 U	69 U	74 U	79 U	79 U	73 U	74 U	72 U	72 U
Naphthalene	100000	12000	ug/kg	35 U	34 U	38 U	35 U	34 U	37 U	39 U	39 U	37 U	37 U	36 U	36 U
Nitrobenzene	NS	NS	ug/kg	69 U	69 U	77 U	69 U	69 U	74 U	79 U	79 U	73 U	74 U	72 U	72 U
n-Nitrosodi-n-propylamine	NS	NS	ug/kg	69 U	69 U	77 U	69 U	69 U	74 U	79 U	79 U	73 U	74 U	72 U	72 U
N-nitrosodiphenylamine	NS	NS	ug/kg	170 U	170 U	190 U	170 U	170 U	190 U	200 U	200 U	180 U	190 U	180 U	180 U
p-Chloroaniline	NS	NS	ug/kg	170 U	170 U	190 U	170 U	170 U	190 UJ	200 UJ	200 UJ	180 UJ	190 UJ	180 U	180 U
Pentachlorophenol	6700	800	ug/kg	170 U	170 U	190 U	170 U	170 U	190 UJ	200 UJ	200 UJ	180 UJ	190 UJ	180 U	180 U
Phenanthrene	100000	1000000	ug/kg	35 U	34 U	38 U	35 U	34 U	37 U	39 U	39 U	37 U	37 U	36 U	36 U
Phenol	100000	330	ug/kg	69 U	69 U	77 U	69 U	69 U	74 U	79 U	79 U	73 U	74 U	72 U	72 U
Pyrene	100000	1000000	ug/kg	35 U	34 U	38 U	35 U	34 U	37 U	39 U	39 U	37 U	37 U	36 U	36 U
PCBs															
Aroclor 1016	1000	3200	ug/kg	35 U	33 U	38 U	36 U	35 U	38 U	39 U	38 U	35 U	37 U	36 U	34 U
Aroclor 1221	1000	3200	ug/kg	35 U	33 U	38 U	36 U	35 U	38 U	39 U	38 U	35 U	37 U	36 U	34 U
Aroclor 1232	1000	3200	ug/kg	35 U	33 U	38 U	36 U	35 U	38 U	39 U	38 U	35 U	37 U	36 U	34 U
Aroclor 1242	1000	3200	ug/kg	35 U	33 U	38 U	36 U	35 U	38 U	39 U	38 U	35 U	37 U	36 U	34 U
Aroclor 1248	1000	3200	ug/kg	35 U	33 U	38 U	36 U	35 U	38 U	39 U	38 U	35 U	37 U	36 U	34 U
Aroclor 1254	1000	3200	ug/kg	35 U	33 U	38 U	36 U	35 U	38 U	39 U	38 U	35 U	37 U	36 U	34 U
Aroclor 1260	1000	3200	ug/kg	35 U	33 U	38 U	36 U	35 U	38 U	39 U	38 U	35 U	37 U	36 U	34 U
Aroclor 1262	1000	3200	ug/kg	35 U	33 U	38 U	36 U	35 U	38 U	39 U	38 U	35 U	37 U	36 U	34 U
Aroclor 1268	1000	3200	ug/kg	35 U	33 U	38 U	36 U	35 U	38 U	39 U	38 U	35 U	37 U	36 U	34 U
Metals															
Aluminum	NS	NS	mg/kg	5310 J	5760 J	6360 J	7210 J	9090 J	5080 J	6670 J	7540 J	7560 J	7970 J	5920 J	6370 J
Antimony	NS	NS	mg/kg	2.2 UJ	2.2 UJ	2.2 UJ	2.3 UJ	1.9 J	2.3 UJ	2.3 UJ	2.2 UB	2.1 UB	2.2 UB	1.8 UJ	2.3 UJ
Arsenic	16	16	mg/kg	2.7	2 B	2.3	2.7	3.5	2.8	2.9	2.9	3.9	3.7	2.2	2.4
Barium	400	820	mg/kg	25	29.7	38.1	43.9	50.5	23.6	26.9	33.1	51.6	35.9	49.9	25.4
Beryllium	72	47	mg/kg	0.29	0.29	0.34	0.47	0.4	0.34	0.41	0.43	0.41	0.42	0.36	0.33
Cadmium	4.3	7.5	mg/kg	0.55 UB	0.14 B	0.56 U	0.58 UB	0.53 B	0.56 UB	0.58 UB	0.56 UB	0.59	0.54 UB	0.45 UB	0.57 UB
Calcium	NS	NS	mg/kg	9570	7750	8710	21600	2130	2280 J	1910 J	2110 J	19100 J	14200 J	10900	9150
Chromium	NS	NS	mg/kg	15.1	13.1	13.1	15.6	14.8	10	15.2	16.3	18.1	16.8	14.4	13.8
Cobalt	NS	NS	mg/kg	4.7 B	5 B	6.8	5.9	7.4	6.9	6.1	8.3	7.4	6.7	5.4	5.1 B
Copper	270	1720	mg/kg	9.2 J	9.6 J	15 J	9.5 J	18.8 J	8.1	12.8	14.7	17.1	13.7	10.5 J	10.3 J
Iron	NS	NS	mg/kg	13600	14200	16000	17900	20100	12600	15800	18700	16200	16900	13200	14700
Lead	400	450	mg/kg	4.2	4.4	5.1	4.4	90.6	5	5.4	5.9	57	6.9	20.6	4.4
Magnesium	NS	NS	mg/kg	3420	3640	3700	3590	2890	1800	2540	2940	5070	4570	3420	3710
Manganese	2000	2000	mg/kg	217	190	368	385	248	289	329	565	445	361	310	257
Mercury	NS	NS	mg/kg	0.034 UB	0.035 U	0.036 U	0.034 UB	0.036 UB	0.034 UB	0.037 UB	0.036 UB	0.036 UB	0.035 UB	0.0075 B	0.037 UB
Nickel	310	130	mg/kg	9.1	9.1	10.2	8.7	11.7	7.2	12.5	14.8	17.5	15	12.1	10.5
Potassium	NS	NS	mg/kg	852 J	1090 B	1290	1480 J	1020 J	762 B	994 B	1040 B	1290	1340	1030	1030 J
Selenium	180	4	mg/kg	2.2 U	2.2 U	0.48 B	2.3 UB	2.2 U	2.3 U	2.3 U	2.2 U	2.1 U	2.2 U	1.8 U	2.3 U
Silver	180	8.3	mg/kg	0.84	0.55 UB	0.56 U	0.92	0.77	0.56 U	0.58 U	0.56 U	0.53 U	0.54 U	0.45 U	0.97
Sodium	NS	NS	mg/kg	177 B	172 B	197 B	316 B	156 B	157 B	1200 UB	122 B	146 B	168 B	150 B	182 B
Thallium	NS	NS	mg/kg	1.1 UB	1.1 U	1.1 U	1.2 U	1.1 UB	1.1 U	1.2 U	1.1 U	1.1 U	1.1 U	0.89 U	1.1 U
Vanadium	NS	NS	mg/kg	22.3	22	21.4	26.8	26.2	18.3	21.7	26	21.3	24.2	20.5	20.7
Zinc	10000	2480	mg/kg	30.6	22.9	36.1	22.2	56.7	18.9	31.6	33	58.5	34	29	24.5
General Chemistry															
Percent Solids			%	89.2	89.4	85.5	88.3	89.8	88	84.5	84.8	90.9	89.6	85.4	88.4
Notes															
NS				No standard											
NA				Not analyzed											
J				Estimated result											
JN				Estimated result											
R				Rejected result											
UB				Analyte considered non-detect at the listed value due to associated blank contamination											
Bold				Result exceeds 375-6.8(b) protection of groundwater soil cleanup objective.											
Shade				Result exceeds 375-6.8(b) restricted residential use soil cleanup objective.											

Table 11. Confirmatory Soil Sample Results Area C
Ramapo Paint Sludge Site - Operable Unit 2
Rockalnd County, New York



Sample ID	TABLE 375-6: RESTRIC. RES. USE SCO	TABLE 375-6: PROTECTION OF GW SCO	Units	PE-C-D9 12/16/2015	PE-C-D10 12/15/2015	PE-C-E1 11/18/2015	PE-C-E2 11/17/2015	PE-C-E3 11/17/2015	PE-C-E4 11/17/2015	PE-C-E5 11/18/2015	PE-C-E6 11/18/2015	PE-C-E7 11/18/2015	PE-C-E8 11/19/2015	PE-C-E9 11/19/2015	PE-C-E10 11/19/2015	PE-C-E10 DUP-007_201511
Sample Date				2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5
Sample Depth																
VOCs																
1,1,1-Trichloroethane	100000	680	ug/kg	1.5 U	1.7 U	1.7 U	1.8 U	1.9 U	1.5 U	1.6 U	1.5 U	1.6 U	1.6 U	1.7 U	1.6 U	1.9 U
1,1,2,2-Tetrachloroethane	NS	NS	ug/kg	1.5 U	1.7 U	1.7 U	1.8 U	1.9 U	1.5 U	1.6 U	1.5 U	1.6 U	1.6 U	1.7 U	1.6 U	1.9 U
1,1,2-trichloro-1,2,2-trifluoroethane	NS	NS	ug/kg	3.8 U	4.2 U	4.2 U	4.6 U	4.7 U	3.8 U	3.9 U	3.7 U	3.9 U	4 U	4.4 U	4.1 U	4.6 U
1,1,2-Trichloroethane	NS	NS	ug/kg	1.5 U	1.7 U	1.7 U	1.8 U	1.9 U	1.5 U	1.6 U	1.5 U	1.6 U	1.6 U	1.7 U	1.6 U	1.9 U
1,1-Dichloroethane	26000	270	ug/kg	0.75 U	0.85 U	0.85 U	0.92 U	0.94 U	0.77 U	0.79 U	0.73 U	0.78 U	0.81 U	0.87 U	0.81 U	0.93 U
1,1-Dichloroethene	100000	330	ug/kg	0.75 U	0.85 U	0.85 U	0.92 U	0.94 U	0.77 U	0.79 U	0.73 U	0.78 U	0.81 U	0.87 U	0.81 U	0.93 U
1,2,4-Trichlorobenzene	NS	NS	ug/kg	3.8 U	4.2 U	4.2 U	4.6 U	4.7 U	3.8 U	3.9 U	3.7 U	3.9 U	4 U	4.4 U	4.1 U	4.6 U
1,2-Dibromo-3-chloropropane	NS	NS	ug/kg	1.5 U	1.7 U	1.7 U	1.8 U	1.9 U	1.5 U	1.6 U	1.5 U	1.6 U	1.6 U	1.7 U	1.6 U	1.9 U
1,2-Dibromoethane	NS	NS	ug/kg	0.75 U	0.85 U	0.85 U	0.92 U	0.94 U	0.77 U	0.79 U	0.73 U	0.78 U	0.81 U	0.87 U	0.81 U	0.93 U
1,2-Dichlorobenzene	100000	1100	ug/kg	0.75 U	0.85 U	0.85 U	0.92 U	0.94 U	0.77 U	0.79 U	0.73 U	0.78 U	0.81 U	0.87 U	0.81 U	0.93 U
1,2-Dichloroethane	3100	20	ug/kg	0.75 U	0.85 U	0.85 U	0.92 U	0.94 U	0.77 U	0.79 U	0.73 U	0.78 U	0.81 U	0.87 U	0.81 U	0.93 U
1,2-Dichloropropane	NS	NS	ug/kg	1.5 U	1.7 U	1.7 U	1.8 U	1.9 U	1.5 U	1.6 U	1.5 U	1.6 U	1.6 U	1.7 U	1.6 U	1.9 U
1,3-Dichlorobenzene	49000	2400	ug/kg	0.75 U	0.85 U	0.85 U	0.92 U	0.94 U	0.77 U	0.79 U	0.73 U	0.78 U	0.81 U	0.87 U	0.81 U	0.93 U
1,4-Dichlorobenzene	13000	1800	ug/kg	0.75 U	0.85 U	0.85 U	0.92 U	0.94 U	0.77 U	0.79 U	0.73 U	0.78 U	0.81 U	0.87 U	0.81 U	0.93 U
2-Butanone (MEK)	100000	120	ug/kg	7.5 U	8.5 U	8.5 U	9.2 U	9.4 U	7.7 U	7.9 U	7.3 U	7.8 U	8.1 U	8.7 U	8.1 U	9.3 U
4-Methyl-2-Pentanone	NS	NS	ug/kg	3.8 U	4.2 U	4.2 U	4.6 U	4.7 U	3.8 U	3.9 U	3.7 U	3.9 U	4 U	4.4 U	4.1 U	4.6 U
Acetone	100000	50	ug/kg	7.5 U	8.5 U	8.5 U	9.2 U	9.4 U	7.7 U	7.9 U	7.3 U	7.8 U	8.1 U	8.7 U	8.1 U	9.3 U
Benzene	4800	60	ug/kg	0.38 U	0.42 U	0.42 U	0.46 U	0.47 U	0.38 U	0.39 U	0.37 U	0.39 U	0.4 U	0.44 U	0.41 U	0.46 U
Bromodichloromethane	NS	NS	ug/kg	1.5 U	1.7 U	1.7 U	1.8 U	1.9 U	1.5 U	1.6 U	1.5 U	1.6 U	1.6 U	1.7 U	1.6 U	1.9 U
Bromoform	NS	NS	ug/kg	3.8 U	4.2 U	4.2 U	4.6 U	4.7 U	3.8 U	3.9 U	3.7 U	3.9 U	4 U	4.4 U	4.1 U	4.6 U
Bromomethane	NS	NS	ug/kg	3.8 U	4.2 U	4.2 U	4.6 U	4.7 U	3.8 U	3.9 U	3.7 U	3.9 U	4 U	4.4 U	4.1 U	4.6 U
Carbon Disulfide	NS	NS	ug/kg	1.5 U	1.7 U	1.7 U	1.8 U	1.9 U	1.5 U	1.6 U	1.5 U	1.6 U	1.6 U	1.7 U	1.6 U	1.9 U
Carbon Tetrachloride	2400	760	ug/kg	1.5 U	1.7 U	1.7 U	1.8 U	1.9 U	1.5 U	1.6 U	1.5 U	1.6 U	1.6 U	1.7 U	1.6 U	1.9 U
CFC-11	NS	NS	ug/kg	3.8 U	4.2 U	4.2 U	4.6 U	4.7 U	3.8 U	3.9 U	3.7 U	3.9 U	4 U	4.4 U	4.1 U	4.6 U
CFC-12	NS	NS	ug/kg	3.8 U	4.2 U	4.2 U	4.6 U	4.7 U	3.8 U	3.9 U	3.7 U	3.9 U	4 U	4.4 U	4.1 U	4.6 U
Chlorobenzene	100000	1100	ug/kg	1.5 U	1.7 U	1.7 U	1.8 U	1.9 U	1.5 U	1.6 U	1.5 U	1.6 U	1.6 U	1.7 U	1.6 U	1.9 U
Chlorodibromomethane	NS	NS	ug/kg	1.5 U	1.7 U	1.7 U	1.8 U	1.9 U	1.5 U	1.6 U	1.5 U	1.6 U	1.6 U	1.7 U	1.6 U	1.9 U
Chloroethane	NS	NS	ug/kg	3.8 U	4.2 U	4.2 U	4.6 U	4.7 U	3.8 U	3.9 U	3.7 U	3.9 U	4 U	4.4 U	4.1 U	4.6 U
Chloroform	49000	370	ug/kg	1.5 U	1.7 U	1.7 U	1.8 U	1.9 U	1.5 U	1.6 U	1.5 U	1.6 U	1.6 U	1.7 U	1.6 U	1.9 U
Chloromethane	NS	NS	ug/kg	3.8 U	4.2 U	4.2 U	4.6 U	4.7 U	3.8 U	3.9 U	3.7 U	3.9 U	4 U	4.4 U	4.1 U	4.6 U
cis-1,2-Dichloroethene	100000	250	ug/kg	0.75 U	0.85 U	0.85 U	0.92 U	0.94 U	0.77 U	0.79 U	0.73 U	0.78 U	0.81 U	0.87 U	0.81 U	0.93 U
cis-1,3-Dichloropropene	NS	NS	ug/kg	1.5 U	1.7 U	1.7 U	1.8 U	1.9 U	1.5 U	1.6 U	1.5 U	1.6 U	1.6 U	1.7 U	1.6 U	1.9 U
Cyclohexane	NS	NS	ug/kg	1.5 U	1.7 U	1.7 U	1.8 U	1.9 U	1.5 U	1.6 U	1.5 U	1.6 U	1.6 U	1.7 U	1.6 U	1.9 U
Dichloromethane	NS	NS	ug/kg	3.8 U	4.2 U	4.2 U	4.6 U	4.7 U	3.8 U	3.9 U	3.7 U	3.9 U	4 U	4.4 U	4.1 U	4.6 U
Ethylbenzene	41000	1000	ug/kg	0.75 U	0.85 U	0.85 U	0.92 U	0.94 U	0.77 U	0.79 U	0.73 U	0.78 U	0.81 U	0.87 U	0.81 U	0.93 U
Isopropylbenzene	NS	NS	ug/kg	1.5 U	1.7 U	1.7 U	1.8 U	1.9 U	1.5 U	1.6 U	1.5 U	1.6 U	1.6 U	1.7 U	1.6 U	1.9 U
Methyl Acetate	NS	NS	ug/kg	3.8 U	4.2 U	4.2 U	4.6 U	4.7 U	3.8 U	3.9 U	3.7 U	3.9 U	4 U	4.4 U	4.1 U	4.6 U
Methyl N-Butyl Ketone (2-Hexanone)	NS	NS	ug/kg	3.8 U	4.2 U	4.2 U	4.6 U	4.7 U	3.8 U	3.9 U	3.7 U	3.9 U	4 U	4.4 U	4.1 U	4.6 U
Methylcyclohexane	NS	NS	ug/kg	1.5 U	1.7 U	1.7 U	1.8 U	1.9 U	1.5 U	1.6 U	1.5 U	1.6 U	1.6 U	1.7 U	1.6 U	1.9 U
Methyl-tert-butylether	100000	930	ug/kg	0.75 U	0.85 U	0.85 U	0.92 U	0.94 U	0.77 U	0.79 U	0.73 U	0.78 U	0.81 U	0.87 U	0.81 U	0.93 U
Styrene (Monomer)	NS	NS	ug/kg	1.5 U	1.7 U	0.24 J	1.8 U	0.3 J	1.5 U	0.24 J	0.15 J	0.19 J	0.24 J	1.7 U	0.17 J	1.9 U
Tetrachloroethene	19000	1300	ug/kg	1.5 U	1.7 U	1.7 U	1.8 U	1.9 U	1.5 U	1.6 U	1.5 U	1.6 U	1.6 U	1.7 U	1.6 U	1.9 U
Toluene	100000	700	ug/kg	0.75 U	0.85 U	0.85 U	0.92 U	0.94 U	0.77 U	0.79 U	0.73 U	0.78 U	0.81 U	0.87 U	0.81 U	0.93 U
Total Xylenes	100000	1600	ug/kg	0.75 U	0.85 U	0.85 U	0.92 U	0.94 U	0.51 J	0.79 U	0.73 U	0.78 U	0.81 U	0.87 U	0.81 U	0.93 U
trans-1,2-Dichloroethene	100000	190	ug/kg	0.75 U	0.85 U	0.85 U	0.92 U	0.94 U	0.77 U	0.79 U	0.73 U	0.78 U	0.81 U	0.87 U	0.81 U	0.93 U
trans-1,3-Dichloropropene	NS	NS	ug/kg	1.5 U	1.7 U	1.7 U	1.8 U	1.9 U	1.5 U	1.6 U	1.5 U	1.6 U	1.6 U	1.7 U	1.6 U	1.9 U
Trichloroethene	21000	470	ug/kg	0.75 U	0.85 U	0.85 U	0.92 U	0.94 U	0.77 U	0.79 U	0.73 U	0.78 U	0.81 U	0.87 U	0.81 U	0.93 U
Vinyl chloride	900	20	ug/kg	1.5 U	1.7 U	1.7 U	1.8 U	1.9 U	1.5 U	1.6 U	1.5 U	1.6 U	1.6 U	1.7 U	1.6 U	1.9 U

See Notes on Last Page

Table 11. Confirmatory Soil Sample Results Area C
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Sample ID	TABLE 375-6: RESTRIC. RES. USE SCO	TABLE 375-6: PROTECTION OF GW SCO	Units	PE-C-D9 12/16/2015 2-2.5	PE-C-D10 12/15/2015 2-2.5	PE-C-E1 11/18/2015 2-2.5	PE-C-E2 11/17/2015 2-2.5	PE-C-E3 11/17/2015 2-2.5	PE-C-E4 11/17/2015 2-2.5	PE-C-E5 11/18/2015 2-2.5	PE-C-E6 11/18/2015 2-2.5	PE-C-E7 11/18/2015 2-2.5	PE-C-E8 11/19/2015 2-2.5	PE-C-E9 11/19/2015 2-2.5	PE-C-E10 11/19/2015 2-2.5	PE-C-E10 11/19/2015 2-2.5
Sample Date																
Sample Depth																
SVOCs																
1,1-Biphenyl	NS	NS	ug/kg	70 U	64 U	72 U	72 U	72 U	70 U	64 U	68 U	66 U	70 U	73 U	72 U	73 U
2,2-Oxybis(1-Chloropropane)	NS	NS	ug/kg	70 U	64 U	72 U	72 U	72 U	70 U	64 U	68 U	66 U	70 U	73 U	72 U	73 U
2,4,5-Trichlorophenol	NS	NS	ug/kg	170 U	160 U	180 U	180 U	180 U	170 U	160 U	170 U	160 U	170 U	180 U	180 U	180 U
2,4,6-Trichlorophenol	NS	NS	ug/kg	170 U	160 U	180 U	180 U	180 U	170 U	160 U	170 U	160 U	170 U	180 U	180 U	180 U
2,4-Dichlorophenol	NS	NS	ug/kg	170 U	160 U	180 U	180 U	180 U	170 U	160 U	170 U	160 U	170 U	180 U	180 U	180 U
2,4-Dimethylphenol	NS	NS	ug/kg	170 U	160 U	180 U	180 U	180 U	170 U	160 U	170 U	160 U	170 U	180 U	180 U	180 U
2,4-Dinitrophenol	NS	NS	ug/kg	170 U	160 U	180 U	180 U	180 U	170 U	160 U	170 U	160 U	170 U	180 U	180 U	180 U
2,4-Dinitrotoluene	NS	NS	ug/kg	35 U	32 U	36 U	36 U	36 U	35 U	32 U	34 U	33 U	35 U	37 U	36 U	36 U
2,6-Dinitrotoluene	NS	NS	ug/kg	35 U	32 U	36 U	36 U	36 U	35 U	32 U	34 U	33 U	35 U	37 U	36 U	36 U
2-Chloronaphthalene	NS	NS	ug/kg	70 U	64 U	72 U	72 U	72 U	70 U	64 U	68 U	66 U	70 U	73 U	72 U	73 U
2-Chlorophenol	NS	NS	ug/kg	70 U	64 U	72 U	72 U	72 U	70 U	64 U	68 U	66 U	70 U	73 U	72 U	73 U
2-Methyl-4,6-dinitrophenol	NS	NS	ug/kg	170 U	160 U	180 U	180 U	180 U	170 U	160 U	170 U	160 U	170 U	180 U	180 U	180 U
2-Methylnaphthalene	NS	NS	ug/kg	70 U	64 U	72 U	72 U	72 U	70 U	64 U	68 U	66 U	70 U	73 U	72 U	73 U
2-Methylphenol	NS	NS	ug/kg	70 U	64 U	72 U	72 U	72 U	70 U	64 U	68 U	66 U	70 U	73 U	72 U	73 U
2-Nitroaniline	NS	NS	ug/kg	170 U	160 U	180 U	180 U	180 U	170 U	160 U	170 U	160 U	170 U	180 U	180 U	180 U
2-Nitrophenol	NS	NS	ug/kg	170 U	160 U	180 U	180 U	180 U	170 U	160 U	170 U	160 U	170 U	180 U	180 U	180 U
3,3-Dichlorobenzidine	NS	NS	ug/kg	70 U	64 U	72 U	72 U	72 U	70 U	64 U	68 U	66 U	70 U	73 U	72 U	73 U
3-Methylphenol, 4-Methylphenol	NS	NS	ug/kg	70 U	64 U	72 U	72 U	72 U	70 U	64 U	68 U	66 U	70 U	73 U	72 U	73 U
3-Nitroaniline	NS	NS	ug/kg	170 U	160 U	180 U	180 U	180 U	170 U	160 U	170 U	160 U	170 U	180 U	180 U	180 U
4-Bromophenyl phenyl ether	NS	NS	ug/kg	70 U	64 U	72 U	72 U	72 U	70 U	64 U	68 U	66 U	70 U	73 U	72 U	73 U
4-Chloro-3-Methylphenol	NS	NS	ug/kg	170 U	160 U	180 U	180 U	180 U	170 U	160 U	170 U	160 U	170 U	180 U	180 U	180 U
4-Chlorophenyl phenyl ether	NS	NS	ug/kg	70 U	64 U	72 U	72 U	72 U	70 U	64 U	68 U	66 U	70 U	73 U	72 U	73 U
4-Nitroaniline	NS	NS	ug/kg	170 U	160 U	180 U	180 U	180 U	170 U	160 U	170 U	160 U	170 U	180 U	180 U	180 U
4-Nitrophenol	NS	NS	ug/kg	350 U	320 U	360 U	360 U	360 U	350 U	320 U	340 U	330 U	350 U	370 U	360 U	360 U
Acenaphthene	100000	98000	ug/kg	35 U	32 U	36 U	36 U	36 U	35 U	32 U	34 U	33 U	35 U	37 U	36 U	36 U
Acenaphthylene	100000	107000	ug/kg	35 U	32 U	36 U	36 U	36 U	35 U	32 U	34 U	33 U	35 U	37 U	36 U	36 U
Acetophenone	NS	NS	ug/kg	170 U	160 U	180 U	180 U	180 U	170 U	160 U	170 U	160 U	170 U	180 U	180 U	180 U
Anthracene	100000	1000000	ug/kg	35 U	32 U	36 U	36 U	36 U	35 U	32 U	34 U	33 U	35 U	37 U	36 U	36 U
Atrazine	NS	NS	ug/kg	70 U	64 U	72 U	72 U	72 U	70 U	64 U	68 U	66 U	70 U	73 U	72 U	73 U
Benzaldehyde	NS	NS	ug/kg	170 U	160 U	180 U	180 U	180 U	170 U	160 U	170 U	160 U	170 U	180 U	180 U	180 U
Benzo(a)anthracene	1000	1000	ug/kg	35 U	32 U	36 U	36 U	36 U	35 U	32 U	34 U	33 U	35 U	37 U	36 U	36 U
Benzo(a)pyrene	1000	22000	ug/kg	35 U	32 U	36 U	36 U	36 U	35 U	32 U	34 U	33 U	35 U	37 U	36 U	36 U
Benzo(b)fluoranthene	1000	1700	ug/kg	35 U	32 U	36 U	36 U	36 U	35 U	32 U	34 U	33 U	35 U	37 U	36 U	36 U
Benzo(g,h,i)perylene	100000	1000000	ug/kg	35 U	32 U	36 U	36 U	36 U	35 U	32 U	34 U	33 U	35 U	37 U	36 U	36 U
Benzo(k)fluoranthene	3900	1700	ug/kg	35 U	32 U	36 U	36 U	36 U	35 U	32 U	34 U	33 U	35 U	37 U	36 U	36 U
bis(2-Chloroethoxy)methane	NS	NS	ug/kg	70 U	64 U	72 U	72 U	72 U	70 U	64 U	68 U	66 U	70 U	73 U	72 U	73 U
bis(2-Chloroethyl)ether	NS	NS	ug/kg	70 U	64 U	72 U	72 U	72 U	70 U	64 U	68 U	66 U	70 U	73 U	72 U	73 U
bis(2-Ethylhexyl)phthalate	NS	NS	ug/kg	70 U	64 U	72 U	72 U	72 U	70 U	64 U	68 U	66 U	70 U	73 U	72 U	73 U
Butyl benzyl phthalate	NS	NS	ug/kg	70 U	64 U	72 U	72 U	72 U	70 U	64 U	68 U	66 U	70 U	73 U	72 U	73 U
Caprolactam	NS	NS	ug/kg	70 U	64 U	72 U	72 U	72 U	70 U	64 U	68 U	66 U	70 U	73 U	72 U	73 U
Carbazole	NS	NS	ug/kg	70 U	64 U	72 U	72 U	72 U	70 U	64 U	68 U	66 U	70 U	73 U	72 U	73 U
Chrysene	3900	1000	ug/kg	35 U	32 U	36 U	36 U	36 U	35 U	32 U	34 U	33 U	35 U	37 U	36 U	36 U
Dibenzo(a,h)anthracene	330	1000000	ug/kg	35 U	32 U	36 U	36 U	36 U	35 U	32 U	34 U	33 U	35 U	37 U	36 U	36 U
Dibenzofuran	NS	NS	ug/kg	70 U	64 U	72 U	72 U	72 U	70 U	64 U	68 U	66 U	70 U	73 U	72 U	73 U
Diethyl phthalate	NS	NS	ug/kg	70 U	64 U	72 U	72 U	72 U	70 U	64 U	68 U	66 U	70 U	73 U	72 U	73 U
Dimethyl phthalate	NS	NS	ug/kg	70 U	64 U	72 U	72 U	72 U	70 U	64 U	68 U	66 U	70 U	73 U	72 U	73 U
Di-n-butyl phthalate	NS	NS	ug/kg	70 U	64 U	72 U	72 U	72 U	70 U	64 U	68 U	66 U	70 U	73 U	72 U	73 U
Di-n-octyl phthalate	NS	NS	ug/kg	70 U	64 U	72 U	72 U	72 U	70 U	64 U	68 U	66 U	70 U	73 U	72 U	73 U
Fluoranthene	100000	1000000	ug/kg	35 U	32 U	36 U	36 U	36 U	35 U	32 U	34 U	33 U	35 U	37 U	36 U	36 U
Fluorene	100000	386000	ug/kg	35 U	32 U	36 U	36 U	36 U	35 U	32 U	34 U	33 U	35 U	37 U	36 U	36 U
Hexachloro-1,3-butadiene	NS	NS	ug/kg	35 U	32 U	36 U	36 U	36 U	35 U	32 U	34 U	33 U	35 U	37 U	36 U	36 U
Hexachlorobenzene	NS	NS	ug/kg	70 U	64 U	72 U	72 U	72 U	70 U	64 U	68 U	66 U	70 U	73 U	72 U	73 U
Hexachlorocyclopentadiene	NS	NS	ug/kg	350 U	320 U	360 U	360 U	360 U	350 U	320 U	340 U	330 U	350 U	370 U	360 U	360 U

See Notes on Last Page

Table 11. Confirmatory Soil Sample Results Area C
Ramapo Paint Sludge Site - Operable Unit 2
Rockalnd County, New York



Sample ID	TABLE 375-6: RESTRIC. RES. USE SCO	TABLE 375-6: PROTECTION OF GW SCO	Units	PE-C-D9 12/16/2015	PE-C-D10 12/15/2015	PE-C-E1 11/18/2015	PE-C-E2 11/17/2015	PE-C-E3 11/17/2015	PE-C-E4 11/17/2015	PE-C-E5 11/18/2015	PE-C-E6 11/18/2015	PE-C-E7 11/18/2015	PE-C-E8 11/19/2015	PE-C-E9 11/19/2015	PE-C-E10 11/19/2015	PE-C-E10 DUP-007_201511
Sample Date				2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5
Sample Depth																
SVOCs cont.																
Hexachloroethane	NS	NS	ug/kg	170 U	160 U	180 U	180 U	180 U	170 U	160 U	170 U	160 U	170 U	180 U	180 U	180 U
Indeno(1,2,3-cd)pyrene	500	8200	ug/kg	35 U	32 U	36 U	36 U	36 U	35 U	32 U	34 U	33 U	35 U	37 U	36 U	36 U
Isophorone	NS	NS	ug/kg	70 U	64 U	72 U	72 U	72 U	70 U	64 U	68 U	66 U	70 U	73 U	72 U	73 U
Naphthalene	100000	12000	ug/kg	35 U	32 U	36 U	36 U	36 U	35 U	32 U	34 U	33 U	35 U	37 U	36 U	36 U
Nitrobenzene	NS	NS	ug/kg	70 U	64 U	72 U	72 U	72 U	70 U	64 U	68 U	66 U	70 U	73 U	72 U	73 U
n-Nitrosodi-n-propylamine	NS	NS	ug/kg	70 U	64 U	72 U	72 U	72 U	70 U	64 U	68 U	66 U	70 U	73 U	72 U	73 U
N-nitrosodiphenylamine	NS	NS	ug/kg	170 U	160 U	180 U	180 U	180 U	170 U	160 U	170 U	160 U	170 U	180 U	180 U	180 U
p-Chloroaniline	NS	NS	ug/kg	170 U	160 U	180 U	180 U	180 U	170 U	160 U	170 U	160 U	170 U	180 U	180 U	180 UJ
Pentachlorophenol	6700	800	ug/kg	170 U	160 U	180 U	180 U	180 U	170 U	160 U	170 U	160 U	170 UJ	180 UJ	180 UJ	180 UJ
Phenanthrene	100000	1000000	ug/kg	35 U	32 U	36 U	36 U	36 U	35 U	32 U	34 U	33 U	35 U	37 U	36 U	36 U
Phenol	100000	330	ug/kg	70 U	64 U	72 U	72 U	72 U	70 U	64 U	68 U	66 U	70 U	73 U	72 U	73 U
Pyrene	100000	1000000	ug/kg	35 U	32 U	36 U	36 U	36 U	35 U	32 U	34 U	33 U	35 U	37 U	36 U	36 U
PCBs																
Aroclor 1016	1000	3200	ug/kg	36 U	34 U	34 U	37 U	36 U	36 U	33 U	33 U	31 U	34 U	35 U	35 U	35 U
Aroclor 1221	1000	3200	ug/kg	36 U	34 U	34 U	37 U	36 U	36 U	33 U	33 U	31 U	34 U	35 U	35 U	35 U
Aroclor 1232	1000	3200	ug/kg	36 U	34 U	34 U	37 U	36 U	36 U	33 U	33 U	31 U	34 U	35 U	35 U	35 U
Aroclor 1242	1000	3200	ug/kg	36 U	34 U	34 U	37 U	36 U	36 U	33 U	33 U	31 U	34 U	35 U	35 U	35 U
Aroclor 1248	1000	3200	ug/kg	36 U	34 U	34 U	37 U	36 U	36 U	33 U	33 U	31 U	34 U	35 U	35 U	35 U
Aroclor 1254	1000	3200	ug/kg	36 U	34 U	34 U	37 U	36 U	36 U	33 U	33 U	31 U	34 U	35 U	35 U	35 U
Aroclor 1260	1000	3200	ug/kg	36 U	34 U	34 U	37 U	36 U	36 U	33 U	33 U	31 U	34 U	35 U	35 U	35 U
Aroclor 1262	1000	3200	ug/kg	36 U	34 U	34 U	37 U	36 U	36 U	33 U	33 U	31 U	34 U	35 U	35 U	35 U
Aroclor 1268	1000	3200	ug/kg	36 U	34 U	34 U	37 U	36 U	36 U	33 U	33 U	31 U	34 U	35 U	35 U	35 U
Metals																
Aluminum	NS	NS	mg/kg	5360 J	6760 J	13600 J	12600 J	6240 J	7360 J	8020 J	7890 J	6900 J	5500 J	8250 J	5990 J	5780 J
Antimony	NS	NS	mg/kg	2.1 UJ	2.1 UJ	2.1 UJ	0.44 J	1.3 J	0.47 J	1.9 UJ	0.92 J	2 UJ	2.1 UJ	2.2 UJ	2.2 UJ	2.2 UJ
Arsenic	16	16	mg/kg	1.8 B	2 B	3.3	3.5	2.2	2.7	4.4	4.3	3.7	2.4	3.3	1.9 B	2 B
Barium	400	820	mg/kg	20.2 B	52.5	41	40.8	30.4	51.7	37.5	37.3	33.7	26.8	38.8	37.5	35.2
Beryllium	72	47	mg/kg	0.26	0.42	0.57	0.53	0.4	0.43	0.47	0.44	0.41	0.3	0.64	0.31	0.29
Cadmium	4.3	7.5	mg/kg	0.52 UB	0.18 B	0.19 B	0.21 B	0.18 B	0.26 B	0.19 B	0.34 B	0.51 UB	0.51 UB	0.55 UB	0.55 UB	0.54 UB
Calcium	NS	NS	mg/kg	7260	3610	619	1380	2420	3550	23000	11900	12600 J	9490 J	3540 J	2840 J	2570 J
Chromium	NS	NS	mg/kg	13.9	12	21.8	17.4	14	15.2	15.9	16.7	16.1	13.3	10.4	11	12.4
Cobalt	NS	NS	mg/kg	9.5	7.2	6.3	6.3	5.6	6.5	7.7	8.2	6.6	6.1	6.6	6.6	6.9
Copper	270	1720	mg/kg	10 J	18.7 J	8.9	17.4	11.4	17.7	16.3	15.6	12.5	13.5	12.8	18.3	19.4
Iron	NS	NS	mg/kg	13900	15900	16600	18000	16100	18000	18200	18100	15800	13400	18600	15200	14400
Lead	400	450	mg/kg	3.9	35.4	7.2	75.6	9.1	30.4	13.6	63.1	13.4	52.9	4.1	7.9 J	18.4 J
Magnesium	NS	NS	mg/kg	3430	3220	2830	2850	2590	3620	5140	4940	4170	3430	3300	3050	2990
Manganese	2000	2000	mg/kg	224	224	127	187	321	395	424	373	320	301	262	189	216
Mercury	NS	NS	mg/kg	0.035 UB	0.0055 B	0.015 B	0.023 B	0.0097 B	0.013 B	0.014 B	0.013 B	0.03 UB	0.035 UB	0.034 U	0.034 U	0.035 UB
Nickel	310	130	mg/kg	10.3	10.5	11.3	12.2	10.5	14.3	16.4	18.7	14	11	10.2	9	10
Potassium	NS	NS	mg/kg	815 J	1480	536 B	824 B	1060	1220	1370	1210	1200	902 B	1530	1410	1340
Selenium	180	4	mg/kg	2.1 UB	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	1.9 U	2 U	2 U	2.1 U	2.2 U	2.2 U	2.2 U
Silver	180	8.3	mg/kg	0.84	0.52 U	0.52 U	0.53 U	0.52 U	0.53 U	0.48 U	0.51 U	0.51 U	0.56	0.74	0.58	0.32 B
Sodium	NS	NS	mg/kg	174 B	217 B	59.9 B	109 B	167 B	162 B	129 B	126 B	127 B	132 B	229 B	164 B	154 B
Thallium	NS	NS	mg/kg	1 U	1 U	0.51 B	1.1 U	1 U	1.1 U	0.67 B	0.44 B	1 UB	1 U	1.1 U	1.1 UB	1.1 U
Vanadium	NS	NS	mg/kg	21.1	24.8	28.8	28.2	22.8	21.8	23.1	22.4	22.4	19.5	19.4	20.9	23.5
Zinc	10000	2480	mg/kg	21.7	43.4	26.2	38.3	30.5	43.9	41.1	56	33.1	36.1	26.6	46.4	39.6
General Chemistry																
Percent Solids			%	93.4	93.4	92.2	90.6	91.6	92.8	99.2	96.1	97.5	93.8	91.1	93	91.4

Notes		
NS	No standard	
NA	Not analyzed	
J	Estimated result	
JN	Estimated result	
R	Rejected result	
UB	Analyte considered non-detect at the listed value due to associated blank contamination	
Bold	Result exceeds 375-6.8(b) protection of groundwater soil cleanup objective.	
Shade	Result exceeds 375-6.8(b) restricted residential use soil cleanup objective.	

Table 11. Confirmatory Soil Sample Results Area C
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Sample ID	TABLE 375-6: RESTRIC. RES. USE SCO	TABLE 375-6: PROTECTION OF GW SCO	Units	PE-C-F1 11/18/2015	PE-C-F2 11/18/2015	PE-C-F3 11/18/2015	PE-C-F4 11/17/2015	PE-C-F5 11/17/2015	PE-C-F6 11/16/2015	PE-C-F7 11/11/2015	PE-C-F8 11/16/2015	PE-C-F9 11/18/2015	PE-C-F10 11/18/2015	PE-C-G2 11/18/2015	PE-C-G3 11/18/2015	PE-C-G4 11/17/2015
Sample Date				2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5
Sample Depth																
VOCs																
1,1,1-Trichloroethane	100000	680	ug/kg	1.8 U	1.7 U	1.7 U	1.6 U	1.6 U	1.7 U	1.7 U	1.6 U	1.5 U	1.6 U	1.9 U	1.9 U	1.8 U
1,1,2,2-Tetrachloroethane	NS	NS	ug/kg	1.8 U	1.7 U	1.7 U	1.6 U	1.6 U	1.7 U	1.7 U	1.6 U	1.5 U	1.6 U	1.9 U	1.9 U	1.8 U
1,1,2-trichloro-1,2,2-trifluoroethane	NS	NS	ug/kg	4.6 U	4.2 U	4.3 U	4 U	4 U	4.2 U	4.3 U	4 U	3.8 U	4 U	4.7 U	4.6 U	4.5 U
1,1,2-Trichloroethane	NS	NS	ug/kg	1.8 U	1.7 U	1.7 U	1.6 U	1.6 U	1.7 U	1.7 U	1.6 U	1.5 U	1.6 U	1.9 U	1.9 U	1.8 U
1,1-Dichloroethane	26000	270	ug/kg	0.92 U	0.84 U	0.87 U	0.8 U	0.8 U	0.84 U	0.86 U	0.8 U	0.76 U	0.8 U	0.93 U	0.93 U	0.91 U
1,1-Dichloroethene	100000	330	ug/kg	0.92 U	0.84 U	0.87 U	0.8 U	0.8 U	0.84 U	0.86 U	0.8 U	0.76 U	0.8 U	0.93 U	0.93 U	0.91 U
1,2,4-Trichlorobenzene	NS	NS	ug/kg	4.6 U	4.2 U	4.3 U	4 U	4 U	4.2 U	4.3 U	4 U	3.8 U	4 U	4.7 U	4.6 U	4.5 U
1,2-Dibromo-3-chloropropane	NS	NS	ug/kg	1.8 U	1.7 U	1.7 U	1.6 U	1.6 U	1.7 U	1.7 U	1.6 U	1.5 U	1.6 U	1.9 U	1.9 U	1.8 U
1,2-Dibromoethane	NS	NS	ug/kg	0.92 U	0.84 U	0.87 U	0.8 U	0.8 U	0.84 U	0.86 U	0.8 U	0.76 U	0.8 U	0.93 U	0.93 U	0.91 U
1,2-Dichlorobenzene	100000	1100	ug/kg	0.92 U	0.84 U	0.87 U	0.8 U	0.8 U	0.84 U	0.86 U	0.8 U	0.76 U	0.8 U	0.93 U	0.93 U	0.91 U
1,2-Dichloroethane	3100	20	ug/kg	0.92 U	0.84 U	0.87 U	0.8 U	0.8 U	0.84 U	0.86 U	0.8 U	0.76 U	0.8 U	0.93 U	0.93 U	0.91 U
1,2-Dichloropropane	NS	NS	ug/kg	1.8 U	1.7 U	1.7 U	1.6 U	1.6 U	1.7 U	1.7 U	1.6 U	1.5 U	1.6 U	1.9 U	1.9 U	1.8 U
1,3-Dichlorobenzene	49000	2400	ug/kg	0.92 U	0.84 U	0.87 U	0.8 U	0.8 U	0.84 U	0.86 U	0.8 U	0.76 U	0.8 U	0.93 U	0.93 U	0.91 U
1,4-Dichlorobenzene	13000	1800	ug/kg	0.92 U	0.84 U	0.87 U	0.8 U	0.8 U	0.84 U	0.86 U	0.8 U	0.76 U	0.8 U	0.93 U	0.93 U	0.91 U
2-Butanone (MEK)	100000	120	ug/kg	9.2 U	8.4 U	8.7 U	8 U	8 U	8.4 U	8.6 U	8 U	7.6 U	8 U	9.3 U	9.3 U	9.1 U
4-Methyl-2-Pentanone	NS	NS	ug/kg	4.6 U	4.2 U	4.3 U	4 U	4 U	4.2 U	4.3 U	4 U	3.8 U	4 U	4.7 U	4.6 U	4.5 U
Acetone	100000	50	ug/kg	9.2 U	40.5	8.7 U	8 U	8 U	8.4 U	8.6 U	3.4 J	7.6 U	8 U	9.3 U	9.3 U	9.1 U
Benzene	4800	60	ug/kg	0.46 U	0.42 U	0.43 U	0.4 U	0.4 U	0.42 U	0.43 U	0.4 U	0.38 U	0.4 U	0.47 U	0.46 U	0.45 U
Bromodichloromethane	NS	NS	ug/kg	1.8 U	1.7 U	1.7 U	1.6 U	1.6 U	1.7 U	1.7 U	1.6 U	1.5 U	1.6 U	1.9 U	1.9 U	1.8 U
Bromoform	NS	NS	ug/kg	4.6 U	4.2 U	4.3 U	4 U	4 U	4.2 U	4.3 U	4 U	3.8 U	4 U	4.7 U	4.6 U	4.5 U
Bromomethane	NS	NS	ug/kg	4.6 U	4.2 U	4.3 U	4 U	4 U	4.2 U	4.3 U	4 U	3.8 U	4 U	4.7 U	4.6 U	4.5 U
Carbon Disulfide	NS	NS	ug/kg	1.8 U	1.7 U	1.7 U	1.6 U	1.6 U	1.7 U	1.7 U	1.6 U	1.5 U	1.6 U	1.9 U	1.9 U	1.8 U
Carbon Tetrachloride	2400	760	ug/kg	1.8 U	1.7 U	1.7 U	1.6 U	1.6 U	1.7 U	1.7 U	1.6 U	1.5 U	1.6 U	1.9 U	1.9 U	1.8 U
CFC-11	NS	NS	ug/kg	4.6 U	4.2 U	4.3 U	4 U	4 U	4.2 U	4.3 U	4 U	3.8 U	4 U	4.7 U	4.6 U	4.5 U
CFC-12	NS	NS	ug/kg	4.6 U	4.2 U	4.3 U	4 U	4 U	4.2 U	4.3 U	4 U	3.8 U	4 U	4.7 U	4.6 U	4.5 U
Chlorobenzene	100000	1100	ug/kg	1.8 U	1.7 U	1.7 U	1.6 U	1.6 U	1.7 U	1.7 U	1.6 U	1.5 U	1.6 U	1.9 U	1.9 U	1.8 U
Chlorodibromomethane	NS	NS	ug/kg	1.8 U	1.7 U	1.7 U	1.6 U	1.6 U	1.7 U	1.7 U	1.6 U	1.5 U	1.6 U	1.9 U	1.9 U	1.8 U
Chloroethane	NS	NS	ug/kg	4.6 U	4.2 U	4.3 U	4 U	4 U	4.2 U	4.3 U	4 U	3.8 U	4 U	4.7 U	4.6 U	4.5 U
Chloroform	49000	370	ug/kg	1.8 U	1.7 U	1.7 U	1.6 U	1.6 U	1.7 U	1.7 U	1.6 U	1.5 U	1.6 U	1.9 U	1.9 U	1.8 U
Chloromethane	NS	NS	ug/kg	4.6 U	4.2 U	4.3 U	4 U	4 U	4.2 U	4.3 U	4 U	3.8 U	4 U	4.7 U	4.6 U	4.5 U
cis-1,2-Dichloroethene	100000	250	ug/kg	0.92 U	0.84 U	0.87 U	0.8 U	0.8 U	0.84 U	0.86 U	0.8 U	0.76 U	0.8 U	0.93 U	0.93 U	0.91 U
cis-1,3-Dichloropropene	NS	NS	ug/kg	1.8 U	1.7 U	1.7 U	1.6 U	1.6 U	1.7 U	1.7 U	1.6 U	1.5 U	1.6 U	1.9 U	1.9 U	1.8 U
Cyclohexane	NS	NS	ug/kg	1.8 U	1.7 U	1.7 U	1.6 U	1.6 U	1.7 U	1.7 U	1.6 U	1.5 U	1.6 U	1.9 U	1.9 U	1.8 U
Dichloromethane	NS	NS	ug/kg	4.6 U	4.2 U	4.3 U	4 U	4 U	4.2 U	4.3 U	4 U	3.8 U	4 U	4.7 U	4.6 U	4.5 U
Ethylbenzene	41000	1000	ug/kg	0.92 U	0.84 U	0.87 U	0.8 U	0.8 U	0.84 U	0.86 U	0.8 U	0.76 U	0.8 U	0.93 U	0.93 U	0.91 U
Isopropylbenzene	NS	NS	ug/kg	1.8 U	1.7 U	1.7 U	1.6 U	1.6 U	1.7 U	1.7 U	1.6 U	1.5 U	1.6 U	1.9 U	1.9 U	1.8 U
Methyl Acetate	NS	NS	ug/kg	4.6 U	4.2 U	4.3 U	4 U	4 U	4.2 U	4.3 U	4 U	3.8 U	4 U	4.7 U	4.6 U	4.5 U
Methyl N-Butyl Ketone (2-Hexanone)	NS	NS	ug/kg	4.6 U	4.2 U	4.3 U	4 U	4 U	4.2 U	4.3 U	4 U	3.8 U	4 U	4.7 U	4.6 U	4.5 U
Methylcyclohexane	NS	NS	ug/kg	1.8 U	1.7 U	1.7 U	1.6 U	1.6 U	1.7 U	1.7 U	1.6 U	1.5 U	1.6 U	1.9 U	1.9 U	1.8 U
Methyl-tert-butylether	100000	930	ug/kg	0.92 U	0.84 U	0.87 U	0.8 U	0.8 U	0.84 U	0.86 U	0.8 U	0.76 U	0.8 U	0.93 U	0.93 U	0.91 U
Styrene (Monomer)	NS	NS	ug/kg	1.8 U	1.7 U	0.22 J	1.6 U	0.39 J	0.4 J	1.7 U	0.65 J	0.37 J	1.6 U	1.9 U	1.9 U	0.49 J
Tetrachloroethene	19000	1300	ug/kg	1.8 U	1.7 U	1.7 U	1.6 U	1.6 U	1.7 U	1.7 U	1.6 U	1.5 U	1.6 U	1.9 U	1.9 U	1.8 U
Toluene	100000	700	ug/kg	0.92 U	0.84 U	0.87 U	0.8 U	0.8 U	0.84 U	0.86 U	0.8 U	0.76 U	0.8 U	0.93 U	0.93 U	0.91 U
Total Xylenes	100000	1600	ug/kg	0.92 U	0.84 U	0.87 U	0.8 U	0.8 U	0.84 U	0.86 U	0.8 U	0.76 U	0.8 U	0.93 U	0.93 U	0.91 U
trans-1,2-Dichloroethene	100000	190	ug/kg	0.92 U	0.84 U	0.87 U	0.8 U	0.8 U	0.84 U	0.86 U	0.8 U	0.76 U	0.8 U	0.93 U	0.93 U	0.91 U
trans-1,3-Dichloropropene	NS	NS	ug/kg	1.8 U	1.7 U	1.7 U	1.6 U	1.6 U	1.7 U	1.7 U	1.6 U	1.5 U	1.6 U	1.9 U	1.9 U	1.8 U
Trichloroethene	21000	470	ug/kg	0.92 U	0.84 U	0.87 U	0.8 U	0.8 U	0.84 U	0.86 U	0.8 U	0.76 U	0.8 U	0.93 U	0.93 U	0.91 U
Vinyl chloride	900	20	ug/kg	1.8 U	1.7 U	1.7 U	1.6 U	1.6 U	1.7 U	1.7 U	1.6 U	1.5 U	1.6 U	1.9 U	1.9 U	1.8 U

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Table 11. Confirmatory Soil Sample Results Area C
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Sample ID	TABLE 375-6: RESTRIC. RES. USE SCO	TABLE 375-6: PROTECTION OF GW SCO	Units	PE-C-F1 11/18/2015 2-2.5	PE-C-F2 11/18/2015 2-2.5	PE-C-F3 11/18/2015 2-2.5	PE-C-F4 11/17/2015 2-2.5	PE-C-F5 11/17/2015 2-2.5	PE-C-F6 11/16/2015 2-2.5	PE-C-F7 11/11/2015 2-2.5	PE-C-F8 11/16/2015 2-2.5	PE-C-F9 11/18/2015 2-2.5	PE-C-F10 11/18/2015 2-2.5	PE-C-G2 11/18/2015 2-2.5	PE-C-G3 11/18/2015 2-2.5	PE-C-G4 11/17/2015 2-2.5
Sample Date																
Sample Depth																
SVOCs																
1,1-Biphenyl	NS	NS	ug/kg	74 U	71 U	66 U	73 U	72 U	67 U	71 U	70 U	67 U	72 U	70 U	71 U	76 U
2,2-Oxybis(1-Chloropropane)	NS	NS	ug/kg	74 U	71 U	66 U	73 U	72 U	67 U	71 U	70 U	67 U	72 U	70 U	71 U	76 U
2,4,5-Trichlorophenol	NS	NS	ug/kg	180 U	180 U	170 U	180 U	180 U	170 U	180 U	170 U	170 U	180 U	170 U	180 U	190 U
2,4,6-Trichlorophenol	NS	NS	ug/kg	180 U	180 U	170 U	180 U	180 U	170 U	180 U	170 U	170 U	180 U	170 U	180 U	190 U
2,4-Dichlorophenol	NS	NS	ug/kg	180 U	180 U	170 U	180 U	180 U	170 U	180 U	170 U	170 U	180 U	170 U	180 U	190 U
2,4-Dimethylphenol	NS	NS	ug/kg	180 U	180 U	170 U	180 U	180 U	170 U	180 U	170 U	170 U	180 U	170 U	180 U	190 U
2,4-Dinitrophenol	NS	NS	ug/kg	180 U	180 U	170 U	180 U	180 U	170 U	180 U	170 U	170 U	180 U	170 U	180 U	190 U
2,4-Dinitrotoluene	NS	NS	ug/kg	37 U	36 U	33 U	36 U	36 U	34 U	36 U	35 U	34 U	36 U	35 U	36 U	38 U
2,6-Dinitrotoluene	NS	NS	ug/kg	37 U	36 U	33 U	36 U	36 U	34 U	36 U	35 U	34 U	36 U	35 U	36 U	38 U
2-Chloronaphthalene	NS	NS	ug/kg	74 U	71 U	66 U	73 U	72 U	67 U	71 U	70 U	67 U	72 U	70 U	71 U	76 U
2-Chlorophenol	NS	NS	ug/kg	74 U	71 U	66 U	73 U	72 U	67 U	71 U	70 U	67 U	72 U	70 U	71 U	76 U
2-Methyl-4,6-dinitrophenol	NS	NS	ug/kg	180 U	180 U	170 U	180 U	180 U	170 U	180 U	170 U	170 U	180 U	170 U	180 U	190 U
2-Methylnaphthalene	NS	NS	ug/kg	74 U	71 U	66 U	73 U	72 U	67 U	71 U	70 U	67 U	72 U	70 U	71 U	76 U
2-Methylphenol	NS	NS	ug/kg	74 U	71 U	66 U	73 U	72 U	67 U	71 U	70 U	67 U	72 U	70 U	71 U	76 U
2-Nitroaniline	NS	NS	ug/kg	180 U	180 U	170 U	180 U	180 U	170 U	180 U	170 U	170 U	180 U	170 U	180 U	190 U
2-Nitrophenol	NS	NS	ug/kg	180 U	180 U	170 U	180 U	180 U	170 U	180 U	170 U	170 U	180 U	170 U	180 U	190 U
3,3-Dichlorobenzidine	NS	NS	ug/kg	74 U	71 U	66 U	73 U	72 U	67 U	71 U	70 U	67 U	72 U	70 U	71 U	76 U
3-Methylphenol, 4-Methylphenol	NS	NS	ug/kg	74 U	71 U	66 U	73 U	72 U	67 U	71 U	70 U	67 U	72 U	70 U	71 U	76 U
3-Nitroaniline	NS	NS	ug/kg	180 U	180 U	170 U	180 U	180 U	170 U	180 U	170 U	170 U	180 U	170 U	180 U	190 U
4-Bromophenyl phenyl ether	NS	NS	ug/kg	74 U	71 U	66 U	73 U	72 U	67 U	71 U	70 U	67 U	72 U	70 U	71 U	76 U
4-Chloro-3-Methylphenol	NS	NS	ug/kg	180 U	180 U	170 U	180 U	180 U	170 U	180 U	170 U	170 U	180 U	170 U	180 U	190 U
4-Chlorophenyl phenyl ether	NS	NS	ug/kg	74 U	71 U	66 U	73 U	72 U	67 U	71 U	70 U	67 U	72 U	70 U	71 U	76 U
4-Nitroaniline	NS	NS	ug/kg	180 U	180 U	170 U	180 U	180 U	170 U	180 U	170 U	170 U	180 U	170 U	180 U	190 U
4-Nitrophenol	NS	NS	ug/kg	370 U	360 U	330 U	360 U	360 U	340 U	360 U	350 U	340 U	360 U	350 U	360 U	380 U
Acenaphthene	100000	98000	ug/kg	37 U	36 U	33 U	36 U	36 U	34 U	36 U	35 U	34 U	36 U	35 U	36 U	38 U
Acenaphthylene	100000	107000	ug/kg	37 U	36 U	33 U	36 U	36 U	34 U	36 U	35 U	34 U	36 U	35 U	36 U	38 U
Acetophenone	NS	NS	ug/kg	180 U	180 U	170 U	180 U	180 U	170 U	180 U	170 U	170 U	180 U	170 U	180 U	190 U
Anthracene	100000	1000000	ug/kg	37 U	36 U	33 U	36 U	36 U	34 U	36 U	35 U	34 U	36 U	35 U	36 U	38 U
Atrazine	NS	NS	ug/kg	74 U	71 U	66 U	73 U	72 U	67 U	71 U	70 U	67 U	72 U	70 U	71 U	76 U
Benzaldehyde	NS	NS	ug/kg	180 U	180 U	170 U	180 U	180 U	170 U	180 U	170 U	170 U	180 U	170 U	180 U	190 U
Benzo(a)anthracene	1000	1000	ug/kg	37 U	36 U	33 U	36 U	36 U	34 U	36 U	35 U	34 U	36 U	35 U	36 U	38 U
Benzo(a)pyrene	1000	22000	ug/kg	37 U	36 U	33 U	36 U	36 U	34 U	36 U	35 U	34 U	36 U	35 U	36 U	38 U
Benzo(b)fluoranthene	1000	1700	ug/kg	37 U	36 U	33 U	36 U	36 U	34 U	36 U	35 U	34 U	36 U	35 U	36 U	38 U
Benzo(g,h,i)perylene	100000	1000000	ug/kg	37 U	36 U	33 U	17.4 J	36 U	34 U	36 U	35 U	34 U	36 U	35 U	36 U	38 U
Benzo(k)fluoranthene	3900	1700	ug/kg	37 U	36 U	33 U	36 U	36 U	34 U	36 U	35 U	34 U	36 U	35 U	36 U	38 U
bis(2-Chloroethoxy)methane	NS	NS	ug/kg	74 U	71 U	66 U	73 U	72 U	67 U	71 U	70 U	67 U	72 U	70 U	71 U	76 U
bis(2-Chloroethyl)ether	NS	NS	ug/kg	74 U	71 U	66 U	73 U	72 U	67 U	71 U	70 U	67 U	72 U	70 U	71 U	76 U
bis(2-Ethylhexyl)phthalate	NS	NS	ug/kg	74 U	71 U	66 U	73 U	72 U	67 U	71 U	70 U	67 U	72 U	70 U	71 U	76 U
Butyl benzyl phthalate	NS	NS	ug/kg	74 U	71 U	66 U	73 U	72 U	67 U	71 U	70 U	67 U	72 U	70 U	71 U	76 U
Caprolactam	NS	NS	ug/kg	74 U	71 U	66 U	73 U	72 U	67 U	71 U	70 U	67 U	72 U	70 U	71 U	76 U
Carbazole	NS	NS	ug/kg	74 U	71 U	66 U	73 U	72 U	67 U	71 U	70 U	67 U	72 U	70 U	71 U	76 U
Chrysene	3900	1000	ug/kg	37 U	36 U	33 U	36 U	36 U	34 U	36 U	35 U	34 U	36 U	35 U	36 U	38 U
Dibenzo(a,h)anthracene	330	1000000	ug/kg	37 U	36 U	33 U	36 U	36 U	34 U	36 U	35 U	34 U	36 U	35 U	36 U	38 U
Dibenzofuran	NS	NS	ug/kg	74 U	71 U	66 U	73 U	72 U	67 U	71 U	70 U	67 U	72 U	70 U	71 U	76 U
Diethyl phthalate	NS	NS	ug/kg	74 U	71 U	66 U	73 U	72 U	67 U	71 U	70 U	67 U	72 U	70 U	71 U	76 U
Dimethyl phthalate	NS	NS	ug/kg	74 U	71 U	66 U	73 U	72 U	67 U	71 U	70 U	67 U	72 U	70 U	71 U	76 U
Di-n-butyl phthalate	NS	NS	ug/kg	74 U	71 U	66 U	73 U	72 U	67 U	71 U	70 U	67 U	72 U	70 U	71 U	76 U
Di-n-octyl phthalate	NS	NS	ug/kg	74 U	71 U	66 U	73 U	72 U	67 U	71 U	70 U	67 U	72 U	70 U	71 U	76 U
Fluoranthene	100000	1000000	ug/kg	37 U	36 U	33 U	36 U	36 U	34 U	36 U	35 U	34 U	36 U	35 U	36 U	38 U
Fluorene	100000	386000	ug/kg	37 U	36 U	33 U	36 U	36 U	34 U	36 U	35 U	34 U	36 U	35 U	36 U	38 U
Hexachloro-1,3-butadiene	NS	NS	ug/kg	37 U	36 U	33 U	36 U	36 U	34 U	36 U	35 U	34 U	36 U	35 U	36 U	38 U
Hexachlorobenzene	NS	NS	ug/kg	74 U	71 U	66 U	73 U	72 U	67 U	71 U	70 U	67 U	72 U	70 U	71 U	76 U
Hexachlorocyclopentadiene	NS	NS	ug/kg	370 U	360 U	330 U	360 U	360 U	340 U	360 U	350 U	340 U	360 U	350 U	360 U	380 U

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Table 11. Confirmatory Soil Sample Results Area C
Ramapo Paint Sludge Site - Operable Unit 2
Rockalnd County, New York



Sample ID	TABLE 375-6: RESTRIC. RES. USE SCO	TABLE 375-6: PROTECTION OF GW SCO	Units	PE-C-F1 11/18/2015	PE-C-F2 11/18/2015	PE-C-F3 11/18/2015	PE-C-F4 11/17/2015	PE-C-F5 11/17/2015	PE-C-F6 11/16/2015	PE-C-F7 11/11/2015	PE-C-F8 11/16/2015	PE-C-F9 11/18/2015	PE-C-F10 11/18/2015	PE-C-G2 11/18/2015	PE-C-G3 11/18/2015	PE-C-G4 11/17/2015
Sample Date				2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5
Sample Depth																
SVOCs cont.																
Hexachloroethane	NS	NS	ug/kg	180 U	180 U	170 U	180 U	180 U	170 U	180 U	170 U	170 U	180 U	170 U	180 U	190 U
Indeno(1,2,3-cd)pyrene	500	8200	ug/kg	37 U	36 U	33 U	36 U	36 U	34 U	36 U	35 U	34 U	36 U	35 U	36 U	38 U
Isophorone	NS	NS	ug/kg	74 U	71 U	66 U	73 U	72 U	67 U	71 U	70 U	67 U	72 U	70 U	71 U	76 U
Naphthalene	100000	12000	ug/kg	37 U	36 U	33 U	36 U	36 U	34 U	36 U	35 U	34 U	36 U	35 U	36 U	38 U
Nitrobenzene	NS	NS	ug/kg	74 U	71 U	66 U	73 U	72 U	67 U	71 U	70 U	67 U	72 U	70 U	71 U	76 U
n-Nitrosodi-n-propylamine	NS	NS	ug/kg	74 U	71 U	66 U	73 U	72 U	67 U	71 U	70 U	67 U	72 U	70 U	71 U	76 U
N-nitrosodiphenylamine	NS	NS	ug/kg	180 U	180 U	170 U	180 U	180 U	170 U	180 U	170 U	170 U	180 U	170 U	180 U	190 U
p-Chloroaniline	NS	NS	ug/kg	180 U	180 U	170 U	180 U	180 U	170 U	180 U	170 U	170 U	180 U	170 U	180 U	190 U
Pentachlorophenol	6700	800	ug/kg	180 U	180 U	170 U	180 U	180 U	170 UJ	180 U	170 UJ	170 U	180 U	170 U	180 U	190 U
Phenanthrene	100000	1000000	ug/kg	37 U	36 U	33 U	36 U	36 U	34 U	36 U	35 U	34 U	36 U	35 U	36 U	38 U
Phenol	100000	330	ug/kg	74 U	71 U	66 U	73 U	72 U	67 UJ	71 U	70 UJ	67 U	72 U	70 U	71 U	76 U
Pyrene	100000	1000000	ug/kg	37 U	36 U	33 U	36 U	36 U	34 U	36 U	35 U	34 U	36 U	35 U	36 U	38 U
PCBs																
Aroclor 1016	1000	3200	ug/kg	37 U	35 U	33 U	36 U	32 U	34 U	36 U	37 U	33 U	36 U	35 U	37 U	36 U
Aroclor 1221	1000	3200	ug/kg	37 U	35 U	33 U	36 U	32 U	34 U	36 U	37 U	33 U	36 U	35 U	37 U	36 U
Aroclor 1232	1000	3200	ug/kg	37 U	35 U	33 U	36 U	32 U	34 U	36 U	37 U	33 U	36 U	35 U	37 U	36 U
Aroclor 1242	1000	3200	ug/kg	37 U	35 U	33 U	36 U	32 U	34 U	36 U	77	33 U	36 U	35 U	37 U	36 U
Aroclor 1248	1000	3200	ug/kg	37 U	35 U	33 U	36 U	32 U	34 U	36 U	37 U	33 U	36 U	35 U	37 U	36 U
Aroclor 1254	1000	3200	ug/kg	37 U	35 U	33 U	36 U	32 U	34 U	36 U	37 U	33 U	36 U	35 U	37 U	36 U
Aroclor 1260	1000	3200	ug/kg	37 U	35 U	33 U	36 U	32 U	34 U	36 U	37 U	33 U	36 U	35 U	37 U	36 U
Aroclor 1262	1000	3200	ug/kg	37 U	35 U	33 U	36 U	32 U	34 U	36 U	37 U	33 U	36 U	35 U	37 U	36 U
Aroclor 1268	1000	3200	ug/kg	37 U	35 U	33 U	36 U	32 U	34 U	36 U	37 U	33 U	36 U	35 U	37 U	36 U
Metals																
Aluminum	NS	NS	mg/kg	17500 J	17900 J	9640 J	6980 J	8200 J	6290 J	6920 J	6770 J	7000 J	4570 J	15000 J	16600 J	17800 J
Antimony	NS	NS	mg/kg	2.2 UJ	2.2 UJ	2 J	2.1 UJ	5.6 J	2 UB	1.5 UJ	2 J	10.9 J	2.1 UJ	2 UJ	2.1 UJ	2.2 UJ
Arsenic	16	16	mg/kg	3.7	4.3	3.9	2.3	4.2	3.3	3.2	3	6.4	2.2	3.9	4.4	3.7
Barium	400	820	mg/kg	38.2	45.2	46.1	33.2	57.1	28.3	29.6	43	48.8	20.2 B	34.7	40.1	40.7
Beryllium	72	47	mg/kg	0.62	0.62	0.73	0.41	0.45	0.35 J	0.36 J	0.37 J	0.55	0.33	0.63	0.68	0.65
Cadmium	4.3	7.5	mg/kg	0.21 B	0.17 B	0.36 B	0.53 U	0.7	0.23 B	0.38 U	0.59	1	0.14 B	0.27 B	0.23 B	0.065 B
Calcium	NS	NS	mg/kg	751	550	2880	4310	12400	15900 J	12400 J	8620 J	11200	9220	974	1090	758
Chromium	NS	NS	mg/kg	18.5	21.7	11.4	18.6	19	14.3	17.8	14.8	19	14.1	18.5	18.5	18.3
Cobalt	NS	NS	mg/kg	6.2	7.4	7.2	6.9	6.5	6.6	6.4	7.3	7	4.9 B	8.6	7.2	6.7
Copper	270	1720	mg/kg	9.4	11	13.1	14.5	21.8	13.8	12.9	16	19.2	9.1	14.3	11.8	13.4
Iron	NS	NS	mg/kg	17500	19800	18100	18400	21900	15000	16100	16000	19300	13800	18600	18700	19600
Lead	400	450	mg/kg	12.2	6.7	168	5.1	308	25.5	6.1	137	329	5.1	7.2	10.7	10.6
Magnesium	NS	NS	mg/kg	2060	3080	2670	3870	4560	5170 J	4490 J	4070 J	3870	3180	2890	2380	2680
Manganese	2000	2000	mg/kg	113	147	173	309	422	265	293	286	360	233	187	157	156
Mercury	NS	NS	mg/kg	0.035	0.023 B	0.012 B	0.035 UB	0.033 UB	0.0034 B	0.033 UB	0.0045 B	0.01 B	0.0077 B	0.033 B	0.035	0.033 B
Nickel	310	130	mg/kg	10.9	13.2	7.5	13.4	15.5	13.8	14.6	14.7	15.1	10.2	13.6	12.3	12
Potassium	NS	NS	mg/kg	599 B	752 B	1310	1270	1240	999 B	1100	1090 B	1250	797 B	843 B	738 B	725 B
Selenium	180	4	mg/kg	2.2 U	2.2 U	1.9 U	2.1 U	2.1 U	2 UB	1.5 U	2.2 U	2 U	2.1 U	2 U	2.1 U	2.2 U
Silver	180	8.3	mg/kg	0.55 U	0.55 U	0.49 U	0.53 U	0.54 U	0.47 B	0.17 B	0.38 B	0.49 U	0.53 U	0.51 U	0.54 U	0.54 U
Sodium	NS	NS	mg/kg	73.7 B	63.9 B	238 B	188 B	188 B	128 B	138 B	140 B	142 B	162 B	95.2 B	77.2 B	88.1 B
Thallium	NS	NS	mg/kg	0.28 B	0.33 B	0.97 U	1.1 U	1.1 U	1 U	0.76 U	1.1 U	0.5 B	1.1 U	1 U	1.1 U	1.1 U
Vanadium	NS	NS	mg/kg	31.9	34.1	24	27.4	27.4	19.8	21.7	22.9	25	21.9	28.9	29.9	32.2
Zinc	10000	2480	mg/kg	38	29.6	30.8	27.3	85.8	35.6	30.9	74.7	88	24.3	28.9	31.6	30.2
General Chemistry																
Percent Solids			%	86.7	90.6	97.7	91.7	93.2	98.8	90.9	89.7	96.3	90.2	94.1	89.7	87.6

Notes		
NS	No standard	
NA	Not analyzed	
J	Estimated result	
JN	Estimated result	
R	Rejected result	
UB	Analyte considered non-detect at the listed value due to associated blank contamination	
Bold	Result exceeds 375-6.8(b) protection of groundwater soil cleanup objective.	
Shade	Result exceeds 375-6.8(b) restricted residential use soil cleanup objective.	

Table 11. Confirmatory Soil Sample Results Area C
Ramapo Paint Sludge Site - Operable Unit 2
Rockalnd County, New York



Sample ID	TABLE 375-6: RESTRIC. RES. USE SCO	TABLE 375-6: PROTECTION OF GW SCO	Units	PE-C-G4 -DUP-006_201511	PE-C-G5 11/16/2015	PE-C-G6 11/16/2015	PE-C-G7 11/11/2015	PE-C-G8 11/11/2015	PE-C-G9A 11/23/2015	PE-C-G10 11/5/2015	PE-C-S1 11/5/2015	PE-C-S3 11/10/2015	PE-C-S3 11/10/2015	PE-C-S4 11/10/2015	PE-C-S5 11/11/2015	PE-C-S6 11/17/2015
Sample Date				2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2.5-3	2-2.5	1-1.5	2-2.5	2-2.5	5-5.5	2-2.5	1.5-2
Sample Depth																
VOCs																
1,1,1-Trichloroethane	100000	680	ug/kg	1.9 U	1.9 U	1.6 U	1.9 U	1.8 U	NA	1.7 U	1.7 U	2 U	2 U	1.9 U	1.9 U	1.7 U
1,1,2,2-Tetrachloroethane	NS	NS	ug/kg	1.9 U	1.9 U	1.6 U	1.9 U	1.8 U	NA	1.7 U	1.7 U	2 U	2 U	1.9 U	1.9 U	1.7 U
1,1,2-trichloro-1,2,2-trifluoroethane	NS	NS	ug/kg	4.7 U	4.8 U	4.1 U	4.7 U	4.4 U	NA	4.3 U	4.2 U	4.9 U	5 U	4.8 U	4.8 U	4.4 U
1,1,2-Trichloroethane	NS	NS	ug/kg	1.9 U	1.9 U	1.6 U	1.9 U	1.8 U	NA	1.7 U	1.7 U	2 U	2 U	1.9 U	1.9 U	1.7 U
1,1-Dichloroethane	26000	270	ug/kg	0.93 U	0.97 U	0.82 U	0.93 U	0.89 U	NA	0.86 U	0.85 U	0.98 U	1 U	0.96 U	0.97 U	0.87 U
1,1-Dichloroethene	100000	330	ug/kg	0.93 U	0.97 U	0.82 U	0.93 U	0.89 U	NA	0.86 U	0.85 U	0.98 U	1 U	0.96 U	0.97 U	0.87 U
1,2,4-Trichlorobenzene	NS	NS	ug/kg	4.7 U	4.8 U	4.1 U	4.7 U	4.4 U	NA	4.3 U	4.2 U	4.9 U	5 U	4.8 U	4.8 U	4.4 U
1,2-Dibromo-3-chloropropane	NS	NS	ug/kg	1.9 U	1.9 U	1.6 U	1.9 U	1.8 U	NA	1.7 U	1.7 U	2 U	2 U	1.9 U	1.9 U	1.7 U
1,2-Dibromoethane	NS	NS	ug/kg	0.93 U	0.97 U	0.82 U	0.93 U	0.89 U	NA	0.86 U	0.85 U	0.98 U	1 U	0.96 U	0.97 U	0.87 U
1,2-Dichlorobenzene	100000	1100	ug/kg	0.93 U	0.97 U	0.82 U	0.93 U	0.89 U	NA	0.86 U	0.85 U	0.98 U	1 U	0.96 U	0.97 U	0.87 U
1,2-Dichloroethane	3100	20	ug/kg	0.93 U	0.97 U	0.82 U	0.93 U	0.89 U	NA	0.86 U	0.85 U	0.98 U	1 U	0.96 U	0.97 U	0.87 U
1,2-Dichloropropane	NS	NS	ug/kg	1.9 U	1.9 U	1.6 U	1.9 U	1.8 U	NA	1.7 U	1.7 U	2 U	2 U	1.9 U	1.9 U	1.7 U
1,3-Dichlorobenzene	49000	2400	ug/kg	0.93 U	0.97 U	0.82 U	0.93 U	0.89 U	NA	0.86 U	0.85 U	0.98 U	1 U	0.96 U	0.97 U	0.87 U
1,4-Dichlorobenzene	13000	1800	ug/kg	0.93 U	0.97 U	0.82 U	0.93 U	0.89 U	NA	0.86 U	0.85 U	0.98 U	1 U	0.96 U	0.97 U	0.87 U
2-Butanone (MEK)	100000	120	ug/kg	9.3 U	9.7 U	8.2 U	9.3 U	8.9 U	NA	8.6 U	8.5 U	9.8 U	10 U	9.6 U	9.7 U	8.7 U
4-Methyl-2-Pentanone	NS	NS	ug/kg	4.7 U	4.8 U	4.1 U	4.7 U	4.4 U	NA	4.3 U	4.2 U	4.9 U	5 U	4.8 U	4.8 U	4.4 U
Acetone	100000	50	ug/kg	9.3 U	9.7 U	8.2 U	9.3 U	8.9 U	NA	8.6 U	8.5 U	9.8 U	10 U	9.6 U	9.7 U	8.7 U
Benzene	4800	60	ug/kg	0.47 U	0.48 U	0.41 U	0.47 U	0.44 U	NA	0.43 U	0.42 U	0.49 U	0.5 U	0.48 U	0.48 U	0.44 U
Bromodichloromethane	NS	NS	ug/kg	1.9 U	1.9 U	1.6 U	1.9 U	1.8 U	NA	1.7 U	1.7 U	2 U	2 U	1.9 U	1.9 U	1.7 U
Bromoform	NS	NS	ug/kg	4.7 U	4.8 U	4.1 U	4.7 U	4.4 U	NA	4.3 U	4.2 U	4.9 U	5 U	4.8 U	4.8 U	4.4 U
Bromomethane	NS	NS	ug/kg	4.7 U	4.8 U	4.1 U	4.7 U	4.4 U	NA	4.3 U	4.2 U	4.9 U	5 U	4.8 U	4.8 U	4.4 U
Carbon Disulfide	NS	NS	ug/kg	1.9 U	1.9 U	1.6 U	1.9 U	1.8 U	NA	1.7 U	1.7 U	2 U	2 U	1.9 U	1.9 U	1.7 U
Carbon Tetrachloride	2400	760	ug/kg	1.9 U	1.9 U	1.6 U	1.9 U	1.8 U	NA	1.7 U	1.7 U	2 U	2 U	1.9 U	1.9 U	1.7 U
CFC-11	NS	NS	ug/kg	4.7 U	4.8 U	4.1 U	4.7 U	4.4 U	NA	4.3 U	4.2 U	4.9 U	5 U	4.8 U	4.8 U	4.4 U
CFC-12	NS	NS	ug/kg	4.7 U	4.8 U	4.1 U	4.7 U	4.4 U	NA	4.3 U	4.2 U	4.9 U	5 U	4.8 U	4.8 U	4.4 U
Chlorobenzene	100000	1100	ug/kg	1.9 U	1.9 U	1.6 U	1.9 U	1.8 U	NA	1.7 U	1.7 U	2 U	2 U	1.9 U	1.9 U	1.7 U
Chlorodibromomethane	NS	NS	ug/kg	1.9 U	1.9 U	1.6 U	1.9 U	1.8 U	NA	1.7 U	1.7 U	2 U	2 U	1.9 U	1.9 U	1.7 U
Chloroethane	NS	NS	ug/kg	4.7 U	4.8 U	4.1 U	4.7 U	4.4 U	NA	4.3 U	4.2 U	4.9 U	5 U	4.8 U	4.8 U	4.4 U
Chloroform	49000	370	ug/kg	1.9 U	1.9 U	1.6 U	1.9 U	1.8 U	NA	1.7 U	1.7 U	2 U	2 U	1.9 U	1.9 U	1.7 U
Chloromethane	NS	NS	ug/kg	4.7 U	4.8 U	4.1 U	4.7 U	4.4 U	NA	4.3 U	4.2 U	4.9 U	5 U	4.8 U	4.8 U	4.4 U
cis-1,2-Dichloroethene	100000	250	ug/kg	0.93 U	0.97 U	0.82 U	0.93 U	0.89 U	NA	0.86 U	0.85 U	0.98 U	1 U	0.96 U	0.97 U	0.87 U
cis-1,3-Dichloropropene	NS	NS	ug/kg	1.9 U	1.9 U	1.6 U	1.9 U	1.8 U	NA	1.7 U	1.7 U	2 U	2 U	1.9 U	1.9 U	1.7 U
Cyclohexane	NS	NS	ug/kg	1.9 U	1.9 U	1.6 U	1.9 U	1.8 U	NA	1.7 U	1.7 U	2 U	2 U	1.9 U	1.9 U	1.7 U
Dichloromethane	NS	NS	ug/kg	4.7 U	4.8 U	4.1 U	4.7 U	4.4 U	NA	4.3 U	4.2 U	4.9 U	5 U	4.8 U	4.8 U	4.4 U
Ethylbenzene	41000	1000	ug/kg	0.93 U	0.97 U	0.82 U	0.93 U	0.89 U	NA	0.86 U	0.85 U	0.98 U	1 U	0.96 U	0.97 U	0.87 U
Isopropylbenzene	NS	NS	ug/kg	1.9 U	1.9 U	1.6 U	1.9 U	1.8 U	NA	1.7 U	1.7 U	2 U	2 U	1.9 U	1.9 U	1.7 U
Methyl Acetate	NS	NS	ug/kg	4.7 U	4.8 U	4.1 U	4.7 U	4.4 U	NA	4.3 U	4.2 U	4.9 U	5 U	4.8 U	4.8 U	4.4 U
Methyl N-Butyl Ketone (2-Hexanone)	NS	NS	ug/kg	4.7 U	4.8 U	4.1 U	4.7 U	4.4 U	NA	4.3 U	4.2 U	4.9 U	5 U	4.8 U	4.8 U	4.4 U
Methylcyclohexane	NS	NS	ug/kg	1.9 U	1.9 U	1.6 U	1.9 U	1.8 U	NA	1.7 U	1.7 U	2 U	2 U	1.9 U	1.9 U	1.7 U
Methyl-tert-butylether	100000	930	ug/kg	0.93 U	0.97 U	0.82 U	0.93 U	0.89 U	NA	0.86 U	0.85 U	0.98 U	1 U	0.96 U	0.97 U	0.87 U
Styrene (Monomer)	NS	NS	ug/kg	0.47 J	1.9 U	1.5 J	1.9 U	1.8 U	NA	1.7 U	1.7 U	2 U	2 U	1.9 U	1.9 U	1.7 U
Tetrachloroethene	19000	1300	ug/kg	1.9 U	1.9 U	1.6 U	1.9 U	1.8 U	NA	1.7 U	1.7 U	2 U	2 U	1.9 U	1.9 U	1.7 U
Toluene	100000	700	ug/kg	0.93 U	0.97 U	0.82 U	0.93 U	0.89 U	NA	0.86 U	0.85 U	0.98 U	1 U	0.96 U	0.97 U	0.87 U
Total Xylenes	100000	1600	ug/kg	0.93 U	0.97 U	0.82 U	0.93 U	0.89 U	NA	0.86 U	0.85 U	0.98 U	1 U	0.96 U	0.97 U	0.87 U
trans-1,2-Dichloroethene	100000	190	ug/kg	0.93 U	0.97 U	0.82 U	0.93 U	0.89 U	NA	0.86 U	0.85 U	0.98 U	1 U	0.96 U	0.97 U	0.87 U
trans-1,3-Dichloropropene	NS	NS	ug/kg	1.9 U	1.9 U	1.6 U	1.9 U	1.8 U	NA	1.7 U	1.7 U	2 U	2 U	1.9 U	1.9 U	1.7 U
Trichloroethene	21000	470	ug/kg	0.93 U	0.97 U	0.82 U	0.93 U	0.89 U	NA	0.86 U	0.85 U	0.98 U	1 U	0.96 U	0.97 U	0.87 U
Vinyl chloride	900	20	ug/kg	1.9 U	1.9 U	1.6 U	1.9 U	1.8 U	NA	1.7 U	1.7 U	2 U	2 U	1.9 U	1.9 U	1.7 U

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Table 11. Confirmatory Soil Sample Results Area C
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Sample ID	TABLE 375-6: RESTRIC. RES. USE SCO	TABLE 375-6: PROTECTION OF GW SCO	Units	PE-C-G4 DUP-006_201511 2-2.5	PE-C-G5 11/16/2015 2-2.5	PE-C-G6 11/16/2015 2-2.5	PE-C-G7 11/11/2015 2-2.5	PE-C-G8 11/11/2015 2-2.5	PE-C-G9A 11/23/2015 2.5-3	PE-C-G10 11/5/2015 2-2.5	PE-C-S1 11/5/2015 1-1.5	PE-C-S3 11/10/2015 2-2.5	PE-C-S3 11/10/2015 2-2.5	PE-C-S4 11/10/2015 5-5.5	PE-C-S5 11/11/2015 2-2.5	PE-C-S6 11/17/2015 1.5-2
Sample Date																
Sample Depth																
SVOCS																
1,1-Biphenyl	NS	NS	ug/kg	74 U	73 U	66 U	70 U	76 U	NA	71 U	73 U	69 U	70 U	73 U	74 U	72 U
2,2-Oxybis(1-Chloropropane)	NS	NS	ug/kg	74 U	73 U	66 U	70 U	76 U	NA	71 U	73 U	69 U	70 U	73 U	74 U	72 U
2,4,5-Trichlorophenol	NS	NS	ug/kg	180 U	180 U	170 U	180 U	190 U	NA	180 U	180 U	170 U	170 U	180 U	180 U	180 U
2,4,6-Trichlorophenol	NS	NS	ug/kg	180 U	180 U	170 U	180 U	190 U	NA	180 U	180 U	170 U	170 U	180 U	180 U	180 U
2,4-Dichlorophenol	NS	NS	ug/kg	180 U	180 U	170 U	180 U	190 U	NA	180 U	180 U	170 U	170 U	180 U	180 U	180 U
2,4-Dimethylphenol	NS	NS	ug/kg	180 U	180 U	170 U	180 U	190 U	NA	180 U	180 U	170 U	170 U	180 U	180 U	180 U
2,4-Dinitrophenol	NS	NS	ug/kg	180 U	180 U	170 U	180 U	190 U	NA	180 U	180 U	170 U	170 U	180 U	180 U	180 U
2,4-Dinitrotoluene	NS	NS	ug/kg	37 U	37 U	33 U	35 U	38 U	NA	35 U	36 U	35 U	35 U	36 U	37 U	36 U
2,6-Dinitrotoluene	NS	NS	ug/kg	37 U	37 U	33 U	35 U	38 U	NA	35 U	36 U	35 U	35 U	36 U	37 U	36 U
2-Chloronaphthalene	NS	NS	ug/kg	74 U	73 U	66 U	70 U	76 U	NA	71 U	73 U	69 U	70 U	73 U	74 U	72 U
2-Chlorophenol	NS	NS	ug/kg	74 U	73 U	66 U	70 U	76 U	NA	71 U	73 U	69 U	70 U	73 U	74 U	72 U
2-Methyl-4,6-dinitrophenol	NS	NS	ug/kg	180 U	180 U	170 U	180 U	190 U	NA	180 U	180 U	170 U	170 U	180 U	180 U	180 U
2-Methylnaphthalene	NS	NS	ug/kg	74 U	73 U	66 U	70 U	76 U	NA	71 U	73 U	69 U	70 U	14.9 J	74 U	72 U
2-Methylphenol	NS	NS	ug/kg	74 U	73 U	66 U	70 U	76 U	NA	71 U	73 U	69 U	70 U	73 U	74 U	72 U
2-Nitroaniline	NS	NS	ug/kg	180 U	180 U	170 U	180 U	190 U	NA	180 U	180 U	170 U	170 U	180 U	180 U	180 U
2-Nitrophenol	NS	NS	ug/kg	180 U	180 U	170 U	180 U	190 U	NA	180 U	180 U	170 U	170 U	180 U	180 U	180 U
3,3-Dichlorobenzidine	NS	NS	ug/kg	74 U	73 U	66 U	70 U	76 U	NA	71 U	73 U	69 U	70 U	73 U	74 U	72 U
3-Methylphenol, 4-Methylphenol	NS	NS	ug/kg	74 U	73 U	66 U	70 U	76 U	NA	71 U	73 U	69 U	70 U	73 U	74 U	72 U
3-Nitroaniline	NS	NS	ug/kg	180 U	180 U	170 U	180 U	190 U	NA	180 U	180 U	170 U	170 U	180 U	180 U	180 U
4-Bromophenyl phenyl ether	NS	NS	ug/kg	74 U	73 U	66 U	70 U	76 U	NA	71 U	73 U	69 U	70 U	73 U	74 U	72 U
4-Chloro-3-Methylphenol	NS	NS	ug/kg	180 U	180 U	170 U	180 U	190 U	NA	180 U	180 U	170 U	170 U	180 U	180 U	180 U
4-Chlorophenyl phenyl ether	NS	NS	ug/kg	74 U	73 U	66 U	70 U	76 U	NA	71 U	73 U	69 U	70 U	73 U	74 U	72 U
4-Nitroaniline	NS	NS	ug/kg	180 U	180 U	170 U	180 U	190 U	NA	180 U	180 U	170 U	170 U	180 U	180 U	180 U
4-Nitrophenol	NS	NS	ug/kg	370 U	370 U	330 U	350 U	380 U	NA	350 UJ	360 UJ	350 U	350 U	360 U	370 U	360 U
Acenaphthene	100000	98000	ug/kg	37 U	37 U	33 U	35 U	38 U	NA	35 U	36 U	35 U	35 U	36 U	37 U	36 U
Acenaphthylene	100000	107000	ug/kg	37 U	37 U	33 U	35 U	38 U	NA	35 U	36 U	35 U	35 U	36 U	37 U	36 U
Acetophenone	NS	NS	ug/kg	180 U	180 U	170 U	180 U	190 U	NA	180 U	180 U	170 U	170 U	180 U	180 U	180 U
Anthracene	100000	1000000	ug/kg	37 U	37 U	33 U	35 U	38 U	NA	35 U	36 U	35 U	35 U	36 U	37 U	36 U
Atrazine	NS	NS	ug/kg	74 U	73 U	66 U	70 U	76 U	NA	71 U	73 U	69 U	70 U	73 U	74 U	72 U
Benzaldehyde	NS	NS	ug/kg	180 U	180 U	170 U	180 U	190 U	NA	180 U	180 U	170 U	170 U	180 U	180 U	180 U
Benzo(a)anthracene	1000	1000	ug/kg	37 U	37 U	33 U	35 U	38 U	NA	35 U	36 U	35 U	35 U	36 U	37 U	36 U
Benzo(a)pyrene	1000	22000	ug/kg	37 U	37 U	33 U	35 U	38 U	NA	35 U	36 U	35 U	35 U	36 U	37 U	36 U
Benzo(b)fluoranthene	1000	1700	ug/kg	37 U	37 U	33 U	35 U	38 U	NA	35 U	36 U	35 U	35 U	36 U	37 U	36 U
Benzo(g,h,i)perylene	100000	1000000	ug/kg	37 U	37 U	33 U	35 U	38 U	NA	35 U	36 U	35 U	35 U	36 U	37 U	36 U
Benzo(k)fluoranthene	3900	1700	ug/kg	37 U	37 U	33 U	35 U	38 U	NA	35 U	36 U	35 U	35 U	36 U	37 U	36 U
bis(2-Chloroethoxy)methane	NS	NS	ug/kg	74 U	73 U	66 U	70 U	76 U	NA	71 U	73 U	69 U	70 U	73 U	74 U	72 U
bis(2-Chloroethyl)ether	NS	NS	ug/kg	74 U	73 U	66 U	70 U	76 U	NA	71 U	73 U	69 U	70 U	73 U	74 U	72 U
bis(2-Ethylhexyl)phthalate	NS	NS	ug/kg	74 U	73 U	66 U	70 U	76 U	NA	71 U	73 U	69 U	70 U	73 U	74 U	72 U
Butyl benzyl phthalate	NS	NS	ug/kg	74 U	73 U	66 U	70 U	76 U	NA	71 U	73 U	69 U	70 U	73 U	74 U	72 U
Caprolactam	NS	NS	ug/kg	74 U	73 U	66 U	70 U	76 U	NA	71 U	73 U	69 U	70 U	73 U	74 U	72 U
Carbazole	NS	NS	ug/kg	74 U	73 U	66 U	70 U	76 U	NA	71 U	73 U	69 U	70 U	73 U	74 U	72 U
Chrysene	3900	1000	ug/kg	37 U	37 U	33 U	35 U	38 U	NA	35 U	36 U	35 U	35 U	36 U	37 U	36 U
Dibenzo(a,h)anthracene	330	1000000	ug/kg	37 U	37 U	33 U	35 U	38 U	NA	35 U	36 U	35 U	35 U	36 U	37 U	36 U
Dibenzofuran	NS	NS	ug/kg	74 U	73 U	66 U	70 U	76 U	NA	71 U	73 U	69 U	70 U	73 U	74 U	72 U
Diethyl phthalate	NS	NS	ug/kg	74 U	73 U	66 U	70 U	76 U	NA	71 U	73 U	69 U	70 U	73 U	74 U	72 U
Dimethyl phthalate	NS	NS	ug/kg	74 U	73 U	66 U	70 U	76 U	NA	71 U	73 U	69 U	70 U	73 U	74 U	72 U
Di-n-butyl phthalate	NS	NS	ug/kg	74 U	73 U	66 U	70 U	76 U	NA	71 U	73 U	69 U	70 U	73 U	74 U	72 U
Di-n-octyl phthalate	NS	NS	ug/kg	74 U	73 U	66 U	70 U	76 U	NA	71 U	73 U	69 U	70 U	73 U	74 U	72 U
Fluoranthene	100000	1000000	ug/kg	37 U	37 U	33 U	35 U	38 U	NA	35 U	36 U	35 U	35 U	36 U	37 U	36 U
Fluorene	100000	386000	ug/kg	37 U	37 U	33 U	35 U	38 U	NA	35 U	36 U	35 U	35 U	36 U	37 U	36 U
Hexachloro-1,3-butadiene	NS	NS	ug/kg	37 U	37 U	33 U	35 U	38 U	NA	35 U	36 U	35 U	35 U	36 U	37 U	36 U
Hexachlorobenzene	NS	NS	ug/kg	74 U	73 U	66 U	70 U	76 U	NA	71 U	73 U	69 U	70 U	73 U	74 U	72 U
Hexachlorocyclopentadiene	NS	NS	ug/kg	370 U	370 U	330 U	350 U	380 U	NA	350 UJ	360 UJ	350 U	350 U	360 U	370 U	360 U

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Table 11. Confirmatory Soil Sample Results Area C
Ramapo Paint Sludge Site - Operable Unit 2
Rockalnd County, New York



Sample ID	TABLE 375-6: RESTRIC. RES. USE SCO	TABLE 375-6: PROTECTION OF GW SCO	Units	PE-C-G4 -DUP-006_201511	PE-C-G5 11/16/2015	PE-C-G6 11/16/2015	PE-C-G7 11/11/2015	PE-C-G8 11/11/2015	PE-C-G9A 11/23/2015	PE-C-G10 11/5/2015	PE-C-S1 11/5/2015	PE-C-S3 11/10/2015	PE-C-S3 11/10/2015	PE-C-S4 11/10/2015	PE-C-S5 11/11/2015	PE-C-S6 11/17/2015
Sample Date				2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2.5-3	2-2.5	1-1.5	2-2.5	2-2.5	5-5.5	2-2.5	1.5-2
Sample Depth																
SVOCs cont.																
Hexachloroethane	NS	NS	ug/kg	180 U	180 U	170 U	180 U	190 U	NA	180 U	180 U	170 U	170 U	180 U	180 U	180 U
Indeno(1,2,3-cd)pyrene	500	8200	ug/kg	37 U	37 U	33 U	35 U	38 U	NA	35 U	36 U	35 U	35 U	36 U	37 U	36 U
Isophorone	NS	NS	ug/kg	74 U	73 U	66 U	70 U	76 U	NA	71 U	73 U	69 U	70 U	73 U	74 U	72 U
Naphthalene	100000	12000	ug/kg	37 U	37 U	33 U	35 U	38 U	NA	35 U	36 U	35 U	35 U	36 U	37 U	36 U
Nitrobenzene	NS	NS	ug/kg	74 U	73 U	66 U	70 U	76 U	NA	71 U	73 U	69 U	70 U	73 U	74 U	72 U
n-Nitrosodi-n-propylamine	NS	NS	ug/kg	74 U	73 U	66 U	70 U	76 U	NA	71 U	73 U	69 U	70 U	73 U	74 U	72 U
N-nitrosodiphenylamine	NS	NS	ug/kg	180 U	180 U	170 U	180 U	190 U	NA	180 U	180 U	170 U	170 U	180 U	180 U	180 U
p-Chloroaniline	NS	NS	ug/kg	180 U	180 U	170 U	180 U	190 U	NA	180 U	180 U	170 U	170 U	180 U	180 U	180 U
Pentachlorophenol	6700	800	ug/kg	180 U	180 UJ	170 UJ	180 U	190 U	NA	180 UJ	180 UJ	170 U	170 U	180 U	180 U	180 U
Phenanthrene	100000	1000000	ug/kg	37 U	37 U	33 U	35 U	38 U	NA	35 U	36 U	35 U	35 U	36 U	37 U	36 U
Phenol	100000	330	ug/kg	74 U	73 UJ	66 UJ	70 U	76 U	NA	71 U	73 U	69 U	70 U	73 U	74 U	72 U
Pyrene	100000	1000000	ug/kg	37 U	37 U	33 U	35 U	38 U	NA	35 U	36 U	35 U	35 U	36 U	37 U	36 U
PCBs																
Aroclor 1016	1000	3200	ug/kg	36 U	37 U	34 U	35 U	36 U	NA	36 U	35 U	30 U	35 U	34 U	36 U	32 U
Aroclor 1221	1000	3200	ug/kg	36 U	37 U	34 U	35 U	36 U	NA	36 U	35 U	30 U	35 U	34 U	36 U	32 U
Aroclor 1232	1000	3200	ug/kg	36 U	37 U	34 U	35 U	36 U	NA	36 U	35 U	30 U	35 U	34 U	36 U	32 U
Aroclor 1242	1000	3200	ug/kg	36 U	37 U	34 U	35 U	36 U	NA	36 U	35 U	30 U	35 U	34 U	36 U	32 U
Aroclor 1248	1000	3200	ug/kg	36 U	37 U	34 U	35 U	36 U	NA	36 U	35 U	30 U	35 U	34 U	36 U	32 U
Aroclor 1254	1000	3200	ug/kg	36 U	37 U	34 U	35 U	36 U	NA	36 U	35 U	30 U	35 U	34 U	36 U	32 U
Aroclor 1260	1000	3200	ug/kg	36 U	37 U	34 U	35 U	36 U	NA	36 U	35 U	30 U	35 U	34 U	36 U	32 U
Aroclor 1262	1000	3200	ug/kg	36 U	37 U	34 U	35 U	36 U	NA	36 U	35 U	30 U	35 U	34 U	36 U	32 U
Aroclor 1268	1000	3200	ug/kg	36 U	37 U	34 U	35 U	36 U	NA	36 U	35 U	30 U	35 U	34 U	36 U	32 U
Metals																
Aluminum	NS	NS	mg/kg	17300 J	16500 J	5690 J	6640 J	6420 J	6770 J	5950 J	4930 J	7350 J	6240 J	12100 J	15700 J	12500 J
Antimony	NS	NS	mg/kg	2.2 UJ	2.1 UJ	2.1 UJ	1.6 UJ	1.9 UB	2.2 UB	2.2 UJ	2.2 UJ	2 UJ	2.1 UJ	2.2 UJ	1.6 UJ	2.2 UJ
Arsenic	16	16	mg/kg	3.5	3.4	2.4	3.2	3.3	3.3	2 B	1.9 B	1.9 B	1.5 B	2.5	3.6	2.7
Barium	400	820	mg/kg	40	37.8	26.5	30.3	37.6	31.3	21.1 B	24.2	32.2	29.2	26.1	34.6	33.3
Beryllium	72	47	mg/kg	0.67	0.64 J	0.33 J	0.33 J	0.32 J	0.39	0.3 J	0.29 J	0.36 J	0.31 J	0.4 J	0.55 J	0.6 J
Cadmium	4.3	7.5	mg/kg	0.086 B	0.17 B	0.2 B	0.39 U	0.11 B	0.54 UB	0.56 UB	0.55 UB	0.16 B	0.15 B	0.21 B	0.4 U	0.19 B
Calcium	NS	NS	mg/kg	888	806 J	11000 J	26200 J	10100 J	13100 J	9530 J	1640 J	1820 J	1540 J	676 J	944 J	2070 J
Chromium	NS	NS	mg/kg	17.8	16.2	12.6	16.3	14.9	14.8	14.6	11.4	12.6	10	12.6	16.6	15.8
Cobalt	NS	NS	mg/kg	6.3	7	5.6	5.7	5.6	6.4	6	4.8 B	7.8	6.7	5.8	6.6	8.6
Copper	270	1720	mg/kg	12.4	11	9.4	12.1	13.8	12	9.7	9	16.4	15.1	9.4	11.2	12.9
Iron	NS	NS	mg/kg	19200	18000	13200	15500	15400	15600	13900	12300	13200	11900	14100	18300	19200
Lead	400	450	mg/kg	10.6	8.8	11	10.8	32.3	4.9	4.1	4.9	6.6	3.7	10.7	10	5.6
Magnesium	NS	NS	mg/kg	2480	2670 J	3610 J	6470 J	4120 J	4370	4270 J	2000 J	2740 J	2510 J	2200 J	2660 J	3660 J
Manganese	2000	2000	mg/kg	167	156	198	303	308	261	260	304	149	140	121	167	158
Mercury	NS	NS	mg/kg	0.035 B	0.035	0.034 U	0.032 UB	0.038 UB	0.033 UB	0.036 U	0.035 U	0.033 UB	0.033 UB	0.035 UB	0.034 UB	0.035 UB
Nickel	310	130	mg/kg	11.4	12.2	11.3	13.6	12.9	12.6	12	8.7	10.9	9.5	10.7	12.3	12.5
Potassium	NS	NS	mg/kg	709 B	711 B	929 B	1140	965	1210	810 B	795 B	1180	1110	570 B	679 B	1160
Selenium	180	4	mg/kg	2.2 U	2.1 U	2.1 U	1.6 U	1.9 U	2.2 U	2.2 U	2.2 U	2 UB	2.1 UB	2.2 UB	1.6 U	2.2 U
Silver	180	8.3	mg/kg	0.54 U	1.1	1.2	0.22 B	0.25 B	0.48 B	0.56 U	0.31 B	0.41 B	0.25 B	0.66	0.21 B	0.55 U
Sodium	NS	NS	mg/kg	86.8 B	88.2 B	146 B	142 B	144 B	163 B	136 B	154 B	146 B	112 B	68.7 B	89.9 B	148 B
Thallium	NS	NS	mg/kg	1.1 U	1.1 U	1 U	0.78 U	0.94 U	1.1 U	1.1 U	1.1 U	1 U	1.1 U	1.1 U	0.79 U	1.1 U
Vanadium	NS	NS	mg/kg	30.9	28	17.5	21.9	22.6	21.1	24.1	18.9	19.3	18.5	21.9	28	32.5
Zinc	10000	2480	mg/kg	28.7	27.3	29.9	30.9	47.5	31	24.6	21	21.4	19.1	23.4	30	26.1
General Chemistry																
Percent Solids			%	89.3	90.6	95.4	91.1	82.8	90.4	91.8	90.9	94.9	94	89.5	89.3	92.3

Notes	
NS	No standard
NA	Not analyzed
J	Estimated result
JN	Estimated result
R	Rejected result
UB	Analyte considered non-detect at the listed value due to associated blank contamination
Bold	Result exceeds 375-6.8(b) protection of groundwater soil cleanup objective.
Shade	Result exceeds 375-6.8(b) restricted residential use soil cleanup objective.

Table 11. Confirmatory Soil Sample Results Area C
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Sample ID	TABLE 375-6: RESTRIC. RES. USE SCO	TABLE 375-6: PROTECTION OF GW SCO	Units	PE-C-S7 11/17/2015	PE-C-S8 11/17/2015	PE-C-S9 11/17/2015	PE-C-S10 11/18/2015	PE-C-S11 11/19/2015	PE-C-S12 11/5/2015	PE-C-S12 12/17/2015	PE-C-S13 12/17/2015	PE-C-S14 12/21/2015
Sample Date				1.5-2	1.5-2	1.5-2	1.5-2	1.5-2	1-1.5	1.5-2	1.5-2	1.5-2
Sample Depth												
VOCs												
1,1,1-Trichloroethane	100000	680	ug/kg	1.7 U	2.1 U	1.9 U	1.9 U	1.9 U	2.1 U	1.8 U	1.5 U	1.6 U
1,1,2,2-Tetrachloroethane	NS	NS	ug/kg	1.7 U	2.1 U	1.9 U	1.9 U	1.9 U	2.1 U	1.8 U	1.5 U	1.6 U
1,1,2-trichloro-1,2,2-trifluoroethane	NS	NS	ug/kg	4.3 U	5.3 U	4.7 U	4.7 U	4.8 U	5.1 U	4.4 U	3.8 U	4.1 U
1,1,2-Trichloroethane	NS	NS	ug/kg	1.7 U	2.1 U	1.9 U	1.9 U	1.9 U	2.1 U	1.8 U	1.5 U	1.6 U
1,1-Dichloroethane	26000	270	ug/kg	0.86 U	1.1 U	0.93 U	0.93 U	0.97 U	1 U	0.88 U	0.76 U	0.82 U
1,1-Dichloroethene	100000	330	ug/kg	0.86 U	1.1 U	0.93 U	0.93 U	0.97 U	1 U	0.88 U	0.76 U	0.82 U
1,2,4-Trichlorobenzene	NS	NS	ug/kg	4.3 U	5.3 U	4.7 U	4.7 U	4.8 U	5.1 U	4.4 U	3.8 U	4.1 U
1,2-Dibromo-3-chloropropane	NS	NS	ug/kg	1.7 U	2.1 U	1.9 U	1.9 U	1.9 U	2.1 U	1.8 U	1.5 U	1.6 U
1,2-Dibromoethane	NS	NS	ug/kg	0.86 U	1.1 U	0.93 U	0.93 U	0.97 U	1 U	0.88 U	0.76 U	0.82 U
1,2-Dichlorobenzene	100000	1100	ug/kg	0.86 U	1.1 U	0.93 U	0.93 U	0.97 U	1 U	0.88 U	0.76 U	0.82 U
1,2-Dichloroethane	3100	20	ug/kg	0.86 U	1.1 U	0.93 U	0.93 U	0.97 U	1 U	0.88 U	0.76 U	0.82 U
1,2-Dichloropropane	NS	NS	ug/kg	1.7 U	2.1 U	1.9 U	1.9 U	1.9 U	2.1 U	1.8 U	1.5 U	1.6 U
1,3-Dichlorobenzene	49000	2400	ug/kg	0.86 U	1.1 U	0.93 U	0.93 U	0.97 U	1 U	0.88 U	0.76 U	0.82 U
1,4-Dichlorobenzene	13000	1800	ug/kg	0.86 U	1.1 U	0.93 U	0.93 U	0.97 U	1 U	0.88 U	0.76 U	0.82 U
2-Butanone (MEK)	100000	120	ug/kg	8.6 U	11 U	9.3 U	9.3 U	9.7 U	10 U	8.8 U	7.6 U	8.2 U
4-Methyl-2-Pentanone	NS	NS	ug/kg	4.3 U	5.3 U	4.7 U	4.7 U	4.8 U	5.1 U	4.4 U	3.8 U	4.1 U
Acetone	100000	50	ug/kg	8.6 U	11 U	9.3 U	9.3 U	9.7 U	10 U	8.8 U	7.6 U	8.2 U
Benzene	4800	60	ug/kg	0.43 U	0.53 U	0.47 U	0.47 U	0.48 U	0.51 U	0.44 U	0.38 U	0.41 U
Bromodichloromethane	NS	NS	ug/kg	1.7 U	2.1 U	1.9 U	1.9 U	1.9 U	2.1 U	1.8 U	1.5 U	1.6 U
Bromoform	NS	NS	ug/kg	4.3 U	5.3 U	4.7 U	4.7 U	4.8 U	5.1 U	4.4 U	3.8 U	4.1 U
Bromomethane	NS	NS	ug/kg	4.3 U	5.3 U	4.7 U	4.7 U	4.8 U	5.1 U	4.4 U	3.8 U	4.1 U
Carbon Disulfide	NS	NS	ug/kg	1.7 U	2.1 U	1.9 U	1.9 U	1.9 U	2.1 U	1.8 U	1.5 U	1.6 U
Carbon Tetrachloride	2400	760	ug/kg	1.7 U	2.1 U	1.9 U	1.9 U	1.9 U	2.1 U	1.8 U	1.5 U	1.6 U
CFC-11	NS	NS	ug/kg	4.3 U	5.3 U	4.7 U	4.7 U	4.8 U	5.1 U	4.4 U	3.8 U	4.1 U
CFC-12	NS	NS	ug/kg	4.3 U	5.3 U	4.7 U	4.7 U	4.8 U	5.1 U	4.4 U	3.8 U	4.1 U
Chlorobenzene	100000	1100	ug/kg	1.7 U	2.1 U	1.9 U	1.9 U	1.9 U	2.1 U	1.8 U	1.5 U	1.6 U
Chlorodibromomethane	NS	NS	ug/kg	1.7 U	2.1 U	1.9 U	1.9 U	1.9 U	2.1 U	1.8 U	1.5 U	1.6 U
Chloroethane	NS	NS	ug/kg	4.3 U	5.3 U	4.7 U	4.7 U	4.8 U	5.1 U	4.4 U	3.8 U	4.1 U
Chloroform	49000	370	ug/kg	1.7 U	2.1 U	1.9 U	1.9 U	1.9 U	2.1 U	1.8 U	1.5 U	1.6 U
Chloromethane	NS	NS	ug/kg	4.3 U	5.3 U	4.7 U	4.7 U	4.8 U	5.1 U	4.4 U	3.8 U	4.1 U
cis-1,2-Dichloroethene	100000	250	ug/kg	0.86 U	1.1 U	0.93 U	0.93 U	0.97 U	1 U	0.88 U	0.76 U	0.82 U
cis-1,3-Dichloropropene	NS	NS	ug/kg	1.7 U	2.1 U	1.9 U	1.9 U	1.9 U	2.1 U	1.8 U	1.5 U	1.6 U
Cyclohexane	NS	NS	ug/kg	1.7 U	2.1 U	1.9 U	1.9 U	1.9 U	2.1 U	1.8 U	1.5 U	1.6 U
Dichloromethane	NS	NS	ug/kg	4.3 U	5.3 U	4.7 U	4.7 U	4.8 U	5.1 U	4.4 U	3.8 U	4.1 U
Ethylbenzene	41000	1000	ug/kg	0.86 U	1.1 U	0.93 U	0.93 U	0.97 U	1 U	0.88 U	0.76 U	0.31 J
Isopropylbenzene	NS	NS	ug/kg	1.7 U	2.1 U	1.9 U	1.9 U	1.9 U	2.1 U	1.8 U	1.5 U	1.6 U
Methyl Acetate	NS	NS	ug/kg	4.3 U	5.3 U	4.7 U	4.7 U	4.8 U	5.1 U	4.4 U	3.8 U	4.1 U
Methyl N-Butyl Ketone (2-Hexanone)	NS	NS	ug/kg	4.3 U	5.3 U	4.7 U	4.7 U	4.8 U	5.1 U	4.4 U	3.8 U	4.1 U
Methylcyclohexane	NS	NS	ug/kg	1.7 U	2.1 U	1.9 U	1.9 U	1.9 U	2.1 U	1.8 U	1.5 U	1.6 U
Methyl-tert-butylether	100000	930	ug/kg	0.86 U	1.1 U	0.93 U	0.93 U	0.97 U	1 U	0.88 U	0.76 U	0.82 U
Styrene (Monomer)	NS	NS	ug/kg	1.7 U	2.1 U	1.9 U	1.9 U	1.9 U	2.1 U	1.8 U	1.5 U	0.72 J
Tetrachloroethene	19000	1300	ug/kg	1.7 U	2.1 U	1.9 U	1.9 U	1.9 U	2.1 U	1.8 U	1.5 U	1.6 U
Toluene	100000	700	ug/kg	0.86 U	1.1 U	0.93 U	0.93 U	0.97 U	1 U	0.88 U	0.76 U	0.82 U
Total Xylenes	100000	1600	ug/kg	0.86 U	1.1 U	0.93 U	0.93 U	0.97 U	1 U	0.88 U	0.76 U	0.82 U
trans-1,2-Dichloroethene	100000	190	ug/kg	0.86 U	1.1 U	0.93 U	0.93 U	0.97 U	1 U	0.88 U	0.76 U	0.82 U
trans-1,3-Dichloropropene	NS	NS	ug/kg	1.7 U	2.1 U	1.9 U	1.9 U	1.9 U	2.1 U	1.8 U	1.5 U	1.6 U
Trichloroethene	21000	470	ug/kg	0.86 U	1.1 U	0.93 U	0.93 U	0.97 U	1 U	0.88 U	0.76 U	0.82 U
Vinyl chloride	900	20	ug/kg	1.7 U	2.1 U	1.9 U	1.9 U	1.9 U	2.1 U	1.8 U	1.5 U	1.6 U

See Notes on Last Page

Table 11. Confirmatory Soil Sample Results Area C
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Sample ID	TABLE 375-6: RESTRIC. RES. USE SCO	TABLE 375-6: PROTECTION OF GW SCO	Units	PE-C-S7 11/17/2015 1.5-2	PE-C-S8 11/17/2015 1.5-2	PE-C-S9 11/17/2015 1.5-2	PE-C-S10 11/18/2015 1.5-2	PE-C-S11 11/19/2015 1.5-2	PE-C-S12 11/5/2015 1-1.5	PE-C-S12 12/17/2015 1.5-2	PE-C-S13 12/17/2015 1.5-2	PE-C-S14 12/21/2015 1.5-2
Sample Date												
Sample Depth												
SVOCs												
1,1-Biphenyl	NS	NS	ug/kg	74 U	72 U	75 U	70 U	76 U	78 U	75 U	68 U	73 U
2,2-Oxybis(1-Chloropropane)	NS	NS	ug/kg	74 UJ	72 U	75 U	70 U	76 U	78 U	75 U	68 U	73 U
2,4,5-Trichlorophenol	NS	NS	ug/kg	190 U	180 U	190 U	170 U	190 U	190 U	190 U	170 U	180 U
2,4,6-Trichlorophenol	NS	NS	ug/kg	190 U	180 U	190 U	170 U	190 U	190 U	190 U	170 U	180 U
2,4-Dichlorophenol	NS	NS	ug/kg	190 U	180 U	190 U	170 U	190 U	190 U	190 U	170 U	180 U
2,4-Dimethylphenol	NS	NS	ug/kg	190 U	180 U	190 U	170 U	190 U	190 U	190 U	170 U	180 U
2,4-Dinitrophenol	NS	NS	ug/kg	190 U	180 U	190 U	170 U	190 U	190 U	190 U	170 U	180 U
2,4-Dinitrotoluene	NS	NS	ug/kg	37 U	36 U	38 U	35 U	38 U	39 U	38 U	34 U	36 U
2,6-Dinitrotoluene	NS	NS	ug/kg	37 U	36 U	38 U	35 U	38 U	39 U	38 U	34 U	36 U
2-Chloronaphthalene	NS	NS	ug/kg	74 U	72 U	75 U	70 U	76 U	78 U	75 U	68 U	73 U
2-Chlorophenol	NS	NS	ug/kg	74 U	72 U	75 U	70 U	76 U	78 U	75 U	68 U	73 U
2-Methyl-4,6-dinitrophenol	NS	NS	ug/kg	190 U	180 U	190 U	170 U	190 U	190 U	190 U	170 U	180 U
2-Methylnaphthalene	NS	NS	ug/kg	74 U	72 U	75 U	70 U	76 U	78 U	75 U	68 U	73 U
2-Methylphenol	NS	NS	ug/kg	74 U	72 U	75 U	70 U	76 U	78 U	75 U	68 U	73 U
2-Nitroaniline	NS	NS	ug/kg	190 U	180 U	190 U	170 U	190 U	190 U	190 U	170 U	180 U
2-Nitrophenol	NS	NS	ug/kg	190 U	180 U	190 U	170 U	190 U	190 U	190 U	170 U	180 U
3,3-Dichlorobenzidine	NS	NS	ug/kg	74 U	72 U	75 U	70 U	76 UJ	78 U	75 U	68 U	73 U
3-Methylphenol, 4-Methylphenol	NS	NS	ug/kg	74 U	72 U	75 U	70 U	76 U	78 U	75 U	68 U	73 U
3-Nitroaniline	NS	NS	ug/kg	190 U	180 U	190 U	170 U	190 U	190 U	190 U	170 U	180 U
4-Bromophenyl phenyl ether	NS	NS	ug/kg	74 U	72 U	75 U	70 U	76 U	78 U	75 U	68 U	73 U
4-Chloro-3-Methylphenol	NS	NS	ug/kg	190 U	180 U	190 U	170 U	190 U	190 U	190 U	170 U	180 U
4-Chlorophenyl phenyl ether	NS	NS	ug/kg	74 U	72 U	75 U	70 U	76 U	78 U	75 U	68 U	73 U
4-Nitroaniline	NS	NS	ug/kg	190 U	180 U	190 U	170 U	190 U	190 U	190 U	170 U	180 U
4-Nitrophenol	NS	NS	ug/kg	370 U	360 U	380 U	350 U	380 U	390 UJ	380 U	340 U	360 U
Acenaphthene	100000	98000	ug/kg	37 U	36 U	38 U	35 U	38 U	39 U	38 U	34 U	36 U
Acenaphthylene	100000	107000	ug/kg	37 U	36 U	38 U	35 U	38 U	39 U	38 U	34 U	36 U
Acetophenone	NS	NS	ug/kg	190 U	180 U	190 U	170 U	190 U	190 U	190 U	170 U	180 U
Anthracene	100000	1000000	ug/kg	37 U	36 U	38 U	35 U	38 U	39 U	38 U	34 U	36 U
Atrazine	NS	NS	ug/kg	74 U	72 U	75 U	70 U	76 U	78 U	75 U	68 U	73 U
Benzaldehyde	NS	NS	ug/kg	190 U	38.9 J	190 U	170 U	190 U	190 U	190 U	170 U	180 U
Benzo(a)anthracene	1000	1000	ug/kg	37 U	36 U	38 U	35 U	38 UJ	39 U	38 U	34 U	36 U
Benzo(a)pyrene	1000	22000	ug/kg	37 U	36 U	38 U	35 U	38 UJ	39 U	38 U	34 U	36 U
Benzo(b)fluoranthene	1000	1700	ug/kg	37 U	36 U	38 U	35 U	38 UJ	39 U	38 U	34 U	36 U
Benzo(g,h,i)perylene	100000	1000000	ug/kg	37 U	36 U	38 U	35 U	38 UJ	39 U	38 U	34 U	36 U
Benzo(k)fluoranthene	3900	1700	ug/kg	37 U	36 U	38 U	35 U	38 UJ	39 U	38 U	34 U	36 U
bis(2-Chloroethoxy)methane	NS	NS	ug/kg	74 U	72 U	75 U	70 U	76 U	78 U	75 U	68 U	73 U
bis(2-Chloroethyl)ether	NS	NS	ug/kg	74 U	72 U	75 U	70 U	76 U	78 U	75 U	68 U	73 U
bis(2-Ethylhexyl)phthalate	NS	NS	ug/kg	74 U	72 U	75 U	70 U	76 UJ	78 U	75 U	68 U	73 U
Butyl benzyl phthalate	NS	NS	ug/kg	74 U	72 U	75 U	70 U	76 UJ	78 U	75 U	68 U	73 U
Caprolactam	NS	NS	ug/kg	74 U	72 U	75 U	70 U	76 U	78 U	75 U	68 U	73 U
Carbazole	NS	NS	ug/kg	74 U	72 U	75 U	70 U	76 U	78 U	75 U	68 U	73 U
Chrysene	3900	1000	ug/kg	37 U	36 U	38 U	35 U	38 UJ	39 U	38 U	34 U	36 U
Dibenzo(a,h)anthracene	330	1000000	ug/kg	37 U	36 U	38 U	35 U	38 UJ	39 U	38 U	34 U	36 U
Dibenzofuran	NS	NS	ug/kg	74 U	72 U	75 U	70 U	76 U	78 U	75 U	68 U	73 U
Diethyl phthalate	NS	NS	ug/kg	74 U	72 U	75 U	70 U	76 U	78 U	75 U	68 U	73 U
Dimethyl phthalate	NS	NS	ug/kg	74 U	72 U	75 U	70 U	76 U	78 U	75 U	68 U	73 U
Di-n-butyl phthalate	NS	NS	ug/kg	74 U	72 U	75 U	70 U	76 U	78 U	75 U	68 U	73 U
Di-n-octyl phthalate	NS	NS	ug/kg	74 U	72 U	75 U	70 U	76 UJ	78 U	75 U	68 U	73 U
Fluoranthene	100000	1000000	ug/kg	37 U	36 U	38 U	35 U	38 U	39 U	38 U	34 U	36 U
Fluorene	100000	386000	ug/kg	37 U	36 U	38 U	35 U	38 U	39 U	38 U	34 U	36 U
Hexachloro-1,3-butadiene	NS	NS	ug/kg	37 U	36 U	38 U	35 U	38 U	39 U	38 U	34 U	36 U
Hexachlorobenzene	NS	NS	ug/kg	74 U	72 U	75 U	70 U	76 U	78 U	75 U	68 U	73 U
Hexachlorocyclopentadiene	NS	NS	ug/kg	370 U	360 U	380 U	350 U	380 U	390 UJ	380 U	340 U	360 U
See Notes on Last Page												

Table 11. Confirmatory Soil Sample Results Area C
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Sample ID	TABLE 375-6: RESTRIC. RES. USE SCO	TABLE 375-6: PROTECTION OF GW SCO	Units	PE-C-S7 11/17/2015 1.5-2	PE-C-S8 11/17/2015 1.5-2	PE-C-S9 11/17/2015 1.5-2	PE-C-S10 11/18/2015 1.5-2	PE-C-S11 11/19/2015 1.5-2	PE-C-S12 11/5/2015 1-1.5	PE-C-S12 12/17/2015 1.5-2	PE-C-S13 12/17/2015 1.5-2	PE-C-S14 12/21/2015 1.5-2
Sample Date												
Sample Depth												
SVOCs cont.												
Hexachloroethane	NS	NS	ug/kg	190 U	180 U	190 U	170 U	190 U	190 U	190 U	170 U	180 U
Indeno(1,2,3-cd)pyrene	500	8200	ug/kg	37 U	36 U	38 U	35 U	38 UJ	39 U	38 U	34 U	36 U
Isophorone	NS	NS	ug/kg	74 U	72 U	75 U	70 U	76 U	78 U	75 U	68 U	73 U
Naphthalene	100000	12000	ug/kg	37 U	36 U	38 U	35 U	38 U	39 U	38 U	34 U	36 U
Nitrobenzene	NS	NS	ug/kg	74 U	72 U	75 U	70 U	76 U	78 U	75 U	68 U	73 U
n-Nitrosodi-n-propylamine	NS	NS	ug/kg	74 U	72 U	75 U	70 U	76 U	78 U	75 U	68 U	73 U
N-nitrosodiphenylamine	NS	NS	ug/kg	190 U	180 U	190 U	170 U	190 U	190 U	190 U	170 U	180 U
p-Chloroaniline	NS	NS	ug/kg	190 U	180 U	190 U	170 U	190 U	190 U	190 U	170 U	180 U
Pentachlorophenol	6700	800	ug/kg	190 U	180 U	190 U	170 U	190 UJ	190 UJ	190 U	170 U	180 U
Phenanthrene	100000	1000000	ug/kg	37 U	36 U	38 U	35 U	38 U	39 U	38 U	34 U	36 U
Phenol	100000	330	ug/kg	74 U	72 U	75 U	70 U	76 U	78 U	75 U	68 U	73 U
Pyrene	100000	1000000	ug/kg	37 U	36 U	38 U	35 U	38 UJ	39 U	38 U	34 U	36 U
PCBs												
Aroclor 1016	1000	3200	ug/kg	36 U	35 U	38 U	36 U	37 U	38 U	39 U	35 U	34 U
Aroclor 1221	1000	3200	ug/kg	36 U	35 U	38 U	36 U	37 U	38 U	39 U	35 U	34 U
Aroclor 1232	1000	3200	ug/kg	36 U	35 U	38 U	36 U	37 U	38 U	39 U	35 U	34 U
Aroclor 1242	1000	3200	ug/kg	36 U	35 U	38 U	36 U	37 U	38 U	39 U	35 U	34 U
Aroclor 1248	1000	3200	ug/kg	36 U	35 U	38 U	36 U	37 U	38 U	39 U	35 U	34 U
Aroclor 1254	1000	3200	ug/kg	36 U	35 U	38 U	36 U	37 U	38 U	39 U	35 U	34 U
Aroclor 1260	1000	3200	ug/kg	36 U	35 U	38 U	36 U	37 U	38 U	39 U	35 U	34 U
Aroclor 1262	1000	3200	ug/kg	36 U	35 U	38 U	36 U	37 U	38 U	39 U	35 U	34 U
Aroclor 1268	1000	3200	ug/kg	36 U	35 U	38 U	36 U	37 U	38 U	39 U	35 U	34 U
Metals												
Aluminum	NS	NS	mg/kg	16900 J	17300 J	16300 J	18900 J	10300 J	16200 J	5260 J	7130 J	6760 J
Antimony	NS	NS	mg/kg	2.2 UJ	2.2 UJ	2.3 UJ	2.1 UJ	2.2 UJ	2.3 UJ	2.5 UB	2.1 UJ	2.2 UJ
Arsenic	16	16	mg/kg	3.6	3.9	3.4	4.3	3.3	5.4	3	3.2	2.3
Barium	400	820	mg/kg	37.9	37.1	37.6	43.3	29.1	38.5	39	31.8	33.2
Beryllium	72	47	mg/kg	0.62	0.57	0.61	0.67	0.44	0.46 J	0.31	0.42	0.44
Cadmium	4.3	7.5	mg/kg	0.066 B	0.099 B	0.091 B	0.22 B	0.55 UB	0.58 UB	0.66	0.2 B	0.1 B
Calcium	NS	NS	mg/kg	898	643	770	702	1260 J	963 J	2680	1710	2120
Chromium	NS	NS	mg/kg	17.9	18	17.5	22.1	14.2	18.9	11.6	14.5	15
Cobalt	NS	NS	mg/kg	6.6	5.5	6.2	7.6	6	8.7	4.9 B	7.1	7.3
Copper	270	1720	mg/kg	13.2	10.3	12.6	10.4	12.3	11.9	12.9 J	14.5 J	14.1 J
Iron	NS	NS	mg/kg	18300	19100	18200	20000	15100	22300	12100	16300	17300
Lead	400	450	mg/kg	9.2	12.1	8.7	10.6	17.6	10.4	114	6.5	11.4
Magnesium	NS	NS	mg/kg	2550	2480	2570	2710	2240	3850 J	2030	2810	2950
Manganese	2000	2000	mg/kg	155	173	148	173	296	269	215	368	378
Mercury	NS	NS	mg/kg	0.026 B	0.042	0.033 B	0.034	0.028 B	0.03 B	0.037 U	0.034 U	0.035 UB
Nickel	310	130	mg/kg	11.5	10.6	11.9	12.4	10.8	15.6	9.8	16	14.1
Potassium	NS	NS	mg/kg	721 B	641 B	710 B	701 B	751 B	757 B	809 J	1140 J	1050 J
Selenium	180	4	mg/kg	2.2 U	2.2 U	2.3 U	2.1 U	2.2 U	2.3 U	2.5 U	2.1 U	2.2 U
Silver	180	8.3	mg/kg	0.55 U	0.55 U	0.57 U	0.53 U	0.55 U	0.89	0.58 B	0.69	0.35 B
Sodium	NS	NS	mg/kg	93.1 B	75.4 B	92.8 B	70.8 B	1100 UB	91.3 B	110 B	94.1 B	167 B
Thallium	NS	NS	mg/kg	1.1 U	1.1 U	1.1 U	0.26 B	1.1 U	1.2 U	1.3 U	1.1 U	1.1 UB
Vanadium	NS	NS	mg/kg	30.8	31.8	28.7	35.6	25.2	26.5	16.6	21.2	27.5
Zinc	10000	2480	mg/kg	27	31.4	28.1	34.7	28.8	35.7	53.8	44.7	36.8
General Chemistry												
Percent Solids			%	89.5	90.2	86.6	89.6	87.7	85.5	83.1	93.4	90.9
Notes												
NS	No standard											
NA	Not analyzed											
J	Estimated result											
JN	Estimated result											
R	Rejected result											
UB	Analyte considered non-detect at the listed value due to associated blank contamination											
Bold	Result exceeds 375-6.8(b) protection of groundwater soil cleanup objective.											
Shade	Result exceeds 375-6.8(b) restricted residential use soil cleanup objective.											

