

	<b>Title</b> LSRS Waste Management, Transportation and Disposal Plan	<b>Document No.:</b> SWY-PLA-WP-013	<b>Revision No.:</b> 1
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**WASTE MANAGEMENT AND  
 TRANSPORTATION & DISPOSAL PLAN  
 for the  
 Remediation of the Seaway FUSRAP Site,  
 Northside and Southside Areas,  
 Town of Tonawanda, New York**

Prepared for:  
**United States Army Corps of Engineers – Buffalo District**

Under Contract No: W912P4-07-D-0001  
 Task Order No. 0005

Prepared by:  
**LATA-Sharp Remediation Services, LLC**  
 756 Park Meadow Road  
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Deliverable No. 15

June 30, 2015

	<b>Date:</b> 6/30/15	<b>Title:</b> Site Superintendent
	<b>Date:</b> 6/30/15	<b>Title:</b> Project Manager
	<b>Date:</b> 6/30/15	<b>Title:</b> Program Manager

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## LIST OF ACRONYMS

Ac-227	Actinium-227
AK	Acceptable Knowledge
AMP	Air Monitoring Plan
APP	Accident Prevention Plan
ARARs	Applicable or Relevant and Appropriate Requirements
BCRP	Backfill, Compaction and Restoration Plan
C&D	Construction & Demolition
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CFR	Code of Federal Regulations
CHP	Certified Health Physicist
COC	Contaminant of Concern
CPM	Critical Path Method
CQCP	Contractor Quality Control Plan
DOT	Department of Transportation
EHS	Extremely Hazardous Substances
EPCRA	Emergency Planning and Community Right-to-Know Act
FMCSR	Federal Motor Carrier Safety Regulations
FSP	Field Sampling Plan
FSS	Final Status Survey
FUSRAP	Formerly Utilized Sites Remedial Action Program
IMC	Intermodal Containers
LEPC	Local Emergency Planning Committee
LLW	Low-Level Waste
LSRS	LATA-Sharp Remediation Services, LLC
MARC	Multiple Award Remediation Contract
MARSSIM	Multi-Agency Radiation Survey and Site Investigation Manual
MLLW	Mixed Low-Level Waste
NCP	National (Oil and Hazardous Substances) Contingency Plan
NYCRR	New York Code of Rules and Regulations
NYSDEC	New York State Department of Environmental Conservation
O&M	Operation & Maintenance
OSR	Off-Site Rule
Pa-231	Protactinium-231
pCi/g	Pico Curies per Gram
PDT	Project Delivery Team
POC	Point-of-Contact
POTW	Public-Owned Treatment Works
PPE	Personal Protective Equipment
QA/QC	Quality Assurance/Quality Control
RA	Remedial Action
Ra-226	Radium-226

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RQ	Reportable Quantity
RCP	Regulatory Compliance Plan
RCRA	Resource Recovery and Conservation Act
ROD	Record of Decision
RPP	Radiation Protection Plan
SAP	Sampling and Analysis Plan
SARA	Superfund Amendments and Reauthorization Act
SERC	State Emergency Response Commissions
SOP	Site Operations Plan
SOP	Standard Operating Procedure
SSHP	Site Safety and Health Plan
SWPPP	Storm Water Pollution Prevention Plan
T&D	Transportation & Disposal
Th-230	Thorium-230
TSCA	Toxic Substances Control Act
TSDF	Treatment Storage and Disposal Facility
U-234, -235, -238	Uranium-234, -235, -238
UFP-QAPP	Uniform Federal Policy Quality Assurance Project Plan
USACE	United States Army Corps of Engineers
USEPA	United States Environmental Protection Agency
U-Total	Uranium-Total
WAC	Waste Acceptance Criteria
WMP	Water Management Plan
WMTDP	Waste Management, Transportation and Disposal Plan
WTR	Waste Tracking Report
WWPPP	Waste Water Pollution Prevention Plan

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<b>REVISION LOG</b>  <b>Waste Management, Transportation and Disposal Plan for the Seaway FUSRAP Site, Northside and Southside Areas</b>		
Revision Number/Date	Description of Changes	Pages Affected
0 3/29/15	Original Issue	N/A
0-A 5/4/15	Incorporation of USACE comments	All
1 6/29/15	Changed Project Manager  Updated / Revised Figures  Inserted Signed Waste Profile and WAC Supplement  Updated / Attached the Off-Site Compliance Letter	Section 4.1.2, Section 10.1, Table 10.1  Att. A – Fig 2-1, Att. B – Fig. 4-1  Att. H and Att. I  Section 7.0, Att. K

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**CERTIFICATE OF INDEPENDENT TECHNICAL REVIEW COMPLETION**

LATA-Sharp Remediation Services, LLC (LSRS) has completed the Waste Management, Transportation and Disposal Plan for the Remediation of the Seaway FUSRAP Site, Northside and Southside Areas, Town of Tonawanda, New York. Notice is hereby given that an independent technical review has been conducted by staff of LSRS that is appropriate to the level of risk and complexity inherent in the project, as defined in the Contractor Quality Control Plan (CQCP).

During the independent technical review, compliance with established policy principles and procedures, utilizing justified and valid assumptions, was verified. This included review of assumptions; methods, procedures, and material used in analyses; alternatives evaluated; the appropriateness of data used and level of data obtained; and reasonableness of the results, including whether the product meets the customer's needs consistent with law and existing USACE policy. The document/plan preparation was accomplished by [REDACTED] and the independent technical review was accomplished by [REDACTED] as indicated by signatures below. All reviews are documented via red line track changes in associated text files. Red line edited documents are available upon request.

[REDACTED]

Plan/Report Preparer / Date

[REDACTED]

Project Manager / Date

[REDACTED]

Construction Quality Control System Manager / Date

[REDACTED]

Independent Technical Reviewer / Date

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## 1.0 INTRODUCTION

LATA-Sharp Remediation Services, LLC (LSRS) is providing supplies and services for task order No. 0005 issued under the Multiple Award Remediation Contract (MARC) contract No. W912P4-07-D-0001 with the United States Army Corps of Engineers (USACE), Buffalo District to remediate the Seaway Site in accordance with the *Record of Decision (ROD) for the Seaway Site, Town of Tonawanda, New York* (USACE 2009). The project scope includes the excavation, transportation and disposal (T&D) of Formerly Utilized Sites Remedial Action Program (FUSRAP) contaminated soils/sediments/debris from the Northside and Southside areas outside the containment wall. This work is being conducted by USACE under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) as amended by the Superfund Amendments and Reauthorization Act (SARA). Work performed will follow the requirements of the National Oil and Hazardous Substances Contingency Plan (NCP) and other applicable portions of title 40 of the Code of Federal Regulations.

## 2.0 BACKGROUND

USACE is the lead agency for implementing FUSRAP, which was established to identify, investigate, and if necessary cleanup or control contaminated sites. The Seaway Site is a closed landfill in Tonawanda, New York, that is included on the list of FUSRAP sites. The Seaway Site is an inactive hazardous waste disposal site pursuant to Title 6 of the New York Code of Rules and Regulations (NYCRR) Part 375. The site is listed in the Registry of Inactive Hazardous Waste Sites that is maintained by New York State Department of Environmental Conservation (NYSDEC 2003). Under 6NYCRR 375-2.7(b)(3), inactive hazardous waste disposal sites are classified with respect to the threats they pose to the environment, with a Class 1 posing the greatest threat and Class 5 indicating that a site is properly closed and does not require continued operation, maintenance, or monitoring. The Seaway Site is a Class 4 inactive hazardous waste disposal site.

### 2.1 SITE LOCATION

The Seaway Site is located in the Town of Tonawanda, New York approximately 10 miles north of the City of Buffalo. It is situated northeast of the intersection of State Road 266 (River Road) and Interstate 190 and is approximately ¾ mile southeast of River Road. Figure 2-1, presented in Attachment A, provides a Site Location Map. Ashland Oil & Refining Company owns properties to the east and west; primarily using these areas for industrial purposes. Other industrial facilities are located nearby along River Road. The nearest residences are located to the northwest across the Niagara River on Grand Island and to the east in the Town of Tonawanda. A Niagara Mohawk right of way runs along the eastern fence line.

### 2.2 SITE HISTORY

The Seaway property is approximately 100 acres and is referred to as the Seaway Industrial Park. It is currently owned by the Benderson Development/Sands Mobile Park Corporation, which is the successor by merger to the Seaway Industrial Park Development Company, Inc. Since the late 1980's, Browning-Ferris Industries, Inc. followed by Allied Waste operated the landfill on the property (also referred to as the Niagara Landfill).

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The source of the FUSRAP contaminants of concern (COCs) at the site are residues from uranium processing that was conducted at the nearby Linde Site. Various types of wastes were disposed in the landfill starting in 1930 and ending in 1993. These included municipal, commercial, industrial (including hazardous substances), and construction wastes from nearby communities. Approximately 90 percent of the property (90 acres) has been used as a landfill; approximately 69 acres have been capped. The site contains Seaway Southside (Seaway Area D Adjacent Property and Area Northwest of Seaway Area D) and Seaway Northside (property line surface runoff area).

### 3.0 OBJECTIVE AND SCOPE

The overall objective of the project is to remediate FUSRAP contaminated soils/sediment from the Seaway Southside and Northside areas. Site operations include activities associated with the Remedial Action (RA) to include but not limited to water management, Operation and Maintenance (O&M) of the air monitoring system, O&M of the meteorological station, worker health and safety monitoring, maintenance and radiological monitoring of roads and support areas, utility services, civil surveys, weekly conference calls, on-site meetings, dust control, site security, daily reporting and any other daily site activities. Site operations will occur after mobilization and prior to demobilization. LSRS will provide all labor, material, equipment, tools, supplies, sanitary facilities, and off-site laboratory facilities necessary to perform the services required to complete the tasks specified under the statement of work.

