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July 22, 2010

Mr. John Nohrstedt
U.S. Army Corps of Engineers
Engineering and Support Center, Huntsville
Attn: CEHNC-FS-IS
4820 University Square
Huntsville, Alabama 35816-1822

SUBJECT: Final Construction Completion Report for the Former Sludge Waste Piles (SEAD-5), Seneca Army Depot Activity, Romulus, New York; Contract W912DY-08-D-0003, Delivery Order 0006

Dear Mr. Nohrstedt:

Parsons Infrastructure & Technology Group Inc. (Parsons) is pleased to submit the Final Construction Completion Report for the Former Sludge Waste Piles (SEAD-5) located at the Seneca Army Depot Activity in Romulus, New York. This work was performed in accordance with the Scope of Work for Delivery Order 0006 under Contract W912DY-08-D-0003.

Parsons appreciates the opportunity to provide you with the Report for this work. Should you have any questions, please do not hesitate to call me at (617) 449-1405 to discuss them.

Sincerely,

Todd Heino, P.E., Vice President
Program Manager

Enclosures

cc: S. Absolom, SEDA
K. Hoddinott, USACHPPM
R. Battaglia, USACE, NY
T. Battaglia, USACE, NY

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July 22, 2010

Mr. Julio Vazquez
U.S. Environmental Protection Agency, Region II
Superfund Federal Facilities Section
290 Broadway, 18th Floor
New York, NY 10007-1866

Mr. Kuldeep K. Gupta, P.E.
New York State Department of Environmental Conservation (NYSDEC)
Division of Environmental Remediation
Remedial Bureau A, Section C
625 Broadway
Albany, NY 12233-7015

Mr. Mark Sergott
Bureau of Environmental Exposure Investigation, Room 300
New York State Department of Health
547 River Street, Flanigan Square
Troy, NY 12180

SUBJECT: Final Construction Completion Report for the Former Sludge Waste Piles (SEAD-5), Seneca Army Depot Activity, Romulus, New York; EPA Site ID# NY0213820830 and NY Site ID# 8-50-006

Dear Mr. Vazquez/Mr. Gupta/Mr. Sergott:

Parsons Infrastructure & Technology Group Inc. (Parsons) is pleased to submit the Final Construction Completion Report for the Former Sludge Waste Piles (SEAD-5) located at the Seneca Army Depot Activity in Romulus, New York (EPA Site ID# NY0213820830 and NY Site ID# 8-50-006).

Should you have any questions, please do not hesitate to call me at (617) 449-1405 to discuss them.

Sincerely,

Todd Heino, P.E., Vice President
Program Manager

Enclosures

cc: M. Heaney, TechLaw
S. Absolom, SEDA
R. Battaglia, USACE, NY
J. Nohrstedt, USACE, Huntsville
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US Army, Engineering & Support Center
Huntsville, AL

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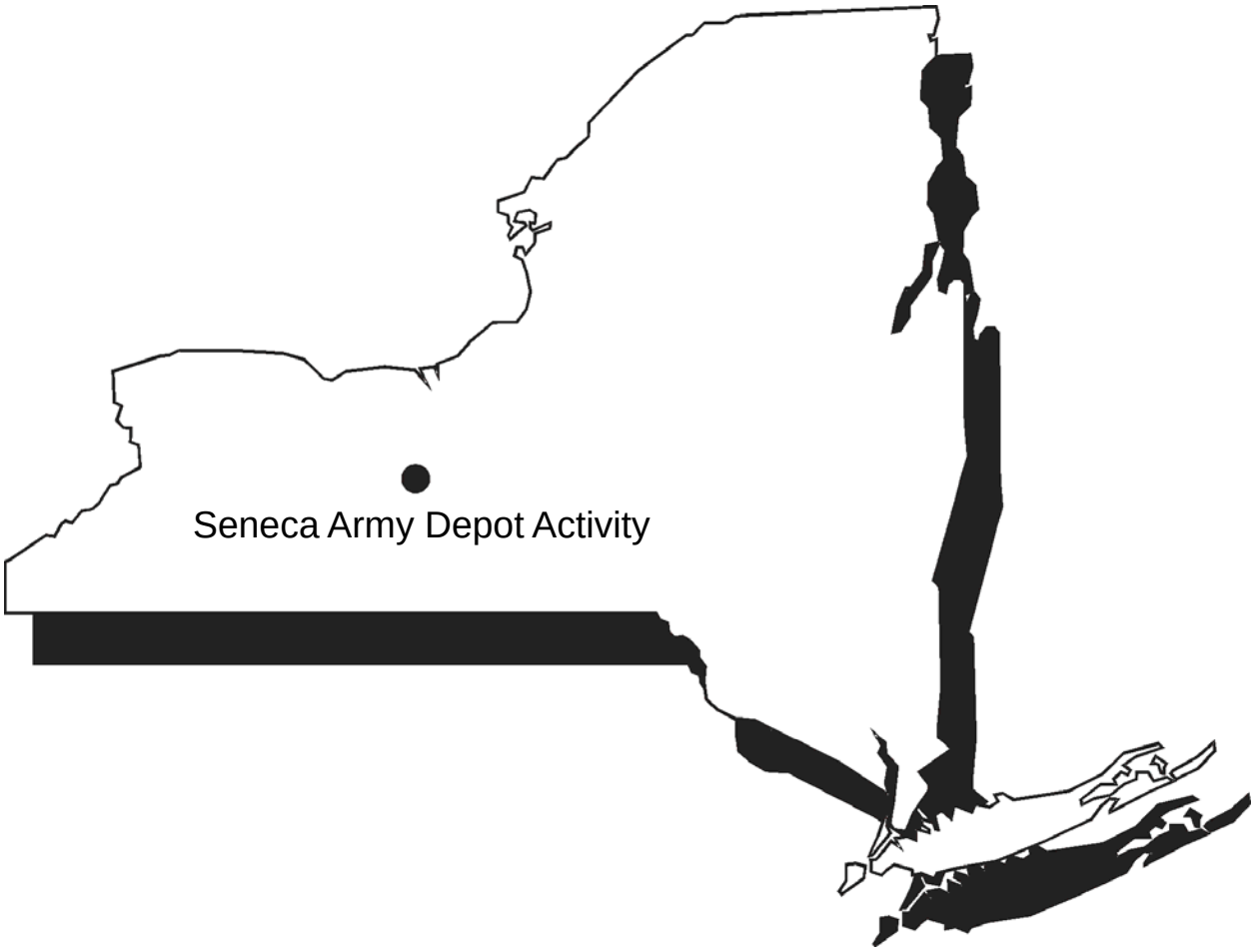
Seneca Army Depot Activity
Romulus, NY



FINAL
CONSTRUCTION COMPLETION REPORT
FORMER SLUDGE WASTE PILES (SEAD-5)
SENECA ARMY DEPOT ACTIVITY

Contract No. W912DY-08-D-0003
Task Order No. 0006
EPA Site ID# NY0213820830
NY Site ID# 8-50-006

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July 2010

FINAL

CONSTRUCTION COMPLETION REPORT

FOR THE FORMER SEWAGE SLUDGE WASTE PILES (SEAD-5)

SENECA ARMY DEPOT ACTIVITY, ROMULUS, NY

Prepared for:

UNITED STATES ARMY CORPS OF ENGINEERS

ENGINEERING AND SUPPORT CENTER, HUNTSVILLE

and

SENECA ARMY DEPOT ACTIVITY

ROMULUS, NY

Prepared by:

PARSONS

100 High Street

Boston, MA 02110

Contract Number W912DY-08-D-0003
Task Order 0006
EPA Site ID# NY0213820830
NY Site ID# 8-50-006 **July 2010**

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ACRONYMS AND ABBREVIATIONS

ACE	United States Army Corps of Engineers
AOC(s)	Area(s) of concern
AWQ	Ambient Water Quality
BaP	Benzo(a)pyrene
CCR	Construction Completion Report
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
COR	Contracting Officer Representative
cPAH(s)	Carcinogenic polyaromatic hydrocarbon(s)
cy	Cubic yard
DPW	Department of Public Works
EPA	Environmental Protection Agency
ESI	Expanded Site Inspection
GPS	Global positioning system
HASP	Health and safety plan
LRA	Seneca Army Depot Local Redevelopment Authority
LUC	Land use control
NYCCR	New York Code of Rules and Regulations
NYS	New York State
NYSDEC	New York State Department of Environmental Conservation
PCB	Polychlorinated biphenyl
PID	Planned Industrial/Office Development
PM	Project Manager
PRG	Preliminary Remediation Goal
RSL(s)	Regional Screening Level(s)
SCIDA	Seneca County Industrial Development Authority
SCO	Soil cleanup objective
SEDA	Seneca Army Depot Activity
SHARP	Safety, Health, and Risk Program
SHS/QC	Site Health and Safety/Quality Control
SM	Site Manager
SOP	Standard Operating Procedure
SVOC	Semivolatile Organic Compound
TCLP	Toxicity Characteristic Leaching Procedure
TCRA	Time Critical Removal Action
UFPO	Underground Facilities Protective Organization
VOC	Volatile organic compound
WDW	Work-derived waste

EXECUTIVE SUMMARY

This Construction Completion Report (CCR) for the Former Sewage Sludge Waste Piles (SEAD-5) located at the Seneca Army Depot Activity (SEDA or Depot) Seneca County, New York (NY) is intended to provide record documentation of the completed remedial action construction activities. It provides documentation that accessible soil remaining in the area of the former sludge pile locations meets the remedial goals defined in the Record of Decision for the former area of concern (AOC).

Parsons Infrastructure & Technology Group, Inc. (Parsons) and the selected earthwork contractor, S. St George Enterprises, Inc. (St. George), mobilized to SEAD-5 on June 30, 2009. After the completion of pre-construction activities, construction activities began on July 6, 2009. The scope of activities are delineated in the final *Remedial Action Operations Plan, Former Sludge Waste Piles (SEAD-5), Seneca Army Depot Activity* (Parsons, 2009a). The purpose of the SEAD-5 construction activities was to construct a soil cover to inter a portion of SEAD-5 where analytical results from soil samples indicated that elevated levels of certain hazardous substances, including benzo(a)pyrene were present at concentrations that posed potential human health risks to future industrial occupants and users of the land.

Stockpiled soil from a prior removal action at other neighboring areas of concern was removed from its staging locations then spread within the defined boundaries of the proposed soil cover; after spreading, the soil was graded and compacted. A layer of demarcation fabric was placed atop the initial layer of spread stockpile soil to delineate the lateral extent of the covered soil. One foot of on- and off-site borrow material of quality that meets Restricted Commercial Use soil cleanup objectives (SCOs) defined by the State of New York Department of Environmental Conservation (NYSDEC) was then placed over the interred soil, the initial cover layer, and demarcation fabric as a protective barrier layer. The on-site borrow material consists of clean crushed concrete and gravel; the off-site borrow material consists of bank run sand obtained from an approved off-site source.

Confirmatory samples collected from the crushed concrete, the gravel, and the bank run sand were collected and analyzed in accordance with the requirements of the Final Work Plan. Results of the chemical characterization samples confirm that each of the identified borrow material is suitable for use as cover material in accordance with NYSDEC Commercial Use SCOs as concentrations of VOCs, SVOCs, pesticides/PCBs, and metals fall below the guidance values.

The initial cover layer soil consists of approximately 5,620 cy of SEAD-59/71 stockpile soil. This soil covered approximately 68,720 square feet (1.57 acres) or 1.57 acres of land. The final cover layer consists of approximately 2,400 cy of off-site borrow material and 600 - 650 cubic yards of crushed concrete and gravel. The crew demobilized from SEAD-5 on July 14, 2009. In early November 2009, the area of the soil cover was seeded with winter wheat to promote growth of vegetation to stabilize the soil cover.

The remedial objectives for SEAD-5 have been achieved and no further construction activities are required. The approved remedy for SEAD-5 requires that three Land Use Controls (LUCs) be implemented, monitored, maintained, and that the continuing protectiveness of the soil cover and the

LUC remedial action be assessed and periodically reported during future years. As a continuance of the remedial action, the Army will prepare, submit, and implement a LUC remedial design that details and implements the three LUCs. Additionally, the Army or the future owner of the land will conduct periodic inspections to document and ensure ongoing LUC compliance and the integrity of the soil cover, and provide summary reports of findings and recommendations to the Environmental Protection Agency, Region II (EPA) and the NYSDEC.

SECTION 1 - INTRODUCTION

This Construction Completion Report (CCR) has been prepared for the former Sewage Sludge Waste Piles site (SEAD-5) at the Seneca Army Depot Activity (SEDA or Depot) in Seneca County, New York. It is intended to provide record documentation of the remedial action construction activities completed at SEAD-5 and to provide documentation that all accessible soil remaining at the site meets the cleanup goals defined in the Final Record of Decision for the former area of concern (AOC).

Parsons Infrastructure & Technology Group Inc. (Parsons) was tasked under the United States Army Corps of Engineers (ACE) Contract Number W912DY-08-D-0003, Task Order No. 0006 to perform the selected remedial action at the former Sewage Sludge Waste Piles site, as documented in the *Record of Decision for Five Former SWMUs – SEADs 1, 2, 5, 24, and 48* (Parsons, 2009a). The goal of the remedial action at SEAD-5 is to prevent access and exposure to soil that contains contamination (i.e., carcinogenic polyaromatic hydrocarbons [cPAHs]) that may pose risk to human health. The soil will be interred beneath a demarcation barrier and a cover layer that meets New York State (NYS) Restricted Commercial Use soil cleanup objective (SCO) guidance values. Internment of the contaminated soil in this manner will minimize the likelihood of unintentional contact with contaminated soil that remains at the site. Once the demarcation barrier and protective fill layer are installed, land use controls (LUCs) will be implemented, maintained, inspected, and periodically reported. This will verify that the implemented remedy remains functional, continues to protect human health, and allows for the property to be used for commercial and industrial use.

1.1 Purpose of the Construction Completion Report

This CCR describes the actions performed to construct the soil cover that was selected as a component of the required remedial action for SEAD-5. This CCR presents laboratory results, record survey data, record drawings, and photo documentation to demonstrate compliance with the requirements set forth by the *Remedial Action Operations Plan, Former Sludge Waste Piles (SEAD-5), Seneca Army Depot Activity* (Parsons, 2009b), hereafter referred to as the Final Work Plan. The purpose of this CCR is to document that the construction activities associated with the action at SEAD-5 were completed in accordance with specifications of the Final Work Plan, submitted to the United States Environmental Protection Agency (EPA) and the New York State Department of Environmental Conservation (NYSDEC) on October 9, 2009.

The remedial action for the former Sewage Sludge Waste Piles site (SEAD-5) identified in the ROD consists of the following elements:

- Covering of contaminated soils, including those originating at SEADs-59 and -71, with at least one foot of clean fill that meets Restricted Commercial Use SCOs defined by the State of New York;
- Placing demarcation fabric (e.g., colored “snow” or safety fence) between the contaminated soil and the clean fill; and,

- Establishing, maintaining, monitoring, and reporting on LUCs that:
  - Prohibit unauthorized excavations or activities that might compromise the integrity of the engineered cover;
  - Prohibit residential houses, elementary and secondary schools, childcare facilities, and playgrounds until unrestricted use and unlimited exposure criteria are achieved in the AOC; and
  - Prohibit access to and use of groundwater at the AOC until quality of the groundwater allows for unrestricted use and unlimited exposure.

Since the selected remedy for SEAD-5 does not allow unrestricted use of, nor unlimited exposure at the AOC, the Army and/or its successors is required to complete a review of the selected remedy at least once every 5 years, in accordance with Section 121(c) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

1.2 Description of the Seneca Army Depot

The SEDA is a former military facility that was owned by the U.S. Government and operated by the Army between 1941 and 2000 when the SEDA's military mission ceased. The Depot occupied approximately 10,600 acres of land in the towns of Varick and Romulus in Seneca County, New York (see **Figure 1**). The Depot's historic military mission included receipt, storage, distribution, maintenance, and demilitarization of conventional ammunition, explosives, and special weapons.

In September 2000 the Army assumed the role of caretaker of the former Depot. As caretaker, the Army maintains control of the Depot's land until parcels are transferred to new owners for alternate uses. Areas in the Depot that are subject to continuing investigation and remedial action under the requirements of CERCLA remain under the control of the Army; however, to date more than 8,000 acres of the former Depot have been transferred to the Seneca County Industrial Development Authority (SCIDA), the State of New York, and federal entities.

1.2.1 Future Land Use

The Seneca County Board of Supervisors established the Seneca Army Depot Local Redevelopment Authority (LRA) in October 1995 to prepare a plan for redevelopment of the SEDA property. The Land Reuse Plan was adopted and approved by the LRA and the Seneca County Board of Supervisors in 1996. The Reuse Plan designated parcels of land in the Depot into eight categories of preferred reuse: Planned Industrial/Office Development (PID), Warehousing, Prison, Conservation/Recreation, Institutional, Housing, Airfield/Special Events, and Federal to Federal Transfer. In 2005, the SCIDA revised the planned future use of Depot property by modifying portions of the original Conservation/Recreation parcels to include Institutional Training, Residential/Resort, Green Energy, Development Reserve, Training Area, and Utility uses. The planned future land use for SEAD-5 is PID or Warehouse area as shown on **Figure 2**.

1.3 Description of SEAD-5

1.3.1 Location

SEAD-5 is a rectangular parcel of land that encompasses approximately 3.1 acres. SEAD-5 is located approximately 600 feet west of Building 135 and approximately 3,000 feet west-southwest of the Depot's main entrance on State Route 9 (see **Figure 2**). The northern boundary of SEAD-5 is defined by an east-west oriented, unnamed dirt road that runs from the intersection of South Avenue and Administration Avenue toward SEAD-16 (i.e., the former Abandoned Deactivation Furnace) and the former location of Building 311. SEAD-59 (i.e., the former Fill Area West of Building 135), which is currently comprised of wooded and grassland areas, abuts the western boundary of SEAD-5 and extends across the east-west oriented dirt road to the northwest. Building 130 and an inactive aboveground storage tank are located in the area north of SEAD-5; SEAD-71 (i.e., the former Alleged Paint Disposal Area) is located north and northeast of SEAD-5 just beyond Building 130. SEADs-16 and -17 (i.e., the former Active Deactivation Furnace) are west and southwest, respectively of SEAD-5.

1.3.2 Site Conditions

The topography at SEAD-5 suggests a man-made variable terrain. An intermittent drainage ditch originates at the northwestern corner of SEAD-5 (south of the unnamed dirt road) and slopes westward toward SEAD-59. This ditch intersects a larger drainage ditch running north-south along the western boundary of SEAD-59. The terrain south of SEAD-5 is relatively flat and grassy, and interrupted by an intermittent east-west drainage ditch approximately 250 feet south of the AOC.

Historic groundwater data for SEAD-5 indicate that groundwater flows southwestward. Groundwater at SEADs-59 and -71 (which are northwest of SEAD-5) and at SEADs-16 and -17 (which are west and southwest of SEAD-5) behave like that at SEAD-5 flowing generally southwest. Groundwater elevations at SEAD-5 range from approximately 2.7 feet below ground surface (bgs) during winter to approximately 7.2 feet bgs during summer. Surface water flow at SEAD-5 is primarily westward. An intermittent drainage ditch originates at the northwestern corner of SEAD-5 (south of the unnamed dirt road) and slopes westward toward SEAD-59. The topography of SEAD-5 slopes gently to the west and runoff that is not channeled to the drainage ditch flows into the grassy field located south of the AOC.

1.3.3 History

During the 1980s, sewage sludge from the wastewater treatment plants at Buildings 4 and 715 was stockpiled at SEAD-5. Sludge generated from the plants was removed from drying beds near the buildings then transported to SEAD-5 bi-monthly where it remained until its disposal. As a result, there were approximately 5 to 6 sewage sludge piles measuring between 5 and 10 feet high staged at the AOC at any given time. The sludge piles were located primarily in the western half of SEAD-5, where it abutted SEAD-59 and away from buildings that are located along and near the eastern side of the AOC. Also, portions of SEAD-5 were used as part of the Depot's department of public works (DPW) storage and staging area for heavy equipment, materials, and supplies.

Samples of the sewage sludge were collected by representatives of NYS in February 1985 and by the Army in October, November, and December 1985. NYS and Army samples indicated that elevated concentrations of copper were present in the sewage sludge. The sludge was subsequently removed from SEAD-5 and disposed off-site.

Samples from the sewage sludge piles were collected again in January 1992 to characterize the sludge with the intent of off-site disposal at the Seneca Meadows Municipal Landfill. The samples were analyzed for Toxicity Characteristic Leaching Procedure (TCLP) metals, organic extractable pesticides, volatile organic compounds (VOCs), and organic extractable base neutrals and acids. Cadmium was the only constituent detected at a concentration above the analytical detection limits. In June 1992, approximately 560 tons of sewage sludge from SEAD-5 was removed and disposed at the municipal landfill.

Conditions at SEAD-5 were later assessed during the Expanded Site Inspection (ESI) in 1994. The results of the ESI are documented in *Draft Final ESI Report, Eight Moderately Low Priority AOCs, SEADs 5, 9, 12 (A and B), (43, 56, 69), 44 (A and B), 50, 58 and 59* (Parsons 1995). Concentrations detected in the soil/sludge samples from the ESI were compared to the NYSDEC Technical and Administrative Guidance Memorandum (TAGM) HWR-94-4046 guidance values. Six cPAHs, [benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, and dibenz(a,h)anthracene] were detected at concentrations above their respective TAGM values in one or more of the samples analyzed. Concentrations of 4-chloroaniline and several inorganic compounds (antimony, calcium, copper, lead, magnesium, mercury, silver, sodium, zinc, and cyanide) exceeded their respective TAGM values in at least one sample. The Army excavated the sludge piles and disposed of the material at an off-site landfill.

No VOCs, SVOCs, or pesticides/polychlorinated biphenyls (PCBs) were detected in the three ESI groundwater samples. Eighteen metals were detected in the groundwater samples. Iron, manganese, and sodium were the only metals detected in groundwater at concentrations above their respective NYSDEC Ambient Water Quality (AWQ) Class GA Standards.

Based on the results of the ESI, the Army performed a Time Critical Removal Action (TCRA) at SEAD-5. The purpose of the TCRA was to remove soil and sludge pile remnants that contained residual levels of six cPAHs and metals above soil guidance cleanup levels in the western half of the AOC. The TCRA was completed in three phases: Phase I occurred in August 2003, Phase II occurred in February 2005, and Phase III occurred in May 2005. After Phase I and Phase II, post-excavation confirmatory samples indicated that although cPAH and metal concentrations dropped from their original values, one or more cPAH compounds and one or more non-target metal concentrations were above the NYS TAGM recommended soil cleanup goals. After Phase III, post-excavation confirmatory samples indicated that the impacts at the site had been reduced and no further remediation was necessary; however, some elevated levels of individual contaminants remained within the site. The removal of cPAH-impacted soil was successfully completed as the majority of cPAH parameters were below NYS TAGM recommended cleanup goals. The cleanup of metal-impacted soil was successfully completed as well, as the average concentrations of target and non-

target metals were below either their recommended soil cleanup goals or the EPA Region 9 Preliminary Remediation Goals (PRGs).

Prior to the preparation of the Final Record of Decision for SEAD-5, the State of New York published and promulgated into law new General Remedial Program Requirements[1] that included new SCO values as an update to NYS TAGM recommended cleanup goals. Likewise, the EPA published the 2008 Regional Screening Levels (RSLs) as an update to the Region 9 PRGs. Confirmation and delineation soil sample results from SEAD-5 were compared to these updated SCOs and RSLs. This comparison indicated that seven cPAH and two metal concentrations exceeded RSLs for Industrial Soil, and of these nine hazardous substances, the 95th UCL concentrations for five of the cPAH compounds and one metal were above the EPA RSL value. The data also indicated that 15 PAH and eight metal concentrations exceeded NYS Part 375 Unrestricted Use SCOs in one or more of the confirmatory samples. The data also show that 10 PAH and three metal concentrations exceeded NYS Commercial SCOs. Five of the computed 95th UCL concentrations for the PAHs also exceeded their respective Commercial Use SCOs. Seven PAHs and one metal were observed in individual samples at concentrations surpassing NYS Industrial Use SCOs. The 95th UCL computed for four of the PAHs are higher than their respective Industrial Use SCO values.

Based on the comparison of the TCRA final results to the updated SCOs and RSLs, a risk assessment was conducted to assess if concentrations of hazardous substances identified in SEAD-5 posed potential risk or hazards to future users or occupants. Currently, SEAD-5 is unused and vacant, and land in the AOC is designated for future use as planned industrial/office development or warehousing. Based on the current and foreseeable land use, three future human receptors were identified: an industrial worker, a construction worker, and an adolescent trespasser. Soil exposure pathways analyzed in the TCRA risk assessment were the ingestion of soil, dermal contact with soil, and inhalation of ambient dust formed by soil resuspension.

Future receptor exposure to groundwater (e.g., via ingestion, inhalation, or dermal contact) were not characterized because these potential exposure pathways are considered incomplete. It is unlikely that groundwater will be used as a potable water source at the Depot. The aquifer that underlies the Depot has not been shown to be productive enough to supply sufficient water to fulfill potential potable water needs of future occupants. Further, the Depot has an existing alternate potable water source that is currently in use.

Results of the post-TCRA risk assessment indicate that the non-carcinogenic hazard indices for the industrial worker, construction worker, and the adolescent trespasser are all less than the EPA-preferred limit of 1. The calculated cancer risk for the construction worker and adolescent trespasser are within the EPA-recommended range (i.e., $1x10^{-4}$ to $1x10^{-6}$); the calculated cancer risk for the industrial worker is slightly above the EPA's recommended range at a level of $1.3x10^{-4}$, with the principal contaminant contributing to the risk being benzo(a)pyrene (BaP).

[1] See Title 6 New York Code of Rules and Regulations, Subpart 375-1 to 375-6

1.4 Report Organization

The first section of this report serves as an introduction to the CCR and provides SEAD-5 site history. **Section 2** details the pre-construction activities completed at SEAD-5. **Section 3** summarizes the construction activities, including the earthwork and confirmatory sample collection and analysis. **Section 4** addresses differences in actions conducted at SEAD-5 from the actions detailed in the Final Work Plan. **Section 5** presents a summary of the post-construction activities. **Section 6** presents the conclusions and recommendations. References are provided in **Section 7**.

Appendix A includes the daily reports; **Appendix B** provides weather data for the period of construction at the site; **Appendices C. D, and E** provide analytical results of the on-site and off-site borrow material used for the engineered cover at SEAD-5; **Appendix F** presents the air monitoring results from the period of construction; and **Appendix E** provides the photo index of construction activities at the AOC.

SECTION 2 - PRE-CONSTRUCTION ACTIVITIES

This section discusses the elements that comprise the pre-construction activities that occurred prior to the remedial action at SEAD-5 (i.e. the site). Work tasks frequently overlapped, but generally proceeded from site preparation and site construction, to verification of construction completion, site restoration, site demobilization, post completion actions, and documenting the results of the action.

2.1 Site Preparation

Site preparation was required prior to the commencement of construction activities at SEAD-5. Site preparation activities are described in detail below.

2.1.1 Pre-Construction Meeting

A project kick-off meeting was held at the Depot on July 6, 2009. Attendees included Parsons' Site Manager (SM), Site Health and Safety/Quality Control (SHS/QC Officer) and Project Manager (PM, by phone); the United States ACE Contracting Officer Representative (COR, by phone); the United States ACE New York District's Project Manager; and personnel of the earthwork subcontractor S. St. George Enterprises, Inc. (St. George). The focus of the kick-off meeting was to review the objectives and requirements of the Final Work Plan and to discuss the implementation of the construction activities. The meeting included a review of health and safety issues and construction quality management requirements, and a SEAD-5 site walk. SEDA, Parsons, and St. George coordinated administrative issues related to the project to ensure that the remedial action would execute smoothly.

2.1.2 Site Health and Safety

Field activities conducted during the remedial action were performed in accordance with the general health and safety plan (HASP), *Accident Prevention Plan and Generic Site Wide Health and Safety Plan for Seneca Army Depot Activity* (Parsons, 2005), which was prepared in accordance with Parsons' Safety, Health, and Risk Program (SHARP) manual. Prior to any construction activity Parsons' employees and St. George personnel attended the health and safety meeting. Additional site-specific health and safety requirements and procedures followed during SEAD-5 construction are provided in *Supplemental HASP in Final Remedial Action Operations Plan Seneca Army Depot Activity Former Sludge Waste Piles (SEAD-5)* (Parsons, 2009b).

2.1.3 Site Control and Security

SEAD-5 is located in the portion of the PID area that is close to offices occupied by Army caretaker personnel and is adjacent to land that is currently used by the Seneca County Highway Department as a storage depot and storage yard (see **Figure 2**). Access to the site was provided by the Army prior to and during construction activities.

Site security was enforced by the SHS/QC Officer (Brendan Baranek-Olmstead) who ensured that only authorized personnel were allowed to enter the work area. Mr. Baranek-Olmstead ensured that entry personnel wore the required level of personal protective equipment (PPE), were trained in accordance with the requirements of Title 29 Code of Federal Regulations (CFR) 1910.120, and were

on a current medical monitoring program. All visitors to the work site were required to report to the Site Manager and/or the SHS/QC Officer as soon as they arrived on-site. The presence of visitors to the site was recorded in the field logbook, including the visitor's name, company, date, time, and activities performed while on-site (see **Appendix A**).

2.1.4 Pre-Construction Site Inspection

On June 30, 2009 and July 1, 2009, prior to construction activities, Parsons delineated SEAD-5 limits. Using the known locations of the TCRA excavations, along with site maps and a global positioning system (GPS), Parsons confirmed the borders of SEAD-5. The locations of monitoring wells MW5-1 and MW59-6 in SEAD-5 were confirmed as well, and extent of soil stockpiles were delineated and their volume verified. See **Figure 3** for the layout of the AOC and the location of the soil stockpiles.

2.2 Mobilization

Field personnel and equipment were mobilized to the site on July 6, 2009. The subcontractor brought all necessary equipment to the site, arranged for the necessary utilities, and obtained all necessary permits. Travel rights-of-way between the work site, support zones, and equipment/material staging areas were established and marked. Access and egress routes were identified with signs to direct traffic and to minimize the impact of construction equipment movement on other activities at the Depot.

2.3 Clearing and Grubbing Requirements

Prior to the remedial action, the ground surface at SEAD-5 was partially covered with soil stockpiles, grass/weeds, and sporadic small trees/bushes. Prior to installing the cover, the grass/weeds were mowed to 1 inch or shorter, and any small trees or shrubs were removed. (See section *On-site and Off-site Borrow Material* for a discussion of the soil stockpiles.)

2.4 Well Decommissioning

In accordance with the Final Work Plan groundwater monitoring wells MW5-1 and MW59-6, located in the SEAD-5 work area, were abandoned and not replaced. Monitoring wells MW5-1 and MW59-6 were closed in accordance with NYSDEC well abandonment procedures. Both wells were accessed and a drill rod was used to punch out the bottom of the well upriser. A Portland cement/bentonite/water slurry, mixed in accordance with State requirements, was then prepared and pumped and tremied down into the open well screen and upriser to a level that was approximately 6 to 12 inches below the top of the well upriser. Once the well upriser was filled, a cable was attached to the upriser and tied off to the excavator bucket and the upriser and screen were slowly pulled from the ground. As each section of the well was raised, additional grout was added to ensure that the grout level in the upriser stayed at a level of approximately 6 to 12 inches below the top. Once all of the upriser and well screen were removed, additional grout was pumped into the hole to raise the final level of the grout to a depth of roughly 36 inches below grade. All components of the well security (i.e., concrete pad, protective casing, and surrounding bollards) were then removed, and additional grout slurry was added to bring the final elevation of grout up to approximately 36-inches below grade. Several nails were then dropped onto the top of the grout above the former well to mark its

location and ease locating it later on with a metal detector should the need arise. Orange snow fence was cut and placed over the grout, nails, and soil, and then native soils were used to fill the void left once the well installation was removed. Once backfilled, the soil overlying the well installation was compacted.

Components of the well installation (e.g. upriser and screen, concrete collar, bollards, protective casing and cap) were then recovered and placed into a dumpster for disposal at the local landfill.

2.5 Identification of Obstructions and Utilities

Although no excavation took place at SEAD-5, as a measure of caution St. George contacted the Underground Facilities Protective Organization (UFPO), also known as Dig Safely New York, and worked with Parsons and the Army to locate utilities and other obstructions at SEAD-5. UFPO and the Army confirmed that no public underground utilities exist at SEAD-5. Two utility poles for electrical power distribution exist near SEAD-5 (see **Figure 3**). Electrical wires span between the two poles and metal wiring anchors these poles to the ground surface. The overhead wires did not interfere with work performed at the site; the utility poles limited the use of the excavator in their immediate vicinity.

2.6 Erosion and Sedimentation Controls

Temporary erosion and sedimentation controls were not installed at SEAD-5. These controls were unnecessary since the minimal amount of precipitation during the period of construction did not require such controls. See **Appendix B** for data summarizing weather conditions during construction activities.

2.7 Site Survey

Prior to the initiation of construction activities, a preconstruction survey was conducted with a GPS to identify and stake the area for placement of the engineered cover material. Specifically, stakes were set to delineate the edge of the 1 foot deep cover and the location where the soil cap ends. Stakes were also set at the locations of the five TCRA samples that had the highest concentrations of cPAHs that most significantly exceeded the NYSDEC Restricted Industrial Use SCOs.

2.8 On-site and Off-site Borrow Material

The soil cover installed at SEAD-5 during the remedial action consists of three layers: the initial cover (see **Figure 4**), the demarcation fabric, and the final cover (see **Figure 5**). Prior to the installation of these cover layers at SEAD-5 it was confirmed that the final cover met NYSDEC Restricted Commercial Use SCOs. See **Table 1** for a comparison of all fill material to NYSDEC Restricted Commercial Use SCOs.

2.8.1 Existing SEAD-5 Surface Soil

The quality of surficial soil at SEAD-5 prior to the remedial actions is known and has been documented in the *ROD for Five Former Solid Waste Management Units (SWMUs) SEAD-1, Hazardous Waste Container Storage Facility; SEAD-2, PCB Transformer Storage Facility; SEAD-5, Sewage Sludge Waste Piles; SEAD-24, Abandoned Powder Burn Pit; and, SEAD-48, Row E0800*

Pitchblende Storage Igloos, Seneca Army Depot Activity, Romulus, New York, Final (Parsons, 2009a). Therefore, in accordance with the Final Work Plan, no samples were collected from surface soil at SEAD-5.

2.8.2 Initial Cover

Stockpiled soil generated during the SEAD-59/71 remedial actions was used as the initial cover layer at SEAD-5. The SEAD-59/71 stockpiles were staged on plastic sheeting at various locations in, and adjacent to, SEAD-5. According to the Final Work Plan, approximately 5,428 cy of stockpiled soil was staged at SEAD-59. Prior to relocating any stockpile material to SEAD-5, Parsons and St. George confirmed with the Army that only those stockpiles that originated from the SEAD-59/71 remedial action projects, and not others, were used as initial fill at SEAD-5. SEAD-59/71 stockpiles could be distinguished from others that had been subsequently staged in the area based on the presence of plastic beneath the piles that originated from the remedial action work.

In accordance with the Final Work Plan, samples were not collected from the stockpiles associated with the SEAD-59/71 TCRA. The character and quality of this material has been determined and is documented in the *Draft Final, Phase II Remedial Investigation Report, Fill Area West of Building 135 (SEAD-59) and the Alleged Paint Disposal Area (SEAD-71)* (Parsons, 2006). This soil was compared to the NYSDEC Restricted Commercial Use SCOs. The table below summarizes the results that exceeded the SCOs.

Parameter	Unit	Max Detected value	NYSDEC Restricted Commercial Use SCO	Number of detects above the SCO
Benzo(a)anthracene	ug/kg	14,000	5,600	16
Benzo(a)pyrene	ug/kg	16,000	1,000	48
Benzo(b)fluoranthene	ug/kg	11,000	5,600	13
Dibenz(a,h)anthracene	ug/kg	2,900	560	41
Indeno(1,2,3-cd)pyrene	ug/kg	8,000	5,600	6
Lead	mg/kg	1,440	1,000	1

The majority of the concentrations detected above NYSDEC Restricted Commercial Use SCOs are cPAHs; one concentration exceeds the lead SCO. Based on sampling, analysis, and a human health risk assessment, the stockpiled soil was found to contain residual levels of hazardous substances including PAHs, cPAHs, and selected metals at concentrations that do not pose unacceptable risk to future commercial and industrial occupants of the area. Additionally, the stockpiled soil was determined not to be a characteristic hazardous waste. As such, this material had been retained by the Army pending its future use as fill at another site where the designated use was either commercial or industrial. During the development and finalization of the Proposed Plan and the Record of Decision for SEAD-5, the Army, the EPA, and the NYSDEC agreed that this would be used as part of the soil cover constructed over cPAH contaminated soils at the site. At the completion of the application and

grading of the initial soil cover layer, 68,720 square feet (1.57 acres) of land within SEAD-5 was covered.

Analytical data describing the quality of the initial cover layer are provided in **Appendix C**. Miscellaneous debris (e.g., construction waste, demolition rubble, waste metal, large cobbles, etc.) was not present in the soil stockpiles.

2.8.3 Final Cover

The final cover layer at SEAD-5 consists of fill derived from two sources

1) Crushed concrete and gravel originally staged in SEAD-16 and SEAD-17, and
2) Bank run sand from an off-site borrow source.

The clean, crushed, concrete and gravel derives from abandoned/dilapidated buildings demolished at various locations in the Depot. Any hazardous or potentially hazardous items in these buildings were separated from non-hazardous building material prior to the demolition of the buildings. Information on these buildings was documented in the draft *Completion Report for Building Cleaning and Building Demolition* (Parsons, 2008). The gravel is a combination of by-products from historic Depot maintenance activities and extra material that accumulated at the Depot throughout its use.

In accordance with the requirements of the Final Work Plan, two representative samples of the clean crushed concrete and 1 representative sample of the gravel (i.e., the on-site borrow material) were submitted for analysis to determine acceptability as suitable backfill material (i.e., meets NYSDEC Restricted Commercial Use SCOs). The on-site borrow material was sampled for VOCs by EPA Method SW846 8260B, semivolatile organic compounds (SVOCs) by EPA Method SW846 8270C, pesticides by EPA Method SW846 8081A, PCBs by EPA Method SW846 8082, and metals by EPA Method SW846 6010B/7471A by Columbia Analytical Services, Inc. Results of the chemical characterization samples were compared to NYSDEC Restricted Commercial Use SCOs, and reviewed and approved by the EPA and NYSDEC. The resulting analytical data confirms that the identified borrow material is suitable for use as cover material in accordance with New York State Codes Rules and Regulations (NYCRR) Part 375, Table 375-6.8(b): Commercial Use SCOs as concentrations of VOCs, SVOCs, pesticides/PCBs, and metals fall below these objectives. Analytical results for this backfill material, chains of custody, case narratives for laboratory sample delivery groups, and the data validation report are provided in **Appendix D**. The analytical results were validated in a manner that is consistent with EPA Region 2 Standard Operating Procedures (SOPs). In accordance with the Final Work Plan, the on-site borrow material used as cover material at SEAD-5 is free of debris, rubble, wood, chemicals, and stones larger than three inches.

The bank run sand was obtained from Riccelli Enterprise, Inc., Source 4-71F in Phelps, NY. Riccelli submitted a sample of the fill material to TestAmerica for analysis of VOCs by EPA SW846 Method 8260B, SVOCs by EPA SW846 Method 8270D, PCBs by EPA SW846 Method 8082, and total metals by EPA SW846 Method 6000/7000. Riccelli also submitted a fill sample to PW Laboratories which performed a sieve analysis by ASTM Method C136 and C117 and a compaction test by ASTM Method D1557. The analytical results meet the acceptance criteria for borrow source material

detailed in the Final Work Plan. Analytical results for this off-site borrow source material are provided in **Appendix E**.

SECTION 3 - CONSTRUCTION ACTIVITIES

This section documents construction-phase activities associated with the Final Work Plan at SEAD-5. Construction activities began with mobilization of personnel and equipment by Parsons and the selected earthwork subcontractor, St. George, on June 30, 2009. All construction activities were completed by July 14, 2009, at which time Parsons and St. George demobilized from the site. The surface of SEAD-5 was raked by a landscaping crew in early November 2009, and seed (i.e., winter wheat) was applied to establish a vegetative cover. All construction activities that took place at SEAD-5 were documented in daily reports (see **Appendix A**).

3.1 Site Preparation

3.1.1 Mobilization

Field equipment was mobilized to the site on June 30, 2009. Equipment included a bull dozer, an excavator, and a Skidster. On July 6, 2009 two dump trucks were brought to the site; on July 7, 2009 one roll-off box and a second bull dozer were brought to the site; on July 13, 2009 two tandems were brought to the site; and on July 14, 2009 one 10-ton compactor was brought to the site.

3.1.2 Health and Safety during Construction

At the start of each work day, site workers attended daily health and safety briefings conducted by the SHS/QC Officer. Site visitors were required to review the project Health and Safety Plan, and attend a site-specific health and safety briefing. These "tailgate" meetings were mandatory for all St. George and Parsons personnel working at the site. At each meeting, the SHS/QC Officer discussed PPE needed for the day and any potential hazards associated with the day's scheduled activities. The topics covered and names of attendees at each daily briefing were documented and the records were stored by the SHS/QC Officer in the project files.

3.2 Dust Control and Air Monitoring

Two dust monitors were installed at SEAD-5 by Parsons personnel on July 7, 2009. The dust monitors functioned during the construction activities completed between July 7 and July 9, 2009. Dust monitoring was conducted using two DataRAM-4000 dust monitors. One dust monitor was positioned upwind of the work area, and the other was positioned downwind of the work area.

In accordance with the Final Work Plan, site personnel implemented the necessary controls to suppress dust generated during the remedial action. Site vehicles were driven below 10 mph throughout the duration of construction activities. Wetting equipment, applying water to buckets during soil relocation, and applying water spray during soil handing activities was unnecessary as wind did not cause excessive dusting. See **Appendix F** for dust monitoring results from the period of construction activities at SEAD-5.

3.3 Engineered Cover Construction

3.3.1 Mobilization

As stated in **Section 2**, prior to any construction activity at SEAD-5, a topographic survey of the site occurred on June 30 and July 1, 2009. At the close of the topographic survey, stakes had been placed at the corners of the soil cap where the native soil meets the engineered cover, at the corners of the final grade, and at the location of five SEAD-5 TCRA soil samples where the highest concentrations of cPAHs were found. No work was performed at the site between July 2 and July 5, 2009. Photographs of site activities are shown in **Appendix G**.

3.3.2 Construction of Initial Soil Cover/Disperse Soil

Construction of the soil cover began by spreading the SEAD-59/71 stockpiled soil located immediately adjacent to the SEAD-5 TCRA excavation sites out within the staked limits of the engineered cover. This material was pushed out from the stockpile location and spread across the staked area using a bull dozer. Stockpiled soil that was staged in areas across the unnamed dirt road from the TCRA excavation site was excavated from the stockpile locations and loaded into haul trucks which then drove to the northern edge of the TCRA excavation site where the soil was dumped within the footprint of the engineered cover. The stockpile soil was dispersed in 6- to 12-inch loose lifts and was not excessively wet or dry at the time of placement. Each layer was spread out by bull dozer to cover the entire staked area of the engineered cover area. The material was spread out in a manner that promotes positive drainage away from the site, with surface flow directed toward the existing man-made drainage channels or the southern and western portions of the construction area. In accordance with the Final Work Plan, this initial soil cover was spread so that it extended 10 feet beyond the sampling locations where concentrations exceeding comparative guidance values were found, and where soils posing potential health risks to future workers were located. Once the initial layer of fill was dispersed and graded to promote positive flow away from the covered site, St. George personnel ran the excavator across the rough surface in a repetitive north-to-south-to-north direction to compact the cover layer. The initial compaction sequence was followed by a second in which the excavator ran across the compacted surface in an east-to-west-to-east manner. Approximately 5,620 cubic yards of SEAD-59/71 stockpiled soil was dispersed at the SEAD-5 site (see **Figure 4**). The installation of the initial layer began on July 6, 2009 and was completed by July 8, 2009.

3.3.3 Installation of Demarcation Fabric

Following completion of the spreading, grading, and compaction of the initial cover material, a layer of demarcation fabric was laid over the initial soil cover. Orange “snow” fence was used as the demarcation fabric, and this was applied by rolling out sections of fencing material that were then over covered with final borrow materials.

3.3.4 Construction of Final Cover

Between July 8, 2009 and July 13, 2009, alternating series of demarcation fabric lay-out and applications of final borrow material cover occurred at SEAD-5. Prior to installing the final cover

layer, a grid of stakes that were marked at 1 foot above initial soil layer level was placed in the soil cap. The 1-foot marking specified the desired final grading level of the top cover layer. The approved borrow material was dispersed in 6-inch lifts across the area; at the time of dispersal, the approved borrow materials were not excessively wet or dry. Once all lifts had been laid and compacted using a 10 ton vibratory roller, the final cover layer was 1 foot thick, which was verified by comparing the final grade elevation to the indicator points on the marked stakes. Refer to **Appendix E** for photographs documenting the construction of the soil cover.

On July 13, 2009, the final cover material (e.g., on- and off-site borrow material) extended 10 feet beyond the initial cover material in accordance with the Final Work Plan. The final cover was graded to promote positive drainage away from the AOC as shown in **Figure 5**. At the end of construction, approximately 3,440 tons (~ 2,300 cubic yards) of off-site borrow material and 600 to 650 cubic yard of crushed concrete and gravel were used to cover the site (see **Figure 6**).

The installed, engineered soil cover is not intended to be impervious, and allows storm event or snow melt water to infiltrate through the cover materials. Storm water that flows off the covered area can flow onto the adjacent soils/grassy areas where it may pool and infiltrate or flow away from the covered area per the natural terrain.

3.4 Demobilization

The crew demobilized from the site on July 14, 2009. Demobilization activities conducted during construction activities included the following:

- Demobilization of all equipment and materials,
- A final inspection and housekeeping sweep of the work areas,
- Removal of all trash and waste materials, and
- Demobilization from the site of all field personnel.

3.4.1 Waste Disposal

Work-derived waste (WDW) included polyethylene liners and PPE. This waste, and miscellaneous trash generated during field activities was disposed in a dumpster located at the Depot.

3.5 Construction Costs

The total construction costs for the remedial action at SEAD-5 were approximately $172,800. The cost breakdown is as follows:

Engineering/Oversight	$88,000
Construction	$82,600
Analytical Laboratory	$2,200

SECTION 4 – DEVIATION FROM THE FINAL WORK PLAN

4.1 SEAD-59.71 Stockpile Volume

The volume of SEAD-59/71 stockpile soil anticipated prior to construction is presented in the Final Work Plan as 5,428 cy. Actual volume of SEAD-59/71 stockpile soil spread at the site during construction varied from this amount as 5,620 cy of soil were spread (see **Figure 3)**. This represents a difference of 192 cy (i.e., 3%).

4.2 Demarcation Fabric Roll Out

As detailed in the Final Work Plan, the demarcation fabric was to be rolled out over the entire area of the initial cover layer before any of the final cover was applied. The process of demarcation fabric lay-out and final cover spreading completed during construction activities varied from the method detailed in the Final Work Plan. As discussed in Section 3, the process of demarcation fabric lay-out and final cover spreading occurred in a piece-by-piece method. In practice, four to five, 4 by 100-foot rolls of snow fence were laid out next to each other then covered with an initial layer of final cover soil. This process repeated until the entire area of initial fill was covered by demarcation fabric and final cover.

The reason for this deviation in methodology is noted: wind at the site prevented the layout of all the demarcation fabric at once. Once applied, the demarcation fabric is easily picked up by breezes or wind if left uncovered for an extended period of time. As such, it was best to lay out the demarcation fabric in sections rather than lay out all of the demarcation fabric at once.

4.3 Radiological Analyses

The inclusion of radiological analyses in the listing of tests that were to be run on the on- and off-site borrow material in the *SEAD-5 Remedial Action Operations Plan* (Parsons, 2009b) was an error. There is no requirement to conduct radiological analyses at locations where radiological contaminants have not been identified and are not suspected to be present. The history of SEAD-5 did not suggest that radiological materials were ever used, handled, or stored within the bounds of the area of concern. Furthermore, the buildings from which the debris originated prior to being crushed and placed into the piles at SEAD-16 and SEAD-17 are known. None of these buildings were associated with any unit or activity that was the previous location where radioactive materials were either managed, stored, or handled.

4.4 Re-Vegetation of Engineered Cover

According to the Final Work Plan, re-vegetation of the soil cover was not anticipated, since a possible future use of the area was as a hard-stand parking/equipment staging area. However, since the final height of the engineered cover layer is too high for this purpose, the Army requested that the soil cover be seeded that would stabilize the area against erosion. Seeding of the area with winter wheat took place in early November 2009.

SECTION 5 – POST-CONSTRUCTION ACTIVITIES

5.1 Post-Construction Completion Inspections

The top of the engineered cover was seeded with winter wheat to help prevent erosion at the site. Post-construction maintenance consists of routine inspections of the site (and repair or further seeding of the final cover if necessary) to ensure site re-vegetation. Seeding of the engineered cover was completed at the beginning of November 2009 by DeMaria Nurseries. The site will be inspected in spring and summer of 2010 to verify the growth of vegetation. If growth is not established, the area will be re-seeded as necessary.

5.2 Annual Inspections by the Army

As detailed in the Final Work Plan and discussed in **Section 1**, the purpose of the engineered cover at SEAD-5 is to prohibit access and exposure to soil that contains concentrations of cPAHs that are projected to pose an elevated carcinogenic risk to future site occupants and that exceed NYSDEC Restricted Industrial Use SCOs. Post-construction maintenance required of the Army consists of routine inspections of the integrity of the soil cover for signs of erosion or breaching by animals. It is the responsibility of the Army to inspect the engineered cover periodically to ensure that the LUC that prohibits unauthorized excavations or activities that might compromise the integrity of the engineered cover is fulfilled.

As detailed in *Record of Decision for Five Former SWMUs – SEADs 1, 2, 5, 24, and 48* (Parsons, April 2009) and discussed in **Section 1**, two additional LUCs exist at SEAD-5:

- Prohibiting residential housing, elementary and secondary schools, childcare facilities and playgrounds until unrestricted use and unlimited exposure criteria are attained within the areas of concern (AOCs); and,
- Prohibiting access to and use of groundwater at SEAD-5 until its quality allows for unrestricted use and unlimited exposures.

Periodically, the Army will ensure through site inspection visits that the land is not used for any unauthorized purpose as described in the above LUCs. The Army will implement, monitor, maintain, and periodically report on the SEAD-5 conditions and LUCs to ensure that future use of the site is consistent with allowable exposures.

The final inspection of the SEAD-5 contract will be completed by the Army once the contractor has achieved response complete, which includes acceptance of the work by the EPA and NYSDEC.

SECTION 6 – CONCLUSIONS AND RECOMMENDATIONS

6.1 Conclusions

Based on the goals outlined in the Final Work Plan, periodic inspections of the site by the Army or the future owner of the land are required at SEAD-5. This continued action will ensure that the goals and LUCs outlined in the Final Work Plan are achieved (see **Section 5**).

Based on the construction activities at SEAD-5, the Army has concluded the following:

- At SEAD-5 5,620 cy of stockpiled SEAD-59/71 soil was spread as the initial layer of the engineered cover. At least 1 foot of combined SEAD-16/17 crushed concrete and gravel and off-site borrow material covers the stockpile soil above a layer of demarcation fabric. This final cover layer at SEAD-5 meets the NYSDEC Commercial Use SCOs. In accordance with the Final Work Plan, 1.6 acres of surface soil at SEAD-5 were covered by the engineered soil cover.

The remedial action at SEAD-5 has been completed satisfactorily and no further construction activity is required at the AOC. The engineered cover was installed in full accordance with the requirements set forth in the Final Work Plan for SEAD-5, and the engineered cover fully conceals the soil at SEAD-5 that poses potential risk to future human receptors at the site.

6.2 Recommendations

Re-vegetation of the site is intended to mitigate deleterious effects of erosion and runoff on the engineered cover at SEAD-5. It is recommended that periodic inspections of the cover at SEAD-5 throughout the spring and summer of 2010 continuing on a quarterly schedule until vegetation is established then periodically to ensure the continued presence of vegetation.

Groundwater monitoring is not required at SEAD-5. According to CP-43: Groundwater Monitoring Well Decommissioning Policy issued by the State of New York (November, 2009), wells that are "no longer needed" for which "re-use for another program is not an option" should be decommissioned. The Army installed three wells, MW5-1, MW5-2, and MW5-3, at SEAD-5 during performance of environmental investigations at this area of concern. Monitoring wells MW5-1 and MW59-6 were removed during the construction of the soil cover at SEAD-5. MW5-3 was removed during the performance of the Time-Critical Removal Action for SEAD-59. The Army intends to abandon monitoring well MW5-2 in accordance with CP-43: Groundwater Monitoring Well Decommissioning Policy during an upcoming separate contract action that will abandon unnecessary monitoring wells at many areas of concern at the Depot in 2010.

The Army will impose three land use controls on SEAD-5 that will prohibit various uses of land and groundwater at SEAD-5 (see **Section 5)**. The Army will prepare, submit, and implement a land use control remedial design (LUC RD) that details and implements the three LUCs. Additionally, it is recommended that the Army or the future owner of the land conduct periodic inspections and issue certifications to ensure ongoing LUC compliance.

The details of implementing the SEAD-5 remedy and LUC will be provided in the Land Use Control Remedial Design. The LUC objectives for SEAD5, as identified in the ROD, are to:

- Prohibit unauthorized excavation or other activities that disturb the constructed soil cover;
- Prevent access or use of land within SEAD-5 for residential housing, elementary or secondary schools, childcare facilities and playgrounds until unrestricted use and unlimited exposure criteria are attained within the AOC; and,
- Prevent access to and use of groundwater until its quality allows for unrestricted use and unlimited exposures.

The LUC RD Amendment details that the LUC implementation actions at SEAD-5 may include lease restrictions, an environmental easement, deed restrictions, zoning, annual certification, and a five-year review. The periodic certification will be submitted to the New York State Department of Environmental Conservation (NYSDEC) and United States Environmental Protection Agency (USEPA) to document that the LUCs at SEAD-5 are unchanged and that no activities have occurred that impair or violate the ability of the LUCs to protect the public health and environment. Additionally, a five-year review will be conducted to evaluate the effectiveness of the selected remedy for SEAD-5.

SECTION 7 – REFERENCES

NYSDEC. 1998 (with 2000 and 2004 Addendum). Ambient Water Quality Standard and Guidance Values and Groundwater Effluent Limitations.

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Parsons, 2009b. Remedial Action Operations Plan, Former Sludge Waste Piles (SEAD-5), Seneca Army Depot Activity. Final. October 2009.

United States Environmental Protection Agency (EPA) Region 2. Region 2 RCRA and CERCLA Data Validation Standard Operating Procedures (SOPs). On-line resources at http://www.epa.gov/region02/qa/documents.htm.