Table 11. Confirmatory Soil Sample Results Area C
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Sample ID	TABLE 375-6: RESTRIC. RES. USE SCO	TABLE 375-6: PROTECTION OF GW SCO	Units	PE-C-S15 12/21/2015 1.5-2	PE-C-S16 12/21/2015 1.5-2	PE-C-S17 12/21/2015 1.5-2	PE-C-S18 12/21/2015 1.5-2	PE-C-S19 12/21/2015 1.5-2	PE-C-S20 12/21/2015 1.5-2
Sample Date									
Sample Depth									
VOCs									
1,1,1-Trichloroethane	100000	680	ug/kg	1.8 U	1.7 U	1.7 U	1.6 U	1.6 U	1.7 U
1,1,2,2-Tetrachloroethane	NS	NS	ug/kg	1.8 U	1.7 U	1.7 U	1.6 U	1.6 U	1.7 U
1,1,2-trichloro-1,2,2-trifluoroethane	NS	NS	ug/kg	4.5 U	4.2 U	4.2 U	3.9 U	4 U	4.3 U
1,1,2-Trichloroethane	NS	NS	ug/kg	1.8 U	1.7 U	1.7 U	1.6 U	1.6 U	1.7 U
1,1-Dichloroethane	26000	270	ug/kg	0.9 U	0.85 U	0.83 U	0.79 U	0.8 U	0.86 U
1,1-Dichloroethene	100000	330	ug/kg	0.9 U	0.85 U	0.83 U	0.79 U	0.8 U	0.86 U
1,2,4-Trichlorobenzene	NS	NS	ug/kg	4.5 U	4.2 U	4.2 U	3.9 U	4 U	4.3 U
1,2-Dibromo-3-chloropropane	NS	NS	ug/kg	1.8 U	1.7 U	1.7 U	1.6 U	1.6 U	1.7 U
1,2-Dibromoethane	NS	NS	ug/kg	0.9 U	0.85 U	0.83 U	0.79 U	0.8 U	0.86 U
1,2-Dichlorobenzene	100000	1100	ug/kg	0.9 U	0.85 U	0.83 U	0.79 U	0.8 U	0.86 U
1,2-Dichloroethane	3100	20	ug/kg	0.9 U	0.85 U	0.83 U	0.79 U	0.8 U	0.86 U
1,2-Dichloropropane	NS	NS	ug/kg	1.8 U	1.7 U	1.7 U	1.6 U	1.6 U	1.7 U
1,3-Dichlorobenzene	49000	2400	ug/kg	0.9 U	0.85 U	0.83 U	0.79 U	0.8 U	0.86 U
1,4-Dichlorobenzene	13000	1800	ug/kg	0.9 U	0.85 U	0.83 U	0.79 U	0.8 U	0.86 U
2-Butanone (MEK)	100000	120	ug/kg	9 U	8.5 U	8.3 U	7.9 U	8 U	8.6 U
4-Methyl-2-Pentanone	NS	NS	ug/kg	4.5 U	4.2 U	4.2 U	3.9 U	4 U	4.3 U
Acetone	100000	50	ug/kg	9 U	8.5 U	8.3 U	7.9 U	8 U	8.6 U
Benzene	4800	60	ug/kg	0.45 U	0.42 U	0.42 U	0.39 U	0.4 U	0.43 U
Bromodichloromethane	NS	NS	ug/kg	1.8 U	1.7 U	1.7 U	1.6 U	1.6 U	1.7 U
Bromoform	NS	NS	ug/kg	4.5 U	4.2 U	4.2 U	3.9 U	4 U	4.3 U
Bromomethane	NS	NS	ug/kg	4.5 U	4.2 U	4.2 U	3.9 U	4 U	4.3 U
Carbon Disulfide	NS	NS	ug/kg	1.8 U	1.7 U	1.7 U	1.6 U	1.6 U	1.7 U
Carbon Tetrachloride	2400	760	ug/kg	1.8 U	1.7 U	1.7 U	1.6 U	1.6 U	1.7 U
CFC-11	NS	NS	ug/kg	4.5 U	4.2 U	4.2 U	3.9 U	4 U	4.3 U
CFC-12	NS	NS	ug/kg	4.5 U	4.2 U	4.2 U	3.9 U	4 U	4.3 U
Chlorobenzene	100000	1100	ug/kg	1.8 U	1.7 U	1.7 U	1.6 U	1.6 U	1.7 U
Chlorodibromomethane	NS	NS	ug/kg	1.8 U	1.7 U	1.7 U	1.6 U	1.6 U	1.7 U
Chloroethane	NS	NS	ug/kg	4.5 U	4.2 U	4.2 U	3.9 U	4 U	4.3 U
Chloroform	49000	370	ug/kg	1.8 U	1.7 U	1.7 U	1.6 U	1.6 U	1.7 U
Chloromethane	NS	NS	ug/kg	4.5 U	4.2 U	4.2 U	3.9 U	4 U	4.3 U
cis-1,2-Dichloroethene	100000	250	ug/kg	0.9 U	0.85 U	0.83 U	0.79 U	0.8 U	0.86 U
cis-1,3-Dichloropropene	NS	NS	ug/kg	1.8 U	1.7 U	1.7 U	1.6 U	1.6 U	1.7 U
Cyclohexane	NS	NS	ug/kg	1.8 U	1.7 U	1.7 U	1.6 U	1.6 U	1.7 U
Dichloromethane	NS	NS	ug/kg	4.5 U	4.2 U	4.2 U	3.9 U	4 U	4.3 U
Ethylbenzene	41000	1000	ug/kg	0.27 J	0.85 U	0.83 U	0.79 U	0.8 U	0.86 U
Isopropylbenzene	NS	NS	ug/kg	1.8 U	1.7 U	1.7 U	1.6 U	1.6 U	1.7 U
Methyl Acetate	NS	NS	ug/kg	4.5 U	4.2 U	4.2 U	3.9 U	4 U	4.3 U
Methyl N-Butyl Ketone (2-Hexanone)	NS	NS	ug/kg	4.5 U	4.2 U	4.2 U	3.9 U	4 U	4.3 U
Methylcyclohexane	NS	NS	ug/kg	1.8 U	1.7 U	1.7 U	1.6 U	1.6 U	1.7 U
Methyl-tert-butylether	100000	930	ug/kg	0.9 U	0.85 U	0.83 U	0.79 U	0.8 U	0.86 U
Styrene (Monomer)	NS	NS	ug/kg	0.67 J	1.7 U	0.15 J	1.6 U	1.6 U	1.7 U
Tetrachloroethene	19000	1300	ug/kg	1.8 U	1.7 U	1.7 U	1.6 U	1.6 U	1.7 U
Toluene	100000	700	ug/kg	0.9 U	0.85 U	0.83 U	0.79 U	0.8 U	0.86 U
Total Xylenes	100000	1600	ug/kg	0.9 U	0.85 U	0.83 U	0.79 U	0.8 U	0.86 U
trans-1,2-Dichloroethene	100000	190	ug/kg	0.9 U	0.85 U	0.83 U	0.79 U	0.8 U	0.86 U
trans-1,3-Dichloropropene	NS	NS	ug/kg	1.8 U	1.7 U	1.7 U	1.6 U	1.6 U	1.7 U
Trichloroethene	21000	470	ug/kg	0.9 U	0.85 U	0.83 U	0.79 U	0.8 U	0.86 U
Vinyl chloride	900	20	ug/kg	1.8 U	1.7 U	1.7 U	1.6 U	1.6 U	1.7 U

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Table 11. Confirmatory Soil Sample Results Area C
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Sample ID	TABLE 375-6: RESTRIC. RES. USE SCO	TABLE 375-6: PROTECTION OF GW SCO	Units	PE-C-S15 12/21/2015 1.5-2	PE-C-S16 12/21/2015 1.5-2	PE-C-S17 12/21/2015 1.5-2	PE-C-S18 12/21/2015 1.5-2	PE-C-S19 12/21/2015 1.5-2	PE-C-S20 12/21/2015 1.5-2
Sample Date									
Sample Depth									
SVOCs									
1,1-Biphenyl	NS	NS	ug/kg	77 U	70 U	71 U	67 U	70 U	73 U
2,2-Oxybis(1-Chloropropane)	NS	NS	ug/kg	77 U	70 U	71 U	67 U	70 U	73 U
2,4,5-Trichlorophenol	NS	NS	ug/kg	190 U	170 U	180 U	170 U	170 U	180 U
2,4,6-Trichlorophenol	NS	NS	ug/kg	190 U	170 U	180 U	170 U	170 U	180 U
2,4-Dichlorophenol	NS	NS	ug/kg	190 U	170 U	180 U	170 U	170 U	180 U
2,4-Dimethylphenol	NS	NS	ug/kg	190 U	170 U	180 U	170 U	170 U	180 U
2,4-Dinitrophenol	NS	NS	ug/kg	190 U	170 U	180 U	170 U	170 U	180 U
2,4-Dinitrotoluene	NS	NS	ug/kg	39 U	35 U	35 U	33 U	35 U	37 U
2,6-Dinitrotoluene	NS	NS	ug/kg	39 U	35 U	35 U	33 U	35 U	37 U
2-Chloronaphthalene	NS	NS	ug/kg	77 U	70 U	71 U	67 U	70 U	73 U
2-Chlorophenol	NS	NS	ug/kg	77 U	70 U	71 U	67 U	70 U	73 U
2-Methyl-4,6-dinitrophenol	NS	NS	ug/kg	190 U	170 U	180 U	170 U	170 U	180 U
2-Methylnaphthalene	NS	NS	ug/kg	77 U	70 U	71 U	67 U	70 U	73 U
2-Methylphenol	NS	NS	ug/kg	77 U	70 U	71 U	67 U	70 U	73 U
2-Nitroaniline	NS	NS	ug/kg	190 U	170 U	180 U	170 U	170 U	180 U
2-Nitrophenol	NS	NS	ug/kg	190 U	170 U	180 U	170 U	170 U	180 U
3,3-Dichlorobenzidine	NS	NS	ug/kg	77 U	70 U	71 U	67 U	70 U	73 U
3-Methylphenol, 4-Methylphenol	NS	NS	ug/kg	77 U	70 U	71 U	67 U	70 U	73 U
3-Nitroaniline	NS	NS	ug/kg	190 U	170 U	180 U	170 U	170 U	180 U
4-Bromophenyl phenyl ether	NS	NS	ug/kg	77 U	70 U	71 U	67 U	70 U	73 U
4-Chloro-3-Methylphenol	NS	NS	ug/kg	190 U	170 U	180 U	170 U	170 U	180 U
4-Chlorophenyl phenyl ether	NS	NS	ug/kg	77 U	70 U	71 U	67 U	70 U	73 U
4-Nitroaniline	NS	NS	ug/kg	190 U	170 U	180 U	170 U	170 U	180 U
4-Nitrophenol	NS	NS	ug/kg	390 U	350 U	350 U	330 U	350 U	370 U
Acenaphthene	100000	98000	ug/kg	39 U	35 U	35 U	33 U	35 U	37 U
Acenaphthylene	100000	107000	ug/kg	39 U	35 U	35 U	33 U	35 U	37 U
Acetophenone	NS	NS	ug/kg	190 U	170 U	180 U	170 U	170 U	180 U
Anthracene	100000	1000000	ug/kg	39 U	35 U	35 U	33 U	35 U	37 U
Atrazine	NS	NS	ug/kg	77 U	70 U	71 U	67 U	70 U	73 U
Benzaldehyde	NS	NS	ug/kg	190 U	170 U	180 U	170 U	170 U	180 U
Benzo(a)anthracene	1000	1000	ug/kg	39 U	35 U	35 U	33 U	35 U	37 U
Benzo(a)pyrene	1000	22000	ug/kg	39 U	35 U	35 U	33 U	35 U	37 U
Benzo(b)fluoranthene	1000	1700	ug/kg	39 U	35 U	35 U	33 U	35 U	37 U
Benzo(g,h,i)perylene	100000	1000000	ug/kg	39 U	35 U	35 U	33 U	35 U	37 U
Benzo(k)fluoranthene	3900	1700	ug/kg	39 U	35 U	35 U	33 U	35 U	37 U
bis(2-Chloroethoxy)methane	NS	NS	ug/kg	77 U	70 U	71 U	67 U	70 U	73 U
bis(2-Chloroethyl)ether	NS	NS	ug/kg	77 U	70 U	71 U	67 U	70 U	73 U
bis(2-Ethylhexyl)phthalate	NS	NS	ug/kg	77 U	70 U	71 U	67 U	70 U	73 U
Butyl benzyl phthalate	NS	NS	ug/kg	77 U	70 U	71 U	67 U	70 U	73 U
Caprolactam	NS	NS	ug/kg	77 U	70 U	71 U	67 U	70 U	73 U
Carbazole	NS	NS	ug/kg	77 U	70 U	71 U	67 U	70 U	73 U
Chrysene	3900	1000	ug/kg	39 U	35 U	35 U	33 U	35 U	37 U
Dibenzo(a,h)anthracene	330	1000000	ug/kg	39 U	35 U	35 U	33 U	35 U	37 U
Dibenzofuran	NS	NS	ug/kg	77 U	70 U	71 U	67 U	70 U	73 U
Diethyl phthalate	NS	NS	ug/kg	77 U	70 U	71 U	67 U	70 U	73 U
Dimethyl phthalate	NS	NS	ug/kg	77 U	70 U	71 U	67 U	70 U	73 U
Di-n-butyl phthalate	NS	NS	ug/kg	77 U	70 U	71 U	67 U	70 U	73 U
Di-n-octyl phthalate	NS	NS	ug/kg	77 U	70 U	71 U	67 U	70 U	73 U
Fluoranthene	100000	1000000	ug/kg	39 U	35 U	35 U	33 U	35 U	37 U
Fluorene	100000	386000	ug/kg	39 U	35 U	35 U	33 U	35 U	37 U
Hexachloro-1,3-butadiene	NS	NS	ug/kg	39 U	35 U	35 U	33 U	35 U	37 U
Hexachlorobenzene	NS	NS	ug/kg	77 U	70 U	71 U	67 U	70 U	73 U
Hexachlorocyclopentadiene	NS	NS	ug/kg	390 U	350 U	350 U	330 U	350 U	370 U

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Table 11. Confirmatory Soil Sample Results Area C
Ramapo Paint Sludge Site - Operable Unit 2
Rockalnd County, New York



Sample ID	TABLE 375-6: RESTRIC. RES. USE SCO	TABLE 375-6: PROTECTION OF GW SCO	Units	PE-C-S15 12/21/2015 1.5-2	PE-C-S16 12/21/2015 1.5-2	PE-C-S17 12/21/2015 1.5-2	PE-C-S18 12/21/2015 1.5-2	PE-C-S19 12/21/2015 1.5-2	PE-C-S20 12/21/2015 1.5-2
Sample Date									
Sample Depth									
SVOCs cont.									
Hexachloroethane	NS	NS	ug/kg	190 U	170 U	180 U	170 U	170 U	180 U
Indeno(1,2,3-cd)pyrene	500	8200	ug/kg	39 U	35 U	35 U	33 U	35 U	37 U
Isophorone	NS	NS	ug/kg	77 U	70 U	71 U	67 U	70 U	73 U
Naphthalene	100000	12000	ug/kg	39 U	35 U	35 U	33 U	35 U	37 U
Nitrobenzene	NS	NS	ug/kg	77 U	70 U	71 U	67 U	70 U	73 U
n-Nitrosodi-n-propylamine	NS	NS	ug/kg	77 U	70 U	71 U	67 U	70 U	73 U
N-nitrosodiphenylamine	NS	NS	ug/kg	190 U	170 U	180 U	170 U	170 U	180 U
p-Chloroaniline	NS	NS	ug/kg	190 U	170 U	180 U	170 U	170 U	180 U
Pentachlorophenol	6700	800	ug/kg	190 U	170 U	180 U	170 U	170 U	180 U
Phenanthrene	100000	1000000	ug/kg	39 U	35 U	35 U	33 U	35 U	37 U
Phenol	100000	330	ug/kg	77 U	70 U	71 U	67 U	70 U	73 U
Pyrene	100000	1000000	ug/kg	39 U	35 U	35 U	33 U	35 U	37 U
PCBs									
Aroclor 1016	1000	3200	ug/kg	36 U	35 U	36 U	36 U	35 U	37 U
Aroclor 1221	1000	3200	ug/kg	36 U	35 U	36 U	36 U	35 U	37 U
Aroclor 1232	1000	3200	ug/kg	36 U	35 U	36 U	36 U	35 U	37 U
Aroclor 1242	1000	3200	ug/kg	36 U	35 U	36 U	36 U	35 U	37 U
Aroclor 1248	1000	3200	ug/kg	36 U	35 U	36 U	36 U	35 U	37 U
Aroclor 1254	1000	3200	ug/kg	36 U	35 U	36 U	36 U	35 U	37 U
Aroclor 1260	1000	3200	ug/kg	36 U	35 U	36 U	36 U	35 U	37 U
Aroclor 1262	1000	3200	ug/kg	36 U	35 U	36 U	36 U	35 U	37 U
Aroclor 1268	1000	3200	ug/kg	36 U	35 U	36 U	36 U	35 U	37 U
Metals									
Aluminum	NS	NS	mg/kg	6840 J	12300 J	8170 J	6980 J	6610 J	7450 J
Antimony	NS	NS	mg/kg	2.4 UJ	11 UJ	2.3 UJ	2.2 UJ	2.1 UJ	2.3 UJ
Arsenic	16	16	mg/kg	2.4	2.3	2.2 B	2.1 B	2.4	2.3
Barium	400	820	mg/kg	26.3	80.8	39.5	35.2	167	46.5
Beryllium	72	47	mg/kg	0.46	1.3	0.59	0.5	0.51	0.45
Cadmium	4.3	7.5	mg/kg	0.59 U	0.11 B	0.58 U	0.075 B	0.29 B	0.16 B
Calcium	NS	NS	mg/kg	2780	4210	2980	2700	3670	3110
Chromium	NS	NS	mg/kg	14	36.7	14.5	14.6	13.1	16.9
Cobalt	NS	NS	mg/kg	6.1	13.4 B	8.5	7.5	7	7.7
Copper	270	1720	mg/kg	11.5 J	41.2 J	12.9 J	15.4 J	18.8 J	23.4 J
Iron	NS	NS	mg/kg	15400	36300	17400	16800	16300	19400
Lead	400	450	mg/kg	4.7	4.2	4.7	9.3	57.7	30.2
Magnesium	NS	NS	mg/kg	2580	5560	3290	3150	3050	3640
Manganese	2000	2000	mg/kg	265	413	337	301	229	245
Mercury	NS	NS	mg/kg	0.038 UB	0.034 UB	0.036 UB	0.034 UB	0.033 UB	0.034 UB
Nickel	310	130	mg/kg	10.8	27.5	12	11.5	10.1	12
Potassium	NS	NS	mg/kg	950 J	3960 J	1310 J	1060 J	1490 J	1470 J
Selenium	180	4	mg/kg	2.4 U	2.2 U	2.3 U	2.2 U	2.1 U	2.3 U
Silver	180	8.3	mg/kg	0.39 B	1.5 B	0.43 B	0.29 B	0.25 B	0.57 U
Sodium	NS	NS	mg/kg	187 B	226 B	216 B	191 B	232 B	180 B
Thallium	NS	NS	mg/kg	1.2 UB	2.1 B	1.2 UB	1.1 UB	1 UB	1.1 UB
Vanadium	NS	NS	mg/kg	25.5	52.7	26.2	25.4	25.8	28.3
Zinc	10000	2480	mg/kg	25.7	41	26.8	29.2	51.3	36.1
General Chemistry									
Percent Solids			%	81.9	92.4	88.1	91.8	91.8	89
Notes									
NS	No standard								
NA	Not analyzed								
J	Estimated result								
JN	Estimated result								
R	Rejected result								
UB	Analyte considered non-detect at the listed value due to associated blank contamination								
Bold	Result exceeds 375-6.8(b) protection of groundwater soil cleanup objective.								
Shade	Result exceeds 375-6.8(b) restricted residential use soil cleanup objective.								

Table 12. Confirmatory Soil Sample Results Area D
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Sample ID	TABLE 375-6: RESTRIC. RES. USE SCO	TABLE 375-6: PROTECTION OF GW SCO		PE-D-B2 1/21/2016	PE-D-B3 1/21/2016	PE-D-C1 1/21/2016	PE-D-C2 1/21/2016	PE-D-C3 1/21/2016	PE-D-C4 1/20/2016	PE-D-D1 1/21/2016	PE-D-D2 3/4/2016	PE-D-D3 3/4/2016	PE-D-D4 1/20/2016	PE-D-D5 1/20/2016	PE-D-D6 1/20/2016
Sample Date															
Sample Depth			Units	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	4-4.5	2-2.5	2-2.5
VOCs															
1,1,1-Trichloroethane	100000	680	ug/kg	2.6 U	2.5 U	2.1 U	2.3 U	2.4 U	2.6 U	2.3 U	2 U	1.9 U	2 U	1.9 U	2.4 U
1,1,2,2-Tetrachloroethane	NS	NS	ug/kg	2.6 U	2.5 U	2.1 U	2.3 U	2.4 U	2.6 U	2.3 U	2 U	1.9 U	2 U	1.9 U	2.4 U
1,1,2-trichloro-1,2,2-trifluoroethane	NS	NS	ug/kg	6.4 U	6.3 U	5.3 U	5.7 U	6 U	6.4 U	5.6 U	4.9 U	4.8 U	5.1 U	4.8 U	6 U
1,1,2-Trichloroethane	NS	NS	ug/kg	2.6 U	2.5 U	2.1 U	2.3 U	2.4 U	2.6 U	2.3 U	2 U	1.9 U	2 U	1.9 U	2.4 U
1,1-Dichloroethane	26000	270	ug/kg	1.3 U	1.3 U	1.1 U	1.1 U	1.2 U	1.3 U	1.1 U	0.98 U	0.96 U	1 U	0.95 U	1.2 U
1,1-Dichloroethene	100000	330	ug/kg	1.3 U	1.3 U	1.1 U	1.1 U	1.2 U	1.3 U	1.1 U	0.98 U	0.96 U	1 U	0.95 U	1.2 U
1,2,4-Trichlorobenzene	NS	NS	ug/kg	6.4 U	6.3 U	5.3 U	5.7 U	6 U	6.4 U	5.6 U	4.9 U	4.8 U	5.1 U	4.8 U	6 U
1,2-Dibromo-3-chloropropane	NS	NS	ug/kg	2.6 U	2.5 U	2.1 U	2.3 U	2.4 U	2.6 U	2.3 U	2 U	1.9 U	2 U	1.9 U	2.4 U
1,2-Dibromoethane	NS	NS	ug/kg	1.3 U	1.3 U	1.1 U	1.1 U	1.2 U	1.3 U	1.1 U	0.98 U	0.96 U	1 U	0.95 U	1.2 U
1,2-Dichlorobenzene	100000	1100	ug/kg	1.3 U	1.3 U	1.1 U	1.1 U	1.2 U	1.3 U	1.1 U	0.98 U	0.96 U	1 U	0.95 U	1.2 U
1,2-Dichloroethane	3100	20	ug/kg	1.3 U	1.3 U	1.1 U	1.1 U	1.2 U	1.3 U	1.1 U	0.98 U	0.96 U	1 U	0.95 U	1.2 U
1,2-Dichloropropane	NS	NS	ug/kg	2.6 U	2.5 U	2.1 U	2.3 U	2.4 U	2.6 U	2.3 U	2 U	1.9 U	2 U	1.9 U	2.4 U
1,3-Dichlorobenzene	49000	2400	ug/kg	1.3 U	1.3 U	1.1 U	1.1 U	1.2 U	1.3 U	1.1 U	0.98 U	0.96 U	1 U	0.95 U	1.2 U
1,4-Dichlorobenzene	13000	1800	ug/kg	1.3 U	1.3 U	1.1 U	1.1 U	1.2 U	1.3 U	1.1 U	0.98 U	0.96 U	1 U	0.95 U	1.2 U
2-Butanone (MEK)	100000	120	ug/kg	13 U	13 U	19.9	4.3 J	12 U	13 U	11 U	9.8 U	9.6 U	2.3 J	9.5 U	5.4 J
4-Methyl-2-Pentanone	NS	NS	ug/kg	6.4 U	6.3 U	5.3 U	5.7 U	6 U	6.4 U	5.6 U	4.9 U	4.8 U	5.1 U	4.8 U	6 U
Acetone	100000	50	ug/kg	105	357 JD	736	148	161	22.9	11 U	13.8	9.6 U	114	13.2	66.6
Benzene	4800	60	ug/kg	0.64 U	0.63 U	0.53 U	0.57 U	0.6 U	0.64 U	0.56 U	0.49 U	0.48 U	0.51 U	0.48 U	0.6 U
Bromodichloromethane	NS	NS	ug/kg	2.6 U	2.5 U	2.1 U	2.3 U	2.4 U	2.6 U	2.3 U	2 U	1.9 U	2 U	1.9 U	2.4 U
Bromoform	NS	NS	ug/kg	6.4 U	6.3 U	5.3 U	5.7 U	6 U	6.4 U	5.6 U	4.9 U	4.8 U	5.1 U	4.8 U	6 U
Bromomethane	NS	NS	ug/kg	6.4 U	6.3 U	5.3 U	5.7 U	6 U	6.4 U	5.6 U	4.9 U	4.8 U	5.1 U	4.8 U	6 U
Carbon Disulfide	NS	NS	ug/kg	2.6 U	2.5 U	2.1 U	2.3 U	2.4 U	2.6 U	2.3 U	2 U	1.9 U	2 U	1.9 U	2.4 U
Carbon Tetrachloride	2400	760	ug/kg	2.6 U	2.5 U	2.1 U	2.3 U	2.4 U	2.6 U	2.3 U	2 U	1.9 U	2 U	1.9 U	2.4 U
CFC-11	NS	NS	ug/kg	6.4 U	6.3 U	5.3 U	5.7 U	6 U	6.4 U	5.6 U	4.9 U	4.8 U	5.1 U	4.8 U	6 U
CFC-12	NS	NS	ug/kg	6.4 U	6.3 U	5.3 U	5.7 U	6 U	6.4 U	5.6 U	4.9 U	4.8 U	5.1 U	4.8 U	6 U
Chlorobenzene	100000	1100	ug/kg	2.6 U	2.5 U	2.1 U	2.3 U	2.4 U	2.6 U	2.3 U	2 U	1.9 U	2 U	1.9 U	2.4 U
Chlorodibromomethane	NS	NS	ug/kg	2.6 U	2.5 U	2.1 U	2.3 U	2.4 U	2.6 U	2.3 U	2 U	1.9 U	2 U	1.9 U	2.4 U
Chloroethane	NS	NS	ug/kg	6.4 U	6.3 U	5.3 U	5.7 U	6 U	6.4 U	5.6 U	4.9 U	4.8 U	5.1 U	4.8 U	6 U
Chloroform	49000	370	ug/kg	2.6 U	2.5 U	2.1 U	2.3 U	2.4 U	2.6 U	2.3 U	2 U	1.9 U	2 U	1.9 U	2.4 U
Chloromethane	NS	NS	ug/kg	6.4 U	6.3 U	5.3 U	5.7 U	6 U	6.4 U	5.6 U	4.9 U	4.8 U	5.1 U	4.8 U	6 U
cis-1,2-Dichloroethene	100000	250	ug/kg	1.3 U	1.3 U	1.1 U	1.1 U	1.2 U	1.3 U	1.1 U	0.98 U	0.96 U	1 U	0.95 U	1.2 U
cis-1,3-Dichloropropene	NS	NS	ug/kg	2.6 U	2.5 U	2.1 U	2.3 U	2.4 U	2.6 U	2.3 U	2 U	1.9 U	2 U	1.9 U	2.4 U
Cyclohexane	NS	NS	ug/kg	2.6 U	2.5 U	2.1 U	2.3 U	2.4 U	2.6 U	2.3 U	2 U	1.9 U	2 U	1.9 U	2.4 U
Dichloromethane	NS	NS	ug/kg	6.4 U	6.3 U	5.3 U	5.7 U	6 U	6.4 U	5.6 U	4.9 U	4.8 U	5.1 U	4.8 U	6 U
Ethylbenzene	41000	1000	ug/kg	1.3 U	1.3 U	1.1 U	0.33 J	1.2 U	1.3 U	1.1 U	1	0.96 U	1 U	0.95 U	0.26 J
Isopropylbenzene	NS	NS	ug/kg	2.6 U	2.5 U	2.1 U	2.3 U	2.4 U	2.6 U	2.3 U	2 U	1.9 U	2 U	1.9 U	2.4 U
Methyl Acetate	NS	NS	ug/kg	6.4 U	6.3 U	5.3 U	5.7 U	6 U	6.4 U	5.6 U	4.9 U	4.8 U	5.1 U	4.8 U	6 U
Methyl N-Butyl Ketone (2-Hexanone)	NS	NS	ug/kg	6.4 U	6.3 U	5.3 U	5.7 U	6 U	6.4 U	5.6 U	4.9 U	4.8 U	5.1 U	4.8 U	6 U
Methylcyclohexane	NS	NS	ug/kg	2.6 U	2.5 U	2.1 U	2.3 U	2.4 U	2.6 U	2.3 U	0.83 J	1.9 U	2 U	1.9 U	2.4 U
Methyl-tert-butylether	100000	930	ug/kg	1.3 U	1.3 U	1.1 U	1.1 U	1.2 U	1.3 U	1.1 U	0.98 U	0.96 U	1 U	0.95 U	1.2 U
Styrene (Monomer)	NS	NS	ug/kg	2.6 U	2.5 U	2.1 U	1.9 J	0.44 J	2.6 U	2.3 U	2 U	1.9 U	2 U	1.9 U	1.4 J
Tetrachloroethene	19000	1300	ug/kg	2.6 U	2.5 U	2.1 U	2.3 U	2.4 U	2.6 U	2.3 U	2 U	1.9 U	2 U	1.9 U	2.4 U
Toluene	100000	700	ug/kg	1.3 U	1.3 U	1.1 U	1.1 U	1.2 U	1.3 U	1.1 U	0.29 J	0.96 U	1 U	0.95 U	1.2 U
Total Xylenes	100000	1600	ug/kg	1.3 U	1.3 U	1.1 U	1.1 U	1.2 U	1.3 U	1.1 U	4.2	0.96 U	1 U	0.95 U	1.2 U
trans-1,2-Dichloroethene	100000	190	ug/kg	1.3 U	1.3 U	1.1 U	1.1 U	1.2 U	1.3 U	1.1 U	0.98 U	0.96 U	1 U	0.95 U	1.2 U
trans-1,3-Dichloropropene	NS	NS	ug/kg	2.6 U	2.5 U	2.1 U	2.3 U	2.4 U	2.6 U	2.3 U	2 U	1.9 U	2 U	1.9 U	2.4 U
Trichloroethene	21000	470	ug/kg	1.3 U	1.3 U	1.1 U	1.1 U	1.2 U	1.3 U	1.1 U	0.98 U	0.96 U	1 U	0.95 U	1.2 U
Vinyl chloride	900	20	ug/kg	2.6 U	2.5 U	2.1 U	2.3 U	2.4 U	2.6 U	2.3 U	2 U	1.9 U	2 U	1.9 U	2.4 U

See Notes on Last Page

Table 12. Confirmatory Soil Sample Results Area D
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Sample ID Sample Date Sample Depth	TABLE 375-6: RESTRIC. RES. USE SCO	TABLE 375-6: PROTECTION OF GW SCO		PE-D-B2 1/21/2016 2-2.5	PE-D-B3 1/21/2016 2-2.5	PE-D-C1 1/21/2016 2-2.5	PE-D-C2 1/21/2016 2-2.5	PE-D-C3 1/21/2016 2-2.5	PE-D-C4 1/20/2016 2-2.5	PE-D-D1 1/21/2016 2-2.5	PE-D-D2 3/4/2016 2-2.5	PE-D-D3 3/4/2016 2-2.5	PE-D-D4 1/20/2016 4-4.5	PE-D-D5 1/20/2016 2-2.5	PE-D-D6 1/20/2016 2-2.5
SVOCs															
1,1-Biphenyl	NS	NS	ug/kg	68 U	79 U	67 U	72 U	71 U	84 U	78 U	73 U	72 U	77 U	71 U	75 U
2,2-Oxybis(1-Chloropropane)	NS	NS	ug/kg	68 U	79 U	67 U	72 U	71 U	84 U	78 U	73 U	72 U	77 U	71 U	75 U
2,4,5-Trichlorophenol	NS	NS	ug/kg	170 U	200 U	170 U	180 U	180 U	210 U	200 U	180 U	180 U	190 U	180 U	190 U
2,4,6-Trichlorophenol	NS	NS	ug/kg	170 U	200 U	170 U	180 U	180 U	210 U	200 U	180 U	180 U	190 U	180 U	190 U
2,4-Dichlorophenol	NS	NS	ug/kg	170 U	200 U	170 U	180 U	180 U	210 U	200 U	180 U	180 U	190 U	180 U	190 U
2,4-Dimethylphenol	NS	NS	ug/kg	170 U	200 U	170 U	180 U	180 U	210 U	200 U	180 U	180 U	190 U	180 U	190 U
2,4-Dinitrophenol	NS	NS	ug/kg	170 U	200 U	170 U	180 U	180 U	210 U	200 U	180 U	180 U	190 U	180 U	190 U
2,4-Dinitrotoluene	NS	NS	ug/kg	34 U	40 U	33 U	36 U	35 U	42 U	39 U	36 U	36 U	38 U	36 U	38 U
2,6-Dinitrotoluene	NS	NS	ug/kg	34 U	40 U	33 U	36 U	35 U	42 U	39 U	36 U	36 U	38 U	36 U	38 U
2-Chloronaphthalene	NS	NS	ug/kg	68 U	79 U	67 U	72 U	71 U	84 U	78 U	73 U	72 U	77 U	71 U	75 U
2-Chlorophenol	NS	NS	ug/kg	68 U	79 U	67 U	72 U	71 U	84 U	78 U	73 U	72 U	77 U	71 U	75 U
2-Methyl-4,6-dinitrophenol	NS	NS	ug/kg	170 U	200 U	170 U	180 U	180 U	210 U	200 U	180 U	180 U	190 U	180 U	190 U
2-Methylnaphthalene	NS	NS	ug/kg	68 U	79 U	67 U	72 U	71 U	84 U	78 U	73 U	72 U	77 U	71 U	75 U
2-Methylphenol	NS	NS	ug/kg	68 U	79 U	67 U	72 U	71 U	84 U	78 U	73 U	72 U	77 U	71 U	75 U
2-Nitroaniline	NS	NS	ug/kg	170 U	200 U	170 U	180 U	180 U	210 U	200 U	180 U	180 U	190 U	180 U	190 U
2-Nitrophenol	NS	NS	ug/kg	170 U	200 U	170 U	180 U	180 U	210 U	200 U	180 U	180 U	190 U	180 U	190 U
3,3-Dichlorobenzidine	NS	NS	ug/kg	R	79 U	67 U	72 U	71 U	84 U	78 U	73 U	72 U	77 U	71 U	75 U
3-Methylphenol, 4-Methylphenol	NS	NS	ug/kg	68 U	79 U	67 U	72 U	71 U	84 U	78 U	73 U	72 U	77 U	71 U	75 U
3-Nitroaniline	NS	NS	ug/kg	R	200 U	170 U	180 U	180 U	210 U	200 U	180 U	180 U	190 U	180 U	190 U
4-Bromophenyl phenyl ether	NS	NS	ug/kg	68 U	79 U	67 U	72 U	71 U	84 U	78 U	73 U	72 U	77 U	71 U	75 U
4-Chloro-3-Methylphenol	NS	NS	ug/kg	170 U	200 U	170 U	180 U	180 U	210 U	200 U	180 U	180 U	190 U	180 U	190 U
4-Chlorophenyl phenyl ether	NS	NS	ug/kg	68 U	79 U	67 U	72 U	71 U	84 U	78 U	73 U	72 U	77 U	71 U	75 U
4-Nitroaniline	NS	NS	ug/kg	R	200 U	170 U	180 U	180 U	210 U	200 U	180 U	180 U	190 U	180 U	190 U
4-Nitrophenol	NS	NS	ug/kg	340 U	400 U	330 U	360 U	350 U	420 U	390 U	360 U	360 U	380 U	360 U	380 U
Acenaphthene	100000	98000	ug/kg	34 U	40 U	33 U	36 U	35 U	42 U	39 U	36 U	36 U	38 U	36 U	38 U
Acenaphthylene	100000	107000	ug/kg	34 U	40 U	33 U	36 U	35 U	42 U	39 U	36 U	36 U	38 U	36 U	38 U
Acetophenone	NS	NS	ug/kg	170 U	200 U	170 U	180 U	180 U	210 U	200 U	180 U	180 U	190 U	180 U	190 U
Anthracene	100000	1000000	ug/kg	34 U	40 U	33 U	36 U	35 U	42 U	39 U	36 U	36 U	38 U	36 U	38 U
Atrazine	NS	NS	ug/kg	68 U	79 U	67 U	72 U	71 U	84 U	78 U	73 U	72 U	77 U	71 U	75 U
Benzaldehyde	NS	NS	ug/kg	34.7 J	200 U	170 U	180 U	180 U	210 U	200 U	180 U	180 U	190 U	180 U	190 U
Benzo(a)anthracene	1000	1000	ug/kg	15.3 J	40 U	33 U	36 U	35 U	42 U	39 U	36 U	36 U	38 U	36 U	38 U
Benzo(a)pyrene	1000	22000	ug/kg	13.8 J	40 U	33 U	36 U	35 U	42 U	39 U	36 U	36 U	38 U	36 U	38 U
Benzo(b)fluoranthene	1000	1700	ug/kg	24.8 J	40 U	33 U	36 U	35 U	42 U	39 U	36 U	36 U	38 U	36 U	38 U
Benzo(g,h,i)perylene	100000	1000000	ug/kg	34 U	40 U	33 U	36 U	35 U	42 U	39 U	36 U	36 U	38 U	36 U	38 U
Benzo(k)fluoranthene	3900	1700	ug/kg	34 U	40 U	33 U	36 U	35 U	42 U	39 U	36 U	36 U	38 U	36 U	38 U
bis(2-Chloroethoxy)methane	NS	NS	ug/kg	68 U	79 U	67 U	72 U	71 U	84 U	78 U	73 U	72 U	77 U	71 U	75 U
bis(2-Chloroethyl)ether	NS	NS	ug/kg	68 U	79 U	67 U	72 U	71 U	84 U	78 U	73 U	72 U	77 U	71 U	75 U
bis(2-Ethylhexyl)phthalate	NS	NS	ug/kg	65.2 J	79 U	67 U	72 U	71 U	84 U	78 U	73 U	72 U	77 U	71 U	75 U
Butyl benzyl phthalate	NS	NS	ug/kg	68 U	79 U	67 U	72 U	71 U	84 U	78 U	73 U	72 U	77 U	71 U	75 U
Caprolactam	NS	NS	ug/kg	68 U	79 U	67 U	72 U	71 U	84 U	78 U	73 U	72 U	77 U	71 U	75 U
Carbazole	NS	NS	ug/kg	68 U	79 U	67 U	72 U	71 U	84 U	78 U	73 U	72 U	77 U	71 U	75 U
Chrysene	3900	1000	ug/kg	20.8 J	40 U	33 U	36 U	35 U	42 U	39 U	36 U	36 U	38 U	36 U	38 U
Dibenzo(a,h)anthracene	330	1000000	ug/kg	34 U	40 U	33 U	36 U	35 U	42 U	39 U	36 U	36 U	38 U	36 U	38 U
Dibenzofuran	NS	NS	ug/kg	68 U	79 U	67 U	72 U	71 U	84 U	78 U	73 U	72 U	77 U	71 U	75 U
Diethyl phthalate	NS	NS	ug/kg	68 U	79 U	67 U	72 U	71 U	84 U	78 U	73 U	72 U	77 U	71 U	75 U
Dimethyl phthalate	NS	NS	ug/kg	68 U	79 U	67 U	72 U	71 U	84 U	78 U	73 U	72 U	77 U	71 U	75 U
Di-n-butyl phthalate	NS	NS	ug/kg	68 U	79 U	67 U	72 U	71 U	84 U	78 U	73 U	72 U	77 U	71 U	75 U
Di-n-octyl phthalate	NS	NS	ug/kg	68 U	79 U	67 U	72 U	71 U	84 U	78 U	73 U	72 U	77 U	71 U	75 U
Fluoranthene	100000	1000000	ug/kg	31.7 J	40 U	33 U	36 U	35 U	42 U	39 U	36 U	36 U	38 U	36 U	38 U
Fluorene	100000	386000	ug/kg	34 U	40 U	33 U	36 U	35 U	42 U	39 U	36 U	36 U	38 U	36 U	38 U
Hexachloro-1,3-butadiene	NS	NS	ug/kg	34 U	40 U	33 U	36 U	35 U	42 U	39 UJ	36 U	36 U	38 U	36 U	38 U
Hexachlorobenzene	NS	NS	ug/kg	68 U	79 U	67 U	72 U	71 U	84 U	78 UJ	73 U	72 U	77 U	71 U	75 U
See Notes on Last Page															

Table 12. Confirmatory Soil Sample Results Area D
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Sample ID	TABLE 375-6: RESTRIC. RES. USE SCO	TABLE 375-6: PROTECTION OF GW SCO		PE-D-B2	PE-D-B3	PE-D-C1	PE-D-C2	PE-D-C3	PE-D-C4	PE-D-D1	PE-D-D2	PE-D-D3	PE-D-D4	PE-D-D5	PE-D-D6
Sample Date				1/21/2016	1/21/2016	1/21/2016	1/21/2016	1/21/2016	1/20/2016	1/21/2016	3/4/2016	3/4/2016	1/20/2016	1/20/2016	1/20/2016
Sample Depth			Units	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	4-4.5	2-2.5	2-2.5
SVOCs cont.															
Hexachlorocyclopentadiene	NS	NS	ug/kg	340 U	400 U	330 U	360 U	350 U	420 U	390 U	360 U	360 U	380 U	360 U	380 U
Hexachloroethane	NS	NS	ug/kg	170 U	200 U	170 U	180 U	180 U	210 U	200 U	180 U	180 U	190 U	180 U	190 U
Indeno(1,2,3-cd)pyrene	500	8200	ug/kg	34 U	40 U	33 U	36 U	35 U	42 U	39 U	36 U	36 U	38 U	36 U	38 U
Isophorone	NS	NS	ug/kg	68 U	79 U	67 U	72 U	71 U	84 U	78 U	73 U	72 U	77 U	71 U	75 U
Naphthalene	100000	12000	ug/kg	34 U	40 U	33 U	36 U	35 U	42 U	39 U	36 U	36 U	38 U	36 U	38 U
Nitrobenzene	NS	NS	ug/kg	68 U	79 U	67 U	72 U	71 U	84 U	78 U	73 U	72 U	77 U	71 U	75 U
n-Nitrosodi-n-propylamine	NS	NS	ug/kg	68 U	79 U	67 U	72 U	71 U	84 U	78 U	73 U	72 U	77 U	71 U	75 U
N-nitrosodiphenylamine	NS	NS	ug/kg	170 U	200 U	170 U	180 U	180 U	210 U	200 U	180 U	180 U	190 U	180 U	190 U
p-Chloroaniline	NS	NS	ug/kg	R	200 U	170 U	180 U	180 U	210 U	200 U	180 U	180 U	190 U	180 U	190 U
Pentachlorophenol	6700	800	ug/kg	170 U	200 U	170 U	180 U	180 U	210 U	200 U	180 U	180 U	190 U	180 U	190 U
Phenanthrene	100000	1000000	ug/kg	20.9 J	40 U	33 U	36 U	35 U	42 U	39 U	36 U	15.6 J	38 U	36 U	38 U
Phenol	100000	330	ug/kg	68 U	79 U	67 U	72 U	71 U	84 U	78 U	73 U	72 U	77 U	71 U	75 U
Pyrene	100000	1000000	ug/kg	27.3 J	40 U	33 U	36 U	35 U	42 U	39 U	36 U	36 U	38 U	36 U	38 U
PCBs															
Aroclor 1016	1000	3200	ug/kg	34 U	37 U	35 U	35 U	35 U	42 U	36 U	35 U	38 U	39 U	33 U	36 U
Aroclor 1221	1000	3200	ug/kg	34 U	37 U	35 U	35 U	35 U	42 U	36 U	35 U	38 U	39 U	33 U	36 U
Aroclor 1232	1000	3200	ug/kg	34 U	37 U	35 U	35 U	35 U	42 U	36 U	35 U	38 U	39 U	33 U	36 U
Aroclor 1242	1000	3200	ug/kg	34 U	37 U	35 U	35 U	35 U	42 U	36 U	35 U	38 U	39 U	33 U	36 U
Aroclor 1248	1000	3200	ug/kg	34 U	37 U	35 U	35 U	35 U	42 U	36 U	35 U	38 U	39 U	33 U	36 U
Aroclor 1254	1000	3200	ug/kg	34 U	37 U	35 U	35 U	35 U	42 U	36 U	35 U	38 U	39 U	33 U	36 U
Aroclor 1260	1000	3200	ug/kg	34 U	37 U	35 U	35 U	35 U	42 U	36 U	35 U	38 U	39 U	33 U	36 U
Aroclor 1262	1000	3200	ug/kg	34 U	37 U	35 U	35 U	35 U	42 U	36 U	35 U	38 U	39 U	33 U	36 U
Aroclor 1268	1000	3200	ug/kg	34 U	37 U	35 U	35 U	35 U	42 U	36 U	35 U	38 U	39 U	33 U	36 U
Metals															
Aluminum	NS	NS	mg/kg	11200 J	14600	14000 J	18300 J	18700	20100	14600 J	14600	12500	20100	20800	25100
Antimony	NS	NS	mg/kg	2 UJ	2.3 U	2 UJ	2.2 UJ	2.1 U	2.6 UJ	2.3 UJ	2 BJ	2.3 UJ	2.3 UJ	2.2 UJ	2.3 UJ
Arsenic	16	16	mg/kg	5.5	3.4	4.5	3.3	3.3	2.8	4.9	3.3	2.9	2.6	2.8	3.3
Barium	400	820	mg/kg	38.7	51	43.9	47.3	45.7	27.6	45.1	98.5	62.6	35.1	36.7	41.1
Beryllium	72	47	mg/kg	0.47	0.51	0.52	0.68	0.8	0.76	0.57	0.57	0.56	0.78	0.85	0.71
Cadmium	4.3	7.5	mg/kg	0.5 UB	0.58 UB	0.51 UB	0.54 UB	0.53 UB	0.12 B	0.57 UB	0.56 U	0.57 U	0.16 B	0.16 B	0.17 B
Calcium	NS	NS	mg/kg	1420	2640	1940	1370	1520	962	1690	1720	2270 J	1130	918	580
Chromium	NS	NS	mg/kg	15.9	16	17	18	18	15.8	16.8	15.8	15.5	17.4	19.5	21
Cobalt	NS	NS	mg/kg	5.3	6	6.9	7.5	7.9	5.3 B	7.7	6.7	7.1	6.9	7.6	5.7
Copper	270	1720	mg/kg	19.7 J	10.4	12.5 J	11.6 J	12	6.5	16.9 J	10.6	8.5	10	8	7.5
Iron	NS	NS	mg/kg	23100 J	15900	17400 J	19500 J	19900	19200	18000 J	17700	16600 J	21500	19500	21100
Lead	400	450	mg/kg	40.7	26.9	15.5	18	14.4	9 J	12.6	105	9.2	9.1 J	6.8 J	13.9 J
Magnesium	NS	NS	mg/kg	1690 J	2360	2610 J	2840 J	2970	1760	2800 J	2570	2800	2460	2150	2120
Manganese	2000	2000	mg/kg	205	303	219	126	131	65	249	271	214 J	82.6	70.5	87.6
Mercury	NS	NS	mg/kg	0.096	0.046 UB	0.059	0.045	0.044 UB	0.13	0.045 UB	0.023 B	0.015 B	0.043	0.044	0.055
Nickel	310	130	mg/kg	12.1	10.1	10.8	10.6	11.3	7.3	13.5	12	9.5	9.4	11	10.5
Potassium	NS	NS	mg/kg	575 B	720 B	1030	807 B	947 B	431 B	1180	875 B	1050 J	517 B	495 B	521 B
Selenium	180	4	mg/kg	2 U	2.3 U	2 U	2.2 U	2.1 U	2.6 U	2.3 U	0.69 B	2.3 U	2.3 U	0.57 B	0.53 B
Silver	180	8.3	mg/kg	0.5 UB	0.43 B	0.51 UB	0.54 UB	0.26 B	0.25 B	0.57 UB	0.49 B	0.57 UB	0.34 B	0.27 B	0.31 B
Sodium	NS	NS	mg/kg	87.2 B	114 B	118 B	125 B	137 B	97.3 B	122 B	114 B	175 J	103 B	97.4 B	63.6 B
Thallium	NS	NS	mg/kg	0.29 B	1.2 U	0.46 B	0.66 B	2.1 U	1.3 U	0.27 B	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
Vanadium	NS	NS	mg/kg	23.1	26.7	29.5	31.3	32.1	30.8	31	28.9	26.5	32.5	32.6	37.5
Zinc	10000	2480	mg/kg	35.7	36.6	33.1	33.5	31.1	23.3	35.2	53.8	24.5 J	27.4	22.5	36
General Chemistry															
Percent Solids			%	97.5	84	93.9	91.1	91.1	78.2	85.4	86.1	85.4	84.5	93.5	87.5
Notes															
NS			No standard												
NA			Not analyzed												
J			Estimated result												
JN			Estimated result												
R			Rejected result												
UB			Analyte considered non-detect at the listed value due to associated blank contamination												
Bold			Result exceeds 375-6.8(b) protection of groundwater soil cleanup objective.												
Shade			Result exceeds 375-6.8(b) restricted residential use soil cleanup objective.												

Table 12. Confirmatory Soil Sample Results Area D
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Sample ID	TABLE 375-6: RESTRIC. RES. USE SCO	TABLE 375-6: PROTECTION OF GW SCO		PE-D-E1 3/4/2016	PE-D-E2 3/4/2016	PE-D-E3 3/4/2016	PE-D-E4 1/21/2016	PE-D-E5 1/20/2016	PE-D-E6 1/20/2016	PE-D-E7 1/19/2016	PE-D-F1 3/4/2016	PE-D-F2 3/4/2016	PE-D-F3 3/4/2016	PE-D-F4 2/24/2016	PE-D-F5 1/20/2016	PE-D-F6 1/20/2016
Sample Date																
Sample Depth			Units	2-2.5	5-5.5	2-2.5	2-2.5	4-4.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5
VOCs																
1,1,1-Trichloroethane	100000	680	ug/kg	1.7 U	1.8 U	2 U	1.9 U	1.9 U	2.8 U	1.9 U	1.9 U	2.4 U	2 U	2.1 U	2.1 U	2.2 U
1,1,2,2-Tetrachloroethane	NS	NS	ug/kg	1.7 U	1.8 U	2 U	1.9 U	1.9 U	2.8 U	1.9 U	1.9 U	2.4 U	2 U	2.1 U	2.1 U	2.2 U
1,1,2-trichloro-1,2,2-trifluoroethane	NS	NS	ug/kg	4.3 U	4.4 U	4.9 U	4.8 U	4.8 U	6.9 U	4.8 U	4.7 U	6 U	5.1 U	5.2 U	5.4 U	5.5 U
1,1,2-Trichloroethane	NS	NS	ug/kg	1.7 U	1.8 U	2 U	1.9 U	1.9 U	2.8 U	1.9 U	1.9 U	2.4 U	2 U	2.1 U	2.1 U	2.2 U
1,1-Dichloroethane	26000	270	ug/kg	0.86 U	0.88 U	0.99 U	0.97 U	0.97 U	1.4 U	0.97 U	0.94 U	1.2 U	1 U	1 U	1.1 U	1.1 U
1,1-Dichloroethene	100000	330	ug/kg	0.86 U	0.88 U	0.99 U	0.97 U	0.97 U	1.4 U	0.97 U	0.94 U	1.2 U	1 U	1 U	1.1 U	1.1 U
1,2,4-Trichlorobenzene	NS	NS	ug/kg	4.3 U	4.4 U	4.9 U	4.8 U	4.8 U	6.9 U	4.8 U	4.7 U	6 U	5.1 U	5.2 U	5.4 U	5.5 U
1,2-Dibromo-3-chloropropane	NS	NS	ug/kg	1.7 U	1.8 U	2 U	1.9 U	1.9 U	2.8 U	1.9 U	1.9 U	2.4 U	2 U	2.1 U	2.1 U	2.2 U
1,2-Dibromoethane	NS	NS	ug/kg	0.86 U	0.88 U	0.99 U	0.97 U	0.97 U	1.4 U	0.97 U	0.94 U	1.2 U	1 U	1 U	1.1 U	1.1 U
1,2-Dichlorobenzene	100000	1100	ug/kg	0.86 U	0.88 U	0.99 U	0.97 U	0.97 U	1.4 U	0.97 U	0.94 U	1.2 U	1 U	1 U	1.1 U	1.1 U
1,2-Dichloroethane	3100	20	ug/kg	0.86 U	0.88 U	0.99 U	0.97 U	0.97 U	1.4 U	0.97 U	0.94 U	1.2 U	1 U	1 U	1.1 U	1.1 U
1,2-Dichloropropane	NS	NS	ug/kg	1.7 U	1.8 U	2 U	1.9 U	1.9 U	2.8 U	1.9 U	1.9 U	2.4 U	2 U	2.1 U	2.1 U	2.2 U
1,3-Dichlorobenzene	49000	2400	ug/kg	0.86 U	0.88 U	0.99 U	0.97 U	0.97 U	1.4 U	0.97 U	0.94 U	1.2 U	1 U	1 U	1.1 U	1.1 U
1,4-Dichlorobenzene	13000	1800	ug/kg	0.86 U	0.88 U	0.99 U	0.97 U	0.97 U	1.4 U	0.97 U	0.94 U	1.2 U	1 U	1 U	1.1 U	1.1 U
2-Butanone (MEK)	100000	120	ug/kg	8.6 U	8.8 U	9.9 U	9.7 U	9.7 U	14 U	9.7 U	9.4 U	12 U	10 U	10 U	11 U	11 U
4-Methyl-2-Pentanone	NS	NS	ug/kg	4.3 U	4.4 U	4.9 U	4.8 U	4.8 U	6.9 U	4.8 U	4.7 U	6 U	5.1 U	5.2 U	5.4 U	5.5 U
Acetone	100000	50	ug/kg	8.6 U	30.7	9.9 U	9.7 U	24.5	79.5	6.4 J	9.4 U	23.1	10 U	10 U	30.9	16.8
Benzene	4800	60	ug/kg	0.43 U	0.44 U	0.49 U	0.48 U	0.19 J	0.69 U	0.48 U	0.47 U	0.92	0.51 U	0.52 U	0.54 U	0.55 U
Bromodichloromethane	NS	NS	ug/kg	1.7 U	1.8 U	2 U	1.9 U	1.9 U	2.8 U	1.9 U	1.9 U	2.4 U	2 U	2.1 U	2.1 U	2.2 U
Bromoform	NS	NS	ug/kg	4.3 U	4.4 U	4.9 U	4.8 U	4.8 U	6.9 U	4.8 U	4.7 U	6 U	5.1 U	5.2 U	5.4 U	5.5 U
Bromomethane	NS	NS	ug/kg	4.3 U	4.4 U	4.9 U	4.8 U	4.8 U	6.9 U	4.8 U	4.7 U	6 U	5.1 U	5.2 U	5.4 U	5.5 U
Carbon Disulfide	NS	NS	ug/kg	1.7 U	1.8 U	2 U	1.9 U	1.9 U	2.8 U	1.9 U	1.9 U	2.4 U	2 U	2.1 U	2.1 U	2.2 U
Carbon Tetrachloride	2400	760	ug/kg	1.7 U	1.8 U	2 U	1.9 U	1.9 U	2.8 U	1.9 U	1.9 U	2.4 U	2 U	2.1 U	2.1 U	2.2 U
CFC-11	NS	NS	ug/kg	4.3 U	4.4 U	4.9 U	4.8 U	4.8 U	6.9 U	4.8 U	4.7 U	6 U	5.1 U	5.2 U	5.4 U	5.5 U
CFC-12	NS	NS	ug/kg	4.3 U	4.4 U	4.9 U	4.8 U	4.8 U	6.9 U	4.8 U	4.7 U	6 U	5.1 U	5.2 U	5.4 U	5.5 U
Chlorobenzene	100000	1100	ug/kg	1.7 U	1.8 U	2 U	1.9 U	1.9 U	2.8 U	1.9 U	1.9 U	2.4 U	2 U	2.1 U	2.1 U	2.2 U
Chlorodibromomethane	NS	NS	ug/kg	1.7 U	1.8 U	2 U	1.9 U	1.9 U	2.8 U	1.9 U	1.9 U	2.4 U	2 U	2.1 U	2.1 U	2.2 U
Chloroethane	NS	NS	ug/kg	4.3 U	4.4 U	4.9 U	4.8 U	4.8 U	6.9 U	4.8 U	4.7 U	6 U	5.1 U	5.2 U	5.4 U	5.5 U
Chloroform	49000	370	ug/kg	1.7 U	1.8 U	2 U	1.9 U	1.9 U	2.8 U	1.9 U	1.9 U	2.4 U	2 U	2.1 U	2.1 U	2.2 U
Chloromethane	NS	NS	ug/kg	4.3 U	4.4 U	4.9 U	4.8 U	4.8 U	6.9 U	4.8 U	4.7 U	6 U	5.1 U	5.2 U	5.4 U	5.5 U
cis-1,2-Dichloroethene	100000	250	ug/kg	0.86 U	0.88 U	0.99 U	0.97 U	0.97 U	1.4 U	0.97 U	0.94 U	1.2 U	1 U	1 U	1.1 U	1.1 U
cis-1,3-Dichloropropene	NS	NS	ug/kg	1.7 U	1.8 U	2 U	1.9 U	1.9 U	2.8 U	1.9 U	1.9 U	2.4 U	2 U	2.1 U	2.1 U	2.2 U
Cyclohexane	NS	NS	ug/kg	1.7 U	1.8 U	2 U	1.9 U	1.9 U	2.8 U	1.9 U	1.9 U	0.6 J	2 U	2.1 U	2.1 U	2.2 U
Dichloromethane	NS	NS	ug/kg	4.3 U	4.4 U	4.9 U	4.8 U	4.8 U	6.9 U	4.8 U	4.7 U	6 U	5.1 U	5.2 U	5.4 U	5.5 U
Ethylbenzene	41000	1000	ug/kg	0.86 U	4.2	0.99 U	0.97 U	0.18 J	1.4 U	0.18 J	0.94 U	28.5	1 U	1 U	1.1 U	1.1 U
Isopropylbenzene	NS	NS	ug/kg	1.7 U	0.45 J	2 U	1.9 U	1.9 U	2.8 U	1.9 U	1.9 U	1.3 J	2 U	2.1 U	2.1 U	2.2 U
Methyl Acetate	NS	NS	ug/kg	4.3 U	4.4 U	4.9 U	4.8 U	4.8 U	6.9 U	4.8 U	4.7 U	6 U	5.1 U	5.2 U	5.4 U	5.5 U
Methyl N-Butyl Ketone (2-Hexanone)	NS	NS	ug/kg	4.3 U	4.4 U	4.9 U	4.8 U	4.8 U	6.9 U	4.8 U	4.7 U	6 U	5.1 U	5.2 U	5.4 U	5.5 U
Methylcyclohexane	NS	NS	ug/kg	1.7 U	1.3 J	2 U	1.9 U	1.9 U	2.8 U	1.9 U	1.9 U	16.3	2 U	2.1 U	2.1 U	2.2 U
Methyl-tert-butylether	100000	930	ug/kg	0.86 U	0.88 U	0.99 U	0.97 U	0.97 U	1.4 U	0.97 U	0.94 U	1.2 U	1 U	1 U	1.1 U	1.1 U
Styrene (Monomer)	NS	NS	ug/kg	1.7 U	1.8 U	2 U	1.9 U	0.31 J	2.8 U	1.9 U	1.9 U	2.4 U	2 U	2.1 U	0.2 J	2.2 U
Tetrachloroethene	19000	1300	ug/kg	1.7 U	1.8 U	2 U	1.9 U	1.9 U	2.8 U	1.9 U	1.9 U	2.4 U	2 U	2.1 U	2.1 U	2.2 U
Toluene	100000	700	ug/kg	0.86 U	1.7	0.99 U	0.97 U	0.97 U	1.4 U	0.97 U	0.94 U	41.8	1 U	1 U	1.1 U	1.1 U
Total Xylenes	100000	1600	ug/kg	0.86 U	27.3	0.99 U	0.97 U	0.97 U	1.4 U	1.1	0.94 U	106	1 U	1 U	1.1 U	1.1 U
trans-1,2-Dichloroethene	100000	190	ug/kg	0.86 U	0.88 U	0.99 U	0.97 U	0.97 U	1.4 U	0.97 U	0.94 U	1.2 U	1 U	1 U	1.1 U	1.1 U
trans-1,3-Dichloropropene	NS	NS	ug/kg	1.7 U	1.8 U	2 U	1.9 U	1.9 U	2.8 U	1.9 U	1.9 U	2.4 U	2 U	2.1 U	2.1 U	2.2 U
Trichloroethene	21000	470	ug/kg	0.86 U	0.88 U	0.99 U	0.97 U	0.97 U	1.4 U	0.97 U	0.94 U	1.2 U	1 U	1 U	1.1 U	1.1 U
Vinyl chloride	900	20	ug/kg	1.7 U	1.8 U	2 U	1.9 U	1.9 U	2.8 U	1.9 U	1.9 U	2.4 U	2 U	2.1 U	2.1 U	2.2 U

See Notes on Last Page

Table 12. Confirmatory Soil Sample Results Area D
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Sample ID	TABLE 375-6: RESTRIC. RES. USE SCO	TABLE 375-6: PROTECTION OF GW SCO		PE-D-E1 3/4/2016	PE-D-E2 3/4/2016	PE-D-E3 3/4/2016	PE-D-E4 1/21/2016	PE-D-E5 1/20/2016	PE-D-E6 1/20/2016	PE-D-E7 1/19/2016	PE-D-F1 3/4/2016	PE-D-F2 3/4/2016	PE-D-F3 3/4/2016	PE-D-F4 2/24/2016	PE-D-F5 1/20/2016	PE-D-F6 1/20/2016
Sample Date																
Sample Depth			Units	2-2.5	5-5.5	2-2.5	2-2.5	4-4.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5
SVOCs																
1,1-Biphenyl	NS	NS	ug/kg	73 U	73 U	70 U	66 U	72 U	74 U	73 U	72 U	77 U	74 U	79 U	24.6 J	71 U
2,2-Oxybis(1-Chloropropane)	NS	NS	ug/kg	73 U	73 U	70 U	66 U	72 U	74 U	73 U	72 U	77 U	74 U	79 U	73 U	71 U
2,4,5-Trichlorophenol	NS	NS	ug/kg	180 U	180 U	170 U	170 U	180 U	190 U	180 U	180 U	190 U	190 U	200 U	180 U	180 U
2,4,6-Trichlorophenol	NS	NS	ug/kg	180 U	180 U	170 U	170 U	180 U	190 U	180 U	180 U	190 U	190 U	200 U	180 U	180 U
2,4-Dichlorophenol	NS	NS	ug/kg	180 U	180 U	170 U	170 U	180 U	190 U	180 U	180 U	190 U	190 U	200 U	180 U	180 U
2,4-Dimethylphenol	NS	NS	ug/kg	180 U	180 U	170 U	170 U	180 U	190 U	180 U	180 U	190 U	190 U	200 U	180 U	180 U
2,4-Dinitrophenol	NS	NS	ug/kg	180 U	180 U	170 U	170 U	180 U	190 U	180 U	180 U	190 U	190 U	200 U	180 U	180 U
2,4-Dinitrotoluene	NS	NS	ug/kg	36 U	36 U	35 U	33 U	36 U	37 U	37 U	36 U	38 U	37 U	39 U	36 U	36 U
2,6-Dinitrotoluene	NS	NS	ug/kg	36 U	36 U	35 U	33 U	36 U	37 U	37 U	36 U	38 U	37 U	39 U	36 U	36 U
2-Chloronaphthalene	NS	NS	ug/kg	73 U	73 U	70 U	66 U	72 U	74 U	73 U	72 U	77 U	74 U	79 U	73 U	71 U
2-Chlorophenol	NS	NS	ug/kg	73 U	73 U	70 U	66 U	72 U	74 U	73 U	72 U	77 U	74 U	79 U	73 U	71 U
2-Methyl-4,6-dinitrophenol	NS	NS	ug/kg	180 U	180 U	170 U	170 U	180 U	190 U	180 U	180 U	190 U	190 U	200 U	180 U	180 U
2-Methylnaphthalene	NS	NS	ug/kg	73 U	21.1 J	70 U	66 U	72 U	74 U	20.9 J	72 U	38 J	74 U	79 U	105	71 U
2-Methylphenol	NS	NS	ug/kg	73 U	73 U	70 U	66 U	72 U	74 U	73 U	72 U	77 U	74 U	79 U	73 U	71 U
2-Nitroaniline	NS	NS	ug/kg	180 U	180 U	170 U	170 U	180 U	190 U	180 U	180 U	190 U	190 U	200 U	180 U	180 U
2-Nitrophenol	NS	NS	ug/kg	180 U	180 U	170 U	170 U	180 U	190 U	180 U	180 U	190 U	190 U	200 U	180 U	180 U
3,3-Dichlorobenzidine	NS	NS	ug/kg	73 U	73 U	70 U	66 U	72 U	74 U	73 U	72 U	77 U	74 U	79 U	73 U	71 U
3-Methylphenol, 4-Methylphenol	NS	NS	ug/kg	73 U	73 U	70 U	66 U	72 U	74 U	73 U	72 U	105	74 U	79 U	73 U	71 U
3-Nitroaniline	NS	NS	ug/kg	180 U	180 U	170 U	170 U	180 U	190 U	180 U	180 U	190 U	190 U	200 U	180 U	180 U
4-Bromophenyl phenyl ether	NS	NS	ug/kg	73 U	73 U	70 U	66 U	72 U	74 U	73 U	72 U	77 U	74 U	79 U	73 U	71 U
4-Chloro-3-Methylphenol	NS	NS	ug/kg	180 U	180 U	170 U	170 U	180 U	190 U	180 U	180 U	190 U	190 U	200 U	180 U	180 U
4-Chlorophenyl phenyl ether	NS	NS	ug/kg	73 U	73 U	70 U	66 U	72 U	74 U	73 U	72 U	77 U	74 U	79 U	73 U	71 U
4-Nitroaniline	NS	NS	ug/kg	180 U	180 U	170 U	170 U	180 U	190 U	180 U	180 U	190 U	190 U	200 U	180 U	180 U
4-Nitrophenol	NS	NS	ug/kg	360 U	360 U	350 U	330 U	360 U	370 U	370 U	360 U	380 U	370 U	390 U	360 U	360 U
Acenaphthene	100000	98000	ug/kg	36 U	36 U	35 U	33 U	36 U	37 U	37 U	36 U	38 U	37 U	39 U	63.7	36 U
Acenaphthylene	100000	107000	ug/kg	36 U	36 U	35 U	33 U	36 U	37 U	37 U	36 U	38 U	37 U	39 U	36 U	36 U
Acetophenone	NS	NS	ug/kg	180 U	180 U	170 U	170 U	180 U	190 U	180 U	180 U	190 U	190 U	200 U	180 U	180 U
Anthracene	100000	1000000	ug/kg	36 U	36 U	35 U	33 U	36 U	37 U	37 U	36 U	38 U	37 U	39 U	94.8	36 U
Atrazine	NS	NS	ug/kg	73 U	73 U	70 U	66 U	72 U	74 U	73 U	72 U	77 U	74 U	79 U	73 U	71 U
Benzaldehyde	NS	NS	ug/kg	180 UJ	180 U	170 UJ	170 U	180 U	190 U	180 U	180 UJ	190 U	190 UJ	200 UJ	180 U	180 U
Benzo(a)anthracene	1000	1000	ug/kg	36 U	36 U	35 U	33 U	36 U	37 U	37 U	36 U	21.1 J	37 U	39 U	75.7	36 U
Benzo(a)pyrene	1000	22000	ug/kg	36 U	36 U	35 U	33 U	36 U	37 U	37 U	36 U	19.6 J	37 U	39 U	26.1 J	36 U
Benzo(b)fluoranthene	1000	1700	ug/kg	36 U	36 U	35 U	33 U	36 U	37 U	37 U	36 U	30.9 J	37 U	39 U	43.4	36 U
Benzo(g,h,i)perylene	100000	1000000	ug/kg	36 U	36 U	35 U	33 U	36 U	37 U	37 U	36 U	38 UJ	37 U	39 U	36 U	36 U
Benzo(k)fluoranthene	3900	1700	ug/kg	36 U	36 U	35 U	33 U	36 U	37 U	37 U	36 U	38 UJ	37 U	39 U	18.4 J	36 U
bis(2-Chloroethoxy)methane	NS	NS	ug/kg	73 U	73 U	70 U	66 U	72 U	74 U	73 U	72 U	77 U	74 U	79 U	73 U	71 U
bis(2-Chloroethyl)ether	NS	NS	ug/kg	73 U	73 U	70 U	66 U	72 U	74 U	73 U	72 U	77 U	74 U	79 U	73 U	71 U
bis(2-Ethylhexyl)phthalate	NS	NS	ug/kg	73 U	73 U	70 U	66 U	72 U	74 U	101	72 U	44.6 J	74 U	79 U	73 U	71 U
Butyl benzyl phthalate	NS	NS	ug/kg	73 U	73 U	70 U	66 U	72 U	74 U	73 U	72 U	77 U	74 U	79 U	73 U	71 U
Caprolactam	NS	NS	ug/kg	73 U	73 U	70 U	66 U	72 U	74 U	73 U	72 U	77 U	74 U	79 U	73 U	71 U
Carbazole	NS	NS	ug/kg	73 U	73 U	70 U	66 U	72 U	74 U	73 U	72 U	77 U	74 U	79 U	73 U	71 U
Chrysene	3900	1000	ug/kg	36 U	36 U	35 U	33 U	36 U	37 U	37 U	36 U	24.4 J	37 U	39 U	71.3	36 U
Dibenzo(a,h)anthracene	330	1000000	ug/kg	36 U	36 U	35 U	33 U	36 U	37 U	37 U	36 U	38 UJ	37 U	39 U	36 U	36 U
Dibenzofuran	NS	NS	ug/kg	73 U	73 U	70 U	66 U	72 U	74 U	73 U	72 U	77 U	74 U	79 U	103	71 U
Diethyl phthalate	NS	NS	ug/kg	73 U	73 U	70 U	66 U	72 U	74 U	73 U	72 U	77 U	74 U	79 U	73 U	71 U
Dimethyl phthalate	NS	NS	ug/kg	73 U	73 U	70 U	66 U	72 U	74 U	73 U	72 U	77 U	74 U	79 U	73 U	71 U
Di-n-butyl phthalate	NS	NS	ug/kg	73 U	73 U	70 U	66 U	72 U	74 U	73 U	72 U	77 U	74 U	79 U	73 U	71 U
Di-n-octyl phthalate	NS	NS	ug/kg	73 U	73 U	70 U	66 U	72 U	74 U	73 U	72 U	77 UJ	74 U	79 U	73 U	71 U
Fluoranthene	100000	1000000	ug/kg	36 U	36 U	35 U	33 U	36 U	37 U	37 U	36 U	32.5 J	37 U	39 U	298	36 U
Fluorene	100000	386000	ug/kg	36 U	36 U	35 U	33 U	36 U	37 U	37 U	36 U	38 U	37 U	39 U	88.4	36 U
Hexachloro-1,3-butadiene	NS	NS	ug/kg	36 U	36 U	35 U	33 U	36 U	37 U	37 U	36 U	38 U	37 U	39 U	36 U	36 U
Hexachlorobenzene	NS	NS	ug/kg	73 U	73 U	70 U	66 U	72 U	74 U	73 U	72 U	77 U	74 U	79 U	73 U	71 U
See Notes on Last Page																

Table 12. Confirmatory Soil Sample Results Area D
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Sample ID Sample Date Sample Depth	TABLE 375-6: RESTRIC. RES. USE SCO	TABLE 375-6: PROTECTION OF GW SCO	Units	PE-D-E1 3/4/2016 2-2.5	PE-D-E2 3/4/2016 5-5.5	PE-D-E3 3/4/2016 2-2.5	PE-D-E4 1/21/2016 2-2.5	PE-D-E5 1/20/2016 4-4.5	PE-D-E6 1/20/2016 2-2.5	PE-D-E7 1/19/2016 2-2.5	PE-D-F1 3/4/2016 2-2.5	PE-D-F2 3/4/2016 2-2.5	PE-D-F3 3/4/2016 2-2.5	PE-D-F4 2/24/2016 2-2.5	PE-D-F5 1/20/2016 2-2.5	PE-D-F6 1/20/2016 2-2.5
SVOCs cont.																
Hexachlorocyclopentadiene	NS	NS	ug/kg	360 U	360 U	350 U	330 U	360 U	370 U	370 U	360 U	380 U	370 U	390 U	360 U	360 U
Hexachloroethane	NS	NS	ug/kg	180 U	180 U	170 U	170 U	180 U	190 U	180 U	180 U	190 U	190 U	200 U	180 U	180 U
Indeno(1,2,3-cd)pyrene	500	8200	ug/kg	36 U	36 U	35 U	33 U	36 U	37 U	37 U	36 U	38 UJ	37 U	39 U	36 U	36 U
Isophorone	NS	NS	ug/kg	73 U	73 U	70 U	66 U	72 U	74 U	73 U	72 U	77 U	74 U	79 U	73 U	71 U
Naphthalene	100000	12000	ug/kg	36 U	74.8	35 U	33 U	36 U	37 U	43.4	36 U	149	37 U	39 U	92	36 U
Nitrobenzene	NS	NS	ug/kg	73 U	73 U	70 U	66 U	72 U	74 U	73 U	72 U	77 U	74 U	79 U	73 U	71 U
n-Nitrosodi-n-propylamine	NS	NS	ug/kg	73 U	73 U	70 U	66 U	72 U	74 U	73 U	72 U	77 U	74 U	79 U	73 U	71 U
N-nitrosodiphenylamine	NS	NS	ug/kg	180 U	180 U	170 U	170 U	180 U	190 U	180 U	180 U	190 U	190 U	200 U	180 U	180 U
p-Chloroaniline	NS	NS	ug/kg	180 U	180 U	170 U	170 U	180 U	190 U	180 U	180 U	190 U	190 U	200 U	180 U	180 U
Pentachlorophenol	6700	800	ug/kg	180 U	180 U	170 U	170 U	180 U	190 U	180 U	180 U	190 U	190 U	200 U	180 U	180 U
Phenanthrene	100000	1000000	ug/kg	36 U	36 U	35 U	33 U	36 U	37 U	37 U	36 U	24.2 J	37 U	39 U	359	36 U
Phenol	100000	330	ug/kg	73 U	73 U	70 U	66 U	72 U	74 U	73 U	72 U	77 U	74 U	79 U	73 U	71 U
Pyrene	100000	1000000	ug/kg	36 U	36 U	35 U	33 U	36 U	37 U	37 U	36 U	38	37 U	39 U	259	36 U
PCBs																
Aroclor 1016	1000	3200	ug/kg	36 U	34 U	37 U	33 U	36 U	35 U	37 U	38 U	38 U	35 U	38 U	36 U	36 U
Aroclor 1221	1000	3200	ug/kg	36 U	34 U	37 U	33 U	36 U	35 U	37 U	38 U	38 U	35 U	38 U	36 U	36 U
Aroclor 1232	1000	3200	ug/kg	36 U	34 U	37 U	33 U	36 U	35 U	37 U	38 U	38 U	35 U	38 U	36 U	36 U
Aroclor 1242	1000	3200	ug/kg	36 U	34 U	37 U	33 U	36 U	35 U	37 U	38 U	38 U	35 U	38 U	36 U	36 U
Aroclor 1248	1000	3200	ug/kg	36 U	34 U	37 U	33 U	36 U	35 U	37 U	38 U	38 U	35 U	38 U	36 U	36 U
Aroclor 1254	1000	3200	ug/kg	36 U	34 U	37 U	33 U	36 U	35 U	37 U	38 U	38 U	35 U	38 U	36 U	36 U
Aroclor 1260	1000	3200	ug/kg	36 U	34 U	37 U	33 U	36 U	35 U	37 U	38 U	38 U	35 U	38 U	36 U	36 U
Aroclor 1262	1000	3200	ug/kg	36 U	34 U	37 U	33 U	36 U	35 U	37 U	38 U	38 U	35 U	38 U	36 U	36 U
Aroclor 1268	1000	3200	ug/kg	36 U	34 U	37 U	33 U	36 U	35 U	37 U	38 U	38 U	35 U	38 U	36 U	36 U
Metals																
Aluminum	NS	NS	mg/kg	13900	15200	11900	13900 J	13200	20200	14900	12200	14800	13100	16100	15000	13600
Antimony	NS	NS	mg/kg	2.3 UJ	2.1 J	2.2 UJ	2.1 UJ	2.1 UJ	2.2 UJ	2.3 UJ	2.2 UJ	2.3 J	2.2 UJ	1.2 UB	2.3 UJ	2.2 UJ
Arsenic	16	16	mg/kg	4.9	3.9	4.7	3.1	2.4	3.5	2.6	3.2	5.9	3.5	3.3	3.5	2.2
Barium	400	820	mg/kg	40.3	63.5	41.7	36.7	38.1	42.2	52	41.3	83.4	26.4	41.1	51.4	33.8
Beryllium	72	47	mg/kg	0.47	0.52	0.44	0.44	0.7	0.76	0.8	0.49	0.49	0.52	0.52	0.66	0.69
Cadmium	4.3	7.5	mg/kg	0.57 U	0.55 U	0.55 U	0.52 UB	0.14 B	0.22 B	0.16 B	0.56 U	0.16 B	0.54 U	0.32	0.22 B	0.088 B
Calcium	NS	NS	mg/kg	1330 J	1010 J	1240 J	1590	1760	1100	1620	1710 J	1550 J	633 J	1080 J	2000	1670
Chromium	NS	NS	mg/kg	15.7	18.5	20.6	14.3	14.5	20.5	15.5	18.5	17.2	12.5	15.3	17.4	19
Cobalt	NS	NS	mg/kg	6.8	6.8	6.8	6.7	6.9	6.8	7.5	6.5	6.9	7.3	5.6	7.8	7.7
Copper	270	1720	mg/kg	10.3	8.5	10.7	11 J	11.3	9	12.5	21.2	16.7	10.3	11.6	14.3	10
Iron	NS	NS	mg/kg	16200 J	17900 J	15600 J	16400 J	16700	20000	17000	18600 J	16000 J	14300 J	15000 J	18300	17300
Lead	400	450	mg/kg	10.4	135	7.6	8.5	22.1 J	85.3	9.2	18.6	159	5.8	11.7	73.5 J	8.5 J
Magnesium	NS	NS	mg/kg	2870	3050	2590	2460 J	2590	2430	2560	2680	2470	2750	2290	2940	3170
Manganese	2000	2000	mg/kg	200 J	175 J	145 J	140	112	112	108	240 J	228 J	174 J	107 J	143	110
Mercury	NS	NS	mg/kg	0.03 B	0.028 B	0.028 B	0.046	0.034 UB	0.036	0.046	0.024 B	0.096	0.026 B	0.027 B	0.024 B	0.026 B
Nickel	310	130	mg/kg	11.4	13	11.9	10.1	9.1	10.4	10.3	14	12.2	11.9	10	11.7	9.4
Potassium	NS	NS	mg/kg	822 J	726 J	920 J	998 B	913 B	685 B	850 B	1020 J	981 J	708 J	747 J	957 B	1060 B
Selenium	180	4	mg/kg	2.3 U	0.31 B	2.2 U	2.1 U	2.1 U	0.46 B	0.29 B	0.62 B	2.3 U	2.2 U	0.58 B	2.3 U	2.2 U
Silver	180	8.3	mg/kg	0.57 U	0.55 UB	0.55 UB	0.52 UB	0.34 B	0.55	0.56 U	0.56 UB	0.57 UB	0.54 U	0.26 B	0.35 B	0.37 B
Sodium	NS	NS	mg/kg	113 J	98.8 J	138 J	111 B	168 B	97.9 B	143 B	127 J	150 J	122 J	86.5 J	132 B	159 B
Thallium	NS	NS	mg/kg	1.1 U	1.1 U	1.1 U	0.38 B	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	0.6 U	1.2 U	1.1 U
Vanadium	NS	NS	mg/kg	25.7	29.1	27.7	26.9	26.5	38.5	25.4	26.1	31.3	20.4	27.5	30.2	27.3
Zinc	10000	2480	mg/kg	30.7 J	42.6 J	23.2 J	25.2	27.4	43.7	23.9	40.9 J	49.2 J	27.3 J	33 J	59.4	26.2
General Chemistry																
Percent Solids			%	87.6	86.5	87.4	92.5	92.2	88.2	90.5	87.5	83.8	89.4	81	89.6	91

Notes		
NS	No standard	
NA	Not analyzed	
J	Estimated result	
JN	Estimated result	
R	Rejected result	
UB	Analyte considered non-detect at the listed value due to associated blank contamination	
Bold	Result exceeds 375-6.8(b) protection of groundwater soil cleanup objective.	
Shade	Result exceeds 375-6.8(b) restricted residential use soil cleanup objective.	

Table 12. Confirmatory Soil Sample Results Area D
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Sample ID	TABLE 375-6: RESTRIC. RES. USE SCO	TABLE 375-6: PROTECTION OF GW SCO		PE-D-F7 1/19/2016	PE-D-F8 1/18/2016	PE-D-F9 1/14/2016	PE-D-G1 3/4/2016	PE-D-G2 3/4/2016
Sample Date			Units	4-4.5	2-2.5	2-2.5	2-2.5	2-2.5
Sample Depth								
VOCs								
1,1,1-Trichloroethane	100000	680	ug/kg	2.3 U	1.8 U	2 U	2.3 U	2.1 U
1,1,2,2-Tetrachloroethane	NS	NS	ug/kg	2.3 U	1.8 U	2 U	2.3 U	2.1 U
1,1,2-trichloro-1,2,2-trifluoroethane	NS	NS	ug/kg	5.7 U	4.4 U	4.9 U	5.7 U	5.3 U
1,1,2-Trichloroethane	NS	NS	ug/kg	2.3 U	1.8 U	2 U	2.3 U	2.1 U
1,1-Dichloroethane	26000	270	ug/kg	1.1 U	0.88 U	0.99 U	1.1 U	1.1 U
1,1-Dichloroethene	100000	330	ug/kg	1.1 U	0.88 U	0.99 U	1.1 U	1.1 U
1,2,4-Trichlorobenzene	NS	NS	ug/kg	5.7 U	4.4 U	4.9 U	5.7 U	5.3 U
1,2-Dibromo-3-chloropropane	NS	NS	ug/kg	2.3 U	1.8 U	2 U	2.3 U	2.1 U
1,2-Dibromoethane	NS	NS	ug/kg	1.1 U	0.88 U	0.99 U	1.1 U	1.1 U
1,2-Dichlorobenzene	100000	1100	ug/kg	1.1 U	0.88 U	0.99 U	1.1 U	1.1 U
1,2-Dichloroethane	3100	20	ug/kg	1.1 U	0.88 U	0.99 U	1.1 U	1.1 U
1,2-Dichloropropane	NS	NS	ug/kg	2.3 U	1.8 U	2 U	2.3 U	2.1 U
1,3-Dichlorobenzene	49000	2400	ug/kg	1.1 U	0.88 U	0.99 U	1.1 U	1.1 U
1,4-Dichlorobenzene	13000	1800	ug/kg	1.1 U	0.88 U	0.99 U	1.1 U	1.1 U
2-Butanone (MEK)	100000	120	ug/kg	11 U	8.8 U	9.9 U	11 U	11 U
4-Methyl-2-Pentanone	NS	NS	ug/kg	5.7 U	4.4 U	4.9 U	5.7 U	5.3 U
Acetone	100000	50	ug/kg	40.7	88.4	22.4	11 U	11 U
Benzene	4800	60	ug/kg	0.57 U	0.16 J	0.49 U	0.57 U	0.53 U
Bromodichloromethane	NS	NS	ug/kg	2.3 U	1.8 U	2 U	2.3 U	2.1 U
Bromoform	NS	NS	ug/kg	5.7 U	4.4 U	4.9 U	5.7 U	5.3 U
Bromomethane	NS	NS	ug/kg	5.7 U	4.4 U	4.9 U	5.7 U	5.3 U
Carbon Disulfide	NS	NS	ug/kg	2.3 U	1.8 U	2 U	2.3 U	2.1 U
Carbon Tetrachloride	2400	760	ug/kg	2.3 U	1.8 U	2 U	2.3 U	2.1 U
CFC-11	NS	NS	ug/kg	5.7 U	4.4 U	4.9 U	5.7 U	5.3 U
CFC-12	NS	NS	ug/kg	5.7 U	4.4 U	4.9 U	5.7 U	5.3 U
Chlorobenzene	100000	1100	ug/kg	2.3 U	1.8 U	2 U	2.3 U	2.1 U
Chlorodibromomethane	NS	NS	ug/kg	2.3 U	1.8 U	2 U	2.3 U	2.1 U
Chloroethane	NS	NS	ug/kg	5.7 U	4.4 U	4.9 U	5.7 U	5.3 U
Chloroform	49000	370	ug/kg	2.3 U	1.8 U	2 U	2.3 U	2.1 U
Chloromethane	NS	NS	ug/kg	5.7 U	4.4 U	4.9 U	5.7 U	5.3 U
cis-1,2-Dichloroethene	100000	250	ug/kg	1.1 U	0.88 U	0.99 U	1.1 U	1.1 U
cis-1,3-Dichloropropene	NS	NS	ug/kg	2.3 U	1.8 U	2 U	2.3 U	2.1 U
Cyclohexane	NS	NS	ug/kg	2.3 U	1.8 U	2 U	2.3 U	2.1 U
Dichloromethane	NS	NS	ug/kg	5.7 U	4.4 U	4.9 U	5.7 U	5.3 U
Ethylbenzene	41000	1000	ug/kg	1.1 U	0.88 U	0.99 U	1.1 U	1.1 U
Isopropylbenzene	NS	NS	ug/kg	2.3 U	1.8 U	2 U	2.3 U	2.1 U
Methyl Acetate	NS	NS	ug/kg	5.7 U	4.4 U	4.9 U	5.7 U	5.3 U
Methyl N-Butyl Ketone (2-Hexanone)	NS	NS	ug/kg	5.7 U	4.4 U	4.9 U	5.7 U	5.3 U
Methylcyclohexane	NS	NS	ug/kg	2.3 U	1.8 U	2 U	2.3 U	2.1 U
Methyl-tert-butylether	100000	930	ug/kg	1.1 U	0.88 U	0.99 U	1.1 U	1.1 U
Styrene (Monomer)	NS	NS	ug/kg	2.3 U	1.8 U	2 U	2.3 U	0.19 J
Tetrachloroethene	19000	1300	ug/kg	2.3 U	1.8 U	2 U	2.3 U	2.1 U
Toluene	100000	700	ug/kg	1.1 U	0.88 U	0.99 U	1.1 U	1.1 U
Total Xylenes	100000	1600	ug/kg	1.1 U	0.88 U	0.99 U	1.1 U	1.1 U
trans-1,2-Dichloroethene	100000	190	ug/kg	1.1 U	0.88 U	0.99 U	1.1 U	1.1 U
trans-1,3-Dichloropropene	NS	NS	ug/kg	2.3 U	1.8 U	2 U	2.3 U	2.1 U
Trichloroethene	21000	470	ug/kg	1.1 U	0.88 U	0.99 U	1.1 U	1.1 U
Vinyl chloride	900	20	ug/kg	2.3 U	1.8 U	2 U	2.3 U	2.1 U

See Notes on Last Page

Table 12. Confirmatory Soil Sample Results Area D
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Sample ID Sample Date Sample Depth	TABLE 375-6: RESTRIC. RES. USE SCO	TABLE 375-6: PROTECTION OF GW SCO	Units	PE-D-F7 1/19/2016 4-4.5	PE-D-F8 1/18/2016 2-2.5	PE-D-F9 1/14/2016 2-2.5	PE-D-G1 3/4/2016 2-2.5	PE-D-G2 3/4/2016 2-2.5
SVOCs								
1,1-Biphenyl	NS	NS	ug/kg	74 U	72 U	72 U	84 U	69 U
2,2-Oxybis(1-Chloropropane)	NS	NS	ug/kg	74 U	72 U	72 U	84 U	69 U
2,4,5-Trichlorophenol	NS	NS	ug/kg	190 U	180 U	180 U	210 U	170 U
2,4,6-Trichlorophenol	NS	NS	ug/kg	190 U	180 U	180 U	210 U	170 U
2,4-Dichlorophenol	NS	NS	ug/kg	190 U	180 U	180 U	210 U	170 U
2,4-Dimethylphenol	NS	NS	ug/kg	190 U	180 U	180 U	210 U	170 U
2,4-Dinitrophenol	NS	NS	ug/kg	190 U	180 U	180 U	210 U	170 U
2,4-Dinitrotoluene	NS	NS	ug/kg	37 U	36 U	36 U	42 U	35 U
2,6-Dinitrotoluene	NS	NS	ug/kg	37 U	36 U	36 U	42 U	35 U
2-Chloronaphthalene	NS	NS	ug/kg	74 U	72 U	72 U	84 U	69 U
2-Chlorophenol	NS	NS	ug/kg	74 U	72 U	72 U	84 U	69 U
2-Methyl-4,6-dinitrophenol	NS	NS	ug/kg	190 U	180 U	180 U	210 U	170 U
2-Methylnaphthalene	NS	NS	ug/kg	74 U	72 U	72 U	84 U	69 U
2-Methylphenol	NS	NS	ug/kg	74 U	72 U	72 U	84 U	69 U
2-Nitroaniline	NS	NS	ug/kg	190 U	180 U	180 U	210 U	170 U
2-Nitrophenol	NS	NS	ug/kg	190 U	180 U	180 U	210 U	170 U
3,3-Dichlorobenzidine	NS	NS	ug/kg	74 U	72 UJ	72 U	84 U	69 U
3-Methylphenol, 4-Methylphenol	NS	NS	ug/kg	74 U	72 U	72 U	84 U	69 U
3-Nitroaniline	NS	NS	ug/kg	190 U	180 U	180 U	210 U	170 U
4-Bromophenyl phenyl ether	NS	NS	ug/kg	74 U	72 U	72 U	84 U	69 U
4-Chloro-3-Methylphenol	NS	NS	ug/kg	190 U	180 U	180 U	210 U	170 U
4-Chlorophenyl phenyl ether	NS	NS	ug/kg	74 U	72 U	72 U	84 U	69 U
4-Nitroaniline	NS	NS	ug/kg	190 U	180 U	180 U	210 U	170 U
4-Nitrophenol	NS	NS	ug/kg	370 U	360 U	360 U	420 U	350 U
Acenaphthene	100000	98000	ug/kg	37 U	36 U	36 U	42 U	35 U
Acenaphthylene	100000	107000	ug/kg	37 U	36 UJ	36 U	42 U	35 U
Acetophenone	NS	NS	ug/kg	190 U	180 U	180 U	210 U	170 U
Anthracene	100000	1000000	ug/kg	37 U	36 U	36 U	42 U	35 U
Atrazine	NS	NS	ug/kg	74 U	72 U	72 U	84 U	69 U
Benzaldehyde	NS	NS	ug/kg	190 U	180 U	180 U	210 UJ	170 UJ
Benzo(a)anthracene	1000	1000	ug/kg	37 U	36 U	36 U	17.7 J	35 U
Benzo(a)pyrene	1000	22000	ug/kg	37 U	36 U	36 U	42 U	35 U
Benzo(b)fluoranthene	1000	1700	ug/kg	37 U	36 U	36 U	17.1 J	35 U
Benzo(g,h,i)perylene	100000	1000000	ug/kg	37 U	36 U	36 U	42 U	35 U
Benzo(k)fluoranthene	3900	1700	ug/kg	37 U	36 U	36 U	42 U	35 U
bis(2-Chloroethoxy)methane	NS	NS	ug/kg	74 U	72 U	72 U	84 U	69 U
bis(2-Chloroethyl)ether	NS	NS	ug/kg	74 U	72 U	72 U	84 U	69 U
bis(2-Ethylhexyl)phthalate	NS	NS	ug/kg	74 U	72 U	72 U	84 U	69 U
Butyl benzyl phthalate	NS	NS	ug/kg	74 U	72 U	72 U	84 U	69 U
Caprolactam	NS	NS	ug/kg	74 U	72 U	72 U	84 U	69 U
Carbazole	NS	NS	ug/kg	74 U	72 U	72 U	84 U	69 U
Chrysene	3900	1000	ug/kg	37 U	36 U	36 U	17 J	35 U
Dibenzo(a,h)anthracene	330	1000000	ug/kg	37 U	36 U	36 U	42 U	35 U
Dibenzofuran	NS	NS	ug/kg	74 U	72 U	72 U	84 U	69 U
Diethyl phthalate	NS	NS	ug/kg	74 U	72 U	72 U	84 U	69 U
Dimethyl phthalate	NS	NS	ug/kg	74 U	72 U	72 U	84 U	69 U
Di-n-butyl phthalate	NS	NS	ug/kg	74 U	72 U	72 U	84 U	69 U
Di-n-octyl phthalate	NS	NS	ug/kg	74 U	72 U	72 U	84 U	69 U
Fluoranthene	100000	1000000	ug/kg	37 U	36 U	36 U	24.3 J	35 U
Fluorene	100000	386000	ug/kg	37 U	36 U	36 U	42 U	35 U
Hexachloro-1,3-butadiene	NS	NS	ug/kg	37 U	36 U	36 UJ	42 U	35 U
Hexachlorobenzene	NS	NS	ug/kg	74 U	72 U	72 U	84 U	69 U
See Notes on Last Page								

Table 12. Confirmatory Soil Sample Results Area D
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Sample ID	TABLE 375-6: RESTRIC. RES. USE SCO	TABLE 375-6: PROTECTION OF GW SCO		PE-D-F7 1/19/2016 4-4.5	PE-D-F8 1/18/2016 2-2.5	PE-D-F9 1/14/2016 2-2.5	PE-D-G1 3/4/2016 2-2.5	PE-D-G2 3/4/2016 2-2.5
Sample Date			Units					
Sample Depth								
SVOCs cont.								
Hexachlorocyclopentadiene	NS	NS	ug/kg	370 U	360 U	360 U	420 U	350 U
Hexachloroethane	NS	NS	ug/kg	190 U	180 U	180 U	210 U	170 U
Indeno(1,2,3-cd)pyrene	500	8200	ug/kg	37 U	36 U	36 U	42 U	35 U
Isophorone	NS	NS	ug/kg	74 U	72 U	72 U	84 U	69 U
Naphthalene	100000	12000	ug/kg	37 U	36 U	36 U	42 U	35 U
Nitrobenzene	NS	NS	ug/kg	74 U	72 U	72 U	84 U	69 U
n-Nitrosodi-n-propylamine	NS	NS	ug/kg	74 U	72 U	72 U	84 U	69 U
N-nitrosodiphenylamine	NS	NS	ug/kg	190 U	180 U	180 U	210 U	170 U
p-Chloroaniline	NS	NS	ug/kg	190 U	180 U	180 U	210 U	170 U
Pentachlorophenol	6700	800	ug/kg	190 U	180 U	180 U	210 U	170 U
Phenanthrene	100000	1000000	ug/kg	37 U	36 U	36 U	42 U	35 U
Phenol	100000	330	ug/kg	74 U	72 U	72 U	84 U	69 U
Pyrene	100000	1000000	ug/kg	37 U	36 U	36 U	23.9 J	35 U
PCBs								
Aroclor 1016	1000	3200	ug/kg	34 U	36 U	37 U	40 U	34 U
Aroclor 1221	1000	3200	ug/kg	34 U	36 U	37 U	40 U	34 U
Aroclor 1232	1000	3200	ug/kg	34 U	36 U	37 U	40 U	34 U
Aroclor 1242	1000	3200	ug/kg	34 U	36 U	37 U	40 U	34 U
Aroclor 1248	1000	3200	ug/kg	34 U	36 U	37 U	40 U	34 U
Aroclor 1254	1000	3200	ug/kg	34 U	36 U	37 U	40 U	34 U
Aroclor 1260	1000	3200	ug/kg	34 U	36 U	37 U	40 U	34 U
Aroclor 1262	1000	3200	ug/kg	34 U	36 U	37 U	40 U	34 U
Aroclor 1268	1000	3200	ug/kg	34 U	36 U	37 U	40 U	34 U
Metals								
Aluminum	NS	NS	mg/kg	17600	9890	18800	13500	7160
Antimony	NS	NS	mg/kg	2.2 UJ	2.2 U	2.4 UJ	2.4 UJ	2.1 UJ
Arsenic	16	16	mg/kg	4.1	2.7	6.6	4.9	1.8 B
Barium	400	820	mg/kg	37.3	36	45	53.8	27.1
Beryllium	72	47	mg/kg	0.7	0.55	0.8	0.52	0.3
Cadmium	4.3	7.5	mg/kg	0.28 B	0.18 B	0.17 B	0.6 UB	0.53 U
Calcium	NS	NS	mg/kg	1900	1990	1390	1660 J	1350 J
Chromium	NS	NS	mg/kg	15.9	12.8	19.5	20.1	12.8
Cobalt	NS	NS	mg/kg	8	7	8.8	7.6	6.8
Copper	270	1720	mg/kg	12.4	20.3	7	10	7.4
Iron	NS	NS	mg/kg	20700	16200	19900	15200 J	12600 J
Lead	400	450	mg/kg	27.6	45.5	6.2	25	2.9
Magnesium	NS	NS	mg/kg	3180	2780	2520	2260	2440
Manganese	2000	2000	mg/kg	177	153	163	350 J	131 J
Mercury	NS	NS	mg/kg	0.045	0.015 B	0.043	0.041 B	0.012 B
Nickel	310	130	mg/kg	12.4	9.7	10.6	10.9	12.1
Potassium	NS	NS	mg/kg	816 B	1130	832 B	947 J	611 J
Selenium	180	4	mg/kg	2.2 U	0.42 B	2.4 U	2.4 U	2.1 U
Silver	180	8.3	mg/kg	0.56 U	0.54 U	0.6 U	0.6 U	0.53 U
Sodium	NS	NS	mg/kg	105 B	145 B	121 B	134 J	117 J
Thallium	NS	NS	mg/kg	0.37 B	1.1 U	0.81 B	1.2 U	1.1 U
Vanadium	NS	NS	mg/kg	29	25.3	28.7	29.9	19.5
Zinc	10000	2480	mg/kg	36.8	33.2	43.8	50.6 J	19.6 J
General Chemistry								
Percent Solids			%	87.7	90.6	84.4	78.9	91.4
Notes								
	NS	No standard						
	NA	Not analyzed						
	J	Estimated result						
	JN	Estimated result						
	R	Rejected result						
	UB	Analyte considered non-detect at the listed value due to associated blank contamination						
	Bold	Result exceeds 375-6.8(b) protection of groundwater soil cleanup objective.						
	Shade	Result exceeds 375-6.8(b) restricted residential use soil cleanup objective.						

Table 12. Confirmatory Soil Sample Results Area D
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Sample ID	TABLE 375-6: RESTRIC. RES. USE SCO	TABLE 375-6: PROTECTION OF GW SCO		PE-D-G3 3/4/2016	PE-D-G4 3/2/2016	PE-D-G5 1/20/2016	PE-D-G6 1/11/2016	PE-D-G7 1/19/2016	PE-D-G8 1/18/2016	PE-D-G9 1/13/2016	PE-D-G10 1/13/2016	PE-D-G11 1/13/2016	PE-D-G12 1/13/2016	PE-D-G12 -DUP-012_201601	PE-D-H2 3/4/2016	PE-D-H3 3/4/2016
Sample Date																
Sample Depth			Units	2-2.5	2-2.5	2-2.5	2.5-3	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5
VOCs																
1,1,1-Trichloroethane	100000	680	ug/kg	2.1 U	2.2 U	2.5 U	1.9 U	2 U	2.1 U	2 U	2 U	2.5 U	1.9 U	2.1 U	1.9 U	1.9 U
1,1,2,2-Tetrachloroethane	NS	NS	ug/kg	2.1 U	2.2 U	2.5 U	1.9 U	2 U	2.1 U	2 U	2 U	2.5 U	1.9 U	2.1 U	1.9 U	1.9 U
1,1,2-trichloro-1,2,2-trifluoroethane	NS	NS	ug/kg	5.3 U	5.6 U	6.1 U	4.7 U	5.1 U	5.2 U	4.9 UJ	4.9 UJ	6.3 UJ	4.7 U	5.2 U	4.7 U	4.8 U
1,1,2-Trichloroethane	NS	NS	ug/kg	2.1 U	2.2 U	2.5 U	1.9 U	2 U	2.1 U	2 U	2 U	2.5 U	1.9 U	2.1 U	1.9 U	1.9 U
1,1-Dichloroethane	26000	270	ug/kg	1.1 U	1.1 U	1.2 U	0.95 U	1 U	1 U	0.98 U	0.98 U	1.3 U	0.94 U	1 U	0.95 U	0.97 U
1,1-Dichloroethene	100000	330	ug/kg	1.1 U	1.1 U	1.2 U	0.95 U	1 U	1 U	0.98 U	0.98 U	1.3 U	0.94 U	1 U	0.95 U	0.97 U
1,2,4-Trichlorobenzene	NS	NS	ug/kg	5.3 U	5.6 U	6.1 U	4.7 U	5.1 U	5.2 U	4.9 U	4.9 U	6.3 U	4.7 U	5.2 U	4.7 U	4.8 U
1,2-Dibromo-3-chloropropane	NS	NS	ug/kg	2.1 U	2.2 U	2.5 U	1.9 U	2 U	2.1 U	2 U	2 U	2.5 U	1.9 U	2.1 U	1.9 U	1.9 U
1,2-Dibromoethane	NS	NS	ug/kg	1.1 U	1.1 U	1.2 U	0.95 U	1 U	1 U	0.98 U	0.98 U	1.3 U	0.94 U	1 U	0.95 U	0.97 U
1,2-Dichlorobenzene	100000	1100	ug/kg	1.1 U	1.1 U	1.2 U	0.95 U	1 U	1 U	0.98 U	0.98 U	1.3 U	0.94 U	1 U	0.95 U	0.97 U
1,2-Dichloroethane	3100	20	ug/kg	1.1 U	1.1 U	1.2 U	0.95 U	1 U	1 U	0.98 U	0.98 U	1.3 U	0.94 U	1 U	0.95 U	0.97 U
1,2-Dichloropropane	NS	NS	ug/kg	2.1 U	2.2 U	2.5 U	1.9 U	2 U	2.1 U	2 U	2 U	2.5 U	1.9 U	2.1 U	1.9 U	1.9 U
1,3-Dichlorobenzene	49000	2400	ug/kg	1.1 U	1.1 U	1.2 U	0.95 U	1 U	1 U	0.98 U	0.98 U	1.3 U	0.94 U	1 U	0.95 U	0.97 U
1,4-Dichlorobenzene	13000	1800	ug/kg	1.1 U	1.1 U	1.2 U	0.95 U	1 U	1 U	0.98 U	0.98 U	1.3 U	0.94 U	1 U	0.95 U	0.97 U
2-Butanone (MEK)	100000	120	ug/kg	11 U	16.5	12 U	9.5 U	10 U	10 U	9.8 U	9.8 U	13 U	9.4 U	10 U	9.5 U	9.7 U
4-Methyl-2-Pentanone	NS	NS	ug/kg	5.3 U	5.6 U	6.1 U	4.7 U	5.1 U	5.2 U	4.9 U	4.9 U	6.3 U	4.7 U	5.2 U	4.7 U	4.8 U
Acetone	100000	50	ug/kg	11 U	101	90.3	9.5 U	8.9 J	62	94.8	53.8 J	13 U	16.4	10 U	8.6 J	9.7 U
Benzene	4800	60	ug/kg	0.53 U	0.56 U	0.61 U	0.47 U	0.51 U	0.52 U	0.49 U	0.49 U	0.63 U	0.47 U	0.52 U	0.47 U	0.48 U
Bromodichloromethane	NS	NS	ug/kg	2.1 U	2.2 U	2.5 U	1.9 U	2 U	2.1 U	2 U	2 U	2.5 U	1.9 U	2.1 U	1.9 U	1.9 U
Bromoform	NS	NS	ug/kg	5.3 U	5.6 U	6.1 U	4.7 U	5.1 U	5.2 U	4.9 U	4.9 U	6.3 U	4.7 U	5.2 U	4.7 U	4.8 U
Bromomethane	NS	NS	ug/kg	5.3 U	5.6 U	6.1 U	4.7 U	5.1 U	5.2 U	4.9 U	4.9 U	6.3 U	4.7 U	5.2 U	4.7 U	4.8 U
Carbon Disulfide	NS	NS	ug/kg	2.1 U	2.2 U	2.5 U	1.9 U	2 U	2.1 U	2 U	2 U	2.5 U	1.9 U	2.1 U	1.9 U	1.9 U
Carbon Tetrachloride	2400	760	ug/kg	2.1 U	2.2 U	2.5 U	1.9 U	2 U	2.1 U	2 U	2 U	2.5 U	1.9 U	2.1 U	1.9 U	1.9 U
CFC-11	NS	NS	ug/kg	5.3 U	5.6 U	6.1 U	4.7 U	5.1 U	5.2 U	4.9 U	4.9 U	6.3 U	4.7 U	5.2 U	4.7 U	4.8 U
CFC-12	NS	NS	ug/kg	5.3 U	5.6 U	6.1 U	4.7 U	5.1 U	5.2 U	4.9 U	4.9 U	6.3 U	4.7 U	5.2 U	4.7 U	4.8 U
Chlorobenzene	100000	1100	ug/kg	2.1 U	2.2 U	2.5 U	1.9 U	2 U	2.1 U	2 U	2 U	2.5 U	1.9 U	2.1 U	1.9 U	1.9 U
Chlorodibromomethane	NS	NS	ug/kg	2.1 U	2.2 U	2.5 U	1.9 U	2 U	2.1 U	2 U	2 U	2.5 U	1.9 U	2.1 U	1.9 U	1.9 U
Chloroethane	NS	NS	ug/kg	5.3 U	5.6 U	6.1 U	4.7 U	5.1 U	5.2 U	4.9 U	4.9 U	6.3 U	4.7 U	5.2 U	4.7 U	4.8 U
Chloroform	49000	370	ug/kg	2.1 U	2.2 U	2.5 U	1.9 U	2 U	2.1 U	2 U	2 U	2.5 U	1.9 U	2.1 U	1.9 U	1.9 U
Chloromethane	NS	NS	ug/kg	5.3 U	5.6 U	6.1 U	4.7 U	5.1 U	5.2 U	4.9 U	4.9 U	6.3 U	4.7 U	5.2 U	4.7 U	4.8 U
cis-1,2-Dichloroethene	100000	250	ug/kg	1.1 U	1.1 U	1.2 U	0.95 U	1 U	1 U	0.98 U	0.98 U	1.3 U	0.94 U	1 U	0.95 U	0.97 U
cis-1,3-Dichloropropene	NS	NS	ug/kg	2.1 U	2.2 U	2.5 U	1.9 U	2 U	2.1 U	2 U	2 U	2.5 U	1.9 U	2.1 U	1.9 U	1.9 U
Cyclohexane	NS	NS	ug/kg	2.1 U	2.2 U	2.5 U	1.9 U	2 U	2.1 U	2 U	2 U	2.5 U	1.9 U	2.1 U	1.9 U	1.9 U
Dichloromethane	NS	NS	ug/kg	5.3 U	5.6 U	6.1 U	4.7 U	5.1 U	5.2 U	4.9 U	4.9 U	6.3 U	4.7 U	5.2 U	4.7 U	4.8 U
Ethylbenzene	41000	1000	ug/kg	1.1 U	1.1 U	1.2 U	0.95 U	1 U	0.26 J	0.98 U	2.4	1.3 U	0.94 U	1 U	0.95 U	0.97 U
Isopropylbenzene	NS	NS	ug/kg	2.1 U	2.2 U	2.5 U	1.9 U	2 U	2.1 U	2 U	0.44 J	2.5 U	1.9 U	2.1 U	1.9 U	1.9 U
Methyl Acetate	NS	NS	ug/kg	5.3 U	5.6 U	6.1 U	4.7 U	5.1 U	5.2 U	4.9 U	4.9 U	6.3 U	4.7 U	5.2 U	4.7 U	4.8 U
Methyl N-Butyl Ketone (2-Hexanone)	NS	NS	ug/kg	5.3 U	5.6 U	6.1 U	4.7 U	5.1 U	5.2 U	4.9 U	4.9 U	6.3 U	4.7 U	5.2 U	4.7 U	4.8 U
Methylcyclohexane	NS	NS	ug/kg	2.1 U	2.2 U	2.5 U	1.9 U	2 U	2.1 U	2 U	1.1 J	2.5 U	1.9 U	2.1 U	1.9 U	1.9 U
Methyl-tert-butylether	100000	930	ug/kg	1.1 U	1.1 U	1.2 U	0.95 U	1 U	1 U	0.98 U	0.98 U	1.3 U	0.94 U	1 U	0.95 U	0.97 U
Styrene (Monomer)	NS	NS	ug/kg	2.1 U	0.35 J	2.5 U	1.9 U	2 U	0.53 J	2 U	2 U	2.5 U	1.9 U	2.1 U	1.9 U	1.9 U
Tetrachloroethene	19000	1300	ug/kg	2.1 U	2.2 U	2.5 U	1.9 U	2 U	2.1 U	2 U	2 U	2.5 U	1.9 U	2.1 U	1.9 U	1.9 U
Toluene	100000	700	ug/kg	1.1 U	2.6	1.2 U	0.95 U	1 U	1 U	0.98 U	0.31 J	1.3 U	0.94 U	1 U	0.95 U	0.97 U
Total Xylenes	100000	1600	ug/kg	1.1 U	1.1 U	1.2 U	0.95 U	1 U	1 U	0.98 U	22.1	1.3 U	0.94 U	1 U	0.95 U	0.97 U
trans-1,2-Dichloroethene	100000	190	ug/kg	1.1 U	1.1 U	1.2 U	0.95 U	1 U	1 U	0.98 U	0.98 U	1.3 U	0.94 U	1 U	0.95 U	0.97 U
trans-1,3-Dichloropropene	NS	NS	ug/kg	2.1 U	2.2 U	2.5 U	1.9 U	2 U	2.1 U	2 U	2 U	2.5 U	1.9 U	2.1 U	1.9 U	1.9 U
Trichloroethene	21000	470	ug/kg	1.1 U	1.1 U	1.2 U	0.95 U	1 U	1 U	0.98 U	0.98 U	1.3 U	0.94 U	1 U	0.95 U	0.97 U
Vinyl chloride	900	20	ug/kg	2.1 U	2.2 U	2.5 U	1.9 U	2 U	2.1 U	2 U	2 U	2.5 U	1.9 U	2.1 U	1.9 U	1.9 U

See Notes on Last Page

Table 12. Confirmatory Soil Sample Results Area D
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Sample ID Sample Date Sample Depth	TABLE 375-6: RESTRIC. RES. USE SCO	TABLE 375-6: PROTECTION OF GW SCO		PE-D-G3 3/4/2016 2-2.5	PE-D-G4 3/2/2016 2-2.5	PE-D-G5 1/20/2016 2-2.5	PE-D-G6 1/11/2016 2.5-3	PE-D-G7 1/19/2016 2-2.5	PE-D-G8 1/18/2016 2-2.5	PE-D-G9 1/13/2016 2-2.5	PE-D-G10 1/13/2016 2-2.5	PE-D-G11 1/13/2016 2-2.5	PE-D-G12 1/13/2016 2-2.5	PE-D-G12 -DUP-012_201601 2-2.5	PE-D-H2 3/4/2016 2-2.5	PE-D-H3 3/4/2016 2-2.5
SVOCs																
1,1-Biphenyl	NS	NS	ug/kg	80 U	74 U	71 U	79 U	72 U	76 U	75 U	76 U	75 U	74 U	80 U	72 U	74 U
2,2-Oxybis(1-Chloropropane)	NS	NS	ug/kg	80 U	74 U	71 U	79 U	72 U	76 U	75 U	76 U	75 U	74 U	80 U	72 U	74 U
2,4,5-Trichlorophenol	NS	NS	ug/kg	200 U	190 U	180 U	200 U	180 U	190 U	190 U	190 U	190 U	180 U	200 U	180 U	180 U
2,4,6-Trichlorophenol	NS	NS	ug/kg	200 U	190 U	180 U	200 U	180 U	190 U	190 U	190 U	190 U	180 U	200 U	180 U	180 U
2,4-Dichlorophenol	NS	NS	ug/kg	200 U	190 U	180 U	200 U	180 U	190 U	190 U	190 U	190 U	180 U	200 U	180 U	180 U
2,4-Dimethylphenol	NS	NS	ug/kg	200 U	190 U	180 U	200 U	180 U	190 U	190 U	190 UJ	190 UJ	180 UJ	200 UJ	180 U	180 U
2,4-Dinitrophenol	NS	NS	ug/kg	200 U	190 U	180 U	200 U	180 U	190 U	190 U	190 U	190 U	180 U	200 U	180 U	180 U
2,4-Dinitrotoluene	NS	NS	ug/kg	40 U	37 U	36 U	40 U	36 U	38 U	37 U	38 U	37 U	37 U	40 U	36 U	37 U
2,6-Dinitrotoluene	NS	NS	ug/kg	40 U	37 U	36 U	40 U	36 U	38 U	37 U	38 U	37 U	37 U	40 U	36 U	37 U
2-Chloronaphthalene	NS	NS	ug/kg	80 U	74 U	71 U	79 U	72 U	76 U	75 U	76 U	75 U	74 U	80 U	72 U	74 U
2-Chlorophenol	NS	NS	ug/kg	80 U	74 U	71 U	79 U	72 U	76 U	75 U	76 U	75 U	74 U	80 U	72 U	74 U
2-Methyl-4,6-dinitrophenol	NS	NS	ug/kg	200 U	190 U	180 U	200 U	180 U	190 U	190 U	190 U	190 U	180 U	200 U	180 U	180 U
2-Methylnaphthalene	NS	NS	ug/kg	80 U	34.6 J	71 U	79 U	72 U	76 U	75 U	76 U	75 U	74 U	80 U	72 U	74 U
2-Methylphenol	NS	NS	ug/kg	80 U	74 U	71 U	79 U	72 U	76 U	75 U	76 U	75 U	74 U	80 U	72 U	74 U
2-Nitroaniline	NS	NS	ug/kg	200 U	190 U	180 U	200 U	180 U	190 U	190 U	190 UJ	190 UJ	180 UJ	200 UJ	180 U	180 U
2-Nitrophenol	NS	NS	ug/kg	200 U	190 U	180 U	200 U	180 U	190 U	190 U	190 U	190 U	180 U	200 U	180 U	180 U
3,3-Dichlorobenzidine	NS	NS	ug/kg	80 U	74 U	71 U	79 U	72 U	76 U	75 U	76 U	75 U	74 U	80 U	72 U	74 U
3-Methylphenol, 4-Methylphenol	NS	NS	ug/kg	80 U	74 U	71 U	79 U	72 U	76 U	75 U	76 U	75 U	74 U	80 U	72 U	74 U
3-Nitroaniline	NS	NS	ug/kg	200 U	190 U	180 U	200 U	180 U	190 U	190 U	190 U	190 U	180 U	200 U	180 U	180 U
4-Bromophenyl phenyl ether	NS	NS	ug/kg	80 U	74 U	71 U	79 U	72 U	76 U	75 U	76 U	75 U	74 U	80 U	72 U	74 U
4-Chloro-3-Methylphenol	NS	NS	ug/kg	200 U	190 U	180 U	200 U	180 U	190 U	190 U	190 U	190 U	180 U	200 U	180 U	180 U
4-Chlorophenyl phenyl ether	NS	NS	ug/kg	80 U	74 U	71 U	79 U	72 U	76 U	75 U	76 U	75 U	74 U	80 U	72 U	74 U
4-Nitroaniline	NS	NS	ug/kg	200 U	190 U	180 U	200 U	180 U	190 U	190 U	190 U	190 U	180 U	200 U	180 U	180 U
4-Nitrophenol	NS	NS	ug/kg	400 U	370 U	360 U	400 U	360 U	380 U	370 U	380 UJ	370 UJ	370 UJ	400 UJ	360 U	370 U
Acenaphthene	100000	98000	ug/kg	40 U	37 U	36 U	40 U	36 U	38 U	37 U	38 U	37 U	37 U	40 U	36 U	37 U
Acenaphthylene	100000	107000	ug/kg	40 U	37 U	36 U	40 U	36 U	38 U	37 U	38 U	37 U	37 U	40 U	36 U	37 U
Acetophenone	NS	NS	ug/kg	200 U	190 U	180 U	200 U	180 U	190 U	190 U	190 U	190 U	180 U	200 U	180 U	180 U
Anthracene	100000	1000000	ug/kg	40 U	37 U	36 U	40 U	36 U	38 U	37 U	38 U	37 U	37 U	40 U	36 U	37 U
Atrazine	NS	NS	ug/kg	80 U	74 U	71 U	79 U	72 U	76 U	75 U	76 U	75 U	74 U	80 U	72 U	74 U
Benzaldehyde	NS	NS	ug/kg	200 UJ	190 U	180 U	200 U	180 U	190 U	190 U	190 U	190 U	180 U	200 U	180 UJ	180 UJ
Benzo(a)anthracene	1000	1000	ug/kg	40 U	37 U	36 U	40 U	36 U	38 U	37 U	38 U	37 U	37 U	40 U	36 U	37 U
Benzo(a)pyrene	1000	22000	ug/kg	40 U	37 U	36 U	40 U	36 U	38 U	37 U	38 U	37 U	37 U	40 U	36 U	37 U
Benzo(b)fluoranthene	1000	1700	ug/kg	40 U	37 U	36 U	40 U	36 U	38 U	37 U	38 U	37 U	37 U	40 U	36 U	37 U
Benzo(g,h,i)perylene	100000	1000000	ug/kg	40 U	37 U	36 U	40 U	36 U	38 U	37 U	38 U	37 U	37 U	40 U	36 U	37 U
Benzo(k)fluoranthene	3900	1700	ug/kg	40 U	37 U	36 U	40 U	36 U	38 U	37 U	38 U	37 U	37 U	40 U	36 U	37 U
bis(2-Chloroethoxy)methane	NS	NS	ug/kg	80 U	74 U	71 U	79 U	72 U	76 U	75 U	76 U	75 U	74 U	80 U	72 U	74 U
bis(2-Chloroethyl)ether	NS	NS	ug/kg	80 U	74 U	71 U	79 U	72 U	76 U	75 U	76 U	75 U	74 U	80 U	72 U	74 U
bis(2-Ethylhexyl)phthalate	NS	NS	ug/kg	80 U	74 U	71 U	79 U	72 U	76 U	75 U	76 U	75 U	74 U	80 U	72 U	74 U
Butyl benzyl phthalate	NS	NS	ug/kg	80 U	74 U	71 U	79 U	72 U	76 U	75 U	76 U	75 U	74 U	80 U	72 U	74 U
Caprolactam	NS	NS	ug/kg	80 U	74 U	71 U	79 U	72 U	76 U	75 U	76 U	75 U	74 U	80 U	72 U	74 U
Carbazole	NS	NS	ug/kg	80 U	74 U	71 U	79 U	72 U	76 U	75 U	76 U	75 U	74 U	80 U	72 U	74 U
Chrysene	3900	1000	ug/kg	40 U	37 U	36 U	40 U	36 U	38 U	37 U	38 U	37 U	37 U	40 U	36 U	37 U
Dibenzo(a,h)anthracene	330	1000000	ug/kg	40 U	37 U	36 U	40 U	36 U	38 U	37 U	38 U	37 U	37 U	40 UJ	36 U	37 U
Dibenzofuran	NS	NS	ug/kg	80 U	74 U	71 U	79 U	72 U	76 U	75 U	76 U	75 U	74 U	80 U	72 U	74 U
Diethyl phthalate	NS	NS	ug/kg	80 U	74 U	71 U	79 U	72 U	76 U	75 U	76 U	75 U	74 U	80 U	72 U	74 U
Dimethyl phthalate	NS	NS	ug/kg	80 U	74 U	71 U	79 U	72 U	76 U	75 U	76 U	75 U	74 U	80 U	72 U	74 U
Di-n-butyl phthalate	NS	NS	ug/kg	80 U	74 U	71 U	79 U	72 U	76 U	75 U	76 U	75 U	74 U	80 U	72 U	74 U
Di-n-octyl phthalate	NS	NS	ug/kg	80 U	74 U	71 U	79 UJ	72 U	76 U	75 UJ	76 U	75 U	74 U	80 UJ	72 U	74 U
Fluoranthene	100000	1000000	ug/kg	40 U	37 U	36 U	40 U	36 U	38 U	37 U	38 U	37 U	37 U	40 U	36 U	37 U
Fluorene	100000	386000	ug/kg	40 U	37 U	36 U	40 U	36 U	38 U	37 U	38 U	37 U	37 U	40 U	36 U	37 U
Hexachloro-1,3-butadiene	NS	NS	ug/kg	40 U	37 U	36 U	40 U	36 U	38 U	37 U	38 U	37 U	37 U	40 U	36 U	37 U
Hexachlorobenzene	NS	NS	ug/kg	80 U	74 U	71 U	79 U	72 U	76 U	75 U	76 U	75 U	74 U	80 U	72 U	74 U
See Notes on Last Page																

Table 12. Confirmatory Soil Sample Results Area D
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Sample ID	TABLE 375-6: RESTRIC. RES. USE SCO	TABLE 375-6: PROTECTION OF GW SCO		PE-D-G3 3/4/2016	PE-D-G4 3/2/2016	PE-D-G5 1/20/2016	PE-D-G6 1/11/2016	PE-D-G7 1/19/2016	PE-D-G8 1/18/2016	PE-D-G9 1/13/2016	PE-D-G10 1/13/2016	PE-D-G11 1/13/2016	PE-D-G12 1/13/2016	PE-D-G12 -DUP-012_201601	PE-D-H2 3/4/2016	PE-D-H3 3/4/2016
Sample Date																
Sample Depth			Units	2-2.5	2-2.5	2-2.5	2.5-3	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5
SVOCs cont.																
Hexachlorocyclopentadiene	NS	NS	ug/kg	400 U	370 U	360 U	400 U	360 U	380 U	370 U	380 U	370 U	370 U	400 U	360 U	370 U
Hexachloroethane	NS	NS	ug/kg	200 U	190 U	180 U	200 U	180 U	190 U	190 U	190 U	190 U	180 U	200 U	180 U	180 U
Indeno(1,2,3-cd)pyrene	500	8200	ug/kg	40 U	37 U	36 U	40 U	36 U	38 U	37 U	38 U	37 U	37 U	40 UJ	36 U	37 U
Isophorone	NS	NS	ug/kg	80 U	74 U	71 U	79 U	72 U	76 U	75 U	76 U	75 U	74 U	80 U	72 U	74 U
Naphthalene	100000	12000	ug/kg	40 U	43.5	36 U	40 U	36 U	38 U	37 U	38 U	37 U	37 U	40 U	36 U	37 U
Nitrobenzene	NS	NS	ug/kg	80 U	74 U	71 U	79 U	72 U	76 U	75 U	76 U	75 U	74 U	80 U	72 U	74 U
n-Nitrosodi-n-propylamine	NS	NS	ug/kg	80 U	74 U	71 U	79 U	72 U	76 U	75 U	76 UJ	75 UJ	74 UJ	80 UJ	72 U	74 U
N-nitrosodiphenylamine	NS	NS	ug/kg	200 U	190 U	180 U	200 U	180 U	190 U	190 U	190 U	190 U	180 U	200 U	180 U	180 U
p-Chloroaniline	NS	NS	ug/kg	200 U	190 U	180 U	200 UJ	180 U	190 U	190 U	190 U	190 U	180 U	200 U	180 U	180 U
Pentachlorophenol	6700	800	ug/kg	200 U	190 U	180 U	200 U	180 U	190 U	190 U	190 U	190 U	180 U	200 U	180 U	180 U
Phenanthrene	100000	1000000	ug/kg	40 U	37 U	36 U	40 U	36 U	38 U	37 U	38 U	37 U	37 U	40 U	36 U	37 U
Phenol	100000	330	ug/kg	80 U	74 U	71 U	79 U	72 U	76 U	75 U	76 U	75 U	74 U	80 U	72 U	74 U
Pyrene	100000	1000000	ug/kg	40 U	37 U	36 U	40 U	36 U	38 U	37 U	38 U	37 U	37 U	40 U	36 U	37 U
PCBs																
Aroclor 1016	1000	3200	ug/kg	39 U	40 U	37 U	38 U	33 UJ	39 U	38 U	39 U	37 U	35 U	39 U	36 U	35 U
Aroclor 1221	1000	3200	ug/kg	39 U	40 U	37 U	38 U	33 UJ	39 U	38 U	39 U	37 U	35 U	39 U	36 U	35 U
Aroclor 1232	1000	3200	ug/kg	39 U	40 U	37 U	38 U	33 UJ	39 U	38 U	39 U	37 U	35 U	39 U	36 U	35 U
Aroclor 1242	1000	3200	ug/kg	39 U	40 U	37 U	38 U	33 U	39 U	38 U	39 U	37 U	35 U	39 U	36 U	35 U
Aroclor 1248	1000	3200	ug/kg	39 U	40 U	37 U	38 U	33 U	39 U	38 U	39 U	37 U	35 U	39 U	36 U	35 U
Aroclor 1254	1000	3200	ug/kg	39 U	40 U	37 U	38 U	33 U	39 U	38 U	39 U	37 U	35 U	39 U	36 U	35 U
Aroclor 1260	1000	3200	ug/kg	39 U	40 U	37 U	38 U	33 U	39 U	38 U	39 U	37 U	35 U	39 U	36 U	35 U
Aroclor 1262	1000	3200	ug/kg	39 U	40 U	37 U	38 U	33 U	39 U	38 U	39 U	37 U	35 U	39 U	36 U	35 U
Aroclor 1268	1000	3200	ug/kg	39 U	40 U	37 U	38 U	33 U	39 U	38 U	39 U	37 U	35 U	39 U	36 U	35 U
Metals																
Aluminum	NS	NS	mg/kg	11400	13200	13300	8340	19700	19100	17300	19500	19400	20000	19400	8670	11500
Antimony	NS	NS	mg/kg	2.4 UJ	2.4 UB	0.39 BJ	2.4 U	2.2 UJ	2.3 U	2.2 UJ	2.4 UJ	2.4 UJ	2.2 UJ	2.4 UJ	2.1 UJ	2.3 UJ
Arsenic	16	16	mg/kg	2.7	1.6 B	3.4	2.6	3.5	4.3	3	3.6	2.6	2.4	2.6	2.3	3
Barium	400	820	mg/kg	37.8	130	46.5	44.8	37.9	42.4	38.8	51.5	20.8 B	26.4	29.5	55.6	50.3
Beryllium	72	47	mg/kg	0.34	0.63	0.63	0.41 UB	0.88	0.77	0.48	0.62	0.56	0.67	0.75	0.39	0.44
Cadmium	4.3	7.5	mg/kg	0.59 U	0.61 UB	0.42 B	0.6 UB	0.16 B	0.18 B	0.56 U	0.6 U	0.59 U	0.55 U	0.6 U	0.53 U	0.57 U
Calcium	NS	NS	mg/kg	705 J	4790 J	2320	2500	1230	1170	861	1110	406 B	703	457 B	2460 J	1550 J
Chromium	NS	NS	mg/kg	14.3	12.6	15.2	11.7	18.5	19.7	15.3	17.1	13	14.7	15.6	11.7	14.5
Cobalt	NS	NS	mg/kg	4.6 B	11.3	7.6	6.9	7.5	8.8	4.6 B	7	3.2 B	4.3 B	3.9 B	6.9	6.6
Copper	270	1720	mg/kg	3.7	20.2	19.4	18.1	10.5	18.8	5.3	7.8	2.4 B	3.2	2.8 B	12.4	9.9
Iron	NS	NS	mg/kg	13000 J	22600 J	18700	14600	18400	20200	15300	18600	14900	17200	17900	14500 J	14700 J
Lead	400	450	mg/kg	7.9	3.3	25.8 J	12.8	11.4	16.3	7.6	12.8	6.1	5.3	6	4.2	20.9
Magnesium	NS	NS	mg/kg	2150	5690	2910	2730	2440	2770	1730	1980	795	1130	1040	2770	2280
Manganese	2000	2000	mg/kg	111 J	220 J	254	212	99.4	134	65.8	108	34.3	68.6	97.1	151 J	190 J
Mercury	NS	NS	mg/kg	0.017 B	0.013 B	0.022 B	0.011 B	0.046	0.035 B	0.046	0.05	0.042	0.035	0.038 B	0.0098 B	0.023 B
Nickel	310	130	mg/kg	7.9	14.9	10.8	9.4	9.9	13.8	8.4	10.4	6.9	7.9	6.8	8.7	10.5
Potassium	NS	NS	mg/kg	704 J	3150 J	1010 B	1200	708 B	1020 B	678 B	831 B	260 B	332 B	323 B	1390 J	923 J
Selenium	180	4	mg/kg	2.4 U	2.4 U	2.3 U	2.4 U	0.53 B	0.69 B	2.2 U	2.4 U	0.32 B	0.7 B	0.62 B	2.1 U	2.3 U
Silver	180	8.3	mg/kg	0.59 U	1.6	0.45 B	0.45 B	0.55 U	0.58 U	0.7	0.63	0.63	0.63	0.64	0.53 UB	0.57 U
Sodium	NS	NS	mg/kg	97.1 J	326 J	163 B	1200 UB	128 B	115 B	68.6 B	125 B	49.6 B	75.5 B	55.6 B	198 J	151 J
Thallium	NS	NS	mg/kg	1.2 U	2.4 U	1.1 U	0.68 B	0.37 B	0.29 B	1.1 U	1.2 U	1.2 U	1.1 U	1.2 U	1.1 U	1.1 U
Vanadium	NS	NS	mg/kg	23.6	33.5	30.8	22	28.5	33.3	25.8	29.7	24	26	27.4	21.5	25.5
Zinc	10000	2480	mg/kg	27.8 J	31.7 J	49.1	31.2	29.7	34.7	26.6	37.2	19.7	23	22.5	25.1 J	38.2 J
General Chemistry																
Percent Solids			%	80.7	81.6	90.6	81.2	92.3	83.3	86.3	83.9	86.4	89.7	83	90.9	89.2
Notes																
NS			No standard													
NA			Not analyzed													
J			Estimated result													
JN			Estimated result													
R			Rejected result													
UB			Analyte considered non-detect at the listed value due to associated blank contamination													
Bold			Result exceeds 375-6.8(b) protection of groundwater soil cleanup objective.													
Shade			Result exceeds 375-6.8(b) restricted residential use soil cleanup objective.													