Work to be performed includes the following:

- Preparation of Project Work Plans
- Assisting USACE with a Preconstruction Community Outreach Meeting
- Mobilization and Demobilization activities
- Site health, safety and environmental monitoring
- Field verification of actual conditions and location of each work area
- Verifying the location of the current Landfill Cut-off Wall
- Sampling and Analysis
- Excavation of clean overburden for storage and possible reuse
- Excavation of FUSRAP contaminated materials from areas that are outside of the landfill's Leachate Collection System and Cut-off Wall
- On-site Waste Management and Packaging
- Transportation and off-site disposal
- Radiation survey
- Final Status Survey
- Backfilling the excavated areas and Site Restoration
- Final Status Survey Technical Data Packages (TDPs) for each Survey Unit
- Project Construction Report and Lessons Learned Report

#### 3.1 CLEANUP STANDARDS

In accordance with the Record of Decision (ROD) for the Seaway Site, dated October 2009, exposure pathways considered to be complete for the main receptors of concern (i.e. a

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hypothetical industrial worker and a hypothetical recreational user) are incidental soil ingestion, inhalation of fugitive dust, and direct external gamma radiation. COCs include Ra-226, Th-230, U-Total, Pa-231, and Ac-227. The ARARs related to the soil removal are averaged over 100 m<sup>2</sup> resulting in the following:

**Table 3.1 - Standards for Soil (pCi/g) Incremental to Background**

<b>Radionuclide</b>	<b>Background (pCi/g)</b>	<b>Surface Soil Standard (pCi/g)</b>	<b>Subsurface Soil Standard (pCi/g)</b>
Ra-226	1.1	5	15
Th-230	1.4	15	44
U-Total	6.3	110	1,000

Surface soil is considered to be the ground surface to a depth less than or equal to 15 centimeters (cm) and subsurface soil is considered to be at depths greater than 15 cm below ground surface.

U-Total includes the three isotopes U-234, U-235, and U-238. The USACE determined that activities of uranium daughters Ac-227 and Pa-231 were correlated with site specific activities of U-235 and U-238, respectively. The USACE combined the contributions from Ac-227 and Pa-231 with the doses from U-235 and U-238, respectively, so that cleanup guidelines were lowered for U-235 and U-238. Additionally, per 40 CFR 192 and using Ra-226 as an example, the allowable remaining concentration after remediation is 5 pCi/g while the 15 pCi/g is a removal standard (USACE, 2009).

If a mixture of radionuclides is present at a given location, then the sum of ratios applies per Multi-Agency Radiation Survey and Site Investigation Manual (MARSSIM). Calculations are provided in the Seaway ROD (USACE, 2009).

### 3.2 REGULATORY COMPLIANCE DRIVERS

The below-listed codes, standards, laws, and regulations establish the minimum requirements for waste management, transportation, and disposal work for the Seaway FUSRAP project.

- 29 CFR, Part 1910, Occupational Safety and Health Standards
- 40 CFR, Chapter 1 – Environmental Protection Agency – Parts 260-299 - Resource Conservation and Recovery Act (RCRA): Establishes the standards for hazardous and Mixed Low-level Waste (MLLW) identification, treatment, storage, and disposal of solid and hazardous waste generated by the project.
- 40 CFR, Chapter 1 – Environmental Protection Agency – Part 761 - Toxic Substances Control Act (TSCA): Establishes requirements for identifying, storing, transporting, and treating TSCA and TSCA Low Level Radioactive Waste (LLW).
- 40 CFR, Chapter 1 – Environmental Protection Agency – Part 330.440 Procedures for Planning and Implementing Off-Site Response Actions
- 49 CFR, Subchapter C – Hazardous Material Regulations – Parts 40, 100-185, 325, and 355-399

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- New York State Hazardous Waste Management Regulations - 6 NYCRR Part 370 Series (Parts 370, 371, 372, 373, 374 and 376)
- 6 NYCRR, 360
- 6 NYCRR, 380
- EM 1110-35-3 Management Guidelines for Working with RAD and Mixed Waste. (USACE 2005);
- EP 200-1-1 Process and Procedures for RCRA Manifesting. (USACE 2010a)

Other regulations that may be applicable include:

- Army Regulations, including:
  - AR 11-9 The Army Radiation Safety Program
  - AR 200-1 Environmental Protection and Enhancement
  - AR 200-2 Environmental Effects of Army Actions
  - AR 420-47 Solid and Hazardous Waste Management
- EM 385-1-1: Safety and Health Requirements
- February 2006 U.S. Army policy memorandum, “Sustainable Management of Waste in Military Construction, Renovation, and Demolition Activities”

#### **4.0 WASTE GENERATION PLANNING AND CONTROL**

##### **4.1 PROJECT WASTE GENERATION PLANNING**

Work will be planned, authorized, and accomplished under controlled conditions using work plans, instructions, or procedures commensurate with the complexity and risk of the work. Processes important to waste disposition activities (e.g., characterization, radiological surveys, etc.) are identified in the project SAP. Manifesting will be established to ensure the traceability of the waste from the point of generation through final disposition. Methods for controlling runoff, contaminant migration and spill cleanups are presented in detail the WWPPP, SWPPP, and the WMP.

Attachment B presents Figure 4-1 Site Layout and Figure 4-2 Site Support Area.

##### *4.1.1 Pollution Prevention / Waste Minimization*

LSRS will plan every activity to meet the obligations and responsibilities under Executive Order 12856, Federal Compliance with Right-to-Know Laws and Pollution Prevention Requirements, Executive Order 13423, Strengthening Federal Environmental, Energy, and Transportation Management, Executive Order 13514, Federal Leadership in Environmental, Energy, and Economic Performance, Executive Order 13101, Greening the Government through Waste Prevention, Recycling, and Federal Acquisition, and The Pollution Prevention Act of 1990.

##### *4.1.2 Leak and Spill Protection and Prevention*

**Responsibilities:** Leak and spill prevention is the responsibility of all personnel performing work under this plan. Key positions for spill prevention and control are [REDACTED], the Project Manager, [REDACTED], the Site Superintendent, and all LSRS employees and subcontractors present on-site. In all cases, spills will be reported to the Site Superintendent and cleaned-up

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immediately upon discovery. The Site Superintendent will notify the Project Manager. The specific personnel roles and responsibilities for leak and spill prevention are provided below:

**Project Manager:**

- Ensures personnel are trained regarding associated hazards of the materials used and appropriate spill response procedures;
- Coordinates emergency activities relating to control and cleanup of a hazardous material to minimize any hazards to personnel or the environment;
- Is familiar with the leak and spill prevention protocols discussed in this Section; and
- Ensures personnel are trained in the appropriate spill control procedures in accordance with this section.

**Project Personnel:**

- Are aware of the circumstances and situations that may contribute to oil spills and leaks; and
- Understand how to deal with spills, leaks, and other potential emergencies involving significant materials, including oils and petroleum products.

**Potential Spill Sources:** Multiple on-site activities have a potential for causing a release of oil, hazardous materials, and other pollutants into the environment. Several of these on-site activities and associated spill prevention/containment measures are provided below:

**Vehicle Storage and Equipment Maintenance:** To complete the contract Scope of Work, the project will have several pieces of equipment on the site including excavators, bulldozers, site trucks and rolloff trucks, etc. Maintenance for these vehicles will be conducted on site in a designated area as described in the Site Operations Plan. Leaks and spills of motor oil, hydraulic fluids, coolants, and other lubricants pose potential sources of pollutants. Material handling vehicles and other equipment used on site will be stored or parked in a designated area. Dry cleanup methods such as drip pans, absorbent, and absorbent pads will be used for vehicles leaking fluids until appropriate repairs are made.

**Fuel Transfer Operations:** During filling operations by outside vendors and the transfer of fuels into containers or vehicle tanks by on-site personnel, there is a potential for spillage or leaks of petroleum products onto the pavement. When unloading oil and other petroleum products, the following will be implemented:

- Fill tanks to less than 90% capacity;
- Avoid topping off tanks during filling operations;
- Ensure that a spill kit is accessible during the transfer operation; and
- Contain and clean up spills and leaks immediately.

Loading and unloading of waste materials will be performed in a designated area on site as described in the Site Operations Plan.

*4.1.3 Inventory of On-Site Chemicals and Materials*

Chemicals, oil and petroleum products, and wastes that are stored on site will be in strong tight

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containers or covered areas. An inventory of chemicals stored on site will be available. Flammable liquids and aerosols will be stored in flammable storage cabinets. Other liquid materials will be stored over secondary containment. Products (i.e. chemicals, oil, etc.) will be stored as recommended by the manufacturer.

## 5.0 SEAWAY PROJECT WASTE STREAMS

The following table lists the projected waste streams, classifications, volumes, packaging methods, and disposition pathway. Detailed information regarding LSRS’s transportation and disposal subcontractors is provided in Section 7.0 – Waste Transportation and Disposal.

**Table 5.1 – Seaway Project Waste Streams**

Waste Stream	Description	Classification <sup>1</sup>	Estimated Volume	Packaging Method	Transportation	Disposal Facility
Waste Water	Water Collected from Excavations	Non-hazardous Non-regulated	Unknown - TBD	Portable Storage Tank	Discharge with Approval to Public Owned Treatment Works (POTW)	Town of Tonawanda POTW
FUSRAP Waste	Northside Excavation	Non-hazardous Non-regulated; or Class 7.	300 BCY <sup>2</sup>	Direct Load to Intermodal Containers	Environmental Rail Solutions, Inc. (ERS)	US Ecology Idaho, Inc. (USEI)
	Southside Excavation	Non-hazardous Non-regulated; or Class 7.	800 BCY <sup>2</sup>	Direct Load to Intermodal Containers	Environmental Rail Solutions, Inc. (ERS)	US Ecology Idaho, Inc. (USEI)

Note 1- Classification is based on historical analytical data provided in the Addendum to the Feasibility Study for the Seaway Site, dated April 2008. Confirmatory laboratory analysis will be performed on all generated waste in accordance with USEI’s waste acceptance criteria. Representative sampling and analysis as required by USEI will be performed in accordance with LSRS’s approved Sampling and Analysis Plan.

