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REMOVAL SUPPORT TEAM 3
EPA CONTRACT EP-S2-14-01

September 22, 2015

Mr. Bobby Dease, Construction Manager
U.S. Environmental Protection Agency
Removal Action Branch
2890 Woodbridge Avenue
Edison, NJ 08837

EPA CONTRACT No.: EP-S2-14-01

TDD No.: TO-0006-0051

DOCUMENT CONTROL NO: RST3-02-F-0023

**SUBJECT: FINAL REMOVAL ACTION REPORT, REVISION 1 – READBURN
WOOD TAR SITE, HANCOCK, DELAWARE COUNTY, NEW YORK**

Dear Mr. Dease,

Enclosed please find the Final Removal Action Report, Revision 1 for the Readburn Wood Tar Site located at 2222 Readburn Road in Hancock, Delaware County, New York. This report summarizes the Removal Action conducted at the Site between October 2013 and August 2014. The U.S. Environmental Protection Agency comments in regards to the draft versions of this deliverable, as received on October 28, 2014, January 13, 2015, June 12, 2015, August 7, 2015, and September 16, 2015 have been incorporated.

If you have any questions, please do not hesitate to call me at (732) 585-4413.

Sincerely,

Weston Solutions, Inc.

For Bernard Nwosu
RST 3 Site Project Manager

Enclosures

cc: TDD File TO-0006-0051

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In association with Scientific and Environmental Associates, Inc.,
Environmental Compliance Consultants, Inc., Avatar Environmental, LLC,
On-Site Environmental, Inc., and Sovereign Consulting, Inc.

FINAL REMOVAL ACTION REPORT, REVISION 1

**READBURN WOOD TAR SITE
2222 READBURN ROAD, HANCOCK,
DELAWARE COUNTY, NEW YORK**

CERCLIS Identification Number: NYC200400216

DC No: RST3-02-F-0023
TDD No: TO-0006-0051
EPA CONTRACT No: EP-S2-14-01

Prepared for:

U.S. Environmental Protection Agency
Region II – Removal Action Branch
2890 Woodbridge Avenue
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Prepared by:

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September 2015

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1.0 INTRODUCTION

This Removal Action Report (RAR) summarizes the action taken to remove wood tar waste and Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) hazardous substances contaminated soil that was identified during previous U.S. Environmental Protection Agency (EPA), Region II Removal Action Branch (RAB) and New York State Department of Environmental Conservation (NYSDEC) investigations conducted at the Readburn Wood Tar Site (the Site). This RAR is a summary of all the activities conducted to complete the Removal Action. The actions taken included perimeter air monitoring, waste classification sampling, excavation and off-site disposal of contaminated soil, post excavation soil sampling, groundwater and drinking water sampling, and site restoration.

1.1 Site Location and Description

The Site is located at 2222 Readburn Road in the Town of Hancock, Delaware County, New York (Refer to Figure 1 for the Site Location Map). The Site is located adjacent to Read Creek (the Creek) which discharges into the East Branch of the Delaware River, approximately 2.3 miles downstream. Topographically, the Site is located at approximately 1,140 feet above sea level and is located at 42.013071°N latitude and -75.173347°W longitude. The property is identified on the Hancock, New York Tax Map as Block 405-1, Lot 5.31 and covers approximately 10.4 acres. The Site was the location of a former wood acid factory and Lot 5.31 is believed to have been the location of the main processing building and disposal pits utilized by the wood acid factory. It was estimated that the surface and subsurface areas of contamination covered approximately 43,000 square feet (ft²) and is located in the northern portion of the property. Groundwater is the primary source of potable water in the surrounding area and it is estimated that approximately seven people live within ½ mile of the Site.

Historically, the Site was the location of the Tyler and Hall Chemical Company, a wood acid factory that was in operation from 1886 to 1920. The manufacturing process involved burning of wood in the absence of air to produce charcoal and wood gas. Wood tar was a waste byproduct and was used as fuel. Other noncombustible waste was disposed of in on-site pits that are located immediately adjacent to the Creek and was a source of contamination being released into the Creek. In 1976, ownership of the property changed hands after which a small residence was built on the property and used as a secondary home. Ownership of the Site was transferred again in July 2011 but it is still currently being used as a vacation residence.

1.2 Site History

In June 2006, flooding along the Creek eroded the stream bank and exposed an area of buried wood tar. The exposed wood tar was reported to the NYSDEC as a spill in July 2006. The NYSDEC hired a response contractor to excavate the exposed wood tar substance and to install test pits to determine the vertical extent of the waste deposit. In July 2006, the contractor installed five test pits and excavated 15 tons of material. However, the vertical extent of the material could not be determined. NYSDEC determined that an Immediate Investigation Work Assignment (IIWA) should be conducted at the Site. The excavated material was returned to the test pits and covered with clean fill. One sample was collected for toxicity characteristic leaching procedure (TCLP) analysis and lead, cresols, benzene, and 2-butanone were detected

with only 2-butanone exceeding the TCLP Regulatory Level for a Resource Conservation and Recovery Act (RCRA) characteristic hazardous waste.

In August 2006, the NYSDEC was notified by the New York State Department of Transportation (NYSDOT) that during an inspection a tar substance was discovered at the confluence of the Creek and the Delaware River, approximately 2.3 miles downstream from the Site. It was determined that the floodwaters had exposed the tar substance at the Site and the warm temperatures caused the tar to liquefy and migrate with the floodwaters. The NYSDOT contractor was provided with guidance for the proper cleanup and disposal of the tar substance found in the river.

In May 2007, a NYSDEC contractor installed 22 soil borings and five groundwater monitoring wells on the Site. A total of 15 soil samples were collected from the installed borings. The monitoring wells were sampled in June 2007. The analytical results of the soil samples indicated the presence of volatile organic compounds (VOCs), including benzene, toluene, ethyl benzene, and xylene (BTEX) compounds, at concentrations exceeding the NYSDEC Restricted Residential Use Soil Cleanup Objectives (RRUSCO) at five locations and trans-1, 2-dichloroethene at two locations. In addition, the analytical results for one soil sample exceeded the NYSDEC RRUSCO values for two semivolatile organic compounds (SVOCs) (naphthalene and phenol). Furthermore, the analytical results for three soil samples exceeded the NYSDEC RRUSCO values for copper and/or lead. The analytical results of the groundwater samples collected from the Site did not contain any VOCs or SVOCs at concentrations exceeding the corresponding NYSDEC Class GA Standards. However, the analytical results of the groundwater samples did indicate concentrations of arsenic, cadmium, chromium, and lead that exceeded the NYSDEC Class GA Standard in one unfiltered sample.

In May 2008, EPA conducted a Site visit and collected two samples of the waste material for VOC and SVOC analyses. Laboratory analytical results indicated that the waste material contained elevated concentrations of phenols, specifically 2, 4-dimethylphenol [1,800 milligrams per kilogram (mg/kg)], 4-methylphenol (940 mg/kg), and naphthalene (250 mg/kg).

In July 2008, EPA installed 27 soil borings and collected 85 soil samples for target compound list (TCL) VOC, TCL SVOC, and target analyte list (TAL) metals, including mercury, analyses. The locations of the samples corresponded generally to the locations of soil borings and samples previously collected by NYSDEC in May 2007. Generally, a lens of wood tar was observed in five soil borings at depths of 4 to 6 feet below ground surface (bgs). In one soil boring, wood tar was observed at a depth of 8 to 10 feet bgs. Analytical results of samples collected from this material indicated concentrations of benzo(a)pyrene (4 mg/kg), phenol (1,000 mg/kg), benzene (18 mg/kg), toluene (410 mg/kg), and xylenes (830 mg/kg).

In September 2008, EPA utilized its Environmental Response Team (ERT) to determine if adverse ecological impacts existed from the release of contaminants associated with the wood tar migrating into the Creek. ERT collected fish using an electroshocker from four equal length areas of the Creek, three of which were adjacent to or just downstream of the Site, while one was upstream. ERT collected a total of 160 fish from 11 different species from the upstream location; 57 fish from nine species in reach 1; 72 fish from eight species in reach 2; and 99 fish

from nine species in reach 3. ERT determined that the results indicated that less fish are present in the Creek downstream of the Site due to contamination entering the Creek from the Site.

ERT also collected a sample of the wood tar for use in toxicity tests to evaluate the potential impacts to fish from a release of toxic chemicals associated with the wood tar. ERT prepared two test solutions at two different temperature regimes, at 20 degrees Celsius (°C) and 30°C, using 20 grams of wood tar collected from the Site. ERT used 24-hour fathead minnow larvae for a 7-day exposure period test and rainbow trout fry for a 96-hour exposure period test. Results of the 96-hour exposure test on the rainbow trout fry indicated that there was a higher mortality rate in the 30°C solution [100 percent (%) mortality at 48 hours] versus the 20°C solution (20% mortality at 96 hours). Results of the 7-day exposure period test on the fathead minnow larvae indicated a higher mortality rate in the 30°C solution (100% at day 1) versus the 20°C solution (92.5% at day 4). The results of the toxicity tests confirmed that the leachable components of the wood tar were toxic to fish and that the degree of leachability and toxicity increased with increasing temperature.

ERT also conducted a streamlined ecological risk assessment at the Site. They determined that the Creek is a low order tributary to the east branch of the Delaware River and acts as a trout breeding and nursery area. Trout utilize groundwater upwellings as spawning areas and discharging groundwater or rainwater runoff to the Creek would increase the exposure of eggs and developing embryos to contaminants. The wood tar has a high proportion of phenolic compounds which are soluble with solubility increasing with increased temperature. Therefore, the contaminants releasing from the Site posed a threat to the health of the Creek ecosystem and its associated fish community (*EPA/ERT, Final Report for the Readburn Wood Tar Site, Work Assignment # 347, March 2009*).

In December 2008, in an effort to delineate the horizontal extent of wood tar contamination, EPA installed an additional 30 soil borings at the Site and collected an additional 112 soil samples. All samples collected during this event were analyzed for the same parameters as those collected in July 2008. Analytical Results of the soil samples collected at a depth of 5 feet bgs indicated elevated concentrations of toluene (220 mg/kg), ethyl benzene (110 mg/kg), xylenes (530 mg/kg), benzo(a)pyrene (2.4 mg/kg), and lead (980 mg/kg).

In May 2009 and September 2010, EPA collected groundwater samples from the five monitoring wells installed in May 2007 and from a potable water well which serves as the water supply for the on-site residence. The samples were analyzed for TCL VOCs, TCL SVOCs, and TAL metals. Groundwater samples collected from the Site did not contain any TCL VOCs or SVOCs at concentrations greater than the corresponding NYSDEC Class GA Standards. However, analytical results indicated concentrations of certain TAL metals (chromium, cobalt, iron, manganese, sodium, vanadium, and zinc) that exceeded the NYSDEC Class GA Standard in a portion of the groundwater samples. The analytical results from these two sampling events indicated analytes from the potable water well sample were well below Federal and State health-based maximum allowable contaminant levels for the compounds analyzed.

In August 2011, to further delineate the extent of subsurface soil contamination, EPA installed 14 test pits and collected eight soil samples from 6 inch increments from depths ranging from 18 to 36 inches bgs. The test pits, which were dug to a maximum depth of 36 inches bgs, were

advanced to allow subsurface soil sampling as well as to visually examine the subsurface in the area where a facility building occupied the Site during former on-site operations. The backhoe was used by the subcontractor to determine the approximate extent of the former foundation of the facility building and to identify if any soil beneath the former building had been impacted by historical on-site operations. EPA also collected 43 surface soil samples (0-6 inches bgs) from a grid system established in the northern portion of the Site, and five sediment samples from the Creek. Analytical results of the test pits indicated two areas of buried wood tar throughout the northern portion of the Site. Concrete foundations and the floors of the former on-site buildings were also discovered along with what appeared to be a former floor drain system leading toward the Creek. Analytical results from the surface soil samples (0-6 inches bgs) indicated elevated concentrations of benzo(a)pyrene (maximum concentration of 13.8 mg/kg) and arsenic (maximum concentration of 95.9 mg/kg) and the analytical results from one of the sediment samples collected from the Creek indicated elevated concentrations of benzo(a)pyrene (2.33 mg/kg). These elevated concentrations of contaminants detected in soil samples exceeded the EPA Preliminary Remediation Goals (PRGs) for benzo(a)pyrene (1.5 mg/kg) and arsenic (39 mg/kg). It is important to note that the EPA PRG for arsenic changed from 39 mg/kg, as it was in 2011, to its current value of 67 mg/kg. For the purposes of this action, all analytical results were compared to the EPA PRG for arsenic at the time that the Removal Action was conducted (39 mg/kg).

The two areas in which concentrations of benzo(a)pyrene or arsenic exceeded the EPA PRGs were located in an open field within the northern portion of the Site. The larger of the two areas was approximately 280 feet long and terminated at the bank alongside the Creek. The average width of the area was approximately 80 feet. The wood tar was vertically distributed from the surface to an approximate depth of 5 feet. The areal extent of surficial arsenic contamination was approximately 9,500 ft² and overlaid a major portion of buried wood tar. The second area was 1,125 ft² with arsenic concentrations exceeding the EPA PRG in surface soils (0-6 inches bgs). It is important to note that during the Removal Action conducted at the Site the two separate areas of contamination were combined into one excavation grid system.

Records indicate that the former on-site facility burned an estimated 16 cords of aged wood per day, which would produce approximately 352 gallons or 3,200 pounds of wood tar per day. Over the 34 year life of the Tyler and Hall Chemical Company, an estimated 3,734,016 gallons of wood tar would have been produced at the facility. This waste contains numerous constituents designated as hazardous substances under CERCLA including benzene, toluene, xylenes, benzo(a)pyrene, and phenolic compounds. A release of hazardous substances occurred on the Site in a quantity and concentration that presented a threat to public health and the environment.

1.3 General Site Geology

The Site is located in the Catskill Mountain Range, which is part of the Appalachian Plateau of south-central New York and Pennsylvania. Underlain by Devonian Period strata, including sandstones shales and conglomerates, the bedrock in the area was formed in shallow seas and steady supply of sediment from the Acadian Orogeny in the New England region. Modified by fluvial processes and glaciation during the Pleistocene Epoch, the area is an erosional-dissected plateau with steep valley walls and both narrow and U-shaped valleys. The glaciation and fluvial

processes resulted in the abundance of sands, gravels, and tills throughout the valley areas and leads to a wide variety of soil types in the region. Furthermore, the mining of shale, specifically Bluestone, provides a small economic industry within the region.

2.0 SCOPE OF WORK

The results from previous EPA ERT investigations indicated that toxic material from the Site was migrating into the adjacent Creek and would result in deleterious impacts to the aquatic life within the ecosystem. The Creek supports a number of species of fish including brook, brown, and rainbow trout. The waste material from the Site contains elevated concentrations of phenolic compounds which are particularly toxic to juvenile fish populations. In addition to surface water discharges, there is also concern for impacts to groundwater from the Site since groundwater supply wells are the primary source of drinking water in the surrounding area.

As part of the Removal Action at the Site, Weston Solutions, Inc., Removal Support Team 2 (RST 2) [currently Removal Support Team 3 (RST 3)] was tasked by EPA to document on-site removal operations through photographic documentation and notations in a Site log book. In addition, RST 2 was tasked with conducting work zone air monitoring for workers health and safety, perimeter air monitoring for organic vapors to protect on-site and off-site receptors, as well as particulate monitoring to determine whether dust suppression measures were necessary to contain fugitive dust from potentially migrating offsite. All air monitoring readings were to be recorded and documented. Furthermore, RST 2 was tasked with providing support to EPA's Emergency Rapid Response Services (ERRS) contractor, Environmental Restoration, LLC (ER), in performing post excavation soil and groundwater sampling activities during the Removal Action.

The objective of the Removal Action was to eliminate the threat of direct contact to hazardous substances present in surface and subsurface soil at the Site and to ameliorate the migration of contaminants into the Creek. The Scope of Work (SOW) for the Removal Action was detailed in the Action Memorandum which was approved on September 26, 2013 (Refer to Appendix A for the EPA Action Memorandum).

2.1 Mobilization and Institutional Controls

The Removal Action at the Site was initiated on October 21, 2013. A site walk was conducted by the EPA and the ERRS contractor to discuss Site logistics. On October 25, 2013, Site facility and heavy equipment were delivered to the Site. Access to place the Site facility on a nearby property was obtained from the property owner. Following the underground utilities mark out, on October 30, 2013, Site support services were installed by local service vendors.

In late October 2013, the proposed area of excavation was cleared of brush and other debris. The NYSDEC was also notified of the Removal Action initiation.

Silt fence was installed along the Creek to control sediment erosion, trees within the proposed excavation area were cut and removed, and several loads of stone were utilized to expand the existing driveway to accommodate tri-axle dump trucks. Topsoil and backfill soil vendors were selected and representative samples were collected from their facilities. Waste characterizations

were performed to complete the transportation & disposal (T&D) arrangement with a CERCLA Off-Site Rule-approved disposal facility. An on-site meeting with the Town of Hancock, New York Highway Superintendent occurred on October 25, 2013 to discuss the driveway modification as well as to confirm that the four bridges along Readburn Road that span the Creek were adequate in supporting the several hundred truck loads expected during the Removal Action.

Prior to the initiation of the Removal Action, RST 2 prepared a Site-Specific Community Air Monitoring Plan (CAMP) which outlined the air monitoring procedures to be followed in order to protect on-site personnel and the surrounding community from potential airborne contaminant releases during the implementation of the Removal Action at the Site. RST 2 also prepared a Site-Specific Health and Safety Plan (HASP) which defined safety protocols for RST 2 personnel during field activities (Refer to Appendix B for the Site-Specific CAMP and Appendix C for the Site-Specific HASP).

On November 11, 2013, RST 2 mobilized to the Site and initiated baseline perimeter air monitoring. The ERRS contractor also began to establish work zones and delineated the active work areas at the Site [*i.e.*, exclusion zone, contamination reduction zone (CRZ), and the support zone]. Other site activities were briefly suspended for a 2-week period while awaiting confirmation from the disposal facility (Keystone Sanitary Landfill, Inc. located in Dunmore, Pennsylvania) for the acceptance of the waste material that would be removed from the Site. On December 2, 2013, Removal Action activities resumed (Refer to Attachment B for Photographic Documentation of Site Activities).

2.2 Air Monitoring

On November 11, 2013, RST 2 conducted baseline air monitoring for particulates and VOCs. The objective of this initial baseline air monitoring at the Site was to determine the background concentration of particulates and VOCs in air under normal conditions. Particulate monitoring was conducted using DustTrack II (Model 8530) air monitors and air monitoring for VOCs was conducted using AreaRae™ (Model PGM5120) air monitors. The air monitors were deployed at two air monitoring stations. Each air monitoring station was comprised of one DustTrack II and one AreaRae™ unit. One air monitoring station was located on the south side of the Site, behind the on-site residential property (Station-1), while the other was located on the north side of the Site, west of the Creek (Station-2).

Excavation of wood tar-contaminated soils commenced on December 3, 2013. Three air monitoring stations were established during this phase of the Removal Action. Air monitoring Station-1 was located on the north side of the Site, west of the Creek, air monitoring Station-2 was located on the west side of the Site, opposite residential properties located along Readburn Road, and air monitoring Station-3 was located on the south side of the Site behind the on-site residence. Particulate and air quality monitoring for VOCs was conducted daily during site activities when weather conditions permitted the deployment of the air monitors. Air monitoring was not conducted during periods of rain, snowfall, freezing temperatures [< 32 degrees Fahrenheit ($^{\circ}\text{F}$)], and/or high humidity ($> 95\%$) (Refer to Figure 2, Site Overview Map, for air monitoring station locations, Appendix B for the Site-Specific CAMP, and Attachment B for Photographic Documentation of Site Activities).

2.2.1 Particulate Monitoring Objectives

In accordance with the Site-Specific CAMP, RST 2 utilized DustTrack II air monitors to conduct particulate monitoring during excavation of wood tar-contaminated soils and soil load-out operations. Results obtained from daily particulate monitoring were compared against the baseline particulate monitoring results, the Site-Specific Action Level, and NYSDEC Technical and Administrative Guidance Memorandum (TAGM) 4031 particulate Action Level of 0.100 milligrams per cubic meter (mg/m^3).

As per the Site-Specific CAMP, RST 2 established upwind and downwind particulate air monitoring stations while intrusive on-site activities were conducted. The established Site-Specific Action Level for particulates was $0.100 \text{ mg}/\text{m}^3$. Based upon this criterion, the following actions were taken when specific conditions were encountered:

- Downwind level $\leq 0.100 \text{ mg}/\text{m}^3$ above the upwind background particulate level:
 - Site work activities continued.
- Downwind level $> 0.100 \text{ mg}/\text{m}^3$ above the upwind background particulate level or if visible airborne particulates were observed or recorded on the DustTrack II particulate monitors:
 - Dust suppression techniques (*i.e.*, misting with water via hose connected to a mobile on-site water tank) were employed.
 - Work continued as long as downwind particulate levels were $\leq 0.150 \text{ mg}/\text{m}^3$ above the upwind particulate level for not more than a 15 minute average over background level and provided no visible airborne particulates migrated from the work area.
 - If, after implementation of dust suppression techniques, downwind particulate levels were greater than $0.150 \text{ mg}/\text{m}^3$ above upwind level, work was stopped and re-evaluation of activities initiated. Work would resume provided dust suppression measures and other controls were successful in reducing the downwind particulate concentrations to within $0.150 \text{ mg}/\text{m}^3$ of the upwind level and preventing visible dust migration.

2.2.2 Volatile Organic Compound Monitoring Objectives

In accordance with the Site-Specific CAMP, RST 2 utilized AreaRae™ air monitors to conduct air monitoring for VOCs during excavation of wood tar-contaminated soils and soil load-out operations. Results obtained from air quality monitoring were compared to the baseline air quality monitoring results and the Site-Specific Action Level for benzene. In addition, air quality was monitored for carbon monoxide (CO), hydrogen sulfide (H_2S), oxygen (O_2) and Lower Explosive Limit (LEL) at each air monitoring station.

Based on the established Occupational Safety and Health Administration (OSHA) Permissible Exposure Limit (PEL), the Site-Specific Action Level for benzene was 1.0 part per million (ppm) using an 8-hour time-weighted average (TWA) and/or a maximum short-term exposure limit (STEL) of 5.0 ppm as averaged over any 15 minute period. The LEL for VOCs (benzene) was 1.2%. The PEL for CO was 50 ppm using an 8-hour TWA and LEL of 12.5%. The PEL for H_2S was 20 ppm using an 8-hour TWA with a maximum peak of 50 ppm over a 10 minute period and LEL of 4%.

The Site-Specific Action Levels for VOCs, CO, and H₂S and their effect on site activities were as follows:

- If the air quality results for VOCs (benzene), CO, or H₂S were within the OSHA PELs, site work would resume in modified Level D personal protective equipment (PPE).
- If air quality exceeded the OSHA PELs for VOCs (benzene), CO, or H₂S at any time during site activities, then site work would cease to assess site condition and upgrade to proper PPE.
- If air quality exceeded the LELs for VOCs, CO, or H₂S at any time during site activities, then work would cease to assess Site conditions.

2.3 Sample Collection Objectives and Methodology

Boundaries of the excavation area were determined based on the analytical results of the July 2008 and August 2011 EPA Removal Assessment sampling and were divided into 900 ft² grids (Refer to Appendix D: *Final Removal Assessment Sampling Trip Report*, March 6, 2013, DCN No.: RST 2-02-F-1759). The grid map was used as a guide for post excavation soil sampling during the Removal Action (Refer to Figure 3 – Sample Location Grid Map).

RST 2 provided technical support to EPA and its ERRS contractor during the Removal Action activities, including the collection of a portion of the post excavation soil samples and one aqueous sample (collected from standing water within the excavation). RST 2 followed the sampling procedures adopted by ERRS which were in accordance with EPA and NYSDEC sampling protocols.

Information from previous assessment sampling as described in the Action Memorandum did not detect VOC contamination in any surface soil (0-6 inches bgs) at the Site. However, the concentrations of SVOCs and arsenic exceeded NYSDEC RRUSCO values in two areas of the Site which were located in the open area field on the northern portion of the property. Wood tar was present from the surface to an approximate depth of 5 feet bgs in the east and southeast area of the Site, continuing to the bank of the Creek. In the area located on the northwest and west portions of the Site arsenic contamination was documented from the surface to 6 inches bgs. Arsenic was co-located at the surface in the area of the Site where wood tar was located. Because arsenic covered the SVOC contamination, both the SVOC and arsenic contamination were excavated simultaneously as one area of concern (AOC). In the area where wood tar was concentrated post excavation soil samples were analyzed for TCL SVOCs and RCRA metals. In the area of the where arsenic was the contaminant of concern post excavation soil samples were analyzed for RCRA metals only. During the excavation activities in both areas visual observations dictated the extent of excavation in the area. All post excavation soil samples were submitted to a New York State-certified laboratory, York Analytical Laboratories (York), located in Stratford, Connecticut.

EPA's Site-Specific Cleanup Goals or PRGs for the Site correspond to a 10⁻⁴ risk level for cancer causing chemicals and less than 1 Hazard Index (HI) for non-cancer causing chemicals as indicated below in Chart 1. Results of all post excavation soil samples collected conform to the Site-Specific Cleanup Goals which were evaluated and developed by EPA's Region II Technical

Support Team of the Program Support Branch based on Site information and available data. Furthermore, the PRGs for the 10^{-6} risk level for cancer causing chemicals and NYSDEC's remediation values for restricted residential use (RRUSCO), were attained in a majority of the samples collected from the areas of contamination. The EPA's PRGs for the 10^{-6} risk level for cancer causing chemicals and NYSDEC RRUSCO values are provided for reference purposes only.

Chart 1: EPA PRGs and NYSDEC RRUSCO for Selected Contaminants

Preliminary Remediation Goals (PRGs) for Selected Compounds				NYSDEC RRUSCO (mg/kg)
Compounds	Human Health (mg/kg)			
	10 ⁻⁶ cancer	10 ⁻⁴ cancer*	HI of 1*	
Arsenic**	0.39***	39		16
Lead			400	400
Benzo(a)anthracene	0.15	15		1.0 or background
Benzo(b)fluoranthene	0.15	15		1.0 or background
Benzo(a)pyrene	0.015	1.5		1.0 or background
Indeno(1,2,3-cd)pyrene	0.15	15		0.5 or background

* Site-Specific Cleanup Goals for the areas of contamination.

** It is important to note that the EPA PRG for arsenic changed from 39 mg/kg, as it was in 2011, to its current value of 67 mg/kg. For the purposes of this action, all analytical results were compared to the Site-Specific Cleanup Goal for arsenic (39 mg/kg).

***A typo was made in the Action Memorandum which listed the 10^{-6} cancer value for arsenic as 0.61 mg/kg.

Prior to the commencement of the Removal Action, ERRS collected a pre-Removal Action potable water sample from the on-site residence to determine the quality of the potable water supply for the on-site residence prior to the initiation of the Removal Action. In addition, ERRS conducted backfill and topsoil sampling at the facilities of selected vendors to determine if their soils met the regulatory standards for use during restoration of the Site. All potable water and backfill and topsoil samples were submitted to the York laboratory for analysis. Subsequent to the completion of the Removal Action activities, RST 2 collected drinking water samples from the on-site residence to assess if the Removal Action impacted the quality of its potable water supply. The potable water samples were submitted to an RST 2-procured laboratory, Chemtech Consulting Group (Chemtech), located in Mountainside, New Jersey.

2.3.1 Post Excavation Soil Sampling Methodology

During the excavation of the Site, additional wood tar contamination was discovered outside of the delineated excavation area located on the southeast portion of the excavation. Consequently, this area was extended to include additional excavation grids (AA-1 and AA-2) (Refer to Figure 3 – Sample Location Grid Map). As a result, the entire east and southeast portions of the excavation area, encompassing grids AA-1, AA-2, A through C, and portions of the Creek's southwest bank, were completely excavated leaving the area without a sidewall. Therefore, post

excavation sidewall soil samples were not collected along this portion of the east and southeast area of the excavation (Refer to Figure 3 for the Sample Location Grid Map).