Table 12. Confirmatory Soil Sample Results Area D
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Sample ID	TABLE 375-6: RESTRIC. RES. USE SCO	TABLE 375-6: PROTECTION OF GW SCO		PE-D-H4 3/2/2016	PE-D-H4 -DUP-016_201603	PE-D-H5 3/2/2016	PE-D-H6 3/1/2016	PE-D-H7 3/1/2016	PE-D-H8 1/18/2016	PE-D-H8 -DUP-013_201601	PE-D-H9 1/18/2016	PE-D-H10 1/18/2016	PE-D-H12 1/13/2016	PE-D-I3 3/2/2016	PE-D-I4 3/2/2016	PE-D-S1 1/11/2016
Sample Date																
Sample Depth			Units	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	1-1.5
VOCs																
1,1,1-Trichloroethane	100000	680	ug/kg	1.7 U	2.2 U	1.7 U	1.8 U	1.7 U	1.9 U	1.8 U	2.3 U	3.3 U	1.9 U	2 U	2.2 U	2.3 U
1,1,2,2-Tetrachloroethane	NS	NS	ug/kg	1.7 U	2.2 U	1.7 U	1.8 U	1.7 U	1.9 U	1.8 U	2.3 U	3.3 U	1.9 U	2 U	2.2 U	2.3 U
1,1,2-trichloro-1,2,2-trifluoroethane	NS	NS	ug/kg	4.3 U	5.4 U	4.2 U	4.4 U	4.3 U	4.7 U	4.6 U	5.6 U	8.1 U	4.8 U	5 U	5.4 UJ	5.7 U
1,1,2-Trichloroethane	NS	NS	ug/kg	1.7 U	2.2 U	1.7 U	1.8 U	1.7 U	1.9 U	1.8 U	2.3 U	3.3 U	1.9 U	2 U	2.2 U	2.3 U
1,1-Dichloroethane	26000	270	ug/kg	0.87 U	1.1 U	0.84 U	0.89 U	0.86 U	0.93 U	0.92 U	1.1 U	1.6 U	0.95 U	1 U	1.1 U	1.1 U
1,1-Dichloroethene	100000	330	ug/kg	0.87 U	1.1 U	0.84 U	0.89 U	0.86 U	0.93 U	0.92 U	1.1 U	1.6 U	0.95 U	1 U	1.1 U	1.1 U
1,2,4-Trichlorobenzene	NS	NS	ug/kg	4.3 U	5.4 U	4.2 U	4.4 U	4.3 U	4.7 U	4.6 U	5.6 U	8.1 U	4.8 U	5 U	5.4 UJ	5.7 U
1,2-Dibromo-3-chloropropane	NS	NS	ug/kg	1.7 U	2.2 U	1.7 U	1.8 U	1.7 U	1.9 U	1.8 U	2.3 U	3.3 U	1.9 U	2 U	2.2 U	2.3 U
1,2-Dibromoethane	NS	NS	ug/kg	0.87 U	1.1 U	0.84 U	0.89 U	0.86 U	0.93 U	0.92 U	1.1 U	1.6 U	0.95 U	1 U	1.1 U	1.1 U
1,2-Dichlorobenzene	100000	1100	ug/kg	0.87 U	1.1 U	0.84 U	0.89 U	0.86 U	0.93 U	0.92 U	1.1 U	1.6 U	0.95 U	1 U	1.1 UJ	1.1 U
1,2-Dichloroethane	3100	20	ug/kg	0.87 U	1.1 U	0.84 U	0.89 U	0.86 U	0.93 U	0.92 U	1.1 U	1.6 U	0.95 U	1 U	1.1 U	1.1 U
1,2-Dichloropropane	NS	NS	ug/kg	1.7 U	2.2 U	1.7 U	1.8 U	1.7 U	1.9 U	1.8 U	2.3 U	3.3 U	1.9 U	2 U	2.2 U	2.3 U
1,3-Dichlorobenzene	49000	2400	ug/kg	0.87 U	1.1 U	0.84 U	0.89 U	0.86 U	0.93 U	0.92 U	1.1 U	1.6 U	0.95 U	1 U	1.1 UJ	1.1 U
1,4-Dichlorobenzene	13000	1800	ug/kg	0.87 U	1.1 U	0.84 U	0.89 U	0.86 U	0.93 U	0.92 U	1.1 U	1.6 U	0.95 U	1 U	1.1 UJ	1.1 U
2-Butanone (MEK)	100000	120	ug/kg	8.7 U	11 U	8.4 U	8.9 U	8.6 U	9.3 U	9.2 U	8.6 J	16 U	9.5 U	10 U	11 U	11 U
4-Methyl-2-Pentanone	NS	NS	ug/kg	4.3 U	5.4 U	4.2 U	4.4 U	4.3 U	4.7 U	4.6 U	5.6 U	8.1 U	4.8 U	5 U	5.4 U	5.7 U
Acetone	100000	50	ug/kg	8.7 U	11 U	8.4 U	8.9 U	9.6	47.8	38.2	249 JD	100	9.5 UJ	10 U	11 U	28.6
Benzene	4800	60	ug/kg	0.43 U	0.54 U	0.42 U	0.44 U	0.43 U	0.47 U	0.46 U	0.28 J	0.81 U	0.48 U	0.5 U	0.54 U	0.57 U
Bromodichloromethane	NS	NS	ug/kg	1.7 U	2.2 U	1.7 U	1.8 U	1.7 U	1.9 U	1.8 U	2.3 U	3.3 U	1.9 U	2 U	2.2 U	2.3 U
Bromoform	NS	NS	ug/kg	4.3 U	5.4 U	4.2 U	4.4 U	4.3 U	4.7 U	4.6 U	5.6 U	8.1 U	4.8 U	5 U	5.4 U	5.7 U
Bromomethane	NS	NS	ug/kg	4.3 U	5.4 U	4.2 U	4.4 U	4.3 U	4.7 U	4.6 U	5.6 U	8.1 U	4.8 U	5 U	5.4 U	5.7 U
Carbon Disulfide	NS	NS	ug/kg	1.7 U	2.2 U	1.7 U	1.8 U	1.7 U	1.9 U	1.8 U	2.3 U	3.3 U	1.9 U	2 U	2.2 U	2.3 U
Carbon Tetrachloride	2400	760	ug/kg	1.7 U	2.2 U	1.7 U	1.8 U	1.7 U	1.9 U	1.8 U	2.3 U	3.3 U	1.9 U	2 U	2.2 U	2.3 U
CFC-11	NS	NS	ug/kg	4.3 U	5.4 U	4.2 U	4.4 U	4.3 U	4.7 U	4.6 U	5.6 U	8.1 U	4.8 U	5 U	5.4 UJ	5.7 U
CFC-12	NS	NS	ug/kg	4.3 U	5.4 U	4.2 U	4.4 U	4.3 U	4.7 U	4.6 U	5.6 U	8.1 U	4.8 U	5 U	5.4 UJ	5.7 U
Chlorobenzene	100000	1100	ug/kg	1.7 U	2.2 U	1.7 U	1.8 U	1.7 U	1.9 U	1.8 U	2.3 U	3.3 U	1.9 U	2 U	2.2 U	2.3 U
Chlorodibromomethane	NS	NS	ug/kg	1.7 U	2.2 U	1.7 U	1.8 U	1.7 U	1.9 U	1.8 U	2.3 U	3.3 U	1.9 U	2 U	2.2 U	2.3 U
Chloroethane	NS	NS	ug/kg	4.3 U	5.4 U	4.2 U	4.4 U	4.3 U	4.7 U	4.6 U	5.6 U	8.1 U	4.8 U	5 U	5.4 U	5.7 U
Chloroform	49000	370	ug/kg	1.7 U	2.2 U	1.7 U	1.8 U	1.7 U	1.9 U	1.8 U	2.3 U	3.3 U	1.9 U	2 U	2.2 U	0.41 J
Chloromethane	NS	NS	ug/kg	4.3 U	5.4 U	4.2 U	4.4 U	4.3 U	4.7 U	4.6 U	5.6 U	8.1 U	4.8 U	5 U	5.4 UJ	5.7 U
cis-1,2-Dichloroethene	100000	250	ug/kg	0.87 U	1.1 U	0.84 U	0.89 U	0.86 U	0.93 U	0.92 U	1.1 U	1.6 U	0.95 U	1 U	1.1 U	1.1 U
cis-1,3-Dichloropropene	NS	NS	ug/kg	1.7 U	2.2 U	1.7 U	1.8 U	1.7 U	1.9 U	1.8 U	2.3 U	3.3 U	1.9 U	2 U	2.2 U	2.3 U
Cyclohexane	NS	NS	ug/kg	1.7 U	2.2 U	1.7 U	1.8 U	1.7 U	1.9 U	1.8 U	2.3 U	3.3 U	1.9 U	2 U	2.2 UJ	2.3 U
Dichloromethane	NS	NS	ug/kg	4.3 U	5.4 U	4.2 U	4.4 U	4.3 U	4.7 U	4.6 U	5.6 U	8.1 U	4.8 U	5 U	5.4 U	5.7 U
Ethylbenzene	41000	1000	ug/kg	0.87 U	1.1 U	0.84 U	0.89 U	0.86 U	0.93 U	0.92 U	0.33 J	1.6 U	0.95 U	1 U	1.1 UJ	1.1 U
Isopropylbenzene	NS	NS	ug/kg	1.7 U	2.2 U	1.7 U	1.8 U	1.7 U	1.9 U	1.8 U	2.3 U	3.3 U	1.9 U	2 U	2.2 UJ	2.3 U
Methyl Acetate	NS	NS	ug/kg	4.3 U	5.4 U	4.2 U	4.4 U	4.3 U	4.7 U	4.6 U	5.6 U	8.1 U	4.8 U	5 U	5.4 U	5.7 U
Methyl N-Butyl Ketone (2-Hexanone)	NS	NS	ug/kg	4.3 U	5.4 U	4.2 U	4.4 U	4.3 U	4.7 U	4.6 U	5.6 U	8.1 U	4.8 U	5 U	5.4 U	5.7 U
Methylcyclohexane	NS	NS	ug/kg	1.7 U	2.2 U	1.7 U	1.8 U	1.7 U	1.9 U	1.8 U	2.3 U	3.3 U	1.9 U	2 U	2.2 UJ	1.1 J
Methyl-tert-butylether	100000	930	ug/kg	0.87 U	1.1 U	0.84 U	0.89 U	0.86 U	0.93 U	0.92 U	1.1 U	1.6 U	0.95 U	1 U	1.1 U	1.1 U
Styrene (Monomer)	NS	NS	ug/kg	1.7 U	2.2 U	1.7 U	1.8 U	0.7 J	1.9 U	0.35 J	2.3 U	0.31 J	1.9 U	2 U	2.2 U	2.3 U
Tetrachloroethene	19000	1300	ug/kg	1.7 U	2.2 U	1.7 U	1.8 U	1.7 U	1.9 U	1.8 U	2.3 U	3.3 U	1.9 U	2 U	2.2 UJ	2.3 U
Toluene	100000	700	ug/kg	0.87 U	1.1 U	0.84 U	0.89 U	0.86 U	0.93 U	0.92 U	1.1 U	1.6 U	0.95 U	1 U	1.1 U	0.46 J
Total Xylenes	100000	1600	ug/kg	0.87 U	1.1 U	0.84 U	0.89 U	0.86 U	0.93 U	0.92 U	2.2	1.6 U	0.95 U	1 U	1.1 UJ	0.45 J
trans-1,2-Dichloroethene	100000	190	ug/kg	0.87 U	1.1 U	0.84 U	0.89 U	0.86 U	0.93 U	0.92 U	1.1 U	1.6 U	0.95 U	1 U	1.1 U	1.1 U
trans-1,3-Dichloropropene	NS	NS	ug/kg	1.7 U	2.2 U	1.7 U	1.8 U	1.7 U	1.9 U	1.8 U	2.3 U	3.3 U	1.9 U	2 U	2.2 U	2.3 U
Trichloroethene	21000	470	ug/kg	0.87 U	1.1 U	0.84 U	0.89 U	0.86 U	0.93 U	0.92 U	1.1 U	1.6 U	0.95 U	1 U	1.1 U	1.1 U
Vinyl chloride	900	20	ug/kg	1.7 U	2.2 U	1.7 U	1.8 U	1.7 U	1.9 U	1.8 U	2.3 U	3.3 U	1.9 U	2 U	2.2 UJ	2.3 U

See Notes on Last Page

Table 12. Confirmatory Soil Sample Results Area D
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Sample ID Sample Date Sample Depth	TABLE 375-6: RESTRIC. RES. USE SCO	TABLE 375-6: PROTECTION OF GW SCO		PE-D-H4 3/2/2016 2-2.5	PE-D-H4 DUP-016_201603 2-2.5	PE-D-H5 3/2/2016 2-2.5	PE-D-H6 3/1/2016 2-2.5	PE-D-H7 3/1/2016 2-2.5	PE-D-H8 1/18/2016 2-2.5	PE-D-H8 DUP-013_201601 2-2.5	PE-D-H9 1/18/2016 2-2.5	PE-D-H10 1/18/2016 2-2.5	PE-D-H12 1/13/2016 2-2.5	PE-D-I3 3/2/2016 2-2.5	PE-D-I4 3/2/2016 2-2.5	PE-D-S1 1/11/2016 1-1.5
SVOCs																
1,1-Biphenyl	NS	NS	ug/kg	69 U	79 U	71 U	73 U	71 U	80 U	76 U	80 U	81 U	76 U	72 U	69 U	87 U
2,2-Oxybis(1-Chloropropane)	NS	NS	ug/kg	69 U	79 U	71 U	73 U	71 U	80 U	76 U	80 U	81 U	76 U	72 U	69 U	87 U
2,4,5-Trichlorophenol	NS	NS	ug/kg	170 U	200 U	180 U	180 U	180 U	200 U	190 U	200 U	200 U	190 U	180 U	170 U	220 U
2,4,6-Trichlorophenol	NS	NS	ug/kg	170 U	200 U	180 U	180 U	180 U	200 U	190 U	200 U	200 U	190 U	180 U	170 U	220 U
2,4-Dichlorophenol	NS	NS	ug/kg	170 U	200 U	180 U	180 U	180 U	200 U	190 U	200 U	200 U	190 U	180 U	170 U	220 U
2,4-Dimethylphenol	NS	NS	ug/kg	170 U	200 U	180 U	180 U	180 U	200 U	190 U	200 U	200 U	190 U	180 U	170 U	220 U
2,4-Dinitrophenol	NS	NS	ug/kg	170 U	200 U	180 U	180 U	180 U	200 U	190 U	200 U	200 U	190 U	180 U	170 U	220 U
2,4-Dinitrotoluene	NS	NS	ug/kg	35 U	39 U	35 U	37 U	35 U	40 U	38 U	40 U	40 U	38 U	36 U	34 U	44 U
2,6-Dinitrotoluene	NS	NS	ug/kg	35 U	39 U	35 U	37 U	35 U	40 U	38 U	40 U	40 U	38 U	36 U	34 U	44 U
2-Chloronaphthalene	NS	NS	ug/kg	69 U	79 U	71 U	73 U	71 U	80 U	76 U	80 U	81 U	76 U	72 U	69 U	87 U
2-Chlorophenol	NS	NS	ug/kg	69 U	79 U	71 U	73 U	71 U	80 U	76 U	80 U	81 U	76 U	72 U	69 U	87 U
2-Methyl-4,6-dinitrophenol	NS	NS	ug/kg	170 U	200 U	180 U	180 U	180 U	200 U	190 U	200 U	200 U	190 U	180 U	170 U	220 U
2-Methylnaphthalene	NS	NS	ug/kg	69 U	79 U	71 U	73 U	64.1 J	80 U	76 U	80 U	81 U	76 U	72 U	69 U	87 U
2-Methylphenol	NS	NS	ug/kg	69 U	79 U	71 U	73 U	71 U	80 U	76 U	80 U	81 U	76 U	72 U	69 U	87 U
2-Nitroaniline	NS	NS	ug/kg	170 U	200 U	180 U	180 U	180 U	200 U	190 U	200 U	200 U	190 U	180 U	170 U	220 U
2-Nitrophenol	NS	NS	ug/kg	170 U	200 U	180 U	180 U	180 U	200 U	190 U	200 U	200 U	190 U	180 U	170 U	220 U
3,3-Dichlorobenzidine	NS	NS	ug/kg	69 U	79 U	71 U	73 U	71 U	80 U	76 U	80 U	81 U	76 U	72 U	69 U	87 U
3-Methylphenol, 4-Methylphenol	NS	NS	ug/kg	69 U	79 U	71 U	73 U	71 U	80 U	76 U	80 U	81 U	76 U	72 U	69 U	87 U
3-Nitroaniline	NS	NS	ug/kg	170 U	200 U	180 U	180 U	180 U	200 U	190 U	200 U	200 U	190 U	180 U	170 U	220 U
4-Bromophenyl phenyl ether	NS	NS	ug/kg	69 U	79 U	71 U	73 U	71 U	80 U	76 U	80 U	81 U	76 U	72 U	69 U	87 U
4-Chloro-3-Methylphenol	NS	NS	ug/kg	170 U	200 U	180 U	180 U	180 U	200 U	190 U	200 U	200 U	190 U	180 U	170 U	220 U
4-Chlorophenyl phenyl ether	NS	NS	ug/kg	69 U	79 U	71 U	73 U	71 U	80 U	76 U	80 U	81 U	76 U	72 U	69 U	87 U
4-Nitroaniline	NS	NS	ug/kg	170 U	200 U	180 U	180 U	180 U	200 U	190 U	200 U	200 U	190 U	180 U	170 U	220 U
4-Nitrophenol	NS	NS	ug/kg	350 U	390 U	350 U	370 U	350 U	400 U	380 U	400 U	400 U	380 U	360 U	340 U	440 U
Acenaphthene	100000	98000	ug/kg	35 U	39 U	35 U	37 U	35 U	40 U	38 U	40 U	40 U	38 U	36 U	34 U	44 U
Acenaphthylene	100000	107000	ug/kg	35 U	39 U	35 U	37 U	35 U	40 U	38 U	40 U	40 U	38 U	36 U	34 U	44 U
Acetophenone	NS	NS	ug/kg	170 U	200 U	180 U	180 U	180 U	200 U	190 U	200 U	200 U	190 U	180 U	170 U	220 U
Anthracene	100000	1000000	ug/kg	35 U	39 U	35 U	37 U	35 U	40 U	38 U	40 U	40 U	38 U	36 U	34 U	44 U
Atrazine	NS	NS	ug/kg	69 U	79 U	71 U	73 U	71 U	80 U	76 U	80 U	81 U	76 U	72 U	69 U	87 U
Benzaldehyde	NS	NS	ug/kg	170 U	200 U	180 U	180 U	180 U	200 U	190 U	200 U	200 U	190 U	180 U	170 U	220 U
Benzo(a)anthracene	1000	1000	ug/kg	35 U	39 U	35 U	37 U	35 U	40 U	38 U	40 U	40 U	38 U	36 U	34 U	44 U
Benzo(a)pyrene	1000	22000	ug/kg	35 U	39 U	35 U	37 U	35 U	40 U	38 U	40 U	40 U	38 U	36 U	34 U	44 U
Benzo(b)fluoranthene	1000	1700	ug/kg	35 U	39 U	35 U	37 U	35 U	40 U	38 U	40 U	40 U	38 U	36 U	34 U	44 U
Benzo(g,h,i)perylene	100000	1000000	ug/kg	35 U	39 U	35 U	37 U	35 U	40 U	38 U	40 U	40 U	38 U	36 U	34 U	44 U
Benzo(k)fluoranthene	3900	1700	ug/kg	35 U	39 U	35 U	37 U	35 U	40 U	38 U	40 U	40 U	38 U	36 U	34 U	44 U
bis(2-Chloroethoxy)methane	NS	NS	ug/kg	69 U	79 U	71 U	73 U	71 U	80 U	76 U	80 U	81 U	76 U	72 U	69 U	87 U
bis(2-Chloroethyl)ether	NS	NS	ug/kg	69 U	79 U	71 U	73 U	71 U	80 U	76 U	80 U	81 U	76 U	72 U	69 U	87 U
bis(2-Ethylhexyl)phthalate	NS	NS	ug/kg	69 U	79 U	71 U	73 U	71 U	80 U	76 U	80 U	81 U	76 UJ	72 U	69 U	87 U
Butyl benzyl phthalate	NS	NS	ug/kg	69 U	79 U	71 U	73 U	71 U	80 U	76 U	80 U	81 U	76 U	72 U	69 U	87 U
Caprolactam	NS	NS	ug/kg	69 U	79 U	71 U	73 U	71 U	80 U	76 U	80 U	81 U	76 U	72 U	69 U	87 U
Carbazole	NS	NS	ug/kg	69 U	79 U	71 U	73 U	71 U	80 U	76 U	80 U	81 U	76 U	72 U	69 U	87 U
Chrysene	3900	1000	ug/kg	35 U	39 U	35 U	37 U	35 U	40 U	38 U	40 U	40 U	38 U	36 U	34 U	44 U
Dibenzo(a,h)anthracene	330	1000000	ug/kg	35 U	39 U	35 U	37 U	35 U	40 U	38 U	40 U	40 U	38 U	36 U	34 U	44 U
Dibenzofuran	NS	NS	ug/kg	69 U	79 U	71 U	73 U	71 U	80 U	76 U	16.4 J	81 U	76 U	72 U	69 U	87 U
Diethyl phthalate	NS	NS	ug/kg	69 U	79 U	71 U	73 U	71 U	80 U	76 U	80 U	81 U	76 U	72 U	69 U	87 U
Dimethyl phthalate	NS	NS	ug/kg	69 U	79 U	71 U	73 U	71 U	80 U	76 U	80 U	81 U	76 U	72 U	69 U	87 U
Di-n-butyl phthalate	NS	NS	ug/kg	69 U	79 U	71 U	73 U	71 U	80 U	76 U	80 U	81 U	76 U	72 U	69 U	87 U
Di-n-octyl phthalate	NS	NS	ug/kg	69 U	79 U	71 U	73 U	71 U	80 U	76 U	80 U	81 U	76 UJ	72 U	69 U	87 UJ
Fluoranthene	100000	1000000	ug/kg	35 U	39 U	35 U	37 U	35 U	40 U	38 U	45.5	40 U	38 U	36 U	34 U	44 U
Fluorene	100000	386000	ug/kg	35 U	39 U	35 U	37 U	35 U	40 U	38 U	18.1 J	40 U	38 U	36 U	34 U	44 U
Hexachloro-1,3-butadiene	NS	NS	ug/kg	35 U	39 U	35 U	37 U	35 U	40 U	38 U	40 U	40 U	38 U	36 U	34 U	44 U
Hexachlorobenzene	NS	NS	ug/kg	69 U	79 U	71 U	73 U	71 U	80 U	76 U	80 U	81 U	76 U	72 U	69 U	87 U
See Notes on Last Page																

Table 12. Confirmatory Soil Sample Results Area D
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Sample ID Sample Date Sample Depth	TABLE 375-6: RESTRIC. RES. USE SCO	TABLE 375-6: PROTECTION OF GW SCO	Units	PE-D-H4 3/2/2016 2-2.5	PE-D-H4 -DUP-016_201603 2-2.5	PE-D-H5 3/2/2016 2-2.5	PE-D-H6 3/1/2016 2-2.5	PE-D-H7 3/1/2016 2-2.5	PE-D-H8 1/18/2016 2-2.5	PE-D-H8 -DUP-013_201601 2-2.5	PE-D-H9 1/18/2016 2-2.5	PE-D-H10 1/18/2016 2-2.5	PE-D-H12 1/13/2016 2-2.5	PE-D-I3 3/2/2016 2-2.5	PE-D-I4 3/2/2016 2-2.5	PE-D-S1 1/11/2016 1-1.5
SVOCs cont.																
Hexachlorocyclopentadiene	NS	NS	ug/kg	350 U	390 U	350 U	370 U	350 U	400 U	380 U	400 U	400 U	380 U	360 U	340 U	440 U
Hexachloroethane	NS	NS	ug/kg	170 U	200 U	180 U	180 U	180 U	200 U	190 U	200 U	200 U	190 U	180 U	170 U	220 U
Indeno(1,2,3-cd)pyrene	500	8200	ug/kg	35 U	39 U	35 U	37 UJ	35 UJ	40 U	38 U	40 U	40 U	38 U	36 U	34 U	44 U
Isophorone	NS	NS	ug/kg	69 U	79 U	71 U	73 U	71 U	80 U	76 U	80 U	81 U	76 U	72 U	69 U	87 U
Naphthalene	100000	12000	ug/kg	35 U	39 U	35 U	37 U	39.7 J	40 U	38 U	16.9 J	40 U	38 U	36 U	34 U	44 U
Nitrobenzene	NS	NS	ug/kg	69 U	79 U	71 U	73 U	71 U	80 U	76 U	80 U	81 U	76 U	72 U	69 U	87 U
n-Nitrosodi-n-propylamine	NS	NS	ug/kg	69 U	79 U	71 U	73 U	71 U	80 U	76 U	80 U	81 U	76 U	72 U	69 U	87 U
N-nitrosodiphenylamine	NS	NS	ug/kg	170 U	200 U	180 U	180 U	180 U	200 U	190 U	200 U	200 U	190 U	180 U	170 U	220 U
p-Chloroaniline	NS	NS	ug/kg	170 U	200 U	180 U	180 U	180 U	200 U	190 U	200 U	200 U	190 U	180 U	170 U	220 U
Pentachlorophenol	6700	800	ug/kg	170 U	200 U	180 U	180 U	180 U	200 U	190 U	200 U	200 U	190 U	180 U	170 U	220 U
Phenanthrene	100000	1000000	ug/kg	35 U	39 U	35 U	37 U	35 U	40 U	38 U	64	40 U	38 U	36 U	34 U	44 U
Phenol	100000	330	ug/kg	69 U	79 U	71 U	73 U	71 U	80 U	76 U	80 U	81 U	76 U	72 U	69 U	87 U
Pyrene	100000	1000000	ug/kg	35 U	39 U	35 U	37 U	35 U	40 U	38 U	26.3 J	40 U	38 U	36 U	34 U	44 U
PCBs																
Aroclor 1016	1000	3200	ug/kg	36 U	40 U	35 U	36 U	34 U	40 U	38 U	39 U	38 U	37 U	37 U	36 U	44 U
Aroclor 1221	1000	3200	ug/kg	36 U	40 U	35 U	36 U	34 U	40 U	38 U	39 U	38 U	37 U	37 U	36 U	44 U
Aroclor 1232	1000	3200	ug/kg	36 U	40 U	35 U	36 U	34 U	40 U	38 U	39 U	38 U	37 U	37 U	36 U	44 U
Aroclor 1242	1000	3200	ug/kg	36 U	40 U	35 U	36 U	34 U	40 U	38 U	39 U	38 U	37 U	37 U	36 U	44 U
Aroclor 1248	1000	3200	ug/kg	36 U	40 U	35 U	36 U	34 U	40 U	38 U	39 U	38 U	37 U	37 U	36 U	44 U
Aroclor 1254	1000	3200	ug/kg	36 U	40 U	35 U	36 U	34 U	40 U	38 U	39 U	38 U	37 U	37 U	36 U	44 U
Aroclor 1260	1000	3200	ug/kg	36 U	40 U	35 U	36 U	34 U	40 U	38 U	39 U	38 U	37 U	37 U	36 U	44 U
Aroclor 1262	1000	3200	ug/kg	36 U	40 U	35 U	36 U	34 U	40 U	38 U	39 U	38 U	37 U	37 U	36 U	44 U
Aroclor 1268	1000	3200	ug/kg	36 U	40 U	35 U	36 U	34 U	40 U	38 U	39 U	38 U	37 U	37 U	36 U	44 U
Metals																
Aluminum	NS	NS	mg/kg	9270 J	17100 J	7560	7930	7590	25200	25200	17300	19500	21900	15300	11900	16100
Antimony	NS	NS	mg/kg	2.1 UJ	2.4 UJ	2.1 UJ	2.2 UJ	0.4 J	2.4 U	2.3 U	2.5 U	2.5 U	2.2 UJ	2.2 UB	2.2 UB	2.6 U
Arsenic	16	16	mg/kg	2.1	2.3 B	2.1	2.9	2.5	4	4.1	3.9	4.3	2.3	3.2	2.9	2.9
Barium	400	820	mg/kg	65.1	81.2	47.6	43.7	41.5	51.5	50.1	105	31.4	27	36.8	67.9	34.4
Beryllium	72	47	mg/kg	0.5	0.56	0.44	0.46	0.46	1.1	1.1	0.72	0.7	0.72	0.56	0.7	0.67
Cadmium	4.3	7.5	mg/kg	0.53 U	0.61 U	0.52 U	0.54 U	0.53 U	0.14 B	0.11 B	0.17 B	0.12 B	0.55 U	0.55 U	0.54 U	0.66 UB
Calcium	NS	NS	mg/kg	3250 J	7610 J	2700 J	2470 J	3210 J	1120	1540	1220	904	585	737 J	3220 J	763
Chromium	NS	NS	mg/kg	13.5	16.7	8.8	12.7	10.2	20.7	26.4	17.2	21	15.3	16.1	11.4	14.6
Cobalt	NS	NS	mg/kg	8	8.9	5.5	6.5	6.3	9.8	10.2	7	6.8	4.7 B	6.5	7.2	6.2 B
Copper	270	1720	mg/kg	14.3	16.2	12.2	13.4	13.9	11.7	13.9	12.4	9.5	4.5	12	11.5	4.1
Iron	NS	NS	mg/kg	18400 J	19700 J	15300 J	17200 J	15400 J	23100	28400	18600	20200	17000	17200 J	18700 J	15300
Lead	400	450	mg/kg	2.7	2.4	2.3	3.6	3.3	7.6	8.1	19.7	13.6	6.3	7.2	4.6	6.6
Magnesium	NS	NS	mg/kg	3420	3960	2650	2900	2580	2780 J	4560 J	2260	2800	1200	2330	3150	1580
Manganese	2000	2000	mg/kg	210 J	240 J	171 J	293 J	225 J	119	169	110	120	49	147 J	212 J	113
Mercury	NS	NS	mg/kg	0.0081 B	0.0035 B	0.006 B	0.024 B	0.035 UB	0.064	0.061	0.05	0.055	0.031 B	0.032 B	0.0057 B	0.052
Nickel	310	130	mg/kg	9.6	12.2	7.4	10.3	7.5	14.3	17.5	12.2	17.7	8.9	11.6	8	8.5
Potassium	NS	NS	mg/kg	1720 J	1900 J	1450 J	1330 J	1450 J	754 B	897 B	839 B	568 B	322 B	710 J	1570 J	455 B
Selenium	180	4	mg/kg	2.1 U	2.4 U	2.1 U	0.29 B	2.1 U	0.52 B	0.83 B	0.58 B	0.8 B	0.45 B	2.2 U	2.2 U	2.6 U
Silver	180	8.3	mg/kg	0.92 B	1.5	0.38 B	0.22 B	0.53 U	0.6 U	0.57 U	2.2	0.62 U	0.59	0.39 B	0.94 B	0.3 B
Sodium	NS	NS	mg/kg	214 J	1170 J	177 J	181 J	211 J	147 B	202 B	109 B	116 B	58.7 B	90.5 J	252 J	1300 UB
Thallium	NS	NS	mg/kg	2.1 U	2.4 U	1 U	1.1 U	1.1 U	0.41 B	0.24 B	0.63 B	1.2 U	1.1 U	1.1 U	2.2 U	1.3 UB
Vanadium	NS	NS	mg/kg	25.9	27.3	18.4	23.6	19	34.9	39.9	30.3	34.3	27.9	27.6	22.8	22.4
Zinc	10000	2480	mg/kg	23.7 J	27.1 J	21.5 J	27.8 J	22.2 J	33.7	40.2	35.4	29.7	29	25.3 J	25.9 J	42
General Chemistry																
Percent Solids			%	90.3	81.5	92.7	89.4	92.3	82.6	85.2	79.2	78.8	87.4	88.1	90.1	75.1

Notes	
NS	No standard
NA	Not analyzed
J	Estimated result
JN	Estimated result
R	Rejected result
UB	Analyte considered non-detect at the listed value due to associated blank contamination
Bold	Result exceeds 375-6.8(b) protection of groundwater soil cleanup objective.
Shade	Result exceeds 375-6.8(b) restricted residential use soil cleanup objective.

Table 12. Confirmatory Soil Sample Results Area D
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Sample ID	TABLE 375-6: RESTRIC. RES. USE SCO	TABLE 375-6: PROTECTION OF GW SCO		PE-D-S2 1/13/2016	PE-D-S3 1/13/2016	PE-D-S4 1/14/2016	PE-D-S4 1/18/2016	PE-D-S5 1/21/2016	PE-D-S6 1/21/2016	PE-D-S6 -DUP-014_201601	PE-D-S7 3/7/2016	PE-D-S8 3/7/2016	PE-D-S9 3/7/2016	PE-D-S10 3/7/2016	PE-D-S11 3/7/2016	PE-D-S12 3/7/2016
Sample Date																
Sample Depth			Units	1.5-2	1.5-2	1.5-2	1.5-2	1.5-2	1.5-2	1.5-2	1.5-2	1.5-2	1.5-2	1.5-2	1.5-2	1.5-2
VOCs																
1,1,1-Trichloroethane	100000	680	ug/kg	2.1 U	1.9 U	2.3 U	2.3 U	2.9 U	1.9 U	1.8 U	1.8 U	2 U	1.7 U	1.7 U	1.8 U	1.9 U
1,1,2,2-Tetrachloroethane	NS	NS	ug/kg	2.1 U	1.9 U	2.3 U	2.3 U	2.9 U	1.9 U	1.8 U	1.8 U	2 U	1.7 U	1.7 U	1.8 U	1.9 U
1,1,2-trichloro-1,2,2-trifluoroethane	NS	NS	ug/kg	5.4 U	4.8 U	5.7 U	5.8 U	7.3 U	4.8 U	4.5 U	4.5 U	5.1 U	4.2 U	4.3 U	4.4 U	4.7 U
1,1,2-Trichloroethane	NS	NS	ug/kg	2.1 U	1.9 U	2.3 U	2.3 U	2.9 U	1.9 U	1.8 U	1.8 U	2 U	1.7 U	1.7 U	1.8 U	1.9 U
1,1-Dichloroethane	26000	270	ug/kg	1.1 U	0.97 U	1.1 U	1.2 U	1.5 U	0.95 U	0.89 U	0.89 U	1 U	0.83 U	0.86 U	0.88 U	0.93 U
1,1-Dichloroethene	100000	330	ug/kg	1.1 U	0.97 U	1.1 U	1.2 U	1.5 U	0.95 U	0.89 U	0.89 U	1 U	0.83 U	0.86 U	0.88 U	0.93 U
1,2,4-Trichlorobenzene	NS	NS	ug/kg	5.4 U	4.8 U	5.7 U	5.8 U	7.3 U	4.8 U	4.5 U	4.5 U	5.1 U	4.2 U	4.3 U	4.4 U	4.7 U
1,2-Dibromo-3-chloropropane	NS	NS	ug/kg	2.1 U	1.9 U	2.3 U	2.3 U	2.9 U	1.9 U	1.8 U	1.8 U	2 U	1.7 U	1.7 U	1.8 U	1.9 U
1,2-Dibromoethane	NS	NS	ug/kg	1.1 U	0.97 U	1.1 U	1.2 U	1.5 U	0.95 U	0.89 U	0.89 U	1 U	0.83 U	0.86 U	0.88 U	0.93 U
1,2-Dichlorobenzene	100000	1100	ug/kg	1.1 U	0.97 U	1.1 U	1.2 U	1.5 U	0.95 U	0.89 U	0.89 U	1 U	0.83 U	0.86 U	0.88 U	0.93 U
1,2-Dichloroethane	3100	20	ug/kg	1.1 U	0.97 U	1.1 U	1.2 U	1.5 U	0.95 U	0.89 U	0.89 U	1 U	0.83 U	0.86 U	0.88 U	0.93 U
1,2-Dichloropropane	NS	NS	ug/kg	2.1 U	1.9 U	2.3 U	2.3 U	2.9 U	1.9 U	1.8 U	1.8 U	2 U	1.7 U	1.7 U	1.8 U	1.9 U
1,3-Dichlorobenzene	49000	2400	ug/kg	1.1 U	0.97 U	1.1 U	1.2 U	1.5 U	0.95 U	0.89 U	0.89 U	1 U	0.83 U	0.86 U	0.88 U	0.93 U
1,4-Dichlorobenzene	13000	1800	ug/kg	1.1 U	0.97 U	1.1 U	1.2 U	1.5 U	0.95 U	0.89 U	0.89 U	1 U	0.83 U	0.86 U	0.88 U	0.93 U
2-Butanone (MEK)	100000	120	ug/kg	11 U	9.7 U	11 U	12 U	15 U	9.5 U	8.9 U	8.9 U	10 U	8.3 U	8.6 U	8.8 U	9.3 U
4-Methyl-2-Pentanone	NS	NS	ug/kg	5.4 U	4.8 U	5.7 U	5.8 U	7.3 U	4.8 U	4.5 U	4.5 U	5.1 U	4.2 U	4.3 U	4.4 U	4.7 U
Acetone	100000	50	ug/kg	26.4	9.7 U	186	87.1	15 U	9.5 U	8.9 U	8.9 U	344 EJ	8.3 U	8.6 U	8.8 U	9.3 U
Benzene	4800	60	ug/kg	0.54 U	0.48 U	0.57 U	0.58 U	0.73 U	0.48 U	0.45 U	0.45 U	0.51 U	0.42 U	0.43 U	0.44 U	0.47 U
Bromodichloromethane	NS	NS	ug/kg	2.1 U	1.9 U	2.3 U	2.3 U	2.9 U	1.9 U	1.8 U	1.8 U	2 U	1.7 U	1.7 U	1.8 U	1.9 U
Bromoform	NS	NS	ug/kg	5.4 U	4.8 U	5.7 U	5.8 U	7.3 U	4.8 U	4.5 U	4.5 U	5.1 U	4.2 U	4.3 U	4.4 U	4.7 U
Bromomethane	NS	NS	ug/kg	5.4 U	4.8 U	5.7 U	5.8 U	7.3 U	4.8 U	4.5 U	4.5 U	5.1 U	4.2 U	4.3 U	4.4 U	4.7 U
Carbon Disulfide	NS	NS	ug/kg	2.1 U	1.9 U	2.3 U	2.3 U	2.9 U	1.9 U	1.8 U	1.8 U	2 U	1.7 U	1.7 U	1.8 U	1.9 U
Carbon Tetrachloride	2400	760	ug/kg	2.1 U	1.9 U	2.3 U	2.3 U	2.9 U	1.9 U	1.8 U	1.8 U	2 U	1.7 U	1.7 U	1.8 U	1.9 U
CFC-11	NS	NS	ug/kg	5.4 U	4.8 U	5.7 U	5.8 U	7.3 U	4.8 U	4.5 U	4.5 U	5.1 U	4.2 U	4.3 U	4.4 U	4.7 U
CFC-12	NS	NS	ug/kg	5.4 U	4.8 U	5.7 U	5.8 U	7.3 U	4.8 U	4.5 U	4.5 U	5.1 U	4.2 U	4.3 U	4.4 U	4.7 U
Chlorobenzene	100000	1100	ug/kg	2.1 U	1.9 U	2.3 U	2.3 U	2.9 U	1.9 U	1.8 U	1.8 U	2 U	1.7 U	1.7 U	1.8 U	1.9 U
Chlorodibromomethane	NS	NS	ug/kg	2.1 U	1.9 U	2.3 U	2.3 U	2.9 U	1.9 U	1.8 U	1.8 U	2 U	1.7 U	1.7 U	1.8 U	1.9 U
Chloroethane	NS	NS	ug/kg	5.4 U	4.8 U	5.7 U	5.8 U	7.3 U	4.8 U	4.5 U	4.5 U	5.1 U	4.2 U	4.3 U	4.4 U	4.7 U
Chloroform	49000	370	ug/kg	2.1 U	1.9 U	2.3 U	2.3 U	2.9 U	1.9 U	1.8 U	1.8 U	2 U	1.7 U	1.7 U	1.8 U	1.9 U
Chloromethane	NS	NS	ug/kg	5.4 U	4.8 U	5.7 U	5.8 U	7.3 U	4.8 U	4.5 U	4.5 U	5.1 U	4.2 U	4.3 U	4.4 U	4.7 U
cis-1,2-Dichloroethene	100000	250	ug/kg	1.1 U	0.97 U	1.1 U	1.2 U	1.5 U	0.95 U	0.89 U	0.89 U	1 U	0.83 U	0.86 U	0.88 U	0.93 U
cis-1,3-Dichloropropene	NS	NS	ug/kg	2.1 U	1.9 U	2.3 U	2.3 U	2.9 U	1.9 U	1.8 U	1.8 U	2 U	1.7 U	1.7 U	1.8 U	1.9 U
Cyclohexane	NS	NS	ug/kg	2.1 U	1.9 U	2.3 U	2.3 U	2.9 U	1.9 U	1.8 U	1.8 U	2 U	1.7 U	1.7 U	1.8 U	1.9 U
Dichloromethane	NS	NS	ug/kg	5.4 U	4.8 U	5.7 U	5.8 U	7.3 U	4.8 U	4.5 U	0.97 J	1.2 J	1.2 J	1.1 J	4.4 U	1.1 J
Ethylbenzene	41000	1000	ug/kg	1.1 U	0.97 U	1.1 U	1.2 U	1.5 U	0.95 U	0.89 U	0.89 U	1 U	0.83 U	0.86 U	0.88 U	0.93 U
Isopropylbenzene	NS	NS	ug/kg	2.1 U	1.9 U	2.3 U	2.3 U	2.9 U	1.9 U	1.8 U	1.8 U	2 U	1.7 U	1.7 U	1.8 U	1.9 U
Methyl Acetate	NS	NS	ug/kg	5.4 U	4.8 U	5.7 U	5.8 U	7.3 U	4.8 U	4.5 U	4.5 U	5.1 U	4.2 U	4.3 U	4.4 U	4.7 U
Methyl N-Butyl Ketone (2-Hexanone)	NS	NS	ug/kg	5.4 U	4.8 U	5.7 U	5.8 U	7.3 U	4.8 U	4.5 U	4.5 U	5.1 U	4.2 U	4.3 U	4.4 U	4.7 U
Methylcyclohexane	NS	NS	ug/kg	2.1 U	1.9 U	2.3 U	2.3 U	2.9 U	1.9 U	1.8 U	1.8 U	2 U	1.7 U	1.7 U	1.8 U	1.9 U
Methyl-tert-butylether	100000	930	ug/kg	1.1 U	0.97 U	1.1 U	1.2 U	1.5 U	0.95 U	0.89 U	0.89 U	1 U	0.83 U	0.86 U	0.88 U	0.93 U
Styrene (Monomer)	NS	NS	ug/kg	0.2 J	1.9 U	0.39 J	0.24 J	2.9 U	1.9 U	1.8 U	1.8 U	0.34 J	0.71 J	1.7 U	1.8 U	1.9 U
Tetrachloroethene	19000	1300	ug/kg	2.1 U	1.9 U	2.3 U	2.3 U	2.9 U	1.9 U	1.8 U	1.8 U	2 U	1.7 U	1.7 U	1.8 U	1.9 U
Toluene	100000	700	ug/kg	1.1 U	0.97 U	1.1 U	1.2 U	1.5 U	0.95 U	0.89 U	0.89 U	1 U	0.83 U	0.86 U	0.88 U	0.93 U
Total Xylenes	100000	1600	ug/kg	1.1 U	0.97 U	1.1 U	1.2 U	1.5 U	0.95 U	0.89 U	0.89 U	1 U	0.83 U	0.86 U	0.88 U	0.93 U
trans-1,2-Dichloroethene	100000	190	ug/kg	1.1 U	0.97 U	1.1 U	1.2 U	1.5 U	0.95 U	0.89 U	0.89 U	1 U	0.83 U	0.86 U	0.88 U	0.93 U
trans-1,3-Dichloropropene	NS	NS	ug/kg	2.1 U	1.9 U	2.3 U	2.3 U	2.9 U	1.9 U	1.8 U	1.8 U	2 U	1.7 U	1.7 U	1.8 U	1.9 U
Trichloroethene	21000	470	ug/kg	1.1 U	0.97 U	1.1 U	1.2 U	1.5 U	0.95 U	0.89 U	0.89 U	1 U	0.83 U	0.86 U	0.88 U	0.93 U
Vinyl chloride	900	20	ug/kg	2.1 U	1.9 U	2.3 U	2.3 U	2.9 U	1.9 U	1.8 U	1.8 U	2 U	1.7 U	1.7 U	1.8 U	1.9 U

See Notes on Last Page

Table 12. Confirmatory Soil Sample Results Area D
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Sample ID	TABLE 375-6: RESTRIC. RES. USE SCO	TABLE 375-6: PROTECTION OF GW SCO		PE-D-S2 1/13/2016	PE-D-S3 1/13/2016	PE-D-S4 1/14/2016	PE-D-S4 1/18/2016	PE-D-S5 1/21/2016	PE-D-S6 1/21/2016	PE-D-S6 -DUP-014_201601	PE-D-S7 3/7/2016	PE-D-S8 3/7/2016	PE-D-S9 3/7/2016	PE-D-S10 3/7/2016	PE-D-S11 3/7/2016	PE-D-S12 3/7/2016
Sample Date																
Sample Depth			Units	1.5-2	1.5-2	1.5-2	1.5-2	1.5-2	1.5-2	1.5-2	1.5-2	1.5-2	1.5-2	1.5-2	1.5-2	1.5-2
SVOCs																
1,1-Biphenyl	NS	NS	ug/kg	82 U	78 U	67 U	78 U	75 U	77 U	74 U	72 U	78 U	70 U	69 U	69 U	67 U
2,2-Oxybis(1-Chloropropane)	NS	NS	ug/kg	82 U	78 U	67 U	78 U	75 U	77 U	74 U	72 U	78 U	70 U	69 U	69 U	67 U
2,4,5-Trichlorophenol	NS	NS	ug/kg	200 U	190 U	170 U	200 U	190 U	190 U	180 U	180 U	190 U	180 U	170 U	170 U	170 U
2,4,6-Trichlorophenol	NS	NS	ug/kg	200 U	190 U	170 U	200 U	190 U	190 U	180 U	180 U	190 U	180 U	170 U	170 U	170 U
2,4-Dichlorophenol	NS	NS	ug/kg	200 U	190 U	170 U	200 U	190 U	190 U	180 U	180 U	190 U	180 U	170 U	170 U	170 U
2,4-Dimethylphenol	NS	NS	ug/kg	200 U	190 U	170 U	200 U	190 U	190 U	180 U	180 U	190 U	180 U	170 U	170 U	170 U
2,4-Dinitrophenol	NS	NS	ug/kg	200 U	190 U	170 U	200 U	190 U	190 U	180 U	180 U	190 U	180 U	170 U	170 U	170 U
2,4-Dinitrotoluene	NS	NS	ug/kg	41 U	39 U	34 U	39 U	38 U	38 U	37 U	36 U	39 U	35 U	34 U	35 U	34 U
2,6-Dinitrotoluene	NS	NS	ug/kg	41 UJ	39 U	34 U	39 U	38 U	38 U	37 U	36 U	39 U	35 U	34 U	35 U	34 U
2-Chloronaphthalene	NS	NS	ug/kg	82 U	78 U	67 U	78 U	75 U	77 U	74 U	72 U	78 U	70 U	69 U	69 U	67 U
2-Chlorophenol	NS	NS	ug/kg	82 U	78 U	67 U	78 U	75 U	77 U	74 U	72 U	78 U	70 U	69 U	69 U	67 U
2-Methyl-4,6-dinitrophenol	NS	NS	ug/kg	200 U	190 U	170 U	200 U	190 U	190 U	180 U	180 U	190 U	180 U	170 U	170 U	170 U
2-Methylnaphthalene	NS	NS	ug/kg	82 U	78 U	67 U	78 U	75 U	77 U	74 U	72 U	78 U	70 U	69 U	69 U	67 U
2-Methylphenol	NS	NS	ug/kg	82 U	78 U	67 U	78 U	75 U	77 U	74 U	72 U	78 U	70 U	69 U	69 U	67 U
2-Nitroaniline	NS	NS	ug/kg	200 U	190 U	170 U	200 U	190 U	190 U	180 U	180 U	190 U	180 U	170 U	170 U	170 U
2-Nitrophenol	NS	NS	ug/kg	200 U	190 U	170 U	200 U	190 U	190 U	180 U	180 U	190 U	180 U	170 U	170 U	170 U
3,3-Dichlorobenzidine	NS	NS	ug/kg	82 U	78 U	67 U	78 U	75 U	77 U	74 U	72 U	78 U	70 U	69 U	69 U	67 U
3-Methylphenol, 4-Methylphenol	NS	NS	ug/kg	82 U	78 U	67 U	78 U	75 U	77 U	74 U	72 U	78 U	70 U	69 U	69 U	67 U
3-Nitroaniline	NS	NS	ug/kg	200 U	190 U	170 U	200 U	190 U	190 U	180 U	180 U	190 U	180 U	170 U	170 U	170 U
4-Bromophenyl phenyl ether	NS	NS	ug/kg	82 U	78 U	67 U	78 U	75 U	77 U	74 U	72 U	78 U	70 U	69 U	69 U	67 U
4-Chloro-3-Methylphenol	NS	NS	ug/kg	200 U	190 U	170 U	200 U	190 U	190 U	180 U	180 U	190 U	180 U	170 U	170 U	170 U
4-Chlorophenyl phenyl ether	NS	NS	ug/kg	82 U	78 U	67 U	78 U	75 U	77 U	74 U	72 U	78 U	70 U	69 U	69 U	67 U
4-Nitroaniline	NS	NS	ug/kg	200 U	190 U	170 U	200 U	190 U	190 U	180 U	180 U	190 U	180 U	170 U	170 U	170 U
4-Nitrophenol	NS	NS	ug/kg	410 U	390 U	340 U	390 U	380 U	380 U	370 U	360 U	390 U	350 U	340 U	350 U	340 U
Acenaphthene	100000	98000	ug/kg	41 U	39 U	34 U	39 U	38 U	38 U	37 U	36 U	39 U	35 U	34 U	35 U	34 U
Acenaphthylene	100000	107000	ug/kg	41 U	39 U	34 U	39 U	38 U	38 U	37 U	36 U	39 U	35 U	34 U	35 U	34 U
Acetophenone	NS	NS	ug/kg	200 U	190 U	170 U	200 U	190 U	190 U	180 U	180 U	190 U	180 U	170 U	170 U	170 U
Anthracene	100000	1000000	ug/kg	41 U	39 U	34 U	39 U	38 U	38 U	37 U	36 U	39 U	35 U	34 U	35 U	34 U
Atrazine	NS	NS	ug/kg	82 U	78 U	67 U	78 U	75 U	77 U	74 U	72 U	78 U	70 U	69 U	69 U	67 U
Benzaldehyde	NS	NS	ug/kg	200 U	190 U	170 U	200 U	190 U	190 U	180 U	180 UJ	190 UJ	180 U	170 UJ	170 UJ	170 UJ
Benzo(a)anthracene	1000	1000	ug/kg	41 U	39 U	34 U	39 U	38 U	38 U	37 U	36 U	39 U	35 U	21.5 J	35 U	34 U
Benzo(a)pyrene	1000	22000	ug/kg	41 U	39 U	34 U	39 U	38 U	38 U	37 U	36 U	39 U	35 U	22.3 J	35 U	34 U
Benzo(b)fluoranthene	1000	1700	ug/kg	41 U	39 U	34 U	39 U	38 U	38 U	37 U	36 U	39 U	35 U	28.8 J	35 U	34 U
Benzo(g,h,i)perylene	100000	1000000	ug/kg	41 U	39 U	34 U	39 U	38 U	38 U	37 U	36 U	39 U	35 U	14.1 J	35 U	34 U
Benzo(k)fluoranthene	3900	1700	ug/kg	41 U	39 U	34 U	39 U	38 U	38 U	37 U	36 U	39 U	35 U	34 U	35 U	34 U
bis(2-Chloroethoxy)methane	NS	NS	ug/kg	82 U	78 U	67 U	78 U	75 U	77 U	74 U	72 U	78 U	70 U	69 U	69 U	67 U
bis(2-Chloroethyl)ether	NS	NS	ug/kg	82 U	78 U	67 U	78 U	75 U	77 U	74 U	72 U	78 U	70 U	69 U	69 U	67 U
bis(2-Ethylhexyl)phthalate	NS	NS	ug/kg	82 U	78 U	67 U	78 U	75 U	77 U	74 U	72 U	78 U	70 U	69 U	69 U	67 U
Butyl benzyl phthalate	NS	NS	ug/kg	82 U	78 U	67 U	78 U	75 U	77 U	74 U	72 U	78 U	70 U	69 U	69 U	67 U
Caprolactam	NS	NS	ug/kg	82 U	78 U	67 U	78 U	75 U	77 U	74 U	72 U	78 U	70 U	69 U	69 U	67 U
Carbazole	NS	NS	ug/kg	82 U	78 U	67 U	78 U	75 U	77 U	74 U	72 U	78 U	70 U	69 U	69 U	67 U
Chrysene	3900	1000	ug/kg	41 U	39 U	34 U	39 U	38 U	38 U	37 U	36 U	39 U	35 U	22.8 J	35 U	34 U
Dibenzo(a,h)anthracene	330	1000000	ug/kg	41 U	39 U	34 U	39 U	38 U	38 U	37 U	36 U	39 U	35 U	34 U	35 U	34 U
Dibenzofuran	NS	NS	ug/kg	82 U	78 U	67 U	78 U	75 U	77 U	74 U	72 U	78 U	70 U	69 U	69 U	67 U
Diethyl phthalate	NS	NS	ug/kg	82 U	78 U	67 U	78 U	75 U	77 U	74 U	72 U	78 U	70 U	69 U	69 U	67 U
Dimethyl phthalate	NS	NS	ug/kg	82 U	78 U	67 U	78 U	75 U	77 U	74 U	72 U	78 U	70 U	69 U	69 U	67 U
Di-n-butyl phthalate	NS	NS	ug/kg	82 U	78 U	67 U	78 U	75 U	77 U	74 U	72 U	78 U	70 U	69 U	69 U	67 U
Di-n-octyl phthalate	NS	NS	ug/kg	82 U	78 UJ	67 U	78 U	75 U	77 U	74 U	72 U	78 U	70 U	69 U	69 U	67 U
Fluoranthene	100000	1000000	ug/kg	41 U	39 U	34 U	39 U	38 U	38 U	37 U	15.9 J	24.2 J	35 U	35.8	35 U	34 U
Fluorene	100000	386000	ug/kg	41 U	39 U	34 U	39 U	38 U	38 U	37 U	36 U	39 U	35 U	34 U	35 U	34 U
Hexachloro-1,3-butadiene	NS	NS	ug/kg	41 U	39 U	34 UJ	39 U	38 U	38 U	37 UJ	36 U	39 U	35 U	34 U	35 U	34 U
Hexachlorobenzene	NS	NS	ug/kg	82 U	78 U	67 U	78 U	75 U	77 U	74 UJ	72 U	78 U	70 U	69 U	69 U	67 U
See Notes on Last Page																

Table 12. Confirmatory Soil Sample Results Area D
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Sample ID	TABLE 375-6: RESTRIC. RES. USE SCO	TABLE 375-6: PROTECTION OF GW SCO		PE-D-S2 1/13/2016	PE-D-S3 1/13/2016	PE-D-S4 1/14/2016	PE-D-S4 1/18/2016	PE-D-S5 1/21/2016	PE-D-S6 1/21/2016	PE-D-S6 -DUP-014_201601	PE-D-S7 3/7/2016	PE-D-S8 3/7/2016	PE-D-S9 3/7/2016	PE-D-S10 3/7/2016	PE-D-S11 3/7/2016	PE-D-S12 3/7/2016
Sample Date																
Sample Depth			Units	1.5-2	1.5-2	1.5-2	1.5-2	1.5-2	1.5-2	1.5-2	1.5-2	1.5-2	1.5-2	1.5-2	1.5-2	1.5-2
SVOCs cont.																
Hexachlorocyclopentadiene	NS	NS	ug/kg	410 U	390 U	340 U	390 U	380 U	380 U	370 U	360 U	390 U	350 U	340 U	350 U	340 U
Hexachloroethane	NS	NS	ug/kg	200 U	190 U	170 U	200 U	190 U	190 U	180 U	180 U	190 U	180 U	170 U	170 U	170 U
Indeno(1,2,3-cd)pyrene	500	8200	ug/kg	41 U	39 U	34 U	39 U	38 U	38 U	37 U	36 U	39 U	35 U	34 U	35 U	34 U
Isophorone	NS	NS	ug/kg	82 U	78 U	67 U	78 U	75 U	77 U	74 U	72 U	78 U	70 U	69 U	69 U	67 U
Naphthalene	100000	12000	ug/kg	41 U	39 U	34 U	39 U	38 U	38 U	37 U	36 U	39 U	35 U	34 U	35 U	34 U
Nitrobenzene	NS	NS	ug/kg	82 U	78 U	67 U	78 U	75 U	77 U	74 U	72 U	78 U	70 U	69 U	69 U	67 U
n-Nitrosodi-n-propylamine	NS	NS	ug/kg	82 U	78 U	67 U	78 U	75 U	77 U	74 U	72 U	78 U	70 U	69 U	69 U	67 U
N-nitrosodiphenylamine	NS	NS	ug/kg	200 U	190 U	170 U	200 U	190 U	190 U	180 U	180 U	190 U	180 U	170 U	170 U	170 U
p-Chloroaniline	NS	NS	ug/kg	200 U	190 U	170 U	200 U	190 U	190 U	180 U	180 U	190 U	180 U	170 U	170 U	170 U
Pentachlorophenol	6700	800	ug/kg	200 U	190 U	170 U	200 U	190 U	190 U	180 U	180 U	190 U	180 U	170 U	170 U	170 U
Phenanthrene	100000	1000000	ug/kg	41 U	39 U	34 U	39 U	38 U	38 U	37 U	36 U	34.6 J	35 U	28.6 J	35 U	34 U
Phenol	100000	330	ug/kg	82 U	78 U	67 U	78 U	75 U	77 U	74 U	72 U	78 U	70 U	69 U	69 U	67 U
Pyrene	100000	1000000	ug/kg	41 U	39 U	34 U	39 U	38 U	38 U	37 U	36 U	16.9 J	35 U	35.2	35 U	34 U
PCBs																
Aroclor 1016	1000	3200	ug/kg	40 U	38 U	32 U	37 U	40 U	37 U	36 U	35 U	40 U	36 U	32 U	33 U	35 U
Aroclor 1221	1000	3200	ug/kg	40 U	38 U	32 U	37 U	40 U	37 U	36 U	35 U	40 U	36 U	32 U	33 U	35 U
Aroclor 1232	1000	3200	ug/kg	40 U	38 U	32 U	37 U	40 U	37 U	36 U	35 U	40 U	36 U	32 U	33 U	35 U
Aroclor 1242	1000	3200	ug/kg	40 U	38 U	32 U	37 U	40 U	37 U	36 U	35 U	40 U	36 U	32 U	33 U	35 U
Aroclor 1248	1000	3200	ug/kg	40 U	38 U	32 U	37 U	40 U	37 U	36 U	35 U	40 U	36 U	32 U	33 U	35 U
Aroclor 1254	1000	3200	ug/kg	40 U	38 U	32 U	37 U	40 U	37 U	36 U	35 U	40 U	36 U	32 U	33 U	35 U
Aroclor 1260	1000	3200	ug/kg	40 U	38 U	32 U	37 U	40 U	37 U	36 U	35 U	40 U	36 U	32 U	33 U	35 U
Aroclor 1262	1000	3200	ug/kg	40 U	38 U	32 U	37 U	40 U	37 U	36 U	35 U	40 U	36 U	32 U	33 U	35 U
Aroclor 1268	1000	3200	ug/kg	40 U	38 U	32 U	37 U	40 U	37 U	36 U	35 U	40 U	36 U	32 U	33 U	35 U
Metals																
Aluminum	NS	NS	mg/kg	18400	21200	17800	22400	23000 J	16600 J	16900 J	10200	12300	8020	8680	9020	11000
Antimony	NS	NS	mg/kg	2.5 UJ	2.3 UJ	2 UJ	2.3 U	2.3 UJ	2.3 UJ	2.3 UJ	2.1 UJ	2.5 UJ	2.1 UJ	1 BJ	2.1 UJ	2.1 UJ
Arsenic	16	16	mg/kg	3.8	2.5	3.8	4.6	3.9	3.1	3.1	2.3	2.9	9.3	5.5	3	2.4
Barium	400	820	mg/kg	36.6	28.4	30.8	41.4	42.2	47.8	48.4	43.5	57.9	52.1	104	48.9	80.2
Beryllium	72	47	mg/kg	0.7	0.54	0.52	0.79	0.71	0.67	0.79	0.41	0.58	0.37	0.38	0.44	0.84
Cadmium	4.3	7.5	mg/kg	0.24 B	0.57 U	0.14 B	0.15 B	0.58 UB	0.57 UB	0.57 UB	0.53 U	0.62 U	0.53 U	0.9	0.52 U	0.51 U
Calcium	NS	NS	mg/kg	576 B	449 B	663	849	683	1590	1710	4070	2390	2330	4330	2120	3140
Chromium	NS	NS	mg/kg	17.1	17.7	17.5	24.5	18.2	16.6	17.8	13.7	15.7	17.1	16.3	17.7	11.1
Cobalt	NS	NS	mg/kg	4.8 B	4.1 B	6.5	8.3	6.7	5.4 B	6	7.7	9.1	8.2	10.9	8.1	7.1
Copper	270	1720	mg/kg	4.5	10.9	12.2	11.5	6.4 J	6.9 J	7.7 J	22.9	19.1	14.2	41.5	15.6	12.2
Iron	NS	NS	mg/kg	16300	16600	17300	22000	22400 J	19400 J	20300 J	15800	18500	17300	20300	17300	15400
Lead	400	450	mg/kg	8.8	5.2	12.1	11.2	8.3	4.4	4	4.7	4.3	14.1	112	7.5	2.5
Magnesium	NS	NS	mg/kg	1460	1210	2000	2660	2550 J	2810 J	3070 J	3310	2790	3620	4200	3250	2810
Manganese	2000	2000	mg/kg	85.8	55.8	136	144	154	94.4	115	198	282	555	443	422	208
Mercury	NS	NS	mg/kg	0.06	0.037	0.034 U	0.069	0.061	0.037 UB	0.036 UB	0.0097 B	0.019 B	0.0088 B	0.013 B	0.011 B	0.0097 B
Nickel	310	130	mg/kg	8.7	8.3	11.3	15.6	9.8	9.2	10	11.6	11.6	16.1	16.9	15.3	8.8
Potassium	NS	NS	mg/kg	446 B	349 B	479 B	609 B	564 B	692 B	732 B	1450	1710	1660	1410	1200	1620
Selenium	180	4	mg/kg	2.5 U	2.3 U	2 U	0.77 B	0.62 B	2.3 U	2.3 UB	2.1 U	2.5 U	2.1 U	2.1 U	2.1 U	2.1 U
Silver	180	8.3	mg/kg	0.63 UB	0.57 UB	0.51 U	0.58 U	0.58 UB	0.57 UB	0.57 UB	0.26 B	0.34 B	0.53 U	0.52 U	0.52 U	0.71 B
Sodium	NS	NS	mg/kg	70.3 B	51.9 B	66 B	85.9 B	85.6 B	164 B	170 B	202 B	227 B	184 B	308 B	153 B	229 B
Thallium	NS	NS	mg/kg	1.3 U	1.1 U	0.63 B	0.26 B	0.94 B	0.52 B	2.3 U	1.1 U	1.2 U	0.31 B	0.33 B	0.48 B	2.1 U
Vanadium	NS	NS	mg/kg	25.5	27.6	30.6	38.4	35.3	29.7	30.5	27.1	30.5	24.7	50	26.9	23
Zinc	10000	2480	mg/kg	38.8	23.6	30.1	32.6	27.4	30.9	32.1	27.5	28.1	36.9	91.4	38.7	23.1
General Chemistry																
Percent Solids			%	79	84.8	95.1	85.2	83.1	84.6	86.1	89.1	80.5	92.3	94.2	91.6	92.6
Notes																
NS			No standard													
NA			Not analyzed													
J			Estimated result													
JN			Estimated result													
R			Rejected result													
UB			Analyte considered non-detect at the listed value due to associated blank contamination													
Bold			Result exceeds 375-6.8(b) protection of groundwater soil cleanup objective.													
Shade			Result exceeds 375-6.8(b) restricted residential use soil cleanup objective.													

Table 12. Confirmatory Soil Sample Results Area D
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Sample ID	TABLE 375-6: RESTRIC. RES. USE SCO	TABLE 375-6: PROTECTION OF GW SCO		PE-D-S13 3/7/2016	PE-D-S14 3/7/2016	PE-D-S14 -DUP-017_201603	PE-D-S15 3/7/2016	PE-D-S16A 3/14/2016	PE-D-S17 3/7/2016	PE-D-S18 3/8/2016	PE-D-S19 3/8/2016	PE-D-S20 3/8/2016
Sample Date												
Sample Depth			Units	1.5-2	1.5-2	0	1.5-2	1.5-2	1.5-2	1.5-2	1.5-2	1.5-2
VOCs												
1,1,1-Trichloroethane	100000	680	ug/kg	1.9 U	1.7 U	2.1 U	2.1 U	NA	1.9 U	1.8 U	2.1 U	1.8 U
1,1,2,2-Tetrachloroethane	NS	NS	ug/kg	1.9 U	1.7 U	2.1 U	2.1 U	NA	1.9 U	1.8 U	2.1 U	1.8 U
1,1,2-trichloro-1,2,2-trifluoroethane	NS	NS	ug/kg	4.7 U	4.3 U	5.2 U	5.2 U	NA	4.8 U	4.5 U	5.3 U	4.4 U
1,1,2-Trichloroethane	NS	NS	ug/kg	1.9 U	1.7 U	2.1 U	2.1 U	NA	1.9 U	1.8 U	2.1 U	1.8 U
1,1-Dichloroethane	26000	270	ug/kg	0.94 U	0.86 U	1 U	1 U	NA	0.97 U	0.9 U	1.1 U	0.89 U
1,1-Dichloroethene	100000	330	ug/kg	0.94 U	0.86 U	1 U	1 U	NA	0.97 U	0.9 U	1.1 U	0.89 U
1,2,4-Trichlorobenzene	NS	NS	ug/kg	4.7 U	4.3 U	5.2 U	5.2 U	NA	4.8 UJ	4.5 U	5.3 U	4.4 U
1,2-Dibromo-3-chloropropane	NS	NS	ug/kg	1.9 U	1.7 U	2.1 U	2.1 U	NA	1.9 U	1.8 U	2.1 U	1.8 U
1,2-Dibromoethane	NS	NS	ug/kg	0.94 U	0.86 U	1 U	1 U	NA	0.97 U	0.9 U	1.1 U	0.89 U
1,2-Dichlorobenzene	100000	1100	ug/kg	0.94 U	0.86 U	1 U	1 U	NA	0.97 U	0.9 U	1.1 U	0.89 U
1,2-Dichloroethane	3100	20	ug/kg	0.94 U	0.86 U	1 U	1 U	NA	0.97 U	0.9 U	1.1 U	0.89 U
1,2-Dichloropropane	NS	NS	ug/kg	1.9 U	1.7 U	2.1 U	2.1 U	NA	1.9 U	1.8 U	2.1 U	1.8 U
1,3-Dichlorobenzene	49000	2400	ug/kg	0.94 U	0.86 U	1 U	1 U	NA	0.97 U	0.9 U	1.1 U	0.89 U
1,4-Dichlorobenzene	13000	1800	ug/kg	0.94 U	0.86 U	1 U	1 U	NA	0.97 U	0.9 U	1.1 U	0.89 U
2-Butanone (MEK)	100000	120	ug/kg	9.4 U	8.6 U	10 U	10 U	NA	9.7 U	9 U	11 U	8.9 U
4-Methyl-2-Pentanone	NS	NS	ug/kg	4.7 U	4.3 U	5.2 U	5.2 U	NA	4.8 U	4.5 U	5.3 U	4.4 U
Acetone	100000	50	ug/kg	9.4 U	8.6 U	10 U	10 U	NA	9.7 U	9 U	11 U	35.2
Benzene	4800	60	ug/kg	0.47 U	0.43 U	0.52 U	0.52 U	NA	0.48 U	0.45 U	0.53 U	0.44 U
Bromodichloromethane	NS	NS	ug/kg	1.9 U	1.7 U	2.1 U	2.1 U	NA	1.9 U	1.8 U	2.1 U	1.8 U
Bromoform	NS	NS	ug/kg	4.7 U	4.3 U	5.2 U	5.2 U	NA	4.8 U	4.5 U	5.3 U	4.4 U
Bromomethane	NS	NS	ug/kg	4.7 U	4.3 U	5.2 U	5.2 U	NA	4.8 U	4.5 U	5.3 U	4.4 U
Carbon Disulfide	NS	NS	ug/kg	1.9 U	1.7 U	2.1 U	2.1 U	NA	1.9 U	1.8 U	2.1 U	1.8 U
Carbon Tetrachloride	2400	760	ug/kg	1.9 U	1.7 U	2.1 U	2.1 U	NA	1.9 U	1.8 U	2.1 U	1.8 U
CFC-11	NS	NS	ug/kg	4.7 U	4.3 U	5.2 U	5.2 U	NA	4.8 U	4.5 U	5.3 U	4.4 U
CFC-12	NS	NS	ug/kg	4.7 U	4.3 U	5.2 U	5.2 U	NA	4.8 U	4.5 U	5.3 U	4.4 U
Chlorobenzene	100000	1100	ug/kg	1.9 U	1.7 U	2.1 U	2.1 U	NA	1.9 U	1.8 U	2.1 U	1.8 U
Chlorodibromomethane	NS	NS	ug/kg	1.9 U	1.7 U	2.1 U	2.1 U	NA	1.9 U	1.8 U	2.1 U	1.8 U
Chloroethane	NS	NS	ug/kg	4.7 U	4.3 U	5.2 U	5.2 U	NA	4.8 U	4.5 U	5.3 U	4.4 U
Chloroform	49000	370	ug/kg	1.9 U	1.7 U	2.1 U	2.1 U	NA	1.9 U	1.8 U	2.1 U	1.8 U
Chloromethane	NS	NS	ug/kg	4.7 U	4.3 U	5.2 U	5.2 U	NA	4.8 U	4.5 U	5.3 U	4.4 U
cis-1,2-Dichloroethene	100000	250	ug/kg	0.94 U	0.86 U	1 U	1 U	NA	0.97 U	0.9 U	1.1 U	0.89 U
cis-1,3-Dichloropropene	NS	NS	ug/kg	1.9 U	1.7 U	2.1 U	2.1 U	NA	1.9 U	1.8 U	2.1 U	1.8 U
Cyclohexane	NS	NS	ug/kg	1.9 U	1.7 U	2.1 U	2.1 U	NA	1.9 U	1.8 U	2.1 U	1.8 U
Dichloromethane	NS	NS	ug/kg	4.7 U	4.3 U	5.2 U	5.2 U	NA	1.2 J	4.5 U	5.3 U	4.4 U
Ethylbenzene	41000	1000	ug/kg	0.94 U	0.86 U	1 U	1 U	NA	0.97 U	0.9 U	0.39 J	0.89 U
Isopropylbenzene	NS	NS	ug/kg	1.9 U	1.7 U	2.1 U	2.1 U	NA	1.9 U	1.8 U	2.1 U	1.8 U
Methyl Acetate	NS	NS	ug/kg	4.7 U	4.3 U	5.2 U	5.2 U	NA	4.8 U	4.5 U	5.3 U	4.4 U
Methyl N-Butyl Ketone (2-Hexanone)	NS	NS	ug/kg	4.7 U	4.3 U	5.2 U	5.2 U	NA	4.8 U	4.5 U	5.3 U	4.4 U
Methylcyclohexane	NS	NS	ug/kg	1.9 U	1.7 U	2.1 U	2.1 U	NA	1.9 U	1.8 U	2.1 U	1.8 U
Methyl-tert-butylether	100000	930	ug/kg	0.94 U	0.86 U	1 U	1 U	NA	0.97 U	0.9 U	1.1 U	0.89 U
Styrene (Monomer)	NS	NS	ug/kg	1.9 U	1.7 U	2.1 U	2.1 U	NA	1.9 U	1.8 U	2.6	1.8 U
Tetrachloroethene	19000	1300	ug/kg	1.9 U	1.7 U	2.1 U	2.1 U	NA	1.9 U	1.8 U	2.1 U	1.8 U
Toluene	100000	700	ug/kg	0.94 U	0.86 U	1 U	1 U	NA	0.97 U	0.9 U	1.1 U	0.89 U
Total Xylenes	100000	1600	ug/kg	0.94 U	0.86 U	1 U	1 U	NA	0.97 U	0.9 U	1.1 U	0.89 U
trans-1,2-Dichloroethene	100000	190	ug/kg	0.94 U	0.86 U	1 U	1 U	NA	0.97 U	0.9 U	1.1 U	0.89 U
trans-1,3-Dichloropropene	NS	NS	ug/kg	1.9 U	1.7 U	2.1 U	2.1 U	NA	1.9 U	1.8 U	2.1 U	1.8 U
Trichloroethene	21000	470	ug/kg	0.94 U	0.86 U	1 U	1 U	NA	0.97 U	0.9 U	1.1 U	0.89 U
Vinyl chloride	900	20	ug/kg	1.9 U	1.7 U	2.1 U	2.1 U	NA	1.9 U	1.8 U	2.1 U	1.8 U

See Notes on Last Page

Table 12. Confirmatory Soil Sample Results Area D
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Sample ID Sample Date Sample Depth	TABLE 375-6: RESTRIC. RES. USE SCO	TABLE 375-6: PROTECTION OF GW SCO	Units	PE-D-S13 3/7/2016 1.5-2	PE-D-S14 3/7/2016 1.5-2	PE-D-S14 -DUP-017_201603 0	PE-D-S15 3/7/2016 1.5-2	PE-D-S16A 3/14/2016 1.5-2	PE-D-S17 3/7/2016 1.5-2	PE-D-S18 3/8/2016 1.5-2	PE-D-S19 3/8/2016 1.5-2	PE-D-S20 3/8/2016 1.5-2
SVOCs												
1,1-Biphenyl	NS	NS	ug/kg	73 U	71 U	79 U	81 U	NA	78 U	70 U	82 U	74 U
2,2-Oxybis(1-Chloropropane)	NS	NS	ug/kg	73 U	71 U	79 U	81 U	NA	78 U	70 U	82 U	74 U
2,4,5-Trichlorophenol	NS	NS	ug/kg	180 U	180 U	200 U	200 U	NA	190 U	180 U	200 U	190 U
2,4,6-Trichlorophenol	NS	NS	ug/kg	180 U	180 U	200 U	200 U	NA	190 U	180 U	200 U	190 U
2,4-Dichlorophenol	NS	NS	ug/kg	180 U	180 U	200 U	200 U	NA	190 U	180 U	200 U	190 U
2,4-Dimethylphenol	NS	NS	ug/kg	180 U	180 U	200 U	200 U	NA	190 U	180 U	200 U	190 U
2,4-Dinitrophenol	NS	NS	ug/kg	180 U	180 U	200 U	200 U	NA	190 U	180 U	200 U	190 U
2,4-Dinitrotoluene	NS	NS	ug/kg	37 U	36 U	40 U	40 U	NA	39 U	35 U	41 U	37 U
2,6-Dinitrotoluene	NS	NS	ug/kg	37 U	36 U	40 U	40 U	NA	39 U	35 U	41 U	37 U
2-Chloronaphthalene	NS	NS	ug/kg	73 U	71 U	79 U	81 U	NA	78 U	70 U	82 U	74 U
2-Chlorophenol	NS	NS	ug/kg	73 U	71 U	79 U	81 U	NA	78 U	70 U	82 U	74 U
2-Methyl-4,6-dinitrophenol	NS	NS	ug/kg	180 U	180 U	200 U	200 U	NA	190 U	180 U	200 U	190 U
2-Methylnaphthalene	NS	NS	ug/kg	73 U	71 U	79 U	81 U	NA	78 U	70 U	82 U	74 U
2-Methylphenol	NS	NS	ug/kg	73 U	71 U	79 U	81 U	NA	78 U	70 U	82 U	74 U
2-Nitroaniline	NS	NS	ug/kg	180 U	180 U	200 U	200 U	NA	190 U	180 U	200 U	190 U
2-Nitrophenol	NS	NS	ug/kg	180 U	180 U	200 U	200 U	NA	190 U	180 U	200 U	190 U
3,3-Dichlorobenzidine	NS	NS	ug/kg	73 U	71 U	79 U	81 U	NA	78 U	70 U	82 U	74 U
3-Methylphenol, 4-Methylphenol	NS	NS	ug/kg	73 U	71 U	79 U	81 U	NA	78 U	70 U	82 U	74 U
3-Nitroaniline	NS	NS	ug/kg	180 U	180 U	200 U	200 U	NA	190 U	180 U	200 U	190 U
4-Bromophenyl phenyl ether	NS	NS	ug/kg	73 U	71 U	79 U	81 U	NA	78 U	70 U	82 U	74 U
4-Chloro-3-Methylphenol	NS	NS	ug/kg	180 U	180 U	200 U	200 U	NA	190 U	180 U	200 U	190 U
4-Chlorophenyl phenyl ether	NS	NS	ug/kg	73 U	71 U	79 U	81 U	NA	78 U	70 U	82 U	74 U
4-Nitroaniline	NS	NS	ug/kg	180 U	180 U	200 U	200 U	NA	190 U	180 U	200 U	190 U
4-Nitrophenol	NS	NS	ug/kg	370 U	360 U	400 U	400 U	NA	390 U	350 U	410 U	370 U
Acenaphthene	100000	98000	ug/kg	37 U	36 U	40 U	40 U	NA	39 U	35 U	41 U	37 U
Acenaphthylene	100000	107000	ug/kg	37 U	36 U	40 U	40 U	NA	39 U	35 U	41 U	37 U
Acetophenone	NS	NS	ug/kg	180 U	180 U	200 U	200 U	NA	190 U	180 U	200 U	190 U
Anthracene	100000	1000000	ug/kg	37 U	36 U	40 U	17 J	NA	39 U	35 U	41 U	37 U
Atrazine	NS	NS	ug/kg	73 U	71 U	79 U	81 U	NA	78 U	70 U	82 U	74 U
Benzaldehyde	NS	NS	ug/kg	180 UJ	180 UJ	200 UJ	200 UJ	NA	190 UJ	180 UJ	200 UJ	190 UJ
Benzo(a)anthracene	1000	1000	ug/kg	37 U	36 U	40 U	41.7	NA	39 U	35 U	41 U	37 U
Benzo(a)pyrene	1000	22000	ug/kg	37 U	36 U	40 U	34.6 J	NA	39 U	35 U	41 U	37 U
Benzo(b)fluoranthene	1000	1700	ug/kg	37 U	36 U	40 U	46.2	NA	39 U	35 U	41 U	37 U
Benzo(g,h,i)perylene	100000	1000000	ug/kg	37 U	36 U	40 U	22.9 J	NA	39 U	35 U	41 U	37 U
Benzo(k)fluoranthene	3900	1700	ug/kg	37 U	36 U	40 U	18.2 J	NA	39 U	35 U	41 U	37 U
bis(2-Chloroethoxy)methane	NS	NS	ug/kg	73 U	71 U	79 U	81 U	NA	78 U	70 U	82 U	74 U
bis(2-Chloroethyl)ether	NS	NS	ug/kg	73 U	71 U	79 U	81 U	NA	78 U	70 U	82 U	74 U
bis(2-Ethylhexyl)phthalate	NS	NS	ug/kg	73 U	71 U	79 U	81 U	NA	78 U	70 U	82 U	74 U
Butyl benzyl phthalate	NS	NS	ug/kg	73 U	71 U	79 U	81 U	NA	78 U	70 U	82 U	74 U
Caprolactam	NS	NS	ug/kg	73 U	71 U	79 U	81 U	NA	78 U	70 U	82 U	74 U
Carbazole	NS	NS	ug/kg	73 U	71 U	79 U	81 U	NA	78 U	70 U	82 U	74 U
Chrysene	3900	1000	ug/kg	37 U	36 U	40 U	48.8	NA	39 U	35 U	41 U	37 U
Dibenzo(a,h)anthracene	330	1000000	ug/kg	37 U	36 U	40 U	40 U	NA	39 U	35 U	41 U	37 U
Dibenzofuran	NS	NS	ug/kg	73 U	71 U	79 U	81 U	NA	78 U	70 U	82 U	74 U
Diethyl phthalate	NS	NS	ug/kg	73 U	71 U	79 U	81 U	NA	78 U	70 U	82 U	74 U
Dimethyl phthalate	NS	NS	ug/kg	73 U	71 U	79 U	81 U	NA	78 U	70 U	82 U	74 U
Di-n-butyl phthalate	NS	NS	ug/kg	73 U	71 U	79 U	81 U	NA	78 U	70 U	82 U	74 U
Di-n-octyl phthalate	NS	NS	ug/kg	73 U	71 U	79 U	81 U	NA	78 U	70 U	82 U	74 U
Fluoranthene	100000	1000000	ug/kg	37 U	36 U	40 U	106	NA	39 U	35 U	41 U	37 U
Fluorene	100000	386000	ug/kg	37 U	36 U	40 U	40 U	NA	39 U	35 U	41 U	37 U
Hexachloro-1,3-butadiene	NS	NS	ug/kg	37 U	36 U	40 U	40 U	NA	39 U	35 U	41 U	37 U
Hexachlorobenzene	NS	NS	ug/kg	73 U	71 U	79 U	81 U	NA	78 U	70 U	82 U	74 U
See Notes on Last Page												

Table 12. Confirmatory Soil Sample Results Area D
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Sample ID	TABLE 375-6: RESTRIC. RES. USE SCO	TABLE 375-6: PROTECTION OF GW SCO		PE-D-S13 3/7/2016	PE-D-S14 3/7/2016	PE-D-S14 -DUP-017_201603	PE-D-S15 3/7/2016	PE-D-S16A 3/14/2016	PE-D-S17 3/7/2016	PE-D-S18 3/8/2016	PE-D-S19 3/8/2016	PE-D-S20 3/8/2016
Sample Date												
Sample Depth			Units	1.5-2	1.5-2	0	1.5-2	1.5-2	1.5-2	1.5-2	1.5-2	1.5-2
SVOCs cont.												
Hexachlorocyclopentadiene	NS	NS	ug/kg	370 U	360 U	400 U	400 U	NA	390 U	350 U	410 U	370 U
Hexachloroethane	NS	NS	ug/kg	180 U	180 U	200 U	200 U	NA	190 U	180 U	200 U	190 U
Indeno(1,2,3-cd)pyrene	500	8200	ug/kg	37 U	36 U	40 U	23.6 J	NA	39 U	35 U	41 U	37 U
Isophorone	NS	NS	ug/kg	73 U	71 U	79 U	81 U	NA	78 U	70 U	82 U	74 U
Naphthalene	100000	12000	ug/kg	37 U	36 U	40 U	40 U	NA	39 U	35 U	41 U	37 U
Nitrobenzene	NS	NS	ug/kg	73 U	71 U	79 U	81 U	NA	78 U	70 U	82 U	74 U
n-Nitrosodi-n-propylamine	NS	NS	ug/kg	73 U	71 U	79 U	81 U	NA	78 U	70 U	82 U	74 U
N-nitrosodiphenylamine	NS	NS	ug/kg	180 U	180 U	200 U	200 U	NA	190 U	180 U	200 U	190 U
p-Chloroaniline	NS	NS	ug/kg	180 U	180 U	200 U	200 U	NA	190 U	180 U	200 U	190 U
Pentachlorophenol	6700	800	ug/kg	180 U	180 U	200 U	200 U	NA	190 U	180 U	200 U	190 U
Phenanthrene	100000	1000000	ug/kg	37 U	36 U	40 U	105	NA	39 U	35 U	41 U	37 U
Phenol	100000	330	ug/kg	73 U	71 U	79 U	81 U	NA	78 U	43.6 J	82 U	74 U
Pyrene	100000	1000000	ug/kg	37 U	36 U	40 U	107	NA	39 U	35 U	41 U	37 U
PCBs												
Aroclor 1016	1000	3200	ug/kg	35 U	35 U	41 U	41 U	35 U	39 U	34 U	42 U	37 U
Aroclor 1221	1000	3200	ug/kg	35 U	35 U	41 U	41 U	35 U	39 U	34 U	42 U	37 U
Aroclor 1232	1000	3200	ug/kg	35 U	35 U	41 U	41 U	35 U	39 U	34 U	42 U	37 U
Aroclor 1242	1000	3200	ug/kg	35 U	35 U	41 U	41 U	35 U	39 U	34 U	42 U	37 U
Aroclor 1248	1000	3200	ug/kg	35 U	35 U	41 U	41 U	35 U	39 U	34 U	42 U	37 U
Aroclor 1254	1000	3200	ug/kg	35 U	35 U	41 U	41 U	35 U	39 U	34 U	42 U	37 U
Aroclor 1260	1000	3200	ug/kg	35 U	35 U	41 U	41 U	35 U	39 U	34 U	42 U	37 U
Aroclor 1262	1000	3200	ug/kg	35 U	35 U	41 U	41 U	35 U	39 U	34 U	42 U	37 U
Aroclor 1268	1000	3200	ug/kg	35 U	35 U	41 U	41 U	35 U	39 U	34 U	42 U	37 U
Metals												
Aluminum	NS	NS	mg/kg	18200	16000	17700	14900	NA	13600	12400	11600	14200
Antimony	NS	NS	mg/kg	2.3 UJ	2.2 UJ	2.5 UJ	2.5 UJ	NA	2.4 UJ	2.1 UJ	2.7 UJ	2.2 UJ
Arsenic	16	16	mg/kg	3.7	3.7	4.1	4.2	NA	3.8	4	3.2	2.5
Barium	400	820	mg/kg	46.6	42	45.2	41.6	NA	48.3	71.2	44.7	39.5
Beryllium	72	47	mg/kg	0.57	0.51	0.58	0.47	NA	0.48	0.63	0.57	0.69
Cadmium	4.3	7.5	mg/kg	0.57 U	0.56 U	0.62 U	0.62 U	NA	0.6 U	0.13 B	0.16 B	0.15 B
Calcium	NS	NS	mg/kg	700	828	912	1090	NA	1840	2850	1540	2340
Chromium	NS	NS	mg/kg	19	17.1	22.2	17.7	NA	17.6	17.9	15.9	18.5
Cobalt	NS	NS	mg/kg	7.8	7.4	8.4	7.8	NA	7.3	7.7	4.6 B	7
Copper	270	1720	mg/kg	11.6	14.2	16.5	9.4	NA	12.7	12.1	3.9	11.6
Iron	NS	NS	mg/kg	17700	15400	17900	16200	NA	15600	20900	15200	19300
Lead	400	450	mg/kg	6.8	9.2	10.8	16.5	NA	10.3	14.8	9.4	10
Magnesium	NS	NS	mg/kg	3020	2540	2980	2320	NA	2730	3300	1830	3850
Manganese	2000	2000	mg/kg	170	179	175	346	NA	223	273	296	194
Mercury	NS	NS	mg/kg	0.036	0.026 B	0.033 B	0.034 B	NA	0.027 B	0.013 B	0.031	0.022 B
Nickel	310	130	mg/kg	14.6	12.1	14.4	13.6	NA	12.5	10.8	6.7	12.1
Potassium	NS	NS	mg/kg	787 B	872 B	1010 B	1060 B	NA	1210	1290	511 B	933 B
Selenium	180	4	mg/kg	2.3 U	2.2 U	2.5 U	2.5 U	NA	2.4 U	0.62 B	2.7 U	2.2 U
Silver	180	8.3	mg/kg	0.57 U	0.56 U	0.62 U	0.62 U	NA	0.6 U	0.49 B	0.82	0.82
Sodium	NS	NS	mg/kg	103 B	101 B	109 B	1200 UB	NA	146 B	162 B	103 B	139 B
Thallium	NS	NS	mg/kg	0.5 B	0.37 B	0.53 B	0.45 B	NA	0.55 B	1.1 U	1.4 U	1.1 U
Vanadium	NS	NS	mg/kg	30.8	28.9	35.2	31.4	NA	29.8	30.6	25.1	31.6
Zinc	10000	2480	mg/kg	32.6	29.2	33	43.1	NA	34.1	30.6	27.5	28.3
General Chemistry												
Percent Solids			%	85.6	89.4	78.2	78.5	88	80.6	92.7	75.6	87.8
Notes												
	NS	No standard										
	NA	Not analyzed										
	J	Estimated result										
	JN	Estimated result										
	R	Rejected result										
	UB	Analyte considered non-detect at the listed value due to associated blank contamination										
	Bold	Result exceeds 375-6.8(b) protection of groundwater soil cleanup objective.										
	Shade	Result exceeds 375-6.8(b) restricted residential use soil cleanup objective.										

Table 13. Confirmatory Soil Sample Results Area E
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York

Sample ID	TABLE 375-6: RESTRIC. RES. USE SCO	TABLE 375-6: PROTECTION OF GW SCO		PE-E-A2 DUP-020_201603	PE-E-A2 3/31/2016	PE-E-A3 3/31/2016	PE-E-A4 3/31/2016	PE-E-A5 4/1/2016	PE-E-A6 4/15/2016	PE-E-A6 4/15/2016	PE-E-A7 4/15/2016	PE-E-A8 4/15/2016	PE-E-A9 4/14/2016	PE-E-B1 3/18/2016	PE-E-B2 3/31/2016	PE-E-B3 3/31/2016	PE-E-B4	PE-E-B5 4/1/2016
Sample Date																		
Sample Depth			Units	2-2.5	2-2.5	4-4.5	2-2.5	2-2.5	0	2-2.5	2-2.5	2-2.5	2-2.5	4-4.5	4-4.5	4-4.5	2-2.5	2-2.5
VOCs																		
1,1,1-Trichloroethane	100000	680	ug/kq	2.2 U	2.2 U	2.2 U	2 U	2 U	1.9 U	1.8 U	130 U	1.8 U	1.8 U	1.8 U	2.6 U	1.9 U	2.1 U	2.3 U
1,1,2,2-Tetrachloroethane	NS	NS	ug/kg	2.2 U	2.2 U	2.2 U	2 U	2 U	1.9 U	1.8 U	130 U	1.8 U	1.8 U	1.8 U	2.6 U	1.9 U	2.1 U	2.3 U
1,1,2-trichloro-1,2,2-trifluoroethane	NS	NS	ug/kg	5.4 U	5.5 U	5.6 U	5 U	4.9 U	4.7 U	4.5 U	310 U	4.6 U	4.5 U	4.4 U	6.4 U	4.7 U	5.3 U	5.6 U
1,1,2-Trichloroethane	NS	NS	ug/kg	2.2 U	2.2 U	2.2 U	2 U	2 U	1.9 U	1.8 U	130 U	1.8 U	1.8 U	1.8 U	2.6 U	1.9 U	2.1 U	2.3 U
1,1-Dichloroethane	26000	270	ug/kg	1.1 U	1.1 U	1.1 U	1 U	0.99 U	0.94 U	0.89 U	63 U	0.91 U	0.9 U	0.89 U	1.3 U	0.95 U	1.1 U	1.1 U
1,1-Dichloroethene	100000	330	ug/kg	1.1 U	1.1 U	1.1 U	1 U	0.99 U	0.94 U	0.89 U	63 U	0.91 U	0.9 U	0.89 U	1.3 U	0.95 U	1.1 U	1.1 U
1,2,4-Trichlorobenzene	NS	NS	ug/kg	5.4 U	5.5 U	5.6 U	5 U	4.9 U	4.7 U	4.5 U	310 U	4.6 U	4.5 U	4.4 U	6.4 U	4.7 U	5.3 U	5.6 U
1,2-Dibromo-3-chloropropane	NS	NS	ug/kg	2.2 U	2.2 U	2.2 U	2 U	2 U	1.9 U	1.8 U	130 U	1.8 U	1.8 U	1.8 U	2.6 U	1.9 U	2.1 U	2.3 U
1,2-Dibromoethane	NS	NS	ug/kg	1.1 U	1.1 U	1.1 U	1 U	0.99 U	0.94 U	0.89 U	63 U	0.91 U	0.9 U	0.89 U	1.3 U	0.95 U	1.1 U	1.1 U
1,2-Dichlorobenzene	100000	1100	ug/kg	1.1 U	1.1 U	1.1 U	1 U	0.99 U	0.94 U	0.89 U	31.6 J	0.91 U	0.9 U	0.89 U	1.3 U	0.95 U	1.1 U	1.1 U
1,2-Dichloroethane	3100	20	ug/kg	1.1 U	1.1 U	1.1 U	1 U	0.99 U	0.94 U	0.89 U	63 U	0.91 U	0.9 U	0.89 U	1.3 U	0.95 U	1.1 U	1.1 U
1,2-Dichloropropane	NS	NS	ug/kg	2.2 U	2.2 U	2.2 U	2 U	2 U	1.9 U	1.8 U	130 U	1.8 U	1.8 U	1.8 U	2.6 U	1.9 U	2.1 U	2.3 U
1,3-Dichlorobenzene	49000	2400	ug/kg	1.1 U	1.1 U	1.1 U	1 U	0.99 U	0.94 U	0.89 U	63 U	0.91 U	0.9 U	0.89 U	1.3 U	0.95 U	1.1 U	1.1 U
1,4-Dichlorobenzene	13000	1800	ug/kg	1.1 U	1.1 U	1.1 U	1 U	0.99 U	0.94 U	0.89 U	63 U	0.91 U	0.9 U	0.89 U	1.3 U	0.95 U	1.1 U	1.1 U
2-Butanone (MEK)	100000	120	ug/kg	11 U	11 U	11 U	10 U	9.9 U	9.4 U	8.9 U	630 U	9.1 U	9 U	8.9 U	13 U	9.8	11 U	11 U
4-Methyl-2-Pentanone	NS	NS	ug/kg	5.4 U	5.5 U	5.6 U	5 U	4.9 U	4.7 U	4.5 U	310 U	4.6 U	4.5 U	4.4 U	6.4 U	4.7 U	5.3 U	5.6 U
Acetone	100000	50	ug/kg	7.6 J	14.4	6 J	9.4 J	9.9 U	9.4 U	8.9 U	630 U	9.1 U	9 U	6.4 J	9 J	51	16	12
Benzene	4800	60	ug/kg	0.54 U	0.55 U	0.56 U	0.5 U	0.49 U	0.47 U	0.45 U	31 U	0.46 U	0.45 U	0.44 U	0.64 U	0.47 U	0.53 U	0.56 U
Bromodichloromethane	NS	NS	ug/kg	2.2 U	2.2 U	2.2 U	2 U	2 U	1.9 U	1.8 U	130 U	1.8 U	1.8 U	1.8 U	2.6 U	1.9 U	2.1 U	2.3 U
Bromoform	NS	NS	ug/kg	5.4 U	5.5 U	5.6 U	5 U	4.9 U	4.7 U	4.5 U	310 U	4.6 U	4.5 U	4.4 U	6.4 U	4.7 U	5.3 U	5.6 U
Bromomethane	NS	NS	ug/kg	5.4 U	5.5 U	5.6 U	5 U	4.9 U	4.7 U	4.5 U	310 U	4.6 U	4.5 U	4.4 U	6.4 U	4.7 U	5.3 U	5.6 U
Carbon Disulfide	NS	NS	ug/kq	2.2 U	2.2 U	2.2 U	2 U	2 U	1.9 U	1.8 U	130 U	1.8 U	1.8 U	1.8 U	2.6 U	1.9 U	2.1 U	2.3 U
Carbon Tetrachloride	2400	760	ug/kq	2.2 U	2.2 U	2.2 U	2 U	2 U	1.9 U	1.8 U	130 U	1.8 U	1.8 U	1.8 U	2.6 U	1.9 U	2.1 U	2.3 U
CFC-11	NS	NS	ug/kq	5.4 U	5.5 U	5.6 U	5 U	4.9 U	4.7 U	4.5 U	310 U	4.6 U	4.5 U	4.4 U	6.4 U	4.7 U	5.3 U	5.6 U
CFC-12	NS	NS	ug/kq	5.4 U	5.5 U	5.6 U	5 U	4.9 U	4.7 U	4.5 U	310 U	4.6 U	4.5 U	4.4 U	6.4 U	4.7 U	5.3 U	5.6 U
Chlorobenzene	100000	1100	ug/kq	2.2 U	2.2 U	2.2 U	2 U	2 U	1.9 U	1.8 U	130 U	1.8 U	1.8 U	1.8 U	2.6 U	0.95 J	2.1 U	2.3 U
Chlorodibromomethane	NS	NS	ug/kg	2.2 U	2.2 U	2.2 U	2 U	2 U	1.9 U	1.8 U	130 U	1.8 U	1.8 U	1.8 U	2.6 U	1.9 U	2.1 U	2.3 U
Chloroethane	NS	NS	ug/kg	5.4 U	5.5 U	5.6 U	5 U	4.9 U	4.7 U	4.5 U	310 U	4.6 U	4.5 U	4.4 U	6.4 U	4.7 U	5.3 U	5.6 U
Chloroform	49000	370	ug/kg	2.2 U	2.2 U	2.2 U	2 U	2 U	1.9 U	1.8 U	130 U	1.8 U	1.8 U	1.8 U	2.6 U	1.9 U	2.1 U	2.3 U
Chloromethane	NS	NS	ug/kg	5.4 U	5.5 U	5.6 U	5 U	4.9 U	4.7 U	4.5 U	310 U	4.6 U	4.5 U	4.4 U	6.4 U	4.7 UJ	5.3 U	5.6 U
cis-1,2-Dichloroethene	100000	250	ug/kg	1.1 U	1.1 U	1.1 U	1 U	0.99 U	0.94 U	0.89 U	63 U	0.91 U	0.9 U	0.89 U	1.3 U	0.95 U	1.1 U	1.1 U
cis-1,3-Dichloropropene	NS	NS	ug/kg	2.2 U	2.2 U	2.2 U	2 U	2 U	1.9 U	1.8 U	130 U	1.8 U	1.8 U	1.8 U	2.6 U	1.9 U	2.1 U	2.3 U
Cyclohexane	NS	NS	ug/kg	2.2 U	NS	0.97 J	2 U	2 U	1.9 U	1.8 U	130 U	1.8 U	1.8 U	1.8 U	2.6 U	1.9 U	2.1 U	2.3 U
Dichloromethane	NS	NS	ug/kg	5.4 U	5.5 U	5.6 U	5 U	4.9 U	4.7 U	4.5 U	310 U	4.6 U	4.5 U	4.4 U	6.4 U	4.7 U	5.3 U	5.6 U
Ethylbenzene	41000	1000	ug/kg	0.29 J	9.4 J	0.25 J	1 U	0.99 U	0.94 U	0.89 U	136	0.91 U	0.9 U	0.89 U	1.3 U	0.23 J	0.57 J	1.1 U
Isopropylbenzene	NS	NS	ug/kg	2.2 U	NS	0.9 J	2 U	2 U	1.9 U	1.8 U	130 U	1.8 U	1.8 U	1.8 U	2.6 U	1.3 J	2.1 U	2.3 U
Methyl Acetate	NS	NS	ug/kg	5.4 U	5.5 U	5.6 U	5 U	4.9 U	4.7 U	4.5 U	310 U	4.6 U	4.5 U	4.4 U	6.4 U	4.7 U	5.3 U	5.6 U
Methyl N-Butyl Ketone (2-Hexanone)	NS	NS	ug/kg	5.4 U	5.5 U	5.6 U	5 U	4.9 U	4.7 U	4.5 U	310 U	4.6 U	4.5 U	4.4 U	6.4 U	4.7 U	5.3 U	5.6 U
Methylcyclohexane	NS	NS	ug/kg	2.2 U	NS	1.9 J	2.2 U	2 U	1.9 U	1.8 U	40.5 J	1.8 U	1.8 U	1.8 U	2.6 U	3.6	2.1 U	2.3 U
Methyl-tert-butylether	100000	930	ug/kg	1.1 U	1.1 U	1.1 U	1 U	0.99 U	0.94 U	0.89 U	63 U	0.91 U	0.9 U	0.89 U	1.3 U	0.95 U	1.1 U	1.1 U
Styrene (Monomer)	NS	NS	ug/kg	2.2 U	2.2 U	0.57 J	2 U	2 U	1.9 U	1.8 U	130 U	1.8 U	1.8 U	0.38 J	2.6 U	1.9 U	2.1 U	2.3 U
Tetrachloroethene	19000	1300	ug/kg	2.2 U	2.2 U	2.2 U	2 U	4	1.9 U	1.8 U	130 U	1.8 U	1.8 U	1.8 U	2.6 U	1.9 U	2.1 U	2.3 U
Toluene	100000	700	ug/kg	1.1 UJ	5.4 J	0.32 J	1 U	0.99 U	0.94 U	0.89 U	117	0.91 U	0.9 U	0.89 U	1.3 U	0.27 J	0.54 J	1.1 U
Total Xylenes	100000	1600	ug/kg	0.99 J	74.5 J	0.87 J	0.39 J	0.99 U	0.94 U	0.89 U	1410	0.91 U	0.9 U	0.89 U	1.3 U	0.51 J	2.4	1.1 U
trans-1,2-Dichloroethene	100000	190	ug/kg	1.1 U	1.1 U	1.1 U	1 U	0.99 U	0.94 U	0.89 U	63 U	0.91 U	0.9 U	0.89 U	1.3 U	0.95 U	1.1 U	1.1 U
trans-1,3-Dichloropropene	NS	NS	ug/kg	2.2 U	2.2 U	2.2 U	2 U	2 U	1.9 U	1.8 U	130 U	1.8 U	1.8 U	1.8 U	2.6 U	1.9 U	2.1 U	2.3 U
Trichloroethene	21000	470	ug/kq	1.1 U	1.1 U	1.1 U	1 U	0.99 U	0.94 U	0.89 U	63 U	0.91 U	0.9 U	0.89 U	1.3 U	0.95 U	1.1 U	1.1 U
Vinyl chloride	900	20	ug/kq	2.2 U	2.2 U	2.2 U	2 U	2 U	1.9 U	1.8 U	130 U	1.8 U	1.8 U	1.8 U	2.6 U	1.9 UJ	2.1 U	2.3 U

See Notes on Last Page

Table 13. Confirmatory Soil Sample Results Area E
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York

Sample ID	TABLE 375-6: RESTRIC. RES. USE SCO	TABLE 375-6: PROTECTION OF GW SCO		PE-E-A2 DUP-020_201603	PE-E-A2 3/31/2016	PE-E-A3 3/31/2016	PE-E-A4 3/31/2016	PE-E-A5 4/1/2016	PE-E-A6 4/15/2016	PE-E-A6 4/15/2016	PE-E-A7 4/15/2016	PE-E-A8 4/15/2016	PE-E-A9 4/14/2016	PE-E-B1 3/18/2016	PE-E-B2 3/31/2016	PE-E-B3 3/31/2016	PE-E-B4	PE-E-B5 4/1/2016
Sample Date																		
Sample Depth			Units	2-2.5	2-2.5	4-4.5	2-2.5	2-2.5	0	2-2.5	2-2.5	2-2.5	2-2.5	4-4.5	4-4.5	4-4.5	2-2.5	2-2.5
SVOCs																		
1,1-Biphenyl	NS	NS	ug/kq	41.9 J	76 U	78 U	76 U	80 U	73 U	71 U	19.3 J	77 U	73 U	76 U	93 U	76 U	72 U	84 U
2,2-Oxybis(1-Chloropropane)	NS	NS	ug/kg	73 U	76 U	78 U	76 U	80 U	73 U	71 U	78 U	77 U	73 U	76 U	93 U	76 U	72 U	84 U
2,4,5-Trichlorophenol	NS	NS	ug/kg	180 U	190 U	200 U	190 U	200 U	180 U	180 U	200 U	190 U	180 U	190 U	230 U	190 U	180 U	210 U
2,4,6-Trichlorophenol	NS	NS	ug/kg	180 U	190 U	200 U	190 U	200 U	180 U	180 U	200 U	190 U	180 U	190 U	230 U	190 U	180 U	210 U
2,4-Dichlorophenol	NS	NS	ug/kg	180 U	190 U	200 U	190 U	200 U	180 U	180 U	200 U	190 U	180 U	190 U	230 U	190 U	180 U	210 U
2,4-Dimethylphenol	NS	NS	ug/kg	180 U	190 U	200 U	190 U	200 U	180 U	180 U	200 U	190 U	180 U	190 U	230 U	190 U	180 U	210 U
2,4-Dinitrophenol	NS	NS	ug/kg	180 U	190 U	200 U	190 U	200 U	180 U	180 U	200 U	190 U	180 U	190 U	230 U	190 U	180 U	210 U
2,4-Dinitrotoluene	NS	NS	ug/kg	36 U	38 U	39 U	38 U	40 U	37 U	36 U	39 U	39 U	36 U	38 U	46 U	38 U	36 U	42 U
2,6-Dinitrotoluene	NS	NS	ug/kg	36 U	38 U	39 U	38 U	40 U	37 U	36 U	39 U	39 U	36 U	38 U	46 U	38 U	36 U	42 U
2-Chloronaphthalene	NS	NS	ug/kg	73 U	76 U	78 U	76 U	80 U	73 U	71 U	78 U	77 U	73 U	76 U	93 U	76 U	72 U	84 U
2-Chlorophenol	NS	NS	ug/kg	73 U	76 U	78 U	76 U	80 U	73 U	71 U	78 U	77 U	73 U	76 U	93 U	76 U	72 U	84 U
2-Methyl-4,6-dinitrophenol	NS	NS	ug/kg	180 U	190 U	200 U	190 U	200 U	180 U	180 U	200 U	190 U	180 U	190 U	230 U	190 U	180 U	210 U
2-Methylnaphthalene	NS	NS	ug/kg	1100 J	76 UJ	78 U	76 U	80 U	17 J	19.4 J	232	77 U	73 U	76 U	93 U	76 U	72 U	84 U
2-Methylphenol	NS	NS	ug/kg	73 U	76 U	78 U	76 U	80 U	73 U	71 U	78 U	77 U	73 U	76 U	93 U	76 U	72 U	84 U
2-Nitroaniline	NS	NS	ug/kg	180 U	190 U	200 U	190 U	200 U	180 U	180 U	200 U	190 U	180 U	190 U	230 U	190 U	180 U	210 U
2-Nitrophenol	NS	NS	ug/kg	180 U	190 U	200 U	190 U	200 U	180 U	180 U	200 U	190 U	180 U	190 U	230 U	190 U	180 U	210 U
3,3-Dichlorobenzidine	NS	NS	ug/kg	73 U	76 U	78 U	76 U	80 U	73 U	71 U	78 U	77 U	73 U	76 U	93 U	76 U	72 U	84 U
3-Methylphenol, 4-Methylphenol	NS	NS	ug/kg	73 U	76 U	78 U	76 U	86.3	70.9 J	61.8 J	212	77 U	73 U	76 U	93 U	76 U	72 U	84 U
3-Nitroaniline	NS	NS	ug/kg	180 U	190 U	200 U	190 U	200 U	180 U	180 U	200 UJ	190 U	180 U	190 U	230 U	190 U	180 U	210 U
4-Bromophenyl phenyl ether	NS	NS	ug/kg	73 U	76 U	78 U	76 U	80 U	73 U	71 U	78 U	77 U	73 U	76 U	93 U	76 U	72 U	84 U
4-Chloro-3-Methylphenol	NS	NS	ug/kg	180 U	190 U	200 U	190 U	200 U	180 U	180 U	200 U	190 U	180 U	190 U	230 U	190 U	180 U	210 U
4-Chlorophenyl phenyl ether	NS	NS	ug/kg	73 U	76 U	78 U	76 U	80 U	73 U	71 U	78 U	77 U	73 U	76 U	93 U	76 U	72 U	84 U
4-Nitroaniline	NS	NS	ug/kg	180 U	190 U	200 U	190 U	200 U	180 U	180 U	200 U	190 U	180 U	190 U	230 U	190 U	180 U	210 U
4-Nitrophenol	NS	NS	ug/kg	360 U	380 U	390 U	380 U	400 U	370 U	360 U	390 U	390 U	360 U	380 U	460 U	380 U	360 U	420 U
Acenaphthene	100000	98000	ug/kg	36 U	38 U	39 U	38 U	40 U	37 U	36 U	39 U	39 U	36 U	38 U	46 U	38 U	36 U	42 U
Acenaphthylene	100000	107000	ug/kg	36 U	38 U	39 U	38 U	40 U	37 U	36 U	39 U	39 U	36 U	38 U	46 U	38 U	36 U	42 U
Acetophenone	NS	NS	ug/kg	180 U	190 U	200 U	190 U	200 U	180 U	180 U	200 U	190 U	180 U	190 U	230 U	190 U	180 U	210 U
Anthracene	100000	1000000	ug/kg	36 U	38 U	39 U	38 U	40 U	37 U	38.1	16.2 J	39 U	36 U	38 U	46 U	38 U	36 U	42 U
Atrazine	NS	NS	ug/kg	73 U	76 U	78 U	76 U	80 U	73 U	71 U	78 U	77 U	73 U	76 U	93 U	76 U	72 U	84 U
Benzaldehyde	NS	NS	ug/kg	180 U	190 U	200 U	190 U	200 U	180 U	180 U	200 U	190 U	180 U	190 U	230 U	190 U	180 U	210 U
Benzo(a)anthracene	1000	1000	ug/kg	28.9 J	38 U	39 U	38 U	40 U	37 U	84.7	29.9 J	39 U	36 U	38 U	46 U	38 U	36 U	42 U
Benzo(a)pyrene	1000	22000	ug/kg	29.5 J	38 U	39 U	38 U	40 U	37 U	78.5	23.8 J	39 U	36 U	38 U	46 U	38 U	36 U	42 U
Benzo(b)fluoranthene	1000	1700	ug/kg	32.6 J	38 U	39 U	38 U	40 U	37 U	97.4	38.8 J	39 U	36 U	38 U	46 U	38 U	36 U	42 U
Benzo(g,h,i)perylene	100000	1000000	ug/kg	19.7 J	38 U	39 U	38 U	40 U	37 U	46.1	19.8 J	39 U	36 U	38 U	46 U	38 U	36 U	42 U
Benzo(k)fluoranthene	3900	1700	ug/kg	14.7 J	38 U	39 U	38 U	40 U	37 U	35.4 J	39 U	39 U	36 U	38 U	46 U	38 U	36 U	42 U
bis(2-Chloroethoxy)methane	NS	NS	ug/kg	73 U	76 U	78 U	76 U	80 U	73 U	71 U	78 U	77 U	73 U	76 U	93 U	76 U	72 U	84 U
bis(2-Chloroethyl)ether	NS	NS	ug/kg	73 U	76 U	78 U	76 U	80 U	73 U	71 U	78 U	77 U	73 U	76 U	93 U	76 U	72 U	84 U
bis(2-Ethylhexyl)phthalate	NS	NS	ug/kg	799 J	76 UJ	78 U	76 U	80 U	134	240	841	51.4 J	73 U	76 U	93 U	76 U	72 U	84 U
Butyl benzyl phthalate	NS	NS	ug/kg	73 U	76 U	78 U	76 U	80 U	73 U	71 U	78 U	77 U	73 U	76 U	93 U	76 U	72 U	84 U
Caprolactam	NS	NS	ug/kg	73 U	76 U	78 U	76 U	80 U	73 U	71 U	78 U	77 U	73 U	76 U	93 U	76 U	72 U	84 U
Carbazole	NS	NS	ug/kg	73 U	76 U	78 U	76 U	80 U	73 U	19 J	78 U	77 U	73 U	76 U	93 U	76 U	72 U	84 U
Chrysene	3900	1000	ug/kg	34.7 J	38 U	39 U	38 U	40 U	37 U	78.6	37.2 J	39 U	36 U	38 U	46 U	38 U	36 U	42 U
Dibenzo(a,h)anthracene	330	1000000	ug/kg	36 U	38 U	39 U	38 U	40 U	37 U	36 U	39 U	39 U	36 U	38 U	46 U	38 U	36 U	42 U
Dibenzofuran	NS	NS	ug/kg	73 U	76 U	78 U	76 U	80 U	73 U	71 U	78 U	77 U	73 U	76 U	93 U	76 U	72 U	84 U
Diethyl phthalate	NS	NS	ug/kg	73 U	76 U	78 U	76 U	80 U	73 U	71 U	78 U	77 U	73 U	76 U	93 U	76 U	72 U	84 U
Dimethyl phthalate	NS	NS	ug/kg	73 U	76 U	78 U	76 U	80 U	73 U	71 U	78 U	77 U	73 U	76 U	93 U	76 U	72 U	84 U
Di-n-butyl phthalate	NS	NS	ug/kg	212	76 U	78 U	76 U	80 U	73 U	71 U	56.1 J	77 U	73 U	76 U	93 U	76 U	72 U	84 U
Di-n-octyl phthalate	NS	NS	ug/kg	73 U	76 U	78 U	76 U	80 U	73 U	71 U	78 U	77 U	73 U	76 U	93 U	76 U	72 U	84 U
Fluoranthene	100000	1000000	ug/kg	51.7	38 U	39 U	38 U	18.6 J	16.9 J	172 J	71.8	39 U	36 U	38 U	46 U	38 U	36 U	42 U
Fluorene	100000	386000	ug/kg	36 U	38 U	39 U	38 U	40 U	37 U	36 U	39 U	39 U	36 U	38 U	46 U	38 U	36 U	42 U
Hexachloro-1,3-butadiene	NS	NS	ug/kg	36 U	38 U	39 U	38 U	40 U	37 U	36 U	39 U	39 U	36 U	38 U	46 U	38 U	36 U	42 U
Hexachlorobenzene	NS	NS	ug/kg	73 U	76 U	78 U	76 U	80 U	73 U	71 U	78 U	77 U	73 U	76 U	93 U	76 U	72 U	84 U
Hexachlorocyclopentadiene	NS	NS	ug/kg	360 U	380 U	390 U	380 U	400 U	370 U	360 U	390 U	390 U	360 U	380 U	460 U	380 U	360 U	420 U
Hexachloroethane	NS	NS	ug/kg	180 U	190 U	200 U	190 U	200 U	180 U	180 U	200 U	190 U	180 U	190 U	230 U	190 U	180 U	210 U

See Notes on Last Page

Sample ID		TABLE 375-6: RESTRIC. RES. USE SCO	TABLE 375-6: PROTECTION OF GW SCO	Units	PE-E-A2	PE-E-A2	PE-E-A3	PE-E-A4	PE-E-A5	PE-E-A6	PE-E-A6	PE-E-A7	PE-E-A8	PE-E-A9	PE-E-B1	PE-E-B2	PE-E-B3	PE-E-B4	PE-E-B5
Sample Date	DUP-020_201603				3/31/2016	3/31/2016	3/31/2016	4/1/2016	4/15/2016	4/15/2016	4/15/2016	4/15/2016	4/14/2016	3/18/2016	3/31/2016	3/31/2016			
Sample Depth	2-2.5				2-2.5	4-4.5	2-2.5	2-2.5	0	2-2.5	2-2.5	2-2.5	2-2.5	4-4.5	4-4.5	4-4.5	2-2.5	2-2.5	
SVOCs cont.																			
Indeno(1,2,3-cd)pyrene		500	8200	ug/kq	20.5 J	38 U	39 U	38 U	40 U	37 U	51.1	39 U	39 U	36 U	38 U	46 U	38 U	36 U	42 U
Isophorone		NS	NS	ug/kg	73 U	76 U	78 U	76 U	80 U	73 U	71 U	78 U	77 U	73 U	76 U	93 U	76 U	72 U	84 U
Naphthalene		100000	12000	ug/kg	2780 J	38 UJ	39 U	38 U	40 U	52.6	40	454	39 U	36 U	38 U	46 U	38 U	36 U	42 U
Nitrobenzene		NS	NS	ug/kg	73 U	76 U	78 U	76 U	80 U	73 U	71 U	78 U	77 U	73 U	76 U	93 U	76 U	72 U	84 U
n-Nitrosodi-n-propylamine		NS	NS	ug/kg	73 U	76 U	78 U	76 U	80 U	73 U	71 U	78 U	77 U	73 U	76 U	93 U	76 U	72 U	84 U
N-Nitrosodiphenylamine		NS	NS	ug/kg	180 U	190 U	200 U	190 U	200 U	180 U	180 U	200 U	190 U	180 U	190 U	230 U	190 U	180 U	210 U
p-Chloroaniline		NS	NS	ug/kg	180 U	190 U	200 U	190 U	200 U	180 U	180 U	200 U	190 U	180 U	190 U	230 U	190 U	180 U	210 U
Pentachlorophenol		6700	800	ug/kg	180 U	190 U	200 U	190 U	200 U	180 U	180 U	200 U	190 U	180 U	190 U	230 U	190 U	180 U	210 U
Phenanthrene		100000	1000000	ug/kg	55.2	38 U	39 U	38 U	40 U	37 U	117	56.4	39 U	36 U	38 U	46 U	38 U	36 U	42 U
Phenol		100000	330	ug/kg	73 U	76 U	78 U	76 U	80 U	73 U	71 U	78 U	77 U	73 U	76 U	93 U	76 U	72 U	84 U
Pyrene		100000	1000000	ug/kg	59	38 U	39 U	38 U	19.7 J	17.6 J	148 J	55.4	39 U	36 U	38 U	46 U	38 U	36 U	42 U
PCBs																			
Aroclor 1016		1000	3200	ug/kg	37 U	39 U	39 U	38 U	42 U	37 U	33 U	38 U	38 U	35 U	36 U	47 U	39 U	35 U	41 U
Aroclor 1221		1000	3200	ug/kg	37 U	39 U	39 U	38 U	42 U	37 U	33 U	38 U	38 U	35 U	36 U	47 U	39 U	35 U	41 U
Aroclor 1232		1000	3200	ug/kg	37 U	39 U	39 U	38 U	42 U	37 U	33 U	38 U	38 U	35 U	36 U	47 U	39 U	35 U	41 U
Aroclor 1242		1000	3200	ug/kg	37 U	39 U	39 U	38 U	42 U	37 U	33 U	38 U	38 U	35 U	36 U	47 U	39 U	35 U	41 U
Aroclor 1248		1000	3200	ug/kg	37 U	39 U	39 U	38 U	42 U	37 U	33 U	38 U	38 U	35 U	36 U	47 U	39 U	35 U	41 U
Aroclor 1254		1000	3200	ug/kg	37 U	39 U	39 U	38 U	42 U	99.4	33 U	38 U	38 U	35 U	36 U	47 U	39 U	35 U	41 U
Aroclor 1260		1000	3200	ug/kg	37 U	39 U	39 U	38 U	42 U	37 U	33 U	38 U	38 U	35 U	36 U	47 U	39 U	35 U	41 U
Aroclor 1262		1000	3200	ug/kg	37 U	39 U	39 U	38 U	42 U	37 U	33 U	38 U	38 U	35 U	36 U	47 U	39 U	35 U	41 U
Aroclor 1268		1000	3200	ug/kg	37 U	39 U	39 U	38 U	42 U	37 U	33 U	38 U	38 U	35 U	36 U	47 U	39 U	35 U	41 U
Metals																			
Aluminum		NS	NS	mq/kq	9180 J	20600 J	14500	10100	9170	10700 J	9150 J	13900 J	9060 J	9210 J	7540 J	12600	8680	6320	6780
Antimony		NS	NS	mq/kq	0.9 J	0.39 J	2.5 UJ	2.2 UJ	2.4 UB	0.5 J	0.32 J	0.96 J	2.3 UJ	2.2 UJ	2.2 UJ	2.8 UJ	2.3 UJ	0.95 J	2.7 UJ
Arsenic		16	16	mq/kq	3.2	4.7	2.5	2.7	3.6	3.6	3.3	4.6	3.8	3.2	1.9 B	3.6	1.7 B	2.2	2.4 B
Barium		400	820	mg/kq	115	113	59.9	62.4	70.1	88 J	84.1 J	223 J	48.7 J	47.3 J	48.9	76.9	42.3	28.5	37.1
Beryllium		72	47	mg/kg	0.38	1	0.45	0.43	0.43	0.49 J	0.49 J	0.63 J	0.53 J	0.58 J	0.4	0.66	0.43	0.25	0.29
Cadmium		4.3	7.5	mg/kg	0.36 B	0.29 B	0.16 B	0.12 B	0.26 B	0.32 B	0.31 B	0.47 B	0.57 U	0.19 B	0.56 U	0.13 B	0.58 U	0.11 B	0.094 B
Calcium		NS	NS	mg/kg	3460	4050	1480	2300	2440	2890 J	2650 J	3050 J	1540 J	1290 J	1610 J	2690	1610	1340	2030
Chromium		NS	NS	mg/kg	15.6 J	30.1 J	21	16.1	14	15.7 J	14.3 J	20.5 J	12.4 J	12.8 J	13.9	30.2	17.5	8.9	11.7
Cobalt		NS	NS	mg/kg	5.6	6.8	4.5 B	6.9	6.2	7.9	6.6	9.1	5 B	3.9 B	5.3 B	7.2	4.5 B	4.3 B	4.8 B
Copper		270	1720	mg/kg	15.5	13.3	11.9	6	15.8	16.3 J	13.9 J	17.2 J	5.6 J	7.7 J	2.8	5.4	3.7	10.8	12.7
Iron		NS	NS	mg/kg	16100 J	15500 J	12400 J	19100 J	15800 J	17000 J	15200 J	18700 J	19800 J	17100 J	11500	17600 J	11100 J	13100 J	13200 J
Lead		400	450	mg/kg	72.3	48.8	6.1	6.4	39.7	37.8 J	37.9 J	91.9 J	10.1 J	5.1 J	3.3	7.4	4	36.2	17.9
Magnesium		NS	NS	mg/kg	2850 J	2290 J	1720 J	2670 J	2450 J	3010 J	2660 J	3060 J	1790 J	1860 J	1870	2450 J	1960 J	2420 J	2160 J
Manganese		2000	2000	mg/kg	400	502	114	559	398	584 J	555 J	582 J	292 J	244 J	201	210	140	124	277
Mercury		NS	NS	mg/kg	0.053	0.071	0.038 UB	0.035 UB	0.037	0.035	0.051	0.077	0.035 UB	0.037 UB	0.039 UB	0.038 UB	0.036 UB	0.033 UB	0.014 B
Nickel		310	130	mg/kg	10.1	14.5	10.9	7.5	9.1	13.4	10.9	13.9	7.2	7.5	6.9	8.5	6.3	8.8	8.8
Potassium		NS	NS	mg/kg	952 B	926 B	775 B	778 B	802 B	1180 J	1120 J	1470 J	820 J	892 J	531 J	876 B	619 B	796 B	910 B
Selenium		180	4	mg/kg	2.3 U	2.3 UB	2.5 U	2.2 U	2.4 U	2.2 U	2.1 U	2.3 U	2.3 U	2.2 U	2.2 U	2.8 U	2.3 U	2.2 U	2.7 U
Silver		180	8.3	mg/kg	0.68	0.72	0.84	0.81	1	1.3	1.2	1.3	1.4	0.63	0.56 U	0.77	0.56 B	0.37 B	0.99
Sodium		NS	NS	mg/kg	139 B	107 B	57.2 B	112 B	149 B	216 B	177 B	188 B	79.3 B	61.6 B	94.2 J	124 B	113 B	87.9 B	160 B
Thallium		NS	NS	mg/kg	1.1 U	1.2 U	1.2 U	1.1 U	1.2 UB	1.1 U	1 U	1.2 U	1.1 U	1.1 U	1.1 U	1.4 U	1.2 U	1.1 U	1.3 UB
Vanadium		NS	NS	mg/kg	22.8	26.4	41.3	28.6	24.4	26.6 J	22.6 J	29.6 J	21.8 J	23.2 J	17.1	38.6	22.3	13.4	18.2
Zinc		10000	2480	mg/kg	68.3	59.4	24.1	32.9	47.7	67 J	55.9 J	84.7 J	33.1 J	29.1 J	20.7	30.8	21.8	61.6	41.2
General Chemistry																			
Percent Solids				%	85.2	85.4	80.2	85.9	79	90.2	91.8	82.5	85.5	87.2	85.4	69.5	85.2	89.3	77.9
Notes																			
	NS	No standard																	
	NA	Not analyzed																	
	J	Estimated result																	
	JN	Estimated result																	
	R	Rejected result																	
	UB	Analyte considered non-detect at the listed value due to associated blank contamination																	
	Bold	Result exceeds 375-6.8(b) protection of groundwater soil cleanup objective.																	
	Shade	Result exceeds 375-6.8(b) restricted residential use soil cleanup objective.																	

Table 13. Confirmatory Soil Sample Results Area E
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York

Sample ID	TABLE 375-6: RESTRIC. RES. USE SCO	TABLE 375-6: PROTECTION OF GW SCO		PE-E-B6 4/15/2016	PE-E-B7 4/15/2016	PE-E-B8 4/15/2016	PE-E-B9 4/15/2016	PE-E-B10 4/14/2016	PE-E-C1 3/18/2016	PE-E-C2 3/18/2016	PE-E-C3 3/31/2016	PE-E-C4 3/31/2016	PE-E-C5 4/1/2016	PE-E-C6 4/15/2016	PE-E-C7 4/15/2016	PE-E-C8 4/15/2016	PE-E-C9 4/19/2016	PE-E-C10 4/18/2016
Sample Date																		
Sample Depth			Units	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	4-4.5	4-4.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5
VOCs																		
1,1,1-Trichloroethane	100000	680	ug/kq	1.9 U	2 U	1.8 U	2.4 U	2.4 U	2.2 U	2.2 U	2.2 U	2 U	2.1 U	1.8 U	2.1 U	2 U	2.3 U	2.9 U
1,1,2,2-Tetrachloroethane	NS	NS	ug/kg	1.9 U	2 U	1.8 U	2.4 U	2.4 U	2.2 U	2.2 U	2.2 U	2 U	2.1 U	1.8 U	2.1 U	2 U	2.3 U	2.9 U
1,1,2-trichloro-1,2,2-trifluoroethane	NS	NS	ug/kg	4.7 U	5 U	4.6 U	5.9 U	6 U	5.4 U	5.6 U	5.4 U	5.1 U	5.3 U	4.6 U	5.2 U	5.1 U	5.8 U	7.1 U
1,1,2-Trichloroethane	NS	NS	ug/kg	1.9 U	2 U	1.8 U	2.4 U	2.4 U	2.2 U	2.2 U	2.2 U	2 U	2.1 U	1.8 U	2.1 U	2 U	2.3 U	2.9 U
1,1-Dichloroethane	26000	270	ug/kg	0.94 U	0.99 U	0.92 U	1.2 U	1.2 U	1.1 U	1.1 U	1.1 U	1 U	1.1 U	0.91 U	1 U	1 U	1.2 U	1.4 U
1,1-Dichloroethene	100000	330	ug/kg	0.94 U	0.99 U	0.92 U	1.2 U	1.2 U	1.1 U	1.1 U	1.1 U	1 U	1.1 U	0.91 U	1 U	1 U	1.2 U	1.4 U
1,2,4-Trichlorobenzene	NS	NS	ug/kg	4.7 U	5 U	4.6 U	5.9 U	6 U	5.4 U	5.6 U	5.4 U	5.1 U	5.3 U	4.6 U	5.2 U	5.1 U	5.8 U	7.1 U
1,2-Dibromo-3-chloropropane	NS	NS	ug/kg	1.9 U	2 U	1.8 U	2.4 U	2.4 U	2.2 U	2.2 U	2.2 U	2 U	2.1 U	1.8 U	2.1 U	2 U	2.3 U	2.9 U
1,2-Dibromoethane	NS	NS	ug/kg	0.94 U	0.99 U	0.92 U	1.2 U	1.2 U	1.1 U	1.1 U	1.1 U	1 U	1.1 U	0.91 U	1 U	1 U	1.2 U	1.4 U
1,2-Dichlorobenzene	100000	1100	ug/kg	0.94 U	0.99 U	0.92 U	2.9	1.2 U	1.1 U	1.1 U	1.1 U	0.92 J	1.1 U	0.91 U	1 U	1 U	1.2 U	1.4 U
1,2-Dichloroethane	3100	20	ug/kg	0.94 U	0.99 U	0.92 U	1.2 U	1.2 U	1.1 U	1.1 U	1.1 U	1 U	1.1 U	0.91 U	1 U	1 U	1.2 U	1.4 U
1,2-Dichloropropane	NS	NS	ug/kg	1.9 U	2 U	1.8 U	2.4 U	2.4 U	2.2 U	2.2 U	2.2 U	2 U	2.1 U	1.8 U	2.1 U	2 U	2.3 U	2.9 U
1,3-Dichlorobenzene	49000	2400	ug/kg	0.94 U	0.99 U	0.92 U	1.2 U	1.2 U	1.1 U	1.1 U	1.1 U	1 U	1.1 U	0.91 U	1 U	1 U	1.2 U	1.4 U
1,4-Dichlorobenzene	13000	1800	ug/kg	0.94 U	0.99 U	0.92 U	1.2 U	1.2 U	1.1 U	1.1 U	1.1 U	0.37 J	1.1 U	0.91 U	1 U	1 U	1.2 U	1.4 U
2-Butanone (MEK)	100000	120	ug/kg	9.4 U	9.9 U	9.2 U	12 U	12 U	11 U	11.3	11 U	5 J	11 U	26.7	20.9	10 U	12 U	14 U
4-Methyl-2-Pentanone	NS	NS	ug/kg	4.7 U	5 U	4.6 U	15.4	6 U	5.4 U	5.6 U	5.4 U	5.1 U	5.3 U	4.6 U	5.2 U	5.1 U	5.8 U	7.1 U
Acetone	100000	50	ug/kg	5.9 J	9.9 U	9.2 U	49.9	12 U	11 U	11 U	32	47	11 U	155	98.2	10 U	12 U	14 U
Benzene	4800	60	ug/kg	0.47 U	0.5 U	0.46 U	0.76	0.6 U	0.54 U	0.56 U	0.54 U	0.51 U	0.21 J	0.46 U	0.52 U	0.51 U	0.58 U	0.71 U
Bromodichloromethane	NS	NS	ug/kg	1.9 U	2 U	1.8 U	2.4 U	2.4 U	2.2 U	2.2 U	2.2 U	2 U	2.1 U	1.8 U	2.1 U	2 U	2.3 U	2.9 U
Bromoform	NS	NS	ug/kg	4.7 U	5 U	4.6 U	5.9 U	6 U	5.4 U	5.6 U	5.4 U	5.1 U	5.3 U	4.6 U	5.2 U	5.1 U	5.8 U	7.1 U
Bromomethane	NS	NS	ug/kg	4.7 U	5 U	4.6 U	5.9 U	6 U	5.4 U	5.6 U	5.4 U	5.1 U	5.3 U	4.6 U	5.2 U	5.1 U	5.8 U	7.1 U
Carbon Disulfide	NS	NS	ug/kq	1.9 U	0.4 J	1.8 U	2.4 U	2.4 U	2.2 U	2.2 U	2.2 U	2 U	2.1 U	1.8 U	2.1 U	2 U	2.3 U	2.9 U
Carbon Tetrachloride	2400	760	ug/kq	1.9 U	2 U	1.8 U	2.4 U	2.4 U	2.2 U	2.2 U	2.2 U	2 U	2.1 U	1.8 U	2.1 U	2 U	2.3 U	2.9 U
CFC-11	NS	NS	ug/kq	4.7 U	5 U	4.6 U	5.9 U	6 U	5.4 U	5.6 U	5.4 U	5.1 U	5.3 U	4.6 U	5.2 U	5.1 U	5.8 U	7.1 U
CFC-12	NS	NS	ug/kq	4.7 U	5 U	4.6 U	5.9 U	6 U	5.4 U	5.6 U	5.4 U	5.1 U	5.3 U	4.6 U	5.2 U	5.1 U	5.8 U	7.1 U
Chlorobenzene	100000	1100	ug/kq	1.9 U	2 U	1.8 U	2.4 U	2.4 U	2.2 U	2.2 U	0.59 J	0.91 J	2.1 U	1.8 U	2.1 U	2 U	2.3 U	2.9 U
Chlorodibromomethane	NS	NS	ug/kg	1.9 U	2 U	1.8 U	2.4 U	2.4 U	2.2 U	2.2 U	2.2 U	2 U	2.1 U	1.8 U	2.1 U	2 U	2.3 U	2.9 U
Chloroethane	NS	NS	ug/kg	4.7 U	5 U	4.6 U	5.9 U	6 U	5.4 U	5.6 U	5.4 U	5.1 U	5.3 U	4.6 U	5.2 U	5.1 U	5.8 U	7.1 U
Chloroform	49000	370	ug/kg	1.9 U	2 U	1.8 U	2.4 U	2.4 U	2.2 U	2.2 U	2.2 U	2 U	2.1 U	1.8 U	2.1 U	2 U	2.3 U	2.9 U
Chloromethane	NS	NS	ug/kg	4.7 U	5 U	4.6 U	5.9 U	6 U	5.4 U	5.6 U	5.4 U	5.1 UJ	5.3 U	4.6 U	5.2 U	5.1 U	5.8 U	7.1 U
cis-1,2-Dichloroethene	100000	250	ug/kg	0.94 U	0.99 U	0.92 U	1.2 U	1.2 U	1.1 U	1.1 U	1.1 U	1 U	1.1 U	0.91 U	1 U	1 U	1.2 U	1.4 U
cis-1,3-Dichloropropene	NS	NS	ug/kg	1.9 U	2 U	1.8 U	2.4 U	2.4 U	2.2 U	2.2 U	2.2 U	2 U	2.1 U	1.8 U	2.1 U	2 U	2.3 U	2.9 U
Cyclohexane	NS	NS	ug/kg	1.9 U	2 U	1.8 U	0.82 J	2.4 U	2.2 U	2.2 U	2.2 U	2 U	2.1 U	1.8 U	2.1 U	2 U	2.3 U	2.9 U
Dichloromethane	NS	NS	ug/kg	4.7 U	5 U	4.6 U	5.9 U	6 U	5.4 U	5.6 U	5.4 U	5.1 U	5.3 U	4.6 U	5.2 U	5.1 U	5.8 U	7.1 U
Ethylbenzene	41000	1000	ug/kg	0.94 U	0.99 U	1.9	53.9	4.5	0.31 J	1.1 U	1.1 U	12.9	1.1 U	0.91 U	1.7	0.2 J	1.2 U	1.4 U
Isopropylbenzene	NS	NS	ug/kg	1.9 U	2 U	1.8 U	3.4	2.4 U	2.2 U	2.2 U	0.98 J	2.9	2.1 U	1.8 U	2.1 U	2 U	2.3 U	2.9 U
Methyl Acetate	NS	NS	ug/kg	4.7 U	5 U	4.6 U	5.9 U	6 U	5.4 U	5.6 U	5.4 U	5.1 U	5.3 U	4.6 U	5.2 U	5.1 U	5.8 U	7.1 U
Methyl N-Butyl Ketone (2-Hexanone)	NS	NS	ug/kg	4.7 U	5 U	4.6 U	5.9 U	6 U	5.4 U	5.6 U	5.4 U	5.1 U	5.3 U	4.6 U	5.2 U	5.1 U	5.8 U	7.1 U
Methylcyclohexane	NS	NS	ug/kg	1.9 U	2 U	1.7 J	18.1	3.8	2.2 U	2.2 U	0.76 J	8.1	2.1 U	1.8 U	0.74 J	2 U	2.3 U	2.9 U
Methyl-tert-butylether	100000	930	ug/kg	0.94 U	0.99 U	0.92 U	1.2 U	1.2 U	1.1 U	1.1 U	1.1 U	1 U	1.1 U	0.91 U	1 U	1 U	1.2 U	1.4 U
Styrene (Monomer)	NS	NS	ug/kg	1.9 U	2 U	1.8 U	2.4 U	2.4 U	2.1 J	0.25 J	2.2 U	2 U	0.23 J	1.8 U	2.1 U	2 U	2.3 U	2.9 U
Tetrachloroethene	19000	1300	ug/kg	1.9 U	2 U	1.8 U	2.4 U	2.4 U	2.2 U	2.2 U	2.2 U	2 U	2.1 U	1.8 U	2.1 U	2 U	2.3 U	2.9 U
Toluene	100000	700	ug/kg	0.35 J	0.33 J	1.7	59.2	0.69 J	1.1 U	1.1 U	0.29 J	1.3	1.1 U	0.41 J	11.1	0.34 J	1.2 U	1.4 U
Total Xylenes	100000	1600	ug/kg	0.94 U	0.99 U	12.6	524	18.1	1.1 U	1.1 U	1.1 U	99.8	1.1 U	0.91 U	12.1	1 U	1.2 U	1.4 U
trans-1,2-Dichloroethene	100000	190	ug/kg	0.94 U	0.99 U	0.92 U	1.2 U	1.2 U	1.1 U	1.1 U	1.1 U	1 U	1.1 U	0.91 U	1 U	1 U	1.2 U	1.4 U
trans-1,3-Dichloropropene	NS	NS	ug/kg	1.9 U	2 U	1.8 U	2.4 U	2.4 U	2.2 U	2.2 U	2.2 U	2 U	2.1 U	1.8 U	2.1 U	2 U	2.3 U	2.9 U
Trichloroethene	21000	470	ug/kq	0.94 U	0.99 U	0.92 U	1.2 U	1.2 U	1.1 U	1.1 U	1.1 U	1 U	1.1 U	0.91 U	1 U	1 U	1.2 U	1.4 U
Vinyl chloride	900	20	ug/kq	1.9 U	2 U	1.8 U	2.4 U	2.4 U	2.2 U	2.2 U	2.2 U	2 UJ	2.1 U	1.8 U	2.1 U	2 U	2.3 U	2.9 U

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Table 13. Confirmatory Soil Sample Results Area E
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York

Sample ID	TABLE 375-6: RESTRIC. RES. USE SCO	TABLE 375-6: PROTECTION OF GW SCO		PE-E-B6 4/15/2016	PE-E-B7 4/15/2016	PE-E-B8 4/15/2016	PE-E-B9 4/15/2016	PE-E-B10 4/14/2016	PE-E-C1 3/18/2016	PE-E-C2 3/18/2016	PE-E-C3 3/31/2016	PE-E-C4 3/31/2016	PE-E-C5 4/1/2016	PE-E-C6 4/15/2016	PE-E-C7 4/15/2016	PE-E-C8 4/15/2016	PE-E-C9 4/19/2016	PE-E-C10 4/18/2016
Sample Date																		
Sample Depth			Units	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	4-4.5	4-4.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5
SVOCs																		
1,1-Biphenyl	NS	NS	ug/kq	73 U	74 U	75 U	22.7 J	84 U	81 U	92 U	77 U	77 U	75 U	71 U	83 U	75 U	84 U	89 U
2,2-Oxybis(1-Chloropropane)	NS	NS	ug/kg	73 U	74 U	75 U	91 U	84 U	81 U	92 U	77 U	77 U	75 U	71 U	83 U	75 U	84 U	89 U
2,4,5-Trichlorophenol	NS	NS	ug/kg	180 U	190 U	190 U	230 U	210 U	200 U	230 U	190 U	190 U	190 U	180 U	210 U	190 U	210 U	220 U
2,4,6-Trichlorophenol	NS	NS	ug/kg	180 U	190 U	190 U	230 U	210 U	200 U	230 U	190 U	190 U	190 U	180 U	210 U	190 U	210 U	220 U
2,4-Dichlorophenol	NS	NS	ug/kg	180 U	190 U	190 U	230 U	210 U	200 U	230 U	190 U	190 U	190 U	180 U	210 U	190 U	210 U	220 U
2,4-Dimethylphenol	NS	NS	ug/kg	180 U	190 U	190 U	230 U	210 U	200 U	230 U	190 U	190 U	190 U	180 U	210 U	190 U	210 U	220 U
2,4-Dinitrophenol	NS	NS	ug/kg	180 U	190 U	190 U	230 U	210 U	200 U	230 U	190 U	190 U	190 U	180 U	210 U	190 U	210 U	220 U
2,4-Dinitrotoluene	NS	NS	ug/kg	36 U	37 U	37 U	46 U	42 U	40 U	46 U	38 U	38 U	37 U	36 U	41 U	37 U	42 U	44 U
2,6-Dinitrotoluene	NS	NS	ug/kg	36 U	37 U	37 U	46 U	42 U	40 U	46 U	38 U	38 U	37 U	36 U	41 U	37 U	42 U	44 U
2-Chloronaphthalene	NS	NS	ug/kg	73 U	74 U	75 U	91 U	84 U	81 U	92 U	77 U	77 U	75 U	71 U	83 U	75 U	84 U	89 U
2-Chlorophenol	NS	NS	ug/kg	73 U	74 U	75 U	91 U	84 U	81 U	92 U	77 U	77 U	75 U	71 U	83 U	75 U	84 U	89 U
2-Methyl-4,6-dinitrophenol	NS	NS	ug/kg	180 U	190 U	190 U	230 U	210 U	200 U	230 U	190 U	190 U	190 U	180 U	210 U	190 U	210 U	220 U
2-Methylnaphthalene	NS	NS	ug/kg	73 U	74 U	75.9	237	84 U	81 U	92 U	77 U	43.9 J	24.4 J	71 U	25 J	75 U	84 U	89 U
2-Methylphenol	NS	NS	ug/kg	73 U	74 U	75 U	91 U	84 U	81 U	92 U	77 U	77 U	75 U	71 U	83 U	75 U	84 U	89 U
2-Nitroaniline	NS	NS	ug/kg	180 U	190 U	190 U	230 U	210 U	200 U	230 U	190 U	190 U	190 U	180 U	210 U	190 U	210 U	220 U
2-Nitrophenol	NS	NS	ug/kg	180 U	190 U	190 U	230 U	210 U	200 U	230 U	190 U	190 U	190 U	180 U	210 U	190 U	210 U	220 U
3,3-Dichlorobenzidine	NS	NS	ug/kg	73 U	74 U	75 U	91 U	84 U	81 U	92 U	77 U	77 U	75 U	71 U	83 U	75 U	84 U	89 U
3-Methylphenol, 4-Methylphenol	NS	NS	ug/kg	73 U	38.7 J	59.2 J	380	84 U	81 U	92 U	77 U	77 U	75 U	1410	823	75 U	84 U	726
3-Nitroaniline	NS	NS	ug/kg	180 U	190 U	190 U	230 U	210 U	200 U	230 U	190 U	190 U	190 U	180 U	210 U	190 U	210 U	220 U
4-Bromophenyl phenyl ether	NS	NS	ug/kg	73 U	74 U	75 U	91 U	84 U	81 U	92 U	77 U	77 U	75 U	71 U	83 U	75 U	84 U	89 U
4-Chloro-3-Methylphenol	NS	NS	ug/kg	180 U	190 U	190 U	230 U	210 U	200 U	230 U	190 U	190 U	190 U	180 U	210 U	190 U	210 U	220 U
4-Chlorophenyl phenyl ether	NS	NS	ug/kg	73 U	74 U	75 U	91 U	84 U	81 U	92 U	77 U	77 U	75 U	71 U	83 U	75 U	84 U	89 U
4-Nitroaniline	NS	NS	ug/kg	180 U	190 U	190 U	230 U	210 U	200 U	230 U	190 U	190 U	190 U	180 U	210 U	190 U	210 U	220 U
4-Nitrophenol	NS	NS	ug/kg	360 U	370 U	370 U	460 U	420 U	400 U	460 U	380 U	380 U	370 U	360 U	410 U	370 U	420 U	440 U
Acenaphthene	100000	98000	ug/kg	36 U	37 U	37 U	46 U	42 U	40 U	46 U	38 U	38 U	37 U	36 U	41 U	37 U	42 U	44 U
Acenaphthylene	100000	107000	ug/kg	36 U	37 U	37 U	46 U	42 U	40 U	46 U	38 U	38 U	37 U	36 U	41 U	37 U	42 U	44 U
Acetophenone	NS	NS	ug/kg	180 U	190 U	190 U	230 U	210 U	200 U	230 U	190 U	190 U	190 U	180 U	210 U	190 U	210 U	220 U
Anthracene	100000	1000000	ug/kg	36 U	21.6 J	37 U	46 U	42 U	40 U	46 U	38 U	38 U	37 U	36 U	41 U	37 U	42 U	44 U
Atrazine	NS	NS	ug/kg	73 U	74 U	75 U	91 U	84 U	81 U	92 U	77 U	77 U	75 U	71 U	83 U	75 U	84 U	89 U
Benzaldehyde	NS	NS	ug/kg	180 U	190 U	190 U	230 U	210 U	200 U	230 U	190 U	190 U	190 U	180 U	210 U	190 U	210 U	35.5 J
Benzo(a)anthracene	1000	1000	ug/kg	36 U	59.6	37 U	22.7 J	18.9 J	40 U	46 U	38 U	38 U	25.2 J	31.3 J	41 U	37 U	42 U	20.1 J
Benzo(a)pyrene	1000	22000	ug/kg	36 U	49.9	37 U	18.3 J	42 U	40 U	46 U	38 U	38 U	23.8 J	29.9 J	41 U	37 U	42 U	18.4 J
Benzo(b)fluoranthene	1000	1700	ug/kg	36 U	61.5	37 U	28.1 J	24.7 J	40 U	46 U	38 U	38 U	29.9 J	39.3	19.8 J	37 U	42 U	28.9 J
Benzo(g,h,i)perylene	100000	1000000	ug/kg	36 U	30 J	37 U	46 U	42 U	40 U	46 U	38 U	38 U	16.8 J	24.1 J	41 U	37 U	42 U	44 U
Benzo(k)fluoranthene	3900	1700	ug/kg	36 U	19.1 J	37 U	46 U	42 U	40 U	46 U	38 U	38 U	37 U	36 U	41 U	37 U	42 U	44 U
bis(2-Chloroethoxy)methane	NS	NS	ug/kg	73 U	74 U	75 U	91 U	84 U	81 U	92 U	77 U	77 U	75 U	71 U	83 U	75 U	84 U	89 U
bis(2-Chloroethyl)ether	NS	NS	ug/kg	73 U	74 U	75 U	91 U	84 U	81 U	92 U	77 U	77 U	75 U	71 U	83 U	75 U	84 U	89 U
bis(2-Ethylhexyl)phthalate	NS	NS	ug/kg	73 U	74 U	359	1980	84.2	81 U	92 U	77 U	67.8 J	149	71 U	74.8 J	75 U	84 U	89 U
Butyl benzyl phthalate	NS	NS	ug/kg	73 U	74 U	75 U	91 U	84 U	81 U	92 U	77 U	77 U	75 U	71 U	83 U	75 U	84 U	89 U
Caprolactam	NS	NS	ug/kg	73 U	74 U	75 U	91 U	84 U	81 U	92 U	77 U	77 U	75 U	71 U	83 U	75 U	84 U	89 U
Carbazole	NS	NS	ug/kg	73 U	74 U	75 U	91 U	84 U	81 U	92 U	77 U	77 U	75 U	71 U	83 U	75 U	84 U	89 U
Chrysene	3900	1000	ug/kg	36 U	56.8	37 U	26.2 J	20.3 J	40 U	46 U	38 U	38 U	24.3 J	29 J	18.4 J	37 U	42 U	20.9 J
Dibenzo(a,h)anthracene	330	1000000	ug/kg	36 U	37 U	37 U	46 U	42 U	40 U	46 U	38 U	38 U	37 U	36 U	41 U	37 U	42 U	44 U
Dibenzofuran	NS	NS	ug/kg	73 U	74 U	75 U	91 U	84 U	81 U	92 U	77 U	77 U	75 U	71 U	83 U	75 U	84 U	89 U
Diethyl phthalate	NS	NS	ug/kg	73 U	74 U	75 U	91 U	84 U	81 U	92 U	77 U	77 U	75 U	71 U	83 U	75 U	84 U	89 U
Dimethyl phthalate	NS	NS	ug/kg	73 U	74 U	75 U	91 U	84 U	81 U	92 U	77 U	77 U	75 U	71 U	83 U	75 U	84 U	89 U
Di-n-butyl phthalate	NS	NS	ug/kg	73 U	74 U	75 U	67.3 J	84 U	81 U	92 U	77 U	77 U	75 U	71 U	83 U	75 U	84 U	89 U
Di-n-octyl phthalate	NS	NS	ug/kg	73 U	74 U	75 U	91 U	84 U	81 U	92 U	77 U	77 U	75 U	71 U	83 U	75 U	84 U	89 U
Fluoranthene	100000	1000000	ug/kg	36 U	131	14.9 J	53.8	28.2 J	18.6 J	46 U	38 U	38 U	38.8	52.9	33.4 J	37 U	42 U	40.4 J
Fluorene	100000	386000	ug/kg	36 U	37 U	37 U	46 U	42 U	40 U	46 U	38 U	38 U	37 U	36 U	41 U	37 U	42 U	44 U
Hexachloro-1,3-butadiene	NS	NS	ug/kg	36 U	37 U	37 U	46 U	42 U	40 U	46 U	38 U	38 U	37 U	36 U	41 U	37 U	42 U	44 U
Hexachlorobenzene	NS	NS	ug/kg	73 U	74 U	75 U	91 U	84 U	81 U	92 U	77 U	77 U	75 U	71 U	83 U	75 U	84 U	89 U
Hexachlorocyclopentadiene	NS	NS	ug/kg	360 U	370 U	370 U	460 U	420 U	400 U	460 U	380 U	380 U	370 U	360 U	410 U	370 U	420 U	440 U
Hexachloroethane	NS	NS	ug/kg	180 U	190 U	190 U	230 U	210 U	200 U	230 U	190 U	190 U	190 U	180 U	210 U	190 U	210 U	220 U

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Sample ID		TABLE 375-6: RESTRIC. RES. USE SCO	TABLE 375-6: PROTECTION OF GW SCO	Units	PE-E-B6	PE-E-B7	PE-E-B8	PE-E-B9	PE-E-B10	PE-E-C1	PE-E-C2	PE-E-C3	PE-E-C4	PE-E-C5	PE-E-C6	PE-E-C7	PE-E-C8	PE-E-C9	PE-E-C10
Sample Date	4/15/2016				4/15/2016	4/15/2016	4/15/2016	4/14/2016	3/18/2016	3/18/2016	3/31/2016	3/31/2016	4/1/2016	4/15/2016	4/15/2016	4/15/2016	4/19/2016	4/18/2016	
Sample Depth	2-2.5				2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	4-4.5	4-4.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5
SVOCs cont.																			
Indeno(1,2,3-cd)pyrene		500	8200	ug/kq	36 U	32.7 J	37 U	46 U	42 U	40 U	46 U	38 U	38 U	37 U	25.5 J	41 U	37 U	42 U	44 U
Isophorone		NS	NS	ug/kg	73 U	74 U	75 U	91 U	84 U	81 U	92 U	77 U	77 U	75 U	71 U	83 U	75 U	84 U	89 U
Naphthalene		100000	12000	ug/kg	36 U	37 U	148	572	42 U	40 U	46 U	38 U	104	51.2	36 U	101	37 U	42 U	44 U
Nitrobenzene		NS	NS	ug/kg	73 U	74 U	NS	91 U	84 U	81 U	92 U	77 U	77 U	75 U	71 U	83 U	75 U	84 U	89 U
n-Nitrosodi-n-propylamine		NS	NS	ug/kg	73 U	74 U	75 U	91 U	84 U	81 U	92 U	77 U	77 U	75 U	71 U	83 U	75 U	84 U	89 U
N-Nitrosodiphenylamine		NS	NS	ug/kg	180 U	190 U	190 U	230 U	210 U	200 U	230 U	190 U	190 U	190 U	180 U	210 U	190 U	210 U	220 U
p-Chloroaniline		NS	NS	ug/kg	180 U	190 U	190 U	230 U	210 U	200 U	230 U	190 U	190 U	190 U	180 U	210 U	190 U	210 U	220 U
Pentachlorophenol		6700	800	ug/kg	180 U	190 U	190 U	230 U	210 U	200 U	230 U	190 U	190 U	190 U	180 U	210 U	190 U	210 U	220 U
Phenanthrene		100000	1000000	ug/kg	36 U	104	15.4 J	52.8	22.3 J	40 U	46 U	38 U	38 U	28.2 J	38.9	29.4 J	37 U	42 U	21.9 J
Phenol		100000	330	ug/kg	73 U	74 U	NS	91 U	84 U	81 U	92 U	77 U	77 U	75 U	71 U	83 U	75 U	84 U	89 U
Pyrene		100000	1000000	ug/kg	36 U	132	37 U	45.7 J	25.5 J	17.2 J	46 U	38 U	38 U	46.4	49.3	28.4 J	37 U	42 U	34.3 J
PCBs																			
Aroclor 1016		1000	3200	ug/kg	36 U	37 U	36 U	44 U	44 U	41 U	42 U	37 U	38 U	39 U	35 U	41 U	37 U	38 U	43 U
Aroclor 1221		1000	3200	ug/kg	36 U	37 U	36 U	44 U	44 U	41 U	42 U	37 U	38 U	39 U	35 U	41 U	37 U	38 U	43 U
Aroclor 1232		1000	3200	ug/kg	36 U	37 U	36 U	44 U	44 U	41 U	42 U	37 U	38 U	39 U	35 U	41 U	37 U	38 U	43 U
Aroclor 1242		1000	3200	ug/kg	36 U	37 U	36 U	44 U	44 U	41 U	42 U	37 U	38 U	39 U	35 U	41 U	37 U	38 U	43 U
Aroclor 1248		1000	3200	ug/kg	36 U	37 U	36 U	44 U	44 U	41 U	42 U	37 U	38 U	39 U	35 U	41 U	37 U	38 U	43 U
Aroclor 1254		1000	3200	ug/kg	36 U	37 U	36 U	44 U	44 U	41 U	42 U	37 U	38 U	39 U	35 U	41 U	37 U	38 U	43 U
Aroclor 1260		1000	3200	ug/kg	36 U	37 U	36 U	44 U	44 U	41 U	42 U	37 U	38 U	39 U	35 U	41 U	37 U	38 U	43 U
Aroclor 1262		1000	3200	ug/kg	36 U	37 U	36 U	44 U	44 U	41 U	42 U	37 U	38 U	39 U	35 U	41 U	37 U	38 U	43 U
Aroclor 1268		1000	3200	ug/kg	36 U	37 U	36 U	44 U	44 U	41 U	42 U	37 U	38 U	39 U	35 U	41 U	37 U	38 U	43 U
Metals																			
Aluminum		NS	NS	mq/kq	6660 J	7090 J	12800 J	13600 J	14700 J	13200 J	15300 J	10700	11800	9400	7530 J	9320 J	5850 J	18700 J	14000 J
Antimony		NS	NS	mq/kq	0.37 J	2.3 UJ	2.2 UJ	0.7 J	2.7 UJ	2.5 UJ	2.7 UJ	0.43 J	0.5 J	2.3 UJ	0.87 J	1 J	2.4 UJ	2.5 UJ	2.6 UJ
Arsenic		16	16	mq/kq	2.7	2.9	4.1	4.7	4.6	4.2	3.2	2.9	2.6	1.9 B	3.2	3.3	2.4	4.2	4.8
Barium		400	820	mg/kq	44 J	58.7 J	62.1 J	199 J	94.6 J	64.7	67.2	55.9	60.3	44.9	96.3 J	129 J	53.3 J	77.5	129 J
Beryllium		72	47	mg/kg	0.33 J	0.33 J	0.63 J	0.64 J	0.68 J	0.8	0.89	0.55	0.41	0.22 B	0.32 J	0.36 J	0.29 J	0.93	0.68 J
Cadmium		4.3	7.5	mg/kg	0.13 B	0.24 B	0.055 B	0.33 B	0.57 B	0.62 UB	0.68 U	0.58 U	0.58 U	0.58 U	0.74	0.74	0.15 B	0.25 B	0.67
Calcium		NS	NS	mg/kg	2140 J	2310 J	3350 J	3480 J	3070 J	2680 J	2980 J	1210	1350	900	2660 J	5870 J	2360 J	2610	5100 J
Chromium		NS	NS	mg/kg	11.2 J	12.9 J	18.1 J	21.2 J	19.8 J	18.3	21.5	21.5	17.3	11.6	14 J	13.8 J	11.3 J	19.7	21.6 J
Cobalt		NS	NS	mg/kg	6.5	6.5	9.8	9.1	7.6	8.1	8	6.6	5.1 B	3 B	6.7	11.1	6.1	6.5	9.3
Copper		270	1720	mg/kg	12 J	14.7 J	6.6 J	20.1 J	24.7 J	22.6	10.4	3.9	3.1	1.7 B	506 J	50.9 J	13.2 J	7.3	37.8 J
Iron		NS	NS	mg/kg	14600 J	14700 J	23700 J	20600 J	20300 J	22000	25600	15600 J	15700 J	10500 J	16100 J	23900 J	12500 J	25100	21700 J
Lead		400	450	mg/kg	9.5 J	28.1 J	6.8 J	62.1 J	40.9 J	16	8.1	7.3	9.1	10.1	77.4 J	71.1 J	13.9 J	7.9	51.8 J
Magnesium		NS	NS	mg/kg	2620 J	2750 J	2970 J	3270 J	2860 J	3790	4100	1780 J	1880 J	1780 J	2950 J	4330 J	2220 J	2760	3320 J
Manganese		2000	2000	mg/kg	359 J	312 J	704 J	494 J	563 J	489	198	279	272	111	228 J	395 J	305 J	270	661 J
Mercury		NS	NS	mg/kg	0.037 UB	0.037	0.058	0.051	0.08	0.051	0.02 B	0.037 UB	0.039 UB	0.013 B	0.034 UB	0.056	0.04	0.041	0.083
Nickel		310	130	mg/kg	9.6	10.6	9.1	14.1	13.3	14.7	14	7.3	6.5	5.6	13.3	13	8.8	11.8	14.8
Potassium		NS	NS	mg/kg	966 J	1150 J	1130 J	1550 J	1330 J	1490 J	1360 J	623 B	576 B	405 B	1090 J	1400 J	986 J	800 B	1750 J
Selenium		180	4	mg/kg	2.1 U	2.3 U	2.2 U	2.7 U	2.7 U	2.5 U	2.7 U	2.3 U	2.3 U	2.3 U	2.2 U	2.5 U	2.4 U	2.5 U	2.6 U
Silver		180	8.3	mg/kg	1.3	1.1	1.6	1.3	1.1	0.62 UB	0.68 U	0.47 B	0.39 B	0.77	2.1	1.7	0.88	2.1	0.66 U
Sodium		NS	NS	mg/kg	150 B	167 B	141 B	190 B	142 B	187 J	137 J	104 B	120 B	103 B	206 B	470 B	176 B	109 B	242 B
Thallium		NS	NS	mg/kg	1.1 U	1.2 U	1.1 U	1.4 U	1.4 U	1.2 U	1.4 U	1.2 U	1.2 U	1.2 UB	1.1 U	1.2 U	1.2 U	1.2 U	1.3 U
Vanadium		NS	NS	mg/kg	18.5 J	21.2 J	30.2 J	34.2 J	39.9 J	31.5	34.2	32.4	29	19.1	23.8 J	63 J	19.9 J	37.6	45.7 J
Zinc		10000	2480	mg/kg	28.7 J	54.1 J	45.2 J	75.5 J	84.5 J	46.5	46.4	25	31	21.5	144 J	121 J	33.8 J	56.8	100 J
General Chemistry																			
Percent Solids				%	89.9	88.5	86.1	71.7	75.3	77.1	71.3	83.6	82.2	84.2	92.9	78.6	83.6	77.9	74.5
Notes																			
	NS	No standard																	
	NA	Not analyzed																	
	J	Estimated result																	
	JN	Estimated result																	
	R	Rejected result																	
	UB	Analyte considered non-detect at the listed value due to associated blank contamination																	
	Bold	Result exceeds 375-6.8(b) protection of groundwater soil cleanup objective.																	
	Shade	Result exceeds 375-6.8(b) restricted residential use soil cleanup objective.																	