TABLES

Table 1
Summary of Soil Cover Results
SEAD-5 Construction Completion Report
Seneca Army Depot Activity

Parameter	Units	Maximum Value	Frequency of Detection	NYSDEC Restricted Commercial	Number of Exceedances	Number of Times Detected	Number of Samples Collected
Volatile Organic Compounds							
1,1,1-Trichloroethane	UG/KG	0	0%	500000	0	0	4
1,1,2,2-Tetrachloroethane	UG/KG	0.36	25%		0	1	4
1,1,2-Trichloro-1,2,2-Trifluoroethane	UG/KG	0	25%		0	0	0
1,1,2-Trichloroethane	UG/KG	0	0%		0	0	4
1,1-Dichloroethane	UG/KG	0	0%	240000	0	0	4
1,1-Dichloroethene	UG/KG	0	0%	500000	0	0	4
1,2,3-Trichloropropane	UG/KG	0	0%		0	0	0
1,2,4-Trichlorobenzene	UG/KG	0	0%		0	0	0
1,2-Dibromo-3-chloropropane	UG/KG	0	0%		0	0	0
1,2-Dibromoethane	UG/KG	0	0%		0	0	0
1,2-Dichlorobenzene	UG/KG	0	0%	500000	0	0	0
1,2-Dichloroethane	UG/KG	0	0%	30000	0	0	4
1,2-Dichloropropane	UG/KG	0.33	25%		0	1	4
1,3-Dichlorobenzene	UG/KG	0	25%	280000	0	0	0
1,3-Dichloropropane	UG/KG	0	25%		0	0	0
1,4-Dichlorobenzene	UG/KG	0	25%	130000	0	0	0
Acetone	UG/KG	4.3	75%	500000	0	3	4
Benzene	UG/KG	0.34	25%	44000	0	1	4
Bromodichloromethane	UG/KG	0	0%		0	0	4
Bromoform	UG/KG	0	0%		0	0	4
Carbon disulfide	UG/KG	10	25%		0	1	4
Carbon tetrachloride	UG/KG	0	0%	22000	0	0	4
Chlorobenzene	UG/KG	0	0%	500000	0	0	4
Chlorodibromomethane	UG/KG	0	0%		0	0	4
Chloroethane	UG/KG	0	0%		0	0	4
Chloroform	UG/KG	0.37	25%	350000	0	1	4
Cis-1,2-Dichloroethene	UG/KG	0.35	25%	500000	0	1	4
Cis-1,3-Dichloropropene	UG/KG	0	0%		0	0	4
Cyclohexane	UG/KG	0	0%		0	0	0
Dichlorodifluoromethane	UG/KG	0	0%		0	0	0
Ethyl benzene	UG/KG	0	0%	390000	0	0	4
Isopropylbenzene	UG/KG	0	0%		0	0	0
Meta/Para Xylene	UG/KG	0	0%	500000	0	0	3
Methyl Acetate	UG/KG	0	0%		0	0	0
Methyl Tertbutyl Ether	UG/KG	0	0%	500000	0	0	1
Methyl bromide	UG/KG	0	0%		0	0	4
Methyl butyl ketone	UG/KG	0	0%		0	0	4
Methyl chloride	UG/KG	0	0%		0	0	4
Methyl cyclohexane	UG/KG	0	0%		0	0	0
Methyl ethyl ketone	UG/KG	0	0%	500000	0	0	4
Methyl isobutyl ketone	UG/KG	0	0%		0	0	4
Methylene chloride	UG/KG	0	0%	500000	0	0	4
Ortho Xylene	UG/KG	0	0%	500000	0	0	3
Styrene	UG/KG	0	0%		0	0	4
Tetrachloroethene	UG/KG	0	0%	150000	0	0	4
Toluene	UG/KG	0	0%	500000	0	0	4
Total Xylenes	UG/KG	10	100%	500000	0	1	1
Trans-1,2-Dichloroethene	UG/KG	0	0%	500000	0	0	4
Trans-1,3-Dichloropropene	UG/KG	0	0%		0	0	4
Trichloroethene	UG/KG	0	0%	200000	0	0	4
Trichlorofluoromethane	UG/KG	0	0%		0	0	1
Vinyl chloride	UG/KG	0	0%	13000	0	0	4
Semivolatile Organic Compounds							
1,1'-Biphenyl	UG/KG	0	0%		0	0	0
1,2,4-Trichlorobenzene	UG/KG	0	0%		0	0	3
1,2-Dichlorobenzene	UG/KG	0	0%	500000	0	0	3
1,3-Dichlorobenzene	UG/KG	0	0%	280000	0	0	3
1,4-Dichlorobenzene	UG/KG	0	0%	130000	0	0	3
2,2'-oxybis(1-Chloropropane)	UG/KG	0	0%		0	0	0
2,4,5-Trichlorophenol	UG/KG	0	0%		0	0	3
2,4,6-Trichlorophenol	UG/KG	0	0%		0	0	3
2,4-Dichlorophenol	UG/KG	0	0%		0	0	3
2,4-Dimethylphenol	UG/KG	0	0%		0	0	3
2,4-Dinitrophenol	UG/KG	0	0%		0	0	3
2,4-Dinitrotoluene	UG/KG	430	33%		0	1	3

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Seneca Army Depot Activity

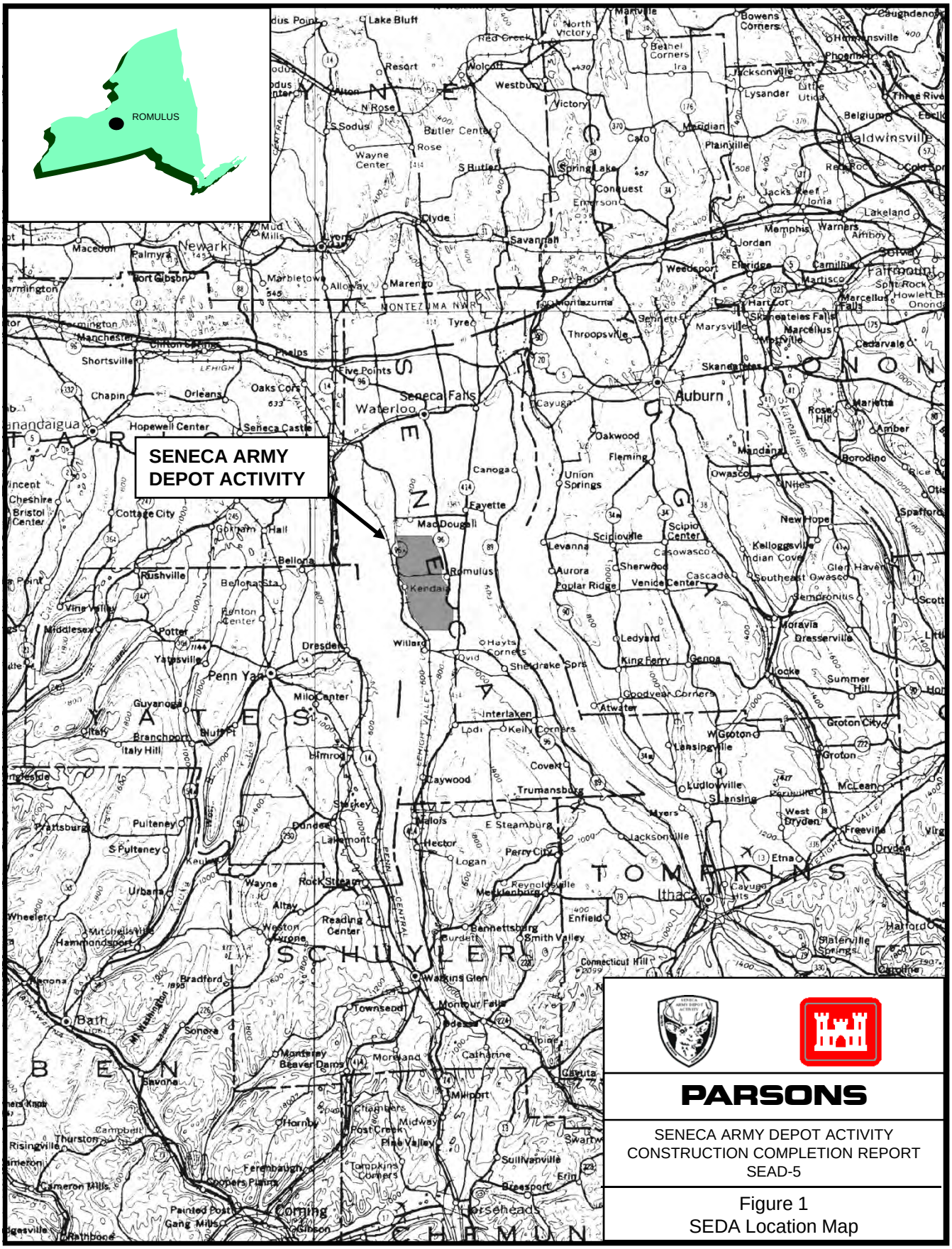
Parameter	Units	Maximum Value	Frequency of Detection	NYSDEC Restricted Commercial	Number of Exceedances	Number of Times Detected	Number of Samples Collected
2,6-Dinitrotoluene	UG/KG	0	0%		0	0	3
2-Chloronaphthalene	UG/KG	0	0%		0	0	3
2-Chlorophenol	UG/KG	0	0%		0	0	3
2-Methylnaphthalene	UG/KG	0	0%		0	0	3
2-Methylphenol	UG/KG	0	0%	500000	0	0	3
2-Nitroaniline	UG/KG	0	0%		0	0	3
2-Nitrophenol	UG/KG	0	0%		0	0	3
3,3'-Dichlorobenzidine	UG/KG	0	0%		0	0	3
3&4-Methylphenol	UG/KG	0	0%		0	0	1
3-Nitroaniline	UG/KG	0	0%		0	0	3
4,6-Dinitro-2-methylphenol	UG/KG	0	0%		0	0	3
4-Bromophenyl phenyl ether	UG/KG	0	0%		0	0	3
4-Chloro-3-methylphenol	UG/KG	0	0%		0	0	3
4-Chloroaniline	UG/KG	0	0%		0	0	3
4-Chlorophenyl phenyl ether	UG/KG	0	0%		0	0	3
4-Methylphenol	UG/KG	0	0%	500000	0	0	0
4-Nitroaniline	UG/KG	0	0%		0	0	3
4-Nitrophenol	UG/KG	0	0%		0	0	3
Acenaphthene	UG/KG	0	0%	500000	0	0	3
Acenaphthylene	UG/KG	51	33%	500000	0	1	3
Acetophenone	UG/KG	0	33%		0	0	0
Aniline	UG/KG	0	0%		0	0	1
Anthracene	UG/KG	100	33%	500000	0	1	3
Atrazine	UG/KG	0	33%		0	0	0
Benzaldehyde	UG/KG	0	33%		0	0	0
Benzo(a)anthracene	UG/KG	240	33%	5600	0	1	3
Benzo(a)pyrene	UG/KG	250	33%	1000	0	1	3
Benzo(b)fluoranthene	UG/KG	200	33%	5600	0	1	3
Benzo(ghi)perylene	UG/KG	220	33%	500000	0	1	3
Benzo(k)fluoranthene	UG/KG	200	33%	56000	0	1	3
Benzyl alcohol	UG/KG	100	67%		0	2	3
Benzoic Acid	UG/KG	0	0%		0	0	1
Bis(2-Chloroethoxy)methane	UG/KG	0	0%		0	0	3
Bis(2-Chloroethyl)ether	UG/KG	0	0%		0	0	3
Bis(2-Chloroisopropyl)ether	UG/KG	0	0%		0	0	3
Bis(2-Ethylhexyl)phthalate	UG/KG	0	0%		0	0	3
Butylbenzylphthalate	UG/KG	0	0%		0	0	3
Caprolactam	UG/KG	0	0%		0	0	0
Carbazole	UG/KG	0	0%		0	0	2
Chrysene	UG/KG	250	33%	56000	0	1	3
Di-n-butylphthalate	UG/KG	0	0%		0	0	3
Di-n-octylphthalate	UG/KG	0	0%		0	0	3
Dibenz(a,h)anthracene	UG/KG	60	33%	560	0	1	3
Dibenzofuran	UG/KG	0	0%	350000	0	0	3
Diethyl phthalate	UG/KG	0	0%		0	0	3
Dimethylphthalate	UG/KG	0	0%		0	0	3
Diphenylamine	UG/KG	0	0%		0	0	1
Fluoranthene	UG/KG	450	33%	500000	0	1	3
Fluorene	UG/KG	0	0%	500000	0	0	3
Hexachlorobenzene	UG/KG	0	0%	6000	0	0	3
Hexachlorobutadiene	UG/KG	0	0%		0	0	3
Hexachlorocyclopentadiene	UG/KG	0	0%		0	0	3
Hexachloroethane	UG/KG	0	0%		0	0	3
Indeno(1,2,3-cd)pyrene	UG/KG	190	33%	5600	0	1	3
Isophorone	UG/KG	0	0%		0	0	3
N-Nitrosodimethylamine	UG/KG	0	0%		0	0	2
N-Nitrosodiphenylamine	UG/KG	0	0%		0	0	2
N-Nitrosodipropylamine	UG/KG	0	0%		0	0	3
Naphthalene	UG/KG	36	33%	500000	0	1	3
Nitrobenzene	UG/KG	0	0%		0	0	3
Pentachlorophenol	UG/KG	0	0%	6700	0	0	3
Phenanthrene	UG/KG	190	33%	500000	0	1	3
Phenol	UG/KG	0	0%	500000	0	0	3
Pyrene	UG/KG	350	33%	500000	0	1	3
Pyridine	UG/KG	0	33%		0	0	0

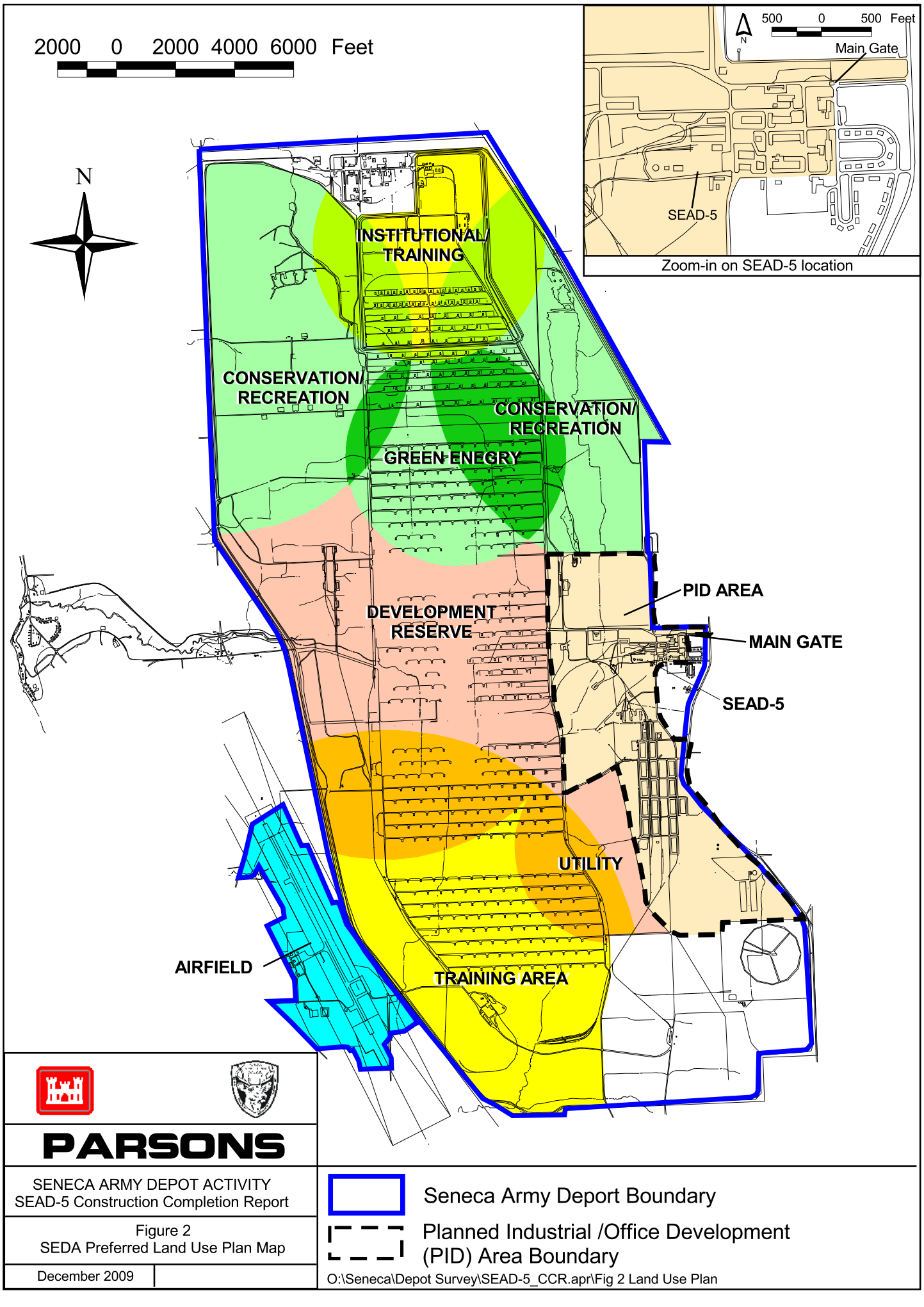
Table 1
Summary of Soil Cover Results
SEAD-5 Construction Completion Report
Seneca Army Depot Activity

Parameter	Units	Maximum Value	Frequency of Detection	NYSDEC Restricted Commercial	Number of Exceedances	Number of Times Detected	Number of Samples Collected
Pesticides							
4,4'-DDD	UG/KG	0	0%	92000	0	0	2
4,4'-DDE	UG/KG	6.2	50%	62000	0	1	2
4,4'-DDT	UG/KG	12	50%	47000	0	1	2
Aldrin	UG/KG	0	0%	680	0	0	2
Alpha-BHC	UG/KG	0	0%	3400	0	0	2
Alpha-Chlordane	UG/KG	2.2	50%	24000	0	1	2
Beta-BHC	UG/KG	0	0%	3000	0	0	2
Delta-BHC	UG/KG	0	0%	500000	0	0	2
Dieldrin	UG/KG	0	0%	1400	0	0	2
Endosulfan I	UG/KG	0	0%	200000	0	0	2
Endosulfan II	UG/KG	0	0%	200000	0	0	2
Endosulfan sulfate	UG/KG	0	0%	200000	0	0	2
Endrin	UG/KG	0	0%	89000	0	0	2
Endrin aldehyde	UG/KG	0	0%		0	0	2
Endrin ketone	UG/KG	0	0%		0	0	2
Gamma-BHC/Lindane	UG/KG	0	0%	9200	0	0	2
Gamma-Chlordane	UG/KG	2.9	50%		0	1	2
Heptachlor	UG/KG	0	0%	15000	0	0	2
Heptachlor epoxide	UG/KG	0	0%		0	0	2
Methoxychlor	UG/KG	0	0%		0	0	2
Toxaphene	UG/KG	0	0%		0	0	2
PCBs							
Aroclor-1016	UG/KG	0	0%	1000	0	0	3
Aroclor-1221	UG/KG	0	0%	1000	0	0	3
Aroclor-1232	UG/KG	0	0%	1000	0	0	3
Aroclor-1242	UG/KG	0	0%	1000	0	0	3
Aroclor-1248	UG/KG	0	0%	1000	0	0	3
Aroclor-1254	UG/KG	0	0%	1000	0	0	3
Aroclor-1260	UG/KG	0	0%	1000	0	0	3
Inorganics							
Aluminum	MG/KG	9480	100%		0	4	4
Antimony	MG/KG	0	0%		0	0	4
Arsenic	MG/KG	5.9	75%	16	0	3	4
Barium	MG/KG	71.5	100%	400	0	4	4
Beryllium	MG/KG	0.438	75%	590	0	3	4
Cadmium	MG/KG	0.196	75%	9.3	0	3	4
Calcium	MG/KG	292000	100%		0	4	4
Chromium	MG/KG	12.4	100%	1500	0	4	4
Cobalt	MG/KG	8.7	100%		0	4	4
Copper	MG/KG	40.8	100%	270	0	4	4
Iron	MG/KG	20500	100%		0	4	4
Lead	MG/KG	91	75%	1000	0	3	4
Magnesium	MG/KG	39600	100%		0	4	4
Manganese	MG/KG	879	100%	10000	0	4	4
Mercury	MG/KG	0.236	75%		0	3	4
Nickel	MG/KG	16.3	100%	310	0	4	4
Potassium	MG/KG	1440	75%		0	3	4
Selenium	MG/KG	1	25%	1500	0	1	4
Silver	MG/KG	0	0%	1500	0	0	4
Sodium	MG/KG	230	100%		0	4	4
Thallium	MG/KG	0	0%		0	0	4
Vanadium	MG/KG	18.4	100%		0	4	4
Zinc	MG/KG	68	100%	10000	0	4	4

Note:
(1) NYSDEC's Restricted Commercial Use Soil Cleanup Objective, 6 NYCRR Part 375-6.

FIGURES


ROMULUS
SENECA ARMY DEPOT ACTIVITY
PARSONS
SENECA ARMY DEPOT ACTIVITY
CONSTRUCTION COMPLETION REPORT
SEAD-5
Figure 1
SEDA Location Map



PARSONS

SENECA ARMY DEPOT ACTIVITY
SEAD-5 Construction Completion Report

Figure 2
SEDA Preferred Land Use Plan Map

December 2009

Seneca Army Deport Boundary

Planned Industrial /Office Development (PID) Area Boundary

O:\Seneca\Depot Survey\SEAD-5_CCR.apr\Fig 2 Land Use Plan

LEGEND

- MINOR WATERWAY
- MAJOR WATERWAY
- FENCE
- UNPAVED ROAD
- BRUSH LINE
- RAILROAD

- ROAD SIGN
- DECIDUOUS TREE
- GUIDE POST
- FIRE HYDRANT
- MANHOLE
- MAILBOX/RR SIGNAL
- POLE
- UTILITY BOX
- OVERHEAD UTILITY POLE
- SURVEY MARKER
- MW5-1 GROUNDWATER MONITORING WELL
- 735 EXISTING MAJOR ELEVATION CONTOUR
- 738 EXISTING MINOR ELEVATION CONTOUR
- SEAD-5 BOUNDARY

NOTES:

1. LOCATIONS OF SOIL STOCKPILES EXCAVATED FROM SEAD-59 AND SEAD-71 ARE BASED ON PRE-CONSTRUCTION GPS SURVEY.
2. BOUNDARY OF SEAD-5 IS BASED ON THE FORMER SEWER SLUDGE WASTE PILES LAND PARCEL BOUNDARY.

STOCKPILE VOLUMES

STOCKPILE	VOLUME (C.Y.)
PILE 1	864.43
PILE 2	252.45
PILE 3	163.51
PILE 4	198.84
PILE 5	601.89
PILE 6	318.92
PILE 7	3219.95
TOTAL	**5619.99**

30 15 0 30 60

SCALE

PARSONS
100 HIGH STREET, 4TH FLOOR - BOSTON, MA 02110-1713

CLIENT/PROJECT TITLE:

SENECA ARMY DEPOT ACTIVITY
CONSTRUCTION COMPLETION REPORT
SEAD-5 FORMER SEWER SLUDGE WASTE PILES

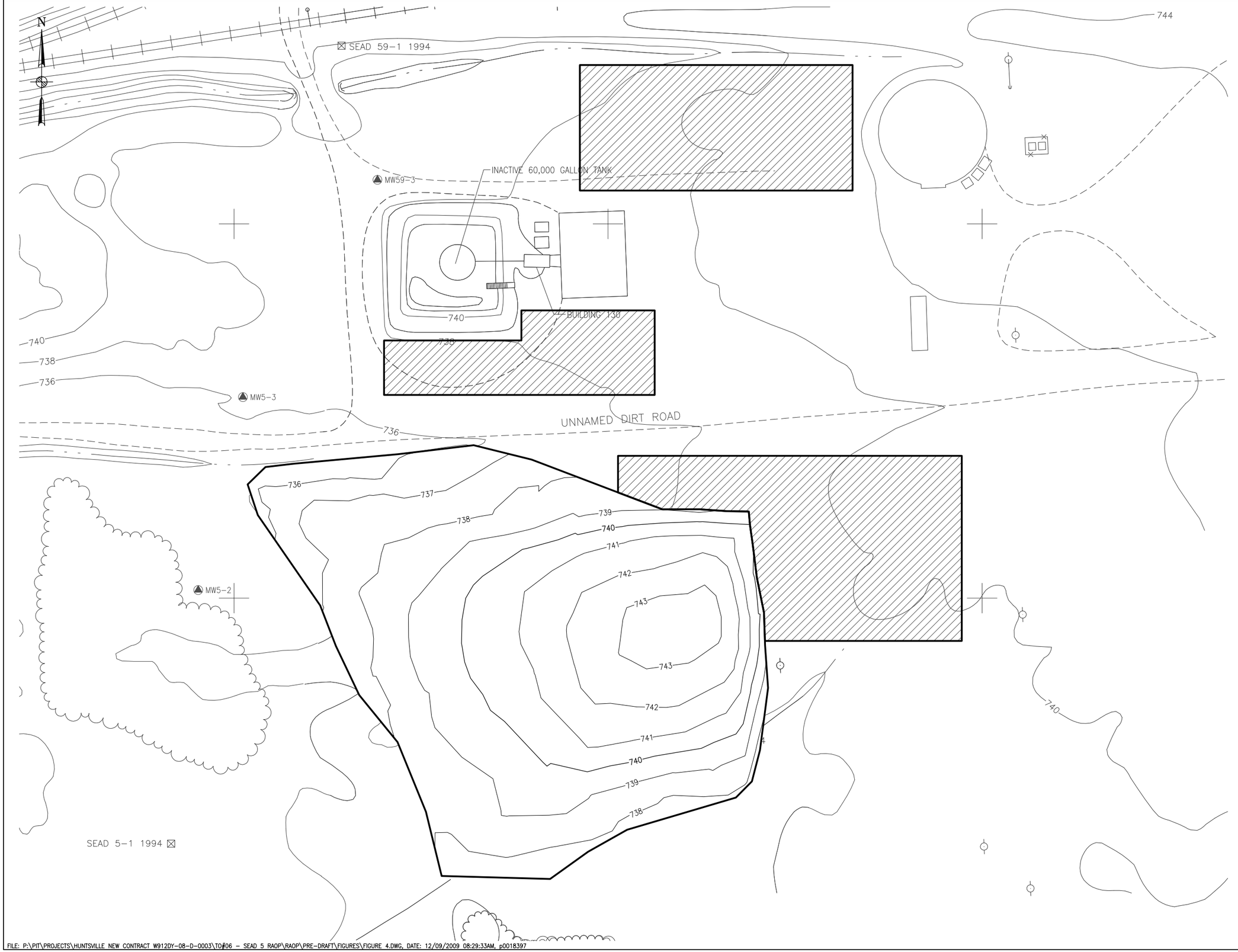
DEPT:	JOB NO:
ENVIRONMENTAL ENGINEERING	746856-01000

FIGURE TITLE:

FIGURE 3
SEAD-5
PRE-CONSTRUCTION SITE MAP

SCALE:	DRWN:	CHKD:	APPD:	DATE:	REV:
AS SHOWN	RR	BBO	JA	12/02/09	-

FILE: P:\PIT\PROJECTS\HUNTSVILLE NEW CONTRACT W912DY-08-D-0003\TO#06 - SEAD 5 RAOP\RAOP\PRE-DRAFT\FIGURES\FIGURE 3.DWG, DATE: 12/09/2009 08:32:10AM, p0018397



LEGEND

- MINOR WATERWAY
- MAJOR WATERWAY
- FENCE
- UNPAVED ROAD
- BRUSH LINE
- RAILROAD
- 760 — GROUND SURFACE ELEVATION CONTOUR
- ROAD SIGN
- DECIDOUS TREE
- GUIDE POST
- FIRE HYDRANT
- MANHOLE
- MAILBOX/RR SIGNAL
- POLE
- UTILITY BOX
- OVERHEAD UTILITY POLE
- SURVEY MARKER
- MW5-1 GROUNDWATER MONITORING WELL
- 735 MAJOR ELEVATION CONTOUR
- 738 MINOR ELEVATION CONTOUR
- BOUNDARY OF STOCKPILE SOIL COVER
- FORMER STOCKPILE STAGING AREA

NOTES:

1. LOCATIONS OF SOIL STOCKPILES EXCAVATED FROM SEAD-59 AND SEAD-71 ARE BASED ON PRE-CONSTRUCTION GPS SURVEY.
2. SOIL STOCKPILES FROM NORTH, SOUTH, AND ADDITIONAL STAGING AREAS WERE RELOCATED TO WITHIN THE LIMITS OF THE SEAD-5 STOCKPILE SOIL COVER.
3. APPROXIMATELY 5620 CUBIC YARDS (C.Y.) OF STOCKPILE SOIL WAS PRESENT IN THE STOCKPILE SOIL COVER BASED ON PRE-CONSTRUCTION AND POST STOCKPILE SOIL COVER TOPOGRAPHIC SURVEYS.

30 15 0 30 60
SCALE

PARSONS
100 HIGH STREET, 4TH FLOOR - BOSTON, MA 02110-1713

CLIENT/PROJECT TITLE:

SENECA army DEPOT ACTIVITY
CONSTRUCTION COMPLETION REPORT
SEAD-5 FORMER SEWER SLUDGE WASTE PILES

DEPT:	JOB NO:
ENVIRONMENTAL ENGINEERING	746856-01000

FIGURE TITLE:

FIGURE 4
SEAD-5
STOCKPILE AND SOIL COVER LOCATIONS

SCALE:	DRWN:	CHKD:	APPD:	DATE:	REV:
AS SHOWN	RR	BBO	JA	12/02/09	-

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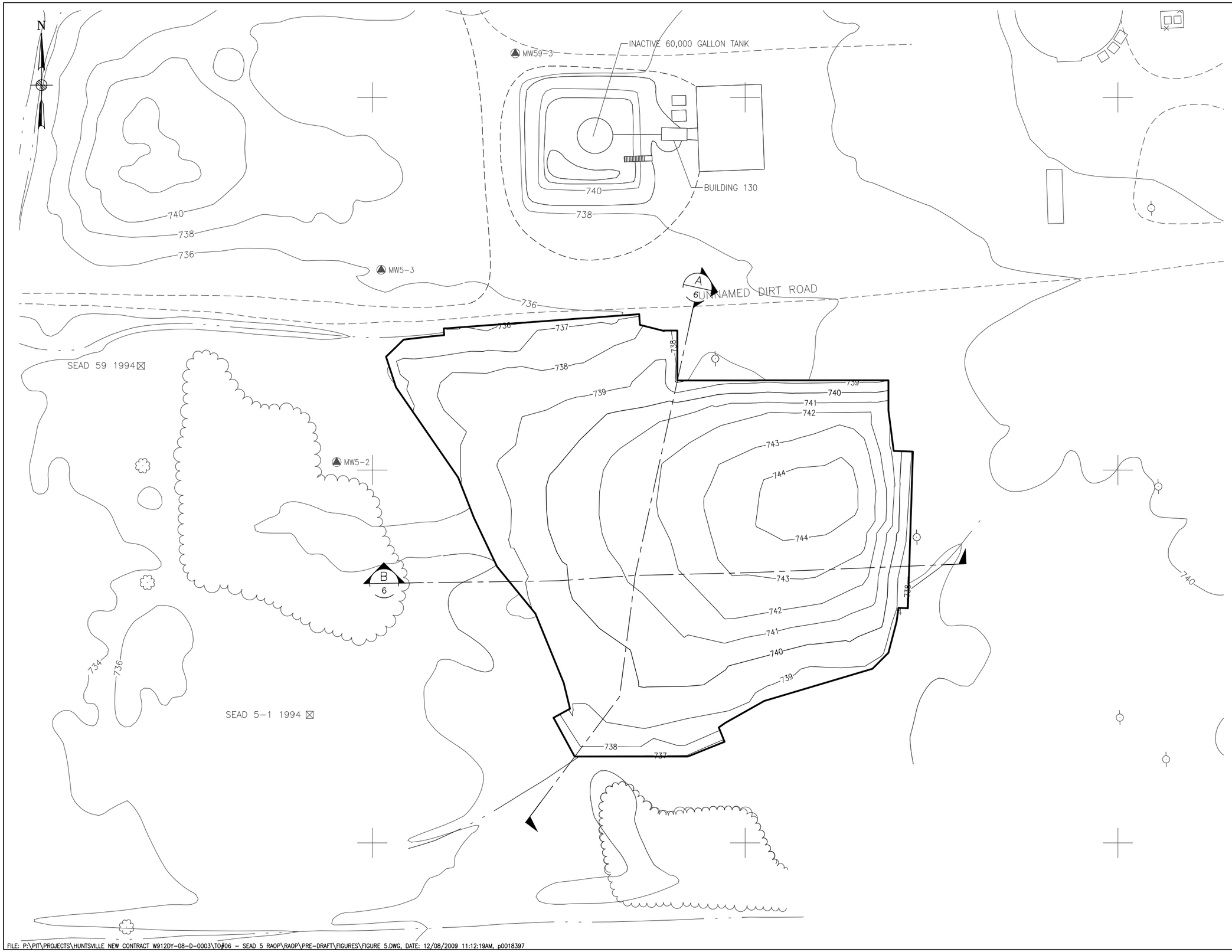

LEGEND

- MINOR WATERWAY
- MAJOR WATERWAY
- FENCE
- UNPAVED ROAD
- BRUSH LINE
- RAILROAD
- 760 — GROUND SURFACE ELEVATION CONTOUR
- ROAD SIGN
- DECIDOUS TREE
- GUIDE POST
- FIRE HYDRANT
- MANHOLE
- MAILBOX/RR SIGNAL
- POLE
- UTILITY BOX
- OVERHEAD UTILITY POLE
- SURVEY MARKER
- MW5-1 GROUNDWATER MONITORING WELL
- APPROXIMATE EXTENT OF SOIL COVER
- 735 — MAJOR ELEVATION CONTOUR
- 738 — MINOR ELEVATION CONTOUR

30 15 0 30 60

SCALE

PARSONS

100 HIGH STREET, 4TH FLOOR - BOSTON, MA 02110-1713

CLIENT/PROJECT TITLE:

SENECA ARMY DEPOT ACTIVITY
CONSTRUCTION COMPLETION REPORT
SEAD-5 FORMER SEWER SLUDGE WASTE PILES

DEPT:	JOB NO:
ENVIRONMENTAL ENGINEERING	746856-01000

FIGURE TITLE:

FIGURE 5
SEAD-5
FINAL GRADING PLAN

SCALE:	DRWN:	CHKD:	APPD:	DATE:	REV:
AS SHOWN	RR	BBO	JA	12/02/09	-

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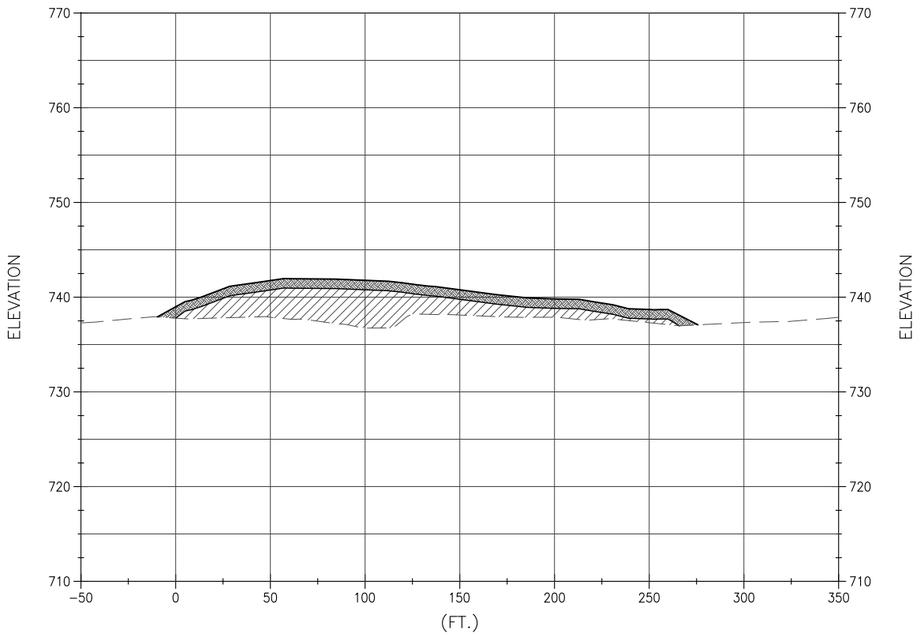
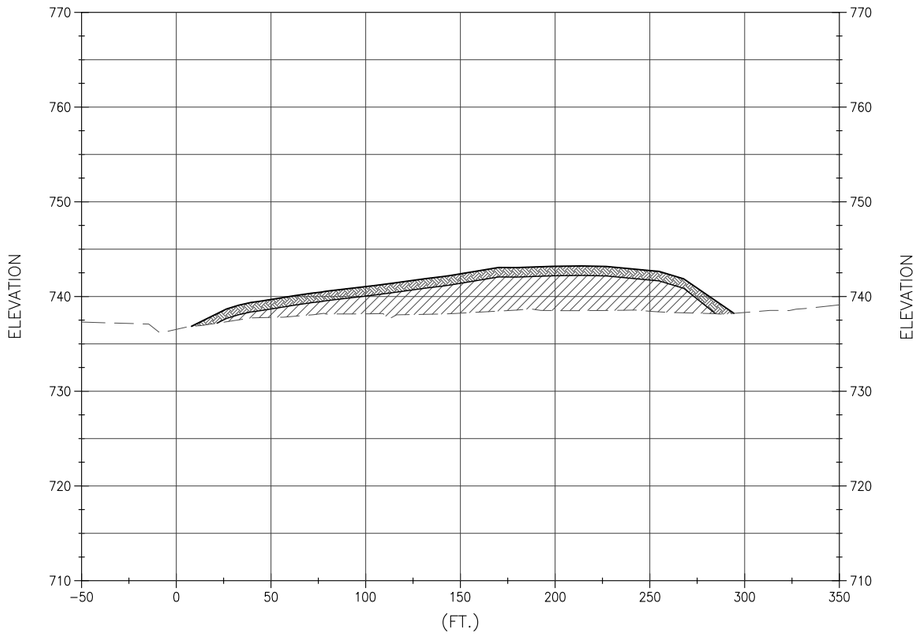
PROFILE NORTH–SOUTH



SECTION A
SCALE: AS SHOWN
5

PROFILE WEST–EAST



SECTION B
SCALE: AS SHOWN
5

LEGEND

- EXISTING GRADE
- STOCKPILE COVER GRADE
- FINAL GRADE
- RELOCATED STOCKPILE MATERIAL
- 1 FOOT COVER MATERIAL

8 4 0 8 16
VERTICAL SCALE

40 20 0 40 80
HORIZONTAL SCALE

PARSONS
100 HIGH STREET, 4TH FLOOR - BOSTON, MA 02110-1713

CLIENT/PROJECT TITLE:
SENECA ARMY DEPOT ACTIVITY
CONSTRUCTION COMPLETION REPORT
SEAD–5 FORMER SEWER SLUDGE WASTE PILES

DEPT:	JOB NO:
ENVIRONMENTAL ENGINEERING	746856–01000

FIGURE TITLE:
FIGURE 6
SEAD–5
STOCKPILE COVER PROFILES

SCALE:	DRWN:	CHKD:	APPD:	DATE:	REV:
AS SHOWN	RR	BBO	JA	12/02/09	–

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APPENDICES

APPENDIX A

DAILY REPORTS

Note: Sampling information, including sampling dates, sample IDs, and required analyses, is provided in the Chain of Custodies, presented in **Appendix D** of this Report.

Daily Field Report

Date:	6/29/2009	**Day:**	0	**Weather Conditions:**	Temp in 60s
Job #	746856			Sunny with scattered clouds	
Site Name:	Sludge Waste Piles			**Task(s):**	
	SEAD-5 RAOP			Site walk over with St. George	

Parsons:	**Position**	**S. St. George**	**Position**
Ben McAllister	SHSO	Steve St. George	Owner
Brendan Baranek-Olmstead	Tech	Jason Micbel	Operator
Tom Andrews	SM		

Visitors	**Representing**

Equipment Utilized:

PPE Level(s):
Level D

Health and Safety:
Slips/Trips/Falls, hydrate, sun screen, check for ticks, avoid contact with vegetation cause poison ivy.

Work Performed:
Steve St. George and Jason Micbel were walked around SEAD-5 site and shown site map of where the soil cap will be placed.

Qty Moved (cy)

	Today		**Proj Total**
Non-haz			
Haz			

Material Loaded

	Loads	**Cu Yds**	**Tons**	**Mat'l Type**	**Hauler**	**Manifest No.**
Non-haz						
Haz						

Also see attached truck and disposal log

No material was brought into or out of the site today.

Sampling:

# of samples collected today:
see attached sampling log
No samples collected today.

Other Materials brought on or off-site

Mat'l Type	**Loads**	**CY**	**Tons**

Notes

Projected Items:

Prepared by:
Thomas C Andrews

Daily Field Report

Date:	6/30/2009	**Day:**	1	**Weather Conditions:**	Temp in 60s
Job #	746856				Scattered rain showers/T-storms
Site Name:	Sludge Waste Piles			**Task(s):**	
	SEAD-5 RAOP				Initial GPS survey of topography

Parsons:	**Position**	**S. St. George**	**Position**
Ben McAllister	SHSO	Steve St. George	Owner
Brendan Baranek-Olmstead	Tech	Jason Micbel	Operator
Tom Andrews	SM		

Visitors	**Representing**

Equipment Utilized:

Trimble GPS base station and two rovers.

PPE Level(s):

Level D

Health and Safety:

Slips/Trips/Falls, hydrate, sun screen, check for ticks, avoid contact with vegetation cause poison ivy.

Stop work if thunder storms are approaching the site.

Work Performed:

Performed pre-construction topographic survey of SEAD-5 soil cap area. Base station setup on 1994 monument at SEAD-71.

Laid out stakes indicating the extent of the soil cap, corners of Final Grade, and samples over NYSDEC SCOs on furthest edges of soil cap. Stopped survey due to approaching thunder storms, will resume survey tomorrow. Moved to SEAD-12.

St. George dropped off Caterpillar Excavator, Dozer, and Skidster to the site for use on Monday (7/6/09)

Qty Moved (cy)

	Today		**Proj Total**
Non-haz			
Haz			

Material Loaded

	Loads	**Cu Yds**	**Tons**	**Mat'l Type**	**Hauler**	**Manifest No.**
Non-haz						
Haz						

Also see attached truck and disposal log

No material was brought into or out of the site today.

Sampling:

# of samples collected today:

see attached sampling log

No samples collected today.

Notes

Other Materials brought on or off-site

Mat'l Type	**Loads**	**CY**	**Tons**

Projected Items:

Prepared by:

Thomas C Andrews

Daily Field Report

Date:	7/1/2009	**Day:**	2	**Weather Conditions:**	Temps in 60s-70s
Job #	746856			Scattered T-storms, partly sunny	
Site Name:	Sludge Waste Piles			**Task(s):**	
	SEAD-5 RAOP			Complete pre-constructions topo survey	

Parsons:	**Position**	**S. St. George**	**Position**
Ben McAllister	SHSO		
Brendan Baranek-Olmstead	Tech		

Visitors	**Representing**

Equipment Utilized: Trimble GPS base station and two rovers.

PPE Level(s): Level D

Health and Safety:

Slips/Trips/Falls, hydrate, sun screen, check for ticks, avoid contact with vegetation cause poison ivy.

Stop work in T-storms are approaching the site.

Work Performed:

Completed pre-construction topographic survey of SEAD-5. Surveyed in location of SEAD-59 stockpile soil locations and stockpile dimensions so a volume estimate can be made. Setup GPS base station at monument SEAD-71 1994 and used SEAD-59-1 1994 as QC check.

Qty Moved (cy)

	Today		**Proj Total**
Non-haz			
Haz			

Material Loaded

	Loads	**Cu Yds**	**Tons**	**Mat'l Type**	**Hauler**	**Manifest No.**
Non-haz						
Haz						

Also see attached truck and disposal log

No material was brought into or out of the site today.

Sampling:

# of samples collected today:

see attached sampling log

Collected 2 crushed concrete and 1 gravel sample.

Notes

Other Materials brought on or off-site

Mat'l Type	**Loads**	**CY**	**Tons**

Projected Items:

Prepared by:

Thomas C Andrews

Daily Field Report

Date:	7/6/2009	**Day:**	3	**Weather Conditions:**	
Job #	746856			clear sunny 70 degrees	

Site Name:	**Project:**
SEAD 5	Seneca Army Depot

Parsons:	**Position:**	**St George**	
TC Andrews	SHSO	Supt./oper	1
Brendan Baranek		Operators	1
		Laborers	
Visitors	**Representing**	Teamster	2

Equipment	
Excavator	1
Dozer	1
Haul Trucks	2

Health and Safety: **PPE Level(s):** D

Tool Box meeting

Discussed poison ivy exposure and wearing safety vests

Work Performed:

Started moving material to the cap and spreading material over cap.

Equipment moved to the job last week. 4 loads.

The stockpiles that are off of the cap area have about 500 cy of soil which have to be moved onto the cap

Disposal	**Loads**	**Total to date**	**Estimated tons**	**To. Tons to date**
			0	0
			0	0
				0

Sampling:

Deliveries Material	**Loads**	**CY**	**Tons**

Prepared by:

Thomas C Andrews

Daily Field Report

Date:	7/7/2009	**Day:**	4	**Weather Conditions:**	
Job #	746856			clear sunny 70 degrees	
				rain last night	
Site Name:				**Project:**	
SEAD 5				Seneca Army Depot	

Parsons:	**Position:**	**St George**	
TC Andrews	SHSO	Supt./oper	1
Brendan Baranek-Olmstead		Operators	2
		Laborers	
Visitors	**Representing**	Teamster	2

Equipment	
Excavator	1
Dozer	2
Haul Trucks	2
Roll off box	1

Health and Safety: **PPE Level(s):** D

Tool Box meeting

Poison Ivy awareness, slips trips and falls and hydration

Work Performed:

Continued moving material to cap

Delivered 2nd dozer. D-3 size.

Disposal	**Loads**	**Total to date**	**Estimated tons**	**To. Tons to date**
			0	0
			0	0
				0

Sampling:

Deliveries Material	**Loads**	**CY**	**Tons**

Prepared by:

Thomas C Andrews

Daily Field Report

Date:	7/8/2009	**Day:**	5	**Weather Conditions:**	
Job #	746856			Cloudy, scattered showers cool	
				Temps in the 60s	
Site Name:				**Project:**	
SEAD 5				Seneca Army Depot	

Parsons:	**Position:**	**St George**	
TC Andrews	SHSO	Supt./oper	1
Brendan Baranek		Operators	1
		Laborers	1
Visitors	**Representing**	Teamster	

Equipment	
Excavator	
Dozer	2
Haul Trucks	

Health and Safety: **PPE Level(s):** D

Tool Box meeting

Discussed vehicle operation, dust control and slips trips and falls

Work Performed:

Completed moving and grading material-started placing the cap

Placing cap material 6" lifts compacting with excavator and dozer

Sealed fill with Excavator tracks

Disposal	**Loads**	**Total to date**	**Estimated tons**	**To. Tons to date**	**Sampling:**
			0	0	
			0	0	
				0	

Deliveries Material	**Loads**	**CY**	**Tons**
Backfill			997.45

Prepared by:

Thomas C Andrews

Daily Field Report

Date:	7/9/2009	**Day:**	6	**Weather Conditions:**	
Job #	746856			Clear, sunny, 70 degrees	
Site Name:				**Project:**	
SEAD 5				Seneca Army Depot	

Parsons:	**Position:**	**St George**	
TC Andrews	SHSO	Supt./oper	1
Brendan Baranek		Operators	1
		Laborers	
Visitors	**Representing**	Teamster	2

Equipment	
Excavator	
Dozer	1
Haul Trucks	

Health and Safety: **PPE Level(s):** D

Tool Box meeting

Discussed poison ivy exposure and wearing safety vests

Work Performed: Equipment moved to the job last week. 4 loads.

Placing cap material 6" lifts compacting with excavator and dozer

Per T Bataglia, will use the crushed concrete and stone fill on the cap

Work will be stopped today until the crushed concrete and stone are moved onto the cap.

Movement of crushed concrete and stone will start Monday.

Disposal	**Loads**	**Total to date**	**Estimated tons**	**To. Tons to date**
			0	0
			0	0
				0

Sampling:

Deliveries Material	**Loads**	**CY**	**Tons**
Backfill			1377.92

Prepared by:

Thomas C Andrews

Daily Field Report

Date:	7/10/2009	**Day:**	7	**Weather Conditions:**
Job #	746856			Clear, sunny, 70 degrees

Site Name:	**Project:**
SEAD 5	Seneca Army Depot

Parsons:	**Position:**	**St George**
TC Andrews	SHSO	
Brendan Baranek		

Visitors	**Representing**

Equipment
Excavator
Dozer
Haul Trucks

Health and Safety:	**PPE Level(s):**

Work Performed:

Truckloads of fill arrived on site; however, there was not enough fill to cover the entire site
More truckloads of fill were requested, but by that time there was not enough time to mobilize and work
Work resumed on Monday, July 13.

Disposal	**Loads**	**Total to date**	**Estimated tons**	**To. Tons to date**	**Sampling:**
			0	0	
			0	0	
				0	

Deliveries Material	**Loads**	**CY**	**Tons**
Backfill			1377.92

Prepared by: **Brendan Baranek**

Daily Field Report

Date:	7/13/2009	**Day:**	8	**Weather Conditions:**	
Job #	746856			Clear, sunny, 70 degrees	

Site Name:	**Position:**	**Project:**
SEAD 5	SHSO	Seneca Army Depot

Parsons:		**St George**	
TC Andrews		Supt./oper	1
Ben McAllister		Operators	2
		Laborers	
Visitors	**Representing**	Teamster	2

Equipment		
Excavator	1	
Dozer	1	
Haul Trucks	2	
Tandems	2	Riccelli rental

Health and Safety:	**PPE Level(s):**	D
Tool Box meeting	Discussed poison ivy exposure and wearing safety vests	

Work Performed:

Moving crushed concrete and gravel to the cap area.

Placing cap material in 6" lifts. Compacting cap material with excavator and dozer.

Disposal	**Loads**	**Total to date**	**Estimated tons**	**To. Tons to date**	**Sampling:**
			0	0	
			0	0	
				0	

Deliveries Material	**Loads**	**CY**	**Tons**
Backfill			89.13

Prepared by:

Thomas C Andrews

Daily Field Report

Date:	7/14/2009	**Day:**	9	**Weather Conditions:**	
Job #	746856			Clear, sunny, 70 degrees	
Site Name:				**Project:**	
SEAD 5				Seneca Army Depot	

Parsons:	**Position:**	**St George**	
TC Andrews	SHSO	Supt./oper	
Ben McAllister		Operators	1
		Laborers	
Visitors	**Representing**	Teamster	
Equipment			
Excavator			
Dozer	1		
Haul Trucks			
Compactor 10 ton	1		
Health and Safety:	**PPE Level(s):**	D	
Tool Box meeting	Discussed poison ivy exposure and wearing safety vests		
Work Performed:			
Completed placing cap. Compacted cap with 10 ton vibratory roller.			
Dressed-up site: removed trash, make sure grade is final			
Total tons of imported fill = 3440.32 tons			
Project complete.			

Disposal	**Loads**	**Total to date**	**Estimated tons**	**To. Tons to date**	**Sampling:**
			0	0	
			0	0	
				0	

Deliveries Material	**Loads**	**CY**	**Tons**
Backfill			975.82

Prepared by:

Thomas C Andrews

Daily Field Report

Date: 11/3/2009 **Day:** 0

Weather Conditions: Temp in 50s

Job # 746856

Sunny, 50s, wind SE 0 - 5 mph

Site Name: Sludge Waste Piles
SEAD-5 RAOP

Task(s):

Position	Position
	DeMaria Lnadscaping

Visitors	Representing

Equipment Utilized:

York Rake
Truck and trailer

Seed - Winter Wheat

PPE Level(s):

Level D

Health and Safety:

Work Performed:

Received phone call from DeMaria Landscaping indicating that crew had gone to Seneca Army Depot and raked and seeded area at SEAD-12 and SEAD-5 with winter wheat. DeMaria will return in spring to re-seed if requested by Parsons/Army if vegetative cover does not take in both areas.

Qty Moved (cy)

	Today		Proj Total

Material Loaded

	Loads	Cu Yds	Tons	Mat'l Type	Hauler	Manifest No.

Sampling:

# of samples collected today:
see attached sampling log
No samples collected today.

Notes

Other Materials brought on or off-site

Mat'l Type	Loads	CY	Tons

Projected Items:

Prepared by:

Ben McAllister

APPENDIX B

PRECIPITATION DATA

Table B-1
Summary of Precipitation Data
Construction Completion Report for SEAD-5
Seneca Army Depot Activity

	Seneca Falls, NY	**Rochester, NY**	**Ithaca, NY**	**Syracuse, NY**
Date	Precipitation (in.)	Precipitation (in.)	Precipitation (in.)	Precipitation (in.)
7/1/2009	0.02	0.08	0.15	0.02
7/2/2009	0.49	0.58	0.36	0.12
7/3/2009	0.04	0	0.26	0.01
7/4/2009	0	0	0	T
7/5/2009	0	0	0	0
7/6/2009	0.21	0.12	0	0.03
7/7/2009	0.08	T	0	0.16
7/8/2009	0	T	0	0.02
7/9/2009	0	0	0	0
7/10/2009	0	0	0	0
7/11/2009	0.59	0.81	0.22	0.41
7/12/2009	0	0	0	0
7/13/2009	0	0	0	T
7/14/2009	0	0	0	0
7/15/2009	0	0.01	0	T
7/16/2009	0	T	0	0.01
7/17/2009	0.04	T	0	0.04
7/18/2009	0	0.21	0	T
7/19/2009	0.02	0	0	0
7/20/2009	0	0	0	0
7/21/2009	0.16	0.62	0	0.07
7/22/2009	0	0	0	0
7/23/2009	0.02	0.59	0	0.01
7/24/2009	0.06	0.05	0	0.31
7/25/2009	0	0.86	0.06	0.04
7/26/2009	0.02	0.02	0.37	0.17
7/27/2009	0.02	0.01	0.56	T
7/28/2009	0	0	0	0
7/29/2009	0.09	0.34	0	0.11
7/30/2009	0	0.02	0	0
7/31/2009	0.44	T	0.1	0.45

APPENDIX C

SEAD-59/71 STOCKPILE SOIL DATA

SEAD-59/71 Stockpile Soil Results
SEAD-5 Construction Completion Report
Seneca Army Depot Activity

SITE LOCATION								SEAD-59	SEAD-59	SEAD-59	SEAD-59	SEAD-59
LOCATION ID								FD-59-WS-03	WS-59-01-005-4	WS-59-01-005-5	WS-59-01-006-1	WS-59-01-006-12
MATRIX								SOIL	SOIL	SOIL	SOIL	SOIL
SAMPLE ID								FD-59-WS-03	WS-59-01-005-4	WS-59-01-005-5	WS-59-01-006-1	WS-59-01-006-12
SAMPLE DATE								5/6/2004	5/6/2004	5/6/2004	5/6/2004	5/6/2004
QC CODE								SA	SA	SA	SA	SA
STUDY ID								ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM
SAMPLE ROUND								1	1	1	1	1
Parameter	**Units**	**Maximum Value**	**Frequency of Detection**	**Criteria Level [1]**	**Number of Exceedances**	**Number of Times Detected**	**Number of Samples Collected**	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)
1,1,1-Trichloroethane	UG/KG	0	0%	500000	0	0	54	5.7 U	5.7 U	5.8 U	5.7 U	5.5 U
1,1,2,2-Tetrachloroethane	UG/KG	0	0%		0	0	53	5.7 UJ	5.7 U	5.8 U	5.7 U	5.5 UJ
1,1,2-Trichloro-1,2,2-Trifluoroethane	UG/KG	1.5	2%		0	1	54	5.7 U	5.7 U	5.8 U	5.7 U	5.5 U
1,1,2-Trichloroethane	UG/KG	0	0%		0	0	5					
1,1-Dichloroethane	UG/KG	0	0%	240000	0	0	54	5.7 U	5.7 U	5.8 U	5.7 U	5.5 U
1,1-Dichloroethene	UG/KG	1	2%	500000	0	1	54	5.7 U	5.7 U	5.8 U	5.7 U	5.5 U
1,2,3-Trichloropropane	UG/KG	0	0%		0	0	48	5.7 UJ	5.7 U	5.8 U	5.7 U	5.5 UJ
1,2,4-Trichlorobenzene	UG/KG	0	0%		0	0	53	5.7 UJ	5.7 U	5.8 U	5.7 U	5.5 UJ
1,2-Dibromo-3-chloropropane	UG/KG	0	0%		0	0	5					
1,2-Dibromoethane	UG/KG	0	0%		0	0	5					
1,2-Dichlorobenzene	UG/KG	0	0%	500000	0	0	53	5.7 UJ	5.7 U	5.8 U	5.7 U	5.5 UJ
1,2-Dichloroethane	UG/KG	0	0%	30000	0	0	54	5.7 U	5.7 U	5.8 U	5.7 U	5.5 U
1,2-Dichloropropane	UG/KG	0	0%		0	0	5					
1,3-Dichlorobenzene	UG/KG	0	0%	280000	0	0	53	5.7 UJ	5.7 U	5.8 U	5.7 U	5.5 UJ
1,3-Dichloropropane	UG/KG	0	0%		0	0	49	5.7 U	5.7 U	5.8 U	5.7 U	5.5 U
1,4-Dichlorobenzene	UG/KG	0	0%	130000	0	0	53	5.7 UJ	5.7 U	5.8 U	5.7 U	5.5 UJ
Acetone	UG/KG	69	24%	500000	0	13	54	23 U	23 U	23 U	23 U	22 U
Benzene	UG/KG	0	0%	44000	0	0	54	5.7 U	5.7 U	5.8 U	5.7 U	5.5 U
Bromodichloromethane	UG/KG	0	0%		0	0	5					
Bromoform	UG/KG	0	0%		0	0	5					
Carbon disulfide	UG/KG	0	0%		0	0	54	5.7 U	5.7 U	5.8 U	5.7 U	5.5 U
Carbon tetrachloride	UG/KG	0	0%	22000	0	0	54	5.7 U	5.7 U	5.8 U	5.7 U	5.5 U
Chlorobenzene	UG/KG	0	0%	500000	0	0	54	5.7 U	5.7 U	5.8 U	5.7 U	5.5 U
Chlorodibromomethane	UG/KG	0	0%		0	0	54	5.7 U	5.7 U	5.8 U	5.7 U	5.5 U
Chloroethane	UG/KG	0	0%		0	0	54	11 U	11 U	12 U	11 U	11 U
Chloroform	UG/KG	0	0%	350000	0	0	54	5.7 U	5.7 U	5.8 U	5.7 U	5.5 U
Cis-1,2-Dichloroethene	UG/KG	0	0%	500000	0	0	5					
Cis-1,3-Dichloropropene	UG/KG	0	0%		0	0	5					
Cyclohexane	UG/KG	0	0%		0	0	5					
Dichlorodifluoromethane	UG/KG	0	0%		0	0	5					
Ethyl benzene	UG/KG	0	0%	390000	0	0	54	5.7 U	5.7 U	5.8 U	5.7 U	5.5 U
Isopropylbenzene	UG/KG	0	0%		0	0	5					
Meta/Para Xylene	UG/KG	2.3	4%	500000	0	2	49	5.7 U	5.7 U	5.8 U	5.7 U	5.5 U
Methyl Acetate	UG/KG	0	0%		0	0	5					
Methyl Tertbutyl Ether	UG/KG	0	0%	500000	0	0	5					
Methyl bromide	UG/KG	0	0%		0	0	5					
Methyl butyl ketone	UG/KG	0	0%		0	0	5					
Methyl chloride	UG/KG	0	0%		0	0	5					
Methyl cyclohexane	UG/KG	0	0%		0	0	5					
Methyl ethyl ketone	UG/KG	7	9%	500000	0	5	54	11 U	11 U	12 U	11 U	11 U
Methyl isobutyl ketone	UG/KG	0	0%		0	0	54	11 U	11 U	12 U	11 U	11 U
Methylene chloride	UG/KG	1.4	2%	500000	0	1	54	1.4 J	5.7 U	5.8 U	5.7 U	5.5 U
Ortho Xylene	UG/KG	1.9	10%	500000	0	5	49	5.7 U	5.7 U	5.8 U	5.7 U	5.5 U
Styrene	UG/KG	0	0%		0	0	5					
Tetrachloroethene	UG/KG	6.7	6%	150000	0	3	54	5.7 U	5.7 U	5.8 U	5.7 U	5.5 U
Toluene	UG/KG	0	0%	500000	0	0	54	5.7 U	5.7 U	5.8 U	5.7 U	5.5 U
Total Xylenes	UG/KG	3	20%	500000	0	1	5					

SEAD-59/71 Stockpile Soil Results
SEAD-5 Construction Completion Report
Seneca Army Depot Activity