As the Removal Action activities progressed, a continuous lens of wood tar was observed at approximately 2 to 3 feet bgs along approximately 100 feet of sidewall at the south side of the excavation. This excavation sidewall was approximately 30 feet from the resident's house and approximately 10 feet from a large storage building. The lens of contamination, which measured approximately 1 foot thick, appeared to continue horizontally toward the residence and storage building. The property owner requested that EPA stop advancing the excavation along this sidewall because of his concerns with the structural stability of his house and storage shed. The OSC agreed to stop excavating the lens of contamination in the sidewall at this location. Pursuant to the OSC's direction, RST 2 collected three post excavation sidewall samples from what appeared to be uncontaminated soil below the lens of the wood tar. Samples RW2-81-AA1-03W, RW2-81-AA2-04W, and RW2-81-AA3-04W were collected at depths ranging from 3 to 4 feet bgs along the south sidewall where visible wood tar contamination was present. The analytical results of these three samples were all below the EPA's Site-Specific Cleanup Goals for the Site. However, since available information (refer to Section 1.1 – Site Location and Description) indicates that the residence was built sometime in the 1980s, it is not known if the structure was built on contamination found in the sidewall. Because the excavation in the direction of the residence was stopped, EPA did not fully complete the work proposed in the Action Memorandum in this area of the Site (Refer to Attachment B for Photographic Documentation of Site Activities).

Using the ERRS-developed grid map as a guide, post excavation soil samples were collected at a frequency of one sidewall soil sample every 30 linear feet of the excavation perimeter and one base soil sample every 900 ft² of the excavation area. Each sidewall and base sample was collected as a modified grab sample (*i.e.*, 5-point composite sample within a 12-inch by 12-inch area of the selected sample location) since the gravelly and rocky geology of the soils did not permit the collection of enough soil sample volume from one grab location. Soil samples were collected directly from the excavation sidewall and base. However, when the excavation conditions were unsafe to enter for sample collection, the excavator bucket was used to obtain the soil samples from the grid. The soil samples were homogenized in stainless steel pie pans. Rocks and other debris were removed before placing the samples into 8 ounce (oz.) glass sample jars and preserved in ice-packed sample coolers. All soil samples collected from the east and southeast portions of the excavation area, encompassing grids AA-1, AA-2, A through C, and portions of the Creek's southwest bank, were submitted to the ERRS-procured York laboratory for TCL SVOC and RCRA metals analyses. All the post excavation soil samples collected from the remainder of the excavation were submitted to the York laboratory for RCRA metals analysis only. In the areas of the excavation that were only sampled for RCRA metals, visual observations were utilized to ensure that no wood tar contamination was present, in addition to the analytical results from the August 2011 Removal Assessment.

The sample naming protocol adopted by ERRS for the samples collected from grids AA1, AA2, and A through C, was as follows: RW2-81-A1-04B or RW2-81-A1-04W; where "RW2-81" represented ERRS's site project number, "A1" represented grid A1, "04" represented the depth of the sampling location in feet, and "B" or "W" represented base sample or sidewall sample, respectively. For subsequent post excavation soil samples collected from grids D through J, the

sample naming protocol adopted included just the sampling depths, hence RW2-81-D-1-W or RW2-81-D-1; where “D-1” represented a bottom sample from grid D-1, and D-1-W represented a sidewall sample from grid D-1. It is noteworthy that the laboratory omitted the prefix “RW2-81-” from the sample names in many of the samples listed in their Analytical Report. However, the complete sample names indicated in the Chain of Custody (COC) records presented in Appendix E were accurately referenced in this RAR.

From December 11, 2013 through January 23, 2014, a total of 55 post excavation soil samples were collected from the Site. A total of 20 post excavation soil samples were collected from excavation sidewall and the remaining 35 samples were collected from the excavation base (Refer to Table 1 for Post Excavation Soil Sample Collection Summary).

2.3.2 Post Excavation Aqueous Sampling Methodology

RST 2 provided technical support to EPA and its ERRS contractor during aqueous sampling conducted as part of the Removal Action. On December 11, 2013, RST 2 collected one aqueous sample directly from pooled water within excavation grids A and B. In order to prevent loss of sample preservatives in the sample containers, dedicated sample containers without preservatives were used to collect the aqueous sample which was then transferred into sample containers with preservatives. The sample naming protocol adopted was: RW2-81-GWAB; where “GW” represented groundwater or aqueous, and “AB” represented the grids from where the sample was collected. The aqueous sample was submitted to the York laboratory for VOC, SVOC, and TAL metals analyses. The analytical results of the aqueous sample were compared with the EPA Maximum Contamination Levels (MCLs) for drinking water, the NYSDEC groundwater/surface water standards, and the results obtained from the August 2011 Removal Assessment groundwater sampling. Aqueous sampling was conducted in order to assist EPA in determining if disposal of pooled water within the excavation was necessary (Refer to Appendix E for Chain of Custody Records).

2.3.3 Drinking Water Sampling Methodology

On October 31, 2013, under the oversight of EPA, ERRS conducted a pre-Removal Action assessment of potable water from the on-site residence. Prior to sample collection, the water was purged by running cold water from the kitchen faucet for approximately 5 minutes. One drinking water sample was collected directly from the kitchen faucet and was submitted to the York laboratory for VOC, SVOC, and TAL metals analyses. Analytical results were compared with the EPA MCLs to assess quality standard of the drinking water (Refer to Appendix E for Chain of Custody Records).

On June 12, 2014, RST 2 conducted a post-Removal Action assessment of the potable water from the on-site residence to assess if the Removal Action impacted the quality of its potable water supply. The sampling event was conducted in accordance with EPA and NYSDEC potable water sampling protocols (Refer to Appendix F for Site-Specific UFP Quality Assurance Project Plan). Prior to collecting the drinking water samples, water was purged by running cold water from the kitchen faucet for approximately 5 minutes. Samples for TCL VOC analysis were collected first using three 40 milliliter (ml) volatile organic analysis (VOA) vials and preserved with hydrochloric acid to achieve a sample pH <2. Two 1,000 ml amber glass jars

with no preservatives were used to collect samples for TCL SVOC analysis. One 1,000 ml rigid plastic container was used to collect the samples for TAL metals analysis which was preserved on-site using nitric acid to achieve a sample pH <2. One field duplicate drinking water sample, additional volumes of drinking water sample for matrix spike/matrix spike duplicate (MS/MSD), and a trip blank sample were also collected. All samples were collected for a definitive data quality assurance/quality control (QA/QC) objective. All sample information was transcribed into EPA's SCRIBE sample management database. Sample labels and COC documents were generated from the SCRIBE database. All samples were placed in an ice-packed cooler and submitted to the Chemtech laboratory for analysis. Analytical results were compared against the EPA MCLs for drinking water and the analytical results obtained from the pre-Removal Action potable water sampling event (Refer to Appendix E for Chain of Custody Records).

2.3.4 Backfill and Topsoil Sampling Methodology

On October 30, 2013, ERRS collected two backfill soil samples from Shinhopple Sand & Gravel (Shinhopple) located in Downsville, New York and one topsoil sample from Schaefer Enterprises of Deposit, Inc. (Schaefer) located in Deposit, New York. The samples were submitted to the York laboratory for VOC, SVOC, pesticide, herbicide, polychlorinated biphenyl (PCB), and metals analyses and were compared against the NYSDEC Unrestricted Use Soil Cleanup Objectives (UUSCO). ERRS did not adopt any specific sample naming protocol for these samples. Backfill samples were simply named Backfill and P. Backfill and topsoil samples were named Top Soil (Refer to Attachment E for Chain of Custody Documents).

2.4 Air Monitoring and Analytical Results Summary

The following section summarizes the results of the particulates and VOC air monitoring activities conducted during the Removal Action. In addition, the analytical results of post excavation soil and groundwater sampling, pre-Removal Action and post-Removal Action drinking water sampling, and backfill and topsoil sampling are also discussed in this section.

2.4.1 Particulate Monitoring and Air Quality Results

The average, maximum/peak and TWA of total particulate matter, CO, VOC, H₂S, and LEL, as well as wind direction, temperature, humidity, and pertinent weather observations are presented in Table 2: Particulate Monitoring and Air Quality Results Summary. All particulate concentrations during Removal Action activities were well below the Site-Specific Action Level of 0.100 mg/m³ except for sustained spikes observed on December 3, 2013 at air monitoring Station-2, located along Readburn Road. On this day, heavy dust was generated from vehicular traffic along the adjacent roadway. The heavy dust observed was associated with prior salting operations for roadway treatment to prevent icy road conditions during snowfall. As a result, a false-positive was recorded on the particulate air monitors. This situation was corrected by moving air monitoring Station-2 closer to the active work area so that only particulates specifically generated by on-site activities were recorded. Subsequent spikes observed during the Removal Action were brief and never lasted more than approximately 3 minutes during excavation and load-out operations. VOC levels recorded during Removal Action operations were below the Site-Specific Action Level of 5.0 ppm for benzene (Refer to Figure 2: Site

Overview Map, for locations of air monitoring stations and Attachment A for Daily Air Monitoring Results Data).

2.4.2 Post Excavation Soil Sampling Results Summary

On December 11, 2013, RST 2 collected a total of 16 post excavation soil samples from excavation grids AA-1, AA-2, and A through C. Six of the samples were sidewall samples and the remaining 10 were base samples. All the post excavation soil samples collected within these grids were analyzed for TCL SVOCs and RCRA metals and were compared with the EPA's Site-Specific Cleanup Goals for the Site which corresponds to a 10^{-4} risk level for cancer causing chemicals and less than 1 HI for non-cancer causing chemicals. The analytical results indicated that all the post excavation soil samples conformed to the EPA's Site-Specific Cleanup Goals for the Site. The analytical results for RCRA metals analysis indicated that all soil samples conformed to the EPA's Site-Specific Cleanup Goals for the Site.

On January 13 and 23, 2014, post excavation soil sampling was conducted by ERRS under EPA oversight. According to the information provided by ERRS, a total of 39 post excavation soil samples were collected from grids D through J. On January 13, 2014, a total of 24 post excavation soil samples, including seven sidewall soil samples and 17 base samples, were collected from the excavation. On January 23, 2014, a total of 15 post excavation soil samples, including seven sidewall soil samples and eight base samples, were collected from the excavation. The post excavation soil samples were analyzed for RCRA metals only and were compared with the EPA's Site-Specific Cleanup Goals for the Site which corresponds to a 10^{-4} risk level for cancer causing chemicals and less than 1 HI for non-cancer causing chemicals. In this area of the excavation, only RCRA metals contamination was discovered during the previous EPA assessment sampling. Therefore, visual observation was used to confirm no soil staining or tarballs existed in the excavation. The analytical results indicated that all the post excavation soil samples conformed to the EPA's Site-Specific Cleanup Goals for the Site with the exception of one sample (RW2-81-E-3) that exceed the 10^{-4} risk level for arsenic with a slightly elevated concentration of 40.9 mg/kg. It is important to note that the EPA PRG for arsenic changed from 39 mg/kg to its current value of 67 mg/kg.

Refer to Figure 3 for the Sample Location Grid Map, Table 1 for the Post Excavation Soil Sample Collection Summary, Table 3 for the Post Excavation Soil Analytical Results – Semivolatile Organic Compounds, Table 4 for the Post Excavation Soil Analytical Results – RCRA Metals, and Appendix G and H for Post Excavation Soil Sampling Analytical Reports.

2.4.3 Post Excavation Aqueous Sampling Results Summary

On December 11, 2013, RST 2 collected one post excavation aqueous sample (RW2-81-GWAB). The aqueous sample was collected from standing water within excavation grids A and B and was analyzed for TCL VOCs, TCL SVOCs, and TAL metals, including mercury. The analytical results of the aqueous sample were compared with the EPA MCLs for drinking water, the NYSDEC groundwater/surface water standards, and the results obtained from the August 2011 Removal Assessment groundwater sampling. Analytical results of the sample indicated the following exceedances of the EPA MCLs and/or NYSDEC groundwater/surface water standards: 1,2,4-trimethylbenzene [44 micrograms per liter ($\mu\text{g/L}$)]; 1,3,5-trimethylbenzene (14 J $\mu\text{g/L}$);

benzene (23 J µg/L); ethylbenzene (55 µg/L); toluene (140 µg/L); 2,4-dimethylphenol (1,140 µg/L); and phenol (149 J µg/L). Due to the fact that the Site-Specific contaminants of concern were not detected, the EPA OSC directed ERRS to backfill the excavation. Refer to Tables 5A through 5C for the Post Excavation Aqueous Analytical Results and Appendix G for the Post Excavation Aqueous Sampling Analytical Report (December 2013).

2.4.4 Drinking Water Sampling Results Summary

On October 31, 2013, under the supervision of EPA, ERRS collected one pre-Removal Action drinking water sample (2222H2O) from the on-site residence. The drinking water sample was analyzed for TCL VOCs, TCL SVOCs, and TAL metals, including mercury. The analytical results of the drinking water sample were compared with the EPA MCLs for drinking water. Analytical results did not indicate any exceedances of the EPA MCLs for drinking water. Refer to Tables 6A through 6C for the Drinking Water Analytical Results and Appendix I for the Pre-Removal Action Drinking Water Analytical Report (November 2013).

On June 12, 2014, RST 2 collected two post-Removal Action drinking water samples (P001-DW01-001 and P0001-DW01-002), including one field duplicate, and one trip blank sample (TB-061214) from the one on-site residence. The drinking water samples were analyzed for TCL VOCs, TCL SVOCs, and TAL metals, including mercury. The analytical results of the drinking water samples were compared with the EPA MCLs for drinking water. Analytical results did not indicate any exceedances of the EPA MCLs. Refer to Tables 6A through 6C for the Drinking Water Analytical Results and Appendix J for the Post-Removal Action Drinking Water Analytical Report (June 2014).

2.4.5 Backfill and Topsoil Sampling Results Summary

On October, 30, 2013, under the supervision of EPA, ERRS collected two backfill soil samples from Shinhopple and one topsoil sample from Schaefer. The soil samples were analyzed for VOCs, SVOCs, pesticides, herbicides, PCBs, and TAL metals, including mercury and cyanide. The analytical results were compared against the NYSDEC UUSCO values. The analytical results did not indicate any exceedances of the NYSDEC UUSCO values. Refer to Tables 7A through 7E for the Backfill Analytical Results, Tables 8A through 8E for the Topsoil Analytical Results, Appendix K for the Back Fill Analytical Report (November 2013), and Appendix L for the Topsoil Analytical Report (November 2013).

2.5 Disposal of Contaminated Soils

On October 30, 2013, prior to initiating the Removal Action, ERRS conducted disposal sampling to characterize the waste soils and wood tar from the Site and to provide pertinent information required to determine the appropriate disposal facility to procure for the Removal Action. The disposal samples were analyzed for TCLP VOCs, TCLP SVOCs, TCLP pesticides, TCLP PCBs, RCRA metals, flash point, ignitability, corrosivity, cyanide reactivity, sulfide reactivity, total solids, and paint filter test. Analytical results were provided to and accepted by a CERCLA off-site Rule compliant disposal facility, Keystone Sanitary Landfill, Inc., located in Dunmore, Pennsylvania, where all contaminated soils and debris that were generated during the Removal Action were transported off-site for disposal. Refer to Appendix E for the Chain of Custody

Records and Appendix M for the Disposal Soil Analytical Reports (November & December 2013).

During the Removal Action, ERRS continuously conducted disposal sampling of on-site soils using the grid map as reference. The disposal soil samples were analyzed for VOCs, SVOCs, pesticides, herbicides, TAL metals, and RCRA metals. Refer to Appendix E for the Chain of Custody Records and Appendix M for the Disposal Soil Analytical Reports (November & December 2013).

A total of 6,576.56 tons of non-hazardous contaminated soil was transported off-site for disposal at the Keystone Sanitary Landfill, Inc. facility. Refer to Attachment N for the Waste Generation Report.

2.6 Excavation Backfill

From November 5, 2013 through January 31, 2014, approximately 6,029.5 tons of backfill material was delivered to the Site to backfill the excavation. Backfilling of the grids commenced on December 17, 2013 and completed on January 30, 2014. All backfilled areas were further restored by placing certified clean topsoil which is discussed further in Section 2.7 of this report.

2.7 Site Restoration

Approximately 900 tons of clean topsoil compliant with NYSDEC UUSCO values was delivered from Shafer. Approximately 43,000 ft² of the backfilled excavation area was restored to the original grade with clean topsoil. In addition, areas within the Site impacted by the Removal Action activities were also restored using clean topsoil. The west bank of the Creek, which was completely excavated as part of the Removal Action, was backfilled to the original ground elevation. At the request of the property owner, approximately 66 tons of 2-inch crushed stone was repurposed from the trailer staging area on-site and used to construct an alternative north drive way to the on-site residence (Refer to Attachment B for Photographic Documentation of Site Activities).

On June 9, 2014, Pittarelli Group, a subcontractor for ERRS, located at Union Center Maine Highway in Endicott, New York, planted a mixture of red clover and pasture grass (contractors blend) throughout the Site via hydro seeding - a planting process that uses a slurry of seed and mulch. The slurry was transported in a tank mounted on a truck or trailer and sprayed over prepared ground. Site restoration activities and demobilization from the Site was concluded on June 9, 2014.

The on-site property owner informed EPA that the site restoration which was completed in June 2014 caused poor stormwater drainage and requested for alteration. On August 18 and 19, 2014, EPA and ERRS remobilized to the Site and restored the impacted area to permit proper stormwater drainage. The material removed during the re-grading activities was utilized to re-grade the west bank of the Creek. During the re-grading of the property, an additional 125 tons of pre-analyzed topsoil was delivered and spread throughout the remediated areas. The areas that re-grading activities were completed were also re-seeded by the ERRS contractor. All

personnel demobilized from the Site on August 19, 2014 marking the end of Removal Action activities at the Site.

REFERENCES:

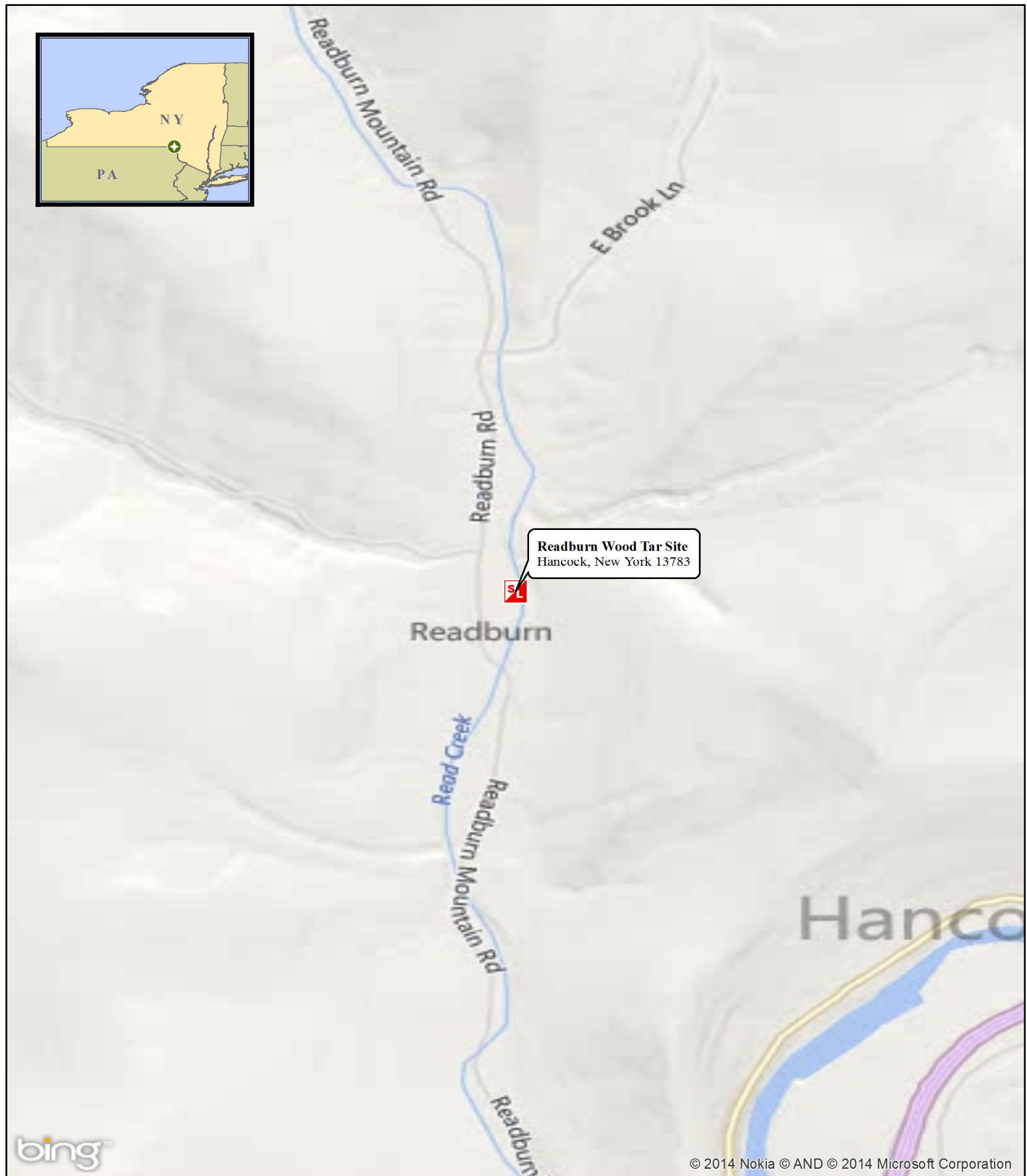
1. NYSDEC/DER; Conceptual Approval Memo for Proposed Standby Contract Work Assignment, October 13, 2006.
2. NYSDEC/Malcom Pirnie, Inc.; Readburn Wood Tar Site Immediate Investigation Work Plan (#D-004439-02), February 2007.
3. NYSDEC/Malcom Pirnie, Inc.; Readburn Wood Tar Site Immediate Investigation Work Assignment Report (#D-004439-02), October 2007.
4. EPA/ERT; Final Report for the Readburn Wood Tar Site, Work Assignment #347, March 2009.
5. NYSDEC DER-10; Technical Guidance for Site Investigation and Remediation, May 2010.

Figures

Figure 1: Site Location Map

Figure 2: Site Overview Map

Figure 3: Sample Location Grid Map



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Legend

 Site Location



0 500 1,000 2,000 3,000 4,000 Feet



Weston Solutions, Inc.
East Division

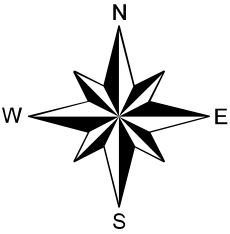
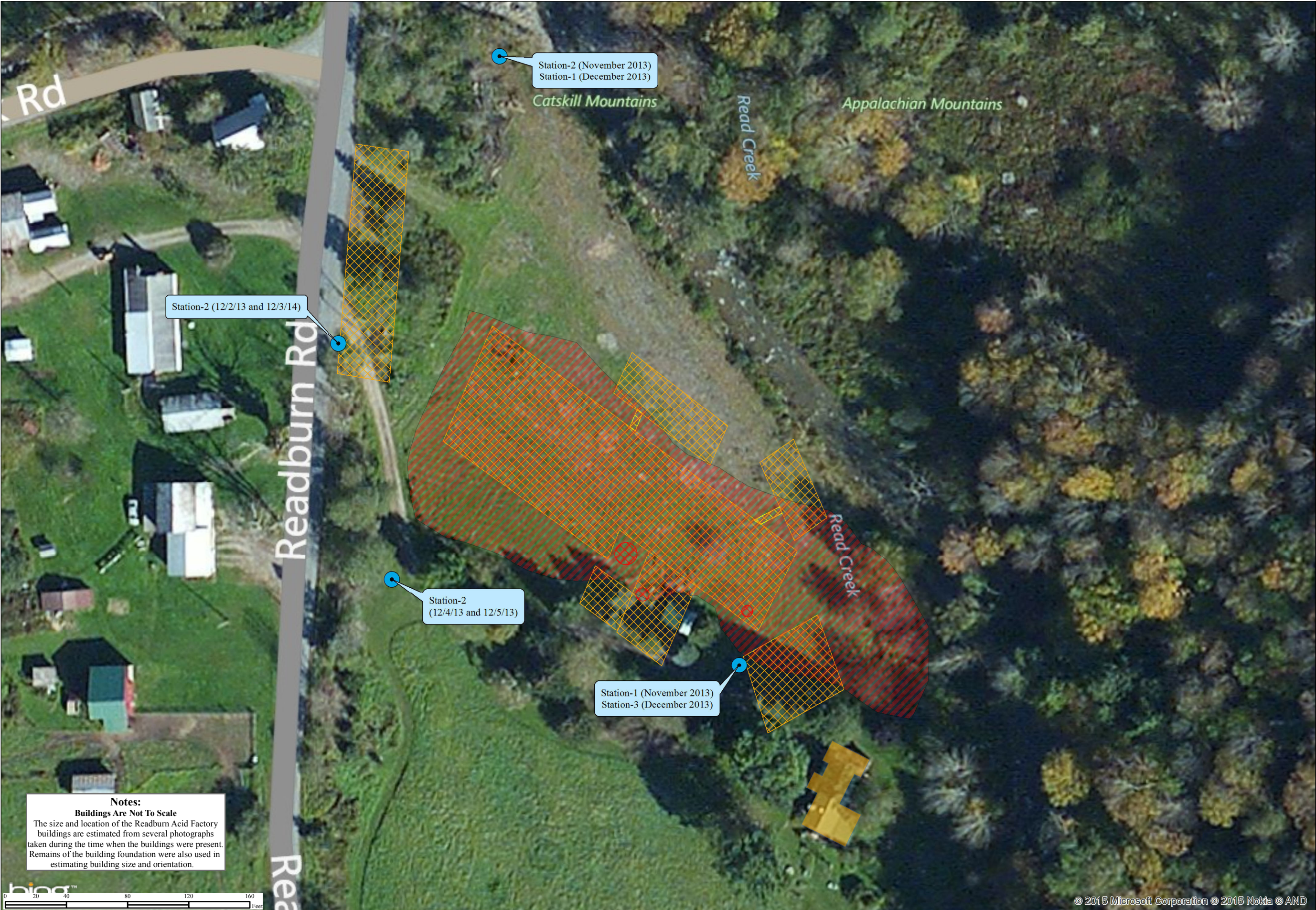
In Association With
Scientific and Environmental Associates, Inc.,
Environmental Compliance Consultants, Inc.,
Avatar Environmental, LLC, On-Site Environmental,
Inc. and Sovereign Consulting, Inc

Figure 1: Site Location Map

READBURN WOOD TAR SITE
HANCOCK, NEW YORK

U.S. ENVIRONMENTAL PROTECTION AGENCY
REMOVAL SUPPORT TEAM 3
CONTRACT # EP-S2-14-01

DATE MODIFIED: 09/26/2014	GIS ANALYST: T. BENTON
EPA OSC: B. DEASE	RST SPM: B. NWOSU
FILENAME: SITELOCATIONMAP.MXD	



SCALE

1:720

LEGEND

- Excavation Area
- Air Monitoring Station
- Readburn Building Location Structure**
- Smoke Stack
- Building Foundation
- Chute
- On-Site Residence

Figure 2: Site Overview Map

**Readburn Wood Tar Site
Hancock, New York**

**UNITED STATES ENVIRONMENTAL
PROTECTION AGENCY
REMOVAL SUPPORT TEAM 3
CONTRACT # EP-S2-14-01**

Weston Solutions, Inc.

In Association With
Scientific and Environmental Associates, Inc.,
Environmental Compliance Consultants, Inc.,
Avatar Environmental, LLC, On-Site Environmental,
Inc. and Sovereign Consulting, Inc.