Note 2 - BCY –Bank Cubic Yards as measured by land survey records to be performed by a licensed NY land surveyor.

The following sections provide general definitions of the waste streams that may be generated during the Seaway project remediation activities. The list may not be inclusive of all wastes generated. Attachment C presents the analytical results summary from historical sampling campaigns as documented in the Addendum to the Feasibility Study for the Seaway Site, dated April 2008.

### 5.1 CHEMICAL AND HAZARDOUS WASTE

Federal regulations define hazardous wastes as those solid wastes that are either specifically

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listed in the solid waste regulations (“F”, “U”, “P”, or “K”-listed wastes) or have particular characteristics (reactivity, ignitability, corrosivity, or leachability). Hazardous wastes include solids, liquids, and gases. In addition, New York regulations define certain wastes containing PCBs as hazardous waste.

Chemical and hazardous wastes generated from excavation activities (e.g. soils, debris, materials) that are determined to be hazardous wastes, per RCRA/TSCA regulations, will be set aside as directed by the USACE. The disposition of hazardous materials not associated with FUSRAP wastes are outside of the scope of work for this contract. USACE will determine final disposition of these materials, in accordance with the applicable regulatory requirements.

### 5.2 FUSRAP - LOW LEVEL RADIOACTIVE WASTE

Based on a review of the site historical data, anticipated FUSRAP waste streams will be excavated from three specific areas as described in the site work plans. Because the Buffalo/Niagara Falls/Tonawanda areas are known to be influenced by Naturally Occurring Radioactive Materials (NORM) or in the case of the Buffalo area, Technically Enhanced Naturally Occurring Radioactive Materials (TNORM) which are materials that are not FUSRAP waste, LSRS will use visual identification of the TNORM materials that show elevated screenings to differentiate between FUSRAP and TNORM materials. TNORM materials in the area have the distinct nature and makeup that most observers identify as “slag”. This “slag” material appears granular in nature and is generally a light lime color. Should suspected TNORM materials that are not comingled with other FUSRAP soils or waste be encountered, LSRS will immediately notify the COR and the excavation will be suspended pending a determination and agreement on a path forward.

### 5.3 NORTHSIDE EXCAVATION

The Northside Excavation is located midway down the side of the landfill between a property fence and the access road that encompasses the landfill. An estimated 300 yd<sup>3</sup> may be excavated from this area. The material expected to be encountered in this area is close to the surface. Walkover scans will be done of the area prior to any excavation. Areas where the walkover survey indicates that elevated radiological levels of material exist will be excavated and loaded directly into lined Intermodal containers, sealed, weighed and transported to the rail transload facility where they were be loaded onto railcars for transportation to the disposal facility.

### 5.4 SOUTHSIDE EXCAVATION

On the south side of the landfill located between the collection system and the property fence are two areas of identified FUSRAP materials. Access to these materials will require stripping of uncontaminated soil overburden in order to expose the materials beneath. The overburden will be moved to the northwest of the excavation area where it will be staged, sampled, and analyzed in preparation for use as backfill material. A smaller area to the southeast contains some material that could be approximately 12 feet below ground surface. The soils above the contaminated material will be removed and staged to the northwest of the excavation and also sampled to be used as backfill material. In order to maintain the integrity of an existing slurry wall, this area of excavation may need to be done in narrow sections with each section being excavated, surveyed, sampled and analyzed and then backfilled along the slurry wall in a two-to-one slope. When this section is backfilled the next narrow section will be excavated to remove

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the FUSRAP waste. This Southside Area will be remediated in a stepwise fashion as described in to protect the integrity of the slurry wall. Excavation methods will be modified based on the specific conditions of the slurry wall as it is uncovered to access the waste below.

#### 5.5 NYSDEC AND NYSDOH CONFIRMATION

Sufficient time is available in the project schedule for NYSDEC and NYSDOH to perform its needed confirmations for the Northside and Southside Area A. LSRS will perform the Northside FSS in early August and will begin backfilling and restoration in early September, thereby allowing 15 working days throughout August for the State’s participation.

For the Southside Area B, LSRS’s approach is to excavate narrow cuts, perform surveys and sampling, and then close the cut to protect the slurry wall. LSRS will collect duplicate samples for analysis by the State. Otherwise, LSRS requests that the State be on-site, being given a 15-day notice, to collect samples in parallel with LSRS.

#### 5.6 LIQUID WASTE

LSRS assumes that the water which accumulates in an excavation is attributed to surface runoff from precipitation that has accumulated is not associated with waste contact leachate. Water samples will be collected from the on-site storage tank and analyzed in accordance with the Sampling and Analysis Plan. LSRS will compare the analytical results obtained with the discharge limit requirements prior to discharge to the local POTW system. If water samples indicate that the water has been impacted by waste leachate the COR will be notified immediately and a direction forward will be agreed to.

### 6.0 CHARACTERIZATION STRATEGY

#### 6.1 GENERAL

The analytical laboratory selected for this project is Test America St. Louis, located in Earth City, Missouri. Test America’s St. Louis laboratory is a NELAC/NELAP certified lab, and they meet the requirements set in the scope of work as they are also DoD-ELAP certified. Test America St. Louis is also certified by the state of New York for environmental analysis. The laboratory is responsible for providing sampling bottles, receipt of samples, and production of analytical reports with the required QC data package. Additionally, the data are to be provided in an electronic data deliverable (EDD) in the laboratory’s standard format, as well as in an USACE acceptable data format (i.e. Environmental Restoration Program Information Management System (ERPIMS) data format.). Although it is not anticipated, if for any reason a laboratory change is needed, notification will be provided to USACE prior to making the change.

Sample collection and analysis shall be performed in accordance with EPA-approved and/or industry standard practices (e.g., EPA SW-846, Test Methods for Evaluating Solid Wastes, EPA Series 900 methods). The technical basis for sampling and analysis will be documented in the approved SAP that includes strategy for sampling and analysis, analytical methods, and standard operating procedures that will be employed for waste characterization.

Samples collected for waste characterization shall be submitted to USEPA approved laboratories which also meet the appropriate QC requirements as described in the applicable WAC of the

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receiving facility. Waste characterization information must be traceable to the exact waste package into which the waste was placed. It is anticipated that once the waste is characterized that it will meet the acceptance criteria for USEI. If the scans and screening being done during the guided dig indicate that the material has significantly changed additional characterization sampling will be done to ensure that the acceptance criteria is met.

Waste characterization is the determination of a material’s physical, chemical, and radiological characteristics with sufficient confidence to permit proper segregation, treatment, storage, and disposal according to USEI’s WAC. Materials are characterized by using process knowledge (acceptable knowledge [AK]), sampling and analysis by an approved and accredited laboratory, or a combination of the two methods. Information obtained by hazards categorization screening is considered to be AK. Waste characterization data is linked to the individual waste item or container and documented in the waste tracking system. All waste characterization activities will be conducted in accordance with an approved LSRS SAP. Sampling methodologies are presented in the SAP.

#### 6.2 NEWLY GENERATED WASTE

LSRS will plan and execute all work such that waste is managed at the point of generation. It is the strategy of LSRS to sort, segregate, size reduce (when necessary), package, and ship waste at the point of generation to the extent practical, thus minimizing the need for on-site storage. In the event that newly generated waste needs to be stored on site, the Waste Characterization / Transportation Lead will ensure that a disposition path has been identified and that the waste is packaged in compliance with 49CFR 100-185 and USEI’s WAC.

#### 6.3 CERCLA WASTE

Site investigation activities and implementation of response actions conducted are not expected to generate contaminated media and debris. If sampling and analysis determine that contaminated media and debris are present with the absence of FUSRAP waste, waste generated will be managed in accordance with applicable, relevant, or appropriate requirements (ARAR) and EPA guidance/policies as required by CERCLA.

#### 6.4 PROFILE DEVELOPMENT

LSRS in coordination with USEI has developed the waste profile for the Seaway FUSRAP waste. The profile will be based on waste generation and physical, chemical, and radiological characteristics. Waste profile information is presented in Section 7.0 – Waste Transportation and Disposal.

### 7.0 WASTE TRANSPORTATION AND DISPOSAL

Based on the analytical data provided in the Addendum to the Feasibility Study for the Seaway Site, dated April 2008, and subsequent preliminary concurrence / acceptance from the waste transporter and the waste disposal facility, FUSRAP wastes will be transported via rail by Environmental Rail Solutions, Inc., (ERS), to US Ecology Idaho, Inc. (USEI) for final disposal. ERS transporter subcontractor, Tonawanda Tanks Transport Service (TTT) will transfer the waste containers to the P & H Warehouse WNY (P&H) Transload Facility. The containers will remain secured at the transload facility pending loading onto rail for delivery to USEI.

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**FUSRAP Waste Rail Transporter:**

Environmental Rail Solutions, Inc. (ERS)  
621 Shrewsbury Avenue, Suite 152  
Shrewsbury, NJ 07702  
Phone: 732-212-8140  
Fax: 732-212-8141  
[www.envrail.com](http://www.envrail.com)  
DOT Hazardous Materials Certificate of Registration No: 051812 551 097UW

Attachment D presents the ERS Certificate of Registration.

**FUSRAP Waste Overland Transporter – Subcontractor to ERS**

Tonawanda Tanks Transport Service, Inc. (TTT)  
P.O. Box H  
Buffalo, NY 14217  
Phone: 716-873-9703  
Fax: 716-877-0227  
[www.tonawandatank.com](http://www.tonawandatank.com)  
Waste Transporter Permit No: 9A-080

Attachment E presents the TTT Waste Transporter Permit.