Table 13. Confirmatory Soil Sample Results Area E
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York

Sample ID	TABLE 375-6: RESTRIC. RES. USE SCO	TABLE 375-6: PROTECTION OF GW SCO		PE-E-D1 1/26/2016	PE-E-D2 3/10/2016	PE-E-D3 3/14/2016	PE-E-D4 3/18/2016	PE-E-D5 3/14/2016	PE-E-D6 4/15/2016	PE-E-D7 4/15/2016	PE-E-D8 4/19/2016	PE-E-D9 4/19/2016	PE-E-D10 4/18/2016	PE-E-E1 1/26/2016	PE-E-E2 1/26/2016	PE-E-E3 DUP-015_20160	PE-E-E3 3/10/2016	PE-E-E3 1/27/2016
Sample Date																		
Sample Depth			Units	2-2.5	11-11.5	5-5.5	5-5.5	4-4.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	11-11.5	2-2.5
VOCs																		
1,1,1-Trichloroethane	100000	680	ug/kq	1.8 U	2 U	2 U	2.3 U	2.1 U	1.9 U	2.3 U	1.9 U	2.4 U	2.1 U	1.5 U	1.8 U	1.7 U	1.9 U	NA
1,1,2,2-Tetrachloroethane	NS	NS	ug/kg	1.8 U	2 U	2 U	2.3 U	2.1 U	1.9 U	2.3 U	1.9 U	2.4 U	2.1 U	1.5 U	1.8 U	1.7 U	1.9 U	NA
1,1,2-trichloro-1,2,2-trifluoroethane	NS	NS	ug/kg	4.6 U	5 U	5 U	5.7 U	5.3 U	4.8 U	5.7 U	4.8 U	6.1 U	5.2 U	3.9 U	4.6 U	4.3 U	4.7 U	NA
1,1,2-Trichloroethane	NS	NS	ug/kg	1.8 U	2 U	2 U	2.3 U	2.1 U	1.9 U	2.3 U	1.9 U	2.4 U	2.1 U	1.5 U	1.8 U	1.7 U	1.9 U	NA
1,1-Dichloroethane	26000	270	ug/kg	0.92 U	1 U	1 U	1.1 U	1.1 U	0.95 U	1.1 U	0.96 U	1.2 U	1 U	0.77 U	0.92 U	0.86 U	0.93 U	NA
1,1-Dichloroethene	100000	330	ug/kg	0.92 U	1 U	1 U	1.1 U	1.1 U	0.95 U	1.1 U	0.96 U	1.2 U	1 U	0.77 U	0.92 U	0.86 U	0.93 U	NA
1,2,4-Trichlorobenzene	NS	NS	ug/kg	4.6 U	5 U	5 U	5.7 U	5.3 U	4.8 U	5.7 U	4.8 U	6.1 U	5.2 U	3.9 U	4.6 U	4.3 U	4.7 U	NA
1,2-Dibromo-3-chloropropane	NS	NS	ug/kg	1.8 U	2 U	2 U	2.3 U	2.1 U	1.9 U	2.3 U	1.9 U	2.4 U	2.1 U	1.5 U	1.8 U	1.7 U	1.9 U	NA
1,2-Dibromoethane	NS	NS	ug/kg	0.92 U	1 U	1 U	1.1 U	1.1 U	0.95 U	1.1 U	0.96 U	1.2 U	1 U	0.77 U	0.92 U	0.86 U	0.93 U	NA
1,2-Dichlorobenzene	100000	1100	ug/kg	0.92 U	1 U	1 U	1.1 U	1.1 U	0.95 U	1.1 U	0.96 U	1.2 U	1 U	0.77 U	0.92 U	0.86 U	0.93 U	NA
1,2-Dichloroethane	3100	20	ug/kg	0.92 U	1 U	1 U	1.1 U	1.1 U	0.95 U	1.1 U	0.96 U	1.2 U	1 U	0.77 U	0.92 U	0.86 U	0.93 U	NA
1,2-Dichloropropane	NS	NS	ug/kg	1.8 U	2 U	2 U	2.3 U	2.1 U	1.9 U	2.3 U	1.9 U	2.4 U	2.1 U	1.5 U	1.8 U	1.7 U	1.9 U	NA
1,3-Dichlorobenzene	49000	2400	ug/kg	0.92 U	1 U	1 U	1.1 U	1.1 U	0.95 U	1.1 U	0.96 U	1.2 U	1 U	0.77 U	0.92 U	0.86 U	0.93 U	NA
1,4-Dichlorobenzene	13000	1800	ug/kg	0.92 U	1 U	1 U	1.1 U	1.1 U	0.95 U	1.1 U	0.96 U	1.2 U	1 U	0.77 U	0.92 U	0.86 U	0.93 U	NA
2-Butanone (MEK)	100000	120	ug/kg	9.2 U	10 U	10 U	6.1 J	11 U	9.5 U	11 U	9.6 U	149	10 U	7.7 U	9.2 U	6.5 J	9.3 U	NA
4-Methyl-2-Pentanone	NS	NS	ug/kg	4.6 U	5 U	5 U	5.7 U	5.3 U	4.8 U	5.7 U	4.8 U	6.1 U	5.2 U	3.9 U	4.6 U	4.3 U	4.7 U	NA
Acetone	100000	50	ug/kg	9.2 U	10 U	65.1	10 J	11 U	9.5 U	10.3 J	9.6 U	210	10 U	7.7 U	12.4	36.6	48.7	NA
Benzene	4800	60	ug/kg	0.46 U	0.5 U	0.5 U	0.57 U	0.53 U	0.48 U	0.57 U	0.48 U	0.61 U	0.52 U	0.39 U	0.46 U	0.43 U	0.47 U	NA
Bromodichloromethane	NS	NS	ug/kg	1.8 U	2 U	2 U	2.3 U	2.1 U	1.9 U	2.3 U	1.9 U	2.4 U	2.1 U	1.5 U	1.8 U	1.7 U	1.9 U	NA
Bromoform	NS	NS	ug/kg	4.6 U	5 U	5 U	5.7 U	5.3 U	4.8 U	5.7 U	4.8 U	6.1 U	5.2 U	3.9 U	4.6 U	4.3 U	4.7 U	NA
Bromomethane	NS	NS	ug/kg	4.6 U	5 U	5 U	5.7 U	5.3 U	4.8 U	5.7 U	4.8 U	6.1 U	5.2 U	3.9 U	4.6 U	4.3 U	4.7 U	NA
Carbon Disulfide	NS	NS	ug/kq	1.8 U	2 U	2 U	0.63 J	2.1 U	1.9 U	2.3 U	1.9 U	0.43 J	2.1 U	1.5 U	1.8 U	0.37 J	0.28 J	NA
Carbon Tetrachloride	2400	760	ug/kq	1.8 U	2 U	2 U	2.3 U	2.1 U	1.9 U	2.3 U	1.9 U	2.4 U	2.1 U	1.5 U	1.8 U	1.7 U	1.9 U	NA
CFC-11	NS	NS	ug/kq	4.6 U	5 U	5 U	5.7 U	5.3 U	4.8 U	5.7 U	4.8 U	6.1 U	5.2 U	3.9 U	4.6 U	4.3 U	4.7 U	NA
CFC-12	NS	NS	ug/kq	4.6 U	5 U	5 U	5.7 U	5.3 U	4.8 U	5.7 U	4.8 U	6.1 U	5.2 U	3.9 U	4.6 U	4.3 U	4.7 U	NA
Chlorobenzene	100000	1100	ug/kq	1.8 U	2 U	2 U	2.3 U	2.1 U	1.9 U	2.3 U	1.9 U	2.4 U	2.1 U	1.5 U	1.8 U	1.7 U	1.9 U	NA
Chlorodibromomethane	NS	NS	ug/kg	1.8 U	2 U	2 U	2.3 U	2.1 U	1.9 U	2.3 U	1.9 U	2.4 U	2.1 U	1.5 U	1.8 U	1.7 U	1.9 U	NA
Chloroethane	NS	NS	ug/kg	4.6 U	5 U	5 U	5.7 U	5.3 U	4.8 U	5.7 U	4.8 U	6.1 U	5.2 U	3.9 U	4.6 U	4.3 U	4.7 U	NA
Chloroform	49000	370	ug/kg	1.8 U	2 U	2 U	2.3 U	2.1 U	1.9 U	2.3 U	1.9 U	2.4 U	2.1 U	1.5 U	1.8 U	1.7 U	1.9 U	NA
Chloromethane	NS	NS	ug/kg	4.6 U	5 U	5 U	5.7 U	5.3 U	4.8 U	5.7 U	4.8 U	6.1 U	5.2 U	3.9 U	4.6 U	4.3 U	4.7 U	NA
cis-1,2-Dichloroethene	100000	250	ug/kg	0.92 U	1 U	1 U	1.1 U	1.1 U	0.95 U	1.1 U	0.96 U	1.2 U	1 U	0.77 U	0.92 U	0.86 U	0.93 U	NA
cis-1,3-Dichloropropene	NS	NS	ug/kg	1.8 U	2 U	2 U	2.3 U	2.1 U	1.9 U	2.3 U	1.9 U	2.4 U	2.1 U	1.5 U	1.8 U	1.7 U	1.9 U	NA
Cyclohexane	NS	NS	ug/kg	1.8 U	2 U	2 U	2.3 U	2.1 U	1.9 U	2.3 U	1.9 U	2.4 U	2.1 U	1.5 U	1.8 U	1.7 U	1.9 U	NA
Dichloromethane	NS	NS	ug/kg	4.6 U	5 U	5 U	5.7 U	5.3 U	4.8 U	5.7 U	4.8 U	6.1 U	5.2 U	3.9 U	4.6 U	4.3 U	4.7 U	NA
Ethylbenzene	41000	1000	ug/kg	0.92 U	1 U	1 U	1.1 U	1.1 U	0.95 U	1.1 U	0.96 U	1.2 U	1 U	0.77 U	0.92 U	0.86 U	0.93 U	NA
Isopropylbenzene	NS	NS	ug/kg	1.8 U	2 U	0.34 J	2.3 U	2.1 U	1.9 U	2.3 U	1.9 U	2.4 U	2.1 U	1.5 U	1.8 U	1.7 U	1.9 U	NA
Methyl Acetate	NS	NS	ug/kg	4.6 U	5 U	5 U	5.7 U	5.3 U	4.8 U	5.7 U	4.8 U	6.1 U	5.2 U	3.9 U	4.6 U	4.3 U	4.7 U	NA
Methyl N-Butyl Ketone (2-Hexanone)	NS	NS	ug/kg	4.6 U	5 U	5 U	5.7 U	5.3 U	4.8 U	5.7 U	4.8 U	6.1 U	5.2 U	3.9 U	4.6 U	4.3 U	4.7 U	NA
Methylcyclohexane	NS	NS	ug/kg	1.8 U	2 U	2 U	2.3 U	2.1 U	1.9 U	2.3 U	1.9 U	2.4 U	2.1 U	1.5 U	1.8 U	1.7 U	1.9 U	NA
Methyl-tert-butylether	100000	930	ug/kg	0.92 U	1 U	1 U	1.1 U	1.1 U	0.95 U	1.1 U	0.96 U	1.2 U	1 U	0.77 U	0.92 U	0.86 U	0.93 U	NA
Styrene (Monomer)	NS	NS	ug/kg	1.8 U	2 U	0.68 J	0.43 J	2.1 U	0.18 J	2.3 U	1.9 U	2.4 U	2.1 U	1.5 U	1.8 U	1.7 U	1.9 U	NA
Tetrachloroethene	19000	1300	ug/kg	1.8 U	2 U	2 U	2.3 U	2.1 U	1.9 U	2.3 U	1.9 U	2.4 U	2.1 U	1.5 U	1.8 U	1.7 U	1.9 U	NA
Toluene	100000	700	ug/kg	0.92 U	1 U	1 U	1.1 U	1.1 U	0.95 U	0.38 J	0.32 J	0.69 J	1 U	0.77 U	0.92 U	0.86 U	0.93 U	NA
Total Xylenes	100000	1600	ug/kg	0.92 U	1 U	1 U	1.1 U	1.1 U	0.95 U	1.1 U	0.96 U	1.2 U	1 U	0.77 U	0.92 U	0.86 U	0.93 U	NA
trans-1,2-Dichloroethene	100000	190	ug/kg	0.92 U	1 U	1 U	1.1 U	1.1 U	0.95 U	1.1 U	0.96 U	1.2 U	1 U	0.77 U	0.92 U	0.86 U	0.93 U	NA
trans-1,3-Dichloropropene	NS	NS	ug/kg	1.8 U	2 U	2 U	2.3 U	2.1 U	1.9 U	2.3 U	1.9 U	2.4 U	2.1 U	1.5 U	1.8 U	1.7 U	1.9 U	NA
Trichloroethene	21000	470	ug/kq	0.92 U	1 U	1 U	1.1 U	1.1 U	0.95 U	1.1 U	0.96 U	1.2 U	1 U	0.77 U	0.92 U	0.86 U	0.93 U	NA
Vinyl chloride	900	20	ug/kq	1.8 U	2 U	2 U	2.3 U	2.1 U	1.9 U	2.3 U	1.9 U	2.4 U	2.1 U	1.5 U	1.8 U	1.7 U	1.9 U	NA

See Notes on Last Page

Table 13. Confirmatory Soil Sample Results Area E
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York

Sample ID	TABLE 375-6: RESTRIC. RES. USE SCO	TABLE 375-6: PROTECTION OF GW SCO		PE-E-D1 1/26/2016	PE-E-D2 3/10/2016	PE-E-D3 3/14/2016	PE-E-D4 3/18/2016	PE-E-D5 3/14/2016	PE-E-D6 4/15/2016	PE-E-D7 4/15/2016	PE-E-D8 4/19/2016	PE-E-D9 4/19/2016	PE-E-D10 4/18/2016	PE-E-E1 1/26/2016	PE-E-E2 1/26/2016	PE-E-E3 DUP-015_20160	PE-E-E3 3/10/2016	PE-E-E3 1/27/2016
Sample Date																		
Sample Depth			Units	2-2.5	11-11.5	5-5.5	5-5.5	4-4.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	11-11.5	2-2.5
SVOCs																		
1,1-Biphenyl	NS	NS	ug/kq	68 U	77 U	79 U	91 U	79 U	75 U	72 U	73 U	76 U	75 U	65 U	67 U	69 U	72 U	69 U
2,2-Oxybis(1-Chloropropane)	NS	NS	ug/kg	68 U	77 U	79 U	91 U	79 U	75 U	72 U	73 U	76 U	75 U	65 U	67 U	69 U	72 U	69 U
2,4,5-Trichlorophenol	NS	NS	ug/kg	170 U	190 U	200 U	230 U	200 U	190 U	180 U	180 U	190 U	190 U	160 U	170 U	170 U	180 U	170 U
2,4,6-Trichlorophenol	NS	NS	ug/kg	170 U	190 U	200 U	230 U	200 U	180 U	180 U	190 U	190 U	190 U	160 U	170 U	170 U	180 U	170 U
2,4-Dichlorophenol	NS	NS	ug/kg	170 U	190 U	200 U	230 U	200 U	190 U	180 U	180 U	190 U	190 U	160 U	170 U	170 U	180 U	170 U
2,4-Dimethylphenol	NS	NS	ug/kg	170 U	190 U	200 U	230 U	200 U	190 U	180 U	180 U	190 U	190 U	160 U	170 U	170 U	180 U	170 U
2,4-Dinitrophenol	NS	NS	ug/kg	170 U	190 U	200 U	230 U	200 U	190 U	180 U	180 U	190 U	190 U	160 U	170 U	170 U	180 U	170 U
2,4-Dinitrotoluene	NS	NS	ug/kg	34 U	38 U	40 U	46 U	39 U	38 U	36 U	37 U	38 U	38 U	32 U	34 U	35 U	36 U	34 U
2,6-Dinitrotoluene	NS	NS	ug/kg	34 U	38 U	40 U	46 U	39 U	38 U	36 U	37 U	38 U	38 U	32 U	34 U	35 U	36 U	34 U
2-Chloronaphthalene	NS	NS	ug/kg	68 U	77 U	79 U	91 U	79 U	75 U	72 U	73 U	76 U	75 U	65 U	67 U	69 U	72 U	69 U
2-Chlorophenol	NS	NS	ug/kg	68 U	77 U	79 U	91 U	79 U	75 U	72 U	73 U	76 U	75 U	65 U	67 U	69 U	72 U	69 U
2-Methyl-4,6-dinitrophenol	NS	NS	ug/kg	170 U	190 U	200 U	230 U	200 U	190 U	180 U	180 U	190 U	190 U	160 U	170 U	170 U	180 U	170 U
2-Methylnaphthalene	NS	NS	ug/kg	68 U	77 U	79 U	91 U	79 U	75 U	72 U	73 U	76 U	75 U	65 U	67 U	69 U	72 U	69 U
2-Methylphenol	NS	NS	ug/kg	68 U	77 U	79 U	91 U	79 U	75 U	72 U	73 U	76 U	75 U	65 U	67 U	69 U	72 U	69 U
2-Nitroaniline	NS	NS	ug/kg	170 U	190 U	200 U	230 U	200 U	190 U	180 U	180 U	190 U	190 U	160 U	170 U	170 U	180 U	170 U
2-Nitrophenol	NS	NS	ug/kg	170 U	190 U	200 U	230 U	200 U	190 U	180 U	180 U	190 U	190 U	160 U	170 U	170 U	180 U	170 U
3,3-Dichlorobenzidine	NS	NS	ug/kg	68 U	77 U	79 U	91 U	79 U	75 U	72 U	73 U	76 U	75 U	65 U	67 U	69 U	72 U	69 U
3-Methylphenol, 4-Methylphenol	NS	NS	ug/kg	68 U	77 U	79 U	91 U	79 U	75 U	72 U	278	133	39 J	65 U	67 U	69 U	72 U	69 U
3-Nitroaniline	NS	NS	ug/kg	170 U	190 U	200 U	230 U	200 U	190 U	180 U	180 U	190 U	190 U	160 U	170 U	170 U	180 U	170 U
4-Bromophenyl phenyl ether	NS	NS	ug/kg	68 U	77 U	79 U	91 U	79 U	75 U	72 U	73 U	76 U	75 U	65 U	67 U	69 U	72 U	69 U
4-Chloro-3-Methylphenol	NS	NS	ug/kg	170 U	190 U	200 U	230 U	200 U	190 U	180 U	180 U	190 U	190 U	160 U	170 U	170 U	180 U	170 U
4-Chlorophenyl phenyl ether	NS	NS	ug/kq	68 U	77 U	79 U	91 U	79 U	75 U	72 U	73 U	76 U	75 U	65 U	67 U	69 U	72 U	69 U
4-Nitroaniline	NS	NS	ug/kq	170 U	190 U	200 U	230 U	200 U	190 U	180 U	180 U	190 U	190 U	160 U	170 U	170 U	180 U	170 U
4-Nitrophenol	NS	NS	ug/kq	340 U	380 U	400 U	460 U	390 U	380 U	360 U	370 U	380 U	380 U	320 U	340 U	350 UJ	360 U	340 UJ
Acenaphthene	100000	98000	ug/kq	34 U	38 U	40 U	46 U	39 U	38 U	36 U	37 U	38 U	38 U	32 U	34 U	35 U	36 U	34 U
Acenaphthylene	100000	107000	ug/kq	34 U	38 U	40 U	46 U	39 U	38 U	36 U	37 U	38 U	38 U	32 U	34 U	35 U	36 U	34 U
Acetophenone	NS	NS	ug/kg	170 U	190 U	200 U	230 U	200 U	190 U	180 U	180 U	190 U	190 U	160 U	170 U	170 U	180 U	170 U
Anthracene	100000	1000000	ug/kg	34 U	38 U	40 U	46 U	39 U	38 U	36 U	37 U	38 U	38 U	32 U	34 U	35 U	36 U	34 U
Atrazine	NS	NS	ug/kg	68 U	77 U	79 U	91 U	79 U	75 U	72 U	73 U	76 U	75 U	65 U	67 U	69 U	72 U	69 U
Benzaldehyde	NS	NS	ug/kg	170 U	190 U	200 UJ	230 U	200 UJ	190 U	180 U	180 U	190 U	190 U	160 U	170 U	170 U	180 U	170 U
Benzo(a)anthracene	1000	1000	ug/kg	34 U	38 U	40 U	46 U	39 U	38 U	36 U	37 U	38 U	42.1	32 U	34 U	35 U	36 U	34 U
Benzo(a)pyrene	1000	22000	ug/kg	34 U	38 U	40 U	46 U	39 U	38 U	36 U	37 U	38 U	27.9 J	32 U	34 U	35 U	36 U	34 U
Benzo(b)fluoranthene	1000	1700	ug/kg	19.1 J	38 U	40 U	46 U	39 U	38 U	36 U	37 U	38 U	66.5	32 U	13.9 J	35 U	36 U	34 U
Benzo(g,h,i)perylene	100000	1000000	ug/kg	34 U	38 U	40 U	46 U	39 U	38 U	36 U	37 U	38 U	20.2 J	32 U	34 U	35 U	36 U	34 U
Benzo(k)fluoranthene	3900	1700	ug/kg	34 U	38 U	40 U	46 U	39 U	38 U	36 U	37 U	38 U	20.1 J	32 U	34 U	35 U	36 U	34 U
bis(2-Chloroethoxy)methane	NS	NS	ug/kg	68 U	77 U	79 U	91 U	79 U	75 U	72 U	73 U	76 U	75 U	65 U	67 U	69 U	72 U	69 U
bis(2-Chloroethyl)ether	NS	NS	ug/kg	68 U	77 U	79 U	91 U	79 U	75 U	72 U	73 U	76 U	75 U	65 U	67 U	69 U	72 U	69 U
bis(2-Ethylhexyl)phthalate	NS	NS	ug/kg	68 U	77 U	79 U	91 U	79 U	75 U	72 U	73 U	76 U	98.1	65 U	67 U	69 U	72 U	69 U
Butyl benzyl phthalate	NS	NS	ug/kg	68 U	77 U	79 U	91 U	79 U	75 U	72 U	73 U	76 U	75 U	65 U	67 U	69 U	72 U	69 U
Caprolactam	NS	NS	ug/kg	68 U	77 U	79 U	91 U	79 U	75 U	72 U	73 U	76 U	75 U	65 U	67 U	69 U	72 U	69 U
Carbazole	NS	NS	ug/kg	68 U	77 U	79 U	91 U	79 U	75 U	72 U	73 U	76 U	75 U	65 U	67 U	69 U	72 U	69 U
Chrysene	3900	1000	ug/kg	34 U	38 U	40 U	46 U	39 U	38 U	36 U	37 U	38 U	54.7	32 U	34 U	35 U	36 U	34 U
Dibenzo(a,h)anthracene	330	1000000	ug/kg	34 U	38 U	40 U	46 U	39 U	38 U	36 U	37 U	38 U	38 U	32 U	34 U	35 U	36 U	34 U
Dibenzofuran	NS	NS	ug/kg	68 U	77 U	79 U	91 U	79 U	75 U	72 U	73 U	76 U	75 U	65 U	67 U	69 U	72 U	69 U
Diethyl phthalate	NS	NS	ug/kg	68 U	77 U	79 U	91 U	79 U	75 U	72 U	73 U	76 U	75 U	65 U	67 U	69 U	72 U	69 U
Dimethyl phthalate	NS	NS	ug/kg	68 U	77 U	79 U	91 U	79 U	75 U	72 U	73 U	76 U	75 U	65 U	67 U	69 U	72 U	69 U
Di-n-butyl phthalate	NS	NS	ug/kq	68 U	77 U	79 U	91 U	79 U	75 U	72 U	73 U	76 U	75 U	65 U	67 U	69 U	72 U	69 U
Di-n-octyl phthalate	NS	NS	ug/kq	68 U	77 U	79 U	91 U	79 U	75 U	72 U	73 U	76 U	75 U	65 U	67 U	69 U	72 U	69 U
Fluoranthene	100000	1000000	ug/kq	22.8 J	38 U	40 U	46 U	39 U	38 U	36 U	14.5 J	38 U	111	32 U	16 J	35 U	36 U	34 U
Fluorene	100000	386000	ug/kq	34 U	38 U	40 U	46 U	39 U	38 U	36 U	37 U	38 U	38 U	32 U	34 U	35 U	36 U	34 U
Hexachloro-1,3-butadiene	NS	NS	ug/kq	34 U	38 U	40 U	46 U	39 U	38 U	36 U	37 U	38 U	38 U	32 U	34 U	35 U	36 U	34 U
Hexachlorobenzene	NS	NS	ug/kg	68 U	77 U	79 U	91 U	79 U	75 U	72 U	73 U	76 U	75 U	65 U	67 U	69 U	72 U	69 U
Hexachlorocyclopentadiene	NS	NS	ug/kg	340 U	380 U	400 UJ	460 U	390 UJ	380 U	360 U	370 U	380 U	380 U	320 U	340 U	350 U	360 U	340 U
Hexachloroethane	NS	NS	ug/kg	170 U	190 U	200 U	230 U	200 U	190 U	180 U	180 U	190 U	190 U	160 U	170 U	170 U	180 U	170 U

See Notes on Last Page

Sample ID		TABLE 375-6: RESTRIC. RES. USE SCO	TABLE 375-6: PROTECTION OF GW SCO	Units	PE-E-D1	PE-E-D2	PE-E-D3	PE-E-D4	PE-E-D5	PE-E-D6	PE-E-D7	PE-E-D8	PE-E-D9	PE-E-D10	PE-E-E1	PE-E-E2	PE-E-E3	PE-E-E3	PE-E-E3
Sample Date	1/26/2016				3/10/2016	3/14/2016	3/18/2016	3/14/2016	4/15/2016	4/15/2016	4/19/2016	4/19/2016	4/18/2016	1/26/2016	1/26/2016	DUP-015_20160	3/10/2016	1/27/2016	
Sample Depth	2-2.5				11-11.5	5-5.5	5-5.5	4-4.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5
SVOCs cont.																			
Indeno(1,2,3-cd)pyrene		500	8200	ug/kq	34 U	38 U	40 U	46 U	39 U	38 U	36 U	37 U	38 U	23.6 J	32 U	34 U	35 U	36 U	34 U
Isophorone		NS	NS	ug/kg	68 U	77 U	79 U	91 U	79 U	75 U	72 U	73 U	76 U	75 U	65 U	67 U	69 U	72 U	69 U
Naphthalene		100000	12000	ug/kg	34 U	38 U	18.3 J	46 U	39 U	38 U	36 U	37 U	38 U	38 U	32 U	34 U	35 U	36 U	34 U
Nitrobenzene		NS	NS	ug/kg	68 U	77 U	79 U	91 U	79 U	75 U	72 U	73 U	76 U	75 U	65 U	67 U	69 U	72 U	69 U
n-Nitrosodi-n-propylamine		NS	NS	ug/kg	68 U	77 U	79 U	91 U	79 U	75 U	72 U	73 U	76 U	75 U	65 U	67 U	69 U	72 U	69 U
N-Nitrosodiphenylamine		NS	NS	ug/kg	170 U	190 U	200 U	230 U	200 U	190 U	180 U	180 U	190 U	190 U	160 U	170 U	170 U	180 U	170 U
p-Chloroaniline		NS	NS	ug/kg	170 U	190 U	200 U	230 U	200 U	190 U	180 U	180 U	190 U	190 U	160 U	170 U	170 U	180 U	170 U
Pentachlorophenol		6700	800	ug/kg	170 U	190 U	200 U	230 U	200 U	190 U	180 U	180 U	190 U	190 U	160 U	170 U	170 U	180 U	170 U
Phenanthrene		100000	1000000	ug/kg	34 U	38 U	40 U	46 U	39 U	38 U	36 U	37 U	38 U	43.5	32 U	34 U	35 U	36 U	34 U
Phenol		100000	330	ug/kg	68 U	77 U	79 U	91 U	79 U	75 U	72 U	73 U	76 U	75 U	65 U	67 U	69 U	72 U	69 U
Pyrene		100000	1000000	ug/kg	17.8 J	38 U	40 U	46 U	39 U	38 U	36 U	37 U	38 U	100	32 U	14.7 J	35 U	36 U	34 U
PCBs																			
Aroclor 1016		1000	3200	ug/kg	34 U	37 U	40 U	44 U	41 U	40 U	37 U	37 U	37 U	38 U	33 U	34 U	35 U	36 U	NA
Aroclor 1221		1000	3200	ug/kg	34 U	37 U	40 U	44 U	41 U	40 U	37 U	37 U	37 U	38 U	33 U	34 U	35 U	36 U	NA
Aroclor 1232		1000	3200	ug/kg	34 U	37 U	40 U	44 U	41 U	40 U	37 U	37 U	37 U	38 U	33 U	34 U	35 U	36 U	NA
Aroclor 1242		1000	3200	ug/kg	34 U	37 U	40 U	44 U	41 U	40 U	37 U	37 U	37 U	38 U	33 U	34 U	35 U	36 U	NA
Aroclor 1248		1000	3200	ug/kg	34 U	37 U	40 U	44 U	41 U	40 U	37 U	37 U	37 U	38 U	33 U	145	35 U	36 U	NA
Aroclor 1254		1000	3200	ug/kg	34 U	37 U	40 U	44 U	41 U	40 U	37 U	37 U	37 U	38 U	33 U	34 U	35 U	36 U	NA
Aroclor 1260		1000	3200	ug/kg	34 U	37 U	40 U	44 U	41 U	40 U	37 U	37 U	37 U	38 U	33 U	34 U	35 U	36 U	NA
Aroclor 1262		1000	3200	ug/kg	34 U	37 U	40 U	44 U	41 U	40 U	37 U	37 U	37 U	38 U	33 U	34 U	35 U	36 U	NA
Aroclor 1268		1000	3200	ug/kg	34 U	37 U	40 U	44 U	41 U	40 U	37 U	37 U	37 U	38 U	33 U	34 U	35 U	36 U	NA
Metals																			
Aluminum		NS	NS	mq/kq	9360 J	9210	12300 J	15000 J	15800 J	11500 J	12700 J	6340 J	5740 J	12600 J	5220 J	5180 J	7240 J	9230	NA
Antimony		NS	NS	mq/kq	2 UJ	2.4 UJ	2.5 UJ	2.8 UJ	2 UJ	1.9 UJ	0.34 J	2.2 UJ	2.3 UJ	1.2 J	1.9 UJ	2.1 UJ	2.1 UJ	2.2 UJ	NA
Arsenic		16	16	mq/kq	4.6	3.9	2.9	5.5	2.8	4.4	6.4	2.9	4	4.9	2	2 B	2.6	2.3	NA
Barium		400	820	mq/kq	49.4	44.3	54.9	53.2	50.2	34.4 J	47.4 J	57.4	32.6	138	22.4	20.5 B	32.1	55.3	NA
Beryllium		72	47	mg/kg	0.5	0.5	0.48	0.95	0.4	0.35 J	0.63 J	0.39	0.39	0.6	0.27	0.26	0.38	0.42	NA
Cadmium		4.3	7.5	mg/kg	0.099 B	0.61 U	0.62 U	0.7 U	0.5 U	0.48 U	0.54 U	0.29 B	0.15 B	0.63	0.48 U	0.52 U	0.52 UB	0.54 U	NA
Calcium		NS	NS	mg/kg	2300 J	1970	1110 J	2090 J	1040 J	857 J	1230 J	2780	2030	3340	8840	8690 J	2450 J	2060	NA
Chromium		NS	NS	mg/kg	18.7	16.1	18.6	33.4	19	14 J	21.5 J	12.1	11.8	21.2	11.4	10.6	11.8	14.8	NA
Cobalt		NS	NS	mg/kg	7.8	7.9	5.9 B	11.4	4.8 B	4.9	6.3	5.4 B	5 B	7.6	4.6 B	4.5 B	5.3	8.1	NA
Copper		270	1720	mg/kg	7.7	6	3.3	6.8	3.1	4.7 J	8.2 J	12.1	13.4	23	13.5 J	8.7	11.2	6.2	NA
Iron		NS	NS	mg/kg	17100 J	18900	14500	29900	19700	19000 J	35900 J	14700	16900	18800	12400 J	12100 J	13500 J	16600	NA
Lead		400	450	mg/kg	9	6.6	8.1	8.1	8.2	4.9 J	5.4 J	17.1	11.9	147	3.6	4.7	6.8	4.5	NA
Magnesium		NS	NS	mg/kg	2920	2420	1800	4480	2060	2680 J	2650 J	2300	2480	2920	3380 J	3150	2140	3150	NA
Manganese		2000	2000	mg/kg	692 J	127	116	280	374	107 J	344 J	154	169	466	209	267 J	326 J	163	NA
Mercury		NS	NS	mg/kg	0.034 UB	0.037 UB	0.04 UB	0.018 B	0.041 UB	0.038 UB	0.034 UB	0.024 B	0.037 U	0.049	0.031 UB	0.032 UB	0.032 UB	0.035 UB	NA
Nickel		310	130	mg/kg	11.8	8.6	8.4	12.7	8.1	7.9	9.7	9.3	10.1	15.4	8.5	8.5	8.2	9.6	NA
Potassium		NS	NS	mg/kg	1100	876 B	780 J	1190 J	720 J	594 J	830 J	910 B	864 B	1430	922 B	734 B	816 B	1390	NA
Selenium		180	4	mg/kg	2 U	0.68 B	2.5 U	2.8 U	2 U	1.9 U	2.1 U	2.2 U	2.3 U	2.3 U	1.9 U	2.1 U	0.47 B	2.2 U	NA
Silver		180	8.3	mg/kg	0.5 U	0.61 U	0.62 U	0.7 U	0.5 U	1.3	2.1	1.5	1.4	0.57 U	0.48 U	0.52 U	0.57	0.54 UB	NA
Sodium		NS	NS	mg/kg	129 B	90.1 B	94.6 J	160 J	127 J	115 B	91.2 B	184 B	121 B	195 B	287 B	234 B	147 B	151 B	NA
Thallium		NS	NS	mg/kg	0.99 UB	1.2 U	1.2 U	1.4 U	0.99 U	0.96 U	1.1 U	1.1 U	1.2 U	1.1 U	0.97 U	1 UB	1 U	1.1 U	NA
Vanadium		NS	NS	mg/kg	29.4	29.3	26.6	47.8	34	24.1 J	35.3 J	22.7	19.9	40	19.5	18.2	19.9	23.6	NA
Zinc		10000	2480	mg/kg	31.2 J	37.1	28.3	37.1	26.9	27.4 J	24.5 J	38.3	38.4	92.9	19.9	23.2 J	23.7 J	29.9	NA
General Chemistry																			
Percent Solids				%	NA	82.9	82.1	69.7	77.2	80.8	88.8	86.7	87.4	83.7	99.6	NA	95.2	91.1	96
Notes																			
	NS	No standard																	
	NA	Not analyzed																	
	J	Estimated result																	
	JN	Estimated result																	
	R	Rejected result																	
	UB	Analyte considered non-detect at the listed value due to associated blank contamination																	
	Bold	Result exceeds 375-6.8(b) protection of groundwater soil cleanup objective.																	
	Shade	Result exceeds 375-6.8(b) restricted residential use soil cleanup objective.																	

Table 13. Confirmatory Soil Sample Results Area E
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York

Sample ID	TABLE 375-6: RESTRIC. RES. USE SCO	TABLE 375-6: PROTECTION OF GW SCO		PE-E-E4 3/10/2016	PE-E-E5A 3/16/2016	PE-E-E6 DUP-018_201603	PE-E-E6 3/10/2016	PE-E-E6 3/10/2016	PE-E-E7 3/14/2016	PE-E-E8 4/19/2016	PE-E-E9 4/18/2016	PE-E-E10 4/18/2016	PE-E-F1 1/27/2016	PE-E-F2 1/27/2016	PE-E-F3 1/27/2016	PE-E-F5 3/10/2016	PE-E-F7 3/11/2016	PE-E-F8 4/19/2016
Sample Date																		
Sample Depth			Units	11-11.5	3-3.5	2-2.5	2-2.5	0-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	6.5-7	2-2.5	2-2.5
VOCs																		
1,1,1-Trichloroethane	100000	680	ug/kg	2 U	NA	2.3 U	2.3 U	1.8 U	1.9 U	2.5 U	2.9 U	2.1 U	1.7 U	1.7 U	1.7 U	2 U	2 U	2.2 U
1,1,2,2-Tetrachloroethane	NS	NS	ug/kg	2 U	NA	2.3 U	2.3 U	1.8 U	1.9 U	2.5 U	2.9 U	2.1 U	1.7 U	1.7 U	1.7 U	2 U	2 U	2.2 U
1,1,2-trichloro-1,2,2-trifluoroethane	NS	NS	ug/kg	5.1 U	NA	5.8 U	5.8 U	4.5 U	4.8 U	6.3 U	7.3 U	5.3 U	4.3 U	4.4 U	4.2 U	4.9 U	5 U	5.5 U
1,1,2-Trichloroethane	NS	NS	ug/kg	2 U	NA	2.3 U	2.3 U	1.8 U	1.9 U	2.5 U	2.9 U	2.1 U	1.7 U	1.7 U	1.7 U	2 U	2 U	2.2 U
1,1-Dichloroethane	26000	270	ug/kg	1 U	NA	1.2 U	1.2 U	0.91 U	0.95 U	1.3 U	1.5 U	1.1 U	0.85 U	0.87 U	0.84 U	0.98 U	1 U	1.1 U
1,1-Dichloroethene	100000	330	ug/kg	1 U	NA	1.2 U	1.2 U	0.91 U	0.95 U	1.3 U	1.5 U	1.1 U	0.85 U	0.87 U	0.84 U	0.98 U	1 U	1.1 U
1,2,4-Trichlorobenzene	NS	NS	ug/kg	5.1 U	NA	5.8 U	5.8 U	4.5 U	4.8 U	6.3 U	7.3 U	5.3 U	4.3 U	4.4 U	4.2 U	4.9 U	5 U	5.5 U
1,2-Dibromo-3-chloropropane	NS	NS	ug/kg	2 U	NA	2.3 U	2.3 U	1.8 U	1.9 U	2.5 U	2.9 U	2.1 U	1.7 U	1.7 U	1.7 U	2 U	2 U	2.2 U
1,2-Dibromoethane	NS	NS	ug/kg	1 U	NA	1.2 U	1.2 U	0.91 U	0.95 U	1.3 U	1.5 U	1.1 U	0.85 U	0.87 U	0.84 U	0.98 U	1 U	1.1 U
1,2-Dichlorobenzene	100000	1100	ug/kg	1 U	NA	1.2 U	1.2 U	0.91 U	0.95 U	1.3 U	1.5 U	1.1 U	0.85 U	0.87 U	0.84 U	0.98 U	1 U	1.1 U
1,2-Dichloroethane	3100	20	ug/kg	1 U	NA	1.2 U	1.2 U	0.91 U	0.95 U	1.3 U	1.5 U	1.1 U	0.85 U	0.87 U	0.84 U	0.98 U	1 U	1.1 U
1,2-Dichloropropane	NS	NS	ug/kg	2 U	NA	2.3 U	2.3 U	1.8 U	1.9 U	2.5 U	2.9 U	2.1 U	1.7 U	1.7 U	1.7 U	2 U	2 U	2.2 U
1,3-Dichlorobenzene	49000	2400	ug/kg	1 U	NA	1.2 U	1.2 U	0.91 U	0.95 U	1.3 U	1.5 U	1.1 U	0.85 U	0.87 U	0.84 U	0.98 U	1 U	1.1 U
1,4-Dichlorobenzene	13000	1800	ug/kg	1 U	NA	1.2 U	1.2 U	0.91 U	0.95 U	1.3 U	1.5 U	1.1 U	0.85 U	0.87 U	0.84 U	0.98 U	1 U	1.1 U
2-Butanone (MEK)	100000	120	ug/kg	10 U	NA	12 U	12 U	9.1 U	9.5 U	13 U	15 U	11 U	8.5 U	8.7 U	3.7 J	9.8 U	10 U	82.2
4-Methyl-2-Pentanone	NS	NS	ug/kg	5.1 U	NA	5.8 U	5.8 U	4.5 U	4.8 U	6.3 U	7.3 U	5.3 U	4.3 U	4.4 U	4.2 U	4.9 U	5 U	5.5 U
Acetone	100000	50	ug/kg	37.4	NA	12 U	12 U	9.1 U	9.5 U	25.3	15 U	11 U	10.2	12.6	26.8	9.8 U	10 U	208
Benzene	4800	60	ug/kg	0.51 U	NA	0.58 U	0.58 U	0.45 U	0.48 U	0.63 U	0.73 U	0.53 U	0.43 U	0.44 U	0.42 U	0.49 U	0.5 U	0.55 U
Bromodichloromethane	NS	NS	ug/kg	2 U	NA	2.3 U	2.3 U	1.8 U	1.9 U	2.5 U	2.9 U	2.1 U	1.7 U	1.7 U	1.7 U	2 U	2 U	2.2 U
Bromoform	NS	NS	ug/kg	5.1 U	NA	5.8 U	5.8 U	4.5 U	4.8 U	6.3 U	7.3 U	5.3 U	4.3 U	4.4 U	4.2 U	4.9 U	5 U	5.5 U
Bromomethane	NS	NS	ug/kg	5.1 U	NA	5.8 U	5.8 U	4.5 U	4.8 U	6.3 U	7.3 U	5.3 U	4.3 U	4.4 U	4.2 U	4.9 U	5 U	5.5 U
Carbon Disulfide	NS	NS	ug/kg	2 U	NA	2.3 U	2.3 U	1.8 U	1.9 U	2.5 U	2.9 U	2.1 U	1.7 U	1.7 U	0.29 J	2 U	2 U	2.2 U
Carbon Tetrachloride	2400	760	ug/kg	2 U	NA	2.3 U	2.3 U	1.8 U	1.9 U	2.5 U	2.9 U	2.1 U	1.7 U	1.7 U	1.7 U	2 U	2 U	2.2 U
CFC-11	NS	NS	ug/kg	5.1 U	NA	5.8 U	5.8 U	4.5 U	4.8 U	6.3 U	7.3 U	5.3 U	4.3 U	4.4 U	4.2 U	4.9 U	5 U	5.5 U
CFC-12	NS	NS	ug/kg	5.1 U	NA	5.8 U	5.8 U	4.5 U	4.8 U	6.3 U	7.3 U	5.3 U	4.3 U	4.4 U	4.2 U	4.9 U	5 U	5.5 U
Chlorobenzene	100000	1100	ug/kg	2 U	NA	2.3 U	2.3 U	1.8 U	1.9 U	2.5 U	2.9 U	2.1 U	1.7 U	1.7 U	1.7 U	2 U	2 U	2.2 U
Chlorodibromomethane	NS	NS	ug/kg	2 U	NA	2.3 U	2.3 U	1.8 U	1.9 U	2.5 U	2.9 U	2.1 U	1.7 U	1.7 U	1.7 U	2 U	2 U	2.2 U
Chloroethane	NS	NS	ug/kg	5.1 U	NA	5.8 U	5.8 U	4.5 U	4.8 U	6.3 U	7.3 U	5.3 U	4.3 U	4.4 U	4.2 U	4.9 U	5 U	5.5 U
Chloroform	49000	370	ug/kg	2 U	NA	2.3 U	2.3 U	1.8 U	1.9 U	2.5 U	2.9 U	2.1 U	1.7 U	1.7 U	1.7 U	2 U	2 U	2.2 U
Chloromethane	NS	NS	ug/kg	5.1 U	NA	5.8 U	5.8 U	4.5 U	4.8 U	6.3 U	7.3 U	5.3 U	4.3 U	4.4 U	4.2 U	4.9 U	5 U	5.5 U
cis-1,2-Dichloroethene	100000	250	ug/kg	1 U	NA	1.2 U	1.2 U	0.91 U	0.95 U	1.3 U	1.5 U	1.1 U	0.85 U	0.87 U	0.84 U	0.98 U	1 U	1.1 U
cis-1,3-Dichloropropene	NS	NS	ug/kg	2 U	NA	2.3 U	2.3 U	1.8 U	1.9 U	2.5 U	2.9 U	2.1 U	1.7 U	1.7 U	1.7 U	2 U	2 U	2.2 U
Cyclohexane	NS	NS	ug/kg	2 U	NA	2.3 U	2.3 U	1.8 U	1.9 U	2.5 U	2.9 U	2.1 U	1.7 U	1.7 U	1.7 U	2 U	2 U	2.2 U
Dichloromethane	NS	NS	ug/kg	5.1 U	NA	5.8 U	5.8 U	4.5 U	4.8 U	6.3 U	7.3 U	5.3 U	4.3 U	4.4 U	4.2 U	4.9 U	5 U	5.5 U
Ethylbenzene	41000	1000	ug/kg	1 U	NA	1.2 U	1.2 U	0.91 U	0.95 U	1.3 U	1.5 U	1.1 U	0.85 U	0.87 U	0.84 U	0.98 U	1 U	1.1 U
Isopropylbenzene	NS	NS	ug/kg	2 U	NA	2.3 U	2.3 U	1.8 U	1.9 U	2.5 U	2.9 U	2.1 U	1.7 U	1.7 U	0.23 J	2 U	2 U	2.2 U
Methyl Acetate	NS	NS	ug/kg	5.1 U	NA	5.8 U	5.8 U	4.5 U	4.8 U	6.3 U	7.3 U	5.3 U	4.3 U	4.4 U	4.2 U	4.9 U	5 U	5.5 U
Methyl N-Butyl Ketone (2-Hexanone)	NS	NS	ug/kg	5.1 U	NA	5.8 U	5.8 U	4.5 U	4.8 U	6.3 U	7.3 U	5.3 U	4.3 U	4.4 U	4.2 U	4.9 U	5 U	5.5 U
Methylcyclohexane	NS	NS	ug/kg	2 U	NA	2.3 U	2.3 U	1.8 U	1.9 U	2.5 U	2.9 U	0.62 J	1.7 U	1.7 U	0.19 J	2 U	2 U	2.2 U
Methyl-tert-butylether	100000	930	ug/kg	1 U	NA	1.2 U	1.2 U	0.91 U	0.95 U	1.3 U	1.5 U	1.1 U	0.85 U	0.87 U	0.84 U	0.98 U	1 U	1.1 U
Styrene (Monomer)	NS	NS	ug/kg	2 U	NA	2.3 U	2.3 U	1.8 U	0.34 J	2.5 U	2.9 U	2.1 U	0.6 J	0.3 J	1.7 U	2 U	2 U	2.2 U
Tetrachloroethene	19000	1300	ug/kg	2 U	NA	2.3 U	2.3 U	1.8 U	1.9 U	2.5 U	2.9 U	2.1 U	1.7 U	1.7 U	1.7 U	2 U	2 U	2.2 U
Toluene	100000	700	ug/kg	1 U	NA	1.2 U	1.2 U	0.91 U	0.95 U	0.74 J	1.5 U	1.1 U	0.85 U	0.87 U	0.84 U	0.98 U	1 U	0.8 J
Total Xylenes	100000	1600	ug/kg	1 U	NA	1.2 U	1.2 U	0.91 U	0.95 U	1.3 U	1.5 U	1.1 U	0.85 U	0.87 U	0.53 J	0.98 U	1 U	1.1 U
trans-1,2-Dichloroethene	100000	190	ug/kg	1 U	NA	1.2 U	1.2 U	0.91 U	0.95 U	1.3 U	1.5 U	1.1 U	0.85 U	0.87 U	0.84 U	0.98 U	1 U	1.1 U
trans-1,3-Dichloropropene	NS	NS	ug/kg	2 U	NA	2.3 U	2.3 U	1.8 U	1.9 U	2.5 U	2.9 U	2.1 U	1.7 U	1.7 U	1.7 U	2 U	2 U	2.2 U
Trichloroethene	21000	470	ug/kg	1 U	NA	1.2 U	1.2 U	0.91 U	0.95 U	1.3 U	1.5 U	1.1 U	0.85 U	0.87 U	0.84 U	0.98 U	1 U	1.1 U
Vinyl chloride	900	20	ug/kg	2 U	NA	2.3 U	2.3 U	1.8 U	1.9 U	2.5 U	2.9 U	2.1 U	1.7 U	1.7 U	1.7 U	2 U	2 U	2.2 U

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Table 13. Confirmatory Soil Sample Results Area E
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York

Sample ID	TABLE 375-6: RESTRIC. RES. USE SCO	TABLE 375-6: PROTECTION OF GW SCO		PE-E-E4 3/10/2016	PE-E-E5A 3/16/2016	PE-E-E6 DUP-018_201603	PE-E-E6 3/10/2016	PE-E-E6 3/10/2016	PE-E-E7 3/14/2016	PE-E-E8 4/19/2016	PE-E-E9 4/18/2016	PE-E-E10 4/18/2016	PE-E-F1 1/27/2016	PE-E-F2 1/27/2016	PE-E-F3 1/27/2016	PE-E-F5 3/10/2016	PE-E-F7 3/11/2016	PE-E-F8 4/19/2016
Sample Date																		
Sample Depth			Units	11-11.5	3-3.5	2-2.5	2-2.5	0-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	6.5-7	2-2.5	2-2.5
SVOCs																		
1,1-Biphenyl	NS	NS	ug/kq	72 U	NA	84 U	80 U	71 U	75 U	92 U	98 U	27.8 J	70 U	77 U	67 U	74 U	76 U	77 U
2,2-Oxybis(1-Chloropropane)	NS	NS	ug/kg	72 U	NA	84 U	80 U	71 U	75 U	92 U	98 U	75 U	70 U	77 U	67 U	74 U	76 U	77 U
2,4,5-Trichlorophenol	NS	NS	ug/kg	180 U	NA	210 U	200 U	180 U	190 U	230 U	240 U	190 U	180 U	190 U	170 U	180 U	190 U	190 U
2,4,6-Trichlorophenol	NS	NS	ug/kg	180 U	NA	210 U	200 U	180 U	190 U	230 U	240 U	190 U	180 U	190 U	170 U	180 U	190 U	190 U
2,4-Dichlorophenol	NS	NS	ug/kg	180 U	NA	210 U	200 U	180 U	190 U	230 U	240 U	190 U	180 U	190 U	170 U	180 U	190 U	190 U
2,4-Dimethylphenol	NS	NS	ug/kg	180 U	NA	210 U	200 U	180 U	190 U	230 U	240 U	190 U	180 U	190 U	170 U	180 U	190 U	190 U
2,4-Dinitrophenol	NS	NS	ug/kg	180 U	NA	210 U	200 U	180 U	190 U	230 U	240 U	190 U	180 U	190 U	170 U	180 U	190 U	190 U
2,4-Dinitrotoluene	NS	NS	ug/kg	36 U	NA	42 U	40 U	36 U	37 U	46 U	49 U	37 U	35 U	38 U	34 U	37 U	38 U	39 U
2,6-Dinitrotoluene	NS	NS	ug/kg	36 U	NA	42 U	40 U	36 U	37 U	46 U	49 U	37 U	35 U	38 U	34 U	37 U	38 U	39 U
2-Chloronaphthalene	NS	NS	ug/kg	72 U	NA	84 U	80 U	71 U	75 U	92 U	98 U	75 U	70 U	77 U	67 U	74 U	76 U	77 U
2-Chlorophenol	NS	NS	ug/kg	72 U	NA	84 U	80 U	71 U	75 U	92 U	98 U	75 U	70 U	77 U	67 U	74 U	76 U	77 U
2-Methyl-4,6-dinitrophenol	NS	NS	ug/kg	180 U	NA	210 U	200 U	180 U	190 U	230 U	240 U	190 U	180 U	190 U	170 U	180 U	190 U	190 U
2-Methylnaphthalene	NS	NS	ug/kg	72 U	NA	84 U	80 U	71 U	75 U	92 U	98 U	254	70 U	77 U	67 U	74 U	76 U	77 U
2-Methylphenol	NS	NS	ug/kg	72 U	NA	84 U	80 U	71 U	75 U	92 U	98 U	75 U	70 U	77 U	67 U	74 U	76 U	77 U
2-Nitroaniline	NS	NS	ug/kg	180 U	NA	210 U	200 U	180 U	190 U	230 U	240 U	190 U	180 U	190 U	170 U	180 U	190 U	190 U
2-Nitrophenol	NS	NS	ug/kg	180 U	NA	210 U	200 U	180 U	190 U	230 U	240 U	190 U	180 U	190 U	170 U	180 U	190 U	190 U
3,3-Dichlorobenzidine	NS	NS	ug/kg	72 U	NA	84 U	80 U	71 U	75 U	92 U	98 U	75 U	70 U	77 U	67 U	74 U	76 U	77 U
3-Methylphenol, 4-Methylphenol	NS	NS	ug/kg	72 U	NA	84 U	80 U	71 U	75 U	316	266	205	70 U	77 U	67 U	74 U	76 U	7940
3-Nitroaniline	NS	NS	ug/kg	180 U	NA	210 U	200 U	180 U	190 U	230 U	240 U	190 U	180 U	190 U	170 U	180 U	190 U	190 U
4-Bromophenyl phenyl ether	NS	NS	ug/kg	72 U	NA	84 U	80 U	71 U	75 U	92 U	98 U	75 U	70 U	77 U	67 U	74 U	76 U	77 U
4-Chloro-3-Methylphenol	NS	NS	ug/kg	180 U	NA	210 U	200 U	180 U	190 U	230 U	240 U	190 U	180 U	190 U	170 U	180 U	190 U	190 U
4-Chlorophenyl phenyl ether	NS	NS	ug/kq	72 U	NA	84 U	80 U	71 U	75 U	92 U	98 U	75 U	70 U	77 U	67 U	74 U	76 U	77 U
4-Nitroaniline	NS	NS	ug/kq	180 U	NA	210 U	200 U	180 U	190 U	230 U	240 U	190 U	180 U	190 U	170 U	180 U	190 U	190 U
4-Nitrophenol	NS	NS	ug/kq	360 U	NA	420 U	400 U	360 U	370 U	460 U	490 U	370 U	350 U	380 UJ	340 UJ	370 U	380 U	390 U
Acenaphthene	100000	98000	ug/kq	36 U	NA	42 U	40 U	36 U	37 U	46 U	49 U	39.8	35 U	38 U	34 U	37 U	38 U	39 U
Acenaphthylene	100000	107000	ug/kq	36 U	NA	42 U	40 U	36 U	37 U	46 U	49 U	37 U	35 U	38 U	34 U	37 U	38 U	39 U
Acetophenone	NS	NS	ug/kg	180 U	NA	210 U	200 U	180 U	190 U	230 U	240 U	190 U	180 U	190 U	170 U	180 U	190 U	190 U
Anthracene	100000	1000000	ug/kg	36 U	NA	42 U	40 U	36 U	37 U	46 U	51	58.3	35 U	38 U	34 U	37 U	38 U	39 U
Atrazine	NS	NS	ug/kg	72 U	NA	84 U	80 U	71 U	75 U	92 U	98 U	75 U	70 U	77 U	67 U	74 U	76 U	77 U
Benzaldehyde	NS	NS	ug/kg	180 U	NA	210 UJ	200 UJ	180 U	190 UJ	230 U	240 U	190 U	180 U	190 U	170 U	180 U	190 U	190 U
Benzo(a)anthracene	1000	1000	ug/kg	36 U	NA	20.6 J	18.2 J	36 U	32.3 J	46 U	72.4	68.5	59.4	47.6	34 U	37 U	38 U	29.3 J
Benzo(a)pyrene	1000	22000	ug/kg	36 U	NA	18.8 J	21.3 J	36 U	24.5 J	46 U	43 J	50.4	74.2	51.2	34 U	37 U	38 U	26.5 J
Benzo(b)fluoranthene	1000	1700	ug/kg	36 U	NA	35.8 J	36.2 J	36 U	30.8 J	46 U	74.8	75.7	102	69.3	34 U	37 U	38 U	38.6 J
Benzo(g,h,i)perylene	100000	1000000	ug/kg	36 U	NA	42 U	18.1 J	36 U	20.4 J	46 U	21.5 J	28.9 J	54.9	40.8	34 U	37 U	38 U	20.8 J
Benzo(k)fluoranthene	3900	1700	ug/kg	36 U	NA	42 U	40 U	36 U	37 U	46 U	30.7 J	25.9 J	39.1	25.8 J	34 U	37 U	38 U	39 U
bis(2-Chloroethoxy)methane	NS	NS	ug/kg	72 U	NA	84 U	80 U	71 U	75 U	92 U	98 U	75 U	70 U	77 U	67 U	74 U	76 U	77 U
bis(2-Chloroethyl)ether	NS	NS	ug/kg	72 U	NA	84 U	80 U	71 U	75 U	92 U	98 U	75 U	70 U	77 U	67 U	74 U	76 U	77 U
bis(2-Ethylhexyl)phthalate	NS	NS	ug/kg	72 U	NA	84 U	80 U	71 U	75 U	92 U	56 J	461	70 U	111	67 U	74 U	76 U	77 U
Butyl benzyl phthalate	NS	NS	ug/kg	72 U	NA	84 U	80 U	71 U	63.7 J	92 U	98 U	75 U	70 U	77 U	67 U	74 U	76 U	77 U
Caprolactam	NS	NS	ug/kg	72 U	NA	84 U	80 U	71 U	75 U	92 U	98 U	75 U	70 U	77 U	67 U	74 U	76 U	77 U
Carbazole	NS	NS	ug/kg	72 U	NA	84 U	80 U	71 U	75 U	92 U	20.8 J	21.9 J	70 U	77 U	67 U	74 U	76 U	77 U
Chrysene	3900	1000	ug/kg	36 U	NA	30.4 J	27.9 J	36 U	32.2 J	46 U	70.2	74.3	77.6	53.7	34 U	37 U	38 U	28.1 J
Dibenzo(a,h)anthracene	330	1000000	ug/kg	36 U	NA	42 U	40 U	36 U	37 U	46 U	49 U	37 U	35 U	38 U	34 U	37 U	38 U	39 U
Dibenzofuran	NS	NS	ug/kg	72 U	NA	84 U	80 U	71 U	75 U	92 U	26.8 J	38.1 J	70 U	77 U	67 U	74 U	76 U	77 U
Diethyl phthalate	NS	NS	ug/kg	72 U	NA	84 U	80 U	71 U	75 U	92 U	98 U	75 U	70 U	77 U	67 U	74 U	76 U	77 U
Dimethyl phthalate	NS	NS	ug/kg	72 U	NA	84 U	80 U	71 U	75 U	92 U	98 U	75 U	70 U	77 U	67 U	74 U	76 U	77 U
Di-n-butyl phthalate	NS	NS	ug/kq	72 U	NA	84 U	80 U	71 U	75 U	92 U	98 U	75 U	70 U	77 U	67 U	74 U	76 U	77 U
Di-n-octyl phthalate	NS	NS	ug/kq	72 U	NA	84 U	80 U	71 U	75 U	92 U	98 U	75 U	70 U	77 U	67 U	74 U	76 U	77 U
Fluoranthene	100000	1000000	ug/kq	36 U	NA	44.7	42.1	36 U	54	46 U	251	223	121	84.9	34 U	37 U	38 U	48.1
Fluorene	100000	386000	ug/kq	36 U	NA	42 U	40 U	36 U	37 U	46 U	46.1 J	61.2	35 U	38 U	34 U	37 U	38 U	39 U
Hexachloro-1,3-butadiene	NS	NS	ug/kq	36 U	NA	42 U	40 U	36 U	37 U	46 U	49 U	37 U	35 U	38 U	34 U	37 U	38 U	39 U
Hexachlorobenzene	NS	NS	ug/kg	72 U	NA	84 U	80 U	71 U	75 U	92 U	98 U	75 U	70 U	77 U	67 U	74 U	76 U	77 U
Hexachlorocyclopentadiene	NS	NS	ug/kg	360 U	NA	420 U	400 U	360 U	370 UJ	460 U	490 U	370 U	350 U	380 U	340 U	370 U	380 U	390 U
Hexachloroethane	NS	NS	ug/kg	180 U	NA	210 U	200 U	180 U	190 U	230 U	240 U	190 U	180 U	190 U	170 U	180 U	190 U	190 U

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Sample ID		TABLE 375-6: RESTRIC. RES. USE SCO	TABLE 375-6: PROTECTION OF GW SCO		Units	PE-E-E4	PE-E-E5A	PE-E-E6	PE-E-E6	PE-E-E6	PE-E-E7	PE-E-E8	PE-E-E9	PE-E-E10	PE-E-F1	PE-E-F2	PE-E-F3	PE-E-F5	PE-E-F7	PE-E-F8
Sample Date	3/10/2016					3/16/2016	DUP-018_201603	3/10/2016	3/10/2016	3/14/2016	4/19/2016	4/18/2016	4/18/2016	1/27/2016	1/27/2016	1/27/2016	3/10/2016	3/11/2016	4/19/2016	
Sample Depth	11-11.5					3-3.5	2-2.5	2-2.5	0-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	6.5-7
SVOCs cont.																				
Indeno(1,2,3-cd)pyrene		500	8200	ug/kg	36 U	NA	42 U	40 U	36 U	37 U	46 U	26.2 J	33.5 J	60.2	40.3	34 U	37 U	38 U	22.4 J	
Isophorone		NS	NS	ug/kg	72 U	NA	84 U	80 U	71 U	75 U	92 U	98 U	75 U	70 U	77 U	67 U	74 U	76 U	77 U	
Naphthalene		100000	12000	ug/kg	36 U	NA	42 U	40 U	36 U	37 U	46 U	49 U	675	35 U	38.2	34 U	37 U	38 U	39 U	
Nitrobenzene		NS	NS	ug/kg	72 U	NA	84 U	80 U	71 U	75 U	92 U	98 U	75 U	70 U	77 U	67 U	74 U	76 U	77 U	
n-Nitrosodi-n-propylamine		NS	NS	ug/kg	72 U	NA	84 U	80 U	71 U	75 U	92 U	98 U	75 U	70 U	77 U	67 U	74 U	76 U	77 U	
N-nitrosodiphenylamine		NS	NS	ug/kg	180 U	NA	210 U	200 U	180 U	190 U	230 U	240 U	190 U	180 U	190 U	170 U	180 U	190 U	190 U	
p-Chloroaniline		NS	NS	ug/kg	180 U	NA	210 U	200 U	180 U	190 U	230 U	240 U	190 U	180 U	190 U	170 U	180 U	190 U	190 U	
Pentachlorophenol		6700	800	ug/kg	180 U	NA	210 U	200 U	180 U	190 U	230 U	240 U	190 U	180 U	190 U	170 U	180 U	190 U	190 U	
Phenanthrene		100000	1000000	ug/kg	36 U	NA	26.2 J	27.4 J	36 U	39.4	46 U	192	233	41.8	32.6 J	34 U	37 U	38 U	33.8 J	
Phenol		100000	330	ug/kg	72 U	NA	84 U	80 U	71 U	75 U	92 U	98 U	75 U	70 U	77 U	67 U	74 U	76 U	77 U	
Pyrene		100000	1000000	ug/kg	36 U	NA	37.1 J	34.1 J	36 U	41.3	46 U	173	156	111	85.8	34 U	37 U	38 U	41.2	
PCBs																				
Aroclor 1016		1000	3200	ug/kg	34 U	NA	43 U	39 U	36 U	36 U	46 U	47 U	39 U	35 U	40 U	36 U	38 U	38 U	36 U	
Aroclor 1221		1000	3200	ug/kg	34 U	NA	43 U	39 U	36 U	36 U	46 U	47 U	39 U	35 U	40 U	36 U	38 U	38 U	36 U	
Aroclor 1232		1000	3200	ug/kg	34 U	NA	43 U	39 U	36 U	36 U	46 U	47 U	39 U	35 U	40 U	36 U	38 U	38 U	36 U	
Aroclor 1242		1000	3200	ug/kg	34 U	NA	43 U	39 U	36 U	36 U	46 U	47 U	39 U	35 U	40 U	36 U	38 U	38 U	36 U	
Aroclor 1248		1000	3200	ug/kg	34 U	NA	43 U	39 U	36 U	36 U	46 U	47 U	39 U	35 U	40 U	36 U	38 U	38 U	36 U	
Aroclor 1254		1000	3200	ug/kg	34 U	NA	43 U	39 U	36 U	36 U	46 U	47 U	39 U	35 U	40 U	36 U	38 U	38 U	36 U	
Aroclor 1260		1000	3200	ug/kg	34 U	NA	43 U	39 U	36 U	36 U	46 U	47 U	39 U	35 U	40 U	36 U	38 U	38 U	36 U	
Aroclor 1262		1000	3200	ug/kg	34 U	NA	43 U	39 U	36 U	36 U	46 U	47 U	39 U	35 U	40 U	36 U	38 U	38 U	36 U	
Aroclor 1268		1000	3200	ug/kg	34 U	NA	43 U	39 U	36 U	36 U	46 U	47 U	39 U	35 U	40 U	36 U	38 U	38 U	36 U	
Metals																				
Aluminum		NS	NS	mg/kg	9380	13500 J	12000 J	11900 J	8530	6540 J	25000 J	14900 J	12200 J	9640 J	8420 J	7480 J	12800	13900 J	9190 J	
Antimony		NS	NS	mg/kg	2.3 UJ	2.2 UJ	2.6 UJ	2.4 UJ	2.1 UJ	2.4 UJ	2.7 UJ	3.1 UJ	2.3 UJ	2.3 UJ	2.4 UJ	2 UJ	2.3 UJ	2.4 UJ	2.4 J	
Arsenic		16	16	mg/kg	3.5	3.3	5.6	5.3	3	2.8	7.8	3.9	3.6	3.5	2.8	2.6	4	4.2	4.9	
Barium		400	820	mg/kg	44.3	33.6	56.5	53.7	38	60.6	154	98.3	150 J	45.2	61.1	51	63.3	46.5	239	
Beryllium		72	47	mg/kg	0.53	0.46	0.52	0.48	0.44	0.32	1.5	0.65	0.58 J	0.51	0.34	0.41	0.48	0.5	0.5	
Cadmium		4.3	7.5	mg/kg	0.57 U	0.56 UB	0.64 UB	0.6 UB	0.52 U	0.27 B	0.87	0.37 B	0.49 B	0.57 UB	0.6 UB	0.51 UB	0.57 U	0.32 B	2.4	
Calcium		NS	NS	mg/kg	1920	1300 J	3160 J	2820 J	2420	2440 J	4440	3150	3410 J	5090 J	3560 J	4540 J	2700	895 J	3820	
Chromium		NS	NS	mg/kg	17.7	12.3	17.3	15.9	18.2	12.3	30.5	21.3	16.8 J	15.1	19.2	13.3	18.5	13.6	19.5	
Cobalt		NS	NS	mg/kg	9.5	6.2	7.1	6	6.9	5.5 B	11.3	5.9 B	6.2	7.1	7.2	5.5	8.2	4.7 B	8.2	
Copper		270	1720	mg/kg	4.9	9.6	19.7	18.4	11.9	13.9	27.8	16.5	20.7 J	17.2	20.4	12.5	18.6	9.5	38.4	
Iron		NS	NS	mg/kg	18000	14000	19300	17800	16800	13600	25200	17600	20100 J	17300 J	15700 J	13200 J	18400	16800	18600	
Lead		400	450	mg/kg	4.8	8.6	32.6	36.4	5.6	56.9	51.3	50.9	45.5 J	15.3	19.4	12.5	33.9	16.3	165	
Magnesium		NS	NS	mg/kg	2970	2210	3060	2770	2940	2270	3470	2460	2860 J	3830	3420	3720	3560	1810	3030	
Manganese		2000	2000	mg/kg	144	230	351	288	262	216	2220	396	333 J	219 J	243 J	265 J	245	169	447	
Mercury		NS	NS	mg/kg	0.036 UB	0.034	0.095	0.05	0.034 UB	0.027 UB	0.017 B	0.057	0.054	0.048 UB	0.059 UB	0.035 UB	0.037 UB	0.04	0.046	
Nickel		310	130	mg/kg	8.4	9.8	12.7	11.3	10.5	9.7	22.8	11.5	9.6	10.7	10.3	8.2	13.9	8.5	17.3	
Potassium		NS	NS	mg/kg	891 B	648 J	1330 J	1190 J	1120	871 J	1560	1130 B	924 J	999 B	1630	936 B	1450	626 J	1350	
Selenium		180	4	mg/kg	2.3 U	2.2 U	0.96 B	2.4 U	0.48 B	2.4 U	2.7 UB	3.1 U	2.3 U	0.32 B	0.66 B	0.98 B	0.65 B	2.4 U	2.4 U	
Silver		180	8.3	mg/kg	0.57 UB	0.56 U	0.64 U	0.6 UB	0.52 U	0.59 U	2.1	0.77 U	0.57 U	0.59	0.66	1.1	0.57 UB	0.6 B	1.9	
Sodium		NS	NS	mg/kg	200 B	88.9 J	1300 UB	1200 UB	138 B	176 J	193 B	197 B	228 B	238 B	330 B	205 B	166 B	1200 UB	223 B	
Thallium		NS	NS	mg/kg	1.1 U	1.1 U	1.3 U	1.2 U	1 U	0.47 B	2.7 U	1.5 U	1.1 U	1.1 U	1.2 U	1 U	1.1 U	1.2 U	1.2 U	
Vanadium		NS	NS	mg/kg	28.7	21.4	31.3	29.1	24.1	19.4	43.7	36.2	34.3 J	27.9	33.8	21	28.1	25.6	27	
Zinc		10000	2480	mg/kg	30.2	29.1	44.6	44.3	27.6	85.2	92.7	77.7	72.3 J	38.3 J	45.3 J	25.1 J	39.8	34.9	250	
General Chemistry																				
Percent Solids				%	90	88.8	76.6	83.2	91.6	88.8	70.7	64.9	85.6	91.7	81.8	93.5	86.7	84.2	83.7	
Notes																				
NS		No standard																		
NA		Not analyzed																		
J		Estimated result																		
JN		Estimated result																		
R		Rejected result																		
UB		Analyte considered non-detect at the listed value due to associated blank contamination																		
Bold		Result exceeds 375-6.8(b) protection of groundwater soil cleanup objective.																		
Shade		Result exceeds 375-6.8(b) restricted residential use soil cleanup objective.																		

Table 13. Confirmatory Soil Sample Results Area E
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York

Sample ID	TABLE 375-6: RESTRIC. RES. USE SCO	TABLE 375-6: PROTECTION OF GW SCO		PE-E-F9	PE-E-F10	PE-E-G4	PE-E-G5A	PE-E-G6	PE-E-G7	PE-E-G8	PE-E-H6	PE-E-S1	PE-E-S2
Sample Date				4/18/2016	4/18/2016	3/10/2016	3/14/2016	2/23/2016	3/10/2016	3/11/2016	2/23/2016	1/26/2016	1/26/2016
Sample Depth			Units	2-2.5	2-2.5	11-11.5	12.5-13	12-12.5	2-2.5	2-2.5	12-12.5	1.5-2	1.5-2
VOCs													
1,1,1-Trichloroethane	100000	680	ug/kq	2.5 U	2.6 U	2.1 U	1.9 U	2 U	2.2 U	2.3 U	100 U	1.7 U	1.8 U
1,1,2,2-Tetrachloroethane	NS	NS	ug/kg	2.5 U	2.6 U	2.1 U	1.9 U	2 U	2.2 U	2.3 U	100 U	1.7 U	1.8 U
1,1,2-trichloro-1,2,2-trifluoroethane	NS	NS	ug/kg	6.3 U	6.4 U	5.1 U	4.8 U	4.9 U	5.5 U	5.8 U	260 U	4.4 U	4.5 U
1,1,2-Trichloroethane	NS	NS	ug/kg	2.5 U	2.6 U	2.1 U	1.9 U	2 U	2.2 U	2.3 U	100 U	1.7 U	1.8 U
1,1-Dichloroethane	26000	270	ug/kg	1.3 U	1.3 U	1 U	0.97 U	0.98 U	1.1 U	1.2 U	52 U	0.87 U	0.89 U
1,1-Dichloroethene	100000	330	ug/kg	1.3 U	1.3 U	1 U	0.97 U	0.98 U	1.1 U	1.2 U	52 U	0.87 U	0.89 U
1,2,4-Trichlorobenzene	NS	NS	ug/kg	6.3 U	6.4 U	5.1 U	4.8 U	4.9 U	5.5 U	5.8 U	260 U	4.4 U	4.5 U
1,2-Dibromo-3-chloropropane	NS	NS	ug/kg	2.5 U	2.6 U	2.1 U	1.9 U	2 U	2.2 U	2.3 U	100 U	1.7 U	1.8 U
1,2-Dibromoethane	NS	NS	ug/kg	1.3 U	1.3 U	1 U	0.97 U	0.98 U	1.1 U	1.2 U	52 U	0.87 U	0.89 U
1,2-Dichlorobenzene	100000	1100	ug/kg	1.3 U	1.3 U	1 U	0.97 U	0.98 U	1.1 U	1.2 U	12.5 J	0.87 U	0.89 U
1,2-Dichloroethane	3100	20	ug/kg	1.3 U	1.3 U	1 U	0.97 U	0.98 U	1.1 U	1.2 U	52 U	0.87 U	0.89 U
1,2-Dichloropropane	NS	NS	ug/kg	2.5 U	2.6 U	2.1 U	1.9 U	2 U	2.2 U	2.3 U	100 U	1.7 U	1.8 U
1,3-Dichlorobenzene	49000	2400	ug/kg	1.3 U	1.3 U	1 U	0.97 U	0.98 U	1.1 U	1.2 U	52 U	0.87 U	0.89 U
1,4-Dichlorobenzene	13000	1800	ug/kg	1.3 U	1.3 U	1 U	0.97 U	0.98 U	1.1 U	1.2 U	52 U	0.87 U	0.89 U
2-Butanone (MEK)	100000	120	ug/kg	13 U	176	10 U	9.7 U	9.8 U	11 U	12 U	520 U	8.7 U	8.9 U
4-Methyl-2-Pentanone	NS	NS	ug/kg	6.3 U	6.4 U	5.1 U	4.8 U	4.9 U	5.5 U	5.8 U	260 U	4.4 U	4.5 U
Acetone	100000	50	ug/kg	13 U	950	10 U	9.7 U	9.8 U	11 U	12 U	520 U	8.7 U	8.9 U
Benzene	4800	60	ug/kg	0.63 U	0.64 U	0.51 U	0.48 U	0.49 U	0.55 U	0.58 U	26 U	0.44 U	0.45 U
Bromodichloromethane	NS	NS	ug/kg	2.5 U	2.6 U	2.1 U	1.9 U	2 U	2.2 U	2.3 U	100 U	1.7 U	1.8 U
Bromoform	NS	NS	ug/kg	6.3 U	6.4 U	5.1 U	4.8 U	4.9 U	5.5 U	5.8 U	260 U	4.4 U	4.5 U
Bromomethane	NS	NS	ug/kg	6.3 U	6.4 U	5.1 U	4.8 U	4.9 U	5.5 U	5.8 U	260 U	4.4 U	4.5 U
Carbon Disulfide	NS	NS	ug/kq	2.5 U	2.6 U	2.1 U	1.9 U	2 U	2.2 U	2.3 U	100 U	1.7 U	1.8 U
Carbon Tetrachloride	2400	760	ug/kq	2.5 U	2.6 U	2.1 U	1.9 U	2 U	2.2 U	2.3 U	100 U	1.7 U	1.8 U
CFC-11	NS	NS	ug/kq	6.3 U	6.4 U	5.1 U	4.8 U	4.9 U	5.5 U	5.8 U	260 U	4.4 U	4.5 U
CFC-12	NS	NS	ug/kq	6.3 U	6.4 U	5.1 U	4.8 U	4.9 U	5.5 U	5.8 U	260 U	4.4 U	4.5 U
Chlorobenzene	100000	1100	ug/kq	2.5 U	2.6 U	2.1 U	1.9 U	2 U	2.2 U	2.3 U	100 U	1.7 U	1.8 U
Chlorodibromomethane	NS	NS	ug/kg	2.5 U	2.6 U	2.1 U	1.9 U	2 U	2.2 U	2.3 U	100 U	1.7 U	1.8 U
Chloroethane	NS	NS	ug/kg	6.3 U	6.4 U	5.1 U	4.8 U	4.9 U	5.5 U	5.8 U	260 U	4.4 U	4.5 U
Chloroform	49000	370	ug/kg	2.5 U	2.6 U	2.1 U	1.9 U	2 U	2.2 U	2.3 U	100 U	1.7 U	1.8 U
Chloromethane	NS	NS	ug/kg	6.3 U	6.4 U	5.1 U	4.8 U	4.9 U	5.5 U	5.8 U	260 U	4.4 U	4.5 U
cis-1,2-Dichloroethene	100000	250	ug/kg	1.3 U	1.3 U	1 U	0.97 U	0.98 U	1.1 U	1.2 U	52 U	0.87 U	0.89 U
cis-1,3-Dichloropropene	NS	NS	ug/kg	2.5 U	2.6 U	2.1 U	1.9 U	2 U	2.2 U	2.3 U	100 U	1.7 U	1.8 U
Cyclohexane	NS	NS	ug/kg	2.5 U	2.6 U	2.1 U	1.9 U	2 U	2.2 U	2.3 U	100 U	1.7 U	1.8 U
Dichloromethane	NS	NS	ug/kg	6.3 U	1.8 J	5.1 U	4.8 U	4.9 U	5.5 U	5.8 U	260 U	4.4 U	4.5 U
Ethylbenzene	41000	1000	ug/kg	1.3 U	1.3 U	1 U	0.97 U	0.6 J	1.1 U	1.2 U	155	0.87 U	0.89 U
Isopropylbenzene	NS	NS	ug/kg	2.5 U	2.6 U	2.1 U	1.9 U	2 U	2.2 U	2.3 U	22.5 J	1.7 U	1.8 U
Methyl Acetate	NS	NS	ug/kg	6.3 U	6.4 U	5.1 U	4.8 U	4.9 U	5.5 U	5.8 U	260 U	4.4 U	4.5 U
Methyl N-Butyl Ketone (2-Hexanone)	NS	NS	ug/kg	6.3 U	6.4 U	5.1 U	4.8 U	4.9 U	5.5 U	5.8 U	260 U	4.4 U	4.5 U
Methylcyclohexane	NS	NS	ug/kg	2.5 U	2.6 U	2.1 U	1.9 U	0.32 J	2.2 U	2.3 U	150	1.7 U	1.8 U
Methyl-tert-butylether	100000	930	ug/kg	1.3 U	1.3 U	1 U	0.97 U	0.98 U	1.1 U	1.2 U	52 U	0.87 U	0.89 U
Styrene (Monomer)	NS	NS	ug/kg	2.5 U	0.32 J	2.1 U	1.9 U	2 U	2.2 U	2.3 U	100 U	0.62 J	1.8 U
Tetrachloroethene	19000	1300	ug/kg	2.5 U	2.6 U	2.1 U	1.9 U	2 U	2.2 U	2.3 U	100 U	1.7 U	1.8 U
Toluene	100000	700	ug/kg	1.3 U	2	1 U	0.97 U	0.98 U	1.1 U	1.2 U	55.8	0.87 U	0.89 U
Total Xylenes	100000	1600	ug/kg	1.3 U	1.3 U	1 U	0.97 U	2.1	1.1 U	1.2 U	987	0.87 U	0.89 U
trans-1,2-Dichloroethene	100000	190	ug/kg	1.3 U	1.3 U	1 U	0.97 U	0.98 U	1.1 U	1.2 U	52 U	0.87 U	0.89 U
trans-1,3-Dichloropropene	NS	NS	ug/kg	2.5 U	2.6 U	2.1 U	1.9 U	2 U	2.2 U	2.3 U	100 U	1.7 U	1.8 U
Trichloroethene	21000	470	ug/kq	1.3 U	1.3 U	1 U	0.97 U	0.98 U	1.1 U	1.2 U	52 U	0.87 U	0.89 U
Vinyl chloride	900	20	ug/kq	2.5 U	2.6 U	2.1 U	1.9 U	2 U	2.2 U	2.3 U	100 U	1.7 U	1.8 U

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Table 13. Confirmatory Soil Sample Results Area E
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York

Sample ID	TABLE 375-6: RESTRIC. RES. USE SCO	TABLE 375-6: PROTECTION OF GW SCO		PE-E-F9	PE-E-F10	PE-E-G4	PE-E-G5A	PE-E-G6	PE-E-G7	PE-E-G8	PE-E-H6	PE-E-S1	PE-E-S2
Sample Date				4/18/2016	4/18/2016	3/10/2016	3/14/2016	2/23/2016	3/10/2016	3/11/2016	2/23/2016	1/26/2016	1/26/2016
Sample Depth			Units	2-2.5	2-2.5	11-11.5	12.5-13	12-12.5	2-2.5	2-2.5	12-12.5	1.5-2	1.5-2
SVOCs													
1,1-Biphenyl	NS	NS	ug/kq	93 U	83 U	69 U	NA	69 U	84 U	84 U	74 U	66 U	72 U
2,2-Oxybis(1-Chloropropane)	NS	NS	ug/kg	93 U	83 U	69 U	NA	69 U	84 U	84 U	74 U	66 U	72 U
2,4,5-Trichlorophenol	NS	NS	ug/kg	230 U	210 U	170 U	NA	170 U	210 U	210 U	190 U	160 U	180 U
2,4,6-Trichlorophenol	NS	NS	ug/kg	230 U	210 U	170 U	NA	170 U	210 U	210 U	190 U	160 U	180 U
2,4-Dichlorophenol	NS	NS	ug/kg	230 U	210 U	170 U	NA	170 U	210 U	210 U	190 U	160 U	180 U
2,4-Dimethylphenol	NS	NS	ug/kg	230 U	210 U	170 U	NA	170 U	210 U	210 U	190 U	160 U	180 U
2,4-Dinitrophenol	NS	NS	ug/kg	230 U	210 U	170 U	NA	170 U	210 U	210 U	190 U	160 U	180 U
2,4-Dinitrotoluene	NS	NS	ug/kg	46 U	42 U	34 U	NA	35 U	42 U	42 U	37 U	33 U	36 U
2,6-Dinitrotoluene	NS	NS	ug/kg	46 U	42 U	34 U	NA	35 U	42 U	42 U	37 U	33 U	36 U
2-Chloronaphthalene	NS	NS	ug/kg	93 U	83 U	69 U	NA	69 U	84 U	84 U	74 U	66 U	72 U
2-Chlorophenol	NS	NS	ug/kg	93 U	83 U	69 U	NA	69 U	84 U	84 U	74 U	66 U	72 U
2-Methyl-4,6-dinitrophenol	NS	NS	ug/kg	230 U	210 U	170 U	NA	170 U	210 U	210 U	190 U	160 U	180 U
2-Methylnaphthalene	NS	NS	ug/kg	93 U	83 U	69 U	NA	69 U	84 U	84 U	74 U	66 U	72 U
2-Methylphenol	NS	NS	ug/kg	93 U	83 U	69 U	NA	69 U	84 U	84 U	74 U	66 U	72 U
2-Nitroaniline	NS	NS	ug/kg	230 U	210 U	170 U	NA	170 U	210 U	210 U	190 U	160 U	180 U
2-Nitrophenol	NS	NS	ug/kg	230 U	210 U	170 U	NA	170 U	210 U	210 U	190 U	160 U	180 U
3,3-Dichlorobenzidine	NS	NS	ug/kg	93 U	83 U	69 U	NA	69 U	84 U	84 U	74 U	66 U	72 U
3-Methylphenol, 4-Methylphenol	NS	NS	ug/kg	153	1640	69 U	NA	69 U	84 U	84 U	74 U	66 U	72 U
3-Nitroaniline	NS	NS	ug/kg	230 U	210 U	170 U	NA	170 U	210 U	210 U	190 U	160 U	180 U
4-Bromophenyl phenyl ether	NS	NS	ug/kg	93 U	83 U	69 U	NA	69 U	84 U	84 U	74 U	66 U	72 U
4-Chloro-3-Methylphenol	NS	NS	ug/kg	230 U	210 U	170 U	NA	170 U	210 U	210 U	190 U	160 U	180 U
4-Chlorophenyl phenyl ether	NS	NS	ug/kq	93 U	83 U	69 U	NA	69 U	84 U	84 U	74 U	66 U	72 U
4-Nitroaniline	NS	NS	ug/kq	230 U	210 U	170 U	NA	170 U	210 U	210 U	190 U	160 U	180 U
4-Nitrophenol	NS	NS	ug/kq	460 U	420 U	340 U	NA	350 U	420 U	420 U	370 U	330 U	360 U
Acenaphthene	100000	98000	ug/kq	46 U	42 U	34 U	NA	35 U	42 U	42 U	37 U	33 U	36 U
Acenaphthylene	100000	107000	ug/kq	46 U	42 U	34 U	NA	35 U	42 U	42 U	37 U	33 U	36 U
Acetophenone	NS	NS	ug/kg	230 U	79.2 J	170 U	NA	170 U	210 U	210 U	190 U	160 U	180 U
Anthracene	100000	1000000	ug/kg	46 U	42 U	34 U	NA	35 U	42 U	42 U	37 U	19.3 J	36 U
Atrazine	NS	NS	ug/kg	93 U	83 U	69 U	NA	69 U	84 U	84 U	74 U	66 U	72 U
Benzaldehyde	NS	NS	ug/kg	230 U	20.1 J	170 UJ	NA	170 U	210 UJ	210 U	190 U	160 U	27.5 J
Benzo(a)anthracene	1000	1000	ug/kg	18.9 J	22.3 J	34 U	NA	35 U	42 U	17.8 J	37 U	68.8	15.1 J
Benzo(a)pyrene	1000	22000	ug/kg	46 U	20.3 J	34 U	NA	35 U	42 U	42 U	37 U	76	16 J
Benzo(b)fluoranthene	1000	1700	ug/kg	22.5 J	26.8 J	34 U	NA	35 U	42 U	30.2 J	37 U	93	36 U
Benzo(g,h,i)perylene	100000	1000000	ug/kg	46 U	16.9 J	34 U	NA	35 U	42 U	42 U	37 U	53.7	14.8 J
Benzo(k)fluoranthene	3900	1700	ug/kg	46 U	42 U	34 U	NA	35 U	42 U	42 U	37 U	32.4 J	36 U
bis(2-Chloroethoxy)methane	NS	NS	ug/kg	93 U	83 U	69 U	NA	69 U	84 U	84 U	74 U	66 U	72 U
bis(2-Chloroethyl)ether	NS	NS	ug/kg	93 U	83 U	69 U	NA	69 U	84 U	84 U	74 U	66 U	72 U
bis(2-Ethylhexyl)phthalate	NS	NS	ug/kg	93 U	83 U	5000	NA	69 U	84 U	84 U	74 U	73.5	72 U
Butyl benzyl phthalate	NS	NS	ug/kg	93 U	83 U	69 U	NA	69 U	84 U	84 U	74 U	66 U	72 U
Caprolactam	NS	NS	ug/kg	93 U	83 U	69 U	NA	69 U	84 U	84 U	74 U	66 U	72 U
Carbazole	NS	NS	ug/kg	93 U	83 U	69 U	NA	69 U	84 U	84 U	74 U	66 U	72 U
Chrysene	3900	1000	ug/kg	46 U	24.6 J	34 U	NA	35 U	42 U	18 J	37 U	63.5	19.2 J
Dibenzo(a,h)anthracene	330	1000000	ug/kg	46 U	42 U	34 U	NA	35 U	42 U	42 U	37 U	14.9 J	36 U
Dibenzofuran	NS	NS	ug/kg	93 U	83 U	69 U	NA	69 U	84 U	84 U	74 U	66 U	72 U
Diethyl phthalate	NS	NS	ug/kg	93 U	83 U	69 U	NA	69 U	84 U	84 U	74 U	66 U	72 U
Dimethyl phthalate	NS	NS	ug/kg	93 U	83 U	69 U	NA	69 U	84 U	84 U	74 U	66 U	72 U
Di-n-butyl phthalate	NS	NS	ug/kq	93 U	83 U	69 U	NA	69 U	84 U	84 U	74 U	66 U	72 U
Di-n-octyl phthalate	NS	NS	ug/kq	93 U	83 U	69 U	NA	69 U	84 U	84 U	74 U	66 U	72 U
Fluoranthene	100000	1000000	ug/kq	35.6 J	43.5	34 U	NA	35 U	42 U	27.4 J	37 U	127	25.5 J
Fluorene	100000	386000	ug/kq	46 U	42 U	34 U	NA	35 U	42 U	42 U	37 U	33 U	36 U
Hexachloro-1,3-butadiene	NS	NS	ug/kq	46 U	42 U	34 U	NA	35 U	42 U	42 U	37 U	33 U	36 U
Hexachlorobenzene	NS	NS	ug/kg	93 U	83 U	69 U	NA	69 U	84 U	84 U	74 U	66 U	72 U
Hexachlorocyclopentadiene	NS	NS	ug/kg	460 U	420 U	340 U	NA	350 U	420 U	420 U	370 U	330 U	360 U
Hexachloroethane	NS	NS	ug/kg	230 U	210 U	170 U	NA	170 U	210 U	210 U	190 U	160 U	180 U

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Table 13. Confirmatory Soil Sample Results Area E
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York

Sample ID		TABLE 375-6: RESTRIC. RES. USE SCO	TABLE 375-6: PROTECTION OF GW SCO		PE-E-F9	PE-E-F10	PE-E-G4	PE-E-G5A	PE-E-G6	PE-E-G7	PE-E-G8	PE-E-H6	PE-E-S1	PE-E-S2
Sample Date	4/18/2016				4/18/2016	3/10/2016	3/14/2016	2/23/2016	3/10/2016	3/11/2016	2/23/2016	1/26/2016	1/26/2016	
Sample Depth	Units				2-2.5	2-2.5	11-11.5	12.5-13	12-12.5	2-2.5	2-2.5	12-12.5	1.5-2	1.5-2
SVOCs cont.														
		500	8200	ug/kq	46 U	42 U	34 U	NA	35 U	42 U	42 U	37 U	58.3	36 U
		NS	NS	ug/kg	93 U	83 U	69 U	NA	69 U	84 U	84 U	74 U	66 U	72 U
		100000	12000	ug/kg	46 U	42 U	17 J	NA	35 U	42 U	42 U	34.4 J	33 U	36 U
		NS	NS	ug/kg	93 U	83 U	69 U	NA	69 U	84 U	84 U	74 U	66 U	72 U
		NS	NS	ug/kg	93 U	83 U	69 U	NA	69 U	84 U	84 U	74 U	66 U	72 U
		NS	NS	ug/kg	230 U	210 U	170 U	NA	170 U	210 U	210 U	190 U	160 U	180 U
		NS	NS	ug/kg	230 U	210 U	170 U	NA	170 U	210 U	210 U	190 U	160 U	180 U
		6700	800	ug/kg	230 U	210 U	170 U	NA	170 U	210 U	210 U	190 U	160 U	180 U
		100000	1000000	ug/kg	46 U	29.6 J	34 U	NA	35 U	42 U	42 U	37 U	59.7	36 U
		100000	330	ug/kg	93 U	83 U	69 U	NA	69 U	84 U	84 U	74 U	66 U	72 U
		100000	1000000	ug/kg	31.7 J	40.6 J	34 U	NA	35 U	42 U	25.5 J	37 U	115	24.8 J
PCBs														
		1000	3200	ug/kg	45 U	41 U	35 U	NA	34 U	43 U	38 U	37 U	32 U	37 U
		1000	3200	ug/kg	45 U	41 U	35 U	NA	34 U	43 U	38 U	37 U	32 U	37 U
		1000	3200	ug/kg	45 U	41 U	35 U	NA	34 U	43 U	38 U	37 U	32 U	37 U
		1000	3200	ug/kg	45 U	41 U	35 U	NA	34 U	43 U	38 U	37 U	32 U	37 U
		1000	3200	ug/kg	45 U	41 U	35 U	NA	34 U	43 U	38 U	37 U	32 U	37 U
		1000	3200	ug/kg	45 U	41 U	35 U	NA	34 U	43 U	38 U	37 U	32 U	37 U
		1000	3200	ug/kg	45 U	41 U	35 U	NA	34 U	43 U	38 U	37 U	32 U	37 U
		1000	3200	ug/kg	45 U	41 U	35 U	NA	34 U	43 U	38 U	37 U	32 U	37 U
Metals														
		NS	NS	mg/kq	8780 J	10700 J	7780 J	NA	6690 J	14700 J	15100 J	8300 J	4360 J	9320 J
		NS	NS	mg/kq	1.4 J	0.6 J	2.1 UJ	NA	2.2 UJ	2.6 UJ	2.4 UJ	2.2 UJ	2 UJ	2.2 UJ
		16	16	mg/kq	4.3	4	3	NA	1.9 B	4.7	5.7	2.2	3.1	3.2
		400	820	mg/kq	92.7	206 J	60.6	NA	20.2 B	51.4	37.5	45	15.9 B	48.1
		72	47	mg/kg	0.46	0.48 J	0.39	NA	0.37	0.57	0.49	0.48	0.3	0.46
		4.3	7.5	mg/kg	0.42 B	0.68	0.51 U	NA	0.54 U	0.65 U	0.35 B	0.087 B	0.16 B	0.089 B
		NS	NS	mg/kg	3220	3370 J	1510 J	NA	1530 J	1780 J	797 J	2160 J	98600 J	2610 J
		NS	NS	mg/kg	18.7	19.7 J	23	NA	10.3	21.7	13.8	14.2	7.3	14.6
		NS	NS	mg/kg	7.6	7	5.6	NA	6.1	8.9	4 B	7.4	4.9	6.3
		270	1720	mg/kg	19.6	25.5 J	9.8	NA	13.1	17.5	9.4	16	17	12
		NS	NS	mg/kg	19400	17600 J	13600	NA	12400 J	20300	15800	16100 J	9830 J	15100 J
		400	450	mg/kg	109	69.3 J	11.6	NA	4.5	17.9	35.8	4.2	11.4	15.3
		NS	NS	mg/kg	3120	3070 J	2670	NA	2420	3710	1610	3000	58200	2640
		2000	2000	mg/kg	711	381 J	80.6	NA	122 J	258	90.4	265 J	235 J	241 J
		NS	NS	mg/kg	0.029 B	0.038	0.034 UB	NA	0.034 UB	0.038 UB	0.049	0.034 UB	0.031 UB	0.034 UB
		310	130	mg/kg	14.1	13.6	9.4	NA	9.6	16	8.2	10.7	9.7	10.9
		NS	NS	mg/kg	1230 B	1410 J	846 J	NA	685 B	1200 J	478 J	1250	898 B	953 B
		180	4	mg/kg	2.8 U	2.6 U	2.1 U	NA	2.2 U	0.62 B	2.4 UB	2.2 U	2 U	2.2 U
		180	8.3	mg/kg	0.69 U	0.65 U	0.51 UB	NA	0.32 B	0.65 U	0.5 B	0.23 B	2.5 U	0.56 U
		NS	NS	mg/kg	201 B	244 B	1000 UB	NA	81.3 B	1300 UB	1200 UB	191 B	312 B	192 B
		NS	NS	mg/kg	1.4 U	1.3 U	1 U	NA	1.1 U	1.3 U	1.2 U	1.1 U	0.98 UB	1.1 U
		NS	NS	mg/kg	31.3	29.4 J	23.2	NA	15.2	32.7	27.7	26	18.5	25.2
		10000	2480	mg/kg	67.5	124 J	22.2	NA	21.7 J	35.9	34.8	25.5 J	28 J	33 J
General Chemistry														
Percent Solids				%	70.1	74.9	93.5	NA	94.3	76.5	79	88.8	NA	NA
Notes														
	NS	No standard												
	NA	Not analyzed												
	J	Estimated result												
	JN	Estimated result												
	R	Rejected result												
	UB	Analyte considered non-detect at the listed value due to associated blank contamination												
	Bold	Result exceeds 375-6.8(b) protection of groundwater soil cleanup objective.												
	Shade	Result exceeds 375-6.8(b) restricted residential use soil cleanup objective.												

Table 13. Confirmatory Soil Sample Results Area E
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York

Sample ID	TABLE 375-6: RESTRIC. RES. USE SCO	TABLE 375-6: PROTECTION OF GW SCO		PE-E-S20	PE-E-S3	PE-E-S7	PE-E-S8	PE-E-S9	PE-E-S10	PE-E-S11	PE-E-S12	PE-E-S13	PE-E-S13	PE-E-S14	PE-E-S15	PE-E-S16	PE-E-S18	PE-E-S18
Sample Date				4/19/2016	1/27/2016	3/14/2016	3/14/2016	3/31/2016	3/31/2016	3/31/2016	4/1/2016	DUP-022_201604	4/14/2016	4/14/2016	4/114/16	4/14/2016	4/19/2016	4/19/2016
Sample Depth			Units	2-2.5	1.5-2	3.5-4	1.5-2	1-1.5	1-1.5	2-2.5	1.5-2	1.5-2	1.5-2	1.5-2	1.5-2	1.5-2	0	2-2.5
VOCs																		
1,1,1-Trichloroethane	100000	680	ug/kg	1.9 U	1.6 U	1.9 U	1.8 U	2.1 U	2.5 U	2 U	2.1 U	2.1 U	2.1 U	3.3 U	1.9 U	2.5 U	2.5 U	2.4 U
1,1,2,2-Tetrachloroethane	NS	NS	ug/kg	1.9 U	1.6 U	1.9 U	1.8 U	2.1 U	2.5 U	2 U	2.1 U	2.1 U	2.1 U	3.3 UJ	1.9 U	2.5 U	2.5 U	2.4 U
1,1,2-trichloro-1,2,2-trifluoroethane	NS	NS	ug/kg	4.7 U	3.9 U	4.7 U	4.5 U	5.2 UJ	6.3 UJ	5.1 UJ	5.2 U	5.2 U	5.2 U	8.2 U	4.6 U	6.2 U	6.3 U	6.1 U
1,1,2-Trichloroethane	NS	NS	ug/kg	1.9 U	1.6 U	1.9 U	1.8 U	2.1 U	2.5 U	2 U	2.1 U	2.1 U	2.1 U	3.3 UJ	1.9 U	2.5 U	2.5 U	2.4 U
1,1-Dichloroethane	26000	270	ug/kg	0.94 U	0.78 U	0.94 U	0.9 U	1 U	1.3 U	1 U	1 U	1 U	1 U	1.6 U	0.93 U	1.2 U	1.3 U	1.2 U
1,1-Dichloroethene	100000	330	ug/kg	0.94 U	0.78 U	0.94 U	0.9 U	1 U	1.3 U	1 U	1 U	1 U	1 U	1.6 U	0.93 U	1.2 U	1.3 U	1.2 U
1,2,4-Trichlorobenzene	NS	NS	ug/kg	4.7 U	3.9 U	4.7 U	4.5 U	5.2 U	6.3 U	5.1 U	5.2 U	5.2 U	5.2 U	8.2 U	4.6 U	6.2 U	6.3 U	6.1 U
1,2-Dibromo-3-chloropropane	NS	NS	ug/kg	1.9 U	1.6 U	1.9 U	1.8 U	2.1 U	2.5 U	2 U	2.1 U	2.1 U	2.1 U	3.3 UJ	1.9 U	2.5 U	2.5 U	2.4 U
1,2-Dibromoethane	NS	NS	ug/kg	0.94 U	0.78 U	0.94 U	0.9 U	1 U	1.3 U	1 U	1 U	1 U	1 U	1.6 UJ	0.93 U	1.2 U	1.3 U	1.2 U
1,2-Dichlorobenzene	100000	1100	ug/kg	0.94 U	0.78 U	0.94 U	0.9 U	1 U	1.3 U	1 U	1 U	1 U	1 U	1.6 U	0.93 U	1.2 U	1.3 U	1.2 U
1,2-Dichloroethane	3100	20	ug/kg	0.94 U	0.78 U	0.94 U	0.9 U	1 U	1.3 U	1 U	1 U	1 U	1 U	1.6 UJ	0.93 U	1.2 U	1.3 U	1.2 U
1,2-Dichloropropane	NS	NS	ug/kg	1.9 U	1.6 U	1.9 U	1.8 U	2.1 U	2.5 U	2 U	2.1 U	2.1 U	2.1 U	3.3 U	1.9 U	2.5 U	2.5 U	2.4 U
1,3-Dichlorobenzene	49000	2400	ug/kg	0.94 U	0.78 U	0.94 U	0.9 U	1 U	1.3 U	1 U	1 U	1 U	1 U	1.6 U	0.93 U	1.2 U	1.3 U	1.2 U
1,4-Dichlorobenzene	13000	1800	ug/kg	0.94 U	0.78 U	0.94 U	0.9 U	1 U	1.3 U	1 U	1 U	1 U	1 U	1.6 U	0.93 U	1.2 U	1.3 U	1.2 U
2-Butanone (MEK)	100000	120	ug/kg	9.4 U	4.6 J	9.4 U	9 U	10 U	13 U	10 U	10 U	10 U	10 U	16 UJ	9.3 U	12 U	13 U	12 U
4-Methyl-2-Pentanone	NS	NS	ug/kg	4.7 U	3.9 U	4.7 U	4.5 U	5.2 U	6.3 U	5.1 U	5.2 U	5.2 U	5.2 U	8.2 UJ	4.6 U	6.2 U	6.3 U	6.1 U
Acetone	100000	50	ug/kg	9.4 U	30.5	9.4 U	9 U	10 U	6.1 J	10 U	10 U	39.2 J	10 UJ	16 UJ	9.3 U	12 U	13 U	12 U
Benzene	4800	60	ug/kg	0.47 U	0.39 U	0.47 U	0.45 U	0.52 U	0.63 U	0.51 U	0.52 U	0.52 U	0.52 U	0.82 U	0.46 U	0.62 U	0.63 U	0.61 U
Bromodichloromethane	NS	NS	ug/kg	1.9 U	1.6 U	1.9 U	1.8 U	2.1 U	2.5 U	2 U	2.1 U	2.1 U	2.1 U	3.3 U	1.9 U	2.5 U	2.5 U	2.4 U
Bromoform	NS	NS	ug/kg	4.7 U	3.9 U	4.7 U	4.5 U	5.2 U	6.3 U	5.1 U	5.2 U	5.2 U	5.2 U	8.2 UJ	4.6 U	6.2 U	6.3 U	6.1 U
Bromomethane	NS	NS	ug/kg	4.7 U	3.9 U	4.7 U	4.5 U	5.2 U	6.3 U	5.1 U	5.2 U	5.2 U	5.2 U	8.2 U	4.6 U	6.2 U	6.3 U	6.1 U
Carbon Disulfide	NS	NS	ug/kg	1.9 U	1.6 U	1.9 U	1.8 U	2.1 U	2.5 U	2 U	2.1 U	0.35 J	2.1 U	3.3 U	1.9 U	2.5 U	2.5 U	2.4 U
Carbon Tetrachloride	2400	760	ug/kg	1.9 U	1.6 U	1.9 U	1.8 U	2.1 U	2.5 U	2 U	2.1 U	2.1 U	2.1 U	3.3 U	1.9 U	2.5 U	2.5 U	2.4 U
CFC-11	NS	NS	ug/kg	4.7 U	3.9 U	4.7 U	4.5 U	5.2 U	6.3 U	5.1 U	5.2 U	5.2 U	5.2 U	8.2 U	4.6 U	6.2 U	6.3 U	6.1 U
CFC-12	NS	NS	ug/kg	4.7 U	3.9 U	4.7 U	4.5 U	5.2 U	6.3 U	5.1 U	5.2 U	5.2 U	5.2 U	8.2 U	4.6 U	6.2 U	6.3 U	6.1 U
Chlorobenzene	100000	1100	ug/kg	1.9 U	1.6 U	1.9 U	1.8 U	2.1 U	2.5 U	2 U	2.1 U	2.1 U	2.1 U	3.3 U	1.9 U	2.5 U	2.5 U	2.4 U
Chlorodibromomethane	NS	NS	ug/kg	1.9 U	1.6 U	1.9 U	1.8 U	2.1 U	2.5 U	2 U	2.1 U	2.1 U	2.1 U	3.3 UJ	1.9 U	2.5 U	2.5 U	2.4 U
Chloroethane	NS	NS	ug/kg	4.7 U	3.9 U	4.7 U	4.5 U	5.2 U	6.3 U	5.1 U	5.2 U	5.2 U	5.2 U	8.2 U	4.6 U	6.2 U	6.3 U	6.1 U
Chloroform	49000	370	ug/kg	1.9 U	1.6 U	1.9 U	1.8 U	2.1 U	2.5 U	2 U	2.1 U	2.1 U	2.1 U	3.3 U	1.9 U	2.5 U	2.5 U	2.4 U
Chloromethane	NS	NS	ug/kg	4.7 U	3.9 U	4.7 U	4.5 U	5.2 U	6.3 U	5.1 U	5.2 U	5.2 U	5.2 U	8.2 U	4.6 U	6.2 U	6.3 U	6.1 U
cis-1,2-Dichloroethene	100000	250	ug/kg	0.94 U	0.78 U	0.94 U	0.9 U	1 U	1.3 U	1 U	1 U	1 U	1 U	1.6 U	0.93 U	1.2 U	1.3 U	1.2 U
cis-1,3-Dichloropropene	NS	NS	ug/kg	1.9 U	1.6 U	1.9 U	1.8 U	2.1 U	2.5 U	2 U	2.1 U	2.1 U	2.1 U	3.3 U	1.9 U	2.5 U	2.5 U	2.4 U
Cyclohexane	NS	NS	ug/kg	1.9 U	1.6 U	1.9 U	1.8 U	2.1 U	2.5 U	2 U	2.1 U	2.1 U	2.1 U	3.3 U	1.9 U	2.5 U	2.5 U	2.4 U
Dichloromethane	NS	NS	ug/kg	4.7 U	3.9 U	4.7 U	4.5 U	5.2 U	6.3 U	5.1 U	5.2 U	5.2 U	5.2 U	8.2 U	4.6 U	6.2 U	6.3 U	6.1 U
Ethylbenzene	41000	1000	ug/kg	0.94 U	0.78 U	0.94 U	0.9 U	1 U	1.3 U	1 U	0.54 J	1 U	1 U	0.45 J	0.93 U	1.2 U	1.3 U	1.2 U
Isopropylbenzene	NS	NS	ug/kg	1.9 U	0.15 J	1.9 U	1.8 U	2.1 U	2.5 U	2 U	2.1 U	2.1 U	2.1 U	3.3 U	1.9 U	2.5 U	2.5 U	2.4 U
Methyl Acetate	NS	NS	ug/kg	4.7 U	3.9 U	4.7 U	4.5 U	5.2 U	6.3 U	5.1 U	5.2 U	5.2 U	5.2 U	8.2 UJ	4.6 U	6.2 U	6.3 U	6.1 U
Methyl N-Butyl Ketone (2-Hexanone)	NS	NS	ug/kg	4.7 U	3.9 U	4.7 U	4.5 U	5.2 U	6.3 U	5.1 U	5.2 U	5.2 U	5.2 U	8.2 UJ	4.6 U	6.2 U	6.3 U	6.1 U
Methylcyclohexane	NS	NS	ug/kg	1.9 U	1.6 U	1.9 U	1.8 U	2.1 U	2.5 U	2 U	2.8	2.1 U	2.1 U	3.3 U	1.9 U	2.5 U	2.5 U	2.4 U
Methyl-tert-butylether	100000	930	ug/kg	0.94 U	0.78 U	0.94 U	0.9 U	1 U	1.3 U	1 U	1 U	1 U	1 U	1.6 UJ	0.93 U	1.2 U	1.3 U	1.2 U
Styrene (Monomer)	NS	NS	ug/kg	1.9 U	0.2 J	0.59 J	1.8 U	2.1 U	2.5 U	2 U	2.1 U	2.1 U	2.1 U	3.3 U	1.9 U	2.5 U	2.5 U	2.4 U
Tetrachloroethene	19000	1300	ug/kg	1.9 U	1.6 U	1.9 U	1.8 U	2.1 U	2.5 U	2 U	2.1 U	2.1 U	2.1 U	3.3 U	1.9 U	2.5 U	2.5 U	2.4 U
Toluene	100000	700	ug/kg	0.94 U	0.78 U	0.94 U	0.9 U	1 U	1.3 U	1 U	1 U	1 U	1 U	0.54 J	0.93 U	1.2 U	1.3 U	1.2 U
Total Xylenes	100000	1600	ug/kg	0.94 U	0.78 U	0.94 U	0.9 U	1 U	1.3 U	1 U	3.1	0.3 J	0.73 J	2.4	0.93 U	1.2 U	1.3 U	1.2 U
trans-1,2-Dichloroethene	100000	190	ug/kg	0.94 U	0.78 U	0.94 U	0.9 U	1 U	1.3 U	1 U	1 U	1 U	1 U	1.6 U	0.93 U	1.2 U	1.3 U	1.2 U
trans-1,3-Dichloropropene	NS	NS	ug/kg	1.9 U	1.6 U	1.9 U	1.8 U	2.1 U	2.5 U	2 U	2.1 U	2.1 U	2.1 U	3.3 UJ	1.9 U	2.5 U	2.5 U	2.4 U
Trichloroethene	21000	470	ug/kg	0.94 U	0.78 U	0.94 U	0.9 U	1 U	1.3 U	1 U	1 U	1 U	1 U	1.6 U	0.93 U	1.2 U	1.3 U	1.2 U
Vinyl chloride	900	20	ug/kg	1.9 U	1.6 U	1.9 U	1.8 U	2.1 U	2.5 U	2 U	2.1 U	2.1 U	2.1 U	3.3 U	1.9 U	2.5 U	2.5 U	2.4 U

See Notes on Last Page

Table 13. Confirmatory Soil Sample Results Area E
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York

Sample ID	TABLE 375-6: RESTRIC. RES. USE SCO	TABLE 375-6: PROTECTION OF GW SCO		PE-E-S20	PE-E-S3	PE-E-S7	PE-E-S8	PE-E-S9	PE-E-S10	PE-E-S11	PE-E-S12	PE-E-S13	PE-E-S13	PE-E-S14	PE-E-S15	PE-E-S16	PE-E-S18	PE-E-S18
Sample Date				4/19/2016	1/27/2016	3/14/2016	3/14/2016	3/31/2016	3/31/2016	3/31/2016	4/1/2016	DUP-022_201604	4/14/2016	4/14/2016	4/114/16	4/14/2016	4/19/2016	4/19/2016
Sample Depth			Units	2-2.5	1.5-2	3.5-4	1.5-2	1-1.5	1-1.5	2-2.5	1.5-2	1.5-2	1.5-2	1.5-2	1.5-2	1.5-2	0	2-2.5
SVOCs																		
1,1-Biphenyl	NS	NS	ug/kq	71 U	69 U	68 U	66 U	70 U	85 U	75 U	79 U	73 U	73 U	85 U	75 U	87 U	90 U	82 U
2,2-Oxybis(1-Chloropropane)	NS	NS	ug/kg	71 U	69 U	68 U	66 U	70 U	85 U	75 U	79 U	73 U	73 U	85 U	75 U	87 U	90 U	82 U
2,4,5-Trichlorophenol	NS	NS	ug/kg	180 U	170 U	170 U	160 U	180 U	210 U	190 U	200 U	180 U	180 U	210 U	190 U	220 U	220 U	210 U
2,4,6-Trichlorophenol	NS	NS	ug/kg	180 U	170 U	170 U	160 U	180 U	210 U	190 U	200 U	180 U	180 U	210 U	190 U	220 U	220 U	210 U
2,4-Dichlorophenol	NS	NS	ug/kg	180 U	170 U	170 U	160 U	180 U	210 U	190 U	200 U	180 U	180 U	210 U	190 U	220 U	220 U	210 U
2,4-Dimethylphenol	NS	NS	ug/kg	180 U	170 U	170 U	160 U	180 U	210 U	190 U	200 U	180 U	180 U	210 U	190 U	220 U	220 U	210 U
2,4-Dinitrophenol	NS	NS	ug/kg	180 U	170 U	170 U	160 U	180 U	210 U	190 U	200 U	180 U	180 U	210 U	190 U	220 U	220 U	210 U
2,4-Dinitrotoluene	NS	NS	ug/kg	36 U	35 U	34 U	33 U	35 U	42 U	37 U	40 U	37 U	36 U	43 U	37 U	44 U	45 U	41 U
2,6-Dinitrotoluene	NS	NS	ug/kg	36 U	35 U	34 U	33 U	35 U	42 U	37 U	40 U	37 U	36 U	43 U	37 U	44 U	45 U	41 U
2-Chloronaphthalene	NS	NS	ug/kg	71 U	69 U	68 U	66 U	70 U	85 U	75 U	79 U	73 U	73 U	85 U	75 U	87 U	90 U	82 U
2-Chlorophenol	NS	NS	ug/kg	71 U	69 U	68 U	66 U	70 U	85 U	75 U	79 U	73 U	73 U	85 U	75 U	87 U	90 U	82 U
2-Methyl-4,6-dinitrophenol	NS	NS	ug/kg	180 U	170 U	170 U	160 U	180 U	210 U	190 U	200 U	180 U	180 U	210 U	190 U	220 U	220 U	210 U
2-Methylnaphthalene	NS	NS	ug/kg	71 U	20.4 J	68 U	66 U	70 U	85 U	75 U	18.3 J	73 U	73 U	85 U	75 U	87 U	90 U	82 U
2-Methylphenol	NS	NS	ug/kg	71 U	69 U	68 U	66 U	70 U	85 U	75 U	79 U	73 U	73 U	85 U	75 U	87 U	90 U	82 U
2-Nitroaniline	NS	NS	ug/kg	180 U	170 U	170 U	160 U	180 U	210 U	190 U	200 U	180 U	180 U	210 U	190 U	220 U	220 U	210 U
2-Nitrophenol	NS	NS	ug/kg	180 U	170 U	170 U	160 U	180 U	210 U	190 U	200 U	180 U	180 U	210 U	190 U	220 U	220 U	210 U
3,3-Dichlorobenzidine	NS	NS	ug/kg	71 U	69 U	68 U	66 U	70 U	85 U	75 U	79 U	73 U	73 U	85 U	75 U	87 U	90 U	82 U
3-Methylphenol, 4-Methylphenol	NS	NS	ug/kg	71 U	69 U	68 U	66 U	70 U	85 U	75 U	79 U	303 J	130 J	85 U	75 U	87 U	62.5 J	73.2 J
3-Nitroaniline	NS	NS	ug/kg	180 U	170 U	170 U	160 U	180 U	210 U	190 U	200 U	180 U	180 U	210 U	190 U	220 U	220 U	210 U
4-Bromophenyl phenyl ether	NS	NS	ug/kg	71 U	69 U	68 U	66 U	70 U	85 U	75 U	79 U	73 U	73 U	85 U	75 U	87 U	90 U	82 U
4-Chloro-3-Methylphenol	NS	NS	ug/kg	180 U	170 U	170 U	160 U	180 U	210 U	190 U	200 U	180 U	180 U	210 U	190 U	220 U	220 U	210 U
4-Chlorophenyl phenyl ether	NS	NS	ug/kq	71 U	69 U	68 U	66 U	70 U	85 U	75 U	79 U	73 U	73 U	85 U	75 U	87 U	90 U	82 U
4-Nitroaniline	NS	NS	ug/kq	180 U	170 U	170 U	160 U	180 U	210 U	190 U	200 U	180 U	180 U	210 U	190 U	220 U	220 U	210 U
4-Nitrophenol	NS	NS	ug/kq	360 U	350 U	340 U	330 U	350 U	420 U	370 U	400 U	370 U	360 U	430 U	370 U	440 U	450 U	410 U
Acenaphthene	100000	98000	ug/kq	36 U	35 U	34 U	33 U	35 U	42 U	37 U	40 U	37 U	36 U	43 U	37 U	44 U	45 U	41 U
Acenaphthylene	100000	107000	ug/kq	36 U	35 U	34 U	33 U	35 U	42 U	37 U	40 U	37 U	36 U	43 U	37 U	44 U	45 U	61.9
Acetophenone	NS	NS	ug/kg	180 U	170 U	170 U	160 U	180 U	210 U	190 U	200 U	180 U	180 U	210 U	190 U	220 U	220 U	210 U
Anthracene	100000	1000000	ug/kg	36 U	35 U	34 U	33 U	35 U	42 U	37 U	40 U	37 U	30.7 J	43 U	37 U	44 U	19.3 J	102
Atrazine	NS	NS	ug/kg	71 U	69 U	68 U	66 U	70 U	85 U	75 U	79 U	73 U	73 U	85 U	75 U	87 U	90 U	82 U
Benzaldehyde	NS	NS	ug/kg	180 U	170 U	170 UJ	160 UJ	180 U	210 U	190 U	200 U	180 U	180 U	22.2 J	190 U	37.4 J	220 U	210 U
Benzo(a)anthracene	1000	1000	ug/kg	36 U	35 U	34 U	33 U	32.9 J	37 J	37 U	29.9 J	37 U	65.3	43 U	37 U	18.2 J	76.4 J	333 J
Benzo(a)pyrene	1000	22000	ug/kg	36 U	35 U	34 U	33 U	29.2 J	30.1 J	37 U	39.6 J	37 U	62.4	43 U	37 U	21.5 J	52.5 J	299 J
Benzo(b)fluoranthene	1000	1700	ug/kg	36 U	35 U	34 U	33 U	41	40.2 J	37 U	48.4	16.5 J	78.7	43 U	37 U	30.7 J	113 J	628 J
Benzo(g,h,i)perylene	100000	1000000	ug/kg	36 U	35 U	34 U	33 U	18.9 J	17.7 J	37 U	26.3 J	37 U	41.4	43 U	37 U	19.2 J	35.9 J	134
Benzo(k)fluoranthene	3900	1700	ug/kg	36 U	35 U	34 U	33 U	35 U	42 U	37 U	20.6 J	37 U	35.5 J	43 U	37 U	44 U	45.2 J	213 J
bis(2-Chloroethoxy)methane	NS	NS	ug/kg	71 U	69 U	68 U	66 U	70 U	85 U	75 U	79 U	73 U	73 U	85 U	75 U	87 U	90 U	82 U
bis(2-Chloroethyl)ether	NS	NS	ug/kg	71 U	69 U	68 U	66 U	70 U	85 U	75 U	79 U	73 U	73 U	85 U	75 U	87 U	90 U	82 U
bis(2-Ethylhexyl)phthalate	NS	NS	ug/kg	71 U	69 U	68 U	66 U	38.7 J	85 U	75 U	59.6 J	73 U	73 U	85 U	75 U	298	47.1 J	82 U
Butyl benzyl phthalate	NS	NS	ug/kg	71 U	69 U	68 U	66 U	70 U	85 U	75 U	79 U	73 U	73 U	85 U	75 U	87 U	90 U	82 U
Caprolactam	NS	NS	ug/kg	71 U	69 U	68 U	66 U	70 U	85 U	75 U	79 U	73 U	73 U	85 U	75 U	87 U	90 U	82 U
Carbazole	NS	NS	ug/kg	71 U	69 U	68 U	66 U	70 U	85 U	75 U	79 U	73 U	19.9 J	85 U	75 U	87 U	90 U	62.7 J
Chrysene	3900	1000	ug/kg	36 U	35 U	34 U	33 U	31.8 J	34.6 J	37 U	25.8 J	37 U	67.4	43 U	37 U	25.2 J	91.9 J	389 J
Dibenzo(a,h)anthracene	330	1000000	ug/kg	36 U	35 U	34 U	33 U	35 U	42 U	37 U	40 U	37 U	36 U	43 U	37 U	44 U	45 U	51.7
Dibenzofuran	NS	NS	ug/kg	71 U	69 U	68 U	66 U	70 U	85 U	75 U	79 U	73 U	73 U	85 U	75 U	87 U	90 U	82 U
Diethyl phthalate	NS	NS	ug/kg	71 U	69 U	68 U	66 U	70 U	85 U	75 U	79 U	73 U	73 U	85 U	75 U	87 U	90 U	82 U
Dimethyl phthalate	NS	NS	ug/kg	71 U	69 U	68 U	66 U	70 U	85 U	75 U	79 U	73 U	73 U	85 U	75 U	87 U	90 U	82 U
Di-n-butyl phthalate	NS	NS	ug/kq	71 U	69 U	68 U	66 U	70 U	85 U	75 U	79 U	73 U	73 U	85 U	75 U	87 U	90 U	82 U
Di-n-octyl phthalate	NS	NS	ug/kq	71 U	69 U	68 U	66 U	70 U	85 U	75 U	79 U	73 U	73 U	85 U	75 U	87 U	90 U	82 U
Fluoranthene	100000	1000000	ug/kq	36 U	35 U	34 U	33 U	51.4	69	37 U	18.4 J	23.4 J	162 J	43 U	37 U	38.6 J	113 J	470 J
Fluorene	100000	386000	ug/kq	36 U	19.7 J	34 U	33 U	35 U	42 U	37 U	40 U	37 U	14.6 J	43 U	37 U	44 U	45 U	41 U
Hexachloro-1,3-butadiene	NS	NS	ug/kq	36 U	35 U	34 U	33 U	35 U	42 U	37 U	40 U	37 U	36 U	43 U	37 U	44 U	45 U	41 U
Hexachlorobenzene	NS	NS	ug/kg	71 U	69 U	68 U	66 U	70 U	85 U	75 U	79 U	73 U	73 U	85 U	75 U	87 U	90 U	82 U
Hexachlorocyclopentadiene	NS	NS	ug/kg	360 U	350 U	340 UJ	330 UJ	350 U	420 U	370 U	400 U	370 U	360 U	430 U	370 U	440 U	450 U	410 U
Hexachloroethane	NS	NS	ug/kg	180 U	170 U	170 U	160 U	180 U	210 U	190 U	200 U	180 U	180 U	210 U	190 U	220 U	220 U	210 U

See Notes on Last Page

Sample ID			TABLE 375-6: RESTRIC. USE SCO	TABLE 375-6: PROTECTION OF GW SCO		PE-E-S20	PE-E-S3	PE-E-S7	PE-E-S8	PE-E-S9	PE-E-S10	PE-E-S11	PE-E-S12	PE-E-S13	PE-E-S13	PE-E-S14	PE-E-S15	PE-E-S16	PE-E-S18	PE-E-S18
Sample Date						4/19/2016	1/27/2016	3/14/2016	3/14/2016	3/31/2016	3/31/2016	3/31/2016	4/1/2016	DUP-022_201604	4/14/2016	4/14/2016	4/114/16	4/14/2016	4/19/2016	4/19/2016
Sample Depth				Units		2-2.5	1.5-2	3.5-4	1.5-2	1-1.5	1-1.5	2-2.5	1.5-2	1.5-2	1.5-2	1.5-2	1.5-2	1.5-2	0	2-2.5
SVOCs cont.																				
Indeno(1,2,3-cd)pyrene			500	8200	ug/kg	36 U	35 U	34 U	33 U	35 U	42 U	37 U	31.4 J	37 U	45.2	43 U	37 U	44 U	42 J	187 J
Isophorone			NS	NS	ug/kg	71 U	69 U	68 U	66 U	70 U	85 U	75 U	79 U	73 U	73 U	85 U	75 U	87 U	90 U	82 U
Naphthalene			100000	12000	ug/kg	36 U	24.3 J	34 U	33 U	35 U	42 U	37 U	47.3	19.4 J	16.2 J	43 U	37 U	24.2 J	45 U	41 U
Nitrobenzene			NS	NS	ug/kg	71 U	69 U	68 U	66 U	70 U	85 U	75 U	79 U	73 U	73 U	85 U	75 U	87 U	90 U	82 U
n-Nitrosodi-n-propylamine			NS	NS	ug/kg	71 U	69 U	68 U	66 U	70 U	85 U	75 U	79 U	73 U	73 U	85 U	75 U	87 U	90 U	82 U
N-nitrosodiphenylamine			NS	NS	ug/kg	180 U	170 U	170 U	160 U	180 U	210 U	190 U	200 U	180 U	180 U	210 U	190 U	220 U	220 U	210 U
p-Chloroaniline			NS	NS	ug/kg	180 U	170 U	170 U	160 U	180 U	210 U	190 U	200 U	180 U	180 U	210 U	190 U	220 U	220 U	210 U
Pentachlorophenol			6700	800	ug/kg	180 U	170 U	170 U	160 U	180 U	210 U	190 U	200 U	180 U	180 U	210 U	190 U	220 U	220 U	210 U
Phenanthrene			100000	1000000	ug/kg	36 U	62.5	34 U	33 U	35.6	49.9	37 U	40 U	14.7 J	141 J	43 U	37 U	26.1 J	35.6 J	46.4
Phenol			100000	330	ug/kg	71 U	69 U	68 U	66 U	70 U	85 U	75 U	79 U	73 U	73 U	85 U	75 U	87 U	90 U	82 U
Pyrene			100000	1000000	ug/kg	36 U	35 U	34 U	33 U	44.7	51.1	37 U	20.5 J	20.8 J	136 J	43 U	37 U	36.5 J	110 J	599 J
PCBs																				
Aroclor 1016			1000	3200	ug/kg	35 U	36 U	35 U	34 U	34 U	44 U	37 U	39 U	38 U	35 U	40 U	38 U	42 U	43 U	40 U
Aroclor 1221			1000	3200	ug/kg	35 U	36 U	35 U	34 U	34 U	44 U	37 U	39 U	38 U	35 U	40 U	38 U	42 U	43 U	40 U
Aroclor 1232			1000	3200	ug/kg	35 U	36 U	35 U	34 U	34 U	44 U	37 U	39 U	38 U	35 U	40 U	38 U	42 U	43 U	40 U
Aroclor 1242			1000	3200	ug/kg	35 U	36 U	35 U	34 U	34 U	44 U	37 U	39 U	38 U	35 U	40 U	38 U	42 U	43 U	40 U
Aroclor 1248			1000	3200	ug/kg	35 U	36 U	35 U	34 U	34 U	44 U	37 U	39 U	38 U	35 U	40 U	38 U	42 U	43 U	40 U
Aroclor 1254			1000	3200	ug/kg	35 U	36 U	35 U	34 U	34 U	44 U	37 U	39 U	38 U	35 U	40 U	38 U	42 U	43 U	40 U
Aroclor 1260			1000	3200	ug/kg	35 U	36 U	35 U	34 U	34 U	44 U	37 U	39 U	38 U	35 U	40 U	38 U	42 U	43 U	40 U
Aroclor 1262			1000	3200	ug/kg	35 U	36 U	35 U	34 U	34 U	44 U	37 U	39 U	38 U	35 U	40 U	38 U	42 U	43 U	40 U
Aroclor 1268			1000	3200	ug/kg	35 U	36 U	35 U	34 U	34 U	44 U	37 U	39 U	38 U	35 U	40 U	38 U	42 U	43 U	40 U
Metals																				
Aluminum			NS	NS	mg/kg	5940 J	9390 J	9220 J	7840 J	8950	8020	8820	13600	8470	7560	22800	9610	12900 J	25600 J	13300 J
Antimony			NS	NS	mg/kg	2.1 UJ	2.1 UJ	2.2 UJ	2 UJ	2.1 U	2.2 U	2.2 U	2.3 UB	0.72 J	1.6 J	2.6 UJ	2.2 UJ	2.8 UJ	2.7 UB	2 UJ
Arsenic			16	16	mg/kg	2.5	3	4.1	3.3	3.3	3.7	1.7 B	2.9	3.4	3	5.7	3.3	4.5	7.7	4.4
Barium			400	820	mg/kg	44.5	43.9	45.9	33.8	49	98.6	29.9	58.2	75 J	79.2 J	124 J	36.8 J	93.7 J	145	91.6
Beryllium			72	47	mg/kg	0.35	0.45	0.54	0.44	0.34	0.36	0.26	0.43	0.46 J	0.43 J	1.2 J	0.44 J	0.66 J	1.5 J	0.89 J
Cadmium			4.3	7.5	mg/kg	0.25 B	0.53 UB	0.56 U	0.51 U	0.16 B	0.56	0.054 B	0.12 B	0.67	0.5 B	0.27 B	0.1 B	0.52 B	0.63 B	0.43 B
Calcium			NS	NS	mg/kg	2280	3970 J	2530 J	2310 J	2410	2630	1530	1840	3850 J	4460 J	3800 J	1700 J	2850 J	4180 J	2420 J
Chromium			NS	NS	mg/kg	10.3	14.5	18.2	13.9	16	14.4	12.3	16.1	15.8 J	15.7 J	26.7 J	17.3 J	19.3 J	26.1	18.8
Cobalt			NS	NS	mg/kg	4.4 B	6.6	7.1	7.5	6.6	7.2	3.9 B	5.4 B	8.2	6.9	7.6	4.6 B	8.1	12.1	10
Copper			270	1720	mg/kg	10.5	14.1	14.8	17.9	12.2	18.6	1.7 B	8.9	33.3 J	24.6 J	11 J	4.6 J	17.6 J	22.4	16.4
Iron			NS	NS	mg/kg	12400	16600 J	17400	17200	16500	15900	11500	18000 J	19700 J	17500 J	23300 J	20400 J	17500 J	26500	20000
Lead			400	450	mg/kg	20.7	9.5	7	4.9	25.3	38.9	2.9	23.6	64.9 J	121 J	14.1	5.2	45.9 J	41	27
Magnesium			NS	NS	mg/kg	2230	3930	2850	2850	3040	2670	1960	2370 J	3540 J	4000 J	2700 J	2880 J	2790 J	3280	2490
Manganese			2000	2000	mg/kg	228	258 J	216	258	305	347	161	234	396	271	1290	305	547 J	838	979
Mercury			NS	NS	mg/kg	0.0061 B	0.037 UB	0.035 UB	0.033 UB	0.036 UB	0.037 UB	0.037 UB	0.02 B	0.035 B	0.05	0.078	0.036 UB	0.082	0.073	0.087
Nickel			310	130	mg/kg	8.4	10.4	12.2	11.6	11.4	12.2	7	8.5	12.8	12	15.4	9.5	13.7	19.9	12.7
Potassium			NS	NS	mg/kg	942 B	1020 B	1030 J	1060 J	1100	1100	569 B	545 B	1130	1110 B	1320	589 B	1320 J	1450	1110
Selenium			180	4	mg/kg	2.1 U	0.38 B	2 U	2 U	2.1 U	2.2 U	2.2 U	2.3 UB	2.2 U	2.3 UB	2.6 UB	2.2 UB	2.8 U	2.7 U	2 U
Silver			180	8.3	mg/kg	1.3	0.71	0.56 U	0.51 U	1.2	1.5	1.1	1.1	0.9	0.61	0.65 U	0.9	0.46 B	2.3 J	0.52 J
Sodium			NS	NS	mg/kg	141 B	236 B	182 J	167 J	145 B	197 B	94.3 B	146 B	202 B	209 B	111 B	102 B	150 B	129 B	118 B
Thallium			NS	NS	mg/kg	1.1 U	1.1 U	1.1 U	1 U	1.1 U	1.1 U	1.1 U	1.2 UB	1.1 U	1.2 U	1.3 U	1.1 U	1.4 U	1.3 U	1 U
Vanadium			NS	NS	mg/kg	17.4	23.9	27.6	23.8	25.3	23.5	18.2	25.5	34.1 J	33.9 J	43.2 J	25.1 J	31.7 J	46.5	28.5
Zinc			10000	2480	mg/kg	36.1	29.3 J	30.7	25.8	36.1	77.8	23.5	48.7	108 J	78.7 J	66 J	27.2 J	80.7 J	86.2	56.6
General Chemistry																				
Percent Solids					%	90.6	90.6	91.3	94.3	89.9	74.4	88.4	81.6	87.9	87.1	76.3	85.7	75.5	72.7	80.3
Notes																				
NS			No standard																	
NA			Not analyzed																	
J			Estimated result																	
JN			Estimated result																	
R			Rejected result																	
UB			Analyte considered non-detect at the listed value due to associated blank contamination																	
Bold			Result exceeds 375-6.8(b) protection of groundwater soil cleanup objective.																	
Shade			Result exceeds 375-6.8(b) restricted residential use soil cleanup objective.																	