GIS ANALYST:	T. BENTON
EPA OSC:	B. DEASE
RST 2 SPM:	B. NWOSU
FILENAME:	092614_SiteOverviewMap.mxd
FIGURE	2
REVISION	2
DATE MODIFIED	5/13/2015



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Table 8E:	Topsoil Analytical Results – Inorganics

Table 1
Post Excavation Soil Sample Collection Summary
Readburn Wood Tar Site
December 2013 through January 2014

Sample ID Number	Sample Date	Sample Time	Laboratory Analysis	Sample Media	Depth (Inches)	Sample Location	Grid Location
RW2-81-AA1-03B	12/11/2013	10:30	SVOC + RCRA Metals	Soil	36	Base	AA1
RW2-81-AA1-03W	12/11/2013	10:40	SVOC + RCRA Metals	Soil	36	Sidewall	AA1
*RW2-81-AA2-04W	12/11/2013	10:45	SVOC + RCRA Metals	Soil	48	Sidewall	AA1
*RW2-81-AA3-04W	12/11/2013	10:50	SVOC + RCRA Metals	Soil	48	Sidewall	AA1
RW2-81-AA2-03B	12/11/2013	10:35	SVOC + RCRA Metals	Soil	36	Base	AA2
RW2-81-A1-04W	12/11/2013	10:55	SVOC + RCRA Metals	Soil	48	Sidewall	A1
RW2-81-B1-04W	12/11/2013	11:00	SVOC + RCRA Metals	Soil	48	Sidewall	B1
RW2-81-C1-02W	12/11/2013	11:05	SVOC + RCRA Metals	Soil	24	Sidewall	C1
RW2-81-A1-08B	12/11/2013	11:10	SVOC + RCRA Metals	Soil	96	Base	A1
RW2-81-A2-08B	12/11/2013	11:15	SVOC + RCRA Metals	Soil	96	Base	A2
RW2-81-B1-08B	12/11/2013	11:20	SVOC + RCRA Metals	Soil	96	Base	B1
RW2-81-B2-08B	12/11/2013	11:25	SVOC + RCRA Metals	Soil	96	Base	B2
RW2-81-B3-06B	12/11/2013	11:30	SVOC + RCRA Metals	Soil	72	Base	B3
RW2-81-C1-03B	12/11/2013	11:35	SVOC + RCRA Metals	Soil	36	Base	C1
RW2-81-C2-03B	12/11/2013	11:40	SVOC + RCRA Metals	Soil	36	Base	C2
**RW2-81-C3-08B	12/11/2013	11:45	SVOC + RCRA Metals	Soil	96	Base	C3
RW2-81-D-1	1/13/2014	9:00	RCRA Metals	Soil	18	Base	D1
RW2-81-D-2	1/13/2014	9:10	RCRA Metals	Soil	18	Base	D2
RW2-81-D-3	1/13/2014	9:15	RCRA Metals	Soil	18	Base	D3
RW2-81-E-1	1/13/2014	9:20	RCRA Metals	Soil	18	Base	E1
RW2-81-E-2	1/13/2014	9:25	RCRA Metals	Soil	18	Base	E2
RW2-81-E-3	1/13/2014	9:30	RCRA Metals	Soil	18	Base	E3
RW2-81-F-1	1/13/2014	9:35	RCRA Metals	Soil	18	Base	F1
RW2-81-F-2	1/13/2014	9:40	RCRA Metals	Soil	18	Base	F2
RW2-81-F-3	1/13/2014	9:45	RCRA Metals	Soil	18	Base	F3
RW2-81-D-1-W	1/13/2014	8:10	RCRA Metals	Soil	18	Sidewall	D1
RW2-81-E-1-W	1/13/2014	8:15	RCRA Metals	Soil	18	Sidewall	E1
RW2-81-F-1-W	1/13/2014	8:20	RCRA Metals	Soil	18	Sidewall	F1
RW2-81-G-1-W	1/13/2014	8:25	RCRA Metals	Soil	18	Sidewall	G1
RW2-81-H-1-W	1/13/2014	8:30	RCRA Metals	Soil	18	Sidewall	H1
RW2-81-I-1-W	1/13/2014	8:35	RCRA Metals	Soil	18	Sidewall	I1
RW2-81-G-1	1/13/2014	10:00	RCRA Metals	Soil	18	Base	G1
RW2-81-H-1	1/13/2014	10:10	RCRA Metals	Soil	18	Base	H1
RW2-81-I-1	1/13/2014	10:30	RCRA Metals	Soil	18	Base	I1
RW2-81-I-2	1/13/2014	10:35	RCRA Metals	Soil	18	Base	I2
RW2-81-I-3	1/13/2014	10:40	RCRA Metals	Soil	18	Base	I3
RW2-81-J1-W	1/13/2014	10:45	RCRA Metals	Soil	18	Sidewall	J1
RW2-81-J-1	1/13/2014	10:50	RCRA Metals	Soil	18	Base	J1
RW2-81-J-2	1/13/2014	10:55	RCRA Metals	Soil	18	Base	J2
RW2-81-J-3	1/13/2014	11:15	RCRA Metals	Soil	18	Base	J3
RW2-81-G-2	1/23/2014	8:30	RCRA Metals	Soil	18	Base	G2
RW2-81-G-3	1/23/2014	8:40	RCRA Metals	Soil	18	Base	G3
RW2-81-G-4	1/23/2014	8:50	RCRA Metals	Soil	18	Base	G4
RW2-81-H-2	1/23/2014	9:00	RCRA Metals	Soil	18	Base	H2
RW2-81-H-3	1/23/2014	9:10	RCRA Metals	Soil	18	Base	H3
RW2-81-H-4	1/23/2014	9:20	RCRA Metals	Soil	18	Base	H4
RW2-81-I-4	1/23/2014	9:30	RCRA Metals	Soil	18	Base	I4
RW2-81-J-4	1/23/2014	9:40	RCRA Metals	Soil	18	Base	J4
***RW2-81-D3-W	1/23/2014	7:10	RCRA Metals	Soil	18	Sidewall	D3
RW2-81-E-3-W	1/23/2014	7:20	RCRA Metals	Soil	18	Sidewall	E3
RW2-81-F-3-W	1/23/2014	7:40	RCRA Metals	Soil	18	Sidewall	F3
RW2-81-G-4-W	1/23/2014	7:50	RCRA Metals	Soil	18	Sidewall	G4
RW2-81-H-4-W	1/23/2014	8:05	RCRA Metals	Soil	18	Sidewall	H4
RW2-81-I-4-W	1/23/2014	8:15	RCRA Metals	Soil	18	Sidewall	I4
RW2-81-J-4-W	1/23/2014	8:20	RCRA Metals	Soil	18	Sidewall	J4

* Sample naming nomenclature did not accurately identify the accurate sample grid location.

** Sample number was inadvertently mislabeled by the laboratory.

*** Sample was submitted to the laboratory for analysis but not analyzed.

Table 2
Particulate Monitoring and Air Quality Results Summary
Readburn Wood Tar Site, Hancock, New York
November and December 2013

Stations	DustTrack II				AreaRAE											Weather Conditions
	Monitoring Period	Location: Exterior			Monitoring Period	Location: Exterior										
		Avg (mg/m³)	Max (mg/m³)	TWA (mg/m³)		CO (ppm)			VOC (ppm)			H ₂ S (ppm)			LEL (%)	
						Peak	TWA	Avg	Peak	TWA	Avg	Peak	TWA	Avg	Peak	
BASELINE – MONDAY, NOVEMBER 11, 2013																
Station-1	13:19-16:44	0.009	0.013	0.004	13:24-16:43	1.2	0.3	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Weather: Cloudy Wind : 1.7 mph Direction: South-south-east Temperature: 44.6 °F Humidity: 68%
Station-2	13:16-16:42	0.006	0.120	0.003	13:14-16:38	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Station-3	N	N	N	N	--	--	--	--	--	--	--	--	--	--	--	
EXCAVATION, LOADING, AND OFF-SITE TRANSPORTATION OF CONTAMINATED SOILS – MONDAY, DECEMBER 2, 2013																
Station-1	12:57-16:29	E	E	E	12:56-16:26	6.2	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Weather: Partly cloudy Wind: 0.0 mph Direction: South Temperature: 40.8 °F Humidity: 85%
Station-2	12:52-16:19	0.032	0.263	0.014	12:52-16:18	11.3	0.1	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	
Station-3	12:47-16:23	0.031	0.085	0.014	12:47-16:21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
EXCAVATION, LOADING, AND OFF-SITE TRANSPORTATION OF CONTAMINATED SOILS – TUESDAY, DECEMBER 3, 2013																
Station-1	07:47-16:13	E	E	E	07:47-16:11	2.2	0.6	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Weather: Mostly cloudy Wind: 0.1 mph Direction: North-east Temperature: 41.1 °F Humidity: 83%
Station-2	07:43-16:09	0.488	3.150	0.490	07:44-16:09	2.0	0.7	0.6	0.2	0.0	0.0	0.0	0.0	0.0	0.0	
Station-3	07:52-16:16	0.060	0.128	0.060	07:52-16:14	4.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
EXCAVATION, LOADING, AND OFF-SITE TRANSPORTATION OF CONTAMINATED SOILS – WEDNESDAY, DECEMBER 4, 2013																
Station-1	07:26-16:09	0.049	0.084	0.050	07:27-16:09	0.9	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Weather: Mostly cloudy Wind: 0.3 mph Direction: North-east Temperature: 49.6 °F Humidity: 83%
Station-2	N	N	N	N	07:23-16:06	3.4	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	
Station-3	07:30-16:04	0.066	0.223	0.066	07:30-16:03	0.7	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
EXCAVATION, LOADING, AND OFF-SITE TRANSPORTATION OF CONTAMINATED SOILS – MONDAY, DECEMBER 5, 2013																
Station-1	07:34-14:53	0.025	0.099	0.022	07:34-14:52	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Weather: Mostly cloudy Wind : 0.3 mph Direction: North-east Temperature: 49.4 °F Humidity: 74%
Station-2	N	N	N	N	07:26-14:48	1.4	0.7	0.7	0.2	0.1	0.1	0.0	0.0	0.0	0.0	
Station-3	07:28-14:49	0.030	0.040	0.027	07:28-14:48	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

Notes:

1) New York State Department of Environmental Conservation (NYSDEC) Technical and Administrative Guidance Memorandum (TAGM) 4031 fugitive dust action level = 0.100 milligram per cubic meter (mg/m³), 15 minute average over background level, with a maximum of 0.150 mg/m³, 15 minute average.

2) Occupational Safety and Health Administration (OSHA) Permissible Exposure Limits (PEL) for benzene = 1.0 parts per million (ppm) using an 8-hour Time-weighted Average (TWA) and/or a maximum Short Term Exposure Limit (STEL) of 5.0 ppm as averaged over any 15 minute period.

E - Indicates equipment error, data collected may be biased **N** - Indicates no data was collected

Avg - Average, **Max** - Maximum, **VOC** - Volatile Organic Compound, **mph** - Miles per hour

CO - Carbon monoxide, **H₂S** - Hydrogen sulfide, **LEL** - Lower Explosive Limit, **%** - Percent

Table 3
Post Excavation Soil Analytical Results - Semivolatile Organic Compounds
Readburn Wood Tar Site, Hancock, New York
December 2013

Field Sample ID	RW2-81-AA1-03B	RW2-81-AA2-03B	RW2-81-AA1-03W	RW2-81-AA2-04W	RW2-81-AA3-04W	RW2-81-A1-04W	RW2-81-B1-04W	RW2-81-C1-02W
Lab Sample ID	13L0404-01	13L0404-02	13L0404-03	13L0404-04	13L0404-05	13L0404-06	13L0404-07	13L0404-08
Sample Depth (ft)	3	3	3	4	4	4	4	2
Sampling Date	12/11/2013	12/11/2013	12/11/2013	12/11/2013	12/11/2013	12/11/2013	12/11/2013	12/11/2013
Matrix	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil

TCL SVOC	EPA PRGs										
	Human Health (µg/kg)										
	10 ⁻⁶ cancer	10 ⁻⁴ cancer	HI of 1								
Acenaphthene	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND
Aniline	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND
Anthracene	NS	NS	NS	ND	ND	ND	103 J	ND	ND	ND	ND
Benzo(a)anthracene	150	15,000	NS	ND	ND	ND	602	ND	ND	ND	ND
Benzo(a)pyrene	15	1,500	NS	ND	ND	ND	506	ND	ND	ND	ND
Benzo(b)fluoranthene	150	15,000	NS	ND	ND	ND	440	ND	ND	ND	ND
Benzo(g,h,i)perylene	NS	NS	NS	ND	ND	ND	168 J	ND	ND	ND	ND
Benzo(k)fluoranthene	NS	NS	NS	ND	ND	ND	407	ND	ND	ND	ND
Benzyl alcohol	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND
Butylbenzylphthalate	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND
4-Bromophenyl-phenyl ether	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloro-3-methylphenol	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloroaniline	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-chloroethoxy)methane	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-chloroethyl)ether	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-chloroisopropyl)ether	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorophenol	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND
4-Chlorophenyl-phenyl ether	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND
Chrysene	NS	NS	NS	ND	ND	ND	728	ND	ND	ND	ND
Dibenz(a,h)anthracene	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzofuran	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-butyl phthalate	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND
3,3'-Dichlorobenzidine	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND
Diethyl phthalate	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol	NS	NS	NS	ND	ND	ND	ND	ND	ND	399	ND
Dimethyl phthalate	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND
4,6-Dinitro-2-methylphenol	NS	NS	NS	ND	ND	ND	216 J	ND	ND	ND	ND
2,4-Dinitrophenol	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND

Notes:

- 1) TCL SVOC - Target Compound List Semivolatile Organic Compound.
- 2) Results are compared with the U.S. Environmental Protection Agency (EPA) Preliminary Remediation Goals (PRGs) (10⁻⁴ cancer risk and Hazard Index [HI] of 1) for selected compounds obtained from the Action Memorandum for the Site.
- 3) EPA PRG 10⁻⁶ cancer risk for cancer causing chemicals values are provided for comparison purposes only.
- 4) All analytical results and EPA PRGs are in micrograms per kilogram (µg/kg).
- 5) ND - Analyte not detected at or above the Reporting Limit (RL).
- 6) J - Analyte detected below the RL but greater than or equal to the Method Detection Limit (MDL).
- 7) ft - feet, NS - Not specified

Table 3
Post Excavation Soil Analytical Results - Semivolatile Organic Compounds
Readburn Wood Tar Site, Hancock, New York
December 2013

				Field Sample ID	RW2-81-AA1-03B	RW2-81-AA2-03B	RW2-81-AA1-03W	RW2-81-AA2-04W	RW2-81-AA3-04W	RW2-81-A1-04W	RW2-81-B1-04W	RW2-81-C1-02W
				Lab Sample ID	13L0404-01	13L0404-02	13L0404-03	13L0404-04	13L0404-05	13L0404-06	13L0404-07	13L0404-08
				Sample Depth (ft)	3	3	3	4	4	4	4	2
				Sampling Date Matrix	12/11/2013 Soil	12/11/2013 Soil	12/11/2013 Soil	12/11/2013 Soil	12/11/2013 Soil	12/11/2013 Soil	12/11/2013 Soil	12/11/2013 Soil
TCL SVOC	EPA PRGs											
	Human Health (µg/kg)											
	10 ⁻⁶ cancer	10 ⁻⁴ cancer	HI of 1									
2,4-Dinitrotoluene	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-octyl phthalate	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	NS	NS	NS	ND	ND	ND	1,460	ND	ND	ND	ND	ND
Fluorene	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobenzene	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachloroethane	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	150	15,000	NS	ND	ND	ND	168 J	ND	ND	ND	ND	ND
Isophorone	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylphenol	NS	NS	NS	ND	ND	ND	ND	ND	ND	497		ND
3- & 4-Methylphenols	NS	NS	NS	ND	ND	ND	ND	ND	ND	436		ND
Naphthalene	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND
3-Nitroaniline	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitroaniline	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitroaniline	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nitrobenzene	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitrophenol	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitrophenol	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitroso-di-n-propylamine	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodimethylamine	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pentachlorophenol	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	NS	NS	NS	ND	ND	ND	613	ND	ND	ND	ND	ND
Phenol	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	NS	NS	NS	ND	ND	ND	1,450	ND	ND	ND	ND	ND
Pyridine	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4,5-Trichlorophenol	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND

Notes:

- 1) TCL SVOC - Target Compound List Semivolatile Organic Compound.
- 2) Results are compared with the U.S. Environmental Protection Agency (EPA) Preliminary Remediation Goals (PRGs) (10⁻⁴ cancer risk and Hazard Index [HI] of 1) for selected compounds obtained from the Action Memorandum for the Site.
- 3) EPA PRG 10⁻⁶ cancer risk for cancer causing chemicals values are provided for comparison purposes only.
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- 7) ft - feet, NS - Not specified

Table 3
Post Excavation Soil Analytical Results - Semivolatile Organic Compounds
Readburn Wood Tar Site, Hancock, New York
December 2013

Field Sample ID	RW2-81-A1-08B	RW2-81-A2-08B	RW2-81-B1-08B	RW2-81-B2-08B	RW2-81-B3-06B	RW2-81-C1-03B	RW2-81-C2-03B	RW2-81-C3-03B
Lab Sample ID	13L0404-09	13L0404-10	13L0404-11	13L0404-12	13L0404-13	13L0404-14	13L0404-15	13L0404-16
Sample Depth (ft)	8	8	8	8	6	3	3	3
Sampling Date	12/11/2013	12/11/2013	12/11/2013	12/11/2013	12/11/2013	12/11/2013	12/11/2013	12/11/2013
Matrix	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil

TCL SVOC	EPA PRGs										
	Human Health (µg/kg)										
	10 ⁻⁶ cancer	10 ⁻⁴ cancer	HI of 1								
Acenaphthene	NS	NS	NS	ND	1,970 J	ND	ND	ND	ND	ND	ND
Acenaphthylene	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND
Aniline	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND
Anthracene	NS	NS	NS	ND	2,850	ND	ND	ND	ND	ND	ND
Benzo(a)anthracene	150	15,000	NS	ND	794 J	ND	ND	ND	ND	ND	ND
Benzo(a)pyrene	15	1,500	NS	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	150	15,000	NS	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(g,h,i)perylene	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(k)fluoranthene	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND
Benzyl alcohol	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND
Butylbenzylphthalate	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND
4-Bromophenyl-phenyl ether	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloro-3-methylphenol	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloroaniline	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-chloroethoxy)methane	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-chloroethyl)ether	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-chloroisopropyl)ether	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorophenol	NS	NS	NS	ND	ND	ND	ND	ND	250 J	ND	ND
4-Chlorophenyl-phenyl ether	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND
Chrysene	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND
Dibenz(a,h)anthracene	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzofuran	NS	NS	NS	ND	5,420	ND	ND	ND	ND	ND	ND
Di-n-butyl phthalate	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND
3,3'-Dichlorobenzidine	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND
Diethyl phthalate	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol	NS	NS	NS	4,800 J	30,600	356	ND	7,790	628	2,580	473 J
Dimethyl phthalate	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND
4,6-Dinitro-2-methylphenol	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrophenol	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND

Notes:

- 1) TCL SVOC - Target Compound List Semivolatile Organic Compound.
- 2) Results are compared with the U.S. Environmental Protection Agency (EPA) Preliminary Remediation Goals (PRGs) (10⁻⁴ cancer risk and Hazard Index [HI] of 1) for selected compounds obtained from the Action Memorandum for the Site.
- 3) EPA PRG 10⁻⁶ cancer risk for cancer causing chemicals values are provided for comparison purposes only.
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- 6) J - Analyte detected below the RL but greater than or equal to the Method Detection Limit (MDL).
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Table 3
Post Excavation Soil Analytical Results - Semivolatile Organic Compounds
Readburn Wood Tar Site, Hancock, New York
December 2013

Field Sample ID	RW2-81-A1-08B	RW2-81-A2-08B	RW2-81-B1-08B	RW2-81-B2-08B	RW2-81-B3-06B	RW2-81-C1-03B	RW2-81-C2-03B	RW2-81-C3-03B
Lab Sample ID	13L0404-09	13L0404-10	13L0404-11	13L0404-12	13L0404-13	13L0404-14	13L0404-15	13L0404-16
Sample Depth (ft)	8	8	8	8	6	3	3	3
Sampling Date	12/11/2013	12/11/2013	12/11/2013	12/11/2013	12/11/2013	12/11/2013	12/11/2013	12/11/2013
Matrix	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil

TCL SVOC	EPA PRGs										
	Human Health (µg/kg)										
	10 ⁻⁶ cancer	10 ⁻⁴ cancer	HI of 1								
2,4-Dinitrotoluene	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-octyl phthalate	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	NS	NS	NS	ND	1,450 J	ND	ND	ND	ND	ND	ND
Fluorene	NS	NS	NS	ND	7,920	ND	ND	ND	120 J	ND	ND
Hexachlorobenzene	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND
Hexachloroethane	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	150	15,000	NS	ND	ND	ND	ND	ND	ND	ND	ND
Isophorone	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	NS	NS	NS	ND	28,300	120 J	ND	2,350	440	613 J	ND
2-Methylphenol	NS	NS	NS	ND	20,700	629	ND	10,200	528	3,070	ND
3- & 4-Methylphenols	NS	NS	NS	14,000	22,400	673	ND	9,780	828	1,920	851 J
Naphthalene	NS	NS	NS	ND	22,500	103 J	ND	3,030	265 J	451 J	ND
3-Nitroaniline	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitroaniline	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitroaniline	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND
Nitrobenzene	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitrophenol	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitrophenol	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitroso-di-n-propylamine	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodimethylamine	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND
Pentachlorophenol	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	NS	NS	NS	ND	7,110	ND	ND	471 J	105 J	ND	ND
Phenol	NS	NS	NS	7,670 J	ND	ND	ND	ND	160 J	1,240 J	ND
Pyrene	NS	NS	NS	ND	3,020	ND	ND	ND	ND	ND	ND
Pyridine	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND
2,4,5-Trichlorophenol	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND

Notes:

- 1) TCL SVOC - Target Compound List Semivolatile Organic Compound.
- 2) Results are compared with the U.S. Environmental Protection Agency (EPA) Preliminary Remediation Goals (PRGs) (10⁻⁴ cancer risk and Hazard Index [HI] of 1) for selected compounds obtained from the Action Memorandum for the Site.
- 3) EPA PRG 10⁻⁶ cancer risk for cancer causing chemicals values are provided for comparison purposes only.
- 4) All analytical results and EPA PRGs are in micrograms per kilogram (µg/kg).
- 5) ND - Analyte not detected at or above the Reporting Limit (RL).
- 6) J - Analyte detected below the RL but greater than or equal to the Method Detection Limit (MDL).
- 7) ft - feet, NS - Not specified

Table 4
Post Excavation Soil Analytical Results - RCRA Metals
Readburn Wood Tar Site, Hancock, New York
December 2013 and January 2014

	Field Sample ID			RW2-81-AA1-03B	RW2-81-AA2-03B	RW2-81-AA1-03W	RW2-81-AA2-04W	RW2-81-AA3-04W	RW2-81-A1-04W	RW2-81-B1-04W
	Lab Sample ID			13L0404-01	13L0404-02	13L0404-03	13L0404-04	13L0404-05	13L0404-06	13L0404-07
	Sample Depth (ft)			3	3	3	4	4	4	4
	Sampling Date			12/11/2013	12/11/2013	12/11/2013	12/11/2013	12/11/2013	12/11/2013	12/11/2013
	Matrix			Soil	Soil	Soil	Soil	Soil	Soil	Soil
RCRA Metals	EPA PRGs									
	Human Health (mg/kg)									
	10 ⁻⁶ cancer	10 ⁻⁴ cancer	HI of 1							
Arsenic	0.39	39*	NS	4.99	8.10	10.9	8.19	12.4	23.1	13.7
Barium	NS	NS	NS	41.9	77.5	71.4	90.7	66.4	756	62.4
Cadmium	NS	NS	NS	ND	ND	ND	ND	0.794	0.789	ND
Chromium	NS	NS	NS	7.58	8.06	8.59	7.77	7.68	15.8	8.61
Lead	NS	NS	400	9.33	23.8	12.8	79.2	40.9	71.6	11.5
Selenium	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND
Silver	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND
Mercury	NS	NS	NS	0.0251	0.0143	0.00866	0.0412	0.0252	0.0793	0.0297

	Field Sample ID			RW2-81-C1-02W	RW2-81-A1-08B	RW2-81-A2-08B	RW2-81-B1-08B	RW2-81-B2-08B	RW2-81-B3-06B	RW2-81-C1-03B
	Lab Sample ID			13L0404-08	13L0404-09	13L0404-10	13L0404-11	13L0404-12	13L0404-13	13L0404-14
	Sample Depth (ft)			2	8	8	8	8	6	3
	Sampling Date			12/11/2013	12/11/2013	12/11/2013	12/11/2013	12/11/2013	12/11/2013	12/11/2013
	Matrix			Soil	Soil	Soil	Soil	Soil	Soil	Soil
RCRA Metals	EPA PRGs									
	Human Health (mg/kg)									
	10 ⁻⁶ cancer	10 ⁻⁴ cancer	HI of 1							
Arsenic	0.39	39*	NS	7.77	8.07	4.60	3.96	5.84	8.49	10.9
Barium	NS	NS	NS	208	107	67.2	76.2	76.2	116	104
Cadmium	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND
Chromium	NS	NS	NS	8.39	9.64	7.74	8.18	8.05	10.0	9.80
Lead	NS	NS	400	82.6	10.7	12.4	17.3	9.72	13.8	47.2
Selenium	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND
Silver	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND
Mercury	NS	NS	NS	0.0313	0.00859	0.0123	0.0202	0.0101	0.0165	0.0765

Notes:

- 1) RCRA - Resource Conservation and Recovery Act
 - 2) Results are compared with the U.S. Environmental Protection Agency (EPA) Preliminary Remediation Goals (PRGs) (10⁻⁴ cancer risk and Hazard Index [HI] of 1) for selected elements obtained from the Action Memorandum for the Site.
 - 3) EPA PRG 10⁻⁶ cancer risk for cancer causing chemicals values are provided for comparison purposes only.
 - 4) All analytical results and EPA PRGs are in milligrams per kilogram (mg/kg).
 - 5) ft - feet, NS - Not specified
 - 6) ND - Analyte not detected at or above the Reporting Limit (RL).
 - 7) **Bold and red font** values equal or exceed EPA PRG 10⁻⁴ cancer risk for cancer causing chemicals.
 - 8) Sample RW2-81-D3-W was submitted to the laboratory on the Chain of Custody (COC) record but not analyzed.
- * It is important to note that the EPA PRG for arsenic changed from 39 mg/kg, as it was in 2011, to its current value of 67 mg/kg.