**Transload Facility**

P & H Warehouse WNY (P&H)  
250 Lake Ave.  
Track 853  
Blasdell, NY 14219  
Phone: 716-826-5920  
Fax: 716-822-3739  
[www.phwarehousewny.com](http://www.phwarehousewny.com)

In accordance with 6NYCRR Part 360-17(b)(7), P&H is exempt from permitting requirements. Attachment F presents the explanatory email from the NYSDEC indicating the transload exemption.

**FUSRAP Waste Disposal Facility:**

U.S. Ecology Idaho, Inc. (USEI)  
300 East Mallard, Suite 300  
Boise, ID 83706  
Phone: 208-331-8400  
Fax: 208-331-7900  
[www.usecology.com](http://www.usecology.com)  
Part B Permit EPA ID. No.: IDD073114654

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Attachment G presents the US Ecology Idaho, Inc. – EPA Part B Permit (Signature Page and Renewal Application).

**USEI Waste Profile, Waste Acceptance Criteria Supplement, Waste Acceptance Criteria and Off-Site Compliance Letter:**

Attachment H presents the USEI Waste Profile.  
Attachment I presents the USEI Waste Acceptance Criteria Supplement.  
Attachment J presents the USEI Waste Acceptance Criteria.

**USEI Off-Site Compliance Letter:**

Discussions with the USEPA Region X Regional Off-site Coordinator indicate that USEI is in compliance with Section 121(d)(3) of CERCLA, and the Off-Site Rule (OSR), set forth in the National Contingency Plan (NCP), at 40 CFR 300.440.

The OSR stipulates that wastes must be shipped within 60 days of receipt of the compliance letter. LSRS obtained the compliance letter from the regulator on June 3, 2015.

Attachment K – presents the Off-Site Compliance Letter from the USEPA Regional Offsite Coordinator (ROC)

7.1 PACKAGING AND TRANSPORTATION

Waste will be packaged in a manner that provides containment and protection for transit between the Seaway site and USEI. Selection and use of containers must be appropriate for the waste being packaged. The waste will be packaged for transportation in intermodal containers with rollback tight lids.

On-site and off-site transportation of waste will be coordinated through the LSRS Transportation Lead. Only designated and trained shippers will be authorized to complete shipping papers (e.g., uniform low-level radioactive waste manifests, uniform hazardous waste manifests, bills of lading, etc.) and review waste shipments for compliance with 49CFR. Waste shipping personnel will be trained in accordance with 49CFR subpart H.

For waste shipments involving regulated DOT materials, LSRS will use motor carriers that are approved for use by the DOT. Self-assessments of transportation and packaging operations will be performed to ensure compliance with applicable regulations.

Excavated soils that are wet will be modified by adding a drying agent of granulated polymer to ensure the materials packaged contain “no free liquids” as required by USEI’s WAC.

Packages will be marked and labeled in accordance with DOT requirements for direct shipments to USEI and in accordance with LSRS procedures addressing waste packaging and onsite/offsite transport. For those wastes shipped in commerce (public roads), marking and labeling is performed in accordance with DOT and specific USEI criteria. Each container of waste generated shall be individually marked in accordance with transportation and USEI requirements immediately following containerization and will include the USACE FUSRAP Waste Label.

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USACE is the generator and will provide authorized personnel to provide signatures for waste profiles & manifests. USACE retains title to the waste until it is final-disposed at USEI.

Shipping containers will be tracked daily using the Waste Tracking Report (WTR).

**7.2 DEPARTMENT OF TRANSPORTATION RADIATION DOSE AND CONTAMINATED LIMITS**

Table 7.1 presents the radiation dose and contamination limits for railcar acceptance, package dose rate for transportation, and non-fixed external radioactive contamination limits for packages. DOT only requires transferable contamination and dose rate surveys for vehicles transporting radioactive materials or contaminated items. Therefore, direct contamination surveys will not be performed unless the vehicle has entered a controlled area. For conveyances in which radioactive materials or contaminated items are transported by public roads, rail, DOT 49 CFR regulations will be followed. Typical shipments are EXCLUSIVE USE.

**Table 7.1 – DOT Radiation Dose and Contamination Limits**

Dose Rates	Non-Exclusive Use	Exclusive Use
	Limits	Limits
At any external surface of a package	200 mrem/hr	200 mrem/hr or 1000 mrem/hr IF <sup>1</sup>
At 2 meter from the external surface of a package	10 mrem/hr	N/A
At any point on outer surface of vehicle (including top and underside) <sup>2</sup>	N/A	200 mrem/hr
At any point 2 meters from outer surfaces of vehicle	N/A	10 mrem/hr
Normally occupied space (i.e., cab)	N/A	2 mrem/hr <sup>3,4</sup>

Note 1 - The 1000 mrem/hr limit applies to closed transport vehicles only (i.e., does not apply to flatbed trailers, etc.).

Note 2 - For flatbed trailers, the vertical or horizontal (for the top) planes of the trailer will be used when performing dose rate surveys.

Note 3 - For non- vehicle operators, the dose rate in the cab may exceed 2 mrem/hr if the operator is a radiological worker and is part of a certified dosimetry program.

Note 4 - Whenever a vehicle is operated by an employee monitored through the TLD personnel monitoring program, normally occupied spaces cannot exceed 1.8 mrem/hr

**7.3 APPLICABLE TRANSPORTATION REGULATIONS**

Wastes generated during the excavation activities are expected to be non-regulated C&D debris, municipal, and sanitary waste. The following regulations may apply if waste classifications sampling determines a waste stream is contaminated:

- ICAO/IATA-Dangerous Goods Regulations
- ISO 9001-Quality Management Standard

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- FMCSR-Federal Motor Carrier Safety Regulations
- NYCRR- New York Codes, Rules, Regulations
- Title 29 CFR 1910- Occupational Safety and Health Standards
- Title 40 CFR 61, 262-263 and 700-789
- Title 49 CFR, 100-185, 325 and 355-399

## 8.0 CONTAINER MANAGEMENT, STAGING, AND STORAGE

### 8.1 CONTAINER MANAGEMENT AND TRACKING

LSRS will use intermodal containers from the fleet of our transportation subcontractor. These intermodal containers will be inspected prior to being shipped to the site by the transportation subcontractor to ensure that they are undamaged, uncontaminated and of the proper container type for the waste being shipped for disposal.

Containers will be transported to the site on intermodal chassis where they will be staged for loading by our subcontractor. Once staged on site a radiological control technician will do an inbound survey on the container. Once the container has been surveyed and is deemed not contaminated laborers will use a man lift to open the container and install a liner. Our subcontractor will use a city cab type tractor to pull the chassis with the empty intermodal containers to the dig face. At the dig face the container will be loaded to its estimated optimal weight capacity. After the container is loaded it will be surveyed to ensure that no contaminated soils are on the outside of the container and the container will be driven to a commercial scale located within 2 miles of the site to document the container weight. Containers will be closed tight when not being filled with waste or during rain events during excavation activities.

Should a containers weight need to be adjusted either up or down, the container will be returned to the dig face where the adjustments can be made using the excavator. Once the container is at optimum weight it will be staged in preparation for our transportation subcontractor to pick it up from the project site and transported to the transload facility. Once the container is picked up from the project site by the transportation subcontractor the location of the container will be tracked daily until received and emptied at USEI. The waste manifest and radiological survey data will accompany the waste container as it leaves the site.

As the status and/or location of these containers changes or if specific requirements of a project specific conditions dictate, updates to the container tracking must be made accordingly. Once filled, additional information must be tracked, including the following:

- Date packaged;
- Container ID number;
- Manifest document number;
- Waste type (LLW, MLLW, TSCA LLW, RCRA, TSCA, etc.);
- Waste weight and gross weight;
- Waste codes (as applicable);
- Waste description (including physical form);
- Waste location (point of generation and storage location if applicable);

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- Radionuclides; and
- Appropriate profile identification.

In addition, shipment information will be tracked daily using the Waste Tracking Report including shipment number, date, and destination.

Attachment L presents examples of the waste manifest and bills-of-lading that will be used for this project.

## 8.2 ACCUMULATION, STAGING, AND STORAGE AREAS

### 8.2.1 *Temporary Stockpile Areas*

LSRS will use the “OHIO” (only handle it once) principal for handling the waste. Our work plans will call for the waste to be to direct-load into intermodal containers during remediation activities into intermodal containers to avoid double handling material and reduce labor and fuel costs associated with waste handling. However, LSRS may have to temporarily stockpile waste streams on-site due to container/shipper availability, additional characterization and needs of the project schedule. Waste will be protected according to the SWPPP.

### 8.2.2 *Staging Areas*

LSRS does not anticipate the accumulation of non-hazardous waste (such as recyclable material or construction and demolition debris) or radiological waste that will require staging prior to shipment. If needed, the Waste Characterization/Transportation Lead shall work with project management to establish and manage staging areas.

### 8.2.3 *Inspections*

The LSRS Characterization/Transportation Lead will ensure that routine inspections of temporary storage areas are conducted. These inspections include checking postings, labels, container integrity, and general housekeeping. Additional QC inspection requirements are included in the Contractor Quality Control Plan and the QAPP.

## 9.0 DISPOSITION STRATEGY

### 9.1 OVERVIEW

LSRS will characterize and package all waste in accordance with this WMTDP, SAP, and USEI WAC, as applicable. Subsequent actions include submission of the waste profile sheets and supporting analytical results for USACE approval followed by disposal facility authorization.

### 9.2 WASTEWATER

LSRS assumes the standing water on-site is attributable to surface water runoff, and is not associated with historic site activities. The LSRS Waste Characterization / Transportation Lead will ensure that water accumulating in an excavation is properly collected and stored prior to sampling. It will be managed in accordance with federal, state and local regulations. Anticipated sources of liquid waste are from storm water run-on/run-off. Sampling and analysis of the collected water will be performed in accordance with the SAP to verify that it meets criteria for discharge into the POTW.