Table 13. Confirmatory Soil Sample Results Area E
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York

Sample ID Sample Date Sample Depth	TABLE 375-6: RESTRIC. RES. USE SCO	TABLE 375-6: PROTECTION OF GW SCO	Units	PE-E-S19 4/19/2016 2-2.5
VOCs				
1,1,1-Trichloroethane	100000	680	ug/kg	2.1 U
1,1,2,2-Tetrachloroethane	NS	NS	ug/kg	2.1 U
1,1,2-trichloro-1,2,2-trifluoroethane	NS	NS	ug/kg	5.4 U
1,1,2-Trichloroethane	NS	NS	ug/kg	2.1 U
1,1-Dichloroethane	26000	270	ug/kg	1.1 U
1,1-Dichloroethene	100000	330	ug/kg	1.1 U
1,2,4-Trichlorobenzene	NS	NS	ug/kg	5.4 U
1,2-Dibromo-3-chloropropane	NS	NS	ug/kg	2.1 U
1,2-Dibromoethane	NS	NS	ug/kg	1.1 U
1,2-Dichlorobenzene	100000	1100	ug/kg	1.1 U
1,2-Dichloroethane	3100	20	ug/kg	1.1 U
1,2-Dichloropropane	NS	NS	ug/kg	2.1 U
1,3-Dichlorobenzene	49000	2400	ug/kg	1.1 U
1,4-Dichlorobenzene	13000	1800	ug/kg	1.1 U
2-Butanone (MEK)	100000	120	ug/kg	11 U
4-Methyl-2-Pentanone	NS	NS	ug/kg	5.4 U
Acetone	100000	50	ug/kg	11 U
Benzene	4800	60	ug/kg	0.54 U
Bromodichloromethane	NS	NS	ug/kg	2.1 U
Bromoform	NS	NS	ug/kg	5.4 U
Bromomethane	NS	NS	ug/kg	5.4 U
Carbon Disulfide	NS	NS	ug/kg	2.1 U
Carbon Tetrachloride	2400	760	ug/kg	2.1 U
CFC-11	NS	NS	ug/kg	5.4 U
CFC-12	NS	NS	ug/kg	5.4 U
Chlorobenzene	100000	1100	ug/kg	2.1 U
Chlorodibromomethane	NS	NS	ug/kg	2.1 U
Chloroethane	NS	NS	ug/kg	5.4 U
Chloroform	49000	370	ug/kg	2.1 U
Chloromethane	NS	NS	ug/kg	5.4 U
cis-1,2-Dichloroethene	100000	250	ug/kg	1.1 U
cis-1,3-Dichloropropene	NS	NS	ug/kg	2.1 U
Cyclohexane	NS	NS	ug/kg	2.1 U
Dichloromethane	NS	NS	ug/kg	5.4 U
Ethylbenzene	41000	1000	ug/kg	1.1 U
Isopropylbenzene	NS	NS	ug/kg	2.1 U
Methyl Acetate	NS	NS	ug/kg	5.4 U
Methyl N-Butyl Ketone (2-Hexanone)	NS	NS	ug/kg	5.4 U
Methylcyclohexane	NS	NS	ug/kg	2.1 U
Methyl-tert-butylether	100000	930	ug/kg	1.1 U
Styrene (Monomer)	NS	NS	ug/kg	2.1 U
Tetrachloroethene	19000	1300	ug/kg	2.1 U
Toluene	100000	700	ug/kg	1.1 U
Total Xylenes	100000	1600	ug/kg	1.1 U
trans-1,2-Dichloroethene	100000	190	ug/kg	1.1 U
trans-1,3-Dichloropropene	NS	NS	ug/kg	2.1 U
Trichloroethene	21000	470	ug/kg	1.1 U
Vinyl chloride	900	20	ug/kg	2.1 U

See Notes on Last Page

Table 13. Confirmatory Soil Sample Results Area E
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York

Sample ID Sample Date Sample Depth	TABLE 375-6: RESTRIC. RES. USE SCO	TABLE 375-6: PROTECTION OF GW SCO	Units	PE-E-S19 4/19/2016 2-2.5
SVOCs				
1,1-Biphenyl	NS	NS	ug/kg	83 U
2,2-Oxybis(1-Chloropropane)	NS	NS	ug/kg	83 U
2,4,5-Trichlorophenol	NS	NS	ug/kg	210 U
2,4,6-Trichlorophenol	NS	NS	ug/kg	210 U
2,4-Dichlorophenol	NS	NS	ug/kg	210 U
2,4-Dimethylphenol	NS	NS	ug/kg	210 U
2,4-Dinitrophenol	NS	NS	ug/kg	210 U
2,4-Dinitrotoluene	NS	NS	ug/kg	42 U
2,6-Dinitrotoluene	NS	NS	ug/kg	42 U
2-Chloronaphthalene	NS	NS	ug/kg	83 U
2-Chlorophenol	NS	NS	ug/kg	83 U
2-Methyl-4,6-dinitrophenol	NS	NS	ug/kg	210 U
2-Methylnaphthalene	NS	NS	ug/kg	83 U
2-Methylphenol	NS	NS	ug/kg	83 U
2-Nitroaniline	NS	NS	ug/kg	210 U
2-Nitrophenol	NS	NS	ug/kg	210 U
3,3-Dichlorobenzidine	NS	NS	ug/kg	83 U
3-Methylphenol, 4-Methylphenol	NS	NS	ug/kg	196
3-Nitroaniline	NS	NS	ug/kg	210 U
4-Bromophenyl phenyl ether	NS	NS	ug/kg	83 U
4-Chloro-3-Methylphenol	NS	NS	ug/kg	210 U
4-Chlorophenyl phenyl ether	NS	NS	ug/kg	83 U
4-Nitroaniline	NS	NS	ug/kg	210 U
4-Nitrophenol	NS	NS	ug/kg	420 U
Acenaphthene	100000	98000	ug/kg	42 U
Acenaphthylene	100000	107000	ug/kg	42 U
Acetophenone	NS	NS	ug/kg	210 U
Anthracene	100000	1000000	ug/kg	22.5 J
Atrazine	NS	NS	ug/kg	83 U
Benzaldehyde	NS	NS	ug/kg	210 U
Benzo(a)anthracene	1000	1000	ug/kg	73.6
Benzo(a)pyrene	1000	22000	ug/kg	59.8
Benzo(b)fluoranthene	1000	1700	ug/kg	117
Benzo(g,h,i)perylene	100000	1000000	ug/kg	37.5 J
Benzo(k)fluoranthene	3900	1700	ug/kg	29 J
bis(2-Chloroethoxy)methane	NS	NS	ug/kg	83 U
bis(2-Chloroethyl)ether	NS	NS	ug/kg	83 U
bis(2-Ethylhexyl)phthalate	NS	NS	ug/kg	165
Butyl benzyl phthalate	NS	NS	ug/kg	83 U
Caprolactam	NS	NS	ug/kg	83 U
Carbazole	NS	NS	ug/kg	83 U
Chrysene	3900	1000	ug/kg	78
Dibenzo(a,h)anthracene	330	1000000	ug/kg	42 U
Dibenzofuran	NS	NS	ug/kg	83 U
Diethyl phthalate	NS	NS	ug/kg	83 U
Dimethyl phthalate	NS	NS	ug/kg	83 U
Di-n-butyl phthalate	NS	NS	ug/kg	83 U
Di-n-octyl phthalate	NS	NS	ug/kg	83 U
Fluoranthene	100000	1000000	ug/kg	150
Fluorene	100000	386000	ug/kg	42 U
Hexachloro-1,3-butadiene	NS	NS	ug/kg	42 U
Hexachlorobenzene	NS	NS	ug/kg	83 U
Hexachlorocyclopentadiene	NS	NS	ug/kg	420 U
Hexachloroethane	NS	NS	ug/kg	210 U

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Table 13. Confirmatory Soil Sample Results Area E
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York

Sample ID	TABLE 375-6: RESTRIC. RES. USE SCO	TABLE 375-6: PROTECTION OF GW SCO		PE-E-S19
Sample Date				4/19/2016
Sample Depth			Units	2-2.5
SVOCs cont.				
Indeno(1,2,3-cd)pyrene	500	8200	ug/kg	38.9 J
Isophorone	NS	NS	ug/kg	83 U
Naphthalene	100000	12000	ug/kg	17.4 J
Nitrobenzene	NS	NS	ug/kg	83 U
n-Nitrosodi-n-propylamine	NS	NS	ug/kg	83 U
N-nitrosodiphenylamine	NS	NS	ug/kg	210 U
p-Chloroaniline	NS	NS	ug/kg	210 U
Pentachlorophenol	6700	800	ug/kg	210 U
Phenanthrene	100000	1000000	ug/kg	70.8
Phenol	100000	330	ug/kg	83 U
Pyrene	100000	1000000	ug/kg	142
PCBs				
Aroclor 1016	1000	3200	ug/kg	42 U
Aroclor 1221	1000	3200	ug/kg	42 U
Aroclor 1232	1000	3200	ug/kg	42 U
Aroclor 1242	1000	3200	ug/kg	42 U
Aroclor 1248	1000	3200	ug/kg	42 U
Aroclor 1254	1000	3200	ug/kg	42 U
Aroclor 1260	1000	3200	ug/kg	42 U
Aroclor 1262	1000	3200	ug/kg	42 U
Aroclor 1268	1000	3200	ug/kg	42 U
Metals				
Aluminum	NS	NS	mq/kg	13800 J
Antimony	NS	NS	mq/kg	2.5 UB
Arsenic	16	16	mq/kg	4.7
Barium	400	820	mq/kg	154
Beryllium	72	47	mg/kg	0.72
Cadmium	4.3	7.5	mg/kg	0.77
Calcium	NS	NS	mg/kg	3550
Chromium	NS	NS	mg/kg	18.7
Cobalt	NS	NS	mg/kg	9
Copper	270	1720	mg/kg	29.2
Iron	NS	NS	mg/kg	20300
Lead	400	450	mg/kg	60.3
Magnesium	NS	NS	mg/kg	3300
Manganese	2000	2000	mg/kg	476
Mercury	NS	NS	mg/kg	0.054
Nickel	310	130	mg/kg	15.9
Potassium	NS	NS	mg/kg	1460
Selenium	180	4	mg/kg	2.5 U
Silver	180	8.3	mg/kg	1.9
Sodium	NS	NS	mg/kg	203 B
Thallium	NS	NS	mg/kg	1.2 U
Vanadium	NS	NS	mg/kg	32.9
Zinc	10000	2480	mg/kg	105
General Chemistry				
Percent Solids			%	79.2
Notes				
	NS	No standard		
	NA	Not analyzed		
	J	Estimated result		
	JN	Estimated result		
	R	Rejected result		
	UB	Analyte considered non-detect at the listed value due to associated blank contamination		
	Bold	Result exceeds 375-6.8(b) protection of groundwater soil cleanup objective.		
	Shade	Result exceeds 375-6.8(b) restricted residential use soil cleanup objective.		

Table 14. Soil Sample Results Torne Valley Road Area E
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York

Sample ID Sample Date Sample Depth	TABLE 375-6: RESTRIC. RES. USE SCO	TABLE 375-6: PROTECTION OF GW SCO	Units	PE-E-F4 3/14/2016 11-11.5	PE-E-S4 2/1/2016 6-6.5	PE-E-S5 2/1/2016 5-5.5	PE-E-S6 2/1/2016 1.5-2
VOCs							
1,1,1-Trichloroethane	100000	680	ug/kg	3.2 U	120 U	120 U	3.7 U
1,1,2,2-Tetrachloroethane	NS	NS	ug/kg	3.2 U	120 U	120 U	3.7 U
1,1,2-trichloro-1,2,2-trifluoroethane	NS	NS	ug/kg	7.9 U	290 U	300 U	9.3 U
1,1,2-Trichloroethane	NS	NS	ug/kg	3.2 U	120 U	120 U	3.7 U
1,1-Dichloroethane	26000	270	ug/kg	1.6 U	59 U	60 U	1.9 U
1,1-Dichloroethene	100000	330	ug/kg	1.6 U	59 U	60 U	1.9 U
1,2,4-Trichlorobenzene	NS	NS	ug/kg	7.9 U	290 U	300 U	9.3 U
1,2-Dibromo-3-chloropropane	NS	NS	ug/kg	3.2 U	120 U	120 U	3.7 U
1,2-Dibromoethane	NS	NS	ug/kg	1.6 U	59 U	60 U	1.9 U
1,2-Dichlorobenzene	100000	1100	ug/kg	20.4	294	543	1.9 U
1,2-Dichloroethane	3100	20	ug/kg	1.6 U	59 U	60 U	1.9 U
1,2-Dichloropropane	NS	NS	ug/kg	3.2 U	120 U	120 U	3.7 U
1,3-Dichlorobenzene	49000	2400	ug/kg	1.2 J	59 U	60 U	1.9 U
1,4-Dichlorobenzene	13000	1800	ug/kg	2.4	59 U	33.3 J	1.9 U
2-Butanone (MEK)	100000	120	ug/kg	19.6	590 U	600 U	19 U
4-Methyl-2-Pentanone	NS	NS	ug/kg	7.9 U	290 U	300 U	9.3 U
Acetone	100000	50	ug/kg	409 EJ	590 U	600 U	19 U
Benzene	4800	60	ug/kg	10.8	45.3	34.6	0.93 U
Bromodichloromethane	NS	NS	ug/kg	3.2 U	120 U	120 U	3.7 U
Bromoform	NS	NS	ug/kg	7.9 U	290 U	300 U	9.3 U
Bromomethane	NS	NS	ug/kg	7.9 U	290 U	300 U	9.3 U
Carbon Disulfide	NS	NS	ug/kg	3.2 U	120 U	120 U	3.7 U
Carbon Tetrachloride	2400	760	ug/kg	3.2 U	120 U	120 U	3.7 U
CFC-11	NS	NS	ug/kg	7.9 U	290 U	300 U	9.3 U
CFC-12	NS	NS	ug/kg	7.9 U	290 U	300 U	9.3 U
Chlorobenzene	100000	1100	ug/kg	7.2	120 U	120 U	3.7 U
Chlorodibromomethane	NS	NS	ug/kg	3.2 U	120 U	120 U	3.7 U
Chloroethane	NS	NS	ug/kg	7.9 U	290 U	300 U	9.3 U
Chloroform	49000	370	ug/kg	3.2 U	120 U	120 U	3.7 U
Chloromethane	NS	NS	ug/kg	7.9 U	290 UJ	300 UJ	9.3 U
cis-1,2-Dichloroethene	100000	250	ug/kg	1.6 U	59 U	60 U	1.9 U
cis-1,3-Dichloropropene	NS	NS	ug/kg	3.2 U	120 U	120 U	3.7 U
Cyclohexane	NS	NS	ug/kg	19.7	135	50.3 J	3.7 U
Dichloromethane	NS	NS	ug/kg	7.9 U	290 U	300 U	9.3 U
Ethylbenzene	41000	1000	ug/kg	3540	23900	6680	5.5
Isopropylbenzene	NS	NS	ug/kg	141	1750	653	3.7 U
Methyl Acetate	NS	NS	ug/kg	7.9 U	543	300 U	9.3 U
Methyl N-Butyl Ketone (2-Hexanone)	NS	NS	ug/kg	7.9 U	290 U	300 U	9.3 U
Methylcyclohexane	NS	NS	ug/kg	3110	5250	2130	3.7 U
Methyl-tert-butylether	100000	930	ug/kg	1.6 U	59 U	60 U	1.9 U
Styrene (Monomer)	NS	NS	ug/kg	3.2 U	120 U	120 U	3.7 U
Tetrachloroethene	19000	1300	ug/kg	3.2 U	120 U	120 U	3.7 U
Toluene	100000	700	ug/kg	110	8710	29.1 J	1.5 J
Total Xylenes	100000	1600	ug/kg	27300	117000	26300	22.1
trans-1,2-Dichloroethene	100000	190	ug/kg	1.6 U	59 U	60 U	1.9 U
trans-1,3-Dichloropropene	NS	NS	ug/kg	3.2 U	120 U	120 U	3.7 U
Trichloroethene	21000	470	ug/kg	1.6 U	59 U	60 U	1.9 U
Vinyl chloride	900	20	ug/kg	3.2 U	120 U	120 U	3.7 U

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Table 14. Soil Sample Results Torne Valley Road Area E
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York

Sample ID Sample Date Sample Depth	TABLE 375-6: RESTRIC. RES. USE SCO	TABLE 375-6: PROTECTION OF GW SCO	Units	PE-E-F4 3/14/2016 11-11.5	PE-E-S4 2/1/2016 6-6.5	PE-E-S5 2/1/2016 5-5.5	PE-E-S6 2/1/2016 1.5-2
SVOCs							
1,1-Biphenyl	NS	NS	ug/kg	655 J	402	200	374
2,2-Oxybis(1-Chloropropane)	NS	NS	ug/kg	470 U	76 U	77 U	100 U
2,4,5-Trichlorophenol	NS	NS	ug/kg	1200 U	190 U	190 U	250 U
2,4,6-Trichlorophenol	NS	NS	ug/kg	1200 U	190 U	190 U	250 U
2,4-Dichlorophenol	NS	NS	ug/kg	1200 U	190 U	190 U	250 U
2,4-Dimethylphenol	NS	NS	ug/kg	2300	190 U	714	250 U
2,4-Dinitrophenol	NS	NS	ug/kg	1200 U	190 U	190 U	250 U
2,4-Dinitrotoluene	NS	NS	ug/kg	240 U	38 U	38 U	51 U
2,6-Dinitrotoluene	NS	NS	ug/kg	240 U	38 U	38 U	51 U
2-Chloronaphthalene	NS	NS	ug/kg	470 U	76 U	77 U	100 U
2-Chlorophenol	NS	NS	ug/kg	470 U	76 U	77 U	100 U
2-Methyl-4,6-dinitrophenol	NS	NS	ug/kg	1200 U	190 U	190 U	250 U
2-Methylnaphthalene	NS	NS	ug/kg	10800	9030	2480	3760
2-Methylphenol	NS	NS	ug/kg	470 U	1000	77 U	100 U
2-Nitroaniline	NS	NS	ug/kg	1200 U	190 U	190 U	250 U
2-Nitrophenol	NS	NS	ug/kg	1200 U	190 U	190 U	250 U
3,3-Dichlorobenzidine	NS	NS	ug/kg	470 U	76 U	77 U	100 U
3-Methylphenol, 4-Methylphenol	NS	NS	ug/kg	470 U	948	77 U	284
3-Nitroaniline	NS	NS	ug/kg	1200 U	190 U	190 U	250 U
4-Bromophenyl phenyl ether	NS	NS	ug/kg	470 U	76 U	77 U	100 U
4-Chloro-3-Methylphenol	NS	NS	ug/kg	1200 U	190 U	190 U	250 U
4-Chlorophenyl phenyl ether	NS	NS	ug/kg	470 U	76 U	77 U	100 U
4-Nitroaniline	NS	NS	ug/kg	1200 U	190 U	190 U	250 U
4-Nitrophenol	NS	NS	ug/kg	2400 U	380 U	380 U	510 U
Acenaphthene	100000	98000	ug/kg	240 U	252	38 U	51 U
Acenaphthylene	100000	107000	ug/kg	240 U	38 U	38 U	51 U
Acetophenone	NS	NS	ug/kg	1200 U	190 U	190 U	250 U
Anthracene	100000	1000000	ug/kg	240 U	761	38 U	51 U
Atrazine	NS	NS	ug/kg	470 U	76 U	77 U	100 U
Benzaldehyde	NS	NS	ug/kg	1200 UJ	190 U	190 U	250 U
Benzo(a)anthracene	1000	1000	ug/kg	240 U	910	38 U	26.3 J
Benzo(a)pyrene	1000	22000	ug/kg	240 U	768	38 U	27.7 J
Benzo(b)fluoranthene	1000	1700	ug/kg	240 U	904	38 U	34.9 J
Benzo(g,h,i)perylene	100000	1000000	ug/kg	240 U	437	38 U	28.3 J
Benzo(k)fluoranthene	3900	1700	ug/kg	240 U	344	38 U	51 U
bis(2-Chloroethoxy)methane	NS	NS	ug/kg	470 U	76 U	77 U	100 U
bis(2-Chloroethyl)ether	NS	NS	ug/kg	470 U	76 U	77 U	100 U
bis(2-Ethylhexyl)phthalate	NS	NS	ug/kg	7770	8010	87200	89200
Butyl benzyl phthalate	NS	NS	ug/kg	470 U	76 U	77 U	100 U
Caprolactam	NS	NS	ug/kg	470 U	76 U	77 U	100 U
Carbazole	NS	NS	ug/kg	470 U	176	77 U	100 U
Chrysene	3900	1000	ug/kg	240 U	942	28.5 J	37 J
Dibenzo(a,h)anthracene	330	1000000	ug/kg	240 U	141	38 U	51 U
Dibenzofuran	NS	NS	ug/kg	470 U	233	77 U	100 U
Diethyl phthalate	NS	NS	ug/kg	470 U	76 U	77 U	100 U
Dimethyl phthalate	NS	NS	ug/kg	470 U	76 U	77 U	100 U
Di-n-butyl phthalate	NS	NS	ug/kg	470 U	1260	128	147
Di-n-octyl phthalate	NS	NS	ug/kg	470 U	76 U	77 U	100 U
Fluoranthene	100000	1000000	ug/kg	240 U	2020	22.5 J	60
Fluorene	100000	386000	ug/kg	240 U	448	25.5 J	25.7 J
Hexachloro-1,3-butadiene	NS	NS	ug/kg	240 U	38 U	38 U	51 U
Hexachlorobenzene	NS	NS	ug/kg	470 U	76 U	77 U	100 U
Hexachlorocyclopentadiene	NS	NS	ug/kg	2400 UJ	380 U	380 U	510 U
Hexachloroethane	NS	NS	ug/kg	1200 U	190 U	190 U	250 U

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Table 14. Soil Sample Results Torne Valley Road Area E
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York

Sample ID	TABLE 375-6: RESTRIC. RES. USE SCO	TABLE 375-6: PROTECTION OF GW SCO		PE-E-F4 3/14/2016	PE-E-S4 2/1/2016	PE-E-S5 2/1/2016	PE-E-S6 2/1/2016
Sample Date							
Sample Depth			Units	11-11.5	6-6.5	5-5.5	1.5-2
SVOCs cont.							
Indeno(1,2,3-cd)pyrene	500	8200	ug/kg	240 U	467	38 U	51 U
Isophorone	NS	NS	ug/kg	470 U	76 U	77 U	100 U
Naphthalene	100000	12000	ug/kg	46600	30300	13600	14900
Nitrobenzene	NS	NS	ug/kg	470 U	76 U	77 U	100 U
n-Nitrosodi-n-propylamine	NS	NS	ug/kg	470 U	76 U	77 U	100 U
N-nitrosodiphenylamine	NS	NS	ug/kg	557 J	320	101 J	76.8 J
p-Chloroaniline	NS	NS	ug/kg	1200 U	190 U	190 U	250 U
Pentachlorophenol	6700	800	ug/kg	1200 U	190 U	190 U	250 U
Phenanthrene	100000	1000000	ug/kg	488	2390	93.5	106
Phenol	100000	330	ug/kg	470 U	76 U	77 U	100 U
Pyrene	100000	1000000	ug/kg	353	1620	23.6 J	55.8
PCBs							
Aroclor 1016	1000	3200	ug/kg	47 U	40 U	39 U	51 U
Aroclor 1221	1000	3200	ug/kg	47 U	40 U	39 U	51 U
Aroclor 1232	1000	3200	ug/kg	47 U	40 U	39 U	51 U
Aroclor 1242	1000	3200	ug/kg	47 U	40 U	39 U	51 U
Aroclor 1248	1000	3200	ug/kg	47 U	40 U	39 U	51 U
Aroclor 1254	1000	3200	ug/kg	47 U	40 U	39 U	51 U
Aroclor 1260	1000	3200	ug/kg	47 U	40 U	39 U	51 U
Aroclor 1262	1000	3200	ug/kg	47 U	40 U	39 U	51 U
Aroclor 1268	1000	3200	ug/kg	47 U	40 U	39 U	51 U
Metals							
Aluminum	NS	NS	mg/kg	13300 J	9520 J	9780 J	5430 J
Antimony	NS	NS	mg/kg	3.6 J	10.6 J	7.6 J	8.3 J
Arsenic	16	16	mg/kg	4.6	6	4.8	4.1
Barium	400	820	mg/kg	1800	2060	2890	1850
Beryllium	72	47	mg/kg	0.6	0.44	0.52	0.35
Cadmium	4.3	7.5	mg/kg	2.7	4	5.2	0.47
Calcium	NS	NS	mg/kg	2990 J	4050 J	2810 J	12600 J
Chromium	NS	NS	mg/kg	122	73	96.6	20.5
Cobalt	NS	NS	mg/kg	18.7	20.3	6.9	6.2
Copper	270	1720	mg/kg	23.8	29.8	17.3	29.7
Iron	NS	NS	mg/kg	18600	15300 J	14400 J	10200 J
Lead	400	450	mg/kg	636	1250	949	499
Magnesium	NS	NS	mg/kg	3210	3480	2710	6790
Manganese	2000	2000	mg/kg	232	304 J	209 J	220 J
Mercury	NS	NS	mg/kg	0.064	0.076	0.036 UB	0.04 UB
Nickel	310	130	mg/kg	16.2	15.6	13.5	14.4
Potassium	NS	NS	mg/kg	1080 J	833 B	1050	695 B
Selenium	180	4	mg/kg	0.79 B	0.76 B	0.98 B	1.5 U
Silver	180	8.3	mg/kg	0.5 UB	0.96	1.3 B	0.38 U
Sodium	NS	NS	mg/kg	346 J	617 B	345 B	606 B
Thallium	NS	NS	mg/kg	0.99 U	1.1 U	0.77 U	0.77 U
Vanadium	NS	NS	mg/kg	29.7	21.3	22.9	16.5
Zinc	10000	2480	mg/kg	214	215 J	215 J	134 J
General Chemistry							
Percent Solids			%	70.2	83.7	82	64.1
Notes							
	NS	No standard					
	NA	Not analyzed					
	J	Estimated result					
	JN	Estimated result					
	R	Rejected result					
	UB	Analyte considered non-detect at the listed value due to associated blank contamination					
	Bold	Result exceeds 375-6.8(b) protection of groundwater soil cleanup objective.					
	Shade	Result exceeds 375-6.8(b) restricted residential use soil cleanup objective.					

Table 15. Confirmatory Soil Sample Results Area G
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Sample ID	375-6: RESTRIC. RES. USE SCO	375-6: PROTECTION OF GW SCO		PE-G-A1A 2/4/2016	PE-G-A2 1/22/2016	PE-G-A3 1/22/2016	PE-G-B1A 2/4/2016	PE-G-B2 1/22/2016	PE-G-B3 1/22/2016	PE-G-S1 1/22/2016	PE-G-S2 1/22/2016	PE-G-S3A 2/4/2016	PE-G-S4A 42404	PE-G-S5A 2/4/2016	PE-G-S6A 2/4/2016
Sample Date															
Sample Depth			Units	8-8.5	6-6.5	2-2.5	8-8.5	6-6.5	2-2.5	3.5-4	1.5-2	5-5.5	5-5.5	5-5.5	5-5.5
VOCs															
1,1,1-Trichloroethane	100000	680	ug/kg	1.7 U	1.7 U	2.1 U	1.8 U	1.6 U	2.1 U	1.6 U	1.9 U	2 U	1.9 U	2.1 U	1.9 U
1,1,2,2-Tetrachloroethane	NS	NS	ug/kg	1.7 U	1.7 U	2.1 U	1.8 U	1.6 U	2.1 U	1.6 U	1.9 U	2 U	1.9 U	2.1 U	1.9 U
1,1,2-trichloro-1,2,2-trifluoroethane	NS	NS	ug/kg	4.2 U	4.3 U	5.4 U	4.5 U	3.9 U	5.4 U	4 U	4.7 U	5 U	4.8 U	5.1 U	4.7 U
1,1,2-Trichloroethane	NS	NS	ug/kg	1.7 U	1.7 U	2.1 U	1.8 U	1.6 U	2.1 U	1.6 U	1.9 U	2 U	1.9 U	2.1 U	1.9 U
1,1-Dichloroethane	26000	270	ug/kg	0.84 U	0.86 U	1.1 U	0.9 U	0.79 U	1.1 U	0.81 U	0.95 U	1 U	0.97 U	1 U	0.95 U
1,1-Dichloroethene	100000	330	ug/kg	0.84 U	0.86 U	1.1 U	0.9 U	0.79 U	1.1 U	0.81 U	0.95 U	1 U	0.97 U	1 U	0.95 U
1,2,4-Trichlorobenzene	NS	NS	ug/kg	4.2 U	4.3 U	5.4 U	4.5 U	3.9 U	5.4 U	4 U	4.7 U	5 U	4.8 U	5.1 U	4.7 U
1,2-Dibromo-3-chloropropane	NS	NS	ug/kg	1.7 U	1.7 U	2.1 U	1.8 U	1.6 U	2.1 U	1.6 U	1.9 U	2 U	1.9 U	2.1 U	1.9 U
1,2-Dibromoethane	NS	NS	ug/kg	0.84 U	0.86 U	1.1 U	0.9 U	0.79 U	1.1 U	0.81 U	0.95 U	1 U	0.97 U	1 U	0.95 U
1,2-Dichlorobenzene	100000	1100	ug/kg	0.84 U	0.86 U	1.1 U	0.9 U	0.79 U	1.1 U	0.81 U	0.95 U	1 U	0.97 U	1 U	0.95 U
1,2-Dichloroethane	3100	20	ug/kg	0.84 U	0.86 U	1.1 U	0.9 U	0.79 U	1.1 U	0.81 U	0.95 U	1 U	0.97 U	1 U	0.95 U
1,2-Dichloropropane	NS	NS	ug/kg	1.7 U	1.7 U	2.1 U	1.8 U	1.6 U	2.1 U	1.6 U	1.9 U	2 U	1.9 U	2.1 U	1.9 U
1,3-Dichlorobenzene	49000	2400	ug/kg	0.84 U	0.86 U	1.1 U	0.9 U	0.79 U	1.1 U	0.81 U	0.95 U	1 U	0.97 U	1 U	0.95 U
1,4-Dichlorobenzene	13000	1800	ug/kg	0.84 U	0.86 U	1.1 U	0.9 U	0.79 U	1.1 U	0.81 U	0.95 U	1 U	0.97 U	1 U	0.95 U
2-Butanone (MEK)	100000	120	ug/kg	8.4 U	8.6 U	11 U	9 U	7.9 U	11 U	8.1 U	9.5 U	10 U	9.7 U	10 U	9.5 U
4-Methyl-2-Pentanone	NS	NS	ug/kg	4.2 U	4.3 U	5.4 U	4.5 U	3.9 U	5.4 U	4 U	4.7 U	5 U	4.8 U	5.1 U	4.7 U
Acetone	100000	50	ug/kg	8.4 U	8.6 U	11 U	9 U	7.9 U	11 U	8.1 U	9.5 U	10 U	4.6 J	14	8 J
Benzene	4800	60	ug/kg	0.42 U	0.43 U	0.54 U	0.45 U	0.39 U	0.54 U	0.4 U	0.47 U	0.5 U	0.48 U	0.5 J	0.24 J
Bromodichloromethane	NS	NS	ug/kg	1.7 U	1.7 U	2.1 U	1.8 U	1.6 U	2.1 U	1.6 U	1.9 U	2 U	1.9 U	2.1 U	1.9 U
Bromoform	NS	NS	ug/kg	4.2 U	4.3 U	5.4 U	4.5 U	3.9 U	5.4 U	4 U	4.7 U	5 U	4.8 U	5.1 U	4.7 U
Bromomethane	NS	NS	ug/kg	4.2 U	4.3 U	5.4 U	4.5 U	3.9 U	5.4 U	4 U	4.7 U	5 U	4.8 U	5.1 U	4.7 U
Carbon Disulfide	NS	NS	ug/kg	1.7 U	1.7 U	2.1 U	1.8 U	1.6 U	2.1 U	1.6 U	1.9 U	2 U	1.9 U	2.1 U	1.9 U
Carbon Tetrachloride	2400	760	ug/kg	1.7 U	1.7 U	2.1 U	1.8 U	1.6 U	2.1 U	1.6 U	1.9 U	2 U	1.9 U	2.1 U	1.9 U
CFC-11	NS	NS	ug/kg	4.2 U	4.3 U	5.4 U	4.5 U	3.9 U	5.4 U	4 U	4.7 U	5 U	4.8 U	5.1 U	4.7 U
CFC-12	NS	NS	ug/kg	4.2 U	4.3 U	5.4 U	4.5 U	3.9 U	5.4 U	4 U	4.7 U	5 U	4.8 U	5.1 U	4.7 U
Chlorobenzene	100000	1100	ug/kg	1.7 U	1.7 U	2.1 U	1.8 U	1.6 U	2.1 U	1.6 U	1.9 U	2 U	1.9 U	2.1 U	1.9 U
Chlorodibromomethane	NS	NS	ug/kg	1.7 U	1.7 U	2.1 U	1.8 U	1.6 U	2.1 U	1.6 U	1.9 U	2 U	1.9 U	2.1 U	1.9 U
Chloroethane	NS	NS	ug/kg	4.2 U	4.3 U	5.4 U	4.5 U	3.9 U	5.4 U	4 U	4.7 U	5 U	4.8 U	5.1 U	4.7 U
Chloroform	49000	370	ug/kg	1.7 U	1.7 U	2.1 U	1.8 U	1.6 U	2.1 U	1.6 U	1.9 U	2 U	1.9 U	2.1 U	1.9 U
Chloromethane	NS	NS	ug/kg	4.2 U	4.3 U	5.4 U	4.5 U	3.9 U	5.4 U	4 U	4.7 U	5 U	4.8 U	5.1 U	4.7 U
cis-1,2-Dichloroethene	100000	250	ug/kg	0.84 U	0.86 U	1.1 U	0.9 U	0.79 U	1.1 U	0.81 U	0.95 U	1 U	0.97 U	1 U	0.95 U
cis-1,3-Dichloropropene	NS	NS	ug/kg	1.7 U	1.7 U	2.1 U	1.8 U	1.6 U	2.1 U	1.6 U	1.9 U	2 U	1.9 U	2.1 U	1.9 U
Cyclohexane	NS	NS	ug/kg	1.7 U	1.7 U	2.1 U	1.8 U	1.6 U	2.1 U	1.6 U	1.9 U	2 U	1.9 U	2.1 U	1.9 U
Dichloromethane	NS	NS	ug/kg	4.2 U	4.3 U	5.4 U	4.5 U	3.9 U	5.4 U	4 U	4.7 U	5 U	4.8 U	5.1 U	4.7 U
Ethylbenzene	41000	1000	ug/kg	0.84 U	0.86 U	1.1 U	0.9 U	0.79 U	1.1 U	0.81 U	0.95 U	1 U	0.97 U	1 U	0.95 U
Isopropylbenzene	NS	NS	ug/kg	1.7 U	1.7 U	2.1 U	1.8 U	1.6 U	2.1 U	1.6 U	1.9 U	2 U	1.9 U	2.1 U	1.9 U
Methyl Acetate	NS	NS	ug/kg	4.2 U	4.3 U	5.4 U	4.5 U	3.9 U	5.4 U	4 U	4.7 U	5 U	4.8 U	5.1 U	4.7 U
Methyl N-Butyl Ketone (2-Hexanone)	NS	NS	ug/kg	4.2 U	4.3 U	5.4 U	4.5 U	3.9 U	5.4 U	4 U	4.7 U	5 U	4.8 U	5.1 U	4.7 U
Methylcyclohexane	NS	NS	ug/kg	1.7 U	1.7 U	2.1 U	1.8 U	1.6 U	2.1 U	1.6 U	1.9 U	2 U	1.9 U	2.1 U	1.9 U
Methyl-tert-butylether	100000	930	ug/kg	0.84 U	0.86 U	1.1 U	0.9 U	0.79 U	1.1 U	0.81 U	0.95 U	1 U	0.97 U	1 U	0.95 U
Styrene (Monomer)	NS	NS	ug/kg	0.55 J	1.7 U	2.1 U	1.8 U	1.6 U	2.1 U	1.6 U	1.9 U	2 U	1.9 U	2.1 U	1.9 U
Tetrachloroethene	19000	1300	ug/kg	1.7 U	1.7 U	2.1 U	1.8 U	1.6 U	2.1 U	1.6 U	1.9 U	2 U	1.9 U	2.1 U	1.9 U
Toluene	100000	700	ug/kg	0.84 U	0.86 U	1.1 U	0.9 U	0.79 U	1.1 U	0.81 U	0.95 U	1 U	0.97 U	1 U	0.95 U
Total Xylenes	100000	1600	ug/kg	0.84 U	0.42 J	1.1 U	0.9 U	0.79 U	1.1 U	0.81 U	0.95 U	1 U	0.97 U	1 U	0.95 U
trans-1,2-Dichloroethene	100000	190	ug/kg	0.84 U	0.86 U	1.1 U	0.9 U	0.79 U	1.1 U	0.81 U	0.95 U	1 U	0.97 U	1 U	0.95 U
trans-1,3-Dichloropropene	NS	NS	ug/kg	1.7 U	1.7 U	2.1 U	1.8 U	1.6 U	2.1 U	1.6 U	1.9 U	2 U	1.9 U	2.1 U	1.9 U
Trichloroethene	21000	470	ug/kg	0.84 U	0.86 U	1.1 U	0.9 U	0.79 U	1.1 U	0.81 U	0.95 U	1 U	0.97 U	1 U	0.95 U
Vinyl chloride	900	20	ug/kg	1.7 U	1.7 U	2.1 U	1.8 U	1.6 U	2.1 U	1.6 U	1.9 U	2 U	1.9 U	2.1 U	1.9 U

See Notes on Last Page

Table 15. Confirmatory Soil Sample Results Area G
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Sample ID	375-6: RESTRIC. RES. USE SCO	375-6: PROTECTION OF GW SCO		PE-G-A1A 2/4/2016	PE-G-A2 1/22/2016	PE-G-A3 1/22/2016	PE-G-B1A 2/4/2016	PE-G-B2 1/22/2016	PE-G-B3 1/22/2016	PE-G-S1 1/22/2016	PE-G-S2 1/22/2016	PE-G-S3A 2/4/2016	PE-G-S4A 42404	PE-G-S5A 2/4/2016	PE-G-S6A 2/4/2016
Sample Date															
Sample Depth			Units	8-8.5	6-6.5	2-2.5	8-8.5	6-6.5	2-2.5	3.5-4	1.5-2	5-5.5	5-5.5	5-5.5	5-5.5
SVOCs															
1,1-Biphenyl	NS	NS	ug/kg	72 U	74 U	70 U	70 U	70 U	70 U	69 U	74 U	71 U	68 U	16.2 J	70 U
2,2-Oxybis(1-Chloropropane)	NS	NS	ug/kg	72 U	74 U	70 U	70 U	70 U	70 U	69 U	74 U	71 U	68 U	75 U	70 U
2,4,5-Trichlorophenol	NS	NS	ug/kg	180 U	180 U	170 U	180 U	180 U	170 U	170 U	190 U	180 U	170 U	190 U	180 U
2,4,6-Trichlorophenol	NS	NS	ug/kg	180 U	180 U	170 U	180 U	180 U	170 U	170 U	190 U	180 U	170 U	190 U	180 U
2,4-Dichlorophenol	NS	NS	ug/kg	180 U	180 U	170 U	180 U	180 U	170 U	170 U	190 U	180 U	170 U	190 U	180 U
2,4-Dimethylphenol	NS	NS	ug/kg	180 U	180 U	170 U	180 U	180 U	170 U	170 U	190 U	180 U	170 U	190 U	180 U
2,4-Dinitrophenol	NS	NS	ug/kg	180 U	180 U	170 U	180 U	180 U	170 U	170 U	190 U	180 U	170 U	190 U	180 U
2,4-Dinitrotoluene	NS	NS	ug/kg	36 U	37 U	35 U	35 U	35 U	35 U	35 U	37 U	35 U	34 U	38 U	35 U
2,6-Dinitrotoluene	NS	NS	ug/kg	36 U	37 U	35 U	35 U	35 U	35 U	35 U	37 U	35 U	34 U	38 U	35 U
2-Chloronaphthalene	NS	NS	ug/kg	72 U	74 U	70 U	70 U	70 U	70 U	69 U	74 U	71 U	68 U	75 U	70 U
2-Chlorophenol	NS	NS	ug/kg	72 U	74 U	70 U	70 U	70 U	70 U	69 U	74 U	71 U	68 U	75 U	70 U
2-Methyl-4,6-dinitrophenol	NS	NS	ug/kg	180 U	180 U	170 U	180 U	180 U	170 U	170 U	190 U	180 U	170 U	190 U	180 U
2-Methylnaphthalene	NS	NS	ug/kg	72 U	74 U	70 U	70 U	70 U	70 U	69 U	74 U	71 U	68 U	75 U	70 U
2-Methylphenol	NS	NS	ug/kg	72 U	74 U	70 U	70 U	70 U	70 U	69 U	74 U	71 U	68 U	75 U	70 U
2-Nitroaniline	NS	NS	ug/kg	180 U	180 U	170 U	180 U	180 U	170 U	170 U	190 U	180 U	170 U	190 U	180 U
2-Nitrophenol	NS	NS	ug/kg	180 U	180 U	170 U	180 U	180 U	170 U	170 U	190 U	180 U	170 U	190 U	180 U
3,3-Dichlorobenzidine	NS	NS	ug/kg	72 U	74 U	70 U	70 U	70 U	70 U	69 U	74 U	71 U	68 U	75 U	70 U
3-Methylphenol, 4-Methylphenol	NS	NS	ug/kg	72 U	74 U	70 U	70 U	70 U	70 U	69 U	74 U	71 U	68 U	75 U	70 U
3-Nitroaniline	NS	NS	ug/kg	180 U	180 U	170 U	180 U	180 U	170 U	170 U	190 U	180 U	170 U	190 U	180 U
4-Bromophenyl phenyl ether	NS	NS	ug/kg	72 U	74 U	70 U	70 U	70 U	70 U	69 U	74 U	71 U	68 U	75 U	70 U
4-Chloro-3-Methylphenol	NS	NS	ug/kg	180 U	180 U	170 U	180 U	180 U	170 U	170 U	190 U	180 U	170 U	190 U	180 U
4-Chlorophenyl phenyl ether	NS	NS	ug/kg	72 U	74 U	70 U	70 U	70 U	70 U	69 U	74 U	71 U	68 U	75 U	70 U
4-Nitroaniline	NS	NS	ug/kg	180 U	180 U	170 U	180 U	180 U	170 U	170 U	190 U	180 U	170 U	190 U	180 U
4-Nitrophenol	NS	NS	ug/kg	360 UJ	370 U	350 U	350 UJ	350 U	350 U	350 U	370 U	350 UJ	340 UJ	380 UJ	350 UJ
Acenaphthene	100000	98000	ug/kg	36 U	37 U	35 U	35 U	35 U	35 U	35 U	37 U	35 U	34 U	38 U	35 U
Acenaphthylene	100000	107000	ug/kg	36 U	37 U	35 U	35 U	35 U	35 U	35 U	37 U	35 U	34 U	38 U	35 U
Acetophenone	NS	NS	ug/kg	180 U	180 U	170 U	180 U	180 U	170 U	170 U	190 U	180 U	170 U	24 J	180 U
Anthracene	100000	1000000	ug/kg	36 U	37 U	35 U	35 U	35 U	32.5 J	35 U	37 U	35 U	51	38 U	35 U
Atrazine	NS	NS	ug/kg	72 U	74 U	70 U	70 U	70 U	70 U	69 U	74 U	71 U	68 U	75 U	70 U
Benzaldehyde	NS	NS	ug/kg	180 U	180 U	170 U	180 U	180 U	170 U	170 U	190 U	180 U	170 U	190 U	180 U
Benzo(a)anthracene	1000	1000	ug/kg	36 U	37 U	55.1	35 U	35 U	124	35 U	37 U	35 U	382	20.7 J	35 U
Benzo(a)pyrene	1000	22000	ug/kg	36 U	37 U	49.4	35 U	35 U	117	35 U	37 U	35 U	519	19.1 J	35 U
Benzo(b)fluoranthene	1000	1700	ug/kg	36 U	37 U	53.9	35 U	35 U	130	35 U	37 U	35 U	638	28.5 J	35 U
Benzo(g,h,i)perylene	100000	1000000	ug/kg	36 U	37 U	31.5 J	35 U	35 U	76.3	35 U	37 U	35 U	434	19.1 J	35 U
Benzo(k)fluoranthene	3900	1700	ug/kg	36 U	37 U	21.9 J	35 U	35 U	50.3	35 U	37 U	35 U	264	38 U	35 U
bis(2-Chloroethoxy)methane	NS	NS	ug/kg	72 U	74 U	70 U	70 U	70 U	70 U	69 U	74 U	71 U	68 U	75 U	70 U
bis(2-Chloroethyl)ether	NS	NS	ug/kg	72 U	74 U	70 U	70 U	70 U	70 U	69 U	74 U	71 U	68 U	75 U	70 U
bis(2-Ethylhexyl)phthalate	NS	NS	ug/kg	72 U	74 U	70 U	70 U	70 U	70 U	69 U	74 U	71 U	51.4 J	75 U	70 U
Butyl benzyl phthalate	NS	NS	ug/kg	72 U	74 U	70 U	70 U	70 U	70 U	69 U	74 U	71 U	68 U	75 U	70 U
Caprolactam	NS	NS	ug/kg	72 U	74 U	70 U	70 U	70 U	70 U	69 U	74 U	71 U	68 U	75 U	70 U
Carbazole	NS	NS	ug/kg	72 U	74 U	70 U	70 U	70 U	14.7 J	69 U	74 U	71 U	26.8 J	75 U	70 U
Chrysene	3900	1000	ug/kg	36 U	37 U	53.4	35 U	35 U	114	35 U	37 U	35 U	456	29.7 J	35 U
Dibenzo(a,h)anthracene	330	1000000	ug/kg	36 U	37 U	35 U	35 U	35 U	19.9 J	35 U	37 U	35 U	133	38 U	35 U
Dibenzofuran	NS	NS	ug/kg	72 U	74 U	70 U	70 U	70 U	70 U	69 U	74 U	71 U	68 U	75 U	70 U
Diethyl phthalate	NS	NS	ug/kg	72 U	74 U	70 U	70 U	70 U	70 U	69 U	74 U	71 U	68 U	75 U	70 U
Dimethyl phthalate	NS	NS	ug/kg	72 U	74 U	70 U	70 U	70 U	70 U	69 U	74 U	71 U	68 U	75 U	70 U
Di-n-butyl phthalate	NS	NS	ug/kg	72 U	74 U	70 U	70 U	70 U	70 U	69 U	74 U	71 U	68 U	75 U	70 U
Di-n-octyl phthalate	NS	NS	ug/kg	72 U	74 U	70 U	70 U	70 U	70 U	69 U	74 U	71 U	68 U	75 U	70 U
Fluoranthene	100000	1000000	ug/kg	36 U	37 U	79.2	35 U	35 U	175	35 U	37 U	35 U	497	31.5 J	35 U
Fluorene	100000	386000	ug/kg	36 U	37 U	35 U	35 U	35 U	35 U	35 U	37 U	35 U	34 U	38 U	35 U
Hexachloro-1,3-butadiene	NS	NS	ug/kg	36 UJ	37 U	35 U	35 UJ	35 U	35 U	35 U	37 U	35 UJ	34 UJ	38 UJ	35 UJ
Hexachlorobenzene	NS	NS	ug/kg	72 UJ	74 U	70 U	70 UJ	70 U	70 U	69 U	74 U	71 UJ	68 UJ	75 UJ	70 UJ
Hexachlorocyclopentadiene	NS	NS	ug/kg	360 UJ	370 U	350 U	350 UJ	350 U	350 U	350 U	370 U	350 UJ	340 UJ	380 UJ	350 UJ
Hexachloroethane	NS	NS	ug/kg	180 U	180 U	170 U	180 U	180 U	170 U	170 U	190 U	180 U	170 U	190 U	180 U
Indeno(1,2,3-cd)pyrene	500	8200	ug/kg	36 U	37 U	26.1 J	35 U	35 U	65	35 U	37 U	35 U	445	19.4 J	35 U

Table 15. Confirmatory Soil Sample Results Area G
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Sample ID	375-6: RESTRIC. RES. USE SCO	375-6: PROTECTION OF GW SCO		PE-G-A1A 2/4/2016	PE-G-A2 1/22/2016	PE-G-A3 1/22/2016	PE-G-B1A 2/4/2016	PE-G-B2 1/22/2016	PE-G-B3 1/22/2016	PE-G-S1 1/22/2016	PE-G-S2 1/22/2016	PE-G-S3A 2/4/2016	PE-G-S4A 42404	PE-G-S5A 2/4/2016	PE-G-S6A 2/4/2016
Sample Date															
Sample Depth			Units	8-8.5	6-6.5	2-2.5	8-8.5	6-6.5	2-2.5	3.5-4	1.5-2	5-5.5	5-5.5	5-5.5	5-5.5
See Notes on Last Page															
SVOCs cont.															
Isophorone	NS	NS	ug/kg	72 U	74 U	70 U	70 U	70 U	70 U	69 U	74 U	71 U	68 U	75 U	70 U
Naphthalene	100000	12000	ug/kg	36 U	37 U	35 U	35 U	35 U	35 U	35 U	37 U	35 U	34 U	40.9	35 U
Nitrobenzene	NS	NS	ug/kg	72 U	74 U	70 U	70 U	70 U	70 U	69 U	74 U	71 U	68 U	75 U	70 U
n-Nitrosodi-n-propylamine	NS	NS	ug/kg	72 U	74 U	70 U	70 U	70 U	70 U	69 U	74 U	71 U	68 U	75 U	70 U
N-nitrosodiphenylamine	NS	NS	ug/kg	180 U	180 U	170 U	180 U	180 U	170 U	170 U	190 U	180 U	170 U	190 U	180 U
p-Chloroaniline	NS	NS	ug/kg	180 U	180 U	170 U	180 U	180 U	170 U	170 U	190 U	180 U	170 U	190 U	180 U
Pentachlorophenol	6700	800	ug/kg	180 U	180 U	170 U	180 U	180 U	170 U	170 U	190 U	180 U	170 U	190 U	180 U
Phenanthrene	100000	1000000	ug/kg	36 U	37 U	36.3	35 U	35 U	112	35 U	37 U	35 U	221	46.4	35 U
Phenol	100000	330	ug/kg	72 U	74 U	70 U	70 U	70 U	70 U	69 U	74 U	71 U	68 U	75 U	70 U
Pyrene	100000	1000000	ug/kg	36 U	37 U	110	35 U	35 U	209	35 U	37 U	35 U	495	30.5 J	35 U
PCBs															
Aroclor 1016	1000	3200	ug/kg	35 U	36 U	35 U	34 U	34 U	37 U	37 U	34 U	36 U	32 U	37 U	32 U
Aroclor 1221	1000	3200	ug/kg	35 U	36 U	35 U	34 U	34 U	37 U	37 U	34 U	36 U	32 U	37 U	32 U
Aroclor 1232	1000	3200	ug/kg	35 U	36 U	35 U	34 U	34 U	37 U	37 U	34 U	36 U	32 U	37 U	32 U
Aroclor 1242	1000	3200	ug/kg	35 U	36 U	35 U	34 U	34 U	37 U	37 U	34 U	36 U	32 U	37 U	32 U
Aroclor 1248	1000	3200	ug/kg	35 U	36 U	35 U	34 U	34 U	37 U	37 U	34 U	36 U	32 U	37 U	32 U
Aroclor 1254	1000	3200	ug/kg	35 U	36 U	35 U	34 U	34 U	37 U	37 U	34 U	36 U	32 U	37 U	32 U
Aroclor 1260	1000	3200	ug/kg	35 U	36 U	35 U	34 U	34 U	37 U	37 U	34 U	36 U	32 U	37 U	32 U
Aroclor 1262	1000	3200	ug/kg	35 U	36 U	35 U	34 U	34 U	37 U	37 U	34 U	36 U	32 U	37 U	32 U
Aroclor 1268	1000	3200	ug/kg	35 U	36 U	35 U	34 U	34 U	37 U	37 U	34 U	36 U	32 U	37 U	32 U
Metals															
Aluminum	NS	NS	mg/kg	7960 J	10200 J	9230 J	4770 J	6710 J	9940 J	7050 J	7310 J	11600 J	5340 J	8450 J	6630 J
Antimony	NS	NS	mg/kg	2.1 UB	2.1 UB	2.1 UB	2.2 UJ	2.1 UJ	2.2 UJ	2.3 UJ	2.3 UB	2.1 UJ	11.6 J	42.5 J	1.6 J
Arsenic	16	16	mg/kg	2.2	3.5	3	8.1	2.7	3.6	2.9	3	3.6	5.4	21.1	3.3
Barium	400	820	mg/kg	33.4	68	109	18.9 B	29.6	110	47.1	89	36.4	342	2660	618
Beryllium	72	47	mg/kg	0.59	0.52	0.48	0.29	0.4	0.51	0.48	0.43	0.46	0.28	0.38	0.36
Cadmium	4.3	7.5	mg/kg	0.23 B	0.53 UB	0.55	0.55 U	0.51 UB	0.54 UB	0.58 UB	0.58 UB	0.53 U	2.1	14.2	1.8
Calcium	NS	NS	mg/kg	3140 J	2340	2560	5300 J	3840	9610	3020	2720	1140 J	5440 J	22300 J	9240 J
Chromium	NS	NS	mg/kg	7.8	15.3	15.1	12.9	14.2	15.7	16	13.8	15	20.9	308	21.5
Cobalt	NS	NS	mg/kg	5.5	7.4	6.9	4.8 B	6.4	7.3	7.3	6.1	8.6	6.8	8.3	6.1
Copper	270	1720	mg/kg	10	15.4 J	19.7 J	9.5	14.4 J	22.8 J	18.6 J	66.9 J	14.7	98.8	401	269
Iron	NS	NS	mg/kg	15900 J	17000 J	16900 J	13100 J	16500 J	17100 J	19500 J	15500 J	15800 J	19900 J	59900 J	17500 J
Lead	400	450	mg/kg	3.1	40.8	59.8	9.9	4.5	23.8	6.2	35.2	4.8	701	2690	162
Magnesium	NS	NS	mg/kg	2310	2790 J	2780 J	3030	3040 J	5400 J	3370 J	2380 J	3490	2770	5440	3410
Manganese	2000	2000	mg/kg	161 J	305	246	194 J	271	687	407	220	281 J	254 J	818 J	322 J
Mercury	NS	NS	mg/kg	0.034 UB	0.042 UB	0.049	0.035 UB	0.033 UB	0.089	0.036 UB	0.039 UB	0.035 UB	0.037 UB	0.081	0.033 UB
Nickel	310	130	mg/kg	6.4	13.2	13.8	9.6	12.6	13.8	15.8	11	16.7	38.3	185	14.4
Potassium	NS	NS	mg/kg	1490	1030 B	981 B	749 B	1130	1210	1220	1020 B	1230	721 B	1210	1150
Selenium	180	4	mg/kg	0.87 B	2.1 U	2.1 U	2.2 U	2.1 U	2.2 U	2.3 U	2.3 U	2.1 U	2.1 U	7.2 U	2.1 U
Silver	180	8.3	mg/kg	0.86	0.93	1	0.55 U	0.81	1.3	0.93	0.91	0.38 B	0.47 B	2.6	0.26 B
Sodium	NS	NS	mg/kg	259 B	142 B	149 B	172 B	169 B	165 B	191 B	203 B	115 B	156 B	472 B	218 B
Thallium	NS	NS	mg/kg	1.1 U	1.1 U	1 U	1.1 U	1 U	1.1 U	1.2 U	1.2 U	1.1 U	1 U	3.6 U	1 U
Vanadium	NS	NS	mg/kg	18.4	24.2	23.8	20	22.2	25.8	26.2	21.7	23.6	18.7	22.5	21.7
Zinc	10000	2480	mg/kg	22.8 J	42.9	112	19.2 J	27.4	54.7	45.2	75.4	29 J	858 J	2690 J	393 J
General Chemistry															
Percent Solids			%	92.6	89.8	95.3	92.5	93.4	89.8	89.7	86.4	91.9	93.9	85.4	94.4
Notes															
NS	No standard														
NA	Not analyzed														
J	Estimated result														
JN	Estimated result														
R	Rejected result														
UB	Analyte considered non-detect at the listed value due to associated blank contamination														
Bold	Result exceeds 375-6.8(b) residential use soil cleanup objective.														
Shade	Result exceeds 375-6.8(b) restricted residential use soil cleanup objective.														

Table 16. Confirmatory Soil Sample Results Area H
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Sample ID Sample Date Sample Depth	375-6: RESTRIC. RES. USE SCO	375-6: PROTECTION OF GW SCO	Units	PE-H-A1 42457 2-2.5	PE-H-A2 3/28/2016 2-2.5	PE-H-A3A 4/5/2016 3-3.5	PE-H-A4 3/28/2016 2-2.5	PE-H-B1 3/25/2016 8-8.5	PE-H-B2 3/28/2016 2-2.5	PE-H-B3 3/28/2016 2-2.5	PE-H-C1 3/25/2016 8-8.5	PE-H-C2 3/25/2016 8-8.5
VOCs												
1,1,1-Trichloroethane	100000	680	ug/kg	1.8 U	2.2 U	NA	2.5 U	2.9 U	2 U	2.5 U	2 U	2.1 U
1,1,2,2-Tetrachloroethane	NS	NS	ug/kg	1.8 U	2.2 U	NA	2.5 U	2.9 U	2 U	2.5 U	2 U	2.1 U
1,1,2-trichloro-1,2,2-trifluoroethane	NS	NS	ug/kg	4.6 UJ	5.5 U	NA	6.4 U	7.2 U	5 UJ	6.3 U	5 U	5.3 U
1,1,2-Trichloroethane	NS	NS	ug/kg	1.8 U	2.2 U	NA	2.5 U	2.9 U	2 U	2.5 U	2 U	2.1 U
1,1-Dichloroethane	26000	270	ug/kg	0.92 U	1.1 U	NA	1.3 U	1.4 U	1 U	1.3 U	1 U	1.1 U
1,1-Dichloroethene	100000	330	ug/kg	0.92 U	1.1 U	NA	1.3 U	1.4 U	1 U	1.3 U	1 U	1.1 U
1,2,4-Trichlorobenzene	NS	NS	ug/kg	4.6 U	5.5 U	NA	6.4 U	7.2 U	5 U	6.3 U	5 U	5.3 U
1,2-Dibromo-3-chloropropane	NS	NS	ug/kg	1.8 U	2.2 U	NA	2.5 U	2.9 U	2 U	2.5 U	2 U	2.1 U
1,2-Dibromoethane	NS	NS	ug/kg	0.92 U	1.1 U	NA	1.3 U	1.4 U	1 U	1.3 U	1 U	1.1 U
1,2-Dichlorobenzene	100000	1100	ug/kg	0.92 U	1.1 U	NA	1.3 U	1.4 U	1 U	1.3 U	1 U	1.1 U
1,2-Dichloroethane	3100	20	ug/kg	0.92 U	1.1 U	NA	1.3 U	1.4 U	1 U	1.3 U	1 U	1.1 U
1,2-Dichloropropane	NS	NS	ug/kg	1.8 U	2.2 U	NA	2.5 U	2.9 U	2 U	2.5 U	2 U	2.1 U
1,3-Dichlorobenzene	49000	2400	ug/kg	0.92 U	1.1 U	NA	1.3 U	1.4 U	1 U	1.3 U	1 U	1.1 U
1,4-Dichlorobenzene	13000	1800	ug/kg	0.92 U	1.1 U	NA	1.3 U	1.4 U	1 U	1.3 U	1 U	1.1 U
2-Butanone (MEK)	100000	120	ug/kg	9.2 U	11 U	NA	13 U	11 J	16.4	13 U	8.6 J	8 J
4-Methyl-2-Pentanone	NS	NS	ug/kg	4.6 U	5.5 U	NA	6.4 U	7.2 U	5 U	6.3 U	5 U	5.3 U
Acetone	100000	50	ug/kg	9.2 U	11 U	NA	13 U	44 J	70.8 J	13 U	35.9	51.3
Benzene	4800	60	ug/kg	0.46 U	0.55 U	NA	0.64 U	0.72 U	0.5 U	0.63 U	0.2 J	0.53 U
Bromodichloromethane	NS	NS	ug/kg	1.8 U	2.2 U	NA	2.5 U	2.9 U	2 U	2.5 U	2 U	2.1 U
Bromoform	NS	NS	ug/kg	4.6 U	5.5 U	NA	6.4 U	7.2 U	5 U	6.3 U	5 U	5.3 U
Bromomethane	NS	NS	ug/kg	4.6 U	5.5 UJ	NA	6.4 UJ	7.2 U	5 U	6.3 UJ	5 U	5.3 U
Carbon Disulfide	NS	NS	ug/kg	1.8 UJ	2.2 U	NA	2.5 U	2.9 U	2 UJ	2.5 U	0.42 J	2.1 U
Carbon Tetrachloride	2400	760	ug/kg	1.8 U	2.2 U	NA	2.5 U	2.9 U	2 U	2.5 U	2 U	2.1 U
CFC-11	NS	NS	ug/kg	4.6 UJ	5.5 UJ	NA	6.4 UJ	7.2 U	5 UJ	6.3 UJ	5 U	5.3 U
CFC-12	NS	NS	ug/kg	4.6 U	5.5 U	NA	6.4 U	7.2 U	5 U	6.3 U	5 U	5.3 U
Chlorobenzene	100000	1100	ug/kg	1.8 U	2.2 U	NA	2.5 U	2.9 U	2 U	2.5 U	2 U	2.1 U
Chlorodibromomethane	NS	NS	ug/kg	1.8 U	2.2 U	NA	2.5 U	2.9 U	2 U	2.5 U	2 U	2.1 U
Chloroethane	NS	NS	ug/kg	4.6 U	5.5 U	NA	6.4 U	7.2 U	5 U	6.3 U	5 U	5.3 U
Chloroform	49000	370	ug/kg	1.8 U	2.2 U	NA	2.5 U	2.9 U	2 U	2.5 U	2 U	2.1 U
Chloromethane	NS	NS	ug/kg	4.6 U	5.5 U	NA	6.4 U	7.2 U	5 U	6.3 U	5 U	5.3 U
cis-1,2-Dichloroethene	100000	250	ug/kg	0.92 U	1.1 U	NA	1.3 U	1.4 U	1 U	1.3 U	1 U	1.1 U
cis-1,3-Dichloropropene	NS	NS	ug/kg	1.8 U	2.2 U	NA	2.5 U	2.9 U	2 U	2.5 U	2 U	2.1 U
Cyclohexane	NS	NS	ug/kg	1.8 U	2.2 U	NA	2.5 U	2.9 U	2 U	2.5 U	2 U	2.1 U
Dichloromethane	NS	NS	ug/kg	4.6 U	5.5 U	NA	6.4 U	7.2 U	5 U	6.3 U	5 U	5.3 U
Ethylbenzene	41000	1000	ug/kg	0.92 U	1.1 U	NA	1.3 U	1.4 U	1 U	1.3 U	1 U	1.1 U
Isopropylbenzene	NS	NS	ug/kg	1.8 U	2.2 U	NA	2.5 U	2.9 U	2 U	2.5 U	2 U	2.1 U
Methyl Acetate	NS	NS	ug/kg	4.6 U	5.5 U	NA	6.4 U	7.2 U	5 U	6.3 U	5 U	5.3 U
Methyl N-Butyl Ketone (2-Hexanone)	NS	NS	ug/kg	4.6 U	5.5 U	NA	6.4 U	7.2 U	5 U	6.3 U	5 U	5.3 U
Methylcyclohexane	NS	NS	ug/kg	1.8 U	2.2 U	NA	2.5 U	2.9 U	2 U	2.5 U	2 U	2.1 U
Methyl-tert-butylether	100000	930	ug/kg	0.92 U	1.1 U	NA	1.3 U	1.4 U	1 U	1.3 U	1 U	1.1 U
Styrene (Monomer)	NS	NS	ug/kg	1.8 U	2.2 U	NA	2.5 U	2.9 U	2 U	2.5 U	2 U	2.1 U
Tetrachloroethene	19000	1300	ug/kg	1.8 U	2.2 U	NA	2.5 U	2.9 U	2 U	2.5 U	2 U	2.1 U
Toluene	100000	700	ug/kg	0.92 U	1.1 U	NA	1.3 U	1.4 U	1 U	1.3 U	1 U	1.1 U
Total Xylenes	100000	1600	ug/kg	0.92 U	1.1 U	NA	1.3 U	1.4 U	1 U	1.3 U	1 U	1.1 U
trans-1,2-Dichloroethene	100000	190	ug/kg	0.92 U	1.1 U	NA	1.3 U	1.4 U	1 U	1.3 U	1 U	1.1 U
trans-1,3-Dichloropropene	NS	NS	ug/kg	1.8 U	2.2 U	NA	2.5 U	2.9 U	2 U	2.5 U	2 U	2.1 U
Trichloroethene	21000	470	ug/kg	0.92 U	1.1 U	NA	1.3 U	1.4 U	1 U	1.3 U	1 U	1.1 U
Vinyl chloride	900	20	ug/kg	1.8 U	2.2 U	NA	2.5 U	2.9 U	2 U	2.5 U	2 U	2.1 U

See Last Page for Notes

Table 16. Confirmatory Soil Sample Results Area H
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Sample ID	375-6: RESTRIC. RES. USE SCO	375-6: PROTECTION OF GW SCO		PE-H-A1	PE-H-A2	PE-H-A3A	PE-H-A4	PE-H-B1	PE-H-B2	PE-H-B3	PE-H-C1	PE-H-C2
Sample Date				42457	3/28/2016	4/5/2016	3/28/2016	3/25/2016	3/28/2016	3/28/2016	3/25/2016	3/25/2016
Sample Depth			Units	2-2.5	2-2.5	3-3.5	2-2.5	8-8.5	2-2.5	2-2.5	8-8.5	8-8.5
SVOCs												
1,1-Biphenyl	NS	NS	ug/kg	73 U	77 U	NA	79 U	91 U	70 U	81 U	76 U	80 U
2,2-Oxybis(1-Chloropropane)	NS	NS	ug/kg	73 UJ	77 UJ	NA	79 UJ	91 U	70 UJ	81 U	76 U	80 U
2,4,5-Trichlorophenol	NS	NS	ug/kg	180 U	190 U	NA	200 U	230 U	180 U	200 U	190 U	200 U
2,4,6-Trichlorophenol	NS	NS	ug/kg	180 U	190 U	NA	200 U	230 U	180 U	200 U	190 U	200 U
2,4-Dichlorophenol	NS	NS	ug/kg	180 U	190 U	NA	200 U	230 U	180 U	200 U	190 U	200 U
2,4-Dimethylphenol	NS	NS	ug/kg	180 U	190 U	NA	200 U	230 U	180 U	200 U	190 U	200 U
2,4-Dinitrophenol	NS	NS	ug/kg	180 UJ	190 UJ	NA	200 UJ	R	180 UJ	200 UJ	190 U	200 U
2,4-Dinitrotoluene	NS	NS	ug/kg	37 UJ	38 UJ	NA	40 UJ	45 U	35 UJ	41 UJ	38 U	40 U
2,6-Dinitrotoluene	NS	NS	ug/kg	37 U	38 U	NA	40 U	45 U	35 U	41 U	38 U	40 U
2-Chloronaphthalene	NS	NS	ug/kg	73 U	77 U	NA	79 U	91 U	70 U	81 U	76 U	80 U
2-Chlorophenol	NS	NS	ug/kg	73 U	77 U	NA	79 U	91 U	70 U	81 U	76 U	80 U
2-Methyl-4,6-dinitrophenol	NS	NS	ug/kg	180 UJ	190 UJ	NA	200 UJ	230 UJ	180 UJ	200 UJ	190 U	200 U
2-Methylnaphthalene	NS	NS	ug/kg	73 U	77 U	NA	32.7 J	91 U	70 U	81 U	76 U	80 U
2-Methylphenol	NS	NS	ug/kg	73 U	77 U	NA	79 U	91 U	70 U	81 U	76 U	80 U
2-Nitroaniline	NS	NS	ug/kg	180 UJ	190 UJ	NA	200 UJ	230 U	180 UJ	200 U	190 U	200 U
2-Nitrophenol	NS	NS	ug/kg	180 U	190 U	NA	200 U	230 U	180 U	200 U	190 U	200 U
3,3-Dichlorobenzidine	NS	NS	ug/kg	73 U	77 U	NA	79 U	91 U	70 U	81 U	76 U	80 U
3-Methylphenol, 4-Methylphenol	NS	NS	ug/kg	73 U	77 U	NA	79 U	91 U	119	81 U	76 U	80 U
3-Nitroaniline	NS	NS	ug/kg	180 U	190 U	NA	200 U	230 U	180 U	200 U	190 U	200 U
4-Bromophenyl phenyl ether	NS	NS	ug/kg	73 U	77 U	NA	79 U	91 U	70 U	81 U	76 U	80 U
4-Chloro-3-Methylphenol	NS	NS	ug/kg	180 U	190 U	NA	200 U	230 U	180 U	200 U	190 U	200 U
4-Chlorophenyl phenyl ether	NS	NS	ug/kg	73 U	77 U	NA	79 U	91 U	70 U	81 U	76 U	80 U
4-Nitroaniline	NS	NS	ug/kg	180 U	190 U	NA	200 U	230 U	180 U	200 U	190 U	200 U
4-Nitrophenol	NS	NS	ug/kg	370 UJ	380 UJ	NA	400 UJ	450 U	350 UJ	410 UJ	380 U	400 U
Acenaphthene	100000	98000	ug/kg	37 U	38 U	NA	123	45 U	35 U	41 U	38 U	40 U
Acenaphthylene	100000	107000	ug/kg	20.7 J	38 U	NA	146	45 U	50.9	22.9 J	38 U	40 U
Acetophenone	NS	NS	ug/kg	180 U	190 U	NA	200 U	230 U	180 U	200 U	190 U	200 U
Anthracene	100000	1000000	ug/kg	36 J	38 U	NA	370	33.5 J	88.8	37.2 J	38 U	16.5 J
Atrazine	NS	NS	ug/kg	73 UJ	77 UJ	NA	79 UJ	91 U	70 UJ	81 UJ	76 U	80 U
Benzaldehyde	NS	NS	ug/kg	17.6 J	190 U	NA	200 U	56.7 J	16.6 J	21.4 J	190 U	200 U
Benzo(a)anthracene	1000	1000	ug/kg	103	39.6	NA	836	90.1	256	161	39.6	41.2
Benzo(a)pyrene	1000	22000	ug/kg	110	36.2 J	NA	828	96.2	279	162	43.1	42.5
Benzo(b)fluoranthene	1000	1700	ug/kg	140	42.7	NA	907	117	337	201	51.2	55.5
Benzo(g,h,i)perylene	100000	1000000	ug/kg	76.6	19.6 J	NA	477	78.9	183	95.8	31.2 J	40.5
Benzo(k)fluoranthene	3900	1700	ug/kg	49.2	16 J	NA	354	41.6 J	117	75.6	21.8 J	21.8 J
bis(2-Chloroethoxy)methane	NS	NS	ug/kg	73 U	77 U	NA	79 U	91 U	70 U	81 U	76 U	80 U
bis(2-Chloroethyl)ether	NS	NS	ug/kg	73 U	77 U	NA	79 U	91 U	70 U	81 U	76 U	80 U
bis(2-Ethylhexyl)phthalate	NS	NS	ug/kg	73 UJ	77 UJ	NA	79 UJ	61.2 J	70 UJ	81 U	76 U	80 U
Butyl benzyl phthalate	NS	NS	ug/kg	73 UJ	77 UJ	NA	79 UJ	91 U	70 UJ	81 U	76 U	80 U
Caprolactam	NS	NS	ug/kg	73 U	77 U	NA	79 U	91 U	70 U	81 U	76 U	80 U
Carbazole	NS	NS	ug/kg	73 U	77 U	NA	79.2	91 U	21.8 J	81 U	76 U	80 U
Chrysene	3900	1000	ug/kg	110	37.9 J	NA	859	104	270	169	41.3	58.2
Dibenzo(a,h)anthracene	330	1000000	ug/kg	18.5 J	38 U	NA	130	24.8 J	49.7	29.7 J	38 U	40 U
Dibenzofuran	NS	NS	ug/kg	73 U	77 U	NA	58 J	91 U	70 U	81 U	76 U	80 U
Diethyl phthalate	NS	NS	ug/kg	73 U	77 U	NA	79 U	91 U	70 U	81 U	76 U	80 U
Dimethyl phthalate	NS	NS	ug/kg	73 U	77 U	NA	79 U	91 U	70 U	81 U	76 U	80 U
Di-n-butyl phthalate	NS	NS	ug/kg	73 U	77 U	NA	79 U	91 U	70 U	81 U	76 U	80 U
Di-n-octyl phthalate	NS	NS	ug/kg	73 U	77 U	NA	79 U	91 U	70 U	81 U	76 U	80 U
Fluoranthene	100000	1000000	ug/kg	176	70.9	NA	1510	184	435	275	70.8	96.3
Fluorene	100000	386000	ug/kg	37 U	38 U	NA	157	45 U	21.6 J	41 U	38 U	40 U
Hexachloro-1,3-butadiene	NS	NS	ug/kg	37 UJ	38 UJ	NA	40 UJ	45 U	35 UJ	41 UJ	38 U	40 U
Hexachlorobenzene	NS	NS	ug/kg	73 U	77 U	NA	79 U	91 U	70 U	81 U	76 U	80 U
Hexachlorocyclopentadiene	NS	NS	ug/kg	370 U	380 U	NA	400 U	R	350 U	410 U	380 U	400 U
Hexachloroethane	NS	NS	ug/kg	180 U	190 U	NA	200 U	230 U	180 U	200 U	190 U	200 U
Indeno(1,2,3-cd)pyrene	500	8200	ug/kg	84.1	24.2 J	NA	532	75.4	201	107	36.6 J	47.2
Isophorone	NS	NS	ug/kg	73 U	77 U	NA	79 U	91 U	70 U	81 U	76 U	80 U

See Last Page for Notes

Table 16. Confirmatory Soil Sample Results Area H
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Sample ID	375-6: RESTRIC. RES. USE SCO	375-6: PROTECTION OF GW SCO		PE-H-A1	PE-H-A2	PE-H-A3A	PE-H-A4	PE-H-B1	PE-H-B2	PE-H-B3	PE-H-C1	PE-H-C2
Sample Date				42457	3/28/2016	4/5/2016	3/28/2016	3/25/2016	3/28/2016	3/28/2016	3/25/2016	3/25/2016
Sample Depth			Units	2-2.5	2-2.5	3-3.5	2-2.5	8-8.5	2-2.5	2-2.5	8-8.5	8-8.5
SVOCs cont.												
Naphthalene	100000	12000	ug/kg	37 U	38 U	NA	41.1	45 U	35 U	41 U	38 U	26.1 J
Nitrobenzene	NS	NS	ug/kg	73 U	77 U	NA	79 U	91 U	70 U	81 U	76 U	80 U
n-Nitrosodi-n-propylamine	NS	NS	ug/kg	73 U	77 U	NA	79 U	91 U	70 U	81 U	76 U	80 U
N-nitrosodiphenylamine	NS	NS	ug/kg	180 U	190 U	NA	200 U	230 U	180 U	200 U	190 U	200 U
p-Chloroaniline	NS	NS	ug/kg	180 U	190 U	NA	200 U	230 U	180 U	200 U	190 U	200 U
Pentachlorophenol	6700	800	ug/kg	180 U	190 U	NA	200 U	230 U	180 U	200 U	190 U	200 U
Phenanthrene	100000	1000000	ug/kg	108	56.3	NA	1350	104	223	127	49.2	76.6
Phenol	100000	330	ug/kg	73 U	77 U	NA	79 U	91 U	70 U	81 U	76 U	80 U
Pyrene	100000	1000000	ug/kg	210	81.2	NA	1910	163	530	335	78.2	83.9
See Last Page for Notes												
PCBs												
Aroclor 1016	1000	3200	ug/kg	37 U	37 U	36 U	41 U	45 U	35 U	41 U	36 U	37 U
Aroclor 1221	1000	3200	ug/kg	37 U	37 U	36 U	41 U	45 U	35 U	41 U	36 U	37 U
Aroclor 1232	1000	3200	ug/kg	37 U	37 U	36 U	41 U	45 U	35 U	41 U	36 U	37 U
Aroclor 1242	1000	3200	ug/kg	37 U	37 U	36 U	41 U	45 U	35 U	41 U	36 U	37 U
Aroclor 1248	1000	3200	ug/kg	37 U	37 U	36 U	41 U	45 U	35 U	41 U	36 U	37 U
Aroclor 1254	1000	3200	ug/kg	37 U	37 U	36 U	41 U	45 U	35 U	41 U	36 U	37 U
Aroclor 1260	1000	3200	ug/kg	37 U	37 U	36 U	41 U	45 U	35 U	41 U	36 U	37 U
Aroclor 1262	1000	3200	ug/kg	37 U	37 U	36 U	41 U	45 U	35 U	41 U	36 U	37 U
Aroclor 1268	1000	3200	ug/kg	37 U	37 U	36 U	41 U	45 U	35 U	41 U	36 U	37 U
Metals												
Aluminum	NS	NS	mg/kg	9160	19300	NA	10600	14500	9350	8930	6120 J	9660
Antimony	NS	NS	mg/kg	2.2 U	2.2 U	NA	2.2 B	1.1 B	0.47 B	3.1	2.5 J	1.8 B
Arsenic	16	16	mg/kg	3.2	3.6	NA	4.7	10.1	3.6	4.3	3.5	3.8
Barium	400	820	mg/kg	67.4	48.2	NA	158	181	55.3	103	507	244
Beryllium	72	47	mg/kg	0.38	0.54	NA	0.35	0.65	0.36	0.36	0.33	0.34
Cadmium	4.3	7.5	mg/kg	0.25 B	0.11 B	NA	1.8	0.53 B	0.38 B	0.67	1.3	0.86
Calcium	NS	NS	mg/kg	2630	414 B	NA	3440	3300	2960	2920	7530 J	2620
Chromium	NS	NS	mg/kg	14.7	27.1	NA	16.6	23.9	14.9	15.1	16.7	14.9
Cobalt	NS	NS	mg/kg	7	8.9	NA	5.4 B	8.2	5.7	6.3 B	5.3 B	5.6 B
Copper	270	1720	mg/kg	25.3	17.1	NA	34.6	28	22.2	35.4	28.1	27.9
Iron	NS	NS	mg/kg	19200	18700	NA	20600	24700	14900	17200	16700	15100
Lead	400	450	mg/kg	38.4	7	NA	217	92.5	86.6	153	156	138
Magnesium	NS	NS	mg/kg	3410	3520	NA	2000	3290	2480	2690	3640	2160
Manganese	2000	2000	mg/kg	351	179	NA	318	426	309	511	525	242
Mercury	NS	NS	mg/kg	0.019 B	0.036	NA	0.06	0.1	0.12	0.063	0.032 B	0.032 B
Nickel	310	130	mg/kg	13.2	14.9	NA	15.6	18.8	12.6	14.1	13.4	16.1
Potassium	NS	NS	mg/kg	1010 B	1050 B	NA	555 B	1510	710 B	844 B	907 J	896 B
Selenium	180	4	mg/kg	0.55 B	0.74 B	NA	2.4 U	2.9 U	2.2 U	2.6 U	2.2 U	2.4 U
Silver	180	8.3	mg/kg	0.89	0.58	NA	0.88	14	0.62	1	0.56 U	9.5
Sodium	NS	NS	mg/kg	187 B	1100 UB	NA	78.5 B	175 B	132 B	194 B	141 J	121 B
Thallium	NS	NS	mg/kg	1.1 U	0.58 B	NA	1.2 U	1.4 U	1.1 U	1.3 U	1.1 U	1.2 U
Vanadium	NS	NS	mg/kg	31.6	34.1	NA	23.5	34.8	27.4	30.8	19.8	26.9
Zinc	10000	2480	mg/kg	73.9	32.8	NA	655	205	145	172	259	284
General Chemistry												
Percent Solids			%	89.2	85.8	86.2	81.9	72.5	90.2	76.6	84.8	81.6

Notes

NS	No standard
NA	Not analyzed
J	Estimated result
JN	Estimated result
R	Rejected result
UB	Analyte considered non-detect at the listed value due to associated blank contamination
Bold	Result exceeds 375-6.8(b) residential use soil cleanup objective.
Shade	Result exceeds 375-6.8(b) restricted residential use soil cleanup objective.

Table 16. Confirmatory Soil Sample Results Area H
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Sample ID Sample Date Sample Depth	375-6: RESTRIC. RES. USE SCO	375-6: PROTECTION OF GW SCO		PE-H-S1 3/25/2016	PE-H-S2 3/25/2016	PE-H-S3 3/28/2016	PE-H-S4 42457	PE-H-S5 3/29/2016	PE-H-S6 3/29/2016	PE-H-S7 3/29/2016	PE-H-S8 3/29/2016	PE-H-S9 3/29/2016
VOCs			Units	7.5-8	7.5-8	1.5-2	1.5-2	1.5-2	1.5-2	1.5-2	1.5-2	1.5-2
1,1,1-Trichloroethane	100000	680	ug/kg	1.8 U	1.8 U	1.9 U	2 U	1.9 U	1.9 U	2 U	2 U	1.8 U
1,1,2,2-Tetrachloroethane	NS	NS	ug/kg	1.8 U	1.8 U	1.9 U	2 U	1.9 U	1.9 U	2 U	2 U	1.8 U
1,1,2-trichloro-1,2,2-trifluoroethane	NS	NS	ug/kg	4.4 U	4.6 U	4.8 U	4.9 UJ	4.7 U	4.7 U	5.1 U	5 U	4.6 U
1,1,2-Trichloroethane	NS	NS	ug/kg	1.8 U	1.8 U	1.9 U	2 U	1.9 U	1.9 U	2 U	2 U	1.8 U
1,1-Dichloroethane	26000	270	ug/kg	0.89 U	0.91 U	0.96 U	0.98 U	0.94 U	0.94 U	1 U	1 U	0.91 U
1,1-Dichloroethene	100000	330	ug/kg	0.89 U	0.91 U	0.96 U	0.98 U	0.94 U	0.94 U	1 U	1 U	0.91 U
1,2,4-Trichlorobenzene	NS	NS	ug/kg	4.4 U	4.6 U	4.8 U	4.9 U	4.7 UJ	4.7 UJ	5.1 UJ	5 UJ	4.6 UJ
1,2-Dibromo-3-chloropropane	NS	NS	ug/kg	1.8 U	1.8 U	1.9 U	2 U	1.9 U	1.9 U	2 U	2 U	1.8 U
1,2-Dibromoethane	NS	NS	ug/kg	0.89 U	0.91 U	0.96 U	0.98 U	0.94 U	0.94 U	1 U	1 U	0.91 U
1,2-Dichlorobenzene	100000	1100	ug/kg	0.89 U	0.91 U	0.96 U	0.98 U	0.94 U	0.94 U	1 U	1 U	0.91 U
1,2-Dichloroethane	3100	20	ug/kg	0.89 U	0.91 U	0.96 U	0.98 U	0.94 U	0.94 U	1 U	1 U	0.91 U
1,2-Dichloropropane	NS	NS	ug/kg	1.8 U	1.8 U	1.9 U	2 U	1.9 U	1.9 U	2 U	2 U	1.8 U
1,3-Dichlorobenzene	49000	2400	ug/kg	0.89 U	0.91 U	0.96 U	0.98 U	0.94 U	0.94 U	1 U	1 U	0.91 U
1,4-Dichlorobenzene	13000	1800	ug/kg	0.89 U	0.91 U	0.96 U	0.98 U	0.94 U	0.94 U	1 U	1 U	0.91 U
2-Butanone (MEK)	100000	120	ug/kg	8.4 J	3.8 J	9.6 U	9.8 U	9.4 U	9.4 U	10 U	10 U	9.1 U
4-Methyl-2-Pentanone	NS	NS	ug/kg	4.4 U	4.6 U	4.8 U	4.9 U	4.7 U	4.7 U	5.1 U	5 U	4.6 U
Acetone	100000	50	ug/kg	32.8	17.1	9.6 U	9.8 U	9.4 U	9.4 U	10 U	10 U	9.1 U
Benzene	4800	60	ug/kg	0.44 U	0.46 U	0.48 U	0.49 U	0.47 U	0.47 U	0.51 U	0.5 U	0.46 U
Bromodichloromethane	NS	NS	ug/kg	1.8 U	1.8 U	1.9 U	2 U	1.9 U	1.9 U	2 U	2 U	1.8 U
Bromoform	NS	NS	ug/kg	4.4 U	4.6 U	4.8 U	4.9 U	4.7 U	4.7 U	5.1 U	5 U	4.6 U
Bromomethane	NS	NS	ug/kg	4.4 U	4.6 U	4.8 UJ	4.9 U	4.7 U	4.7 U	5.1 U	5 U	4.6 U
Carbon Disulfide	NS	NS	ug/kg	1.8 U	1.8 U	1.9 U	2 UJ	1.9 U	1.9 U	2 U	2 U	1.8 U
Carbon Tetrachloride	2400	760	ug/kg	1.8 U	1.8 U	1.9 U	2 U	1.9 U	1.9 U	2 U	2 U	1.8 U
CFC-11	NS	NS	ug/kg	4.4 U	4.6 U	4.8 UJ	4.9 UJ	4.7 U	4.7 U	5.1 U	5 U	4.6 U
CFC-12	NS	NS	ug/kg	4.4 U	4.6 U	4.8 U	4.9 U	4.7 U	4.7 U	5.1 U	5 U	4.6 U
Chlorobenzene	100000	1100	ug/kg	1.8 U	1.8 U	1.9 U	2 U	1.9 U	1.9 U	2 U	2 U	1.8 U
Chlorodibromomethane	NS	NS	ug/kg	1.8 U	1.8 U	1.9 U	2 U	1.9 U	1.9 U	2 U	2 U	1.8 U
Chloroethane	NS	NS	ug/kg	4.4 U	4.6 U	4.8 U	4.9 U	4.7 U	4.7 U	5.1 U	5 U	4.6 U
Chloroform	49000	370	ug/kg	1.8 U	1.8 U	1.9 U	2 U	1.9 U	1.9 U	2 U	2 U	1.8 U
Chloromethane	NS	NS	ug/kg	4.4 U	4.6 U	4.8 U	4.9 U	4.7 U	4.7 U	5.1 U	5 U	4.6 U
cis-1,2-Dichloroethene	100000	250	ug/kg	0.89 U	0.91 U	0.96 U	0.98 U	0.94 U	0.94 U	1 U	1 U	0.91 U
cis-1,3-Dichloropropene	NS	NS	ug/kg	1.8 U	1.8 U	1.9 U	2 U	1.9 U	1.9 U	2 U	2 U	1.8 U
Cyclohexane	NS	NS	ug/kg	1.8 U	1.8 U	1.9 U	2 U	1.9 U	1.9 U	2 U	2 U	1.8 U
Dichloromethane	NS	NS	ug/kg	4.4 U	4.6 U	4.8 U	4.9 U	4.7 U	4.7 U	5.1 U	5 U	4.6 U
Ethylbenzene	41000	1000	ug/kg	0.89 U	0.91 U	0.96 U	0.98 U	0.94 U	0.94 U	1 U	1 U	0.91 U
Isopropylbenzene	NS	NS	ug/kg	1.8 U	1.8 U	1.9 U	2 U	1.9 U	1.9 U	2 U	2 U	1.8 U
Methyl Acetate	NS	NS	ug/kg	4.4 U	4.6 U	4.8 U	4.9 U	4.7 U	4.7 U	5.1 U	5 U	4.6 U
Methyl N-Butyl Ketone (2-Hexanone)	NS	NS	ug/kg	4.4 U	4.6 U	4.8 U	4.9 U	4.7 U	4.7 U	5.1 U	5 U	4.6 U
Methylcyclohexane	NS	NS	ug/kg	1.8 U	1.8 U	1.9 U	2 U	1.9 U	1.9 U	2 U	2 U	1.8 U
Methyl-tert-butylether	100000	930	ug/kg	0.89 U	0.91 U	0.96 U	0.98 U	0.94 U	0.94 U	1 U	1 U	0.91 U
Styrene (Monomer)	NS	NS	ug/kg	1.8 U	1.8 U	0.38 J	2 U	1.9 U	1.9 U	2 U	2 U	1.8 U
Tetrachloroethene	19000	1300	ug/kg	1.8 U	1.8 U	1.9 U	2 U	1.9 U	1.9 U	2 U	2 U	1.8 U
Toluene	100000	700	ug/kg	0.89 U	0.91 U	0.96 U	0.98 U	0.94 U	0.21 J	0.22 J	1 U	0.19 J
Total Xylenes	100000	1600	ug/kg	0.89 U	0.91 U	0.96 U	0.98 U	0.94 U	0.94 U	1 U	1 U	0.91 U
trans-1,2-Dichloroethene	100000	190	ug/kg	0.89 U	0.91 U	0.96 U	0.98 U	0.94 U	0.94 U	1 U	1 U	0.91 U
trans-1,3-Dichloropropene	NS	NS	ug/kg	1.8 U	1.8 U	1.9 U	2 U	1.9 U	1.9 U	2 U	2 U	1.8 U
Trichloroethene	21000	470	ug/kg	0.89 U	0.91 U	0.96 U	0.98 U	0.94 U	0.94 U	1 U	1 U	0.91 U
Vinyl chloride	900	20	ug/kg	1.8 U	1.8 U	1.9 U	2 U	1.9 U	1.9 U	2 U	2 U	1.8 U

See Last Page for Notes

Table 16. Confirmatory Soil Sample Results Area H
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Sample ID	375-6: RESTRIC. RES. USE SCO	375-6: PROTECTION OF GW SCO		PE-H-S1	PE-H-S2	PE-H-S3	PE-H-S4	PE-H-S5	PE-H-S6	PE-H-S7	PE-H-S8	PE-H-S9
Sample Date				3/25/2016	3/25/2016	3/28/2016	42457	3/29/2016	3/29/2016	3/29/2016	3/29/2016	3/29/2016
Sample Depth			Units	7.5-8	7.5-8	1.5-2	1.5-2	1.5-2	1.5-2	1.5-2	1.5-2	1.5-2
SVOCs												
1,1-Biphenyl	NS	NS	ug/kg	74 U	73 U	70 U	78 U	72 U	77 U	81 U	74 U	72 U
2,2-Oxybis(1-Chloropropane)	NS	NS	ug/kg	74 U	73 U	70 UJ	78 UJ	72 U	77 U	81 U	74 U	72 U
2,4,5-Trichlorophenol	NS	NS	ug/kg	190 U	180 U	170 U	200 U	180 U	190 U	200 U	190 U	180 U
2,4,6-Trichlorophenol	NS	NS	ug/kg	190 U	180 U	170 U	200 U	180 U	190 U	200 U	190 U	180 U
2,4-Dichlorophenol	NS	NS	ug/kg	190 U	180 U	170 U	200 U	180 UJ	190 U	200 U	190 U	180 U
2,4-Dimethylphenol	NS	NS	ug/kg	190 U	180 U	170 U	200 U	180 U	190 U	200 U	190 U	180 U
2,4-Dinitrophenol	NS	NS	ug/kg	190 U	180 U	170 UJ	200 UJ	180 U	190 U	200 U	190 U	180 U
2,4-Dinitrotoluene	NS	NS	ug/kg	37 U	37 U	35 UJ	39 UJ	36 U	38 U	40 U	37 U	36 U
2,6-Dinitrotoluene	NS	NS	ug/kg	37 U	37 U	35 U	39 U	36 U	38 U	40 U	37 U	36 U
2-Chloronaphthalene	NS	NS	ug/kg	74 U	73 U	70 U	78 U	72 U	77 U	81 U	74 U	72 U
2-Chlorophenol	NS	NS	ug/kg	74 U	73 U	70 U	78 U	72 U	77 U	81 U	74 U	72 U
2-Methyl-4,6-dinitrophenol	NS	NS	ug/kg	190 U	180 U	170 UJ	200 UJ	180 U	190 U	200 U	190 U	180 U
2-Methylnaphthalene	NS	NS	ug/kg	74 U	73 U	70 U	78 U	72 U	77 U	81 U	74 U	72 U
2-Methylphenol	NS	NS	ug/kg	74 U	73 U	70 U	78 U	72 U	77 U	81 U	74 U	72 U
2-Nitroaniline	NS	NS	ug/kg	190 U	180 U	170 UJ	200 UJ	180 UJ	190 U	200 U	190 U	180 U
2-Nitrophenol	NS	NS	ug/kg	190 U	180 U	170 U	200 U	180 U	190 U	200 U	190 U	180 U
3,3-Dichlorobenzidine	NS	NS	ug/kg	74 U	73 U	70 U	78 U	72 U	77 U	81 U	74 U	72 U
3-Methylphenol, 4-Methylphenol	NS	NS	ug/kg	74 U	73 U	70 U	78 U	72 U	77 U	81 U	74 U	35.3 J
3-Nitroaniline	NS	NS	ug/kg	190 U	180 U	170 U	200 U	180 U	190 U	200 U	190 U	180 U
4-Bromophenyl phenyl ether	NS	NS	ug/kg	74 U	73 U	70 U	78 U	72 U	77 U	81 U	74 U	72 U
4-Chloro-3-Methylphenol	NS	NS	ug/kg	190 U	180 U	170 U	200 U	180 U	190 U	200 U	190 U	180 U
4-Chlorophenyl phenyl ether	NS	NS	ug/kg	74 U	73 U	70 U	78 U	72 U	77 U	81 U	74 U	72 U
4-Nitroaniline	NS	NS	ug/kg	190 U	180 U	170 U	200 U	180 U	190 U	200 U	190 U	180 U
4-Nitrophenol	NS	NS	ug/kg	370 U	370 U	350 UJ	390 UJ	360 UJ	380 UJ	400 U	370 U	360 U
Acenaphthene	100000	98000	ug/kg	37 U	37 U	35 U	39 U	36 U	38 U	40 U	37 U	36 U
Acenaphthylene	100000	107000	ug/kg	16.6 J	17.5 J	35 U	16.1 J	22.2 J	38 U	40 U	37 U	15.6 J
Acetophenone	NS	NS	ug/kg	190 U	180 U	170 U	200 U	180 U	190 U	200 U	190 U	180 U
Anthracene	100000	1000000	ug/kg	69.3	29.1 J	25.6 J	24.8 J	28 J	38 U	40 U	37 U	33.1 J
Atrazine	NS	NS	ug/kg	74 U	73 U	70 UJ	78 UJ	72 U	77 U	81 U	74 U	72 U
Benzaldehyde	NS	NS	ug/kg	190 U	180 U	170 U	200 U	180 U	190 U	22 J	190 U	15.1 J
Benzo(a)anthracene	1000	1000	ug/kg	177	73.8	77.6	67.9	76.2	38 U	40 U	37 U	115
Benzo(a)pyrene	1000	22000	ug/kg	156	71.3	82.1	69.3	91.8	38 U	40 U	37 U	123
Benzo(b)fluoranthene	1000	1700	ug/kg	185	89.7	110	86.2	99.7	38 U	40 U	16.2 J	166
Benzo(g,h,i)perylene	100000	1000000	ug/kg	125	70.5	55	43.7	96.8	38 U	40 U	37 U	84.6
Benzo(k)fluoranthene	3900	1700	ug/kg	80.5	34.1 J	39.2	29.5 J	38.8	38 U	40 U	37 U	56
bis(2-Chloroethoxy)methane	NS	NS	ug/kg	74 U	73 U	70 U	78 U	72 U	77 U	81 U	74 U	72 U
bis(2-Chloroethyl)ether	NS	NS	ug/kg	74 U	73 U	70 U	78 U	72 U	77 U	81 U	74 U	72 U
bis(2-Ethylhexyl)phthalate	NS	NS	ug/kg	74 U	73 U	70 UJ	78 UJ	72 UJ	77 U	81 U	74 U	36.4 J
Butyl benzyl phthalate	NS	NS	ug/kg	74 U	73 U	70 UJ	78 UJ	72 UJ	77 U	81 U	74 U	72 U
Caprolactam	NS	NS	ug/kg	74 U	73 U	70 U	78 U	72 UJ	77 UJ	81 U	74 U	72 U
Carbazole	NS	NS	ug/kg	20.6 J	73 U	70 U	78 U	72 U	77 U	81 U	74 U	15.9 J
Chrysene	3900	1000	ug/kg	181	82.4	76	75.2	94.7	38 U	40 U	37 U	126
Dibenzo(a,h)anthracene	330	1000000	ug/kg	32.3 J	21.5 J	15.1 J	39 U	17.2 J	38 U	40 U	37 U	22.7 J
Dibenzofuran	NS	NS	ug/kg	74 U	73 U	70 U	78 U	72 U	77 U	81 U	74 U	72 U
Diethyl phthalate	NS	NS	ug/kg	74 U	73 U	70 U	78 U	72 U	77 U	81 U	74 U	72 U
Dimethyl phthalate	NS	NS	ug/kg	74 U	73 U	70 U	78 U	72 U	77 U	81 U	74 U	72 U
Di-n-butyl phthalate	NS	NS	ug/kg	74 U	73 U	70 U	78 U	72 U	77 U	81 U	74 U	72 U
Di-n-octyl phthalate	NS	NS	ug/kg	74 U	73 U	70 U	78 U	72 UJ	77 UJ	81 U	74 U	72 U
Fluoranthene	100000	1000000	ug/kg	401	153	116	131	170	21.2 J	40 U	16.3 J	212
Fluorene	100000	386000	ug/kg	26.5 J	37 U	35 U	39 U	36 U	38 U	40 U	37 U	36 U
Hexachloro-1,3-butadiene	NS	NS	ug/kg	37 U	37 U	35 UJ	39 UJ	36 U	38 U	40 U	37 U	36 U
Hexachlorobenzene	NS	NS	ug/kg	74 U	73 U	70 U	78 U	72 U	77 U	81 U	74 U	72 U
Hexachlorocyclopentadiene	NS	NS	ug/kg	370 U	370 U	350 U	390 U	360 U	380 U	400 U	370 U	360 U
Hexachloroethane	NS	NS	ug/kg	190 U	180 U	170 U	200 U	180 U	190 U	200 U	190 U	180 U
Indeno(1,2,3-cd)pyrene	500	8200	ug/kg	125	65.1	63.6	50.1	65.6	38 U	40 U	37 U	93
Isophorone	NS	NS	ug/kg	74 U	73 U	70 U	78 U	72 U	77 U	81 U	74 U	72 U

See Last Page for Notes

Table 16. Confirmatory Soil Sample Results Area H
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Sample ID	375-6: RESTRIC. RES. USE SCO	375-6: PROTECTION OF GW SCO		PE-H-S1 3/25/2016	PE-H-S2 3/25/2016	PE-H-S3 3/28/2016	PE-H-S4 42457	PE-H-S5 3/29/2016	PE-H-S6 3/29/2016	PE-H-S7 3/29/2016	PE-H-S8 3/29/2016	PE-H-S9 3/29/2016
Sample Date												
Sample Depth			Units	7.5-8	7.5-8	1.5-2	1.5-2	1.5-2	1.5-2	1.5-2	1.5-2	1.5-2
SVOCs cont.												
Naphthalene	100000	12000	ug/kg	37 U	14.9 J	35 U	39 U	36 U	38 U	40 U	37 U	36 U
Nitrobenzene	NS	NS	ug/kg	74 U	73 U	70 U	78 U	72 U	77 U	81 U	74 U	72 U
n-Nitrosodi-n-propylamine	NS	NS	ug/kg	74 U	73 U	70 U	78 U	72 U	77 U	81 U	74 U	72 U
N-nitrosodiphenylamine	NS	NS	ug/kg	190 U	180 U	170 U	200 U	180 U	190 U	200 U	190 U	180 U
p-Chloroaniline	NS	NS	ug/kg	190 U	180 U	170 U	200 U	180 U	190 U	200 U	190 U	180 U
Pentachlorophenol	6700	800	ug/kg	190 U	180 U	170 U	200 U	180 U	190 U	200 U	190 U	180 U
Phenanthrene	100000	1000000	ug/kg	252	87.2	55.1	87.6	120	17.2 J	40 U	37 U	123
Phenol	100000	330	ug/kg	74 U	73 U	70 U	78 U	72 U	77 U	81 U	74 U	72 U
Pyrene	100000	1000000	ug/kg	334	135	136	161	186	20.5 J	40 U	15.4 J	218
See Last Page for Notes												
PCBs												
Aroclor 1016	1000	3200	ug/kg	34 U	37 U	35 U	38 U	37 U	39 U	39 U	36 U	35 U
Aroclor 1221	1000	3200	ug/kg	34 U	37 U	35 U	38 U	37 U	39 U	39 U	36 U	35 U
Aroclor 1232	1000	3200	ug/kg	34 U	37 U	35 U	38 U	37 U	39 U	39 U	36 U	35 U
Aroclor 1242	1000	3200	ug/kg	34 U	37 U	35 U	38 U	37 U	39 U	39 UJ	36 U	35 U
Aroclor 1248	1000	3200	ug/kg	34 U	37 U	35 U	38 U	37 U	39 U	39 UJ	36 U	35 U
Aroclor 1254	1000	3200	ug/kg	34 U	37 U	35 U	38 U	37 U	39 U	39 UJ	36 U	130
Aroclor 1260	1000	3200	ug/kg	34 U	37 U	35 U	38 U	37 U	39 U	39 UJ	36 U	35 U
Aroclor 1262	1000	3200	ug/kg	34 U	37 U	35 U	38 U	37 U	39 U	39 UJ	36 U	35 U
Aroclor 1268	1000	3200	ug/kg	34 U	37 U	35 U	38 U	37 U	39 U	39 UJ	36 U	35 U
Metals												
Aluminum	NS	NS	mg/kg	6960	5180	8480	10100	14700	14600	20000	18500	9300
Antimony	NS	NS	mg/kg	0.85 B	1.5 B	2.2 U	0.63 B	2.2 UBJ	2.3 UJ	0.34 J	2.2 UJ	2.3 UBJ
Arsenic	16	16	mg/kg	3.2	2.7	3.1	3.7	7.2	3.7	3.7	4.7	3.4
Barium	400	820	mg/kg	105	207	50	65.5	42.5	40	32.5	42.1	103
Beryllium	72	47	mg/kg	0.32	0.26	0.38	0.47	0.62	0.63	0.62	0.65	0.53
Cadmium	4.3	7.5	mg/kg	0.41 B	0.49 B	0.12 B	0.38 B	0.18 B	0.08 B	0.59 U	0.056 B	0.19 B
Calcium	NS	NS	mg/kg	8980	43800	7900	1980	2250	1640	491 B	645	4170
Chromium	NS	NS	mg/kg	13	12.1	15.2	16.5	15.4	17	17.8	20.3	14.1
Cobalt	NS	NS	mg/kg	5.3 B	4.6 B	6.4	5.5 B	5.7	7.1	3.9 B	6.4	7
Copper	270	1720	mg/kg	17.6	14.7	19.4	19.5	14	12.9	8.7	11.8	41.4 J
Iron	NS	NS	mg/kg	13900	13200	15200	17000	15600	17900	17600	18000	17700
Lead	400	450	mg/kg	47.7	53.9	16.6	70.4	32.6	10.3	8.3	13.5	34.9
Magnesium	NS	NS	mg/kg	4760	24200	6170	2290	2380	2880	1650	2580	3170
Manganese	2000	2000	mg/kg	381	330	334	295	139	219	80.7	140	328 J
Mercury	NS	NS	mg/kg	0.033	0.047	0.051	0.054	0.081	0.034	0.056	0.057	0.056
Nickel	310	130	mg/kg	11.6	9.9	14	11.4	9.6	11.8	8.9	12.4	12.4
Potassium	NS	NS	mg/kg	814 B	865 B	948 B	763 B	683 B	769 B	418 B	682 B	1040 B
Selenium	180	4	mg/kg	2.2 U	2.4 U	2.2 U	2.5 U	2.2 U	2.3 U	2.4 U	2.2 U	2.3 U
Silver	180	8.3	mg/kg	6	6.4	1.1	1.1	0.18 B	0.27 B	0.22 B	0.26 B	0.63
Sodium	NS	NS	mg/kg	103 B	141 B	114 B	96.5 B	69.7 B	85.2 B	49.1 B	68.2 B	157 B
Thallium	NS	NS	mg/kg	1.1 U	1.2 U	1.1 U	1.2 U	1.1 U	1.1 U	1.2 UB	1.1 U	1.1 U
Vanadium	NS	NS	mg/kg	18.4	18.5	26	25.6	23.8	28.2	32.2	30.9	34
Zinc	10000	2480	mg/kg	99.2	79.3	49.4	97	106	34.8	29.6	41.1	70 J
General Chemistry												
Percent Solids			%	89.3	87.1	91	83.6	88.4	83.2	80.8	87.9	88.6

Notes

NS	No standard
NA	Not analyzed
J	Estimated result
JN	Estimated result
R	Rejected result
UB	Analyte considered non-detect at the listed value due to associated blank contamination
Bold	Result exceeds 375-6.8(b) residential use soil cleanup object
Shade	Result exceeds 375-6.8(b) restricted residential use soil cleanup objective.

Table 17. Confirmatory Soil Sample Results Area I
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Sample ID	375-6: RESTRICTED RESIDENTIAL USE SCO	375-6: PROTECTION OF GROUNDWATER SCO		PE-I-A1	PE-I-A2	PE-I-B1	PE-I-B2	PE-I-S1	PE-I-S2A	PE-I-S2B	PE-I-S3B	PE-I-S4A	PE-I-S4B
Sample Depth				2-2.5	2-2.5	2-2.5	2-2.5	1-1.5	1-1.5	1-1.5	1-1.5	1-1.5	1-1.5
Sample Date	USE SCO	GROUNDWATER SCO	Units	42256	42256	42256	42256	42256	42256	42256	42265	42256	42256
VOCs													
1,1,1-Trichloroethane	100000	680	ug/kg	2.1 U	2.2 U	1.9 U	1.9 U	2.3 U	2.1 U	2.1 U	NA	2.1 U	1.9 U
1,1,2,2-Tetrachloroethane	NS	NS	ug/kg	2.1 U	2.2 U	1.9 U	1.9 U	2.3 U	2.1 U	2.1 U	NA	2.1 U	1.9 U
1,1,2-trichloro-1,2,2-trifluoroethane	NS	NS	ug/kg	5.2 U	5.5 U	4.7 U	4.7 U	5.7 U	5.2 U	5.3 U	NA	5.2 U	4.8 U
1,1,2-Trichloroethane	NS	NS	ug/kg	2.1 U	2.2 U	1.9 U	1.9 U	2.3 U	2.1 U	2.1 U	NA	2.1 U	1.9 U
1,1-Dichloroethane	26000	270	ug/kg	1 U	1.1 U	0.94 U	0.95 U	1.1 U	1 U	1.1 U	NA	1 U	0.96 U
1,1-Dichloroethene	100000	330	ug/kg	1 U	1.1 U	0.94 U	0.95 U	1.1 U	1 U	1.1 U	NA	1 U	0.96 U
1,2,4-Trichlorobenzene	NS	NS	ug/kg	5.2 U	5.5 U	4.7 U	4.7 U	5.7 U	5.2 U	5.3 U	NA	5.2 U	4.8 U
1,2-Dibromo-3-chloropropane	NS	NS	ug/kg	2.1 U	2.2 U	1.9 U	1.9 U	2.3 U	2.1 U	2.1 U	NA	2.1 U	1.9 U
1,2-Dibromoethane	NS	NS	ug/kg	1 U	1.1 U	0.94 U	0.95 U	1.1 U	1 U	1.1 U	NA	1 U	0.96 U
1,2-Dichlorobenzene	100000	1100	ug/kg	1 U	1.1 U	0.94 U	0.95 U	1.1 U	1 U	1.1 U	NA	1 U	0.96 U
1,2-Dichloroethane	3100	20	ug/kg	1 U	1.1 U	0.94 U	0.95 U	1.1 U	1 U	1.1 U	NA	1 U	0.96 U
1,2-Dichloropropane	NS	NS	ug/kg	2.1 U	2.2 U	1.9 U	1.9 U	2.3 U	2.1 U	2.1 U	NA	2.1 U	1.9 U
1,3-Dichlorobenzene	49000	2400	ug/kg	1 U	1.1 U	0.94 U	0.95 U	1.1 U	1 U	1.1 U	NA	1 U	0.96 U
1,4-Dichlorobenzene	13000	1800	ug/kg	1 U	1.1 U	0.94 U	0.95 U	1.1 U	1 U	1.1 U	NA	1 U	0.96 U
2-Butanone (MEK)	100000	120	ug/kg	10 U	11 U	9.4 U	9.5 U	11 U	10 U	11 U	NA	10 U	9.6 U
4-Methyl-2-Pentanone	NS	NS	ug/kg	5.2 U	5.5 U	4.7 U	4.7 U	5.7 U	5.2 U	5.3 U	NA	5.2 U	4.8 U
Acetone	100000	50	ug/kg	13.7	11 U	9.4 U	6.3 J	11 U	10 U	11 U	NA	10 U	9.6 U
Benzene	4800	60	ug/kg	0.52 U	0.55 U	0.47 U	0.47 U	0.57 U	0.52 U	0.53 U	NA	0.52 U	0.48 U
Bromodichloromethane	NS	NS	ug/kg	2.1 U	2.2 U	1.9 U	1.9 U	2.3 U	2.1 U	2.1 U	NA	2.1 U	1.9 U
Bromoform	NS	NS	ug/kg	5.2 U	5.5 U	4.7 U	4.7 U	5.7 U	5.2 U	5.3 U	NA	5.2 U	4.8 U
Bromomethane	NS	NS	ug/kg	5.2 U	5.5 U	4.7 U	4.7 U	5.7 U	5.2 U	5.3 U	NA	5.2 U	4.8 U
Carbon Disulfide	NS	NS	ug/kg	2.1 U	2.2 U	1.9 U	1.9 U	2.3 U	2.1 U	2.1 U	NA	2.1 U	1.9 U
Carbon Tetrachloride	2400	760	ug/kg	2.1 U	2.2 U	1.9 U	1.9 U	2.3 U	2.1 U	2.1 U	NA	2.1 U	1.9 U
CFC-11	NS	NS	ug/kg	5.2 U	5.5 U	4.7 U	4.7 U	5.7 U	5.2 U	5.3 U	NA	5.2 U	4.8 U
CFC-12	NS	NS	ug/kg	5.2 U	5.5 U	4.7 U	4.7 U	5.7 U	5.2 U	5.3 U	NA	5.2 U	4.8 U
Chlorobenzene	100000	1100	ug/kg	2.1 U	2.2 U	1.9 U	1.9 U	2.3 U	2.1 U	2.1 U	NA	2.1 U	1.9 U
Chlorodibromomethane	NS	NS	ug/kg	2.1 U	2.2 U	1.9 U	1.9 U	2.3 U	2.1 U	2.1 U	NA	2.1 U	1.9 U
Chloroethane	NS	NS	ug/kg	5.2 U	5.5 U	4.7 U	4.7 U	5.7 U	5.2 U	5.3 U	NA	5.2 U	4.8 U
Chloroform	49000	370	ug/kg	2.1 U	2.2 U	1.9 U	1.9 U	2.3 U	2.1 U	2.1 U	NA	2.1 U	1.9 U
Chloromethane	NS	NS	ug/kg	5.2 U	5.5 U	4.7 U	4.7 U	5.7 U	5.2 U	5.3 U	NA	5.2 U	4.8 U
cis-1,2-Dichloroethene	100000	250	ug/kg	1 U	1.1 U	0.94 U	0.95 U	1.1 U	1 U	1.1 U	NA	1 U	0.96 U
cis-1,3-Dichloropropene	NS	NS	ug/kg	2.1 U	2.2 U	1.9 U	1.9 U	2.3 U	2.1 U	2.1 U	NA	2.1 U	1.9 U
Cyclohexane	NS	NS	ug/kg	2.1 U	2.2 U	1.9 U	1.9 U	2.3 U	2.1 U	2.1 U	NA	2.1 U	1.9 U
Dichloromethane	NS	NS	ug/kg	5.2 U	5.5 U	4.7 U	4.7 U	5.7 U	5.2 U	5.3 U	NA	5.2 U	4.8 U
Ethylbenzene	41000	1000	ug/kg	1 U	1.1 U	0.94 U	0.95 U	1.1 U	1 U	1.1 U	NA	1 U	0.96 U
Isopropylbenzene	NS	NS	ug/kg	2.1 U	2.2 U	1.9 U	1.9 U	2.3 U	2.1 U	2.1 U	NA	2.1 U	1.9 U
Methyl Acetate	NS	NS	ug/kg	5.2 U	5.5 U	4.7 U	4.7 U	5.7 U	5.2 U	5.3 U	NA	5.2 U	4.8 U
Methyl N-Butyl Ketone (2-Hexanone)	NS	NS	ug/kg	5.2 U	5.5 U	4.7 U	4.7 U	5.7 U	5.2 U	5.3 U	NA	5.2 U	4.8 U
Methylcyclohexane	NS	NS	ug/kg	2.1 U	2.2 U	1.9 U	1.9 U	2.3 U	2.1 U	2.1 U	NA	2.1 U	1.9 U
Methyl-tert-butylether	100000	930	ug/kg	1 U	1.1 U	0.94 U	0.95 U	1.1 U	1 U	1.1 U	NA	1 U	0.96 U
Styrene (Monomer)	NS	NS	ug/kg	2.1 U	2.2 U	1.9 U	1.9 U	2.3 U	2.1 U	2.1 U	NA	2.1 U	1.9 U
Tetrachloroethene	19000	1300	ug/kg	2.1 U	2.2 U	1.9 U	1.9 U	2.3 U	2.1 U	2.1 U	NA	2.1 U	1.9 U
Toluene	100000	700	ug/kg	1 U	1.1 U	0.94 U	0.95 U	1.1 U	1 U	1.1 U	NA	1 U	0.96 U
Total Xylenes	100000	1600	ug/kg	1 U	1.1 U	0.94 U	0.95 U	1.1 U	1 U	1.1 U	NA	1 U	0.96 U
trans-1,2-Dichloroethene	100000	190	ug/kg	1 U	1.1 U	0.94 U	0.95 U	1.1 U	1 U	1.1 U	NA	1 U	0.96 U
trans-1,3-Dichloropropene	NS	NS	ug/kg	2.1 U	2.2 U	1.9 U	1.9 U	2.3 U	2.1 U	2.1 U	NA	2.1 U	1.9 U
Trichloroethene	21000	470	ug/kg	1 U	1.1 U	0.94 U	0.95 U	1.1 U	1 U	1.1 U	NA	1 U	0.96 U
Vinyl chloride	900	20	ug/kg	2.1 U	2.2 U	1.9 U	1.9 U	2.3 U	2.1 U	2.1 U	NA	2.1 U	1.9 U

See Notes on Last Page

Table 17. Confirmatory Soil Sample Results Area I
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Sample ID Sample Depth Sample Date	375-6: RESTRICTED RESIDENTIAL USE SCO	375-6: PROTECTION OF GROUNDWATER SCO		PE-I-A1 2-2.5 42256	PE-I-A2 2-2.5 42256	PE-I-B1 2-2.5 42256	PE-I-B2 2-2.5 42256	PE-I-S1 1-1.5 42256	PE-I-S2A 1-1.5 42256	PE-I-S2B 1-1.5 42256	PE-I-S3B 1-1.5 42265	PE-I-S4A 1-1.5 42256	PE-I-S4B 1-1.5 42256
SVOCs			Units										
1,1-Biphenyl	NS	NS	ug/kg	72 U	80 U	72 U	72 U	76 U	71 U	67 U	NA	74 U	75 U
2,2-Oxybis(1-Chloropropane)	NS	NS	ug/kg	72 U	80 U	72 U	72 U	76 U	71 U	67 U	NA	74 U	75 U
2,4,5-Trichlorophenol	NS	NS	ug/kg	180 U	200 U	180 U	180 U	190 U	180 U	170 U	NA	180 U	190 U
2,4,6-Trichlorophenol	NS	NS	ug/kg	180 U	200 U	180 U	180 U	190 U	180 U	170 U	NA	180 U	190 U
2,4-Dichlorophenol	NS	NS	ug/kg	180 U	200 U	180 U	180 U	190 U	180 U	170 U	NA	180 U	190 U
2,4-Dimethylphenol	NS	NS	ug/kg	180 U	200 U	180 U	180 U	190 U	180 U	170 U	NA	180 U	190 U
2,4-Dinitrophenol	NS	NS	ug/kg	180 UJ	200 UJ	180 UJ	180 UJ	190 UJ	180 UJ	170 UJ	NA	180 U	190 U
2,4-Dinitrotoluene	NS	NS	ug/kg	36 U	40 U	36 U	36 U	38 U	35 U	34 U	NA	37 U	38 U
2,6-Dinitrotoluene	NS	NS	ug/kg	36 U	40 U	36 U	36 U	38 U	35 U	34 U	NA	37 U	38 U
2-Chloronaphthalene	NS	NS	ug/kg	72 U	80 U	72 U	72 U	76 U	71 U	67 U	NA	74 U	75 U
2-Chlorophenol	NS	NS	ug/kg	72 U	80 U	72 U	72 U	76 U	71 U	67 U	NA	74 U	75 U
2-Methyl-4,6-dinitrophenol	NS	NS	ug/kg	R	200 U	180 U	180 U	190 U	180 U	170 U	NA	180 U	190 U
2-Methylnaphthalene	NS	NS	ug/kg	72 U	80 U	72 U	72 U	76 U	71 U	67 U	NA	74 U	75 U
2-Methylphenol	NS	NS	ug/kg	72 U	80 U	72 U	72 U	76 U	71 U	67 U	NA	74 U	75 U
2-Nitroaniline	NS	NS	ug/kg	180 U	200 U	180 U	180 U	190 U	180 U	170 U	NA	180 U	190 U
2-Nitrophenol	NS	NS	ug/kg	180 U	200 U	180 U	180 U	190 U	180 U	170 U	NA	180 U	190 U
3,3-Dichlorobenzidine	NS	NS	ug/kg	72 U	80 U	72 U	72 U	76 U	71 U	67 U	NA	74 U	75 U
3-Methylphenol, 4-Methylphenol	NS	NS	ug/kg	72 U	80 U	72 U	72 U	76 U	71 U	67 U	NA	74 U	75 U
3-Nitroaniline	NS	NS	ug/kg	180 U	200 U	180 U	180 U	190 U	180 U	170 U	NA	180 U	190 U
4-Bromophenyl phenyl ether	NS	NS	ug/kg	72 U	80 U	72 U	72 U	76 U	71 U	67 U	NA	74 U	75 U
4-Chloro-3-Methylphenol	NS	NS	ug/kg	180 U	200 U	180 U	180 U	190 U	180 U	170 U	NA	180 U	190 U
4-Chlorophenyl phenyl ether	NS	NS	ug/kg	72 U	80 U	72 U	72 U	76 U	71 U	67 U	NA	74 U	75 U
4-Nitroaniline	NS	NS	ug/kg	180 U	200 U	180 U	180 U	190 U	180 U	170 U	NA	180 U	190 U
4-Nitrophenol	NS	NS	ug/kg	360 U	400 U	360 U	360 U	380 U	350 U	340 U	NA	370 U	380 U
Acenaphthene	100000	98000	ug/kg	36 U	40 U	36 U	36 U	38 U	35 U	34 U	NA	37 U	38 U
Acenaphthylene	100000	107000	ug/kg	36 U	40 U	15.9 J	36 U	38 U	35 U	34 U	NA	37 U	38 U
Acetophenone	NS	NS	ug/kg	180 U	200 U	180 U	180 U	190 U	180 U	170 U	NA	180 U	190 U
Anthracene	100000	1000000	ug/kg	36 U	40 U	20.6 J	36 U	38 U	15.9 J	34 U	NA	37 U	38 U
Atrazine	NS	NS	ug/kg	72 U	80 U	72 U	72 U	76 U	71 U	67 U	NA	74 U	75 U
Benzaldehyde	NS	NS	ug/kg	180 U	84.9 J	92 J	180 U	190 U	180 U	170 U	NA	180 U	190 U
Benzo(a)anthracene	1000	1000	ug/kg	36 U	44.2	80.1	27.5 J	38 U	58.3	37	NA	37 U	38 U
Benzo(a)pyrene	1000	22000	ug/kg	36 U	41.6	70.2	25 J	38 U	56.6	33.9 J	NA	37 U	38 U
Benzo(b)fluoranthene	1000	1700	ug/kg	36 U	47.6	87.6	36.5	38 U	76.3	41.5	NA	37 U	38 U
Benzo(g,h,i)perylene	100000	1000000	ug/kg	36 U	32.1 J	42.8	22 J	38 U	38.6	22.7 J	NA	37 U	38 U
Benzo(k)fluoranthene	3900	1700	ug/kg	36 U	17.6 J	36.8	36 U	38 U	28.1 J	17.8 J	NA	37 U	38 U
bis(2-Chloroethoxy)methane	NS	NS	ug/kg	72 U	80 U	72 U	72 U	76 U	71 U	67 U	NA	74 U	75 U
bis(2-Chloroethyl)ether	NS	NS	ug/kg	72 U	80 U	72 U	72 U	76 U	71 U	67 U	NA	74 U	75 U
bis(2-Ethylhexyl)phthalate	NS	NS	ug/kg	72 U	45.9 J	72 U	72 U	76 U	71 U	67 U	NA	74 U	75 U
Butyl benzyl phthalate	NS	NS	ug/kg	72 U	80 U	72 U	72 U	76 U	71 U	67 U	NA	74 U	75 U
Caprolactam	NS	NS	ug/kg	72 U	80 U	72 U	72 U	76 U	71 U	67 U	NA	74 U	75 U
Carbazole	NS	NS	ug/kg	72 U	80 U	72 U	72 U	76 U	71 U	67 U	NA	74 U	75 U
Chrysene	3900	1000	ug/kg	36 U	45.6	72.1	31.2 J	38 U	53.5	34.2	NA	37 U	38 U
Dibenzo(a,h)anthracene	330	1000000	ug/kg	36 U	40 U	36 U	36 U	38 U	35 U	34 U	NA	37 U	38 U
Dibenzofuran	NS	NS	ug/kg	72 U	80 U	72 U	72 U	76 U	71 U	67 U	NA	74 U	75 U
Diethyl phthalate	NS	NS	ug/kg	72 U	80 U	72 U	72 U	76 U	71 U	67 U	NA	74 U	75 U
Dimethyl phthalate	NS	NS	ug/kg	72 U	80 U	72 U	72 U	76 U	71 U	67 U	NA	74 U	75 U
Di-n-butyl phthalate	NS	NS	ug/kg	72 U	80 U	72 U	72 U	76 U	71 U	67 U	NA	74 U	75 U
Di-n-octyl phthalate	NS	NS	ug/kg	72 U	80 U	72 U	72 U	76 U	71 U	67 U	NA	74 U	75 U
Fluoranthene	100000	1000000	ug/kg	36 U	61.1	105	39.3	38 U	86.5	52.1	NA	37 U	38 U
Fluorene	100000	386000	ug/kg	36 U	40 U	36 U	36 U	38 U	35 U	34 U	NA	37 U	38 U
Hexachloro-1,3-butadiene	NS	NS	ug/kg	36 U	40 U	36 U	36 U	38 U	35 U	34 U	NA	37 U	38 U
Hexachlorobenzene	NS	NS	ug/kg	72 U	80 U	72 U	72 U	76 U	71 U	67 U	NA	74 U	75 U
Hexachlorocyclopentadiene	NS	NS	ug/kg	360 U	400 U	360 U	360 U	380 U	350 U	340 U	NA	370 U	380 U
Hexachloroethane	NS	NS	ug/kg	180 U	200 U	180 U	180 U	190 U	180 U	170 U	NA	180 U	190 U
Indeno(1,2,3-cd)pyrene	500	8200	ug/kg	36 U	31.2 J	41.3	20.7 J	38 U	37	21 J	NA	37 U	38 U
Isophorone	NS	NS	ug/kg	72 U	80 U	72 U	72 U	76 U	71 U	67 U	NA	74 U	75 U

Table 17. Confirmatory Soil Sample Results Area I
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Sample ID	375-6: RESTRICTED RESIDENTIAL USE SCO	375-6: PROTECTION OF GROUNDWATER SCO		PE-I-A1	PE-I-A2	PE-I-B1	PE-I-B2	PE-I-S1	PE-I-S2A	PE-I-S2B	PE-I-S3B	PE-I-S4A	PE-I-S4B
Sample Depth				2-2.5	2-2.5	2-2.5	2-2.5	1-1.5	1-1.5	1-1.5	1-1.5	1-1.5	1-1.5
Sample Date			Units	42256	42256	42256	42256	42256	42256	42256	42265	42256	42256
SVOCs cont.													
Naphthalene	100000	12000	ug/kg	36 U	19.3 J	36 U	23.3 J	38 U	35 U	34 U	NA	37 U	38 U
Nitrobenzene	NS	NS	ug/kg	72 U	80 U	72 U	72 U	76 U	71 U	67 U	NA	74 U	75 U
n-Nitrosodi-n-propylamine	NS	NS	ug/kg	72 U	80 U	72 U	72 U	76 U	71 U	67 U	NA	74 U	75 U
N-nitrosodiphenylamine	NS	NS	ug/kg	180 U	200 U	180 U	180 U	190 U	180 U	170 U	NA	180 U	190 U
p-Chloroaniline	NS	NS	ug/kg	180 U	200 U	180 U	180 U	190 U	180 U	170 U	NA	180 U	190 U
Pentachlorophenol	6700	800	ug/kg	180 U	200 U	180 U	180 U	190 U	180 U	170 U	NA	180 U	190 U
Phenanthrene	100000	1000000	ug/kg	36 U	41.3	38.4	26.8 J	38 U	57	29.2 J	NA	37 U	38 U
Phenol	100000	330	ug/kg	72 U	80 U	72 U	72 U	76 U	71 U	72 U	NA	74 U	75 U
Pyrene	100000	1000000	ug/kg	36 U	88	166	51.4	38 U	109	63.3	NA	37 U	38 U
PCBs													
Aroclor 1016	1000	3200	ug/kg	38 U	36 U	38 U	37 U	39 U	33 U	31 U	NA	36 U	37 U
Aroclor 1221	1000	3200	ug/kg	38 U	36 U	38 U	37 U	39 U	33 U	31 U	NA	36 U	37 U
Aroclor 1232	1000	3200	ug/kg	38 U	36 U	38 U	37 U	39 U	33 U	31 U	NA	36 U	37 U
Aroclor 1242	1000	3200	ug/kg	38 U	36 U	38 U	37 U	39 U	33 U	31 U	NA	36 U	37 U
Aroclor 1248	1000	3200	ug/kg	38 U	36 U	38 U	37 U	39 U	33 U	31 U	NA	36 U	37 U
Aroclor 1254	1000	3200	ug/kg	38 U	36 U	38 U	37 U	39 U	33 U	31 U	NA	36 U	37 U
Aroclor 1260	1000	3200	ug/kg	38 U	36 U	38 U	37 U	39 U	33 U	31 U	NA	36 U	37 U
Aroclor 1262	1000	3200	ug/kg	38 U	36 U	38 U	37 U	39 U	33 U	31 U	NA	36 U	37 U
Aroclor 1268	1000	3200	ug/kg	38 U	36 U	38 U	37 U	39 U	33 U	31 U	NA	36 U	37 U
Metals													
Aluminum	NS	NS	mg/kg	12100	9710	6750	5860	12300	3720	4480	7320	13600	20300
Antimony	NS	NS	mg/kg	2.3 U	0.7 B	2.3 U	1.5 B	2.4 U	2.1 U	2 U	2.2 UB	2.3 U	2.4 U
Arsenic	16	16	mg/kg	3.6	3.8	2.5	3.6	3.7	3.1	2.8	3.4	4	5.1
Barium	400	820	mg/kg	65.4	184	99.2	329	56.7	26	38.8	134	63.1	88.7
Beryllium	72	47	mg/kg	0.63	0.47	0.33	0.3	0.67	0.2 B	0.25	0.47	0.71	1
Cadmium	4.3	7.5	mg/kg	0.52 B	1.3	0.85	1.5	0.47 B	0.4 B	0.32 B	0.73	0.46 B	0.65
Calcium	NS	NS	mg/kg	2710	3900	4410	2760	2540	118000	63600	2580	2370	3070
Chromium	NS	NS	mg/kg	17.3	17.4	11.5	15.8	15.7	6.1	8.4	16	17.6	23.2
Cobalt	NS	NS	mg/kg	8.1	7.3	5.3 B	5.1 B	8	3.7 B	4.3 B	6.6	8.4	10.9
Copper	270	1720	mg/kg	20.3	24.9	15.6	26.5	19.5	8.7	12.8	21	21.4	29.6
Iron	NS	NS	mg/kg	20100	18000	13500	12800	19700	8670	9910	16100	20900	28200
Lead	400	450	mg/kg	15.8	84.5	32.2	135	6.8	10.2 B	11.9	90.6	7.3	10.8
Magnesium	NS	NS	mg/kg	3650	3290	2860	2520	3190	68300	34200	2750	3510	4770
Manganese	2000	2000	mg/kg	385	411	261	193	311	252	259	244	368	469
Mercury	NS	NS	mg/kg	0.035 UB	0.051	0.046	0.036 UB	0.039 UB	0.036 UB	0.033 UB	0.037 UB	0.035 UB	0.038 B
Nickel	310	130	mg/kg	13.9	14.1	9.4	10.5	13	6.1	8.1	12.3	14.5	20.1
Potassium	NS	NS	mg/kg	1630	1500	1110	922 B	1480	746 B	764 B	1150	1760	2410
Selenium	180	4	mg/kg	2.3 U	2.4 U	2.3 U	2.2 U	2.4 U	2.1 U	2 U	2.2 UB	2.3 U	2.4 U
Silver	180	8.3	mg/kg	0.37 B	0.59 B	0.49 B	0.56	0.38 B	1.1 B	0.82 B	0.51 B	0.4 B	1.2 U
Sodium	NS	NS	mg/kg	194 B	175 B	137 B	138 B	179 B	77.7 B	95.1 B	167 B	185 B	231 B
Thallium	NS	NS	mg/kg	1.1 U	1.2 U	1.1 U	1.1 U	1.2 U	1.1 U	1 U	1.1 U	1.1 U	2.4 U
Vanadium	NS	NS	mg/kg	28.8	24.6	18.4	16.7	28	11.2	14.2	21.4	30	39.6
Zinc	10000	2480	mg/kg	45.5	142	73.1	196	32.2	43.1	38.3	155	36.4	52.8
General Chemistry													
Percent Solids	NS	NS	%	85.1	82.1	87.3	87.8	82.6	93.5	95.8	89.1	86.6	84.1
Notes													
NS		No standard											
NA		Not analyzed											
J		Estimated result											
JN		Estimated result											
R		Rejected result											
UB		Analyte considered non-detect at the listed value due to associated blank contamination											
Bold		Result exceeds 375-6.8(b) protection of groundwater soil cleanup objective.											
Shade		Result exceeds 375-6.8(b) restricted residential use soil cleanup objective.											