SITE LOCATION								SEAD-59	SEAD-59	SEAD-59	SEAD-59	SEAD-59
LOCATION ID								FD-59-WS-03	WS-59-01-005-4	WS-59-01-005-5	WS-59-01-006-1	WS-59-01-006-12
MATRIX								SOIL	SOIL	SOIL	SOIL	SOIL
SAMPLE ID								FD-59-WS-03	WS-59-01-005-4	WS-59-01-005-5	WS-59-01-006-1	WS-59-01-006-12
SAMPLE DATE								5/6/2004	5/6/2004	5/6/2004	5/6/2004	5/6/2004
QC CODE								SA	SA	SA	SA	SA
STUDY ID								ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM
SAMPLE ROUND								1	1	1	1	1
Parameter	**Units**	**Maximum Value**	**Frequency of Detection**	**Criteria Level [1]**	**Number of Exceedances**	**Number of Times Detected**	**Number of Samples Collected**	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)
Trans-1,2-Dichloroethene	UG/KG	0	0%	500000	0	0	54	5.7 U	5.7 U	5.8 U	5.7 U	5.5 U
Trans-1,3-Dichloropropene	UG/KG	0	0%		0	0	5					
Trichloroethene	UG/KG	2.7	7%	200000	0	4	54	5.7 U	5.7 U	5.8 U	5.7 U	2.7 J
Trichlorofluoromethane	UG/KG	0	0%		0	0	5					
Vinyl chloride	UG/KG	0	0%	13000	0	0	54	11 U	11 U	12 U	11 U	11 U
1,1'-Biphenyl	UG/KG	59	20%		0	1	5					
2,2'-oxybis(1-Chloropropane)	UG/KG	0	0%		0	0	5					
2,4,5-Trichlorophenol	UG/KG	0	0%		0	0	54	1900 U	760 U	380 U	1900 U	1800 U
2,4,6-Trichlorophenol	UG/KG	0	0%		0	0	54	1900 U	760 U	380 U	1900 U	1800 U
2,4-Dichlorophenol	UG/KG	0	0%		0	0	54	1900 U	760 U	380 U	1900 U	1800 U
2,4-Dimethylphenol	UG/KG	0	0%		0	0	5					
2,4-Dinitrophenol	UG/KG	0	0%		0	0	54	9600 U	3900 U	2000 U	9600 U	9300 U
2,4-Dinitrotoluene	UG/KG	0	0%		0	0	54	1900 U	760 U	380 U	1900 U	1800 U
2,6-Dinitrotoluene	UG/KG	0	0%		0	0	54	1900 U	760 U	380 U	1900 U	1800 U
2-Chloronaphthalene	UG/KG	0	0%		0	0	5					
2-Chlorophenol	UG/KG	0	0%		0	0	54	1900 U	760 U	380 U	1900 U	1800 U
2-Methylnaphthalene	UG/KG	1200	50%		0	27	54	1900 U	760 U	380 U	1900 U	1800 U
2-Methylphenol	UG/KG	0	0%	500000	0	0	54	1900 U	760 U	380 U	1900 U	1800 U
2-Nitroaniline	UG/KG	0	0%		0	0	54	9600 U	3900 U	2000 U	9600 U	9300 U
2-Nitrophenol	UG/KG	0	0%		0	0	54	1900 U	760 U	380 U	1900 U	1800 U
3,3'-Dichlorobenzidine	UG/KG	0	0%		0	0	54	1900 U	760 U	380 U	1900 U	1800 U
3-Nitroaniline	UG/KG	0	0%		0	0	54	9600 U	3900 U	2000 U	9600 U	9300 U
4,6-Dinitro-2-methylphenol	UG/KG	0	0%		0	0	5					
4-Bromophenyl phenyl ether	UG/KG	0	0%		0	0	5					
4-Chloro-3-methylphenol	UG/KG	0	0%		0	0	54	1900 U	760 U	380 U	1900 U	1800 U
4-Chloroaniline	UG/KG	0	0%		0	0	54	1900 U	760 U	380 U	1900 U	1800 U
4-Chlorophenyl phenyl ether	UG/KG	0	0%		0	0	5					
4-Methylphenol	UG/KG	0	0%	500000	0	0	54	1900 U	760 U	380 U	1900 U	1800 U
4-Nitroaniline	UG/KG	0	0%		0	0	5					
4-Nitrophenol	UG/KG	0	0%		0	0	54	9600 U	3900 U	2000 U	9600 U	9300 U
Acenaphthene	UG/KG	2400	87%	500000	0	47	54	200 J	110 J	380 U	360 J	330 J
Acenaphthylene	UG/KG	3500	98%	500000	0	53	54	1300 J	690 J	180 J	2400	3300
Acetophenone	UG/KG	0	0%		0	0	5					
Aniline	UG/KG	0	0%		0	0	49	1900 U	760 U	380 U	1900 U	1800 U
Anthracene	UG/KG	6600	100%	500000	0	54	54	1000 J	730 J	150 J	2300	2400
Atrazine	UG/KG	0	0%		0	0	5					
Benzaldehyde	UG/KG	0	0%		0	0	5					
Benzo(a)anthracene	UG/KG	14000	100%	5600	16	54	54	2000	1700	440	5500	5300
Benzo(a)pyrene	UG/KG	16000	100%	1000	48	54	54	**2400** J	**1800**	500	**6000**	**6400** J
Benzo(b)fluoranthene	UG/KG	11000	100%	5600	13	54	54	1600 J	1200	400	4000	4300
Benzo(ghi)perylene	UG/KG	8000	100%	500000	0	54	54	1800 J	910	400	4100	4500
Benzo(k)fluoranthene	UG/KG	13000	100%	56000	0	54	54	1600 J	1300	380 J	4300	4100
Benzoic Acid	UG/KG	0	0%		0	0	49	9600 UJ	3900 U	2000 U	9600 U	9300 UJ
Bis(2-Chloroethoxy)methane	UG/KG	0	0%		0	0	5					
Bis(2-Chloroethyl)ether	UG/KG	0	0%		0	0	5					
Bis(2-Ethylhexyl)phthalate	UG/KG	130	6%		0	3	54	1900 U	760 U	380 U	1900 U	1800 U
Butylbenzylphthalate	UG/KG	0	0%		0	0	54	1900 U	760 U	380 U	1900 U	1800 U

SEAD-59/71 Stockpile Soil Results
SEAD-5 Construction Completion Report
Seneca Army Depot Activity

SITE LOCATION							SEAD-59	SEAD-59	SEAD-59	SEAD-59	SEAD-59
LOCATION ID							FD-59-WS-03	WS-59-01-005-4	WS-59-01-005-5	WS-59-01-006-1	WS-59-01-006-12
MATRIX							SOIL	SOIL	SOIL	SOIL	SOIL
SAMPLE ID							FD-59-WS-03	WS-59-01-005-4	WS-59-01-005-5	WS-59-01-006-1	WS-59-01-006-12
SAMPLE DATE							5/6/2004	5/6/2004	5/6/2004	5/6/2004	5/6/2004
QC CODE							SA	SA	SA	SA	SA
STUDY ID							ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM
SAMPLE ROUND							1	1	1	1	1
Parameter	**Units**	**Maximum Value**	**Frequency of Detection**	**Criteria Level [1]**	**Number of Exceedances**	**Number of Times Detected**	**Number of Samples Collected**	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)
Caprolactam	UG/KG	0	0%		0	0	5					
Carbazole	UG/KG	1100	80%		0	4	5					
Chrysene	UG/KG	13000	100%	56000	0	54	54	2000	1700	460	5300	5100
Di-n-butylphthalate	UG/KG	0	0%		0	0	54	1900 U	760 U	380 U	1900 U	1800 U
Di-n-octylphthalate	UG/KG	0	0%		0	0	54	1900 U	760 U	380 U	1900 U	1800 U
Dibenz(a,h)anthracene	UG/KG	2900	98%	560	41	53	54	560 J	310 J	120 J	**1400** J	**1500** J
Dibenzofuran	UG/KG	1300	61%	350000	0	33	54	1900 U	760 U	380 U	1900 U	1800 U
Diethyl phthalate	UG/KG	0	0%		0	0	54	1900 U	760 U	380 U	1900 U	1800 U
Dimethylphthalate	UG/KG	0	0%		0	0	54	1900 U	760 U	380 U	1900 U	1800 U
Fluoranthene	UG/KG	29000	100%	500000	0	54	54	3600 J	2900	840	9900	9600 J
Fluorene	UG/KG	3100	87%	500000	0	47	54	1900 U	160 J	380 U	510 J	470 J
Hexachlorobenzene	UG/KG	0	0%	6000	0	0	54	1900 U	760 U	380 U	1900 U	1800 U
Hexachlorobutadiene	UG/KG	0	0%		0	0	54	1900 U	760 U	380 U	1900 U	1800 U
Hexachlorocyclopentadiene	UG/KG	0	0%		0	0	5					
Hexachloroethane	UG/KG	0	0%		0	0	54	1900 U	760 U	380 U	1900 U	1800 U
Indeno(1,2,3-cd)pyrene	UG/KG	8000	100%	5600	6	54	54	1600 J	860	350 J	3600 J	4000 J
Isophorone	UG/KG	0	0%		0	0	54	1900 U	760 U	380 U	1900 U	1800 U
N-Nitrosodiphenylamine	UG/KG	0	0%		0	0	5					
N-Nitrosodipropylamine	UG/KG	0	0%		0	0	5					
Naphthalene	UG/KG	1200	61%	500000	0	33	54	1900 U	760 U	380 U	1900 U	1800 U
Nitrobenzene	UG/KG	0	0%		0	0	54	1900 U	760 U	380 U	1900 U	1800 U
Pentachlorophenol	UG/KG	660	2%	6700	0	1	54	9600 U	3900 U	2000 U	9600 U	9300 U
Phenanthrene	UG/KG	17000	100%	500000	0	54	54	1700 J	1600	370 J	5200	5200
Phenol	UG/KG	0	0%	500000	0	0	54	1900 U	760 U	380 U	1900 U	1800 U
Pyrene	UG/KG	22000	100%	500000	0	54	54	3500 J	2500	820	9500	9000 J
Pyridine	UG/KG	0	0%		0	0	49	9600 U	3900 U	2000 U	9600 U	9300 U
4,4'-DDD	UG/KG	450	61%	92000	0	33	54	120 J	25 J	19 U	23	18 UJ
4,4'-DDE	UG/KG	260	61%	62000	0	33	54	260 J	100	96	140 J	18 UJ
4,4'-DDT	UG/KG	520	69%	47000	0	37	54	520 J	150	78	110	18 UJ
Aldrin	UG/KG	0	0%	680	0	0	54	38 U	9.7 U	9.9 U	9.6 U	9.3 U
Alpha-BHC	UG/KG	4.4	2%	3400	0	1	54	38 U	9.7 U	9.9 U	9.6 U	9.3 U
Alpha-Chlordane	UG/KG	27	11%	24000	0	6	54	38 U	9.7 U	23 J	9.6 U	9.3 U
Beta-BHC	UG/KG	13	2%	3000	0	1	54	38 U	9.7 U	9.9 U	9.6 U	9.3 U
Delta-BHC	UG/KG	0	0%	500000	0	0	54	38 U	9.7 U	9.9 U	9.6 U	9.3 U
Dieldrin	UG/KG	0	0%	1400	0	0	54	75 U	19 U	19 U	19 U	18 U
Endosulfan I	UG/KG	0	0%	200000	0	0	54	38 U	9.7 U	9.9 U	9.6 U	9.3 U
Endosulfan II	UG/KG	0	0%	200000	0	0	54	75 U	19 U	19 U	19 U	18 U
Endosulfan sulfate	UG/KG	0	0%	200000	0	0	54	75 U	19 U	19 U	19 U	18 U
Endrin	UG/KG	0	0%	89000	0	0	54	75 U	19 U	19 U	19 U	18 U
Endrin aldehyde	UG/KG	0	0%		0	0	54	75 U	19 U	19 U	19 U	18 U
Endrin ketone	UG/KG	15	2%		0	1	54	75 U	19 U	19 U	19 U	18 U
Gamma-BHC/Lindane	UG/KG	0	0%	9200	0	0	54	38 U	9.7 U	9.9 U	9.6 U	9.3 U
Gamma-Chlordane	UG/KG	21	9%		0	5	54	38 U	9.7 U	21 J	9.6 U	9.3 U
Heptachlor	UG/KG	0	0%	15000	0	0	54	38 U	9.7 U	9.9 U	9.6 U	9.3 U
Heptachlor epoxide	UG/KG	0	0%		0	0	54	38 U	9.7 U	9.9 U	9.6 U	9.3 U
Methoxychlor	UG/KG	0	0%		0	0	54	380 U	97 U	99 U	96 U	93 U
Toxaphene	UG/KG	0	0%		0	0	54	750 U	190 U	190 U	190 U	180 U

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Seneca Army Depot Activity

SITE LOCATION								SEAD-59	SEAD-59	SEAD-59	SEAD-59	SEAD-59
LOCATION ID								FD-59-WS-03	WS-59-01-005-4	WS-59-01-005-5	WS-59-01-006-1	WS-59-01-006-12
MATRIX								SOIL	SOIL	SOIL	SOIL	SOIL
SAMPLE ID								FD-59-WS-03	WS-59-01-005-4	WS-59-01-005-5	WS-59-01-006-1	WS-59-01-006-12
SAMPLE DATE								5/6/2004	5/6/2004	5/6/2004	5/6/2004	5/6/2004
QC CODE								SA	SA	SA	SA	SA
STUDY ID								ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM
SAMPLE ROUND								1	1	1	1	1
Parameter	**Units**	**Maximum Value**	**Frequency of Detection**	**Criteria Level [1]**	**Number of Exceedances**	**Number of Times Detected**	**Number of Samples Collected**	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)
Aroclor-1016	UG/KG	0	0%	1000	0	0	54	37 U	38 U	38 U	37 U	36 U
Aroclor-1221	UG/KG	0	0%	1000	0	0	54	37 U	38 U	38 U	37 U	36 U
Aroclor-1232	UG/KG	0	0%	1000	0	0	54	37 U	38 U	38 U	37 U	36 U
Aroclor-1242	UG/KG	0	0%	1000	0	0	54	37 U	38 U	38 U	37 U	36 U
Aroclor-1248	UG/KG	0	0%	1000	0	0	54	37 U	38 U	38 U	37 U	36 U
Aroclor-1254	UG/KG	0	0%	1000	0	0	54	37 U	38 U	38 U	37 U	36 U
Aroclor-1260	UG/KG	0	0%	1000	0	0	54	37 U	38 U	38 U	37 U	36 U
Aluminum	MG/KG	13400	100%		0	54	54	9910	11000	13400	9740	10700
Antimony	MG/KG	43.9	20%		0	11	54	3.4 UJ	3.4 UJ	3.4 UJ	3.4 UJ	3.2 UJ
Arsenic	MG/KG	7.3	100%	16	0	54	54	5.8 J	4.1	5.4	4.5	4.8 J
Barium	MG/KG	135	100%	400	0	54	54	85.1	88.1	128	93.5	80.1
Beryllium	MG/KG	0.69	100%	590	0	54	54	0.27	0.69	0.16	0.2	0.27
Cadmium	MG/KG	1.2	98%	9.3	0	53	54	0.61	0.28 U	0.67	0.57 J	0.66
Calcium	MG/KG	100000	100%		0	54	54	52900	25000	17500	45300	59000
Chromium	MG/KG	35	100%	1500	0	54	54	17	19	20.6	25.6	18.8
Cobalt	MG/KG	13.9	100%		0	54	54	10.2	8.6	10.2	9.1	10.4
Copper	MG/KG	51.8	100%	270	0	54	54	28.2 J	30.5 J	31.8	32.3	29.1 J
Iron	MG/KG	26500	100%		0	54	54	18100	20600	22200	18800	19600
Lead	MG/KG	1440	100%	1000	1	54	54	50.9	55.3 J	38.1	82.9	69.1
Magnesium	MG/KG	26600	100%		0	54	54	9070	5680	6320	7410	8020
Manganese	MG/KG	1220	100%	10000	0	54	54	461	387	529	451	529
Nickel	MG/KG	56.6	100%	310	0	54	54	26.9	25.5	26.5	26.3	30
Potassium	MG/KG	1580	100%		0	54	54	1060	1180	1320	1060	1050
Selenium	MG/KG	0.72	4%	1500	0	2	54	0.57 U	0.57 U	0.56 U	0.57 UJ	0.53 U
Silver	MG/KG	4.7	17%	1500	0	9	54	0.57 UJ	0.57 U	0.6 J	0.57 U	0.53 UJ
Sodium	MG/KG	525	100%		0	54	54	178	111	68.5	93	148
Thallium	MG/KG	0.99	50%		0	27	54	0.57 U	0.57 U	0.87 J	0.57 U	0.53 U
Vanadium	MG/KG	35.4	100%		0	54	54	18.6	20.1	23	17.1	18.3
Zinc	MG/KG	185	100%	10000	0	54	54	135 J	81.9 J	87.9	89.8	87.2 J
Flashpoint	?C	100	100%		0	45	0		100 GT			100 GT
Percent Solids	%	91.4	100%		0	49	49	88.4	87.3	86.2	88.1	91.4
Reactive Cyanide	MG/KG	0	0%		0	0	44					5 U
Reactive Sulfide	MG/KG	0	0%		0	0	45		20 U			20 U
pH	Std units	8.71	100%		0	45	45		8.71			8
TCLP 1,4-Dichlorobenzene	UG/L	0	0%	7500	0	0	6		100 U			
TCLP 2,4,5-Trichlorophenol	UG/L	0	0%	1000	0	0	6		100 U			
TCLP 2,4,6-Trichlorophenol	UG/L	0	0%	2000	0	0	6		100 U			
TCLP 2,4-Dinitrotoluene	UG/L	0	0%	100	0	0	6		100 U			
TCLP 2-Methylphenol	UG/L	0	0%		0	0	6		100 U			
TCLP Hexachlorobenzene	UG/L	0	0%	100	0	0	6		100 U			
TCLP Hexachlorobutadiene	UG/L	0	0%		0	0	6		100 U			
TCLP Hexachloroethane	UG/L	0	0%	3000	0	0	6		100 U			
TCLP Nitrobenzene	UG/L	0	0%	2000	0	0	6		100 U			
TCLP Pentachlorophenol	UG/L	0	0%	100000	0	0	6		500 U			
TCLP Pyridine	UG/L	0	0%	5000	0	0	6		500 U			
TCLP Arsenic	UG/L	0	0%	5000	0	0	5					
TCLP Barium	UG/L	0	0%	100000	0	0	5					

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SITE LOCATION								SEAD-59	SEAD-59	SEAD-59	SEAD-59	SEAD-59
LOCATION ID								FD-59-WS-03	WS-59-01-005-4	WS-59-01-005-5	WS-59-01-006-1	WS-59-01-006-12
MATRIX								SOIL	SOIL	SOIL	SOIL	SOIL
SAMPLE ID								FD-59-WS-03	WS-59-01-005-4	WS-59-01-005-5	WS-59-01-006-1	WS-59-01-006-12
SAMPLE DATE								5/6/2004	5/6/2004	5/6/2004	5/6/2004	5/6/2004
QC CODE								SA	SA	SA	SA	SA
STUDY ID								ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM
SAMPLE ROUND								1	1	1	1	1
Parameter	**Units**	**Maximum Value**	**Frequency of Detection**	**Criteria Level [1]**	**Number of Exceedances**	**Number of Times Detected**	**Number of Samples Collected**	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)
TCLP Cadmium	UG/L	0	0%	1000	0	0	5					
TCLP Chromium	UG/L	0	0%	5000	0	0	5					
TCLP Lead	UG/L	106	20%	5000	0	1	5					
TCLP Mercury	UG/L	0	0%	200	0	0	5					
TCLP Selenium	UG/L	0	0%	1000	0	0	5					
TCLP Silver	UG/L	0	0%	5000	0	0	5					

(1) The following criterias were used to compare the soil results against:
- NYSDEC's Restricted Commercial Use Soil Cleanup Objective, 6 NYCRR Part 375-6.
- TCLP regulatory limits are based on 40CFR 261.23 and 40CFR 261.24.

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SITE LOCATION							SEAD-59	SEAD-59	SEAD-59	SEAD-59	SEAD-59	SEAD-59
LOCATION ID							WS-59-01-006-3	WS-59-01-006-7	WS-59-01-006-9	WS-59-01-007-1	WS-59-01-007-10	WS-59-01-007-11
MATRIX							SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
SAMPLE ID							WS-59-01-006-3	WS-59-01-006-7	WS-59-01-006-9	WS-59-01-007-1	WS-59-01-007-10	WS-59-01-007-11
SAMPLE DATE							5/6/2004	5/6/2004	5/6/2004	5/6/2004	5/6/2004	5/6/2004
QC CODE							SA	SA	SA	SA	SA	SA
STUDY ID							ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM
SAMPLE ROUND							1	1	1	1	1	1
Parameter	**Units**	**Maximum Value**	**Frequency of Detection**	**Criteria Level [1]**	**Number of Exceedances**	**Number of Times Detected**	**Number of Samples Collected**	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)
1,1,1-Trichloroethane	UG/KG	0	0%	500000	0	0	54	5.5 U	5.7 U	5.7 U	5.8 U	5.6 U	5.8 U
1,1,2,2-Tetrachloroethane	UG/KG	0	0%		0	0	53	5.5 U	5.7 U	5.7 R	5.8 U	5.6 U	5.8 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	UG/KG	1.5	2%		0	1	54	5.5 U	5.7 U	5.7 U	5.8 U	5.6 U	5.8 U
1,1,2-Trichloroethane	UG/KG	0	0%		0	0	5						
1,1-Dichloroethane	UG/KG	0	0%	240000	0	0	54	5.5 U	5.7 U	5.7 U	5.8 U	5.6 U	5.8 U
1,1-Dichloroethene	UG/KG	1	2%	500000	0	1	54	5.5 U	5.7 U	5.7 U	5.8 U	5.6 U	5.8 U
1,2,3-Trichloropropane	UG/KG	0	0%		0	0	48	5.5 U	5.7 U	5.7 R	5.8 U	5.6 U	5.8 U
1,2,4-Trichlorobenzene	UG/KG	0	0%		0	0	53	5.5 U	5.7 U	5.7 R	5.8 U	5.6 U	5.8 U
1,2-Dibromo-3-chloropropane	UG/KG	0	0%		0	0	5						
1,2-Dibromoethane	UG/KG	0	0%		0	0	5						
1,2-Dichlorobenzene	UG/KG	0	0%	500000	0	0	53	5.5 U	5.7 U	5.7 R	5.8 U	5.6 U	5.8 U
1,2-Dichloroethane	UG/KG	0	0%	30000	0	0	54	5.5 U	5.7 U	5.7 U	5.8 U	5.6 U	5.8 U
1,2-Dichloropropane	UG/KG	0	0%		0	0	5						
1,3-Dichlorobenzene	UG/KG	0	0%	280000	0	0	53	5.5 U	5.7 U	5.7 R	5.8 U	5.6 U	5.8 U
1,3-Dichloropropane	UG/KG	0	0%		0	0	49	5.5 U	5.7 U	5.7 UJ	5.8 U	5.6 U	5.8 U
1,4-Dichlorobenzene	UG/KG	0	0%	130000	0	0	53	5.5 U	5.7 U	5.7 R	5.8 U	5.6 U	5.8 U
Acetone	UG/KG	69	24%	500000	0	13	54	46	4.8 J	5.4 J	25	17 J	23 U
Benzene	UG/KG	0	0%	44000	0	0	54	5.5 U	5.7 U	5.7 U	5.8 U	5.6 U	5.8 U
Bromodichloromethane	UG/KG	0	0%		0	0	5						
Bromoform	UG/KG	0	0%		0	0	5						
Carbon disulfide	UG/KG	0	0%		0	0	54	5.5 U	5.7 U	5.7 U	5.8 U	5.6 U	5.8 U
Carbon tetrachloride	UG/KG	0	0%	22000	0	0	54	5.5 U	5.7 U	5.7 U	5.8 U	5.6 U	5.8 U
Chlorobenzene	UG/KG	0	0%	500000	0	0	54	5.5 U	5.7 U	5.7 UJ	5.8 U	5.6 U	5.8 U
Chlorodibromomethane	UG/KG	0	0%		0	0	54	5.5 U	5.7 U	5.7 UJ	5.8 U	5.6 U	5.8 U
Chloroethane	UG/KG	0	0%		0	0	54	11 U	11 U	11 U	12 U	11 U	12 U
Chloroform	UG/KG	0	0%	350000	0	0	54	5.5 U	5.7 U	5.7 U	5.8 U	5.6 U	5.8 U
Cis-1,2-Dichloroethene	UG/KG	0	0%	500000	0	0	5						
Cis-1,3-Dichloropropene	UG/KG	0	0%		0	0	5						
Cyclohexane	UG/KG	0	0%		0	0	5						
Dichlorodifluoromethane	UG/KG	0	0%		0	0	5						
Ethyl benzene	UG/KG	0	0%	390000	0	0	54	5.5 U	5.7 U	5.7 UJ	5.8 U	5.6 U	5.8 U
Isopropylbenzene	UG/KG	0	0%		0	0	5						
Meta/Para Xylene	UG/KG	2.3	4%	500000	0	2	49	5.5 U	5.7 U	5.7 UJ	5.8 U	5.6 U	5.8 U
Methyl Acetate	UG/KG	0	0%		0	0	5						
Methyl Tertbutyl Ether	UG/KG	0	0%	500000	0	0	5						
Methyl bromide	UG/KG	0	0%		0	0	5						
Methyl butyl ketone	UG/KG	0	0%		0	0	5						
Methyl chloride	UG/KG	0	0%		0	0	5						
Methyl cyclohexane	UG/KG	0	0%		0	0	5						
Methyl ethyl ketone	UG/KG	7	9%	500000	0	5	54	11 U	11 U	11 U	2.7 J	4.6 J	12 U
Methyl isobutyl ketone	UG/KG	0	0%		0	0	54	11 U	11 U	11 U	12 U	11 U	12 U
Methylene chloride	UG/KG	1.4	2%	500000	0	1	54	5.5 U	5.7 U	5.7 U	5.8 U	5.6 U	5.8 U
Ortho Xylene	UG/KG	1.9	10%	500000	0	5	49	5.5 U	5.7 U	5.7 UJ	5.8 U	5.6 U	5.8 U
Styrene	UG/KG	0	0%		0	0	5						
Tetrachloroethene	UG/KG	6.7	6%	150000	0	3	54	5.5 U	5.7 U	5.7 UJ	5.8 U	5.6 U	5.8 U
Toluene	UG/KG	0	0%	500000	0	0	54	5.5 U	5.7 U	5.7 UJ	5.8 U	5.6 U	5.8 U
Total Xylenes	UG/KG	3	20%	500000	0	1	5						

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SITE LOCATION								SEAD-59	SEAD-59	SEAD-59	SEAD-59	SEAD-59	SEAD-59
LOCATION ID								WS-59-01-006-3	WS-59-01-006-7	WS-59-01-006-9	WS-59-01-007-1	WS-59-01-007-10	WS-59-01-007-11
MATRIX								SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
SAMPLE ID								WS-59-01-006-3	WS-59-01-006-7	WS-59-01-006-9	WS-59-01-007-1	WS-59-01-007-10	WS-59-01-007-11
SAMPLE DATE								5/6/2004	5/6/2004	5/6/2004	5/6/2004	5/6/2004	5/6/2004
QC CODE								SA	SA	SA	SA	SA	SA
STUDY ID								ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM
SAMPLE ROUND								1	1	1	1	1	1
Parameter	**Units**	**Maximum Value**	**Frequency of Detection**	**Criteria Level [1]**	**Number of Exceedances**	**Number of Times Detected**	**Number of Samples Collected**	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)
Trans-1,2-Dichloroethene	UG/KG	0	0%	500000	0	0	54	5.5 U	5.7 U	5.7 U	5.8 U	5.6 U	5.8 U
Trans-1,3-Dichloropropene	UG/KG	0	0%		0	0	5						
Trichloroethene	UG/KG	2.7	7%	200000	0	4	54	5.5 U	1.1 J	1.7 J	5.8 U	5.6 U	5.8 U
Trichlorofluoromethane	UG/KG	0	0%		0	0	5						
Vinyl chloride	UG/KG	0	0%	13000	0	0	54	11 U	11 UJ	11 UJ	12 U	11 U	12 U
1,1'-Biphenyl	UG/KG	59	20%		0	1	5						
2,2'-oxybis(1-Chloropropane)	UG/KG	0	0%		0	0	5						
2,4,5-Trichlorophenol	UG/KG	0	0%		0	0	54	1800 U	1900 U	3800 U	1900 U	1800 U	1900 U
2,4,6-Trichlorophenol	UG/KG	0	0%		0	0	54	1800 U	1900 U	3800 U	1900 U	1800 U	1900 U
2,4-Dichlorophenol	UG/KG	0	0%		0	0	54	1800 U	1900 U	3800 U	1900 U	1800 U	1900 U
2,4-Dimethylphenol	UG/KG	0	0%		0	0	5						
2,4-Dinitrophenol	UG/KG	0	0%		0	0	54	9400 U	9700 U	19000 UJ	9900 U	9500 U	9900 U
2,4-Dinitrotoluene	UG/KG	0	0%		0	0	54	1800 U	1900 U	3800 U	1900 U	1800 U	1900 U
2,6-Dinitrotoluene	UG/KG	0	0%		0	0	54	1800 U	1900 U	3800 U	1900 U	1800 U	1900 U
2-Chloronaphthalene	UG/KG	0	0%		0	0	5						
2-Chlorophenol	UG/KG	0	0%		0	0	54	1800 U	1900 U	3800 U	1900 U	1800 U	1900 U
2-Methylnaphthalene	UG/KG	1200	50%		0	27	54	1800 U	210 J	3800 U	1200 J	1800 U	1900 U
2-Methylphenol	UG/KG	0	0%	500000	0	0	54	1800 U	1900 U	3800 U	1900 U	1800 U	1900 U
2-Nitroaniline	UG/KG	0	0%		0	0	54	9400 U	9700 U	19000 U	9900 U	9500 U	9900 U
2-Nitrophenol	UG/KG	0	0%		0	0	54	1800 U	1900 U	3800 U	1900 U	1800 U	1900 U
3,3'-Dichlorobenzidine	UG/KG	0	0%		0	0	54	1800 U	1900 U	3800 U	1900 U	1800 U	1900 U
3-Nitroaniline	UG/KG	0	0%		0	0	54	9400 U	9700 U	19000 U	9900 U	9500 U	9900 U
4,6-Dinitro-2-methylphenol	UG/KG	0	0%		0	0	5						
4-Bromophenyl phenyl ether	UG/KG	0	0%		0	0	5						
4-Chloro-3-methylphenol	UG/KG	0	0%		0	0	54	1800 U	1900 U	3800 U	1900 U	1800 U	1900 U
4-Chloroaniline	UG/KG	0	0%		0	0	54	1800 U	1900 U	3800 U	1900 U	1800 U	1900 U
4-Chlorophenyl phenyl ether	UG/KG	0	0%		0	0	5						
4-Methylphenol	UG/KG	0	0%	500000	0	0	54	1800 U	1900 U	3800 U	1900 U	1800 U	1900 U
4-Nitroaniline	UG/KG	0	0%		0	0	5						
4-Nitrophenol	UG/KG	0	0%		0	0	54	9400 U	9700 U	19000 U	9900 U	9500 U	9900 U
Acenaphthene	UG/KG	2400	87%	500000	0	47	54	520 J	460 J	440 J	720 J	250 J	370 J
Acenaphthylene	UG/KG	3500	98%	500000	0	53	54	2500	2000	1600 J	2700	960 J	1300 J
Acetophenone	UG/KG	0	0%		0	0	5						
Aniline	UG/KG	0	0%		0	0	49	1800 U	1900 U	3800 U	1900 U	1800 U	1900 U
Anthracene	UG/KG	6600	100%	500000	0	54	54	2400	1900	2000 J	2800	880 J	1300 J
Atrazine	UG/KG	0	0%		0	0	5						
Benzaldehyde	UG/KG	0	0%		0	0	5						
Benzo(a)anthracene	UG/KG	14000	100%	5600	16	54	54	5300	4300	5600	5200	2200	3000
Benzo(a)pyrene	UG/KG	16000	100%	1000	48	54	54	**6900**	**5400**	**7400**	**5400**	**2700**	**3100**
Benzo(b)fluoranthene	UG/KG	11000	100%	5600	13	54	54	4600	3900	5400	3600	2000	2300
Benzo(ghi)perylene	UG/KG	8000	100%	500000	0	54	54	4800	4200	4900	3300	1700 J	1600 J
Benzo(k)fluoranthene	UG/KG	13000	100%	56000	0	54	54	4300	3700	5400	3600	2000	2400
Benzoic Acid	UG/KG	0	0%		0	0	49	9400 U	9700 UJ	19000 U	9900 UJ	9500 U	9900 U
Bis(2-Chloroethoxy)methane	UG/KG	0	0%		0	0	5						
Bis(2-Chloroethyl)ether	UG/KG	0	0%		0	0	5						
Bis(2-Ethylhexyl)phthalate	UG/KG	130	6%		0	3	54	1800 U	1900 U	3800 U	1900 U	1800 U	1900 U
Butylbenzylphthalate	UG/KG	0	0%		0	0	54	1800 U	1900 U	3800 U	1900 U	1800 UJ	1900 UJ

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SITE LOCATION								SEAD-59	SEAD-59	SEAD-59	SEAD-59	SEAD-59	SEAD-59
LOCATION ID								WS-59-01-006-3	WS-59-01-006-7	WS-59-01-006-9	WS-59-01-007-1	WS-59-01-007-10	WS-59-01-007-11
MATRIX								SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
SAMPLE ID								WS-59-01-006-3	WS-59-01-006-7	WS-59-01-006-9	WS-59-01-007-1	WS-59-01-007-10	WS-59-01-007-11
SAMPLE DATE								5/6/2004	5/6/2004	5/6/2004	5/6/2004	5/6/2004	5/6/2004
QC CODE								SA	SA	SA	SA	SA	SA
STUDY ID								ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM
SAMPLE ROUND								1	1	1	1	1	1
Parameter	**Units**	**Maximum Value**	**Frequency of Detection**	**Criteria Level [1]**	**Number of Exceedances**	**Number of Times Detected**	**Number of Samples Collected**	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)
Caprolactam	UG/KG	0	0%		0	0	5						
Carbazole	UG/KG	1100	80%		0	4	5						
Chrysene	UG/KG	13000	100%	56000	0	54	54	5400	4400	5700	5000	2300	3200
Di-n-butylphthalate	UG/KG	0	0%		0	0	54	1800 U	1900 U	3800 U	1900 U	1800 U	1900 U
Di-n-octylphthalate	UG/KG	0	0%		0	0	54	1800 U	1900 U	3800 U	1900 U	1800 U	1900 U
Dibenz(a,h)anthracene	UG/KG	2900	98%	560	41	53	54	**1600** J	**1400** J	**1500** J	**1100** J	550 J	550 J
Dibenzofuran	UG/KG	1300	61%	350000	0	33	54	210 J	1900 U	3800 U	490 J	1800 U	1900 U
Diethyl phthalate	UG/KG	0	0%		0	0	54	1800 U	1900 U	3800 U	1900 U	1800 U	1900 U
Dimethylphthalate	UG/KG	0	0%		0	0	54	1800 U	1900 U	3800 U	1900 U	1800 U	1900 U
Fluoranthene	UG/KG	29000	100%	500000	0	54	54	11000	8900	9500	11000	4400	7500
Fluorene	UG/KG	3100	87%	500000	0	47	54	490 J	500 J	560 J	1300 J	240 J	420 J
Hexachlorobenzene	UG/KG	0	0%	6000	0	0	54	1800 U	1900 U	3800 U	1900 U	1800 U	1900 U
Hexachlorobutadiene	UG/KG	0	0%		0	0	54	1800 U	1900 U	3800 U	1900 U	1800 U	1900 U
Hexachlorocyclopentadiene	UG/KG	0	0%		0	0	5						
Hexachloroethane	UG/KG	0	0%		0	0	54	1800 U	1900 U	3800 U	1900 U	1800 U	1900 U
Indeno(1,2,3-cd)pyrene	UG/KG	8000	100%	5600	6	54	54	4500 J	3600 J	4700 J	3000 J	1600 J	1600 J
Isophorone	UG/KG	0	0%		0	0	54	1800 U	1900 U	3800 U	1900 U	1800 U	1900 U
N-Nitrosodiphenylamine	UG/KG	0	0%		0	0	5						
N-Nitrosodipropylamine	UG/KG	0	0%		0	0	5						
Naphthalene	UG/KG	1200	61%	500000	0	33	54	1800 U	240 NJ	3800 U	1000 J	1800 U	220 NJ
Nitrobenzene	UG/KG	0	0%		0	0	54	1800 U	1900 U	3800 U	1900 U	1800 U	1900 U
Pentachlorophenol	UG/KG	660	2%	6700	0	1	54	9400 U	9700 U	19000 U	9900 U	9500 U	9900 U
Phenanthrene	UG/KG	17000	100%	500000	0	54	54	5300	4400	4900	7800	2200	4000
Phenol	UG/KG	0	0%	500000	0	0	54	1800 U	1900 U	3800 U	1900 U	1800 U	1900 U
Pyrene	UG/KG	22000	100%	500000	0	54	54	9600	7400	8900	9800	3500	5600
Pyridine	UG/KG	0	0%		0	0	49	9400 U	9700 U	19000 U	9900 U	9500 U	9900 U
4,4'-DDD	UG/KG	450	61%	92000	0	33	54	20	49	90	28	19	30
4,4'-DDE	UG/KG	260	61%	62000	0	33	54	110 J	100	230	28	22	52 J
4,4'-DDT	UG/KG	520	69%	47000	0	37	54	52 J	130	190	51	20	34
Aldrin	UG/KG	0	0%	680	0	0	54	9.4 U	9.7 U	9.7 U	10 U	9.5 U	9.9 U
Alpha-BHC	UG/KG	4.4	2%	3400	0	1	54	9.4 U	9.7 U	9.7 U	10 U	9.5 U	9.9 U
Alpha-Chlordane	UG/KG	27	11%	24000	0	6	54	9.4 U	9.7 U	9.7 U	10 U	9.5 U	9.9 U
Beta-BHC	UG/KG	13	2%	3000	0	1	54	9.4 U	9.7 U	9.7 U	10 U	9.5 U	9.9 U
Delta-BHC	UG/KG	0	0%	500000	0	0	54	9.4 U	9.7 U	9.7 U	10 U	9.5 U	9.9 U
Dieldrin	UG/KG	0	0%	1400	0	0	54	18 U	19 U	19 U	19 U	18 U	19 U
Endosulfan I	UG/KG	0	0%	200000	0	0	54	9.4 U	9.7 U	9.7 U	10 U	9.5 U	9.9 U
Endosulfan II	UG/KG	0	0%	200000	0	0	54	18 U	19 U	19 U	19 U	18 U	19 U
Endosulfan sulfate	UG/KG	0	0%	200000	0	0	54	18 U	19 U	19 U	19 U	18 U	19 U
Endrin	UG/KG	0	0%	89000	0	0	54	18 U	19 U	19 U	19 U	18 U	19 U
Endrin aldehyde	UG/KG	0	0%		0	0	54	18 U	19 U	19 U	19 U	18 U	19 U
Endrin ketone	UG/KG	15	2%		0	1	54	18 U	19 U	19 U	19 U	18 U	19 U
Gamma-BHC/Lindane	UG/KG	0	0%	9200	0	0	54	9.4 U	9.7 U	9.7 U	10 U	9.5 U	9.9 U
Gamma-Chlordane	UG/KG	21	9%		0	5	54	9.4 U	9.7 U	9.7 U	10 U	9.5 U	9.9 U
Heptachlor	UG/KG	0	0%	15000	0	0	54	9.4 U	9.7 U	9.7 U	10 U	9.5 U	9.9 U
Heptachlor epoxide	UG/KG	0	0%		0	0	54	9.4 U	9.7 U	9.7 U	10 U	9.5 U	9.9 U
Methoxychlor	UG/KG	0	0%		0	0	54	94 U	97 U	97 U	99 U	95 U	99 U
Toxaphene	UG/KG	0	0%		0	0	54	180 U	190 U	190 U	190 U	180 U	190 U

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Seneca Army Depot Activity

SITE LOCATION								SEAD-59		SEAD-59		SEAD-59		SEAD-59		SEAD-59	
LOCATION ID								WS-59-01-006-3		WS-59-01-006-7		WS-59-01-006-9		WS-59-01-007-1		WS-59-01-007-10	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE ID								WS-59-01-006-3		WS-59-01-006-7		WS-59-01-006-9		WS-59-01-007-1		WS-59-01-007-10	
SAMPLE DATE								5/6/2004		5/6/2004		5/6/2004		5/6/2004		5/6/2004	
QC CODE								SA		SA		SA		SA		SA	
STUDY ID								ENSR IRM		ENSR IRM		ENSR IRM		ENSR IRM		ENSR IRM	
SAMPLE ROUND								1		1		1		1		1	
Parameter	**Units**	**Maximum Value**	**Frequency of Detection**	**Criteria Level [1]**	**Number of Exceedances**	**Number of Times Detected**	**Number of Samples Collected**	Value (Q)		Value (Q)		Value (Q)		Value (Q)		Value (Q)	
Aroclor-1016	UG/KG	0	0%	1000	0	0	54	36	U	38	U	38	U	39	U	37	U
Aroclor-1221	UG/KG	0	0%	1000	0	0	54	36	U	38	U	38	U	39	U	37	U
Aroclor-1232	UG/KG	0	0%	1000	0	0	54	36	U	38	U	38	U	39	U	37	U
Aroclor-1242	UG/KG	0	0%	1000	0	0	54	36	U	38	U	38	U	39	U	37	U
Aroclor-1248	UG/KG	0	0%	1000	0	0	54	36	U	38	U	38	U	39	U	37	U
Aroclor-1254	UG/KG	0	0%	1000	0	0	54	36	U	38	U	38	U	39	U	37	U
Aroclor-1260	UG/KG	0	0%	1000	0	0	54	36	U	38	U	38	U	39	U	37	U
Aluminum	MG/KG	13400	100%		0	54	54	11900		10900		11400		10800		8340	
Antimony	MG/KG	43.9	20%		0	11	54	3.3	UJ	3.3	UJ	3.4	UJ	3.4	UJ	3.2	UJ
Arsenic	MG/KG	7.3	100%	16	0	54	54	5.1		5.1	J	5.8	J	4.8	J	4.4	
Barium	MG/KG	135	100%	400	0	54	54	99.5		88.6		90.8		98		74.7	
Beryllium	MG/KG	0.69	100%	590	0	54	54	0.21		0.34		0.58		0.36		0.21	
Cadmium	MG/KG	1.2	98%	9.3	0	53	54	0.43	J	0.73		0.76		0.62		0.7	
Calcium	MG/KG	100000	100%		0	54	54	70600		46900		41200		41600		94200	
Chromium	MG/KG	35	100%	1500	0	54	54	19.1		22.5		21.3		19.4		21.4	
Cobalt	MG/KG	13.9	100%		0	54	54	10.5		11.3		13.9		10.1		8.1	
Copper	MG/KG	51.8	100%	270	0	54	54	31.3		32.5	J	43.6	J	37.4	J	27.3	
Iron	MG/KG	26500	100%		0	54	54	21500		21300		21200		18800		16100	
Lead	MG/KG	1440	100%	1000	1	54	54	56.7		77		51.8		64.6		66.2	J
Magnesium	MG/KG	26600	100%		0	54	54	8340		7390		7690		7170		8830	
Manganese	MG/KG	1220	100%	10000	0	54	54	642		547		476		479		438	
Nickel	MG/KG	56.6	100%	310	0	54	54	26.5		33.8		36.1		28		26.5	
Potassium	MG/KG	1580	100%		0	54	54	1190		1120		1200		1120		939	
Selenium	MG/KG	0.72	4%	1500	0	2	54	0.54	UJ	0.55	U	0.57	U	0.56	U	0.53	U
Silver	MG/KG	4.7	17%	1500	0	9	54	0.54	U	0.55	UJ	0.57	UJ	1.1	J	0.53	UJ
Sodium	MG/KG	525	100%		0	54	54	107		225		192	J	151	J	121	
Thallium	MG/KG	0.99	50%		0	27	54	0.69	J	0.55	U	0.65	J	0.69	J	0.53	U
Vanadium	MG/KG	35.4	100%		0	54	54	20.6		19.5		19.9		18.9		35.4	
Zinc	MG/KG	185	100%	10000	0	54	54	110		106	J	185	J	84	J	90.8	
Flashpoint	?C	100	100%		0	45	0			100	GT	100	GT	100	GT	100	GT
Percent Solids	%	91.4	100%		0	49	49	90.9		87.5		87.6		85.7		89.3	
Reactive Cyanide	MG/KG	0	0%		0	0	44			5	U	5	U	5	U	5	U
Reactive Sulfide	MG/KG	0	0%		0	0	45			20	U	20	U	20	U	20	U
pH	Std units	8.71	100%		0	45	45			8.17		7.96		7.89		8.16	
TCLP 1,4-Dichlorobenzene	UG/L	0	0%	7500	0	0	6					100	U				
TCLP 2,4,5-Trichlorophenol	UG/L	0	0%	1000	0	0	6					100	U				
TCLP 2,4,6-Trichlorophenol	UG/L	0	0%	2000	0	0	6					100	U				
TCLP 2,4-Dinitrotoluene	UG/L	0	0%	100	0	0	6					100	U				
TCLP 2-Methylphenol	UG/L	0	0%		0	0	6					100	U				
TCLP Hexachlorobenzene	UG/L	0	0%	100	0	0	6					100	U				
TCLP Hexachlorobutadiene	UG/L	0	0%		0	0	6					100	U				
TCLP Hexachloroethane	UG/L	0	0%	3000	0	0	6					100	U				
TCLP Nitrobenzene	UG/L	0	0%	2000	0	0	6					100	U				
TCLP Pentachlorophenol	UG/L	0	0%	100000	0	0	6					500	U				
TCLP Pyridine	UG/L	0	0%	5000	0	0	6					500	U				
TCLP Arsenic	UG/L	0	0%	5000	0	0	5										
TCLP Barium	UG/L	0	0%	100000	0	0	5										

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SITE LOCATION								SEAD-59	SEAD-59	SEAD-59	SEAD-59	SEAD-59	SEAD-59
LOCATION ID								WS-59-01-006-3	WS-59-01-006-7	WS-59-01-006-9	WS-59-01-007-1	WS-59-01-007-10	WS-59-01-007-11
MATRIX								SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
SAMPLE ID								WS-59-01-006-3	WS-59-01-006-7	WS-59-01-006-9	WS-59-01-007-1	WS-59-01-007-10	WS-59-01-007-11
SAMPLE DATE								5/6/2004	5/6/2004	5/6/2004	5/6/2004	5/6/2004	5/6/2004
QC CODE								SA	SA	SA	SA	SA	SA
STUDY ID								ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM
SAMPLE ROUND								1	1	1	1	1	1
Parameter	**Units**	**Maximum Value**	**Frequency of Detection**	**Criteria Level [1]**	**Number of Exceedances**	**Number of Times Detected**	**Number of Samples Collected**	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)
TCLP Cadmium	UG/L	0	0%	1000	0	0	5						
TCLP Chromium	UG/L	0	0%	5000	0	0	5						
TCLP Lead	UG/L	106	20%	5000	0	1	5						
TCLP Mercury	UG/L	0	0%	200	0	0	5						
TCLP Selenium	UG/L	0	0%	1000	0	0	5						
TCLP Silver	UG/L	0	0%	5000	0	0	5						

(1) The following criterias were used to compare the soil results against:
- NYSDEC's Restricted Commercial Use Soil Cleanup Objective, 6 NYCRR Part 375-6.
- TCLP regulatory limits are based on 40CFR 261.23 and 40CFR 261.24.

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SITE LOCATION								SEAD-59	SEAD-59	SEAD-59	SEAD-59	SEAD-59	SEAD-59
LOCATION ID								WS-59-01-007-12	WS-59-01-007-13	WS-59-01-007-14	WS-59-01-007-2	WS-59-01-007-5	WS-59-01-007-6
MATRIX								SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
SAMPLE ID								WS-59-01-007-12	WS-59-01-007-13	WS-59-01-007-14	WS-59-01-007-2	WS-59-01-007-5	WS-59-01-007-6
SAMPLE DATE								5/6/2004	5/6/2004	5/6/2004	5/6/2004	5/6/2004	5/6/2004
QC CODE								SA	SA	SA	SA	SA	SA
STUDY ID								ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM
SAMPLE ROUND								1	1	1	1	1	1
Parameter	**Units**	**Maximum Value**	**Frequency of Detection**	**Criteria Level [1]**	**Number of Exceedances**	**Number of Times Detected**	**Number of Samples Collected**	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)
1,1,1-Trichloroethane	UG/KG	0	0%	500000	0	0	54	5.6 U	5.8 U	5.6 U	5.7 U	5.7 U	5.8 U
1,1,2,2-Tetrachloroethane	UG/KG	0	0%		0	0	53	5.6 U	5.8 U	5.6 U	5.7 U	5.7 U	5.8 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	UG/KG	1.5	2%		0	1	54	5.6 U	5.8 U	5.6 U	5.7 U	5.7 U	5.8 U
1,1,2-Trichloroethane	UG/KG	0	0%		0	0	5						
1,1-Dichloroethane	UG/KG	0	0%	240000	0	0	54	5.6 U	5.8 U	5.6 U	5.7 U	5.7 U	5.8 U
1,1-Dichloroethene	UG/KG	1	2%	500000	0	1	54	5.6 U	5.8 U	5.6 U	5.7 U	5.7 U	5.8 U
1,2,3-Trichloropropane	UG/KG	0	0%		0	0	48	5.6 U	5.8 U	5.6 U	5.7 U	5.7 U	5.8 U
1,2,4-Trichlorobenzene	UG/KG	0	0%		0	0	53	5.6 U	5.8 U	5.6 U	5.7 U	5.7 U	5.8 U
1,2-Dibromo-3-chloropropane	UG/KG	0	0%		0	0	5						
1,2-Dibromoethane	UG/KG	0	0%		0	0	5						
1,2-Dichlorobenzene	UG/KG	0	0%	500000	0	0	53	5.6 U	5.8 U	5.6 U	5.7 U	5.7 U	5.8 U
1,2-Dichloroethane	UG/KG	0	0%	30000	0	0	54	5.6 U	5.8 U	5.6 U	5.7 U	5.7 U	5.8 U
1,2-Dichloropropane	UG/KG	0	0%		0	0	5						
1,3-Dichlorobenzene	UG/KG	0	0%	280000	0	0	53	5.6 U	5.8 U	5.6 U	5.7 U	5.7 U	5.8 U
1,3-Dichloropropane	UG/KG	0	0%		0	0	49	5.6 U	5.8 U	5.6 U	5.7 U	5.7 U	5.8 U
1,4-Dichlorobenzene	UG/KG	0	0%	130000	0	0	53	5.6 U	5.8 U	5.6 U	5.7 U	5.7 U	5.8 U
Acetone	UG/KG	69	24%	500000	0	13	54	22 U	5.1 J	22 U	25	5.8 J	23 U
Benzene	UG/KG	0	0%	44000	0	0	54	5.6 U	5.8 U	5.6 U	5.7 U	5.7 U	5.8 U
Bromodichloromethane	UG/KG	0	0%		0	0	5						
Bromoform	UG/KG	0	0%		0	0	5						
Carbon disulfide	UG/KG	0	0%		0	0	54	5.6 U	5.8 U	5.6 U	5.7 U	5.7 U	5.8 U
Carbon tetrachloride	UG/KG	0	0%	22000	0	0	54	5.6 U	5.8 U	5.6 U	5.7 U	5.7 U	5.8 U
Chlorobenzene	UG/KG	0	0%	500000	0	0	54	5.6 U	5.8 U	5.6 U	5.7 U	5.7 U	5.8 U
Chlorodibromomethane	UG/KG	0	0%		0	0	54	5.6 U	5.8 U	5.6 U	5.7 U	5.7 U	5.8 U
Chloroethane	UG/KG	0	0%		0	0	54	11 U	12 U	11 U	11 U	11 U	12 U
Chloroform	UG/KG	0	0%	350000	0	0	54	5.6 U	5.8 U	5.6 U	5.7 U	5.7 U	5.8 U
Cis-1,2-Dichloroethene	UG/KG	0	0%	500000	0	0	5						
Cis-1,3-Dichloropropene	UG/KG	0	0%		0	0	5						
Cyclohexane	UG/KG	0	0%		0	0	5						
Dichlorodifluoromethane	UG/KG	0	0%		0	0	5						
Ethyl benzene	UG/KG	0	0%	390000	0	0	54	5.6 U	5.8 U	5.6 U	5.7 U	5.7 U	5.8 U
Isopropylbenzene	UG/KG	0	0%		0	0	5						
Meta/Para Xylene	UG/KG	2.3	4%	500000	0	2	49	5.6 U	2.3 J	5.6 U	5.7 U	5.7 U	5.8 U
Methyl Acetate	UG/KG	0	0%		0	0	5						
Methyl Tertbutyl Ether	UG/KG	0	0%	500000	0	0	5						
Methyl bromide	UG/KG	0	0%		0	0	5						
Methyl butyl ketone	UG/KG	0	0%		0	0	5						
Methyl chloride	UG/KG	0	0%		0	0	5						
Methyl cyclohexane	UG/KG	0	0%		0	0	5						
Methyl ethyl ketone	UG/KG	7	9%	500000	0	5	54	11 U	2.6 J	11 U	11 U	11 U	12 U
Methyl isobutyl ketone	UG/KG	0	0%		0	0	54	11 U	12 U	11 U	11 U	11 U	12 U
Methylene chloride	UG/KG	1.4	2%	500000	0	1	54	5.6 U	5.8 U	5.6 U	5.7 U	5.7 U	5.8 U
Ortho Xylene	UG/KG	1.9	10%	500000	0	5	49	5.6 U	1.6 J	1 J	5.7 U	5.7 U	5.8 U
Styrene	UG/KG	0	0%		0	0	5						
Tetrachloroethene	UG/KG	6.7	6%	150000	0	3	54	5.6 U	5.8 U	5.6 U	5.7 U	5.7 U	5.8 U
Toluene	UG/KG	0	0%	500000	0	0	54	5.6 U	5.8 U	5.6 U	5.7 U	5.7 U	5.8 U
Total Xylenes	UG/KG	3	20%	500000	0	1	5						

SEAD-59/71 Stockpile Soil Results
SEAD-5 Construction Completion Report
Seneca Army Depot Activity

SITE LOCATION								SEAD-59	SEAD-59	SEAD-59	SEAD-59	SEAD-59	SEAD-59
LOCATION ID								WS-59-01-007-12	WS-59-01-007-13	WS-59-01-007-14	WS-59-01-007-2	WS-59-01-007-5	WS-59-01-007-6
MATRIX								SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
SAMPLE ID								WS-59-01-007-12	WS-59-01-007-13	WS-59-01-007-14	WS-59-01-007-2	WS-59-01-007-5	WS-59-01-007-6
SAMPLE DATE								5/6/2004	5/6/2004	5/6/2004	5/6/2004	5/6/2004	5/6/2004
QC CODE								SA	SA	SA	SA	SA	SA
STUDY ID								ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM
SAMPLE ROUND								1	1	1	1	1	1
Parameter	**Units**	**Maximum Value**	**Frequency of Detection**	**Criteria Level [1]**	**Number of Exceedances**	**Number of Times Detected**	**Number of Samples Collected**	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)
Trans-1,2-Dichloroethene	UG/KG	0	0%	500000	0	0	54	5.6 U	5.8 U	5.6 U	5.7 U	5.7 U	5.8 U
Trans-1,3-Dichloropropene	UG/KG	0	0%		0	0	5						
Trichloroethene	UG/KG	2.7	7%	200000	0	4	54	5.6 U	5.8 U	5.6 U	5.7 U	5.7 U	5.8 U
Trichlorofluoromethane	UG/KG	0	0%		0	0	5						
Vinyl chloride	UG/KG	0	0%	13000	0	0	54	11 U	12 U	11 U	11 U	11 U	12 U
1,1'-Biphenyl	UG/KG	59	20%		0	1	5						
2,2'-oxybis(1-Chloropropane)	UG/KG	0	0%		0	0	5						
2,4,5-Trichlorophenol	UG/KG	0	0%		0	0	54	1900 U	1900 U	3700 U	1900 U	1900 U	1900 U
2,4,6-Trichlorophenol	UG/KG	0	0%		0	0	54	1900 U	1900 U	3700 U	1900 U	1900 U	1900 U
2,4-Dichlorophenol	UG/KG	0	0%		0	0	54	1900 U	1900 U	3700 U	1900 U	1900 U	1900 U
2,4-Dimethylphenol	UG/KG	0	0%		0	0	5						
2,4-Dinitrophenol	UG/KG	0	0%		0	0	54	9600 U	9900 U	19000 U	9700 UJ	9700 U	9900 U
2,4-Dinitrotoluene	UG/KG	0	0%		0	0	54	1900 U	1900 U	3700 U	1900 U	1900 U	1900 U
2,6-Dinitrotoluene	UG/KG	0	0%		0	0	54	1900 U	1900 U	3700 U	1900 U	1900 U	1900 U
2-Chloronaphthalene	UG/KG	0	0%		0	0	5						
2-Chlorophenol	UG/KG	0	0%		0	0	54	1900 U	1900 U	3700 U	1900 U	1900 U	1900 U
2-Methylnaphthalene	UG/KG	1200	50%		0	27	54	290 J	860 J	600 J	240 J	1900 U	1900 U
2-Methylphenol	UG/KG	0	0%	500000	0	0	54	1900 U	1900 U	3700 U	1900 U	1900 U	1900 U
2-Nitroaniline	UG/KG	0	0%		0	0	54	9600 U	9900 U	19000 U	9700 U	9700 U	9900 U
2-Nitrophenol	UG/KG	0	0%		0	0	54	1900 U	1900 U	3700 U	1900 U	1900 U	1900 U
3,3'-Dichlorobenzidine	UG/KG	0	0%		0	0	54	1900 U	1900 U	3700 U	1900 U	1900 U	1900 U
3-Nitroaniline	UG/KG	0	0%		0	0	54	9600 U	9900 U	19000 U	9700 U	9700 U	9900 U
4,6-Dinitro-2-methylphenol	UG/KG	0	0%		0	0	5						
4-Bromophenyl phenyl ether	UG/KG	0	0%		0	0	5						
4-Chloro-3-methylphenol	UG/KG	0	0%		0	0	54	1900 U	1900 U	3700 U	1900 U	1900 U	1900 U
4-Chloroaniline	UG/KG	0	0%		0	0	54	1900 U	1900 U	3700 U	1900 U	1900 U	1900 U
4-Chlorophenyl phenyl ether	UG/KG	0	0%		0	0	5						
4-Methylphenol	UG/KG	0	0%	500000	0	0	54	1900 U	1900 U	3700 U	1900 U	1900 U	1900 U
4-Nitroaniline	UG/KG	0	0%		0	0	5						
4-Nitrophenol	UG/KG	0	0%		0	0	54	9600 U	9900 U	19000 U	9700 U	9700 U	9900 U
Acenaphthene	UG/KG	2400	87%	500000	0	47	54	580 J	780 J	1500 J	340 J	370 J	410 J
Acenaphthylene	UG/KG	3500	98%	500000	0	53	54	2200	1600 J	3500 J	1100 J	1500 J	1200 J
Acetophenone	UG/KG	0	0%		0	0	5						
Aniline	UG/KG	0	0%		0	0	49	1900 U	1900 U	3700 U	1900 U	1900 U	1900 U
Anthracene	UG/KG	6600	100%	500000	0	54	54	2300	2200	6600	1400 J	1300 J	1600 J
Atrazine	UG/KG	0	0%		0	0	5						
Benzaldehyde	UG/KG	0	0%		0	0	5						
Benzo(a)anthracene	UG/KG	14000	100%	5600	16	54	54	5400	3800	**13000**	4300	3600	3400
Benzo(a)pyrene	UG/KG	16000	100%	1000	48	54	54	**5900**	**4300**	**14000**	**4600**	**4400**	**3600**
Benzo(b)fluoranthene	UG/KG	11000	100%	5600	13	54	54	4300	2900	**9800**	3300	3200	2800
Benzo(ghi)perylene	UG/KG	8000	100%	500000	0	54	54	2900	2100	6800	2600	3000	2000
Benzo(k)fluoranthene	UG/KG	13000	100%	56000	0	54	54	4500	3200	11000	3400	3400	2700
Benzoic Acid	UG/KG	0	0%		0	0	49	9600 U	9900 U	19000 U	9700 U	9700 U	9900 U
Bis(2-Chloroethoxy)methane	UG/KG	0	0%		0	0	5						
Bis(2-Chloroethyl)ether	UG/KG	0	0%		0	0	5						
Bis(2-Ethylhexyl)phthalate	UG/KG	130	6%		0	3	54	1900 U	1900 U	3700 U	1900 U	1900 U	1900 U
Butylbenzylphthalate	UG/KG	0	0%		0	0	54	1900 UJ	1900 UJ	3700 UJ	1900 U	1900 U	1900 UJ