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### 9.3 FUSRAP WASTE

Waste that is generated during the Seaway remediation activities will be shipped to USEI. It is anticipated that a waste profile will be created for a single waste stream to handle FUSRAP and FUSRAP/mixed wastes that will be generated as a result of this operation. All waste streams will be managed in accordance with local, state, and federal requirements and follow the respective approval process of USEI, which includes the document generation, and review and approval of characterization determinations. The waste management team will begin interfacing with USEI’s waste acceptance team far in advance of intended shipments to ensure that all administrative requirements are met prior to moving onto the next step. This process ensures that proper characterization determinations are made and that the correct waste codes are assigned to the waste stream to ensure the generated wastes are compliant prior to disposal.

### 9.4 SHIPPING DOCUMENTS

LSRS will accurately and completely prepare the required shipping documents for the transportation and acceptance of the wastes at the disposal facility. Shipping documents, including manifests and / or bills of lading, will be provided to USACE authorized personnel, as the generator, for signature.

### 9.5 CERTIFICATE OF DISPOSAL

LSRS will collect a Certificate of Disposal (COD) for each container shipped for this Waste Stream. The CODs will be turned over to the USACE upon completion of the project.

## 10.0 RESPONSIBILITIES

Waste management activities have subset activities such as waste tracking from cradle-to-grave, waste volume reduction, waste minimization and pollution prevention, packaging, transportation and disposal. Waste management is the responsibility of all personnel performing work under this plan. Work procedures and processes are designated to minimize waste generation to the maximum extent practical. All LSRS team personnel and LSRS subcontractors are required to comply with this WMTDP. Training requirements for the project personnel are summarized in Section 13.0 – Training; and are presented in detail in the Site Safety and Health Plan and the Radiological Protection Plan.

LSRS has identified key positions for the implementation of waste management activities, including the:

- Project Manager; and
- Project Superintendent / On-site QC Representative / Waste Characterization/Transportation Lead.

Support services for waste handling activities will be provided by the Site Health and Safety Officer.

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**Table 10.1 – Summary of Waste Management Key Positions and Supporting Positions**

Key Positions	Name	Responsibility Description
Project Manager	[REDACTED]	Section 10.1
Project Superintendent / On-site QC Representative - Waste Characterization & Transportation Lead	[REDACTED]	Section 10.2
Supporting Positions	Name	Responsibility Description
Waste Transporter	Environmental Rail Solutions	Section 10.3
Site Health and Safety Officer	[REDACTED]	Section 10.4
Laboratory Manager and Project Chemist	[REDACTED]	Section 10.5
CQC System Manager	[REDACTED]	Section 10.6
Radiological Control Technicians	EDi	Section 10.7
Analytical Laboratory	Test America	Section 10.8
Third Party Validator	HSW Engineering	Section 10.8

Their specific responsibilities are provided below.

**10.1 PROJECT MANAGER**

The Project Manager, [REDACTED], is responsible for management and control of all activities associated with the Seaway FUSRAP remediation project. [REDACTED] will ensure that personnel assigned to perform waste management activities do so in accordance with this plan and all appropriate procedures to meet requirements for disposition of the waste. The Project Manager is responsible for making the land disposal restriction notification. In the event of an emergency, the Project Manager, or designee, will make all appropriate notifications.

**10.2 SUPERINTENDENT / ON-SITE QC REPRESENTATIVE**

The Site Superintendent / On-site QC, [REDACTED], is the Waste Characterization and Transportation Lead and will be on-site at all times that waste activities are taking place. He will serve as the point of contact for matters relating to characterization and management of wastes. The Waste Characterization & Transportation Lead is responsible for matters associated with waste handling including but not limited to:

1. Directing project field activities
2. Ensuring that the proper characterization and management of wastes is accomplished;
3. Review USACE QA activities to verify that appropriate QC measures are being conducted and documented;
4. Verify that records related to QC are documented and maintained in a manner that assures they are secure and retrievable; and
5. Verify that corrective actions are conducted and documented in a manner that minimizes or precludes future occurrences.
6. Ensuring that personnel involved in the management of waste are qualified and trained to

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perform job specific duties.

7. Interfacing with USACE and US Ecology (the Treatment, Storage, and Disposal Facility [TSDf]) on characterization, certification, and acceptance.
8. Ensuring that waste packages have the proper certifications for the type of waste contained therein.
9. Ensuring that waste being shipped meets the USEI's Waste Acceptance Criteria (WAC).
10. Ensuring that waste manifests have been accurately and completely prepared by LSRS's subcontractor for transportation.
11. Acquiring signatures on waste profiles and manifests from authorized USACE personal (USACE is the generator)
12. Maintaining the waste container log, shipping documentation, container inspection report and daily waste tracking log.
13. Directing the scheduling of waste container deliveries and shipments. Identifying and fulfilling equipment and other resource requirements

### 10.3 WASTE TRANSPORTER

Environmental Rail Solutions, Inc. (ERS) will work directly with the Waste Characterization & Transportation Lead to ensure that all waste storage and/or transportation containers (i.e. Intermodal Containers (IMCs), rolloffs, baker tanks, tanker trucks, etc.) are appropriate to the waste type and hazard level. The waste shipper is also responsible to work with the Waste Characterization & Transportation Lead to ensure that all wastes are properly labeled, loaded, and shipped in accordance with the appropriate, local, state, Department of Transportation (DOT), and USEI facility requirements.

### 10.4 SITE HEALTH AND SAFETY OFFICER (SHSO)

██████████, EDi, will serve as the project qualified SSHO. With respect to waste activities, ██████████ will be responsible for ensuring that waste loading and handling activities are performed safely and in compliance with the Site Health and Safety Plan and the Radiological Protection Plan. He will verify driver qualifications and training, inspect transports and containers, and assist the Transportation Lead in ensuring that placarding, manifests, and other required documentation are correct. He will ensure that the movement of transport vehicles and equipment are performed safely.

### 10.5 LABORATORY MANAGER AND PROJECT CHEMIST

██████████ is LSRS's Laboratory Manager and Project Chemist. ██████████ is responsible for document coordination, coordinating with the analytical laboratory, data management, data evaluation and validation, and preparation of the chemistry- and data-related portions of the work plans and data report(s).

He will coordinate with the Site Superintendent to ensure that representative samples of the waste are collected and analyzed in accordance with the SAP. Prior to waste loading operations, he will ensure that analytical results received are in compliance with USEI's WAC. He will immediately report to the Project Manager any deviations to the WAC.

### 10.6 CQC SYSTEM MANAGER

Russell Barnes is LSRS's CQC System Manager. He will coordinate with the Site

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Superintendent to ensure that key and other site personnel are trained to the requirements of the QAPP, will provide instructions to and review the work of the field staff, provide QC support as needed to the Project Manager and Site Superintendent, and verify resolution of all quality issues.

#### 10.7 LEAD RADIOLOGICAL CONTROL TECHNICIAN (RCT)

EDi is LSRS’s radiological support contractor. EDi’s Lead RCT will ensure that appropriate radiological controls for waste generation, packaging and storage are in place, will collect waste samples for radiological characterization, and will conduct radiological surveys of shipments containers and transport vehicles. The Lead RCT will provide technical support to the Site Superintendent to identify radiological hazards and controls associated with waste handling, including hazards and controls associated with changed waste conditions. He will review project conditions to ensure personnel protective equipment and controls are adequate prior to the start of waste operations. He will implement the RPP and provide supplemental radiological training to the other project staff.

#### 10.8 ANALYTICAL LABORATORY AND THIRD PARTY VALIDATOR

The analytical laboratory selected for this project is Test America St. Louis, located in Earth City, Missouri. Test America’s St. Louis laboratory is a NELAC/NELAP certified lab, and they meet the requirements set in the scope of work as they are also DoD-ELAP certified. Test America St. Louis is also certified by the state of New York for environmental analysis. The laboratory is responsible for providing sampling bottles, receipt of samples, and production of analytical reports with the required QC data package. Additionally, the data are to be provided in an electronic data deliverable (EDD) in the laboratory’s standard format, as well as in an USACE acceptable data format (i.e. Environmental Restoration Program Information Management System (ERPIMS) data format.). Although it is not anticipated, if for any reason a laboratory change is needed, notification will be provided to USACE prior to making the change. The Project Chemist has been designated as responsible for data evaluation and coordinating a third party data review. [REDACTED] of HSW Engineering, Inc., located in Tampa, Florida will serve as the independent Third Party Data Validator for the Seaway Project. Additional information on the role and responsibilities of the third party validator can be found in the UFP-QAPP (Part Volume 2 of the SAP) for the Seaway project.

### 11.0 PROBLEM IDENTIFICATION AND CORRECTIVE ACTIONS

#### 11.1 EMERGENCY RESPONSE AND NOTIFICATIONS

LSRS has assessed the risk of a significant chemical spill at the site or during transportation of waste and has classified this risk as extremely low.

Should a release of hazardous substance occur at the site the contractor has the responsibility to immediately notify the national response Center (1-800-424-8802 in Washington DC 202-267-2675; fax number is 202-267-1322). The reporting requirements are listed in the specific regulation and incorporated in this plan by reference.

Radionuclides are excluded from this CFR. Potential spills from radiological contaminated materials would be at the container loading area at the excavation site. Equipment dedicated to

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excavation and container loading will immediately collect and clean up any materials that spill outside the container or radiological boundaries.

For radiological releases, Section 103 of CERCLA requires the person in charge of a facility or vessel, as soon as he or she has knowledge of a release of a hazardous substance in an amount equal to or greater than the reportable quantity (RQ), to report the release immediately to the NRC. The NRC number is 1-800-424-8802, or (202) 267-2675 in the Washington, DC area. Under section 304 of EPCRA, the "owner or operator" of a facility is required to report immediately to the appropriate State emergency response commissions (SERCs) and local emergency planning committees (LEPCs) when there is a release of a CERCLA hazardous substance or of an extremely hazardous substance (EHS) at or above the RQ.