Table 18. Confirmatory Soil Sample Results Area J
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Sample ID	375-6: RESTRICTED RESIDENTIAL USE SCO	375-6: PROTECTION OF GROUNDWATER SCO		PE-J-A1	PE-J-A2	PE-J-B1	PE-J-B2	PE-J-C1	PE-J-C2	PE-J-C2	PE-J-D1	PE-J-D2	PE-J-S1	PE-J-S2
Sample Date				2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	1.5-2	1.5-2
Sample Depth			Units	42464	42464	42464	42464	42465	PE-DUP-021_20160405	42465	42465	42465	42464	42464
VOCs														
1,1,1-Trichloroethane	100000	680	ug/kg	2 U	2.2 U	2.2 U	2 U	1.9 U	2 U	2.1 U	2.1 U	1.9 U	2.3 U	2.2 U
1,1,2,2-Tetrachloroethane	NS	NS	ug/kg	2 U	2.2 U	2.2 U	2 U	1.9 U	2 U	2.1 U	2.1 U	1.9 U	2.3 U	2.2 U
1,1,2-trichloro-1,2,2-trifluoroethane	NS	NS	ug/kg	5 U	5.4 U	5.5 U	5 U	4.7 U	5.1 U	5.3 U	5.4 U	4.7 U	5.7 U	5.6 U
1,1,2-Trichloroethane	NS	NS	ug/kg	2 U	2.2 U	2.2 U	2 U	1.9 U	2 U	2.1 U	2.1 U	1.9 U	2.3 U	2.2 U
1,1-Dichloroethane	26000	270	ug/kg	0.99 U	1.1 U	1.1 U	1 U	0.94 U	1 U	1.1 U	1.1 U	0.93 U	1.1 U	1.1 U
1,1-Dichloroethene	100000	330	ug/kg	0.99 U	1.1 U	1.1 U	1 U	0.94 U	1 U	1.1 U	1.1 U	0.93 U	1.1 U	1.1 U
1,2,4-Trichlorobenzene	NS	NS	ug/kg	5 U	5.4 U	5.5 U	5 U	4.7 U	5.1 U	5.3 U	5.4 U	4.7 U	5.7 U	5.6 U
1,2-Dibromo-3-chloropropane	NS	NS	ug/kg	2 U	2.2 U	2.2 U	2 U	1.9 U	2 U	2.1 U	2.1 U	1.9 U	2.3 U	2.2 U
1,2-Dibromoethane	NS	NS	ug/kg	0.99 U	1.1 U	1.1 U	1 U	0.94 U	1 U	1.1 U	1.1 U	0.93 U	1.1 U	1.1 U
1,2-Dichlorobenzene	100000	1100	ug/kg	0.99 U	1.1 U	1.1 U	1 U	0.94 U	1 U	1.1 U	1.1 U	0.93 U	1.1 U	1.1 U
1,2-Dichloroethane	3100	20	ug/kg	0.99 U	1.1 U	1.1 U	1 U	0.94 U	1 U	1.1 U	1.1 U	0.93 U	1.1 U	1.1 U
1,2-Dichloropropane	NS	NS	ug/kg	2 U	2.2 U	2.2 U	2 U	1.9 U	2 U	2.1 U	2.1 U	1.9 U	2.3 U	2.2 U
1,3-Dichlorobenzene	49000	2400	ug/kg	0.99 U	1.1 U	1.1 U	1 U	0.94 U	1 U	1.1 U	1.1 U	0.93 U	1.1 U	1.1 U
1,4-Dichlorobenzene	13000	1800	ug/kg	0.99 U	1.1 U	1.1 U	1 U	0.94 U	1 U	1.1 U	1.1 U	0.93 U	1.1 U	1.1 U
2-Butanone (MEK)	100000	120	ug/kg	9.9 U	11 U	11 U	10 U	9.4 U	10 U	24.7 J	11 U	9.3 U	11 U	11 U
4-Methyl-2-Pentanone	NS	NS	ug/kg	5 U	5.4 U	5.5 U	5 U	4.7 U	5.1 U	5.3 U	5.4 U	4.7 U	5.7 U	5.6 U
Acetone	100000	50	ug/kg	8.3 J	11 U	9.6 J	7.4 J	44.7	10 UJ	54.9 J	8.9 J	6.7 J	11 U	11 U
Benzene	4800	60	ug/kg	0.5 U	0.54 U	0.55 U	0.5 U	0.47 U	0.51 U	0.53 U	0.54 U	0.47 U	0.57 U	0.56 U
Bromodichloromethane	NS	NS	ug/kg	2 U	2.2 U	2.2 U	2 U	1.9 U	2 U	2.1 U	2.1 U	1.9 U	2.3 U	2.2 U
Bromoform	NS	NS	ug/kg	5 U	5.4 U	5.5 U	5 U	4.7 U	5.1 U	5.3 U	5.4 U	4.7 U	5.7 U	5.6 U
Bromomethane	NS	NS	ug/kg	5 U	5.4 U	5.5 U	5 U	4.7 U	5.1 U	5.3 U	5.4 U	4.7 U	5.7 U	5.6 U
Carbon Disulfide	NS	NS	ug/kg	2 U	2.2 U	2.2 U	2 U	1.9 U	2 U	2.1 U	2.1 U	1.9 U	2.3 U	2.2 U
Carbon Tetrachloride	2400	760	ug/kg	2 U	2.2 U	2.2 U	2 U	1.9 U	2 U	2.1 U	2.1 U	1.9 U	2.3 U	2.2 U
CFC-11	NS	NS	ug/kg	5 U	5.4 U	5.5 U	5 U	4.7 U	5.1 U	5.3 U	5.4 U	4.7 U	5.7 U	5.6 U
CFC-12	NS	NS	ug/kg	5 U	5.4 U	5.5 U	5 U	4.7 U	5.1 U	5.3 U	5.4 U	4.7 U	5.7 U	5.6 U
Chlorobenzene	100000	1100	ug/kg	2 U	2.2 U	2.2 U	2 U	1.9 U	2 U	2.1 U	2.1 U	1.9 U	2.3 U	2.2 U
Chlorodibromomethane	NS	NS	ug/kg	2 U	2.2 U	2.2 U	2 U	1.9 U	2 U	2.1 U	2.1 U	1.9 U	2.3 U	2.2 U
Chloroethane	NS	NS	ug/kg	5 U	5.4 U	5.5 U	5 U	4.7 U	5.1 U	5.3 U	5.4 U	4.7 U	5.7 U	5.6 U
Chloroform	49000	370	ug/kg	2 U	2.2 U	2.2 U	2 U	1.9 U	2 U	2.1 U	2.1 U	1.9 U	2.3 U	2.2 U
Chloromethane	NS	NS	ug/kg	5 U	5.4 U	5.5 U	5 U	4.7 U	5.1 U	5.3 U	5.4 U	4.7 U	5.7 U	5.6 U
cis-1,2-Dichloroethene	100000	250	ug/kg	0.99 U	1.1 U	1.1 U	1 U	0.94 U	1 U	1.1 U	1.1 U	0.93 U	1.1 U	1.1 U
cis-1,3-Dichloropropene	NS	NS	ug/kg	2 U	2.2 U	2.2 U	2 U	1.9 U	2 U	2.1 U	2.1 U	1.9 U	2.3 U	2.2 U
Cyclohexane	NS	NS	ug/kg	2 U	2.2 U	2.2 U	2 U	1.9 U	2 U	2.1 U	2.1 U	1.9 U	2.3 U	2.2 U
Dichloromethane	NS	NS	ug/kg	5 U	5.4 U	5.5 U	5 U	4.7 U	5.1 U	5.3 U	5.4 U	4.7 U	5.7 U	5.6 U
Ethylbenzene	41000	1000	ug/kg	0.99 U	1.1 U	2.1	1 U	0.16 J	1 U	0.28 J	1.1 U	0.93 U	1.1 U	1.1 U
Isopropylbenzene	NS	NS	ug/kg	2 U	2.2 U	2.2 U	2 U	1.9 U	2 U	2.1 U	2.1 U	1.9 U	2.3 U	2.2 U
Methyl Acetate	NS	NS	ug/kg	5 U	5.4 U	5.5 U	5 U	4.7 U	5.1 U	5.3 U	5.4 U	4.7 U	5.7 U	5.6 U
Methyl N-Butyl Ketone (2-Hexanone)	NS	NS	ug/kg	5 U	5.4 U	5.5 U	5 U	4.7 U	5.1 U	5.3 U	5.4 U	4.7 U	5.7 U	5.6 U
Methylcyclohexane	NS	NS	ug/kg	2 U	2.2 U	2.2 U	2 U	1.9 U	2 U	2.1 U	2.1 U	1.9 U	2.3 U	2.2 U
Methyl-tert-butylether	100000	930	ug/kg	0.99 U	1.1 U	1.1 U	1 U	0.94 U	1 U	1.1 U	1.1 U	0.93 U	1.1 U	1.1 U
Styrene (Monomer)	NS	NS	ug/kg	2 U	2.2 U	2.2 U	2 U	1.9 U	0.47 J	2.1 U	2.1 U	1.9 U	2.3 U	2.2 U
Tetrachloroethene	19000	1300	ug/kg	2 U	2.2 U	2.2 U	2 U	1.9 U	2 U	2.1 U	2.1 U	1.9 U	2.3 U	2.2 U
Toluene	100000	700	ug/kg	0.99 U	1.1 U	11.7	1 U	1.7	1 U	1.1 U	0.33 J	0.93 U	1.1 U	1.1 U
Total Xylenes	100000	1600	ug/kg	0.99 U	1.1 U	4.2	1 U	0.8 J	1 U	1.1 U	1.1 U	0.93 U	1.1 U	1.1 U
trans-1,2-Dichloroethene	100000	190	ug/kg	0.99 U	1.1 U	1.1 U	1 U	0.94 U	1 U	1.1 U	1.1 U	0.93 U	1.1 U	1.1 U
trans-1,3-Dichloropropene	NS	NS	ug/kg	2 U	2.2 U	2.2 U	2 U	1.9 U	2 U	2.1 U	2.1 U	1.9 U	2.3 U	2.2 U
Trichloroethene	21000	470	ug/kg	0.99 U	1.1 U	1.1 U	1 U	0.94 U	1 U	1.1 U	1.1 U	0.93 U	1.1 U	1.1 U
Vinyl chloride	900	20	ug/kg	2 U	2.2 U	2.2 U	2 U	1.9 U	2 U	2.1 U	2.1 U	1.9 U	2.3 U	2.2 U

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Table 18. Confirmatory Soil Sample Results Area J
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Sample ID Sample Date Sample Depth	375-6: RESTRICTED RESIDENTIAL USE SCO	375-6: PROTECTION OF GROUNDWATER SCO	Units	PE-J-A1 2-2.5 42464	PE-J-A2 2-2.5 42464	PE-J-B1 2-2.5 42464	PE-J-B2 2-2.5 42464	PE-J-C1 2-2.5 42465	PE-J-C2 2-2.5 PE-DUP-021_20160405	PE-J-C2 2-2.5 42465	PE-J-D1 2-2.5 42465	PE-J-D2 2-2.5 42465	PE-J-S1 1.5-2 42464	PE-J-S2 1.5-2 42464
SVOCs														
1,1-Biphenyl	NS	NS	ug/kg	74 U	81 U	82 U	75 U	71 U	77 U	67 U	66 U	70 U	85 U	84 U
2,2-Oxybis(1-Chloropropane)	NS	NS	ug/kg	74 U	81 U	82 U	75 U	71 U	77 U	67 U	66 U	70 U	85 U	84 U
2,4,5-Trichlorophenol	NS	NS	ug/kg	190 U	200 U	200 U	190 U	180 U	190 U	170 U	170 U	170 U	210 U	210 U
2,4,6-Trichlorophenol	NS	NS	ug/kg	190 U	200 U	200 U	190 U	180 U	190 U	170 U	170 U	170 U	210 U	210 U
2,4-Dichlorophenol	NS	NS	ug/kg	190 U	200 U	200 U	190 U	180 U	190 U	170 U	170 U	170 U	210 U	210 U
2,4-Dimethylphenol	NS	NS	ug/kg	190 U	200 U	200 U	190 U	180 U	190 U	170 U	170 U	170 U	210 U	210 U
2,4-Dinitrophenol	NS	NS	ug/kg	190 U	200 U	200 U	190 U	180 U	190 U	170 U	170 U	170 U	210 U	210 U
2,4-Dinitrotoluene	NS	NS	ug/kg	37 U	41 U	41 U	37 U	35 U	39 U	34 U	33 U	35 U	43 U	42 U
2,6-Dinitrotoluene	NS	NS	ug/kg	37 U	41 U	41 U	37 U	35 U	39 U	34 U	33 U	35 U	43 U	42 U
2-Chloronaphthalene	NS	NS	ug/kg	74 U	81 U	82 U	75 U	71 U	77 U	67 U	66 U	70 U	85 U	84 U
2-Chlorophenol	NS	NS	ug/kg	74 U	81 U	82 U	75 U	71 U	77 U	67 U	66 U	70 U	85 U	84 U
2-Methyl-4,6-dinitrophenol	NS	NS	ug/kg	190 U	200 U	200 U	190 U	180 U	190 U	170 U	170 U	170 U	210 U	210 U
2-Methylnaphthalene	NS	NS	ug/kg	74 U	81 U	82 U	75 U	71 U	77 U	67 U	66 U	70 U	85 U	84 U
2-Methylphenol	NS	NS	ug/kg	74 U	81 U	82 U	75 U	71 U	77 U	67 U	66 U	70 U	85 U	84 U
2-Nitroaniline	NS	NS	ug/kg	190 U	200 U	200 U	190 U	180 U	190 U	170 U	170 U	170 U	210 U	210 U
2-Nitrophenol	NS	NS	ug/kg	190 U	200 U	200 U	190 U	180 U	190 U	170 U	170 U	170 U	210 U	210 U
3,3-Dichlorobenzidine	NS	NS	ug/kg	74 U	81 U	82 U	75 U	71 U	77 U	67 U	66 U	70 U	85 U	84 U
3-Methylphenol, 4-Methylphenol	NS	NS	ug/kg	74 U	81 U	92.6	75 U	46.9 J	77 U	67 U	66 U	70 U	85 U	84 U
3-Nitroaniline	NS	NS	ug/kg	190 U	200 U	200 U	190 U	180 U	190 U	170 U	170 U	170 U	210 U	210 U
4-Bromophenyl phenyl ether	NS	NS	ug/kg	74 U	81 U	82 U	75 U	71 U	77 U	67 U	66 U	70 U	85 U	84 U
4-Chloro-3-Methylphenol	NS	NS	ug/kg	190 U	200 U	200 U	190 U	180 U	190 U	170 U	170 U	170 U	210 U	210 U
4-Chlorophenyl phenyl ether	NS	NS	ug/kg	74 U	81 U	82 U	75 U	71 U	77 U	67 U	66 U	70 U	85 U	84 U
4-Nitroaniline	NS	NS	ug/kg	190 U	200 U	200 U	190 U	180 U	190 U	170 U	170 U	170 U	210 U	210 U
4-Nitrophenol	NS	NS	ug/kg	370 U	410 U	410 U	370 U	350 U	390 U	340 U	330 U	350 U	430 U	420 U
Acenaphthene	100000	98000	ug/kg	37 U	41 U	41 U	37 U	35 U	39 U	34 U	33 U	35 U	43 U	42 U
Acenaphthylene	100000	107000	ug/kg	37 U	41 U	41 U	37 U	35 U	39 U	34 U	33 U	35 U	43 U	42 U
Acetophenone	NS	NS	ug/kg	190 U	200 U	200 U	190 U	180 U	190 U	170 U	170 U	170 U	210 U	210 U
Anthracene	100000	1000000	ug/kg	37 U	41 U	41 U	37 U	21.7 J	39 U	13.8 J	33 U	35 U	43 U	42 U
Atrazine	NS	NS	ug/kg	74 U	81 U	82 U	75 U	71 U	77 U	67 U	66 U	70 U	85 U	84 U
Benzaldehyde	NS	NS	ug/kg	190 U	200 U	200 U	190 U	180 U	190 U	170 U	170 U	170 U	210 U	210 U
Benzo(a)anthracene	1000	1000	ug/kg	37 U	41 U	23.1 J	22.9 J	92.3	17.3 J	32.9 J	15.7 J	35 U	43 U	22.9 J
Benzo(a)pyrene	1000	22000	ug/kg	37 U	41 U	16.6 J	21.5 J	75.6	15.3 J	32.2 J	14.8 J	35 U	43 U	22.4 J
Benzo(b)fluoranthene	1000	1700	ug/kg	37 U	41 U	28.4 J	26.9 J	102	18.1 J	38.1	18.8 J	35 U	43 U	35.6 J
Benzo(g,h,i)perylene	100000	1000000	ug/kg	37 U	41 U	41 U	37 U	39	39 U	20 J	33 U	35 U	43 U	17 J
Benzo(k)fluoranthene	3900	1700	ug/kg	37 U	41 U	10.1 J	11.1 J	37.1	39 U	14.8 J	33 U	35 U	43 U	42 U
bis(2-Chloroethoxy)methane	NS	NS	ug/kg	74 U	81 U	82 U	75 U	71 U	77 U	67 U	66 U	70 U	85 U	84 U
bis(2-Chloroethyl)ether	NS	NS	ug/kg	74 U	81 U	82 U	75 U	71 U	77 U	67 U	66 U	70 U	85 U	84 U
bis(2-Ethylhexyl)phthalate	NS	NS	ug/kg	74 U	81 U	90.8	75 U	71 U	77 U	67 U	66 U	70 U	85 U	84 U
Butyl benzyl phthalate	NS	NS	ug/kg	74 U	81 U	82 U	75 U	71 U	77 U	67 U	66 U	70 U	85 U	84 U
Caprolactam	NS	NS	ug/kg	74 U	81 U	82 U	75 U	71 U	77 U	67 U	66 U	70 U	85 U	84 U
Carbazole	NS	NS	ug/kg	74 U	81 U	82 U	75 U	71 U	77 U	67 U	66 U	70 U	85 U	84 U
Chrysene	3900	1000	ug/kg	37 U	41 U	23.5 J	22.1 J	82.4	15.6 J	29.5 J	15.1 J	35 U	43 U	27.2 J
Dibenzo(a,h)anthracene	330	1000000	ug/kg	37 U	41 U	41 U	37 U	35 U	39 U	34 U	33 U	35 U	43 U	42 U
Dibenzofuran	NS	NS	ug/kg	74 U	81 U	82 U	75 U	71 U	77 U	67 U	66 U	70 U	85 U	84 U
Diethyl phthalate	NS	NS	ug/kg	74 U	81 U	82 U	75 U	71 U	77 U	67 U	66 U	70 U	85 U	84 U
Dimethyl phthalate	NS	NS	ug/kg	74 U	81 U	82 U	75 U	71 U	77 U	67 U	66 U	70 U	85 U	84 U
Di-n-butyl phthalate	NS	NS	ug/kg	74 U	81 U	82 U	75 U	71 U	77 U	67 U	66 U	70 U	85 U	84 U
Di-n-octyl phthalate	NS	NS	ug/kg	74 U	81 U	82 U	75 U	71 U	77 U	67 U	66 U	70 U	85 U	84 U
Fluoranthene	100000	1000000	ug/kg	21.5 J	41 U	41.2	36.9 J	159	27.2 J	65.5	30.8 J	19.2 J	43 U	44.4
Fluorene	100000	386000	ug/kg	37 U	41 U	41 U	37 U	35 U	39 U	34 U	33 U	35 U	43 U	42 U
Hexachloro-1,3-butadiene	NS	NS	ug/kg	37 U	41 U	41 U	37 U	35 U	39 U	34 U	33 U	35 U	43 U	42 U
Hexachlorobenzene	NS	NS	ug/kg	74 U	81 U	82 U	75 U	71 U	77 U	67 U	66 U	70 U	85 U	84 U
Hexachlorocyclopentadiene	NS	NS	ug/kg	370 U	410 U	410 U	370 U	350 U	390 U	340 U	330 U	350 U	430 U	420 U
Hexachloroethane	NS	NS	ug/kg	190 U	200 U	200 U	190 U	180 U	190 U	170 U	170 U	170 U	210 U	210 U
Indeno(1,2,3-cd)pyrene	500	8200	ug/kg	37 U	41 U	41 U	37 U	47.2	39 U	21.7 J	33 U	35 U	43 U	42 U

See Notes on Last Page

Table 18. Confirmatory Soil Sample Results Area J
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Sample ID	375-6: RESTRICTED RESIDENTIAL USE SCO	375-6: PROTECTION OF GROUNDWATER SCO		PE-J-A1	PE-J-A2	PE-J-B1	PE-J-B2	PE-J-C1	PE-J-C2	PE-J-C2	PE-J-D1	PE-J-D2	PE-J-S1	PE-J-S2
Sample Date				2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	2-2.5	1.5-2	1.5-2
Sample Depth			Units	42464	42464	42464	42464	42465	PE-DUP-021 20160405	42465	42465	42465	42464	42464
SVOCs cont.														
Isophorone	NS	NS	ug/kg	74 U	81 U	82 U	75 U	71 U	77 U	67 U	66 U	70 U	85 U	84 U
Naphthalene	100000	12000	ug/kg	37 U	41 U	19.9 J	37 U	35 U	39 U	34 U	33 U	35 U	43 U	42 U
Nitrobenzene	NS	NS	ug/kg	74 U	81 U	82 U	75 U	71 U	77 U	67 U	66 U	70 U	85 U	84 U
n-Nitrosodi-n-propylamine	NS	NS	ug/kg	74 U	81 U	82 U	75 U	71 U	77 U	67 U	66 U	70 U	85 U	84 U
N-nitrosodiphenylamine	NS	NS	ug/kg	190 U	200 U	200 U	190 U	180 U	190 U	170 U	170 U	170 U	210 U	210 U
p-Chloroaniline	NS	NS	ug/kg	190 U	200 U	200 U	190 U	180 U	190 U	170 U	170 U	170 U	210 U	210 U
Pentachlorophenol	6700	800	ug/kg	190 U	200 U	200 U	190 U	180 U	190 U	170 U	170 U	170 U	210 U	210 U
Phenanthrene	100000	1000000	ug/kg	37 U	41 U	26.3 J	18.1 J	78.5	39 U	50.6	18 J	35 U	43 U	21.3 J
Phenol	100000	330	ug/kg	74 U	81 U	82 U	75 U	71 U	77 U	67 U	66 U	70 U	85 U	84 U
Pyrene	100000	1000000	ug/kg	21.2 J	41 U	36.1 J	32.9 J	139	25.9 J	61.8	27.5 J	15.6 J	43 U	44.9
PCBs														
Aroclor 1016	1000	3200	ug/kg	37 U	43 U	42 U	40 U	35 U	39 U	33 U	32 U	35 U	43 U	44 U
Aroclor 1221	1000	3200	ug/kg	37 U	43 U	42 U	40 U	35 U	39 U	33 U	32 U	35 U	43 U	44 U
Aroclor 1232	1000	3200	ug/kg	37 U	43 U	42 U	40 U	35 U	39 U	33 U	32 U	35 U	43 U	44 U
Aroclor 1242	1000	3200	ug/kg	37 U	43 U	42 U	40 U	35 U	39 U	33 U	32 U	35 U	43 U	44 U
Aroclor 1248	1000	3200	ug/kg	37 U	43 U	42 U	40 U	35 U	39 U	33 U	32 U	35 U	43 U	44 U
Aroclor 1254	1000	3200	ug/kg	37 U	43 U	42 U	40 U	35 U	39 U	33 U	32 U	35 U	43 U	44 U
Aroclor 1260	1000	3200	ug/kg	37 U	43 U	42 U	40 U	35 U	39 U	33 U	32 U	35 U	43 U	44 U
Aroclor 1262	1000	3200	ug/kg	37 U	43 U	42 U	40 U	35 U	39 U	33 U	32 U	35 U	43 U	44 U
Aroclor 1268	1000	3200	ug/kg	37 U	43 U	42 U	40 U	35 U	39 U	33 U	32 U	35 U	43 U	44 U
Metals														
Aluminum	NS	NS	mg/kg	7540	13000	12000	13700	5620 J	5760 J	5450 J	5110 J	5210 J	20100	10800
Antimony	NS	NS	mg/kg	1.9 UJ	2 UJ	2 UJ	2 UJ	2.2 UJ	2.3 UJ	2.1 UB	2 UJ	2.1 UB	2 UJ	1.9 UJ
Arsenic	16	16	mg/kg	2.9	4	4.4	5.2	1.8 B	2.1 B	2.1	1.6 B	1.9 B	4.4	5.4
Barium	400	820	mg/kg	63.4	52	69.8	73.9	20 J	36.4 J	37.8 J	17.7 J	30.1 J	66.4	142
Beryllium	72	47	mg/kg	0.35	0.54	0.57	0.62	0.28	0.34	0.35	0.29	0.32	0.6	0.48
Cadmium	4.3	7.5	mg/kg	0.14 B	0.12 B	0.23 B	0.22 B	0.54 UB	0.57 UB	0.13 B	0.5 UB	0.52 UB	0.12 B	0.26 B
Calcium	NS	NS	mg/kg	1920	1670	2840	2610	1900 J	2290 J	1890 J	1550 J	2070 J	1160	9170
Chromium	NS	NS	mg/kg	12.2	18.3	16.5	19.3	9.6	13.5	11.3	11.2	10.1	20.3	16
Cobalt	NS	NS	mg/kg	5.2	5	6.9	9.4	4.9 B	4.8 B	4.6 B	4.2 B	4.5 B	11.4	5.1
Copper	270	1720	mg/kg	11.4	5	12.9	10.3	8.6	10.9	9.2	7.8	11.4	9.2	10.5
Iron	NS	NS	mg/kg	14500 J	19000 J	18200 J	22700 J	11800	16100	14100	11700	12800	21700 J	21000 J
Lead	400	450	mg/kg	16.8	6.6	30	13.7	7.6	12.1	10.1	7.5	25.2	7.4	29.1
Magnesium	NS	NS	mg/kg	2330 J	2110 J	2770 J	2920 J	2260	2230	2100	2120	2400	2660 J	6100 J
Manganese	2000	2000	mg/kg	221	319	549	418	130 J	154 J	145 J	105 J	127 J	537	332
Mercury	NS	NS	mg/kg	0.014 B	0.028 B	0.05	0.035 B	0.0089 B	0.008 B	0.034 U	0.034 U	0.031 U	0.041	0.04
Nickel	310	130	mg/kg	9.6	7.6	11.4	9.1	8.3	8.1	8	8.2	7.9	12	8.3
Potassium	NS	NS	mg/kg	756 B	614 B	993	729 B	676 B	679 B	693 B	665 B	690 B	678 B	626 B
Selenium	180	4	mg/kg	1.9 U	2 U	2 U	2 U	2.2 U	2.3 U	2.1 U	2 U	2.1 U	2 UB	1.9 U
Silver	180	8.3	mg/kg	0.91	1.3	1.4	1.7	0.72	0.72	0.73	0.57	0.56	2.8	2.2
Sodium	NS	NS	mg/kg	120 B	79.3 B	164 B	120 B	131 B	151 B	133 B	105 B	154 B	93.1 B	122 B
Thallium	NS	NS	mg/kg	0.96 U	0.99 U	0.98 U	0.99 U	1.1 U	1.1 U	1.1 U	1 U	1 U	0.98 UB	0.97 U
Vanadium	NS	NS	mg/kg	20.3	30.8	27.9	35.3	14.7	26.5	20.7	15.7	18.8	35.5	27.8
Zinc	10000	2480	mg/kg	38.7	30.4	47.8	39.4	29.6	28.6	29.7	24.2	31.8	48.4	55.1
General Chemistry														
Percent Solids	NS	NS	%	88.3	77.1	77.2	83.3	89.8	83.7	95	95.2	94.1	75.4	73.6

Notes		
NS	No standard	
NA	Not analyzed	
J	Estimated result	
JN	Estimated result	
R	Rejected result	
UB	Analyte considered non-detect at the listed value due to associated blank contamination	
Bold	Result exceeds 375-6.8(b) protection of groundwater soil cleanup objective.	
Shade	Result exceeds 375-6.8(b) restricted residential use soil cleanup objective.	

Table 18. Confirmatory Soil Sample Results Area J
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Sample ID	375-6: RESTRICTED RESIDENTIAL USE SCO	375-6: PROTECTION OF GROUNDWATER SCO		PE-J-S3A	PE-J-S4	PE-J-S5	PE-J-S6	PE-J-S7	PE-J-S8
Sample Date				1.5-2	1.5-2	1.5-2	1.5-2	1.5-2	1.5-2
Sample Depth			Units	42471	42464	42467	42467	42467	42467
VOCs									
1,1,1-Trichloroethane	100000	680	ug/kg	NA	2.1 U	1.8 U	2.5 U	2.4 U	1.8 U
1,1,2,2-Tetrachloroethane	NS	NS	ug/kg	NA	2.1 U	1.8 U	2.5 U	2.4 U	1.8 U
1,1,2-trichloro-1,2,2-trifluoroethane	NS	NS	ug/kg	NA	5.2 U	4.6 U	6.2 U	6 U	4.4 U
1,1,2-Trichloroethane	NS	NS	ug/kg	NA	2.1 U	1.8 U	2.5 U	2.4 U	1.8 U
1,1-Dichloroethane	26000	270	ug/kg	NA	1 U	0.92 U	1.2 U	1.2 U	0.88 U
1,1-Dichloroethene	100000	330	ug/kg	NA	1 U	0.92 U	1.2 U	1.2 U	0.88 U
1,2,4-Trichlorobenzene	NS	NS	ug/kg	NA	5.2 U	4.6 U	6.2 U	6 U	4.4 U
1,2-Dibromo-3-chloropropane	NS	NS	ug/kg	NA	2.1 U	1.8 U	2.5 U	2.4 U	1.8 U
1,2-Dibromoethane	NS	NS	ug/kg	NA	1 U	0.92 U	1.2 U	1.2 U	0.88 U
1,2-Dichlorobenzene	100000	1100	ug/kg	NA	1 U	0.92 U	1.2 U	1.2 U	0.88 U
1,2-Dichloroethane	3100	20	ug/kg	NA	1 U	0.92 U	1.2 U	1.2 U	0.88 U
1,2-Dichloropropane	NS	NS	ug/kg	NA	2.1 U	1.8 U	2.5 U	2.4 U	1.8 U
1,3-Dichlorobenzene	49000	2400	ug/kg	NA	1 U	0.92 U	1.2 U	1.2 U	0.88 U
1,4-Dichlorobenzene	13000	1800	ug/kg	NA	1 U	0.92 U	1.2 U	1.2 U	0.88 U
2-Butanone (MEK)	100000	120	ug/kg	NA	10 U	10.9	12 U	12 U	8.8 U
4-Methyl-2-Pentanone	NS	NS	ug/kg	NA	5.2 U	4.6 U	6.2 U	6 U	4.4 U
Acetone	100000	50	ug/kg	NA	12.6	91.4 J	12 U	12 U	8.8 U
Benzene	4800	60	ug/kg	NA	0.52 U	0.46 U	0.62 U	0.6 U	0.44 U
Bromodichloromethane	NS	NS	ug/kg	NA	2.1 U	1.8 U	2.5 U	2.4 U	1.8 U
Bromoform	NS	NS	ug/kg	NA	5.2 U	4.6 U	6.2 U	6 U	4.4 U
Bromomethane	NS	NS	ug/kg	NA	5.2 U	4.6 U	6.2 U	6 U	4.4 U
Carbon Disulfide	NS	NS	ug/kg	NA	2.1 U	1.8 U	2.5 U	2.4 U	1.8 U
Carbon Tetrachloride	2400	760	ug/kg	NA	2.1 U	1.8 U	2.5 U	2.4 U	1.8 U
CFC-11	NS	NS	ug/kg	NA	5.2 U	4.6 U	6.2 U	6 U	4.4 U
CFC-12	NS	NS	ug/kg	NA	5.2 U	4.6 U	6.2 U	6 U	4.4 U
Chlorobenzene	100000	1100	ug/kg	NA	2.1 U	1.8 U	2.5 U	2.4 U	1.8 U
Chlorodibromomethane	NS	NS	ug/kg	NA	2.1 U	1.8 U	2.5 U	2.4 U	1.8 U
Chloroethane	NS	NS	ug/kg	NA	5.2 U	4.6 U	6.2 U	6 U	4.4 U
Chloroform	49000	370	ug/kg	NA	2.1 U	1.8 U	2.5 U	2.4 U	1.8 U
Chloromethane	NS	NS	ug/kg	NA	5.2 U	4.6 U	6.2 U	6 U	4.4 U
cis-1,2-Dichloroethene	100000	250	ug/kg	NA	1 U	0.92 U	1.2 U	1.2 U	0.88 U
cis-1,3-Dichloropropene	NS	NS	ug/kg	NA	2.1 U	1.8 U	2.5 U	2.4 U	1.8 U
Cyclohexane	NS	NS	ug/kg	NA	2.1 U	1.8 U	2.5 U	2.4 U	1.8 U
Dichloromethane	NS	NS	ug/kg	NA	5.2 U	4.6 U	6.2 U	6 U	4.4 U
Ethylbenzene	41000	1000	ug/kg	NA	1 U	0.92 U	1.2 U	1.2 U	0.88 U
Isopropylbenzene	NS	NS	ug/kg	NA	2.1 U	1.8 U	2.5 U	2.4 U	1.8 U
Methyl Acetate	NS	NS	ug/kg	NA	5.2 U	4.6 U	6.2 U	6 U	4.4 U
Methyl N-Butyl Ketone (2-Hexanone)	NS	NS	ug/kg	NA	5.2 U	4.6 U	6.2 U	6 U	4.4 U
Methylcyclohexane	NS	NS	ug/kg	NA	2.1 U	1.8 U	2.5 U	2.4 U	1.8 U
Methyl-tert-butylether	100000	930	ug/kg	NA	1 U	0.92 U	1.2 U	1.2 U	0.88 U
Styrene (Monomer)	NS	NS	ug/kg	NA	2.1 U	0.28 J	2.5 U	2.4 U	1.8 U
Tetrachloroethene	19000	1300	ug/kg	NA	2.1 U	1.8 U	2.5 U	2.4 U	1.8 U
Toluene	100000	700	ug/kg	NA	0.24 J	0.92 U	1.2 U	1.2 U	0.88 U
Total Xylenes	100000	1600	ug/kg	NA	1 U	0.92 U	1.2 U	1.2 U	0.88 U
trans-1,2-Dichloroethene	100000	190	ug/kg	NA	1 U	0.92 U	1.2 U	1.2 U	0.88 U
trans-1,3-Dichloropropene	NS	NS	ug/kg	NA	2.1 U	1.8 U	2.5 U	2.4 U	1.8 U
Trichloroethene	21000	470	ug/kg	NA	1 U	0.92 U	1.2 U	1.2 U	0.88 U
Vinyl chloride	900	20	ug/kg	NA	2.1 U	1.8 U	2.5 U	2.4 U	1.8 U

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Table 18. Confirmatory Soil Sample Results Area J
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Sample ID	375-6: RESTRICTED RESIDENTIAL USE SCO	375-6: PROTECTION OF GROUNDWATER SCO		PE-J-S3A	PE-J-S4	PE-J-S5	PE-J-S6	PE-J-S7	PE-J-S8
Sample Date				1.5-2	1.5-2	1.5-2	1.5-2	1.5-2	1.5-2
Sample Depth			Units	42471	42464	42467	42467	42467	42467
SVOCs									
1,1-Biphenyl	NS	NS	ug/kg	NA	77 U	68 U	89 U	86 U	74 U
2,2-Oxybis(1-Chloropropane)	NS	NS	ug/kg	NA	77 U	68 U	89 U	86 U	74 U
2,4,5-Trichlorophenol	NS	NS	ug/kg	NA	190 U	170 U	220 U	210 U	180 U
2,4,6-Trichlorophenol	NS	NS	ug/kg	NA	190 U	170 U	220 U	210 U	180 U
2,4-Dichlorophenol	NS	NS	ug/kg	NA	190 U	170 U	220 U	210 U	180 U
2,4-Dimethylphenol	NS	NS	ug/kg	NA	190 U	170 U	220 U	210 U	180 U
2,4-Dinitrophenol	NS	NS	ug/kg	NA	190 U	170 U	220 U	210 U	180 U
2,4-Dinitrotoluene	NS	NS	ug/kg	NA	38 U	34 U	45 U	43 U	37 U
2,6-Dinitrotoluene	NS	NS	ug/kg	NA	38 U	34 U	45 U	43 U	37 U
2-Chloronaphthalene	NS	NS	ug/kg	NA	77 U	68 U	89 U	86 U	74 U
2-Chlorophenol	NS	NS	ug/kg	NA	77 U	68 U	89 U	86 U	74 U
2-Methyl-4,6-dinitrophenol	NS	NS	ug/kg	NA	190 U	170 U	220 U	210 U	180 U
2-Methylnaphthalene	NS	NS	ug/kg	NA	77 U	68 U	89 U	86 U	74 U
2-Methylphenol	NS	NS	ug/kg	NA	77 U	68 U	89 U	86 U	74 U
2-Nitroaniline	NS	NS	ug/kg	NA	190 U	170 U	220 U	210 U	180 U
2-Nitrophenol	NS	NS	ug/kg	NA	190 U	170 U	220 U	210 U	180 U
3,3-Dichlorobenzidine	NS	NS	ug/kg	NA	77 U	68 U	89 U	86 U	74 U
3-Methylphenol, 4-Methylphenol	NS	NS	ug/kg	NA	77 U	68 U	89 U	44.3 J	74 U
3-Nitroaniline	NS	NS	ug/kg	NA	190 U	170 U	220 U	210 U	180 U
4-Bromophenyl phenyl ether	NS	NS	ug/kg	NA	77 U	68 U	89 U	86 U	74 U
4-Chloro-3-Methylphenol	NS	NS	ug/kg	NA	190 U	170 U	220 U	210 U	180 U
4-Chlorophenyl phenyl ether	NS	NS	ug/kg	NA	77 U	68 U	89 U	86 U	74 U
4-Nitroaniline	NS	NS	ug/kg	NA	190 U	170 U	220 U	210 U	180 U
4-Nitrophenol	NS	NS	ug/kg	NA	380 U	340 U	450 U	430 U	370 U
Acenaphthene	100000	98000	ug/kg	NA	38 U	34 U	45 U	43 U	37 U
Acenaphthylene	100000	107000	ug/kg	NA	38 U	34 U	45 U	43 U	37 U
Acetophenone	NS	NS	ug/kg	NA	190 U	170 U	220 U	210 U	180 U
Anthracene	100000	1000000	ug/kg	NA	38 U	34 U	45 U	43 U	37 U
Atrazine	NS	NS	ug/kg	NA	77 U	68 U	89 U	86 U	74 U
Benzaldehyde	NS	NS	ug/kg	NA	190 U	170 U	220 U	20.2 J	180 U
Benzo(a)anthracene	1000	1000	ug/kg	NA	26 J	24.5 J	31.3 J	19.4 J	37 U
Benzo(a)pyrene	1000	22000	ug/kg	NA	24.3 J	20.9 J	27.1 J	18.6 J	37 U
Benzo(b)fluoranthene	1000	1700	ug/kg	NA	31.4 J	22.9 J	34.3 J	20.9 J	37 U
Benzo(g,h,i)perylene	100000	1000000	ug/kg	NA	17.7 J	13.8 J	22.4 J	43 U	37 U
Benzo(k)fluoranthene	3900	1700	ug/kg	NA	38 U	34 U	45 U	43 U	37 U
bis(2-Chloroethoxy)methane	NS	NS	ug/kg	NA	77 U	68 U	89 U	86 U	74 U
bis(2-Chloroethyl)ether	NS	NS	ug/kg	NA	77 U	68 U	89 U	86 U	74 U
bis(2-Ethylhexyl)phthalate	NS	NS	ug/kg	NA	42.4 J	68 U	89 U	86 U	74 U
Butyl benzyl phthalate	NS	NS	ug/kg	NA	77 U	68 U	89 U	86 U	74 U
Caprolactam	NS	NS	ug/kg	NA	77 U	68 U	89 U	86 U	74 U
Carbazole	NS	NS	ug/kg	NA	77 U	68 U	89 U	86 U	74 U
Chrysene	3900	1000	ug/kg	NA	22.7 J	23.6 J	33.9 J	18.4 J	37 U
Dibenzo(a,h)anthracene	330	1000000	ug/kg	NA	38 U	34 U	45 U	43 U	37 U
Dibenzofuran	NS	NS	ug/kg	NA	77 U	68 U	89 U	86 U	74 U
Diethyl phthalate	NS	NS	ug/kg	NA	77 U	68 U	89 U	86 U	74 U
Dimethyl phthalate	NS	NS	ug/kg	NA	77 U	68 U	89 U	86 U	74 U
Di-n-butyl phthalate	NS	NS	ug/kg	NA	77 U	68 U	89 U	86 U	74 U
Di-n-octyl phthalate	NS	NS	ug/kg	NA	77 U	68 U	89 U	86 U	74 U
Fluoranthene	100000	1000000	ug/kg	NA	46.4	39.4	63.8	28.1 J	37 U
Fluorene	100000	386000	ug/kg	NA	38 U	34 U	45 U	43 U	37 U
Hexachloro-1,3-butadiene	NS	NS	ug/kg	NA	38 U	34 U	45 U	43 U	37 U
Hexachlorobenzene	NS	NS	ug/kg	NA	77 U	68 U	89 U	86 U	74 U
Hexachlorocyclopentadiene	NS	NS	ug/kg	NA	380 U	340 U	450 U	430 U	370 U
Hexachloroethane	NS	NS	ug/kg	NA	190 U	170 U	220 U	210 U	180 U
Indeno(1,2,3-cd)pyrene	500	8200	ug/kg	NA	38 U	34 U	45 U	43 U	37 U

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Table 18. Confirmatory Soil Sample Results Area J
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Sample ID	375-6: RESTRICTED RESIDENTIAL USE SCO	375-6: PROTECTION OF GROUNDWATER SCO		PE-J-S3A	PE-J-S4	PE-J-S5	PE-J-S6	PE-J-S7	PE-J-S8
Sample Date				1.5-2	1.5-2	1.5-2	1.5-2	1.5-2	1.5-2
Sample Depth			Units	42471	42464	42467	42467	42467	42467
SVOCs cont.									
Isophorone	NS	NS	ug/kg	NA	77 U	68 U	89 U	86 U	74 U
Naphthalene	100000	12000	ug/kg	NA	38 U	34 U	45 U	43 U	37 U
Nitrobenzene	NS	NS	ug/kg	NA	77 U	68 U	89 U	86 U	74 U
n-Nitrosodi-n-propylamine	NS	NS	ug/kg	NA	77 U	68 U	89 U	86 U	74 U
N-nitrosodiphenylamine	NS	NS	ug/kg	NA	190 U	170 U	220 U	210 U	180 U
p-Chloroaniline	NS	NS	ug/kg	NA	190 U	170 U	220 U	210 U	180 U
Pentachlorophenol	6700	800	ug/kg	NA	190 U	170 U	220 U	210 U	180 U
Phenanthrene	100000	1000000	ug/kg	NA	35.3 J	36.2	54.1	18.7 J	37 U
Phenol	100000	330	ug/kg	NA	77 U	68 U	89 U	86 U	74 U
Pyrene	100000	1000000	ug/kg	NA	44.2	52.6	78.9	37.8 J	37 U
PCBs									
Aroclor 1016	1000	3200	ug/kg	NA	40 U	36 U	45 U	45 U	36 U
Aroclor 1221	1000	3200	ug/kg	NA	40 U	36 U	45 U	45 U	36 U
Aroclor 1232	1000	3200	ug/kg	NA	40 U	36 U	45 U	45 U	36 U
Aroclor 1242	1000	3200	ug/kg	NA	40 U	36 U	45 U	45 U	36 U
Aroclor 1248	1000	3200	ug/kg	NA	40 U	36 U	45 U	45 U	36 U
Aroclor 1254	1000	3200	ug/kg	NA	40 U	36 U	45 U	45 U	36 U
Aroclor 1260	1000	3200	ug/kg	NA	40 U	36 U	45 U	45 U	36 U
Aroclor 1262	1000	3200	ug/kg	NA	40 U	36 U	45 U	45 U	36 U
Aroclor 1268	1000	3200	ug/kg	NA	40 U	36 U	45 U	45 U	36 U
Metals									
Aluminum	NS	NS	mg/kg	12700	7160	6330 J	10200 J	13200 J	11100 J
Antimony	NS	NS	mg/kg	2 UJ	2 UJ	2.2 UJ	2 UJ	1.6 UJ	2.4 UJ
Arsenic	16	16	mg/kg	3.4	3.1	2 B	3.7	5.2	2.2 B
Barium	400	820	mg/kg	58.5 J	113	20.6 J	49.4 J	71.5 J	39.4 J
Beryllium	72	47	mg/kg	0.57 J	0.31	0.28	0.43	0.69	0.34
Cadmium	4.3	7.5	mg/kg	0.18 B	0.34 B	0.075 B	0.22 B	0.25 B	0.085 B
Calcium	NS	NS	mg/kg	2160 J	3240	2020 J	2390 J	2450 J	1220 J
Chromium	NS	NS	mg/kg	16.4 J	12.5	10.1	14.4	17.3	11.9
Cobalt	NS	NS	mg/kg	6.1	5.6	4.9 B	5.9	7	2.8 B
Copper	270	1720	mg/kg	6.6 J	19.8	173	15.8	9.8	2.2 B
Iron	NS	NS	mg/kg	18500 J	16200 J	14100	16900	15800	14300
Lead	400	450	mg/kg	7.6	39.5	36.2	22.6	21.3	4.2
Magnesium	NS	NS	mg/kg	2490 J	2330 J	2340	2610	2330	2100
Manganese	2000	2000	mg/kg	434	340	161 J	341 J	605 J	118 J
Mercury	NS	NS	mg/kg	0.036 UB	0.017 B	0.02 B	0.061	0.056	0.031 B
Nickel	310	130	mg/kg	8.9	9.3	8.2	10.4	9.3	5
Potassium	NS	NS	mg/kg	741 B	848 B	670 B	912 B	732 B	494 B
Selenium	180	4	mg/kg	2 UB	2 U	2.2 U	0.59 B	0.61 B	2.4 U
Silver	180	8.3	mg/kg	1.2	1	2.4	3.8	2.7	4.4
Sodium	NS	NS	mg/kg	106 B	159 B	188 B	153 B	108 B	89.3 B
Thallium	NS	NS	mg/kg	0.98 U	0.98 U	1.1 U	0.98 U	0.8 U	1.2 U
Vanadium	NS	NS	mg/kg	30.8 J	22.5	18.8	26.4	30	22
Zinc	10000	2480	mg/kg	41.9 J	69.1	28.7	48.6	44.2	29.2
General Chemistry									
Percent Solids	NS	NS	%	89.1	79.9	91	74.3	74.7	84.9

Notes		
NS	No standard	
NA	Not analyzed	
J	Estimated result	
JN	Estimated result	
R	Rejected result	
UB	Analyte considered non-detect at the listed value due to associate blank contamination	
Bold	Result exceeds 375-6.8(b) protection of groundwater soil cleanup objective.	
Shade	Result exceeds 375-6.8(b) restricted residential use soil cleanup objective.	

Table 19. Confirmatory Soil Sample Results Area F
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Sample ID	375-6.8(a):	Units		PE-F-A2	PE-F-B1	PE-F-B2	PE-F-S1	PE-F-S2	PE-F-S3	PE-F-S4	PE-F-S5
Sample Depth	UNRESTRICTED			2-2.5	1-1.5	2-2.5	0.5-1	0.5-1	0.5-1	1-1.5	1-1.5
Sample Date			PE-F-A1	42352	42327	42352	42340	42340	42340	42352	42352
VOCs											
1,1,1-Trichloroethane	680	ug/kg	1.9 U	2.5 U	1.7 U	2.3 U	3.2 U	2.5 U	2.5 U	2.2 U	2.6 U
1,1,2,2-Tetrachloroethane	NS	ug/kg	1.9 U	PE-F-A2	1.7 U	2.3 U	2.5 U	2.5 U	2.5 U	2.2 U	2.6 U
1,1,2-trichloro-1,2,2-trifluoroethane	NS	ug/kg	4.9 U	6.2 U	4.4 U	5.7 U	7.9 U	6.3 U	6.2 U	5.4 U	6.4 U
1,1,2-Trichloroethane	NS	ug/kg	1.9 U	2.5 U	1.7 U	2.3 U	3.2 U	2.5 U	2.5 U	2.2 U	2.6 U
1,1-Dichloroethane	270	ug/kg	0.97 U	1.2 U	0.87 U	1.1 U	1.6 U	1.3 U	1.2 U	1.1 U	1.3 U
1,1-Dichloroethene	330	ug/kg	0.97 U	1.2 U	0.87 U	1.1 U	1.6 U	1.3 U	1.2 U	1.1 U	1.3 U
1,2,4-Trichlorobenzene	NS	ug/kg	4.9 U	6.2 U	4.4 U	5.7 U	7.9 U	6.3 U	6.2 U	5.4 U	6.4 U
1,2-Dibromo-3-chloropropane	NS	ug/kg	1.9 U	2.5 U	1.7 U	2.3 U	3.2 U	2.5 U	2.5 U	2.2 U	2.6 U
1,2-Dibromoethane	NS	ug/kg	0.97 U	1.2 U	0.87 U	1.1 U	1.6 U	1.3 U	1.2 U	1.1 U	1.3 U
1,2-Dichlorobenzene	1100	ug/kg	0.97 U	1.2 U	0.87 U	1.1 U	1.6 U	1.3 U	1.2 U	1.1 U	1.3 U
1,2-Dichloroethane	20	ug/kg	0.97 U	1.2 U	0.87 U	1.1 U	1.6 U	1.3 U	1.2 U	1.1 U	1.3 U
1,2-Dichloropropane	NS	ug/kg	1.9 U	2.5 U	1.7 U	2.3 U	3.2 U	2.5 U	2.5 U	2.2 U	2.6 U
1,3-Dichlorobenzene	2400	ug/kg	0.97 U	1.2 U	0.87 U	1.1 U	1.6 U	1.3 U	1.2 U	1.1 U	1.3 U
1,4-Dichlorobenzene	1800	ug/kg	0.97 U	1.2 U	0.87 U	1.1 U	1.6 U	1.3 U	1.2 U	1.1 U	1.3 U
2-Butanone (MEK)	120	ug/kg	9.7 U	12 U	8.7 U	11 U	16 U	13 U	12 U	11 U	13 U
4-Methyl-2-Pentanone	NS	ug/kg	4.9 U	6.2 U	4.4 U	5.7 U	7.9 U	6.3 U	6.2 U	5.4 U	6.4 U
Acetone	50	ug/kg	9.7 U	12 U	8.7 U	11 U	16 U	13 U	12 U	11.6	13 U
Benzene	60	ug/kg	1.6	0.62 U	0.44 U	0.57 U	0.79 U	0.63 U	0.62 U	0.54 U	0.64 U
Bromodichloromethane	NS	ug/kg	1.9 U	2.5 U	1.7 U	2.3 U	3.2 U	2.5 U	2.5 U	2.2 U	2.6 U
Bromoform	NS	ug/kg	4.9 U	6.2 U	4.4 U	5.7 U	7.9 U	6.3 U	6.2 U	5.4 U	6.4 U
Bromomethane	NS	ug/kg	4.9 U	6.2 U	4.4 U	5.7 U	7.9 U	6.3 U	6.2 U	5.4 U	6.4 U
Carbon Disulfide	NS	ug/kg	1.9 U	2.5 U	1.7 U	2.3 U	3.2 U	2.5 U	2.5 U	2.2 U	2.6 U
Carbon Tetrachloride	760	ug/kg	1.9 U	2.5 U	1.7 U	2.3 U	3.2 U	2.5 U	2.5 U	2.2 U	2.6 U
CFC-11	NS	ug/kg	4.9 U	6.2 U	4.4 U	5.7 U	7.9 U	6.3 U	6.2 U	5.4 U	6.4 U
CFC-12	NS	ug/kg	4.9 U	6.2 U	4.4 U	5.7 U	7.9 U	6.3 U	6.2 U	5.4 U	6.4 U
Chlorobenzene	1100	ug/kg	1.9 U	2.5 U	1.7 U	2.3 U	3.2 U	2.5 U	2.5 U	2.2 U	2.6 U
Chlorodibromomethane	NS	ug/kg	1.9 U	2.5 U	1.7 U	2.3 U	3.2 U	2.5 U	2.5 U	2.2 U	2.6 U
Chloroethane	NS	ug/kg	4.9 U	6.2 U	4.4 U	5.7 U	7.9 U	6.3 U	6.2 U	5.4 U	6.4 U
Chloroform	370	ug/kg	1.9 U	2.5 U	1.7 U	2.3 U	3.2 U	2.5 U	2.5 U	2.2 U	2.6 U
Chloromethane	NS	ug/kg	4.9 U	6.2 U	4.4 U	5.7 U	7.9 U	6.3 U	6.2 U	5.4 U	6.4 U
cis-1,2-Dichloroethene	250	ug/kg	0.97 U	1.2 U	0.87 U	1.1 U	1.6 U	1.3 U	1.2 U	1.1 U	1.3 U
cis-1,3-Dichloropropene	NS	ug/kg	1.9 U	2.5 U	1.7 U	2.3 U	3.2 U	2.5 U	2.5 U	2.2 U	2.6 U
Cyclohexane	NS	ug/kg	1.9 U	2.5 U	1.7 U	2.3 U	3.2 U	2.5 U	2.5 U	2.2 U	2.6 U
Dichloromethane	NS	ug/kg	4.9 U	6.2 U	4.4 U	5.7 U	7.9 U	6.3 U	6.2 U	5.4 U	6.4 U
Ethylbenzene	1000	ug/kg	0.97 U	1.2 U	0.87 U	1.1 U	1.6 U	1.3 U	1.2 U	0.6 J	1.3 U
Isopropylbenzene	NS	ug/kg	2	2.5 U	1.7 U	2.3 U	3.2 U	2.5 U	2.5 U	0.3 J	2.6 U
Methyl Acetate	NS	ug/kg	4.9 U	6.2 U	4.4 U	5.7 U	7.9 U	6.3 U	6.2 U	5.4 U	6.4 U
Methyl N-Butyl Ketone (2-Hexanone)	NS	ug/kg	4.9 U	6.2 U	4.4 U	5.7 U	7.9 U	6.3 U	6.2 U	5.4 U	6.4 U
Methylcyclohexane	NS	ug/kg	1.9 U	2.5 U	1.7 U	2.3 U	3.2 U	2.5 U	2.5 U	2.2 U	2.6 U
Methyl-tert-butylether	930	ug/kg	0.97 U	1.2 U	0.87 U	1.1 U	1.6 U	1.3 U	1.2 U	1.1 U	1.3 U
Styrene (Monomer)	NS	ug/kg	1.9 U	2.5 U	1.7 U	2.3 U	3.2 U	2.5 U	2.5 U	2.2 U	2.6 U
Tetrachloroethene	1300	ug/kg	1.9 U	2.5 U	1.7 U	2.3 U	3.2 U	2.5 U	2.5 U	2.2 U	2.6 U
Toluene	700	ug/kg	0.97 U	1.2 U	0.87 U	1.1 U	1.6 U	1.3 U	1.2 U	1.1 U	1.3 U
Total Xylenes	260	ug/kg	2.9	0.55 J	0.27 J	1.1 U	1.6 U	1.3 U	1.2 U	7.8	1.4
trans-1,2-Dichloroethene	190	ug/kg	0.97 U	1.2 U	0.87 U	1.1 U	1.6 U	1.3 U	1.2 U	1.1 U	1.3 U
trans-1,3-Dichloropropene	NS	ug/kg	1.9 U	2.5 U	1.7 U	2.3 U	3.2 U	2.5 U	2.5 U	2.2 U	2.6 U
Trichloroethene	470	ug/kg	0.97 U	1.2 U	0.87 U	1.1 U	1.6 U	1.3 U	1.2 U	1.1 U	1.3 U
Vinyl chloride	20	ug/kg	1.9 U	2.5 U	1.7 U	2.3 U	3.2 U	2.5 U	2.5 U	2.2 U	2.6 U

See Notes on Last Page

Table 19. Confirmatory Soil Sample Results Area F
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Sample ID	375-6.8(a): UNRESTRICTED	Units		PE-F-A2	PE-F-B1	PE-F-B2	PE-F-S1	PE-F-S2	PE-F-S3	PE-F-S4	PE-F-S5
Sample Depth				2-2.5	1-1.5	2-2.5	0.5-1	0.5-1	0.5-1	1-1.5	1-1.5
Sample Date			PE-F-A1	42352	42327	42352	42340	42340	42340	42352	42352
SVOCs											
1,1-Biphenyl	NS	ug/kg	75 U	81 U	68 U	88 U	98 U	92 U	83 U	82 U	81 U
2,2-Oxybis(1-Chloropropane)	NS	ug/kg	75 U	81 U	68 U	88 U	98 U	92 U	83 U	82 U	81 U
2,4,5-Trichlorophenol	NS	ug/kg	190 U	200 U	170 U	220 U	240 U	230 U	210 U	200 U	200 U
2,4,6-Trichlorophenol	NS	ug/kg	190 U	200 U	170 U	220 U	240 U	230 U	210 U	200 U	200 U
2,4-Dichlorophenol	NS	ug/kg	190 U	200 U	170 U	220 U	240 U	230 U	210 U	200 U	200 U
2,4-Dimethylphenol	NS	ug/kg	190 U	200 U	170 U	220 U	240 U	230 U	210 U	200 U	200 U
2,4-Dinitrophenol	NS	ug/kg	190 U	200 U	170 U	220 U	240 U	230 U	210 U	200 U	200 U
2,4-Dinitrotoluene	NS	ug/kg	38 U	40 U	34 U	44 U	49 U	46 U	42 U	41 U	40 U
2,6-Dinitrotoluene	NS	ug/kg	38 U	40 U	34 U	44 U	49 U	46 U	42 U	41 U	40 U
2-Chloronaphthalene	NS	ug/kg	75 U	81 U	68 U	88 U	98 U	92 U	83 U	82 U	81 U
2-Chlorophenol	NS	ug/kg	75 U	81 U	68 U	88 U	98 U	92 U	83 U	82 U	81 U
2-Methyl-4,6-dinitrophenol	NS	ug/kg	190 U	200 U	170 U	220 U	240 U	230 U	210 U	200 U	200 U
2-Methylnaphthalene	NS	ug/kg	75 U	81 U	68 U	88 U	98 U	34 J	45.1 J	82 U	81 U
2-Methylphenol	NS	ug/kg	75 U	81 U	68 U	88 U	98 U	92 U	83 U	82 U	81 U
2-Nitroaniline	NS	ug/kg	190 U	200 U	170 U	220 U	240 UJ	230 U	210 UJ	200 U	200 U
2-Nitrophenol	NS	ug/kg	190 U	200 U	170 U	220 U	240 U	230 U	210 U	200 U	200 U
3,3-Dichlorobenzidine	NS	ug/kg	75 U	81 U	68 U	88 U	98 U	92 UJ	83 U	82 U	81 U
3-Methylphenol, 4-Methylphenol	NS	ug/kg	75 U	81 U	68 U	88 U	98 U	92 U	83 U	82 U	81 U
3-Nitroaniline	NS	ug/kg	190 U	200 U	170 U	220 U	240 U	230 U	210 U	200 U	200 U
4-Bromophenyl phenyl ether	NS	ug/kg	75 U	81 U	68 U	88 U	98 U	92 U	83 U	82 U	81 U
4-Chloro-3-Methylphenol	NS	ug/kg	190 U	200 U	170 U	220 U	240 U	230 U	210 U	200 U	200 U
4-Chlorophenyl phenyl ether	NS	ug/kg	75 U	81 U	68 U	88 U	98 U	92 U	83 U	82 U	81 U
4-Nitroaniline	NS	ug/kg	190 U	200 U	170 U	220 U	240 U	230 U	210 U	200 U	200 U
4-Nitrophenol	NS	ug/kg	380 U	400 U	340 U	440 U	490 UJ	460 U	420 UJ	410 U	400 U
Acenaphthene	20000	ug/kg	38 U	40 U	34 U	44 U	49 U	46 U	42 U	41 U	40 U
Acenaphthylene	100000	ug/kg	38 U	40 U	34 U	44 U	49 U	46 U	42 U	41 U	40 U
Acetophenone	NS	ug/kg	190 U	200 U	170 U	220 U	240 U	230 U	210 U	200 U	200 U
Anthracene	100000	ug/kg	38 U	40 U	34 U	44 U	49 U	46 U	42 U	41 U	40 U
Atrazine	NS	ug/kg	75 U	81 U	68 U	88 U	98 U	92 U	83 U	82 U	81 U
Benzaldehyde	NS	ug/kg	190 U	57.9 J	170 U	220 U	240 U	230 U	210 U	200 U	200 U
Benzo(a)anthracene	1000	ug/kg	38 U	40 U	34 U	44 U	49 U	46 UJ	42 U	41 U	40 U
Benzo(a)pyrene	1000	ug/kg	38 U	40 U	34 U	44 U	49 U	46 U	42 U	41 U	40 U
Benzo(b)fluoranthene	1000	ug/kg	38 U	40 U	34 U	44 U	49 U	46 U	42 U	41 U	40 U
Benzo(g,h,i)perylene	100000	ug/kg	38 U	40 U	34 U	44 U	49 U	46 U	42 U	41 U	40 U
Benzo(k)fluoranthene	800	ug/kg	38 U	40 U	34 U	44 U	49 U	46 U	42 U	41 U	40 U
bis(2-Chloroethoxy)methane	NS	ug/kg	75 U	81 U	68 U	88 U	98 U	92 U	83 U	82 U	81 U
bis(2-Chloroethyl)ether	NS	ug/kg	75 U	81 U	68 U	88 U	98 U	92 U	83 U	82 U	81 U
bis(2-Ethylhexyl)phthalate	NS	ug/kg	75 U	81 U	68 U	88 U	98 U	92 UJ	83 U	67.2 J	81 U
Butyl benzyl phthalate	NS	ug/kg	75 U	81 U	68 U	88 U	98 U	92 UJ	83 U	82 U	81 U
Caprolactam	NS	ug/kg	75 U	81 U	68 U	88 U	98 U	92 U	83 U	82 U	81 U
Carbazole	NS	ug/kg	75 U	81 U	68 U	88 U	98 U	92 U	83 U	82 U	81 U
Chrysene	1000	ug/kg	38 U	40 U	34 U	44 U	49 U	46 UJ	42 U	41 U	40 U
Dibenzo(a,h)anthracene	330	ug/kg	38 U	40 U	34 U	44 U	49 U	46 U	42 U	41 U	40 U
Dibenzofuran	NS	ug/kg	75 U	81 U	68 U	88 U	98 U	92 U	83 U	82 U	81 U
Diethyl phthalate	NS	ug/kg	75 U	81 U	68 U	88 U	98 U	92 U	83 U	82 U	81 U
Dimethyl phthalate	NS	ug/kg	75 U	81 U	68 U	88 U	98 U	92 U	83 U	82 U	81 U
Di-n-butyl phthalate	NS	ug/kg	75 U	81 U	68 U	88 U	98 U	92 U	83 U	82 U	81 U
Di-n-octyl phthalate	NS	ug/kg	75 U	81 U	68 U	88 U	98 U	92 U	83 U	82 U	81 U
Fluoranthene	100000	ug/kg	38 U	40 U	34 U	44 U	49 U	46 U	42 U	41 U	40 U
Fluorene	30000	ug/kg	38 U	40 U	34 U	44 U	49 U	46 U	42 U	41 U	40 U
Hexachloro-1,3-butadiene	NS	ug/kg	38 U	40 U	34 U	44 U	49 UJ	46 U	42 UJ	41 U	40 U
Hexachlorobenzene	NS	ug/kg	75 U	81 U	68 U	88 U	98 U	92 U	83 U	82 U	81 U
Hexachlorocyclopentadiene	NS	ug/kg	380 U	400 U	340 U	440 U	490 UJ	460 U	420 UJ	410 U	400 U
Hexachloroethane	NS	ug/kg	190 U	200 U	170 U	220 U	240 U	230 U	210 U	200 U	200 U
Indeno(1,2,3-cd)pyrene	500	ug/kg	38 U	40 U	34 U	44 U	49 U	46 U	42 U	41 U	40 U
Isophorone	NS	ug/kg	75 U	81 U	68 U	88 U	98 U	92 U	83 U	82 U	81 U
Naphthalene	12000	ug/kg	38 U	40 U	34 U	44 U	49 U	56.9	69.6	41 U	40 U
Nitrobenzene	NS	ug/kg	75 U	81 U	68 U	88 U	98 UJ	92 U	83 UJ	82 U	81 U
n-Nitrosodi-n-propylamine	NS	ug/kg	75 U	81 U	68 U	88 U	98 UJ	92 U	83 UJ	82 U	81 U
N-nitrosodiphenylamine	NS	ug/kg	190 U	200 U	170 U	220 U	240 U	230 U	210 U	200 U	200 U
p-Chloroaniline	NS	ug/kg	190 U	200 U	170 U	220 U	240 U	230 U	210 U	200 U	200 U
Pentachlorophenol	800	ug/kg	190 UJ	200 U	170 UJ	220 U	240 U	230 U	210 U	200 U	200 U
Phenanthrene	100000	ug/kg	38 U	40 U	34 U	44 U	49 U	18.2 J	42 U	41 U	40 U
Phenol	330	ug/kg	75 U	81 U	68 U	88 U	98 U	92 U	83 U	82 U	81 U
Pyrene	100000	ug/kg	38 U	40 U	34 U	44 U	49 U	46 UJ	42 U	41 U	40 U

Table 19. Confirmatory Soil Sample Results Area F
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Sample ID	375-6.8(a):	Units		PE-F-A2	PE-F-B1	PE-F-B2	PE-F-S1	PE-F-S2	PE-F-S3	PE-F-S4	PE-F-S5
Sample Depth	UNRESTRICTED			2-2.5	1-1.5	2-2.5	0.5-1	0.5-1	0.5-1	1-1.5	1-1.5
Sample Date			PE-F-A1	42352	42327	42352	42340	42340	42340	42352	42352
PCBs											
Aroclor 1016	100	ug/kg	36 U	39 U	34 U	44 U	47 U	45 U	40 U	40 U	44 U
Aroclor 1221	100	ug/kg	36 U	39 U	34 U	44 U	47 U	45 U	40 U	40 U	44 U
Aroclor 1232	100	ug/kg	36 U	39 U	34 U	44 U	47 U	45 U	40 U	40 U	44 U
Aroclor 1242	100	ug/kg	36 U	39 U	34 U	44 U	47 U	45 U	40 U	40 U	44 U
Aroclor 1248	100	ug/kg	36 U	39 U	34 U	44 U	47 U	45 U	40 U	40 U	44 U
Aroclor 1254	100	ug/kg	36 U	39 U	34 U	44 U	47 U	45 U	40 U	40 U	44 U
Aroclor 1260	100	ug/kg	36 U	39 U	34 U	44 U	47 U	45 U	40 U	40 U	44 U
Aroclor 1262	100	ug/kg	36 U	39 U	34 U	44 U	47 U	45 U	40 U	40 U	44 U
Aroclor 1268	100	ug/kg	36 U	39 U	34 U	44 U	47 U	45 U	40 U	40 U	44 U
See Notes on Last Page											
Metals											
Aluminum	NS	mg/kg	14000 J	27100 J	19500 J	24000 J	27200 J	28200 J	28900 J	28900 J	27700 J
Antimony	NS	mg/kg	2.3 UJ	2.4 UB	2 UJ	2.7 UJ	3 UJ	2.9 UJ	2.6 UJ	2.4 UB	2.5 UJ
Arsenic	13	mg/kg	5.6	6.2	5.1	7.6	8.1	8.9	6.2	6.7	6.4
Barium	350	mg/kg	56.7	48.4	48.2	55.7	38.2	58.3	55.1	71.4	55
Beryllium	7.2	mg/kg	0.6	0.39	0.36	0.43	0.43	0.46	0.51	0.43	0.43
Cadmium	2.5	mg/kg	0.57 UB	0.59 U	0.49 UB	0.68 U	0.74 UB	0.73 UB	0.66 UB	0.6 U	0.64 U
Calcium	NS	mg/kg	597 J	208 B	137 J	248 B	210 J	223 J	190 J	152 B	232 B
Chromium	NS	mg/kg	16.4	24.5	20.5	21.5	28.9	27.1	25.6	25.9	27
Cobalt	NS	mg/kg	13.3	9	9.1	10.3	11	7.6	8.1	8.8	14.6
Copper	50	mg/kg	25.8	19.2 J	17.5	28.7 J	21.6	19.1	20.3	28.9 J	28.4 J
Iron	NS	mg/kg	27000	21000	17000	22200	25300	24700	23300	23300	21000
Lead	63	mg/kg	31.5	15.6	10.2	19.3	11.6	25.5	14.4	23.1	20.6
Magnesium	NS	mg/kg	4240	2230	3160	4270	3270	2160	2710	3650	3010
Manganese	1600	mg/kg	222	90.2	126	229	166	94.6	103	124	138
Mercury	0.18	mg/kg	0.033 UB	0.062	0.049	0.067	0.065	0.1	0.053	0.035 B	0.088
Nickel	30	mg/kg	25.3	22.3	18.2	25.8	28.4	19.5	17.8	21.9	30.8
Potassium	NS	mg/kg	831 B	747 B	898 B	1310 B	1000 B	739 B	832 B	1060 B	1070 B
Selenium	3.9	mg/kg	2.3 U	2.4 UB	2 U	2.7 U	3 UB	2.9 UB	2.6 UB	2.4 U	2.5 UB
Silver	2	mg/kg	1.6	0.59 U	0.81	0.68 UB	0.37 B	0.73 U	0.32 B	0.6 U	0.64 U
Sodium	NS	mg/kg	1100 UB	47.9 B	990 UB	63.9 B	39.3 B	44.4 B	35.8 B	53.2 B	54 B
Thallium	NS	mg/kg	1.1 U	1.2 U	0.99 UB	1.4 U	1.5 UB	1.5 UB	1.3 UB	1.2 U	1.3 U
Vanadium	NS	mg/kg	24.7	43.6	32.4	34.4	42.3	51.3	44.9	44.5	45.3
Zinc	109	mg/kg	69.6	45.7	42	59.2	57.7	49.3	46.8	53.2	55.9
General Chemistry											
Percent Solids		%	88.5	81.8	97.2	75.1	66.1	69.6	74.4	80.7	75.3

Notes		
mg/kg	Milligrams per kilogram	
µg/kg	Micrograms per kilogram	
NA	Not Analyzed	
NS	No Standard	
UB	Result non-detected at the listed value due to associated blank contamination.	
B	Result is between the method detection limit and the reporting limit.	
J or JN	Estimated Result	
R	Rejected Result	
30.8	Result exceeds both 375-6.8(b) unrestricted use sco.	

Table 20. Confirmatory Soil Sample Results MSA
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Sample ID	375-6: RESTRICTED RESIDENTIAL USE SCO	375-6: PROTECTION OF GROUNDWATER SCO		PE-MSA-M1 42472	PE-MSA-M2 4/12/2016	PE-MSA-M3 4/12/2016	PE-MSA-M4 4/12/2016	PE-MSA-M5 4/12/2016	PE-MSA-M6 4/12/2016	PE-MSA-M7 4/12/2016	PE-MSA-M8 4/11/2016
Sample Date											
Sample Depth			Units	0.5-1	0.5-1	0.5-1	0.5-1	0.5-1	0.5-1	0.5-1	0.5-1
VOCs											
1,1,1-Trichloroethane	100000	680	ug/kg	2 U	1.9 U	1.9 U	1.7 U	1.9 U	2.2 U	2 U	2.3 U
1,1,2,2-Tetrachloroethane	NS	NS	ug/kg	2 U	1.9 U	1.9 U	1.7 U	1.9 U	2.2 U	2 U	2.3 U
1,1,2-trichloro-1,2,2-trifluoroethane	NS	NS	ug/kg	5 U	4.7 U	4.9 U	4.3 U	4.8 U	5.4 U	5 U	5.6 U
1,1,2-Trichloroethane	NS	NS	ug/kg	2 U	1.9 U	1.9 U	1.7 U	1.9 U	2.2 U	2 U	2.3 U
1,1-Dichloroethane	26000	270	ug/kg	1 U	0.94 U	0.97 U	0.86 U	0.96 U	1.1 U	0.99 U	1.1 U
1,1-Dichloroethene	100000	330	ug/kg	1 U	0.94 U	0.97 U	0.86 U	0.96 U	1.1 U	0.99 U	1.1 U
1,2,4-Trichlorobenzene	NS	NS	ug/kg	5 U	4.7 U	4.9 U	4.3 U	4.8 U	5.4 U	5 U	5.6 U
1,2-Dibromo-3-chloropropane	NS	NS	ug/kg	2 U	1.9 U	1.9 U	1.7 U	1.9 U	2.2 U	2 U	2.3 U
1,2-Dibromoethane	NS	NS	ug/kg	1 U	0.94 U	0.97 U	0.86 U	0.96 U	1.1 U	0.99 U	1.1 U
1,2-Dichlorobenzene	100000	1100	ug/kg	1 U	0.94 U	0.97 U	0.86 U	0.96 U	1.1 U	0.99 U	1.1 U
1,2-Dichloroethane	3100	20	ug/kg	1 U	0.94 U	0.97 U	0.86 U	0.96 U	1.1 U	0.99 U	1.1 U
1,2-Dichloropropane	NS	NS	ug/kg	2 U	1.9 U	1.9 U	1.7 U	1.9 U	2.2 U	2 U	2.3 U
1,3-Dichlorobenzene	49000	2400	ug/kg	1 U	0.94 U	0.97 U	0.86 U	0.96 U	1.1 U	0.99 U	1.1 U
1,4-Dichlorobenzene	13000	1800	ug/kg	1 U	0.94 U	0.97 U	0.86 U	0.96 U	1.1 U	0.99 U	1.1 U
2-Butanone (MEK)	100000	120	ug/kg	10 U	9.4 U	9.7 U	11.6	9.6 U	11 U	9.9 U	11 U
4-Methyl-2-Pentanone	NS	NS	ug/kg	5 U	4.7 U	4.9 U	4.3 U	4.8 U	5.4 U	5 U	5.6 U
Acetone	100000	50	ug/kg	10 U	9.4 U	24.4	43.4	16.1	11 U	9.9 U	16.5
Benzene	4800	60	ug/kg	0.5 U	0.47 U	0.49 U	0.43 U	0.48 U	0.54 U	0.5 U	0.56 U
Bromodichloromethane	NS	NS	ug/kg	2 U	1.9 U	1.9 U	1.7 U	1.9 U	2.2 U	2 U	2.3 U
Bromoform	NS	NS	ug/kg	5 U	4.7 U	4.9 U	4.3 U	4.8 U	5.4 U	5 U	5.6 U
Bromomethane	NS	NS	ug/kg	5 U	4.7 U	4.9 U	4.3 U	4.8 U	5.4 U	5 U	5.6 U
Carbon Disulfide	NS	NS	ug/kg	2 U	1.9 U	1.9 U	1.7 U	1.9 U	2.2 U	2 U	2.3 U
Carbon Tetrachloride	2400	760	ug/kg	2 U	1.9 U	1.9 U	1.7 U	1.9 U	2.2 U	2 U	2.3 U
CFC-11	NS	NS	ug/kg	5 U	4.7 U	4.9 U	4.3 U	4.8 U	5.4 U	5 U	5.6 U
CFC-12	NS	NS	ug/kg	5 U	4.7 U	4.9 U	4.3 U	4.8 U	5.4 U	5 U	5.6 U
Chlorobenzene	100000	1100	ug/kg	2 U	1.9 U	1.9 U	1.7 U	1.9 U	2.2 U	2 U	2.3 U
Chlorodibromomethane	NS	NS	ug/kg	2 U	1.9 U	1.9 U	1.7 U	1.9 U	2.2 U	2 U	2.3 U
Chloroethane	NS	NS	ug/kg	5 U	4.7 U	4.9 U	4.3 U	4.8 U	5.4 U	5 U	5.6 U
Chloroform	49000	370	ug/kg	2 U	1.9 U	1.9 U	1.7 U	1.9 U	2.2 U	2 U	2.3 U
Chloromethane	NS	NS	ug/kg	5 U	4.7 U	4.9 U	4.3 U	4.8 U	5.4 U	5 U	5.6 U
cis-1,2-Dichloroethene	100000	250	ug/kg	1 U	0.94 U	0.97 U	0.86 U	0.96 U	1.1 U	0.99 U	1.1 U
cis-1,3-Dichloropropene	NS	NS	ug/kg	2 U	1.9 U	1.9 U	1.7 U	1.9 U	2.2 U	2 U	2.3 U
Cyclohexane	NS	NS	ug/kg	2 U	1.9 U	1.9 U	1.7 U	1.9 U	2.2 U	2 U	2.3 U
Dichloromethane	NS	NS	ug/kg	5 U	4.7 U	4.9 U	0.87 J	4.8 U	5.4 U	5 U	5.6 U
Ethylbenzene	41000	1000	ug/kg	1 U	0.94 U	0.31 J	1.3	0.96 U	1.1 U	0.99 U	0.63 J
Isopropylbenzene	NS	NS	ug/kg	2 U	1.9 U	1.9 U	1.7 U	1.9 U	2.2 U	2 U	0.17 J
Methyl Acetate	NS	NS	ug/kg	5 U	4.7 U	4.9 U	4.3 U	4.8 U	5.4 U	5 U	5.6 U
Methyl N-Butyl Ketone (2-Hexanone)	NS	NS	ug/kg	5 U	4.7 U	4.9 U	4.3 U	4.8 U	5.4 U	5 U	5.6 U
Methylcyclohexane	NS	NS	ug/kg	2 U	1.9 U	1.9 U	1.7 U	1.9 U	2.2 U	2 U	2.3 U
Methyl-tert-butylether	100000	930	ug/kg	1 U	0.94 U	0.97 U	0.86 U	0.96 U	1.1 U	0.99 U	1.1 U
Styrene (Monomer)	NS	NS	ug/kg	2 U	0.34 J	0.27 J	1.7 U	1.9 U	0.4 J	2 U	2.3 U
Tetrachloroethene	19000	1300	ug/kg	2 U	1.9 U	1.9 U	1.7 U	1.9 U	2.2 U	2 U	2.3 U
Toluene	100000	700	ug/kg	1 U	0.94 U	1	8.8	0.96 U	1.1 U	0.99 U	1.1 U
Total Xylenes	100000	1600	ug/kg	1 U	0.94 U	1.2	0.86 U	0.96 U	1.1 U	0.99 U	6.3
trans-1,2-Dichloroethene	100000	190	ug/kg	1 U	0.94 U	0.97 U	0.86 U	0.96 U	1.1 U	0.99 U	1.1 U
trans-1,3-Dichloropropene	NS	NS	ug/kg	2 U	1.9 U	1.9 U	1.7 U	1.9 U	2.2 U	2 U	2.3 U
Trichloroethene	21000	470	ug/kg	1 U	0.94 U	0.97 U	0.86 U	0.96 U	1.1 U	0.99 U	1.1 U
Vinyl chloride	900	20	ug/kg	2 U	1.9 U	1.9 U	1.7 U	1.9 U	2.2 U	2 U	2.3 U

See Notes on Last Page

Table 20. Confirmatory Soil Sample Results MSA
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Sample ID	375-6: RESTRICTED RESIDENTIAL USE SCO	375-6: PROTECTION OF GROUNDWATER SCO		PE-MSA-M1	PE-MSA-M2	PE-MSA-M3	PE-MSA-M4	PE-MSA-M5	PE-MSA-M6	PE-MSA-M7	PE-MSA-M8
Sample Date				42472	4/12/2016	4/12/2016	4/12/2016	4/12/2016	4/12/2016	4/12/2016	4/11/2016
Sample Depth			Units	0.5-1	0.5-1	0.5-1	0.5-1	0.5-1	0.5-1	0.5-1	0.5-1
SVOCs											
1,1-Biphenyl	NS	NS	ug/kg	84 U	77 U	81 U	71 U	79 U	85 U	77 U	85 U
2,2-Oxybis(1-Chloropropane)	NS	NS	ug/kg	84 U	77 U	81 U	71 U	79 U	85 U	77 U	85 U
2,4,5-Trichlorophenol	NS	NS	ug/kg	210 U	190 U	200 U	180 U	200 U	210 U	190 U	210 U
2,4,6-Trichlorophenol	NS	NS	ug/kg	210 U	190 U	200 U	180 U	200 U	210 U	190 U	210 U
2,4-Dichlorophenol	NS	NS	ug/kg	210 U	190 U	200 U	180 U	200 U	210 U	190 U	210 U
2,4-Dimethylphenol	NS	NS	ug/kg	210 U	190 U	200 U	180 U	200 U	210 U	190 U	210 U
2,4-Dinitrophenol	NS	NS	ug/kg	210 U	190 U	200 U	180 U	200 U	210 U	190 U	210 U
2,4-Dinitrotoluene	NS	NS	ug/kg	42 U	39 U	40 U	36 U	39 U	42 U	38 U	43 U
2,6-Dinitrotoluene	NS	NS	ug/kg	42 U	39 U	40 U	36 U	39 U	42 U	38 U	43 U
2-Chloronaphthalene	NS	NS	ug/kg	84 U	77 U	81 U	71 U	79 U	85 U	77 U	85 U
2-Chlorophenol	NS	NS	ug/kg	84 U	77 U	81 U	71 U	79 U	85 U	77 U	85 U
2-Methyl-4,6-dinitrophenol	NS	NS	ug/kg	210 U	190 U	200 U	180 U	200 U	210 U	190 U	210 U
2-Methylnaphthalene	NS	NS	ug/kg	84 U	77 U	81 U	71 U	79 U	85 U	77 U	85 U
2-Methylphenol	NS	NS	ug/kg	84 U	77 U	81 U	71 U	79 U	85 U	77 U	85 U
2-Nitroaniline	NS	NS	ug/kg	210 U	190 U	200 U	180 U	200 U	210 U	190 U	210 U
2-Nitrophenol	NS	NS	ug/kg	210 U	190 U	200 U	180 U	200 U	210 U	190 U	210 U
3,3-Dichlorobenzidine	NS	NS	ug/kg	84 U	77 U	81 U	71 U	79 U	85 U	77 U	85 U
3-Methylphenol, 4-Methylphenol	NS	NS	ug/kg	84 U	63.5 J	555	157	47.3 J	85 U	77 U	85 U
3-Nitroaniline	NS	NS	ug/kg	210 U	190 U	200 U	180 U	200 U	210 U	190 U	210 U
4-Bromophenyl phenyl ether	NS	NS	ug/kg	84 U	77 U	81 U	71 U	79 U	85 U	77 U	85 U
4-Chloro-3-Methylphenol	NS	NS	ug/kg	210 U	190 U	200 U	180 U	200 U	210 U	190 U	210 U
4-Chlorophenyl phenyl ether	NS	NS	ug/kg	84 U	77 U	81 U	71 U	79 U	85 U	77 U	85 U
4-Nitroaniline	NS	NS	ug/kg	210 U	190 U	200 U	180 U	200 U	210 U	190 U	210 U
4-Nitrophenol	NS	NS	ug/kg	420 U	390 U	400 U	360 U	390 U	420 U	380 U	430 U
Acenaphthene	100000	98000	ug/kg	42 U	39 U	40 U	36 U	39 U	42 U	38 U	43 U
Acenaphthylene	100000	107000	ug/kg	42 U	39 U	40 U	36 U	39 U	42 U	38 U	43 U
Acetophenone	NS	NS	ug/kg	210 U	190 U	200 U	180 U	200 U	210 U	190 U	210 U
Anthracene	100000	1000000	ug/kg	42 U	39 U	40 U	36 U	39 U	42 U	38 U	43 U
Atrazine	NS	NS	ug/kg	84 U	77 U	81 U	71 U	79 U	85 U	77 U	85 U
Benzaldehyde	NS	NS	ug/kg	210 U	190 U	200 U	180 U	200 U	210 U	190 U	210 U
Benzo(a)anthracene	1000	1000	ug/kg	42 U	39 U	40 U	36 U	39 U	42 U	38 U	43 U
Benzo(a)pyrene	1000	22000	ug/kg	42 U	39 U	40 U	36 U	39 U	42 U	38 U	43 U
Benzo(b)fluoranthene	1000	1700	ug/kg	42 U	39 U	16.7 J	36 U	39 U	18.3 J	38 U	18.7 J
Benzo(g,h,i)perylene	100000	1000000	ug/kg	42 U	39 U	40 U	36 U	39 U	42 U	38 U	43 U
Benzo(k)fluoranthene	3900	1700	ug/kg	42 U	39 U	40 U	36 U	39 U	42 U	38 U	43 U
bis(2-Chloroethoxy)methane	NS	NS	ug/kg	84 U	77 U	81 U	71 U	79 U	85 U	77 U	85 U
bis(2-Chloroethyl)ether	NS	NS	ug/kg	84 U	77 U	81 U	71 U	79 U	85 U	77 U	85 U
bis(2-Ethylhexyl)phthalate	NS	NS	ug/kg	62.8 J	77 U	81 U	71 U	79 U	328	77 U	85 U
Butyl benzyl phthalate	NS	NS	ug/kg	84 U	77 U	81 U	71 U	79 U	85 U	77 U	85 U
Caprolactam	NS	NS	ug/kg	84 U	77 U	81 U	71 U	79 U	85 U	77 U	85 U
Carbazole	NS	NS	ug/kg	84 U	77 U	81 U	71 U	79 U	85 U	77 U	85 U
Chrysene	3900	1000	ug/kg	42 U	39 U	40 U	36 U	39 U	16.1 J	38 U	43 U
Dibenzo(a,h)anthracene	330	1000000	ug/kg	42 U	39 U	40 U	36 U	39 U	42 U	38 U	43 U
Dibenzofuran	NS	NS	ug/kg	84 U	77 U	81 U	71 U	79 U	85 U	77 U	85 U
Diethyl phthalate	NS	NS	ug/kg	84 U	77 U	81 U	71 U	79 U	85 U	77 U	85 U
Dimethyl phthalate	NS	NS	ug/kg	84 U	77 U	81 U	71 U	79 U	85 U	77 U	85 U
Di-n-butyl phthalate	NS	NS	ug/kg	84 U	77 U	81 U	71 U	79 U	85 U	77 U	85 U
Di-n-octyl phthalate	NS	NS	ug/kg	84 U	77 U	81 U	71 U	79 U	85 U	77 U	85 U
Fluoranthene	100000	1000000	ug/kg	42 U	39 U	29.8 J	14.2 J	17.2 J	26.4 J	38 U	22.5 J
Fluorene	100000	386000	ug/kg	42 U	39 U	40 U	36 U	39 U	42 U	38 U	43 U
Hexachloro-1,3-butadiene	NS	NS	ug/kg	42 U	39 U	40 U	36 U	39 U	42 U	38 U	43 U
Hexachlorobenzene	NS	NS	ug/kg	84 U	77 U	81 U	71 U	79 U	85 U	77 U	85 U

See Notes on Last Page

Table 20. Confirmatory Soil Sample Results MSA
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Sample ID	375-6: RESTRICTED RESIDENTIAL USE SCO	375-6: PROTECTION OF GROUNDWATER SCO		PE-MSA-M1	PE-MSA-M2	PE-MSA-M3	PE-MSA-M4	PE-MSA-M5	PE-MSA-M6	PE-MSA-M7	PE-MSA-M8
Sample Date				42472	4/12/2016	4/12/2016	4/12/2016	4/12/2016	4/12/2016	4/12/2016	4/11/2016
Sample Depth			Units	0.5-1	0.5-1	0.5-1	0.5-1	0.5-1	0.5-1	0.5-1	0.5-1
SVOC cont.											
Hexachlorocyclopentadiene	NS	NS	ug/kg	420 U	390 U	400 U	360 U	390 U	420 U	380 U	430 U
Hexachloroethane	NS	NS	ug/kg	210 U	190 U	200 U	180 U	200 U	210 U	190 U	210 U
Indeno(1,2,3-cd)pyrene	500	8200	ug/kg	42 U	39 U	40 U	36 U	39 U	42 U	38 U	43 U
Isophorone	NS	NS	ug/kg	84 U	77 U	81 U	71 U	79 U	85 U	77 U	85 U
Naphthalene	100000	12000	ug/kg	42 U	39 U	40 U	36 U	39 U	42 U	38 U	43 U
Nitrobenzene	NS	NS	ug/kg	84 U	77 U	81 U	71 U	79 U	85 U	77 U	85 U
n-Nitrosodi-n-propylamine	NS	NS	ug/kg	84 U	77 U	81 U	71 U	79 U	85 U	77 U	85 U
N-nitrosodiphenylamine	NS	NS	ug/kg	210 U	190 U	200 U	180 U	200 U	210 U	190 U	210 U
p-Chloroaniline	NS	NS	ug/kg	210 U	190 U	200 U	180 U	200 U	210 U	190 U	210 U
Pentachlorophenol	6700	800	ug/kg	210 U	190 U	200 U	180 U	200 U	210 U	190 U	210 U
Phenanthrene	100000	1000000	ug/kg	42 U	39 U	24.2 J	36 U	39 U	42 U	38 U	43 U
Phenol	100000	330	ug/kg	84 U	77 U	81 U	71 U	79 U	85 U	77 U	85 U
Pyrene	100000	1000000	ug/kg	42 U	39 U	27 J	15.4 J	39 U	23.4 J	38 U	18.3 J
See Notes on Last Page											
PCBs											
Aroclor 1016	1000	3200	ug/kg	39 U	35 U	39 U	37 U	35 U	40 U	39 U	39 U
Aroclor 1221	1000	3200	ug/kg	39 U	35 U	39 U	37 U	35 U	40 U	39 U	39 U
Aroclor 1232	1000	3200	ug/kg	39 U	35 U	39 U	37 U	35 U	40 U	39 U	39 U
Aroclor 1242	1000	3200	ug/kg	39 U	35 U	39 U	37 U	45.9	40 U	39 U	39 U
Aroclor 1248	1000	3200	ug/kg	39 U	35 U	39 U	37 U	35 U	40 U	39 U	39 U
Aroclor 1254	1000	3200	ug/kg	39 U	35 U	39 U	648	35 U	40 U	39 U	39 U
Aroclor 1260	1000	3200	ug/kg	39 U	35 U	39 U	37 U	35 U	40 U	39 U	39 U
Aroclor 1262	1000	3200	ug/kg	39 U	35 U	39 U	37 U	35 U	40 U	39 U	39 U
Aroclor 1268	1000	3200	ug/kg	39 U	35 U	39 U	37 U	35 U	40 U	39 U	39 U
Metals											
Aluminum	NS	NS	mg/kg	13500	4900	9540	6300	6340	13100	4930	16400
Antimony	NS	NS	mg/kg	2.1 J	2.2 UJ	2.6 UJ	2.4 UJ	2.3 UJ	2.7 UJ	2.3 UJ	2 UJ
Arsenic	16	16	mg/kg	5.3	1.9 B	3.5	3	2.4	4	2.3	5.6
Barium	400	820	mg/kg	138 J	53.5 J	93.8 J	56 J	58.8 J	115 J	45.5 J	102 J
Beryllium	72	47	mg/kg	0.74 J	0.28 J	0.46 J	0.33 J	0.34 J	0.56 J	0.25 J	0.83 J
Cadmium	4.3	7.5	mg/kg	0.46 B	0.21 B	0.64	0.28 B	0.51 B	0.4 B	0.17 B	0.33 B
Calcium	NS	NS	mg/kg	2680 J	1990 J	2690 J	2470 J	2040 J	4200 J	2160 J	3120 J
Chromium	NS	NS	mg/kg	16.8 J	10.6 J	14.9 J	12.1 J	10.9 J	15.5 J	11 J	28.3 J
Cobalt	NS	NS	mg/kg	11.5	4.8 B	6.7	5.4 B	5 B	9.4	4.6 B	9.7
Copper	270	1720	mg/kg	20.2 J	11.5 J	18.1 J	12.8 J	13.4 J	59.5 J	11.3 J	12.8 J
Iron	NS	NS	mg/kg	22000 J	11700 J	15700 J	14500 J	12200 J	23500 J	11500 J	22600 J
Lead	400	450	mg/kg	143	13.9	36.9	15.2	24.4	27.3	14	25.2
Magnesium	NS	NS	mg/kg	3440 J	2190 J	2700 J	2330 J	2310 J	3150 J	2010 J	3190 J
Manganese	2000	2000	mg/kg	2140	406	416	345	199	515	232	892
Mercury	NS	NS	mg/kg	0.026 B	0.035 UB	0.031 B	0.036 UB	0.027 B	0.035	0.036 UB	0.043
Nickel	310	130	mg/kg	18.4	9.1	12.2	11.2	9.5	12	7.9	14.4
Potassium	NS	NS	mg/kg	1560	888 B	1180 B	865 B	945 B	1460	928 B	1140
Selenium	180	4	mg/kg	2.5 UB	2.2 U	2.6 UB	2.4 U	2.3 U	2.7 U	2.3 U	2 UB
Silver	180	8.3	mg/kg	1.9 U	0.56 U	0.64 UB	0.59 UB	0.58 UB	0.67 U	0.57 UB	1.2
Sodium	NS	NS	mg/kg	182 B	126 B	155 B	130 B	116 B	175 B	126 B	132 B
Thallium	NS	NS	mg/kg	3.7 U	1.1 U	1.3 U	1.2 U	1.2 U	1.3 U	1.1 U	1 U
Vanadium	NS	NS	mg/kg	31.9 J	18.3 J	27.1 J	21.9 J	18.5 J	60.9 J	18.1 J	40.3 J
Zinc	10000	2480	mg/kg	47.7 J	33.1 J	74.3 J	44.3 J	57.4 J	71.1 J	32.3 J	72.1 J
General Chemistry											
Percent Solids			%	78.9	85.8	81.6	85.6	84.3	75.3	84.1	77.8
Notes											
NS	No standard										
NA	Not analyzed										
J	Estimated result										
JN	Estimated result										
R	Rejected result										
UB	Analyte considered non-detect at the listed value due to associated blank contamination										
Bold	Result exceeds 375-6.8(b) protection of groundwater soil cleanup objective.										
Shade	Result exceeds 375-6.8(b) restricted residential use soil cleanup objective.										

Table 20. Confirmatory Soil Sample Results MSA
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Sample ID	375-6: RESTRICTED RESIDENTIAL USE SCO	375-6: PROTECTION OF GROUNDWATER SCO		PE-MSA-M9 4/11/2016	PE-MSA-M10 4/11/2016	PE-MSA-M11 4/11/2016	PE-MSA-M12 4/12/2016	PE-MSA-M13 4/12/2016	PE-MSA-M14 4/12/2016	PE-MSA-M15 4/11/2016	PE-MSA-M16 4/11/2016	PE-MSA-M17 4/11/2016	PE-MSA-M18 4/11/2016	PE-MSA-M19 4/13/2016
Sample Date			Units	0.5-1	0.5-1	0.5-1	0.5-1	0.5-1	0.5-1	0.5-1	0.5-1	0.5-1	0.5-1	0.5-1
Sample Depth														
VOCs														
1,1,1-Trichloroethane	100000	680	ug/kg	2.1 U	2.6 U	1.9 U	2.3 U	2 U	2.2 U	2 U	1.9 U	2.1 U	2.2 U	2.1 U
1,1,2,2-Tetrachloroethane	NS	NS	ug/kg	2.1 U	2.6 U	1.9 U	2.3 U	2 U	2.2 U	2 U	1.9 U	2.1 U	2.2 U	2.1 U
1,1,2-trichloro-1,2,2-trifluoroethane	NS	NS	ug/kg	5.4 U	6.4 U	4.9 U	5.7 U	5 U	5.5 U	5 U	4.7 U	5.2 U	5.5 U	5.2 U
1,1,2-Trichloroethane	NS	NS	ug/kg	2.1 U	2.6 U	1.9 U	2.3 U	2 U	2.2 U	2 U	1.9 U	2.1 U	2.2 U	2.1 U
1,1-Dichloroethane	26000	270	ug/kg	1.1 U	1.3 U	0.97 U	1.1 U	1 U	1.1 U	1 U	0.94 U	1 U	1.1 U	1 U
1,1-Dichloroethene	100000	330	ug/kg	1.1 U	1.3 U	0.97 U	1.1 U	1 U	1.1 U	1 U	0.94 U	1 U	1.1 U	1 U
1,2,4-Trichlorobenzene	NS	NS	ug/kg	5.4 U	6.4 U	4.9 U	5.7 U	5 U	5.5 U	5 U	4.7 U	5.2 U	5.5 U	5.2 U
1,2-Dibromo-3-chloropropane	NS	NS	ug/kg	2.1 U	2.6 U	1.9 U	2.3 U	2 U	2.2 U	2 U	1.9 U	2.1 U	2.2 U	2.1 U
1,2-Dibromoethane	NS	NS	ug/kg	1.1 U	1.3 U	0.97 U	1.1 U	1 U	1.1 U	1 U	0.94 U	1 U	1.1 U	1 U
1,2-Dichlorobenzene	100000	1100	ug/kg	1.1 U	1.3 U	0.97 U	1.1 U	1 U	1.1 U	1 U	0.94 U	1 U	1.1 U	1 U
1,2-Dichloroethane	3100	20	ug/kg	1.1 U	1.3 U	0.97 U	1.1 U	1 U	1.1 U	1 U	0.94 U	1 U	1.1 U	1 U
1,2-Dichloropropane	NS	NS	ug/kg	2.1 U	2.6 U	1.9 U	2.3 U	2 U	2.2 U	2 U	1.9 U	2.1 U	2.2 U	2.1 U
1,3-Dichlorobenzene	49000	2400	ug/kg	1.1 U	1.3 U	0.97 U	1.1 U	1 U	1.1 U	1 U	0.94 U	1 U	1.1 U	1 U
1,4-Dichlorobenzene	13000	1800	ug/kg	1.1 U	1.3 U	0.97 U	1.1 U	1 U	1.1 U	1 U	0.94 U	1 U	1.1 U	1 U
2-Butanone (MEK)	100000	120	ug/kg	11 U	13 U	9.7 U	81.8	10 U	11 U	10 U	9.4 U	41.7	11 U	10 U
4-Methyl-2-Pentanone	NS	NS	ug/kg	5.4 U	6.4 U	4.9 U	5.7 U	5 U	5.5 U	5 U	4.7 U	5.2 U	5.5 U	5.2 U
Acetone	100000	50	ug/kg	6.3 J	13 U	9.7 U	196	51.7	11 U	10 U	9.4 U	44.6	11 U	10 U
Benzene	4800	60	ug/kg	0.54 U	0.64 U	0.49 U	0.57 U	0.5 U	0.55 U	0.5 U	0.47 U	0.52 U	0.55 U	0.52 U
Bromodichloromethane	NS	NS	ug/kg	2.1 U	2.6 U	1.9 U	2.3 U	2 U	2.2 U	2 U	1.9 U	2.1 U	2.2 U	2.1 U
Bromoform	NS	NS	ug/kg	5.4 U	6.4 U	4.9 U	5.7 U	5 U	5.5 U	5 U	4.7 U	5.2 U	5.5 U	5.2 U
Bromomethane	NS	NS	ug/kg	5.4 U	6.4 U	4.9 U	5.7 U	5 U	5.5 U	5 U	4.7 U	5.2 U	5.5 U	5.2 U
Carbon Disulfide	NS	NS	ug/kg	2.1 U	2.6 U	1.9 U	0.34 J	2 U	2.2 U	2 U	1.9 U	2.1 U	2.2 U	2.1 U
Carbon Tetrachloride	2400	760	ug/kg	2.1 U	2.6 U	1.9 U	2.3 U	2 U	2.2 U	2 U	1.9 U	2.1 U	2.2 U	2.1 U
CFC-11	NS	NS	ug/kg	5.4 U	6.4 U	4.9 U	5.7 U	5 U	5.5 U	5 U	4.7 U	5.2 U	5.5 U	5.2 U
CFC-12	NS	NS	ug/kg	5.4 U	6.4 U	4.9 U	5.7 U	5 U	5.5 U	5 U	4.7 U	5.2 U	5.5 U	5.2 U
Chlorobenzene	100000	1100	ug/kg	2.1 U	2.6 U	1.9 U	2.3 U	2 U	2.2 U	2 U	1.9 U	2.1 U	2.2 U	2.1 U
Chlorodibromomethane	NS	NS	ug/kg	2.1 U	2.6 U	1.9 U	2.3 U	2 U	2.2 U	2 U	1.9 U	2.1 U	2.2 U	2.1 U
Chloroethane	NS	NS	ug/kg	5.4 U	6.4 U	4.9 U	5.7 U	5 U	5.5 U	5 U	4.7 U	5.2 U	5.5 U	5.2 U
Chloroform	49000	370	ug/kg	2.1 U	2.6 U	1.9 U	2.3 U	2 U	2.2 U	2 U	1.9 U	2.1 U	2.2 U	2.1 U
Chloromethane	NS	NS	ug/kg	5.4 U	6.4 U	4.9 U	5.7 U	5 U	5.5 U	5 U	4.7 U	5.2 U	5.5 U	5.2 U
cis-1,2-Dichloroethene	100000	250	ug/kg	1.1 U	1.3 U	0.97 U	1.1 U	1 U	1.1 U	1 U	0.94 U	1 U	1.1 U	1 U
cis-1,3-Dichloropropene	NS	NS	ug/kg	2.1 U	2.6 U	1.9 U	2.3 U	2 U	2.2 U	2 U	1.9 U	2.1 U	2.2 U	2.1 U
Cyclohexane	NS	NS	ug/kg	2.1 U	2.6 U	1.9 U	2.3 U	2 U	2.2 U	2 U	1.9 U	2.1 U	2.2 U	2.1 U
Dichloromethane	NS	NS	ug/kg	5.4 U	6.4 U	4.9 U	5.7 U	5 U	5.5 U	5 U	4.7 U	5.2 U	5.5 U	5.2 U
Ethylbenzene	41000	1000	ug/kg	1.1 U	1.3 U	0.97 U	1.1 U	1 U	1.1 U	1 U	0.94 U	1 U	1.1 U	1 U
Isopropylbenzene	NS	NS	ug/kg	2.1 U	2.6 U	1.9 U	2.3 U	2 U	2.2 U	2 U	1.9 U	2.1 U	2.2 U	2.1 U
Methyl Acetate	NS	NS	ug/kg	5.4 U	6.4 U	4.9 U	5.7 U	5 U	5.5 U	5 U	4.7 U	5.2 U	5.5 U	5.2 U
Methyl N-Butyl Ketone (2-Hexanone)	NS	NS	ug/kg	5.4 U	6.4 U	4.9 U	5.7 U	5 U	5.5 U	5 U	4.7 U	5.2 U	5.5 U	5.2 U
Methylcyclohexane	NS	NS	ug/kg	2.1 U	2.6 U	1.9 U	2.3 U	2 U	2.2 U	2 U	1.9 U	2.1 U	2.2 U	2.1 U
Methyl-tert-butylether	100000	930	ug/kg	1.1 U	1.3 U	0.97 U	1.1 U	1 U	1.1 U	1 U	0.94 U	1 U	1.1 U	1 U
Styrene (Monomer)	NS	NS	ug/kg	2.1 U	2.6 U	1.9 U	2.3 U	2 U	2.2 U	2 U	0.58 J	0.28 J	0.28 J	2.1 U
Tetrachloroethene	19000	1300	ug/kg	2.1 U	2.6 U	1.9 U	2.3 U	2 U	2.2 U	2 U	1.9 U	2.1 U	2.2 U	2.1 U
Toluene	100000	700	ug/kg	1.1 U	1.3 U	1.7	1.1 U	3.5	1.1 U	1 U	0.94 U	1 U	1.1 U	1 U
Total Xylenes	100000	1600	ug/kg	1.1 U	1.3 U	0.97 U	1.1 U	1 U	1.1 U	1 U	0.94 U	1 U	1.1 U	1 U
trans-1,2-Dichloroethene	100000	190	ug/kg	1.1 U	1.3 U	0.97 U	1.1 U	1 U	1.1 U	1 U	0.94 U	1 U	1.1 U	1 U
trans-1,3-Dichloropropene	NS	NS	ug/kg	2.1 U	2.6 U	1.9 U	2.3 U	2 U	2.2 U	2 U	1.9 U	2.1 U	2.2 U	2.1 U
Trichloroethene	21000	470	ug/kg	1.1 U	1.3 U	0.97 U	1.1 U	1 U	1.1 U	1 U	0.94 U	1 U	1.1 U	1 U
Vinyl chloride	900	20	ug/kg	2.1 U	2.6 U	1.9 U	2.3 U	2 U	2.2 U	2 U	1.9 U	2.1 U	2.2 U	2.1 U

See Notes on Last Page

Table 20. Confirmatory Soil Sample Results MSA
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Sample ID	375-6: RESTRICTED RESIDENTIAL USE SCO	375-6: PROTECTION OF GROUNDWATER SCO		PE-MSA-M9	PE-MSA-M10	PE-MSA-M11	PE-MSA-M12	PE-MSA-M13	PE-MSA-M14	PE-MSA-M15	PE-MSA-M16	PE-MSA-M17	PE-MSA-M18	PE-MSA-M19
Sample Date				4/11/2016	4/11/2016	4/11/2016	4/12/2016	4/12/2016	4/12/2016	4/11/2016	4/11/2016	4/11/2016	4/11/2016	4/13/2016
Sample Depth			Units	0.5-1	0.5-1	0.5-1	0.5-1	0.5-1	0.5-1	0.5-1	0.5-1	0.5-1	0.5-1	0.5-1
SVOCs														
1,1-Biphenyl	NS	NS	ug/kg	77 U	87 U	75 U	81 U	81 U	83 U	80 U	16.4 J	70 U	82 U	75 U
2,2-Oxybis(1-Chloropropane)	NS	NS	ug/kg	77 U	87 U	75 U	81 U	81 U	83 U	80 U	69 U	70 U	82 U	75 U
2,4,5-Trichlorophenol	NS	NS	ug/kg	190 U	220 U	190 U	200 U	200 U	210 U	200 U	170 U	180 U	200 U	190 U
2,4,6-Trichlorophenol	NS	NS	ug/kg	190 U	220 U	190 U	200 U	200 U	210 U	200 U	170 U	180 U	200 U	190 U
2,4-Dichlorophenol	NS	NS	ug/kg	190 U	220 U	190 U	200 U	200 U	210 U	200 U	170 U	180 U	200 U	190 U
2,4-Dimethylphenol	NS	NS	ug/kg	190 U	220 U	190 U	200 U	200 U	210 U	200 U	170 U	180 U	200 U	190 U
2,4-Dinitrophenol	NS	NS	ug/kg	190 U	220 U	190 U	200 U	200 U	210 U	200 U	170 U	180 U	200 U	190 U
2,4-Dinitrotoluene	NS	NS	ug/kg	39 U	44 U	37 U	41 U	40 U	42 U	40 U	35 U	35 U	41 U	38 U
2,6-Dinitrotoluene	NS	NS	ug/kg	39 U	44 U	37 U	41 U	40 U	42 U	40 U	35 U	35 U	41 U	38 U
2-Chloronaphthalene	NS	NS	ug/kg	77 U	87 U	75 U	81 U	81 U	83 U	80 U	69 U	70 U	82 U	75 U
2-Chlorophenol	NS	NS	ug/kg	77 U	87 U	75 U	81 U	81 U	83 U	80 U	69 U	70 U	82 U	75 U
2-Methyl-4,6-dinitrophenol	NS	NS	ug/kg	190 U	220 U	190 U	200 U	200 U	210 U	200 U	170 U	180 U	200 U	190 U
2-Methylnaphthalene	NS	NS	ug/kg	77 U	20.1 J	75 U	81 U	81 U	83 U	80 U	69.5	70 U	82 U	75 U
2-Methylphenol	NS	NS	ug/kg	77 U	87 U	75 U	81 U	81 U	83 U	80 U	69 U	70 U	82 U	75 U
2-Nitroaniline	NS	NS	ug/kg	190 U	220 U	190 U	200 U	200 U	210 U	200 U	170 U	180 U	200 U	190 U
2-Nitrophenol	NS	NS	ug/kg	190 U	220 U	190 U	200 U	200 U	210 U	200 U	170 U	180 U	200 U	190 U
3,3-Dichlorobenzidine	NS	NS	ug/kg	77 U	87 U	75 U	81 U	81 U	83 U	80 U	69 U	70 U	82 U	75 U
3-Methylphenol, 4-Methylphenol	NS	NS	ug/kg	77 U	87 U	133	101	65.2 J	52.1 J	66.5 J	69 U	436	82 U	75 U
3-Nitroaniline	NS	NS	ug/kg	190 U	220 U	190 U	200 U	200 U	210 U	200 U	170 U	180 U	200 U	190 U
4-Bromophenyl phenyl ether	NS	NS	ug/kg	77 U	87 U	75 U	81 U	81 U	83 U	80 U	69 U	70 U	82 U	75 U
4-Chloro-3-Methylphenol	NS	NS	ug/kg	190 U	220 U	190 U	200 U	200 U	210 U	200 U	170 U	180 U	200 U	190 U
4-Chlorophenyl phenyl ether	NS	NS	ug/kg	77 U	87 U	75 U	81 U	81 U	83 U	80 U	69 U	70 U	82 U	75 U
4-Nitroaniline	NS	NS	ug/kg	190 U	220 U	190 U	200 U	200 U	210 U	200 U	170 U	180 U	200 U	190 U
4-Nitrophenol	NS	NS	ug/kg	390 U	440 U	370 U	410 U	400 U	420 U	400 U	350 U	350 U	410 U	380 U
Acenaphthene	100000	98000	ug/kg	39 U	44 U	37 U	41 U	40 U	42 U	40 U	218	35 U	41 U	38 U
Acenaphthylene	100000	107000	ug/kg	39 U	44 U	37 U	41 U	40 U	42 U	40 U	16.1 J	35 U	19.9 J	38 U
Acetophenone	NS	NS	ug/kg	190 U	220 U	190 U	200 U	200 U	210 U	200 U	170 U	180 U	200 U	190 U
Anthracene	100000	1000000	ug/kg	39 U	44 U	70.8	41 U	40 U	42 U	40 U	470	35 U	28.5 J	38 U
Atrazine	NS	NS	ug/kg	77 U	87 U	75 U	81 U	81 U	83 U	80 U	69 U	70 U	82 U	75 U
Benzaldehyde	NS	NS	ug/kg	190 U	220 U	190 U	200 U	200 U	20.9 J	200 U	170 U	180 U	200 U	190 U
Benzo(a)anthracene	1000	1000	ug/kg	16.8 J	19.4 J	183	41 U	21.8 J	18.5 J	21.3 J	561	29.3 J	52.6	38 U
Benzo(a)pyrene	1000	22000	ug/kg	16.2 J	19 J	166	41 U	17.6 J	42 U	22.8 J	450	45.2	57.6	38 U
Benzo(b)fluoranthene	1000	1700	ug/kg	26.9 J	32.4 J	209	41 U	23.8 J	23.5 J	33.1 J	550	68.9	134	17.1 J
Benzo(g,h,i)perylene	100000	1000000	ug/kg	39 U	44 U	98.4	41 U	40 U	42 U	17.3 J	233	21 J	30.2 J	38 U
Benzo(k)fluoranthene	3900	1700	ug/kg	39 U	44 U	80.5	41 U	40 U	42 U	40 U	226	23.2 J	52.9	38 U
bis(2-Chloroethoxy)methane	NS	NS	ug/kg	77 U	87 U	75 U	81 U	81 U	83 U	80 U	69 U	70 U	82 U	75 U
bis(2-Chloroethyl)ether	NS	NS	ug/kg	77 U	87 U	75 U	81 U	81 U	83 U	80 U	69 U	70 U	82 U	75 U
bis(2-Ethylhexyl)phthalate	NS	NS	ug/kg	77 U	117	75 U	81 U	81 U	83 U	80 U	112	70 U	82 U	75 U
Butyl benzyl phthalate	NS	NS	ug/kg	77 U	87 U	75 U	81 U	81 U	83 U	80 U	69 U	70 U	82 U	75 U
Caprolactam	NS	NS	ug/kg	77 U	87 U	75 U	81 U	81 U	83 U	80 U	69 U	70 U	82 U	75 U
Carbazole	NS	NS	ug/kg	77 U	87 U	75 U	81 U	81 U	83 U	80 U	108	70 U	27.7 J	75 U
Chrysene	3900	1000	ug/kg	19.5 J	26.8 J	179	41 U	24.8 J	19.2 J	25.2 J	517	31.8 J	82	38 U
Dibenzo(a,h)anthracene	330	1000000	ug/kg	39 U	44 U	28.5 J	41 U	40 U	42 U	40 U	68.6	35 U	41 U	38 U
Dibenzofuran	NS	NS	ug/kg	77 U	87 U	75 U	81 U	81 U	83 U	80 U	138	70 U	82 U	75 U
Diethyl phthalate	NS	NS	ug/kg	77 U	87 U	75 U	81 U	81 U	83 U	80 U	69 U	70 U	82 U	75 U
Dimethyl phthalate	NS	NS	ug/kg	77 U	87 U	75 U	81 U	81 U	83 U	80 U	69 U	70 U	82 U	75 U
Di-n-butyl phthalate	NS	NS	ug/kg	77 U	87 U	75 U	81 U	81 U	83 U	80 U	69 U	70 U	82 U	75 U
Di-n-octyl phthalate	NS	NS	ug/kg	77 U	87 U	75 U	81 U	81 U	83 U	80 U	69 U	70 U	82 U	75 U
Fluoranthene	100000	1000000	ug/kg	33.8 J	43.5 J	430	41 U	39.7 J	30.7 J	44.8	1510	44.1	77	38 U
Fluorene	100000	386000	ug/kg	39 U	44 U	25.1 J	41 U	40 U	42 U	40 U	271	35 U	41 U	38 U
Hexachloro-1,3-butadiene	NS	NS	ug/kg	39 U	44 U	37 U	41 U	40 U	42 U	40 U	35 U	35 U	41 U	38 U
Hexachlorobenzene	NS	NS	ug/kg	77 U	87 U	75 U	81 U	81 U	83 U	80 U	69 U	70 U	82 U	75 U

See Notes on Last Page

Table 20. Confirmatory Soil Sample Results MSA
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Sample ID	375-6: RESTRICTED RESIDENTIAL USE SCO	375-6: PROTECTION OF GROUNDWATER SCO		PE-MSA-M9 4/11/2016	PE-MSA-M10 4/11/2016	PE-MSA-M11 4/11/2016	PE-MSA-M12 4/12/2016	PE-MSA-M13 4/12/2016	PE-MSA-M14 4/12/2016	PE-MSA-M15 4/11/2016	PE-MSA-M16 4/11/2016	PE-MSA-M17 4/11/2016	PE-MSA-M18 4/11/2016	PE-MSA-M19 4/13/2016
Sample Date			Units	0.5-1	0.5-1	0.5-1	0.5-1	0.5-1	0.5-1	0.5-1	0.5-1	0.5-1	0.5-1	0.5-1
Sample Depth														
SVOC cont.														
Hexachlorocyclopentadiene	NS	NS	ug/kg	390 U	440 U	370 U	410 U	400 U	420 U	400 U	350 U	350 U	410 U	380 U
Hexachloroethane	NS	NS	ug/kg	190 U	220 U	190 U	200 U	200 U	210 U	200 U	170 U	180 U	200 U	190 U
Indeno(1,2,3-cd)pyrene	500	8200	ug/kg	39 U	44 U	110	41 U	40 U	42 U	40 U	276	21.7 J	36.9 J	38 U
Isophorone	NS	NS	ug/kg	77 U	87 U	75 U	81 U	81 U	83 U	80 U	69 U	70 U	82 U	75 U
Naphthalene	100000	12000	ug/kg	39 U	25.7 J	37 U	41 U	40 U	42 U	40 U	81.1	35 U	41 U	38 U
Nitrobenzene	NS	NS	ug/kg	77 U	87 U	75 U	81 U	81 U	83 U	80 U	69 U	70 U	82 U	75 U
n-Nitrosodi-n-propylamine	NS	NS	ug/kg	77 U	87 U	75 U	81 U	81 U	83 U	80 U	69 U	70 U	82 U	75 U
N-nitrosodiphenylamine	NS	NS	ug/kg	190 U	220 U	190 U	200 U	200 U	210 U	200 U	170 U	180 U	200 U	190 U
p-Chloroaniline	NS	NS	ug/kg	190 U	220 U	190 U	200 U	200 U	210 U	200 U	170 U	180 U	200 U	190 U
Pentachlorophenol	6700	800	ug/kg	190 U	220 U	190 U	200 U	200 U	210 U	200 U	170 U	180 U	200 U	190 U
Phenanthrene	100000	1000000	ug/kg	18.6 J	27.5 J	271	41 U	16.6 J	17.6 J	33.4 J	1740	20.8 J	41 U	38 U
Phenol	100000	330	ug/kg	77 U	87 U	75 U	81 U	81 U	83 U	80 U	69 U	70 U	82 U	75 U
Pyrene	100000	1000000	ug/kg	31.5 J	36.7 J	369	41 U	36.4 J	31 J	41.5	1210	41.6	104	38 U
See Notes on Last Page														
PCBs														
Aroclor 1016	1000	3200	ug/kg	39 U	44 U	39 U	40 U	38 U	42 U	41 U	33 U	36 U	39 U	39 U
Aroclor 1221	1000	3200	ug/kg	39 U	44 U	39 U	40 U	38 U	42 U	41 U	33 U	36 U	39 U	39 U
Aroclor 1232	1000	3200	ug/kg	39 U	44 U	39 U	40 U	38 U	42 U	41 U	33 U	36 U	39 U	39 U
Aroclor 1242	1000	3200	ug/kg	39 U	44 U	39 U	81.4	38 U	42 U	41 U	33 U	36 U	39 U	39 U
Aroclor 1248	1000	3200	ug/kg	39 U	44 U	39 U	40 U	38 U	42 U	41 U	33 U	36 U	39 U	39 U
Aroclor 1254	1000	3200	ug/kg	39 U	44 U	39 U	40 U	38 U	42 U	41 U	55.7	36 U	39 U	39 U
Aroclor 1260	1000	3200	ug/kg	39 U	44 U	39 U	40 U	38 U	42 U	41 U	33 U	36 U	39 U	39 U
Aroclor 1262	1000	3200	ug/kg	39 U	44 U	39 U	40 U	38 U	42 U	41 U	33 U	36 U	39 U	39 U
Aroclor 1268	1000	3200	ug/kg	39 U	44 U	39 U	40 U	38 U	42 U	41 U	33 U	36 U	39 U	39 U
Metals														
Aluminum	NS	NS	mg/kg	10400 J	16500 J	9230 J	6210	11000	13500	13800 J	6960 J	7060 J	7170 J	5230
Antimony	NS	NS	mg/kg	2 UJ	2 UJ	2 UJ	2.4 UJ	2.4 UJ	2.5 UJ	2 UJ	2.1 UJ	0.71 J	2 UJ	1.7 J
Arsenic	16	16	mg/kg	4.1	6	4	2.5	3.8	4.8	4.6	2.6	3.2	3	3.2
Barium	400	820	mg/kg	50.8 J	132 J	74.7 J	54.6 J	83.6 J	107 J	95.6 J	31.6 J	225 J	31.4 J	226 J
Beryllium	72	47	mg/kg	0.6	0.99	0.52	0.31 J	0.55 J	0.64 J	0.75	0.36	0.41	0.4	0.32 J
Cadmium	4.3	7.5	mg/kg	0.26 B	0.35 B	0.49 B	0.34 B	0.54 B	0.6 B	0.54	0.14 B	0.81	0.16 B	2
Calcium	NS	NS	mg/kg	2730 J	4430 J	3280 J	2230 J	2830 J	3380 J	3300 J	1770 J	2550 J	2170 J	3480 J
Chromium	NS	NS	mg/kg	17.6	24.1	17.9	11.7 J	18.7 J	18.3 J	22.7	12.3	17	13.8	13.2 J
Cobalt	NS	NS	mg/kg	7.5	10.3	7.5	5.2 B	7.5	8.6	10	5.1	6	6.3	5.6 B
Copper	270	1720	mg/kg	14.1	26.6	18.6	12.4 J	20.4 J	25.2 J	23.1	10.9	21.1	11.4	22.8 J
Iron	NS	NS	mg/kg	17200	23500	17800	12900 J	17600 J	20700 J	21400	14200	16200	14900	12100 J
Lead	400	450	mg/kg	20.8	39.5	37.1	19.1	30.2	47.8	32	18.8	70	11.1	131
Magnesium	NS	NS	mg/kg	2820	3140	2960	2200 J	2960 J	3060 J	3920	2380	2450	2650	2410 J
Manganese	2000	2000	mg/kg	516 J	804 J	518 J	122	417	485	1170 J	399 J	489 J	285 J	207
Mercury	NS	NS	mg/kg	0.061	0.1	0.065	0.034 UB	0.052	0.058	0.058	0.034 UB	0.034 UB	0.037 UB	0.036 UB
Nickel	310	130	mg/kg	12.5	14	13.3	9.7	13.7	18.5	17.1	9	11.7	10.8	10.7
Potassium	NS	NS	mg/kg	1080	1170	1320	974 B	1320	1400	1520	754 B	984 B	810 B	820 B
Selenium	180	4	mg/kg	0.48 B	0.85 B	0.66 B	2.4 U	2.4 UB	2.5 U	0.64 B	0.52 B	0.5 B	2 U	2.3 UB
Silver	180	8.3	mg/kg	1.1	1.2	1.1	0.6 U	0.61 UB	0.64 U	1.4	0.9	0.91	0.71	0.57 UB
Sodium	NS	NS	mg/kg	133 B	159 B	194 B	155 B	164 B	182 B	189 B	120 B	159 B	123 B	152 B
Thallium	NS	NS	mg/kg	0.98 U	0.99 U	1 U	1.2 U	1.2 U	1.3 U	2 U	1 U	1.1 U	0.99 U	1.1 U
Vanadium	NS	NS	mg/kg	27.1	54.6	28.1	19.3 J	30.5 J	37.1 J	33.3	18.5	24.1	22.9	17.2 J
Zinc	10000	2480	mg/kg	49.2	69.8	76.8	50.8 J	71.5 J	99.5 J	76.6	38.3	116	32.8	284 J
General Chemistry														
Percent Solids			%	83.1	75.2	84.1	79.5	81.7	77.7	79.4	93.8	92.6	80.3	84.5
Notes														
NS	No standard													
NA	Not analyzed													
J	Estimated result													
JN	Estimated result													
R	Rejected result													
UB	Analyte considered non-detect at the listed value due to associated blank contamination													
Bold	Result exceeds 375-6.8(b) protection of groundwater soil cleanup objective.													
Shade	Result exceeds 375-6.8(b) restricted residential use soil cleanup objective.													