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SITE LOCATION								SEAD-59	SEAD-59	SEAD-59	SEAD-59	SEAD-59	SEAD-59
LOCATION ID								WS-59-01-007-12	WS-59-01-007-13	WS-59-01-007-14	WS-59-01-007-2	WS-59-01-007-5	WS-59-01-007-6
MATRIX								SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
SAMPLE ID								WS-59-01-007-12	WS-59-01-007-13	WS-59-01-007-14	WS-59-01-007-2	WS-59-01-007-5	WS-59-01-007-6
SAMPLE DATE								5/6/2004	5/6/2004	5/6/2004	5/6/2004	5/6/2004	5/6/2004
QC CODE								SA	SA	SA	SA	SA	SA
STUDY ID								ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM
SAMPLE ROUND								1	1	1	1	1	1
Parameter	**Units**	**Maximum Value**	**Frequency of Detection**	**Criteria Level [1]**	**Number of Exceedances**	**Number of Times Detected**	**Number of Samples Collected**	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)
Caprolactam	UG/KG	0	0%		0	0	5						
Carbazole	UG/KG	1100	80%		0	4	5						
Chrysene	UG/KG	13000	100%	56000	0	54	54	5400	3800	13000	4200	3600	3300
Di-n-butylphthalate	UG/KG	0	0%		0	0	54	1900 U	1900 U	3700 U	1900 U	1900 U	1900 U
Di-n-octylphthalate	UG/KG	0	0%		0	0	54	1900 U	1900 U	3700 U	1900 U	1900 U	1900 U
Dibenz(a,h)anthracene	UG/KG	2900	98%	560	41	53	54	**1100** J	**780** J	**2500** J	**870** J	**940** J	**740** J
Dibenzofuran	UG/KG	1300	61%	350000	0	33	54	380 J	630 J	900 J	190 J	200 J	270 J
Diethyl phthalate	UG/KG	0	0%		0	0	54	1900 U	1900 U	3700 U	1900 U	1900 U	1900 U
Dimethylphthalate	UG/KG	0	0%		0	0	54	1900 U	1900 U	3700 U	1900 U	1900 U	1900 U
Fluoranthene	UG/KG	29000	100%	500000	0	54	54	11000	8100	29000	7600	7000	7200
Fluorene	UG/KG	3100	87%	500000	0	47	54	810 J	1400 J	2300 J	470 J	460 J	730 J
Hexachlorobenzene	UG/KG	0	0%	6000	0	0	54	1900 U	1900 U	3700 U	1900 U	1900 U	1900 U
Hexachlorobutadiene	UG/KG	0	0%		0	0	54	1900 U	1900 U	3700 U	1900 U	1900 U	1900 U
Hexachlorocyclopentadiene	UG/KG	0	0%		0	0	5						
Hexachloroethane	UG/KG	0	0%		0	0	54	1900 U	1900 U	3700 U	1900 U	1900 U	1900 U
Indeno(1,2,3-cd)pyrene	UG/KG	8000	100%	5600	6	54	54	2800 J	2000 J	**7000** J	2500 J	2600 J	2000 J
Isophorone	UG/KG	0	0%		0	0	54	1900 U	1900 U	3700 U	1900 U	1900 U	1900 U
N-Nitrosodiphenylamine	UG/KG	0	0%		0	0	5						
N-Nitrosodipropylamine	UG/KG	0	0%		0	0	5						
Naphthalene	UG/KG	1200	61%	500000	0	33	54	500 J	1200 J	880 J	260 J	200 J	1900 U
Nitrobenzene	UG/KG	0	0%		0	0	54	1900 U	1900 U	3700 U	1900 U	1900 U	1900 U
Pentachlorophenol	UG/KG	660	2%	6700	0	1	54	9600 U	9900 U	19000 U	9700 U	9700 U	9900 U
Phenanthrene	UG/KG	17000	100%	500000	0	54	54	6000	6400	17000	3000	3600	4800
Phenol	UG/KG	0	0%	500000	0	0	54	1900 U	1900 U	3700 U	1900 U	1900 U	1900 U
Pyrene	UG/KG	22000	100%	500000	0	54	54	9300	6300	19000	6500	7100	6100
Pyridine	UG/KG	0	0%		0	0	49	9600 U	9900 U	19000 U	9700 U	9700 U	9900 U
4,4'-DDD	UG/KG	450	61%	92000	0	33	54	29	65	27	19 U	53	26
4,4'-DDE	UG/KG	260	61%	62000	0	33	54	35	96 J	47	50	47	42 J
4,4'-DDT	UG/KG	520	69%	47000	0	37	54	29	95	59	52	32	33
Aldrin	UG/KG	0	0%	680	0	0	54	9.6 U	9.9 U	9.5 U	9.7 U	9.7 U	10 U
Alpha-BHC	UG/KG	4.4	2%	3400	0	1	54	9.6 U	9.9 U	9.5 U	9.7 U	9.7 U	10 U
Alpha-Chlordane	UG/KG	27	11%	24000	0	6	54	9.6 U	9.9 U	9.5 U	9.7 U	9.7 U	10 U
Beta-BHC	UG/KG	13	2%	3000	0	1	54	9.6 U	9.9 U	9.5 U	9.7 U	9.7 U	10 U
Delta-BHC	UG/KG	0	0%	500000	0	0	54	9.6 U	9.9 U	9.5 U	9.7 U	9.7 U	10 U
Dieldrin	UG/KG	0	0%	1400	0	0	54	19 U	19 U	18 U	19 U	19 U	19 U
Endosulfan I	UG/KG	0	0%	200000	0	0	54	9.6 U	9.9 U	9.5 U	9.7 U	9.7 U	10 U
Endosulfan II	UG/KG	0	0%	200000	0	0	54	19 U	19 U	18 U	19 U	19 U	19 U
Endosulfan sulfate	UG/KG	0	0%	200000	0	0	54	19 U	19 U	18 U	19 U	19 U	19 U
Endrin	UG/KG	0	0%	89000	0	0	54	19 U	19 U	18 U	19 U	19 U	19 U
Endrin aldehyde	UG/KG	0	0%		0	0	54	19 U	19 U	18 U	19 U	19 U	19 U
Endrin ketone	UG/KG	15	2%		0	1	54	19 U	19 U	18 U	19 U	19 U	19 U
Gamma-BHC/Lindane	UG/KG	0	0%	9200	0	0	54	9.6 U	9.9 U	9.5 U	9.7 U	9.7 U	10 U
Gamma-Chlordane	UG/KG	21	9%		0	5	54	9.6 U	9.9 U	9.5 U	9.7 U	9.7 U	10 U
Heptachlor	UG/KG	0	0%	15000	0	0	54	9.6 U	9.9 U	9.5 U	9.7 U	9.7 U	10 U
Heptachlor epoxide	UG/KG	0	0%		0	0	54	9.6 U	9.9 U	9.5 U	9.7 U	9.7 U	10 U
Methoxychlor	UG/KG	0	0%		0	0	54	96 U	99 U	95 U	97 U	97 U	99 U
Toxaphene	UG/KG	0	0%		0	0	54	190 U	190 U	180 U	190 U	190 U	190 U

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Seneca Army Depot Activity

SITE LOCATION								SEAD-59		SEAD-59		SEAD-59		SEAD-59		SEAD-59	
LOCATION ID								WS-59-01-007-12		WS-59-01-007-13		WS-59-01-007-14		WS-59-01-007-2		WS-59-01-007-5	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE ID								WS-59-01-007-12		WS-59-01-007-13		WS-59-01-007-14		WS-59-01-007-2		WS-59-01-007-5	
SAMPLE DATE								5/6/2004		5/6/2004		5/6/2004		5/6/2004		5/6/2004	
QC CODE								SA		SA		SA		SA		SA	
STUDY ID								ENSR IRM		ENSR IRM		ENSR IRM		ENSR IRM		ENSR IRM	
SAMPLE ROUND								1		1		1		1		1	
Parameter	**Units**	**Maximum Value**	**Frequency of Detection**	**Criteria Level [1]**	**Number of Exceedances**	**Number of Times Detected**	**Number of Samples Collected**	Value (Q)		Value (Q)		Value (Q)		Value (Q)		Value (Q)	
Aroclor-1016	UG/KG	0	0%	1000	0	0	54	37	U	38	U	37	U	38	U	38	U
Aroclor-1221	UG/KG	0	0%	1000	0	0	54	37	U	38	U	37	U	38	U	38	U
Aroclor-1232	UG/KG	0	0%	1000	0	0	54	37	U	38	U	37	U	38	U	38	U
Aroclor-1242	UG/KG	0	0%	1000	0	0	54	37	U	38	U	37	U	38	U	38	U
Aroclor-1248	UG/KG	0	0%	1000	0	0	54	37	U	38	U	37	U	38	U	38	U
Aroclor-1254	UG/KG	0	0%	1000	0	0	54	37	U	38	U	37	U	38	U	38	U
Aroclor-1260	UG/KG	0	0%	1000	0	0	54	37	U	38	U	37	U	38	U	38	U
Aluminum	MG/KG	13400	100%		0	54	54	10400		11000		10700		11300		10700	
Antimony	MG/KG	43.9	20%		0	11	54	3.3	UJ	3.5	UJ	3.3	UJ	3.4	UJ	3.3	UJ
Arsenic	MG/KG	7.3	100%	16	0	54	54	5.9		5		4.6		5	J	4.5	
Barium	MG/KG	135	100%	400	0	54	54	81.4		87.8		78.5		89.6		84.9	
Beryllium	MG/KG	0.69	100%	590	0	54	54	0.3		0.4		0.38		0.38		0.28	
Cadmium	MG/KG	1.2	98%	9.3	0	53	54	0.72		0.72		0.72		0.66		0.76	
Calcium	MG/KG	100000	100%		0	54	54	59200		39800		54000		33400		53300	
Chromium	MG/KG	35	100%	1500	0	54	54	18		19.2		19.6		31.8		19.9	
Cobalt	MG/KG	13.9	100%		0	54	54	13.9		11.5		11		11.5		10.4	
Copper	MG/KG	51.8	100%	270	0	54	54	36.2		38.3		30.8		31.4	J	28.2	
Iron	MG/KG	26500	100%		0	54	54	20900		21200		20900		20300		19300	
Lead	MG/KG	1440	100%	1000	1	54	54	59.4	J	45.5	J	32.7	J	42.9		77.5	J
Magnesium	MG/KG	26600	100%		0	54	54	10200		7750		10200		7020		8370	
Manganese	MG/KG	1220	100%	10000	0	54	54	453		499		510		474		475	
Nickel	MG/KG	56.6	100%	310	0	54	54	56.6		31.2		33.3		31.7		33.2	
Potassium	MG/KG	1580	100%		0	54	54	1090		1110		1120		1150		1090	
Selenium	MG/KG	0.72	4%	1500	0	2	54	0.55	UJ	0.58	UJ	0.69	J	0.56	U	0.56	U
Silver	MG/KG	4.7	17%	1500	0	9	54	0.55	UJ	0.58	UJ	0.55	UJ	0.85	J	0.56	UJ
Sodium	MG/KG	525	100%		0	54	54	123		118		106		237	J	115	
Thallium	MG/KG	0.99	50%		0	27	54	0.6	J	0.58	U	0.6	J	0.56	U	0.56	U
Vanadium	MG/KG	35.4	100%		0	54	54	20.8		21.2		18.6		19.4		20.2	
Zinc	MG/KG	185	100%	10000	0	54	54	78.6		98.1		85.5		113	J	88.9	
Flashpoint	?C	100	100%		0	45	0	100	GT	100	GT	100	GT	100	GT	100	GT
Percent Solids	%	91.4	100%		0	49	49	89		86.1		89.7		87.7		88	
Reactive Cyanide	MG/KG	0	0%		0	0	44	5	U	5	U	5	U	5	U	5	U
Reactive Sulfide	MG/KG	0	0%		0	0	45	20	U	20	U	20	U	20	U	20	U
pH	Std units	8.71	100%		0	45	45	7.87		8.21		8.26		8.09		8.32	
TCLP 1,4-Dichlorobenzene	UG/L	0	0%	7500	0	0	6					100	U				
TCLP 2,4,5-Trichlorophenol	UG/L	0	0%	1000	0	0	6					100	U				
TCLP 2,4,6-Trichlorophenol	UG/L	0	0%	2000	0	0	6					100	U				
TCLP 2,4-Dinitrotoluene	UG/L	0	0%	100	0	0	6					100	U				
TCLP 2-Methylphenol	UG/L	0	0%		0	0	6					100	U				
TCLP Hexachlorobenzene	UG/L	0	0%	100	0	0	6					100	U				
TCLP Hexachlorobutadiene	UG/L	0	0%		0	0	6					100	U				
TCLP Hexachloroethane	UG/L	0	0%	3000	0	0	6					100	U				
TCLP Nitrobenzene	UG/L	0	0%	2000	0	0	6					100	U				
TCLP Pentachlorophenol	UG/L	0	0%	100000	0	0	6					500	U				
TCLP Pyridine	UG/L	0	0%	5000	0	0	6					500	U				
TCLP Arsenic	UG/L	0	0%	5000	0	0	5										
TCLP Barium	UG/L	0	0%	100000	0	0	5										

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SITE LOCATION								SEAD-59	SEAD-59	SEAD-59	SEAD-59	SEAD-59	SEAD-59
LOCATION ID								WS-59-01-007-12	WS-59-01-007-13	WS-59-01-007-14	WS-59-01-007-2	WS-59-01-007-5	WS-59-01-007-6
MATRIX								SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
SAMPLE ID								WS-59-01-007-12	WS-59-01-007-13	WS-59-01-007-14	WS-59-01-007-2	WS-59-01-007-5	WS-59-01-007-6
SAMPLE DATE								5/6/2004	5/6/2004	5/6/2004	5/6/2004	5/6/2004	5/6/2004
QC CODE								SA	SA	SA	SA	SA	SA
STUDY ID								ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM
SAMPLE ROUND								1	1	1	1	1	1
Parameter	**Units**	**Maximum Value**	**Frequency of Detection**	**Criteria Level [1]**	**Number of Exceedances**	**Number of Times Detected**	**Number of Samples Collected**	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)
TCLP Cadmium	UG/L	0	0%	1000	0	0	5						
TCLP Chromium	UG/L	0	0%	5000	0	0	5						
TCLP Lead	UG/L	106	20%	5000	0	1	5						
TCLP Mercury	UG/L	0	0%	200	0	0	5						
TCLP Selenium	UG/L	0	0%	1000	0	0	5						
TCLP Silver	UG/L	0	0%	5000	0	0	5						

(1) The following criterias were used to compare the soil results against:
- NYSDEC's Restricted Commercial Use Soil Cleanup Objective, 6 NYCRR Part 375-6.
- TCLP regulatory limits are based on 40CFR 261.23 and 40CFR 261.24.

SEAD-59/71 Stockpile Soil Results
SEAD-5 Construction Completion Report
Seneca Army Depot Activity

SITE LOCATION								SEAD-59	SEAD-59	SEAD-59	SEAD-59	SEAD-59	SEAD-59
LOCATION ID								WS-59-01-007-8	WS-59-01-008-1	WS-59-01-008-2	WS-59-01-008-3	WS-59-01-011-1	WS-59-01-011-2
MATRIX								SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
SAMPLE ID								WS-59-01-007-8	WS-59-01-008-1	WS-59-01-008-2	WS-59-01-008-3	WS-59-01-011-1	WS-59-01-011-2
SAMPLE DATE								5/6/2004	5/6/2004	5/6/2004	5/6/2004	5/6/2004	5/6/2004
QC CODE								SA	SA	SA	SA	SA	SA
STUDY ID								ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM
SAMPLE ROUND								1	1	1	1	1	1
Parameter	**Units**	**Maximum Value**	**Frequency of Detection**	**Criteria Level [1]**	**Number of Exceedances**	**Number of Times Detected**	**Number of Samples Collected**	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)
1,1,1-Trichloroethane	UG/KG	0	0%	500000	0	0	54	5.6 U	5.9 U	5.6 U	5.8 U	5 U	6 UJ
1,1,2,2-Tetrachloroethane	UG/KG	0	0%		0	0	53	5.6 U	5.9 U	5.6 U	5.8 U	5 U	6 UJ
1,1,2-Trichloro-1,2,2-Trifluoroethane	UG/KG	1.5	2%		0	1	54	5.6 U	5.9 U	5.6 U	5.8 U	5 UJ	6 UJ
1,1,2-Trichloroethane	UG/KG	0	0%		0	0	5					5 U	6 UJ
1,1-Dichloroethane	UG/KG	0	0%	240000	0	0	54	5.6 U	5.9 U	5.6 U	5.8 U	5 U	6 UJ
1,1-Dichloroethene	UG/KG	1	2%	500000	0	1	54	5.6 U	5.9 U	5.6 U	5.8 U	1 J	6 UJ
1,2,3-Trichloropropane	UG/KG	0	0%		0	0	48	5.6 U	5.9 U	5.6 U	5.8 U		
1,2,4-Trichlorobenzene	UG/KG	0	0%		0	0	53	5.6 U	5.9 U	5.6 U	5.8 U	5 U	6 UJ
1,2-Dibromo-3-chloropropane	UG/KG	0	0%		0	0	5					5 U	6 UJ
1,2-Dibromoethane	UG/KG	0	0%		0	0	5					5 U	6 UJ
1,2-Dichlorobenzene	UG/KG	0	0%	500000	0	0	53	5.6 U	5.9 U	5.6 U	5.8 U	5 U	6 UJ
1,2-Dichloroethane	UG/KG	0	0%	30000	0	0	54	5.6 U	5.9 U	5.6 U	5.8 U	5 U	6 UJ
1,2-Dichloropropane	UG/KG	0	0%		0	0	5					5 U	6 UJ
1,3-Dichlorobenzene	UG/KG	0	0%	280000	0	0	53	5.6 U	5.9 U	5.6 U	5.8 U	5 U	6 UJ
1,3-Dichloropropane	UG/KG	0	0%		0	0	49	5.6 U	5.9 U	5.6 U	5.8 U		
1,4-Dichlorobenzene	UG/KG	0	0%	130000	0	0	53	5.6 U	5.9 U	5.6 U	5.8 U	5 U	6 UJ
Acetone	UG/KG	69	24%	500000	0	13	54	23 U	24 U	22 U	23 U	5 U	6 UJ
Benzene	UG/KG	0	0%	44000	0	0	54	5.6 U	5.9 U	5.6 U	5.8 U	5 U	6 UJ
Bromodichloromethane	UG/KG	0	0%		0	0	5					5 U	6 UJ
Bromoform	UG/KG	0	0%		0	0	5					5 U	6 UJ
Carbon disulfide	UG/KG	0	0%		0	0	54	5.6 U	5.9 U	5.6 U	5.8 U	5 U	6 UJ
Carbon tetrachloride	UG/KG	0	0%	22000	0	0	54	5.6 U	5.9 U	5.6 U	5.8 U	5 U	6 UJ
Chlorobenzene	UG/KG	0	0%	500000	0	0	54	5.6 U	5.9 U	5.6 U	5.8 U	5 U	6 UJ
Chlorodibromomethane	UG/KG	0	0%		0	0	54	5.6 U	5.9 U	5.6 U	5.8 U	5 U	6 UJ
Chloroethane	UG/KG	0	0%		0	0	54	11 U	12 U	11 U	12 U	5 U	6 UJ
Chloroform	UG/KG	0	0%	350000	0	0	54	5.6 U	5.9 U	5.6 U	5.8 U	5 U	6 UJ
Cis-1,2-Dichloroethene	UG/KG	0	0%	500000	0	0	5					5 U	6 UJ
Cis-1,3-Dichloropropene	UG/KG	0	0%		0	0	5					5 U	6 UJ
Cyclohexane	UG/KG	0	0%		0	0	5					5 U	6 UJ
Dichlorodifluoromethane	UG/KG	0	0%		0	0	5					5 U	6 UJ
Ethyl benzene	UG/KG	0	0%	390000	0	0	54	5.6 U	5.9 U	5.6 U	5.8 U	5 U	6 UJ
Isopropylbenzene	UG/KG	0	0%		0	0	5					5 U	6 UJ
Meta/Para Xylene	UG/KG	2.3	4%	500000	0	2	49	5.6 U	5.9 U	5.6 U	5.8 U		
Methyl Acetate	UG/KG	0	0%		0	0	5					5 U	6 UJ
Methyl Tertbutyl Ether	UG/KG	0	0%	500000	0	0	5					5 U	6 UJ
Methyl bromide	UG/KG	0	0%		0	0	5					5 U	6 UJ
Methyl butyl ketone	UG/KG	0	0%		0	0	5					5 U	6 UJ
Methyl chloride	UG/KG	0	0%		0	0	5					5 U	6 UJ
Methyl cyclohexane	UG/KG	0	0%		0	0	5					5 U	6 UJ
Methyl ethyl ketone	UG/KG	7	9%	500000	0	5	54	11 U	12 U	11 U	12 U	5 U	6 UJ
Methyl isobutyl ketone	UG/KG	0	0%		0	0	54	11 U	12 U	11 U	12 U	5 U	6 UJ
Methylene chloride	UG/KG	1.4	2%	500000	0	1	54	5.6 U	5.9 U	5.6 U	5.8 U	5 U	6 UJ
Ortho Xylene	UG/KG	1.9	10%	500000	0	5	49	1.4 J	1.7 J	5.6 U	5.8 U		
Styrene	UG/KG	0	0%		0	0	5					5 U	6 UJ
Tetrachloroethene	UG/KG	6.7	6%	150000	0	3	54	5.6 U	5.9 U	5.6 U	5.8 U	5 U	6 UJ
Toluene	UG/KG	0	0%	500000	0	0	54	5.6 U	5.9 U	5.6 U	5.8 U	5 U	6 UJ
Total Xylenes	UG/KG	3	20%	500000	0	1	5					3 J	6 UJ

SEAD-59/71 Stockpile Soil Results
SEAD-5 Construction Completion Report
Seneca Army Depot Activity

SITE LOCATION								SEAD-59	SEAD-59	SEAD-59	SEAD-59	SEAD-59	SEAD-59
LOCATION ID								WS-59-01-007-8	WS-59-01-008-1	WS-59-01-008-2	WS-59-01-008-3	WS-59-01-011-1	WS-59-01-011-2
MATRIX								SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
SAMPLE ID								WS-59-01-007-8	WS-59-01-008-1	WS-59-01-008-2	WS-59-01-008-3	WS-59-01-011-1	WS-59-01-011-2
SAMPLE DATE								5/6/2004	5/6/2004	5/6/2004	5/6/2004	5/6/2004	5/6/2004
QC CODE								SA	SA	SA	SA	SA	SA
STUDY ID								ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM
SAMPLE ROUND								1	1	1	1	1	1
Parameter	**Units**	**Maximum Value**	**Frequency of Detection**	**Criteria Level [1]**	**Number of Exceedances**	**Number of Times Detected**	**Number of Samples Collected**	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)
Trans-1,2-Dichloroethene	UG/KG	0	0%	500000	0	0	54	5.6 U	5.9 U	5.6 U	5.8 U	5 U	6 UJ
Trans-1,3-Dichloropropene	UG/KG	0	0%		0	0	5					5 U	6 UJ
Trichloroethene	UG/KG	2.7	7%	200000	0	4	54	1.4 J	5.9 U	5.6 U	5.8 U	5 U	6 UJ
Trichlorofluoromethane	UG/KG	0	0%		0	0	5					5 U	6 UJ
Vinyl chloride	UG/KG	0	0%	13000	0	0	54	11 U	12 U	11 U	12 U	5 U	6 UJ
1,1'-Biphenyl	UG/KG	59	20%		0	1	5					1800 U	1900 U
2,2'-oxybis(1-Chloropropane)	UG/KG	0	0%		0	0	5					1800 U	1900 U
2,4,5-Trichlorophenol	UG/KG	0	0%		0	0	54	3700 U	2000 U	3700 U	1900 U	4500 U	4700 U
2,4,6-Trichlorophenol	UG/KG	0	0%		0	0	54	3700 U	2000 U	3700 U	1900 U	1800 U	1900 U
2,4-Dichlorophenol	UG/KG	0	0%		0	0	54	3700 U	2000 U	3700 U	1900 U	1800 U	1900 U
2,4-Dimethylphenol	UG/KG	0	0%		0	0	5					1800 U	1900 U
2,4-Dinitrophenol	UG/KG	0	0%		0	0	54	19000 U	10000 U	19000 U	9900 U	4500 U	4700 U
2,4-Dinitrotoluene	UG/KG	0	0%		0	0	54	3700 U	2000 U	3700 U	1900 U	1800 U	1900 U
2,6-Dinitrotoluene	UG/KG	0	0%		0	0	54	3700 U	2000 U	3700 U	1900 U	1800 U	1900 U
2-Chloronaphthalene	UG/KG	0	0%		0	0	5					1800 U	1900 U
2-Chlorophenol	UG/KG	0	0%		0	0	54	3700 U	2000 U	3700 U	1900 U	1800 U	1900 U
2-Methylnaphthalene	UG/KG	1200	50%		0	27	54	3700 U	610 J	3700 U	570 J	940 J	240 J
2-Methylphenol	UG/KG	0	0%	500000	0	0	54	3700 U	2000 U	3700 U	1900 U	1800 U	1900 U
2-Nitroaniline	UG/KG	0	0%		0	0	54	19000 U	10000 U	19000 U	9900 U	4500 U	4700 U
2-Nitrophenol	UG/KG	0	0%		0	0	54	3700 U	2000 U	3700 U	1900 U	1800 U	1900 U
3,3'-Dichlorobenzidine	UG/KG	0	0%		0	0	54	3700 U	2000 U	3700 U	1900 U	1800 U	1900 U
3-Nitroaniline	UG/KG	0	0%		0	0	54	19000 U	10000 U	19000 U	9900 U	4500 U	4700 U
4,6-Dinitro-2-methylphenol	UG/KG	0	0%		0	0	5					4500 U	4700 U
4-Bromophenyl phenyl ether	UG/KG	0	0%		0	0	5					1800 U	1900 U
4-Chloro-3-methylphenol	UG/KG	0	0%		0	0	54	3700 U	2000 U	3700 U	1900 U	1800 U	1900 U
4-Chloroaniline	UG/KG	0	0%		0	0	54	3700 U	2000 U	3700 U	1900 U	1800 U	1900 U
4-Chlorophenyl phenyl ether	UG/KG	0	0%		0	0	5					1800 U	1900 U
4-Methylphenol	UG/KG	0	0%	500000	0	0	54	3700 U	2000 U	3700 U	1900 U	1800 U	1900 U
4-Nitroaniline	UG/KG	0	0%		0	0	5					4500 U	4700 U
4-Nitrophenol	UG/KG	0	0%		0	0	54	19000 U	10000 U	19000 U	9900 U	4500 U	4700 U
Acenaphthene	UG/KG	2400	87%	500000	0	47	54	780 J	630 J	530 J	660 J	1200 J	420 J
Acenaphthylene	UG/KG	3500	98%	500000	0	53	54	3000 J	1500 J	2700 J	2200	1600 J	1400 J
Acetophenone	UG/KG	0	0%		0	0	5					1800 U	1900 U
Aniline	UG/KG	0	0%		0	0	49	3700 U	2000 U	3700 U	1900 U		
Anthracene	UG/KG	6600	100%	500000	0	54	54	3100 J	2500	2400 J	2900	4100	2300
Atrazine	UG/KG	0	0%		0	0	5					1800 U	1900 U
Benzaldehyde	UG/KG	0	0%		0	0	5					1800 U	1900 U
Benzo(a)anthracene	UG/KG	14000	100%	5600	16	54	54	**6900**	5400	**8400**	**7800**	**8200**	**6900**
Benzo(a)pyrene	UG/KG	16000	100%	1000	48	54	54	**8200**	**5800**	**11000**	**9400**	**9500**	**7400**
Benzo(b)fluoranthene	UG/KG	11000	100%	5600	13	54	54	**5800**	3900	**7300**	**6700**	**10000**	**8100**
Benzo(ghi)perylene	UG/KG	8000	100%	500000	0	54	54	4200	3300	6400	5500	5400	4200
Benzo(k)fluoranthene	UG/KG	13000	100%	56000	0	54	54	6300	3900	7200	6500	4200	3200
Benzoic Acid	UG/KG	0	0%		0	0	49	19000 U	10000 U	19000 U	9900 U		
Bis(2-Chloroethoxy)methane	UG/KG	0	0%		0	0	5					1800 U	1900 U
Bis(2-Chloroethyl)ether	UG/KG	0	0%		0	0	5					1800 U	1900 U
Bis(2-Ethylhexyl)phthalate	UG/KG	130	6%		0	3	54	3700 U	2000 U	3700 U	1900 U	1800 U	1900 U
Butylbenzylphthalate	UG/KG	0	0%		0	0	54	3700 UJ	2000 U	3700 U	1900 U	1800 U	1900 U

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SITE LOCATION								SEAD-59	SEAD-59	SEAD-59	SEAD-59	SEAD-59	SEAD-59
LOCATION ID								WS-59-01-007-8	WS-59-01-008-1	WS-59-01-008-2	WS-59-01-008-3	WS-59-01-011-1	WS-59-01-011-2
MATRIX								SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
SAMPLE ID								WS-59-01-007-8	WS-59-01-008-1	WS-59-01-008-2	WS-59-01-008-3	WS-59-01-011-1	WS-59-01-011-2
SAMPLE DATE								5/6/2004	5/6/2004	5/6/2004	5/6/2004	5/6/2004	5/6/2004
QC CODE								SA	SA	SA	SA	SA	SA
STUDY ID								ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM
SAMPLE ROUND								1	1	1	1	1	1
Parameter	**Units**	**Maximum Value**	**Frequency of Detection**	**Criteria Level [1]**	**Number of Exceedances**	**Number of Times Detected**	**Number of Samples Collected**	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)
Caprolactam	UG/KG	0	0%		0	0	5					1800 U	1900 U
Carbazole	UG/KG	1100	80%		0	4	5					1100 J	320 J
Chrysene	UG/KG	13000	100%	56000	0	54	54	7000	5400 J	8500	7900	8000	6600
Di-n-butylphthalate	UG/KG	0	0%		0	0	54	3700 U	2000 U	3700 U	1900 U	1800 U	1900 U
Di-n-octylphthalate	UG/KG	0	0%		0	0	54	3700 U	2000 U	3700 U	1900 U	1800 U	1900 U
Dibenz(a,h)anthracene	UG/KG	2900	98%	560	41	53	54	**1600** J	**1200** J	**2200** J	**1900** J	**1600** J	**1200** J
Dibenzofuran	UG/KG	1300	61%	350000	0	33	54	460 J	440 J	3700 U	460 J	950 J	230 J
Diethyl phthalate	UG/KG	0	0%		0	0	54	3700 U	2000 U	3700 U	1900 U	1800 U	1900 U
Dimethylphthalate	UG/KG	0	0%		0	0	54	3700 U	2000 U	3700 U	1900 U	1800 U	1900 U
Fluoranthene	UG/KG	29000	100%	500000	0	54	54	14000	9300	14000	14000	13000	12000
Fluorene	UG/KG	3100	87%	500000	0	47	54	1100 J	1100 J	700 J	1200 J	1900	700 J
Hexachlorobenzene	UG/KG	0	0%	6000	0	0	54	3700 U	2000 U	3700 U	1900 U	1800 U	1900 U
Hexachlorobutadiene	UG/KG	0	0%		0	0	54	3700 U	2000 U	3700 U	1900 U	1800 U	1900 U
Hexachlorocyclopentadiene	UG/KG	0	0%		0	0	5					1800 U	1900 U
Hexachloroethane	UG/KG	0	0%		0	0	54	3700 U	2000 U	3700 U	1900 U	1800 U	1900 U
Indeno(1,2,3-cd)pyrene	UG/KG	8000	100%	5600	6	54	54	4100 J	3100 J	**5900** J	5200 J	**5800**	4500
Isophorone	UG/KG	0	0%		0	0	54	3700 U	2000 U	3700 U	1900 U	1800 U	1900 U
N-Nitrosodiphenylamine	UG/KG	0	0%		0	0	5					1800 U	1900 U
N-Nitrosodipropylamine	UG/KG	0	0%		0	0	5					1800 U	1900 U
Naphthalene	UG/KG	1200	61%	500000	0	33	54	440 NJ	510 J	3700 U	370 J	1100 J	260 J
Nitrobenzene	UG/KG	0	0%		0	0	54	3700 U	2000 U	3700 U	1900 U	1800 U	1900 U
Pentachlorophenol	UG/KG	660	2%	6700	0	1	54	19000 U	10000 U	19000 U	9900 U	4500 U	4700 U
Phenanthrene	UG/KG	17000	100%	500000	0	54	54	7700	7100	4500	7600	12000	5200
Phenol	UG/KG	0	0%	500000	0	0	54	3700 U	2000 U	3700 U	1900 U	1800 U	1900 U
Pyrene	UG/KG	22000	100%	500000	0	54	54	11000	9000	13000	12000	13000	14000
Pyridine	UG/KG	0	0%		0	0	49	19000 U	10000 U	19000 U	9900 U		
4,4'-DDD	UG/KG	450	61%	92000	0	33	54	21	29	19	43	60 J	15 J
4,4'-DDE	UG/KG	260	61%	62000	0	33	54	29	21	18 U	19 U	36 NJ	28 NJ
4,4'-DDT	UG/KG	520	69%	47000	0	37	54	43	37 J	33 J	35	110 J	38 J
Aldrin	UG/KG	0	0%	680	0	0	54	9.6 U	10 U	9.5 U	10 U	9.2 U	1.9 U
Alpha-BHC	UG/KG	4.4	2%	3400	0	1	54	9.6 U	10 U	9.5 U	10 U	9.2 U	4.4
Alpha-Chlordane	UG/KG	27	11%	24000	0	6	54	9.6 U	10 U	9.5 U	10 U	9.2 U	15
Beta-BHC	UG/KG	13	2%	3000	0	1	54	9.6 U	10 U	9.5 U	10 U	9.2 U	1.9 U
Delta-BHC	UG/KG	0	0%	500000	0	0	54	9.6 U	10 U	9.5 U	10 U	9.2 U	1.9 U
Dieldrin	UG/KG	0	0%	1400	0	0	54	19 U	20 U	18 U	19 U	18 U	3.8 U
Endosulfan I	UG/KG	0	0%	200000	0	0	54	9.6 U	10 U	9.5 U	10 U	9.2 U	1.9 U
Endosulfan II	UG/KG	0	0%	200000	0	0	54	19 U	20 U	18 U	19 U	18 U	3.8 U
Endosulfan sulfate	UG/KG	0	0%	200000	0	0	54	19 U	20 U	18 U	19 U	18 U	3.8 U
Endrin	UG/KG	0	0%	89000	0	0	54	19 U	20 U	18 U	19 U	18 U	3.8 U
Endrin aldehyde	UG/KG	0	0%		0	0	54	19 U	20 U	18 U	19 U	18 U	3.8 U
Endrin ketone	UG/KG	15	2%		0	1	54	19 U	20 U	18 U	19 U	18 U	15 J
Gamma-BHC/Lindane	UG/KG	0	0%	9200	0	0	54	9.6 U	10 U	9.5 U	10 U	9.2 U	1.9 U
Gamma-Chlordane	UG/KG	21	9%		0	5	54	9.6 U	10 U	9.5 U	10 U	9.2 U	7.9
Heptachlor	UG/KG	0	0%	15000	0	0	54	9.6 U	10 U	9.5 U	10 U	9.2 UJ	1.9 UJ
Heptachlor epoxide	UG/KG	0	0%		0	0	54	9.6 U	10 U	9.5 U	10 U	9.2 U	1.9 U
Methoxychlor	UG/KG	0	0%		0	0	54	96 U	100 U	95 U	99 U	92 U	19 U
Toxaphene	UG/KG	0	0%		0	0	54	190 U	200 U	180 U	190 U	920 U	190 U

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Seneca Army Depot Activity

SITE LOCATION								SEAD-59		SEAD-59		SEAD-59		SEAD-59		SEAD-59	
LOCATION ID								WS-59-01-007-8		WS-59-01-008-1		WS-59-01-008-2		WS-59-01-008-3		WS-59-01-011-1	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE ID								WS-59-01-007-8		WS-59-01-008-1		WS-59-01-008-2		WS-59-01-008-3		WS-59-01-011-1	
SAMPLE DATE								5/6/2004		5/6/2004		5/6/2004		5/6/2004		5/6/2004	
QC CODE								SA		SA		SA		SA		SA	
STUDY ID								ENSR IRM		ENSR IRM		ENSR IRM		ENSR IRM		ENSR IRM	
SAMPLE ROUND								1		1		1		1		1	
Parameter	**Units**	**Maximum Value**	**Frequency of Detection**	**Criteria Level [1]**	**Number of Exceedances**	**Number of Times Detected**	**Number of Samples Collected**	Value (Q)		Value (Q)		Value (Q)		Value (Q)		Value (Q)	
Aroclor-1016	UG/KG	0	0%	1000	0	0	54	37	U	39	U	37	U	39	U	36	U
Aroclor-1221	UG/KG	0	0%	1000	0	0	54	37	U	39	U	37	U	39	U	36	U
Aroclor-1232	UG/KG	0	0%	1000	0	0	54	37	U	39	U	37	U	39	U	36	U
Aroclor-1242	UG/KG	0	0%	1000	0	0	54	37	U	39	U	37	U	39	U	36	U
Aroclor-1248	UG/KG	0	0%	1000	0	0	54	37	U	39	U	37	U	39	U	36	U
Aroclor-1254	UG/KG	0	0%	1000	0	0	54	37	U	39	U	37	U	39	U	36	U
Aroclor-1260	UG/KG	0	0%	1000	0	0	54	37	U	39	U	37	U	39	U	36	U
Aluminum	MG/KG	13400	100%		0	54	54	9580		12200		11100		10500		12300	J
Antimony	MG/KG	43.9	20%		0	11	54	3.2	UJ	3.5	UJ	3.2	UJ	3.5	UJ	1.9	J
Arsenic	MG/KG	7.3	100%	16	0	54	54	4.8		5.2		4.9		4.1		5.4	J
Barium	MG/KG	135	100%	400	0	54	54	81.5		101		82.6		115		84.7	J
Beryllium	MG/KG	0.69	100%	590	0	54	54	0.27		0.36	J	0.34	J	0.14	J	0.61	
Cadmium	MG/KG	1.2	98%	9.3	0	53	54	0.66		0.52	J	0.62		0.41	J	0.46	
Calcium	MG/KG	100000	100%		0	54	54	82600		33800	J	49700	J	68800	J	52200	J
Chromium	MG/KG	35	100%	1500	0	54	54	17.6		20.5		20.5		16.7		19.9	J
Cobalt	MG/KG	13.9	100%		0	54	54	10.8		10.3		10.3		8.4		10.1	J
Copper	MG/KG	51.8	100%	270	0	54	54	26.9		29.4		27.2		25		25.6	J
Iron	MG/KG	26500	100%		0	54	54	18200		21900		26500		18800	J	23100	
Lead	MG/KG	1440	100%	1000	1	54	54	37.4	J	33.9	J	34.8	J	28.1	J	33.4	J
Magnesium	MG/KG	26600	100%		0	54	54	10300		7700	J	11300	J	26600	J	7240	J
Manganese	MG/KG	1220	100%	10000	0	54	54	560		416		466		619		499	J
Nickel	MG/KG	56.6	100%	310	0	54	54	28.7		30.7		32		24.6		31	J
Potassium	MG/KG	1580	100%		0	54	54	1080		1490		1290		1420		1580	J
Selenium	MG/KG	0.72	4%	1500	0	2	54	0.54	U	0.59	U	0.54	U	0.58	U	0.37	U
Silver	MG/KG	4.7	17%	1500	0	9	54	0.54	UJ	0.59	U	0.54	U	0.58	U	0.56	
Sodium	MG/KG	525	100%		0	54	54	128		174		134		137		200	J
Thallium	MG/KG	0.99	50%		0	27	54	0.59	J	0.78	J	0.61	J	0.74	J	0.19	U
Vanadium	MG/KG	35.4	100%		0	54	54	18.7		22.9		22.5		20.4		22	J
Zinc	MG/KG	185	100%	10000	0	54	54	77.9		118	J	84.5	J	75	J	73.7	J
Flashpoint	?C	100	100%		0	45	0	100	GT	100	GT	100	GT	100	GT		
Percent Solids	%	91.4	100%		0	49	49	88.8		84.1		89.6		85.7			
Reactive Cyanide	MG/KG	0	0%		0	0	44	5	U	5	U	5	U	5	U		
Reactive Sulfide	MG/KG	0	0%		0	0	45	20	U	20	U	20	U	20	U		
pH	Std units	8.71	100%		0	45	45	8.07		7.46		7.95		7.72			
TCLP 1,4-Dichlorobenzene	UG/L	0	0%	7500	0	0	6	100	U			100	U				
TCLP 2,4,5-Trichlorophenol	UG/L	0	0%	1000	0	0	6	100	U			100	U				
TCLP 2,4,6-Trichlorophenol	UG/L	0	0%	2000	0	0	6	100	U			100	U				
TCLP 2,4-Dinitrotoluene	UG/L	0	0%	100	0	0	6	100	U			100	U				
TCLP 2-Methylphenol	UG/L	0	0%		0	0	6	100	U			100	U				
TCLP Hexachlorobenzene	UG/L	0	0%	100	0	0	6	100	U			100	U				
TCLP Hexachlorobutadiene	UG/L	0	0%		0	0	6	100	U			100	U				
TCLP Hexachloroethane	UG/L	0	0%	3000	0	0	6	100	U			100	U				
TCLP Nitrobenzene	UG/L	0	0%	2000	0	0	6	100	U			100	U				
TCLP Pentachlorophenol	UG/L	0	0%	100000	0	0	6	500	U			500	U				
TCLP Pyridine	UG/L	0	0%	5000	0	0	6	500	U			500	U				
TCLP Arsenic	UG/L	0	0%	5000	0	0	5										
TCLP Barium	UG/L	0	0%	100000	0	0	5										

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SITE LOCATION								SEAD-59	SEAD-59	SEAD-59	SEAD-59	SEAD-59	SEAD-59
LOCATION ID								WS-59-01-007-8	WS-59-01-008-1	WS-59-01-008-2	WS-59-01-008-3	WS-59-01-011-1	WS-59-01-011-2
MATRIX								SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
SAMPLE ID								WS-59-01-007-8	WS-59-01-008-1	WS-59-01-008-2	WS-59-01-008-3	WS-59-01-011-1	WS-59-01-011-2
SAMPLE DATE								5/6/2004	5/6/2004	5/6/2004	5/6/2004	5/6/2004	5/6/2004
QC CODE								SA	SA	SA	SA	SA	SA
STUDY ID								ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM
SAMPLE ROUND								1	1	1	1	1	1
Parameter	**Units**	**Maximum Value**	**Frequency of Detection**	**Criteria Level [1]**	**Number of Exceedances**	**Number of Times Detected**	**Number of Samples Collected**	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)
TCLP Cadmium	UG/L	0	0%	1000	0	0	5						
TCLP Chromium	UG/L	0	0%	5000	0	0	5						
TCLP Lead	UG/L	106	20%	5000	0	1	5						
TCLP Mercury	UG/L	0	0%	200	0	0	5						
TCLP Selenium	UG/L	0	0%	1000	0	0	5						
TCLP Silver	UG/L	0	0%	5000	0	0	5						

(1) The following criterias were used to compare the soil results against:
- NYSDEC's Restricted Commercial Use Soil Cleanup Objective, 6 NYCRR Part 375-6.
- TCLP regulatory limits are based on 40CFR 261.23 and 40CFR 261.24.

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SITE LOCATION							SEAD-59	SEAD-59	SEAD-59	SEAD-59	SEAD-59	SEAD-59
LOCATION ID							WS-59-01-011-5	WS-59-01-011-6	WS-59-01-011-7	WS-59-01-011-8	WS-59-01-011-9	WS-59-01-012-2
MATRIX							SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
SAMPLE ID							WS-59-01-011-5	WS-59-01-011-6	WS-59-01-011-7	WS-59-01-011-8	WS-59-01-011-9	WS-59-01-012-2
SAMPLE DATE							5/6/2004	5/6/2004	5/6/2004	5/6/2004	5/6/2004	5/6/2004
QC CODE							SA	SA	SA	SA	SA	SA
STUDY ID							ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM
SAMPLE ROUND							1	1	1	1	1	1
Parameter	**Units**	**Maximum Value**	**Frequency of Detection**	**Criteria Level [1]**	**Number of Exceedances**	**Number of Times Detected**	**Number of Samples Collected**	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)
1,1,1-Trichloroethane	UG/KG	0	0%	500000	0	0	54	5.7 U	5.6 U	5.8 U	5.6 U	5.9 U	6 U
1,1,2,2-Tetrachloroethane	UG/KG	0	0%		0	0	53	5.7 U	5.6 U	5.8 U	5.6 U	5.9 U	6 UJ
1,1,2-Trichloro-1,2,2-Trifluoroethane	UG/KG	1.5	2%		0	1	54	5.7 U	5.6 U	5.8 U	5.6 U	5.9 U	6 U
1,1,2-Trichloroethane	UG/KG	0	0%		0	0	5						6 U
1,1-Dichloroethane	UG/KG	0	0%	240000	0	0	54	5.7 U	5.6 U	5.8 U	5.6 U	5.9 U	6 U
1,1-Dichloroethene	UG/KG	1	2%	500000	0	1	54	5.7 U	5.6 U	5.8 U	5.6 U	5.9 U	6 U
1,2,3-Trichloropropane	UG/KG	0	0%		0	0	48	5.7 U	5.6 U	5.8 U	5.6 U	5.9 U	
1,2,4-Trichlorobenzene	UG/KG	0	0%		0	0	53	5.7 U	5.6 U	5.8 U	5.6 U	5.9 U	6 UJ
1,2-Dibromo-3-chloropropane	UG/KG	0	0%		0	0	5						6 UJ
1,2-Dibromoethane	UG/KG	0	0%		0	0	5						6 U
1,2-Dichlorobenzene	UG/KG	0	0%	500000	0	0	53	5.7 U	5.6 U	5.8 U	5.6 U	5.9 U	6 UJ
1,2-Dichloroethane	UG/KG	0	0%	30000	0	0	54	5.7 U	5.6 U	5.8 U	5.6 U	5.9 U	6 U
1,2-Dichloropropane	UG/KG	0	0%		0	0	5						6 U
1,3-Dichlorobenzene	UG/KG	0	0%	280000	0	0	53	5.7 U	5.6 U	5.8 U	5.6 U	5.9 U	6 UJ
1,3-Dichloropropane	UG/KG	0	0%		0	0	49	5.7 U	5.6 U	5.8 U	5.6 U	5.9 U	
1,4-Dichlorobenzene	UG/KG	0	0%	130000	0	0	53	5.7 U	5.6 U	5.8 U	5.6 U	5.9 U	6 UJ
Acetone	UG/KG	69	24%	500000	0	13	54	23 U	22 U	23 U	22 U	24 U	69 NJ
Benzene	UG/KG	0	0%	44000	0	0	54	5.7 U	5.6 U	5.8 U	5.6 U	5.9 U	6 U
Bromodichloromethane	UG/KG	0	0%		0	0	5						6 U
Bromoform	UG/KG	0	0%		0	0	5						6 U
Carbon disulfide	UG/KG	0	0%		0	0	54	5.7 U	5.6 U	5.8 U	5.6 U	5.9 U	6 U
Carbon tetrachloride	UG/KG	0	0%	22000	0	0	54	5.7 U	5.6 U	5.8 U	5.6 U	5.9 U	6 U
Chlorobenzene	UG/KG	0	0%	500000	0	0	54	5.7 U	5.6 U	5.8 U	5.6 U	5.9 U	6 U
Chlorodibromomethane	UG/KG	0	0%		0	0	54	5.7 U	5.6 U	5.8 U	5.6 U	5.9 U	6 U
Chloroethane	UG/KG	0	0%		0	0	54	11 U	11 U	12 U	11 U	12 U	6 U
Chloroform	UG/KG	0	0%	350000	0	0	54	5.7 U	5.6 U	5.8 U	5.6 U	5.9 U	6 U
Cis-1,2-Dichloroethene	UG/KG	0	0%	500000	0	0	5						6 U
Cis-1,3-Dichloropropene	UG/KG	0	0%		0	0	5						6 U
Cyclohexane	UG/KG	0	0%		0	0	5						6 U
Dichlorodifluoromethane	UG/KG	0	0%		0	0	5						6 U
Ethyl benzene	UG/KG	0	0%	390000	0	0	54	5.7 U	5.6 U	5.8 U	5.6 U	5.9 U	6 U
Isopropylbenzene	UG/KG	0	0%		0	0	5						6 U
Meta/Para Xylene	UG/KG	2.3	4%	500000	0	2	49	5.7 U	5.6 U	5.8 U	5.6 U	5.9 U	
Methyl Acetate	UG/KG	0	0%		0	0	5						6 U
Methyl Tertbutyl Ether	UG/KG	0	0%	500000	0	0	5						6 U
Methyl bromide	UG/KG	0	0%		0	0	5						6 U
Methyl butyl ketone	UG/KG	0	0%		0	0	5						6 U
Methyl chloride	UG/KG	0	0%		0	0	5						6 U
Methyl cyclohexane	UG/KG	0	0%		0	0	5						6 U
Methyl ethyl ketone	UG/KG	7	9%	500000	0	5	54	11 U	11 U	12 U	11 U	12 U	7 J
Methyl isobutyl ketone	UG/KG	0	0%		0	0	54	11 U	11 U	12 U	11 U	12 U	6 U
Methylene chloride	UG/KG	1.4	2%	500000	0	1	54	5.7 U	5.6 U	5.8 U	5.6 U	5.9 U	6 U
Ortho Xylene	UG/KG	1.9	10%	500000	0	5	49	5.7 U	5.6 U	5.8 U	5.6 U	5.9 U	
Styrene	UG/KG	0	0%		0	0	5						6 U
Tetrachloroethene	UG/KG	6.7	6%	150000	0	3	54	5.7 U	5.6 U	5.8 U	5.6 U	5.9 U	6 U
Toluene	UG/KG	0	0%	500000	0	0	54	5.7 U	5.6 U	5.8 U	5.6 U	5.9 U	6 U
Total Xylenes	UG/KG	3	20%	500000	0	1	5						6 UJ

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SITE LOCATION								SEAD-59	SEAD-59	SEAD-59	SEAD-59	SEAD-59	SEAD-59
LOCATION ID								WS-59-01-011-5	WS-59-01-011-6	WS-59-01-011-7	WS-59-01-011-8	WS-59-01-011-9	WS-59-01-012-2
MATRIX								SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
SAMPLE ID								WS-59-01-011-5	WS-59-01-011-6	WS-59-01-011-7	WS-59-01-011-8	WS-59-01-011-9	WS-59-01-012-2
SAMPLE DATE								5/6/2004	5/6/2004	5/6/2004	5/6/2004	5/6/2004	5/6/2004
QC CODE								SA	SA	SA	SA	SA	SA
STUDY ID								ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM
SAMPLE ROUND								1	1	1	1	1	1
Parameter	**Units**	**Maximum Value**	**Frequency of Detection**	**Criteria Level [1]**	**Number of Exceedances**	**Number of Times Detected**	**Number of Samples Collected**	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)
Trans-1,2-Dichloroethene	UG/KG	0	0%	500000	0	0	54	5.7 U	5.6 U	5.8 U	5.6 U	5.9 U	6 U
Trans-1,3-Dichloropropene	UG/KG	0	0%		0	0	5						6 U
Trichloroethene	UG/KG	2.7	7%	200000	0	4	54	5.7 U	5.6 U	5.8 U	5.6 U	5.9 U	6 U
Trichlorofluoromethane	UG/KG	0	0%		0	0	5						6 U
Vinyl chloride	UG/KG	0	0%	13000	0	0	54	11 U	11 U	12 U	11 U	12 U	6 U
1,1'-Biphenyl	UG/KG	59	20%		0	1	5						59 J
2,2'-oxybis(1-Chloropropane)	UG/KG	0	0%		0	0	5						380 U
2,4,5-Trichlorophenol	UG/KG	0	0%		0	0	54	750 U	1900 U	3800 U	1800 U	2000 U	950 U
2,4,6-Trichlorophenol	UG/KG	0	0%		0	0	54	750 U	1900 U	3800 U	1800 U	2000 U	380 U
2,4-Dichlorophenol	UG/KG	0	0%		0	0	54	750 U	1900 U	3800 U	1800 U	2000 U	380 U
2,4-Dimethylphenol	UG/KG	0	0%		0	0	5						380 U
2,4-Dinitrophenol	UG/KG	0	0%		0	0	54	3900 U	9600 U	20000 U	9500 U	10000 U	950 UJ
2,4-Dinitrotoluene	UG/KG	0	0%		0	0	54	750 U	1900 U	3800 U	1800 U	2000 U	380 U
2,6-Dinitrotoluene	UG/KG	0	0%		0	0	54	750 U	1900 U	3800 U	1800 U	2000 U	380 U
2-Chloronaphthalene	UG/KG	0	0%		0	0	5						380 U
2-Chlorophenol	UG/KG	0	0%		0	0	54	750 U	1900 U	3800 U	1800 U	2000 U	380 U
2-Methylnaphthalene	UG/KG	1200	50%		0	27	54	750 U	490 J	3800 U	580 J	210 J	300 J
2-Methylphenol	UG/KG	0	0%	500000	0	0	54	750 U	1900 U	3800 U	1800 U	2000 U	380 U
2-Nitroaniline	UG/KG	0	0%		0	0	54	3900 U	9600 U	20000 U	9500 U	10000 U	950 U
2-Nitrophenol	UG/KG	0	0%		0	0	54	750 U	1900 U	3800 U	1800 U	2000 U	380 U
3,3'-Dichlorobenzidine	UG/KG	0	0%		0	0	54	750 U	1900 U	3800 U	1800 U	2000 U	380 UJ
3-Nitroaniline	UG/KG	0	0%		0	0	54	3900 U	9600 U	20000 U	9500 U	10000 U	950 U
4,6-Dinitro-2-methylphenol	UG/KG	0	0%		0	0	5						950 U
4-Bromophenyl phenyl ether	UG/KG	0	0%		0	0	5						380 U
4-Chloro-3-methylphenol	UG/KG	0	0%		0	0	54	750 U	1900 U	3800 U	1800 U	2000 U	380 U
4-Chloroaniline	UG/KG	0	0%		0	0	54	750 U	1900 U	3800 U	1800 U	2000 U	380 UJ
4-Chlorophenyl phenyl ether	UG/KG	0	0%		0	0	5						380 U
4-Methylphenol	UG/KG	0	0%	500000	0	0	54	750 U	1900 U	3800 U	1800 U	2000 U	380 U
4-Nitroaniline	UG/KG	0	0%		0	0	5						950 U
4-Nitrophenol	UG/KG	0	0%		0	0	54	3900 U	9600 U	20000 U	9500 U	10000 U	950 U
Acenaphthene	UG/KG	2400	87%	500000	0	47	54	120 J	560 J	900 J	1300 J	520 J	440
Acenaphthylene	UG/KG	3500	98%	500000	0	53	54	620 J	1700 J	3200 J	3300	2600	930
Acetophenone	UG/KG	0	0%		0	0	5						380 U
Aniline	UG/KG	0	0%		0	0	49	750 U	1900 U	3800 U	1800 U	2000 U	
Anthracene	UG/KG	6600	100%	500000	0	54	54	540 J	2200	4300	4900	2500	1500
Atrazine	UG/KG	0	0%		0	0	5						380 U
Benzaldehyde	UG/KG	0	0%		0	0	5						380 U
Benzo(a)anthracene	UG/KG	14000	100%	5600	16	54	54	1600	**5800**	**14000**	**12000**	**7700**	**5700** NJ
Benzo(a)pyrene	UG/KG	16000	100%	1000	48	54	54	**1900**	**6300**	**16000**	**15000**	**9900**	**5700**
Benzo(b)fluoranthene	UG/KG	11000	100%	5600	13	54	54	1600	4600	**11000**	**11000**	**7700**	**6500**
Benzo(ghi)perylene	UG/KG	8000	100%	500000	0	54	54	1000	3100	8000	7000	5200	2700 J
Benzo(k)fluoranthene	UG/KG	13000	100%	56000	0	54	54	1600	5100	13000	11000	7600	3200
Benzoic Acid	UG/KG	0	0%		0	0	49	3900 UJ	9600 UJ	20000 UJ	9500 UJ	10000 UJ	
Bis(2-Chloroethoxy)methane	UG/KG	0	0%		0	0	5						380 U
Bis(2-Chloroethyl)ether	UG/KG	0	0%		0	0	5						380 U
Bis(2-Ethylhexyl)phthalate	UG/KG	130	6%		0	3	54	750 U	1900 U	3800 U	1800 U	2000 U	130 NJ
Butylbenzylphthalate	UG/KG	0	0%		0	0	54	750 U	1900 U	3800 U	1800 U	2000 U	380 UJ