Section 11.4 indicates the name and contact information for LSRS's 24-Hour Emergency Response Contact. His contact information will accompany shipping manifests and bills-of-lading.

## 11.2 SPILL CONTINGENCY

The probable risk of a release of any chemical substances during the course of construction activities on the Seaway site will be limited to hydraulic oil release from a broken or damaged fitting or hose, spills from refueling operations and leaks from trucks delivering containers and/or materials to the site.

LSRS will have a spill contingency kit on-site in order to respond to any potential spill of oil, fuels or coolants and antifreeze from equipment on the site. Materials collected in the course of her response to a spill on-site will be containerized and disposed of in accordance with all federal, state and local regulations.

## 11.3 TRACKING AND CORRECTIVE ACTIONS

LSRS will implement a program to track issues, corrective actions, and lessons learned, including past packaging and transportation successes and problems throughout the site and with other contractors. These lessons learned will be utilized in work planning and shall be provided for future reference.

## 11.4 STOP WORK AUTHORITY AND EMERGENCY RESPONSE

LSRS will implement procedures that will ensure waste is managed as follows:

- Protect the public from exposure;
- Protect the environment; and
- Protect workers.

All LSRS workers have the authority to stop work when the task poses an imminent risk to the individual or the environment. Transportation-related emergencies involving hazardous material require accident and spill reporting. Regulations and requirements mandating the reporting of hazardous material accidents and spills are as follows:

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- 49 CFR 171.15, Immediate Notice of Certain Hazardous Materials Incidents – As soon as practical but no later than 12 hours after a reportable incident, each person in control of the hazardous material must provide telephone notification to the National Response Center (NRC) at 1-800-424-8802 or 202-267-2675.

The notice must include the following:

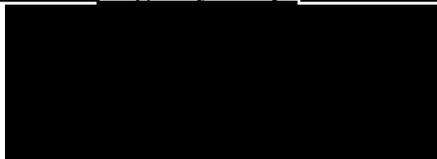
- Name of reporter;
- Name and address of person represented by reporter;
- Phone number where reporter can be contacted;
- Date, time and location of incident;
- The extent of injury (if any);
- Class or division, proper shipping name, and quantity of hazardous materials involved;
- Type of incident and nature of the hazardous material involved.

Emergency response information pertaining to the transfer of hazardous materials will be in accordance to 49 CFR 172.600, Subpart G Emergency Response Information. Incident reporting and emergency response phone numbers will be verified and provided to LSRS and LSRS subcontractors prior to startup of work.

- 49 CFR 171.16, Detailed Hazardous Materials Incidents Reports – This section requires each carrier who transports a hazardous material to report in writing, in duplicate, on DOT Form F, 5800.1 to DOT within 30 days of each incident identified in 49 CFR 171.15(a) or any unintentional release that occurs during the course of transportation or that occurs as a result of an unintentional release of hazardous materials from a package, or any quantity of hazardous waste discharged during transportation.
- 40 CFR 355.40, Emergency Release Notification – This section requires that transportation-related releases of reportable quantities be reported to the 911 Operator.

LSRS’s Site Superintendent, [REDACTED], will serve as the 24-Hour Emergency Response Contact and as the person who is knowledgeable of the hazardous material and has comprehensive emergency response and incident mitigation information. His phone number will be on all hazardous material shipping papers in accordance with 49 CFR 172 Subpart G, “Emergency Response Information.” He will monitor his telephone at all times while the hazardous material is in transit, including storage incidental to transportation.

**24-Hour Emergency Response Contact**



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## 12.0 WASTE REPORTING

### 12.1 ANNUAL HAZARDOUS WASTE REPORT

Generation of hazardous wastes at the Seaway Site is not anticipated. If found, and pursuant to 6 NYCRR 372.2(c)(2), generated hazardous, mixed waste, and associated activities shall be reported to NYSDEC through USACE, if applicable, by March 1 of each calendar year as required.

### 12.2 ANNUAL PCB REPORT

Generation of PCB waste at the Seaway Site is not anticipated. Should PCB waste exceeding 45 kg be generated, LSRS will prepare and maintain an annual log and records, as required.

### 12.3 EXCEPTION REPORTS

Generation of hazardous wastes at the Seaway Site is not anticipated. If found, and pursuant to 6 NYCRR 372.2(c)(3), a generator who does not receive a copy of the hazardous waste manifest with the handwritten signature of the owner or operator of the designated facility within 45 days of the date of shipment, shall submit an exception report to NYSDEC and, in the case of interstate shipments, submit an exception report to the state in which the shipment was to be received, and any states in which the shipment may have been delivered. In the case of states which do not have EPA-approved hazardous waste programs, notification shall be sent to NYDEC. This report shall be completed by the Waste Supervisor or designee and submitted to USACE for transmittal to NYDEC.

## 13.0 TRAINING

LSRS employees involved in work at hazardous sites will be trained as required by 29 CFR 1910.120, 29 CFR 1926.65 and other applicable regulations. In addition, program/project managers, supervisors, and SSHOs for projects involving hazardous materials will be qualified and trained to safely supervise or manage work at hazardous waste sites (i.e., have had HAZWOPER Supervisor training, 29 CFR 1910.120(e)(4)).

A matrix of training requirements for site personnel will be maintained on Site along with the records of training and medical surveillance (e.g., fit-for-duty letter, respirator fit-test card) of site personnel by the SSHO in accordance with 29 CFR 1910.120(b)(4)(ii)(B). Training records will confirm that each employee assigned to a task has had adequate and current training for that work. The LSRS Health and Safety Manager will maintain copies of the training and medical surveillance records as required by the LATA QMSD and HSPP.

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**Table 13.1 – Safety & Health Training and  
Qualification Requirements for Project Personnel**

<b>Training /Qualification Requirement</b>	<b>Applicability</b>
HAZWOPER 40-Hour and Current 8-Hour Refresher	Applies to all project personnel except Visitors under escort.
HAZWOPER Supervisor Training	Applies to the onsite Project Manager and Site Superintendent(s).
Hazard Communications Training	Applies to all project personnel except Visitors under escort.
First Aid/CPR Training/Bloodborne Pathogens Training	Applies to a minimum of two persons per shift.
Fall Protection Training	Applies to all project personnel working in the vicinity of unprotected sides or edges at a height of four feet or more.
Fire Extinguisher Training	Applies to all project personnel except Visitors under escort.
Project SSHP and applicable LSRS procedures	Applies to all project personnel except Visitors under escort.
Lock Out/Tag Out Training	Applies to all project personnel working on energized systems. See additional requirements for work on electrical systems.
Radiation Safety Training	Applies to all project personnel working in close proximity to potential radiation hazards.
Respiratory Protection	Applies to all persons wearing respiratory protection or prescribing the use of respiratory protection.
Equipment operators	Required to meet the training and qualification requirements specified in EM 385-1-1, Section 18 for the equipment being operated.
Licensed Electrician	Required for all work performed on live electrical systems.
OSHA 30-Hour Construction Safety	Corporate Safety & Health/Project SSHA
Excavation Competent Person	Minimum of 1 Excavation Competent Person on site during excavation activities per OSHA 29 CFR Subpart P.
Hazardous Materials Safety and Security Awareness Training	Required for all project personnel involved in wash packaging and shipping phases per 49 CFR 172.704.

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## 14.0 REFERENCES

EPA, 2004, Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, Update IIIB, November

Executive Order 12856, *Federal Compliance with Right-to-Know Laws and Pollution Prevention Requirements*

Executive Order 13101, *Greening the Government through Waste Prevention, Recycling, and Federal Acquisition*

Executive Order 13423, *Strengthening Federal Environmental, Energy, and Transportation Management*

Executive Order 13514, *Federal Leadership in Environmental, Energy, and Economic Performance*

10 CFR Part 71, Nuclear Regulatory Commission, “Packaging and Transportation of Radioactive Material”

10 CFR Part 830, Department of Energy, “Nuclear Safety Management”

29 CFR Part 1910, Occupational Safety and Health Administration, Subpart H, “Hazardous Materials”

29 CFR Part 1910, Occupational Safety and Health Administration, Subpart N, “Materials Handling and Storage”

29 CFR Part 1926, Occupational Safety and Health Administration, “Safety and Health Regulations for Construction”

40 CFR Parts 260–265, Environmental Protection Agency (EPA), Resource Conservation and Recovery Act (RCRA)

49 CFR Parts 100–185, Research and Special Programs Administration

EM 385-1-80; ER 1110-1-263; EP 200-1-2; EP4 15-1-266; and EM 1110-35-1

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**Attachment A Figure 2-1 Site Location Map**