Table 4
Post Excavation Soil Analytical Results - RCRA Metals
Readburn Wood Tar Site, Hancock, New York
December 2013 and January 2014

				Field Sample ID	RW2-81-C2-03B	**RW2-81-C3-08B	RW2-81-D1-W	RW2-81-E-1-W	RW2-81-F-1-W	RW2-81-G1-W	RW2-81-H-1-W
				Lab Sample ID	13L0404-15	13L0404-16	14A0260-01	14A0260-02	14A0260-03	14A0260-04	14A0260-05
				Sample Depth (ft)	3	3	NS	NS	NS	NS	NS
				Sampling Date	12/11/2013	12/11/2013	1/13/2014	1/13/2014	1/13/2014	1/13/2014	1/13/2014
				Matrix	Soil	Soil	Soil	Soil	Soil	Soil	Soil
RCRA Metals	EPA PRGs										
	Human Health (mg/kg)										
	10 ⁻⁶ cancer	10 ⁻⁴ cancer	HI of 1								
Arsenic	0.39	39*	NS	6.71	6.55	7.89	12.2	7.85	6.88	7.66	
Barium	NS	NS	NS	162	61.4	51.5	2,040	407	59.1	76.6	
Cadmium	NS	NS	NS	ND	ND	ND	0.725	0.696	ND	ND	
Chromium	NS	NS	NS	7.32	8.26	8.74	7.85	7.39	7.95	8.00	
Lead	NS	NS	400	55.3	13.9	10.6	21.5	53.6	11.1	15.4	
Selenium	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	
Silver	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	
Mercury	NS	NS	NS	0.0228	0.0165	0.0256	0.0221	0.105	0.0329	0.0368	

** Sample number was inadvertently entered in laboratory analytical report as RW2-81-C3-03B.

		Field Sample ID		RW2-81-I-1-W	RW2-81-G-1	RW2-81-H-1	RW2-81-D-1	RW2-81-D-2	RW2-81-D-3	RW2-81-E-1
		Lab Sample ID		14A0260-06	14A0260-07	14A0260-08	14A0260-09	14A0260-10	14A0260-11	14A0260-12
		Sample Depth (ft)		NS	NS	NS	NS	NS	NS	NS
		Sampling Date		1/13/2014	1/13/2014	1/13/2014	1/13/2014	1/13/2014	1/13/2014	1/13/2014
		Matrix		Soil	Soil	Soil	Soil	Soil	Soil	Soil
RCRA Metals	EPA PRGs									
	Human Health (mg/kg)									
	10 ⁻⁶ cancer	10 ⁻⁴ cancer	HI of 1							
Arsenic	0.39	39*	NS	8.95	12.1	6.58	5.68	17.2	7.80	8.27
Barium	NS	NS	NS	61.4	124	37.6	56.7	107	109	85.1
Cadmium	NS	NS	NS	ND	ND	ND	ND	0.364	0.354	ND
Chromium	NS	NS	NS	10.1	13.0	6.79	9.59	9.85	9.13	9.39
Lead	NS	NS	400	13.3	15.9	8.22	12.2	13.2	36.9	8.85
Selenium	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND
Silver	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND
Mercury	NS	NS	NS	0.0391	0.0338	0.00740	0.0203	0.0122	0.0601	0.0224

Notes:

- 1) RCRA - Resource Conservation and Recovery Act
 - 2) Results are compared with the U.S. Environmental Protection Agency (EPA) Preliminary Remediation Goals (PRGs) (10⁻⁴ cancer risk and Hazard Index [HI] of 1) for selected elements obtained from the Action Memorandum for the Site.
 - 3) EPA PRG 10⁻⁶ cancer risk for cancer causing chemicals values are provided for comparison purposes only.
 - 4) All analytical results and EPA PRGs are in milligrams per kilogram (mg/kg).
 - 5) ft - feet, NS - Not specified
 - 6) ND - Analyte not detected at or above the Reporting Limit (RL).
 - 7) **Red** and **red font** values equal or exceed EPA PRG 10⁻⁴ cancer risk for cancer causing chemicals.
 - 8) Sample RW2-81-D3-W was submitted to the laboratory on the Chain of Custody (COC) record but not analyzed.
- * It is important to note that the EPA PRG for arsenic changed from 39 mg/kg, as it was in 2011, to its current value of 67 mg/kg.

Table 4
Post Excavation Soil Analytical Results - RCRA Metals
Readburn Wood Tar Site, Hancock, New York
December 2013 and January 2014

				Lab Sample ID	RW2-81-E-2	RW2-81-E-3	RW2-81-F-1	RW2-81-F-2	RW2-81-F-3	RW2-81-I-1	RW2-81-I-2
				Lab Sample ID	14A0260-13	14A0260-14	14A0260-15	14A0260-16	14A0260-17	14A0260-18	14A0260-19
				Sample Depth (ft)	NS	NS	NS	NS	NS	NS	NS
				Sampling Date	1/13/2014	1/13/2014	1/13/2014	1/13/2014	1/13/2014	1/13/2014	1/13/2014
				Matrix	Soil	Soil	Soil	Soil	Soil	Soil	Soil
RCRA Metals	EPA PRGs										
	Human Health (mg/kg)										
	10 ⁻⁶ cancer	10 ⁻⁴ cancer	HI of 1								
Arsenic	0.39	39*	NS	8.29	40.9	11.1	7.73	9.29	8.30	9.69	
Barium	NS	NS	NS	66.0	69.3	83.1	57.7	166	72.3	93.0	
Cadmium	NS	NS	NS	ND	0.447	ND	ND	0.598	ND	ND	
Chromium	NS	NS	NS	10.3	10.4	10.2	9.21	8.96	9.88	9.21	
Lead	NS	NS	400	14.1	12.3	13.9	11.4	179	23.6	19.3	
Selenium	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	
Silver	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	
Mercury	NS	NS	NS	0.112	0.0166	0.0297	0.0357	0.107	0.0477	0.0443	

				Field Sample ID	RW2-81-I-3	RW2-81-J-1-W	RW2-81-J-1	RW2-81-J-2	RW2-81-J-3	RW2-81-G-2	RW2-81-G-3
				Lab Sample ID	14A0260-20	14A0260-21	14A0260-22	14A0260-23	14A0260-24	14A0668-01	14A0668-02
				Sample Depth (ft)	NS	NS	NS	NS	NS	NS	NS
				Sampling Date	1/13/2014	1/13/2014	1/13/2014	1/13/2014	1/13/2014	1/23/2014	1/23/2014
				Matrix	Soil	Soil	Soil	Soil	Soil	Soil	Soil
RCRA Metals	EPA PRGs										
	Human Health (mg/kg)										
	10 ⁻⁶ cancer	10 ⁻⁴ cancer	HI of 1								
Arsenic	0.39	39*	NS		9.52	10.7	14.7	8.03	10.4	9.84	10.4
Barium	NS	NS	NS		70.1	106	187	157	65.1	98.8	109
Cadmium	NS	NS	NS		ND	ND	0.686	ND	0.414	0.461	0.445
Chromium	NS	NS	NS		8.98	9.56	11.2	9.10	11.3	7.04	7.16
Lead	NS	NS	400		11.3	46.0	67.0	30.4	13.4	61.4	69.8
Selenium	NS	NS	NS		ND	ND	ND	ND	ND	ND	1.21
Silver	NS	NS	NS		ND	ND	ND	ND	ND	ND	ND
Mercury	NS	NS	NS		0.0202	0.0407	0.109	0.100	0.0553	0.0627	0.0697

Notes:

- 1) RCRA - Resource Conservation and Recovery Act
 - 2) Results are compared with the U.S. Environmental Protection Agency (EPA) Preliminary Remediation Goals (PRGs) (10⁻⁴ cancer risk and Hazard Index [HI] of 1) for selected elements obtained from the Action Memorandum for the Site.
 - 3) EPA PRG 10⁻⁶ cancer risk for cancer causing chemicals values are provided for comparison purposes only.
 - 4) All analytical results and EPA PRGs are in milligrams per kilogram (mg/kg).
 - 5) ft - feet, NS - Not specified
 - 6) ND - Analyte not detected at or above the Reporting Limit (RL).
 - 7) **Bold and red font** values equal or exceed EPA PRG 10⁻⁴ cancer risk for cancer causing chemicals.
 - 8) Sample RW2-81-D3-W was submitted to the laboratory on the Chain of Custody (COC) record but not analyzed.
- * It is important to note that the EPA PRG for arsenic changed from 39 mg/kg, as it was in 2011, to its current value of 67 mg/kg.

Table 4
Post Excavation Soil Analytical Results - RCRA Metals
Readburn Wood Tar Site, Hancock, New York
December 2013 and January 2014

				Lab Sample ID	RW2-81-G-4	RW2-81-H-2	RW2-81-H-3	RW2-81-H-4	RW2-81-I-4	RW2-81-J-4	RW2-81-E-3-W
				Lab Sample ID	14A0668-03	14A0668-04	14A0668-05	14A0668-06	14A0668-07	14A0668-08	14A0668-10
				Sample Depth (ft)	NS	NS	NS	NS	NS	NS	NS
				Sampling Date	1/23/2014	1/23/2014	1/23/2014	1/23/2014	1/23/2014	1/23/2014	1/23/2014
				Matrix	Soil	Soil	Soil	Soil	Soil	Soil	Soil
RCRA Metals	EPA PRGs										
	Human Health (mg/kg)										
	10 ⁻⁶ cancer	10 ⁻⁴ cancer	HI of 1								
Arsenic	0.39	39*	NS	15.4	11	10.7	11.6	9.03	13	12.9	
Barium	NS	NS	NS	126	109	105	110	91.5	113	105	
Cadmium	NS	NS	NS	0.588	0.507	0.55	0.52	ND	0.618	0.684	
Chromium	NS	NS	NS	7.68	7.54	7.47	6.61	8.0	7.78	7.84	
Lead	NS	NS	400	80.2	153	88.2	76.2	33.3	83.5	150	
Selenium	NS	NS	NS	1.32	ND	1.78	1.44	ND	1.93	ND	
Silver	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	
Mercury	NS	NS	NS	0.0771	0.0854	0.0603	0.0697	0.047	0.0725	0.0609	

				Field Sample ID	RW2-81-F-3-W	RW2-81-G-4-W	RW2-81-H-4-W	RW2-81-I-4-W	RW2-81-J-4-W
				Lab Sample ID	14A0668-11	14A0668-12	14A0668-13	14A0668-14	14A0668-15
				Sample Depth (ft)	NS	NS	NS	NS	NS
				Sampling Date	1/23/2014	1/23/2014	1/23/2014	1/23/2014	1/23/2014
				Matrix	Soil	Soil	Soil	Soil	Soil
RCRA Metals	EPA PRGs								
	Human Health (mg/kg)								
	10 ⁻⁶ cancer	10 ⁻⁴ cancer	HI of 1						
Arsenic	0.39	39*	NS	14.5	16.2	12.6	10.6	12.3	
Barium	NS	NS	NS	123	113	117	102	119	
Cadmium	NS	NS	NS	0.828	0.716	0.546	0.449	0.572	
Chromium	NS	NS	NS	8.35	8.79	7.39	8.33	7.84	
Lead	NS	NS	400	168	179	81	65	123	
Selenium	NS	NS	NS	ND	1.78	1.56	ND	1.48	
Silver	NS	NS	NS	ND	ND	ND	ND	ND	
Mercury	NS	NS	NS	0.056	0.0598	0.0625	0.0938	0.0474	

Notes:

- 1) RCRA - Resource Conservation and Recovery Act
 - 2) Results are compared with the U.S. Environmental Protection Agency (EPA) Preliminary Remediation Goals (PRGs) (10⁻⁴ cancer risk and Hazard Index [HI] of 1) for selected elements obtained from the Action Memorandum for the Site.
 - 3) EPA PRG 10⁻⁶ cancer risk for cancer causing chemicals values are provided for comparison purposes only.
 - 4) All analytical results and EPA PRGs are in milligrams per kilogram (mg/kg).
 - 5) ft - feet, NS - Not specified
 - 6) ND - Analyte not detected at or above the Reporting Limit (RL).
 - 7) **Bold and red font** values equal or exceed EPA PRG 10⁻⁴ cancer risk for cancer causing chemicals.
 - 8) Sample RW2-81-D3-W was submitted to the laboratory on the Chain of Custody (COC) record but not analyzed.
- * It is important to note that the EPA PRG for arsenic changed from 39 mg/kg, as it was in 2011, to its current value of 67 mg/kg.

Table 5A
Post Excavation Aqueous Analytical Results - Volatile Organic Compounds
Readburn Wood Tar Site, Hancock, New York
December 2013

		Field Sample ID	*SEEP-01	RW2-81-GWAB
		Lab Sample ID	R108006-61	13L0404-17
		Sampling Date	8/24/2011	12/11/2013
		Matrix	Water	Water
TCL VOC	EPA Drinking Water MCL	NYSDEC Surface Water/ Groundwater Standards		
1,1,1-Trichloroethane	200	5	ND	ND
1,1,2,2-Tetrachloroethane	NS	5	ND	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	NS	5	NA	ND
1,1,2-Trichloroethane	5	1	ND	ND
1,1-Dichloroethane	NS	5	ND	ND
1,1-Dichloroethene	7	5	ND	ND
1,2,4-Trichlorobenzene	70	5	ND	ND
1,2,4-Trimethylbenzene	NS	5	ND	44
1,2-Dibromo-3-chloropropane	0.2	0.04	ND	ND
1,2-Dibromoethane	NS	NS	ND	ND
1,2-Dichloroethane	5	0.6	ND	ND
1,2-Dichloropropane	5	1	ND	ND
1,3,5-Trimethylbenzene	NS	5	ND	14 J
2-Butanone	NS	NS	ND	23 J
2-Hexanone	NS	NS	ND	ND
4-Methyl-2-pentanone	NS	NS	ND	ND
Acetone	NS	NS	ND	34 J
Benzene	5	1	ND	23 J
Bromochloromethane	NS	5	ND	ND
Bromoform	NS	NS	ND	ND
Bromomethane	NS	5	ND	ND
Carbon disulfide	NS	60	ND	ND
Carbon Tetrachloride	5	5	ND	ND
Chlorobenzene	100	5	ND	ND
Chloroethane	NS	5	ND	ND
Chloroform	NS	7	ND	ND
Chloromethane	NS	NS	ND	ND
cis-1,2-Dichloroethene	70	5	ND	ND
cis-1,3-Dichloropropene	NS	NS	ND	ND
Dibromochloromethane	NS	NS	ND	ND
Dichlorodifluoromethane	NS	5	ND	ND
Ethylbenzene	700	5	ND	55
Isopropylbenzene	NS	5	ND	ND
Methyl tert-Butyl ether	NS	NS	ND	ND
Methylene chloride	5	5	ND	ND
Naphthalene	NS	NS	ND	41 J
n-Butylbenzene	NS	5	ND	ND
n-Propylbenzene	NS	5	ND	ND
*o-Xylene	10,000 ¹	NS	ND	66
*m,p-Xylene	10,000 ¹	NS	ND	140
sec-Butylbenzene	NS	5	ND	ND
Styrene	100	5	ND	ND
tert-Butylbenzene	NS	5	ND	ND
Tetrachloroethene	5	5	ND	ND
Toluene	1,000	5	ND	140
trans-1,2-Dichloroethene	100	5	ND	ND
trans-1,3-Dichloropropene	NS	NS	ND	ND
Trichloroethene	5	5	ND	ND
Trichlorofluoromethane	NS	5	ND	ND
Vinyl Chloride	2	2	ND	ND
Xylenes, Total	10,000	NS	ND	210

Notes:

- 1) TCL VOC - Target Compound List Volatile Organic Compound
- 2) All analytical results and standards are in micrograms per liter (µg/L).
- 3) NA - Not analyzed, ND - Analyte not detected at or above the Reporting Limit (RL), NS - Not Specified.
- 4) J - Analyte detected below the RL but greater than or equal to the Method Detection Limit (MDL).

¹ EPA MCL reported for total xylenes.

*SEEP-01 was collected during the August 2011 Removal Assessment and presented for comparison purposes only.

Bold and red font values equal or exceed the EPA MCL and/or NYSDEC Surface Water/ Groundwater Standards.

Table 5B
Post Excavation Aqueous Analytical Results - Semivolatile Organic Compounds
Readburn Wood Tar Site, Hancock, New York
December 2013

		Field Sample ID	*SEEP-01	RW2-81-GWAB
		Lab Sample ID	R108006-61	13L0404-17
		Sampling Date	8/24/2011	12/11/2013
		Matrix	Water	Water
TCL SVOC	EPA Drinking Water MCL	NYSDEC Surface Water/ Groundwater Standards		
Acenaphthene	NS	20	ND	ND
Acenaphthylene	NS	NS	ND	ND
Anthracene	NS	NS	ND	ND
Benzo(a)anthracene	NS	NS	ND	ND
Benzo(a)pyrene	0.2	NS	ND	ND
Benzo(b)fluoranthene	NS	NS	ND	ND
Benzoic Acid	NS	NS	NA	ND
Benzo(g,h,i)perylene	NS	NS	ND	ND
Benzo(k)fluoranthene	NS	NS	ND	ND
Benzyl alcohol	NS	NS	ND	ND
Butylbenzylphthalate	NS	NS	ND	ND
4-Bromophenyl-phenyl ether	NS	NS	ND	ND
4-Chloro-3-methylphenol	NS	NS	ND	ND
4-Chloroaniline	NS	5	ND	ND
Bis(2-chloroethoxy)methane	NS	5	ND	ND
Bis(2-chloroethyl)ether	NS	1	ND	ND
Bis(2-chloroisopropyl)ether	NS	NS	ND	ND
2-Chloronaphthalene	NS	NS	ND	ND
2-Chlorophenol	NS	NS	ND	ND
4-Chlorophenyl-phenyl ether	NS	NS	ND	ND
Chrysene	NS	NS	ND	ND
Dibenzo(a,h)anthracene	NS	NS	ND	ND
Dibenzofuran	NS	NS	ND	ND
Di-n-butyl phthalate	NS	50	ND	ND
1,3-Dichlorobenzene	NS	3	ND	ND
1,4-Dichlorobenzene	NS	3	ND	ND
1,2-Dichlorobenzene	NS	3	ND	ND
3,3'-Dichlorobenzidine	NS	5	ND	ND
2,4-Dichlorophenol	NS	0.3	ND	ND
Diethyl phthalate	NS	NS	ND	ND
2,4-Dimethylphenol	NS	1,000	ND	1,140
Dimethyl phthalate	NS	NS	ND	ND
4,6-Dinitro-2-methylphenol	NS	NS	ND	ND

Notes:

- 1) TCL SVOC - Target Compound List Semivolatile Organic Compound
 - 2) All analytical results and standards are in micrograms per liter (µg/L).
 - 3) NA - Not analyzed, ND - Analyte not detected at or above the Reporting Limit (RL), NS - Not Specified.
 - 4) J - Analyte detected below the RL but greater than or equal to the Method Detection Limit (MDL).
- *SEEP-01 was collected during the August 2011 Removal Assessment and presented for comparison purposes only.
- Bold and red font** values equal or exceed the NYSDEC Surface Water/ Groundwater Standards.

Table 5B
Post Excavation Aqueous Analytical Results - Semivolatile Organic Compounds
Readburn Wood Tar Site, Hancock, New York
December 2013

		Field Sample ID	*SEEP-01	RW2-81-GWAB
		Lab Sample ID	R108006-61	13L0404-17
		Sampling Date	8/24/2011	12/11/2013
		Matrix	Water	Water
TCL SVOC	EPA Drinking Water MCL	NYSDEC Surface Water/ Groundwater Standards		
2,4-Dinitrophenol	NS	400	ND	ND
2,4-Dinitrotoluene	NS	5	ND	ND
2,6-Dinitrotoluene	NS	5	ND	ND
Di-n-octyl phthalate	NS	NS	ND	ND
Bis(2-ethylhexyl)phthalate	NS	5	ND	ND
Fluoranthene	NS	NS	ND	ND
Fluorene	NS	NS	ND	ND
Hexachlorobenzene	1	0.04	ND	ND
Hexachlorobutadiene	NS	0.5	ND	ND
Hexachlorocyclopentadiene	50	5	ND	ND
Hexachloroethane	NS	5	ND	ND
Indeno(1,2,3-cd)pyrene	NS	NS	ND	ND
Isophorone	NS	NS	ND	ND
2-Methylnaphthalene	NS	NS	ND	ND
2-Methylphenol	NS	NS	ND	904
3- & 4-Methylphenol	NS	NS	ND	1,410
Naphthalene	NS	10	ND	ND
3-Nitroaniline	NS	5	ND	ND
2-Nitroaniline	NS	5	ND	ND
4-Nitroaniline	NS	5	ND	ND
Nitrobenzene	NS	0.4	ND	ND
2-Nitrophenol	NS	NS	ND	ND
4-Nitrophenol	NS	NS	ND	ND
N-Nitroso-di-n-propylamine	NS	NS	ND	ND
N-Nitrosodiphenylamine	NS	NS	ND	ND
Pentachlorophenol	1	NS	ND	ND
Phenanthrene	NS	NS	ND	ND
Phenol	NS	3	ND	149 J
Pyrene	NS	NS	ND	ND
1,2,4-Trichlorobenzene	70	5	ND	ND
2,4,6-Trichlorophenol	NS	NS	ND	ND
2,4,5-Trichlorophenol	NS	NS	ND	ND

Notes:

- 1) TCL SVOC - Target Compound List Semivolatile Organic Compound
 - 2) All analytical results and standards are in micrograms per liter (µg/L).
 - 3) NA - Not analyzed, ND - Analyte not detected at or above the Reporting Limit (RL), NS - Not Specified.
 - 4) J - Analyte detected below the RL but greater than or equal to the Method Detection Limit (MDL).
- *SEEP-01 was collected during the August 2011 Removal Assessment and presented for comparison purposes only.
- Bold and red font** values equal or exceed the NYSDEC Surface Water/ Groundwater Standards.

Table 5C
Post Excavation Aqueous Analytical Results - TAL Metals
Readburn Wood Tar Site, Hancock, New York
December 2013

		Field Sample ID	*SEEP-01	RW2-81-GWAB
		Lab Sample ID	R108006-61	13L0404-17
		Sampling Date	8/24/2011	12/11/2013
		Matrix	Water	Water
TAL Metal	EPA Drinking Water MCL	NYSDEC Surface Water/ Groundwater Standards		
Aluminum	NS	NS	0.906	3.45
Antimony	6	3	ND	ND
Arsenic	10	25	ND	0.024
Barium	2,000	1,000	0.0236	0.206
Beryllium	4	NS	ND	ND
Cadmium	5	5	ND	ND
Calcium	NS	NS	5.36	21.9
Chromium	100	50	ND	ND
Cobalt	NS	NS	ND	ND
Copper	1,300	200	ND	0.149
Iron	NS	300	1.1	6.98
Lead	15	25	ND	0.105
Magnesium	NS	NS	1.06	1.78
Manganese	NS	300	0.0622	0.935
Nickel	NS	100	ND	0.011
Potassium	NS	NS	0.808	1.53
Selenium	50	10	ND	ND
Silver	NS	50	ND	ND
Sodium	NS	20,000	1.47	1.70
Thallium	2	NS	ND	ND
Vanadium	NS	NS	ND	ND
Zinc	NS	NS	ND	0.093
Mercury	2	0.7	NA	ND

Notes:

- 1) TAL - Target Analyte List
 - 2) All analytical results and standards are in milligrams per liter (mg/L).
 - 3) ND - Analyte not detected at or above the Reporting Limit (RL), NS - Not Specified.
 - 4) NA - Not analyzed
- *SEEP-01 was collected during the August 2011 Removal Assessment and presented for comparison purposes only.

Table 6A
Drinking Water Analytical Results - Volatile Organic Compounds
Readburn Wood Tar Site, Hancock, New York
October 2013 and June 2014

	Field Sample ID	2222H2O	P001-DW01-001	P001-DW01-002	TB-061214
	Lab Sample ID	13J1149-01	F2737-01	F2737-04	F2737-05
	Sampling Date	10/31/2013	6/12/2014	6/12/2014	6/12/2014
	Reporting Criteria	RL	LOD	LOD	LOD
	Matrix	Water	Water	Water	Water
TCL VOC	EPA Drinking Water MCL				
Dichlorodifluoromethane	NS	NA	ND	ND	ND
Chloromethane	NS	ND	ND	ND	ND
Vinyl Chloride	2	ND	ND	ND	ND
Bromomethane	NS	ND	ND	ND	ND
Chloroethane	NS	ND	ND	ND	ND
Trichlorofluoromethane	NS	NA	ND	ND	ND
1,1,2-Trichlorotrifluoroethane	NS	NA	ND	ND	ND
1,1-Dichloroethene	7	ND	ND	ND	ND
Acetone	NS	ND	ND	ND	8.8
Carbon disulfide	NS	ND	ND	ND	ND
Methyl tert-butyl Ether	NS	NA	ND	ND	ND
Methyl Acetate	NS	NA	ND	ND	ND
Methylene chloride	5	ND	ND	ND	ND
trans-1,2-Dichloroethene	100	ND	ND	ND	ND
1,1-Dichloroethane	NS	ND	ND	ND	ND
Cyclohexane	NS	NA	ND	ND	ND
2-Butanone	NS	ND	ND	ND	ND
Carbon Tetrachloride	5	ND	ND	ND	ND
cis-1,2-Dichloroethene	70	ND	ND	ND	ND
Bromochloromethane	NS	ND	ND	ND	ND
Chloroform	NS	ND	ND	ND	ND
1,1,1-Trichloroethane	200	ND	ND	ND	ND
Methylcyclohexane	NS	NA	ND	ND	ND
Benzene	5	ND	ND	ND	ND
1,2-Dichloroethane	5	ND	ND	ND	ND
Trichloroethene	5	ND	ND	ND	ND
1,2-Dichloropropane	5	ND	ND	ND	ND
Bromodichloromethane	NS	ND	ND	ND	ND
4-Methyl-2-pentanone	NS	ND	ND	ND	ND
Toluene	1,000	ND	ND	ND	ND
trans-1,3-Dichloropropene	NS	ND	ND	ND	ND
cis-1,3-Dichloropropene	NS	ND	ND	ND	ND
1,1,2-Trichloroethane	5	ND	ND	ND	ND
2-Hexanone	NS	ND	ND	ND	ND
Dibromochloromethane	NS	ND	ND	ND	ND
1,2-Dibromoethane	0.05	ND	ND	ND	ND
Tetrachloroethene	5	ND	ND	ND	ND
Chlorobenzene	100	ND	ND	ND	ND
Ethylbenzene	700	ND	ND	ND	ND
m,p-Xylene	10,000 ¹	ND	ND	ND	ND
o-Xylene	10,000 ¹	ND	ND	ND	ND
Styrene	100	ND	ND	ND	ND
Bromoform	NS	ND	ND	ND	ND
Isopropylbenzene	NS	NA	ND	ND	ND
1,1,2,2-Tetrachloroethane	NS	ND	ND	ND	ND
1,3-Dichlorobenzene	NS	ND	ND	ND	ND
1,4-Dichlorobenzene	75	ND	ND	ND	ND
1,2-Dichlorobenzene	600	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane	0.2	ND	ND	ND	ND
1,2,4-Trichlorobenzene	70	NA	ND	ND	ND
1,2,3-Trichlorobenzene	NS	NA	ND	ND	ND
1,4-Dioxane	NS	NA	R	R	R
Bromobenzene	NS	ND	NA	NA	NA

Notes:

- 1) All analytical results, RLs, LODs, and MCLs are in micrograms per liter (µg/L).
 - 2) TCL VOC - Target Compound List Volatile Organic Compound
 - 3) EPA - U. S Environmental Protection Agency, MCL - Maximum Contaminant Level
 - 4) RL - Reporting Limit, LOD - Limit of Detection
 - 5) NS - Not Specified, NA - Not Analyzed
 - 6) ND - Analyte not detected above laboratory RL or LOD.
 - 7) R - Rejected value
- ¹ EPA MCL reported for total xylenes.

Table 6B
Drinking Water Analytical Results - Semivolatile Organic Compounds
Readburn Wood Tar Site, Hancock, New York
October 2013 and June 2014

	Field Sample ID	2222H2O	P001-DW01-001	P001-DW01-002
	Lab Sample ID	13J1149-01	F2737-01	F2737-04
	Sampling Date	10/31/2013	6/12/2014	6/12/2014
	Reporting Criteria	RL	LOD	LOD
	Matrix	Water	Water	Water
TCL SVOC	EPA Drinking Water MCL			
Benzaldehyde	NS	NA	ND	ND
Phenol	NS	ND	ND	ND
bis(2-Chloroethyl)ether	NS	NA	ND	ND
2-Chlorophenol	NS	ND	ND	ND
2-Methylphenol	NS	ND	ND	ND
2,2-oxybis(1-Chloropropane)	NS	NA	ND	ND
Acetophenone	NS	NA	ND	ND
3- & 4-Methylphenol	NS	ND	ND	ND
N-Nitroso-di-n-propylamine	NS	ND	ND	ND
Hexachloroethane	NS	ND	ND	ND
Nitrobenzene	NS	ND	ND	ND
Isophorone	NS	ND	ND	ND
2-Nitrophenol	NS	ND	ND	ND
2,4-Dimethylphenol	NS	ND	ND	ND
Bis(2-chloroethoxy)methane	NS	ND	ND	ND
2,4-Dichlorophenol	NS	ND	ND	ND
Naphthalene	NS	ND	ND	ND
4-Chloroaniline	NS	ND	ND	ND
Hexachlorobutadiene	NS	ND	ND	ND
Caprolactam	NS	NA	ND	ND
4-Chloro-3-methylphenol	NS	ND	ND	ND
2-Methylnaphthalene	NS	ND	ND	ND
Hexachlorocyclopentadiene	50	ND	ND	ND
2,4,6-Trichlorophenol	NS	ND	ND	ND
2,4,5-Trichlorophenol	NS	ND	ND	ND
1,1-Biphenyl	NS	NA	ND	ND
2-Chloronaphthalene	NS	ND	ND	ND
2-Nitroaniline	NS	ND	ND	ND
Dimethyl phthalate	NS	ND	3.6 J	4 J
Acenaphthylene	NS	ND	ND	ND
2,6-Dinitrotoluene	NS	ND	ND	ND
3-Nitroaniline	NS	ND	ND	ND
Acenaphthene	NS	ND	ND	ND
2,4-Dinitrophenol	NS	ND	ND	ND
4-Nitrophenol	NS	ND	ND	ND

Notes:

- 1) All analytical results, RLs, LODs, and MCLs are in micrograms per liter (µg/L).
- 2) TCL SVOC - Target Compound List Semivolatile Organic Compound
- 3) EPA - U. S Environmental Protection Agency, MCL - Maximum Contaminant Level
- 4) RL - Reporting Limit, LOD - Limit of Detection
- 5) NS - Not Specified, NA - Not Analyzed
- 6) ND - Analyte not detected above laboratory RL or LOD.