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SITE LOCATION								SEAD-59	SEAD-59	SEAD-59	SEAD-59	SEAD-59	SEAD-59
LOCATION ID								WS-59-01-011-5	WS-59-01-011-6	WS-59-01-011-7	WS-59-01-011-8	WS-59-01-011-9	WS-59-01-012-2
MATRIX								SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
SAMPLE ID								WS-59-01-011-5	WS-59-01-011-6	WS-59-01-011-7	WS-59-01-011-8	WS-59-01-011-9	WS-59-01-012-2
SAMPLE DATE								5/6/2004	5/6/2004	5/6/2004	5/6/2004	5/6/2004	5/6/2004
QC CODE								SA	SA	SA	SA	SA	SA
STUDY ID								ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM
SAMPLE ROUND								1	1	1	1	1	1
Parameter	**Units**	**Maximum Value**	**Frequency of Detection**	**Criteria Level [1]**	**Number of Exceedances**	**Number of Times Detected**	**Number of Samples Collected**	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)
Caprolactam	UG/KG	0	0%		0	0	5						380 U
Carbazole	UG/KG	1100	80%		0	4	5						240 J
Chrysene	UG/KG	13000	100%	56000	0	54	54	1600	5900	13000	12000	7700	5600
Di-n-butylphthalate	UG/KG	0	0%		0	0	54	750 U	1900 U	3800 U	1800 U	2000 U	380 U
Di-n-octylphthalate	UG/KG	0	0%		0	0	54	750 U	1900 U	3800 U	1800 U	2000 U	380 UJ
Dibenz(a,h)anthracene	UG/KG	2900	98%	560	41	53	54	330 J	**1100** J	**2800** J	**2600** J	**1900** J	**820** J
Dibenzofuran	UG/KG	1300	61%	350000	0	33	54	750 U	420 J	510 J	770 J	240 J	260 J
Diethyl phthalate	UG/KG	0	0%		0	0	54	750 U	1900 U	3800 U	1800 U	2000 U	380 U
Dimethylphthalate	UG/KG	0	0%		0	0	54	750 U	1900 U	3800 U	1800 U	2000 U	380 U
Fluoranthene	UG/KG	29000	100%	500000	0	54	54	2900	10000	23000	21000	12000	7300
Fluorene	UG/KG	3100	87%	500000	0	47	54	140 J	880 J	1200 J	1800 J	700 J	690
Hexachlorobenzene	UG/KG	0	0%	6000	0	0	54	750 U	1900 U	3800 U	1800 U	2000 U	380 U
Hexachlorobutadiene	UG/KG	0	0%		0	0	54	750 U	1900 U	3800 U	1800 U	2000 U	380 U
Hexachlorocyclopentadiene	UG/KG	0	0%		0	0	5						380 U
Hexachloroethane	UG/KG	0	0%		0	0	54	750 U	1900 U	3800 U	1800 U	2000 U	380 U
Indeno(1,2,3-cd)pyrene	UG/KG	8000	100%	5600	6	54	54	1000 J	3000 J	**8000** J	**7000** J	5100 J	2600 J
Isophorone	UG/KG	0	0%		0	0	54	750 U	1900 U	3800 U	1800 U	2000 U	380 U
N-Nitrosodiphenylamine	UG/KG	0	0%		0	0	5						380 U
N-Nitrosodipropylamine	UG/KG	0	0%		0	0	5						380 U
Naphthalene	UG/KG	1200	61%	500000	0	33	54	750 U	520 J	400 J	570 J	270 J	350 J
Nitrobenzene	UG/KG	0	0%		0	0	54	750 U	1900 U	3800 U	1800 U	2000 U	380 U
Pentachlorophenol	UG/KG	660	2%	6700	0	1	54	3900 U	9600 U	20000 U	9500 U	10000 U	950 U
Phenanthrene	UG/KG	17000	100%	500000	0	54	54	1400	6400	9500	12000	4600	3400
Phenol	UG/KG	0	0%	500000	0	0	54	750 U	1900 U	3800 U	1800 U	2000 U	380 U
Pyrene	UG/KG	22000	100%	500000	0	54	54	2600	8900	20000	18000	11000	9300
Pyridine	UG/KG	0	0%		0	0	49	3900 U	9600 U	20000 U	9500 U	10000 U	
4,4'-DDD	UG/KG	450	61%	92000	0	33	54	95	70	35	48	20 U	9.3 NJ
4,4'-DDE	UG/KG	260	61%	62000	0	33	54	51 J	130	71	120	51	24 NJ
4,4'-DDT	UG/KG	520	69%	47000	0	37	54	70 J	160	110 J	120	45 J	7
Aldrin	UG/KG	0	0%	680	0	0	54	9.6 U	9.6 U	9.9 U	9.5 U	10 U	2 U
Alpha-BHC	UG/KG	4.4	2%	3400	0	1	54	9.6 U	9.6 U	9.9 U	9.5 U	10 U	2 U
Alpha-Chlordane	UG/KG	27	11%	24000	0	6	54	9.6 U	18 J	9.9 U	27 J	10 U	2 U
Beta-BHC	UG/KG	13	2%	3000	0	1	54	9.6 U	9.6 U	9.9 U	9.5 U	10 U	2 U
Delta-BHC	UG/KG	0	0%	500000	0	0	54	9.6 U	9.6 U	9.9 U	9.5 U	10 U	2 U
Dieldrin	UG/KG	0	0%	1400	0	0	54	19 U	19 U	19 U	18 U	20 U	3.8 U
Endosulfan I	UG/KG	0	0%	200000	0	0	54	9.6 U	9.6 U	9.9 U	9.5 U	10 U	2 U
Endosulfan II	UG/KG	0	0%	200000	0	0	54	19 U	19 U	19 U	18 U	20 U	3.8 U
Endosulfan sulfate	UG/KG	0	0%	200000	0	0	54	19 U	19 U	19 U	18 U	20 U	3.8 U
Endrin	UG/KG	0	0%	89000	0	0	54	19 U	19 U	19 U	18 U	20 U	3.8 U
Endrin aldehyde	UG/KG	0	0%		0	0	54	19 U	19 U	19 U	18 U	20 U	3.8 U
Endrin ketone	UG/KG	15	2%		0	1	54	19 U	19 U	19 U	18 U	20 U	3.8 U
Gamma-BHC/Lindane	UG/KG	0	0%	9200	0	0	54	9.6 U	9.6 U	9.9 U	9.5 U	10 U	2 U
Gamma-Chlordane	UG/KG	21	9%		0	5	54	9.6 U	15	9.9 U	21 J	10 U	2 U
Heptachlor	UG/KG	0	0%	15000	0	0	54	9.6 U	9.6 U	9.9 U	9.5 U	10 U	2 U
Heptachlor epoxide	UG/KG	0	0%		0	0	54	9.6 U	9.6 U	9.9 U	9.5 U	10 U	2 U
Methoxychlor	UG/KG	0	0%		0	0	54	96 U	96 U	99 U	95 U	100 U	20 U
Toxaphene	UG/KG	0	0%		0	0	54	190 U	190 U	190 U	180 U	200 U	200 U

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SITE LOCATION								SEAD-59	SEAD-59	SEAD-59	SEAD-59	SEAD-59	SEAD-59
LOCATION ID								WS-59-01-011-5	WS-59-01-011-6	WS-59-01-011-7	WS-59-01-011-8	WS-59-01-011-9	WS-59-01-012-2
MATRIX								SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
SAMPLE ID								WS-59-01-011-5	WS-59-01-011-6	WS-59-01-011-7	WS-59-01-011-8	WS-59-01-011-9	WS-59-01-012-2
SAMPLE DATE								5/6/2004	5/6/2004	5/6/2004	5/6/2004	5/6/2004	5/6/2004
QC CODE								SA	SA	SA	SA	SA	SA
STUDY ID								ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM
SAMPLE ROUND								1	1	1	1	1	1
Parameter	**Units**	**Maximum Value**	**Frequency of Detection**	**Criteria Level [1]**	**Number of Exceedances**	**Number of Times Detected**	**Number of Samples Collected**	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)
Aroclor-1016	UG/KG	0	0%	1000	0	0	54	37 U	37 U	38 U	37 U	39 U	38 U
Aroclor-1221	UG/KG	0	0%	1000	0	0	54	37 U	37 U	38 U	37 U	39 U	38 U
Aroclor-1232	UG/KG	0	0%	1000	0	0	54	37 U	37 U	38 U	37 U	39 U	38 U
Aroclor-1242	UG/KG	0	0%	1000	0	0	54	37 U	37 U	38 U	37 U	39 U	38 U
Aroclor-1248	UG/KG	0	0%	1000	0	0	54	37 U	37 U	38 U	37 U	39 U	38 U
Aroclor-1254	UG/KG	0	0%	1000	0	0	54	37 U	37 U	38 U	37 U	39 U	38 U
Aroclor-1260	UG/KG	0	0%	1000	0	0	54	37 U	37 U	38 U	37 U	39 U	38 U
Aluminum	MG/KG	13400	100%		0	54	54	9220	9890	7260	10300	11200	10800 J
Antimony	MG/KG	43.9	20%		0	11	54	15.6 J	3.2 UJ	3.5 UJ	3.4 UJ	3.5 UJ	1.7 J
Arsenic	MG/KG	7.3	100%	16	0	54	54	3.6 J	4.7 J	3.9 J	4 J	4.7 J	5 J
Barium	MG/KG	135	100%	400	0	54	54	97.6	75.5	53.6	80.1	114	71.2 J
Beryllium	MG/KG	0.69	100%	590	0	54	54	0.22	0.34	0.24	0.38	0.41	0.57
Cadmium	MG/KG	1.2	98%	9.3	0	53	54	0.35 J	0.33 J	0.29 J	0.37 J	0.6	0.48
Calcium	MG/KG	100000	100%		0	54	54	46100	51600	44700	61900	34400	86700 J
Chromium	MG/KG	35	100%	1500	0	54	54	15.4 J	17.4 J	15.3 J	18.4 J	19.4 J	18.6 J
Cobalt	MG/KG	13.9	100%		0	54	54	8.5	10.6	7.7	11.2	12.6	10.1 J
Copper	MG/KG	51.8	100%	270	0	54	54	25.3 J	26.8 J	18.4 J	44.7 J	26.8 J	27.5 J
Iron	MG/KG	26500	100%		0	54	54	17000	20300	16300	19900	23200	22700 J
Lead	MG/KG	1440	100%	1000	1	54	54	41.5 J	34.2 J	40.9 J	49.4 J	32.9 J	35.7 J
Magnesium	MG/KG	26600	100%		0	54	54	10800	9720	8370	8540	7680	8010 J
Manganese	MG/KG	1220	100%	10000	0	54	54	452	456	361	475	1080	489 J
Nickel	MG/KG	56.6	100%	310	0	54	54	23.8 J	29.4 J	22.5 J	33.5 J	36.1 J	32.8 J
Potassium	MG/KG	1580	100%		0	54	54	936	1060	781	1100	1150	1340 J
Selenium	MG/KG	0.72	4%	1500	0	2	54	1.1 UJ	1.1 UJ	1.2 UJ	1.1 UJ	1.2 UJ	0.43 U
Silver	MG/KG	4.7	17%	1500	0	9	54	0.55 U	0.56 U	0.55 U	0.52 U	0.56 U	0.11 U
Sodium	MG/KG	525	100%		0	54	54	240	206	129	115	148	163 J
Thallium	MG/KG	0.99	50%		0	27	54	0.67 J	0.56 J	0.58 U	0.64 J	0.93 J	0.22 U
Vanadium	MG/KG	35.4	100%		0	54	54	16.1	17.7	13.4	18.4	20.3	18 J
Zinc	MG/KG	185	100%	10000	0	54	54	96 J	80.4 J	57 J	89.3 J	80.9 J	69.3 J
Flashpoint	?C	100	100%		0	45	0	100 GT	100 GT	100 GT	100 GT	100 GT	
Percent Solids	%	91.4	100%		0	49	49	88.1	89	86.1	89.5	84.3	
Reactive Cyanide	MG/KG	0	0%		0	0	44	5 U	5 U	5 U	5 U	5 U	
Reactive Sulfide	MG/KG	0	0%		0	0	45	20 U	20 U	20 U	20 U	20 U	
pH	Std units	8.71	100%		0	45	45	7.59	8.1	8	7.91	7.93	
TCLP 1,4-Dichlorobenzene	UG/L	0	0%	7500	0	0	6			100 U			
TCLP 2,4,5-Trichlorophenol	UG/L	0	0%	1000	0	0	6			100 U			
TCLP 2,4,6-Trichlorophenol	UG/L	0	0%	2000	0	0	6			100 U			
TCLP 2,4-Dinitrotoluene	UG/L	0	0%	100	0	0	6			100 U			
TCLP 2-Methylphenol	UG/L	0	0%		0	0	6			100 U			
TCLP Hexachlorobenzene	UG/L	0	0%	100	0	0	6			100 U			
TCLP Hexachlorobutadiene	UG/L	0	0%		0	0	6			100 U			
TCLP Hexachloroethane	UG/L	0	0%	3000	0	0	6			100 U			
TCLP Nitrobenzene	UG/L	0	0%	2000	0	0	6			100 U			
TCLP Pentachlorophenol	UG/L	0	0%	100000	0	0	6			500 U			
TCLP Pyridine	UG/L	0	0%	5000	0	0	6			500 U			
TCLP Arsenic	UG/L	0	0%	5000	0	0	5						
TCLP Barium	UG/L	0	0%	100000	0	0	5						

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SITE LOCATION								SEAD-59	SEAD-59	SEAD-59	SEAD-59	SEAD-59	SEAD-59
LOCATION ID								WS-59-01-011-5	WS-59-01-011-6	WS-59-01-011-7	WS-59-01-011-8	WS-59-01-011-9	WS-59-01-012-2
MATRIX								SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
SAMPLE ID								WS-59-01-011-5	WS-59-01-011-6	WS-59-01-011-7	WS-59-01-011-8	WS-59-01-011-9	WS-59-01-012-2
SAMPLE DATE								5/6/2004	5/6/2004	5/6/2004	5/6/2004	5/6/2004	5/6/2004
QC CODE								SA	SA	SA	SA	SA	SA
STUDY ID								ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM
SAMPLE ROUND								1	1	1	1	1	1
Parameter	**Units**	**Maximum Value**	**Frequency of Detection**	**Criteria Level [1]**	**Number of Exceedances**	**Number of Times Detected**	**Number of Samples Collected**	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)
TCLP Cadmium	UG/L	0	0%	1000	0	0	5						
TCLP Chromium	UG/L	0	0%	5000	0	0	5						
TCLP Lead	UG/L	106	20%	5000	0	1	5						
TCLP Mercury	UG/L	0	0%	200	0	0	5						
TCLP Selenium	UG/L	0	0%	1000	0	0	5						
TCLP Silver	UG/L	0	0%	5000	0	0	5						

(1) The following criterias were used to compare the soil results against:
- NYSDEC's Restricted Commercial Use Soil Cleanup Objective, 6 NYCRR Part 375-6.
- TCLP regulatory limits are based on 40CFR 261.23 and 40CFR 261.24.

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SITE LOCATION							SEAD-59	SEAD-59	SEAD-59	SEAD-59	SEAD-59	SEAD-59
LOCATION ID							WS-59-01-012-3	WS-59-01-013-2	WS-59-01-014-5	WS-59-01-015-14	WS-59-01-015-15	WS-59-01-015-16
MATRIX							SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
SAMPLE ID							WS-59-01-012-3	WS-59-01-013-2	WS-59-01-014-5	WS-59-01-015-14	WS-59-01-015-15	WS-59-01-015-16
SAMPLE DATE							5/6/2004	5/6/2004	5/6/2004	5/6/2004	5/6/2004	5/6/2004
QC CODE							SA	SA	SA	SA	SA	SA
STUDY ID							ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM
SAMPLE ROUND							1	1	1	1	1	1
Parameter	**Units**	**Maximum Value**	**Frequency of Detection**	**Criteria Level [1]**	**Number of Exceedances**	**Number of Times Detected**	**Number of Samples Collected**	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)
1,1,1-Trichloroethane	UG/KG	0	0%	500000	0	0	54	5.6 U	5.7 U	5 U	6 U	5.8 U	5.7 U
1,1,2,2-Tetrachloroethane	UG/KG	0	0%		0	0	53	5.6 U	5.7 U	5 UJ	6 U	5.8 U	5.7 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	UG/KG	1.5	2%		0	1	54	5.6 U	5.7 U	5 U	6 U	5.8 U	5.7 U
1,1,2-Trichloroethane	UG/KG	0	0%		0	0	5			5 U			
1,1-Dichloroethane	UG/KG	0	0%	240000	0	0	54	5.6 U	5.7 U	5 U	6 U	5.8 U	5.7 U
1,1-Dichloroethene	UG/KG	1	2%	500000	0	1	54	5.6 U	5.7 U	5 U	6 U	5.8 U	5.7 U
1,2,3-Trichloropropane	UG/KG	0	0%		0	0	48	5.6 U	5.7 U		6 U	5.8 U	5.7 U
1,2,4-Trichlorobenzene	UG/KG	0	0%		0	0	53	5.6 U	5.7 U	5 UJ	6 U	5.8 U	5.7 U
1,2-Dibromo-3-chloropropane	UG/KG	0	0%		0	0	5			5 UJ			
1,2-Dibromoethane	UG/KG	0	0%		0	0	5			5 U			
1,2-Dichlorobenzene	UG/KG	0	0%	500000	0	0	53	5.6 U	5.7 U	5 UJ	6 U	5.8 U	5.7 U
1,2-Dichloroethane	UG/KG	0	0%	30000	0	0	54	5.6 U	5.7 U	5 U	6 U	5.8 U	5.7 U
1,2-Dichloropropane	UG/KG	0	0%		0	0	5			5 U			
1,3-Dichlorobenzene	UG/KG	0	0%	280000	0	0	53	5.6 U	5.7 U	5 UJ	6 U	5.8 U	5.7 U
1,3-Dichloropropane	UG/KG	0	0%		0	0	49	5.6 U	5.7 U		6 U	5.8 U	5.7 U
1,4-Dichlorobenzene	UG/KG	0	0%	130000	0	0	53	5.6 U	5.7 U	5 UJ	6 U	5.8 U	5.7 U
Acetone	UG/KG	69	24%	500000	0	13	54	22 U	23 U	11 NJ	24 U	23 U	23 U
Benzene	UG/KG	0	0%	44000	0	0	54	5.6 U	5.7 U	5 U	6 U	5.8 U	5.7 U
Bromodichloromethane	UG/KG	0	0%		0	0	5			5 U			
Bromoform	UG/KG	0	0%		0	0	5			5 U			
Carbon disulfide	UG/KG	0	0%		0	0	54	5.6 U	5.7 U	5 U	6 U	5.8 U	5.7 U
Carbon tetrachloride	UG/KG	0	0%	22000	0	0	54	5.6 U	5.7 U	5 U	6 U	5.8 U	5.7 U
Chlorobenzene	UG/KG	0	0%	500000	0	0	54	5.6 U	5.7 U	5 U	6 U	5.8 U	5.7 U
Chlorodibromomethane	UG/KG	0	0%		0	0	54	5.6 U	5.7 U	5 U	6 U	5.8 U	5.7 U
Chloroethane	UG/KG	0	0%		0	0	54	11 U	11 U	5 U	12 U	12 U	11 U
Chloroform	UG/KG	0	0%	350000	0	0	54	5.6 U	5.7 U	5 U	6 U	5.8 U	5.7 U
Cis-1,2-Dichloroethene	UG/KG	0	0%	500000	0	0	5			5 U			
Cis-1,3-Dichloropropene	UG/KG	0	0%		0	0	5			5 U			
Cyclohexane	UG/KG	0	0%		0	0	5			5 U			
Dichlorodifluoromethane	UG/KG	0	0%		0	0	5			5 U			
Ethyl benzene	UG/KG	0	0%	390000	0	0	54	5.6 U	5.7 U	5 U	6 U	5.8 U	5.7 U
Isopropylbenzene	UG/KG	0	0%		0	0	5			5 U			
Meta/Para Xylene	UG/KG	2.3	4%	500000	0	2	49	5.6 U	5.7 U		6 U	5.8 U	5.7 U
Methyl Acetate	UG/KG	0	0%		0	0	5			5 U			
Methyl Tertbutyl Ether	UG/KG	0	0%	500000	0	0	5			5 U			
Methyl bromide	UG/KG	0	0%		0	0	5			5 U			
Methyl butyl ketone	UG/KG	0	0%		0	0	5			5 U			
Methyl chloride	UG/KG	0	0%		0	0	5			5 U			
Methyl cyclohexane	UG/KG	0	0%		0	0	5			5 U			
Methyl ethyl ketone	UG/KG	7	9%	500000	0	5	54	11 U	11 U	5 U	12 U	12 U	11 U
Methyl isobutyl ketone	UG/KG	0	0%		0	0	54	11 U	11 U	5 U	12 U	12 U	11 U
Methylene chloride	UG/KG	1.4	2%	500000	0	1	54	5.6 U	5.7 U	5 U	6 U	5.8 U	5.7 U
Ortho Xylene	UG/KG	1.9	10%	500000	0	5	49	5.6 U	5.7 U		6 U	5.8 U	5.7 U
Styrene	UG/KG	0	0%		0	0	5			5 U			
Tetrachloroethene	UG/KG	6.7	6%	150000	0	3	54	5.6 U	5.7 U	5 U	6 U	5.8 U	5.7 U
Toluene	UG/KG	0	0%	500000	0	0	54	5.6 U	5.7 U	5 U	6 U	5.8 U	5.7 U
Total Xylenes	UG/KG	3	20%	500000	0	1	5			5 UJ			

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SITE LOCATION								SEAD-59	SEAD-59	SEAD-59	SEAD-59	SEAD-59	SEAD-59
LOCATION ID								WS-59-01-012-3	WS-59-01-013-2	WS-59-01-014-5	WS-59-01-015-14	WS-59-01-015-15	WS-59-01-015-16
MATRIX								SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
SAMPLE ID								WS-59-01-012-3	WS-59-01-013-2	WS-59-01-014-5	WS-59-01-015-14	WS-59-01-015-15	WS-59-01-015-16
SAMPLE DATE								5/6/2004	5/6/2004	5/6/2004	5/6/2004	5/6/2004	5/6/2004
QC CODE								SA	SA	SA	SA	SA	SA
STUDY ID								ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM
SAMPLE ROUND								1	1	1	1	1	1
Parameter	**Units**	**Maximum Value**	**Frequency of Detection**	**Criteria Level [1]**	**Number of Exceedances**	**Number of Times Detected**	**Number of Samples Collected**	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)
Trans-1,2-Dichloroethene	UG/KG	0	0%	500000	0	0	54	5.6 U	5.7 U	5 U	6 U	5.8 U	5.7 U
Trans-1,3-Dichloropropene	UG/KG	0	0%		0	0	5			5 U			
Trichloroethene	UG/KG	2.7	7%	200000	0	4	54	5.6 U	5.7 U	5 U	6 U	5.8 U	5.7 U
Trichlorofluoromethane	UG/KG	0	0%		0	0	5			5 U			
Vinyl chloride	UG/KG	0	0%	13000	0	0	54	11 U	11 U	5 U	12 U	12 U	11 U
1,1'-Biphenyl	UG/KG	59	20%		0	1	5			370 U			
2,2'-oxybis(1-Chloropropane)	UG/KG	0	0%		0	0	5			370 U			
2,4,5-Trichlorophenol	UG/KG	0	0%		0	0	54	1800 U	1900 U	930 U	2000 U	1900 U	1900 U
2,4,6-Trichlorophenol	UG/KG	0	0%		0	0	54	1800 U	1900 U	370 U	2000 U	1900 U	1900 U
2,4-Dichlorophenol	UG/KG	0	0%		0	0	54	1800 U	1900 U	370 U	2000 U	1900 U	1900 U
2,4-Dimethylphenol	UG/KG	0	0%		0	0	5			370 U			
2,4-Dinitrophenol	UG/KG	0	0%		0	0	54	9500 U	9600 U	930 U	10000 U	9900 U	9700 U
2,4-Dinitrotoluene	UG/KG	0	0%		0	0	54	1800 U	1900 U	370 U	2000 U	1900 U	1900 U
2,6-Dinitrotoluene	UG/KG	0	0%		0	0	54	1800 U	1900 U	370 U	2000 U	1900 U	1900 U
2-Chloronaphthalene	UG/KG	0	0%		0	0	5			370 U			
2-Chlorophenol	UG/KG	0	0%		0	0	54	1800 U	1900 U	370 U	2000 U	1900 U	1900 U
2-Methylnaphthalene	UG/KG	1200	50%		0	27	54	710 J	200 J	39 J	2000 U	1900 U	440 J
2-Methylphenol	UG/KG	0	0%	500000	0	0	54	1800 U	1900 U	370 U	2000 U	1900 U	1900 U
2-Nitroaniline	UG/KG	0	0%		0	0	54	9500 U	9600 U	930 U	10000 U	9900 U	9700 U
2-Nitrophenol	UG/KG	0	0%		0	0	54	1800 U	1900 U	370 U	2000 U	1900 U	1900 U
3,3'-Dichlorobenzidine	UG/KG	0	0%		0	0	54	1800 U	1900 U	370 U	2000 U	1900 U	1900 U
3-Nitroaniline	UG/KG	0	0%		0	0	54	9500 U	9600 U	930 U	10000 U	9900 U	9700 U
4,6-Dinitro-2-methylphenol	UG/KG	0	0%		0	0	5			930 U			
4-Bromophenyl phenyl ether	UG/KG	0	0%		0	0	5			370 U			
4-Chloro-3-methylphenol	UG/KG	0	0%		0	0	54	1800 U	1900 U	370 U	2000 U	1900 U	1900 U
4-Chloroaniline	UG/KG	0	0%		0	0	54	1800 U	1900 U	370 U	2000 U	1900 U	1900 U
4-Chlorophenyl phenyl ether	UG/KG	0	0%		0	0	5			370 U			
4-Methylphenol	UG/KG	0	0%	500000	0	0	54	1800 U	1900 U	370 U	2000 U	1900 U	1900 U
4-Nitroaniline	UG/KG	0	0%		0	0	5			930 U			
4-Nitrophenol	UG/KG	0	0%		0	0	54	9500 U	9600 U	930 U	10000 U	9900 U	9700 U
Acenaphthene	UG/KG	2400	87%	500000	0	47	54	850 J	480 J	370 U	340 J	360 J	380 J
Acenaphthylene	UG/KG	3500	98%	500000	0	53	54	3000	1000 J	97 J	1500 J	1400 J	1300 J
Acetophenone	UG/KG	0	0%		0	0	5			370 U			
Aniline	UG/KG	0	0%		0	0	49	1800 U	1900 U		2000 U	1900 U	1900 U
Anthracene	UG/KG	6600	100%	500000	0	54	54	3400	1700 J	110 J	1600 J	1600 J	1500 J
Atrazine	UG/KG	0	0%		0	0	5			370 U			
Benzaldehyde	UG/KG	0	0%		0	0	5			370 U			
Benzo(a)anthracene	UG/KG	14000	100%	5600	16	54	54	**10000**	4600	370 NJ	4200	4000	3400
Benzo(a)pyrene	UG/KG	16000	100%	1000	48	54	54	**16000**	**5100**	430	**4800**	**4300**	**4000**
Benzo(b)fluoranthene	UG/KG	11000	100%	5600	13	54	54	**11000**	3900	550	3600	3200	2700
Benzo(ghi)perylene	UG/KG	8000	100%	500000	0	54	54	7600	3400	280 J	2900	2500	2400
Benzo(k)fluoranthene	UG/KG	13000	100%	56000	0	54	54	13000	4000	200 J	3800	3300	3000
Benzoic Acid	UG/KG	0	0%		0	0	49	9500 UJ	9600 UJ		10000 UJ	9900 UJ	9700 U
Bis(2-Chloroethoxy)methane	UG/KG	0	0%		0	0	5			370 U			
Bis(2-Chloroethyl)ether	UG/KG	0	0%		0	0	5			370 U			
Bis(2-Ethylhexyl)phthalate	UG/KG	130	6%		0	3	54	1800 U	1900 U	110 J	2000 U	1900 U	1900 U
Butylbenzylphthalate	UG/KG	0	0%		0	0	54	1800 U	1900 UJ	370 U	2000 U	1900 U	1900 UJ

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SITE LOCATION								SEAD-59	SEAD-59	SEAD-59	SEAD-59	SEAD-59	SEAD-59
LOCATION ID								WS-59-01-012-3	WS-59-01-013-2	WS-59-01-014-5	WS-59-01-015-14	WS-59-01-015-15	WS-59-01-015-16
MATRIX								SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
SAMPLE ID								WS-59-01-012-3	WS-59-01-013-2	WS-59-01-014-5	WS-59-01-015-14	WS-59-01-015-15	WS-59-01-015-16
SAMPLE DATE								5/6/2004	5/6/2004	5/6/2004	5/6/2004	5/6/2004	5/6/2004
QC CODE								SA	SA	SA	SA	SA	SA
STUDY ID								ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM
SAMPLE ROUND								1	1	1	1	1	1
Parameter	**Units**	**Maximum Value**	**Frequency of Detection**	**Criteria Level [1]**	**Number of Exceedances**	**Number of Times Detected**	**Number of Samples Collected**	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)
Caprolactam	UG/KG	0	0%		0	0	5			370 U			
Carbazole	UG/KG	1100	80%		0	4	5			42 J			
Chrysene	UG/KG	13000	100%	56000	0	54	54	11000	4700	420	4300	3900	3400
Di-n-butylphthalate	UG/KG	0	0%		0	0	54	1800 U	1900 U	370 U	2000 U	1900 U	1900 U
Di-n-octylphthalate	UG/KG	0	0%		0	0	54	1800 U	1900 U	370 U	2000 U	1900 U	1900 U
Dibenz(a,h)anthracene	UG/KG	2900	98%	560	41	53	54	**2900** J	**1100** J	73 J	**880** J	**780** J	**770** J
Dibenzofuran	UG/KG	1300	61%	350000	0	33	54	650 J	310 J	370 U	240 J	240 J	310 J
Diethyl phthalate	UG/KG	0	0%		0	0	54	1800 U	1900 U	370 U	2000 U	1900 U	1900 U
Dimethylphthalate	UG/KG	0	0%		0	0	54	1800 U	1900 U	370 U	2000 U	1900 U	1900 U
Fluoranthene	UG/KG	29000	100%	500000	0	54	54	20000	7800	660	7700	7000	5700
Fluorene	UG/KG	3100	87%	500000	0	47	54	1300 J	690 J	370 U	490 J	570 J	690 J
Hexachlorobenzene	UG/KG	0	0%	6000	0	0	54	1800 U	1900 U	370 U	2000 U	1900 U	1900 U
Hexachlorobutadiene	UG/KG	0	0%		0	0	54	1800 U	1900 U	370 U	2000 U	1900 U	1900 U
Hexachlorocyclopentadiene	UG/KG	0	0%		0	0	5			370 U			
Hexachloroethane	UG/KG	0	0%		0	0	54	1800 U	1900 U	370 U	2000 U	1900 U	1900 U
Indeno(1,2,3-cd)pyrene	UG/KG	8000	100%	5600	6	54	54	**7800** J	3200 J	290 J	2600 J	2300 J	2200 J
Isophorone	UG/KG	0	0%		0	0	54	1800 U	1900 U	370 U	2000 U	1900 U	1900 U
N-Nitrosodiphenylamine	UG/KG	0	0%		0	0	5			370 U			
N-Nitrosodipropylamine	UG/KG	0	0%		0	0	5			370 U			
Naphthalene	UG/KG	1200	61%	500000	0	33	54	840 J	290 J	46 J	2000 U	1900 U	520 J
Nitrobenzene	UG/KG	0	0%		0	0	54	1800 U	1900 U	370 U	2000 U	1900 U	1900 U
Pentachlorophenol	UG/KG	660	2%	6700	0	1	54	9500 U	9600 U	660 J	10000 U	9900 U	9700 U
Phenanthrene	UG/KG	17000	100%	500000	0	54	54	8100	4500	250 J	4800	4400	4200
Phenol	UG/KG	0	0%	500000	0	0	54	1800 U	1900 U	370 U	2000 U	1900 U	1900 U
Pyrene	UG/KG	22000	100%	500000	0	54	54	22000	7800	650	8200	7400	6600 J
Pyridine	UG/KG	0	0%		0	0	49	9500 U	9600 U		10000 U	9900 U	9700 U
4,4'-DDD	UG/KG	450	61%	92000	0	33	54	51 J	34 J	24	450	36	21 J
4,4'-DDE	UG/KG	260	61%	62000	0	33	54	160	43	49	86 J	31 J	19 U
4,4'-DDT	UG/KG	520	69%	47000	0	37	54	92 J	33 J	45	520	55	22 J
Aldrin	UG/KG	0	0%	680	0	0	54	9.5 U	9.6 U	1.9 U	10 U	9.9 U	9.7 U
Alpha-BHC	UG/KG	4.4	2%	3400	0	1	54	9.5 U	9.6 U	1.9 U	10 U	9.9 U	9.7 U
Alpha-Chlordane	UG/KG	27	11%	24000	0	6	54	9.5 U	9.6 U	3.4	10 U	9.9 U	9.7 U
Beta-BHC	UG/KG	13	2%	3000	0	1	54	9.5 U	9.6 U	13 NJ	10 U	9.9 U	9.7 U
Delta-BHC	UG/KG	0	0%	500000	0	0	54	9.5 U	9.6 U	1.9 U	10 U	9.9 U	9.7 U
Dieldrin	UG/KG	0	0%	1400	0	0	54	18 U	19 U	3.7 U	20 U	19 U	19 U
Endosulfan I	UG/KG	0	0%	200000	0	0	54	9.5 U	9.6 U	1.9 U	10 U	9.9 U	9.7 U
Endosulfan II	UG/KG	0	0%	200000	0	0	54	18 U	19 U	3.7 U	20 U	19 U	19 U
Endosulfan sulfate	UG/KG	0	0%	200000	0	0	54	18 U	19 U	3.7 U	20 U	19 U	19 U
Endrin	UG/KG	0	0%	89000	0	0	54	18 U	19 U	3.7 U	20 U	19 U	19 U
Endrin aldehyde	UG/KG	0	0%		0	0	54	18 U	19 U	3.7 U	20 U	19 U	19 U
Endrin ketone	UG/KG	15	2%		0	1	54	18 U	19 U	3.7 U	20 U	19 U	19 U
Gamma-BHC/Lindane	UG/KG	0	0%	9200	0	0	54	9.5 U	9.6 U	1.9 U	10 U	9.9 U	9.7 U
Gamma-Chlordane	UG/KG	21	9%		0	5	54	9.5 U	9.6 U	1.9 U	10 U	9.9 U	9.7 U
Heptachlor	UG/KG	0	0%	15000	0	0	54	9.5 U	9.6 U	1.9 U	10 U	9.9 U	9.7 U
Heptachlor epoxide	UG/KG	0	0%		0	0	54	9.5 U	9.6 U	1.9 U	10 U	9.9 U	9.7 U
Methoxychlor	UG/KG	0	0%		0	0	54	95 U	96 U	19 U	100 U	99 U	97 U
Toxaphene	UG/KG	0	0%		0	0	54	180 U	190 U	190 U	200 U	190 U	190 U

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Seneca Army Depot Activity

SITE LOCATION								SEAD-59	SEAD-59	SEAD-59	SEAD-59	SEAD-59	SEAD-59
LOCATION ID								WS-59-01-012-3	WS-59-01-013-2	WS-59-01-014-5	WS-59-01-015-14	WS-59-01-015-15	WS-59-01-015-16
MATRIX								SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
SAMPLE ID								WS-59-01-012-3	WS-59-01-013-2	WS-59-01-014-5	WS-59-01-015-14	WS-59-01-015-15	WS-59-01-015-16
SAMPLE DATE								5/6/2004	5/6/2004	5/6/2004	5/6/2004	5/6/2004	5/6/2004
QC CODE								SA	SA	SA	SA	SA	SA
STUDY ID								ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM
SAMPLE ROUND								1	1	1	1	1	1
Parameter	**Units**	**Maximum Value**	**Frequency of Detection**	**Criteria Level [1]**	**Number of Exceedances**	**Number of Times Detected**	**Number of Samples Collected**	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)
Aroclor-1016	UG/KG	0	0%	1000	0	0	54	37 U	37 U	37 U	39 U	38 U	38 U
Aroclor-1221	UG/KG	0	0%	1000	0	0	54	37 U	37 U	37 U	39 U	38 U	38 U
Aroclor-1232	UG/KG	0	0%	1000	0	0	54	37 U	37 U	37 U	39 U	38 U	38 U
Aroclor-1242	UG/KG	0	0%	1000	0	0	54	37 U	37 U	37 U	39 U	38 U	38 U
Aroclor-1248	UG/KG	0	0%	1000	0	0	54	37 U	37 U	37 U	39 U	38 U	38 U
Aroclor-1254	UG/KG	0	0%	1000	0	0	54	37 U	37 U	37 U	39 U	38 U	38 U
Aroclor-1260	UG/KG	0	0%	1000	0	0	54	37 U	37 U	37 U	39 U	38 U	38 U
Aluminum	MG/KG	13400	100%		0	54	54	10200	12000	10700 J	11400	10100	12100
Antimony	MG/KG	43.9	20%		0	11	54	3.2 UJ	3.3 U	1.7 J	43.9 J	3.7 J	12
Arsenic	MG/KG	7.3	100%	16	0	54	54	4.9 J	5	7.3 J	4.5 J	4.1 J	4.5
Barium	MG/KG	135	100%	400	0	54	54	77.9	97.6	101 J	135	93.3	91.6
Beryllium	MG/KG	0.69	100%	590	0	54	54	0.42	0.38	0.58	0.32	0.32	0.4
Cadmium	MG/KG	1.2	98%	9.3	0	53	54	0.6	0.52 J	0.54	0.89	0.36 J	0.55 J
Calcium	MG/KG	100000	100%		0	54	54	46300	42900	41300 J	38300	69600	76800
Chromium	MG/KG	35	100%	1500	0	54	54	17.6 J	22	18.2 J	19.9 J	15.5 J	27.7
Cobalt	MG/KG	13.9	100%		0	54	54	12.6	11.1	10.1 J	10.1	8.8	11.1
Copper	MG/KG	51.8	100%	270	0	54	54	30 J	29.5	25 J	24.8 J	22.6 J	36.2
Iron	MG/KG	26500	100%		0	54	54	20800	23200	24500 J	20800	18600	22700
Lead	MG/KG	1440	100%	1000	1	54	54	42.4 J	44.1 J	33.4 J	195 J	31.2 J	149 J
Magnesium	MG/KG	26600	100%		0	54	54	7890	9440	7060 J	7250	6890	7820
Manganese	MG/KG	1220	100%	10000	0	54	54	534	528	632 J	471	646	591
Nickel	MG/KG	56.6	100%	310	0	54	54	33.4 J	34.2	29.1 J	27.5 J	23.3 J	31.6
Potassium	MG/KG	1580	100%		0	54	54	1160	1320	1100 J	1070	949	1260
Selenium	MG/KG	0.72	4%	1500	0	2	54	1.1 UJ	0.72 J	0.43 U	1.2 UJ	1.1 UJ	0.55 U
Silver	MG/KG	4.7	17%	1500	0	9	54	0.56 U	0.55 U	0.74	0.57 U	0.55 U	0.55 U
Sodium	MG/KG	525	100%		0	54	54	103	191	294 J	92.4	106	110
Thallium	MG/KG	0.99	50%		0	27	54	0.68 J	0.76 J	0.22 U	0.88 J	0.98 J	0.99 J
Vanadium	MG/KG	35.4	100%		0	54	54	18	22.3	19 J	19.3	17.3	20.3
Zinc	MG/KG	185	100%	10000	0	54	54	106 J	98.4 J	78.1 J	127 J	82.7 J	97.4 J
Flashpoint	?C	100	100%		0	45	0	100 GT	100 GT		100 GT	100 GT	100 GT
Percent Solids	%	91.4	100%		0	49	49	89.6	88.1		84	85.9	87.7
Reactive Cyanide	MG/KG	0	0%		0	0	44	5 U	5 U		5 U	5 U	5 U
Reactive Sulfide	MG/KG	0	0%		0	0	45	20 U	20 U		20 U	20 U	20 U
pH	Std units	8.71	100%		0	45	45	7.91	8.01		7.33	7.38	7.74
TCLP 1,4-Dichlorobenzene	UG/L	0	0%	7500	0	0	6						
TCLP 2,4,5-Trichlorophenol	UG/L	0	0%	1000	0	0	6						
TCLP 2,4,6-Trichlorophenol	UG/L	0	0%	2000	0	0	6						
TCLP 2,4-Dinitrotoluene	UG/L	0	0%	100	0	0	6						
TCLP 2-Methylphenol	UG/L	0	0%		0	0	6						
TCLP Hexachlorobenzene	UG/L	0	0%	100	0	0	6						
TCLP Hexachlorobutadiene	UG/L	0	0%		0	0	6						
TCLP Hexachloroethane	UG/L	0	0%	3000	0	0	6						
TCLP Nitrobenzene	UG/L	0	0%	2000	0	0	6						
TCLP Pentachlorophenol	UG/L	0	0%	100000	0	0	6						
TCLP Pyridine	UG/L	0	0%	5000	0	0	6						
TCLP Arsenic	UG/L	0	0%	5000	0	0	5				500 U		500 U
TCLP Barium	UG/L	0	0%	100000	0	0	5				1000 U		1000 U

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SITE LOCATION								SEAD-59	SEAD-59	SEAD-59	SEAD-59	SEAD-59	SEAD-59
LOCATION ID								WS-59-01-012-3	WS-59-01-013-2	WS-59-01-014-5	WS-59-01-015-14	WS-59-01-015-15	WS-59-01-015-16
MATRIX								SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
SAMPLE ID								WS-59-01-012-3	WS-59-01-013-2	WS-59-01-014-5	WS-59-01-015-14	WS-59-01-015-15	WS-59-01-015-16
SAMPLE DATE								5/6/2004	5/6/2004	5/6/2004	5/6/2004	5/6/2004	5/6/2004
QC CODE								SA	SA	SA	SA	SA	SA
STUDY ID								ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM
SAMPLE ROUND								1	1	1	1	1	1
Parameter	**Units**	**Maximum Value**	**Frequency of Detection**	**Criteria Level [1]**	**Number of Exceedances**	**Number of Times Detected**	**Number of Samples Collected**	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)
TCLP Cadmium	UG/L	0	0%	1000	0	0	5				100 U		100 U
TCLP Chromium	UG/L	0	0%	5000	0	0	5				100 U		100 U
TCLP Lead	UG/L	106	20%	5000	0	1	5				106		100 U
TCLP Mercury	UG/L	0	0%	200	0	0	5				2 U		2 U
TCLP Selenium	UG/L	0	0%	1000	0	0	5				500 U		500 U
TCLP Silver	UG/L	0	0%	5000	0	0	5				100 U		100 U

(1) The following criterias were used to compare the soil results against:
- NYSDEC's Restricted Commercial Use Soil Cleanup Objective, 6 NYCRR Part 375-6.
- TCLP regulatory limits are based on 40CFR 261.23 and 40CFR 261.24.

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Seneca Army Depot Activity

SITE LOCATION							SEAD-59	SEAD-59	SEAD-59	SEAD-59	SEAD-59	SEAD-59
LOCATION ID							WS-59-01-015-17	WS-59-01-015-20	WS-59-01-015-3	WS-59-01-015-4	WS-59-01-015-8	WS-59-01-016-1
MATRIX							SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
SAMPLE ID							WS-59-01-015-17	WS-59-01-015-20	WS-59-01-015-3	WS-59-01-015-4	WS-59-01-015-8	WS-59-01-016-1
SAMPLE DATE							5/6/2004	5/6/2004	5/6/2004	5/6/2004	5/6/2004	5/6/2004
QC CODE							SA	SA	SA	SA	SA	SA
STUDY ID							ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM
SAMPLE ROUND							1	1	1	1	1	1
Parameter	**Units**	**Maximum Value**	**Frequency of Detection**	**Criteria Level [1]**	**Number of Exceedances**	**Number of Times Detected**	**Number of Samples Collected**	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)
1,1,1-Trichloroethane	UG/KG	0	0%	500000	0	0	54	5.7 U	5.7 U	6.1 U	5.9 U	5.8 U	5.7 U
1,1,2,2-Tetrachloroethane	UG/KG	0	0%		0	0	53	5.7 U	5.7 U	6.1 U	5.9 U	5.8 U	5.7 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	UG/KG	1.5	2%		0	1	54	5.7 U	5.7 U	6.1 U	5.9 U	5.8 U	5.7 U
1,1,2-Trichloroethane	UG/KG	0	0%		0	0	5						
1,1-Dichloroethane	UG/KG	0	0%	240000	0	0	54	5.7 U	5.7 U	6.1 U	5.9 U	5.8 U	5.7 U
1,1-Dichloroethene	UG/KG	1	2%	500000	0	1	54	5.7 U	5.7 U	6.1 U	5.9 U	5.8 U	5.7 U
1,2,3-Trichloropropane	UG/KG	0	0%		0	0	48	5.7 U	5.7 U	6.1 U	5.9 U	5.8 U	5.7 U
1,2,4-Trichlorobenzene	UG/KG	0	0%		0	0	53	5.7 U	5.7 U	6.1 U	5.9 U	5.8 U	5.7 U
1,2-Dibromo-3-chloropropane	UG/KG	0	0%		0	0	5						
1,2-Dibromoethane	UG/KG	0	0%		0	0	5						
1,2-Dichlorobenzene	UG/KG	0	0%	500000	0	0	53	5.7 U	5.7 U	6.1 U	5.9 U	5.8 U	5.7 U
1,2-Dichloroethane	UG/KG	0	0%	30000	0	0	54	5.7 U	5.7 U	6.1 U	5.9 U	5.8 U	5.7 U
1,2-Dichloropropane	UG/KG	0	0%		0	0	5						
1,3-Dichlorobenzene	UG/KG	0	0%	280000	0	0	53	5.7 U	5.7 U	6.1 U	5.9 U	5.8 U	5.7 U
1,3-Dichloropropane	UG/KG	0	0%		0	0	49	5.7 U	5.7 U	6.1 U	5.9 U	5.8 U	5.7 U
1,4-Dichlorobenzene	UG/KG	0	0%	130000	0	0	53	5.7 U	5.7 U	6.1 U	5.9 U	5.8 U	5.7 U
Acetone	UG/KG	69	24%	500000	0	13	54	23 U	23 U	25 U	24 U	23 U	23 U
Benzene	UG/KG	0	0%	44000	0	0	54	5.7 U	5.7 U	6.1 U	5.9 U	5.8 U	5.7 U
Bromodichloromethane	UG/KG	0	0%		0	0	5						
Bromoform	UG/KG	0	0%		0	0	5						
Carbon disulfide	UG/KG	0	0%		0	0	54	5.7 U	5.7 U	6.1 U	5.9 U	5.8 U	5.7 U
Carbon tetrachloride	UG/KG	0	0%	22000	0	0	54	5.7 U	5.7 U	6.1 U	5.9 U	5.8 U	5.7 U
Chlorobenzene	UG/KG	0	0%	500000	0	0	54	5.7 U	5.7 U	6.1 U	5.9 U	5.8 U	5.7 U
Chlorodibromomethane	UG/KG	0	0%		0	0	54	5.7 U	5.7 U	6.1 U	5.9 U	5.8 U	5.7 U
Chloroethane	UG/KG	0	0%		0	0	54	11 U	11 U	12 U	12 U	12 U	11 U
Chloroform	UG/KG	0	0%	350000	0	0	54	5.7 U	5.7 U	6.1 U	5.9 U	5.8 U	5.7 U
Cis-1,2-Dichloroethene	UG/KG	0	0%	500000	0	0	5						
Cis-1,3-Dichloropropene	UG/KG	0	0%		0	0	5						
Cyclohexane	UG/KG	0	0%		0	0	5						
Dichlorodifluoromethane	UG/KG	0	0%		0	0	5						
Ethyl benzene	UG/KG	0	0%	390000	0	0	54	5.7 U	5.7 U	6.1 U	5.9 U	5.8 U	5.7 U
Isopropylbenzene	UG/KG	0	0%		0	0	5						
Meta/Para Xylene	UG/KG	2.3	4%	500000	0	2	49	5.7 U	5.7 U	6.1 U	5.9 U	5.8 U	5.7 U
Methyl Acetate	UG/KG	0	0%		0	0	5						
Methyl Tertbutyl Ether	UG/KG	0	0%	500000	0	0	5						
Methyl bromide	UG/KG	0	0%		0	0	5						
Methyl butyl ketone	UG/KG	0	0%		0	0	5						
Methyl chloride	UG/KG	0	0%		0	0	5						
Methyl cyclohexane	UG/KG	0	0%		0	0	5						
Methyl ethyl ketone	UG/KG	7	9%	500000	0	5	54	11 U	11 U	12 U	12 U	12 U	11 U
Methyl isobutyl ketone	UG/KG	0	0%		0	0	54	11 U	11 U	12 U	12 U	12 U	11 U
Methylene chloride	UG/KG	1.4	2%	500000	0	1	54	5.7 U	5.7 U	6.1 U	5.9 U	5.8 U	5.7 U
Ortho Xylene	UG/KG	1.9	10%	500000	0	5	49	5.7 U	5.7 U	6.1 U	5.9 U	5.8 U	5.7 U
Styrene	UG/KG	0	0%		0	0	5						
Tetrachloroethene	UG/KG	6.7	6%	150000	0	3	54	5.7 U	5.7 U	6.1 U	5.9 U	5.8 U	5.7 U
Toluene	UG/KG	0	0%	500000	0	0	54	5.7 U	5.7 U	6.1 U	5.9 U	5.8 U	5.7 U
Total Xylenes	UG/KG	3	20%	500000	0	1	5						

SEAD-59/71 Stockpile Soil Results
SEAD-5 Construction Completion Report
Seneca Army Depot Activity

SITE LOCATION								SEAD-59	SEAD-59	SEAD-59	SEAD-59	SEAD-59	SEAD-59
LOCATION ID								WS-59-01-015-17	WS-59-01-015-20	WS-59-01-015-3	WS-59-01-015-4	WS-59-01-015-8	WS-59-01-016-1
MATRIX								SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
SAMPLE ID								WS-59-01-015-17	WS-59-01-015-20	WS-59-01-015-3	WS-59-01-015-4	WS-59-01-015-8	WS-59-01-016-1
SAMPLE DATE								5/6/2004	5/6/2004	5/6/2004	5/6/2004	5/6/2004	5/6/2004
QC CODE								SA	SA	SA	SA	SA	SA
STUDY ID								ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM
SAMPLE ROUND								1	1	1	1	1	1
Parameter	**Units**	**Maximum Value**	**Frequency of Detection**	**Criteria Level [1]**	**Number of Exceedances**	**Number of Times Detected**	**Number of Samples Collected**	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)
Trans-1,2-Dichloroethene	UG/KG	0	0%	500000	0	0	54	5.7 U	5.7 U	6.1 U	5.9 U	5.8 U	5.7 U
Trans-1,3-Dichloropropene	UG/KG	0	0%		0	0	5						
Trichloroethene	UG/KG	2.7	7%	200000	0	4	54	5.7 U	5.7 U	6.1 U	5.9 U	5.8 U	5.7 U
Trichlorofluoromethane	UG/KG	0	0%		0	0	5						
Vinyl chloride	UG/KG	0	0%	13000	0	0	54	11 U	11 U	12 U	12 U	12 U	11 U
1,1'-Biphenyl	UG/KG	59	20%		0	1	5						
2,2'-oxybis(1-Chloropropane)	UG/KG	0	0%		0	0	5						
2,4,5-Trichlorophenol	UG/KG	0	0%		0	0	54	1900 U	1900 U	410 U	1900 U	1900 U	1900 U
2,4,6-Trichlorophenol	UG/KG	0	0%		0	0	54	1900 U	1900 U	410 U	1900 U	1900 U	1900 U
2,4-Dichlorophenol	UG/KG	0	0%		0	0	54	1900 U	1900 U	410 U	1900 U	1900 U	1900 U
2,4-Dimethylphenol	UG/KG	0	0%		0	0	5						
2,4-Dinitrophenol	UG/KG	0	0%		0	0	54	9800 U	9600 U	2100 U	10000 U	9900 U	9800 U
2,4-Dinitrotoluene	UG/KG	0	0%		0	0	54	1900 U	1900 U	410 U	1900 U	1900 U	1900 U
2,6-Dinitrotoluene	UG/KG	0	0%		0	0	54	1900 U	1900 U	410 U	1900 U	1900 U	1900 U
2-Chloronaphthalene	UG/KG	0	0%		0	0	5						
2-Chlorophenol	UG/KG	0	0%		0	0	54	1900 U	1900 U	410 U	1900 U	1900 U	1900 U
2-Methylnaphthalene	UG/KG	1200	50%		0	27	54	1900 U	210 J	140 J	1900 U	1900 U	230 J
2-Methylphenol	UG/KG	0	0%	500000	0	0	54	1900 U	1900 U	410 U	1900 U	1900 U	1900 U
2-Nitroaniline	UG/KG	0	0%		0	0	54	9800 U	9600 U	2100 U	10000 U	9900 U	9800 U
2-Nitrophenol	UG/KG	0	0%		0	0	54	1900 U	1900 U	410 U	1900 U	1900 U	1900 U
3,3'-Dichlorobenzidine	UG/KG	0	0%		0	0	54	1900 U	1900 U	410 U	1900 U	1900 U	1900 U
3-Nitroaniline	UG/KG	0	0%		0	0	54	9800 U	9600 U	2100 U	10000 U	9900 U	9800 U
4,6-Dinitro-2-methylphenol	UG/KG	0	0%		0	0	5						
4-Bromophenyl phenyl ether	UG/KG	0	0%		0	0	5						
4-Chloro-3-methylphenol	UG/KG	0	0%		0	0	54	1900 U	1900 U	410 U	1900 U	1900 U	1900 U
4-Chloroaniline	UG/KG	0	0%		0	0	54	1900 U	1900 U	410 U	1900 U	1900 U	1900 U
4-Chlorophenyl phenyl ether	UG/KG	0	0%		0	0	5						
4-Methylphenol	UG/KG	0	0%	500000	0	0	54	1900 U	1900 U	410 U	1900 U	1900 U	1900 U
4-Nitroaniline	UG/KG	0	0%		0	0	5						
4-Nitrophenol	UG/KG	0	0%		0	0	54	9800 U	9600 U	2100 U	10000 U	9900 U	9800 U
Acenaphthene	UG/KG	2400	87%	500000	0	47	54	450 J	520 J	46 J	1900 U	1900 U	1100 J
Acenaphthylene	UG/KG	3500	98%	500000	0	53	54	1800 J	2000	130 J	1400 J	1200 J	1600 J
Acetophenone	UG/KG	0	0%		0	0	5						
Aniline	UG/KG	0	0%		0	0	49	1900 U	1900 U	410 U	1900 U	1900 U	1900 U
Anthracene	UG/KG	6600	100%	500000	0	54	54	2000	2300	120 J	990 J	910 J	5200
Atrazine	UG/KG	0	0%		0	0	5						
Benzaldehyde	UG/KG	0	0%		0	0	5						
Benzo(a)anthracene	UG/KG	14000	100%	5600	16	54	54	5400	5600	460	4200	3700	**8200**
Benzo(a)pyrene	UG/KG	16000	100%	1000	48	54	54	**5400**	**5900**	550	**6200**	**4200**	**7600**
Benzo(b)fluoranthene	UG/KG	11000	100%	5600	13	54	54	3600	4500	410	4700	3200	**6400**
Benzo(ghi)perylene	UG/KG	8000	100%	500000	0	54	54	2800	2700	400 J	4200	2600	3400
Benzo(k)fluoranthene	UG/KG	13000	100%	56000	0	54	54	4300	4900	420	4700	3400	6700
Benzoic Acid	UG/KG	0	0%		0	0	49	9800 U	9600 U	2100 UJ	10000 U	9900 U	9800 U
Bis(2-Chloroethoxy)methane	UG/KG	0	0%		0	0	5						
Bis(2-Chloroethyl)ether	UG/KG	0	0%		0	0	5						
Bis(2-Ethylhexyl)phthalate	UG/KG	130	6%		0	3	54	1900 U	1900 U	410 U	1900 U	1900 U	1900 U
Butylbenzylphthalate	UG/KG	0	0%		0	0	54	1900 UJ	1900 UJ	410 UJ	1900 U	1900 U	1900 UJ

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SEAD-5 Construction Completion Report
Seneca Army Depot Activity

SITE LOCATION								SEAD-59		SEAD-59		SEAD-59		SEAD-59		SEAD-59		SEAD-59	
LOCATION ID								WS-59-01-015-17		WS-59-01-015-20		WS-59-01-015-3		WS-59-01-015-4		WS-59-01-015-8		WS-59-01-016-1	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE ID								WS-59-01-015-17		WS-59-01-015-20		WS-59-01-015-3		WS-59-01-015-4		WS-59-01-015-8		WS-59-01-016-1	
SAMPLE DATE								5/6/2004		5/6/2004		5/6/2004		5/6/2004		5/6/2004		5/6/2004	
QC CODE								SA		SA		SA		SA		SA		SA	
STUDY ID								ENSR IRM		ENSR IRM		ENSR IRM		ENSR IRM		ENSR IRM		ENSR IRM	
SAMPLE ROUND								1		1		1		1		1		1	
Parameter	**Units**	**Maximum Value**	**Frequency of Detection**	**Criteria Level [1]**	**Number of Exceedances**	**Number of Times Detected**	**Number of Samples Collected**	Value	(Q)	Value	(Q)	Value	(Q)	Value	(Q)	Value	(Q)	Value	(Q)
Caprolactam	UG/KG	0	0%		0	0	5												
Carbazole	UG/KG	1100	80%		0	4	5												
Chrysene	UG/KG	13000	100%	56000	0	54	54	5300		5400		480		4300	NJ	3600	NJ	9000	
Di-n-butylphthalate	UG/KG	0	0%		0	0	54	1900	U	1900	U	410	U	1900	U	1900	U	1900	U
Di-n-octylphthalate	UG/KG	0	0%		0	0	54	1900	U	1900	U	410	U	1900	U	1900	U	1900	U
Dibenz(a,h)anthracene	UG/KG	2900	98%	560	41	53	54	**890**	J	**1000**	J	120	J	**1300**	J	**840**	J	**1200**	J
Dibenzofuran	UG/KG	1300	61%	350000	0	33	54	320	J	330	J	410	U	1900	U	1900	U	700	J
Diethyl phthalate	UG/KG	0	0%		0	0	54	1900	U	1900	U	410	U	1900	U	1900	U	1900	U
Dimethylphthalate	UG/KG	0	0%		0	0	54	1900	U	1900	U	410	U	1900	U	1900	U	1900	U
Fluoranthene	UG/KG	29000	100%	500000	0	54	54	10000		11000		680		5000		6100		18000	
Fluorene	UG/KG	3100	87%	500000	0	47	54	740	J	800	J	51	NJ	1900	U	250	NJ	1300	J
Hexachlorobenzene	UG/KG	0	0%	6000	0	0	54	1900	U	1900	U	410	U	1900	U	1900	U	1900	U
Hexachlorobutadiene	UG/KG	0	0%		0	0	54	1900	U	1900	U	410	U	1900	U	1900	U	1900	U
Hexachlorocyclopentadiene	UG/KG	0	0%		0	0	5												
Hexachloroethane	UG/KG	0	0%		0	0	54	1900	U	1900	U	410	U	1900	U	1900	U	1900	U
Indeno(1,2,3-cd)pyrene	UG/KG	8000	100%	5600	6	54	54	2600	J	2700	J	360	J	3800	J	2400	J	3400	J
Isophorone	UG/KG	0	0%		0	0	54	1900	U	1900	U	410	U	1900	U	1900	U	1900	U
N-Nitrosodiphenylamine	UG/KG	0	0%		0	0	5												
N-Nitrosodipropylamine	UG/KG	0	0%		0	0	5												
Naphthalene	UG/KG	1200	61%	500000	0	33	54	220	NJ	280	NJ	54	J	1900	U	1900	U	210	J
Nitrobenzene	UG/KG	0	0%		0	0	54	1900	U	1900	U	410	U	1900	U	1900	U	1900	U
Pentachlorophenol	UG/KG	660	2%	6700	0	1	54	9800	U	9600	U	2100	U	10000	U	9900	U	9800	U
Phenanthrene	UG/KG	17000	100%	500000	0	54	54	5100		5600		280	J	1400	J	1900	J	6100	
Phenol	UG/KG	0	0%	500000	0	0	54	1900	U	1900	U	410	U	1900	U	1900	U	1900	U
Pyrene	UG/KG	22000	100%	500000	0	54	54	10000	J	9400	J	730		5200		6000		15000	J
Pyridine	UG/KG	0	0%		0	0	49	9800	U	9600	U	2100	U	10000	U	9900	U	9800	U
4,4'-DDD	UG/KG	450	61%	92000	0	33	54	76		19	U	20	U	19	U	19	U	95	U
4,4'-DDE	UG/KG	260	61%	62000	0	33	54	61	J	19	U	20	U	19	U	19	U	95	U
4,4'-DDT	UG/KG	520	69%	47000	0	37	54	60	J	19	U	20	U	19	U	27	J	95	U
Aldrin	UG/KG	0	0%	680	0	0	54	9.8	U	9.6	U	10	U	10	U	9.9	U	49	U
Alpha-BHC	UG/KG	4.4	2%	3400	0	1	54	9.8	U	9.6	U	10	U	10	U	9.9	U	49	U
Alpha-Chlordane	UG/KG	27	11%	24000	0	6	54	9.8	U	9.6	U	10	U	10	U	9.9	U	49	U
Beta-BHC	UG/KG	13	2%	3000	0	1	54	9.8	U	9.6	U	10	U	10	U	9.9	U	49	U
Delta-BHC	UG/KG	0	0%	500000	0	0	54	9.8	U	9.6	U	10	U	10	U	9.9	U	49	U
Dieldrin	UG/KG	0	0%	1400	0	0	54	19	U	19	U	20	U	19	U	19	U	95	U
Endosulfan I	UG/KG	0	0%	200000	0	0	54	9.8	U	9.6	U	10	U	10	U	9.9	U	49	U
Endosulfan II	UG/KG	0	0%	200000	0	0	54	19	U	19	U	20	U	19	U	19	U	95	U
Endosulfan sulfate	UG/KG	0	0%	200000	0	0	54	19	U	19	U	20	U	19	U	19	U	95	U
Endrin	UG/KG	0	0%	89000	0	0	54	19	U	19	U	20	U	19	U	19	U	95	U
Endrin aldehyde	UG/KG	0	0%		0	0	54	19	U	19	U	20	U	19	U	19	U	95	U
Endrin ketone	UG/KG	15	2%		0	1	54	19	U	19	U	20	U	19	U	19	U	95	U
Gamma-BHC/Lindane	UG/KG	0	0%	9200	0	0	54	9.8	U	9.6	U	10	U	10	U	9.9	U	49	U
Gamma-Chlordane	UG/KG	21	9%		0	5	54	9.8	U	9.6	U	10	U	10	U	9.9	U	49	U
Heptachlor	UG/KG	0	0%	15000	0	0	54	9.8	U	9.6	U	10	U	10	U	9.9	U	49	U
Heptachlor epoxide	UG/KG	0	0%		0	0	54	9.8	U	9.6	U	10	U	10	U	9.9	U	49	U
Methoxychlor	UG/KG	0	0%		0	0	54	98	U	96	U	100	U	100	U	99	U	490	U
Toxaphene	UG/KG	0	0%		0	0	54	190	U	190	U	200	U	190	U	190	U	950	U