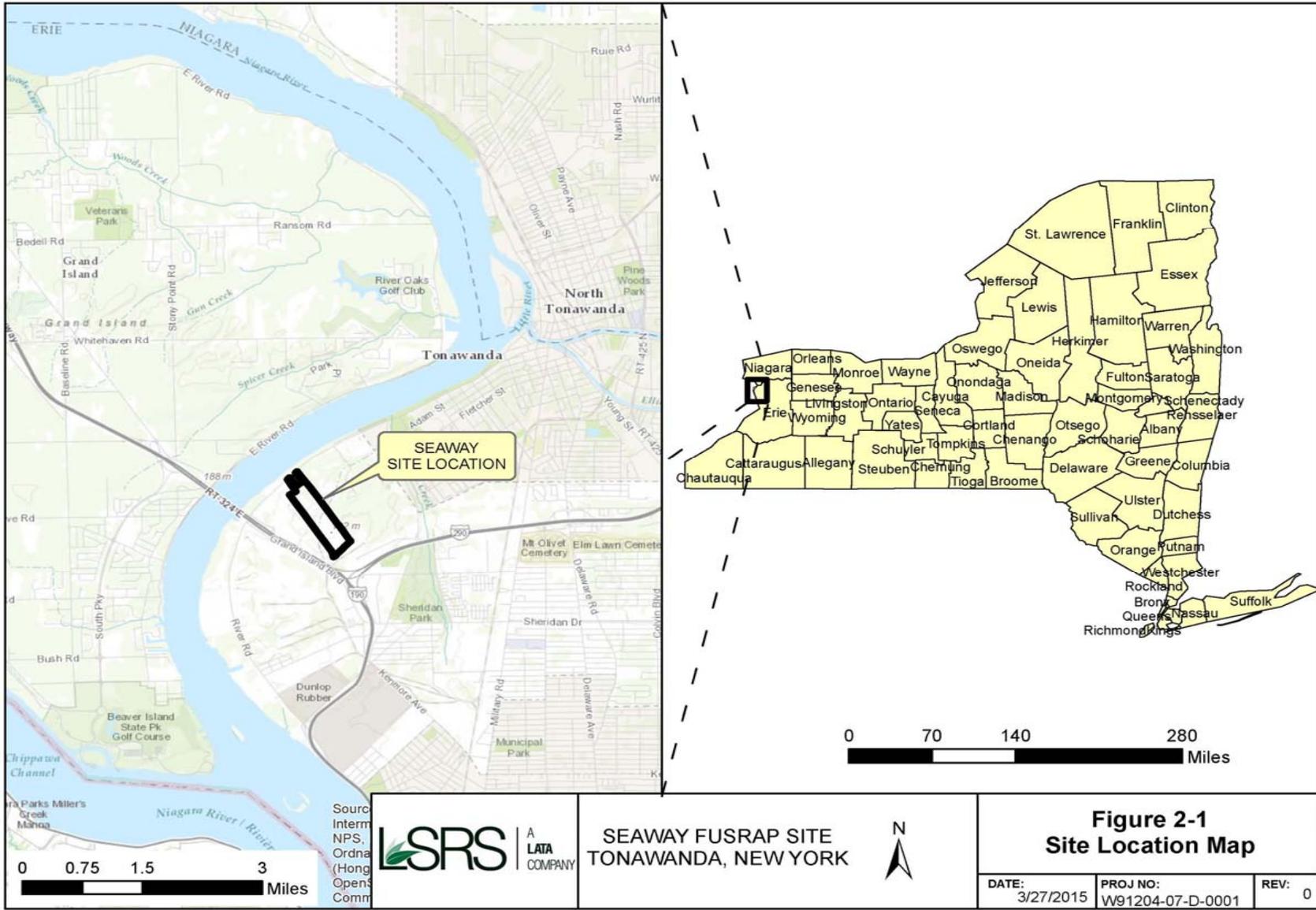


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Plan

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1



0 0.75 1.5 3 Miles

Source:  
Intern  
NPS,  
Ordn  
(Hong  
Open  
Comm



SEAWAY FUSRAP SITE  
TONAWANDA, NEW YORK



Figure 2-1  
Site Location Map

DATE:  
3/27/2015

PROJ NO:  
W91204-07-D-0001

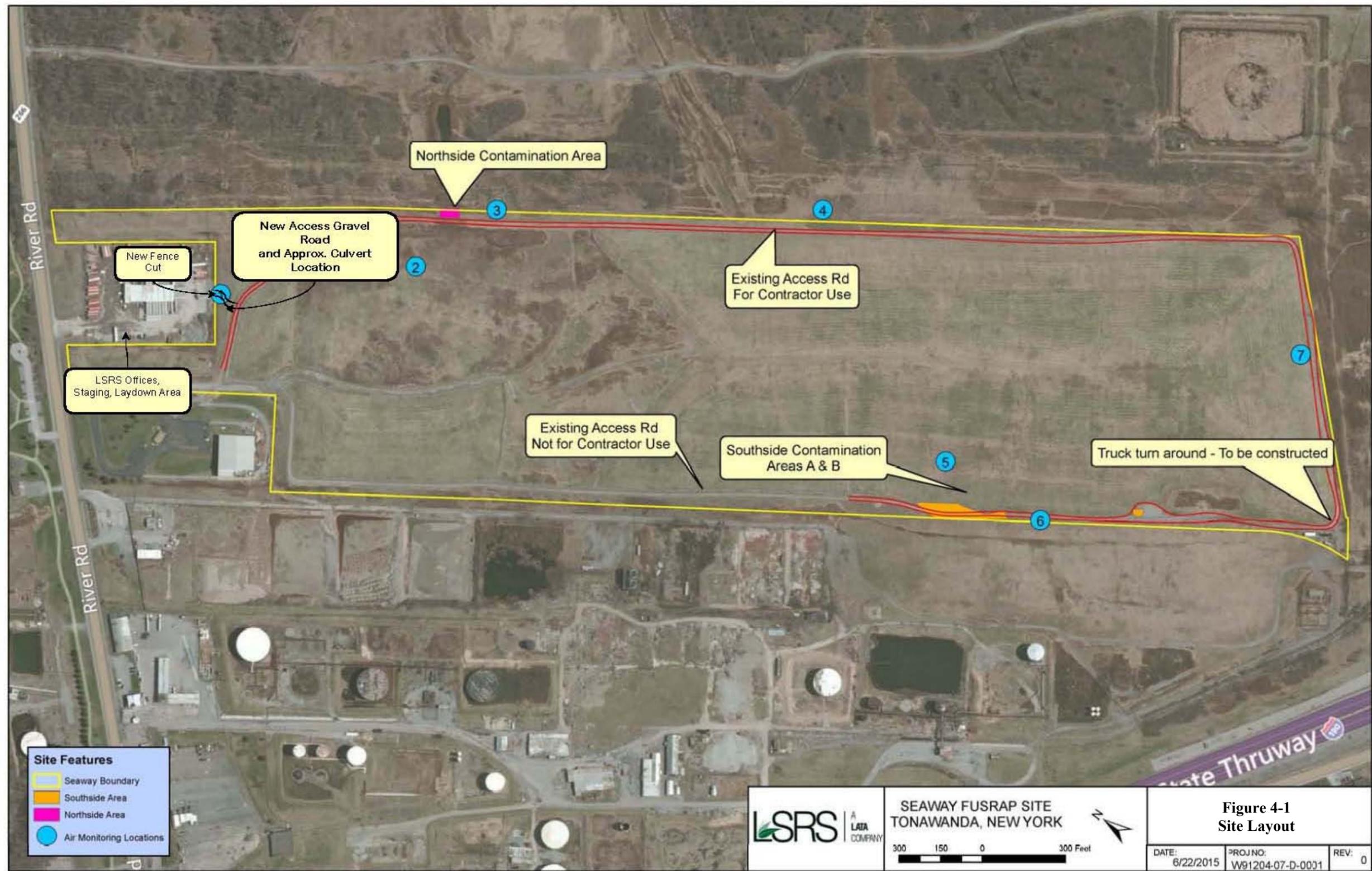
REV: 0

 <b>LSRS</b>   A <b>LATA</b> COMPANY	<b>Title</b> LSRS Waste Management, Transportation and Disposal Plan	<b>Document No.:</b> SWY-PLA-WP-013	<b>Revision No.:</b> 1
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**Attachment B Figure 4-1 Site Layout, Figure 4-2 Site Support Area**

	<b>Title</b> LSRS Waste Management, Transportation and Disposal Plan	<b>Document No.:</b> SWY-PLA-WP-013	<b>Revision No.:</b> 1
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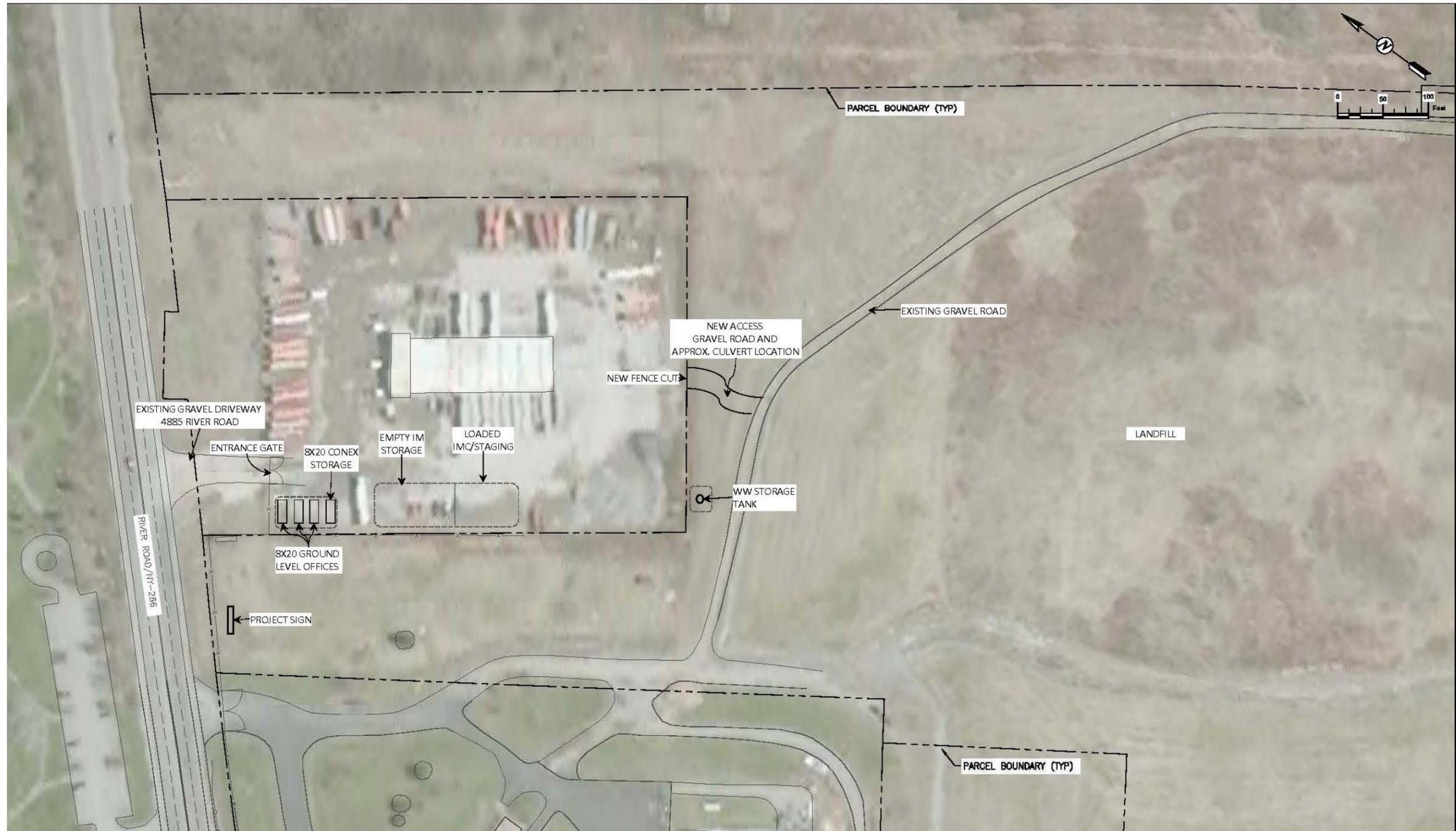