Table 6B
Drinking Water Analytical Results - Semivolatile Organic Compounds
Readburn Wood Tar Site, Hancock, New York
October 2013 and June 2014

		Sample ID	2222H2O	P001-DW01-001	P001-DW01-002
		Lab Sample Number	13J1149-01	F2737-01	F2737-04
		Sampling Date	10/31/2013	6/12/2014	6/12/2014
		Reporting Criteria	RL	LOD	LOD
		Matrix	Water	Water	Water
TCL SVOC	EPA Drinking Water MCL				
Dibenzofuran	NS	ND	ND	ND	
2,4-Dinitrotoluene	NS	ND	ND	ND	
Diethyl phthalate	NS	ND	ND	ND	
4-Chlorophenyl-phenyl ether	NS	ND	ND	ND	
Fluorene	NS	0.513	ND	ND	
4-Nitroaniline	NS	ND	ND	ND	
4,6-Dinitro-2-methylphenol	NS	ND	ND	ND	
N-Nitrosodiphenylamine	NS	ND	ND	ND	
4-Bromophenyl-phenyl ether	NS	ND	ND	ND	
Hexachlorobenzene	1	ND	ND	ND	
Atrazine	3	NA	ND	ND	
Pentachlorophenol	1	ND	ND	ND	
Phenanthrene	NS	ND	ND	ND	
Anthracene	NS	ND	ND	ND	
Carbazole	NS	ND	ND	ND	
Di-n-butyl phthalate	NS	ND	ND	ND	
Fluoranthene	NS	ND	ND	ND	
Pyrene	NS	0.318	ND	ND	
Butyl benzyl phthalate	NS	ND	ND	ND	
3,3'-Dichlorobenzidine	NS	ND	ND	ND	
Benzo(a)anthracene	NS	ND	ND	ND	
Chrysene	NS	ND	ND	ND	
Bis(2-ethylhexyl)phthalate	6	ND	ND	ND	
Di-n-octyl phthalate	NS	ND	ND	ND	
Benzo(b)fluoranthene	NS	ND	ND	ND	
Benzo(k)fluoranthene	NS	ND	ND	ND	
Benzo(a)pyrene	0.2	ND	ND	ND	
Indeno(1,2,3-cd)pyrene	NS	ND	ND	ND	
Dibenzo(a,h)anthracene	NS	ND	ND	ND	
Benzo(g,h,i)perylene	NS	ND	ND	ND	
1,2,4,5-Tetrachlorobenzene	NS	NA	ND	ND	
2,3,4,6-Tetrachlorophenol	NS	NA	ND	ND	
1,2,4-Trichlorobenzene	70	ND	NA	NA	
Bis(2-chloroisopropyl)ether	NS	ND	NA	NA	

Notes:

- 1) All analytical results, RLs, LODs, and MCLs are in micrograms per liter (µg/L).
- 2) TCL SVOC - Target Compound List Semivolatile Organic Compound
- 3) EPA - U. S Environmental Protection Agency, MCL - Maximum Contaminant Level
- 4) RL - Reporting Limit, LOD - Limit of Detection
- 5) NS - Not Specified, NA - Not Analyzed
- 6) ND - Analyte not detected above laboratory RL or LOD.

Table 6C
Drinking Water Analytical Results - TAL Metals
Readburn Wood Tar Site, Hancock, New York
October 2013 and June 2014

	Field Sample ID	2222H2O	P001-DW01-001	P001-DW01-002
	Lab Sample ID	13J1149-01	F2737-01	F2737-04
	Sampling Date	10/31/2013	6/12/2014	6/12/2014
	Reporting Criteria	RL	LOD	LOD
	Matrix	Water	Water	Water
TAL Metal	EPA Drinking Water MCL			
Aluminum	NS	ND	19.5 J	14.4 J
Antimony	6	ND	ND	ND
Arsenic	10	ND	ND	ND
Barium	2,000	15	17.5 J	18.6 J
Beryllium	4	ND	ND	ND
Cadmium	5	ND	ND	ND
Calcium	NS	20,800	22,100	23,600
Chromium	100	ND	10.4	ND
Cobalt	NS	ND	ND	ND
Copper	1,300	ND	ND	ND
Iron	NS	207	190	155
Lead	15	ND	ND	ND
Magnesium	NS	3,060	3,230	3,480
Manganese	NS	12	10.8	11.5
Mercury	2	ND	ND	ND
Nickel	NS	ND	ND	ND
Potassium	NS	647	678 J	747 J
Selenium	50	ND	ND	ND
Silver	NS	ND	ND	ND
Sodium	NS	5,220	6,190	6,620
Thallium	2	ND	ND	ND
Vanadium	NS	ND	ND	ND
Zinc	NS	12	ND	ND

Notes:

- 1) All analytical results, RLs, LODs, and MCLs are in micrograms per liter (µg/L).
- 2) TAL - Target Analyte List
- 3) EPA - U. S Environmental Protection Agency, MCL - Maximum Contaminant Level
- 4) RL - Reporting Limit, LOD - Limit of Detection
- 5) NS - Not Specified, NA - Not Analyzed, J - Estimated value
- 6) ND - Analyte not detected above laboratory RL or LOD.

Table 7A
Backfill Analytical Results - Volatile Organic Compounds
Readburn Wood Tar Site, Hancock, New York
October 2013

	Field Sample ID	Soil Backfill	P Backfill
	Lab Sample ID	13J1145-02	13J1146-02
	Sampling Date	10/30/2013	10/30/2013
	Matrix	Soil	Soil
VOC	NYSDEC UUSCO		
1,1,1-Trichloroethane	680 ^f	ND	ND
1,1-Dichloroethane	270 ^f	ND	ND
1,1-Dichloroethene	330 ^f	ND	ND
1,2,4-Trimethylbenzene	3,600 ^f	ND	ND
1,2-Dichlorobenzene	1,100 ^f	ND	ND
1,2-Dichloroethane	20 ^c	ND	ND
1,3,5-Triethylbenzene	8,400 ^f	ND	ND
1,3-Dichlorobenzene	2,400 ^f	ND	ND
1,4-Dichlorobenzene	1,800	ND	ND
1,4-Dioxane	100 ^b	ND	ND
2-Butanone	120	ND	ND
Acetone	50	ND	ND
Benzene	60	ND	ND
Carbon Tetrachloride	760 ^f	ND	ND
Chlorobenzene	1,100	ND	ND
Chloroform	370	ND	ND
cis-1,2-Dichloroethene	250 ^f	ND	ND
Ethyl benzene	1,000 ^f	ND	ND
Methyl tert-Butyl ether	930 ^f	ND	ND
Methylene chloride	50	ND	ND
n-Butylbenzene	12,000 ^f	ND	ND
n-Propylbenzene	3,900 ^f	ND	ND
o-Xylene	NS	ND	ND
m,p-Xylene	NS	ND	ND
Xylene, Total	260	ND	ND
sec-Butylbenzene	11,000 ^f	ND	ND
tert-Butylbenzene	5,900 ^f	ND	ND
Tetrachloroethene	1,300	ND	ND
Toluene	700	ND	ND
trans-1,2-Dichloroethene	190 ^f	ND	ND
Trichloroethene	470	ND	ND
Vinyl Chloride	20	ND	ND

Notes:

VOC - Volatile Organic Compound

NS - Not specified

ND - Analyte not detected at or above the Reporting Limit (RL).

1) All analytical results and soil cleanup objectives (SCO) are in micrograms per kilogram (µg/kg).

2) The Unrestricted Use Soil Cleanup Objective (UUSCO) values are obtained from New York State Department of Conservation (NYSDEC) Subpart 375-6.8(a): Remedial Program Soil Cleanup Objectives.

3) ^b For constituents where the calculated SCO was lower than the contract required quantitation limit (CRQL), the CRQL is used as the Track 1 SCO value.

4) ^c For constituents where the calculated SCO was lower than the rural soil background concentration, as determined by the Department of Health rural soil survey, the rural soil background concentration is used as the Track 1 SCO value for this use of the site.

5) ^f Protection of ecological resources SCOs were not developed for contaminants identified in Table 375-6.8(b) with "NS". Where such contaminants appear in Table 375-6.8(a), the applicant may be required by the Department to calculate a protection of ecological resources SCO according to the Technical Support Document (TSD).

Table 7B
Backfill Analytical Results - Semivolatile Organic Compounds
Readburn Wood Tar Site, Hancock, New York
October 2013

	Field Sample ID	Soil Backfill	P Backfill
	Lab Sample ID	13J1145-01	13J1146-01
	Sampling Date	10/30/2013	10/30/2013
	Matrix	Soil	Soil
SVOC	NYSDEC UUSCO		
2-Methylphenol	330 ^{b, f}	ND	ND
3- & 4-Methylphenol	330 ^{b, f}	ND	ND
Acenaphthene	20,000	ND	ND
Acenaphthylene	100,000 ^{a, f}	ND	ND
Anthracene	100,000 ^{a, f}	ND	ND
Benzo(a)anthracene	1,000 ^{c, f}	ND	ND
Benzo(a)pyrene	1,000 ^c	ND	ND
Benzo(b)fluoranthene	1,000 ^{c, f}	ND	ND
Benzo(g,h,i)perylene	100,000 ^f	ND	ND
Benzo(k)fluoranthene	800 ^{c, f}	ND	ND
Chrysene	1,000 ^{c, f}	ND	ND
Dibenz(a,h)anthracene	330 ^{b, f}	ND	ND
Dibenzofuran	7,000 ^f	ND	ND
Fluoranthene	100,000 ^{a, f}	ND	ND
Fluorene	30,000	ND	ND
Hexachlorobenzene	330 ^{b, f}	ND	ND
Indeno(1,2,3-cd)pyrene	500 ^{c, f}	ND	ND
Naphthalene	12,000 ^f	ND	ND
Pentachlorophenol	800 ^b	ND	ND
Phenanthrene	100,000 ^f	ND	ND
Phenol	330 ^b	ND	ND
Pyrene	100,000 ^f	ND	ND

Notes:

SVOC - Semivolatile Organic Compound

NS - Not specified

ND - Analyte not detected at or above the Reporting Limit (RL).

1) All analytical results and soil cleanup objectives (SCO) are in micrograms per kilogram (µg/kg).

2) The Unrestricted Use Soil Cleanup Objective (UUSCO) values are obtained from New York State Department of Conservation (NYSDEC) Subpart 375-6.8(a): Remedial Program Soil Cleanup Objectives.

3) ^a The SCOs for unrestricted use were capped at a maximum value of 100 ppm. See Technical Support Document (TSD), section 9.3.

4) ^b For constituents where the calculated SCO was lower than the contract required quantitation limit (CRQL), the CRQL is used as the Track 1 SCO value.

5) ^c For constituents where the calculated SCO was lower than the rural soil background concentration, as determined by the Department of Health rural soil survey, the rural soil background concentration is used as the Track 1 SCO value for this use of the site.

6) ^f Protection of ecological resources SCOs were not developed for contaminants identified in Table 375-6.8(b) with "NS". Where such contaminants appear in Table 375-6.8(a), the applicant may be required by the Department to calculate a protection of ecological resources SCO according to the Technical Support Document (TSD).

Table 7C
Backfill Analytical Results - Pesticides and Herbicides
Readburn Wood Tar Site, Hancock, New York
October 2013

	Field Sample ID	Soil Backfill	P Backfill
	Lab Sample ID	13J1145-01	13J1146-01
	Sampling Date	10/30/2013	10/30/2013
	Matrix	Soil	Soil
Pesticide	NYSDEC UUSCO		
4,4'-DDD	3.3 ^b	ND	ND
4,4'-DDE	3.3 ^b	ND	ND
4,4'-DDT	3.3 ^b	ND	ND
Aldrin	5 ^c	ND	ND
alpha-BHC	20	ND	ND
alpha-Chlordane	94	ND	ND
beta-BHC	36	ND	ND
delta-BHC	40 ^g	ND	ND
Dieldrin	5 ^c	ND	ND
Endosulfan I	2,400 ^{d, f}	ND	ND
Endosulfan II	2,400 ^{d, f}	ND	ND
Endosulfan sulfate	2,400 ^{d, f}	ND	ND
Endrin	14	ND	ND
gamma-BHC (Lindane)	100	ND	ND
Heptachlor	42	ND	ND

Herbicide	NYSDEC UUSCO		
2,4,5-TP (Silvex)	3,800 ^f	ND	ND

Notes:

ND - Analyte not detected at or above the Reporting Limit (RL).

- 1) All analytical results and soil cleanup objectives (SCO) are in micrograms per kilogram (µg/kg).
- 2) The Unrestricted Use Soil Cleanup Objective (UUSCO) values are obtained from New York State Department of Conservation (NYSDEC) Subpart 375-6.8(b): Remedial Program Soil Cleanup Objectives.
- 3) ^b For constituents where the calculated SCO was lower than the contract required quantitation limit (CRQL), the CRQL is used as the Track 1 SCO value.
- 4) ^c For constituents where the calculated SCO was lower than the rural soil background concentration, as determined by the Department of Health rural soil survey, the rural soil background concentration is used as the Track 1 SCO value for this use of the site.
- 5) ^d SCO is the sum of endosulfan I, endosulfan II and endosulfan sulfate.
- 6) ^f Protection of ecological resources SCOs were not developed for contaminants identified in Table 375-6.8(b) with "NS". Where such contaminants appear in Table 375-6.8(a), the applicant may be required by the Department to calculate a protection of ecological resources SCO according to the Technical Support Document (TSD).
- 7) ^g This SCO is derived from data on mixed isomers of BHC.

Table 7D
Backfill Analytical Results - Polychlorinated Biphenyls
Readburn Wood Tar Site, Hancock, New York
October 2013

	Field Sample ID	Soil Backfill	P Backfill
	Lab Sample ID	13J1145-01	13J1146-01
	Sampling Date	10/30/2013	10/30/2013
	Matrix	Soil	Soil
PCB	NYSDEC UUSCO		
Aroclor-1016	0.1	ND	ND
Aroclor-1221	0.1	ND	ND
Aroclor-1232	0.1	ND	ND
Aroclor-1242	0.1	ND	ND
Aroclor-1248	0.1	ND	ND
Aroclor-1254	0.1	ND	ND
Aroclor-1260	0.1	ND	ND
Total PCB	NS	ND	ND

Notes:

PCB - Polychlorinated Biphenyl

NS - Not specified

ND - Analyte not detected at or above the Reporting Limit (RL).

1) All analytical results and soil cleanup objectives (SCO) are in milligrams per kilogram (mg/kg).

2) The Unrestricted Use Soil Cleanup Objective (UUSCO) values are obtained from New York State Department of Conservation (NYSDEC) Subpart 375-6.8(a): Remedial Program Soil Cleanup Objectives.

Table 7E
Backfill Analytical Results - Inorganics
Readburn Wood Tar Site, Hancock, New York
October 2013

	Field Sample ID	Soil Backfill	P Backfill
	Lab Sample ID	13J1145-01	13J1146-01
	Sampling Date	10/30/2013	10/30/2013
	Matrix	Soil	Soil
Inorganics	NYSDEC UUSCO		
Arsenic	13 ^c	9.63	5.37
Barium	350 ^c	70.6	64.3
Beryllium	7.2	0.196	0.195
Cadmium	2.5 ^c	ND	ND
Chromium, Total	NS	7.22	6.56
Chromium, Hexavalent	1 ^{e, b}	ND	ND
Chromium, Trivalent	30 ^{e, c}	7.13	6.55
Copper	50	14.3	11.4
Lead	63 ^c	11.1	5.71
Manganese	1,600 ^c	536	617
Nickel	30	21.9	19.1
Selenium	3.9 ^c	ND	ND
Silver	2	ND	ND
Zinc	109 ^c	46.9	40.9
Mercury	0.18 ^c	0.008	0.00631
Cyanide, total	27 ^{e, f}	ND	ND

Notes:

NS - Not specified

ND - Analyte not detected at or above the Reporting Limit (RL).

1) All analytical results and soil cleanup objectives (SCO) are in milligrams per kilogram (mg/kg).

2) The Unrestricted Use Soil Cleanup Objective (UUSCO) values are obtained from New York State Department of Conservation (NYSDEC) Subpart 375-6.8(a): Remedial Program Soil Cleanup Objectives.

3) ^b For constituents where the calculated SCO was lower than the contract required quantitation limit (CRQL), the CRQL is used as the Track 1 SCO value.

4) ^c For constituents where the calculated SCO was lower than the rural soil background concentration, as determined by the Department of Health rural soil survey, the rural soil background concentration is used as the Track 1 SCO value for this use of the site.

5) ^e The SCO for this specific compound (or family of compounds) is considered to be met if the analysis for the total species of this contaminant is below the specific SCO.

6) ^f Protection of ecological resources SCOs were not developed for contaminants identified in Table 375-6.8(b) with "NS". Where such contaminants appear in Table 375-6.8(a), the applicant may be required by the Department to calculate a protection of ecological resources SCO according to the Technical Support Document (TSD).

Table 8A
Topsoil Analytical Results - Volatile Organic Compounds
Readburn Wood Tar Site, Hancock, New York
October 2013

	Field Sample ID	Top Soil
	Lab Sample ID	13J1142-02
	Sampling Date	10/30/2013
	Matrix	Soil
VOC	NYSDEC UUSCO	
1,1,1-Trichloroethane	680 ^f	ND
1,1-Dichloroethane	270 ^f	ND
1,1-Dichloroethene	330 ^f	ND
1,2,4-Trimethylbenzene	3,600 ^f	ND
1,2-Dichlorobenzene	1,100 ^f	ND
1,2-Dichloroethane	20 ^c	ND
1,3,5-Triethylbenzene	8,400 ^f	ND
1,3-Dichlorobenzene	2,400 ^f	ND
1,4-Dichlorobenzene	1,800	ND
1,4-Dioxane	100 ^b	ND
2-Butanone	120	ND
Acetone	50	ND
Benzene	60	ND
Carbon Tetrachloride	760 ^f	ND
Chlorobenzene	1,100	ND
Chloroform	370	ND
cis-1,2-Dichloroethene	250 ^f	ND
Ethyl benzene	1,000 ^f	ND
Methyl tert-Butyl ether	930 ^f	ND
Methylene chloride	50	ND
n-Butylbenzene	12,000 ^f	ND
n-Propylbenzene	3,900 ^f	ND
o-Xylene	NS	ND
m,p-Xylene	NS	ND
Xylene, Total	260	ND
sec-Butylbenzene	11,000 ^f	ND
tert-Butylbenzene	5,900 ^f	ND
Tetrachloroethene	1,300	ND
Toluene	700	ND
trans-1,2-Dichloroethene	190 ^f	ND
Trichloroethene	470	ND
Vinyl Chloride	20	ND

Notes:

VOC - Volatile Organic Compound

NS - Not specified

ND - Analyte not detected at or above the Reporting Limit (RL).

1) All analytical results and soil cleanup objectives (SCO) are in micrograms per kilogram (µg/kg).

2) The Unrestricted Use Soil Cleanup Objective (UUSCO) values are obtained from New York State Department of Conservation (NYSDEC) Subpart 375-6.8(a): Remedial Program Soil Cleanup Objectives.

3) ^b For constituents where the calculated SCO was lower than the contract required quantitation limit (CRQL), the CRQL is used as the Track 1 SCO value.

4) ^c For constituents where the calculated SCO was lower than the rural soil background concentration, as determined by the Department of Health rural soil survey, the rural soil background concentration is used as the Track 1 SCO value for this use of the site.

5) ^f Protection of ecological resources SCOs were not developed for contaminants identified in Table 375-6.8(b) with "NS". Where such contaminants appear in Table 375-6.8(a), the applicant may be required by the Department to calculate a protection of ecological resources SCO according to the Technical Support Document (TSD).

Table 8B
Topsoil Analytical Results - Semivolatile Organic Compounds
Readburn Wood Tar Site, Hancock, New York
October 2013

	Field Sample ID	Top Soil
	Lab Sample ID	13J1142-01
	Sampling Date	10/30/2013
	Matrix	Soil
SVOC	NYSDEC UUSCO	
2-Methylphenol	330 ^{b, f}	ND
3- & 4-Methylphenol	330 ^{b, f}	ND
Acenaphthene	20,000	ND
Acenaphthylene	100,000 ^{a, f}	ND
Anthracene	100,000 ^{a, f}	ND
Benzo(a)anthracene	1,000 ^{c, f}	ND
Benzo(a)pyrene	1,000 ^c	ND
Benzo(b)fluoranthene	1,000 ^{c, f}	ND
Benzo(g,h,i)perylene	100,000 ^f	ND
Benzo(k)fluoranthene	800 ^{c, f}	ND
Chrysene	1,000 ^{c, f}	ND
Dibenz(a,h)anthracene	330 ^{b, f}	ND
Dibenzofuran	7,000 ^f	ND
Fluoranthene	100,000 ^{a, f}	ND
Fluorene	30,000	ND
Hexachlorobenzene	330 ^{b, f}	ND
Indeno(1,2,3-cd)pyrene	500 ^{c, f}	ND
Naphthalene	12,000 ^f	ND
Pentachlorophenol	800 ^b	ND
Phenanthrene	100,000 ^f	ND
Phenol	330 ^b	ND
Pyrene	100,000 ⁱ	ND

Notes:

SVOC - Semivolatile Organic Compound

NS - Not specified

ND - Analyte not detected at or above the Reporting Limit (RL).

1) All analytical results and soil cleanup objectives (SCO) are in micrograms per kilogram (µg/kg).

2) The Unrestricted Use Soil Cleanup Objective (UUSCO) values are obtained from New York State Department of Conservation (NYSDEC) Subpart 375-6.8(a): Remedial Program Soil Cleanup Objectives.

3) ^a The SCOs for unrestricted use were capped at a maximum value of 100 ppm. See Technical Support Document (TSD), section 9.3.

4) ^b For constituents where the calculated SCO was lower than the contract required quantitation limit (CRQL), the CRQL is used as the Track 1 SCO value.

5) ^c For constituents where the calculated SCO was lower than the rural soil background concentration, as determined by the Department of Health rural soil survey, the rural soil background concentration is used as the Track 1 SCO value for this use of the site.

6) ^f Protection of ecological resources SCOs were not developed for contaminants identified in Table 375-6.8(b) with "NS". Where such contaminants appear in Table 375-6.8(a), the applicant may be required by the Department to calculate a protection of ecological resources SCO according to the Technical Support Document (TSD).

Table 8C
Topsoil Analytical Results - Pesticides and Herbicide
Readburn Wood Tar Site, Hancock, New York
October 2013

	Field Sample ID	Top Soil
	Lab Sample ID	13J1142-01
	Sampling Date	10/30/2013
	Matrix	Soil
Pesticide	NYSDEC UUSCO	
4,4'-DDD	3.3 ^b	ND
4,4'-DDE	3.3 ^b	ND
4,4'-DDT	3.3 ^b	ND
Aldrin	5 ^c	ND
alpha-BHC	20	ND
alpha-Chlordane	94	ND
beta-BHC	36	ND
delta-BHC	40 ^g	ND
Dieldrin	5 ^c	ND
Endosulfan I	2,400 ^{d, f}	ND
Endosulfan II	2,400 ^{d, f}	ND
Endosulfan sulfate	2,400 ^{d, f}	ND
Endrin	14	ND
gamma-BHC (Lindane)	100	ND
Heptachlor	42	ND
Herbicide	NYSDEC UUSCO	
2,4,5-TP (Silvex)	3,800 ^f	ND

Notes:

ND - Analyte not detected at or above the Reporting Limit (RL).

- 1) All analytical results and soil cleanup objectives (SCO) are in micrograms per kilogram (µg/kg).
- 2) The Unrestricted Use Soil Cleanup Objective (UUSCO) values are obtained from New York State Department of Conservation (NYSDEC) Subpart 375-6.8(a): Remedial Program Soil Cleanup Objectives.
- 3) ^b For constituents where the calculated SCO was lower than the contract required quantitation limit (CRQL), the CRQL is used as the Track 1 SCO value.
- 4) ^c For constituents where the calculated SCO was lower than the rural soil background concentration, as determined by the Department of Health rural soil survey, the rural soil background concentration is used as the Track 1 SCO value for this use of the site.
- 5) ^d SCO is the sum of endosulfan I, endosulfan II and endosulfan sulfate.
- 6) ^f Protection of ecological resources SCOs were not developed for contaminants identified in Table 375-6.8(b) with "NS". Where such contaminants appear in Table 375-6.8(a), the applicant may be required by the Department to calculate a protection of ecological resources SCO according to the Technical Support Document (TSD).
- 7) ^g This SCO is derived from data on mixed isomers of BHC.

Table 8D
Topsoil Analytical Results - Polychlorinated Biphenyls
Readburn Wood Tar Site, Hancock, New York
October 2013

	Field Sample ID	Top Soil
	Lab Sample ID	13J1142-01
	Sampling Date	10/30/2013
	Matrix	Soil
PCB	NYSDEC UUSCO	
Aroclor-1016	0.1	ND
Aroclor-1221	0.1	ND
Aroclor-1232	0.1	ND
Aroclor-1242	0.1	ND
Aroclor-1248	0.1	ND
Aroclor-1254	0.1	ND
Aroclor-1260	0.1	ND
Total PCB	NS	ND

Notes:

PCB - Polychlorinated Biphenyl

NS - Not specified

ND - Analyte not detected at or above the Reporting Limit (RL).

1) All analytical results and soil cleanup objectives (SCO) are in milligrams per kilogram (mg/kg).

2) The Unrestricted Use Soil Cleanup Objective (UUSCO) values are obtained from New York State Department of Conservation (NYSDEC) Subpart 375-6.8(a): Remedial Program Soil Cleanup Objectives.

Table 8E
Topsoil Analytical Results - Inorganics
Readburn Wood Tar Site, Hancock, New York
October 2013

	Field Sample ID	Top Soil
	Lab Sample ID	13J1142-01
	Sampling Date	10/30/2013
	Matrix	Soil
Metal	NYSDEC UUSCO	
Arsenic	13 ^c	6.53
Barium	350 ^c	68.2
Beryllium	7.2	0.124
Cadmium	2.5 ^c	ND
Chromium, Total	NS	8.22
Chromium, Hexavalent	1 ^{e, b}	ND
Chromium, Trivalent	30 ^{e, c}	7.37
Copper	50	12.4
Lead	63 ^c	14.4
Manganese	1,600 ^c	525
Nickel	30	19.5
Selenium	3.9 ^c	ND
Silver	2	ND
Zinc	109 ^c	47.8
Mercury	0.18 ^c	0.0515
Cyanide, total	27 ^{e, f}	ND

Notes:

NS - Not specified

ND - Analyte not detected at or above the Reporting Limit (RL).

1) All analytical results and soil cleanup objectives (SCO) are in milligrams per kilogram (mg/kg).

2) The Unrestricted Use Soil Cleanup Objective (UUSCO) values are obtained from New York State Department of Conservation (NYSDEC) Subpart 375-6.8(a): Remedial Program Soil Cleanup Objectives.

3) ^b For constituents where the calculated SCO was lower than the contract required quantitation limit (CRQL), the CRQL is used as the Track 1 SCO value.

4) ^c For constituents where the calculated SCO was lower than the rural soil background concentration, as determined by the Department of Health rural soil survey, the rural soil background concentration is used as the Track 1 SCO value for this use of the site.