SEAD-59/71 Stockpile Soil Results
SEAD-5 Construction Completion Report
Seneca Army Depot Activity

SITE LOCATION								SEAD-59	SEAD-59	SEAD-59	SEAD-59	SEAD-59	SEAD-59
LOCATION ID								WS-59-01-015-17	WS-59-01-015-20	WS-59-01-015-3	WS-59-01-015-4	WS-59-01-015-8	WS-59-01-016-1
MATRIX								SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
SAMPLE ID								WS-59-01-015-17	WS-59-01-015-20	WS-59-01-015-3	WS-59-01-015-4	WS-59-01-015-8	WS-59-01-016-1
SAMPLE DATE								5/6/2004	5/6/2004	5/6/2004	5/6/2004	5/6/2004	5/6/2004
QC CODE								SA	SA	SA	SA	SA	SA
STUDY ID								ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM
SAMPLE ROUND								1	1	1	1	1	1
Parameter	**Units**	**Maximum Value**	**Frequency of Detection**	**Criteria Level [1]**	**Number of Exceedances**	**Number of Times Detected**	**Number of Samples Collected**	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)
Aroclor-1016	UG/KG	0	0%	1000	0	0	54	38 U	37 U	41 U	39 U	38 U	38 U
Aroclor-1221	UG/KG	0	0%	1000	0	0	54	38 U	37 U	41 U	39 U	38 U	38 U
Aroclor-1232	UG/KG	0	0%	1000	0	0	54	38 U	37 U	41 U	39 U	38 U	38 U
Aroclor-1242	UG/KG	0	0%	1000	0	0	54	38 U	37 U	41 U	39 U	38 U	38 U
Aroclor-1248	UG/KG	0	0%	1000	0	0	54	38 U	37 U	41 U	39 U	38 U	38 U
Aroclor-1254	UG/KG	0	0%	1000	0	0	54	38 U	37 U	41 U	39 U	38 U	38 U
Aroclor-1260	UG/KG	0	0%	1000	0	0	54	38 U	37 U	41 U	39 U	38 U	38 U
Aluminum	MG/KG	13400	100%		0	54	54	11000	12400	11400	10600	11100	10100
Antimony	MG/KG	43.9	20%		0	11	54	3.4 U	3.4 U	3.6 UJ	3.4 UJ	3.3 UJ	3.3 UJ
Arsenic	MG/KG	7.3	100%	16	0	54	54	4.9	5.1	4.8	4.8	4.7	4.2
Barium	MG/KG	135	100%	400	0	54	54	133	104	107	84.7	99.9	76.1
Beryllium	MG/KG	0.69	100%	590	0	54	54	0.3	0.41	0.27	0.33	0.34	0.36
Cadmium	MG/KG	1.2	98%	9.3	0	53	54	0.57 J	0.51 J	0.64	0.73	0.72	0.73
Calcium	MG/KG	100000	100%		0	54	54	96100	66700	17600	29600	40500	59200
Chromium	MG/KG	35	100%	1500	0	54	54	18.1	21.5	18.6	18.2	19.7	17.3
Cobalt	MG/KG	13.9	100%		0	54	54	9.8	12.1	10.4	10.3	10	9.2
Copper	MG/KG	51.8	100%	270	0	54	54	32.3	37.4	24.3	24.9	26.1	26.3 J
Iron	MG/KG	26500	100%		0	54	54	19800	23700	23200	21900	21100	19800
Lead	MG/KG	1440	100%	1000	1	54	54	61.6 J	65.4 J	20.5 J	27.8 J	39.7 J	41.9 J
Magnesium	MG/KG	26600	100%		0	54	54	15600	8980	4890	7020	7900	9270
Manganese	MG/KG	1220	100%	10000	0	54	54	536	557	734	467	513	567
Nickel	MG/KG	56.6	100%	310	0	54	54	26.5	34.3	27.7	29.8	28.5	27.3
Potassium	MG/KG	1580	100%		0	54	54	1200	1290	1200	1140	1140	1150
Selenium	MG/KG	0.72	4%	1500	0	2	54	0.57 U	0.57 U	0.61 UJ	0.56 UJ	0.55 UJ	0.56 U
Silver	MG/KG	4.7	17%	1500	0	9	54	0.57 U	0.57 U	0.61 UJ	0.56 UJ	0.55 UJ	0.56 U
Sodium	MG/KG	525	100%		0	54	54	131	125	252	221	211	151
Thallium	MG/KG	0.99	50%		0	27	54	0.95 J	0.85 J	0.94 J	0.65 J	0.55 U	0.56 U
Vanadium	MG/KG	35.4	100%		0	54	54	21.3	22.9	18.7	18.7	19.3	18.2
Zinc	MG/KG	185	100%	10000	0	54	54	81.9 J	99.6 J	77.6 J	80.5 J	76.3 J	88.3 J
Flashpoint	?C	100	100%		0	45	0	100 GT	100 GT	100 GT	100 GT	100 GT	100 GT
Percent Solids	%	91.4	100%		0	49	49	87	88.1	81.4	85	86.1	87
Reactive Cyanide	MG/KG	0	0%		0	0	44	5 U	5 U	5 U	5 U	5 U	5 U
Reactive Sulfide	MG/KG	0	0%		0	0	45	20 U	20 U	20 U	20 U	20 U	20 U
pH	Std units	8.71	100%		0	45	45	7.64	7.99	8.06	8.02	7.9	8.04
TCLP 1,4-Dichlorobenzene	UG/L	0	0%	7500	0	0	6						
TCLP 2,4,5-Trichlorophenol	UG/L	0	0%	1000	0	0	6						
TCLP 2,4,6-Trichlorophenol	UG/L	0	0%	2000	0	0	6						
TCLP 2,4-Dinitrotoluene	UG/L	0	0%	100	0	0	6						
TCLP 2-Methylphenol	UG/L	0	0%		0	0	6						
TCLP Hexachlorobenzene	UG/L	0	0%	100	0	0	6						
TCLP Hexachlorobutadiene	UG/L	0	0%		0	0	6						
TCLP Hexachloroethane	UG/L	0	0%	3000	0	0	6						
TCLP Nitrobenzene	UG/L	0	0%	2000	0	0	6						
TCLP Pentachlorophenol	UG/L	0	0%	100000	0	0	6						
TCLP Pyridine	UG/L	0	0%	5000	0	0	6						
TCLP Arsenic	UG/L	0	0%	5000	0	0	5						
TCLP Barium	UG/L	0	0%	100000	0	0	5						

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SITE LOCATION								SEAD-59	SEAD-59	SEAD-59	SEAD-59	SEAD-59	SEAD-59
LOCATION ID								WS-59-01-015-17	WS-59-01-015-20	WS-59-01-015-3	WS-59-01-015-4	WS-59-01-015-8	WS-59-01-016-1
MATRIX								SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
SAMPLE ID								WS-59-01-015-17	WS-59-01-015-20	WS-59-01-015-3	WS-59-01-015-4	WS-59-01-015-8	WS-59-01-016-1
SAMPLE DATE								5/6/2004	5/6/2004	5/6/2004	5/6/2004	5/6/2004	5/6/2004
QC CODE								SA	SA	SA	SA	SA	SA
STUDY ID								ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM
SAMPLE ROUND								1	1	1	1	1	1
Parameter	**Units**	**Maximum Value**	**Frequency of Detection**	**Criteria Level [1]**	**Number of Exceedances**	**Number of Times Detected**	**Number of Samples Collected**	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)
TCLP Cadmium	UG/L	0	0%	1000	0	0	5						
TCLP Chromium	UG/L	0	0%	5000	0	0	5						
TCLP Lead	UG/L	106	20%	5000	0	1	5						
TCLP Mercury	UG/L	0	0%	200	0	0	5						
TCLP Selenium	UG/L	0	0%	1000	0	0	5						
TCLP Silver	UG/L	0	0%	5000	0	0	5						

(1) The following criterias were used to compare the soil results against:
- NYSDEC's Restricted Commercial Use Soil Cleanup Objective, 6 NYCRR Part 375-6.
- TCLP regulatory limits are based on 40CFR 261.23 and 40CFR 261.24.

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SEAD-5 Construction Completion Report
Seneca Army Depot Activity

SITE LOCATION								SEAD-59	SEAD-59	SEAD-59	SEAD-59	SEAD-59	SEAD-59
LOCATION ID								WS-59-01-016-10	WS-59-01-016-13	WS-59-01-016-14	WS-59-01-016-18	WS-59-01-016-19	WS-59-01-016-2
MATRIX								SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
SAMPLE ID								WS-59-01-016-10	WS-59-01-016-13	WS-59-01-016-14	WS-59-01-016-18	WS-59-01-016-19	WS-59-01-016-2
SAMPLE DATE								5/6/2004	5/6/2004	5/6/2004	5/6/2004	5/6/2004	5/6/2004
QC CODE								SA	SA	SA	SA	SA	SA
STUDY ID								ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM
SAMPLE ROUND								1	1	1	1	1	1
Parameter	**Units**	**Maximum Value**	**Frequency of Detection**	**Criteria Level [1]**	**Number of Exceedances**	**Number of Times Detected**	**Number of Samples Collected**	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)
1,1,1-Trichloroethane	UG/KG	0	0%	500000	0	0	54	5.8 U	5.8 U	5.8 U	5.9 U	5.8 U	6 U
1,1,2,2-Tetrachloroethane	UG/KG	0	0%		0	0	53	5.8 U	5.8 U	5.8 U	5.9 U	5.8 U	6 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	UG/KG	1.5	2%		0	1	54	5.8 U	1.5 J	5.8 U	5.9 U	5.8 U	6 U
1,1,2-Trichloroethane	UG/KG	0	0%		0	0	5						
1,1-Dichloroethane	UG/KG	0	0%	240000	0	0	54	5.8 U	5.8 U	5.8 U	5.9 U	5.8 U	6 U
1,1-Dichloroethene	UG/KG	1	2%	500000	0	1	54	5.8 U	5.8 U	5.8 U	5.9 U	5.8 U	6 U
1,2,3-Trichloropropane	UG/KG	0	0%		0	0	48	5.8 U	5.8 U	5.8 U	5.9 U	5.8 U	6 U
1,2,4-Trichlorobenzene	UG/KG	0	0%		0	0	53	5.8 U	5.8 U	5.8 U	5.9 U	5.8 U	6 U
1,2-Dibromo-3-chloropropane	UG/KG	0	0%		0	0	5						
1,2-Dibromoethane	UG/KG	0	0%		0	0	5						
1,2-Dichlorobenzene	UG/KG	0	0%	500000	0	0	53	5.8 U	5.8 U	5.8 U	5.9 U	5.8 U	6 U
1,2-Dichloroethane	UG/KG	0	0%	30000	0	0	54	5.8 U	5.8 U	5.8 U	5.9 U	5.8 U	6 U
1,2-Dichloropropane	UG/KG	0	0%		0	0	5						
1,3-Dichlorobenzene	UG/KG	0	0%	280000	0	0	53	5.8 U	5.8 U	5.8 U	5.9 U	5.8 U	6 U
1,3-Dichloropropane	UG/KG	0	0%		0	0	49	5.8 U	5.8 U	5.8 U	5.9 U	5.8 U	6 U
1,4-Dichlorobenzene	UG/KG	0	0%	130000	0	0	53	5.8 U	5.8 U	5.8 U	5.9 U	5.8 U	6 U
Acetone	UG/KG	69	24%	500000	0	13	54	20 J	23 U	23 U	24 U	23 U	24 U
Benzene	UG/KG	0	0%	44000	0	0	54	5.8 U	5.8 U	5.8 U	5.9 U	5.8 U	6 U
Bromodichloromethane	UG/KG	0	0%		0	0	5						
Bromoform	UG/KG	0	0%		0	0	5						
Carbon disulfide	UG/KG	0	0%		0	0	54	5.8 U	5.8 U	5.8 U	5.9 U	5.8 U	6 U
Carbon tetrachloride	UG/KG	0	0%	22000	0	0	54	5.8 U	5.8 U	5.8 U	5.9 U	5.8 U	6 U
Chlorobenzene	UG/KG	0	0%	500000	0	0	54	5.8 U	5.8 U	5.8 U	5.9 U	5.8 U	6 U
Chlorodibromomethane	UG/KG	0	0%		0	0	54	5.8 U	5.8 U	5.8 U	5.9 U	5.8 U	6 U
Chloroethane	UG/KG	0	0%		0	0	54	12 U	12 U	12 U	12 U	12 U	12 U
Chloroform	UG/KG	0	0%	350000	0	0	54	5.8 U	5.8 U	5.8 U	5.9 U	5.8 U	6 U
Cis-1,2-Dichloroethene	UG/KG	0	0%	500000	0	0	5						
Cis-1,3-Dichloropropene	UG/KG	0	0%		0	0	5						
Cyclohexane	UG/KG	0	0%		0	0	5						
Dichlorodifluoromethane	UG/KG	0	0%		0	0	5						
Ethyl benzene	UG/KG	0	0%	390000	0	0	54	5.8 U	5.8 U	5.8 U	5.9 U	5.8 U	6 U
Isopropylbenzene	UG/KG	0	0%		0	0	5						
Meta/Para Xylene	UG/KG	2.3	4%	500000	0	2	49	2.2 J	5.8 U	5.8 U	5.9 U	5.8 U	6 U
Methyl Acetate	UG/KG	0	0%		0	0	5						
Methyl Tertbutyl Ether	UG/KG	0	0%	500000	0	0	5						
Methyl bromide	UG/KG	0	0%		0	0	5						
Methyl butyl ketone	UG/KG	0	0%		0	0	5						
Methyl chloride	UG/KG	0	0%		0	0	5						
Methyl cyclohexane	UG/KG	0	0%		0	0	5						
Methyl ethyl ketone	UG/KG	7	9%	500000	0	5	54	12 U	12 U	12 U	12 U	12 U	12 U
Methyl isobutyl ketone	UG/KG	0	0%		0	0	54	12 U	12 U	12 U	12 U	12 U	12 U
Methylene chloride	UG/KG	1.4	2%	500000	0	1	54	5.8 U	5.8 U	5.8 U	5.9 U	5.8 U	6 U
Ortho Xylene	UG/KG	1.9	10%	500000	0	5	49	1.9 J	5.8 U	5.8 U	5.9 U	5.8 U	6 U
Styrene	UG/KG	0	0%		0	0	5						
Tetrachloroethene	UG/KG	6.7	6%	150000	0	3	54	5.8 U	5.8 U	5.8 U	5.4 J	5.3 J	6 U
Toluene	UG/KG	0	0%	500000	0	0	54	5.8 U	5.8 U	5.8 U	5.9 U	5.8 U	6 U
Total Xylenes	UG/KG	3	20%	500000	0	1	5						

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SITE LOCATION								SEAD-59	SEAD-59	SEAD-59	SEAD-59	SEAD-59	SEAD-59
LOCATION ID								WS-59-01-016-10	WS-59-01-016-13	WS-59-01-016-14	WS-59-01-016-18	WS-59-01-016-19	WS-59-01-016-2
MATRIX								SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
SAMPLE ID								WS-59-01-016-10	WS-59-01-016-13	WS-59-01-016-14	WS-59-01-016-18	WS-59-01-016-19	WS-59-01-016-2
SAMPLE DATE								5/6/2004	5/6/2004	5/6/2004	5/6/2004	5/6/2004	5/6/2004
QC CODE								SA	SA	SA	SA	SA	SA
STUDY ID								ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM
SAMPLE ROUND								1	1	1	1	1	1
Parameter	**Units**	**Maximum Value**	**Frequency of Detection**	**Criteria Level [1]**	**Number of Exceedances**	**Number of Times Detected**	**Number of Samples Collected**	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)
Trans-1,2-Dichloroethene	UG/KG	0	0%	500000	0	0	54	5.8 U	5.8 U	5.8 U	5.9 U	5.8 U	6 U
Trans-1,3-Dichloropropene	UG/KG	0	0%		0	0	5						
Trichloroethene	UG/KG	2.7	7%	200000	0	4	54	5.8 U	5.8 U	5.8 U	5.9 U	5.8 U	6 U
Trichlorofluoromethane	UG/KG	0	0%		0	0	5						
Vinyl chloride	UG/KG	0	0%	13000	0	0	54	12 U	12 U	12 U	12 U	12 U	12 U
1,1'-Biphenyl	UG/KG	59	20%		0	1	5						
2,2'-oxybis(1-Chloropropane)	UG/KG	0	0%		0	0	5						
2,4,5-Trichlorophenol	UG/KG	0	0%		0	0	54	1900 U	1100 U	1200 U	1900 U	1900 U	1200 U
2,4,6-Trichlorophenol	UG/KG	0	0%		0	0	54	1900 U	1100 U	1200 U	1900 U	1900 U	1200 U
2,4-Dichlorophenol	UG/KG	0	0%		0	0	54	1900 U	1100 U	1200 U	1900 U	1900 U	1200 U
2,4-Dimethylphenol	UG/KG	0	0%		0	0	5						
2,4-Dinitrophenol	UG/KG	0	0%		0	0	54	9900 UJ	5900 UJ	5900 UJ	10000 U	9800 U	6100 U
2,4-Dinitrotoluene	UG/KG	0	0%		0	0	54	1900 U	1100 U	1200 U	1900 U	1900 U	1200 U
2,6-Dinitrotoluene	UG/KG	0	0%		0	0	54	1900 U	1100 U	1200 U	1900 U	1900 U	1200 U
2-Chloronaphthalene	UG/KG	0	0%		0	0	5						
2-Chlorophenol	UG/KG	0	0%		0	0	54	1900 U	1100 U	1200 U	1900 U	1900 U	1200 U
2-Methylnaphthalene	UG/KG	1200	50%		0	27	54	1900 U	270 J	270 J	1900 U	1900 U	150 J
2-Methylphenol	UG/KG	0	0%	500000	0	0	54	1900 U	1100 U	1200 U	1900 U	1900 U	1200 U
2-Nitroaniline	UG/KG	0	0%		0	0	54	9900 U	5900 U	5900 U	10000 U	9800 U	6100 U
2-Nitrophenol	UG/KG	0	0%		0	0	54	1900 U	1100 U	1200 U	1900 U	1900 U	1200 U
3,3'-Dichlorobenzidine	UG/KG	0	0%		0	0	54	1900 U	1100 U	1200 U	1900 U	1900 U	1200 U
3-Nitroaniline	UG/KG	0	0%		0	0	54	9900 U	5900 U	5900 U	10000 U	9800 U	6100 U
4,6-Dinitro-2-methylphenol	UG/KG	0	0%		0	0	5						
4-Bromophenyl phenyl ether	UG/KG	0	0%		0	0	5						
4-Chloro-3-methylphenol	UG/KG	0	0%		0	0	54	1900 U	1100 U	1200 U	1900 U	1900 U	1200 U
4-Chloroaniline	UG/KG	0	0%		0	0	54	1900 U	1100 U	1200 U	1900 U	1900 U	1200 U
4-Chlorophenyl phenyl ether	UG/KG	0	0%		0	0	5						
4-Methylphenol	UG/KG	0	0%	500000	0	0	54	1900 U	1100 U	1200 U	1900 U	1900 U	1200 U
4-Nitroaniline	UG/KG	0	0%		0	0	5						
4-Nitrophenol	UG/KG	0	0%		0	0	54	9900 U	5900 U	5900 U	10000 U	9800 U	6100 U
Acenaphthene	UG/KG	2400	87%	500000	0	47	54	500 J	490 J	580 J	1900 U	210 J	360 J
Acenaphthylene	UG/KG	3500	98%	500000	0	53	54	1200 J	1200	1800	200 J	310 J	1600
Acetophenone	UG/KG	0	0%		0	0	5						
Aniline	UG/KG	0	0%		0	0	49	1900 U	1100 U	1200 U	1900 U	1900 U	1200 U
Anthracene	UG/KG	6600	100%	500000	0	54	54	1800 J	1600	3900	280 J	540 J	1500
Atrazine	UG/KG	0	0%		0	0	5						
Benzaldehyde	UG/KG	0	0%		0	0	5						
Benzo(a)anthracene	UG/KG	14000	100%	5600	16	54	54	3800	3600	**8400**	860 J	1100 J	3800
Benzo(a)pyrene	UG/KG	16000	100%	1000	48	54	54	**3600**	**3700**	**7300**	950 J	**1200** J	**4600**
Benzo(b)fluoranthene	UG/KG	11000	100%	5600	13	54	54	2500	2800	5300	750 J	1000 J	3400
Benzo(ghi)perylene	UG/KG	8000	100%	500000	0	54	54	2100	2200	3700	670 J	770 J	2100
Benzo(k)fluoranthene	UG/KG	13000	100%	56000	0	54	54	2800	3100	5800	790 J	910 J	3800
Benzoic Acid	UG/KG	0	0%		0	0	49	9900 U	5900 U	5900 U	10000 U	9800 U	6100 U
Bis(2-Chloroethoxy)methane	UG/KG	0	0%		0	0	5						
Bis(2-Chloroethyl)ether	UG/KG	0	0%		0	0	5						
Bis(2-Ethylhexyl)phthalate	UG/KG	130	6%		0	3	54	1900 U	1100 U	1200 U	1900 U	1900 U	1200 U
Butylbenzylphthalate	UG/KG	0	0%		0	0	54	1900 U	1100 U	1200 U	1900 U	1900 U	1200 UJ

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SITE LOCATION								SEAD-59	SEAD-59	SEAD-59	SEAD-59	SEAD-59	SEAD-59
LOCATION ID								WS-59-01-016-10	WS-59-01-016-13	WS-59-01-016-14	WS-59-01-016-18	WS-59-01-016-19	WS-59-01-016-2
MATRIX								SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
SAMPLE ID								WS-59-01-016-10	WS-59-01-016-13	WS-59-01-016-14	WS-59-01-016-18	WS-59-01-016-19	WS-59-01-016-2
SAMPLE DATE								5/6/2004	5/6/2004	5/6/2004	5/6/2004	5/6/2004	5/6/2004
QC CODE								SA	SA	SA	SA	SA	SA
STUDY ID								ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM
SAMPLE ROUND								1	1	1	1	1	1
Parameter	**Units**	**Maximum Value**	**Frequency of Detection**	**Criteria Level [1]**	**Number of Exceedances**	**Number of Times Detected**	**Number of Samples Collected**	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)
Caprolactam	UG/KG	0	0%		0	0	5						
Carbazole	UG/KG	1100	80%		0	4	5						
Chrysene	UG/KG	13000	100%	56000	0	54	54	3700	3500	7900	940 J	1200 J	3900
Di-n-butylphthalate	UG/KG	0	0%		0	0	54	1900 U	1100 U	1200 U	1900 U	1900 U	1200 U
Di-n-octylphthalate	UG/KG	0	0%		0	0	54	1900 U	1100 U	1200 U	1900 U	1900 U	1200 U
Dibenz(a,h)anthracene	UG/KG	2900	98%	560	41	53	54	**730** J	**660** J	**1300** J	210 J	250 J	**760** J
Dibenzofuran	UG/KG	1300	61%	350000	0	33	54	320 J	320 J	480 J	1900 U	1900 U	210 J
Diethyl phthalate	UG/KG	0	0%		0	0	54	1900 U	1100 U	1200 U	1900 U	1900 U	1200 U
Dimethylphthalate	UG/KG	0	0%		0	0	54	1900 U	1100 U	1200 U	1900 U	1900 U	1200 U
Fluoranthene	UG/KG	29000	100%	500000	0	54	54	7600	7300	18000	1800 J	2300	7300
Fluorene	UG/KG	3100	87%	500000	0	47	54	780 J	700 J	1300	1900 U	260 J	520 J
Hexachlorobenzene	UG/KG	0	0%	6000	0	0	54	1900 U	1100 U	1200 U	1900 U	1900 U	1200 U
Hexachlorobutadiene	UG/KG	0	0%		0	0	54	1900 U	1100 U	1200 U	1900 U	1900 U	1200 U
Hexachlorocyclopentadiene	UG/KG	0	0%		0	0	5						
Hexachloroethane	UG/KG	0	0%		0	0	54	1900 U	1100 U	1200 U	1900 U	1900 U	1200 U
Indeno(1,2,3-cd)pyrene	UG/KG	8000	100%	5600	6	54	54	2000 J	2100 J	3700 J	560 J	740 J	2100 J
Isophorone	UG/KG	0	0%		0	0	54	1900 U	1100 U	1200 U	1900 U	1900 U	1200 U
N-Nitrosodiphenylamine	UG/KG	0	0%		0	0	5						
N-Nitrosodipropylamine	UG/KG	0	0%		0	0	5						
Naphthalene	UG/KG	1200	61%	500000	0	33	54	250 J	340 J	240 J	1900 U	1900 U	140 J
Nitrobenzene	UG/KG	0	0%		0	0	54	1900 U	1100 U	1200 U	1900 U	1900 U	1200 U
Pentachlorophenol	UG/KG	660	2%	6700	0	1	54	9900 U	5900 U	5900 U	10000 U	9800 U	6100 U
Phenanthrene	UG/KG	17000	100%	500000	0	54	54	4300	4300	11000	840 J	1600 J	3100
Phenol	UG/KG	0	0%	500000	0	0	54	1900 U	1100 U	1200 U	1900 U	1900 U	1200 U
Pyrene	UG/KG	22000	100%	500000	0	54	54	6800	6000	14000	1300 J	1700 J	6300 J
Pyridine	UG/KG	0	0%		0	0	49	9900 U	5900 U	5900 U	10000 U	9800 U	6100 U
4,4'-DDD	UG/KG	450	61%	92000	0	33	54	96 U	96 U	96 U	97 U	95 U	98 U
4,4'-DDE	UG/KG	260	61%	62000	0	33	54	96 U	96 U	96 U	97 U	95 U	98 U
4,4'-DDT	UG/KG	520	69%	47000	0	37	54	96 U	96 U	96 U	97 U	95 U	98 U
Aldrin	UG/KG	0	0%	680	0	0	54	50 U	49 U	50 U	50 U	49 U	51 U
Alpha-BHC	UG/KG	4.4	2%	3400	0	1	54	50 U	49 U	50 U	50 U	49 U	51 U
Alpha-Chlordane	UG/KG	27	11%	24000	0	6	54	50 U	49 U	50 U	50 U	49 U	51 U
Beta-BHC	UG/KG	13	2%	3000	0	1	54	50 U	49 U	50 U	50 U	49 U	51 U
Delta-BHC	UG/KG	0	0%	500000	0	0	54	50 U	49 U	50 U	50 U	49 U	51 U
Dieldrin	UG/KG	0	0%	1400	0	0	54	96 U	96 U	96 U	97 U	95 U	98 U
Endosulfan I	UG/KG	0	0%	200000	0	0	54	50 U	49 U	50 U	50 U	49 U	51 U
Endosulfan II	UG/KG	0	0%	200000	0	0	54	96 U	96 U	96 U	97 U	95 U	98 U
Endosulfan sulfate	UG/KG	0	0%	200000	0	0	54	96 U	96 U	96 U	97 U	95 U	98 U
Endrin	UG/KG	0	0%	89000	0	0	54	96 U	96 U	96 U	97 U	95 U	98 U
Endrin aldehyde	UG/KG	0	0%		0	0	54	96 U	96 U	96 U	97 U	95 U	98 U
Endrin ketone	UG/KG	15	2%		0	1	54	96 U	96 U	96 U	97 U	95 U	98 U
Gamma-BHC/Lindane	UG/KG	0	0%	9200	0	0	54	50 U	49 U	50 U	50 U	49 U	51 U
Gamma-Chlordane	UG/KG	21	9%		0	5	54	50 U	49 U	50 U	50 U	49 U	51 U
Heptachlor	UG/KG	0	0%	15000	0	0	54	50 U	49 U	50 U	50 U	49 U	51 U
Heptachlor epoxide	UG/KG	0	0%		0	0	54	50 U	49 U	50 U	50 U	49 U	51 U
Methoxychlor	UG/KG	0	0%		0	0	54	500 U	490 U	500 U	500 U	490 U	510 U
Toxaphene	UG/KG	0	0%		0	0	54	960 U	960 U	960 U	970 U	950 U	980 U

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SITE LOCATION								SEAD-59	SEAD-59	SEAD-59	SEAD-59	SEAD-59	SEAD-59
LOCATION ID								WS-59-01-016-10	WS-59-01-016-13	WS-59-01-016-14	WS-59-01-016-18	WS-59-01-016-19	WS-59-01-016-2
MATRIX								SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
SAMPLE ID								WS-59-01-016-10	WS-59-01-016-13	WS-59-01-016-14	WS-59-01-016-18	WS-59-01-016-19	WS-59-01-016-2
SAMPLE DATE								5/6/2004	5/6/2004	5/6/2004	5/6/2004	5/6/2004	5/6/2004
QC CODE								SA	SA	SA	SA	SA	SA
STUDY ID								ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM
SAMPLE ROUND								1	1	1	1	1	1
Parameter	**Units**	**Maximum Value**	**Frequency of Detection**	**Criteria Level [1]**	**Number of Exceedances**	**Number of Times Detected**	**Number of Samples Collected**	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)
Aroclor-1016	UG/KG	0	0%	1000	0	0	54	39 U	38 U	38 U	39 U	38 U	39 U
Aroclor-1221	UG/KG	0	0%	1000	0	0	54	39 U	38 U	38 U	39 U	38 U	39 U
Aroclor-1232	UG/KG	0	0%	1000	0	0	54	39 U	38 U	38 U	39 U	38 U	39 U
Aroclor-1242	UG/KG	0	0%	1000	0	0	54	39 U	38 U	38 U	39 U	38 U	39 U
Aroclor-1248	UG/KG	0	0%	1000	0	0	54	39 U	38 U	38 U	39 U	38 U	39 U
Aroclor-1254	UG/KG	0	0%	1000	0	0	54	39 U	38 U	38 U	39 U	38 U	39 U
Aroclor-1260	UG/KG	0	0%	1000	0	0	54	39 U	38 U	38 U	39 U	38 U	39 U
Aluminum	MG/KG	13400	100%		0	54	54	10500	11200	11200	10800	10800	11600
Antimony	MG/KG	43.9	20%		0	11	54	5.9 J	3.4 UJ	3.5 UJ	3.5 UJ	3.4 UJ	3.5 UJ
Arsenic	MG/KG	7.3	100%	16	0	54	54	4	4.1	4.6	4.6	4.3	5.2
Barium	MG/KG	135	100%	400	0	54	54	93.1	90.3	78.9	85	92.4	90.3
Beryllium	MG/KG	0.69	100%	590	0	54	54	0.33	0.4	0.3	0.3	0.38	0.41
Cadmium	MG/KG	1.2	98%	9.3	0	53	54	0.72	0.72	0.78	0.97	0.73	0.7
Calcium	MG/KG	100000	100%		0	54	54	42500	58200	46000	42800	41200	45700
Chromium	MG/KG	35	100%	1500	0	54	54	16.9	19.3	29.7	35	19.3	19.4
Cobalt	MG/KG	13.9	100%		0	54	54	9.2	9.9	9.6	9.2	9.3	12.3
Copper	MG/KG	51.8	100%	270	0	54	54	37.7 J	44.1 J	25.6 J	51.8 J	36.4 J	28.8 J
Iron	MG/KG	26500	100%		0	54	54	19400	19300	22400	20200	19800	23000
Lead	MG/KG	1440	100%	1000	1	54	54	**1440** J	51.5 J	84.6 J	129 J	41.7 J	45.8 J
Magnesium	MG/KG	26600	100%		0	54	54	8130	8530	7860	9170	8050	7260
Manganese	MG/KG	1220	100%	10000	0	54	54	489	455	435	459	457	556
Nickel	MG/KG	56.6	100%	310	0	54	54	25.1	30.9	26.4	27.3	28	30.7
Potassium	MG/KG	1580	100%		0	54	54	1220	1170	1200	1240	1170	1230
Selenium	MG/KG	0.72	4%	1500	0	2	54	0.56 U	0.57 U	0.58 U	0.58 U	0.57 U	0.59 U
Silver	MG/KG	4.7	17%	1500	0	9	54	0.56 U	0.57 U	0.58 U	4.7	1.2 J	0.59 U
Sodium	MG/KG	525	100%		0	54	54	330	236	239	398	455	129
Thallium	MG/KG	0.99	50%		0	27	54	0.56 J	0.65 J	0.58 U	0.58 U	0.57 U	0.59 U
Vanadium	MG/KG	35.4	100%		0	54	54	18.9	19.3	20.1	20.8	20.5	20
Zinc	MG/KG	185	100%	10000	0	54	54	82.5 J	92.8 J	72.7 J	157 J	93 J	82.2 J
Flashpoint	?C	100	100%		0	45	0	100 GT	100 GT	100 GT	100 GT	100 GT	100 GT
Percent Solids	%	91.4	100%		0	49	49	85.7	86.2	85.8	85.1	86.6	83.9
Reactive Cyanide	MG/KG	0	0%		0	0	44	5 U	5 U	5 U	5 U	5 U	5 U
Reactive Sulfide	MG/KG	0	0%		0	0	45	20 U	20 U	20 U	20 U	20 U	20 U
pH	Std units	8.71	100%		0	45	45	8.25	8.12	8.21	8.18	8.45	7.93
TCLP 1,4-Dichlorobenzene	UG/L	0	0%	7500	0	0	6						
TCLP 2,4,5-Trichlorophenol	UG/L	0	0%	1000	0	0	6						
TCLP 2,4,6-Trichlorophenol	UG/L	0	0%	2000	0	0	6						
TCLP 2,4-Dinitrotoluene	UG/L	0	0%	100	0	0	6						
TCLP 2-Methylphenol	UG/L	0	0%		0	0	6						
TCLP Hexachlorobenzene	UG/L	0	0%	100	0	0	6						
TCLP Hexachlorobutadiene	UG/L	0	0%		0	0	6						
TCLP Hexachloroethane	UG/L	0	0%	3000	0	0	6						
TCLP Nitrobenzene	UG/L	0	0%	2000	0	0	6						
TCLP Pentachlorophenol	UG/L	0	0%	100000	0	0	6						
TCLP Pyridine	UG/L	0	0%	5000	0	0	6						
TCLP Arsenic	UG/L	0	0%	5000	0	0	5	500 U		500 U	500 U		
TCLP Barium	UG/L	0	0%	100000	0	0	5	1000 U		1000 U	1000 U		

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SITE LOCATION								SEAD-59	SEAD-59	SEAD-59	SEAD-59	SEAD-59	SEAD-59
LOCATION ID								WS-59-01-016-10	WS-59-01-016-13	WS-59-01-016-14	WS-59-01-016-18	WS-59-01-016-19	WS-59-01-016-2
MATRIX								SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
SAMPLE ID								WS-59-01-016-10	WS-59-01-016-13	WS-59-01-016-14	WS-59-01-016-18	WS-59-01-016-19	WS-59-01-016-2
SAMPLE DATE								5/6/2004	5/6/2004	5/6/2004	5/6/2004	5/6/2004	5/6/2004
QC CODE								SA	SA	SA	SA	SA	SA
STUDY ID								ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM
SAMPLE ROUND								1	1	1	1	1	1
Parameter	**Units**	**Maximum Value**	**Frequency of Detection**	**Criteria Level [1]**	**Number of Exceedances**	**Number of Times Detected**	**Number of Samples Collected**	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)
TCLP Cadmium	UG/L	0	0%	1000	0	0	5	100 U		100 U	100 U		
TCLP Chromium	UG/L	0	0%	5000	0	0	5	100 U		100 U	100 U		
TCLP Lead	UG/L	106	20%	5000	0	1	5	100 U		100 U	100 U		
TCLP Mercury	UG/L	0	0%	200	0	0	5	2 U		2 U	2 U		
TCLP Selenium	UG/L	0	0%	1000	0	0	5	500 U		500 U	500 U		
TCLP Silver	UG/L	0	0%	5000	0	0	5	100 U		100 U	100 U		

(1) The following criterias were used to compare the soil results against:
- NYSDEC's Restricted Commercial Use Soil Cleanup Objective, 6 NYCRR Part 375-6.
- TCLP regulatory limits are based on 40CFR 261.23 and 40CFR 261.24.

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SITE LOCATION								SEAD-59	SEAD-59	SEAD-59	SEAD-59	SEAD-59	SEAD-59
LOCATION ID								WS-59-01-016-20	WS-59-01-016-3	WS-59-01-016-4	WS-59-01-016-5	WS-59-01-016-6	WS-59-01-016-9
MATRIX								SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
SAMPLE ID								WS-59-01-016-20	WS-59-01-016-3	WS-59-01-016-4	WS-59-01-016-5	WS-59-01-016-6	WS-59-01-016-9
SAMPLE DATE								5/6/2004	5/6/2004	5/6/2004	5/6/2004	5/6/2004	5/6/2004
QC CODE								SA	SA	SA	SA	SA	SA
STUDY ID								ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM
SAMPLE ROUND								1	1	1	1	1	1
Parameter	**Units**	**Maximum Value**	**Frequency of Detection**	**Criteria Level [1]**	**Number of Exceedances**	**Number of Times Detected**	**Number of Samples Collected**	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)
1,1,1-Trichloroethane	UG/KG	0	0%	500000	0	0	54	5.8 U	5.8 U	5.8 U	5.9 U	5.7 U	5.7 U
1,1,2,2-Tetrachloroethane	UG/KG	0	0%		0	0	53	5.8 U	5.8 U	5.8 U	5.9 U	5.7 U	5.7 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	UG/KG	1.5	2%		0	1	54	5.8 U	5.8 U	5.8 U	5.9 U	5.7 U	5.7 U
1,1,2-Trichloroethane	UG/KG	0	0%		0	0	5						
1,1-Dichloroethane	UG/KG	0	0%	240000	0	0	54	5.8 U	5.8 U	5.8 U	5.9 U	5.7 U	5.7 U
1,1-Dichloroethene	UG/KG	1	2%	500000	0	1	54	5.8 U	5.8 U	5.8 U	5.9 U	5.7 U	5.7 U
1,2,3-Trichloropropane	UG/KG	0	0%		0	0	48	5.8 U	5.8 U	5.8 U	5.9 U	5.7 U	5.7 U
1,2,4-Trichlorobenzene	UG/KG	0	0%		0	0	53	5.8 U	5.8 U	5.8 U	5.9 U	5.7 U	5.7 U
1,2-Dibromo-3-chloropropane	UG/KG	0	0%		0	0	5						
1,2-Dibromoethane	UG/KG	0	0%		0	0	5						
1,2-Dichlorobenzene	UG/KG	0	0%	500000	0	0	53	5.8 U	5.8 U	5.8 U	5.9 U	5.7 U	5.7 U
1,2-Dichloroethane	UG/KG	0	0%	30000	0	0	54	5.8 U	5.8 U	5.8 U	5.9 U	5.7 U	5.7 U
1,2-Dichloropropane	UG/KG	0	0%		0	0	5						
1,3-Dichlorobenzene	UG/KG	0	0%	280000	0	0	53	5.8 U	5.8 U	5.8 U	5.9 U	5.7 U	5.7 U
1,3-Dichloropropane	UG/KG	0	0%		0	0	49	5.8 U	5.8 U	5.8 U	5.9 U	5.7 U	5.7 U
1,4-Dichlorobenzene	UG/KG	0	0%	130000	0	0	53	5.8 U	5.8 U	5.8 U	5.9 U	5.7 U	5.7 U
Acetone	UG/KG	69	24%	500000	0	13	54	23 U	23 U	23 U	34	23 U	14 J
Benzene	UG/KG	0	0%	44000	0	0	54	5.8 U	5.8 U	5.8 U	5.9 U	5.7 U	5.7 U
Bromodichloromethane	UG/KG	0	0%		0	0	5						
Bromoform	UG/KG	0	0%		0	0	5						
Carbon disulfide	UG/KG	0	0%		0	0	54	5.8 U	5.8 U	5.8 U	5.9 U	5.7 U	5.7 U
Carbon tetrachloride	UG/KG	0	0%	22000	0	0	54	5.8 U	5.8 U	5.8 U	5.9 U	5.7 U	5.7 U
Chlorobenzene	UG/KG	0	0%	500000	0	0	54	5.8 U	5.8 U	5.8 U	5.9 U	5.7 U	5.7 U
Chlorodibromomethane	UG/KG	0	0%		0	0	54	5.8 U	5.8 U	5.8 U	5.9 U	5.7 U	5.7 U
Chloroethane	UG/KG	0	0%		0	0	54	12 U	12 U	12 U	12 U	11 U	11 U
Chloroform	UG/KG	0	0%	350000	0	0	54	5.8 U	5.8 U	5.8 U	5.9 U	5.7 U	5.7 U
Cis-1,2-Dichloroethene	UG/KG	0	0%	500000	0	0	5						
Cis-1,3-Dichloropropene	UG/KG	0	0%		0	0	5						
Cyclohexane	UG/KG	0	0%		0	0	5						
Dichlorodifluoromethane	UG/KG	0	0%		0	0	5						
Ethyl benzene	UG/KG	0	0%	390000	0	0	54	5.8 U	5.8 U	5.8 U	5.9 U	5.7 U	5.7 U
Isopropylbenzene	UG/KG	0	0%		0	0	5						
Meta/Para Xylene	UG/KG	2.3	4%	500000	0	2	49	5.8 U	5.8 U	5.8 U	5.9 U	5.7 U	5.7 U
Methyl Acetate	UG/KG	0	0%		0	0	5						
Methyl Tertbutyl Ether	UG/KG	0	0%	500000	0	0	5						
Methyl bromide	UG/KG	0	0%		0	0	5						
Methyl butyl ketone	UG/KG	0	0%		0	0	5						
Methyl chloride	UG/KG	0	0%		0	0	5						
Methyl cyclohexane	UG/KG	0	0%		0	0	5						
Methyl ethyl ketone	UG/KG	7	9%	500000	0	5	54	12 U	12 U	12 U	2.9 J	11 U	11 U
Methyl isobutyl ketone	UG/KG	0	0%		0	0	54	12 U	12 U	12 U	12 U	11 U	11 U
Methylene chloride	UG/KG	1.4	2%	500000	0	1	54	5.8 U	5.8 U	5.8 U	5.9 U	5.7 U	5.7 U
Ortho Xylene	UG/KG	1.9	10%	500000	0	5	49	5.8 U	5.8 U	5.8 U	5.9 U	5.7 U	5.7 U
Styrene	UG/KG	0	0%		0	0	5						
Tetrachloroethene	UG/KG	6.7	6%	150000	0	3	54	6.7	5.8 U	5.8 U	5.9 U	5.7 U	5.7 U
Toluene	UG/KG	0	0%	500000	0	0	54	5.8 U	5.8 U	5.8 U	5.9 U	5.7 U	5.7 U
Total Xylenes	UG/KG	3	20%	500000	0	1	5						

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SITE LOCATION								SEAD-59	SEAD-59	SEAD-59	SEAD-59	SEAD-59	SEAD-59
LOCATION ID								WS-59-01-016-20	WS-59-01-016-3	WS-59-01-016-4	WS-59-01-016-5	WS-59-01-016-6	WS-59-01-016-9
MATRIX								SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
SAMPLE ID								WS-59-01-016-20	WS-59-01-016-3	WS-59-01-016-4	WS-59-01-016-5	WS-59-01-016-6	WS-59-01-016-9
SAMPLE DATE								5/6/2004	5/6/2004	5/6/2004	5/6/2004	5/6/2004	5/6/2004
QC CODE								SA	SA	SA	SA	SA	SA
STUDY ID								ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM
SAMPLE ROUND								1	1	1	1	1	1
Parameter	**Units**	**Maximum Value**	**Frequency of Detection**	**Criteria Level [1]**	**Number of Exceedances**	**Number of Times Detected**	**Number of Samples Collected**	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)
Trans-1,2-Dichloroethene	UG/KG	0	0%	500000	0	0	54	5.8 U	5.8 U	5.8 U	5.9 U	5.7 U	5.7 U
Trans-1,3-Dichloropropene	UG/KG	0	0%		0	0	5						
Trichloroethene	UG/KG	2.7	7%	200000	0	4	54	5.8 U	5.8 U	5.8 U	5.9 U	5.7 U	5.7 U
Trichlorofluoromethane	UG/KG	0	0%		0	0	5						
Vinyl chloride	UG/KG	0	0%	13000	0	0	54	12 U	12 U	12 U	12 U	11 U	11 U
1,1'-Biphenyl	UG/KG	59	20%		0	1	5						
2,2'-oxybis(1-Chloropropane)	UG/KG	0	0%		0	0	5						
2,4,5-Trichlorophenol	UG/KG	0	0%		0	0	54	1900 U	1200 U	1100 U	2000 U	1900 U	1900 U
2,4,6-Trichlorophenol	UG/KG	0	0%		0	0	54	1900 U	1200 U	1100 U	2000 U	1900 U	1900 U
2,4-Dichlorophenol	UG/KG	0	0%		0	0	54	1900 U	1200 U	1100 U	2000 U	1900 U	1900 U
2,4-Dimethylphenol	UG/KG	0	0%		0	0	5						
2,4-Dinitrophenol	UG/KG	0	0%		0	0	54	9800 U	5900 U	5900 U	10000 U	9700 UJ	9700 UJ
2,4-Dinitrotoluene	UG/KG	0	0%		0	0	54	1900 U	1200 U	1100 U	2000 U	1900 U	1900 U
2,6-Dinitrotoluene	UG/KG	0	0%		0	0	54	1900 U	1200 U	1100 U	2000 U	1900 U	1900 U
2-Chloronaphthalene	UG/KG	0	0%		0	0	5						
2-Chlorophenol	UG/KG	0	0%		0	0	54	1900 U	1200 U	1100 U	2000 U	1900 U	1900 U
2-Methylnaphthalene	UG/KG	1200	50%		0	27	54	1900 U	1200 U	1100 U	310 J	240 J	210 J
2-Methylphenol	UG/KG	0	0%	500000	0	0	54	1900 U	1200 U	1100 U	2000 U	1900 U	1900 U
2-Nitroaniline	UG/KG	0	0%		0	0	54	9800 U	5900 U	5900 U	10000 U	9700 U	9700 U
2-Nitrophenol	UG/KG	0	0%		0	0	54	1900 U	1200 U	1100 U	2000 U	1900 U	1900 U
3,3'-Dichlorobenzidine	UG/KG	0	0%		0	0	54	1900 U	1200 U	1100 U	2000 U	1900 U	1900 U
3-Nitroaniline	UG/KG	0	0%		0	0	54	9800 U	5900 U	5900 U	10000 U	9700 U	9700 U
4,6-Dinitro-2-methylphenol	UG/KG	0	0%		0	0	5						
4-Bromophenyl phenyl ether	UG/KG	0	0%		0	0	5						
4-Chloro-3-methylphenol	UG/KG	0	0%		0	0	54	1900 U	1200 U	1100 U	2000 U	1900 U	1900 U
4-Chloroaniline	UG/KG	0	0%		0	0	54	1900 U	1200 U	1100 U	2000 U	1900 U	1900 U
4-Chlorophenyl phenyl ether	UG/KG	0	0%		0	0	5						
4-Methylphenol	UG/KG	0	0%	500000	0	0	54	1900 U	1200 U	1100 U	2000 U	1900 U	1900 U
4-Nitroaniline	UG/KG	0	0%		0	0	5						
4-Nitrophenol	UG/KG	0	0%		0	0	54	9800 U	5900 U	5900 U	10000 U	9700 U	9700 U
Acenaphthene	UG/KG	2400	87%	500000	0	47	54	270 J	210 J	1100 U	620 J	550 J	2400
Acenaphthylene	UG/KG	3500	98%	500000	0	53	54	3400	800 J	380 J	1500 J	1600 J	2200
Acetophenone	UG/KG	0	0%		0	0	5						
Aniline	UG/KG	0	0%		0	0	49	1900 U	1200 U	1100 U	2000 U	1900 U	1900 U
Anthracene	UG/KG	6600	100%	500000	0	54	54	2200	830 J	280 J	2300	2400	4600
Atrazine	UG/KG	0	0%		0	0	5						
Benzaldehyde	UG/KG	0	0%		0	0	5						
Benzo(a)anthracene	UG/KG	14000	100%	5600	16	54	54	**6800**	2700	900 J	4400	5000	**7700**
Benzo(a)pyrene	UG/KG	16000	100%	1000	48	54	54	**8500**	**2900**	1000 J	**4400**	**4700**	**6700**
Benzo(b)fluoranthene	UG/KG	11000	100%	5600	13	54	54	**6400**	2300	850 J	3300	3100	4900
Benzo(ghi)perylene	UG/KG	8000	100%	500000	0	54	54	5200	1400	530 J	2000	3000	4000
Benzo(k)fluoranthene	UG/KG	13000	100%	56000	0	54	54	6500	2500	930 J	3700	3700	5500
Benzoic Acid	UG/KG	0	0%		0	0	49	9800 U	5900 U	5900 U	10000 U	9700 U	9700 U
Bis(2-Chloroethoxy)methane	UG/KG	0	0%		0	0	5						
Bis(2-Chloroethyl)ether	UG/KG	0	0%		0	0	5						
Bis(2-Ethylhexyl)phthalate	UG/KG	130	6%		0	3	54	1900 U	1200 U	1100 U	2000 U	1900 U	1900 U
Butylbenzylphthalate	UG/KG	0	0%		0	0	54	1900 U	1200 UJ	1100 UJ	2000 UJ	1900 U	1900 U

SEAD-59/71 Stockpile Soil Results
SEAD-5 Construction Completion Report
Seneca Army Depot Activity

SITE LOCATION								SEAD-59	SEAD-59	SEAD-59	SEAD-59	SEAD-59	SEAD-59
LOCATION ID								WS-59-01-016-20	WS-59-01-016-3	WS-59-01-016-4	WS-59-01-016-5	WS-59-01-016-6	WS-59-01-016-9
MATRIX								SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
SAMPLE ID								WS-59-01-016-20	WS-59-01-016-3	WS-59-01-016-4	WS-59-01-016-5	WS-59-01-016-6	WS-59-01-016-9
SAMPLE DATE								5/6/2004	5/6/2004	5/6/2004	5/6/2004	5/6/2004	5/6/2004
QC CODE								SA	SA	SA	SA	SA	SA
STUDY ID								ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM
SAMPLE ROUND								1	1	1	1	1	1
Parameter	**Units**	**Maximum Value**	**Frequency of Detection**	**Criteria Level [1]**	**Number of Exceedances**	**Number of Times Detected**	**Number of Samples Collected**	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)
Caprolactam	UG/KG	0	0%		0	0	5						
Carbazole	UG/KG	1100	80%		0	4	5						
Chrysene	UG/KG	13000	100%	56000	0	54	54	7500	2700	970 J	4300	4900	7600
Di-n-butylphthalate	UG/KG	0	0%		0	0	54	1900 U	1200 U	1100 U	2000 U	1900 U	1900 U
Di-n-octylphthalate	UG/KG	0	0%		0	0	54	1900 U	1200 U	1100 U	2000 U	1900 U	1900 U
Dibenz(a,h)anthracene	UG/KG	2900	98%	560	41	53	54	**1800** J	510 J	180 J	**700** J	**960** J	**1400** J
Dibenzofuran	UG/KG	1300	61%	350000	0	33	54	1900 U	1200 U	1100 U	540 J	420 J	1300 J
Diethyl phthalate	UG/KG	0	0%		0	0	54	1900 U	1200 U	1100 U	2000 U	1900 U	1900 U
Dimethylphthalate	UG/KG	0	0%		0	0	54	1900 U	1200 U	1100 U	2000 U	1900 U	1900 U
Fluoranthene	UG/KG	29000	100%	500000	0	54	54	12000	5400	1700	9900	10000	18000
Fluorene	UG/KG	3100	87%	500000	0	47	54	310 J	200 J	1100 U	1100 J	1200 J	3100
Hexachlorobenzene	UG/KG	0	0%	6000	0	0	54	1900 U	1200 U	1100 U	2000 U	1900 U	1900 U
Hexachlorobutadiene	UG/KG	0	0%		0	0	54	1900 U	1200 U	1100 U	2000 U	1900 U	1900 U
Hexachlorocyclopentadiene	UG/KG	0	0%		0	0	5						
Hexachloroethane	UG/KG	0	0%		0	0	54	1900 U	1200 U	1100 U	2000 U	1900 U	1900 U
Indeno(1,2,3-cd)pyrene	UG/KG	8000	100%	5600	6	54	54	5000 J	1400 J	530 J	2000 J	2700 J	3800 J
Isophorone	UG/KG	0	0%		0	0	54	1900 U	1200 U	1100 U	2000 U	1900 U	1900 U
N-Nitrosodiphenylamine	UG/KG	0	0%		0	0	5						
N-Nitrosodipropylamine	UG/KG	0	0%		0	0	5						
Naphthalene	UG/KG	1200	61%	500000	0	33	54	1900 U	1200 U	1100 U	360 J	280 J	290 J
Nitrobenzene	UG/KG	0	0%		0	0	54	1900 U	1200 U	1100 U	2000 U	1900 U	1900 U
Pentachlorophenol	UG/KG	660	2%	6700	0	1	54	9800 U	5900 U	5900 U	10000 U	9700 U	9700 U
Phenanthrene	UG/KG	17000	100%	500000	0	54	54	3300	2200	780 J	6900	7400	13000
Phenol	UG/KG	0	0%	500000	0	0	54	1900 U	1200 U	1100 U	2000 U	1900 U	1900 U
Pyrene	UG/KG	22000	100%	500000	0	54	54	9700	4300 J	1400 J	8300 J	11000	16000
Pyridine	UG/KG	0	0%		0	0	49	9800 U	5900 U	5900 U	10000 U	9700 U	9700 U
4,4'-DDD	UG/KG	450	61%	92000	0	33	54	95 U	96 U	96 U	98 U	94 U	94 U
4,4'-DDE	UG/KG	260	61%	62000	0	33	54	95 U	96 U	96 U	98 U	94 U	94 U
4,4'-DDT	UG/KG	520	69%	47000	0	37	54	95 U	96 U	96 U	98 U	94 U	94 U
Aldrin	UG/KG	0	0%	680	0	0	54	49 U	49 U	49 U	51 U	48 U	48 U
Alpha-BHC	UG/KG	4.4	2%	3400	0	1	54	49 U	49 U	49 U	51 U	48 U	48 U
Alpha-Chlordane	UG/KG	27	11%	24000	0	6	54	49 U	49 U	49 U	51 U	48 U	48 U
Beta-BHC	UG/KG	13	2%	3000	0	1	54	49 U	49 U	49 U	51 U	48 U	48 U
Delta-BHC	UG/KG	0	0%	500000	0	0	54	49 U	49 U	49 U	51 U	48 U	48 U
Dieldrin	UG/KG	0	0%	1400	0	0	54	95 U	96 U	96 U	98 U	94 U	94 U
Endosulfan I	UG/KG	0	0%	200000	0	0	54	49 U	49 U	49 U	51 U	48 U	48 U
Endosulfan II	UG/KG	0	0%	200000	0	0	54	95 U	96 U	96 U	98 U	94 U	94 U
Endosulfan sulfate	UG/KG	0	0%	200000	0	0	54	95 U	96 U	96 U	98 U	94 U	94 U
Endrin	UG/KG	0	0%	89000	0	0	54	95 U	96 U	96 U	98 U	94 U	94 U
Endrin aldehyde	UG/KG	0	0%		0	0	54	95 U	96 U	96 U	98 U	94 U	94 U
Endrin ketone	UG/KG	15	2%		0	1	54	95 U	96 U	96 U	98 U	94 U	94 U
Gamma-BHC/Lindane	UG/KG	0	0%	9200	0	0	54	49 U	49 U	49 U	51 U	48 U	48 U
Gamma-Chlordane	UG/KG	21	9%		0	5	54	49 U	49 U	49 U	51 U	48 U	48 U
Heptachlor	UG/KG	0	0%	15000	0	0	54	49 U	49 U	49 U	51 U	48 U	48 U
Heptachlor epoxide	UG/KG	0	0%		0	0	54	49 U	49 U	49 U	51 U	48 U	48 U
Methoxychlor	UG/KG	0	0%		0	0	54	490 U	490 U	490 U	510 U	480 U	480 U
Toxaphene	UG/KG	0	0%		0	0	54	950 U	960 U	960 U	980 U	940 U	940 U

SEAD-59/71 Stockpile Soil Results
SEAD-5 Construction Completion Report
Seneca Army Depot Activity

SITE LOCATION								SEAD-59	SEAD-59	SEAD-59	SEAD-59	SEAD-59	SEAD-59
LOCATION ID								WS-59-01-016-20	WS-59-01-016-3	WS-59-01-016-4	WS-59-01-016-5	WS-59-01-016-6	WS-59-01-016-9
MATRIX								SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
SAMPLE ID								WS-59-01-016-20	WS-59-01-016-3	WS-59-01-016-4	WS-59-01-016-5	WS-59-01-016-6	WS-59-01-016-9
SAMPLE DATE								5/6/2004	5/6/2004	5/6/2004	5/6/2004	5/6/2004	5/6/2004
QC CODE								SA	SA	SA	SA	SA	SA
STUDY ID								ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM
SAMPLE ROUND								1	1	1	1	1	1
Parameter	**Units**	**Maximum Value**	**Frequency of Detection**	**Criteria Level [1]**	**Number of Exceedances**	**Number of Times Detected**	**Number of Samples Collected**	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)
Aroclor-1016	UG/KG	0	0%	1000	0	0	54	38 U	38 U	38 U	39 U	38 U	38 U
Aroclor-1221	UG/KG	0	0%	1000	0	0	54	38 U	38 U	38 U	39 U	38 U	38 U
Aroclor-1232	UG/KG	0	0%	1000	0	0	54	38 U	38 U	38 U	39 U	38 U	38 U
Aroclor-1242	UG/KG	0	0%	1000	0	0	54	38 U	38 U	38 U	39 U	38 U	38 U
Aroclor-1248	UG/KG	0	0%	1000	0	0	54	38 U	38 U	38 U	39 U	38 U	38 U
Aroclor-1254	UG/KG	0	0%	1000	0	0	54	38 U	38 U	38 U	39 U	38 U	38 U
Aroclor-1260	UG/KG	0	0%	1000	0	0	54	38 U	38 U	38 U	39 U	38 U	38 U
Aluminum	MG/KG	13400	100%		0	54	54	9200	10600	11000	11500	9410	10900
Antimony	MG/KG	43.9	20%		0	11	54	3.4 UJ	3.5 UJ	3.4 UJ	4.6 J	3.4 UJ	3.3 UJ
Arsenic	MG/KG	7.3	100%	16	0	54	54	3.9	4.9	5	6.8	4.2	4.4
Barium	MG/KG	135	100%	400	0	54	54	74	86.4	86.5	126	94.4	85
Beryllium	MG/KG	0.69	100%	590	0	54	54	0.25	0.38	0.39	0.41	0.26	0.37
Cadmium	MG/KG	1.2	98%	9.3	0	53	54	0.66	0.69	0.68	1.2	1.1	0.77
Calcium	MG/KG	100000	100%		0	54	54	100000	66200	43600	56900	72100	60200
Chromium	MG/KG	35	100%	1500	0	54	54	16.4	17.2	18.5	20.7	16.1	19.3
Cobalt	MG/KG	13.9	100%		0	54	54	7.6	9.2	11.2	10.9	8.8	9.4
Copper	MG/KG	51.8	100%	270	0	54	54	28.7 J	26.5 J	26.5 J	42.5 J	33.6 J	31.1 J
Iron	MG/KG	26500	100%		0	54	54	16300	20300	22500	26300	18300	20600
Lead	MG/KG	1440	100%	1000	1	54	54	44.8 J	31.8 J	29.4 J	75.3 J	59.7 J	61.8 J
Magnesium	MG/KG	26600	100%		0	54	54	7730	9530	7450	6490	13900	7580
Manganese	MG/KG	1220	100%	10000	0	54	54	391	466	515	1220	574	512
Nickel	MG/KG	56.6	100%	310	0	54	54	22.4	25.6	30.3	26.1	24.1	27
Potassium	MG/KG	1580	100%		0	54	54	1090	1120	1230	1260	1120	1200
Selenium	MG/KG	0.72	4%	1500	0	2	54	0.56 U	0.58 U	0.56 U	0.56 U	0.56 U	0.27 U
Silver	MG/KG	4.7	17%	1500	0	9	54	0.56 U	0.58 U	0.56 U	0.56 U	0.56 U	0.55 U
Sodium	MG/KG	525	100%		0	54	54	178	312	525	123	178	176
Thallium	MG/KG	0.99	50%		0	27	54	0.56 U	0.58 U	0.56 U	0.79 J	0.56 U	0.55 U
Vanadium	MG/KG	35.4	100%		0	54	54	19	18.6	19.4	23.7	17.6	19.1
Zinc	MG/KG	185	100%	10000	0	54	54	79 J	76.5 J	90.5 J	109 J	75.4 J	91.5 J
Flashpoint	?C	100	100%		0	45	0	100 GT	100 GT	100 GT	100 GT	100 GT	100 GT
Percent Solids	%	91.4	100%		0	49	49	86.9	86	86.3	84.1	87.7	87.9
Reactive Cyanide	MG/KG	0	0%		0	0	44	5 U	5 U	5 U	5 U	5 U	5 U
Reactive Sulfide	MG/KG	0	0%		0	0	45	20 U	20 U	20 U	20 U	20 U	20 U
pH	Std units	8.71	100%		0	45	45	8.15	8.22	8.13	7.82	7.94	8.22
TCLP 1,4-Dichlorobenzene	UG/L	0	0%	7500	0	0	6						
TCLP 2,4,5-Trichlorophenol	UG/L	0	0%	1000	0	0	6						
TCLP 2,4,6-Trichlorophenol	UG/L	0	0%	2000	0	0	6						
TCLP 2,4-Dinitrotoluene	UG/L	0	0%	100	0	0	6						
TCLP 2-Methylphenol	UG/L	0	0%		0	0	6						
TCLP Hexachlorobenzene	UG/L	0	0%	100	0	0	6						
TCLP Hexachlorobutadiene	UG/L	0	0%		0	0	6						
TCLP Hexachloroethane	UG/L	0	0%	3000	0	0	6						
TCLP Nitrobenzene	UG/L	0	0%	2000	0	0	6						
TCLP Pentachlorophenol	UG/L	0	0%	100000	0	0	6						
TCLP Pyridine	UG/L	0	0%	5000	0	0	6						
TCLP Arsenic	UG/L	0	0%	5000	0	0	5						
TCLP Barium	UG/L	0	0%	100000	0	0	5						

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Seneca Army Depot Activity

SITE LOCATION								SEAD-59	SEAD-59	SEAD-59	SEAD-59	SEAD-59	SEAD-59
LOCATION ID								WS-59-01-016-20	WS-59-01-016-3	WS-59-01-016-4	WS-59-01-016-5	WS-59-01-016-6	WS-59-01-016-9
MATRIX								SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
SAMPLE ID								WS-59-01-016-20	WS-59-01-016-3	WS-59-01-016-4	WS-59-01-016-5	WS-59-01-016-6	WS-59-01-016-9
SAMPLE DATE								5/6/2004	5/6/2004	5/6/2004	5/6/2004	5/6/2004	5/6/2004
QC CODE								SA	SA	SA	SA	SA	SA
STUDY ID								ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM	ENSR IRM
SAMPLE ROUND								1	1	1	1	1	1
Parameter	**Units**	**Maximum Value**	**Frequency of Detection**	**Criteria Level [1]**	**Number of Exceedances**	**Number of Times Detected**	**Number of Samples Collected**	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)
TCLP Cadmium	UG/L	0	0%	1000	0	0	5						
TCLP Chromium	UG/L	0	0%	5000	0	0	5						
TCLP Lead	UG/L	106	20%	5000	0	1	5						
TCLP Mercury	UG/L	0	0%	200	0	0	5						
TCLP Selenium	UG/L	0	0%	1000	0	0	5						
TCLP Silver	UG/L	0	0%	5000	0	0	5						

(1) The following criterias were used to compare the soil results against:
- NYSDEC's Restricted Commercial Use Soil Cleanup Objective, 6 NYCRR Part 375-6.
- TCLP regulatory limits are based on 40CFR 261.23 and 40CFR 261.24.