Table 20. Confirmatory Soil Sample Results MSA
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Sample ID	375-6: RESTRICTED RESIDENTIAL USE SCO	375-6: PROTECTION OF GROUNDWATER SCO		PE-MSA-M20 4/13/2016	PE-MSA-M21 4/11/2016	PE-MSA-M22 4/11/2016	PE-MSA-M23 4/11/2016	PE-MSA-M24 4/11/2016	PE-MSA-M25 4/13/2016	PE-MSA-M26 4/13/2016	PE-MSA-M27 4/18/2016	PE-MSA-M28 4/13/2016
Sample Date												
Sample Depth			Units	0.5-1	0.5-1	0.5-1	0.5-1	0.5-1	0.5-1	0.5-1	1.5-2	0.5-1
VOCs												
1,1,1-Trichloroethane	100000	680	ug/kg	2.1 U	1.9 U	2.5 U	2 U	2.1 U	1.8 U	1.9 U	2.2 U	2 U
1,1,2,2-Tetrachloroethane	NS	NS	ug/kg	2.1 U	1.9 U	2.5 U	2 U	2.1 U	1.8 U	1.9 U	2.2 U	2 U
1,1,2-trichloro-1,2,2-trifluoroethane	NS	NS	ug/kg	5.2 U	4.6 U	6.3 U	4.9 U	5.2 U	4.5 U	4.9 U	5.4 U	5 U
1,1,2-Trichloroethane	NS	NS	ug/kg	2.1 U	1.9 U	2.5 U	2 U	2.1 U	1.8 U	1.9 U	2.2 U	2 U
1,1-Dichloroethane	26000	270	ug/kg	1 U	0.93 U	1.3 U	0.98 U	1 U	0.89 U	0.97 U	1.1 U	0.99 U
1,1-Dichloroethene	100000	330	ug/kg	1 U	0.93 U	1.3 U	0.98 U	1 U	0.89 U	0.97 U	1.1 U	0.99 U
1,2,4-Trichlorobenzene	NS	NS	ug/kg	5.2 U	4.6 U	6.3 U	4.9 U	5.2 U	4.5 U	4.9 U	5.4 U	5 U
1,2-Dibromo-3-chloropropane	NS	NS	ug/kg	2.1 U	1.9 U	2.5 U	2 U	2.1 U	1.8 U	1.9 U	2.2 U	2 U
1,2-Dibromoethane	NS	NS	ug/kg	1 U	0.93 U	1.3 U	0.98 U	1 U	0.89 U	0.97 U	1.1 U	0.99 U
1,2-Dichlorobenzene	100000	1100	ug/kg	1 U	0.93 U	1.3 U	0.98 U	0.27 J	0.89 U	0.97 U	1.1 U	0.99 U
1,2-Dichloroethane	3100	20	ug/kg	1 U	0.93 U	1.3 U	0.98 U	1 U	0.89 U	0.97 U	1.1 U	0.99 U
1,2-Dichloropropane	NS	NS	ug/kg	2.1 U	1.9 U	2.5 U	2 U	2.1 U	1.8 U	1.9 U	2.2 U	2 U
1,3-Dichlorobenzene	49000	2400	ug/kg	1 U	0.93 U	1.3 U	0.98 U	1 U	0.89 U	0.97 U	1.1 U	0.99 U
1,4-Dichlorobenzene	13000	1800	ug/kg	1 U	0.93 U	1.3 U	0.98 U	1 U	0.89 U	0.97 U	1.1 U	0.99 U
2-Butanone (MEK)	100000	120	ug/kg	153	9.3 U	13 U	21.5	10 U	8.9 U	9.7 U	11 U	9.9 U
4-Methyl-2-Pentanone	NS	NS	ug/kg	5.2 U	4.6 U	6.3 U	4.9 U	5.2 U	4.5 U	4.9 U	5.4 U	5 U
Acetone	100000	50	ug/kg	103	9.3 U	6 J	731	9.9 J	9.4	9.7 U	11 U	9.9 U
Benzene	4800	60	ug/kg	0.52 U	0.46 U	0.63 U	0.49 U	0.52 U	0.45 U	0.49 U	0.54 U	0.5 U
Bromodichloromethane	NS	NS	ug/kg	2.1 U	1.9 U	2.5 U	2 U	2.1 U	1.8 U	1.9 U	2.2 U	2 U
Bromoform	NS	NS	ug/kg	5.2 U	4.6 U	6.3 U	4.9 U	5.2 U	4.5 U	4.9 U	5.4 U	5 U
Bromomethane	NS	NS	ug/kg	5.2 U	4.6 U	6.3 U	4.9 U	5.2 U	4.5 U	4.9 U	5.4 U	5 U
Carbon Disulfide	NS	NS	ug/kg	0.38 J	1.9 U	2.5 U	2 U	2.1 U	1.8 U	1.9 U	2.2 U	2 U
Carbon Tetrachloride	2400	760	ug/kg	2.1 U	1.9 U	2.5 U	2 U	2.1 U	1.8 U	1.9 U	2.2 U	2 U
CFC-11	NS	NS	ug/kg	5.2 U	4.6 U	6.3 U	4.9 U	5.2 U	4.5 U	4.9 U	5.4 U	5 U
CFC-12	NS	NS	ug/kg	5.2 U	4.6 U	6.3 U	4.9 U	5.2 U	4.5 U	4.9 U	5.4 U	5 U
Chlorobenzene	100000	1100	ug/kg	2.1 U	1.9 U	2.5 U	2 U	2.1 U	1.8 U	1.9 U	2.2 U	2 U
Chlorodibromomethane	NS	NS	ug/kg	2.1 U	1.9 U	2.5 U	2 U	2.1 U	1.8 U	1.9 U	2.2 U	2 U
Chloroethane	NS	NS	ug/kg	5.2 U	4.6 U	6.3 U	4.9 U	5.2 U	4.5 U	4.9 U	5.4 U	5 U
Chloroform	49000	370	ug/kg	2.1 U	1.9 U	2.5 U	2 U	2.1 U	1.8 U	1.9 U	2.2 U	2 U
Chloromethane	NS	NS	ug/kg	5.2 U	4.6 U	6.3 U	4.9 U	5.2 U	4.5 U	4.9 U	5.4 U	5 U
cis-1,2-Dichloroethene	100000	250	ug/kg	1 U	0.93 U	1.3 U	0.98 U	1 U	0.89 U	0.97 U	1.1 U	0.99 U
cis-1,3-Dichloropropene	NS	NS	ug/kg	2.1 U	1.9 U	2.5 U	2 U	2.1 U	1.8 U	1.9 U	2.2 U	2 U
Cyclohexane	NS	NS	ug/kg	2.1 U	1.9 U	2.5 U	2 U	2.1 U	1.8 U	1.9 U	2.2 U	2 U
Dichloromethane	NS	NS	ug/kg	5.2 U	4.6 U	6.3 U	4.9 U	5.2 U	4.5 U	4.9 U	5.4 U	5 U
Ethylbenzene	41000	1000	ug/kg	1 U	0.93 U	1.3 U	1.7	1 U	0.89 U	0.97 U	1.1 U	0.99 U
Isopropylbenzene	NS	NS	ug/kg	2.1 U	1.9 U	2.5 U	2 U	2.1 U	1.8 U	1.9 U	2.2 U	2 U
Methyl Acetate	NS	NS	ug/kg	5.2 U	4.6 U	6.3 U	4.9 U	5.2 U	4.5 U	4.9 U	5.4 U	5 U
Methyl N-Butyl Ketone (2-Hexanone)	NS	NS	ug/kg	5.2 U	4.6 U	6.3 U	4.9 U	5.2 U	4.5 U	4.9 U	5.4 U	5 U
Methylcyclohexane	NS	NS	ug/kg	2.1 U	1.9 U	2.5 U	2 U	5.2	1.8 U	1.9 U	2.2 U	2 U
Methyl-tert-butylether	100000	930	ug/kg	1 U	0.93 U	1.3 U	0.98 U	1 U	0.89 U	0.97 U	1.1 U	0.99 U
Styrene (Monomer)	NS	NS	ug/kg	2.1 U	1.9 U	0.44 J	2 U	2.1 U	1.8 U	1.9 U	2.2 U	2 U
Tetrachloroethene	19000	1300	ug/kg	2.1 U	1.9 U	2.5 U	2 U	2.1 U	1.8 U	1.9 U	2.2 U	2 U
Toluene	100000	700	ug/kg	1 U	0.93 U	0.71 J	31.5	1 U	0.89 U	0.97 U	1.1 U	0.99 U
Total Xylenes	100000	1600	ug/kg	1 U	0.93 U	1.3 U	0.98 U	1 U	0.89 U	0.97 U	1.1 U	0.99 U
trans-1,2-Dichloroethene	100000	190	ug/kg	1 U	0.93 U	1.3 U	0.98 U	1 U	0.89 U	0.97 U	1.1 U	0.99 U
trans-1,3-Dichloropropene	NS	NS	ug/kg	2.1 U	1.9 U	2.5 U	2 U	2.1 U	1.8 U	1.9 U	2.2 U	2 U
Trichloroethene	21000	470	ug/kg	1 U	0.93 U	1.3 U	0.98 U	1 U	0.89 U	0.97 U	1.1 U	0.99 U
Vinyl chloride	900	20	ug/kg	2.1 U	1.9 U	2.5 U	2 U	2.1 U	1.8 U	1.9 U	2.2 U	2 U

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Table 20. Confirmatory Soil Sample Results MSA
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Sample ID	375-6: RESTRICTED RESIDENTIAL USE SCO	375-6: PROTECTION OF GROUNDWATER SCO		PE-MSA-M20	PE-MSA-M21	PE-MSA-M22	PE-MSA-M23	PE-MSA-M24	PE-MSA-M25	PE-MSA-M26	PE-MSA-M27	PE-MSA-M28
Sample Date				4/13/2016	4/11/2016	4/11/2016	4/11/2016	4/11/2016	4/13/2016	4/13/2016	4/18/2016	4/13/2016
Sample Depth			Units	0.5-1	0.5-1	0.5-1	0.5-1	0.5-1	0.5-1	0.5-1	1.5-2	0.5-1
SVOCs												
1,1-Biphenyl	NS	NS	ug/kg	75 U	75 U	91 U	76 U	80 U	70 U	71 U	77 U	78 U
2,2-Oxybis(1-Chloropropane)	NS	NS	ug/kg	75 U	75 U	91 U	76 U	80 U	70 U	71 U	77 U	78 U
2,4,5-Trichlorophenol	NS	NS	ug/kg	190 U	190 U	230 U	190 U	200 U	180 U	180 U	190 U	200 U
2,4,6-Trichlorophenol	NS	NS	ug/kg	190 U	190 U	230 U	190 U	200 U	180 U	180 U	190 U	200 U
2,4-Dichlorophenol	NS	NS	ug/kg	190 U	190 U	230 U	190 U	200 U	180 U	180 U	190 U	200 U
2,4-Dimethylphenol	NS	NS	ug/kg	190 U	190 U	230 U	190 U	200 U	180 U	180 U	190 U	200 U
2,4-Dinitrophenol	NS	NS	ug/kg	190 U	190 U	230 U	190 U	200 U	180 U	180 U	190 U	200 U
2,4-Dinitrotoluene	NS	NS	ug/kg	38 U	38 U	45 U	38 U	40 U	35 U	36 U	39 U	39 U
2,6-Dinitrotoluene	NS	NS	ug/kg	38 U	38 U	45 U	38 U	40 U	35 U	36 U	39 U	39 U
2-Chloronaphthalene	NS	NS	ug/kg	75 U	75 U	91 U	76 U	80 U	70 U	71 U	77 U	78 U
2-Chlorophenol	NS	NS	ug/kg	75 U	75 U	91 U	76 U	80 U	70 U	71 U	77 U	78 U
2-Methyl-4,6-dinitrophenol	NS	NS	ug/kg	190 U	190 U	230 U	190 U	200 U	180 U	180 U	190 U	200 U
2-Methylnaphthalene	NS	NS	ug/kg	75 U	75 U	91 U	76 U	80 U	70 U	71 U	77 U	78 U
2-Methylphenol	NS	NS	ug/kg	80.6	75 U	91 U	76 U	80 U	70 U	71 U	77 U	78 U
2-Nitroaniline	NS	NS	ug/kg	190 U	190 U	230 U	190 U	200 U	180 U	180 U	190 U	200 U
2-Nitrophenol	NS	NS	ug/kg	190 U	190 U	230 U	190 U	200 U	180 U	180 U	190 U	200 U
3,3-Dichlorobenzidine	NS	NS	ug/kg	75 U	75 U	91 U	76 U	80 U	70 U	71 U	77 U	78 U
3-Methylphenol, 4-Methylphenol	NS	NS	ug/kg	223	60.3 J	460	527	96.6	45.1 J	71 U	77 U	78 U
3-Nitroaniline	NS	NS	ug/kg	190 U	190 U	230 U	190 U	200 U	180 U	180 U	190 U	200 U
4-Bromophenyl phenyl ether	NS	NS	ug/kg	75 U	75 U	91 U	76 U	80 U	70 U	71 U	77 U	78 U
4-Chloro-3-Methylphenol	NS	NS	ug/kg	190 U	190 U	230 U	190 U	200 U	180 U	180 U	190 U	200 U
4-Chlorophenyl phenyl ether	NS	NS	ug/kg	75 U	75 U	91 U	76 U	80 U	70 U	71 U	77 U	78 U
4-Nitroaniline	NS	NS	ug/kg	190 U	190 U	230 U	190 U	200 U	180 U	180 U	190 U	200 U
4-Nitrophenol	NS	NS	ug/kg	380 U	380 U	450 U	380 U	400 U	350 U	360 U	390 U	390 U
Acenaphthene	100000	98000	ug/kg	38 U	38 U	45 U	38 U	40 U	35 U	36 U	39 U	39 U
Acenaphthylene	100000	107000	ug/kg	38 U	38 U	45 U	38 U	40 U	35 U	36 U	39 U	39 U
Acetophenone	NS	NS	ug/kg	190 U	190 U	230 U	190 U	200 U	180 U	180 U	190 U	200 U
Anthracene	100000	1000000	ug/kg	38 U	38 U	45 U	15.3 J	40 U	35 U	36 U	39 U	39 U
Atrazine	NS	NS	ug/kg	75 U	75 U	91 U	76 U	80 U	70 U	71 U	77 U	78 U
Benzaldehyde	NS	NS	ug/kg	190 U	190 U	230 U	190 U	200 U	180 U	180 U	17.3 J	200 U
Benzo(a)anthracene	1000	1000	ug/kg	38 U	38 U	48.6	53.5	40 U	35 U	25.6 J	33 J	24.9 J
Benzo(a)pyrene	1000	22000	ug/kg	38 U	38 U	47.1	49.8	40 U	35 U	24.9 J	31.1 J	22.9 J
Benzo(b)fluoranthene	1000	1700	ug/kg	38 U	38 U	79.9	69.8	16.7 J	35 U	34.8 J	42.7	32.1 J
Benzo(g,h,i)perylene	100000	1000000	ug/kg	38 U	38 U	31.8 J	36.2 J	40 U	35 U	17.8 J	23.4 J	16.1 J
Benzo(k)fluoranthene	3900	1700	ug/kg	38 U	38 U	31.6 J	28.8 J	40 U	35 U	36 U	39 U	39 U
bis(2-Chloroethoxy)methane	NS	NS	ug/kg	75 U	75 U	91 U	76 U	80 U	70 U	71 U	77 U	78 U
bis(2-Chloroethyl)ether	NS	NS	ug/kg	75 U	75 U	91 U	76 U	80 U	70 U	71 U	77 U	78 U
bis(2-Ethylhexyl)phthalate	NS	NS	ug/kg	75 U	75 U	95.9	76 U	80 U	70 U	71 U	77 U	1100
Butyl benzyl phthalate	NS	NS	ug/kg	75 U	75 U	91 U	76 U	80 U	70 U	71 U	77 U	810
Caprolactam	NS	NS	ug/kg	75 U	75 U	91 U	76 U	80 U	70 U	71 U	77 U	78 U
Carbazole	NS	NS	ug/kg	75 U	75 U	91 U	76 U	80 U	70 U	71 U	77 U	78 U
Chrysene	3900	1000	ug/kg	38 U	38 U	64.4	54.7	40 U	35 U	29.2 J	30.1 J	26.8 J
Dibenzo(a,h)anthracene	330	1000000	ug/kg	38 U	38 U	45 U	38 U	40 U	35 U	36 U	39 U	39 U
Dibenzofuran	NS	NS	ug/kg	75 U	75 U	91 U	76 U	80 U	70 U	71 U	77 U	78 U
Diethyl phthalate	NS	NS	ug/kg	75 U	75 U	91 U	76 U	80 U	70 U	71 U	77 U	78 U
Dimethyl phthalate	NS	NS	ug/kg	75 U	75 U	91 U	76 U	80 U	70 U	71 U	77 U	78 U
Di-n-butyl phthalate	NS	NS	ug/kg	75 U	75 U	91 U	76 U	80 U	70 U	71 U	77 U	78 U
Di-n-octyl phthalate	NS	NS	ug/kg	75 U	75 U	91 U	76 U	80 U	70 U	71 U	77 U	78 U
Fluoranthene	100000	1000000	ug/kg	15.5 J	23.9 J	107	102	20 J	35 U	49	60.4	48.2
Fluorene	100000	386000	ug/kg	38 U	38 U	45 U	38 U	40 U	35 U	36 U	39 U	39 U
Hexachloro-1,3-butadiene	NS	NS	ug/kg	38 U	38 U	45 U	38 U	40 U	35 U	36 U	39 U	39 U
Hexachlorobenzene	NS	NS	ug/kg	75 U	75 U	91 U	76 U	80 U	70 U	23.8 J	77 U	78 U

See Notes on Last Page

Table 20. Confirmatory Soil Sample Results MSA
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Sample ID	375-6: RESTRICTED RESIDENTIAL USE SCO	375-6: PROTECTION OF GROUNDWATER SCO		PE-MSA-M20 4/13/2016	PE-MSA-M21 4/11/2016	PE-MSA-M22 4/11/2016	PE-MSA-M23 4/11/2016	PE-MSA-M24 4/11/2016	PE-MSA-M25 4/13/2016	PE-MSA-M26 4/13/2016	PE-MSA-M27 4/18/2016	PE-MSA-M28 4/13/2016
Sample Date												
Sample Depth			Units	0.5-1	0.5-1	0.5-1	0.5-1	0.5-1	0.5-1	0.5-1	1.5-2	0.5-1
SVOC cont.												
Hexachlorocyclopentadiene	NS	NS	ug/kg	380 U	380 U	450 U	380 U	400 U	350 U	360 U	390 U	390 U
Hexachloroethane	NS	NS	ug/kg	190 U	190 U	230 U	190 U	200 U	180 U	180 U	190 U	200 U
Indeno(1,2,3-cd)pyrene	500	8200	ug/kg	38 U	38 U	34.8 J	37.5 J	40 U	35 U	36 U	26.5 J	39 U
Isophorone	NS	NS	ug/kg	75 U	75 U	91 U	76 U	80 U	70 U	71 U	77 U	78 U
Naphthalene	100000	12000	ug/kg	38 U	38 U	45 U	38 U	40 U	35 U	36 U	39 U	39 U
Nitrobenzene	NS	NS	ug/kg	75 U	75 U	91 U	76 U	80 U	70 U	71 U	77 U	78 U
n-Nitrosodi-n-propylamine	NS	NS	ug/kg	75 U	75 U	91 U	76 U	80 U	70 U	71 U	77 U	78 U
N-nitrosodiphenylamine	NS	NS	ug/kg	190 U	190 U	230 U	190 U	200 U	180 U	180 U	190 U	200 U
p-Chloroaniline	NS	NS	ug/kg	190 U	190 U	230 U	190 U	200 U	180 U	180 U	190 U	200 U
Pentachlorophenol	6700	800	ug/kg	190 U	190 U	230 U	190 U	200 U	180 U	180 U	190 U	200 U
Phenanthrene	100000	1000000	ug/kg	38 U	16.7 J	41.4 J	52.2	40 U	35 U	25.6 J	34.1 J	27.7 J
Phenol	100000	330	ug/kg	886 J	75 U	91 U	76 U	80 U	70 U	71 U	77 U	78 U
Pyrene	100000	1000000	ug/kg	38 U	19.6 J	106	93	18.7 J	35 U	48.2	51.7	42.6
See Notes on Last Page												
PCBs												
Aroclor 1016	1000	3200	ug/kg	39 U	34 U	43 U	40 U	39 UJ	35 U	38 U	39 U	39 U
Aroclor 1221	1000	3200	ug/kg	39 U	34 U	43 U	40 U	39 UJ	35 U	38 U	39 U	39 U
Aroclor 1232	1000	3200	ug/kg	39 U	34 U	43 U	40 U	39 UJ	35 U	38 U	39 U	39 U
Aroclor 1242	1000	3200	ug/kg	39 U	34 U	43 U	40 U	39 UJ	35 U	38 U	39 U	39 U
Aroclor 1248	1000	3200	ug/kg	39 U	34 U	43 U	40 U	39 UJ	35 U	38 U	39 U	39 U
Aroclor 1254	1000	3200	ug/kg	39 U	34 U	43 U	40 U	39 UJ	35 U	38 U	39 U	39 U
Aroclor 1260	1000	3200	ug/kg	39 U	34 U	43 U	40 U	39 UJ	35 U	38 U	39 U	39 U
Aroclor 1262	1000	3200	ug/kg	39 U	34 U	43 U	40 U	39 UJ	35 U	38 U	39 U	39 U
Aroclor 1268	1000	3200	ug/kg	39 U	34 U	43 U	40 U	39 UJ	35 U	38 U	39 U	39 U
Metals												
Aluminum	NS	NS	mg/kg	6620	8970 J	9210 J	8380 J	5630 J	4990	6200	8880 J	7860
Antimony	NS	NS	mg/kg	2.3 J	2 UJ	0.64 J	2 UJ	2 UJ	2.1 UJ	2.2 UJ	2.3 UJ	1.9 UJ
Arsenic	16	16	mg/kg	4.3	3.9	3.5	3.7	1.9 B	2.2	2.4	2.9	3
Barium	400	820	mg/kg	409 J	68.8 J	129 J	119 J	28.1 J	32.5 J	29.2 J	100 J	109 J
Beryllium	72	47	mg/kg	0.33 J	0.49	0.44	0.46	0.39	0.35 J	0.33 J	0.4 J	0.36 J
Cadmium	4.3	7.5	mg/kg	2.2	0.38 B	0.87	0.65	0.18 B	0.16 B	0.19 B	0.3 B	0.27 B
Calcium	NS	NS	mg/kg	4110 J	2550 J	3830 J	3120 J	1960 J	1920 J	2120 J	2650 J	3290 J
Chromium	NS	NS	mg/kg	16.9 J	14.8	16.7	16.7	46.8	12.6 J	11.5 J	15.3 J	12.2 J
Cobalt	NS	NS	mg/kg	7.5	7.6	7.5	7	5.1	5.9	5.6	6.1	8
Copper	270	1720	mg/kg	56.6 J	14.9	29.1	19.2	12.3	7.4 J	11.4 J	18.9 J	30.1 J
Iron	NS	NS	mg/kg	18400 J	15400	19000	16200	13200	15300 J	13300 J	16400 J	18300 J
Lead	400	450	mg/kg	207	20.7	76.3	48.4	15.6	9.2	16.9	32.1 J	80.4
Magnesium	NS	NS	mg/kg	3410 J	2640	3490	2960	2160	2400 J	2350 J	2570 J	3020 J
Manganese	2000	2000	mg/kg	316	427 J	380 J	305 J	208 J	124	122	286 J	296
Mercury	NS	NS	mg/kg	0.035 UB	0.035 UB	0.078	0.047	0.014 B	0.036 UB	0.036 UB	0.037	0.031 UB
Nickel	310	130	mg/kg	15.5	11.4	13.1	12.4	7.5	7.7	9.4	11.3	11.2
Potassium	NS	NS	mg/kg	1110	979 B	1330	1190	801 B	688 B	806 B	1160 J	891 B
Selenium	180	4	mg/kg	2.3 UB	2 U	2.2 U	2 U	2 U	2.1 U	2.2 U	2.3 U	1.9 U
Silver	180	8.3	mg/kg	0.57 UB	1.1	1.7	0.86	0.72	0.52 UB	0.55 UB	0.57 U	0.47 UB
Sodium	NS	NS	mg/kg	256 B	139 B	230 B	176 B	123 B	108 B	185 B	159 B	221 B
Thallium	NS	NS	mg/kg	1.1 U	1 U	1.1 U	1 U	1 U	1 U	1.1 U	1.1 U	0.94 U
Vanadium	NS	NS	mg/kg	35 J	22.7	28.7	25.8	19	20.4 J	19.2 J	27.2 J	35.4 J
Zinc	10000	2480	mg/kg	362 J	52.2	129	93.7	38.5	31.5 J	38.4 J	67.8 J	54.4 J
General Chemistry												
Percent Solids			%	85.9	88.5	73.4	83.9	79.3	91.9	87.2	85.8	83.9

Notes		
NS	No standard	
NA	Not analyzed	
J	Estimated result	
JN	Estimated result	
R	Rejected result	
UB	Analyte considered non-detect at the listed value due to associated blank contamination	
Bold	Result exceeds 375-6.8(b) protection of groundwater soil cleanup objective.	
Shade	Result exceeds 375-6.8(b) restricted residential use soil cleanup objective.	

Table 21. Validated Sample Results Determined Unusable ⁽¹⁾
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Arcadis Sample ID	Sample Date	SDG	Lab Sample ID	Matrix	Analytical Method	Chemical Name	Report Result Limit	Interpreted Qualifier
PE-I-A1(2.0-2.5)	42256	JC3435	JC3435-1	Soil	SW8270D	2-Methyl-4,6-dinitrophenol	180	R
CS-M-1 (0.0-0.5)	42298	JC6747	JC6747-1	Soil	SW8270D	4-Nitroaniline	240	R
CS-M-1 (0.0-0.5)	42298	JC6747	JC6747-1	Soil	SW8270D	4-Chloroaniline	240	R
CS-M-1 (0.0-0.5)	42298	JC6747	JC6747-1	Soil	SW8270D	Hexachlorocyclopentadiene	480	R
CS-M-1 (0.0-0.5)	42298	JC6747	JC6747-1	Soil	SW8270D	3,3-Dichlorobenzidine	96	R
CS-K-1 (0.0-0.5)	42299	JC6747	JC6747-17	Soil	SW8270D	4-Chloroaniline	180	R
CS-K-1 (0.0-0.5)	42299	JC6747	JC6747-17	Soil	SW8260B	Methyl N-Butyl Ketone	7.7	R
CS-K-1 (0.0-0.5)	42299	JC6747	JC6747-17	Soil	SW8270D	Hexachlorocyclopentadiene	370	R
CS-K-1 (0.0-0.5)	42299	JC6747	JC6747-17	Soil	SW8270D	3,3-Dichlorobenzidine	74	R
CS-K-1 (0.0-0.5)	42299	JC6747	JC6747-17	Soil	SW8270D	3-Nitroaniline	180	R
CS-K-2 (0.0-0.5)	42299	JC6747	JC6747-19	Soil	SW8270D	4-Nitroaniline	190	R
CS-K-2 (0.0-0.5)	42299	JC6747	JC6747-19	Soil	SW8270D	4-Chloroaniline	190	R
CS-K-2 (0.0-0.5)	42299	JC6747	JC6747-19	Soil	SW8270D	2,4-Dinitrophenol	190	R
CS-K-2 (0.0-0.5)	42299	JC6747	JC6747-19	Soil	SW8270D	2-Methyl-4,6-dinitrophenol	190	R
CS-K-2 (0.0-0.5)	42299	JC6747	JC6747-19	Soil	SW8270D	Hexachlorocyclopentadiene	390	R
CS-K-2 (0.0-0.5)	42299	JC6747	JC6747-19	Soil	SW8270D	3,3-Dichlorobenzidine	78	R
CS-K-2 (0.0-0.5)	42299	JC6747	JC6747-19	Soil	SW8270D	3-Nitroaniline	190	R
PE-A-S14(1.0-1.5)	42307	JC7182	JC7182-8	Soil	SW8270D	3,3-Dichlorobenzidine	78	R
WW-INF-11062015	42314	JC8022	JC8022-3	Waste water	E625	3,3-Dichlorobenzidine	2.1	R
CS-D-4(0.0-0.5)	42368	JC11776	JC11776-9	Soil	SW8270D	4-Nitroaniline	800	R
CS-D-4(0.0-0.5)	42368	JC11776	JC11776-9	Soil	SW8260B	1,2,4-Trichlorobenzene	21	R
CS-D-4(0.0-0.5)	42368	JC11776	JC11776-9	Soil	SW8270D	Hexachlorocyclopentadiene	1600	R
CS-D-4(0.0-0.5)	42368	JC11776	JC11776-9	Soil	SW8270D	3,3-Dichlorobenzidine	320	R
PE-D-B2(2.0-2.5)	42390	JC13041	JC13041-1	Soil	SW8270D	4-Nitroaniline	ND	R
PE-D-B2(2.0-2.5)	42390	JC13041	JC13041-1	Soil	SW8270D	4-Chloroaniline	ND	R
PE-D-B2(2.0-2.5)	42390	JC13041	JC13041-1	Soil	SW8270D	3,3-Dichlorobenzidine	ND	R
PE-D-B2(2.0-2.5)	42390	JC13041	JC13041-1	Soil	SW8270D	3-Nitroaniline	ND	R
PE-H-B1(8.0-8.5)	42454	JC17031	JC17031-2	Soil	SW8270D	2,4-Dinitrophenol	230	R
PE-H-B1(8.0-8.5)	42454	JC17031	JC17031-2	Soil	SW8270D	Hexachlorocyclopentadiene	450	R

¹Validated sample results determined unusable. Data rejected.

Table 22. Wastewater Analytical Results
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Sample ID	NY TOGS Class	WW-INF	WW-INF	WW-EFF	WW-EFF	WW-EFF	WW-F	WW-F
Sample Date	GA GW Standards	WW-INF-11062015	WW-INF-11182015	WW-EFF-11062015	WW-DUP-001_20151106	WW-EFF-11182015	WW-F-12012015	WW-F-12032015
					WW-EFF-11062015			
VOCs								
1,1,1-Trichloroethane	5	2 U	1 U	1 U	1 U	1 U	NA	1 U
1,1,2,2-Tetrachloroethane	5	2 U	1 U	1 U	1 U	1 U	NA	1 U
1,1,2-trichloro-1,2,2-trifluoroethane	NS	4 U	2 U	2 U	2 U	2 U	NA	5 U
1,1,2-Trichloroethane	1	2 U	1 U	1 U	1 U	1 U	NA	1 U
1,1-Dichloroethane	5	2 U	1 U	1 U	1 U	1 U	NA	1 U
1,1-Dichloroethene	5	2 U	1 U	1 U	1 U	1 U	5 U	1 U
1,2,4-Trichlorobenzene	5	4 U	2 U	2 U	2 U	2 U	NA	1 U
1,2-Dibromo-3-chloropropane	0.04	4 U	2 U	2 U	2 U	2 U	NA	2 U
1,2-Dibromoethane	0.0006	2 U	1 U	1 U	1 U	1 U	NA	1 U
1,2-Dichlorobenzene	3	2 U	1 U	1 U	1 U	1 U	NA	1 U
1,2-Dichloroethane	0.6	2 U	1 U	1 U	1 U	1 U	5 U	1 U
1,2-Dichloropropane	1	2 U	1 U	1 U	1 U	1 U	NA	1 U
1,3-Dichlorobenzene	3	2 U	1 U	1 U	1 U	1 U	NA	1 U
1,4-Dichlorobenzene	3	2 U	1 U	1 U	1 U	1 U	5 U	1 U
2-Butanone (MEK)	NS	59.5	56.3	5 U	5 U	5 U	100 U	10 U
2-Chloroethyl vinyl ether	NS	NA	NA	NA	NA	NA	NA	10 U
4-Methyl-2-Pentanone	NS	27.9	22.2	5 U	5 U	5 U	NA	16
Acetone	NS	179 J	263 D	5 U	5 U	28.1	NA	23.7
Acrolein	5	NA	NA	NA	NA	NA	NA	50 U
Acrylonitrile	5	NA	NA	NA	NA	NA	NA	50 U
Benzene	1	0.92 J	0.17 J	1 U	1 U	1 U	4.9	6.1
Bromodichloromethane	NS	2 U	1 U	1 U	1 U	1 U	NA	1 U
Bromoform	NS	2 U	1 U	1 U	1 U	1 U	NA	1 U
Bromomethane	5	2 UJ	1 U	1 UJ	1 UJ	1 U	NA	2 U
Carbon Disulfide	60	2 U	1 U	1 U	1 U	1 U	NA	2 U
Carbon Tetrachloride	5	2 U	1 U	1 U	1 U	1 U	5 U	1 U
CFC-11	NS	4 U	2 U	2 U	2 U	2 U	NA	2 U
CFC-12	NS	4 U	2 U	2 U	2 U	2 U	NA	2 U
Chlorobenzene	5	2 U	1 U	1 U	1 U	1 U	5 U	1 U
Chlorodibromomethane	NS	2 U	1 U	1 U	1 U	1 U	NA	1 U
Chloroethane	5	2 U	1 U	1 U	1 U	1 U	NA	1 U
Chloroform	7	2 U	1 U	1 U	1 U	1 U	5 U	1 U
Chloromethane	5	2 U	1 U	1 U	1 U	1 U	NA	1 U
cis-1,2-Dichloroethene	5	2 U	1 U	1 U	1 U	1 U	NA	1 U
cis-1,3-Dichloropropene	5	2 U	1 U	1 U	1 U	1 U	NA	1 U
Cyclohexane	NS	4 U	2 UJ	2 U	2 U	2 UJ	NA	3.6 J
Dichloromethane	NS	2 U	1 U	1 U	1 U	1 U	NA	2 U
Ethylbenzene	5	10.2	1.1	1 U	1 U	1 U	NA	62
Isopropylbenzene	5	2 U	1 U	1 U	1 U	1 U	NA	4.8
Methyl Acetate	NS	10 U	5 U	5 U	5 U	5 U	NA	5 U
Methyl N-Butyl Ketone (2-Hexanone)	NS	10 U	5 U	5 U	5 U	5 U	NA	5 U
Methylcyclohexane	NS	10 UJ	5 U	5 UJ	5 UJ	5 U	NA	6.1
Methyl-tert-butylether	10	2 U	1 U	1 U	1 U	1 U	NA	1 U
Styrene (Monomer)	5	4 U	2 U	2 U	2 U	2 U	NA	1 U
Tetrachloroethene	5	2 U	1 U	1 U	1 U	1 U	5 U	1 U
Toluene	5	20.9	2.6	1 U	1 U	1 U	NA	74.9
Total Xylenes	5	76.5	11	1 U	1 U	1 U	NA	386
trans-1,2-Dichloroethene	5	2 U	1 U	1 U	1 U	1 U	NA	1 U
trans-1,3-Dichloropropene	NS	2 U	1 U	1 U	1 U	1 U	NA	1 U
Trichloroethene	5	2 U	1 U	1 U	1 U	1 U	5 U	1 U
Vinyl chloride	2	2 U	1 U	1 U	1 U	1 U	5 U	1 U

See notes on last page.

Table 22. Wastewater Analytical Results
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Sample ID	NY TOGS Class	WW-INF	WW-INF	WW-EFF	WW-EFF	WW-EFF	WW-F	WW-F
Sample Date	GA GW Standards	WW-INF-11062015	WW-INF-11182015	WW-EFF-11062015	WW-DUP-001_20151106	WW-EFF-11182015	WW-F-12012015	WW-F-12032015
					WW-EFF-11062015			
SVOCs								
1,1-Biphenyl	5	5.3 U	5 U	5 U	5 U	5.4 U	NA	1 U
1,2,4-Trichlorobenzene	NS	NA	NA	NA	NA	NA	NA	1 U
1,2-Dichlorobenzene	3	NA	NA	NA	NA	NA	NA	1 U
1,2-Diphenylhydrazine	NS	NA	NA	NA	NA	NA	NA	1 U
1,3-Dichlorobenzene	3	NA	NA	NA	NA	NA	NA	1 U
1,4-Dichlorobenzene	3	NA	NA	NA	NA	NA	20 U	1 U
2,2-Oxybis(1-Chloropropane)	NS	2.1 U	2 U	2 U	2 U	2.2 U	NA	2 U
2,4,5-Trichlorophenol	NS	2.1 U	2 U	2 U	2 U	2.2 U	50 U	5.1 U
2,4,6-Trichlorophenol	NS	2.1 U	2 U	2 U	2 U	2.2 U	50 U	5.1 U
2,4-Dichlorophenol	1	5.3 U	5 U	5 U	5 U	5.4 U	NA	2 U
2,4-Dimethylphenol	1	1.8 J	5 U	5 U	5 U	5.4 U	NA	9.2
2,4-Dinitrophenol	1	5.3 UJ	5 U	5 UJ	5 UJ	5.4 U	NA	10 U
2,4-Dinitrotoluene	5	2.1 UJ	2 U	2 UJ	2 UJ	2.2 U	20 U	1 U
2,6-Dinitrotoluene	5	2.1 U	2 U	2 U	2 U	2.2 U	NA	1 U
2-Chloronaphthalene	NS	2.1 U	2 U	2 U	2 U	2.2 U	NA	2 U
2-Chlorophenol	NS	5.3 U	5 U	5 U	5 U	5.4 U	NA	5.1 U
2-Methyl-4,6-dinitrophenol	NS	5.3 U	5 U	5 U	5 U	5.4 U	NA	NA
2-Methylnaphthalene	NS	0.6 J	2 U	2 U	2 U	2.2 U	NA	2.1
2-Methylphenol	NS	1.8 J	2 U	2 U	2 U	2.2 U	20 U	2 U
2-Nitroaniline	5	5.3 U	5 U	5 U	5 U	5.4 U	NA	5.1 U
2-Nitrophenol	NS	2.1 U	2 U	2 U	2 U	2.2 U	NA	5.1 U
3,3-Dichlorobenzidine	5	R	2 U	2 U	2 U	2.2 U	NA	2 U
3-Methylphenol, 4-Methylphenol	NS	454 D	93.3	5 U	5 U	5.4 U	20 U	3.3
3-Nitroaniline	5	5.3 U	5 U	5 U	5 U	5.4 U	NA	5.1 U
4-Bromophenyl phenyl ether	NS	2.1 U	2 U	2 U	2 U	2.2 U	NA	2 U
4-Chloro-3-Methylphenol	NS	5.3 U	5 U	5 U	5 U	5.4 U	NA	5.1 U
4-Chlorophenyl phenyl ether	NS	2.1 U	2 U	2 U	2 U	2.2 U	NA	2 U
4-Nitroaniline	5	5.3 U	5 U	5 U	5 U	5.4 U	NA	5.1 U
4-Nitrophenol	NS	11 U	10 UJ	10 U	10 U	11 UJ	NA	10 U
Acenaphthene	20	1.1 U	1 U	1 U	1 U	1.1 U	NA	1 U
Acenaphthylene	NS	0.81 J	1 U	1 U	1 U	1.1 U	NA	1 U
Acetophenone	NS	9.5	11.5	5 U	5 U	5.4 U	NA	2 U
Anthracene	NS	1.1 U	1 U	1 U	1 U	1.1 U	NA	1 U
Atrazine	7.5	5.3 U	5 U	5 U	5 U	5.4 U	NA	2 U
Benzaldehyde	NS	5.3 U	5 U	5 U	5 U	5.4 U	NA	5.1 U
Benzidine	5	NA	NA	NA	NA	NA	NA	10 UJ
Benzo(a)anthracene	NS	1.1 U	1 U	1 U	1 U	1.1 U	NA	NA
Benzo(a)pyrene	NS	1.1 U	1 U	1 U	1 U	1.1 U	NA	NA
Benzo(b)fluoranthene	NS	1.1 U	1 U	1 U	1 U	1.1 U	NA	NA
Benzo(g,h,i)perylene	NS	1.1 U	1 U	1 U	1 U	1.1 U	NA	1 U
Benzo(k)fluoranthene	NS	1.1 U	1 U	1 U	1 U	1.1 U	NA	NA
bis(2-Chloroethoxy)methane	5	2.1 U	2 U	2 U	2 U	2.2 U	NA	2 U
bis(2-Chloroethyl)ether	1	2.1 U	2 U	2 U	2 U	2.2 U	NA	2 U
bis(2-Ethylhexyl)phthalate	5	2.1 U	2 U	2.7	2 U	2.2 U	NA	2 U
Butyl benzyl phthalate	NS	2.1 U	2 U	2 U	2 U	2.2 U	NA	2 U
Caprolactam	NS	5.3 U	5 U	5 U	5 U	5.4 U	NA	2 U
Carbazole	NS	2.1 U	2 U	2 U	2 U	2.2 U	NA	1 U
Chrysene	NS	1.1 U	1 U	1 U	1 U	1.1 U	NA	1 U
Dibenzo(a,h)anthracene	NS	1.1 U	1 U	1 U	1 U	1.1 U	NA	NA
Dibenzofuran	NS	2.1 U	2 U	2 U	2 U	2.2 U	NA	5.1 U
Diethyl phthalate	NS	2.1 U	2 U	2 U	2 U	2.2 U	NA	2 U
Dimethyl phthalate	NS	2.1 U	2 U	2 U	2 U	2.2 U	NA	2 U
Di-n-butyl phthalate	NS	80.2	82.2	2 U	2 U	2.2 U	NA	225 D

See notes on last page.

Table 22. Wastewater Analytical Results
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Sample ID	NY TOGS Class	WW-INF	WW-INF	WW-EFF	WW-EFF	WW-EFF	WW-F	WW-F
Sample Date	GA GW Standards	WW-INF-11062015	WW-INF-11182015	WW-EFF-11062015	WW-DUP-001_20151106	WW-EFF-11182015	WW-F-12012015	WW-F-12032015
					WW-EFF-11062015			
SVOCs								
Di-n-octyl phthalate	0.05	2.1 UJ	2 UJ	2 UJ	2 UJ	2.2 UJ	NA	2 U
Fluoranthene	NS	1.1 U	1 U	1 U	1 U	1.1 U	NA	1 U
Fluorene	NS	1.1 U	1 U	1 U	1 U	1.1 U	NA	1 U
Hexachloro-1,3-butadiene	NS	1.1 U	1 U	1 U	1 U	1.1 U	10 UJ	1 U
Hexachlorobenzene	0.04	1.1 U	1 U	1 U	1 U	1.1 U	20 U	NA
Hexachlorocyclopentadiene	5	11 U	10 U	10 U	10 U	11 U	NA	10 U
Hexachloroethane	5	5.3 U	5 U	5 U	5 U	5.4 U	50 UJ	2 U
Indeno(1,2,3-cd)pyrene	NS	1.1 U	1 U	1 U	1 U	1.1 U	NA	NA
Isophorone	NS	2.1 U	2 U	2 U	2 U	2.2 U	NA	2 U
Naphthalene	NS	1.2	1 U	1 U	1 U	1.1 U	NA	22.8
Nitrobenzene	0.4	2.1 U	2 U	2 U	2 U	2.2 U	20 U	2 U
N-Nitrosodimethylamine	NS	NA	NA	NA	NA	NA	NA	2 U
n-Nitrosodi-n-propylamine	NS	2.1 U	2 U	2 U	2 U	2.2 U	NA	2 U
N-nitrosodiphenylamine	NS	5.3 U	5 U	5 U	5 U	5.4 U	NA	5.1 U
p-Chloroaniline	NS	2.1 UJ	2 U	2 U	2 U	2.2 U	NA	5.1 U
Pentachlorophenol	1	5.3 U	5 U	5 U	5 U	5.4 U	100 U	NA
Phenanthrene	NS	1.1 U	1 U	1 U	1 U	1.1 U	NA	1 U
Phenol	1	21.5	12.3	2 U	2 U	2.2 U	NA	2 U
Pyrene	NS	1.1 U	1 U	1 U	1 U	1.1 U	NA	1 U
Pyridine	NS	NA	NA	NA	NA	NA	20 U	NA
Total TIC, Semi-Volatile	NS	NA	NA	NA	NA	NA	NA	NA
PCBs								
Aroclor 1016	0.09	0.25 UJ	0.27 U	0.25 U	0.25 U	0.27 U	NA	0.5 U
Aroclor 1221	0.09	0.25 UJ	0.27 U	0.25 U	0.25 U	0.27 U	NA	0.5 U
Aroclor 1232	0.09	0.25 UJ	0.27 U	0.25 U	0.25 U	0.27 U	NA	0.5 U
Aroclor 1242	0.09	0.25 U	0.27 U	0.25 U	0.25 U	0.27 U	NA	0.5 U
Aroclor 1248	0.09	0.25 U	0.27 U	0.25 U	0.25 U	0.27 U	NA	0.5 U
Aroclor 1254	0.09	0.25 U	0.27 U	0.25 U	0.25 U	0.27 U	NA	0.5 U
Aroclor 1260	0.09	0.25 U	0.27 U	0.25 U	0.25 U	0.27 U	NA	0.5 U
Aroclor 1262	0.09	ND	ND	ND	ND	ND	ND	0.5 U
Aroclor 1268	0.09	ND	ND	ND	ND	ND	ND	0.5 U
Pesticides								
Chlordane (Technical)	50	NA	NA	NA	NA	NA	5 U	NA
Endrin	ND	NA	NA	NA	NA	NA	0.0001 U	NA
Gamma-BHC	NS	NA	NA	NA	NA	NA	0.0001 U	NA
Heptachlor	0.04	NA	NA	NA	NA	NA	0.0001 U	NA
Heptachlor epoxide	0.03	NA	NA	NA	NA	NA	0.0001 U	NA
Methoxychlor	35	NA	NA	NA	NA	NA	0.0002 U	NA
Toxaphene	0.06	NA	NA	NA	NA	NA	0.0025 U	NA

See notes on last page.

Table 22. Wastewater Analytical Results
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Sample ID	NY TOGS Class	WW-INF	WW-INF	WW-EFF	WW-EFF	WW-EFF	WW-F	WW-F
Sample Date	GA GW Standards	WW-INF-11062015	WW-INF-11182015	WW-EFF-11062015	WW-DUP-001_20151106	WW-EFF-11182015	WW-F-12012015	WW-F-12032015
					WW-EFF-11062015			
Metals - Total								
Aluminum	NS	13800	2060	9090	9250	289	NA	NA
Antimony	3	4.8 B	7.6	14.2	12.8	6.6	NA	NA
Arsenic	25	10.7	11	30.2	28.4	15.1	500 U	NA
Barium	1000	360	254	260	207	143 B	140 B	NA
Beryllium	NS	1.1	1 U	0.9 B	0.8 B	1 U	NA	NA
Cadmium	5	1.9 B	2.3 B	1.8 B	1.8 B	1.6 B	25 U	NA
Calcium	NS	67100	78200	169000	154000	77000	NA	NA
Chromium	50	16.5	3.3 B	9.7 B	9.3 B	1.1 B	50 U	NA
Chromium VI	50	0.013 J	0.01 U	0.01 U	0.01 U	0.01 U	NA	NA
Cobalt	NS	18 J	4.7 B	6.2 J	6.4 J	1.3 B	NA	NA
Copper	200	46.7	25.4	43.1	40.2	21.7	NA	NA
Iron	300	26600	4650	10700	9860	1640	NA	NA
Lead	25	101 J	68	74.5 J	76.1	35.6	54 B	NA
Magnesium	NS	17800	15600	24600	24500	15900	NA	NA
Manganese	300	4050 J	2180	879 J	823 J	1370	NA	NA
Mercury	0.7	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	NA
Nickel	100	24.9	9.6 B	12.4	11.7	5.2 B	NA	NA
Potassium	NS	88800	66500	106000	102000	72600	NA	NA
Selenium	10	3.2 B	10 U	3.7 B	3.7 B	10 U	500 U	NA
Silver	50	2.7 B	10 U	2.1 B	2.4 B	10 U	50 U	NA
Sodium	20000	30000	36200	71500	64600	40000	NA	NA
Thallium	NS	10 U	2 U	10 UB	10 U	2 U	NA	NA
Vanadium	NS	30 B	6.8 B	19.9 B	19.6 B	1.5 B	NA	NA
Zinc	NS	1460 J	269	1140 J	1140 J	143	NA	NA
Metals - Dissolved								
Aluminum	NS	460	216	455	200 UB	183 B	NA	NA
Antimony	3	4.5 B	7.8	12.4	13.5	5.6 B	NA	NA
Arsenic	25	6.6	8	22.1	22.1	14.1	NA	NA
Barium	1000	266	231	127 B	131 B	139 B	NA	NA
Beryllium	NS	1 UB	1 U	1 UB	1 UB	1 U	NA	NA
Cadmium	5	3 U	0.5 B	0.5 B	3 U	0.8 B	NA	NA
Calcium	NS	72600	78700	154000	158000	76800	NA	NA
Chromium	50	2.3 B	1.1 B	0.8 B	0.9 B	0.9 B	NA	NA
Cobalt	NS	11.3 B	3.5 B	50 UB	50 UB	0.9 B	NA	NA
Copper	200	6.2 B	10 UB	5.2 B	3.4 B	15.6	NA	NA
Iron	300	8820	1140	519 J	220 J	1380	NA	NA
Lead	25	22.1	27	10.9	6.6	30.9	NA	NA
Magnesium	NS	17300	15100	23100	23700	15800	NA	NA
Manganese	300	4090	2160	680	681	1360	NA	NA
Mercury	0.7	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	NA	NA
Nickel	100	12.3	7.2 B	2 B	2.5 B	5.5 B	NA	NA
Potassium	NS	92900 J	67600	99800 J	104000 J	72100	NA	NA
Selenium	10	4 B	10 U	3.2 B	3.2 B	10 U	NA	NA
Silver	50	10 U	10 U	10 U	2.2 B	10 U	NA	NA
Sodium	20000	31800	36900	64800	67100	39800	NA	NA
Thallium	NS	10 U	2 U	10 UB	10 UB	2 U	NA	NA
Vanadium	NS	10.6 B	2.8 B	7.6 B	7.2 B	1.7 B	NA	NA
Zinc	NS	281 J	88.6	215 J	123 J	110	NA	NA
Herbicides								
2,4,5-TP (Silvex)	NS	NA	NA	NA	NA	NA	0.0015 U	NA
2,4-D	NS	NA	NA	NA	NA	NA	5 U	NA
General Chemistry								
Ignitability	NS	NA	NA	NA	NA	NA	200 >	NA
Total Suspended Solids	NS	169	59	168	181	7.3	NA	NA

See notes on last page.

Table 22. Wastewater Analytical Results
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Sample ID	NY TOGS Class	WW-INF	WW-INF	WW-EFF	WW-EFF	WW-EFF	WW-F	WW-F
Sample Date	GA GW Standards	WW-INF-11062015	WW-INF-11182015	WW-EFF-11062015	WW-DUP-001_20151106	WW-EFF-11182015	WW-F-12012015	WW-F-12032015
					WW-EFF-11062015			
Miscellaneous								
Sufide Reactivity	NS	NA	NA	NA	NA	NA	100 U	NA
Cyanide Reactivity	NS	NA	NA	NA	NA	NA	10 U	NA
Corrosivity	NS	NA	NA	NA	NA	NA	5.46 NC	NA
Notes:								
Results are reported in micrograms per liter (ug/l).								
NA	Not Analyzed							
NS	No Standard							
UB	Results considered non-detect at the listed value due to blank contamination.							
B	Result is between the method detection limit and the reporting limit.							
J or JN	Estimated Result							
R	Rejected Result							
Bold	Detection							
Bold	Exceedance of GWQS							

Table 23. Waste Characterization Analytical Results
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Waste Stream:			Non-Hazardous Material												
Disposal Facility:			MCLF	MCLF	MCLF/Casella	MCLF/Casella	MCLF/Casella	MCLF	MCLF/Casella	MCLF/Casella	MCLF/Casella	MCLF/Casella	MCLF/Casella	MCLF	MCLF
Sample ID:	Maximum TCLP Concentration	Units		WC-B2	WC-B2	WC-B2	WC-B2	WC-B3	WC-B4	WC-B4	WC-B4	WC-B4	WC-B4	WC-B4	WC-B4
Sample Date:				42263	10/9/2015	10/20/2015	10/29/2015	1/21/2016	9/24/2015	10/15/2015	11/17/2015	12/16/2015	1/13/2016	1/28/2016	3/1/2016
Sample Name:			WC-B1	WC-B2-09162015	WC-B2-100915	WC-B2-102015	WC-B2-102915	WC-B3-01212016	WC-B4-092415	WC-B4-101515	WC-B4-11172015	WC-B4-12162015	WC-B4-01132016	WC-B4-01282016	WC-B4-03012016
VOCs															
1,1,1-Trichloroethane	NS	ug/kg	2.3 U	2.0 U	2.2 U	2.3 U	2.3 U	2.0 U	2.1 U	120 U	2.2 U	2.2 U	2.6 U	2.1 U	2.3 U
1,1,2,2-Tetrachloroethane	NS	ug/kg	2.3 U	2.0 U	2.2 U	2.3 U	2.3 U	2.0 U	2.1 U	120 U	2.2 U	2.2 U	2.6 U	2.1 U	2.3 U
1,1,2-trichloro-1,2,2-trifluoroethane	NS	ug/kg	5.7 U	5.1 U	5.6 U	5.7 U	5.9 U	5.1 U	5.2 U	290 U	5.5 U	5.6 U	6.5 U	5.2 U	5.7 U
1,1,2-Trichloroethane	NS	ug/kg	2.3 U	2.0 U	2.2 U	2.3 U	2.3 U	2.0 U	2.1 U	120 U	2.2 U	2.2 U	2.6 U	2.1 U	2.3 U
1,1-Dichloroethane	NS	ug/kg	1.1 U	1.0 U	1.1 U	1.1 U	1.2 U	1.0 U	1.0 U	59 U	1.1 U	1.1 U	1.3 U	1.0 U	1.1 U
1,1-Dichloroethene	NS	ug/kg	1.1 U	1.0 U	1.1 U	1.1 U	1.2 U	1.0 U	1.0 U	59 U	1.1 U	1.1 U	1.3 U	1.0 U	1.1 U
1,2,4-Trichlorobenzene	NS	ug/kg	5.7 U	5.1 U	5.6 U	5.7 U	5.9 U	5.1 U	5.2 U	290 U	5.5 U	5.6 U	6.5 U	5.2 U	5.7 U
1,2-Dibromo-3-chloropropane	NS	ug/kg	2.3 U	2.0 U	2.2 U	2.3 U	2.3 U	2.0 U	2.1 U	120 U	2.2 U	2.2 U	2.6 U	2.1 U	2.3 U
1,2-Dibromoethane	NS	ug/kg	1.1 U	1.0 U	1.1 U	1.1 U	1.2 U	1.0 U	1.0 U	59 U	1.1 U	1.1 U	1.3 U	1.0 U	1.1 U
1,2-Dichlorobenzene	NS	ug/kg	1.1 U	1.0 U	1.1 U	1.1 U	1.2 U	1.0 U	1.0 U	59 U	1.1 U	1.1 U	1.3 U	4.7	1.1 U
1,2-Dichloroethane	NS	ug/kg	1.1 U	1.0 U	1.1 U	1.1 U	1.2 U	1.0 U	1.0 U	59 U	1.1 U	1.1 U	1.3 U	1.0 U	1.1 U
1,2-Dichloropropane	NS	ug/kg	2.3 U	2.0 U	2.2 U	2.3 U	2.3 U	2.0 U	2.1 U	120 U	2.2 U	2.2 U	2.6 U	2.1 U	2.3 U
1,3-Dichlorobenzene	NS	ug/kg	1.1 U	1.0 U	1.1 U	1.1 U	1.2 U	1.0 U	1.0 U	59 U	1.1 U	1.1 U	1.3 U	1.0 U	1.1 U
1,4-Dichlorobenzene	NS	ug/kg	1.1 U	1.0 U	1.1 U	1.1 U	1.2 U	1.0 U	1.0 U	59 U	1.1 U	1.1 U	1.3 U	0.54 J	1.1 U
2-Butanone	NS	ug/kg	11 U	10 U	11 U	11 U	12 U	10 U	10 U	590 U	11 U	11 U	13 U	5.4 J	11 U
2-Hexanone	NS	ug/kg	5.7 U	5.1 U	5.6 U	5.7 U	5.9 U	5.1 U	5.2 U	290 U	5.5 U	5.6 U	6.5 U	5.2 U	5.7 U
4-Methyl-2-pentanone	NS	ug/kg	5.7 U	5.1 U	5.6 U	5.7 U	5.9 U	5.1 U	5.2 U	290 U	5.5 U	5.6 U	6.5 U	5.2 U	5.7 U
Acetone	NS	ug/kg	11 U	10 U	11 U	11 U	12 U	10 U	10 U	590 U	11 U	9.9 J	14.2	233 E	11 U
Benzene	NS	ug/kg	0.57 U	0.51 U	0.56 U	0.57 U	0.59 U	0.51 U	0.52 U	29 U	0.55 U	0.56 U	0.25 J	2.4	0.57 U
Bromodichloromethane	NS	ug/kg	2.3 U	2.0 U	2.2 U	2.3 U	2.3 U	2.0 U	2.1 U	120 U	2.2 U	2.2 U	2.6 U	2.1 U	2.3 U
Bromoform	NS	ug/kg	5.7 U	5.1 U	5.6 U	5.7 U	5.9 U	5.1 U	5.2 U	290 U	5.5 U	5.6 U	6.5 U	5.2 U	5.7 U
Bromomethane	NS	ug/kg	5.7 U	5.1 U	5.6 U	5.7 U	5.9 U	5.1 U	5.2 U	290 U	5.5 U	5.6 U	6.5 U	5.2 U	5.7 U
Carbon Disulfide	NS	ug/kg	2.3 U	2.0 U	2.2 U	2.3 U	2.3 U	2.0 U	2.1 U	120 U	2.2 U	2.2 U	2.6 U	2.1 U	2.3 U
Carbon Tetrachloride	NS	ug/kg	2.3 U	2.0 U	2.2 U	2.3 U	2.3 U	2.0 U	2.1 U	120 U	2.2 U	2.2 U	2.6 U	2.1 U	2.3 U
Chlorobenzene	NS	ug/kg	2.3 U	2.0 U	2.2 U	2.3 U	2.3 U	2.0 U	2.1 U	120 U	2.2 U	2.2 U	2.6 U	2.1 U	2.3 U
Chloroethane	NS	ug/kg	5.7 U	5.1 U	5.6 U	5.7 U	5.9 U	5.1 U	5.2 U	290 U	5.5 U	5.6 U	6.5 U	5.2 U	5.7 U
Chloroform	NS	ug/kg	2.3 U	2.0 U	2.2 U	2.3 U	2.3 U	2.0 U	2.1 U	120 U	2.2 U	2.2 U	2.6 U	2.1 U	2.3 U
Chloromethane	NS	ug/kg	5.7 U	5.1 U	5.6 U	5.7 U	5.9 U	5.1 U	5.2 U	290 U	5.5 U	5.6 U	6.5 U	5.2 U	5.7 U
cis-1,2-Dichloroethene	NS	ug/kg	1.1 U	1.0 U	1.1 U	1.1 U	1.2 U	1.0 U	1.0 U	59 U	1.1 U	1.1 U	1.3 U	1.0 U	1.1 U
cis-1,3-Dichloropropene	NS	ug/kg	2.3 U	2.0 U	2.2 U	2.3 U	2.3 U	2.0 U	2.1 U	120 U	2.2 U	2.2 U	2.6 U	2.1 U	2.3 U
Cyclohexane	NS	ug/kg	2.3 U	2.0 U	2.2 U	2.3 U	2.3 U	2.0 U	2.1 U	120 U	2.2 U	2.2 U	2.6 U	1.7 J	2.3 U
Dibromochloromethane	NS	ug/kg	2.3 U	2.0 U	2.2 U	2.3 U	2.3 U	2.0 U	2.1 U	120 U	2.2 U	2.2 U	2.6 U	2.1 U	2.3 U
Dichlorodifluoromethane	NS	ug/kg	5.7 U	5.1 U	5.6 U	5.7 U	5.9 U	5.1 U	5.2 U	290 U	5.5 U	5.6 U	6.5 U	5.2 U	5.7 U
Ethylbenzene	NS	ug/kg	0.57 J	1.0 U	1.1 U	0.65 J	0.32 J	2.8	1.0 U	3,070	1.1 U	3.8	2.3	1,030	0.29 J
Isopropylbenzene	NS	ug/kg	2.3 U	2.0 U	2.2 U	2.3 U	2.3 U	1.8 J	2.1 U	665	2.2 U	3.2	0.42 J	15.6	2.3 U
Methyl acetate	NS	ug/kg	5.7 U	5.1 U	5.6 U	6.1	5.9 U	5.1 U	5.2 U	290 U	5.5 U	2.3 J	6.5 U	3.4 J	14.4
Methyl tert-butyl ether	NS	ug/kg	1.1 U	1.0 U	1.1 U	1.1 U	1.2 U	1.0 U	1.0 U	59 U	1.1 U	1.1 U	1.3 U	1.0 U	1.1 U
Methylcyclohexane	NS	ug/kg	7.0	2.0 U	2.2 U	2.3 U	2.3 U	2.0 U	2.1 U	15.1 J	2.2 U	2.2 U	2.6 U	70.1	2.3 U
Methylene Chloride	NS	ug/kg	5.7 U	5.1 U	5.6 U	5.7 U	5.9 U	5.1 U	5.2 U	290 U	5.5 U	2.0 J	6.5 U	5.2 U	5.7 U
Styrene	NS	ug/kg	2.3 U	2.0 U	2.2 U	2.3 U	2.3 U	2.0 U	2.1 U	120 U	2.2 U	2.2 U	2.6 U	2.1 U	2.3 U
Tetrachloroethene	NS	ug/kg	2.3 U	2.0 U	2.2 U	2.3 U	2.3 U	2.0 U	2.1 U	120 U	2.2 U	2.2 U	2.6 U	2.1 U	2.3 U
Toluene	NS	ug/kg	1.1 U	1.0 U	1.1 U	1.1 U	1.2 U	0.57 J	1.0 U	194	1.1 U	1.1 U	0.53 J	600	1.1 U
trans-1,2-Dichloroethene	NS	ug/kg	1.1 U	1.0 U	1.1 U	1.1 U	1.2 U	1.0 U	1.0 U	59 U	1.1 U	1.1 U	1.3 U	1.0 U	1.1 U
trans-1,3-Dichloropropene	NS	ug/kg	2.3 U	2.0 U	2.2 U	2.3 U	2.3 U	2.0 U	2.1 U	120 U	2.2 U	2.2 U	2.6 U	2.1 U	2.3 U
Trichloroethene	NS	ug/kg	1.1 U	1.0 U	1.1 U	1.1 U	1.2 U	1.0 U	1.0 U	59 U	1.1 U	1.1 U	1.3 U	1.0 U	1.1 U
Trichlorofluoromethane	NS	ug/kg	5.7 U	5.1 U	5.6 U	5.7 U	5.9 U	5.1 U	5.2 U	290 U	5.5 U	5.6 U	6.5 U	5.2 U	5.7 U
Vinyl Chloride	NS	ug/kg	2.3 U	2.0 U	2.2 U	2.3 U	2.3 U	2.0 U	2.1 U	120 U	2.2 U	2.2 U	2.6 U	2.1 U	2.3 U
Xylenes (total)	NS	ug/kg	8.1	1.0 U	1.1 U	3.9	0.54 J	27.1	0.56 J	28,800	1.1	31.9	19.3	8,380	1.2

See notes on last page

Table 23. Waste Characterization Analytical Results
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Waste Stream:			Non-Hazardous Material												
Disposal Facility:			MCLF	MCLF	MCLF/Casella	MCLF/Casella	MCLF/Casella	MCLF	MCLF/Casella	MCLF/Casella	MCLF/Casella	MCLF/Casella	MCLF/Casella	MCLF	MCLF
Sample ID:	Maximum TCLP Concentration	Units		WC-B2	WC-B2	WC-B2	WC-B2	WC-B3	WC-B4	WC-B4	WC-B4	WC-B4	WC-B4	WC-B4	WC-B4
Sample Date:				42263	10/9/2015	10/20/2015	10/29/2015	1/21/2016	9/24/2015	10/15/2015	11/17/2015	12/16/2015	1/13/2016	1/28/2016	3/1/2016
Sample Name:			WC-B1	WC-B2-09162015	WC-B2-100915	WC-B2-102015	WC-B2-102915	WC-B3-01212016	WC-B4-092415	WC-B4-101515	WC-B4-11172015	WC-B4-12162015	WC-B4-01132016	WC-B4-01282016	WC-B4-03012016
SVOCs															
1,1'-Biphenyl	NS	ug/kg	72 U	74 U	73 U	75 U	74 U	74 U	67 U	21.4 J	73 U	72 U	79 U	67 U	73 U
2,2'-Oxybis(1-Chloropropane)	NS	ug/kg	72 U	74 U	73 U	75 U	74 U	74 U	67 U	72 U	73 U	72 U	79 U	67 U	73 U
2,4,5-Trichlorophenol	NS	ug/kg	180 U	180 U	180 U	190 U	180 U	180 U	170 U	180 U	180 U	180 U	200 U	170 U	180 U
2,4,6-Trichlorophenol	NS	ug/kg	180 U	180 U	180 U	190 U	190 U	180 U	170 U	180 U	180 U	180 U	200 U	170 U	180 U
2,4-Dichlorophenol	NS	ug/kg	180 U	180 U	180 U	190 U	190 U	180 U	170 U	180 U	180 U	180 U	200 U	170 U	180 U
2,4-Dimethylphenol	NS	ug/kg	180 U	180 U	180 U	190 U	190 U	180 U	170 U	180 U	180 U	180 U	200 U	170 U	180 U
2,4-Dinitrophenol	NS	ug/kg	180 U	180 U	180 U	190 U	190 U	180 U	170 U	180 U	180 U	180 U	200 U	170 U	180 U
2,4-Dinitrotoluene	NS	ug/kg	36 U	37 U	36 U	38 U	37 U	37 U	33 U	36 U	36 U	36 U	40 U	34 U	36 U
2,6-Dinitrotoluene	NS	ug/kg	36 U	37 U	36 U	38 U	37 U	37 U	33 U	36 U	36 U	36 U	40 U	34 U	36 U
2-Chloronaphthalene	NS	ug/kg	72 U	74 U	73 U	75 U	74 U	74 U	67 U	72 U	73 U	72 U	79 U	67 U	73 U
2-Chlorophenol	NS	ug/kg	72 U	74 U	73 U	75 U	74 U	74 U	67 U	72 U	73 U	72 U	79 U	67 U	73 U
2-Methylnaphthalene	NS	ug/kg	72 U	74 U	73 U	75 U	74 U	16.1 J	12.9 J	233	73 U	72 U	19.3 J	115	73 U
2-Methylphenol	NS	ug/kg	72 U	74 U	73 U	75 U	74 U	74 U	67 U	72 U	73 U	72 U	79 U	67 U	73 U
2-Nitroaniline	NS	ug/kg	180 U	180 U	180 U	190 U	190 U	180 U	170 U	180 U	180 U	180 U	200 U	170 U	180 U
2-Nitrophenol	NS	ug/kg	180 U	180 U	180 U	190 U	190 U	180 U	170 U	180 U	180 U	180 U	200 U	170 U	180 U
3,3'-Dichlorobenzidine	NS	ug/kg	72 U	74 U	73 U	75 U	74 U	74 U	67 U	72 U	73 U	72 U	79 U	67 U	73 U
3-Methylphenol, 4-Methylphenol	NS	ug/kg	72 U	74 U	73 U	75 U	74 U	74 U	67 U	72 U	73 U	72 U	79 U	67 U	73 U
3-Nitroaniline	NS	ug/kg	180 U	180 U	180 U	190 U	190 U	180 U	170 U	180 U	180 U	180 U	200 U	170 U	180 U
4,6-Dinitro-2-methylphenol	NS	ug/kg	180 U	180 U	180 U	190 U	190 U	180 U	170 U	180 U	180 U	180 U	200 U	170 U	180 U
4-Bromophenyl-phenylether	NS	ug/kg	72 U	74 U	73 U	75 U	74 U	74 U	67 U	72 U	73 U	72 U	79 U	67 U	73 U
4-Chloro-3-Methylphenol	NS	ug/kg	180 U	180 U	180 U	190 U	190 U	180 U	170 U	180 U	180 U	180 U	200 U	170 U	180 U
4-Chloroaniline	NS	ug/kg	180 U	180 U	180 U	190 U	190 U	180 U	170 U	180 U	180 U	180 U	200 U	170 U	180 U
4-Chlorophenyl-phenylether	NS	ug/kg	72 U	74 U	73 U	75 U	74 U	74 U	67 U	72 U	73 U	72 U	79 U	67 U	73 U
4-Nitroaniline	NS	ug/kg	180 U	180 U	180 U	190 U	190 U	180 U	170 U	180 U	180 U	180 U	200 U	170 U	180 U
4-Nitrophenol	NS	ug/kg	360 U	370 U	360 U	380 U	370 U	370 U	330 U	360 U	360 U	360 U	400 U	340 U	360 U
Acenaphthene	NS	ug/kg	36 U	37 U	36 U	38 U	37 U	37 U	33 U	46.4	36 U	36 U	40 U	34 U	36 U
Acenaphthylene	NS	ug/kg	36 U	37 U	36 U	51.7	37 U	37 U	33 U	85.5	36 U	36 U	40 U	34 U	36 U
Acetophenone	NS	ug/kg	180 U	180 U	180 U	190 U	190 U	180 U	170 U	180 U	180 U	180 U	200 U	31.5 J	180 U
Anthracene	NS	ug/kg	36 U	37 U	36 U	79.2	37 U	17.0 J	33 U	153	36 U	36 U	40 U	34 U	36 U
Atrazine	NS	ug/kg	72 U	74 U	73 U	75 U	74 U	74 U	67 U	75 U	72 U	72 U	79 U	67 U	73 U
Benzaldehyde	NS	ug/kg	180 U	180 U	180 U	190 U	190 U	180 U	170 U	180 U	180 U	180 U	200 U	170 U	180 U
Benzo(a)anthracene	NS	ug/kg	16.1 J	37 U	20.7 J	278	37 U	61.8	33 U	426	36 U	36 U	40 U	34 U	24.3 J
Benzo(a)pyrene	NS	ug/kg	11.0 J	37 U	18.1 J	313	37 U	59.3	33 U	527	36 U	36 U	40 U	34 U	19.3 J
Benzo(b)fluoranthene	NS	ug/kg	16.2 J	37 U	21.1 J	379	37 U	84.0	33 U	684	36 U	36 U	17.7 J	34 U	33.0 J
Benzo(g,h,i)perylene	NS	ug/kg	36 U	37 U	14.4 J	212	37 U	39.8	33 U	382	36 U	36 U	40 U	34 U	17.5 J
Benzo(k)fluoranthene	NS	ug/kg	36 U	37 U	36 U	148	37 U	37.4	33 U	201	36 U	36 U	40 U	34 U	36 U
bis(2-Chloroethoxy)methane	NS	ug/kg	72 U	74 U	73 U	75 U	74 U	74 U	67 U	72 U	73 U	72 U	79 U	67 U	73 U
bis(2-Chloroethyl)ether	NS	ug/kg	72 U	74 U	73 U	75 U	74 U	74 U	67 U	72 U	73 U	72 U	79 U	67 U	73 U
bis(2-Ethylhexyl)phthalate	NS	ug/kg	76.0	74 U	73 U	75 U	74 U	74 U	67 U	81.4	73 U	72 U	79 U	1,440	46.3 J
Butylbenzylphthalate	NS	ug/kg	72 U	74 U	73 U	75 U	74 U	74 U	67 U	72 U	73 U	72 U	79 U	203	73 U
Caprolactam	NS	ug/kg	72 U	74 U	73 U	75 U	74 U	74 U	67 U	72 U	73 U	72 U	79 U	67 U	73 U
Carbazole	NS	ug/kg	72 U	74 U	73 U	22.4 J	74 U	74 U	67 U	38.6 J	73 U	72 U	79 U	67 U	73 U
Chrysene	NS	ug/kg	14.4 J	37 U	16.6 J	290	37 U	73.8	33 U	434	36 U	36 U	40 U	34 U	32.8 J
Dibenzo(a,h)anthracene	NS	ug/kg	36 U	37 U	36 U	43.1	37 U	37 U	33 U	96.5	36 U	36 U	40 U	34 U	36 U
Dibenzofuran	NS	ug/kg	72 U	74 U	73 U	75 U	74 U	74 U	67 U	31.1 J	73 U	72 U	79 U	67 U	73 U
Diethylphthalate	NS	ug/kg	72 U	74 U	73 U	75 U	74 U	74 U	67 U	72 U	73 U	72 U	79 U	67 U	73 U
Dimethylphthalate	NS	ug/kg	72 U	74 U	73 U	75 U	74 U	74 U	67 U	72 U	73 U	72 U	79 U	67 U	73 U
Di-n-Butylphthalate	NS	ug/kg	72 U	74 U	73 U	75 U	74 U	74 U	67 U	75 U	73 U	72 U	79 U	36.0 J	73 U
Di-n-Octylphthalate	NS	ug/kg	72 U	74 U	73 U	75 U	74 U	74 U	67 U	72 U	73 U	72 U	79 U	67 U	73 U
Fluoranthene	NS	ug/kg	26.9 J	37 U	31.6 J	472	37 U	128	33 U	788	36 U	36 U	27.8 J	34 U	45.6
Fluorene	NS	ug/kg	36 U	37 U	36 U	29.8 J	37 U	37 U	33 U	64.8	36 U	36 U	40 U	34 U	36 U
Hexachlorobenzene	NS	ug/kg	72 U	74 U	73 U	75 U	74 U	74 U	67 U	72 U	73 U	72 U	79 U	67 U	73 U
Hexachlorobutadiene	NS	ug/kg	36 U	37 U	36 U	38 U	37 U	37 U	33 U	36 U	36 U	36 U	40 U	34 U	36 U
Hexachlorocyclopentadiene	NS	ug/kg	360 U	370 U	360 U	380 U	370 U	370 U	330 U	360 U	360 U	360 U	400 U	340 U	360 U
Hexachloroethane	NS	ug/kg	180 U	180 U	180 U	190 U	190 U	180 U	170 U	180 U	180 U	180 U	200 U	170 U	180 U
Indeno(1,2,3-cd)pyrene	NS	ug/kg	36 U	37 U	36 U	226	37 U	43.1	33 U	390	36 U	36 U	40 U	34 U	58.7
Isophorone	NS	ug/kg	72 U	74 U	73 U	75 U	74 U	74 U	67 U	72 U	73 U	72 U	79 U	67 U	73 U
Naphthalene	NS	ug/kg	26.9 J	37 U	36 U	38 U	37 U	60.6	17.2 J	1,050	36 U	19.2 J	46.8	260	36 U
Nitrobenzene	NS	ug/kg	72 U	74 U	73 U	75 U	74 U	74 U	67 U	72 U	73 U	72 U	79 U	67 U	73 U
N-Nitroso-di-n-propylamine	NS	ug/kg	72 U	74 U	73 U	75 U	74 U	74 U	67 U	72 U	73 U	72 U	79 U	67 U	73 U
N-Nitrosodiphenylamine	NS	ug/kg	180 U	180 U	180 U	190 U	190 U	180 U	170 U	180 U	180 U	180 U	200 U	170 U	180 U
Pentachlorophenol	NS	ug/kg	180 U	180 U	180 U	190 U	190 U	180 U	170 U	180 U	180 U	180 U	200 U	170 U	180 U
Phenanthrene	NS	ug/kg	18.1 J	37 U	16.5 J	249	37 U	51.4	33 U	473	36 U	36 U	27.9 J	26.1 J	24.9 J
Phenol	NS	ug/kg	72 U	74 U	73 U	75 U	74 U	74 U	67 U	72 U	73 U	72 U	79 U	67 U	73 U
Pyrene	NS	ug/kg	22.0 J	37 U	28.3 J	513	37 U	103	33 U	778	36 U	36 U	25.9 J	34 U	46.2

See notes on last page

Table 23. Waste Characterization Analytical Results
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Waste Stream:			Non-Hazardous Material												
Disposal Facility:			MCLF	MCLF	MCLF/Casella	MCLF/Casella	MCLF/Casella	MCLF	MCLF/Casella	MCLF/Casella	MCLF/Casella	MCLF/Casella	MCLF/Casella	MCLF	MCLF
Sample ID:	Maximum TCLP Concentration	Units		WC-B2	WC-B2	WC-B2	WC-B2	WC-B3	WC-B4	WC-B4	WC-B4	WC-B4	WC-B4	WC-B4	WC-B4
Sample Date:				42263	10/9/2015	10/20/2015	10/29/2015	1/21/2016	9/24/2015	10/15/2015	11/17/2015	12/16/2015	1/13/2016	1/28/2016	3/1/2016
Sample Name:			WC-B1	WC-B2-09162015	WC-B2-100915	WC-B2-102015	WC-B2-102915	WC-B3-01212016	WC-B4-092415	WC-B4-101515	WC-B4-11172015	WC-B4-12162015	WC-B4-01132016	WC-B4-01282016	WC-B4-03012016
VOCs TCLP Leachate															
1,1-Dichloroethene	0.7	mg/L	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
1,2-Dichloroethane	0.5	mg/L	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
1,4-Dichlorobenzene	7.5	mg/L	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
2-Butanone	200	mg/L	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Benzene	0.5	mg/L	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U
Carbon Tetrachloride	0.5	mg/L	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Chlorobenzene	100	mg/L	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Chloroform	6	mg/L	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Tetrachloroethene	0.7	mg/L	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0027 J	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Trichloroethene	0.5	mg/L	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Vinyl Chloride	0.2	mg/L	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
SVOCs TCLP Leachate															
1,4-Dichlorobenzene	7.5	mg/L	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U
2,4,5-Trichlorophenol	400	mg/L	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
2,4,6-Trichlorophenol	2	mg/L	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
2,4-Dinitrotoluene	0.13	mg/L	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U
2-Methylphenol	200	mg/L	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U
3-Methylphenol, 4-Methylphenol	200	mg/L	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U
Hexachlorobenzene	0.13	mg/L	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U
Hexachlorobutadiene	0.5	mg/L	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
Hexachloroethane	3	mg/L	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
Nitrobenzene	2	mg/L	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U
Pentachlorophenol	100	mg/L	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Pyridine	5	mg/L	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U
Pesticide TCLP Leachate															
Chlordane (Technical)	0.03	mg/L	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Endrin	0.02	mg/L	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U
Gamma-BHC (Lindane)	0.4	mg/L	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U
Heptachlor	.008	mg/L	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U
Heptachlor Epoxide	.008	mg/L	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U
Methoxychlor	NS	mg/L	0.00020 U	0.00020 U	0.00020 U	0.00020 U	0.00020 U	0.00020 U	0.00020 U	0.00020 U	0.00020 U	0.00020 U	0.00020 U	0.00020 U	0.00020 U
Toxaphene	NS	mg/L	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U
See notes on last page															
Herbicide TCLP Leachate															
2,4,5-TP	1	mg/L	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U
2,4-D	10	mg/L	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
PCBs															
Aroclor-1016	NS	ug/kg	37 U	36 U	37 U	36 U	34 U	37 U	36 U	34 U	36 U	33 U	39 U	36 U	37 U
Aroclor-1221	NS	ug/kg	37 U	36 U	37 U	36 U	34 U	37 U	36 U	34 U	36 U	33 U	39 U	36 U	37 U
Aroclor-1232	NS	ug/kg	37 U	36 U	37 U	36 U	34 U	37 U	36 U	34 U	36 U	33 U	39 U	36 U	37 U
Aroclor-1242	NS	ug/kg	37 U	36 U	37 U	36 U	34 U	37 U	36 U	34 U	36 U	33 U	39 U	36 U	37 U
Aroclor-1248	NS	ug/kg	37 U	36 U	37 U	36 U	34 U	37 U	36 U	34 U	36 U	33 U	39 U	36 U	37 U
Aroclor-1254	NS	ug/kg	37 U	36 U	37 U	36 U	34 U	37 U	36 U	34 U	36 U	33 U	39 U	36 U	37 U
Aroclor-1260	NS	ug/kg	37 U	36 U	37 U	36 U	34 U	37 U	36 U	34 U	36 U	33 U	39 U	36 U	37 U
Aroclor-1262	NS	ug/kg	37 U	36 U	37 U	36 U	34 U	37 U	36 U	34 U	36 U	33 U	39 U	36 U	37 U
Aroclor-1268	NS	ug/kg	37 U	36 U	37 U	36 U	34 U	37 U	36 U	34 U	36 U	33 U	39 U	36 U	37 U
Metals TCLP Leachate															
Arsenic	5	mg/L	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.019 B
Barium	100	mg/L	0.95 B	0.50 B	0.77 B	0.93 B	1.3	1.5	2.5	2.0	1.4	0.56 B	0.36 B	0.84 B	0.60 B
Cadmium	1	mg/L	0.0023 B	0.025 U	0.0047 B	0.0031 B	0.0062 B	0.0077 B	0.013 B	0.0063 B	0.018 B	0.0021 B	0.025 U	0.0014 B	0.0031 B
Chromium	5	mg/L	0.0061 B	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.0045 B	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
Lead	5	mg/L	0.19 B	0.023 B	0.13 B	0.093 B	0.27 B	0.91	0.46 B	0.91	0.70	0.040 B	0.030 B	0.021 B	0.026 B
Mercury	0.2	mg/L	0.00020 U	0.00020 U	0.00020 U	0.00020 U	0.00020 U	0.00020 U	0.00020 U	0.00020 U	0.00020 U	0.00020 U	0.00020 U	0.00020 U	0.00020 U
Selenium	1	mg/L	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.024 B	0.50 U
Silver	5	mg/L	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
TPH															
Diesel C10-C28	NS	mg/kg	49.0	10 U	13.4	73.7	10 U	24.6	37.5	2,850	10 U	11.1	34.2	300	28.0
Gasoline C6-C10	NS	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 23. Waste Characterization Analytical Results
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Waste Stream:			Non-Hazardous Material												
Disposal Facility:			MCLF	MCLF	MCLF/Casella	MCLF/Casella	MCLF/Casella	MCLF	MCLF/Casella	MCLF/Casella	MCLF/Casella	MCLF/Casella	MCLF/Casella	MCLF	MCLF
Sample ID:	Maximum TCLP Concentration	Units		WC-B2	WC-B2	WC-B2	WC-B2	WC-B3	WC-B4	WC-B4	WC-B4	WC-B4	WC-B4	WC-B4	WC-B4
Sample Date:				42263	10/9/2015	10/20/2015	10/29/2015	1/21/2016	9/24/2015	10/15/2015	11/17/2015	12/16/2015	1/13/2016	1/28/2016	3/1/2016
Sample Name:			WC-B1	WC-B2-09162015	WC-B2-100915	WC-B2-102015	WC-B2-102915	WC-B3-01212016	WC-B4-092415	WC-B4-101515	WC-B4-11172015	WC-B4-12162015	WC-B4-01132016	WC-B4-01282016	WC-B4-03012016
Other															
Corrosivity	NS	SU	6.95 NC	5.70 NC	6.48 NC	6.75 NC	6.35 NC	7.72 NC	6.48 NC	7.98 NC	7.95 nc	8.03 NC	4.82 NC	6.56 NC	7.33 NC
Cyanide Reactivity	NS	mg/kg	11 U	11 U	11 U	11 U	11 U	11 U	11 U	11 U	11 U	11 U	12 U	11 U	11 U
Heat Content, BTU	NS	BTU	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Heat Content, BTU	NS	btu/lb	100 U	5,170	1,810	163	1,310	1,450	1,040	224	733	243	998	496	100 U
Heating Value	NS	btu/lb	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ignitability	NS	deg f	>	>	>	>	>	>	>	>	>	>	>	>	>
Paint Filter Test	NS	ml/100g	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Sufide Reactivity	NS	mg/kg	110 U	110 U	110 U	110 U	110 U	110 U	110 U	110 U	110 U	110 U	120 U	110 U	110 U
Total Organic Halides	NS	mg/kg	22 U	22 U	38.8	25 U	23 U	20 U	21 U	23 U	20 U	22 U	21 U	23 U	23 U
Solids															
Percent Solids	NS	%	91.2	89.6	89.4	88.0	88.7	90.7	93.6	92.1	91.3	91.0	83.6	87.7	88.1

Notes:
mg/kg: Milligrams per kilogram
BTU: British Thermal Units
UB: Result non-detected at the listed value due to associated blank contamination.
B: Result is between the method detection limit and the reporting limit.
J or JN: Estimated Result
R: Rejected Result
SU: System Units
btu/lb: British Thermal Units per Pound
deg F: Degrees Fahrenheit
mg/L: Milligrams per Liter
ml/100g: Milliliters per 100 grams
PCBs: Polychlorinated Biphenyls
Bolded values indicate detection.

Bolded and shaded values indicate exceedance of the maximum TCLP Concentration.

Disposal Facility:
MCLF: Middlesex County Landfill located in East Brunswick, New Jersey
Casella: Ontario County Landfill located in Stanley, New York
PSC: Republic Environmental Systems (PA), LLC located in Hatfield, Pennsylvania
York: Envirite of Pennsylvania, Inc. located in York, Pennsylvania
USE: Wayne Disposal, Inc. Site #2 Landfill located in Belleville, Michigan
Heritage: Heritage Thermal Services, Inc. located in East Liverpool, Ohio

Table 23. Waste Characterization Analytical Results
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Waste Stream:			Non-Hazardous Material													
Disposal Facility:			MCLF/Casella	MCLF/Casella	MCLF/Casella	MCLF/Casella	MCLF/Casella	MCLF/Casella	MCLF/Casella	MCLF/Casella	MCLF	MCLF/Casella	MCLF	MCLF/Casella	MCLF/Casella	MCLF/Casella
Sample ID:	Maximum TCLP Concentration	Units	WC-B4	WC-B4	WC-B5	WC-B5	WC-B5	WC-B5	WC-B5	WC-B5-01052016	WC-B5	WC-B5	WC-B6	WC-B6	WC-B6	WC-B6
Sample Date:			3/10/2016	42458	10/12/2015	10/27/2015	11/20/2015	12/8/2015	1/5/2016	3/7/2016	3/25/2016	10/14/2015	12/1/2015	12/11/2015	12/23/2015	
Sample Name:			WC-B4-03102016	WC-B4-03292016	WC-B5-101215	WC-B5-102715	WC-B5-11202015	WC-B5-12082015	WC-B5-01052016	WC-B5-03072016	WC-B5-03252016	WC-B6-101415	WC-B6-12012015	WC-B6-12112015	WC-B6-12232015	
VOCs																
1,1,1-Trichloroethane	NS	ug/kg	2.5 U	2.3 U	2.3 U	2.2 U	2.2 U	2.2 U	2.4 U	140 U	2.5 U	2.4 U	2.2 U	2.1 U	2.4 U	
1,1,2,2-Tetrachloroethane	NS	ug/kg	2.5 U	2.3 U	2.3 U	2.2 U	2.2 U	2.2 U	2.4 U	140 U	2.5 U	2.4 U	2.2 U	2.1 U	2.4 U	
1,1,2-trichloro-1,2,2-trifluoroethane	NS	ug/kg	6.2 U	5.7 U	5.6 U	5.4 U	5.6 U	5.4 U	6.0 U	350 U	6.3 U	5.9 U	5.5 U	5.3 U	6.1 U	
1,1,2-Trichloroethane	NS	ug/kg	2.5 U	2.3 U	2.3 U	2.2 U	2.2 U	2.2 U	2.4 U	140 U	2.5 U	2.4 U	2.2 U	2.1 U	2.4 U	
1,1-Dichloroethane	NS	ug/kg	1.2 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.2 U	69 U	1.3 U	1.2 U	1.1 U	1.1 U	1.2 U	
1,1-Dichloroethene	NS	ug/kg	1.2 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.2 U	69 U	1.3 U	1.2 U	1.1 U	1.1 U	1.2 U	
1,2,4-Trichlorobenzene	NS	ug/kg	6.2 U	5.7 U	5.6 U	5.4 U	5.6 U	5.4 U	6.0 U	350 U	6.3 U	5.9 U	5.5 U	5.3 U	6.1 U	
1,2-Dibromo-3-chloropropane	NS	ug/kg	2.5 U	2.3 U	2.3 U	2.2 U	2.2 U	2.2 U	2.4 U	140 U	2.5 U	2.4 U	2.2 U	2.1 U	2.4 U	
1,2-Dibromoethane	NS	ug/kg	1.2 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.2 U	69 U	1.3 U	1.2 U	1.1 U	1.1 U	1.2 U	
1,2-Dichlorobenzene	NS	ug/kg	0.54 J	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.2 U	15.8 J	1.3 U	1.2 U	1.1 U	1.1 U	1.2 U	
1,2-Dichloroethane	NS	ug/kg	1.2 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.2 U	69 U	1.3 U	1.2 U	1.1 U	1.1 U	1.2 U	
1,2-Dichloropropane	NS	ug/kg	2.5 U	2.3 U	2.3 U	2.2 U	2.2 U	2.2 U	2.4 U	140 U	2.5 U	2.4 U	2.2 U	2.1 U	2.4 U	
1,3-Dichlorobenzene	NS	ug/kg	1.2 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.2 U	69 U	1.3 U	1.2 U	1.1 U	1.1 U	1.2 U	
1,4-Dichlorobenzene	NS	ug/kg	1.2 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.2 U	69 U	1.3 U	1.2 U	1.1 U	1.1 U	1.2 U	
2-Butanone	NS	ug/kg	12 U	11 U	11 U	11 U	11 U	11 U	12 U	690 U	13 U	12 U	11 U	11 U	12 U	
2-Hexanone	NS	ug/kg	6.2 U	5.7 U	5.6 U	5.4 U	5.6 U	5.4 U	6.0 U	350 U	6.3 U	5.9 U	5.5 U	5.3 U	6.1 U	
4-Methyl-2-pentanone	NS	ug/kg	6.2 U	5.7 U	5.6 U	9.2	5.6 U	5.4 U	6.0 U	350 U	6.3 U	5.9 U	5.5 U	5.3 U	6.1 U	
Acetone	NS	ug/kg	12 U	11 U	54.1	39.2	11 U	11 U	12 U	690 U	13 U	12 U	11 U	11 U	12 U	
Benzene	NS	ug/kg	0.62 U	0.57 U	0.33 J	0.54 U	0.56 U	0.54 U	0.60 U	35 U	0.63 U	0.30 J	0.25 J	0.53 U	0.61 U	
Bromodichloromethane	NS	ug/kg	2.5 U	2.3 U	2.3 U	2.2 U	2.2 U	2.2 U	2.4 U	140 U	2.5 U	2.4 U	2.2 U	2.1 U	2.4 U	
Bromoform	NS	ug/kg	6.2 U	5.7 U	5.6 U	5.4 U	5.6 U	5.4 U	6.0 U	350 U	6.3 U	5.9 U	5.5 U	5.3 U	6.1 U	
Bromomethane	NS	ug/kg	6.2 U	5.7 U	5.6 U	5.4 U	5.6 U	5.4 U	6.0 U	350 U	6.3 U	5.9 U	5.5 U	5.3 U	6.1 U	
Carbon Disulfide	NS	ug/kg	2.5 U	2.3 U	2.3 U	2.2 U	2.2 U	2.2 U	2.4 U	35.3 J	2.5 U	2.4 U	2.2 U	2.1 U	2.4 U	
Carbon Tetrachloride	NS	ug/kg	2.5 U	2.3 U	2.3 U	2.2 U	2.2 U	2.2 U	2.4 U	140 U	2.5 U	2.4 U	2.2 U	2.1 U	2.4 U	
Chlorobenzene	NS	ug/kg	2.5 U	2.3 U	2.3 U	2.2 U	2.2 U	2.2 U	2.4 U	140 U	2.5 U	2.4 U	2.2 U	2.1 U	2.4 U	
Chloroethane	NS	ug/kg	6.2 U	5.7 U	5.6 U	5.4 U	5.6 U	5.4 U	6.0 U	350 U	6.3 U	5.9 U	5.5 U	5.3 U	6.1 U	
Chloroform	NS	ug/kg	2.5 U	2.3 U	2.3 U	2.2 U	2.2 U	2.2 U	2.4 U	140 U	2.5 U	2.4 U	2.2 U	2.1 U	2.4 U	
Chloromethane	NS	ug/kg	6.2 U	5.7 U	5.6 U	5.4 U	5.6 U	5.4 U	6.0 U	350 U	6.3 U	5.9 U	5.5 U	5.3 U	6.1 U	
cis-1,2-Dichloroethene	NS	ug/kg	1.2 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.2 U	69 U	1.3 U	1.2 U	1.1 U	1.1 U	1.2 U	
cis-1,3-Dichloropropene	NS	ug/kg	2.5 U	2.3 U	2.3 U	2.2 U	2.2 U	2.2 U	2.4 U	140 U	2.5 U	2.4 U	2.2 U	2.1 U	2.4 U	
Cyclohexane	NS	ug/kg	2.5 U	2.3 U	2.3 U	2.2 U	2.2 U	2.2 U	2.4 U	140 U	2.5 U	2.4 U	2.2 U	2.1 U	2.4 U	
Dibromochloromethane	NS	ug/kg	2.5 U	2.3 U	2.3 U	2.2 U	2.2 U	2.2 U	2.4 U	140 U	2.5 U	2.4 U	2.2 U	2.1 U	2.4 U	
Dichlorodifluoromethane	NS	ug/kg	6.2 U	5.7 U	5.6 U	5.4 U	5.6 U	5.4 U	6.0 U	350 U	6.3 U	5.9 U	5.5 U	5.3 U	6.1 U	
Ethylbenzene	NS	ug/kg	2.5	0.81 J	24.0	9.0	1.1 U	1.1 U	1.2 U	474	1.3 U	23.9	1.1 U	1.1 U	1.2 U	
Isopropylbenzene	NS	ug/kg	0.43 J	2.3 U	1.3 J	2.7	2.2 U	2.2 U	2.4 U	228	2.5 U	10.9	2.2 U	2.1 U	2.4 U	
Methyl acetate	NS	ug/kg	6.2 U	5.7 U	5.6 U	5.4 U	5.6 U	5.4 U	6.0 U	350 U	6.3 U	5.9 U	5.5 U	5.3 U	6.1 U	
Methyl tert-butyl ether	NS	ug/kg	1.2 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.2 U	69 U	1.3 U	1.2 U	1.1 U	1.1 U	1.2 U	
Methylcyclohexane	NS	ug/kg	2.2 J	2.3 U	0.45 J	2.2 U	2.2 U	2.2 U	2.4 U	375	2.5 U	2.4 U	2.2 U	2.1 U	2.4 U	
Methylene Chloride	NS	ug/kg	6.2 U	5.7 U	5.6 U	5.4 U	5.6 U	5.4 U	6.0 U	350 U	1.6 J	5.9 U	5.5 U	5.3 U	6.1 U	
Styrene	NS	ug/kg	2.5 U	2.3 U	2.3 U	2.2 U	2.2 U	2.2 U	2.4 U	140 U	2.5 U	2.4 U	2.2 U	2.1 U	2.4 U	
Tetrachloroethene	NS	ug/kg	2.5 U	2.3 U	2.3 U	2.2 U	2.2 U	2.2 U	2.4 U	140 U	2.5 U	2.4 U	2.2 U	2.1 U	2.4 U	
Toluene	NS	ug/kg	1.8	1.1 U	24.2	2.7	1.1 U	1.1 U	1.2 U	294	1.3 U	0.48 J	1.1 U	1.1 U	1.2 U	
trans-1,2-Dichloroethene	NS	ug/kg	1.2 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.2 U	69 U	1.3 U	1.2 U	1.1 U	1.1 U	1.2 U	
trans-1,3-Dichloropropene	NS	ug/kg	2.5 U	2.3 U	2.3 U	2.2 U	2.2 U	2.2 U	2.4 U	140 U	2.5 U	2.4 U	2.2 U	2.1 U	2.4 U	
Trichloroethene	NS	ug/kg	1.2 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.2 U	69 U	1.3 U	1.2 U	1.1 U	1.1 U	1.2 U	
Trichlorofluoromethane	NS	ug/kg	6.2 U	5.7 U	5.6 U	5.4 U	5.6 U	5.4 U	6.0 U	350 U	6.3 U	5.9 U	5.5 U	5.3 U	6.1 U	
Vinyl Chloride	NS	ug/kg	2.5 U	2.3 U	2.3 U	2.2 U	2.2 U	2.2 U	2.4 U	140 U	2.5 U	2.4 U	2.2 U	2.1 U	2.4 U	
Xylenes (total)	NS	ug/kg	17.4	6.0	133	91.3	1.1 U	1.1 U	1.2 U	2,280	1.3 U	218	1.1 U	1.1 U	1.2 U	

See notes on last page

Table 23. Waste Characterization Analytical Results
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Waste Stream:			Non-Hazardous Material												
Disposal Facility:			MCLF/Casella	MCLF/Casella	MCLF/Casella	MCLF/Casella	MCLF/Casella	MCLF/Casella	MCLF/Casella	MCLF	MCLF/Casella	MCLF	MCLF/Casella	MCLF/Casella	MCLF/Casella
Sample ID:	Maximum TCLP Concentration	Units	WC-B4	WC-B4	WC-B5	WC-B5	WC-B5	WC-B5	WC-B5	WC-B5	WC-B5	WC-B5	WC-B6	WC-B6	WC-B6
Sample Date:			3/10/2016	42458	10/12/2015	10/27/2015	11/20/2015	12/8/2015	1/5/2016	3/7/2016	3/25/2016	10/14/2015	12/1/2015	12/11/2015	12/23/2015
Sample Name:			WC-B4-03102016	WC-B4-03292016	WC-B5-101215	WC-B5-102715	WC-B5-11202015	WC-B5-12082015	WC-B5-01052016	WC-B5-03072016	WC-B5-03252016	WC-B6-101415	WC-B6-12012015	WC-B6-12112015	WC-B6-12232015
SVOCs															
1,1'-Biphenyl	NS	ug/kg	360 U	71 U	28.7 J	210 U	77 U	74 U	74 U	78 U	74 U	72 U	70 U	76 U	73 U
2,2'-Oxybis(1-Chloropropane)	NS	ug/kg	360 U	71 U	72 U	210 U	77 U	74 U	74 U	78 U	74 U	72 U	70 U	76 U	73 U
2,4,5-Trichlorophenol	NS	ug/kg	910 U	180 U	180 U	530 U	190 U	190 U	180 U	200 U	180 U	180 U	170 U	190 U	180 U
2,4,6-Trichlorophenol	NS	ug/kg	910 U	180 U	180 U	530 U	190 U	190 U	180 U	200 U	180 U	180 U	170 U	190 U	180 U
2,4-Dichlorophenol	NS	ug/kg	910 U	180 U	180 U	530 U	190 U	190 U	180 U	200 U	180 U	180 U	170 U	190 U	180 U
2,4-Dimethylphenol	NS	ug/kg	910 U	180 U	180 U	530 U	190 U	190 U	180 U	200 U	180 U	180 U	170 U	190 U	180 U
2,4-Dinitrophenol	NS	ug/kg	910 U	180 U	180 U	530 U	190 U	190 U	180 U	200 U	180 U	180 U	170 U	190 U	180 U
2,4-Dinitrotoluene	NS	ug/kg	180 U	36 U	36 U	110 U	39 U	37 U	37 U	39 U	37 U	36 U	35 U	38 U	36 U
2,6-Dinitrotoluene	NS	ug/kg	180 U	36 U	36 U	110 U	39 U	37 U	37 U	39 U	37 U	36 U	35 U	38 U	36 U
2-Chloronaphthalene	NS	ug/kg	360 U	71 U	72 U	210 U	77 U	74 U	74 U	78 U	74 U	72 U	70 U	76 U	73 U
2-Chlorophenol	NS	ug/kg	360 U	71 U	72 U	210 U	77 U	74 U	74 U	78 U	74 U	72 U	70 U	76 U	73 U
2-Methylnaphthalene	NS	ug/kg	360 U	71 U	269	95.6 J	77 U	74 U	74 U	152	74 U	134	70 U	76 U	73 U
2-Methylphenol	NS	ug/kg	360 U	71 U	72 U	210 U	77 U	74 U	74 U	78 U	74 U	72 U	70 U	76 U	73 U
2-Nitroaniline	NS	ug/kg	910 U	180 U	180 U	530 U	190 U	190 U	180 U	200 U	180 U	180 U	170 U	190 U	180 U
2-Nitrophenol	NS	ug/kg	910 U	180 U	180 U	530 U	190 U	190 U	180 U	200 U	180 U	180 U	170 U	190 U	180 U
3,3'-Dichlorobenzidine	NS	ug/kg	360 U	71 U	72 U	210 U	77 U	74 U	74 U	78 U	74 U	72 U	70 U	76 U	73 U
3-Methylphenol, 4-Methylphenol	NS	ug/kg	360 U	71 U	72 U	210 U	77 U	74 U	74 U	78 U	117	72 U	70 U	76 U	73 U
3-Nitroaniline	NS	ug/kg	910 U	180 U	180 U	530 U	190 U	190 U	180 U	200 U	180 U	180 U	170 U	190 U	180 U
4,6-Dinitro-2-methylphenol	NS	ug/kg	910 U	180 U	180 U	530 U	190 U	190 U	180 U	200 U	180 U	180 U	170 U	190 U	180 U
4-Bromophenyl-phenylether	NS	ug/kg	360 U	71 U	72 U	210 U	77 U	74 U	74 U	78 U	74 U	72 U	70 U	76 U	73 U
4-Chloro-3-Methylphenol	NS	ug/kg	910 U	180 U	180 U	530 U	190 U	190 U	180 U	200 U	180 U	180 U	170 U	190 U	180 U
4-Chloroaniline	NS	ug/kg	910 U	180 U	180 U	530 U	190 U	190 U	180 U	200 U	180 U	180 U	170 U	190 U	180 U
4-Chlorophenyl-phenylether	NS	ug/kg	360 U	71 U	72 U	210 U	77 U	74 U	74 U	78 U	74 U	72 U	70 U	76 U	73 U
4-Nitroaniline	NS	ug/kg	910 U	180 U	180 U	530 U	190 U	190 U	180 U	200 U	180 U	180 U	170 U	190 U	180 U
4-Nitrophenol	NS	ug/kg	1,800 U	360 U	360 U	1,100 U	390 U	370 U	370 U	390 U	370 U	360 U	350 U	380 U	360 U
Acenaphthene	NS	ug/kg	180 U	36 U	36 U	110 U	39 U	37 U	37 U	39 U	37 U	36 U	35 U	38 U	36 U
Acenaphthylene	NS	ug/kg	180 U	36 U	52.4	110 U	39 U	37 U	37 U	39 U	61.5	36 U	35 U	38 U	36 U
Acetophenone	NS	ug/kg	910 U	180 U	180 U	530 U	190 U	190 U	180 U	200 U	180 U	180 U	170 U	190 U	180 U
Anthracene	NS	ug/kg	180 U	36 U	166	110 U	39 U	37 U	37 U	39 U	108	17.9 J	35 U	38 U	36 U
Atrazine	NS	ug/kg	360 U	71 U	72 U	210 U	77 U	74 U	74 U	78 U	74 U	72 U	70 U	76 U	73 U
Benzaldehyde	NS	ug/kg	910 U	180 U	180 U	530 U	190 U	190 U	180 U	200 U	26.4 J	180 U	170 U	190 U	180 U
Benzo(a)anthracene	NS	ug/kg	180 U	29.0 J	368	110 U	39 U	37 U	37 U	39 U	207	63.0	35 U	38 U	36 U
Benzo(a)pyrene	NS	ug/kg	180 U	26.7 J	302	110 U	39 U	37 U	37 U	39 U	201	73.4	35 U	38 U	36 U
Benzo(b)fluoranthene	NS	ug/kg	180 U	36.2	373	45.4 J	39 U	37 U	37 U	39 U	266	84.3	35 U	38 U	36 U
Benzo(g,h,i)perylene	NS	ug/kg	180 U	22.0 J	186	110 U	39 U	37 U	37 U	39 U	158	56.7	35 U	38 U	36 U
Benzo(k)fluoranthene	NS	ug/kg	180 U	36 U	138	110 U	39 U	37 U	37 U	39 U	91.2	33.6 J	35 U	38 U	36 U
bis(2-Chloroethoxy)methane	NS	ug/kg	360 U	71 U	72 U	210 U	77 U	74 U	74 U	78 U	74 U	72 U	70 U	76 U	73 U
bis(2-Chloroethyl)ether	NS	ug/kg	360 U	71 U	72 U	210 U	77 U	74 U	74 U	78 U	74 U	72 U	70 U	76 U	73 U
bis(2-Ethylhexyl)phthalate	NS	ug/kg	360 U	67.4 J	72 U	210 U	77 U	74 U	74 U	63,800	74 U	69.7 J	70 U	76 U	73 U
Butylbenzylphthalate	NS	ug/kg	360 U	71 U	72 U	210 U	77 U	74 U	74 U	78 U	74 U	72 U	70 U	76 U	73 U
Caprolactam	NS	ug/kg	360 U	71 U	72 U	210 U	77 U	74 U	74 U	78 U	74 U	72 U	70 U	76 U	73 U
Carbazole	NS	ug/kg	360 U	71 U	29.4 J	210 U	77 U	74 U	74 U	78 U	41.7 J	72 U	70 U	76 U	73 U
Chrysene	NS	ug/kg	180 U	27.1 J	361	110 U	39 U	37 U	37 U	18.0 J	236	70.2	35 U	38 U	36 U
Dibenzo(a,h)anthracene	NS	ug/kg	180 U	36 U	54.4	110 U	39 U	37 U	37 U	39 U	46.0	36 U	35 U	38 U	36 U
Dibenzofuran	NS	ug/kg	360 U	71 U	72 U	210 U	77 U	74 U	74 U	78 U	74 U	72 U	70 U	76 U	73 U
Diethylphthalate	NS	ug/kg	360 U	71 U	72 U	210 U	77 U	74 U	74 U	78 U	74 U	72 U	70 U	76 U	73 U
Dimethylphthalate	NS	ug/kg	360 U	71 U	72 U	210 U	77 U	74 U	74 U	78 U	74 U	72 U	70 U	76 U	73 U
Di-n-Butylphthalate	NS	ug/kg	360 U	71 U	72 U	210 U	77 U	74 U	74 U	71.6 J	74 U	72 U	70 U	76 U	73 U
Di-n-Octylphthalate	NS	ug/kg	360 U	71 U	72 U	210 U	77 U	74 U	74 U	78 U	74 U	72 U	70 U	76 U	73 U
Fluoranthene	NS	ug/kg	180 U	51.2	925	110 U	39 U	37 U	37 U	36.7 J	425	107	35 U	38 U	36 U
Fluorene	NS	ug/kg	180 U	36 U	38.3	110 U	39 U	37 U	37 U	39 U	19.6 J	36 U	35 U	38 U	36 U
Hexachlorobenzene	NS	ug/kg	360 U	71 U	72 U	210 U	77 U	74 U	74 U	78 U	74 U	72 U	70 U	76 U	73 U
Hexachlorobutadiene	NS	ug/kg	180 U	36 U	36 U	110 U	39 U	37 U	37 U	39 U	37 U	36 U	35 U	38 U	36 U
Hexachlorocyclopentadiene	NS	ug/kg	1,800 U	360 U	360 U	1,100 U	390 U	370 U	370 U	390 U	370 U	360 U	350 U	380 U	360 U
Hexachloroethane	NS	ug/kg	910 U	180 U	180 U	530 U	190 U	190 U	180 U	200 U	180 U	180 U	170 U	190 U	180 U
Indeno(1,2,3-cd)pyrene	NS	ug/kg	180 U	22.9 J	195	110 U	39 U	37 U	37 U	39 U	149	56.3	35 U	38 U	36 U
Isophorone	NS	ug/kg	360 U	71 U	72 U	210 U	77 U	74 U	74 U	78 U	74 U	72 U	70 U	76 U	73 U
Naphthalene	NS	ug/kg	180 U	19.1 J	1,020	255	39 U	37 U	37 U	285	15.5 J	470	35 U	38 U	36 U
Nitrobenzene	NS	ug/kg	360 U	71 U	72 U	210 U	77 U	74 U	74 U	78 U	74 U	72 U	70 U	76 U	73 U
N-Nitroso-di-n-propylamine	NS	ug/kg	360 U	71 U	72 U	210 U	77 U	74 U	74 U	78 U	74 U	72 U	70 U	76 U	73 U
N-Nitrosodiphenylamine	NS	ug/kg	910 U	180 U	180 U	530 U	190 U	190 U	180 U	200 U	180 U	180 U	170 U	190 U	180 U
Pentachlorophenol	NS	ug/kg	910 U	180 U	180 U	530 U	190 U	190 U	180 U	200 U	180 U	180 U	170 U	190 U	180 U
Phenanthrene	NS	ug/kg	180 U	39.6	562	110 U	39 U	37 U	37 U	39 U	184	53.6	35 U	38 U	36 U
Phenol	NS	ug/kg	360 U	71 U	72 U	210 U	77 U	74 U	74 U	78 U	74 U	72 U	70 U	76 U	73 U
Pyrene	NS	ug/kg	180 U	46.5	777	110 U	39 U	37 U	37 U	15.7 J	347	111	35 U	38 U	36 U

See notes on last page

Table 23. Waste Characterization Analytical Results
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Waste Stream:			Non-Hazardous Material												
Disposal Facility:			MCLF/Casella	MCLF/Casella	MCLF/Casella	MCLF/Casella	MCLF/Casella	MCLF/Casella	MCLF/Casella	MCLF	MCLF/Casella	MCLF	MCLF/Casella	MCLF/Casella	MCLF/Casella
Sample ID:	Maximum TCLP Concentration	Units	WC-B4	WC-B4	WC-B5	WC-B5	WC-B5	WC-B5	WC-B5	WC-B5	WC-B5	WC-B5	WC-B6	WC-B6	WC-B6
Sample Date:			3/10/2016	42458	10/12/2015	10/27/2015	11/20/2015	12/8/2015	1/5/2016	3/7/2016	3/25/2016	10/14/2015	12/1/2015	12/11/2015	12/23/2015
Sample Name:			WC-B4-03102016	WC-B4-03292016	WC-B5-101215	WC-B5-102715	WC-B5-11202015	WC-B5-12082015	WC-B5-01052016	WC-B5-03072016	WC-B5-03252016	WC-B6-101415	WC-B6-12012015	WC-B6-12112015	WC-B6-12232015
VOCs TCLP Leachate															
1,1-Dichloroethene	0.7	mg/L	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
1,2-Dichloroethane	0.5	mg/L	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
1,4-Dichlorobenzene	7.5	mg/L	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
2-Butanone	200	mg/L	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Benzene	0.5	mg/L	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U
Carbon Tetrachloride	0.5	mg/L	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Chlorobenzene	100	mg/L	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Chloroform	6	mg/L	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Tetrachloroethene	0.7	mg/L	0.0050 U	0.0050 U	0.0050 U	0.0087	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Trichloroethene	0.5	mg/L	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Vinyl Chloride	0.2	mg/L	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
SVOCs TCLP Leachate															
1,4-Dichlorobenzene	7.5	mg/L	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U
2,4,5-Trichlorophenol	400	mg/L	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
2,4,6-Trichlorophenol	2	mg/L	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
2,4-Dinitrotoluene	0.13	mg/L	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U
2-Methylphenol	200	mg/L	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U
3-Methylphenol, 4-Methylphenol	200	mg/L	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U
Hexachlorobenzene	0.13	mg/L	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U
Hexachlorobutadiene	0.5	mg/L	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
Hexachloroethane	3	mg/L	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
Nitrobenzene	2	mg/L	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U
Pentachlorophenol	100	mg/L	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Pyridine	5	mg/L	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U
Pesticide TCLP Leachate															
Chlordane (Technical)	0.03	mg/L	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.00050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Endrin	0.02	mg/L	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U
Gamma-BHC (Lindane)	0.4	mg/L	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.000010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U
Heptachlor	.008	mg/L	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.000010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U
Heptachlor Epoxide	.008	mg/L	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.000010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U
Methoxychlor	NS	mg/L	0.00020 U	0.00020 U	0.00020 U	0.00020 U	0.00020 U	0.00020 U	0.00020 U	0.00020 U	0.000020 U	0.00020 U	0.00020 U	0.00020 U	0.00020 U
Toxaphene	NS	mg/L	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.00025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U
See notes on last page															
Herbicide TCLP Leachate															
2,4,5-TP	1	mg/L	0.0096 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U
2,4-D	10	mg/L	0.032 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
PCBs															
Aroclor-1016	NS	ug/kg	35 U	36 U	37 U	36 U	39 U	34 U	34 U	38 U	37 U	35 U	35 U	37 U	39 U
Aroclor-1221	NS	ug/kg	35 U	36 U	37 U	36 U	39 U	34 U	34 U	38 U	37 U	35 U	35 U	37 U	39 U
Aroclor-1232	NS	ug/kg	35 U	36 U	37 U	36 U	39 U	34 U	34 U	38 U	37 U	35 U	35 U	37 U	39 U
Aroclor-1242	NS	ug/kg	35 U	36 U	37 U	36 U	39 U	34 U	34 U	38 U	37 U	35 U	35 U	37 U	39 U
Aroclor-1248	NS	ug/kg	35 U	36 U	37 U	36 U	39 U	34 U	34 U	38 U	37 U	35 U	35 U	37 U	39 U
Aroclor-1254	NS	ug/kg	35 U	36 U	37 U	36 U	39 U	34 U	34 U	38 U	37 U	35 U	35 U	37 U	39 U
Aroclor-1260	NS	ug/kg	35 U	36 U	37 U	36 U	39 U	34 U	34 U	38 U	37 U	35 U	35 U	37 U	39 U
Aroclor-1262	NS	ug/kg	35 U	36 U	37 U	36 U	39 U	34 U	34 U	38 U	37 U	35 U	35 U	37 U	39 U
Aroclor-1268	NS	ug/kg	35 U	36 U	37 U	36 U	39 U	34 U	34 U	38 U	37 U	35 U	35 U	37 U	39 U
Metals TCLP Leachate															
Arsenic	5	mg/L	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Barium	100	mg/L	0.63 B	1.0	1.5	0.95 B	0.15 B	0.43 B	0.37 B	0.46 B	1.8	3.5	2.5	0.83 B	0.24 B
Cadmium	1	mg/L	0.025 U	0.025 U	0.014 B	0.0032 B	0.0015 B	0.0035 B	0.0017 B	0.025 U	0.0082 B	0.026	0.011 B	0.0018 B	0.025 U
Chromium	5	mg/L	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.0062 B	0.0058 B	0.050 U	0.050 U	0.30 U
Lead	5	mg/L	0.38 B	0.13 B	0.15 B	0.013 B	0.038 B	0.33 B	0.047 B	0.052 B	0.23 B	2.3	2.3	0.018 B	0.014 B
Mercury	0.2	mg/L	0.000060 B	0.00020 U	0.00020 U	0.00020 U	0.00020 U	0.00020 U	0.00020 U	0.00020 U	0.00020 U	0.00020 U	0.00020 U	0.00020 U	0.00020 U
Selenium	1	mg/L	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Silver	5	mg/L	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
TPH															
Diesel C10-C28	NS	mg/kg	11 U	25.1	47.5	94.8	7,460	10 U	11.7	45.9	21.2	106	17.4	14.5	22.8
Gasoline C6-C10	NS	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
See notes on last page															

Table 23. Waste Characterization Analytical Results
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Waste Stream:			Non-Hazardous Material												
Disposal Facility:			MCLF/Casella	MCLF/Casella	MCLF/Casella	MCLF/Casella	MCLF/Casella	MCLF/Casella	MCLF/Casella	MCLF	MCLF/Casella	MCLF	MCLF/Casella	MCLF/Casella	MCLF/Casella
Sample ID:	Maximum TCLP Concentration	Units	WC-B4	WC-B4	WC-B5	WC-B5	WC-B5	WC-B5	WC-B5	WC-B5-01052016	WC-B5	WC-B5	WC-B6	WC-B6	WC-B6
Sample Date:			3/10/2016	42458	10/12/2015	10/27/2015	11/20/2015	12/8/2015	1/5/2016	3/7/2016	3/25/2016	10/14/2015	12/1/2015	12/11/2015	12/23/2015
Sample Name:			WC-B4-03102016	WC-B4-03292016	WC-B5-101215	WC-B5-102715	WC-B5-11202015	WC-B5-12082015	WC-B5-01052016	WC-B5-03072016	WC-B5-03252016	WC-B6-101415	WC-B6-12012015	WC-B6-12112015	WC-B6-12232015
Other															
Corrosivity	NS	SU	5.99 NC	7.23 NC	7.34 NC	7.74 NC	6.58 NC	7.67 NC	4.53 NC	6.47 NC	6.87 NC	7.90 NC	4.42 NC	7.83 NC	5.25 NC
Cyanide Reactivity	NS	mg/kg	11 U	10 U	11 U	11 U	12 U	10 U	11 U	12 U	12 U	11 U	11 U	11 U	12 U
Heat Content, BTU	NS	BTU	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Heat Content, BTU	NS	btu/lb	100 U	135	3,710	587	521	875	414	100 U	116	100 U	100 U	215	949
Heating Value	NS	btu/lb	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ignitability	NS	deg f	>	>	>	>	>	>	>	>	>	>	>	>	>
Paint Filter Test	NS	ml/100g	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Sulfide Reactivity	NS	mg/kg	110 U	110 U	110 U	110 U	120 U	100 U	110 U	120 U	120 U	110 U	110 U	110 U	120 U
Total Organic Halides	NS	mg/kg	20 U	21 U	23 U	21 U	22 U	23 U	20 U	24 U	20 U	22 U	22 U	20 U	22 U
Solids															
Percent Solids	NS	%	87.9	92.0	88.6	92.8	86.1	88.9	87.3	83.9	85.6	92.2	88.2	87.8	86.0

Notes:
mg/kg: Milligrams per kilogram
BTU: British Thermal Units
UB: Result non-detected at the listed value due to associated blank contamination.
B: Result is between the method detection limit and the reporting limit.
J or JN: Estimated Result
R: Rejected Result
SU: System Units
btu/lb: British Thermal Units per Pound
deg F: Degrees Fahrenheit
mg/L: Milligrams per Liter
ml/100g: Milliliters per 100 grams
PCBs: Polychlorinated Biphenyls
Bolded values indicate detection.

Bolded and shaded values indicate exceedance of the maximum TCLP Concentration.

Disposal Facility:
MCLF: Middlesex County Landfill located in East Brunswick, New Jersey
Casella: Ontario County Landfill located in Stanley, New York
PSC: Republic Environmental Systems (PA), LLC located in Hatfield, Pennsylvania
York: Envirite of Pennsylvania, Inc. located in York, Pennsylvania
USE: Wayne Disposal, Inc. Site #2 Landfill located in Belleville, Michigan
Heritage: Heritage Thermal Services, Inc. located in East Liverpool, Ohio

Table 23. Waste Characterization Analytical Results
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Waste Stream:			Non-Hazardous Material												
Disposal Facility:			MCLF	MCLF/Casella	MCLF	MCLF/Casella	MCLF	MCLF/Casella	MCLF/Casella	MCLF/Casella	MCLF/Casella	MCLF/Casella	MCLF/Casella	MCLF	MCLF
Sample ID:	Maximum TCLP Concentration	Units	WC-B6 1/27/2016	WC-B6 2/22/2016	WC-B6 3/2/2016	WC-B6 3/14/2016	WC-B6 3/24/2016	WC-B7 9/30/2015	WC-B7 10/20/2015	WC-B7 11/3/2015	WC-B7 12/2/2015	WC-B7 12/14/2015	WC-B7 1/18/2016	WC-B7 2/4/2016	WC-B7 2/23/2016
Sample Name:			WC-B6-01272016	WC-B6-02222016	WC-B6-03022016	WC-B6-03142016	WC-B6-03242016	WC-B7-093015	WC-B7-102015	WC-B7-11032015	WC-B7-12022015	WC-B7-12142015	WC-B7-01182016	WC-B7-02042016	WC-B7-02222016
VOCs															
1,1,1-Trichloroethane	NS	ug/kg	2.6 U	110 U	2.2 U	2.3 U	3.4 U	120 U	2.3 U	2.0 U	2.1 U	2.1 U	2.2 U	2.0 U	130 U
1,1,2,2-Tetrachloroethane	NS	ug/kg	2.6 U	110 U	2.2 U	2.3 U	3.4 U	120 U	2.3 U	2.0 U	2.1 U	2.1 U	2.2 U	2.0 U	130 U
1,1,2-trichloro-1,2,2-trifluoroethane	NS	ug/kg	6.4 U	280 U	5.6 U	5.8 U	8.4 U	300 U	5.7 U	5.1 U	5.3 U	5.4 U	5.6 U	5.0 U	330 U
1,1,2-Trichloroethane	NS	ug/kg	2.6 U	110 U	2.2 U	2.3 U	3.4 U	120 U	2.3 U	2.0 U	2.1 U	2.1 U	2.2 U	2.0 U	130 U
1,1-Dichloroethane	NS	ug/kg	1.3 U	56 U	1.1 U	1.2 U	1.7 U	59 U	1.1 U	1.0 U	1.1 U	1.1 U	1.1 U	1.0 U	65 U
1,1-Dichloroethene	NS	ug/kg	1.3 U	56 U	1.1 U	1.2 U	1.7 U	59 U	1.1 U	1.0 U	1.1 U	1.1 U	1.1 U	1.0 U	65 U
1,2,4-Trichlorobenzene	NS	ug/kg	6.4 U	280 U	5.6 U	5.8 U	8.4 U	300 U	5.7 U	5.1 U	5.3 U	5.4 U	5.6 U	5.0 U	330 U
1,2-Dibromo-3-chloropropane	NS	ug/kg	2.6 U	110 U	2.2 U	2.3 U	3.4 U	120 U	2.3 U	2.0 U	2.1 U	2.1 U	2.2 U	2.0 U	130 U
1,2-Dibromoethane	NS	ug/kg	1.3 U	56 U	1.1 U	1.2 U	1.7 U	59 U	1.1 U	1.0 U	1.1 U	1.1 U	1.1 U	1.0 U	65 U
1,2-Dichlorobenzene	NS	ug/kg	1.3 U	50.8 J	1.1 U	1.2	1.7 U	59 U	1.1 U	1.0 U	1.1 U	1.1 U	1.1 U	1.0 U	22.9 J
1,2-Dichloroethane	NS	ug/kg	1.3 U	56 U	1.1 U	1.2 U	1.7 U	59 U	1.1 U	1.0 U	1.1 U	1.1 U	1.1 U	1.0 U	65 U
1,2-Dichloropropane	NS	ug/kg	2.6 U	110 U	2.2 U	2.3 U	3.4 U	120 U	2.3 U	2.0 U	2.1 U	2.1 U	2.2 U	2.0 U	130 U
1,3-Dichlorobenzene	NS	ug/kg	1.3 U	56 U	1.1 U	0.27 J	1.7 U	59 U	1.1 U	1.0 U	1.1 U	1.1 U	1.1 U	1.0 U	65 U
1,4-Dichlorobenzene	NS	ug/kg	1.3 U	56 U	1.1 U	0.58 J	1.7 U	59 U	1.1 U	1.0 U	1.1 U	1.1 U	1.1 U	1.0 U	65 U
2-Butanone	NS	ug/kg	13 U	560 U	11 U	12 U	17 U	590 U	11 U	10 U	11 U	11 U	11 U	10 U	650 U
2-Hexanone	NS	ug/kg	6.4 U	280 U	5.6 U	5.8 U	8.4 U	300 U	5.7 U	5.1 U	5.3 U	5.4 U	5.6 U	5.0 U	330 U
4-Methyl-2-pentanone	NS	ug/kg	6.4 U	482	5.6 U	5.8 U	8.4 U	262 J	5.7 U	5.1 U	5.3 U	5.4 U	5.6 U	5.0 U	330 U
Acetone	NS	ug/kg	13 U	1,020	11 U	12 U	28.2	590 U	11 U	4.1 J	11 U	4.7 J	28.8	10 U	650 U
Benzene	NS	ug/kg	0.64 U	28 U	0.56 U	0.58 U	0.84 U	30 U	0.57 U	0.51 U	0.20 J	0.54 U	0.56 U	0.50 U	33 U
Bromodichloromethane	NS	ug/kg	2.6 U	110 U	2.2 U	2.3 U	3.4 U	120 U	2.3 U	2.0 U	2.1 U	2.1 U	2.2 U	2.0 U	130 U
Bromoform	NS	ug/kg	6.4 U	280 U	5.6 U	5.8 U	8.4 U	300 U	5.7 U	5.1 U	5.3 U	5.4 U	5.6 U	5.0 U	330 U
Bromomethane	NS	ug/kg	6.4 U	280 U	5.6 U	5.8 U	8.4 U	300 U	5.7 U	5.1 U	5.3 U	5.4 U	5.6 U	5.0 U	330 U
Carbon Disulfide	NS	ug/kg	2.6 U	110 U	2.2 U	2.3 U	3.4 U	120 U	2.3 U	2.0 U	2.1 U	2.1 U	2.2 U	2.0 U	130 U
Carbon Tetrachloride	NS	ug/kg	2.6 U	110 U	2.2 U	2.3 U	3.4 U	120 U	2.3 U	2.0 U	2.1 U	2.1 U	2.2 U	2.0 U	130 U
Chlorobenzene	NS	ug/kg	2.6 U	110 U	2.2 U	2.3 U	3.4 U	120 U	2.3 U	2.0 U	2.1 U	2.1 U	2.2 U	2.0 U	130 U
Chloroethane	NS	ug/kg	6.4 U	280 U	5.6 U	5.8 U	8.4 U	300 U	5.7 U	5.1 U	5.3 U	5.4 U	5.6 U	5.0 U	330 U
Chloroform	NS	ug/kg	2.6 U	110 U	2.2 U	2.3 U	3.4 U	120 U	2.3 U	2.0 U	2.1 U	2.1 U	2.2 U	2.0 U	130 U
Chloromethane	NS	ug/kg	6.4 U	280 U	5.6 U	5.8 U	8.4 U	300 U	5.7 U	5.1 U	5.3 U	5.4 U	5.6 U	5.0 U	330 U
cis-1,2-Dichloroethene	NS	ug/kg	1.3 U	56 U	1.1 U	1.2 U	1.7 U	59 U	1.1 U	1.0 U	1.1 U	1.1 U	1.1 U	1.0 U	65 U
cis-1,3-Dichloropropene	NS	ug/kg	2.6 U	110 U	2.2 U	2.3 U	3.4 U	120 U	2.3 U	2.0 U	2.1 U	2.1 U	2.2 U	2.0 U	130 U
Cyclohexane	NS	ug/kg	2.6 U	110 U	2.2 U	2.3 U	3.4 U	120 U	2.3 U	2.0 U	2.1 U	2.1 U	2.2 U	2.0 U	130 U
Dibromochloromethane	NS	ug/kg	2.6 U	110 U	2.2 U	2.3 U	3.4 U	120 U	2.3 U	2.0 U	2.1 U	2.1 U	2.2 U	2.0 U	130 U
Dichlorodifluoromethane	NS	ug/kg	6.4 U	280 U	5.6 U	5.8 U	8.4 U	300 U	5.7 U	5.1 U	5.3 U	5.4 U	5.6 U	5.0 U	330 U
Ethylbenzene	NS	ug/kg	2.7	1,640	1.1 U	1.4	2.1	18,800	7.1	0.27 J	1.1 U	1.1 U	0.20 J	0.38 J	717
Isopropylbenzene	NS	ug/kg	0.28 J	102 J	2.2 U	0.39 J	3.4 U	3,000	1.4 J	2.0 U	2.1 U	2.1 U	2.2 U	2.0 U	56.3 J
Methyl acetate	NS	ug/kg	7.0	280 U	5.6 U	5.8 U	8.4 U	300 U	8.6	6.8	5.3 U	5.4 U	5.6 U	5.0 U	330 U
Methyl tert-butyl ether	NS	ug/kg	1.3 U	56 U	1.1 U	1.2 U	1.7 U	59 U	1.1 U	1.0 U	1.1 U	1.1 U	1.1 U	1.0 U	65 U
Methylcyclohexane	NS	ug/kg	0.49 J	795	2.2 U	7.0	1.1 J	101 J	2.3 U	2.0 U	2.1 U	2.1 U	2.2 U	2.0 U	390
Methylene Chloride	NS	ug/kg	6.4 U	280 U	5.6 U	1.6 J	8.4 U	300 U	5.7 U	5.1 U	5.3 U	5.4 U	5.6 U	5.0 U	330 U
Styrene	NS	ug/kg	2.6 U	110 U	2.2 U	2.3 U	3.4 U	120 U	2.3 U	2.0 U	2.1 U	2.1 U	2.2 U	2.0 U	130 U
Tetrachloroethene	NS	ug/kg	2.6 U	110 U	2.2 U	2.3 U	3.4 U	120 U	2.3 U	2.0 U	2.1 U	2.1 U	2.2 U	2.0 U	130 U
Toluene	NS	ug/kg	1.2 J	2,090	1.1 U	0.28 J	0.98 J	2,740	0.94 J	1.0 U	1.1 U	1.1 U	1.1 U	0.23 J	635
trans-1,2-Dichloroethene	NS	ug/kg	1.3 U	56 U	1.1 U	1.2 U	1.7 U	59 U	1.1 U	1.0 U	1.1 U	1.1 U	1.1 U	1.0 U	65 U
trans-1,3-Dichloropropene	NS	ug/kg	2.6 U	110 U	2.2 U	2.3 U	3.4 U	120 U	2.3 U	2.0 U	2.1 U	2.1 U	2.2 U	2.0 U	130 U
Trichloroethene	NS	ug/kg	1.3 U	56 U	1.1 U	1.2 U	1.7 U	59 U	1.1 U	1.0 U	1.1 U	1.1 U	1.1 U	1.0 U	65 U
Trichlorofluoromethane	NS	ug/kg	6.4 U	280 U	5.6 U	5.8 U	8.4 U	300 U	5.7 U	5.1 U	5.3 U	5.4 U	5.6 U	5.0 U	330 U
Vinyl Chloride	NS	ug/kg	2.6 U	110 U	2.2 U	2.3 U	3.4 U	120 U	2.3 U	2.0 U	2.1 U	2.1 U	2.2 U	2.0 U	130 U
Xylenes (total)	NS	ug/kg	15.0	7,870	1.1 U	15.1	12.4	146,000	66.1	1.3	1.1 U	1.1 U	0.96 J	2.6	3,480

See notes on last page

Table 23. Waste Characterization Analytical Results
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Waste Stream:			Non-Hazardous Material												
Disposal Facility:			MCLF	MCLF/Casella	MCLF	MCLF/Casella	MCLF	MCLF/Casella	MCLF/Casella	MCLF/Casella	MCLF/Casella	MCLF/Casella	MCLF/Casella	MCLF	MCLF
Sample ID:	Maximum TCLP Concentration	Units	WC-B6 1/27/2016	WC-B6 2/22/2016	WC-B6 3/2/2016	WC-B6 3/14/2016	WC-B6 3/24/2016	WC-B7 9/30/2015	WC-B7 10/20/2015	WC-B7 11/3/2015	WC-B7 12/2/2015	WC-B7 12/14/2015	WC-B7 1/18/2016	WC-B7 2/4/2016	WC-B7 2/23/2016
Sample Name:			WC-B6-01272016	WC-B6-02222016	WC-B6-03022016	WC-B6-03142016	WC-B6-03242016	WC-B7-093015	WC-B7-102015	WC-B7-11032015	WC-B7-12022015	WC-B7-12142015	WC-B7-01182016	WC-B7-02042016	WC-B7-02222016
SVOCs															
1,1'-Biphenyl	NS	ug/kg	76 U	38.0 J	69 U	23.2 J	100 U	133	76 U	72 U	72 U	72 U	73 U	69 U	123
2,2'-Oxybis(1-Chloropropane)	NS	ug/kg	76 U	75 U	69 U	75 U	100 U	70 U	76 U	72 U	72 U	72 U	73 U	69 U	73 U
2,4,5-Trichlorophenol	NS	ug/kg	190 U	190 U	170 U	190 U	260 U	170 U	190 U	180 U	180 U	180 U	180 U	170 U	180 U
2,4,6-Trichlorophenol	NS	ug/kg	190 U	190 U	170 U	190 U	260 U	170 U	190 U	180 U	180 U	180 U	180 U	170 U	180 U
2,4-Dichlorophenol	NS	ug/kg	190 U	190 U	170 U	190 U	260 U	170 U	190 U	180 U	180 U	180 U	180 U	170 U	180 U
2,4-Dimethylphenol	NS	ug/kg	190 U	190 U	170 U	190 U	260 U	170 U	190 U	180 U	180 U	180 U	180 U	170 U	180 U
2,4-Dinitrophenol	NS	ug/kg	190 U	190 U	170 U	190 U	260 U	170 U	190 U	180 U	180 U	180 U	180 U	170 U	180 U
2,4-Dinitrotoluene	NS	ug/kg	38 U	37 U	35 U	38 U	51 U	35 U	38 U	36 U	36 U	36 U	36 U	34 U	37 U
2,6-Dinitrotoluene	NS	ug/kg	38 U	37 U	35 U	38 U	51 U	35 U	38 U	36 U	36 U	36 U	36 U	34 U	37 U
2-Chloronaphthalene	NS	ug/kg	76 U	75 U	69 U	75 U	100 U	70 U	76 U	72 U	72 U	72 U	73 U	69 U	73 U
2-Chlorophenol	NS	ug/kg	76 U	75 U	69 U	75 U	100 U	70 U	76 U	72 U	72 U	72 U	73 U	69 U	73 U
2-Methylnaphthalene	NS	ug/kg	76 U	377	69 U	238	100 U	1,980	169	72 U	35.3 J	72 U	73 U	69 U	1,700
2-Methylphenol	NS	ug/kg	76 U	75 U	69 U	75 U	100 U	70 U	76 U	72 U	72 U	72 U	73 U	69 U	73 U
2-Nitroaniline	NS	ug/kg	190 U	190 U	170 U	190 U	260 U	170 U	190 U	180 U	180 U	180 U	180 U	170 U	180 U
2-Nitrophenol	NS	ug/kg	190 U	190 U	170 U	190 U	260 U	170 U	190 U	180 U	180 U	180 U	180 U	170 U	180 U
3,3'-Dichlorobenzidine	NS	ug/kg	76 U	75 U	69 U	75 U	100 U	70 U	76 U	72 U	72 U	72 U	73 U	69 U	73 U
3-Methylphenol, 4-Methylphenol	NS	ug/kg	76 U	75 U	69 U	75 U	100 U	70 U	76 U	72 U	72 U	72 U	73 U	69 U	73 U
3-Nitroaniline	NS	ug/kg	190 U	190 U	170 U	190 U	260 U	170 U	190 U	180 U	180 U	180 U	180 U	170 U	180 U
4,6-Dinitro-2-methylphenol	NS	ug/kg	190 U	190 U	170 U	190 U	260 U	170 U	190 U	180 U	180 U	180 U	180 U	170 U	180 U
4-Bromophenyl-phenylether	NS	ug/kg	76 U	75 U	69 U	75 U	100 U	70 U	76 U	72 U	72 U	72 U	73 U	69 U	73 U
4-Chloro-3-Methylphenol	NS	ug/kg	190 U	190 U	170 U	190 U	260 U	170 U	190 U	180 U	180 U	180 U	180 U	170 U	180 U
4-Chloroaniline	NS	ug/kg	190 U	190 U	170 U	190 U	260 U	170 U	190 U	180 U	180 U	180 U	180 U	170 U	180 U
4-Chlorophenyl-phenylether	NS	ug/kg	76 U	75 U	69 U	75 U	100 U	70 U	76 U	72 U	72 U	72 U	73 U	69 U	73 U
4-Nitroaniline	NS	ug/kg	190 U	190 U	170 U	190 U	260 U	170 U	190 U	180 U	180 U	180 U	180 U	170 U	180 U
4-Nitrophenol	NS	ug/kg	380 U	370 U	350 U	380 U	510 U	350 U	380 U	360 U	360 U	360 U	360 U	340 U	370 U
Acenaphthene	NS	ug/kg	38 U	37 U	35 U	38 U	51 U	35 U	38 U	36 U	36 U	36 U	36 U	34 U	37 U
Acenaphthylene	NS	ug/kg	38 U	37 U	35 U	38 U	54.7	35 U	33.8 J	36 U	36 U	36 U	36 U	34 U	37 U
Acetophenone	NS	ug/kg	190 U	190 U	170 U	190 U	260 U	170 U	190 U	180 U	180 U	180 U	180 U	170 U	180 U
Anthracene	NS	ug/kg	38 U	37 U	35 U	38 U	65.6	35 U	55.6	36 U	36 U	36 U	36 U	34 U	37 U
Atrazine	NS	ug/kg	76 U	75 U	69 U	75 U	100 U	70 U	76 U	72 U	72 U	72 U	73 U	69 U	73 U
Benzaldehyde	NS	ug/kg	190 U	190 U	170 U	190 U	260 U	170 U	190 U	180 U	180 U	180 U	20.2 J	170 U	180 U
Benzo(a)anthracene	NS	ug/kg	38 U	37 U	35 U	38 U	151	14.9 J	150	36 U	36 U	36 U	36 U	18.3 J	37 U
Benzo(a)pyrene	NS	ug/kg	38 U	37 U	35 U	38 U	171	35 U	169	36 U	36 U	36 U	36 U	20.6 J	37 U
Benzo(b)fluoranthene	NS	ug/kg	38 U	37 U	35 U	38 U	184	18.2 J	199	36 U	36 U	36 U	36 U	25.5 J	37 U
Benzo(g,h,i)perylene	NS	ug/kg	38 U	37 U	35 U	38 U	138	35 U	114	36 U	36 U	36 U	36 U	21.7 J	37 U
Benzo(k)fluoranthene	NS	ug/kg	38 U	37 U	35 U	38 U	81.1	35 U	82.5	36 U	36 U	36 U	36 U	34 U	37 U
bis(2-Chloroethoxy)methane	NS	ug/kg	76 U	75 U	69 U	75 U	100 U	70 U	76 U	72 U	72 U	72 U	73 U	69 U	73 U
bis(2-Chloroethyl)ether	NS	ug/kg	76 U	75 U	69 U	75 U	100 U	70 U	76 U	72 U	72 U	72 U	73 U	69 U	73 U
bis(2-Ethylhexyl)phthalate	NS	ug/kg	96.7	10,400	69 U	360	100 U	128	121	72 U	72 U	62.2 J	73 U	69 U	7,330
Butylbenzylphthalate	NS	ug/kg	76 U	3,140	69 U	75 U	100 U	70 U	76 U	72 U	72 U	72 U	73 U	69 U	73 U
Caprolactam	NS	ug/kg	76 U	75 U	69 U	75 U	100 U	70 U	76 U	72 U	72 U	72 U	73 U	69 U	73 U
Carbazole	NS	ug/kg	76 U	75 U	69 U	75 U	32.1 J	70 U	15.5 J	72 U	72 U	72 U	73 U	69 U	73 U
Chrysene	NS	ug/kg	38 U	37 U	35 U	17.0 J	162	25.6 J	173	36 U	36 U	36 U	36 U	19.3 J	30.2 J
Dibenzo(a,h)anthracene	NS	ug/kg	38 U	37 U	35 U	38 U	39.1 J	35 U	23.4 J	36 U	36 U	36 U	36 U	34 U	37 U
Dibenzofuran	NS	ug/kg	76 U	75 U	69 U	75 U	72 U	70 U	76 U	72 U	72 U	72 U	73 U	69 U	73 U
Diethylphthalate	NS	ug/kg	76 U	75 U	69 U	75 U	100 U	70 U	76 U	72 U	72 U	72 U	73 U	69 U	73 U
Dimethylphthalate	NS	ug/kg	76 U	75 U	69 U	75 U	100 U	70 U	76 U	72 U	72 U	72 U	73 U	69 U	73 U
Di-n-Butylphthalate	NS	ug/kg	76 U	807	69 U	75 U	100 U	56.9 J	39.7 J	72 U	72 U	72 U	73 U	69 U	165
Di-n-Octylphthalate	NS	ug/kg	76 U	75 U	69 U	75 U	100 U	70 U	76 U	72 U	72 U	72 U	73 U	69 U	73 U
Fluoranthene	NS	ug/kg	38 U	37 U	35 U	38 U	286	37.9	285	36 U	36 U	36 U	36 U	22.9 J	37 U
Fluorene	NS	ug/kg	38 U	37 U	35 U	38 U	23.0 J	35 U	25.8 J	36 U	36 U	36 U	36 U	34 U	37 U
Hexachlorobenzene	NS	ug/kg	76 U	75 U	69 U	75 U	100 U	70 U	76 U	72 U	72 U	72 U	73 U	69 U	73 U
Hexachlorobutadiene	NS	ug/kg	38 U	37 U	35 U	38 U	51 U	35 U	38 U	36 U	36 U	36 U	36 U	34 U	37 U
Hexachlorocyclopentadiene	NS	ug/kg	380 U	370 U	350 U	380 U	510 U	350 U	380 U	360 U	360 U	360 U	360 U	340 U	370 U
Hexachloroethane	NS	ug/kg	190 U	190 U	170 U	190 U	260 U	170 U	190 U	180 U	180 U	180 U	180 U	170 U	180 U
Indeno(1,2,3-cd)pyrene	NS	ug/kg	38 U	37 U	35 U	38 U	128	35 U	121	36 U	36 U	36 U	43.1	20.3 J	37 U
Isophorone	NS	ug/kg	76 U	75 U	69 U	75 U	100 U	70 U	76 U	72 U	72 U	72 U	73 U	69 U	73 U
Naphthalene	NS	ug/kg	38 U	1,530	35 U	514	51 U	10,200	599	36 U	102	36 U	36 U	34 U	4,790
Nitrobenzene	NS	ug/kg	76 U	75 U	69 U	75 U	100 U	70 U	76 U	72 U	72 U	72 U	73 U	69 U	73 U
N-Nitroso-di-n-propylamine	NS	ug/kg	76 U	75 U	69 U	75 U	100 U	70 U	76 U	72 U	72 U	72 U	73 U	69 U	73 U
N-Nitrosodiphenylamine	NS	ug/kg	190 U	80.4 J	170 U	190 U	260 U	170 U	190 U	180 U	180 U	180 U	180 U	170 U	180 U
Pentachlorophenol	NS	ug/kg	190 U	190 U	170 U	190 U	260 U	170 U	190 U	180 U	180 U	180 U	180 U	170 U	180 U
Phenanthrene	NS	ug/kg	38 U	37 U	35 U	24.4 J	171	56.8	193	36 U	36 U	36 U	36 U	34 U	64.9
Phenol	NS	ug/kg	76 U	75 U	69 U	75 U	100 U	70 U	76 U	72 U	72 U	72 U	73 U	69 U	73 U
Pyrene	NS	ug/kg	38 U	37 U	35 U	25.3 J	249	36.0	311	36 U	36 U	36 U	36 U	25.9 J	36.1 J

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Table 23. Waste Characterization Analytical Results
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Waste Stream:			Non-Hazardous Material												
Disposal Facility:			MCLF	MCLF/Casella	MCLF	MCLF/Casella	MCLF	MCLF/Casella	MCLF/Casella	MCLF/Casella	MCLF/Casella	MCLF/Casella	MCLF/Casella	MCLF	MCLF
Sample ID:	Maximum TCLP Concentration	Units	WC-B6	WC-B6	WC-B6	WC-B6	WC-B6	WC-B7	WC-B7	WC-B7	WC-B7	WC-B7	WC-B7	WC-B7	WC-B7
Sample Date:			1/27/2016	2/22/2016	3/2/2016	3/14/2016	3/24/2016	9/30/2015	10/20/2015	11/3/2015	12/2/2015	12/14/2015	1/18/2016	2/4/2016	2/23/2016
Sample Name:			WC-B6-01272016	WC-B6-02222016	WC-B6-03022016	WC-B6-03142016	WC-B6-03242016	WC-B7-093015	WC-B7-102015	WC-B7-11032015	WC-B7-12022015	WC-B7-12142015	WC-B7-01182016	WC-B7-02042016	WC-B7-02222016
VOCs TCLP Leachate															
1,1-Dichloroethene	0.7	mg/L	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
1,2-Dichloroethane	0.5	mg/L	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
1,4-Dichlorobenzene	7.5	mg/L	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
2-Butanone	200	mg/L	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Benzene	0.5	mg/L	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U
Carbon Tetrachloride	0.5	mg/L	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Chlorobenzene	100	mg/L	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Chloroform	6	mg/L	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Tetrachloroethene	0.7	mg/L	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Trichloroethene	0.5	mg/L	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Vinyl Chloride	0.2	mg/L	0.0050 U	0.0050 U	0.0050 U	0.0021 J	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
SVOCs TCLP Leachate															
1,4-Dichlorobenzene	7.5	mg/L	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U
2,4,5-Trichlorophenol	400	mg/L	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
2,4,6-Trichlorophenol	2	mg/L	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
2,4-Dinitrotoluene	0.13	mg/L	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U
2-Methylphenol	200	mg/L	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U
3-Methylphenol, 4-Methylphenol	200	mg/L	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U
Hexachlorobenzene	0.13	mg/L	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U
Hexachlorobutadiene	0.5	mg/L	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
Hexachloroethane	3	mg/L	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
Nitrobenzene	2	mg/L	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U
Pentachlorophenol	100	mg/L	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Pyridine	5	mg/L	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U
Pesticide TCLP Leachate															
Chlordane (Technical)	0.03	mg/L	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Endrin	0.02	mg/L	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U
Gamma-BHC (Lindane)	0.4	mg/L	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U
Heptachlor	.008	mg/L	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U
Heptachlor Epoxide	.008	mg/L	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U
Methoxychlor	NS	mg/L	0.00020 U	0.00020 U	0.00020 U	0.00020 U	0.00020 U	0.00020 U	0.00020 U	0.00020 U	0.00020 U	0.00020 U	0.00020 U	0.00020 U	0.00020 U
Toxaphene	NS	mg/L	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U
See notes on last page															
Herbicide TCLP Leachate															
2,4,5-TP	1	mg/L	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U
2,4-D	10	mg/L	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
PCBs															
Aroclor-1016	NS	ug/kg	36 U	35 U	35 U	35 U	51 U	36 U	37 U	35 U	36 U	36 U	35 U	34 U	38 U
Aroclor-1221	NS	ug/kg	36 U	35 U	35 U	35 U	51 U	36 U	37 U	35 U	36 U	36 U	35 U	34 U	38 U
Aroclor-1232	NS	ug/kg	36 U	35 U	35 U	35 U	51 U	36 U	37 U	35 U	36 U	36 U	35 U	34 U	38 U
Aroclor-1242	NS	ug/kg	36 U	35 U	35 U	35 U	51 U	36 U	37 U	35 U	36 U	36 U	35 U	34 U	38 U
Aroclor-1248	NS	ug/kg	36 U	35 U	35 U	35 U	51 U	36 U	37 U	35 U	36 U	36 U	35 U	34 U	38 U
Aroclor-1254	NS	ug/kg	36 U	35 U	35 U	35 U	51 U	36 U	37 U	35 U	36 U	36 U	35 U	34 U	38 U
Aroclor-1260	NS	ug/kg	36 U	35 U	35 U	35 U	51 U	36 U	37 U	35 U	36 U	36 U	35 U	34 U	38 U
Aroclor-1262	NS	ug/kg	36 U	35 U	35 U	35 U	51 U	36 U	37 U	35 U	36 U	36 U	35 U	34 U	38 U
Aroclor-1268	NS	ug/kg	36 U	35 U	35 U	35 U	51 U	36 U	37 U	35 U	36 U	36 U	35 U	34 U	38 U
Metals TCLP Leachate															
Arsenic	5	mg/L	0.50 U	0.50 U	0.50 U	0.50 U	0.031 B	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.012 B
Barium	100	mg/L	0.63 B	1.6	0.58 B	1.6	1.5	1.4	2.0	0.79 B	0.55 B	0.24 B	0.32 B	2.3	1.5
Cadmium	1	mg/L	0.025 U	0.0021 B	0.025 U	0.0027 B	0.0051 B	0.0023 B	0.0093 B	0.0017 B	0.0027 B	0.0028 B	0.025 U	0.014 B	0.0019 B
Chromium	5	mg/L	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.013 B	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
Lead	5	mg/L	0.18 B	0.65	0.014 B	0.79	0.60	0.46 B	0.66	0.13 B	0.061 B	0.090 B	0.035 B	0.98	1.3
Mercury	0.2	mg/L	0.00020 U	0.00020 U	0.00020 U	0.00020 U	0.00020 U	0.000071 B	0.00020 U	0.00020 U	0.00020 U	0.00020 U	0.00020 U	0.00020 U	0.00020 U
Selenium	1	mg/L	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Silver	5	mg/L	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
TPH															
Diesel C10-C28	NS	mg/kg	12.5	213	11 U	174	35.4	63.3	85.7	19.4	17.1	9.2 U	41.6	7.63	112
Gasoline C6-C10	NS	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
See notes on last page															

Table 23. Waste Characterization Analytical Results
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Waste Stream:			Non-Hazardous Material												
Disposal Facility:			MCLF	MCLF/Casella	MCLF	MCLF/Casella	MCLF	MCLF/Casella	MCLF/Casella	MCLF/Casella	MCLF/Casella	MCLF/Casella	MCLF/Casella	MCLF	MCLF
Sample ID:	Maximum TCLP Concentration	Units	WC-B6	WC-B6	WC-B6	WC-B6	WC-B6	WC-B7	WC-B7	WC-B7	WC-B7	WC-B7	WC-B7	WC-B7	WC-B7
Sample Date:			1/27/2016	2/22/2016	3/2/2016	3/14/2016	3/24/2016	9/30/2015	10/20/2015	11/3/2015	12/2/2015	12/14/2015	1/18/2016	2/4/2016	2/23/2016
Sample Name:			WC-B6-01272016	WC-B6-02222016	WC-B6-03022016	WC-B6-03142016	WC-B6-03242016	WC-B7-093015	WC-B7-102015	WC-B7-11032015	WC-B7-12022015	WC-B7-12142015	WC-B7-01182016	WC-B7-02042016	WC-B7-02222016
Other															
Corrosivity	NS	SU	6.51 NC	6.91 NC	6.74 NC	6.40 NC	7.12 NC	6.03 NC	7.10 NC	5.27 nc	4.75 NC	6.42 NC	4.82 NC	7.40 NC	6.52 NC
Cyanide Reactivity	NS	mg/kg	11 U	12 U	10 U	11 U	15 U	11 U	11 U	11 U	11 U	11 U	10 U	11 U	12 U
Heat Content, BTU	NS	BTU	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Heat Content, BTU	NS	btu/lb	623	100 U	1,990	922	246	296	1,210	1,180	940	100 U	873	100 U	100 U
Heating Value	NS	btu/lb	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ignitability	NS	deg f	>	>	>	>	>	>	>	>	>	>	>	>	>
Paint Filter Test	NS	ml/100g	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Sufide Reactivity	NS	mg/kg	110 U	120 U	100 U	110 U	150 U	110 U	110 U	110 U	110 U	110 U	100 U	110 U	120 U
Total Organic Halides	NS	mg/kg	20 U	23 U	22 U	22 U	28 U	22 U	21 U	21 U	22 U	22 U	21 U	20 U	23 U
Solids															
Percent Solids	NS	%	86.9	86.8	89.5	86.6	64.7	91.6	88.2	91.3	89.6	91.2	89.4	90.4	86.9

Notes:
mg/kg: Milligrams per kilogram
BTU: British Thermal Units
UB: Result non-detected at the listed value due to associated blank contamination.
B: Result is between the method detection limit and the reporting limit.
J or JN: Estimated Result
R: Rejected Result
SU: System Units
btu/lb: British Thermal Units per Pound
deg F: Degrees Fahrenheit
mg/L: Milligrams per Liter
ml/100g: Milliliters per 100 grams
PCBs: Polychlorinated Biphenyls
Bolded values indicate detection.