5) ^e The SCO for this specific compound (or family of compounds) is considered to be met if the analysis for the total species of this contaminant is below the specific SCO.

6) ^f Protection of ecological resources SCOs were not developed for contaminants identified in Table 375-6.8(b) with "NS". Where such contaminants appear in Table 375-6.8(a), the applicant may be required by the Department to calculate a protection of ecological resources SCO according to the Technical Support Document (TSD).

Attachment A

Daily Air Monitoring Results Data

Readburn Wood Tar Site
November 11, 2013 – Volatile Organic Compounds Air Monitoring Data

Station-1: South side of the site, behind a residential property

Instrument: AreaRAE Serial Number: 502462
 User ID: 00000001 Site ID: 00000001
 Data Points: 200 Data Type: Avg Sample Period: 60 sec
 Last Calibration Time: 08/25/1996 03:27
 Start At: 11/11/2013 13:24 End At: 11/11/2013 16:43

Sensor:	CO (ppm)	VOC (ppm)	H2S (ppm)	LEL (%)	OXY (%)
High Alarm Levels:	200.0	100.0	20.0	20.0	23.5
Low Alarm Levels:	35.0	10.0	10.0	10.0	19.5
STEL Alarm Levels:	100.0	25.0	15.0	-----	-----
TWA Alarm Levels:	35.0	10.0	10.0	-----	-----

Sensor:	CO (ppm)	VOC (ppm)	H2S (ppm)	LEL (%)	OXY (%)
Peak Data Value:	1.2	0.0	0.0	0.0	20.9
Min Data Value:	0.2	0.0	0.0	0.0	20.9
TWA Data Value:	0.3	0.0	0.0	-----	-----
AVG Data Value:	0.6	0.0	0.0	-----	-----

Station-2: North side of the site, west of Read Creek

Instrument: AreaRAE Serial Number: 500684
 User ID: 00000001 Site ID: 00000000
 Data Points: 205 Data Type: Avg Sample Period: 60 sec
 Last Calibration Time: 11/11/2013 12:59
 Start At: 11/11/2013 13:14 End At: 11/11/2013 16:38

Sensor:	CO (ppm)	VOC (ppm)	H2S (ppm)	LEL (%)	OXY (%)
High Alarm Levels:	200.0	100.0	20.0	20.0	23.5
Low Alarm Levels:	35.0	50.0	10.0	3.0	19.5
STEL Alarm Levels:	100.0	25.0	15.0	-----	-----
TWA Alarm Levels:	35.0	10.0	10.0	-----	-----

Sensor:	CO (ppm)	VOC (ppm)	H2S (ppm)	LEL (%)	OXY (%)
Peak Data Value:	0.1	0.0	0.0	0.0	20.9
Min Data Value:	0.0	0.0	0.0	0.0	20.9
TWA Data Value:	0.0	0.0	0.0	-----	-----
AVG Data Value:	0.0	0.0	0.0	-----	-----

Prevailing Weather Conditions

WEATHER	TEMPERATURE (°F)		WIND SPEED (mph)		WIND DIRECTION	HUMIDITY (Daily Average)
Cloudy	<u>High</u> 44.6	<u>Low</u> 29.7	<u>Gust</u> 17	<u>Average</u> 1.7	South-South-East	68%

Source: www.wunderground.com/

Readburn Wood Tar Site – Particulate Air Monitoring Data and Graph

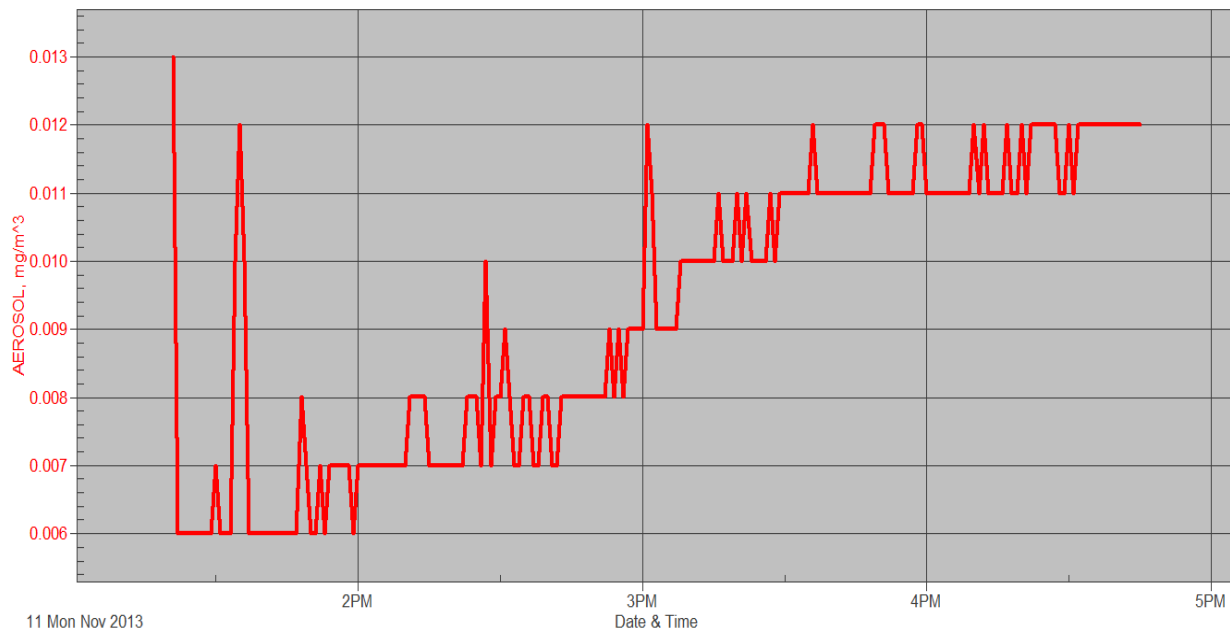
November 11, 2013

Station-1: South side of site, behind a residential property

Instrument		Data Properties	
Model	DustTrak II	Start Date	11/11/2013
Instrument S/N	8530113321	Start Time	13:19:59
		Stop Date	11/11/2013
		Stop Time	16:44:59
		Total Time	0:03:25:00
		Logging Interval	60 seconds
Statistics			
		AEROSOL	
Avg		0.009 mg/m ³	
Max		0.013 mg/m ³	
Max Date		11/11/2013	
Max Time		13:20:59	
Min		0.006 mg/m ³	
Min Date		11/11/2013	
Min Time		13:21:59	
TWA (8 hr)		0.004	
TWA Start Date		11/11/2013	
TWA Start Time		13:19:59	
TWA End Time		16:44:59	

Particulate Air Monitoring Data Graph

DT-1: S/N 8530113321



Site-Specific Action Level for fugitive dust is 0.100 mg/m³, 15 minute average over background level, with a maximum of 0.150 mg/m³, 15 minute average.

Readburn Wood Tar Site – Particulate Air Monitoring Data and Graph

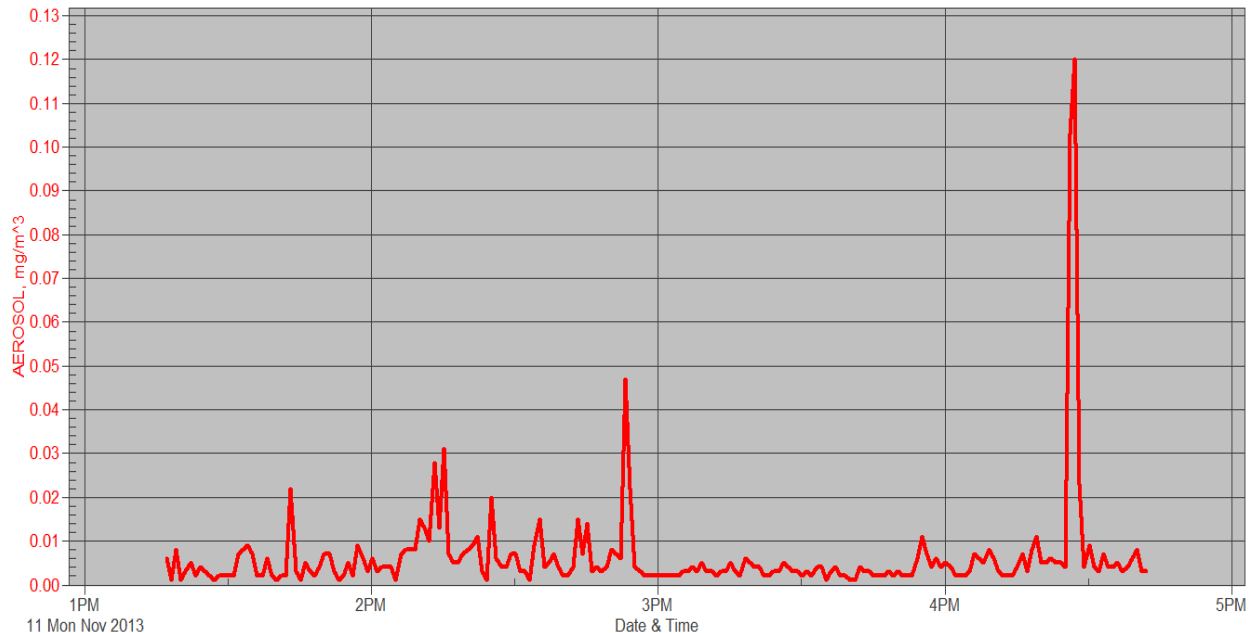
November 11, 2013

Station-2: North side of site, west of Read Creek

Instrument		Data Properties	
Model	DustTrak II	Start Date	11/11/2013
Instrument S/N	8530083620	Start Time	13:16:10
		Stop Date	11/11/2013
		Stop Time	16:42:10
		Total Time	0:03:26:00
		Logging Interval	60 seconds
Statistics			
		AEROSOL	
Avg		0.006 mg/m ³	
Max		0.120 mg/m ³	
Max Date		11/11/2013	
Max Time		16:27:10	
Min		0.001 mg/m ³	
Min Date		11/11/2013	
Min Time		13:18:10	
TWA (8 hr)		0.003	
TWA Start Date		11/11/2013	
TWA Start Time		13:16:10	
TWA End Time		16:42:10	

Particulate Air Monitoring Data Graph

DT-2: S/N 8530083620



Site-Specific Action Level for fugitive dust is 0.100 mg/m³, 15 minute average over background level, with a maximum of 0.150 mg/m³, 15 minute average.

Readburn Wood Tar Site
December 2, 2013 – Volatile Organic Compounds Air Monitoring Data

Station-1: North side of the site, west of Read Creek

Instrument: AreaRAE Serial Number: 500663
User ID: 00000001 Site ID: 00000001
Data Points: 211 Data Type: Avg Sample Period: 60 sec
Last Calibration Time: 08/25/1996 10:27
Start At: 12/02/2013 12:56 End At: 12/02/2013 16:26

Sensor:	CO (ppm)	VOC (ppm)	H2S (ppm)	LEL (%)	OXY (%)
High Alarm Levels:	200.0	100.0	20.0	20.0	23.5
Low Alarm Levels:	35.0	0.5	10.0	10.0	19.5
STEL Alarm Levels:	100.0	5.0	15.0	-----	-----
TWA Alarm Levels:	35.0	1.0	10.0	-----	-----

Sensor:	CO (ppm)	VOC (ppm)	H2S (ppm)	LEL (%)	OXY (%)
Peak Data Value:	6.2	0.0	0.0	0.0	20.9
Min Data Value:	0.0	0.0	0.0	0.0	20.9
TWA Data Value:	0.1	0.0	0.0	-----	-----
AVG Data Value:	0.2	0.0	0.0	-----	-----

Station-2: West side of the site, opposite residential properties

Instrument: AreaRAE Serial Number: 503574
User ID: 00000001 Site ID: 00000008
Data Points: 207 Data Type: Avg Sample Period: 60 sec
Last Calibration Time: 11/14/2013 17:39
Start At: 12/02/2013 12:52 End At: 12/02/2013 16:18

Sensor:	CO (ppm)	VOC (ppm)	H2S (ppm)	LEL (%)	OXY (%)
High Alarm Levels:	200.0	100.0	20.0	20.0	23.5
Low Alarm Levels:	35.0	0.5	20.0	10.0	19.5
STEL Alarm Levels:	100.0	5.0	15.0	-----	-----
TWA Alarm Levels:	35.0	1.0	10.0	-----	-----

Sensor:	CO (ppm)	VOC (ppm)	H2S (ppm)	LEL (%)	OXY (%)
Peak Data Value:	11.3	0.1	0.0	0.0	20.9
Min Data Value:	0.0	0.0	0.0	0.0	20.6
TWA Data Value:	0.1	0.0	0.0	-----	-----
AVG Data Value:	0.2	0.0	0.0	-----	-----

Station-3: South side of the site, behind a residential property

Instrument: AreaRAE Serial Number: 500684
User ID: 00000001 Site ID: 00000000
Data Points: 215 Data Type: Avg Sample Period: 60 sec
Last Calibration Time: 11/14/2013 16:43
Start At: 12/02/2013 12:47 End At: 12/02/2013 16:21

Sensor:	CO (ppm)	VOC (ppm)	H2S (ppm)	LEL (%)	OXY (%)
High Alarm Levels:	200.0	100.0	20.0	20.0	23.5
Low Alarm Levels:	35.0	0.5	10.0	10.0	19.5
STEL Alarm Levels:	100.0	5.0	15.0	-----	-----
TWA Alarm Levels:	35.0	1.0	10.0	-----	-----

Sensor:	CO (ppm)	VOC (ppm)	H2S (ppm)	LEL (%)	OXY (%)
Peak Data Value:	0.0	0.0	0.0	0.0	20.9
Min Data Value:	0.0	0.0	0.0	0.0	20.9
TWA Data Value:	0.0	0.0	0.0	-----	-----
AVG Data Value:	0.0	0.0	0.0	-----	-----

Prevailing Weather Conditions

WEATHER	TEMPERATURE (°F)		WIND SPEED (mph)		WIND DIRECTION	HUMIDITY (Daily Average)
Partly Cloudy	<u>High</u> 40.8	<u>Low</u> 29.3	<u>Gust</u> 2.0	<u>Average</u> 0.0	South	85%

Source: www.wunderground.com

Readburn Wood Tar Site – Particulate Air Monitoring Data and Graph

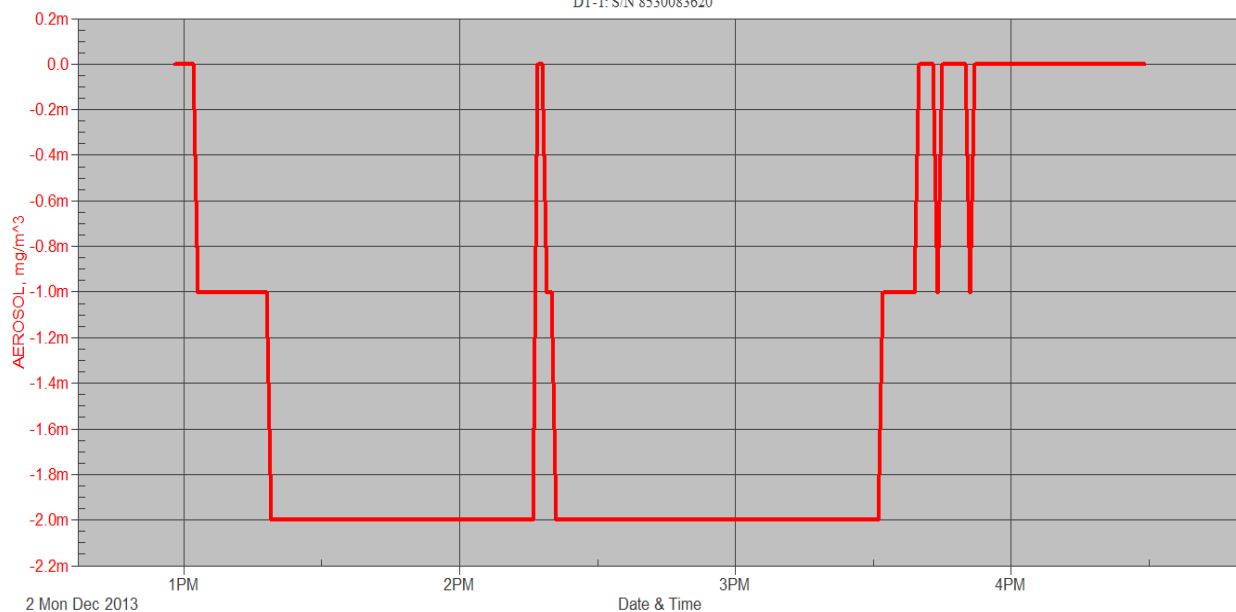
December 2, 2013

Station-1: North side of site, west of Read Creek

Instrument		Data Properties	
Model	DustTrak II	Start Date	12/02/2013
Instrument S/N	8530083620	Start Time	12:57:00
		Stop Date	12/02/2013
		Stop Time	16:29:00
		Total Time	0:03:32:00
		Logging Interval	60 seconds
Statistics			
		AEROSOL	
Avg		-0.001 mg/m ³	
Max		0.000 mg/m ³	
Max Date		12/02/2013	
Max Time		12:58:00	
Min		-0.002 mg/m ³	
Min Date		12/02/2013	
Min Time		13:19:00	
TWA (8 hr)		-0.001	
TWA Start Date		12/02/2013	
TWA Start Time		12:57:00	
TWA End Time		16:29:00	

Particulate Air Monitoring Data Graph

DT-1: S/N 8530083620



Site-Specific Action Level for fugitive dust is 0.100 mg/m³, 15 minute average over background level, with a maximum of 0.150 mg/m³, 15 minute average.

Readburn Wood Tar Site – Particulate Air Monitoring Data and Graph

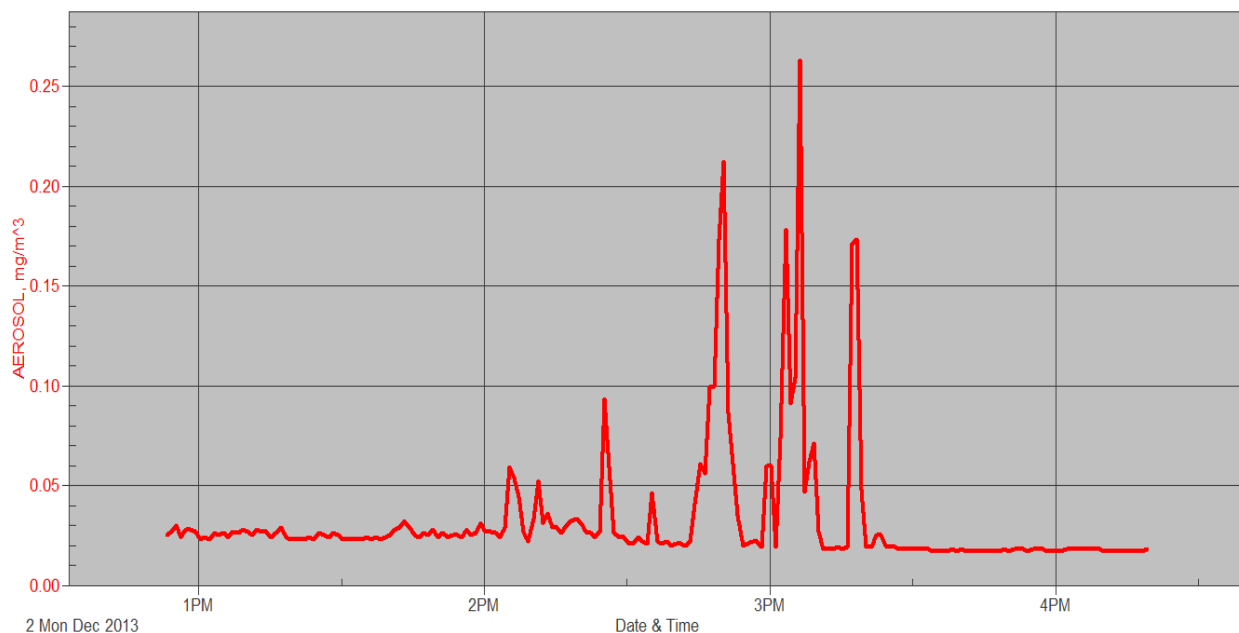
December 2, 2013

Station-2: West side of site, opposite residential properties

Instrument		Data Properties	
Model	DustTrak II	Start Date	12/02/2013
Instrument S/N	8530104208	Start Time	12:52:17
		Stop Date	12/02/2013
		Stop Time	16:19:17
		Total Time	0:03:27:00
		Logging Interval	60 seconds
Statistics			
		AEROSOL	
Avg		0.032 mg/m ³	
Max		0.263 mg/m ³	
Max Date		12/02/2013	
Max Time		15:06:17	
Min		0.017 mg/m ³	
Min Date		12/02/2013	
Min Time		15:34:17	
TWA (8 hr)		0.014	
TWA Start Date		12/02/2013	
TWA Start Time		12:52:17	
TWA End Time		16:19:17	

Particulate Air Monitoring Data Graph

DT-2: 8530104208



Site-Specific Action Level for fugitive dust is 0.100 mg/m³, 15 minute average over background level, with a maximum of 0.150 mg/m³, 15 minute average.

Readburn Wood Tar Site – Particulate Air Monitoring Data and Graph

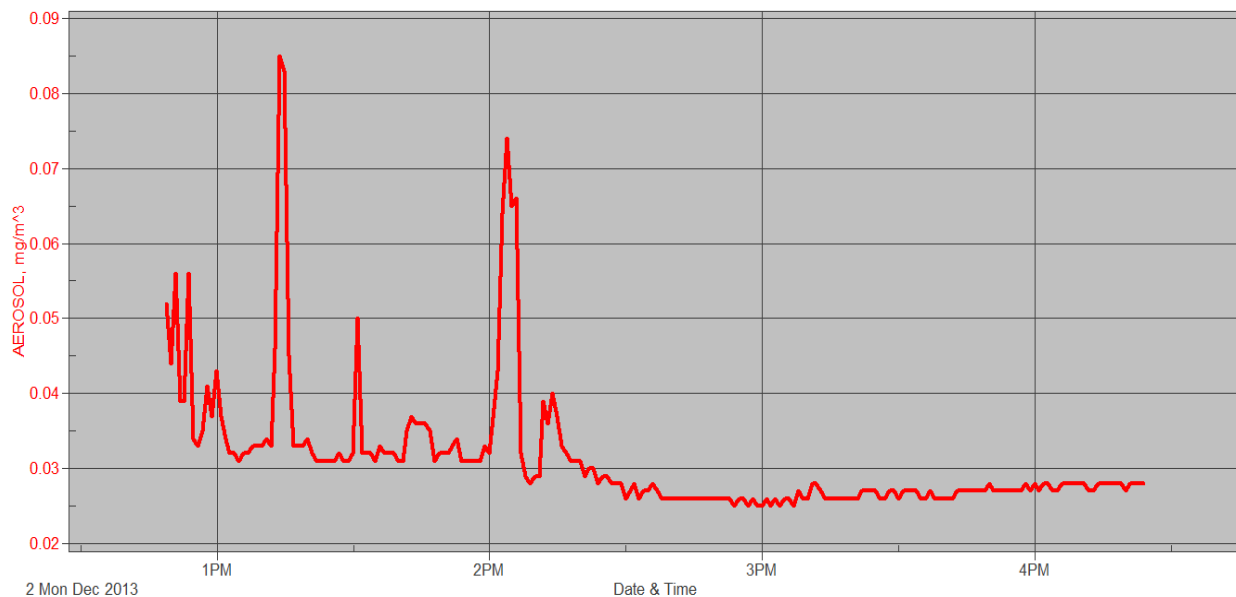
December 2, 2013

Station-3: South side of site, behind a residential property

Instrument		Data Properties	
Model	DustTrak II	Start Date	12/02/2013
Instrument S/N	8530131514	Start Time	12:47:50
		Stop Date	12/02/2013
		Stop Time	16:23:50
		Total Time	0:03:36:00
		Logging Interval	60 seconds
Statistics			
		AEROSOL	
Avg		0.031 mg/m ³	
Max		0.085 mg/m ³	
Max Date		12/02/2013	
Max Time		13:13:50	
Min		0.025 mg/m ³	
Min Date		12/02/2013	
Min Time		14:53:50	
TWA (8 hr)		0.014	
TWA Start Date		12/02/2013	
TWA Start Time		12:47:50	
TWA End Time		16:23:50	

Particulate Air Monitoring Data Graph

DT-3: S/N 8530131514



Site-Specific Action Level for fugitive dust is 0.100 mg/m³, 15 minute average over background level, with a maximum of 0.150 mg/m³, 15 minute average.