SEAD-59/71 Stockpile Soil Results
SEAD-5 Construction Completion Report
Seneca Army Depot Activity

SITE LOCATION	SEAD-59
LOCATION ID	WS-59-04-010-8
MATRIX	SOIL
SAMPLE ID	WS-59-04-010-8
SAMPLE DATE	5/6/2004
QC CODE	SA
STUDY ID	ENSR IRM
SAMPLE ROUND	1

Parameter	Units	Maximum Value	Frequency of Detection	Criteria Level [1]	Number of Exceedances	Number of Times Detected	Number of Samples Collected	Value (Q)
1,1,1-Trichloroethane	UG/KG	0	0%	500000	0	0	54	5 U
1,1,2,2-Tetrachloroethane	UG/KG	0	0%		0	0	53	5 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	UG/KG	1.5	2%		0	1	54	5 UJ
1,1,2-Trichloroethane	UG/KG	0	0%		0	0	5	5 U
1,1-Dichloroethane	UG/KG	0	0%	240000	0	0	54	5 U
1,1-Dichloroethene	UG/KG	1	2%	500000	0	1	54	5 U
1,2,3-Trichloropropane	UG/KG	0	0%		0	0	48	
1,2,4-Trichlorobenzene	UG/KG	0	0%		0	0	53	5 U
1,2-Dibromo-3-chloropropane	UG/KG	0	0%		0	0	5	5 U
1,2-Dibromoethane	UG/KG	0	0%		0	0	5	5 U
1,2-Dichlorobenzene	UG/KG	0	0%	500000	0	0	53	5 U
1,2-Dichloroethane	UG/KG	0	0%	30000	0	0	54	5 U
1,2-Dichloropropane	UG/KG	0	0%		0	0	5	5 U
1,3-Dichlorobenzene	UG/KG	0	0%	280000	0	0	53	5 U
1,3-Dichloropropane	UG/KG	0	0%		0	0	49	
1,4-Dichlorobenzene	UG/KG	0	0%	130000	0	0	53	5 U
Acetone	UG/KG	69	24%	500000	0	13	54	5 U
Benzene	UG/KG	0	0%	44000	0	0	54	5 U
Bromodichloromethane	UG/KG	0	0%		0	0	5	5 U
Bromoform	UG/KG	0	0%		0	0	5	5 U
Carbon disulfide	UG/KG	0	0%		0	0	54	5 U
Carbon tetrachloride	UG/KG	0	0%	22000	0	0	54	5 U
Chlorobenzene	UG/KG	0	0%	500000	0	0	54	5 U
Chlorodibromomethane	UG/KG	0	0%		0	0	54	5 U
Chloroethane	UG/KG	0	0%		0	0	54	5 U
Chloroform	UG/KG	0	0%	350000	0	0	54	5 U
Cis-1,2-Dichloroethene	UG/KG	0	0%	500000	0	0	5	5 U
Cis-1,3-Dichloropropene	UG/KG	0	0%		0	0	5	5 U
Cyclohexane	UG/KG	0	0%		0	0	5	5 U
Dichlorodifluoromethane	UG/KG	0	0%		0	0	5	5 U
Ethyl benzene	UG/KG	0	0%	390000	0	0	54	5 U
Isopropylbenzene	UG/KG	0	0%		0	0	5	5 U
Meta/Para Xylene	UG/KG	2.3	4%	500000	0	2	49	
Methyl Acetate	UG/KG	0	0%		0	0	5	5 U
Methyl Tertbutyl Ether	UG/KG	0	0%	500000	0	0	5	5 U
Methyl bromide	UG/KG	0	0%		0	0	5	5 U
Methyl butyl ketone	UG/KG	0	0%		0	0	5	5 U
Methyl chloride	UG/KG	0	0%		0	0	5	5 U
Methyl cyclohexane	UG/KG	0	0%		0	0	5	5 U
Methyl ethyl ketone	UG/KG	7	9%	500000	0	5	54	5 U
Methyl isobutyl ketone	UG/KG	0	0%		0	0	54	5 U
Methylene chloride	UG/KG	1.4	2%	500000	0	1	54	5 U
Ortho Xylene	UG/KG	1.9	10%	500000	0	5	49	
Styrene	UG/KG	0	0%		0	0	5	5 U
Tetrachloroethene	UG/KG	6.7	6%	150000	0	3	54	5 U
Toluene	UG/KG	0	0%	500000	0	0	54	5 U
Total Xylenes	UG/KG	3	20%	500000	0	1	5	5 U

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Seneca Army Depot Activity

SITE LOCATION	SEAD-59
LOCATION ID	WS-59-04-010-8
MATRIX	SOIL
SAMPLE ID	WS-59-04-010-8
SAMPLE DATE	5/6/2004
QC CODE	SA
STUDY ID	ENSR IRM
SAMPLE ROUND	1

Parameter	Units	Maximum Value	Frequency of Detection	Criteria Level [1]	Number of Exceedances	Number of Times Detected	Number of Samples Collected	Value	(Q)
Trans-1,2-Dichloroethene	UG/KG	0	0%	500000	0	0	54	5	U
Trans-1,3-Dichloropropene	UG/KG	0	0%		0	0	5	5	U
Trichloroethene	UG/KG	2.7	7%	200000	0	4	54	5	U
Trichlorofluoromethane	UG/KG	0	0%		0	0	5	5	U
Vinyl chloride	UG/KG	0	0%	13000	0	0	54	5	U
1,1'-Biphenyl	UG/KG	59	20%		0	1	5	370	U
2,2'-oxybis(1-Chloropropane)	UG/KG	0	0%		0	0	5	370	U
2,4,5-Trichlorophenol	UG/KG	0	0%		0	0	54	930	U
2,4,6-Trichlorophenol	UG/KG	0	0%		0	0	54	370	U
2,4-Dichlorophenol	UG/KG	0	0%		0	0	54	370	U
2,4-Dimethylphenol	UG/KG	0	0%		0	0	5	370	U
2,4-Dinitrophenol	UG/KG	0	0%		0	0	54	930	U
2,4-Dinitrotoluene	UG/KG	0	0%		0	0	54	370	U
2,6-Dinitrotoluene	UG/KG	0	0%		0	0	54	370	U
2-Chloronaphthalene	UG/KG	0	0%		0	0	5	370	U
2-Chlorophenol	UG/KG	0	0%		0	0	54	370	U
2-Methylnaphthalene	UG/KG	1200	50%		0	27	54	370	U
2-Methylphenol	UG/KG	0	0%	500000	0	0	54	370	U
2-Nitroaniline	UG/KG	0	0%		0	0	54	930	U
2-Nitrophenol	UG/KG	0	0%		0	0	54	370	U
3,3'-Dichlorobenzidine	UG/KG	0	0%		0	0	54	370	U
3-Nitroaniline	UG/KG	0	0%		0	0	54	930	U
4,6-Dinitro-2-methylphenol	UG/KG	0	0%		0	0	5	930	U
4-Bromophenyl phenyl ether	UG/KG	0	0%		0	0	5	370	U
4-Chloro-3-methylphenol	UG/KG	0	0%		0	0	54	370	U
4-Chloroaniline	UG/KG	0	0%		0	0	54	370	U
4-Chlorophenyl phenyl ether	UG/KG	0	0%		0	0	5	370	U
4-Methylphenol	UG/KG	0	0%	500000	0	0	54	370	U
4-Nitroaniline	UG/KG	0	0%		0	0	5	930	U
4-Nitrophenol	UG/KG	0	0%		0	0	54	930	U
Acenaphthene	UG/KG	2400	87%	500000	0	47	54	370	U
Acenaphthylene	UG/KG	3500	98%	500000	0	53	54	370	U
Acetophenone	UG/KG	0	0%		0	0	5	370	U
Aniline	UG/KG	0	0%		0	0	49		
Anthracene	UG/KG	6600	100%	500000	0	54	54	120	J
Atrazine	UG/KG	0	0%		0	0	5	370	U
Benzaldehyde	UG/KG	0	0%		0	0	5	370	U
Benzo(a)anthracene	UG/KG	14000	100%	5600	16	54	54	86	NJ
Benzo(a)pyrene	UG/KG	16000	100%	1000	48	54	54	85	J
Benzo(b)fluoranthene	UG/KG	11000	100%	5600	13	54	54	110	J
Benzo(ghi)perylene	UG/KG	8000	100%	500000	0	54	54	52	J
Benzo(k)fluoranthene	UG/KG	13000	100%	56000	0	54	54	48	J
Benzoic Acid	UG/KG	0	0%		0	0	49		
Bis(2-Chloroethoxy)methane	UG/KG	0	0%		0	0	5	370	U
Bis(2-Chloroethyl)ether	UG/KG	0	0%		0	0	5	370	U
Bis(2-Ethylhexyl)phthalate	UG/KG	130	6%		0	3	54	97	J
Butylbenzylphthalate	UG/KG	0	0%		0	0	54	370	U

SEAD-59/71 Stockpile Soil Results
SEAD-5 Construction Completion Report
Seneca Army Depot Activity

SITE LOCATION	SEAD-59
LOCATION ID	WS-59-04-010-8
MATRIX	SOIL
SAMPLE ID	WS-59-04-010-8
SAMPLE DATE	5/6/2004
QC CODE	SA
STUDY ID	ENSR IRM
SAMPLE ROUND	1

Parameter	Units	Maximum Value	Frequency of Detection	Criteria Level [1]	Number of Exceedances	Number of Times Detected	Number of Samples Collected	Value	(Q)
Caprolactam	UG/KG	0	0%		0	0	5	370	U
Carbazole	UG/KG	1100	80%		0	4	5	370	U
Chrysene	UG/KG	13000	100%	56000	0	54	54	87	J
Di-n-butylphthalate	UG/KG	0	0%		0	0	54	370	U
Di-n-octylphthalate	UG/KG	0	0%		0	0	54	370	U
Dibenz(a,h)anthracene	UG/KG	2900	98%	560	41	53	54	370	U
Dibenzofuran	UG/KG	1300	61%	350000	0	33	54	370	U
Diethyl phthalate	UG/KG	0	0%		0	0	54	370	U
Dimethylphthalate	UG/KG	0	0%		0	0	54	370	U
Fluoranthene	UG/KG	29000	100%	500000	0	54	54	170	J
Fluorene	UG/KG	3100	87%	500000	0	47	54	370	U
Hexachlorobenzene	UG/KG	0	0%	6000	0	0	54	370	U
Hexachlorobutadiene	UG/KG	0	0%		0	0	54	370	U
Hexachlorocyclopentadiene	UG/KG	0	0%		0	0	5	370	U
Hexachloroethane	UG/KG	0	0%		0	0	54	370	U
Indeno(1,2,3-cd)pyrene	UG/KG	8000	100%	5600	6	54	54	55	J
Isophorone	UG/KG	0	0%		0	0	54	370	U
N-Nitrosodiphenylamine	UG/KG	0	0%		0	0	5	370	U
N-Nitrosodipropylamine	UG/KG	0	0%		0	0	5	370	U
Naphthalene	UG/KG	1200	61%	500000	0	33	54	370	U
Nitrobenzene	UG/KG	0	0%		0	0	54	370	U
Pentachlorophenol	UG/KG	660	2%	6700	0	1	54	930	U
Phenanthrene	UG/KG	17000	100%	500000	0	54	54	120	J
Phenol	UG/KG	0	0%	500000	0	0	54	370	U
Pyrene	UG/KG	22000	100%	500000	0	54	54	160	J
Pyridine	UG/KG	0	0%		0	0	49		
4,4'-DDD	UG/KG	450	61%	92000	0	33	54	6	
4,4'-DDE	UG/KG	260	61%	62000	0	33	54	2.4	J
4,4'-DDT	UG/KG	520	69%	47000	0	37	54	6.1	J
Aldrin	UG/KG	0	0%	680	0	0	54	1.9	U
Alpha-BHC	UG/KG	4.4	2%	3400	0	1	54	1.9	U
Alpha-Chlordane	UG/KG	27	11%	24000	0	6	54	16	J
Beta-BHC	UG/KG	13	2%	3000	0	1	54	1.9	U
Delta-BHC	UG/KG	0	0%	500000	0	0	54	1.9	U
Dieldrin	UG/KG	0	0%	1400	0	0	54	3.7	U
Endosulfan I	UG/KG	0	0%	200000	0	0	54	1.9	U
Endosulfan II	UG/KG	0	0%	200000	0	0	54	3.7	U
Endosulfan sulfate	UG/KG	0	0%	200000	0	0	54	3.7	U
Endrin	UG/KG	0	0%	89000	0	0	54	3.7	U
Endrin aldehyde	UG/KG	0	0%		0	0	54	3.7	U
Endrin ketone	UG/KG	15	2%		0	1	54	3.7	U
Gamma-BHC/Lindane	UG/KG	0	0%	9200	0	0	54	1.9	U
Gamma-Chlordane	UG/KG	21	9%		0	5	54	15	
Heptachlor	UG/KG	0	0%	15000	0	0	54	1.9	U
Heptachlor epoxide	UG/KG	0	0%		0	0	54	1.9	U
Methoxychlor	UG/KG	0	0%		0	0	54	19	U
Toxaphene	UG/KG	0	0%		0	0	54	190	U

SEAD-59/71 Stockpile Soil Results
SEAD-5 Construction Completion Report
Seneca Army Depot Activity

SITE LOCATION	SEAD-59
LOCATION ID	WS-59-04-010-8
MATRIX	SOIL
SAMPLE ID	WS-59-04-010-8
SAMPLE DATE	5/6/2004
QC CODE	SA
STUDY ID	ENSR IRM
SAMPLE ROUND	1

Parameter	Units	Maximum Value	Frequency of Detection	Criteria Level [1]	Number of Exceedances	Number of Times Detected	Number of Samples Collected	Value	(Q)
Aroclor-1016	UG/KG	0	0%	1000	0	0	54	37	U
Aroclor-1221	UG/KG	0	0%	1000	0	0	54	37	U
Aroclor-1232	UG/KG	0	0%	1000	0	0	54	37	U
Aroclor-1242	UG/KG	0	0%	1000	0	0	54	37	U
Aroclor-1248	UG/KG	0	0%	1000	0	0	54	37	U
Aroclor-1254	UG/KG	0	0%	1000	0	0	54	37	U
Aroclor-1260	UG/KG	0	0%	1000	0	0	54	37	U
Aluminum	MG/KG	13400	100%		0	54	54	6830	J
Antimony	MG/KG	43.9	20%		0	11	54	0.96	J
Arsenic	MG/KG	7.3	100%	16	0	54	54	3.7	J
Barium	MG/KG	135	100%	400	0	54	54	62.7	J
Beryllium	MG/KG	0.69	100%	590	0	54	54	0.35	
Cadmium	MG/KG	1.2	98%	9.3	0	53	54	0.4	
Calcium	MG/KG	100000	100%		0	54	54	72900	
Chromium	MG/KG	35	100%	1500	0	54	54	11.4	J
Cobalt	MG/KG	13.9	100%		0	54	54	6.1	J
Copper	MG/KG	51.8	100%	270	0	54	54	32.5	J
Iron	MG/KG	26500	100%		0	54	54	14900	
Lead	MG/KG	1440	100%	1000	1	54	54	15.4	J
Magnesium	MG/KG	26600	100%		0	54	54	15700	J
Manganese	MG/KG	1220	100%	10000	0	54	54	321	J
Nickel	MG/KG	56.6	100%	310	0	54	54	19.1	J
Potassium	MG/KG	1580	100%		0	54	54	1200	J
Selenium	MG/KG	0.72	4%	1500	0	2	54	0.45	U
Silver	MG/KG	4.7	17%	1500	0	9	54	4.1	J
Sodium	MG/KG	525	100%		0	54	54	140	J
Thallium	MG/KG	0.99	50%		0	27	54	0.22	U
Vanadium	MG/KG	35.4	100%		0	54	54	13.7	J
Zinc	MG/KG	185	100%	10000	0	54	54	63.2	J
Flashpoint	?C	100	100%		0	45	0		
Percent Solids	%	91.4	100%		0	49	49		
Reactive Cyanide	MG/KG	0	0%		0	0	44		
Reactive Sulfide	MG/KG	0	0%		0	0	45		
pH	Std units	8.71	100%		0	45	45		
TCLP 1,4-Dichlorobenzene	UG/L	0	0%	7500	0	0	6		
TCLP 2,4,5-Trichlorophenol	UG/L	0	0%	1000	0	0	6		
TCLP 2,4,6-Trichlorophenol	UG/L	0	0%	2000	0	0	6		
TCLP 2,4-Dinitrotoluene	UG/L	0	0%	100	0	0	6		
TCLP 2-Methylphenol	UG/L	0	0%		0	0	6		
TCLP Hexachlorobenzene	UG/L	0	0%	100	0	0	6		
TCLP Hexachlorobutadiene	UG/L	0	0%		0	0	6		
TCLP Hexachloroethane	UG/L	0	0%	3000	0	0	6		
TCLP Nitrobenzene	UG/L	0	0%	2000	0	0	6		
TCLP Pentachlorophenol	UG/L	0	0%	100000	0	0	6		
TCLP Pyridine	UG/L	0	0%	5000	0	0	6		
TCLP Arsenic	UG/L	0	0%	5000	0	0	5		
TCLP Barium	UG/L	0	0%	100000	0	0	5		

SEAD-59/71 Stockpile Soil Results
SEAD-5 Construction Completion Report
Seneca Army Depot Activity

SITE LOCATION	SEAD-59
LOCATION ID	WS-59-04-010-8
MATRIX	SOIL
SAMPLE ID	WS-59-04-010-8
SAMPLE DATE	5/6/2004
QC CODE	SA
STUDY ID	ENSR IRM
SAMPLE ROUND	1

Parameter	Units	Maximum Value	Frequency of Detection	Criteria Level [1]	Number of Exceedances	Number of Times Detected	Number of Samples Collected	Value (Q)
TCLP Cadmium	UG/L	0	0%	1000	0	0	5	
TCLP Chromium	UG/L	0	0%	5000	0	0	5	
TCLP Lead	UG/L	106	20%	5000	0	1	5	
TCLP Mercury	UG/L	0	0%	200	0	0	5	
TCLP Selenium	UG/L	0	0%	1000	0	0	5	
TCLP Silver	UG/L	0	0%	5000	0	0	5	

(1) The following criterias were used to compare the soil results against:
- NYSDEC's Restricted Commercial Use Soil Cleanup Objective, 6 NYCRR Part 375-6.
- TCLP regulatory limits are based on 40CFR 261.23 and 40CFR 261.24.

APPENDIX D

SEAD-16/17 CRUSHED CONCRETE AND GRAVEL DATA

- **Case Narrative**
- **Chain of Custody**
- **Data Validation**
- **Analytical Results**

COLUMBIA ANALYTICAL SERVICES, INC.

Client: Parsons Engineering Science
Project: SEAD-5 RAOP
Sample Matrix: Soil

Service Request No.: R0903705
Date Received: 7/02/09

All analyses were performed consistent with the quality assurance program of Columbia Analytical Services, Inc. (CAS). This report contains analytical results for samples designated for Tier IV, ASP-B deliverables. When appropriate to the method, method blank results have been reported with each analytical test.

SAMPLE RECEIPT

Three soil samples were sampled on 7/01/09 and received at CAS on 7/02/09 at a cooler temperature of 7 °C. Otherwise, the samples were received in good condition and consistent with the accompanying chain of custody form. The samples were stored in a refrigerator between 1°C and 6°C upon receipt at the laboratory.

Note: Sample 5OSB0630-2 was mostly rock upon receipt therefore, there was insufficient sample to perform the analysis for the semivolatile analyses by methods 8081, 8082, and 8270.

VOLATILE ORGANICS

Three soil samples were analyzed for the TCL list of Volatile Organics by SW-846 method 8260B. Values detected between the MDL and PQL have been flagged with a "J" as estimated.

All Tuning criteria for BFB were and within QC limits.

Internal Standard Areas were within QC limits for all samples.

All the initial and continuing calibration criteria were met for all analytes.

All surrogate standard recoveries were within acceptance limits for all samples.

The Blank Spike (LCS) recoveries were all acceptable.

The Method Blanks associated with these samples were free of contamination.

No other analytical or QC problems were encountered.

SEMIVOLATILE ORGANICS

Two soil samples were analyzed for the TCL List Semivolatiles by method 8270C from SW-846. All results between the PQL and MDL are flagged with a "J", as estimated.

All Tuning criteria for DFTPP were within QC limits.

All the initial and continuing calibration criteria were met for all analytes.

All Internal Standard Areas were within QC limits.

All surrogate standard recoveries were within acceptance limits

All Blank Spike (LCS)/Blank Spike Duplicate (LCSD) recoveries were within QC limits. All RPD's were within QC limits.

The Laboratory Blanks associated with these samples were free of contamination except a "J" flagged value for Bis(2-ethylhexyl) phthalate. No data was affected.

No other QC or analytical problems were encountered.

PESTICIDE/PCB ANALYSIS

Two soil samples were analyzed for the TCL List of Pesticides by method 8081A from SW-846 and PCB's by method 8082 from SW-846.

All the initial and continuing calibration criteria were met for all analytes.

The surrogate standard recovery for DCB and TCMX were within QC acceptance limits.

All Blank Spike (LCS)/Blank Spike Duplicate (LCSD) recoveries were within QC limits. All RPD's were within QC limits.

The Laboratory Blanks associated with these analyses were free of contamination.

All samples were extracted and analyzed within required holding times.

No other analytical or QC problems were encountered.

INORGANIC ANALYSIS

Three soil samples were analyzed for the TAL list of Metals were using SW-846 methods 6010C/7471.

The Zinc results were flagged with an "E" indicating the serial dilution was greater than the 10 % QC limit which may indicate matrix interference in the sample.

All Blank spike (LCS) recoveries were within limits. The CRDL was within QC limits for all metals.

No other analytical or QC problems were encountered.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the details conditioned above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

CAS ASP/CLP Batching Form/Login Sheet

Client Proj #:	746856-02000	Batch Complete:	Yes	Date Revised:	
Submission:	R0903705	Diskette Requested:	No	Date Due:	7/10/09
Client:	Parsons Engineering Science	Date:	7/6/09	Protocol:	SW846
Client Rep:	MPERRY	Custody Seal: Present/Absent:		Shipping No.:	
Project:	SEAD-5 RAOP	Chain of Custody: Present/Absent:		SDG #:	

CAS Job #	Client/EPA ID	Matrix	Requested Parameters	Date Sampled	Date Received	pH (Solids)	% Solids	Remarks Sample Condition
R0903705-001	5OSB0630-1	Soil	6010B, 7471A, 160.3 Modified, 8270C, 8081A, 8082, 8260B	7/1/09	7/2/09			
R0903705-002	5OSB0630-2 *	Soil	6010B, 7471A, 160.3 Modified, 8270C, 8081A, 8082, 8260B	7/1/09	7/2/09			
R0903705-003	5OSB0630-3	Soil	6010B, 7471A, 160.3 Modified, 8270C, 8081A, 8082, 8260B	7/1/09	7/2/09			

* sample is mostly rock, extractions methods 8081, 8082, and 8270 can not be done.

Folder Comments:

1 Mustard Street, Suite 250
Rochester, NY 14609

Confirmation of Sample Receipt

To:	Simriti Tanwar	**From:**	Michael Perry
Email:	simriti.tanwar@parsons.com	**Email:**	MPerry@caslab.com
Fax:	617-946-9777	**Fax:**	585-288-8475
Phone:	617-449-1570	**Phone:**	585-288-5380 x129

Samples for analysis have been received by Columbia Analytical Services on 7/ 2/09 and assigned our Service Request number **R0903705**. **Please verify the following information and notify me of any corrections as soon as possible.**

The estimated completion date for this work is: **7/10/09**

Client: Parsons Engineering Science
Project: SEAD-5 RAOP/746856-02000

PO Number: 746856-02000-00

EDD Required: Yes

Tier: IV

Report To:
Simriti Tanwar
Parsons Engineering Science
150 Federal St. 4th Floor
Boston, MA 02110

Billing Address:
Jeffrey Adams
Parsons Engineering Science
150 Federal St. 4th Floor
Boston, MA 02110

Comments:

Thank you for your business!

A - Test is Authorized H - Test is On Hold P - Test is Authorized for Prep Only C - Test has been Cancelled * - Test has assigned QC

				160.3 Modified TS	6010B Ag T	6010B Al T	6010B As T	6010B Ba T	6010B Be T	6010B Cd T	6010B Co T	6010B Cr T	6010B Cu T	6010B Fe T	6010B K T
R0903705-001	5OSB0630-1	Soil	7/ 1/09 1247	A	A	A	A	A	A	A	A	A	A	A	A
R0903705-002	5OSB0630-2	Soil	7/ 1/09 1253	A	A	A	A	A	A	A	A	A	A	A	A
R0903705-003	5OSB0630-3	Soil	7/ 1/09 1240	A	A	A	A	A	A	A	A	A	A	A	A

				6010B Mg T	6010B Mn T	6010B Na T	6010B Ni T	6010B Pb T	6010B Sb T	6010B Se T	6010B Sn T	6010B Tl T	6010B V T	6010B Zn T	7471A Hg
R0903705-001	5OSB0630-1	Soil	7/ 1/09 1247	A	A	A	A	A	A	A	A	A	A	A	A
R0903705-002	5OSB0630-2	Soil	7/ 1/09 1253	A	A	A	A	A	A	A	A	A	A	A	A
R0903705-003	5OSB0630-3	Soil	7/ 1/09 1240	A	A	A	A	A	A	A	A	A	A	A	A

				8081A PEST_OC	8082 PCB	8260B VOC_FP	8270C SVO
R0903705-001	5OSB0630-1	Soil	7/ 1/09 1247	A	A	A	A
R0903705-002	5OSB0630-2	Soil	7/ 1/09 1253	A	A	A	A
R0903705-003	5OSB0630-3	Soil	7/ 1/09 1240	A	A	A	A

Data Validation
SEAD-5 Construction Completion Report
Seneca Army Depot Activity

PROJECT NAME/NO.	USACE - Seneca Army Depot SEAD-5
LAB:	Columbia Analytical Services, Inc. (CAS)
SDG:	R0903705
FRACTION:	TCL VOC (SW846 8260B)
MEDIA:	SOIL
NUMBER OF SAMPLES:	3

CRITERIA	Did Analyses Meet all criteria as specified in the SOPS?	Region 2 Acceptable limits / criteria	Comments/Qualifying Actions	Qualifiers Added?
Data Completeness, Holding Times, Preservation, & Solids Percentage	Yes	Cooler temp < 10º. Samples holding time requirement < 14 days. Solids percentage >50%.	Cooler was received at 7°C by the laboratory. All samples were received in good condition based on the laboratory login report. Solid percentage was at least 50 percent in the samples.	No
System Monitoring Compounds	Yes	recoveries within limits (70 - 130%) or laboratory established limits	All system monitoring compound recoveries were within the laboratory limits for all samples in this SDG. No action was taken.	No
Matrix Spike/Matrix Spike Duplicates and Laboratory Control Sample Recoveries	Yes	MS/MSD: 1 per 20 project samples. Recoveries within lab limits (or 70-130%). RPD < lab limit.	No MS/MSD were collected for this SDG. LCS results were within the laboratory established QC limits and the project advisory limits of 70-130%. No action was taken.	No
Blanks	Yes	Method blanks: 1 per 20 project samples. No TCL or TICs detected in MB, TB, or EB.	No TCLs were detected in the associated method blank.	No
GC/MS Instrument Performance Check	Yes	Performance check every 12 hours per instrument. Ion abundances normalized to m/z 95.		No
TCL Analytes	Yes	RRT within 0.06 RRT units of standard RRT in CV.4. Relative intensities of characteristic ions within ± 30% of reference MS.	The standard relative ion intensities generally agree within 20% for all TCLs detected. All RTs within 0.06 RRT units of the standard RRT.	No
Tentatively Identified Compounds	N/A	No TCLs are listed as TIC. Ions in reference MS with relative intensity≥10% present in sample MS. TIC and "best match" standard relative ion intensities agree within ± 20%.	TICs were not evaluated for this project.	No

Data Validation
SEAD-5 Construction Completion Report
Seneca Army Depot Activity

PROJECT NAME/NO.	USACE - Seneca Army Depot SEAD-5
LAB:	Columbia Analytical Services, Inc. (CAS)
SDG:	R0903705
FRACTION:	TCL VOC (SW846 8260B)
MEDIA:	SOIL
NUMBER OF SAMPLES:	3

CRITERIA	Did Analyses Meet all criteria as specified in the SOPS?	Region 2 Acceptable limits / criteria	Comments/Qualifying Actions	Qualifiers Added?
Reported Quantitation Limits	Yes	Quantitation limits adjusted to reflect sample dilutions and moisture.		No
GC/MS Initial Calibration	No	%RSD ≤ 20%. Average RRFs > 0.050.	The initial calibration (6/30/09) associated with all samples in this SDG was outside the %RSD criteria for bromoform (25.3%RSD). Validation qualification of the sample data was not required since bromoform sample results were nondetect.	No
GC/MS Continuing Calibration	Yes	CV performed for every 12 hours per instrument. %D ≤ 20%. RRFs ≥ 0.05.		No
Internal Standards	Yes	IS areas of samples & blank within (-50% to + 100%). RTs < 30 seconds.	Standard recovery area within the QC limits for all standards; and retention times were within 30 seconds of the standard for all samples that were used in this SDG.	No
Field Duplicate	N/A	All % RPD ≤ 50%?	A field duplicate was not collected for this SDG.	No

RT = Retention Time; %D = Percent Deviation; %RPD = Relative Percent Difference; %RSD = Percent Relative Standard Deviation; RRF = Relative Response Factor;
TCL = Target Compound List; TIC = Tentatively Identified Compound; CCV = Continuing Calibration Verification

Data Validation
SEAD-5 Construction Completion Report
Seneca Army Depot Activity

PROJECT NAME/NO. USACE - Seneca Army Depot SEAD-5
LAB: Columbia Analytical Services, Inc. (CAS)
SDG: R0903705
FRACTION: TCL SVOC (SW846 8270C)
MEDIA: SOIL
NUMBER OF SAMPLES: 2

CRITERIA	Did Analyses Meet all criteria as specified in the SOPS?	Region 2 Acceptable limits / criteria	Comments/Qualifying Actions	Qualifiers Added?
Data Completeness, Holding Times, Preservation, & Solids Percentage	Yes	Cooler temp < 10 ºC. Samples extracted within <	Cooler was received at 7°C by the laboratory. All samples were received in good condition based on the laboratory login report. Solid percentage was at least 50 percent in the samples. It was noted that an extraction could not be performed for sample	No
System Monitoring Compounds	Yes	Recoveries for all samples within lab established limits		No
Matrix Spike/Matrix Spike Duplicates	Yes	MS/MSD: 1 per 20 project samples or each preparation batch. Recoveries within lab	There were no designated MS/MSD samples associated with this SDG. No action taken.	No
Lab Control Sample/Duplicate	Yes	Recoveries within lab limits (or 70-130%).	LCS results were within the laboratory established QC limits.	No
Blanks	No	Method blanks: 1 per 20 project samples. No TCL or TICs detected in MB or EB.	Laboratory method blank SBLK1 associated with the samples in this SDG contained bis(2-ethylhexyl)phthalate at a concentration of 83 ug/kg. Sample results for this compound which were detected below the reporting limit were qualified "U" at the quantitation limit. No EB was collected for this SDG.	Yes
GC/MS Instrument Performance Check	Yes	Instrument performance check analyzed for every 12	Instrument performance check met requirement.	No
TCL Analytes	Yes	RRT of TCL within 0.06 RRT units of standard RRT in CV. Relative intensities of	All RTs within 0.06 RRT units of the standard RRT. The standard relative ion intensities generally agree within 20% for all TCLs detected.	No
Tentatively Identified Compounds	N/A	No TCLs are listed as TIC.Ions in reference MS	TICs were evaluated for this SDG.	No
Quantitation Limits	Yes	Quantitation limits adjusted to reflect sample dilutions and moisture.		No
GC/MS Initial Calibration	No	%RSD ≤ 15%?. Average RRFs > 0.050.	The initial calibration (4/17/09) associated with all samples in this SDG was outside the %RSD criteria for 2,4-dinitrophenol (28.63%RSD). Validation qualification of this compound was not required since 2,4-dinitrophenol was not detected in the	No
GC/MS Continuing Calibration	Yes	CV performed for every 12 hours per instrument. %D ≤ 20%. RRFs ≥ 0.05.		No
Internal Standards	Yes	IS areas within (-50% to + 100%). RTs of IS within 30 seconds.	Standard recovery area within the QC limits for all standards; and retention times were within 30 seconds of the standard for all samples that were used.	No
Field Duplicate	N/A	% RPD ≤ 50%.	A field duplicate was not collected for this SDG.	No

RT = Retention Time; %D = Percent Deviation; %RPD = Relative Percent Difference; %RSD = Percent Relative Standard Deviation; RRF = Relative Response Factor;
TCL = Target Compound List; TIC = Tentatively Identified Compound; CCV = Continuing Calibration Verification

Data Validation
SEAD-5 Construction Completion Report
Seneca Army Depot Activity

PROJECT NAME/NO. USACE - Seneca Army Depot SEAD-5
LAB: Columbia Analytical Services, Inc. (CAS)
SDG: R0903705
FRACTION: Pesticides (SW846 8081A)
MEDIA: SOIL
NUMBER OF SAMPLES: 2

CRITERIA	Did Analyses Meet all criteria as specified in the SOPS?	Region 2 Acceptable limits / criteria	Comments/Qualifying Actions	Qualifiers Added?
Data Completeness, Holding Times, Preservation, & Solids Percentage	Yes	Cooler temp < 4 ºC. Samples extracted within < 14 days & analyzed within <40 days. Solids percentage >50%.	Coolers were received at 7°C by the laboratory. All samples were received in good condition based on the laboratory login report. Solid percentage was at least 50 percent in the samples. It was noted that an extraction could not be performed for sample 50OSBM0630-2 since this sample contained mostly rock.	NO
System Monitoring Compounds	Yes	Surrogates TCMX & DCB recoveries within 30-150%. RT within windows established during initial 5-point analysis.	All system compound recoveries were within the laboratory established limits. All RTs were within the established limits.	NO
Matrix Spike/Matrix Spike Duplicates	Yes	MS/MSD: 1 per 20 project samples or each preparation batch. Recoveries within limits specified in Table 6 of SOP HW-44.	MS/MSD analysis was not conducted for this SDG.	NO
Lab Control Sample/ Duplicate	Yes	LCS/LCSD: 1 per 20 project samples. Recoveries within limits specified in Table 3 of Region 2 SOP HW-44.	The LCS/LCSD results were within the laboratory established limits.	NO
Blanks	Yes	Method blanks: 1 per 20 project samples. No TCL detected in MB or EB.	No target compounds were detected in the associated method blank. No EB collected for this SDG.	NO
GC Instrument Performance Check	Yes	Chromatogram baselines stable.		NO

TCL Analytes	Yes	RTs of TCL within established RT windows for both columns. %D <25%.		NO
Reported Quantitation Limits	Yes	Quantitation limits adjusted to reflect sample dilutions and moisture.		NO
GC Initial Calibration	Yes	ICV performed at start of analytical sequence. %RSD ≤ 20%. RTs within established windows.		NO
GC Continuing Calibration/Calibration Verification	Yes	CV performed after every 10 samples & at end of each analytical sequence. %RSD ≤ 20%. RTs within windows established during initial calibration.		NO
Field Duplicate	N/A	% RPD ≤ 50%.	A field duplicate pair was not collected for this SDG.	NO

RT = Retention Time; %D = Percent Deviation; %RPD = Relative Percent Difference; %RSD = Percent Relative Standard Deviation; RRF = Relative Response Factor
TCL = Target Compound List; TIC = Tentatively Identified Compound; CCV = Continuing Calibration Verification

Nondetects reported by the laboratory indicate analytes are not detected above the reporting limits (RLs). The higher of the two columns are usually reported as the final result.

Data Validation
SEAD-5 Construction Completion Report
Seneca Army Depot Activity

PROJECT NAME/NO.	USACE - Seneca Army Depot SEAD-5
LAB:	Columbia Analytical Services, Inc. (CAS)
SDG:	R0903705
FRACTION:	PCB (SW846 8082)
MEDIA:	SOIL
NUMBER OF SAMPLES:	2

CRITERIA	Did Analyses Meet all criteria as specified in the SOPS?	Region 2 Acceptable limits / criteria	Comments/Qualifying Actions	Qualifiers Added?
Data Completeness, Holding Times, Preservation, & Solids Percentage	Yes	Cooler temp < 10 ºC. Samples extracted within < 14 days & analyzed within <40 days. Solids percentage >50%.	Coolers were received at 7°C by the laboratory. All samples were received in good condition based on the laboratory login report. Solid percentage was at least 50 percent in the samples. It was noted that an extraction could not be performed on sample 50OSBM0630-2 since this sample contained mostly rock.	NO
System Monitoring Compounds	Yes	Surrogates TCMX & DCB recoveries within 30-150%. RT within windows established during initial 5-point analysis.	All recoveries within the laboratory established limits.	NO
Matrix Spike/Matrix Spike Duplicates	Yes	MS/MSD: 1 per 20 project samples or each preparation batch. Recoveries within limits specified in Table 5 of SOP HW-44.	MS/MSD analysis was not conducted for this SDG.	NO
Lab Control Sample/ Duplicates	Yes	LCS/LCSD: 1 per 20 project samples or each preparation batch. Recoveries within limits specified in Table 3 of SOP HW-44.	The LCS results were within the laboratory established limits and the limits of 70-130% and %RPDs were below the laboratory established limit and limit of 25%.	NO
Blanks	Yes	Method blanks: 1 per 20 project samples.	No Aroclors were detected in the associated method blank.	NO
GC Instrument Performance Check	Yes	Chromatogram baselines stable.		NO
TCL Analytes	Yes	RTs of identified PCBs within established RT windows for both columns. %D for positive sample results on two GC columns <25%.	No PCBs were identified in any project samples in this SDG.	NO

Reported Quantitation Limits	Yes	Quantitation limits adjusted to reflect sample dilutions and moisture.		NO
GC Initial Calibration	Yes	ICV performed at start of analytical sequence. %RSD ≤ 20%. RTs within established windows.		NO
GC Continuing Calibration Check	Yes	CV performed after every 10 samples & at end of each analytical sequence. %RSD ≤ 20%. RTs within windows established during initial calibration.		NO
Field Duplicate	N/A	% RPD ≤ 50%.	A field duplicate pair was not collected for this SDG.	NO

RT = Retention Time; %D = Percent Deviation; %RPD = Relative Percent Difference; %RSD = Percent Relative Standard Deviation; RRF = Relative Response Factor
TCL = Target Compound List; CCV = Continuing Calibration Verification

Nondetects reported by the laboratory indicate analytes are not detected above the reporting limits (RLs). The higher of the two columns are usually reported as the final result.

Data Validation
SEAD-5 Construction Completion Report
Seneca Army Depot Activity

PROJECT NAME/NO.	USACE - Seneca Army Depot SEAD-5
LAB:	Columbia Analytical Services, Inc. (CAS)
SDG:	R0903705
FRACTION:	Metals (SW846 6010B and 7471A)
MEDIA:	SOIL
NUMBER OF SAMPLES:	3

CRITERIA	Did Analyses Meet all criteria as specified in the SOPS?	Region 2 Acceptable limits / criteria	Comments/Qualifying Actions	Qualifiers Added?
Data Completeness, Holding Times & Preservation	Yes	Cooler temp < 10 C. Holding Time Hg < 28 days, all other metals < 180 days from collection.	Samples were received in good condition with ice and cooler temperature at 7ºC according to the lab cooler receipt and preservation check form. Solid percentages were all at least 90% for the samples in this SDG.	No
Calibration	Yes	r^2 ≥ 0.995 CCV every 10 samps or 2 hours ICV/CCV %R btw 90-110%	Calibrations available, taken every ten samples, and within recovery limits for metals.	No
Blanks (prep blank, ICB, CCB)	No	Method blanks: 1 per 20 project samples.	ICB associated with all samples contains silver, barium, antimony, and thallium less than the reporting limit at concentrations of 0.59, 0.81, 4.66, and 2.63 ug/L, respectively; CCBs associated with all samples contains calcium, silver, barium, antimony, and vanadium less than the reporting limit at concentrations of 14.9, 0.46, 1, 4.68, and 0.24 ug/L, respectively; and the prep blank associated with all samples contains barium, chromium, and nickel less than the reporting limit at concentrations of 0.05, 0.11, and 0.03 mg/kg, respectively. The antimony result reported less than the reporting limit for sample 50OSBM0630-1was qualified "U" at the quantitation limit.	Yes
CRDL Standard	Yes	CRDL results btw 70-130%	CRDL analyses conducted at the beginning and end of the analysis. All met requirements.	No
Laboratory Control Sample	Yes	LCS/LCSD: 1 per 20 project samples or each preparation batch. LCS limits within 80-120%.	Solid LCS results within limits for metals.	No
Duplicates	Yes	RPD < 35% or Absolute Diff < 2 RL when samp/dup value < 5x RL	No laboratory duplicate associated with this SDG. No action taken.	No
Matrix Spike/Matrix Spike Duplicates	Yes	MS/MSD: 1 per 20 project samples or each preparation batch. Recoveries within lab limits. MS/MSD %RPDs <= 20%. Spike Recovery limits 75-125%	Spike sample results for 50OSBM0630-3 were within the limits for all metals.	No

ICP Interference Check Sample (ICS)	Yes	ICS results within 80-120%.	All concentrations detected in all samples within the ICP Linear Range. No action was taken.	No
Serial Dilution	No	Performed on samples of a similar matrix or 1 per 20 samples. %D ≤ 10% conc ≥ 25xDL (7470A/7471A) and 10x IDL (6010B) for 5-fold dilution.	Serial dilution was performed on sample 50OSBM0630-3 with %D out of criteria for nickel (11%D), lead (12%D), and zinc (14%D). Positive results for these analytes in the project samples were qualified "J".	Yes
Field Duplicate Precision	N/A	%RPD less than 50%	A field duplicate pair was not collected for this SDG.	No

RT = Retention Time; %D = Percent Deviation; %RPD = Relative Percent Difference; %RSD = Percent Relative Standard Deviation; RRF = Relative Response Factor;
TCL = Target Compound List; TIC = Tentatively Identified Compound; CCV = Continuing Calibration Verification
TCL = Target Compound List; MS = Matrix Spike; MSD = Matrix Spike Duplicate;

Analytical Results
SEAD-5 Construction Completion Report
Seneca Army Depot Activity

SITE LOCATION								SEAD-5		SEAD-5		SEAD-5		
LOCATION ID								SEAD-16		SEAD-16		SEAD-16		
MATRIX								BORROW		BORROW		BORROW		
SAMPLE ID								5OSB0630-1		5OSB0630-2		5OSB0630-3		
TOP OF SAMPLE								0.2		0.2		0.2		
BOTTOM OF SAMPLE								0.4		0.4		0.4		
SAMPLE DATE								7/1/2009		7/1/2009		7/1/2009		
QC CODE								SA		SA		SA		
STUDY ID								RAOP		RAOP		RAOP		
Parameter	**Units**	**Maximum Value**	**Frequency of Detection**	**Criteria[1] Level**	**Number of Exceedances**	**Number of Times Detected**	**Number of Samples Collected**	Value	(Q)	Value	(Q)	Value	(Q)	
1,1,1-Trichloroethane	UG/KG	0	0%	680	0	0	3	5	U	5	U	5	U	
1,1,2,2-Tetrachloroethane	UG/KG	0.36	33%		0	1	3	0.36	J	5	U	5	U	
1,1,2-Trichloroethane	UG/KG	0	0%		0	0	3	5	U	5	U	5	U	
1,1-Dichloroethane	UG/KG	0	0%	270	0	0	3	5	U	5	U	5	U	
1,1-Dichloroethene	UG/KG	0	0%	330	0	0	3	5	U	5	U	5	U	
1,2-Dichloroethane	UG/KG	0	0%	20	0	0	3	5	U	5	U	5	U	
1,2-Dichloropropane	UG/KG	0.33	33%		0	1	3	0.33	J	5	U	5	U	
Acetone	UG/KG	4.3	100%	50	0	3	3	4.3	J	1.8	J	1.8	J	
Benzene	UG/KG	0.34	33%	60	0	1	3	0.34	J	5	U	5	U	
Bromodichloromethane	UG/KG	0	0%		0	0	3	5	U	5	U	5	U	
Bromoform	UG/KG	0	0%		0	0	3	5	U	5	U	5	U	
Carbon disulfide	UG/KG	0	0%		0	0	3	10	U	10	U	10	U	
Carbon tetrachloride	UG/KG	0	0%	760	0	0	3	5	U	5	U	5	U	
Chlorobenzene	UG/KG	0	0%	1100	0	0	3	5	U	5	U	5	U	
Chlorodibromomethane	UG/KG	0	0%		0	0	3	5	U	5	U	5	U	
Chloroethane	UG/KG	0	0%		0	0	3	5	U	5	U	5	U	
Chloroform	UG/KG	0.37	33%	370	0	1	3	0.37	J	5	U	5	U	
Cis-1,2-Dichloroethene	UG/KG	0.35	33%	250	0	1	3	0.35	J	5	U	5	U	
Cis-1,3-Dichloropropene	UG/KG	0	0%		0	0	3	5	U	5	U	5	U	
Ethyl benzene	UG/KG	0	0%	1000	0	0	3	5	U	5	U	5	U	
Meta/Para Xylene	UG/KG	0	0%	260	0	0	3	5	U	5	U	5	U	
Methyl bromide	UG/KG	0	0%		0	0	3	5	U	5	U	5	U	
Methyl butyl ketone	UG/KG	0	0%		0	0	3	10	U	10	U	10	U	
Methyl chloride	UG/KG	0	0%		0	0	3	5	U	5	U	5	U	
Methyl ethyl ketone	UG/KG	0	0%	120	0	0	3	10	U	10	U	10	U	
Methyl isobutyl ketone	UG/KG	0	0%		0	0	3	10	U	10	U	10	U	
Methylene chloride	UG/KG	0	0%	50	0	0	3	5	U	5	U	5	U	
Ortho Xylene	UG/KG	0	0%	260	0	0	3	5	U	5	U	5	U	
Styrene	UG/KG	0	0%		0	0	3	5	U	5	U	5	U	
Tetrachloroethene	UG/KG	0	0%	1300	0	0	3	5	U	5	U	5	U	
Toluene	UG/KG	0	0%	700	0	0	3	5	U	5	U	5	U	
Trans-1,2-Dichloroethene	UG/KG	0	0%	190	0	0	3	5	U	5	U	5	U	
Trans-1,3-Dichloropropene	UG/KG	0	0%		0	0	3	5	U	5	U	5	U	
Trichloroethene	UG/KG	0	0%	470	0	0	3	5	U	5	U	5	U	
Vinyl chloride	UG/KG	0	0%	20	0	0	3	5	U	5	U	5	U	
1,2,4-Trichlorobenzene	UG/KG	0	0%		0	0	2	330	U			330	U	
1,2-Dichlorobenzene	UG/KG	0	0%	1100	0	0	2	330	U			330	U	
1,3-Dichlorobenzene	UG/KG	0	0%	2400	0	0	2	330	U			330	U	
1,4-Dichlorobenzene	UG/KG	0	0%	1800	0	0	2	330	U			330	U	
2,4,5-Trichlorophenol	UG/KG	0	0%		0	0	2	330	U			330	U	
2,4,6-Trichlorophenol	UG/KG	0	0%		0	0	2	330	U			330	U	
2,4-Dichlorophenol	UG/KG	0	0%		0	0	2	330	U			330	U	
2,4-Dimethylphenol	UG/KG	0	0%		0	0	2	330	U			330	U	
2,4-Dinitrophenol	UG/KG	0	0%		0	0	2	1700	U			1700	U	
2,4-Dinitrotoluene	UG/KG	430	50%		0	1	2	430				330	U	
2,6-Dinitrotoluene	UG/KG	0	0%		0	0	2	330	U			330	U	
2-Chloronaphthalene	UG/KG	0	0%		0	0	2	330	U			330	U	
2-Chlorophenol	UG/KG	0	0%		0	0	2	330	U			330	U	

Analytical Results
SEAD-5 Construction Completion Report
Seneca Army Depot Activity

SITE LOCATION	SEAD-5	SEAD-5	SEAD-5
LOCATION ID	SEAD-16	SEAD-16	SEAD-16
MATRIX	BORROW	BORROW	BORROW
SAMPLE ID	5OSB0630-1	5OSB0630-2	5OSB0630-3
TOP OF SAMPLE	0.2	0.2	0.2
BOTTOM OF SAMPLE	0.4	0.4	0.4
SAMPLE DATE	7/1/2009	7/1/2009	7/1/2009
QC CODE	SA	SA	SA
STUDY ID	RAOP	RAOP	RAOP

Parameter	Units	Maximum Value	Frequency of Detection	Criteria[1] Level	Number of Exceedances	Number of Times Detected	Number of Samples Collected	Value	(Q)	Value	(Q)	Value	(Q)
2-Methylnaphthalene	UG/KG	0	0%		0	0	2	330	U			330	U
2-Methylphenol	UG/KG	0	0%	330	0	0	2	330	U			330	U
2-Nitroaniline	UG/KG	0	0%		0	0	2	1700	U			1700	U
2-Nitrophenol	UG/KG	0	0%		0	0	2	330	U			330	U
3,3'-Dichlorobenzidine	UG/KG	0	0%		0	0	2	330	U			330	U
3-Nitroaniline	UG/KG	0	0%		0	0	2	1700	U			1700	U
4,6-Dinitro-2-methylphenol	UG/KG	0	0%		0	0	2	1700	U			1700	U
4-Bromophenyl phenyl ether	UG/KG	0	0%		0	0	2	330	U			330	U
4-Chloro-3-methylphenol	UG/KG	0	0%		0	0	2	330	U			330	U
4-Chloroaniline	UG/KG	0	0%		0	0	2	330	U			330	U
4-Chlorophenyl phenyl ether	UG/KG	0	0%		0	0	2	330	U			330	U
4-Nitroaniline	UG/KG	0	0%		0	0	2	1700	U			1700	U
4-Nitrophenol	UG/KG	0	0%		0	0	2	1700	U			1700	U
Acenaphthene	UG/KG	0	0%	20000	0	0	2	330	U			330	U
Acenaphthylene	UG/KG	51	50%	100000	0	1	2	51	J			330	U
Anthracene	UG/KG	100	50%	100000	0	1	2	100	J			330	U
Benzo(a)anthracene	UG/KG	240	50%	1000	0	1	2	240	J			330	U
Benzo(a)pyrene	UG/KG	250	50%	1000	0	1	2	250	J			330	U
Benzo(b)fluoranthene	UG/KG	200	50%	1000	0	1	2	200	J			330	U
Benzo(ghi)perylene	UG/KG	220	50%	100000	0	1	2	220	J			330	U
Benzo(k)fluoranthene	UG/KG	200	50%	800	0	1	2	200	J			330	U
Benzyl alcohol	UG/KG	100	100%		0	2	2	100	J			48	J
Bis(2-Chloroethoxy)methane	UG/KG	0	0%		0	0	2	330	U			330	U
Bis(2-Chloroethyl)ether	UG/KG	0	0%		0	0	2	330	U			330	U
Bis(2-Chloroisopropyl)ether	UG/KG	0	0%		0	0	2	330	U			330	U
Bis(2-Ethylhexyl)phthalate	UG/KG	0	0%		0	0	2	350	U			360	U
Butylbenzylphthalate	UG/KG	0	0%		0	0	2	330	U			330	U
Carbazole	UG/KG	0	0%		0	0	2	330	U			330	U
Chrysene	UG/KG	250	50%	1000	0	1	2	250	J			330	U
Di-n-butylphthalate	UG/KG	0	0%		0	0	2	330	U			330	U
Di-n-octylphthalate	UG/KG	0	0%		0	0	2	330	U			330	U
Dibenz(a,h)anthracene	UG/KG	60	50%	330	0	1	2	60	J			330	U
Dibenzofuran	UG/KG	0	0%	7000	0	0	2	330	U			330	U
Diethyl phthalate	UG/KG	0	0%		0	0	2	330	U			330	U
Dimethylphthalate	UG/KG	0	0%		0	0	2	330	U			330	U
Fluoranthene	UG/KG	450	50%	100000	0	1	2	450				330	U
Fluorene	UG/KG	0	0%	30000	0	0	2	330	U			330	U
Hexachlorobenzene	UG/KG	0	0%	330	0	0	2	330	U			330	U
Hexachlorobutadiene	UG/KG	0	0%		0	0	2	330	U			330	U
Hexachlorocyclopentadiene	UG/KG	0	0%		0	0	2	330	U			330	U
Hexachloroethane	UG/KG	0	0%		0	0	2	330	U			330	U
Indeno(1,2,3-cd)pyrene	UG/KG	190	50%	500	0	1	2	190	J			330	U
Isophorone	UG/KG	0	0%		0	0	2	330	U			330	U
N-Nitrosodimethylamine	UG/KG	0	0%		0	0	2	330	U			330	U
N-Nitrosodiphenylamine	UG/KG	0	0%		0	0	2	330	U			330	U
N-Nitrosodipropylamine	UG/KG	0	0%		0	0	2	330	U			330	U
Naphthalene	UG/KG	36	50%	12000	0	1	2	36	J			330	U
Nitrobenzene	UG/KG	0	0%		0	0	2	330	U			330	U
Pentachlorophenol	UG/KG	0	0%	800	0	0	2	1700	U			1700	U