Bolded and shaded values indicate exceedance of the maximum TCLP Concentration.

Disposal Facility:
MCLF: Middlesex County Landfill located in East Brunswick, New Jersey
Casella: Ontario County Landfill located in Stanley, New York
PSC: Republic Environmental Systems (PA), LLC located in Hatfield, Pennsylvania
York: Envirite of Pennsylvania, Inc. located in York, Pennsylvania
USE: Wayne Disposal, Inc. Site #2 Landfill located in Belleville, Michigan
Heritage: Heritage Thermal Services, Inc. located in East Liverpool, Ohio

Table 23. Waste Characterization Analytical Results
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Waste Stream:			Non-Hazardous Material					Hazardous Materials for Metals Treatment and Subtitle "D" Landfilling							
Disposal Facility:			MCLF	MCLF	MCLF	MCLF	MCLF	PSC/York	York	PSC/York	PSC/York	PSC/York	PSC/York	PSC/York	PSC/York
Sample ID:	Maximum TCLP Concentration	Units	WC-B7	WC-E	WC-J	WC-MSA	WC-SE	WC-B2	WC-B2	WC-B2	WC-B2	WC-B2	WC-B3	WC-B4	WC-B5
Sample Date:			3/18/2016	4/5/2016	3/28/2016	3/29/2016	42255	11/12/2015	12/8/2015	12/28/2015	1/12/2016	1/26/2016	42276	11/3/2015	11/5/2015
Sample Name:			WC-B7-03182016	WC-E-04052016	WC-J-03282016	WC-MSA-03292016	WC-SE-090815	WC-B2-11122015	WC-B2-12082015	WC-B2-12282015	WC-B2-01122016	WC-B2-01262016	WC-B3-092915	WC-B4-11032015	WC-B5-11052015
VOCs															
1,1,1-Trichloroethane	NS	ug/kg	2.9 U	2.2 U	2.4 U	2.6 U	2.2 U	2.4 U	170 U	2.6 U	2.3 U	2.5 U	2.1 U	120 U	2.2 U
1,1,2,2-Tetrachloroethane	NS	ug/kg	2.9 U	2.2 U	2.4 U	2.6 U	2.2 U	2.4 U	170 U	2.6 U	2.3 U	2.5 U	2.1 U	120 U	2.2 U
1,1,2-trichloro-1,2,2-trifluoroethane	NS	ug/kg	7.3 U	5.6 U	6.0 U	6.4 U	5.4 U	6.0 U	430 U	6.6 U	5.8 U	6.1 U	5.2 U	290 U	5.6 U
1,1,2-Trichloroethane	NS	ug/kg	2.9 U	2.2 U	2.4 U	2.6 U	2.2 U	2.4 U	170 U	2.6 U	2.3 U	2.5 U	2.1 U	120 U	2.2 U
1,1-Dichloroethane	NS	ug/kg	1.5 U	1.1 U	1.2 U	1.3 U	1.1 U	1.2 U	85 U	1.3 U	1.2 U	1.2 U	1.0 U	58 U	1.1 U
1,1-Dichloroethene	NS	ug/kg	1.5 U	1.1 U	1.2 U	1.3 U	1.1 U	1.2 U	85 U	1.3 U	1.2 U	1.2 U	1.0 U	58 U	1.1 U
1,2,4-Trichlorobenzene	NS	ug/kg	7.3 U	5.6 U	6.0 U	6.4 U	5.4 U	6.0 U	430 U	6.6 U	5.8 U	6.1 U	5.2 U	290 U	5.6 U
1,2-Dibromo-3-chloropropane	NS	ug/kg	2.9 U	2.2 U	2.4 U	2.6 U	2.2 U	2.4 U	170 U	2.6 U	2.3 U	2.5 U	2.1 U	120 U	2.2 U
1,2-Dibromoethane	NS	ug/kg	1.5 U	1.1 U	1.2 U	1.3 U	1.1 U	1.2 U	85 U	1.3 U	1.2 U	1.2 U	1.0 U	58 U	1.1 U
1,2-Dichlorobenzene	NS	ug/kg	1.5 U	1.1 U	1.2 U	1.3 U	1.1 U	1.2 U	85 U	1.3 U	1.2 U	1.2 U	1.0 U	58 U	1.1 U
1,2-Dichloroethane	NS	ug/kg	1.5 U	1.1 U	1.2 U	1.3 U	1.1 U	1.2 U	85 U	1.3 U	1.2 U	1.2 U	1.0 U	58 U	1.1 U
1,2-Dichloropropane	NS	ug/kg	2.9 U	2.2 U	2.4 U	2.6 U	2.2 U	2.4 U	170 U	2.6 U	2.3 U	2.5 U	2.1 U	120 U	2.2 U
1,3-Dichlorobenzene	NS	ug/kg	1.5 U	1.1 U	1.2 U	1.3 U	1.1 U	1.2 U	85 U	1.3 U	1.2 U	1.2 U	1.0 U	58 U	1.1 U
1,4-Dichlorobenzene	NS	ug/kg	1.5 U	1.1 U	1.2 U	1.3 U	1.1 U	1.2 U	85 U	1.3 U	1.2 U	1.2 U	1.0 U	58 U	1.1 U
2-Butanone	NS	ug/kg	15 U	51.5	12 U	47.4	11 U	12 U	850 U	13 U	12 U	12 U	10 U	132 J	11 U
2-Hexanone	NS	ug/kg	7.3 U	5.6 U	6.0 U	6.4 U	5.4 U	6.0 U	430 U	6.6 U	5.8 U	6.1 U	5.2 U	290 U	5.6 U
4-Methyl-2-pentanone	NS	ug/kg	7.3 U	5.6 U	6.0 U	6.4 U	5.4 U	6.0 U	430 U	6.6 U	5.8 U	6.1 U	5.2 U	1,640	5.6 U
Acetone	NS	ug/kg	15 U	145	16.3	85.5	17.3	12 U	850 U	8.5 J	35.3	12 U	9.8 J	2,170	11 U
Benzene	NS	ug/kg	0.73 U	0.56 U	0.60 U	0.64 U	0.54 U	0.28 J	43 U	0.52 J	0.95	1.3	0.52 U	135	0.19 J
Bromodichloromethane	NS	ug/kg	2.9 U	2.2 U	2.4 U	2.6 U	2.2 U	2.4 U	170 U	2.6 U	2.3 U	2.5 U	2.1 U	120 U	2.2 U
Bromoform	NS	ug/kg	7.3 U	5.6 U	6.0 U	6.4 U	5.4 U	6.0 U	430 U	6.6 U	5.8 U	6.1 U	5.2 U	290 U	5.6 U
Bromomethane	NS	ug/kg	7.3 U	5.6 U	6.0 U	6.4 U	5.4 U	6.0 U	430 U	6.6 U	5.8 U	6.1 U	5.2 U	290 U	5.6 U
Carbon Disulfide	NS	ug/kg	2.9 U	2.2 U	2.4 U	2.6 U	2.2 U	2.4 U	170 U	2.6 U	2.3 U	2.5 U	2.1 U	120 U	2.2 U
Carbon Tetrachloride	NS	ug/kg	2.9 U	2.2 U	2.4 U	2.6 U	2.2 U	2.4 U	170 U	2.6 U	2.3 U	2.5 U	2.1 U	120 U	2.2 U
Chlorobenzene	NS	ug/kg	2.9 U	2.2 U	2.4 U	2.6 U	2.2 U	2.4 U	170 U	2.6 U	2.3 U	2.8	2.1 U	120 U	2.2 U
Chloroethane	NS	ug/kg	7.3 U	5.6 U	6.0 U	6.4 U	5.4 U	6.0 U	430 U	6.6 U	5.8 U	6.1 U	5.2 U	290 U	5.6 U
Chloroform	NS	ug/kg	2.9 U	2.2 U	2.4 U	2.6 U	2.2 U	2.4 U	170 U	2.6 U	2.3 U	2.5 U	2.1 U	120 U	2.2 U
Chloromethane	NS	ug/kg	7.3 U	5.6 U	6.0 U	6.4 U	5.4 U	6.0 U	430 U	6.6 U	5.8 U	6.1 U	5.2 U	290 U	5.6 U
cis-1,2-Dichloroethene	NS	ug/kg	1.5 U	1.1 U	1.2 U	1.3 U	1.1 U	1.2 U	85 U	1.3 U	1.2 U	1.2 U	1.0 U	58 U	1.1 U
cis-1,3-Dichloropropene	NS	ug/kg	2.9 U	2.2 U	2.4 U	2.6 U	2.2 U	2.4 U	170 U	2.6 U	2.3 U	2.5 U	2.1 U	120 U	2.2 U
Cyclohexane	NS	ug/kg	2.9 U	2.2 U	2.4 U	2.6 U	2.2 U	2.4 U	170 U	1.2 J	2.3 U	2.5 U	2.1 U	120 U	2.2 U
Dibromochloromethane	NS	ug/kg	2.9 U	2.2 U	2.4 U	2.6 U	2.2 U	2.4 U	170 U	2.6 U	2.3 U	2.5 U	2.1 U	120 U	2.2 U
Dichlorodifluoromethane	NS	ug/kg	7.3 U	5.6 U	6.0 U	6.4 U	5.4 U	6.0 U	430 U	6.6 U	5.8 U	6.1 U	5.2 U	290 U	5.6 U
Ethylbenzene	NS	ug/kg	1.5 U	1.9	0.36 J	0.83 J	0.32 J	0.78 J	329	9.6	69.7	5.7	11.2	36,500	0.29 J
Isopropylbenzene	NS	ug/kg	2.9 U	2.2 U	2.4 U	2.6 U	2.2 U	2.4 U	21.7 J	1.1 J	6.5	4.3	3.6	2,260	2.2 U
Methyl acetate	NS	ug/kg	7.3 U	5.6 U	6.0 U	6.4 U	5.4 U	6.0 U	430 U	6.6 U	5.8 U	6.1 U	5.2 U	290 U	10.4
Methyl tert-butyl ether	NS	ug/kg	1.5 U	1.1 U	1.2 U	1.3 U	1.1 U	1.2 U	85 U	1.3 U	1.2 U	1.2 U	1.0 U	58 U	1.1 U
Methylcyclohexane	NS	ug/kg	0.62 J	2.2 U	2.4 U	2.6 U	2.2 U	2.4 U	170 U	5.1	10.6	3.6	6.6	2,140	2.2 U
Methylene Chloride	NS	ug/kg	7.3 U	5.6 U	6.0 U	6.4 U	5.4 U	6.0 U	430 U	6.6 U	5.8 U	6.1 U	2.5 J	290 U	5.6 U
Styrene	NS	ug/kg	2.9 U	2.2 U	2.4 U	2.6 U	2.2 U	2.4 U	170 U	2.6 U	2.3 U	2.5 U	2.1 U	120 U	2.2 U
Tetrachloroethene	NS	ug/kg	2.9 U	2.2 U	2.4 U	2.6 U	2.2 U	0.40 J	170 U	2.6 U	2.3 U	2.5 U	2.1 U	120 U	2.2 U
Toluene	NS	ug/kg	1.5 U	10.1	8.8	3.9	1.1 U	0.46 J	42.5 J	26.0	77.3	0.28 J	6.2	23,700	0.29 J
trans-1,2-Dichloroethene	NS	ug/kg	1.5 U	1.1 U	1.2 U	1.3 U	1.1 U	1.2 U	85 U	1.3 U	1.2 U	1.2 U	1.0 U	58 U	1.1 U
trans-1,3-Dichloropropene	NS	ug/kg	2.9 U	2.2 U	2.4 U	2.6 U	2.2 U	2.4 U	170 U	2.6 U	2.3 U	2.5 U	2.1 U	120 U	2.2 U
Trichloroethene	NS	ug/kg	1.5 U	1.1 U	1.2 U	1.3 U	1.1 U	1.2 U	85 U	1.3 U	1.2 U	1.2 U	1.0 U	58 U	1.1 U
Trichlorofluoromethane	NS	ug/kg	7.3 U	5.6 U	6.0 U	6.4 U	5.4 U	6.0 U	430 U	6.6 U	5.8 U	6.1 U	5.2 U	290 U	5.6 U
Vinyl Chloride	NS	ug/kg	2.9 U	2.2 U	2.4 U	2.6 U	2.2 U	2.4 U	170 U	2.6 U	2.3 U	2.5 U	2.1 U	120 U	2.2 U
Xylenes (total)	NS	ug/kg	1.5 U	9.5	1.2 U	5.8	0.52 J	5.3	2,430	286	27,700	42.5	117	216,000	1.4

See notes on last page

Table 23. Waste Characterization Analytical Results
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Waste Stream:			Non-Hazardous Material					Hazardous Materials for Metals Treatment and Subtitle "D" Landfilling							
Disposal Facility:			MCLF	MCLF	MCLF	MCLF	MCLF	PSC/York	York	PSC/York	PSC/York	PSC/York	PSC/York	PSC/York	PSC/York
Sample ID:	Maximum TCLP Concentration	Units	WC-B7	WC-E	WC-J	WC-MSA	WC-SE	WC-B2	WC-B2	WC-B2	WC-B2	WC-B2	WC-B3	WC-B4	WC-B5
Sample Date:			3/18/2016	4/5/2016	3/28/2016	3/29/2016	42255	11/12/2015	12/8/2015	12/28/2015	1/12/2016	1/26/2016	42276	11/3/2015	11/5/2015
Sample Name:			WC-B7-03182016	WC-E-04052016	WC-J-03282016	WC-MSA-03292016	WC-SE-090815	WC-B2-11122015	WC-B2-12082015	WC-B2-12282015	WC-B2-01122016	WC-B2-01262016	WC-B3-092915	WC-B4-11032015	WC-B5-11052015
SVOCs															
1,1'-Biphenyl	NS	ug/kg	50.4 J	74 U	76 U	71 U	73 U	76 U	70 U	77 U	28.8 J	73 U	72 U	202	73 U
2,2'-Oxybis(1-Chloropropane)	NS	ug/kg	78 U	74 U	76 U	71 U	73 U	76 U	70 U	77 U	77 U	73 U	72 U	72 U	73 U
2,4,5-Trichlorophenol	NS	ug/kg	190 U	180 U	190 U	180 U	180 U	190 U	170 U	190 U	190 U	180 U	180 U	180 U	180 U
2,4,6-Trichlorophenol	NS	ug/kg	190 U	180 U	190 U	180 U	180 U	190 U	170 U	190 U	190 U	180 U	180 U	180 U	180 U
2,4-Dichlorophenol	NS	ug/kg	190 U	180 U	190 U	180 U	180 U	190 U	170 U	190 U	190 U	180 U	180 U	180 U	180 U
2,4-Dimethylphenol	NS	ug/kg	190 U	180 U	190 U	180 U	180 U	190 U	170 U	190 U	190 U	180 U	180 U	180 U	180 U
2,4-Dinitrophenol	NS	ug/kg	190 U	180 U	190 U	180 U	180 U	190 U	170 U	190 U	190 U	180 U	180 U	180 U	180 U
2,4-Dinitrotoluene	NS	ug/kg	39 U	37 U	38 U	36 U	36 U	38 U	35 U	38 U	39 U	37 U	36 U	36 U	36 U
2,6-Dinitrotoluene	NS	ug/kg	39 U	37 U	38 U	36 U	36 U	38 U	35 U	38 U	39 U	37 U	36 U	36 U	36 U
2-Chloronaphthalene	NS	ug/kg	78 U	74 U	76 U	71 U	73 U	76 U	70 U	77 U	77 U	73 U	72 U	72 U	73 U
2-Chlorophenol	NS	ug/kg	78 U	74 U	76 U	71 U	73 U	76 U	70 U	77 U	77 U	73 U	72 U	72 U	73 U
2-Methylnaphthalene	NS	ug/kg	717	74 U	76 U	71 U	73 U	76 U	79.3	213	697	208	291	7,450	73 U
2-Methylphenol	NS	ug/kg	78 U	74 U	76 U	71 U	73 U	76 U	70 U	77 U	77 U	73 U	72 U	72 U	73 U
2-Nitroaniline	NS	ug/kg	190 U	180 U	190 U	180 U	180 U	190 U	170 U	190 U	190 U	180 U	180 U	180 U	180 U
2-Nitrophenol	NS	ug/kg	190 U	180 U	190 U	180 U	180 U	190 U	170 U	190 U	190 U	180 U	180 U	180 U	180 U
3,3'-Dichlorobenzidine	NS	ug/kg	78 U	74 U	76 U	71 U	73 U	76 U	70 U	77 U	77 U	73 U	72 U	72 U	73 U
3-Methylphenol, 4-Methylphenol	NS	ug/kg	78 U	227	51.5 J	574	73 U	76 U	70 U	77 U	77 U	73 U	72 U	126	73 U
3-Nitroaniline	NS	ug/kg	190 U	180 U	190 U	180 U	180 U	190 U	170 U	190 U	190 U	180 U	180 U	180 U	180 U
4,6-Dinitro-2-methylphenol	NS	ug/kg	190 U	180 U	190 U	180 U	180 U	190 U	170 U	190 U	190 U	180 U	180 U	180 U	180 U
4-Bromophenyl-phenylether	NS	ug/kg	78 U	74 U	76 U	71 U	73 U	76 U	70 U	77 U	77 U	73 U	72 U	72 U	73 U
4-Chloro-3-Methylphenol	NS	ug/kg	190 U	180 U	190 U	180 U	180 U	190 U	170 U	190 U	190 U	180 U	180 U	180 U	180 U
4-Chloroaniline	NS	ug/kg	190 U	180 U	190 U	180 U	180 U	190 U	170 U	190 U	190 U	180 U	180 U	180 U	180 U
4-Chlorophenyl-phenylether	NS	ug/kg	78 U	74 U	76 U	71 U	73 U	76 U	70 U	77 U	77 U	73 U	72 U	72 U	73 U
4-Nitroaniline	NS	ug/kg	190 U	180 U	190 U	180 U	180 U	190 U	170 U	190 U	190 U	180 U	180 U	180 U	180 U
4-Nitrophenol	NS	ug/kg	390 U	370 U	380 U	360 U	360 U	380 U	350 U	380 U	390 U	370 U	360 U	360 U	360 U
Acenaphthene	NS	ug/kg	39 U	37 U	38 U	36 U	36 U	38 U	35 U	38 U	39 U	37 U	36 U	50.2	36 U
Acenaphthylene	NS	ug/kg	39 U	37 U	38 U	36 U	36 U	38 U	35 U	38 U	39 U	37 U	36 U	55.8	36 U
Acetophenone	NS	ug/kg	190 U	180 U	190 U	180 U	180 U	190 U	170 U	190 U	190 U	180 U	180 U	180 U	180 U
Anthracene	NS	ug/kg	35.4 J	37 U	16.6 J	36 U	36 U	38 U	35 U	38 U	39 U	37 U	36 U	134	36 U
Atrazine	NS	ug/kg	78 U	74 U	76 U	71 U	73 U	76 U	70 U	77 U	77 U	73 U	72 U	72 U	73 U
Benzaldehyde	NS	ug/kg	190 U	180 U	190 U	22.4 J	180 U	73.1 J	170 U	190 U	190 U	180 U	180 U	180 U	180 U
Benzo(a)anthracene	NS	ug/kg	77.2	17.5 J	47.0	17.6 J	19.4 J	38 U	18.4 J	19.9 J	31.6 J	19.3 J	36 U	273	36 U
Benzo(a)pyrene	NS	ug/kg	57.0	37 U	45.0	15.7 J	18.7 J	38 U	21.9 J	16.3 J	44.1	15.6 J	36 U	281	36 U
Benzo(b)fluoranthene	NS	ug/kg	82.7	18.3 J	52.7	24.3 J	21.9 J	38 U	25.3 J	19.6 J	34.0 J	21.8 J	36 U	347	36 U
Benzo(g,h,i)perylene	NS	ug/kg	37.1 J	37 U	27.0 J	36 U	36 U	38 U	19.4 J	38 U	50.9	16.8 J	14.2 J	169	36 U
Benzo(k)fluoranthene	NS	ug/kg	28.8 J	37 U	22.2 J	36 U	36 U	38 U	35 U	38 U	39 U	37 U	36 U	131	36 U
bis(2-Chloroethoxy)methane	NS	ug/kg	78 U	74 U	76 U	71 U	73 U	76 U	70 U	77 U	77 U	73 U	72 U	72 U	73 U
bis(2-Chloroethyl)ether	NS	ug/kg	78 U	74 U	76 U	71 U	73 U	76 U	70 U	77 U	77 U	73 U	72 U	72 U	73 U
bis(2-Ethylhexyl)phthalate	NS	ug/kg	366	71.3 J	51.0 J	49.8 J	73 U	117	94.4	463	576	15,600	183	3,270	73 U
Butylbenzylphthalate	NS	ug/kg	78 U	74 U	76 U	71 U	73 U	76 U	70 U	77 U	77 U	73 U	72 U	72 U	73 U
Caprolactam	NS	ug/kg	78 U	74 U	76 U	71 U	73 U	76 U	70 U	77 U	77 U	73 U	72 U	72 U	73 U
Carbazole	NS	ug/kg	15.6 J	74 U	76 U	71 U	73 U	76 U	70 U	77 U	77 U	73 U	72 U	29.0 J	73 U
Chrysene	NS	ug/kg	85.4	17.4 J	50.5	20.0 J	20.0 J	15.0 J	22.2 J	21.5 J	47.3	24.1 J	25.7 J	294	36 U
Dibenzo(a,h)anthracene	NS	ug/kg	39 U	37 U	38 U	36 U	36 U	38 U	35 U	38 U	39 U	37 U	36 U	50.4	36 U
Dibenzofuran	NS	ug/kg	78 U	74 U	76 U	71 U	73 U	76 U	70 U	77 U	77 U	73 U	72 U	50.0 J	73 U
Diethylphthalate	NS	ug/kg	78 U	74 U	76 U	71 U	73 U	76 U	70 U	77 U	77 U	73 U	72 U	72 U	73 U
Dimethylphthalate	NS	ug/kg	78 U	74 U	76 U	71 U	73 U	76 U	70 U	77 U	77 U	73 U	72 U	76.0	73 U
Di-n-Butylphthalate	NS	ug/kg	78 U	74 U	76 U	71 U	73 U	76 U	70 U	77 U	77 U	73 U	72 U	647	73 U
Di-n-Octylphthalate	NS	ug/kg	78 U	74 U	76 U	71 U	73 U	76 U	70 U	77 U	77 U	73 U	72 U	72 U	73 U
Fluoranthene	NS	ug/kg	197	27.2 J	84.9	32.4 J	30.9 J	38 U	33.3 J	37.4 J	46.2	25.1 J	25.8 J	624	36 U
Fluorene	NS	ug/kg	22.6 J	37 U	38 U	36 U	36 U	38 U	35 U	38 U	39 U	37 U	36 U	79.5	36 U
Hexachlorobenzene	NS	ug/kg	647	74 U	76 U	71 U	73 U	76 U	70 U	77 U	77 U	73 U	72 U	72 U	73 U
Hexachlorobutadiene	NS	ug/kg	39 U	37 U	38 U	36 U	36 U	38 U	35 U	38 U	39 U	37 U	36 U	36 U	36 U
Hexachlorocyclopentadiene	NS	ug/kg	390 U	370 U	380 U	360 U	360 U	380 U	350 U	380 U	390 U	370 U	360 U	360 U	360 U
Hexachloroethane	NS	ug/kg	190 U	180 U	190 U	180 U	180 U	190 U	170 U	190 U	190 U	180 U	180 U	180 U	180 U
Indeno(1,2,3-cd)pyrene	NS	ug/kg	40.3	37 U	31.5 J	36 U	36 U	38 U	19.5 J	38 U	26.2 J	37 U	36 U	180	36 U
Isophorone	NS	ug/kg	78 U	74 U	76 U	71 U	73 U	76 U	70 U	77 U	77 U	73 U	72 U	72 U	73 U
Naphthalene	NS	ug/kg	2,120	15.6 J	38 U	26.3 J	36 U	38 U	220	598	1,860	533	541	29,900	36 U
Nitrobenzene	NS	ug/kg	78 U	74 U	76 U	71 U	73 U	76 U	70 U	77 U	77 U	73 U	72 U	72 U	73 U
N-Nitroso-di-n-propylamine	NS	ug/kg	78 U	74 U	76 U	71 U	73 U	76 U	70 U	77 U	77 U	73 U	72 U	72 U	73 U
N-Nitrosodiphenylamine	NS	ug/kg	66.8 J	180 U	190 U	180 U	180 U	190 U	170 U	190 U	190 U	180 U	180 U	113 J	180 U
Pentachlorophenol	NS	ug/kg	190 U	180 U	190 U	180 U	180 U	190 U	170 U	190 U	190 U	180 U	180 U	180 U	180 U
Phenanthrene	NS	ug/kg	159	21.3 J	64.6	22.3 J	36 U	38 U	33.9 J	33.0 J	52.5	24.6 J	60.3	486	36 U
Phenol	NS	ug/kg	78 U	74 U	76 U	71 U	73 U	76 U	70 U	77 U	77 U	73 U	72 U	262	73 U
Pyrene	NS	ug/kg	145	34.2 J	84.8	27.8 J	26.4 J	38 U	34.7 J	36.0 J	58.4	30.3 J	17.0 J	502	36 U

See notes on last page

Table 23. Waste Characterization Analytical Results
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Waste Stream:			Non-Hazardous Material					Hazardous Materials for Metals Treatment and Subtitle "D" Landfilling							
Disposal Facility:			MCLF	MCLF	MCLF	MCLF	MCLF	PSC/York	York	PSC/York	PSC/York	PSC/York	PSC/York	PSC/York	PSC/York
Sample ID:	Maximum TCLP Concentration	Units	WC-B7	WC-E	WC-J	WC-MSA	WC-SE	WC-B2	WC-B2	WC-B2	WC-B2	WC-B2	WC-B3	WC-B4	WC-B5
Sample Date:			3/18/2016	4/5/2016	3/28/2016	3/29/2016	42255	11/12/2015	12/8/2015	12/28/2015	1/12/2016	1/26/2016	42276	11/3/2015	11/5/2015
Sample Name:			WC-B7-03182016	WC-E-04052016	WC-J-03282016	WC-MSA-03292016	WC-SE-090815	WC-B2-11122015	WC-B2-12082015	WC-B2-12282015	WC-B2-01122016	WC-B2-01262016	WC-B3-092915	WC-B4-11032015	WC-B5-11052015
VOCs TCLP Leachate															
1,1-Dichloroethene	0.7	mg/L	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
1,2-Dichloroethane	0.5	mg/L	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
1,4-Dichlorobenzene	7.5	mg/L	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
2-Butanone	200	mg/L	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Benzene	0.5	mg/L	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0065	0.0025 U
Carbon Tetrachloride	0.5	mg/L	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Chlorobenzene	100	mg/L	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Chloroform	6	mg/L	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Tetrachloroethene	0.7	mg/L	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0042 J	0.0050 U	0.0050 U	0.0027 J	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Trichloroethene	0.5	mg/L	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Vinyl Chloride	0.2	mg/L	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
SVOCs TCLP Leachate															
1,4-Dichlorobenzene	7.5	mg/L	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U
2,4,5-Trichlorophenol	400	mg/L	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
2,4,6-Trichlorophenol	2	mg/L	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
2,4-Dinitrotoluene	0.13	mg/L	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U
2-Methylphenol	200	mg/L	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U
3-Methylphenol, 4-Methylphenol	200	mg/L	0.020 U	0.0374	0.020 U	0.0141 J	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U
Hexachlorobenzene	0.13	mg/L	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U
Hexachlorobutadiene	0.5	mg/L	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
Hexachloroethane	3	mg/L	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
Nitrobenzene	2	mg/L	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U
Pentachlorophenol	100	mg/L	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Pyridine	5	mg/L	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U
Pesticide TCLP Leachate															
Chlordane (Technical)	0.03	mg/L	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Endrin	0.02	mg/L	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U
Gamma-BHC (Lindane)	0.4	mg/L	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U
Heptachlor	.008	mg/L	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U
Heptachlor Epoxide	.008	mg/L	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U
Methoxychlor	NS	mg/L	0.00020 U	0.00020 U	0.00020 U	0.00020 U	0.00020 U	0.00020 U	0.00020 U	0.00020 U	0.00020 U	0.00020 U	0.00020 U	0.00020 U	0.00020 U
Toxaphene	NS	mg/L	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U
See notes on last page															
Herbicide TCLP Leachate															
2,4,5-TP	1	mg/L	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U
2,4-D	10	mg/L	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
PCBs															
Aroclor-1016	NS	ug/kg	38 U	36 U	37 U	38 U	37 U	38 U	37 U	39 U	38 U	35 U	36 U	35 U	36 U
Aroclor-1221	NS	ug/kg	38 U	36 U	37 U	38 U	37 U	38 U	37 U	39 U	38 U	35 U	36 U	35 U	36 U
Aroclor-1232	NS	ug/kg	38 U	36 U	37 U	38 U	37 U	38 U	37 U	39 U	38 U	35 U	36 U	35 U	36 U
Aroclor-1242	NS	ug/kg	38 U	36 U	37 U	38 U	37 U	38 U	37 U	39 U	38 U	35 U	36 U	35 U	36 U
Aroclor-1248	NS	ug/kg	38 U	36 U	37 U	38 U	37 U	38 U	37 U	39 U	38 U	35 U	36 U	35 U	36 U
Aroclor-1254	NS	ug/kg	38 U	36 U	37 U	38 U	37 U	38 U	37 U	39 U	38 U	35 U	36 U	35 U	36 U
Aroclor-1260	NS	ug/kg	38 U	36 U	37 U	38 U	37 U	38 U	37 U	39 U	38 U	35 U	36 U	35 U	36 U
Aroclor-1262	NS	ug/kg	38 U	36 U	37 U	38 U	37 U	38 U	37 U	39 U	38 U	35 U	36 U	35 U	36 U
Aroclor-1268	NS	ug/kg	38 U	36 U	37 U	38 U	37 U	38 U	37 U	39 U	38 U	35 U	36 U	35 U	36 U
Metals TCLP Leachate															
Arsenic	5	mg/L	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.035 B	0.50 U	0.012 B	0.014 B	0.50 U	0.50 U	0.020 B	0.016 B
Barium	100	mg/L	1.5	1.2	0.40 B	1.5	0.77 B	2.1	2.8	2.8	1.8	2.8	2.7	2.5	3.4
Cadmium	1	mg/L	0.0028 B	0.0084 B	0.025 U	0.014 B	0.0048 B	0.069	0.086	0.078	0.059	0.013 B	0.032	0.013 B	0.039
Chromium	5	mg/L	0.074	0.050 U	0.050 U	0.050 U	0.050 U	0.0049 B	0.050 U	0.0045 B	0.050 U	0.0071 B	0.017 B	0.0072 B	0.050 U
Lead	5	mg/L	0.63	0.16 B	0.014 B	0.20 B	0.13 B	81.7	10.0	9.2	7.6	7.3	17.4	23.9	5.1
Mercury	0.2	mg/L	0.00020 U	0.00020 U	0.00020 U	0.00020 U	0.00020 U	0.00020 U	0.00020 U	0.00020 U	0.00020 U	0.00020 U	0.00020 U	0.00020 U	0.00020 U
Selenium	1	mg/L	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Silver	5	mg/L	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
TPH															
Diesel C10-C28	NS	mg/kg	392	48.1	12.6	26.7	28.8	11 U	86.2	68.6	363	65.3	394	870	10 U
Gasoline C6-C10	NS	mg/kg	NA	NA	NA	NA	13 U	NA	NA	NA	NA	NA	NA	NA	NA
See notes on last page															

Table 23. Waste Characterization Analytical Results
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Waste Stream:			Non-Hazardous Material					Hazardous Materials for Metals Treatment and Subtitle "D" Landfilling							
Disposal Facility:			MCLF	MCLF	MCLF	MCLF	MCLF	PSC/York	York	PSC/York	PSC/York	PSC/York	PSC/York	PSC/York	PSC/York
Sample ID:	Maximum TCLP Concentration	Units	WC-B7	WC-E	WC-J	WC-MSA	WC-SE	WC-B2	WC-B2	WC-B2	WC-B2	WC-B2	WC-B3	WC-B4	WC-B5
Sample Date:			3/18/2016	4/5/2016	3/28/2016	3/29/2016	42255	11/12/2015	12/8/2015	12/28/2015	1/12/2016	1/26/2016	42276	11/3/2015	11/5/2015
Sample Name:			WC-B7-03182016	WC-E-04052016	WC-J-03282016	WC-MSA-03292016	WC-SE-090815	WC-B2-11122015	WC-B2-12082015	WC-B2-12282015	WC-B2-01122016	WC-B2-01262016	WC-B3-092915	WC-B4-11032015	WC-B5-11052015
Other															
Corrosivity	NS	SU	7.09 NC	6.91 NC	6.99 NC	7.37 NC	7.21 NC	7.10 NC	7.36 NC	7.20 NC	7.15 NC	7.57 NC	6.00 NC	7.51 nc	7.32 NC
Cyanide Reactivity	NS	mg/kg	11 U	11 U	11 U	11 U	11 U	11 U	11 U	12 U	12 U	11 U	11 U	11 U	11 U
Heat Content, BTU	NS	BTU	NA	NA	NA	NA	100 U	NA	NA	NA	NA	NA	NA	NA	NA
Heat Content, BTU	NS	btu/lb	1,530	100 U	117	132	NA	352	843	719	1,050	146	436	730	100 U
Heating Value	NS	btu/lb	NA	NA	NA	NA	1,000 U	NA	NA	NA	NA	NA	NA	NA	NA
Ignitability	NS	deg f	>	>	>	>	>	>	>	>	>	>	>	>	>
Paint Filter Test	NS	ml/100g	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Sufide Reactivity	NS	mg/kg	110 U	110 U	110 U	110 U	110 U	110 U	110 U	120 U	120 U	110 U	110 U	110 U	110 U
Total Organic Halides	NS	mg/kg	21 U	23 U	22 U	21 U	75.0	23 U	22 U	22 U	20 U	21 U	20 U	22 U	22 U
Solids															
Percent Solids	NS	%	83.4	88.1	87.1	86.8	87.2	86.9	87.5	82.5	84.4	90.4	91.3	91.1	89.3

Notes:
mg/kg: Milligrams per kilogram
BTU: British Thermal Units
UB: Result non-detected at the listed value due to associated blank contamination.
B: Result is between the method detection limit and the reporting limit.
J or JN: Estimated Result
R: Rejected Result
SU: System Units
btu/lb: British Thermal Units per Pound
deg F: Degrees Fahrenheit
mg/L: Milligrams per Liter
ml/100g: Milliliters per 100 grams
PCBs: Polychlorinated Biphenyls
Bolded values indicate detection.

Bolded and shaded values indicate exceedance of the maximum TCLP Concentration.

Disposal Facility:
MCLF: Middlesex County Landfill located in East Brunswick, New Jersey
Casella: Ontario County Landfill located in Stanley, New York
PSC: Republic Environmental Systems (PA), LLC located in Hatfield, Pennsylvania
York: Envirite of Pennsylvania, Inc. located in York, Pennsylvania
USE: Wayne Disposal, Inc. Site #2 Landfill located in Belleville, Michigan
Heritage: Heritage Thermal Services, Inc. located in East Liverpool, Ohio

Table 23. Waste Characterization Analytical Results
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Waste Stream:			Hazardous Materials for Metals Treatment and Subtitle "D" Landfilling				Hazardous Materials for Disposal of PCBs	Hazardous Materials for Thermal Treatment and Landfilling
Disposal Facility:			PSC/York	York	PSC/York	PSC/York	USE	Heritage
Sample ID:	Maximum TCLP Concentration	Units	WC-B6	WC-B6	WC-B7	WC-B7	WC-B5	WC-PS
Sample Date:			10/26/2015	11/10/2015	11/16/2015	3/4/2016	1/25/2016	9/25/2015
Sample Name:			WC-B6-102615	WC-B6-11102015	WC-B7-11162015	WC-B7-03042016	WC-B5-01252016	WC-PS-092515
VOCs								
1,1,1-Trichloroethane	NS	ug/kg	120 U	2.2 U	2.2 U	130 U	2.2 U	10,000 U
1,1,2,2-Tetrachloroethane	NS	ug/kg	120 U	2.2 U	2.2 U	130 U	2.2 U	10,000 U
1,1,2-trichloro-1,2,2-trifluoroethane	NS	ug/kg	300 U	5.4 U	5.5 U	330 U	5.4 U	25,000 U
1,1,2-Trichloroethane	NS	ug/kg	120 U	2.2 U	2.2 U	130 U	2.2 U	10,000 U
1,1-Dichloroethane	NS	ug/kg	60 U	1.1 U	1.1 U	65 U	1.1 U	5,000 U
1,1-Dichloroethene	NS	ug/kg	60 U	1.1 U	1.1 U	65 U	1.1 U	5,000 U
1,2,4-Trichlorobenzene	NS	ug/kg	300 U	5.4 U	5.5 U	330 U	5.4 U	25,000 U
1,2-Dibromo-3-chloropropane	NS	ug/kg	120 U	2.2 U	2.2 U	130 U	2.2 U	10,000 U
1,2-Dibromoethane	NS	ug/kg	60 U	1.1 U	1.1 U	65 U	1.1 U	5,000 U
1,2-Dichlorobenzene	NS	ug/kg	60 U	1.1 U	1.1 U	65 U	1.1 U	5,000 U
1,2-Dichloroethane	NS	ug/kg	60 U	1.1 U	1.1 U	65 U	1.1 U	5,000 U
1,2-Dichloropropane	NS	ug/kg	120 U	2.2 U	2.2 U	130 U	2.2 U	10,000 U
1,3-Dichlorobenzene	NS	ug/kg	60 U	1.1 U	1.1 U	65 U	1.1 U	5,000 U
1,4-Dichlorobenzene	NS	ug/kg	60 U	1.1 U	1.1 U	65 U	1.1 U	5,000 U
2-Butanone	NS	ug/kg	600 U	11 U	11 U	650 U	11 U	50,000 U
2-Hexanone	NS	ug/kg	300 U	5.4 U	5.5 U	330 U	5.4 U	25,000 U
4-Methyl-2-pentanone	NS	ug/kg	379	5.4 U	5.5 U	330 U	5.4 U	25,000 U
Acetone	NS	ug/kg	844	6.7 J	12.1	650 U	11 U	50,000 U
Benzene	NS	ug/kg	13.3 J	0.54 U	0.45 J	33 U	0.54 U	2,500 U
Bromodichloromethane	NS	ug/kg	120 U	2.2 U	2.2 U	130 U	2.2 U	10,000 U
Bromoform	NS	ug/kg	300 U	5.4 U	5.5 U	330 U	5.4 U	25,000 U
Bromomethane	NS	ug/kg	300 U	5.4 U	5.5 U	330 U	5.4 U	25,000 U
Carbon Disulfide	NS	ug/kg	120 U	2.2 U	2.2 U	130 U	2.2 U	10,000 U
Carbon Tetrachloride	NS	ug/kg	120 U	2.2 U	2.2 U	130 U	2.2 U	10,000 U
Chlorobenzene	NS	ug/kg	120 U	2.2 U	2.2 U	130 U	2.2 U	10,000 U
Chloroethane	NS	ug/kg	300 U	5.4 U	5.5 U	330 U	5.4 U	25,000 U
Chloroform	NS	ug/kg	120 U	2.2 U	2.2 U	130 U	2.2 U	10,000 U
Chloromethane	NS	ug/kg	300 U	5.4 U	5.5 U	330 U	5.4 U	25,000 U
cis-1,2-Dichloroethene	NS	ug/kg	60 U	1.1 U	1.1 U	65 U	1.1 U	5,000 U
cis-1,3-Dichloropropene	NS	ug/kg	120 U	2.2 U	2.2 U	130 U	2.2 U	10,000 U
Cyclohexane	NS	ug/kg	36.2 J	2.2 U	2.2 U	130 U	2.2 U	10,000 U
Dibromochloromethane	NS	ug/kg	120 U	2.2 U	2.2 U	130 U	2.2 U	10,000 U
Dichlorodifluoromethane	NS	ug/kg	300 U	5.4 U	5.5 U	330 U	5.4 U	25,000 U
Ethylbenzene	NS	ug/kg	5,910	25.6	1.1 U	1,510	0.46 J	232,000
Isopropylbenzene	NS	ug/kg	590	5.3	2.2 U	413	0.18 J	39,400
Methyl acetate	NS	ug/kg	300 U	5.4 U	11.3	330 U	5.4 U	25,000 U
Methyl tert-butyl ether	NS	ug/kg	60 U	1.1 U	1.1 U	65 U	1.1 U	5,000 U
Methylcyclohexane	NS	ug/kg	371	1.2 J	2.2 U	1,480	2.2 U	5,050 J
Methylene Chloride	NS	ug/kg	300 U	5.4 U	2.0 J	330 U	5.4 U	25,000 U
Styrene	NS	ug/kg	120 U	2.2 U	2.2 U	130 U	2.2 U	10,000 U
Tetrachloroethene	NS	ug/kg	120 U	2.2 U	2.2 U	130 U	2.2 U	10,000 U
Toluene	NS	ug/kg	3,210	5.4	1.1 U	215	1.1 U	144,000
trans-1,2-Dichloroethene	NS	ug/kg	60 U	1.1 U	1.1 U	65 U	1.1 U	5,000 U
trans-1,3-Dichloropropene	NS	ug/kg	120 U	2.2 U	2.2 U	130 U	2.2 U	10,000 U
Trichloroethene	NS	ug/kg	60 U	1.1 U	1.1 U	65 U	1.1 U	5,000 U
Trichlorofluoromethane	NS	ug/kg	300 U	5.4 U	5.5 U	330 U	5.4 U	25,000 U
Vinyl Chloride	NS	ug/kg	120 U	2.2 U	2.2 U	130 U	2.2 U	10,000 U
Xylenes (total)	NS	ug/kg	44,000	241	1.1 U	16,400	3.9	1,770,000
See notes on last page								

Table 23. Waste Characterization Analytical Results
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Waste Stream:			Hazardous Materials for Metals Treatment and Subtitle "D" Landfilling				Hazardous Materials for Disposal of PCBs	Hazardous Materials for Thermal Treatment and Landfilling
Disposal Facility:			PSC/York	York	PSC/York	PSC/York	USE	Heritage
Sample ID:	Maximum TCLP Concentration	Units	WC-B6	WC-B6	WC-B7	WC-B7	WC-B5	WC-PS
Sample Date:			10/26/2015	11/10/2015	11/16/2015	3/4/2016	1/25/2016	9/25/2015
Sample Name:			WC-B6-102615	WC-B6-11102015	WC-B7-11162015	WC-B7-03042016	WC-B5-01252016	WC-PS-092515
SVOCs								
1,1'-Biphenyl	NS	ug/kg	80.0	73 U	72 U	43.2 J	70 U	1,220
2,2'-Oxybis(1-Chloropropane)	NS	ug/kg	73 U	73 U	72 U	76 U	70 U	510 U
2,4,5-Trichlorophenol	NS	ug/kg	180 U	180 U	180 U	190 U	170 U	1,300 U
2,4,6-Trichlorophenol	NS	ug/kg	180 U	180 U	180 U	190 U	170 U	1,300 U
2,4-Dichlorophenol	NS	ug/kg	180 U	180 U	180 U	190 U	170 U	1,300 U
2,4-Dimethylphenol	NS	ug/kg	180 U	180 U	180 U	190 U	170 U	1,300 U
2,4-Dinitrophenol	NS	ug/kg	180 U	180 U	180 U	190 U	170 U	1,300 U
2,4-Dinitrotoluene	NS	ug/kg	37 U	36 U	36 U	38 U	35 U	250 U
2,6-Dinitrotoluene	NS	ug/kg	37 U	36 U	36 U	38 U	35 U	250 U
2-Chloronaphthalene	NS	ug/kg	73 U	73 U	72 U	76 U	70 U	510 U
2-Chlorophenol	NS	ug/kg	73 U	73 U	72 U	76 U	70 U	510 U
2-Methylnaphthalene	NS	ug/kg	3,040	73 U	72 U	455	70 U	18,400
2-Methylphenol	NS	ug/kg	73 U	73 U	72 U	76 U	70 U	510 U
2-Nitroaniline	NS	ug/kg	180 U	180 U	180 U	190 U	170 U	1,300 U
2-Nitrophenol	NS	ug/kg	180 U	180 U	180 U	190 U	170 U	1,300 U
3,3'-Dichlorobenzidine	NS	ug/kg	73 U	73 U	72 U	76 U	70 U	510 U
3-Methylphenol, 4-Methylphenol	NS	ug/kg	73 U	73 U	72 U	76 U	70 U	510 U
3-Nitroaniline	NS	ug/kg	180 U	180 U	180 U	190 U	170 U	1,300 U
4,6-Dinitro-2-methylphenol	NS	ug/kg	180 U	180 U	180 U	190 U	170 U	1,300 U
4-Bromophenyl-phenylether	NS	ug/kg	73 U	73 U	72 U	76 U	70 U	510 U
4-Chloro-3-Methylphenol	NS	ug/kg	180 U	180 U	180 U	190 U	170 U	1,300 U
4-Chloroaniline	NS	ug/kg	180 U	180 U	180 U	190 U	170 U	1,300 U
4-Chlorophenyl-phenylether	NS	ug/kg	73 U	73 U	72 U	76 U	70 U	510 U
4-Nitroaniline	NS	ug/kg	180 U	180 U	180 U	190 U	170 U	1,300 U
4-Nitrophenol	NS	ug/kg	370 U	360 U	360 U	380 U	350 U	2,500 U
Acenaphthene	NS	ug/kg	94.6	36 U	36 U	38 U	35 U	250 U
Acenaphthylene	NS	ug/kg	109	36 U	36 U	38 U	35 U	250 U
Acetophenone	NS	ug/kg	180 U	180 U	180 U	190 U	170 U	1,300 U
Anthracene	NS	ug/kg	330	36 U	36 U	38 U	35 U	250 U
Atrazine	NS	ug/kg	73 U	73 U	72 U	76 U	70 U	510 U
Benzaldehyde	NS	ug/kg	180 U	180 U	180 U	190 U	170 U	1,300 U
Benzo(a)anthracene	NS	ug/kg	771	36 U	36 U	38 U	35.0	250 U
Benzo(a)pyrene	NS	ug/kg	913	36 U	36 U	38 U	37.7	250 U
Benzo(b)fluoranthene	NS	ug/kg	1,130	36 U	36 U	38 U	61.2	250 U
Benzo(g,h,i)perylene	NS	ug/kg	589	36 U	36 U	38 U	35.4	250 U
Benzo(k)fluoranthene	NS	ug/kg	327	36 U	36 U	38 U	20.6 J	250 U
bis(2-Chloroethoxy)methane	NS	ug/kg	73 U	73 U	72 U	76 U	70 U	510 U
bis(2-Chloroethyl)ether	NS	ug/kg	73 U	73 U	72 U	76 U	70 U	510 U
bis(2-Ethylhexyl)phthalate	NS	ug/kg	1,430	73 U	76.7	401	75.8	519
Butylbenzylphthalate	NS	ug/kg	73 U	73 U	72 U	76 U	70 U	988
Caprolactam	NS	ug/kg	73 U	73 U	72 U	76 U	70 U	510 U
Carbazole	NS	ug/kg	68.4 J	73 U	72 U	76 U	70 U	510 U
Chrysene	NS	ug/kg	761	36 U	36 U	38 U	42.1	250 U
Dibenzo(a,h)anthracene	NS	ug/kg	152	36 U	36 U	38 U	35 U	250 U
Dibenzofuran	NS	ug/kg	65.0 J	73 U	72 U	76 U	70 U	510 U
Diethylphthalate	NS	ug/kg	73 U	73 U	72 U	76 U	70 U	510 U
Dimethylphthalate	NS	ug/kg	73 U	73 U	72 U	76 U	70 U	510 U
Di-n-Butylphthalate	NS	ug/kg	73 U	73 U	72 U	76 U	70 U	510 U
Di-n-Octylphthalate	NS	ug/kg	73 U	73 U	72 U	76 U	70 U	510 U
Fluoranthene	NS	ug/kg	1,750	36 U	36 U	16.3 J	61.9	250 U
Fluorene	NS	ug/kg	118	36 U	36 U	38 U	35 U	250 U
Hexachlorobenzene	NS	ug/kg	73 U	73 U	72 U	76 U	70 U	510 U
Hexachlorobutadiene	NS	ug/kg	37 U	36 U	36 U	38 U	35 U	250 U
Hexachlorocyclopentadiene	NS	ug/kg	370 U	360 U	360 U	380 U	350 U	2,500 U
Hexachloroethane	NS	ug/kg	180 U	180 U	180 U	190 U	170 U	1,300 U
Indeno(1,2,3-cd)pyrene	NS	ug/kg	570	36 U	36 U	38 U	31.3 J	250 U
Isophorone	NS	ug/kg	73 U	73 U	72 U	76 U	70 U	510 U
Naphthalene	NS	ug/kg	18,200	36 U	36 U	1,410	35 U	96,700
Nitrobenzene	NS	ug/kg	73 U	73 U	72 U	76 U	70 U	510 U
N-Nitroso-di-n-propylamine	NS	ug/kg	73 U	73 U	72 U	76 U	70 U	510 U
N-Nitrosodiphenylamine	NS	ug/kg	71.8 J	180 U	180 U	28.3 J	170 U	1,300 U
Pentachlorophenol	NS	ug/kg	180 U	180 U	180 U	190 U	170 U	1,300 U
Phenanthrene	NS	ug/kg	1,050	36 U	36 U	23.8 J	21.6 J	429
Phenol	NS	ug/kg	235	73 U	72 U	76 U	70 U	510 U
Pyrene	NS	ug/kg	1,470	36 U	36 U	15.6 J	58.5	132 J
See notes on last page								

Table 23. Waste Characterization Analytical Results
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Waste Stream:			Hazardous Materials for Metals Treatment and Subtitle "D" Landfilling				Hazardous Materials for Disposal of PCBs	Hazardous Materials for Thermal Treatment and Landfilling
Disposal Facility:			PSC/York	York	PSC/York	PSC/York	USE	Heritage
Sample ID:	Maximum TCLP Concentration	Units	WC-B6	WC-B6	WC-B7	WC-B7	WC-B5	WC-PS
Sample Date:			10/26/2015	11/10/2015	11/16/2015	3/4/2016	1/25/2016	9/25/2015
Sample Name:			WC-B6-102615	WC-B6-11102015	WC-B7-11162015	WC-B7-03042016	WC-B5-01252016	WC-PS-092515
VOCs TCLP Leachate								
1,1-Dichloroethene	0.7	mg/L	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
1,2-Dichloroethane	0.5	mg/L	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
1,4-Dichlorobenzene	7.5	mg/L	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
2-Butanone	200	mg/L	0.0405 J	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Benzene	0.5	mg/L	0.0025 U	0.0025 U	0.0025 U	0.0052	0.0025 U	0.0077
Carbon Tetrachloride	0.5	mg/L	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Chlorobenzene	100	mg/L	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Chloroform	6	mg/L	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Tetrachloroethene	0.7	mg/L	0.0082	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Trichloroethene	0.5	mg/L	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0046 J
Vinyl Chloride	0.2	mg/L	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
SVOCs TCLP Leachate								
1,4-Dichlorobenzene	7.5	mg/L	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U
2,4,5-Trichlorophenol	400	mg/L	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
2,4,6-Trichlorophenol	2	mg/L	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
2,4-Dinitrotoluene	0.13	mg/L	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U
2-Methylphenol	200	mg/L	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U
3-Methylphenol, 4-Methylphenol	200	mg/L	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U
Hexachlorobenzene	0.13	mg/L	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U
Hexachlorobutadiene	0.5	mg/L	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
Hexachloroethane	3	mg/L	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
Nitrobenzene	2	mg/L	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U
Pentachlorophenol	100	mg/L	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Pyridine	5	mg/L	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U
Pesticide TCLP Leachate								
Chlordane (Technical)	0.03	mg/L	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Endrin	0.02	mg/L	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U
Gamma-BHC (Lindane)	0.4	mg/L	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U
Heptachlor	.008	mg/L	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U
Heptachlor Epoxide	.008	mg/L	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U
Methoxychlor	NS	mg/L	0.00020 U	0.00020 U	0.00020 U	0.00020 U	0.00020 U	0.00020 U
Toxaphene	NS	mg/L	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U
See notes on last page								
Herbicide TCLP Leachate								
2,4,5-TP	1	mg/L	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U
2,4-D	10	mg/L	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
PCBs								
Aroclor-1016	NS	ug/kg	36 U	33 U	37 U	36 U	35 U	51 U
Aroclor-1221	NS	ug/kg	36 U	33 U	37 U	36 U	35 U	51 U
Aroclor-1232	NS	ug/kg	36 U	33 U	37 U	36 U	35 U	51 U
Aroclor-1242	NS	ug/kg	36 U	33 U	37 U	36 U	35 U	51 U
Aroclor-1248	NS	ug/kg	36 U	33 U	37 U	36 U	35 U	51 U
Aroclor-1254	NS	ug/kg	36 U	33 U	37 U	36 U	13,600	51 U
Aroclor-1260	NS	ug/kg	36 U	33 U	37 U	36 U	35 U	51 U
Aroclor-1262	NS	ug/kg	36 U	33 U	37 U	36 U	35 U	51 U
Aroclor-1268	NS	ug/kg	36 U	33 U	37 U	36 U	35 U	51 U
Metals TCLP Leachate								
Arsenic	5	mg/L	0.018 B	0.031 B	0.50 U	0.014 B	0.50 U	0.50 U
Barium	100	mg/L	2.1	2.3	1.4	1.8	0.64 B	1.1
Cadmium	1	mg/L	0.0093 B	0.076	0.036	0.0049 B	0.0025 B	0.025 U
Chromium	5	mg/L	0.0059 B	0.050 U	0.050 U	0.050 U	0.050 U	0.10
Lead	5	mg/L	15.4	59.2	8.0	10.7	0.041 B	0.86
Mercury	0.2	mg/L	0.00020 U	0.00020 U	0.00020 U	0.00020 U	0.00020 U	0.00020 U
Selenium	1	mg/L	0.022 B	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Silver	5	mg/L	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
TPH								
Diesel C10-C28	NS	mg/kg	582	30.6	20.4	283	44.2	12,800
Gasoline C6-C10	NS	mg/kg	NA	NA	NA	NA	NA	NA

See notes on last page

Table 23. Waste Characterization Analytical Results
Ramapo Paint Sludge Site - Operable Unit 2
Rockland County, New York



Waste Stream:			Hazardous Materials for Metals Treatment and Subtitle "D" Landfilling				Hazardous Materials for Disposal of PCBs	Hazardous Materials for Thermal Treatment and Landfilling
Disposal Facility:			PSC/York	York	PSC/York	PSC/York	USE	Heritage
Sample ID:	Maximum TCLP Concentration	Units	WC-B6	WC-B6	WC-B7	WC-B7	WC-B5	WC-PS
Sample Date:			10/26/2015	11/10/2015	11/16/2015	3/4/2016	1/25/2016	9/25/2015
Sample Name:			WC-B6-102615	WC-B6-11102015	WC-B7-11162015	WC-B7-03042016	WC-B5-01252016	WC-PS-092515
Other								
Corrosivity	NS	SU	7.33 NC	7.19 NC	6.70 NC	6.52 NC	7.78 NC	6.85 NC
Cyanide Reactivity	NS	mg/kg	11 U	11 U	11 U	12 U	11 U	15 U
Heat Content, BTU	NS	BTU	NA	NA	NA	NA	NA	NA
Heat Content, BTU	NS	btu/lb	634	1,070	545	720	968	2,960
Heating Value	NS	btu/lb	NA	NA	NA	NA	NA	NA
Ignitability	NS	deg f	>	>	>	>	>	>
Paint Filter Test	NS	ml/100g	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Sufide Reactivity	NS	mg/kg	110 U	110 U	110 U	120 U	110 U	150 U
Total Organic Halides	NS	mg/kg	20 U	22 U	23 U	23 U	19 U	47.1
Solids								
Percent Solids	NS	%	90.6	87.7	90.2	86.7	91.8	65.3

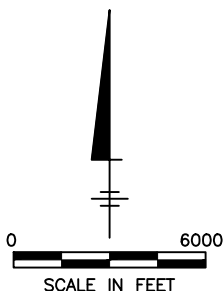
Notes:
mg/kg: Milligrams per kilogram
BTU: British Thermal Units
UB: Result non-detected at the listed value due to associated blank contamination.
B: Result is between the method detection limit and the reporting limit.
J or JN: Estimated Result
R: Rejected Result
SU: System Units
btu/lb: British Thermal Units per Pound
deg F: Degrees Fahrenheit
mg/L: Milligrams per Liter
ml/100g: Milliliters per 100 grams
PCBs: Polychlorinated Biphenyls
Bolded values indicate detection.

Bolded and shaded values indicate exceedance of the maximum TCLP Concentration.

Disposal Facility:
MCLF: Middlesex County Landfill located in East Brunswick, New Jersey
Casella: Ontario County Landfill located in Stanley, New York
PSC: Republic Environmental Systems (PA), LLC located in Hatfield, Pennsylvania
York: Envirite of Pennsylvania, Inc. located in York, Pennsylvania
USE: Wayne Disposal, Inc. Site #2 Landfill located in Belleville, Michigan
Heritage: Heritage Thermal Services, Inc. located in East Liverpool, Ohio

FIGURES

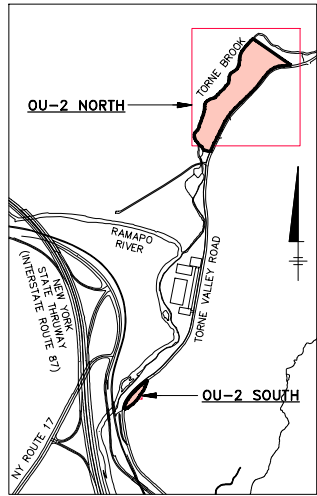
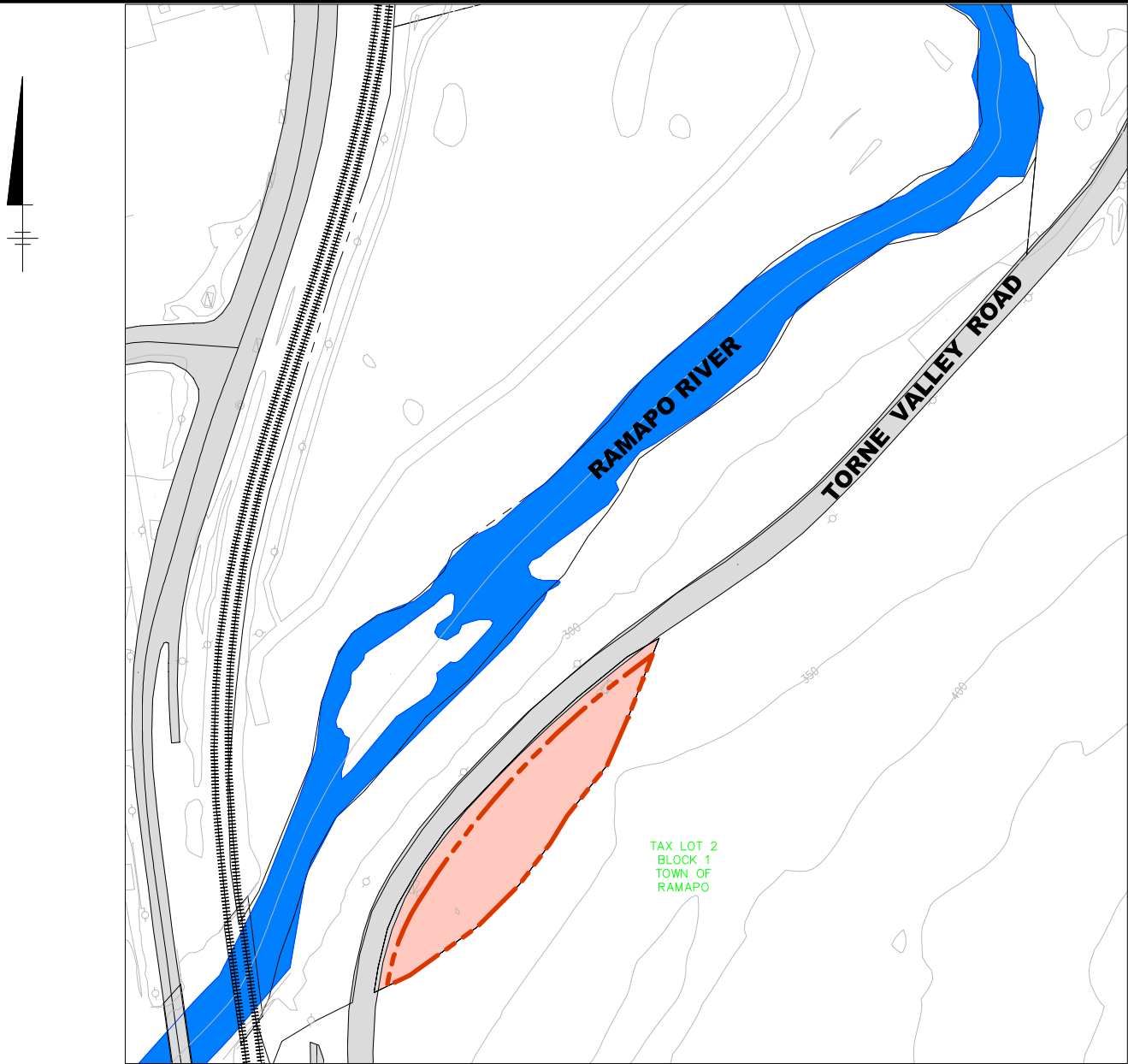
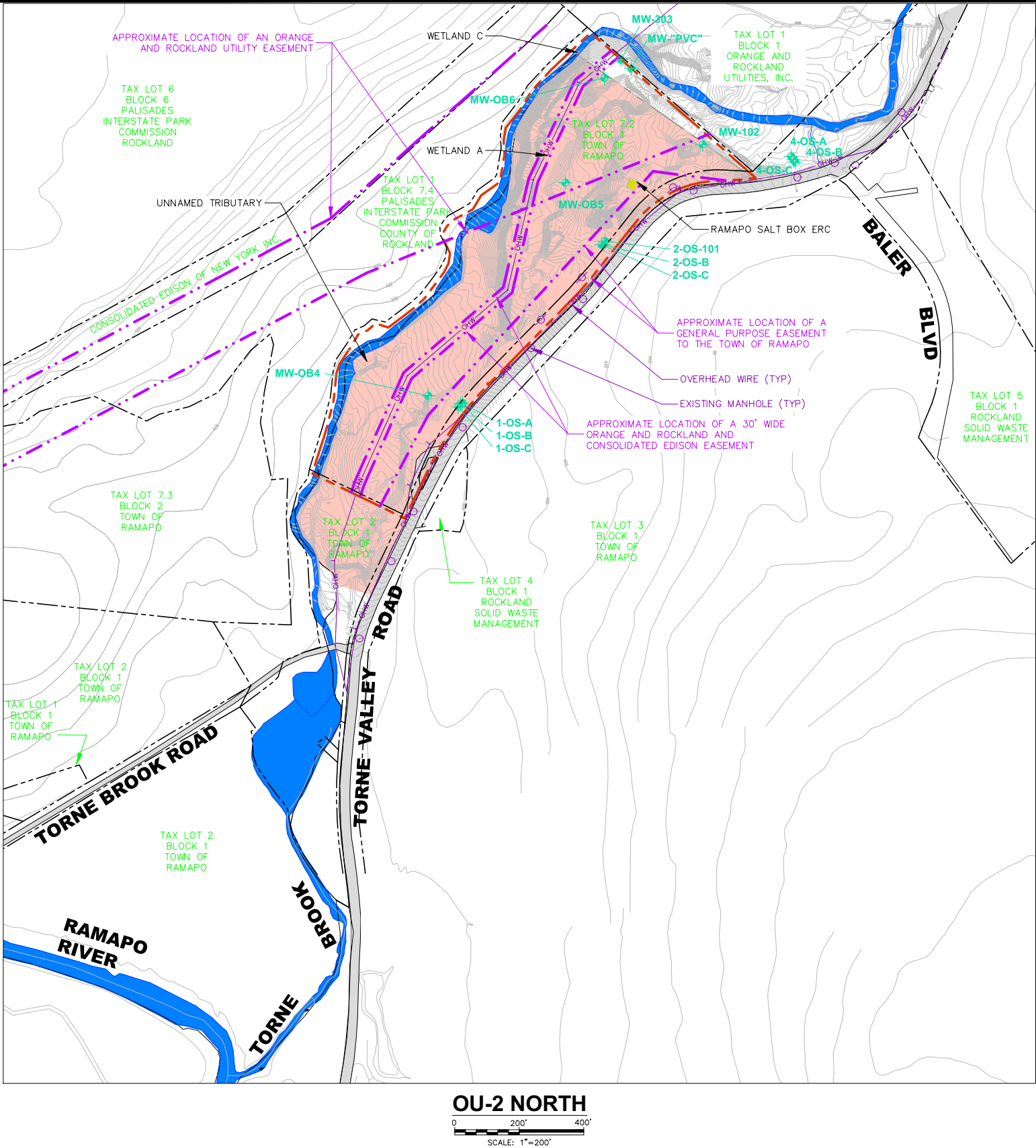




RAMAPO PAINT SLUDGE SITE - OPERABLE UNIT 2
ROCKLAND COUNTY, NEW YORK
CONSTRUCTION COMPLETION REPORT

SITE LOCATION MAP





- OU-2 SOUTH**
- 0 100' 200'
- SCALE: 1"=100'
- NOTES:**
1. BASE MAP INFORMATION FROM A SURVEY ENTITLED "TEST PIT LOCATION PLAN" BY BORBAS SURVEYING & MAPPING, LLC, DATED 7/1/2014, AT A SCALE OF 1" = 40'.
 2. APPARENT HORIZONTAL DATUM IS NEW YORK EAST STATE PLANE COORDINATE SYSTEM, APPARENT VERTICAL DATUM IS NAVD 88.
 3. TAX MAP INFORMATION SOURCE: TAX MAP, TOWN OF RAMAPO, ROCKLAND COUNTY, NEW YORK, REVISED THROUGH FEBRUARY 28, 2014, GRID 39.15 AND 39.19.
 4. FORD AND THE TOWN OF RAMAPO ENTERED INTO AN ACCESS AGREEMENT ON OCTOBER 5, 2012 TO COMPLETE THE REMEDIAL ACTION ON THE PORTIONS OF BLOCK 1, LOT 2 AND BLOCK 1, LOT 7.2 ASSOCIATED WITH OU-2. THE ACCESS AGREEMENT WAS IN ACCORDANCE WITH THE ORDER ON CONSENT AND ADMINISTRATIVE SETTLEMENT ISSUED BY THE NYSDEC.
 5. THE RESTRICTIVE COVENANT WAS RECORDED WITH THE ROCKLAND COUNTY CLERK ON APRIL 24, 2014 BY THE TOWN OF RAMAPO FOR PORTIONS OF BLOCK 1, LOT 2 AND BLOCK 1, LOT 7.2 ASSOCIATED WITH OU-2. THE RESTRICTIVE COVENANT RESTRICTS THE USE OF OU-2 TO "RESTRICTED RESIDENTIAL."

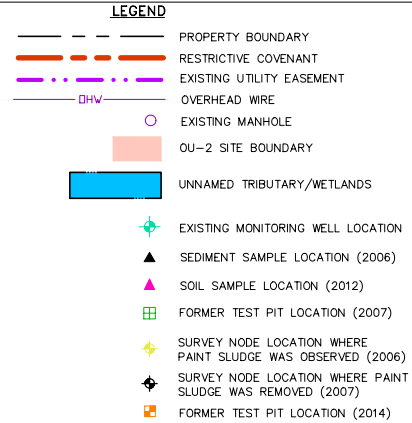
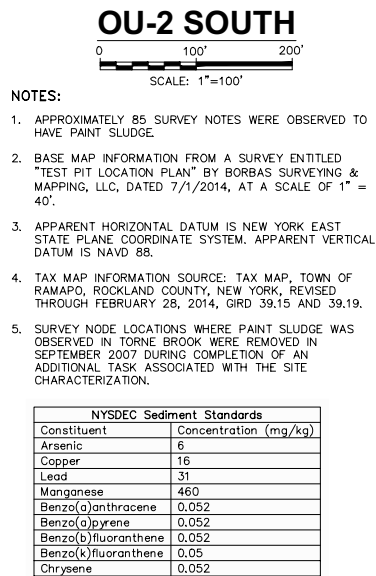
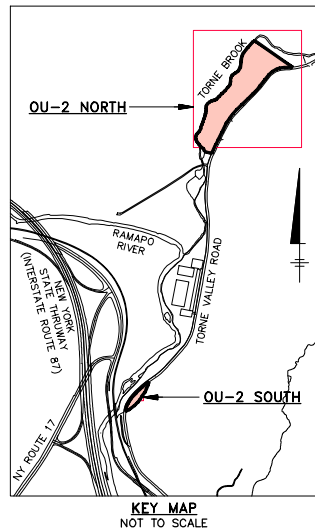
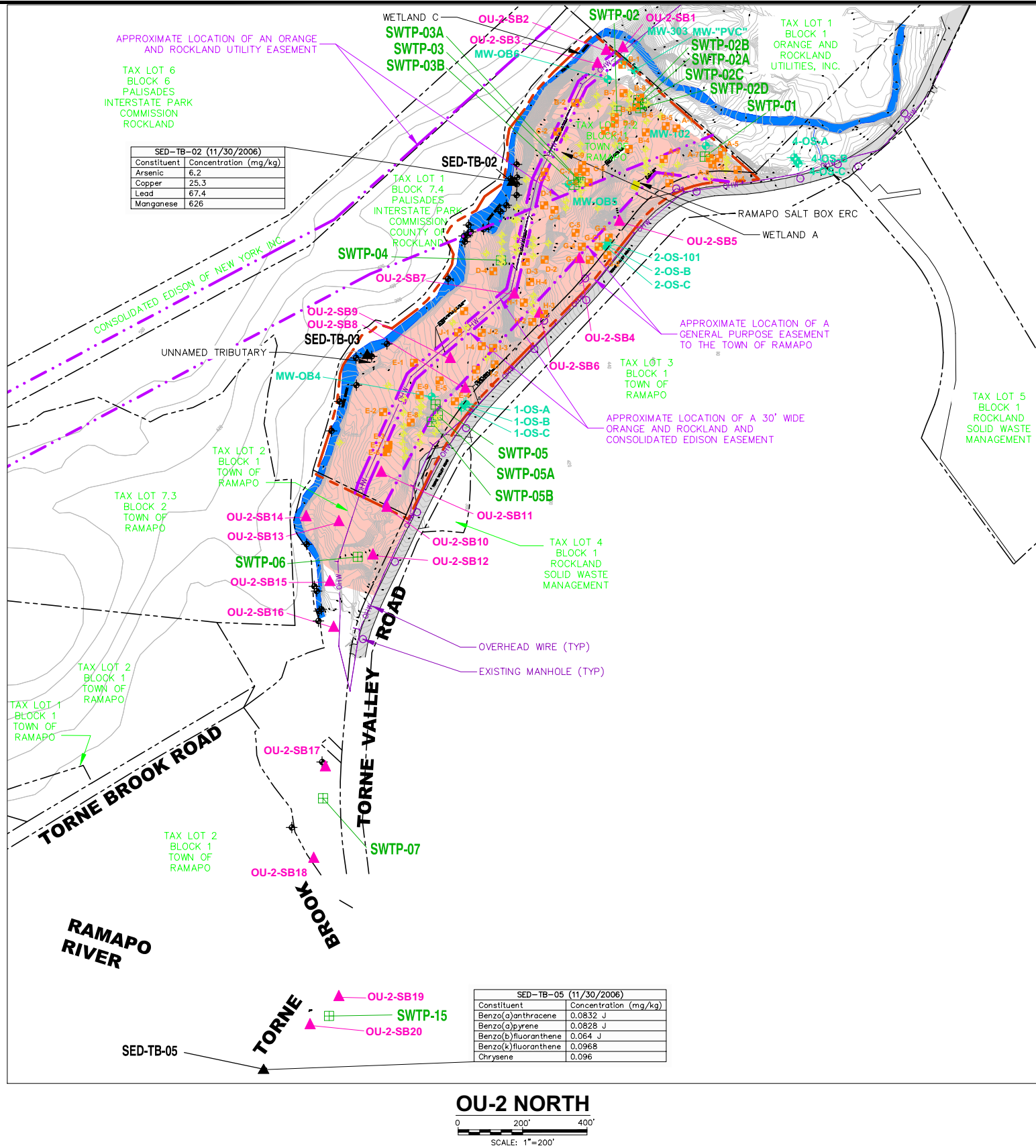
- LEGEND**
- — — — — PROPERTY BOUNDARY
 - — — — — RESTRICTIVE COVENANT
 - - - - - EXISTING UTILITY EASEMENT
 - - - - - OVERHEAD WIRE
 - EXISTING MANHOLE
 - OU-2 SITE BOUNDARY
 - ⊕ EXISTING MONITORING WELL LOCATION
 - UNNAMED TRIBUTARY/WETLANDS

RAMAPO PAINT SLUDGE SITE - OPERABLE UNIT 2
ROCKLAND COUNTY, NEW YORK
CONSTRUCTION COMPLETION REPORT

GENERAL SITE LOCATION

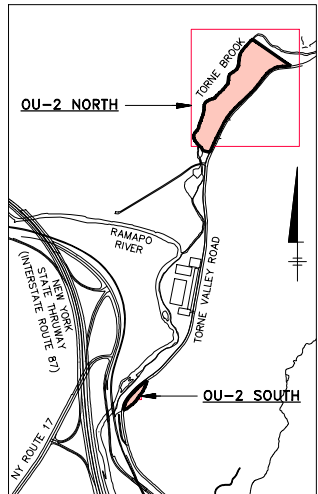
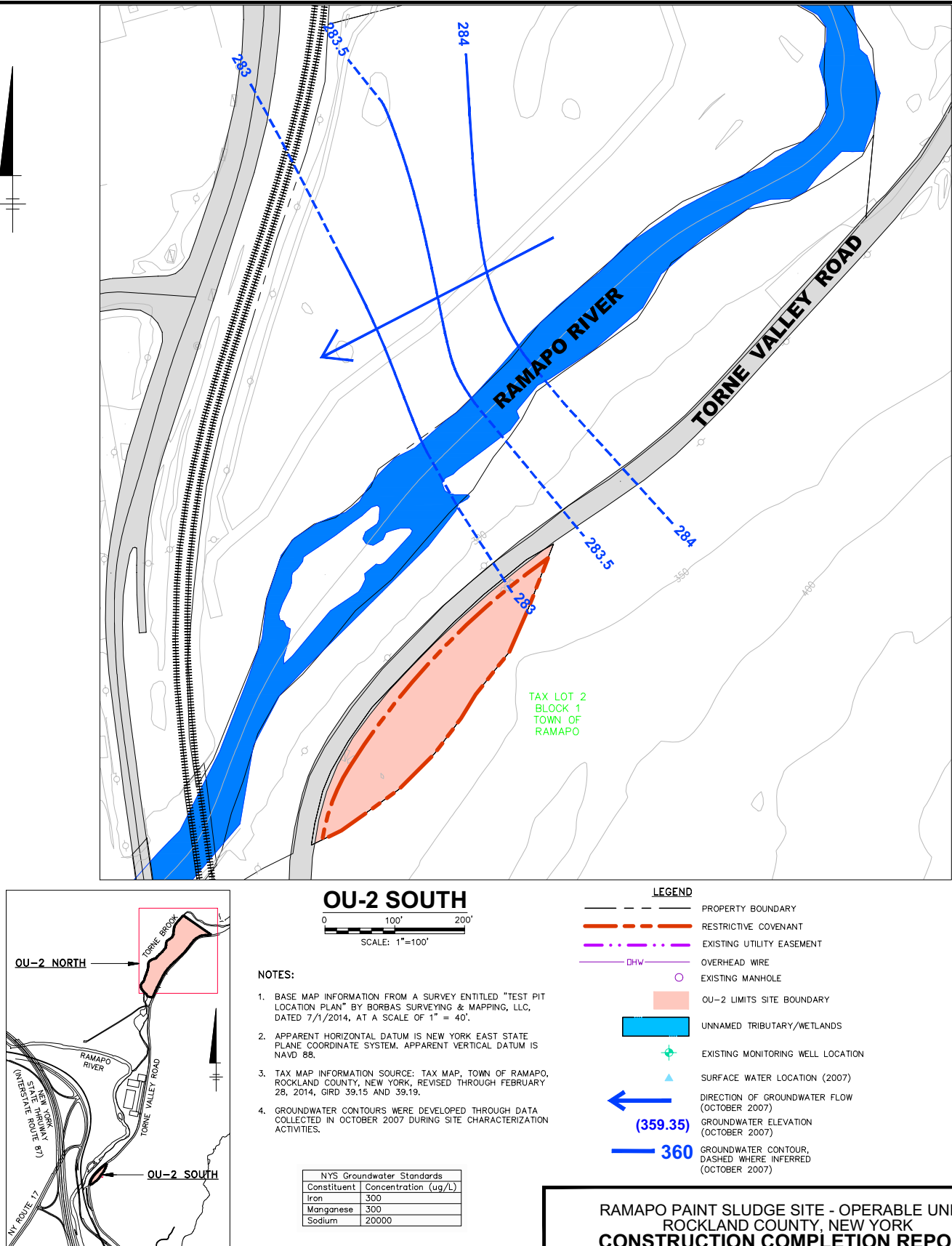
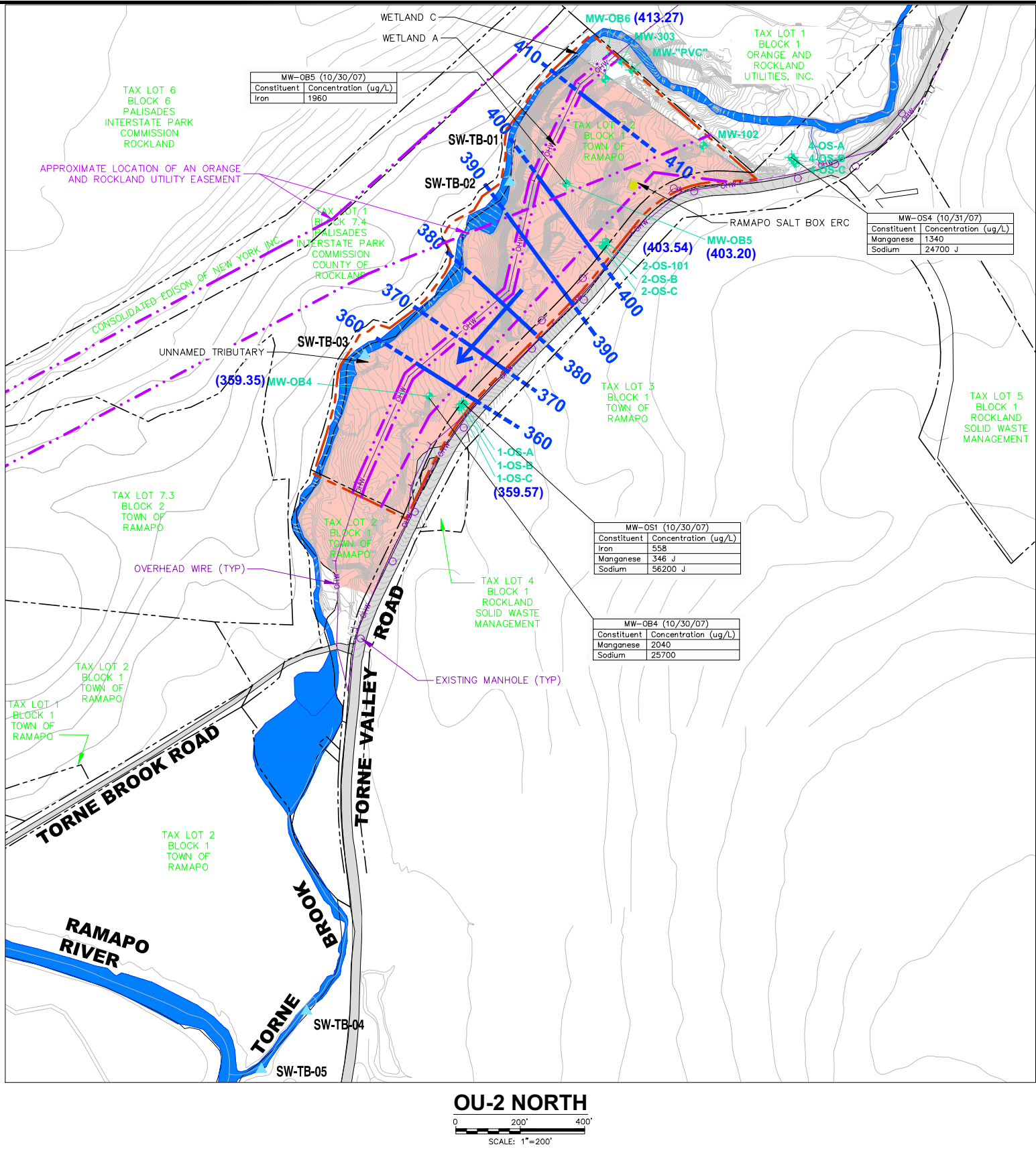
ARCADIS

FIGURE
2



RAMAPO PAINT SLUDGE SITE - OPERABLE UNIT 2
ROCKLAND COUNTY, NEW YORK
CONSTRUCTION COMPLETION REPORT

HISTORICAL SITE DATA -
SOIL AND SEDIMENT



1. ALL LOCATIONS ARE APPROXIMATE.
2. BASE MAP SUPPLIED BY BORBAS SURVEYING & MAPPING;
DATED FEBRUARY 10, 2017.
3. DATABOX KEY:

PE-D-S8(1.5-2.0)		PE-D-S4(1.5-2.0)	
Constituents	3/7/2016	Constituents	1/18/2016
VOCs (µg/kg)		VOCs (µg/kg)	
Acetone	344 EJ	Acetone	87.1
SVOCs (µg/kg)	NE	SVOCs (µg/kg)	NE
PCBs (µg/kg)	ND	PCBs (µg/kg)	ND
Metals (mg/kg)	NE	Metals (mg/kg)	NE
PE-D-H9(2.0-2.5)		PE-D-H10(2.0-2.5)	
Constituents	1/18/2016	Constituents	1/18/2016
VOCs (µg/kg)		VOCs (µg/kg)	
Acetone	100	Acetone	100
SVOCs (µg/kg)	NE	SVOCs (µg/kg)	NE
PCBs (µg/kg)	ND	PCBs (µg/kg)	ND
Metals (mg/kg)	NE	Metals (mg/kg)	NE

Constituents	1/18/2016
DOCs (µg/kg)	
Acetone	249 JD
VOCs (µg/kg)	NE
CBs (µg/kg)	ND
Metals (mg/kg)	NE

Constituents	1/13/2016
CS (µg/kg)	
Stone	53.8 J
OCs (µg/kg)	NE
BS (µg/kg)	ND
Metals (mg/kg)	NE

OCs (µg/kg)	NE
BCs (µg/kg)	ND
Metals (mg/kg)	NE

PE-D-G9(2.0-2.5)	
Constituents	1/13/2016
VOCs (µg/kg)	
Acetone	94.8
SVOCs (µg/kg)	NE
PCBs (µg/kg)	ND
Metals (mg/kg)	NE

PE-D-G8(2.0-2.5)	
Constituents	1/18/2016
VOCs (µg/kg)	
Acetone	62
SVOCs (µg/kg)	NE
PCBs (µg/kg)	ND
Metals (mg/kg)	NE

PE-D-G5(2.0-2.5)	
Constituents	1/20/2016
VOCs (µg/kg)	
Acetone	90.3
SVOCs (µg/kg)	NE
PCBs (µg/kg)	ND
Metals (mg/kg)	NE

PE-D-F8(2.0-2.5)	
Constituents	1/18/2016
VOCs (µg/kg)	
Acetone	88.4
SVOCs (µg/kg)	NE
PCBs (µg/kg)	ND
Metals (mg/kg)	NE

PE-D-G4(2.0-2.5)	
Constituents	3/2/2016
VOCs (µg/kg)	
Acetone	101
SVOCs (µg/kg)	NE
PCBs (µg/kg)	ND
Metals (mg/kg)	NE

PE-D-E6(2.0-2.5)	
Constituents	1/20/2016
VOCs (µg/kg)	
Acetone	79.5
SVOCs (µg/kg)	NE
PCBs (µg/kg)	ND
Metals (mg/kg)	NE

PE-D-D6(2.0-2.5)	
Constituents	1/20/2016
VOCs (µg/kg)	
Acetone	66.6
SVOCs (µg/kg)	NE
PCBs (µg/kg)	ND
Metals (mg/kg)	NE

PE-D-D4(4.0-4.5)	
Constituents	1/20/2016
VOCs (µg/kg)	
Acetone	114
SVOCs (µg/kg)	NE
PCBs (µg/kg)	ND
Metals (mg/kg)	NE

PE-D-B3(2.0-2.5)	
Constituents	1/21/2016
VOCs (µg/kg)	
Acetone	357 JD
SVOCs (µg/kg)	NE
PCBs (µg/kg)	ND
Metals (mg/kg)	NE

PE-D-C3(2.0-2.5)	
Constituents	1/21/2016
VOCs (µg/kg)	
Acetone	161
SVOCs (µg/kg)	NE
PCBs (µg/kg)	ND
Metals (mg/kg)	NE

PE-D-C2(2.0-2.5)	
Constituents	1/21/2016
VOCs (µg/kg)	
Acetone	148
SVOCs (µg/kg)	NE
PCBs (µg/kg)	ND
Metals (mg/kg)	NE

PE-D-B2(2.0-2.5)	
Constituents	1/21/2016
VOCs (µg/kg)	
Acetone	105
SVOCs (µg/kg)	NE
PCBs (µg/kg)	ND
Metals (mg/kg)	NE

PE-D-C1(2.0-2.5)	
Constituents	1/21/2016
VOCs (µg/kg)	
Acetone	736
SVOCs (µg/kg)	NE
PCBs (µg/kg)	ND
Metals (mg/kg)	NE

PE-D-S4(1.5-2.0)	
Constituents	1/18/2016
VOCs (µg/kg)	
Acetone	87.1
SVOCs (µg/kg)	NE
PCBs (µg/kg)	ND
Metals (mg/kg)	NE

PE-D-H10(2.0-2.5)	
Constituents	1/18/2016
VOCs (µg/kg)	
Acetone	100
SVOCs (µg/kg)	NE
PCBs (µg/kg)	ND
Metals (mg/kg)	NE

PE-D-G9(2.0-2.5)	
Constituents	1/13/2016
VOCs (µg/kg)	
Acetone	94.8
SVOCs (µg/kg)	NE
PCBs (µg/kg)	ND
Metals (mg/kg)	NE

PE-A-S12A(1.0-1.5)	
Constituents	10/15/2015
VOCs (µg/kg)	NE
SVOCs (µg/kg)	
Benzo(a)anthracene	2160
Benzo(a)pyrene	2230
Benzo(b)fluoranthene	2410
Chrysene	2520
Dibenzo(a,h)anthracene	356
Indeno(1,2,3-cd)pyrene	1640
PCBs (µg/kg)	NE
Metals (mg/kg)	NE

PE-A-S11(3.5-4.0)	
Constituents	10/27/2015
VOCs (µg/kg)	
Acetone	86.5
SVOCs (µg/kg)	NE
PCBs (µg/kg)	ND
Metals (mg/kg)	NE

PE-A-C2(2.0-2.5)	
Constituents	10/22/2015
VOCs (µg/kg)	
Acetone	53
SVOCs (µg/kg)	NE
PCBs (µg/kg)	ND
Metals (mg/kg)	NE

PE-A-E2(9.0-9.5)	
Constituents	10/27/2015
VOCs (µg/kg)	
Acetone	131
SVOCs (µg/kg)	NE
PCBs (µg/kg)	ND
Metals (mg/kg)	NE

PE-G-S4A (5-5.5)	
Constituents	2/4/2016
VOCs (ug/kg)	NE
SVOCS (ug/kg)	NE
PCBs (ug/kg)	ND
Metals (mg/kg)	
Lead	701

PE-G-S5A (5-5.5)	
Constituents	2/4/2016
VOCs (ug/kg)	NE
SVOCs (ug/kg)	NE
PCBs (ug/kg)	ND
Metals (mg/kg)	
Arsenic	21.1
Barium	2660
Cadmium	14.2
Copper	401
Lead	2690
Nickel	185
Selenium	7.2 U
Zinc	2690 J

PE-G-S6A (5-5.5)	
Constituents	2/4/2016
VOCs (ug/kg)	NE
SVOCS (ug/kg)	ND
PCBs (ug/kg)	ND
Metals (mg/kg)	
Barium	618

PE-A-S5(1.0-1.5)	
Constituents	10/13/2015
VOCs (µg/kg)	
Acetone	64.4
SVOCs (µg/kg)	NE
PCBs (µg/kg)	ND
Metals (mg/kg)	NE

PE-A-S6(1.0-1.5)	
Constituents	10/15/2015
VOCs (µg/kg)	
Ethylbenzene	5090
Total Xylenes	35100
SVOCs (µg/kg)	NE
PCBs (µg/kg)	NE
Metals (mg/kg)	
Barium	2780 J
Lead	1030 J

TAX LOT 1
BLOCK 1
N/F ORANGE AND ROCKLAND UTILITIES
SUB-STATION

 MONITORING WELL
 BOTTOM SAMPLE
 SIDEWALL SAMPLE
 EXCAVATION AREA
 EDGE OF PAVEMENT
 EDGE OF WATER
 100 YEAR FLOOD PLAIN
 OVERHEAD ELECTRIC LINE
 REINFORCED CONCRETE PIPE (RCP)
 FENCE
 MANHOLE
 SIGN
 UTILITY POLE W/GUY WIRE

AREA B EXCAVATION
AREA: 33,836 SF
VOLUME: 3,294 CY

AREA A EXCAVATION
AREA: 46,886 SF
VOLUME: 6,100 CY

AREA C EXCAVATION
- AREA: 56,355 SF
VOLUME: 6,125 CY

AREA G EXCAVATION
AREA: 5,474 SF
VOLUME: 865 CY

AREA D EXCAVATION
- AREA: 49,763 SF
VOLUME: 6,305 CY

MATCH LINE — SEE FIGURE 6

LEGEND:

 MONITORING WELL
 BOTTOM SAMPLE
 SIDEWALL SAMPLE

0 40' 80'

GRAPHIC SCALE

A circular professional seal for Krista Hawkins Mastrogola, a Professional Engineer in the State of New York. The seal features the text "STATE OF NEW YORK" at the top and "REGISTERED PROFESSIONAL ENGINEER" at the bottom. In the center is the coat of arms of the State of New York, with the license number "092498" below it. The seal is stamped over the signature of Krista Hawkins Mastrogola.

Professional Engineer's KRISTA HANKINS MASTROCOLA		
P.E.'s Number 092498	State NY	Date Signed 5/31/2022

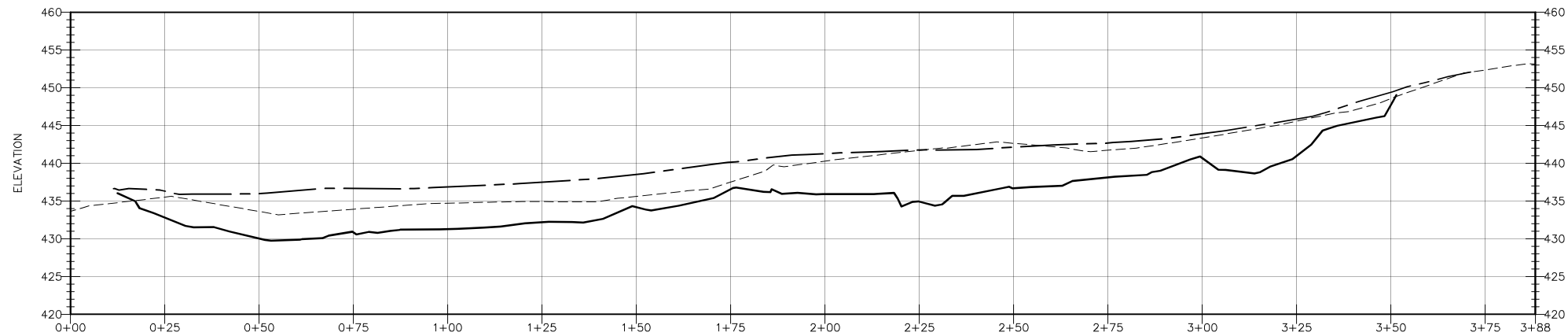
RAMAPO PAINT SLUDGE SITE - OPERABLE UNIT 2
ROCKLAND COUNTY, NEW YORK
CONSTRUCTION COMPLETION REPORT

LIMITS OF EXCAVATION OU-2 NORTH WORK AREA 1

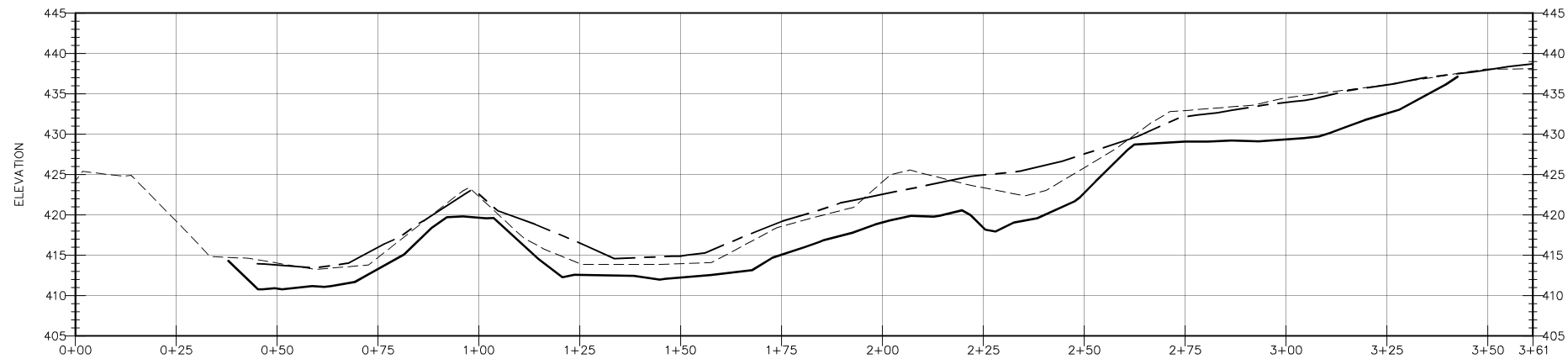
FIGURE
5



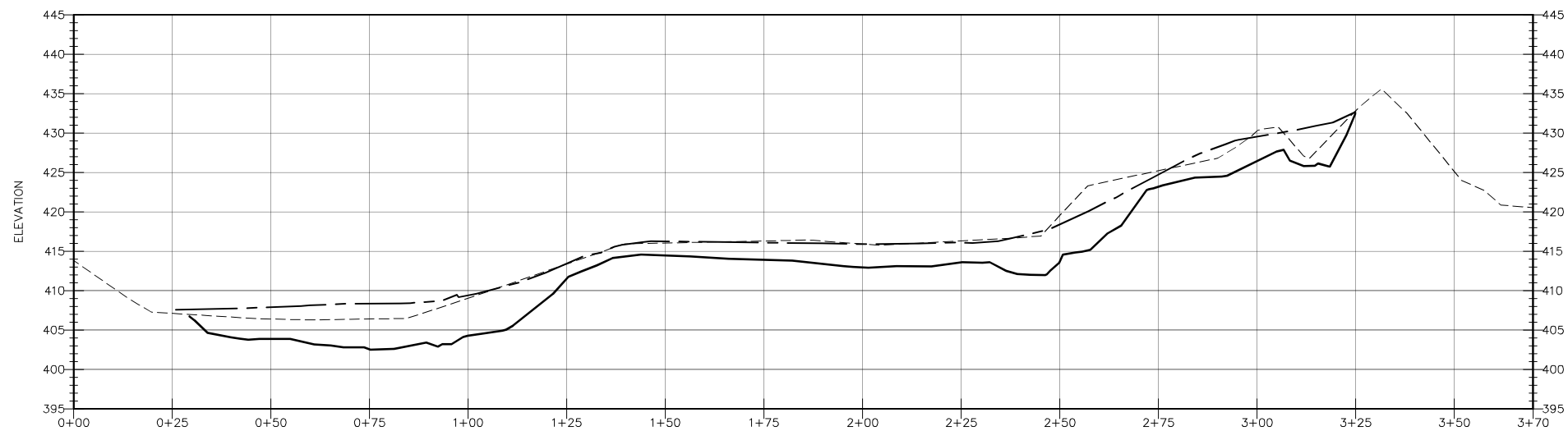
CITY:SYRACUSE-NY DIV/GROUP: ENVCAD DB: N KRASNECKY LD: J GONZALEZ PIC: (Opt) PM: J ROCKLIN TM: K MASTROCOLA LXR: (Opt) ON: "OFF" = "REF"
C:\Users\steinberger\ACCDocs\Arcadis\AUS-FORD-RAMAPO PAINT SLUDGE-RAMAPO New York\Project Files\2022\01-In Progress\01+DWG\CCR-FIG07-FIG08-FIG10-XSEC.dwg LAYOUT: 7 SAVED: 5/26/2022 9:32 AM ACADVER: 24.1S (LMS TECH) PAGES: 7 PLOT: 1 PLOTSTYLE: TABLE PLT: FULL CTB
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CROSS SECTION 1

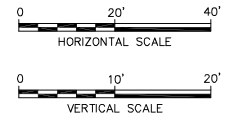


CROSS SECTION 2



CROSS SECTION 3

LEGEND:
----- ORIGINAL GRADE
———— EXCAVATION GRADE
- . - . - . FINAL GRADE



Professional Engineer's
KRISTA HANKINS MASTROCOLA
P.E.'s Number 092498 State NY Date Signed 5/31/2022

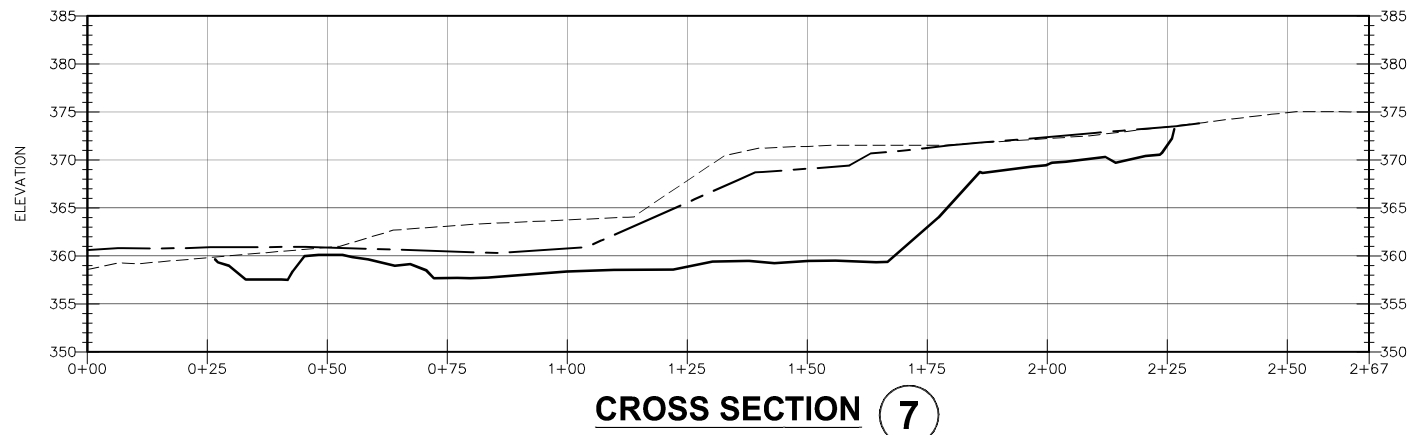
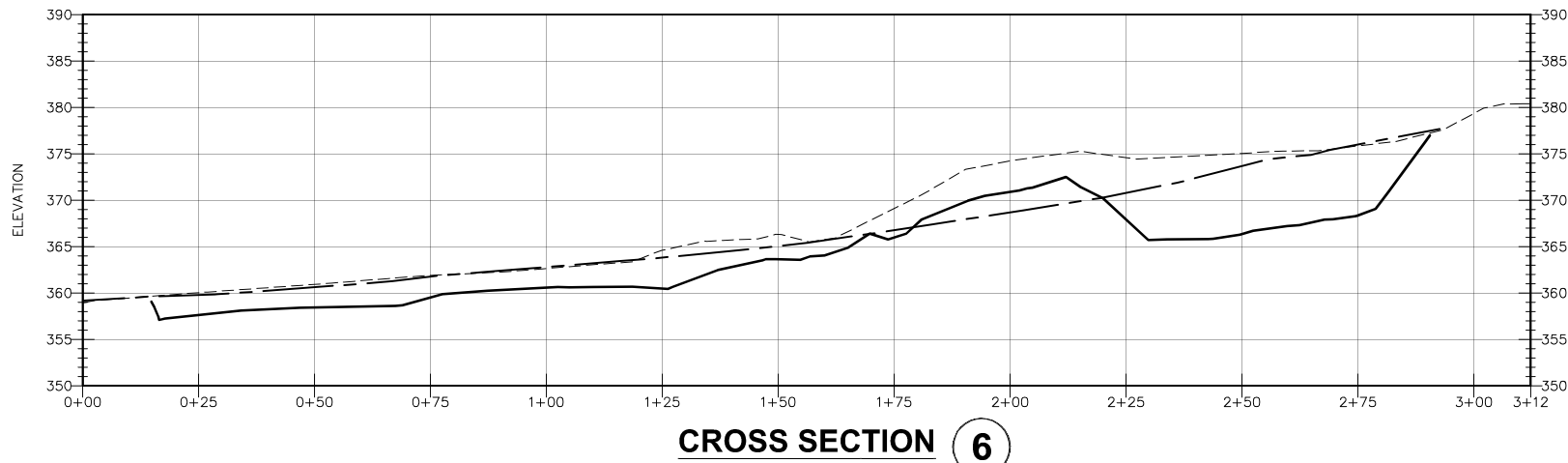
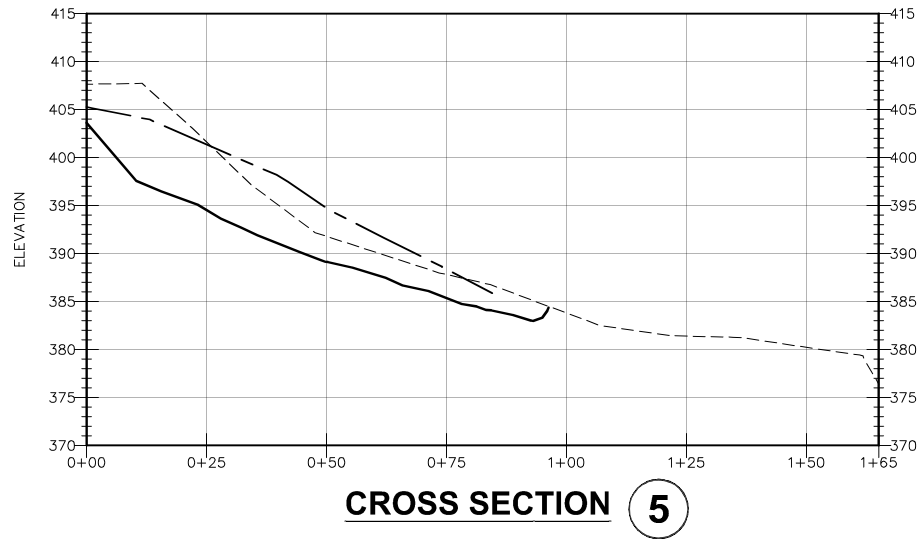
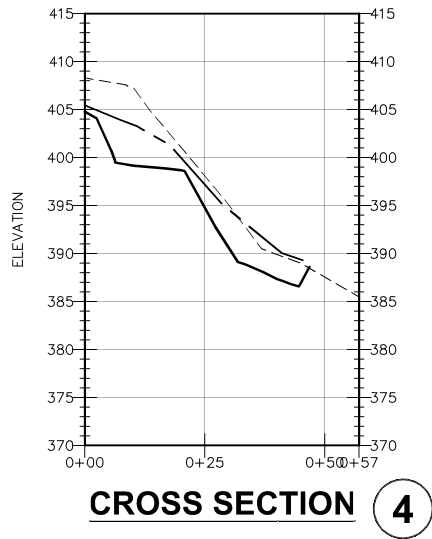
RAMAPO PAINT SLUDGE SITE - OPERABLE UNIT 2
ROCKLAND COUNTY, NEW YORK
CONSTRUCTION COMPLETION REPORT

**CROSS-SECTIONS
OU-2 NORTH (1 OF 2)**

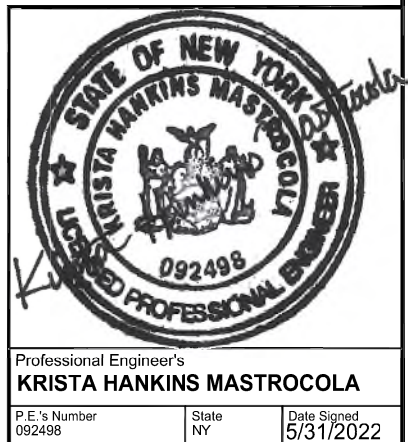
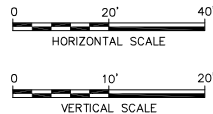


FIGURE
7

CITY:SYRACUSE-NY DIV/GROUP:ENVCAD DB:N KRASNECKY LD:J GONZALEZ PIC:Opt PM:J ROCKLIN TM:K MASTROCOLA LXR:(Op)ON="OFF"=REF
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PLOTTED:5/26/2022 10:10 AM BY:STEINBERGER, GEORGE
XREFS:IMAGES: PROJECTNAME: N:\98X00-STAMP



LEGEND:
----- ORIGINAL GRADE
———— EXCAVATION GRADE
- . - . - . FINAL GRADE



RAMAPO PAINT SLUDGE SITE - OPERABLE UNIT 2
ROCKLAND COUNTY, NEW YORK
CONSTRUCTION COMPLETION REPORT

CROSS-SECTIONS
OU-2 NORTH (2 OF 2)



FIGURE
8

CITY:SYRACUSE-NEW YORK DIV:GROUP: ENVCAD DB: N KRASNECKY LD: J GONZALEZ PIC:OPT: PM: J ROCKLIN TM: K MASTROCOLA LXR: (OPTION) OFF: REF
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- NOTES:
1. BASE MAP SUPPLIED BY BORBAS SURVEYING & MAPPING;
DATED FEBRUARY 10, 2017.
 2. DATABOX KEY:

PE-F-S5(1.0-1.5)	
Constituents	12/14/2015
VOCs (µg/kg)	NE
SVOCs (µg/kg)	ND
PCBs (µg/kg)	ND
Metals (mg/kg)	
Nickel	30.8

NYS NEW YORK STATE
ND NON-DETECT
NE NON-EXCEEDANCE

SAMPLE ID
SAMPLE DEPTH
SAMPLE DATE

RESULT EXCEEDS
UNRESTRICTED
USE SCOs

CONSTITUENT

LIMIT OF OU-2 SOUTH AREA

8
10

PE-F-S5(1.0-1.5)	
Constituents	12/14/2015
VOCs (µg/kg)	NE
SVOCs (µg/kg)	ND
PCBs (µg/kg)	ND
Metals (mg/kg)	
Nickel	30.8

E: 584425
N: 636793

0 20' 40'
GRAPHIC SCALE

- LEGEND:
- MONITORING WELL
 - BOTTOM SAMPLE
 - SIDEWALL SAMPLE
 - EXCAVATION AREA
 - EDGE OF PAVEMENT
 - EDGE OF WATER
 - OVERHEAD ELECTRIC LINE
 - REINFORCED CONCRETE PIPE (RCP)
 - FENCE
 - MANHOLE
 - SIGN
 - UTILITY POLE W/GUY WIRE



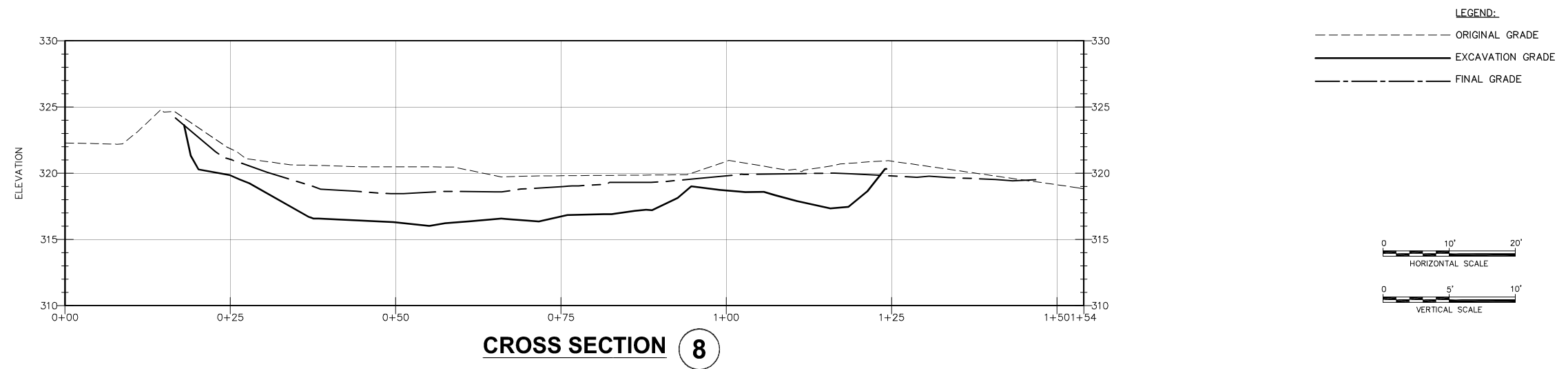
Professional Engineer's
KRISTA HANKINS MASTROCOLA
P.E.'s Number 092498 State NY Date Signed 5/31/2022

RAMAPO PAINT SLUDGE SITE - OPERABLE UNIT 2
ROCKLAND COUNTY, NEW YORK
CONSTRUCTION COMPLETION REPORT

**LIMITS OF EXCAVATION
OU-2 SOUTH**



FIGURE
9



Professional Engineer's		
KRISTA HANKINS MASTROCOLA		
P.E.'s Number 092498	State NY	Date Signed 5/31/2022

RAMAPO PAINT SLUDGE SITE - OPERABLE UNIT 2
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**CROSS-SECTION
OU-2 SOUTH**



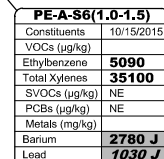
FIGURE
10

1. ALL LOCATIONS ARE APPROXIMATE.
2. BASE MAP SUPPLIED BY BORBAS SURVEYING & MAPPING;
DATED FEBRUARY 10, 2017.
3. DATABOX KEY:

PE-X-X01 (0.5-1.0)		SAMPLE ID
Constituents	4/13/2016	SAMPLE DEPTH
VOCs (µg/kg)		SAMPLE DATE
2-Butanone (MEK)	153	
Acetone	103	RESULT EXCEEDS NYS RESTRICTED RESIDENTIAL SCOs
SVOCs (µg/kg)		
Phenol	886 J	
PCBs (µg/kg)	ND	RESULT EXCEEDS NYS ECOLOGICAL RESOURCE SCOs
Metals (mg/kg)		
Barium	409 J	
Copper	56.6 J	
Lead	207	RESULT EXCEEDS NYS PROTECTION OF GROUNDWATER SCOs
Zinc	362 J	

J	ESTIMATED RESULT
NYS	NEW YORK STATE
ND	NON- DETECT
NE	NON-EXCEEDANCE

 BOTTOM SAMPLE
 SIDEWALL SAMPLE
 EXCAVATION AREA
 EDGE OF PAVEMENT
 OVERHEAD ELECTRIC LINE
 SIGN
 UTILITY POLE W/GUY WIRE
 LIMITS OF OBSERVED PAINT SLUDGE
 -430
 -431
 -431.3
 EXCAVATION GRADE
 1 PHOTO ID AND VIEW DIRECTION

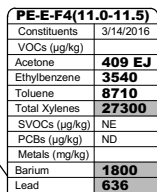


0 10' 20'

GRAPHIC SCALE

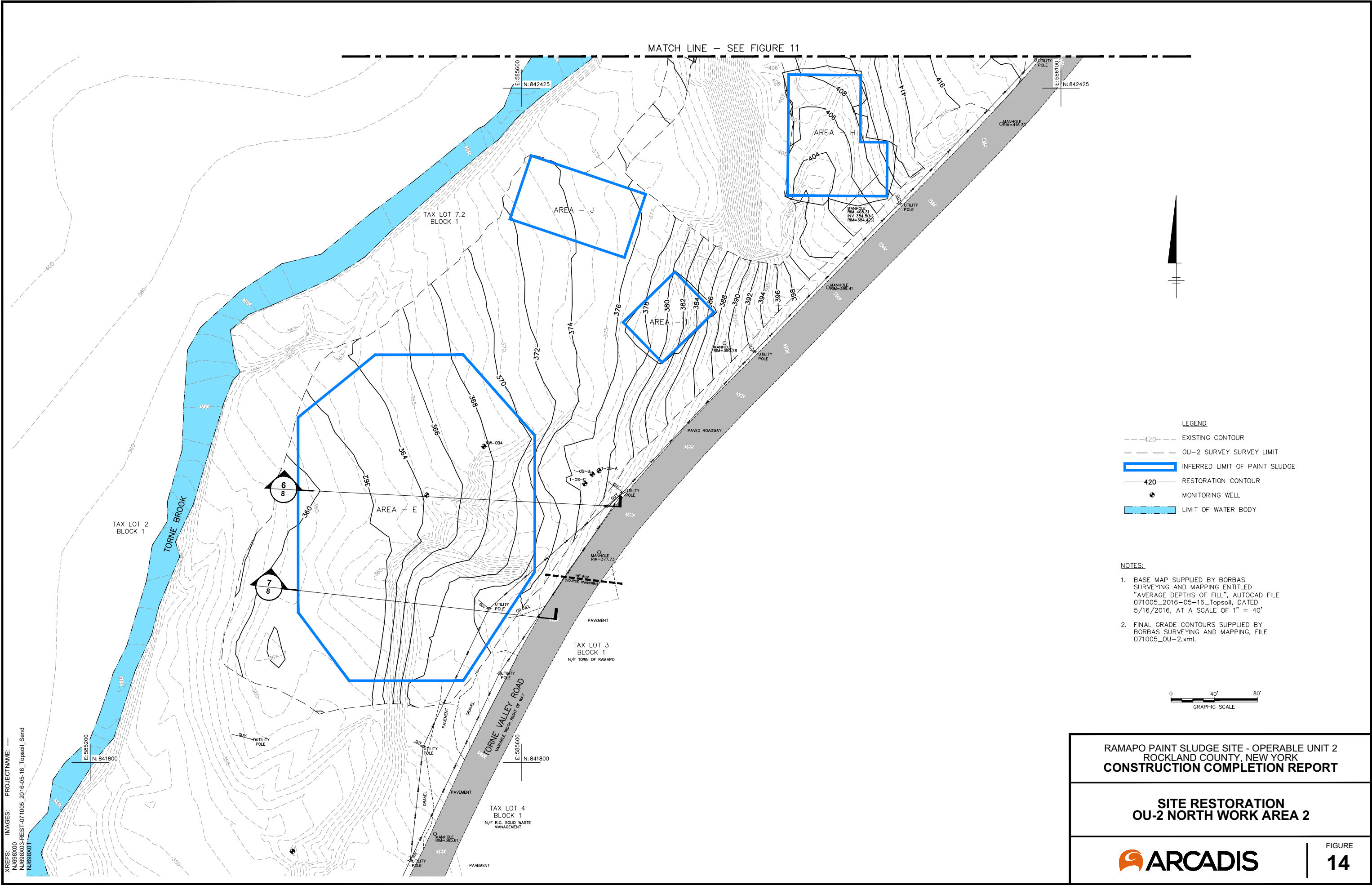
LIMITS OF PAINT SLUDGE - TORNE VALLEY ROAD AREA A

FIGURE
11



 BOTTOM SAMPLE
 SIDEWALL SAMPLE
 EXCAVATION AREA
 EDGE OF PAVEMENT
 OVERHEAD ELECTRIC LINE
 SIGN
 UTILITY POLE W/GUY WIRE
 LIMITS OF OBSERVED PAINT SLUDGE
 - 430 -
 - 431 -
 - 431.3 -
 1 PHOTO ID AND VIEW DIRECTION





RAMAPO PAINT SLUDGE SITE - OPERABLE UNIT 2
ROCKLAND COUNTY, NEW YORK
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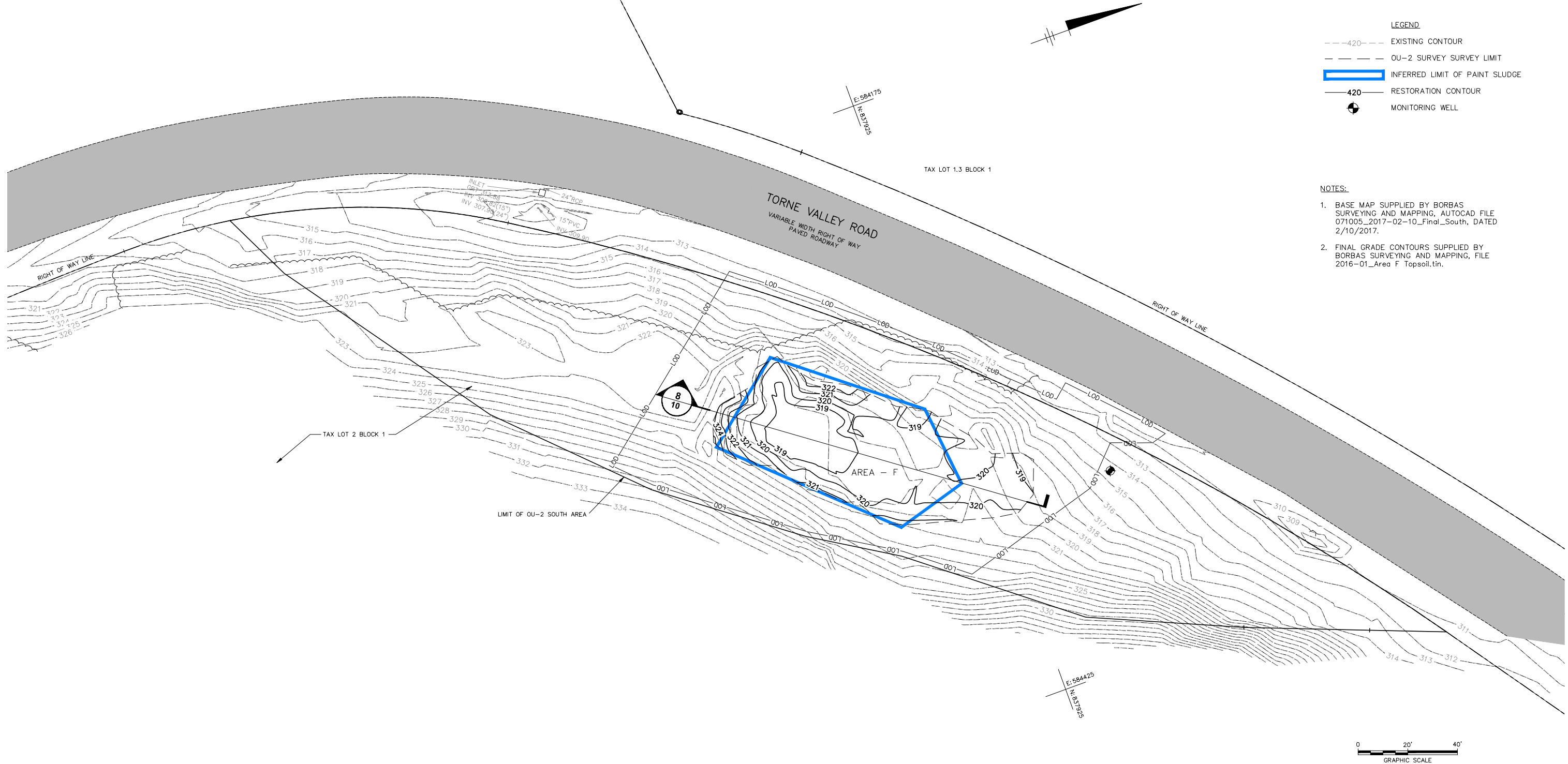
**SITE RESTORATION
OU-2 NORTH WORK AREA 2**



CITY:SYRACUSE-NY DIV/GROUP: ENVCAD DB: N KRASNECKY LD: J. GONZALEZ PIC: (Opt) PM: J. ROCKLIN TM: K. MASTROCOLA LXR: (OPTION) OFF: REF*
C:\Users\steinberger\Arcadis\AUS-FORD-RAMAPO PAINT SLUDGE-RAMAPO New York\Project Files\2022\01-In Progress\01-DWG\CCR-FIG15-RESTORE SOUTH.dwg LAYOUT: 15 SAVED: 5/26/2022 9:50 AM ACADVER: 24.1 (LMS TECH) PAGES: 15 PLOT: PLOTSTYLETABLE: ARCADIS-MAHWAH.CTB PLOTTED: 5/26/2022 10:20 AM BY: STEINBERGER, GEORGE

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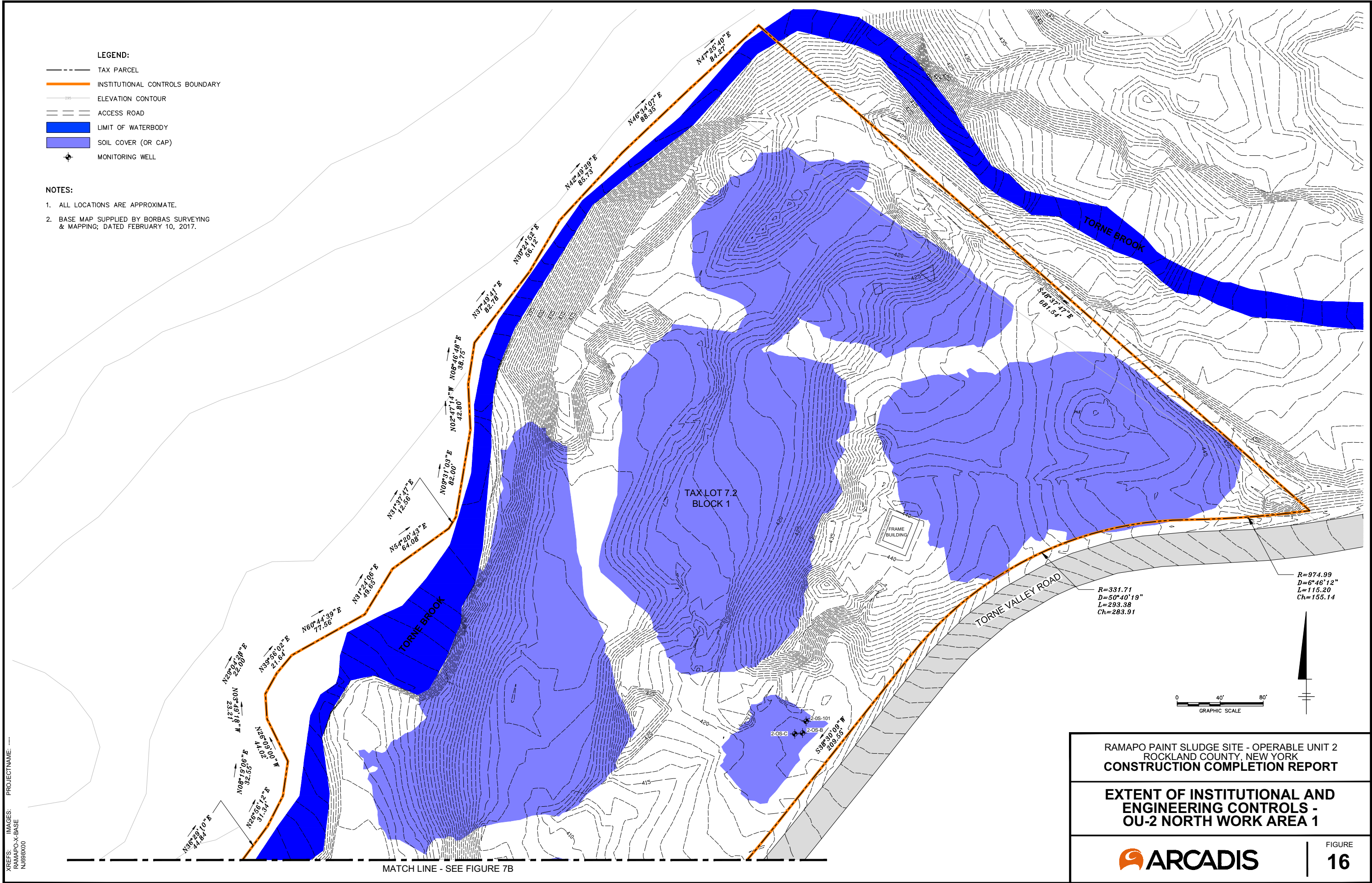
NJ088X00
NJ088X02
NJ088X05-REST-SOUTH



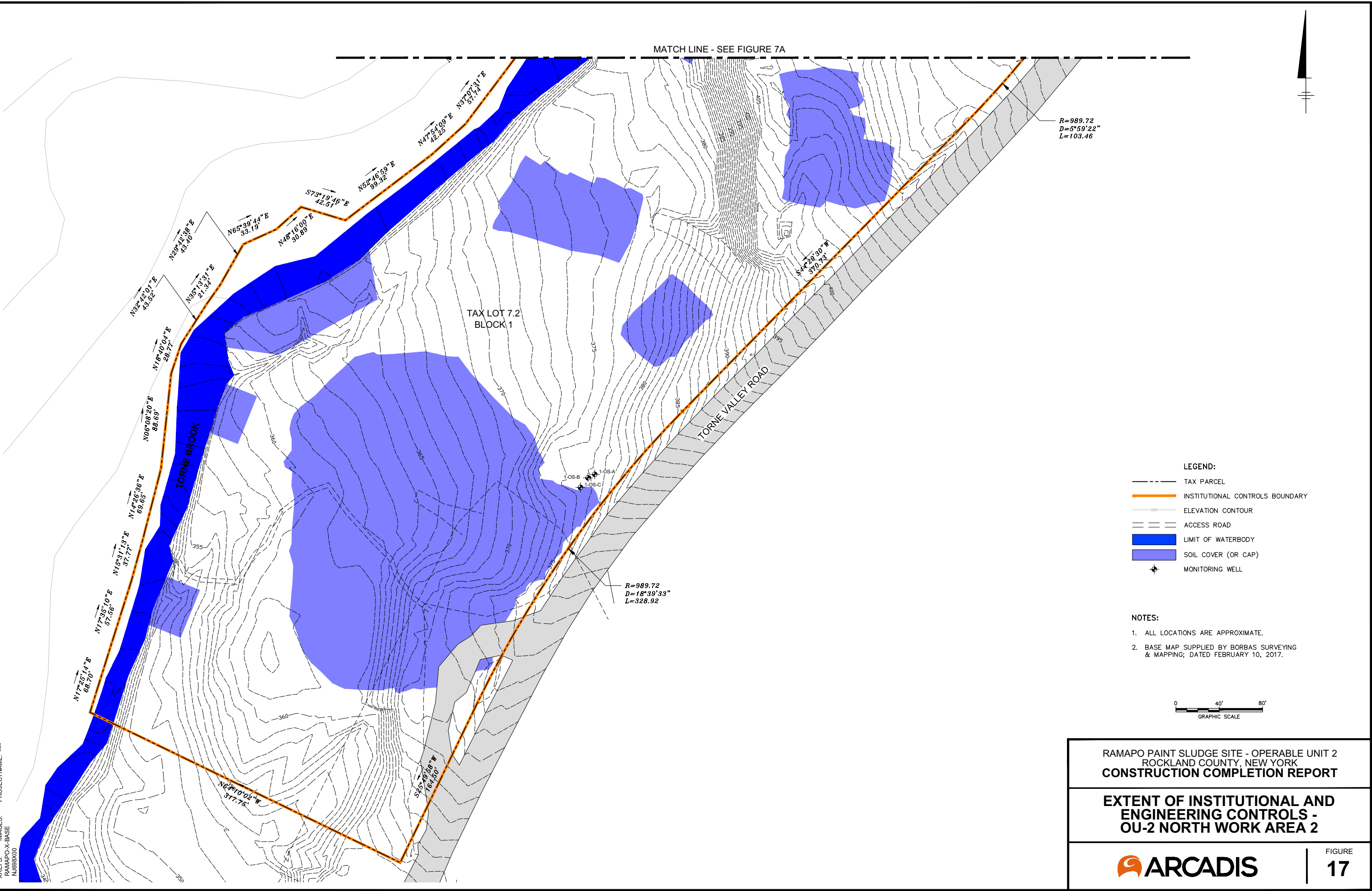
RAMAPO PAINT SLUDGE SITE - OPERABLE UNIT 2
ROCKLAND COUNTY, NEW YORK
CONSTRUCTION COMPLETION REPORT

**SITE RESTORATION
OU-2 SOUTH**





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RAMAPO PAINT SLUDGE SITE - OPERABLE UNIT 2
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CONSTRUCTION COMPLETION REPORT

EXTENT OF INSTITUTIONAL AND
ENGINEERING CONTROLS -
OU-2 NORTH WORK AREA 2



APPENDIX A

Regulatory Correspondence



APPENDIX B

Test Pit Logs



APPENDIX C

Remedial Action Photo Log



APPENDIX D

Permit Ledger and Approvals



APPENDIX E

Community Air Monitoring Reports



APPENDIX F

Confirmatory Soil Sample Data Usability Summary Reports



APPENDIX G

Waste Profiles



APPENDIX H

Wastewater Data Usability Summary Reports



APPENDIX I

Wastewater Bills of Lading



APPENDIX J

Waste Characterization Laboratory Analytical Reports



APPENDIX K

Non-Hazardous Manifests



APPENDIX L

Hazardous Soil Manifest



APPENDIX M

Hazardous Soil Manifest – Incineration



APPENDIX N

Screenings & Aggregate Approvals



APPENDIX O

Screenings & Aggregate Log and Weight Tickets



APPENDIX P

Topsoil Approval



APPENDIX Q

Topsoil Log & Weight Tickets



APPENDIX R

Site Restoration Monitoring Report



APPENDIX S

Daily Construction Reports



APPENDIX T

As-Built Survey



APPENDIX U

Spill #1511302 Post Excavation Results



APPENDIX V

Project Schedule



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