Readburn Wood Tar Site
December 3, 2013 – Volatile Organic Compounds Air Monitoring Data

Station-1: North side of the site, west of Read Creek

Instrument: AreaRAE Serial Number: 500663
User ID: 00000001 Site ID: 00000001
Data Points: 505 Data Type: Avg Sample Period: 60 sec
Last Calibration Time: 12/03/2013 07:33
Start At: 12/03/2013 07:47 End At: 12/03/2013 16:11

```
=====
Sensor:          CO (ppm)  VOC (ppm)  H2S (ppm)  LEL (%)  OXY (%)
High Alarm Levels: 200.0    100.0    20.0      20.0     23.5
Low Alarm Levels:  35.0      0.5     10.0      10.0     19.5
STEL Alarm Levels: 100.0      5.0     15.0      -----
TWA Alarm Levels:  35.0      1.0     10.0      -----
=====
Sensor:          CO (ppm)  VOC (ppm)  H2S (ppm)  LEL (%)  OXY (%)
Peak Data Value:  2.2      0.0      0.0        0.0      20.9
Min Data Value:   0.1      0.0      0.0        0.0      20.5
TWA Data Value:   0.6      0.0      0.0        -----
AVG Data Value:   0.5      0.0      0.0        -----
=====
```

Station-2: West side of the site, opposite residential properties

Instrument: AreaRAE Serial Number: 503574
User ID: 00000001 Site ID: 00000008
Data Points: 506 Data Type: Avg Sample Period: 60 sec
Last Calibration Time: 12/03/2013 07:37
Start At: 12/03/2013 07:44 End At: 12/03/2013 16:09

```
=====
Sensor:          CO (ppm)  VOC (ppm)  H2S (ppm)  LEL (%)  OXY (%)
High Alarm Levels: 200.0    100.0    20.0      20.0     23.5
Low Alarm Levels:  35.0      0.5     20.0      10.0     19.5
STEL Alarm Levels: 100.0      5.0     15.0      -----
TWA Alarm Levels:  35.0      1.0     10.0      -----
=====
Sensor:          CO (ppm)  VOC (ppm)  H2S (ppm)  LEL (%)  OXY (%)
Peak Data Value:  2.0      0.2      0.0        0.0      20.9
Min Data Value:   0.2      0.0      0.0        0.0      20.4
TWA Data Value:   0.7      0.0      0.0        -----
AVG Data Value:   0.6      0.0      0.0        -----
=====
```

Station-3: South side of the site, behind a residential property

Instrument: AreaRAE Serial Number: 500684
User ID: 00000001 Site ID: 00000000
Data Points: 503 Data Type: Avg Sample Period: 60 sec
Last Calibration Time: 12/03/2013 07:40
Start At: 12/03/2013 07:52 End At: 12/03/2013 16:14

```
=====
Sensor:          CO (ppm)  VOC (ppm)  H2S (ppm)  LEL (%)  OXY (%)
High Alarm Levels: 200.0    100.0    20.0      20.0     23.5
Low Alarm Levels:  35.0      0.5     10.0      10.0     19.5
STEL Alarm Levels: 100.0      5.0     15.0      -----
TWA Alarm Levels:  35.0      1.0     10.0      -----
=====
Sensor:          CO (ppm)  VOC (ppm)  H2S (ppm)  LEL (%)  OXY (%)
Peak Data Value:  4.2      0.0      0.0        0.0      20.9
Min Data Value:   0.0      0.0      0.0        0.0      20.1
TWA Data Value:   0.0      0.0      0.0        -----
AVG Data Value:   0.0      0.0      0.0        -----
=====
```

Prevailing Weather Conditions

WEATHER	TEMPERATURE (°F)		WIND SPEED (mph)		WIND DIRECTION	HUMIDITY (Daily Average)
Mostly Cloudy	<u>High</u> 41.1	<u>Low</u> 29.1	<u>Gust</u> 8.0	<u>Average</u> 0.1	North-East	83%

Source: www.wunderground.com

Readburn Wood Tar Site – Particulate Air Monitoring Data and Graph

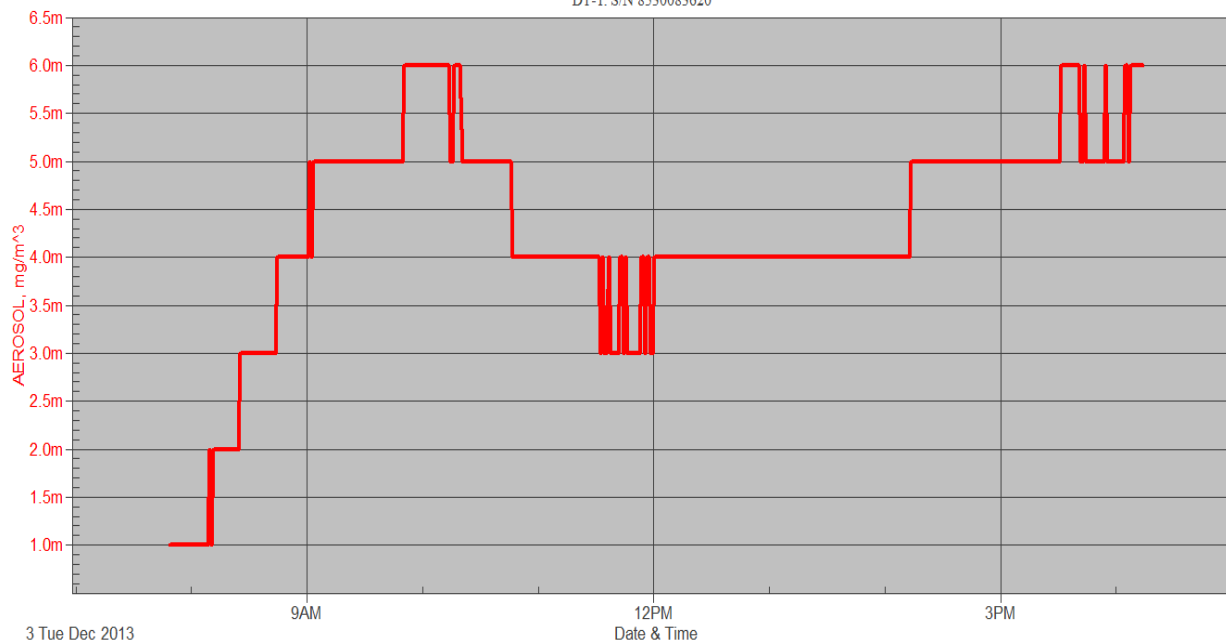
December 3, 2013

Station-1: North side of site, west of Read Creek

Instrument		Data Properties	
Model	DustTrak II	Start Date	12/03/2013
Instrument S/N	8530083620	Start Time	07:47:34
		Stop Date	12/03/2013
		Stop Time	16:13:34
		Total Time	0:08:26:00
		Logging Interval	60 seconds
Statistics			
		AEROSOL	
Avg		0.004 mg/m ³	
Max		0.006 mg/m ³	
Max Date		12/03/2013	
Max Time		09:50:34	
Min		0.001 mg/m ³	
Min Date		12/03/2013	
Min Time		07:48:34	
TWA (8 hr)		0.004	
TWA Start Date		12/03/2013	
TWA Start Time		07:47:34	
TWA End Time		16:13:34	

Particulate Air Monitoring Data Graph

DT-1: S/N 8530083620



Site-Specific Action Level for fugitive dust is 0.100 mg/m³, 15 minute average over background level, with a maximum of 0.150 mg/m³, 15 minute average.

Readburn Wood Tar Site – Particulate Air Monitoring Data and Graph

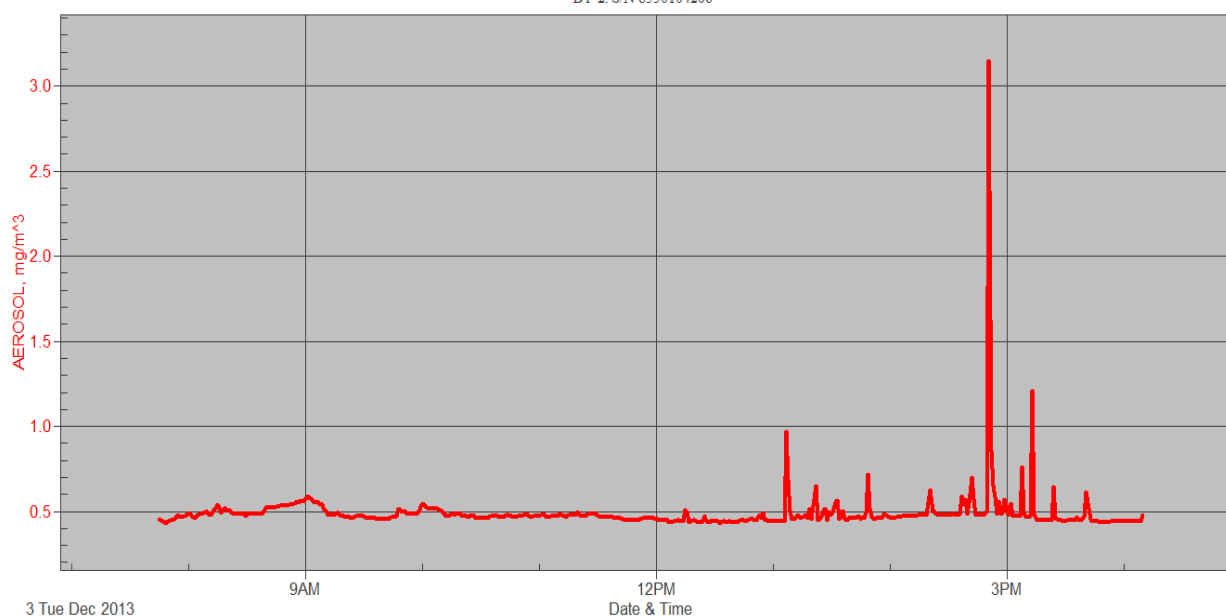
December 3, 2013

Station-2: West side of site, opposite residential properties

Instrument		Data Properties	
Model	DustTrak II	Start Date	12/03/2013
Instrument S/N	8530104208	Start Time	07:43:43
		Stop Date	12/03/2013
		Stop Time	16:09:43
		Total Time	0:08:26:00
		Logging Interval	60 seconds
Statistics			
		AEROSOL	
Avg		0.488 mg/m ³	
Max		3.150 mg/m ³	
Max Date		12/03/2013	
Max Time		14:50:43	
Min		0.429 mg/m ³	
Min Date		12/03/2013	
Min Time		07:48:43	
TWA (8 hr)		0.490	
TWA Start Date		12/03/2013	
TWA Start Time		07:43:43	
TWA End Time		16:09:43	

Particulate Air Monitoring Data Graph

DT-2: S/N 8530104208



Site-Specific Action Level for fugitive dust is 0.100 mg/m³, 15 minute average over background level, with a maximum of 0.150 mg/m³, 15 minute average.

Readburn Wood Tar Site – Particulate Air Monitoring Data and Graph

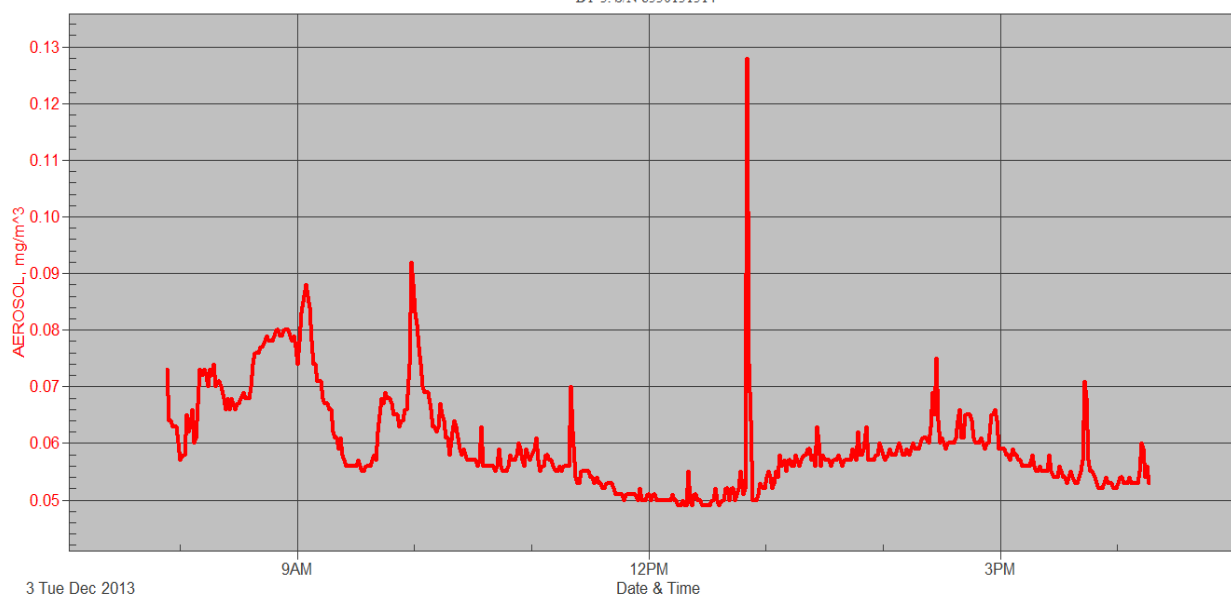
December 3, 2013

Station-3: South side of site, behind a residential property

Instrument		Data Properties	
Model	DustTrak II	Start Date	12/03/2013
Instrument S/N	8530131514	Start Time	07:52:13
		Stop Date	12/03/2013
		Stop Time	16:16:13
		Total Time	0:08:24:00
		Logging Interval	60 seconds
Statistics			
		AEROSOL	
Avg		0.060 mg/m ³	
Max		0.128 mg/m ³	
Max Date		12/03/2013	
Max Time		12:50:13	
Min		0.049 mg/m ³	
Min Date		12/03/2013	
Min Time		12:15:13	
TWA (8 hr)		0.060	
TWA Start Date		12/03/2013	
TWA Start Time		07:52:13	
TWA End Time		16:16:13	

Particulate Air Monitoring Data Graph

DT-3: S/N 8530131514



Site-Specific Action Level for fugitive dust is 0.100 mg/m³, 15 minute average over background level, with a maximum of 0.150 mg/m³, 15 minute average.

Readburn Wood Tar Site
December 4, 2013 – Volatile Organic Compounds Air Monitoring Data

Station-1: North side of the site, west of Read Creek

Instrument: AreaRAE Serial Number: 500663
User ID: 00000001 Site ID: 00000001
Data Points: 523 Data Type: Avg Sample Period: 60 sec
Last Calibration Time: 12/04/2013 07:13
Start At: 12/04/2013 07:27 End At: 12/04/2013 16:09

```
=====
Sensor:          CO (ppm)  VOC (ppm)  H2S (ppm)  LEL (%)  OXY (%)
High Alarm Levels: 200.0    100.0    20.0      20.0    23.5
Low Alarm Levels:  35.0      0.5     10.0     10.0    19.5
STEL Alarm Levels: 100.0      5.0     15.0     -----
TWA Alarm Levels:  35.0      1.0     10.0     -----
=====
Sensor:          CO (ppm)  VOC (ppm)  H2S (ppm)  LEL (%)  OXY (%)
Peak Data Value:  0.9      0.0      0.0      0.0     21.2
Min Data Value:   0.0      0.0      0.0      0.0     20.6
TWA Data Value:   0.1      0.0      0.0     -----
AVG Data Value:   0.1      0.0      0.0     -----
=====
```

Station-2: West side of the site, opposite residential properties

Instrument: AreaRAE Serial Number: 503574
User ID: 00000001 Site ID: 00000008
Data Points: 524 Data Type: Avg Sample Period: 60 sec
Last Calibration Time: 12/04/2013 07:14
Start At: 12/04/2013 07:23 End At: 12/04/2013 16:06

```
=====
Sensor:          CO (ppm)  VOC (ppm)  H2S (ppm)  LEL (%)  OXY (%)
High Alarm Levels: 200.0    100.0    20.0      20.0    23.5
Low Alarm Levels:  35.0      0.5     20.0     10.0    19.5
STEL Alarm Levels: 100.0      5.0     15.0     -----
TWA Alarm Levels:  35.0      1.0     10.0     -----
=====
Sensor:          CO (ppm)  VOC (ppm)  H2S (ppm)  LEL (%)  OXY (%)
Peak Data Value:  3.4      0.1      0.0      0.0     20.9
Min Data Value:   0.0      0.0      0.0      0.0     20.4
TWA Data Value:   0.1      0.0      0.0     -----
AVG Data Value:   0.1      0.0      0.0     -----
=====
```

Station-3: South side of the site, behind a residential property

Instrument: AreaRAE Serial Number: 500684
User ID: 00000001 Site ID: 00000000
Data Points: 514 Data Type: Avg Sample Period: 60 sec
Last Calibration Time: 12/04/2013 07:16
Start At: 12/04/2013 07:30 End At: 12/04/2013 16:03

```
=====
Sensor:          CO (ppm)  VOC (ppm)  H2S (ppm)  LEL (%)  OXY (%)
High Alarm Levels: 200.0    100.0    20.0      20.0    23.5
Low Alarm Levels:  35.0      0.5     10.0     10.0    19.5
STEL Alarm Levels: 100.0      5.0     15.0     -----
TWA Alarm Levels:  35.0      1.0     10.0     -----
=====
Sensor:          CO (ppm)  VOC (ppm)  H2S (ppm)  LEL (%)  OXY (%)
Peak Data Value:  0.7      0.0      0.0      0.0     20.9
Min Data Value:   0.0      0.0      0.0      0.0     20.1
TWA Data Value:   0.1      0.0      0.0     -----
AVG Data Value:   0.1      0.0      0.0     -----
=====
```

Prevailing Weather Conditions

WEATHER	TEMPERATURE (°F)		WIND SPEED (mph)		WIND DIRECTION	HUMIDITY (Daily Average)
Mostly Cloudy	<u>High</u> 49.6	<u>Low</u> 36.7	<u>Gust</u> 7.0	<u>Average</u> 0.3	North-East	83%

Source: www.wunderground.com

Readburn Wood Tar Site – Particulate Air Monitoring Data and Graph

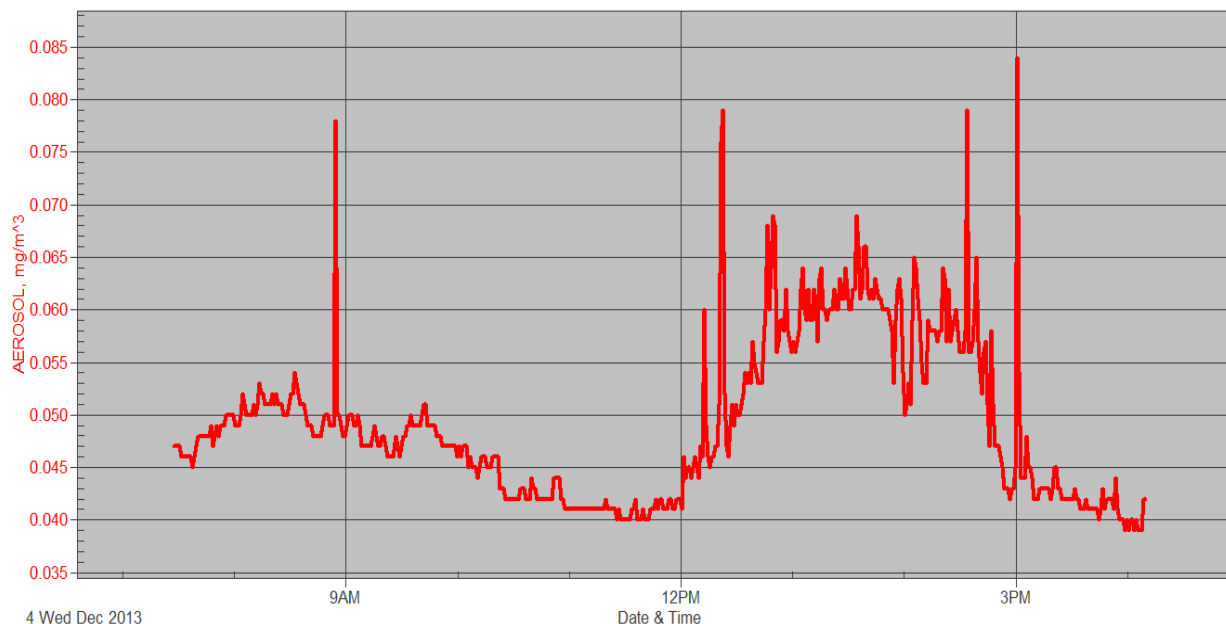
December 4, 2013

Station-1: North side of site, west of Read Creek

Instrument		Data Properties	
Model	DustTrak II	Start Date	12/04/2013
Instrument S/N	8530093124	Start Time	07:26:33
		Stop Date	12/04/2013
		Stop Time	16:09:33
		Total Time	0:08:43:00
		Logging Interval	60 seconds
Statistics			
		AEROSOL	
Avg		0.049 mg/m ³	
Max		0.084 mg/m ³	
Max Date		12/04/2013	
Max Time		15:00:33	
Min		0.039 mg/m ³	
Min Date		12/04/2013	
Min Time		15:58:33	
TWA (8 hr)		0.050	
TWA Start Date		12/04/2013	
TWA Start Time		07:26:33	
TWA End Time		16:09:33	

Particulate Air Monitoring Data Graph

DT-1: S/N 8530093124



Site-Specific Action Level for fugitive dust is 0.100 mg/m³, 15 minute average over background level, with a maximum of 0.150 mg/m³, 15 minute average.

Readburn Wood Tar Site – Particulate Air Monitoring Data and Graph

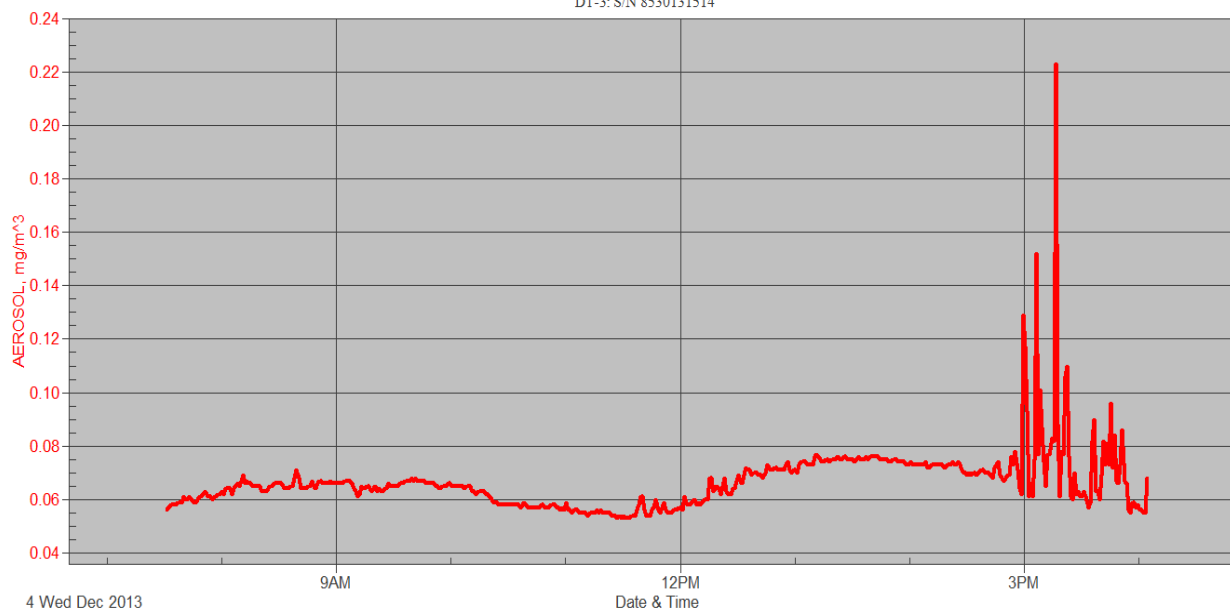
December 4, 2013

Station-3: South side of site, behind a residential property

Instrument		Data Properties	
Model	DustTrak II	Start Date	12/04/2013
Instrument S/N	8530131514	Start Time	07:30:19
		Stop Date	12/04/2013
		Stop Time	16:04:19
		Total Time	0:08:34:00
		Logging Interval	60 seconds
Statistics			
		AEROSOL	
Avg		0.066 mg/m ³	
Max		0.223 mg/m ³	
Max Date		12/04/2013	
Max Time		15:16:19	
Min		0.053 mg/m ³	
Min Date		12/04/2013	
Min Time		11:27:19	
TWA (8 hr)		0.066	
TWA Start Date		12/04/2013	
TWA Start Time		07:30:19	
TWA End Time		16:04:19	

Particulate Air Monitoring Data Graph

DT-3: S/N 8530131514



Site-Specific Action Level for fugitive dust is 0.100 mg/m³, 15 minute average over background level, with a maximum of 0.150 mg/m³, 15 minute average.

Readburn Wood Tar Site
December 5, 2013 – Volatile Organic Compounds Air Monitoring Data

Station-1: North side of the site, west of Read Creek

Instrument: AreaRAE Serial Number: 500663
User ID: 00000001 Site ID: 00000001
Data Points: 439 Data Type: Avg Sample Period: 60 sec
Last Calibration Time: 12/05/2013 07:16
Start At: 12/05/2013 07:34 End At: 12/05/2013 14:52

```
=====
Sensor:          CO (ppm)  VOC (ppm)  H2S (ppm)  LEL (%)  OXY (%)
High Alarm Levels: 200.0    100.0    20.0      20.0     23.5
Low Alarm Levels:  35.0      0.5     10.0      10.0     19.5
STEL Alarm Levels: 100.0      5.0     15.0      -----
TWA Alarm Levels:  35.0      1.0     10.0      -----
=====
Sensor:          CO (ppm)  VOC (ppm)  H2S (ppm)  LEL (%)  OXY (%)
Peak Data Value:  0.0      0.0      0.0      0.0     20.9
Min Data Value:   0.0      0.0      0.0      0.0     20.9
TWA Data Value:   0.0      0.0      0.0      -----
AVG Data Value:   0.0      0.0      0.0      -----
=====
```

Station-2: West side of the site, opposite residential properties

Instrument: AreaRAE Serial Number: 503574
User ID: 00000001 Site ID: 00000008
Data Points: 443 Data Type: Avg Sample Period: 60 sec
Last Calibration Time: 12/05/2013 07:18
Start At: 12/05/2013 07:26 End At: 12/05/2013 14:48

```
=====
Sensor:          CO (ppm)  VOC (ppm)  H2S (ppm)  LEL (%)  OXY (%)
High Alarm Levels: 200.0    100.0    20.0      20.0     23.5
Low Alarm Levels:  35.0      0.5     20.0      10.0     19.5
STEL Alarm Levels: 100.0      5.0     15.0      -----
TWA Alarm Levels:  35.0      1.0     10.0      -----
=====
Sensor:          CO (ppm)  VOC (ppm)  H2S (ppm)  LEL (%)  OXY (%)
Peak Data Value:  1.4      0.2      0.0      0.0     20.9
Min Data Value:   0.3      0.0      0.0      0.0     20.6
TWA Data Value:   0.7      0.1      0.0      -----
AVG Data Value:   0.7      0.1      0.0      -----
=====
```

Station-3: South side of the site, behind a residential property

Instrument: AreaRAE Serial Number: 500684
User ID: 00000001 Site ID: 00000000
Data Points: 441 Data Type: Avg Sample Period: 60 sec
Last Calibration Time: 12/05/2013 07:20
Start At: 12/05/2013 07:28 End At: 12/05/2013 14:48

```
=====
Sensor:          CO (ppm)  VOC (ppm)  H2S (ppm)  LEL (%)  OXY (%)
High Alarm Levels: 200.0    100.0    20.0      20.0     23.5
Low Alarm Levels:  35.0      0.5     10.0      10.0     19.5
STEL Alarm Levels: 100.0      5.0     15.0      -----
TWA Alarm Levels:  35.0      1.0     10.0      -----
=====
Sensor:          CO (ppm)  VOC (ppm)  H2S (ppm)  LEL (%)  OXY (%)
Peak Data Value:  0.4      0.0      0.0      0.0     20.9
Min Data Value:   0.0      0.0      0.0      0.0     20.3
TWA Data Value:   0.0      0.0      0.0      -----
AVG Data Value:   0.0      0.0      0.0      -----
=====
```

Prevailing Weather Conditions

WEATHER	TEMPERATURE (°F)		WIND SPEED (mph)		WIND DIRECTION	HUMIDITY (Daily Average)
Mostly Cloudy	<u>High</u> 49.4	<u>Low</u> 39.9	<u>Gust</u> 9.0	<u>Average</u> 0.3	North-East	74%

Source: www.wunderground.com

Readburn Wood Tar Site – Particulate Air Monitoring Data and Graph

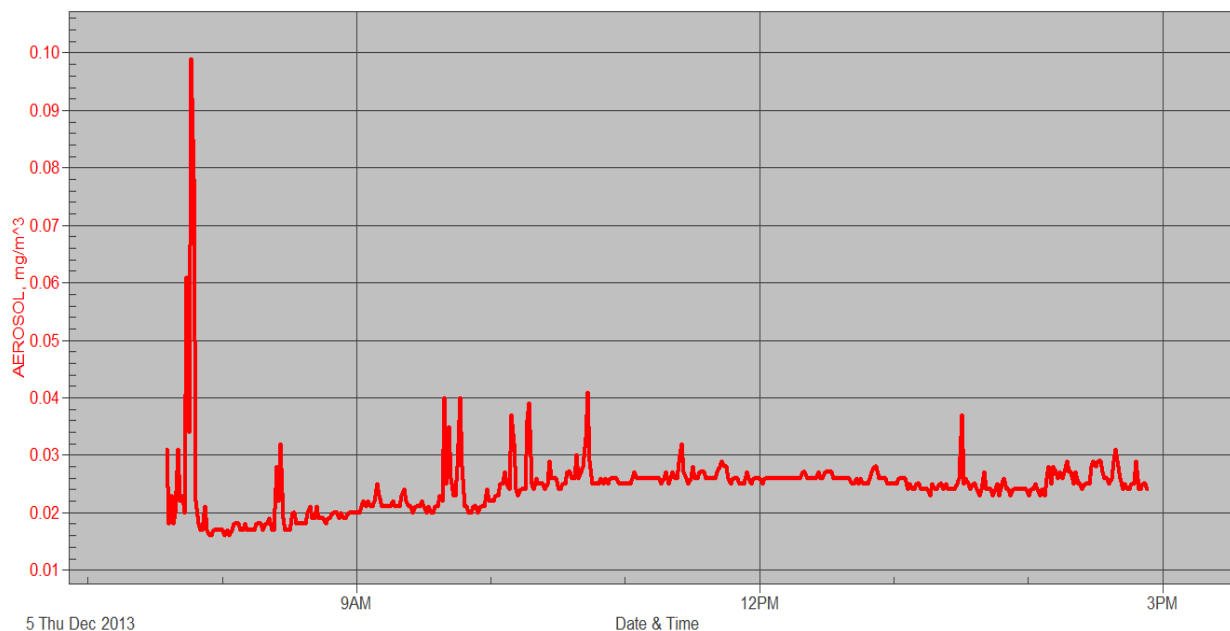
December 5, 2013

Station-1: North side of site, west of Read Creek

Instrument		Data Properties	
Model	DustTrak II	Start Date	12/05/2013
Instrument S/N	8530093124	Start Time	07:34:09
		Stop Date	12/05/2013
		Stop Time	14:53:09
		Total Time	0:07:19:00
		Logging Interval	60 seconds
Statistics			
		AEROSOL	
Avg		0.025 mg/m ³	
Max		0.099 mg/m ³	
Max Date		12/05/2013	
Max Time		07:46:09	
Min		0.016 mg/m ³	
Min Date		12/05/2013	
Min Time		07:54:09	
TWA (8 hr)		0.022	
TWA Start Date		12/05/2013	
TWA Start Time		07:34:09	
TWA End Time		14:53:09	

Particulate Air Monitoring Data Graph

DT-1: S/N 8530093124



Site-Specific Action Level for fugitive dust is 0.100 mg/m³, 15 minute average over background level, with a maximum of 0.150 mg/m³, 15 minute average.