Analytical Results
SEAD-5 Construction Completion Report
Seneca Army Depot Activity

SITE LOCATION								SEAD-5		SEAD-5		SEAD-5		
LOCATION ID								SEAD-16		SEAD-16		SEAD-16		
MATRIX								BORROW		BORROW		BORROW		
SAMPLE ID								5OSB0630-1		5OSB0630-2		5OSB0630-3		
TOP OF SAMPLE								0.2		0.2		0.2		
BOTTOM OF SAMPLE								0.4		0.4		0.4		
SAMPLE DATE								7/1/2009		7/1/2009		7/1/2009		
QC CODE								SA		SA		SA		
STUDY ID								RAOP		RAOP		RAOP		
Parameter	**Units**	**Maximum Value**	**Frequency of Detection**	**Criteria[1] Level**	**Number of Exceedances**	**Number of Times Detected**	**Number of Samples Collected**	Value	(Q)	Value	(Q)	Value	(Q)	
Phenanthrene	UG/KG	190	50%	100000	0	1	2	190	J			330	U	
Phenol	UG/KG	0	0%	330	0	0	2	330	U			330	U	
Pyrene	UG/KG	350	50%	100000	0	1	2	350	J			330	U	
Aroclor-1016	UG/KG	0	0%	100	0	0	2	33	U			33	U	
Aroclor-1221	UG/KG	0	0%	100	0	0	2	67	U			67	U	
Aroclor-1232	UG/KG	0	0%	100	0	0	2	33	U			33	U	
Aroclor-1242	UG/KG	0	0%	100	0	0	2	33	U			33	U	
Aroclor-1248	UG/KG	0	0%	100	0	0	2	33	U			33	U	
Aroclor-1254	UG/KG	0	0%	100	0	0	2	33	U			33	U	
Aroclor-1260	UG/KG	0	0%	100	0	0	2	33	U			33	U	
4,4'-DDD	UG/KG	0	0%	3.3	0	0	2	3.3	U			3.3	U	
4,4'-DDE	UG/KG	6.2	50%	3.3	1	1	2	**6.2**				3.3	U	
4,4'-DDT	UG/KG	12	50%	3.3	1	1	2	**12**				3.3	U	
Aldrin	UG/KG	0	0%	5	0	0	2	1.7	U			1.7	U	
Alpha-BHC	UG/KG	0	0%	20	0	0	2	1.7	U			1.7	U	
Alpha-Chlordane	UG/KG	2.2	50%	94	0	1	2	2.2				1.7	U	
Beta-BHC	UG/KG	0	0%	36	0	0	2	1.7	U			1.7	U	
Delta-BHC	UG/KG	0	0%	40	0	0	2	1.7	U			1.7	U	
Dieldrin	UG/KG	0	0%	5	0	0	2	3.3	U			3.3	U	
Endosulfan I	UG/KG	0	0%	2400	0	0	2	1.7	U			1.7	U	
Endosulfan II	UG/KG	0	0%	2400	0	0	2	3.3	U			3.3	U	
Endosulfan sulfate	UG/KG	0	0%	2400	0	0	2	3.3	U			3.3	U	
Endrin	UG/KG	0	0%	14	0	0	2	3.3	U			3.3	U	
Endrin aldehyde	UG/KG	0	0%		0	0	2	3.3	U			3.3	U	
Endrin ketone	UG/KG	0	0%		0	0	2	3.3	U			3.3	U	
Gamma-BHC/Lindane	UG/KG	0	0%	100	0	0	2	1.7	U			1.7	U	
Gamma-Chlordane	UG/KG	2.9	50%		0	1	2	2.9				1.7	U	
Heptachlor	UG/KG	0	0%	42	0	0	2	1.7	U			1.7	U	
Heptachlor epoxide	UG/KG	0	0%		0	0	2	1.7	U			1.7	U	
Methoxychlor	UG/KG	0	0%		0	0	2	17	U			17	U	
Toxaphene	UG/KG	0	0%		0	0	2	33	U			33	U	
Aluminum	MG/KG	9480	100%		0	3	3	4530		3070		9480		
Antimony	MG/KG	0	0%		0	0	3	6.3	U	0.427	U	0.43	U	
Arsenic	MG/KG	5.9	67%	13	0	2	3	0.733	J	0.239	U	5.9		
Barium	MG/KG	71.5	100%	350	0	3	3	43.5		10		71.5		
Beryllium	MG/KG	0.438	100%	7.2	0	3	3	0.301	J	0.23	J	0.438	J	
Cadmium	MG/KG	0.196	100%	2.5	0	3	3	0.196	J	0.061	J	0.177	J	
Calcium	MG/KG	292000	100%		0	3	3	262000		292000		70000		
Chromium	MG/KG	12.4	100%	30	0	3	3	6.9		4.8		12.4		
Cobalt	MG/KG	8.7	100%		0	3	3	2.9	J	3.3	J	8.7		
Copper	MG/KG	40.8	100%	50	0	3	3	30.7		4.8		40.8		
Iron	MG/KG	20500	100%		0	3	3	7940		5940		20500		
Lead	MG/KG	91	100%	63	1	3	3	**91**	J	7.8	J	46.5	J	
Magnesium	MG/KG	39600	100%		0	3	3	12100		39600		24200		
Manganese	MG/KG	879	100%	1600	0	3	3	188		198		879		
Mercury	MG/KG	0.236	100%	0.18	1	3	3	**0.236**		0.011	J	0.067		
Nickel	MG/KG	16.3	100%	30	0	3	3	9.5	J	9.9	J	16.3	J	
Potassium	MG/KG	1440	100%		0	3	3	844		640		1440		
Selenium	MG/KG	1	33%	3.9	0	1	3	0.182	U	0.554	U	1	J	

Analytical Results
SEAD-5 Construction Completion Report
Seneca Army Depot Activity

SITE LOCATION								SEAD-5		SEAD-5		SEAD-5	
LOCATION ID								SEAD-16		SEAD-16		SEAD-16	
MATRIX								BORROW		BORROW		BORROW	
SAMPLE ID								5OSB0630-1		5OSB0630-2		5OSB0630-3	
TOP OF SAMPLE								0.2		0.2		0.2	
BOTTOM OF SAMPLE								0.4		0.4		0.4	
SAMPLE DATE								7/1/2009		7/1/2009		7/1/2009	
QC CODE								SA		SA		SA	
STUDY ID								RAOP		RAOP		RAOP	
Parameter	**Units**	**Maximum Value**	**Frequency of Detection**	**Criteria[1] Level**	**Number of Exceedances**	**Number of Times Detected**	**Number of Samples Collected**	Value	(Q)	Value	(Q)	Value	(Q)
Silver	MG/KG	0	0%	2	0	0	3	0.027	U	0.027	U	0.028	U
Sodium	MG/KG	183	100%		0	3	3	168		183		103	J
Thallium	MG/KG	0	0%		0	0	3	0.557	U	0.564	U	0.946	U
Vanadium	MG/KG	18.4	100%		0	3	3	8.4		7.3		18.4	
Zinc	MG/KG	68	100%	109	0	3	3	35.1	J	7.1	J	68	J

(1) NYSDEC Unrestricted Use Soil Cleanup Objective, 6 NYCRR Part 375-6.

Analytical Results
SEAD-5 Construction Completion Report
Seneca Army Depot Activity

SITE LOCATION							SEAD-5	SEAD-5	SEAD-5
LOCATION ID							SEAD-16	SEAD-16	SEAD-16
MATRIX							BORROW	BORROW	BORROW
SAMPLE ID							5OSB0630-1	5OSB0630-2	5OSB0630-3
TOP OF SAMPLE							0.2	0.2	0.2
BOTTOM OF SAMPLE							0.4	0.4	0.4
SAMPLE DATE							7/1/2009	7/1/2009	7/1/2009
QC CODE							SA	SA	SA
STUDY ID							RAOP	RAOP	RAOP
Parameter	**Units**	**Maximum Value**	**Frequency of Detection**	**NYSDEC Restricted Commercial**	**Number of Exceedances**	**Number of Times Detected**	**Number of Samples Collected**	Value (Q)	Value (Q)	Value (Q)
1,1,1-Trichloroethane	UG/KG	0	0%	500000	0	0	3	5 U	5 U	5 U
1,1,2,2-Tetrachloroethane	UG/KG	0.36	33%		0	1	3	0.36 J	5 U	5 U
1,1,2-Trichloroethane	UG/KG	0	0%		0	0	3	5 U	5 U	5 U
1,1-Dichloroethane	UG/KG	0	0%	240000	0	0	3	5 U	5 U	5 U
1,1-Dichloroethene	UG/KG	0	0%	500000	0	0	3	5 U	5 U	5 U
1,2-Dichloroethane	UG/KG	0	0%	30000	0	0	3	5 U	5 U	5 U
1,2-Dichloropropane	UG/KG	0.33	33%		0	1	3	0.33 J	5 U	5 U
Acetone	UG/KG	4.3	100%	500000	0	3	3	4.3 J	1.8 J	1.8 J
Benzene	UG/KG	0.34	33%	44000	0	1	3	0.34 J	5 U	5 U
Bromodichloromethane	UG/KG	0	0%		0	0	3	5 U	5 U	5 U
Bromoform	UG/KG	0	0%		0	0	3	5 U	5 U	5 U
Carbon disulfide	UG/KG	0	0%		0	0	3	10 U	10 U	10 U
Carbon tetrachloride	UG/KG	0	0%	22000	0	0	3	5 U	5 U	5 U
Chlorobenzene	UG/KG	0	0%	500000	0	0	3	5 U	5 U	5 U
Chlorodibromomethane	UG/KG	0	0%		0	0	3	5 U	5 U	5 U
Chloroethane	UG/KG	0	0%		0	0	3	5 U	5 U	5 U
Chloroform	UG/KG	0.37	33%	350000	0	1	3	0.37 J	5 U	5 U
Cis-1,2-Dichloroethene	UG/KG	0.35	33%	500000	0	1	3	0.35 J	5 U	5 U
Cis-1,3-Dichloropropene	UG/KG	0	0%		0	0	3	5 U	5 U	5 U
Ethyl benzene	UG/KG	0	0%	390000	0	0	3	5 U	5 U	5 U
Meta/Para Xylene	UG/KG	0	0%	500000	0	0	3	5 U	5 U	5 U
Methyl bromide	UG/KG	0	0%		0	0	3	5 U	5 U	5 U
Methyl butyl ketone	UG/KG	0	0%		0	0	3	10 U	10 U	10 U
Methyl chloride	UG/KG	0	0%		0	0	3	5 U	5 U	5 U
Methyl ethyl ketone	UG/KG	0	0%	500000	0	0	3	10 U	10 U	10 U
Methyl isobutyl ketone	UG/KG	0	0%		0	0	3	10 U	10 U	10 U
Methylene chloride	UG/KG	0	0%	500000	0	0	3	5 U	5 U	5 U
Ortho Xylene	UG/KG	0	0%	500000	0	0	3	5 U	5 U	5 U
Styrene	UG/KG	0	0%		0	0	3	5 U	5 U	5 U
Tetrachloroethene	UG/KG	0	0%	150000	0	0	3	5 U	5 U	5 U
Toluene	UG/KG	0	0%	500000	0	0	3	5 U	5 U	5 U
Trans-1,2-Dichloroethene	UG/KG	0	0%	500000	0	0	3	5 U	5 U	5 U
Trans-1,3-Dichloropropene	UG/KG	0	0%		0	0	3	5 U	5 U	5 U
Trichloroethene	UG/KG	0	0%	200000	0	0	3	5 U	5 U	5 U
Vinyl chloride	UG/KG	0	0%	13000	0	0	3	5 U	5 U	5 U
1,2,4-Trichlorobenzene	UG/KG	0	0%		0	0	2	330 U		330 U
1,2-Dichlorobenzene	UG/KG	0	0%	500000	0	0	2	330 U		330 U
1,3-Dichlorobenzene	UG/KG	0	0%	280000	0	0	2	330 U		330 U
1,4-Dichlorobenzene	UG/KG	0	0%	130000	0	0	2	330 U		330 U
2,4,5-Trichlorophenol	UG/KG	0	0%		0	0	2	330 U		330 U
2,4,6-Trichlorophenol	UG/KG	0	0%		0	0	2	330 U		330 U
2,4-Dichlorophenol	UG/KG	0	0%		0	0	2	330 U		330 U
2,4-Dimethylphenol	UG/KG	0	0%		0	0	2	330 U		330 U
2,4-Dinitrophenol	UG/KG	0	0%		0	0	2	1700 U		1700 U
2,4-Dinitrotoluene	UG/KG	430	50%		0	1	2	430		330 U
2,6-Dinitrotoluene	UG/KG	0	0%		0	0	2	330 U		330 U
2-Chloronaphthalene	UG/KG	0	0%		0	0	2	330 U		330 U
2-Chlorophenol	UG/KG	0	0%		0	0	2	330 U		330 U
2-Methylnaphthalene	UG/KG	0	0%		0	0	2	330 U		330 U
2-Methylphenol	UG/KG	0	0%	500000	0	0	2	330 U		330 U
2-Nitroaniline	UG/KG	0	0%		0	0	2	1700 U		1700 U
2-Nitrophenol	UG/KG	0	0%		0	0	2	330 U		330 U
3,3'-Dichlorobenzidine	UG/KG	0	0%		0	0	2	330 U		330 U
3-Nitroaniline	UG/KG	0	0%		0	0	2	1700 U		1700 U
4,6-Dinitro-2-methylpheno	UG/KG	0	0%		0	0	2	1700 U		1700 U

Analytical Results
SEAD-5 Construction Completion Report
Seneca Army Depot Activity

SITE LOCATION								SEAD-5	SEAD-5	SEAD-5
LOCATION ID								SEAD-16	SEAD-16	SEAD-16
MATRIX								BORROW	BORROW	BORROW
SAMPLE ID								5OSB0630-1	5OSB0630-2	5OSB0630-3
TOP OF SAMPLE								0.2	0.2	0.2
BOTTOM OF SAMPLE								0.4	0.4	0.4
SAMPLE DATE								7/1/2009	7/1/2009	7/1/2009
QC CODE								SA	SA	SA
STUDY ID								RAOP	RAOP	RAOP
Parameter	**Units**	**Maximum Value**	**Frequency of Detection**	**NYSDEC Restricted Commercial**	**Number of Exceedances**	**Number of Times Detected**	**Number of Samples Collected**	Value (Q)	Value (Q)	Value (Q)
4-Bromophenyl phenyl ethe	UG/KG	0	0%		0	0	2	330 U		330 U
4-Chloro-3-methylpheno	UG/KG	0	0%		0	0	2	330 U		330 U
4-Chloroaniline	UG/KG	0	0%		0	0	2	330 U		330 U
4-Chlorophenyl phenyl ethe	UG/KG	0	0%		0	0	2	330 U		330 U
4-Nitroaniline	UG/KG	0	0%		0	0	2	1700 U		1700 U
4-Nitrophenol	UG/KG	0	0%		0	0	2	1700 U		1700 U
Acenaphthene	UG/KG	0	0%	500000	0	0	2	330 U		330 U
Acenaphthylene	UG/KG	51	50%	500000	0	1	2	51 J		330 U
Anthracene	UG/KG	100	50%	500000	0	1	2	100 J		330 U
Benzo(a)anthracene	UG/KG	240	50%	5600	0	1	2	240 J		330 U
Benzo(a)pyrene	UG/KG	250	50%	1000	0	1	2	250 J		330 U
Benzo(b)fluoranthene	UG/KG	200	50%	5600	0	1	2	200 J		330 U
Benzo(ghi)perylene	UG/KG	220	50%	500000	0	1	2	220 J		330 U
Benzo(k)fluoranthene	UG/KG	200	50%	56000	0	1	2	200 J		330 U
Benzyl alcohol	UG/KG	100	100%		0	2	2	100 J		48 J
Bis(2-Chloroethoxy)methane	UG/KG	0	0%		0	0	2	330 U		330 U
Bis(2-Chloroethyl)ether	UG/KG	0	0%		0	0	2	330 U		330 U
Bis(2-Chloroisopropyl)ether	UG/KG	0	0%		0	0	2	330 U		330 U
Bis(2-Ethylhexyl)phthalate	UG/KG	0	0%		0	0	2	350 U		360 U
Butylbenzylphthalate	UG/KG	0	0%		0	0	2	330 U		330 U
Carbazole	UG/KG	0	0%		0	0	2	330 U		330 U
Chrysene	UG/KG	250	50%	56000	0	1	2	250 J		330 U
Di-n-butylphthalate	UG/KG	0	0%		0	0	2	330 U		330 U
Di-n-octylphthalate	UG/KG	0	0%		0	0	2	330 U		330 U
Dibenz(a,h)anthracene	UG/KG	60	50%	560	0	1	2	60 J		330 U
Dibenzofuran	UG/KG	0	0%	350000	0	0	2	330 U		330 U
Diethyl phthalate	UG/KG	0	0%		0	0	2	330 U		330 U
Dimethylphthalate	UG/KG	0	0%		0	0	2	330 U		330 U
Fluoranthene	UG/KG	450	50%	500000	0	1	2	450		330 U
Fluorene	UG/KG	0	0%	500000	0	0	2	330 U		330 U
Hexachlorobenzene	UG/KG	0	0%	6000	0	0	2	330 U		330 U
Hexachlorobutadiene	UG/KG	0	0%		0	0	2	330 U		330 U
Hexachlorocyclopentadiene	UG/KG	0	0%		0	0	2	330 U		330 U
Hexachloroethane	UG/KG	0	0%		0	0	2	330 U		330 U
Indeno(1,2,3-cd)pyrene	UG/KG	190	50%	5600	0	1	2	190 J		330 U
Isophorone	UG/KG	0	0%		0	0	2	330 U		330 U
N-Nitrosodimethylamine	UG/KG	0	0%		0	0	2	330 U		330 U
N-Nitrosodiphenylamine	UG/KG	0	0%		0	0	2	330 U		330 U
N-Nitrosodipropylamine	UG/KG	0	0%		0	0	2	330 U		330 U
Naphthalene	UG/KG	36	50%	500000	0	1	2	36 J		330 U
Nitrobenzene	UG/KG	0	0%		0	0	2	330 U		330 U
Pentachlorophenol	UG/KG	0	0%	6700	0	0	2	1700 U		1700 U
Phenanthrene	UG/KG	190	50%	500000	0	1	2	190 J		330 U
Phenol	UG/KG	0	0%	500000	0	0	2	330 U		330 U
Pyrene	UG/KG	350	50%	500000	0	1	2	350 J		330 U

Analytical Results
SEAD-5 Construction Completion Report
Seneca Army Depot Activity

SITE LOCATION							SEAD-5	SEAD-5	SEAD-5
LOCATION ID							SEAD-16	SEAD-16	SEAD-16
MATRIX							BORROW	BORROW	BORROW
SAMPLE ID							5OSB0630-1	5OSB0630-2	5OSB0630-3
TOP OF SAMPLE							0.2	0.2	0.2
BOTTOM OF SAMPLE							0.4	0.4	0.4
SAMPLE DATE							7/1/2009	7/1/2009	7/1/2009
QC CODE							SA	SA	SA
STUDY ID							RAOP	RAOP	RAOP
Parameter	**Units**	**Maximum Value**	**Frequency of Detection**	**NYSDEC Restricted Commercial**	**Number of Exceedances**	**Number of Times Detected**	**Number of Samples Collected**	Value (Q)	Value (Q)	Value (Q)
Aroclor-1016	UG/KG	0	0%	1000	0	0	2	33 U		33 U
Aroclor-1221	UG/KG	0	0%	1000	0	0	2	67 U		67 U
Aroclor-1232	UG/KG	0	0%	1000	0	0	2	33 U		33 U
Aroclor-1242	UG/KG	0	0%	1000	0	0	2	33 U		33 U
Aroclor-1248	UG/KG	0	0%	1000	0	0	2	33 U		33 U
Aroclor-1254	UG/KG	0	0%	1000	0	0	2	33 U		33 U
Aroclor-1260	UG/KG	0	0%	1000	0	0	2	33 U		33 U
4,4'-DDD	UG/KG	0	0%	92000	0	0	2	3.3 U		3.3 U
4,4'-DDE	UG/KG	6.2	50%	62000	0	1	2	6.2		3.3 U
4,4'-DDT	UG/KG	12	50%	47000	0	1	2	12		3.3 U
Aldrin	UG/KG	0	0%	680	0	0	2	1.7 U		1.7 U
Alpha-BHC	UG/KG	0	0%	3400	0	0	2	1.7 U		1.7 U
Alpha-Chlordane	UG/KG	2.2	50%	24000	0	1	2	2.2		1.7 U
Beta-BHC	UG/KG	0	0%	3000	0	0	2	1.7 U		1.7 U
Delta-BHC	UG/KG	0	0%	500000	0	0	2	1.7 U		1.7 U
Dieldrin	UG/KG	0	0%	1400	0	0	2	3.3 U		3.3 U
Endosulfan I	UG/KG	0	0%	200000	0	0	2	1.7 U		1.7 U
Endosulfan II	UG/KG	0	0%	200000	0	0	2	3.3 U		3.3 U
Endosulfan sulfate	UG/KG	0	0%	200000	0	0	2	3.3 U		3.3 U
Endrin	UG/KG	0	0%	89000	0	0	2	3.3 U		3.3 U
Endrin aldehyde	UG/KG	0	0%		0	0	2	3.3 U		3.3 U
Endrin ketone	UG/KG	0	0%		0	0	2	3.3 U		3.3 U
Gamma-BHC/Lindane	UG/KG	0	0%	9200	0	0	2	1.7 U		1.7 U
Gamma-Chlordane	UG/KG	2.9	50%		0	1	2	2.9		1.7 U
Heptachlor	UG/KG	0	0%	15000	0	0	2	1.7 U		1.7 U
Heptachlor epoxide	UG/KG	0	0%		0	0	2	1.7 U		1.7 U
Methoxychlor	UG/KG	0	0%		0	0	2	17 U		17 U
Toxaphene	UG/KG	0	0%		0	0	2	33 U		33 U
Aluminum	MG/KG	9480	100%		0	3	3	4530	3070	9480
Antimony	MG/KG	0	0%		0	0	3	6.3 U	0.427 U	0.43 U
Arsenic	MG/KG	5.9	67%	16	0	2	3	0.733 J	0.239 U	5.9
Barium	MG/KG	71.5	100%	400	0	3	3	43.5	10	71.5
Beryllium	MG/KG	0.438	100%	590	0	3	3	0.301 J	0.23 J	0.438 J
Cadmium	MG/KG	0.196	100%	9.3	0	3	3	0.196 J	0.061 J	0.177 J
Calcium	MG/KG	292000	100%		0	3	3	262000	292000	70000
Chromium	MG/KG	12.4	100%	1500	0	3	3	6.9	4.8	12.4
Cobalt	MG/KG	8.7	100%		0	3	3	2.9 J	3.3 J	8.7
Copper	MG/KG	40.8	100%	270	0	3	3	30.7	4.8	40.8
Iron	MG/KG	20500	100%		0	3	3	7940	5940	20500
Lead	MG/KG	91	100%	1000	0	3	3	91 J	7.8 J	46.5 J
Magnesium	MG/KG	39600	100%		0	3	3	12100	39600	24200
Manganese	MG/KG	879	100%	10000	0	3	3	188	198	879
Mercury	MG/KG	0.236	100%	2.8	0	3	3	0.236	0.011 J	0.067
Nickel	MG/KG	16.3	100%	310	0	3	3	9.5 J	9.9 J	16.3 J
Potassium	MG/KG	1440	100%		0	3	3	844	640	1440
Selenium	MG/KG	1	33%	1500	0	1	3	0.182 U	0.554 U	1 J
Silver	MG/KG	0	0%	1500	0	0	3	0.027 U	0.027 U	0.028 U
Sodium	MG/KG	183	100%		0	3	3	168	183	103 J
Thallium	MG/KG	0	0%		0	0	3	0.557 U	0.564 U	0.946 U
Vanadium	MG/KG	18.4	100%		0	3	3	8.4	7.3	18.4
Zinc	MG/KG	68	100%	10000	0	3	3	35.1 J	7.1 J	68 J

(1) NYSDEC Restricted Commercial Use Soil Cleanup Objective, 6 NYCRR Part 375-6

APPENDIX E

OFF-SITE BORROW MATERIAL DATA

Rich.
F-71F
MATT

State of New York
Department of Transportation
Albany, N.Y. 12232
www.nysdot.gov

ASTRID C. GLYNN
COMMISSIONER

DAVID A. PATERSON
GOVERNOR

January 6, 2009

Mr. Matt Simmons
Riccelli Enterprises, Inc.
P.O. Box 6418
6131 East Taft Road
North Syracuse, NY 13212

Geological Source Report Status: **Accepted**
Location: Riccelli Enterprise, Inc.
Source No 4-71F
Phelps, NY

Dear Mr. Simmons:

The 2009 Geologic Source Cyclic and Report Annual Modules submitted for the proposed operating location noted above have been reviewed and accepted. The Geological Source Report Requirements for the 2009 season have been satisfied. However, if significant discrepancies between the report and the quarry operations are noted during field inspection, a revised report will be required. Please note there shall be no extension or alteration to the limits of the area of proposed operations without prior approval from this office.

Aggregate sources which satisfy all applicable requirements of Materials Method 29, issued July 2007 will appear on the Approved List of Sources of Fine and Coarse Aggregates. The Approved List is available on the Internet @

https://www.nysdot.gov/divisions/engineering/technical-services/materials-bureau-repository/mm29.pdf

If the producer or the consulting geologist have any questions regarding these matters, they may call Mr. William Skerritt, or members of his staff in our Materials Bureau Engineering Geology Section at (518) 457-1038.

Very truly yours,

William Skerritt
Engineering Geology

WHS/RLW
File: 4-71F
cc: Jim Jordon, Regional Materials Engineer, Region 4
Stephan Sidlauskas, Continental Placer, Inc.

PW LABORATORIES,INC.
P.O. BOX 56, 5879 FISHER ROAD, EAST SYRACUSE, NY 13057
315-437-1420 • 866-7PW-LABS • Fax 315-437-1752

SIEVE ANALYSIS OF SOIL / AGGREGATE

Project Title: Laboratory Testing

Project #: L-08041

Test Method: ASTM C136 & C117

Report #: 2

Report Date: November 12, 2008

Source:	Lake Road Pit	Sieve Size - Percent Passing Sieve													
Lab I.D. #	Sample	6"	3"	#40	#200										
23775	Bank Run Sand	100	100	69.8	4.4										
23776	Overburden	100	100	95.0	17.2										
	Project Specifications	100	100	0 - 40	0 - 20										

Sample mass, as received, meets minimum mass requirements of test method: Yes X No

Prewashed: Yes X No

Remarks:

Performed By: PE & LS

Checked By: V.J. Thoma

C:_Clients_Jobs\RICELLI ENTERPRISES, INC\2008\L-08041 Lab Testing\Sieve #'s 23774 - 23776

COMPACTION TEST REPORT

STANDARD [ ] MODIFIED [X]

PROCEDURE A [ ] B [ ]

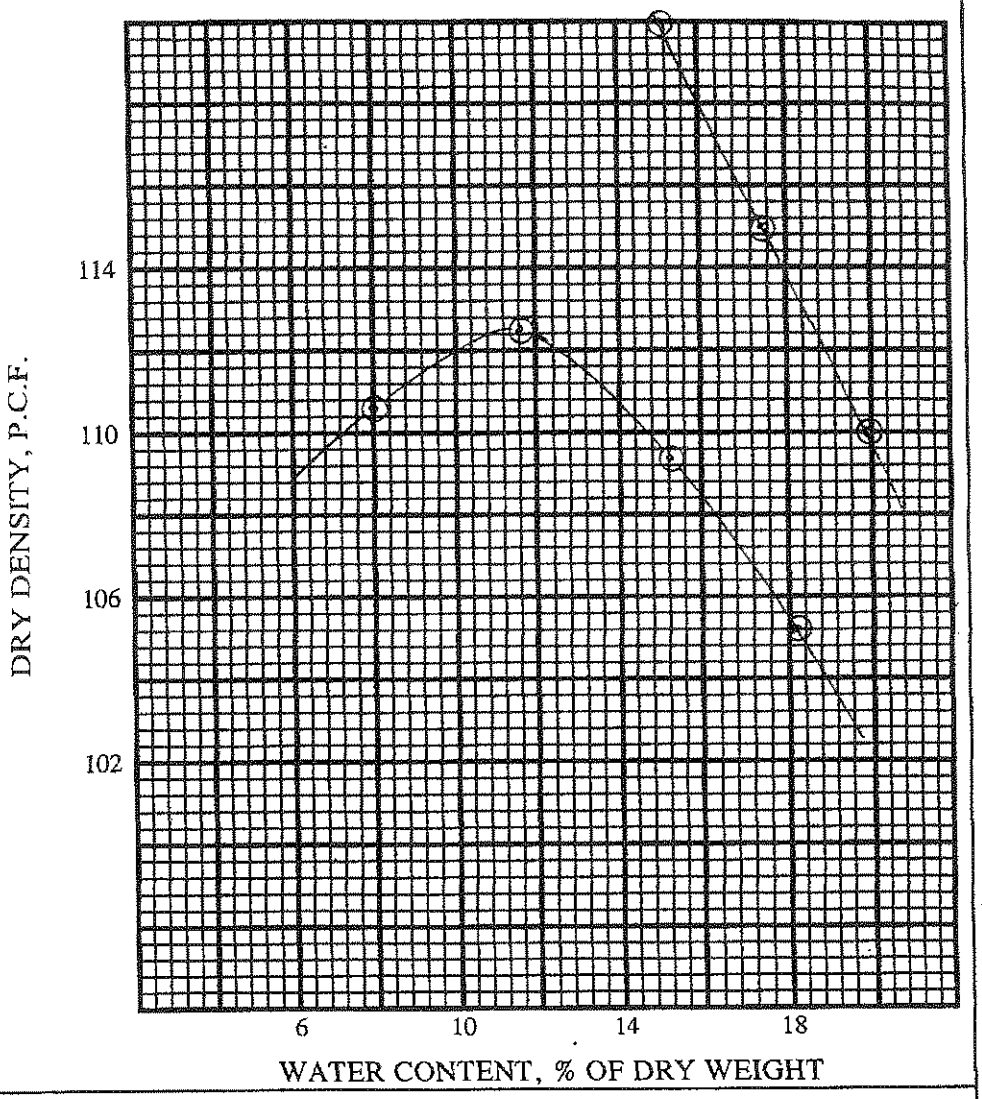
C [X]

MAXIMUM DRY DENSITY
112.5 P.C.F

OPTIMUM MOISTURE CONTENT
11.4 %

PERFORMED IN ACCORDANCE WITH
ASTM D1557
3.9% retained on the 3/4" sieve

SPECIFIC GRAVITY = 2.71



SAMPLE NO.	1	2	3	4			
MOLD + SAMPLE WT.	23.29	23.74	23.78	23.65			
MOLD WEIGHT	14.31	14.31	14.31	14.31			
WET SAMPLE WT.	8.98	9.43	9.47	9.34			
WET DENSITY, P.C.F.	119.5	125.5	126.0	124.3			
MOISTURE CONTENT	8.0	11.6	15.2	18.1			
DRY DENSITY, P.C.F.	110.6	112.5	109.4	105.2			

SOIL LOCATION: Lake Road Material Lab I.D. #21003

DATE 10/26/2006 TESTED BY LS

CHECKED BY: V. J. Thoma

JOB NO. L-06160

REPORT NO. 7

CLIENT Compass Environmental, Inc.

PROJECT LCP Bridge Street Site

(OU1)

Solvay, New York

PW Laboratories, Inc.
P.O. BOX 56, 5879 FISHER ROAD, EAST SYRACUSE, NY 13057
315-437-1420 . (866) 7PW-LABS . FAX NO. 315-437-1752

TestAmerica
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1090 King Georges Post Road - Suite 803 - Edison, NJ 08837 (732) 661-0777 - FAX (610) 661-0305

Compass Environmental	Project: Honeywell LCP OU 1	
201 Bridge St.	Project Number: 1000650	**Reported:**
Solvay NY, 13209	Project Manager: Mark Larowe	11/07/06 17:38

Total Metals by EPA 6000/7000 Series Methods

TestAmerica - King Of Prussia, PA

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Lake Road Pit (KPK0187-01) Soil Sampled: 10/25/06 14:00 Received: 11/06/06 14:20									
Arsenic	**2.5**	1.2	mg/kg dry	5	6110712	11/07/06	11/07/06	EPA 7060A	DILN
Mercury	ND	0.100	"	1	6110714	11/07/06	11/07/06	EPA 7471A	
Aluminum	**3100**	25	"	"	6110706	11/07/06	11/07/06	EPA 6010B	
Antimony	ND	5.0	"	"	"	"	"	"	
Barium	**67**	0.50	"	"	"	"	"	"	
Beryllium	ND	0.20	"	"	"	"	"	"	
Cadmium	ND	1.0	"	"	"	"	"	"	
Calcium	**21000**	250	"	20	"	"	"	"	11, DILN
Chromium	**4.0**	2.5	"	1	"	"	"	"	
Cobalt	**2.4**	1.0	"	"	"	"	"	"	
Copper	**8.8**	1.0	"	"	"	"	"	"	
Iron	**6700**	5.0	"	"	"	"	"	"	11, B
Lead	ND	5.0	"	"	"	"	"	"	
Magnesium	**8900**	12	"	"	"	"	"	"	11
Manganese	**350**	0.50	"	"	"	"	"	"	
Nickel	**5.2**	2.5	"	"	"	"	"	"	11
Potassium	ND	500	"	"	"	"	"	"	
Selenium	ND	12	"	"	"	"	"	"	
Silver	ND	2.5	"	"	"	"	"	"	
Sodium	**230**	25	"	"	"	"	"	"	
Vanadium	**7.6**	1.2	"	"	"	"	"	"	
Zinc	**52**	2.5	"	"	"	"	"	"	
Thallium	ND	0.10	"	"	6110712	11/07/06	11/07/06	EPA 7841	

Enid Dunmire, Project Manager

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Compass Environmental	Project: Honeywell LCP OU 1	
201 Bridge St.	Project Number: 1000650	**Reported:**
Solvay NY, 13209	Project Manager: Mark Larowe	11/07/06 17:38

Polychlorinated Biphenyls by EPA Method 8082

TestAmerica - King Of Prussia, PA

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Lake Road Pit (KPK0187-01) Soil	**Sampled: 10/25/06 14:00**		**Received: 11/06/06 14:20**						**A-01, PRLM**
PCB-1016	ND	50	ug/kg dry	1	6110118	11/06/06	11/07/06	EPA 8082	
PCB-1221	ND	50	"	"	"	"	"	"	
PCB-1232	ND	50	"	"	"	"	"	"	
PCB-1242	ND	50	"	"	"	"	"	"	
PCB-1248	ND	50	"	"	"	"	"	"	
PCB-1254	ND	50	"	"	"	"	"	"	
PCB-1260	ND	50	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*102 %*	*43-112*		"	"	"	"	
Surrogate: Decachlorobiphenyl		*76.5 %*	*17-110*		"	"	"	"	

TestAmerica - King Of Prussia, PA

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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Compass Environmental
201 Bridge St.
Solvay NY, 13209

Project: Honeywell LCP OU 1
Project Number: 1000650
Project Manager: Mark Larowe

Reported:
11/07/06 17:38

Volatile Organic Compounds by EPA Method 8260B

TestAmerica - King Of Prussia, PA

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Lake Road Pit (KPK0187-01) Soil Sampled: 10/25/06 14:00 Received: 11/06/06 14:20									
Acetone	ND	67	ug/kg dry	1	6110632	11/06/06	11/07/06	EPA 8260B	
Benzene	ND	0.67	"	"	"	"	"	"	PDW
Bromodichloromethane	ND	0.67	"	"	"	"	"	"	
Bromoform	ND	1.3	"	"	"	"	"	"	
Bromomethane	ND	2.0	"	"	"	"	"	"	
2-Butanone	ND	67	"	"	"	"	"	"	
Carbon disulfide	**10**	10	"	"	"	"	"	"	
Carbon tetrachloride	ND	1.3	"	"	"	"	"	"	
Chlorobenzene	ND	1.3	"	"	"	"	"	"	
Chlorodibromomethane	ND	1.3	"	"	"	"	"	"	
Chloroethane	ND	2.7	"	"	"	"	"	"	
Chloroform	ND	1.3	"	"	"	"	"	"	
Chloromethane	ND	6.7	"	"	"	"	"	"	
1,1-Dichloroethane	ND	1.3	"	"	"	"	"	"	
1,2-Dichloroethane	ND	1.3	"	"	"	"	"	"	
1,1-Dichloroethene	ND	1.3	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	1.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	1.3	"	"	"	"	"	"	
1,2-Dichloropropane	ND	1.3	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	1.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	1.3	"	"	"	"	"	"	
Ethylbenzene	ND	1.3	"	"	"	"	"	"	
2-Hexanone	ND	6.7	"	"	"	"	"	"	
Methylene chloride	ND	20	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	6.7	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	1.3	"	"	"	"	"	"	
Styrene	ND	1.3	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	1.3	"	"	"	"	"	"	
Tetrachloroethene	ND	0.67	"	"	"	"	"	"	
Toluene	ND	1.3	"	"	"	"	"	"	PDW
1,1,1-Trichloroethane	ND	1.3	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	1.3	"	"	"	"	"	"	
Trichloroethene	ND	0.67	"	"	"	"	"	"	
Trichlorofluoromethane	ND	1.3	"	"	"	"	"	"	
Vinyl chloride	ND	1.3	"	"	"	"	"	"	
Xylenes (total)	**10**	4.0	"	"	"	"	"	"	

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Compass Environmental	Project: Honeywell LCP OU 1	
201 Bridge St.	Project Number: 1000650	**Reported:**
Solvay NY, 13209	Project Manager: Mark Larowe	11/07/06 17:38

Volatile Organic Compounds by EPA Method 8260B

TestAmerica - King Of Prussia, PA

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Lake Road Pit (KPK0187-01) Soil Sampled: 10/25/06 14:00 Received: 11/06/06 14:20									
Surrogate: Dibromofluoromethane		*107 %*	*42.6-163*		*6110632*	*11/06/06*	*11/07/06*	*EPA 8260B*	
Surrogate: 1,2-Dichloroethane-d4		*120 %*	*48.2-167*		*"*	*"*	*"*	*"*	
Surrogate: Toluene-d8		*97.3 %*	*41.6-167*		*"*	*"*	*"*	*"*	

Enid Dunmire, Project Manager

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Compass Environmental	Project: Honeywell LCP OU 1	
201 Bridge St.	Project Number: 1000650	Reported:
Solvay NY, 13209	Project Manager: Mark Larowe	11/07/06 17:38

Semivolatile Organic Compounds by EPA Method 8270D

TestAmerica - King Of Prussia, PA

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Lake Road Pit (KPK0187-01) Soil Sampled: 10/25/06 14:00 Received: 11/06/06 14:20									
Acenaphthene	ND	100	ug/kg dry	1	6110334	11/06/06	11/07/06	EPA 8270D	
Acenaphthylene	ND	100	"	"	"	"	"	"	
Aniline	ND	100	"	"	"	"	"	"	
Anthracene	ND	100	"	"	"	"	"	"	
Benzoic acid	ND	500	"	"	"	"	"	"	
Benz (a) anthracene	ND	100	"	"	"	"	"	"	
Benzo (a) pyrene	ND	100	"	"	"	"	"	"	G03
Benzo (b) fluoranthene	ND	100	"	"	"	"	"	"	G03
Benzo (g,h,i) perylene	ND	100	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	100	"	"	"	"	"	"	G03
Benzyl alcohol	ND	100	"	"	"	"	"	"	
Bis(2-chloroethoxy)methane	ND	100	"	"	"	"	"	"	
Bis(2-chloroethyl)ether	ND	100	"	"	"	"	"	"	
Bis(2-chloroisopropyl)ether	ND	100	"	"	"	"	"	"	
Bis(2-ethylhexyl)phthalate	ND	330	"	"	"	"	"	"	
4-Bromophenyl phenyl ether	ND	100	"	"	"	"	"	"	
Butyl benzyl phthalate	ND	100	"	"	"	"	"	"	
4-Chloroaniline	ND	100	"	"	"	"	"	"	
4-Chloro-3-methylphenol	ND	100	"	"	"	"	"	"	
2-Chloronaphthalene	ND	100	"	"	"	"	"	"	
2-Chlorophenol	ND	100	"	"	"	"	"	"	
4-Chlorophenyl phenyl ether	ND	100	"	"	"	"	"	"	
Chrysene	ND	100	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	100	"	"	"	"	"	"	G03
Dibenzofuran	ND	100	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	100	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	100	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	100	"	"	"	"	"	"	
3,3'-Dichlorobenzidine	ND	500	"	"	"	"	"	"	
2,4-Dichlorophenol	ND	100	"	"	"	"	"	"	
Diethyl phthalate	ND	100	"	"	"	"	"	"	
2,4-Dimethylphenol	ND	100	"	"	"	"	"	"	
Dimethyl phthalate	ND	100	"	"	"	"	"	"	
Di-n-butyl phthalate	ND	330	"	"	"	"	"	"	
4,6-Dinitro-2-methylphenol	ND	500	"	"	"	"	"	"	

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Compass Environmental	Project: Honeywell LCP OU 1	
201 Bridge St.	Project Number: 1000650	Reported:
Solvay NY, 13209	Project Manager: Mark Larowe	11/07/06 17:38

Semivolatile Organic Compounds by EPA Method 8270D

TestAmerica - King Of Prussia, PA

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Lake Road Pit (KPK0187-01) Soil Sampled: 10/25/06 14:00 Received: 11/06/06 14:20									
2,4-Dinitrophenol	ND	500	ug/kg dry	1	6110334	11/06/06	11/07/06	EPA 8270D	
2,4-Dinitrotoluene	ND	100	"	"	"	"	"	"	
2,6-Dinitrotoluene	ND	100	"	"	"	"	"	"	
Diphenylamine	ND	100	"	"	"	"	"	"	
Di-n-octyl phthalate	ND	100	"	"	"	"	"	"	
Fluoranthene	ND	100	"	"	"	"	"	"	
Fluorene	ND	100	"	"	"	"	"	"	
Hexachlorobenzene	ND	100	"	"	"	"	"	"	
Hexachlorobutadiene	ND	100	"	"	"	"	"	"	
Hexachlorocyclopentadiene	ND	100	"	"	"	"	"	"	
Hexachloroethane	ND	100	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	100	"	"	"	"	"	"	
Isophorone	ND	100	"	"	"	"	"	"	
2-Methylnaphthalene	ND	100	"	"	"	"	"	"	
2-Methylphenol	ND	100	"	"	"	"	"	"	
3&4-Methylphenol	ND	100	"	"	"	"	"	"	
Naphthalene	ND	100	"	"	"	"	"	"	
2-Nitroaniline	ND	500	"	"	"	"	"	"	
3-Nitroaniline	ND	500	"	"	"	"	"	"	
4-Nitroaniline	ND	500	"	"	"	"	"	"	
Nitrobenzene	ND	100	"	"	"	"	"	"	
2-Nitrophenol	ND	100	"	"	"	"	"	"	
4-Nitrophenol	ND	500	"	"	"	"	"	"	
N-Nitrosodi-n-propylamine	ND	100	"	"	"	"	"	"	
Pentachlorophenol	ND	500	"	"	"	"	"	"	
Phenanthrene	ND	100	"	"	"	"	"	"	
Phenol	ND	100	"	"	"	"	"	"	
Pyrene	ND	100	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	100	"	"	"	"	"	"	
2,4,5-Trichlorophenol	ND	500	"	"	"	"	"	"	
2,4,6-Trichlorophenol	ND	100	"	"	"	"	"	"	
Surrogate: 2-Fluorophenol		*73.5 %*	*25-121*		"	"	"	"	
Surrogate: Phenol-d6		*76.4 %*	*24-113*		"	"	"	"	
Surrogate: Nitrobenzene-d5		*74.3 %*	*23-120*		"	"	"	"	
Surrogate: 2-Fluorobiphenyl		*74.3 %*	*30-115*		"	"	"	"	
Surrogate: 2,4,6-Tribromophenol		*75.6 %*	*19-122*		"	"	"	"	

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Compass Environmental	Project: Honeywell LCP OU 1	
201 Bridge St.	Project Number: 1000650	Reported:
Solvay NY, 13209	Project Manager: Mark Larowe	11/07/06 17:38

Semivolatile Organic Compounds by EPA Method 8270D

TestAmerica - King Of Prussia, PA

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Lake Road Pit (KPK0187-01) Soil Sampled: 10/25/06 14:00 Received: 11/06/06 14:20									
Surrogate: Terphenyl-d14		*80.7 %*		*18-137*	*6110334*	*11/06/06*	*11/07/06*	*EPA 8270D*	

Enid Dunmire, Project Manager

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(732) 661-0777 - FAX (610) 661-0305

Compass Environmental 201 Bridge St. Solvay NY, 13209	Project: Honeywell LCP OU 1 Project Number: 1000650 Project Manager: Mark Larowe	**Reported:** 11/07/06 17:38

Notes and Definitions

PRLM	Preliminary results
PDW	The analytical runs from the NaHSO4 vials received for this sample were not reportable due to QC problems. An aliquot of the sample was taken from the non-preserved jar and run in purged drinking water.
G03	The laboratory control spike recoveries associated with this sample were above the laboratory's established acceptance criteria.
Dup	The %RSD between the sample and its duplicate is outside the method acceptable criteria.
DILN	Due to matrix interference and or sample dilution the detection limits for this sample have been elevated.
B	The blank associated with this sample contained 7.57ppm of this compound.
A-01	needs qc
11	This compound was above the method control limits in the Check Standard associated with this sample.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

Enid Dunmire, Project Manager

APPENDIX F

AIR MONITORING RESULTS

Table F-1
Summary of Air Monitoring Data
Construction Completion Report for SEAD-5
Seneca Army Depot Activity

Site	Date	Time	07387 (ug/m^3)	07385 (ug/m^3)	Difference
SEAD-5	7-Jul-09	8:50	14.6	20.7	6.1
		10:50	13.2	17.5	4.3
		12:00	10.2	16.7	6.5
		15:20	6.9	17.6	10.7
		16:40	5.9	16.7	10.8
		17:30	5.5	16.1	10.6
SEAD-5	7-Jul-09	8:40	3.6	8.3	4.7
		11:05	4.7	8.6	3.9
		12:20	4.9	8.2	3.3
		12:20	4.4	7.6	3.2
		15:30	4.3	7.3	3
		16:50	4.2	7.1	2.9
		17:30	4.3	7.9	3.6
SEAD-5	7-Jul-09	8:20	13.1	19.8	6.7
		9:20	10.6	16	5.4
		10:45	19.6	13.8	-5.8
		11:30	33.1	14.1	-19
		12:20	29.4	14.1	-15.3
		13:40	24.7	12.3	-12.4

Notes:

1. The difference column is the difference between upwind and downwind field readings, which must be below 150 ug/m^3 per NYSDEC CAMP..
2. Field readings were recorded with a Dataram.
3. The Datarams were setup at SEAD-5 on July 7, 2009, July 8, 2009, and July 9, 2009. The field personnel checked the Dataram and observed low levels of dust.

Aerosol Monitoring Form

PARSONS 150 FEDERAL STREET BOSTON MA 02110

Project:	Seneca Army Depot Activity - SEAD-5 RAOP		Date 7/7/09
Location:		North - Serial # 07387	Project No.: 746856-02000
Weather:	Partly cloudy	East - Serial #	Inspector:
Instrument Model:	Thermo DATARAM 4000	South - Serial # 07385	Crew:
Calibration Date:	7/7/09	West - Serial #	Location:
			Zero Date:

Time	Instrument	Particulate Count	Wind Dir.	Comments:
6:50	07387	Zero Air Calibration		East of Northern Staging area next to SEAD-5
6:51	07385	Zero Air Calibration		East of Southern Soil cap end.
8:47	07385	SW→NE	20.7 ug/m3	
8:50	07387	"	14.6 ug/m3	Excavator/Dump truck operating
10:43	07385	W→E	17.5 ug/m3	
10:45	07387	"	13.2 ug/m3	Adjacent Stockpile completely removed
12:00	07385	NW→SE	16.7 ug/m3	
12:02	07387	"	10.2 ug/m3	
3:20	07385	NW→SE	17.6 ug/m3	Dozer working operating on soil cap
3:23	07387	"	6.9 ug/m3	
4:39	07387	"	5.9 ug/m3	
4:42	07385	"	16.7 ug/m3	Dozer actively operating on Soil cap
5:32	07385	"	16.1	Fuel Truck running operating
5:35	07387	"	5.4 ug/m3	

Aerosol Monitoring Form

PARSONS 150 FEDERAL STREET BOSTON MA 02110

Date 7/8/09

Project: Seneca Army Depot Activity - SEAD-5 RAOP

Project No.: 746856-02000

Location:

Inspector:

Weather: Partly Sunny, chance of rain

North - Serial #

East - Serial # 07387

Crew:

Instrument Model: Thermo DataRAM 4000

South - Serial #

Location:

Calibration Date:

West - Serial # 07385

Zero Date: 7/8/09

Time	Instrument	Particulate Count	Wind Dir.	Comments:
6:52	#07385			SW corner of Tank Berm
6:52	#07387			East of Eastern edge of Silo
8:36	07387	3.6 ug/m3	W→E	
8:40	07385	8.3 ug/m3	"	
11:03	07387	4.7 ug/m3	NW→SE	
11:06	07385	8.6 ug/m3	"	
12:18	07385	8.2 ug/m3	"	brief 5min rain shower passed by
12:20	07387	4.9 ug/m3	"	"
14:20	07387	4.4 ug/m3	"	
14:24	07385	7.6 ug/m3	"	Kiewit Truck turn & backup 10ft SE
15:31	07385	7.3 ug/m3	"	"
15:51	07387	4.3 ug/m3	"	
16:49	07387	4.2 ug/m3	NW→SE	
16:51	07385	7.1 ug/m3	"	
17:25	07387	4.3 ug/m3	"	Worked has ended for day
17:28	07385	7.9 ug/m3	"	"

Aerosol Monitoring Form

PARSONS 160 FEDERAL STREET BOSTON MA 02110

Date 7/9/09

Project: Seneca Army Depot Activity - SEAD-5 RAOP

Project No.: 746856-02000

Location:

Inspector:

Weather: Sunny, Clear Skys

Crew:

Instrument Model: Thermo Data RAM 4000

Location:

Calibration Date:

Zero Date:

Time	Instrument	Particulate Count	Wind Dir.	Comments:
			North - Serial #	
			East - Serial # 07385	
			South - Serial #	
			West - Serial # 07387	
6:28	07385	Zero Air Calibration		Located ~50ft East of Tekpole on East side
6:28	07387	Zero Air Calibration		Located across street ~50ft East of Fuel Tank
8:13	07385	19.8 ug/m3	SW-NE	Lite wind <3 mph
8:16	07387	13.1 ug/m3	"	"
9:14	07385	16.0 ug/m3	"	"
9:19	07387	10.6 ug/m3	"	"
10:41	07387	19.6 ug/m3	"	"
10:47	07385	13.8 ug/m3	"	"
11:28	07385	14.1 ug/m3	"	"
11:33	07387	33.1 ug/m3	"	"
12:17	07385	14.1 ug/m3	"	Riccill Truck have stopped leaving for Today
12:20	07387	29.4 ug/m3	"	"
13:40	07387	24.7 ug/m3	"	work has stopped for day
13:43	07385	12.3 ug/m3	"	"

APPENDIX G

PHOTO INDEX

Photo Index
SEAD-5 Construction Completion Report
Seneca Army Depot Activity

Photo	Date	Site	Description
1	4/27/2009	SEAD-5	Looking SW at SEAD-5 area, TRCA excavations visible. Stockpile poly visible in bottom left.
2	4/27/2009	SEAD-5/59	Looking SE at SEAD-59/71 South Staging stockpiles located on SEAD-5 sites.
3	4/27/2009	SEAD-5/59	Looking North at the SEAD-59/71 Additional and North Staging stockpiles.
4	4/27/2009	SEAD-16	Crushed concrete pile at SEAD-16. Looking west from MW16-5.
5	4/27/2009	SEAD-16	Gravel piles located at SEAD-16. Looking SE towards SEAD-17.
6	7/6/2009	SEAD-5	Bull dozer spreading out SEAD-59/71 South Staging stockpile across the SEAD-5 soil cap limits.
7	7/6/2009	SEAD-59	Excavator loading haul truck with material from the SEAD-59/71 North Staging stockpiles.
8	7/7/2009	SEAD-59	Dust monitoring location setup at NE corner of North Staging stockpile and NW of salt hut.
9	7/7/2009	SEAD-59	Excavator nearly complete with SEAD-59/71 North Staging stockpile removal.
10	7/7/2009	SEAD-59	Removal of poly from the former location of the SEAD-59/71 North Staging stockpile.
11	7/7/2009	SEAD-59	Excavator nearly finished removing the SEAD-59/71 Additional Staging stockpiles.
12	7/8/2009	SEAD-5	Excavator running North-South across surface to compact of SEAD-59/71 stockpile soil cap.
13	7/8/2009	SEAD-5	Panoramic of SEAD-5 with initial layer of soil cap laid down. 1 foot final cover stakes laid out. Looking to SW.
14	7/8/2009	SEAD-5	Off-site borrow source material unloading on top of demarcation fabric in Grid A-5.
15	7/9/2009	SEAD-5	Bull dozer spreads out off-site borrow source material across the demarcation fabric.
16	7/9/2009	SEAD-5	Off-site borrow source material spread out to 1 foot thickness marked on the stake.
17	7/9/2009	SEAD-5	Feathered edge of soil cap stake (solid orange) and top of soil cap final grade (stripe orange) in the Grid B-9.
18	7/14/2009	SEAD-5	10 Ton vibrator roll compacting final soil cap surface.

Photo: 1 **Date:** 4/27/2009 **Site:** SEAD-5
Description: Looking SW at SEAD-5 area, TRCA excavations visible. Stockpile poly visible in bottom left.

Photo: 2 **Date:** 4/27/2009 **Site:** SEAD-5/59
Description: Looking SE at SEAD-59/71 South Staging stockpiles located on SEAD-5 sites.

Photo: 3 **Date:** 4/27/2009 **Site:** SEAD-5/59
Description: Looking North at the SEAD-59/71 Additional and North Staging stockpiles.

Photo: 4 **Date:** 4/27/2009 **Site:** SEAD-16
Description: Crushed concrete pile at SEAD-16. Looking west from MW16-5.

Photo: 5 **Date:** 7/1/2009 **Site:** SEAD-16
Description: Gravel piles located at SEAD-16. Looking SE towards SEAD-17.

Photo: 6 **Date:** 7/6/2009 **Site:** SEAD-5
Description: Bull dozer spreading out SEAD-59/71 South Staging stockpile across the SEAD-5 soil cap limits.

Photo: 7 **Date:** 7/6/2009 **Site:** SEAD-59
Description: Excavator loading haul truck with material from the SEAD-59/71 North Staging stockpiles.

Photo: 8 **Date:** 7/7/2009 **Site:** SEAD-59
Description: Dust monitoring location setup at NE corner of North Staging stockpile and NW of salt hut.

Photo: 9 **Date:** 7/7/2009 **Site:** SEAD-59
Description: Excavator nearly complete with SEAD-59/71 North Staging stockpile removal.

Photo: 10 **Date:** 7/7/2009 **Site:** SEAD-59
Description: Removal of poly from the former location of the SEAD-59/71 North Staging stockpile.

Photo: 11 **Date:** 7/7/2009 **Site:** SEAD-59
Description: Excavator nearly finished removing the SEAD-59/71 Additional Staging stockpiles.

Photo: 12 **Date:** 7/8/2009 **Site:** SEAD-5
Description: Excavator running North-South across surface to compact of SEAD-59/71 stockpile soil cap.

Photo: 13 **Date:** 7/8/2009 **Site:** SEAD-5

Description: Panoramic of SEAD-5 with initial layer of soil cap laid down. 1 foot final cover stakes laid out. Looking to SW.

Photo: 14 **Date:** 7/8/2009 **Site:** SEAD-5
Description: Off-site borrow source material unloading on top of demarcation fabric in Grid A-5.

Photo: 15 **Date:** 7/9/2009 **Site:** SEAD-5
Description: Bull dozer spreads out off-site borrow source material across the demarcation fabric.

Photo: 16 **Date:** 7/9/2009 **Site:** SEAD-5
Description: Off-site borrow source material spread out to 1 foot thickness marked on the stake.

Photo: 17 **Date:** 7/9/2009 **Site:** SEAD-5
Description: Feathered edge of soil cap stake (solid orange) and top of soil cap final grade (stripe orange) in the Grid B-9.

Photo: 18 **Date:** 7/14/2009 **Site:** SEAD-5
Description: 10 Ton vibrator roll compacting final soil cap surface.