Readburn Wood Tar Site – Particulate Air Monitoring Data and Graph

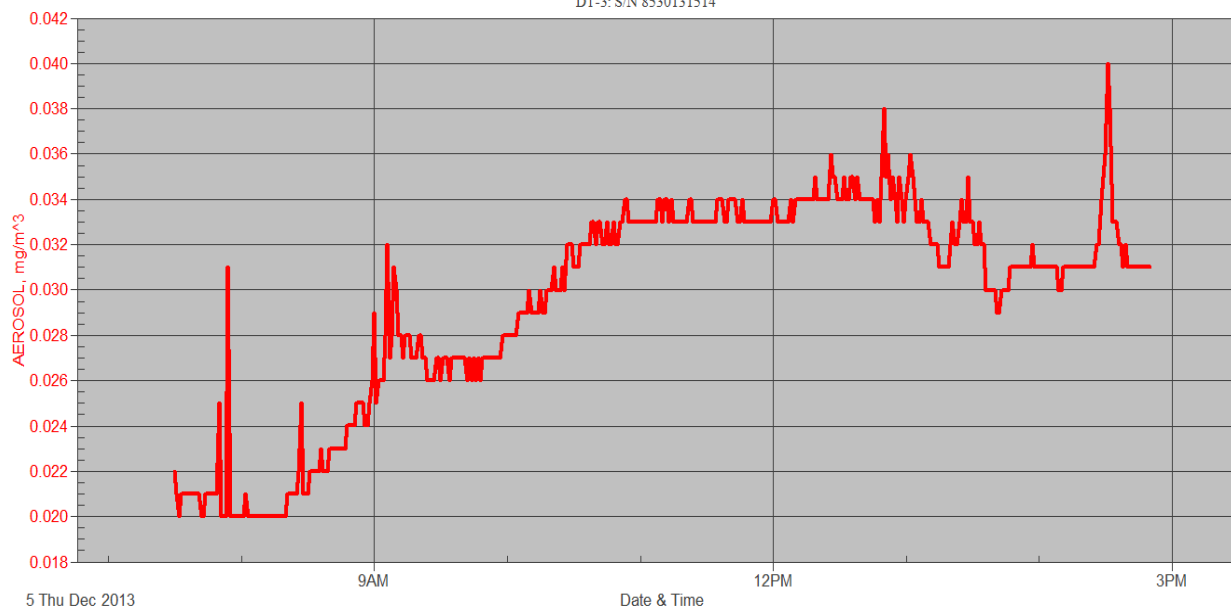
December 5, 2013

Station-3: South side of site, behind a residential property

Instrument		Data Properties	
Model	DustTrak II	Start Date	12/05/2013
Instrument S/N	8530131514	Start Time	07:28:50
		Stop Date	12/05/2013
		Stop Time	14:49:50
		Total Time	0:07:21:00
		Logging Interval	60 seconds
Statistics			
		AEROSOL	
Avg		0.030 mg/m ³	
Max		0.040 mg/m ³	
Max Date		12/05/2013	
Max Time		14:30:50	
Min		0.020 mg/m ³	
Min Date		12/05/2013	
Min Time		07:31:50	
TWA (8 hr)		0.027	
TWA Start Date		12/05/2013	
TWA Start Time		07:28:50	
TWA End Time		14:49:50	

Particulate Air Monitoring Data Graph

DT-3: S/N 8530131514



Site-Specific Action Level for fugitive dust is 0.100 mg/m³, 15 minute average over background level, with a maximum of 0.150 mg/m³, 15 minute average.

Attachment B

Photographic Documentation of Site Activities

Attachment B
Readburn Wood Tar Site
Photographic Documentation of Site Activities
November 2013 through June 2014



Photo 1: RST 2 deployed three air monitoring stations during Removal Action activities at the Site. Each station comprised of one DustTrack II and one AreaRae air monitoring unit.



Photo 2: EPA's ERRS contractor established work zones and delineated the active work areas by installed silt fences along the proposed excavation boundaries of the Site. From this southeast portion of the Site, Read Creek can be seen east of the silt fence.

Attachment B
Readburn Wood Tar Site
Photographic Documentation of Site Activities
November 2013 through June 2014



Photo 3: A view of the southern portion of the Site before ERRS began excavation of contaminated soils. An occupied residence is located on-site.



Photo 4: A northwest view of the Site looking south, before excavation activities commenced. ERRS placed large rocks and cobble stones along the sloped northwest area along Readburn Road to prevent erosion.

Attachment B
Readburn Wood Tar Site
Photographic Documentation of Site Activities
November 2013 through June 2014



Photo 5: Excavation of wood tar-contaminated soils started from the southeast portion of the Site. The southeast sidewall was later removed completely. No sidewall sample was collected from this portion (grid AA2) of the excavation.



Photo 6: The red line indicates the depth, approximately 2 to 3 feet bgs, where material suspected to be wood tar was observed. This area was excavated southward to 4 feet bgs and eastward to 3 feet bgs.

Attachment B
Readburn Wood Tar Site
Photographic Documentation of Site Activities
November 2013 through June 2014



Photo 7: Trucks were lined with poly sheets (red arrow) before they were loaded with contaminated soils for off-site disposal.



Photo 8: Poly sheets (red arrow) were placed along the truck access path to the soil loading area to prevent the vehicles from tracking contaminated soils offsite when exiting the Site.

Attachment B
Readburn Wood Tar Site
Photographic Documentation of Site Activities
November 2013 through June 2014



Photo 9: Trees that were in the way of the excavation area were removed and replanted at a different location within the Site.



Photo 10: This southern portion of the Site encompassing all of grid-A1 and portions of grid-B1 was excavated to a depth of 4 feet bgs. The red line indicates the location where a layer of material suspected to be wood tar was observed to be progressing towards the foundation of on-site residential property.

Attachment B
Readburn Wood Tar Site
Photographic Documentation of Site Activities
November 2013 through June 2014



Photo 11: The southern extent of the excavation was approximately 29 feet from the foundation of the on-site residential property. The property owner requested that the excavation should be stopped from encroaching further in the direction of the residence.



Photo 12: Large chunks of wood tar (red arrow) were excavated from grid-B1. Grid-C1 was excavated to 3 feet bgs (yellow arrow). The yellow square indicates the location where post excavation soil sample RW2-81-B1-08B was collected.

Attachment B
Readburn Wood Tar Site
Photographic Documentation of Site Activities
November 2013 through June 2014



Photo 13: ERRS excavated portions of grid-B1 and all of grid-B2 to a depth of 8 feet bgs. Both grids were filled with large quantities of wood tar which were transferred directly to trucks for off-site disposal.



Photo 14: The yellow ellipse indicates the location within the excavation from where groundwater sample RW2-81GWAB was collected. This location encompassed groundwater that had seeped into grids A and B.

Attachment B
Readburn Wood Tar Site
Photographic Documentation of Site Activities
November 2013 through June 2014



Photo 15: Wood tar-contaminated soils were staged onsite while waiting for trucks to arrive for loading and off-site disposal.



Photo 16: Grid-D1 along the southwest portion of the Site was excavated to approximately 24 inches bgs and tapered to the west and northwest direction to a depth of approximately 18 inches bgs at grid-J1. Although material suspected to be wood tar was observed to be progressing beneath the foundation of the property's garage, the excavation was terminated in this direction at the request of the property owner.

Attachment B
Readburn Wood Tar Site
Photographic Documentation of Site Activities
November 2013 through June 2014



Photo 17: A view of the southwest portion of the Site after it was excavated to a depth of approximately 18 inches bgs along grid-F through grid-J.



Photo 18: ERRS backfilled the excavation with imported pre-analyzed soil starting from the southeast portion of the Site.

Attachment B
Readburn Wood Tar Site
Photographic Documentation of Site Activities
November 2013 through June 2014



Photo 19: The west bank of the Creek which was completely removed during the excavation of the southeast portion of the Site was reconstructed with backfill material. The red ellipse shows portions of the west bank that was reconstructed.



Photo 20: A view of the southern portion of the Site after the excavation was backfilled.

Attachment B
Readburn Wood Tar Site
Photographic Documentation of Site Activities
November 2013 through June 2014



Photo 21: A view of the northwest portion of the Site after the excavation was backfilled.



Photo 22: Approximately 900 tons of pre-analyzed top soil was placed throughout the approximately 65,000 ft² area of the Site, including the approximately 43,000 ft² excavation area, to a depth of 3 to 4 inches, thereby raising the ground surface to its original grade.

Attachment B
Readburn Wood Tar Site
Photographic Documentation of Site Activities
November 2013 through June 2014



Photo 23: Approximately 66 tons of 2-inch crushed stones was repurposed from the Site's CRZ and trailer staging area and used in the construction of an alternative north driveway to the on-site residence. The red arrow indicates the old drive way and the yellow arrow indicates the new drive way.



Photo 24: A mixture of red clover and pasture grass (contractors blend) was planted throughout the Site via hydroseeding.

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Manifest Number	Vendor Invoice No.	Date Shipped	Company	Truck Number	Actual Weight	Cost Weight	Units	Waste Code	Method of Disposal	Disposal Facility	Unit Cost	Trans/Disposal Cost	8% Tax	Total Cost	Total Amount with G&A
316061		12/4/2013	Diaz	188	21.21	22	Tons	Non-Haz Soil	Landfill	Keystone Sanitary Landfill	\$54.20	\$1,192.40	\$95.39	\$1,287.79	\$1,363.77
316062		12/4/2013	Diaz	231	21.93	22	Tons	Non-Haz Soil	Landfill	Keystone Sanitary Landfill	\$54.20	\$1,192.40	\$95.39	\$1,287.79	\$1,363.77
316063		12/4/2013	Diaz	200	23.58	23.58	Tons	Non-Haz Soil	Landfill	Keystone Sanitary Landfill	\$54.20	\$1,278.04	\$102.24	\$1,380.28	\$1,461.72
316064		12/4/2013	Diaz	261	23.15	23.15	Tons	Non-Haz Soil	Landfill	Keystone Sanitary Landfill	\$54.20	\$1,254.73	\$100.38	\$1,355.11	\$1,435.06
316065		12/4/2013	Diaz	199	17.03	22	Tons	Non-Haz Soil	Landfill	Keystone Sanitary Landfill	\$54.20	\$1,192.40	\$95.39	\$1,287.79	\$1,363.77
316066		12/4/2013	Diaz	224	17.52	22	Tons	Non-Haz Soil	Landfill	Keystone Sanitary Landfill	\$54.20	\$1,192.40	\$95.39	\$1,287.79	\$1,363.77
316067		12/4/2013	Diaz	235	21.08	22	Tons	Non-Haz Soil	Landfill	Keystone Sanitary Landfill	\$54.20	\$1,192.40	\$95.39	\$1,287.79	\$1,363.77
316068		12/4/2013	Diaz	187	20.8	22	Tons	Non-Haz Soil	Landfill	Keystone Sanitary Landfill	\$54.20	\$1,192.40	\$95.39	\$1,287.79	\$1,363.77
316069		12/4/2013	Diaz	188	23.51	23.51	Tons	Non-Haz Soil	Landfill	Keystone Sanitary Landfill	\$54.20	\$1,274.24	\$101.94	\$1,376.18	\$1,457.38
316070		12/4/2013	Diaz	231	19.58	22	Tons	Non-Haz Soil	Landfill	Keystone Sanitary Landfill	\$54.20	\$1,192.40	\$95.39	\$1,287.79	\$1,363.77
316071		12/4/2013	Diaz	200	23.31	23.31	Tons	Non-Haz Soil	Landfill	Keystone Sanitary Landfill	\$54.20	\$1,263.40	\$101.07	\$1,364.47	\$1,444.98
316072		12/4/2013	Diaz	261	23.15	23.15	Tons	Non-Haz Soil	Landfill	Keystone Sanitary Landfill	\$54.20	\$1,254.73	\$100.38	\$1,355.11	\$1,435.06
316073		12/4/2013	Diaz	199	20.88	22	Tons	Non-Haz Soil	Landfill	Keystone Sanitary Landfill	\$54.20	\$1,192.40	\$95.39	\$1,287.79	\$1,363.77
316074		12/4/2013	Diaz	224	22.69	22.69	Tons	Non-Haz Soil	Landfill	Keystone Sanitary Landfill	\$54.20	\$1,229.80	\$98.38	\$1,328.18	\$1,406.54
316075		12/4/2013	Diaz	235	23.05	23.05	Tons	Non-Haz Soil	Landfill	Keystone Sanitary Landfill	\$54.20	\$1,249.31	\$99.94	\$1,349.25	\$1,428.86
316076		12/4/2013	Diaz	187	19.04	22	Tons	Non-Haz Soil	Landfill	Keystone Sanitary Landfill	\$54.20	\$1,192.40	\$95.39	\$1,287.79	\$1,363.77
316077		12/4/2013	Diaz	231	19.04	22	Tons	Non-Haz Soil	Landfill	Keystone Sanitary Landfill	\$54.20	\$1,192.40	\$95.39	\$1,287.79	\$1,363.77
316078		12/4/2013	Diaz	188	20.22	22	Tons	Non-Haz Soil	Landfill	Keystone Sanitary Landfill	\$54.20	\$1,192.40	\$95.39	\$1,287.79	\$1,363.77
316079		12/4/2013	Diaz	200	18.81	22	Tons	Non-Haz Soil	Landfill	Keystone Sanitary Landfill	\$54.20	\$1,192.40	\$95.39	\$1,287.79	\$1,363.77
316080		12/4/2013	Diaz	261	24.69	24.69	Tons	Non-Haz Soil	Landfill	Keystone Sanitary Landfill	\$54.20	\$1,338.20	\$107.06	\$1,445.25	\$1,530.52
316081		12/4/2013	Diaz	199	23.39	23.39	Tons	Non-Haz Soil	Landfill	Keystone Sanitary Landfill	\$54.20	\$1,267.74	\$101.42	\$1,369.16	\$1,449.94
TOTAL					447.66	474.52	Tons					\$25,718.98	\$2,057.52	\$27,776.50	\$29,415.32
Load w/weights	21	Total Ton Average Per Load			21.32										
Total Loads	21														

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<p>Waste Generation Report - 12.06.13</p> <p>US EPA Region 2 ERRS</p> <p>Readburn Wood Tar Site</p> <p>ERRS Contract EP-S2-10-03</p> <p>Task Order: 0081</p>
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Manifest Number	Vendor Invoice No.	Date Shipped	Company	Truck Number	Actual Weight	Cost Weight	Units	Waste Code	Method of Disposal	Disposal Facility	Unit Cost	Trans/Disposal Cost	8% Tax	Total Cost	Total Amount with G&A
316425		12/6/2013	Diaz	199	23.4	23.4	Tons	Non-Haz Soil	Landfill	Keystone Sanitary Landfill	\$54.20	\$1,268.28	\$101.46	\$1,369.74	\$1,450.56
316426		12/6/2013	Diaz	231	22.13	22.13	Tons	Non-Haz Soil	Landfill	Keystone Sanitary Landfill	\$54.20	\$1,199.45	\$95.96	\$1,295.40	\$1,371.83
316427		12/6/2013	Diaz	188	24.78	24.78	Tons	Non-Haz Soil	Landfill	Keystone Sanitary Landfill	\$54.20	\$1,343.08	\$107.45	\$1,450.52	\$1,536.10
316428		12/6/2013	Diaz	186	22.38	22.38	Tons	Non-Haz Soil	Landfill	Keystone Sanitary Landfill	\$54.20	\$1,213.00	\$97.04	\$1,310.04	\$1,387.33
316429		12/6/2013	Diaz	187	23.98	23.98	Tons	Non-Haz Soil	Landfill	Keystone Sanitary Landfill	\$54.20	\$1,299.72	\$103.98	\$1,403.69	\$1,486.51
316430		12/6/2013	Diaz	200	24.43	24.43	Tons	Non-Haz Soil	Landfill	Keystone Sanitary Landfill	\$54.20	\$1,324.11	\$105.93	\$1,430.03	\$1,514.41
316431		12/6/2013	Diaz	261	23.64	23.64	Tons	Non-Haz Soil	Landfill	Keystone Sanitary Landfill	\$54.20	\$1,281.29	\$102.50	\$1,383.79	\$1,465.43
316432		12/6/2013	Diaz	235	24.53	24.53	Tons	Non-Haz Soil	Landfill	Keystone Sanitary Landfill	\$54.20	\$1,329.53	\$106.36	\$1,435.89	\$1,520.61
316433		12/6/2013	Diaz	231	23.04	23.04	Tons	Non-Haz Soil	Landfill	Keystone Sanitary Landfill	\$54.20	\$1,248.77	\$99.90	\$1,348.67	\$1,428.24
316434		12/6/2013	Diaz	199	22.19	22.19	Tons	Non-Haz Soil	Landfill	Keystone Sanitary Landfill	\$54.20	\$1,202.70	\$96.22	\$1,298.91	\$1,375.55
316435		12/6/2013	Diaz	186	20.29	22	Tons	Non-Haz Soil	Landfill	Keystone Sanitary Landfill	\$54.20	\$1,192.40	\$95.39	\$1,287.79	\$1,363.77
316436		12/6/2013	Diaz	187	22.04	22.04	Tons	Non-Haz Soil	Landfill	Keystone Sanitary Landfill	\$54.20	\$1,194.57	\$95.57	\$1,290.13	\$1,366.25
316437		12/6/2013	Diaz	200	19.81	22	Tons	Non-Haz Soil	Landfill	Keystone Sanitary Landfill	\$54.20	\$1,192.40	\$95.39	\$1,287.79	\$1,363.77
316438		12/6/2013	Diaz	261	25.2	25.2	Tons	Non-Haz Soil	Landfill	Keystone Sanitary Landfill	\$54.20	\$1,365.84	\$109.27	\$1,475.11	\$1,562.14
316439		12/6/2013	Diaz	235	22.57	22.57	Tons	Non-Haz Soil	Landfill	Keystone Sanitary Landfill	\$54.20	\$1,223.29	\$97.86	\$1,321.16	\$1,399.11
316440		12/6/2013	Diaz	231	20.08	22	Tons	Non-Haz Soil	Landfill	Keystone Sanitary Landfill	\$54.20	\$1,192.40	\$95.39	\$1,287.79	\$1,363.77
316441		12/6/2013	Diaz	224	20.85	22	Tons	Non-Haz Soil	Landfill	Keystone Sanitary Landfill	\$54.20	\$1,192.40	\$95.39	\$1,287.79	\$1,363.77
316442		12/6/2013	Diaz	199	20.72	22	Tons	Non-Haz Soil	Landfill	Keystone Sanitary Landfill	\$54.20	\$1,192.40	\$95.39	\$1,287.79	\$1,363.77
316443		12/6/2013	Diaz	186	18.62	22	Tons	Non-Haz Soil	Landfill	Keystone Sanitary Landfill	\$54.20	\$1,192.40	\$95.39	\$1,287.79	\$1,363.77
316444		12/6/2013	Diaz	187	19.69	22	Tons	Non-Haz Soil	Landfill	Keystone Sanitary Landfill	\$54.20	\$1,192.40	\$95.39	\$1,287.79	\$1,363.77
316445		12/6/2013	Diaz	261	21.25	22	Tons	Non-Haz Soil	Landfill	Keystone Sanitary Landfill	\$54.20	\$1,192.40	\$95.39	\$1,287.79	\$1,363.77
316446		12/6/2013	Diaz	235	18.88	22	Tons	Non-Haz Soil	Landfill	Keystone Sanitary Landfill	\$54.20	\$1,192.40	\$95.39	\$1,287.79	\$1,363.77
316447		12/6/2013	Diaz	200	20.2	22	Tons	Non-Haz Soil	Landfill	Keystone Sanitary Landfill	\$54.20	\$1,192.40	\$95.39	\$1,287.79	\$1,363.77
TOTAL					504.7	524.31	Tons					\$28,417.60	\$2,273.41	\$30,691.01	\$32,501.78
Load w/weights	23	Total Ton Average Per Load			21.94										
Total Loads	23														

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<p>Waste Generation Report - 12.10.13</p> <p>US EPA Region 2 ERRS</p> <p>Readburn Wood Tar Site</p> <p>ERRS Contract EP-S2-10-03</p> <p>Task Order: 0081</p>
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Waste Generation Report - 12.11.13 US EPA Region 2 ERRS Readburn Wood Tar Site ERRS Contract EP-S2-10-03 Task Order: 0081

Manifest Number	Vendor Invoice No.	Date Shipped	Company	Truck Number	Actual Weight	Cost Weight	Units	Waste Code	Method of Disposal	Disposal Facility	Unit Cost	Trans/Disposal Cost	8% tax	Total Cost	Total Amount with G&A
316477		12/11/2013	Diaz	187	19.49	22	Tons	Non-Haz Soil	Landfill	Keystone Sanitary Landfill	\$54.20	\$1,192.40	\$95.39	\$1,287.79	\$1,363.77
316479		12/11/2013	Diaz	261	21.4	22	Tons	Non-Haz Soil	Landfill	Keystone Sanitary Landfill	\$54.20	\$1,192.40	\$95.39	\$1,287.79	\$1,363.77
316480		12/11/2013	Diaz	199	21.47	22	Tons	Non-Haz Soil	Landfill	Keystone Sanitary Landfill	\$54.20	\$1,192.40	\$95.39	\$1,287.79	\$1,363.77
316481		12/11/2013	Diaz	200	21.2	22	Tons	Non-Haz Soil	Landfill	Keystone Sanitary Landfill	\$54.20	\$1,192.40	\$95.39	\$1,287.79	\$1,363.77
316482		12/11/2013	Diaz	231	17.25	22	Tons	Non-Haz Soil	Landfill	Keystone Sanitary Landfill	\$54.20	\$1,192.40	\$95.39	\$1,287.79	\$1,363.77
316483		12/11/2013	Diaz	186	19.67	22	Tons	Non-Haz Soil	Landfill	Keystone Sanitary Landfill	\$54.20	\$1,192.40	\$95.39	\$1,287.79	\$1,363.77
316484		12/11/2013	Diaz	235	20.92	22	Tons	Non-Haz Soil	Landfill	Keystone Sanitary Landfill	\$54.20	\$1,192.40	\$95.39	\$1,287.79	\$1,363.77
316485		12/11/2013	Diaz	224	20.93	22	Tons	Non-Haz Soil	Landfill	Keystone Sanitary Landfill	\$54.20	\$1,192.40	\$95.39	\$1,287.79	\$1,363.77
316486		12/11/2013	Diaz	261	23.26	23.26	Tons	Non-Haz Soil	Landfill	Keystone Sanitary Landfill	\$54.20	\$1,260.69	\$100.86	\$1,361.55	\$1,441.88
316487		12/11/2013	Diaz	199	22.19	22.19	Tons	Non-Haz Soil	Landfill	Keystone Sanitary Landfill	\$54.20	\$1,202.70	\$96.22	\$1,298.91	\$1,375.55
316488		12/11/2013	Diaz	231	22.56	22.56	Tons	Non-Haz Soil	Landfill	Keystone Sanitary Landfill	\$54.20	\$1,222.75	\$97.82	\$1,320.57	\$1,398.49
316489		12/11/2013	Diaz	186	23.67	23.67	Tons	Non-Haz Soil	Landfill	Keystone Sanitary Landfill	\$54.20	\$1,282.91	\$102.63	\$1,385.55	\$1,467.29
316490		12/11/2013	Diaz	200	23.33	23.33	Tons	Non-Haz Soil	Landfill	Keystone Sanitary Landfill	\$54.20	\$1,264.49	\$101.16	\$1,365.64	\$1,446.22
316491		12/11/2013	Diaz	224	24.23	24.23	Tons	Non-Haz Soil	Landfill	Keystone Sanitary Landfill	\$54.20	\$1,313.27	\$105.06	\$1,418.33	\$1,502.01
316492		12/11/2013	Diaz	235	22.42	22.42	Tons	Non-Haz Soil	Landfill	Keystone Sanitary Landfill	\$54.20	\$1,215.16	\$97.21	\$1,312.38	\$1,389.81
316493		12/11/2013	Diaz	231	21.37	22	Tons	Non-Haz Soil	Landfill	Keystone Sanitary Landfill	\$54.20	\$1,192.40	\$95.39	\$1,287.79	\$1,363.77
316494		12/11/2013	Diaz	261	22.31	22.31	Tons	Non-Haz Soil	Landfill	Keystone Sanitary Landfill	\$54.20	\$1,209.20	\$96.74	\$1,305.94	\$1,382.99
316495		12/11/2013	Diaz	199	21.47	22	Tons	Non-Haz Soil	Landfill	Keystone Sanitary Landfill	\$54.20	\$1,192.40	\$95.39	\$1,287.79	\$1,363.77
316496		12/11/2013	Diaz	187	20.62	22	Tons	Non-Haz Soil	Landfill	Keystone Sanitary Landfill	\$54.20	\$1,192.40	\$95.39	\$1,287.79	\$1,363.77
316497		12/11/2013	Diaz	186	21.44	22	Tons	Non-Haz Soil	Landfill	Keystone Sanitary Landfill	\$54.20	\$1,192.40	\$95.39	\$1,287.79	\$1,363.77
316498		12/11/2013	Diaz	200	21.35	22	Tons	Non-Haz Soil	Landfill	Keystone Sanitary Landfill	\$54.20	\$1,192.40	\$95.39	\$1,287.79	\$1,363.77
TOTAL					452.55	469.97	Tons					\$25,472.37	\$2,037.79	\$27,510.16	\$29,133.26
Load w/weights	21		Total Ton Average Per Load			21.55									
Total Loads	21														

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<p>Waste Generation Report - 12.16.13</p> <p>US EPA Region 2 ERRS</p> <p>Readburn Wood Tar Site</p> <p>ERRS Contract EP-S2-10-03</p> <p>Task Order: 0081</p>
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<p>Waste Generation Report - 12.17.13</p> <p>US EPA Region 2 ERRS</p> <p>Readburn Wood Tar Site</p> <p>ERRS Contract EP-S2-10-03</p> <p>Task Order: 0081</p>
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<p>Waste Generation Report - 12.18.13</p> <p>US EPA Region 2 ERRS</p> <p>Readburn Wood Tar Site</p> <p>ERRS Contract EP-S2-10-03</p> <p>Task Order: 0081</p>
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Waste Generation Report - 01.08.14 US EPA Region 2 ERRS Readburn Wood Tar Site ERRS Contract EP-S2-10-03 Task Order: 0081

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<p>Waste Generation Report - 01.09.14</p> <p>US EPA Region 2 ERRS</p> <p>Readburn Wood Tar Site</p> <p>ERRS Contract EP-S2-10-03</p> <p>Task Order: 0081</p>
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<p>Waste Generation Report - 01.10.14</p> <p>US EPA Region 2 ERRS</p> <p>Readburn Wood Tar Site</p> <p>ERRS Contract EP-S2-10-03</p> <p>Task Order: 0081</p>
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<p>Waste Generation Report - 01.13.14</p> <p>US EPA Region 2 ERRS</p> <p>Readburn Wood Tar Site</p> <p>ERRS Contract EP-S2-10-03</p> <p>Task Order: 0081</p>
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Waste Generation Report - 01.15.14
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Waste Generation Report - 01.16.14 US EPA Region 2 ERRS Readburn Wood Tar Site ERRS Contract EP-S2-10-03 Task Order: 0081

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<p>Waste Generation Report - 01.17.14</p> <p>US EPA Region 2 ERRS</p> <p>Readburn Wood Tar Site</p> <p>ERRS Contract EP-S2-10-03</p> <p>Task Order: 0081</p>
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<p>Waste Generation Report - 01.21.14</p> <p>US EPA Region 2 ERRS</p> <p>Readburn Wood Tar Site</p> <p>ERRS Contract EP-S2-10-03</p> <p>Task Order: 0081</p>
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