Document Path: P:\Army Corps of Engineers\Buffalo MARC Contract\Seaway\Drafting - GIS\GIS\02- SEAWAY FUSRAP SITE\Seaway Site Overview Basic W\_AirMonitor.mxd

**Figure 4-1**  
**Site Layout**

DATE: 6/22/2015	PROJ NO: W91204-07-D-0031	REV: 0
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	<b>Title</b>	<b>Document No.:</b>	<b>Revision No.:</b>
	LSRS Waste Management, Transportation and Disposal Plan	SWY-PLA-WP-013	1



	DATE	PROFESSIONAL SEAL		SEAWAY FUSRAP SITE TONAWANDA, NEW YORK		PROJECT NO. 11287.001
	DATE	PROFESSIONAL SEAL		Figure 4-2 Site Support Area.		1
REV	DATE	DESCRIPTION	DRAWN BY	DRAFT	PROJ	LEAD
2	6/10/15	REVISION TO SITE LAYOUT				
1	6/3/15	REVISED SITE ACCESS PLAN				
0	5/29/15	DRAFT SITE PLAN				
SHEET 1 OF 1						

 <b>LSRS</b>   A <b>LATA</b> COMPANY	<b>Title</b> LSRS Waste Management, Transportation and Disposal Plan	<b>Document No.:</b> SWY-PLA-WP-013	<b>Revision No.:</b> 1
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**Attachment C Analytical Summary – Addendum to the Feasibility Study for  
the Seaway Site, April 2008**

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**Table 1: Results of Samples Collected from Lens Face (10/12/01)**

<b>Sample ID</b>	<b>Y</b>	<b>X</b>	<b>Th230*</b>	<b>U238*</b>	<b>Ra226*</b>	<b>CPM with 2x2</b>
AI -SL-SC-746	1090391	410363	18.84	2.81	0.66	21,725
AI-SL-SC-747	1090386	410366	69.14	13.44	1.32	30,117
AI-SL-SC-748	1090381	410370	137.95	12.34	1.57	24,173
AI -SL-SC-749	1090372	410371	98.22	7.33	1.05	18,712
AI -SL-SC-750	1090366	410375	152.24	13.13	2.25	26,225
AI -SL-SC-751	1090354	410383	12.53	3.02	0.44	11,501
AI -SL-SC-752	1090348	410385	3.84	2.96	0.38	16,491
AI-SL-SC-753	1090337	410388	14.40	1.57	0.29	16,387
AL-SL-SC-754	1090390	410356	13.40	2.68	0.33	17,211

\* Analysis by on-site gamma spectroscopy reported in pCi/g

Source: Table 4 from Reference USACE 2002

**Table 2: Sample Analysis of Radiological Parameters for Test Pits**

SAMPLE NUMBER	LOCATION	Analysis On-site by SEC (Gamma Spec.)			
		Depth (ft) <sup>1</sup>	Ra-226 <sup>3</sup> Result (pCi/g) <sup>2</sup>	Th-230 <sup>4</sup> Result (pCi/g) <sup>2</sup>	U-238 <sup>5</sup> Result (pCi/g) <sup>2</sup>
AI-SL-TP-072	TP Location 1	11	0.4	<14.0	2.2
AI-SL-TP-073	TP Location 1	13	0.6	<16.8	2.59
AI-SL-TP-074	TP Location 1	15	0.8	<18.8	2.27
AI-SL-TP-075	TP Location 2	8	0.5	<16.3	3.6
AI-SL-TP-076	TP Location 2	9	0.4	<14.1	2.2
AI-SL-TP-077	TP Location 2	12	0.3	<7.7	1.6
AI-SL-TP-078	TP Location 3	11	0.4	<14.3	1.95
AI-SL-TP-079	TP Location 3	12.5	0.7	7.3	2.7
AI-SL-TP-080	TP Location 3	14	0.4	<9.8	2.7

<sup>1</sup> Feet  
<sup>2</sup> picoCuries per gram  
<sup>3</sup> radium-226  
<sup>4</sup> thorium-230  
<sup>5</sup> uranium-238

Source: Table 3 from Reference USACE 2002

Table 3: Sample Results for Two Trenching Efforts and Comparison to SOR Criteria (SOR<1)

<u>Sample</u>	<u>Sample Results (pCi/g)*</u>			<u>SOR</u>
	<u>Ra-226</u>	<u>U-238</u>	<u>Th-230</u>	
<b>Trench 1</b>				
A1SC0761	0.40	1.58	7.60	0.20
A1SC0762	0.40	1.16	8.51	0.22
A1SC0763	0.31	1.33	8.22	0.21
A1SC0764	0.44	2.39	22.14	0.53
A1SC0765	0.38	1.73	13.20	0.33
<b>Trench 2</b>				
A1-SL-SC-770	0.69	4.54	53.43	1.26
A1-SL-SC-771	0.25	1.18	12.60	0.30
A1-SL-SC-772	0.51	1.52	8.41	0.23
A1-SL-SC-773	0.46	2.47	13.55	0.34
A1-SL-SC-774	0.71	2.80	39.11	0.94
A1-SL-SC-775	0.27	1.84	12.90	0.31

\* Sampling results came from USACE  
2002

Table 4 Seaway Southside Area East of FSS Units 24 & 31

<u>SAMPLE ID</u>	<u>DATE</u>	<u>NORTH</u>	<u>EAST</u>	<u>DEPTH</u>	<u>CPM</u>	<u>Th-230</u> <u>(pCi/g)</u>	<u>U-238</u> <u>(pCi/g)</u>	<u>Ra-226</u> <u>(pCi/g)</u>	<u>Comment</u>
A1-SL-SC-0839	2/25/2002	1090821	410021	0-6"	120421	1853.7	154.5	10.6	
A1-SL-SC-0842	3/6/2002	1090904	409957	0-6"	15239	82.5	27.8	1.3	
A1-SL-SC-0865	3/20/2002	1090746	410069	0-6"	16388	<6.0	2	0.2	
A1-SL-SC-0866	3/20/2002	1090743	410068	0-6"	15388	13	3	0.3	
A1-SL-SC-0867	3/20/2002	1090712	410084	0-6"	16278	25	3	0.4	
A1-SL-SC-0878	4/2/2002	1090921	409951	0-6"	20246	149	23	1.9	From Lens*
A1-SL-SC-0879	4/2/2002	1090911	409958	0-6"	25173	753	62	4.7	From Lens*
A1-SL-SC-0880	4/2/2002	1090899	409966	0-6"	20246	629	68	4.1	From Lens*
A1-SL-SC-0881	4/2/2002	1090889	409971	0-6"	53096	742	69	4.8	From Lens*
A1-SL-SC-0896	4/23/2002	1090802	410031	0-6"	18030	<10.5	2	0.2	From Lens*
A1-SL-SC-0897	4/23/2002	1090726	410070	0-6"	6283	<6.1	<0.9	0.1	
A1-SL-SC-0898	4/23/2002	1090698	410090	0-6"	8633	<6.5	1.6	0.2	
A1-SL-SC-0899	4/23/2002	1090684	410099	0-6"	6255	<10.4	1.2	0.2	
A1-SL-SC-0900	4/23/2002	1090664	410114	0-6"	8654	<8.9	<1.1	0.1	
A1-SL-SC-0901	4/23/2002	1090809	410027	0-6"	75742	979	89	9.1	From Lens*
A1-SL-SC-0902	4/23/2002	1090824	410017	0-6"	76475	1762	136	9.3	From Lens*
A1-SL-SC-0903	4/23/2002	1090838	410006	0-6"	79502	1563	167	14.0	From Lens*
A1-SL-SC-0904	4/23/2002	1090857	409994	0-6"	80308	1442	220	13.7	From Lens*
A1-SL-SC-0905	4/23/2002	1090876	409982	0-6"	76224	648	69	4.1	From Lens*
A1-SL-SC-0906	4/23/2002	1090787	410042	0-6"	13971	<10.5	2	0.2	From Lens*
A1-SL-SC-0907	4/23/2002	1090928	409945	0-6"	13602	<10.0	2	0.2	From Lens*
A1-SL-TP-0065	6/4/2001	1090866	410003	0-6"	*31823	603	49	4.5	East of Seaway Rd.

\* - Soil sample collected approximately 6" horizontally into lens.

Table taken from USACE 2003

**APPENDIX B**  
**SEAWAY NORTHSIDE DATA**



Letter of Transmittal

IT Corporation  
Tonawanda Field Office  
4545 River Road  
Tonawanda, NY 14150-0410  
716-873-1074

**DATE:** June 14, 2000

**TO:** [REDACTED]  
US Army Corps of Engineers

**FROM:** [REDACTED]  
IT Corporation  
Construction Quality Control Manager

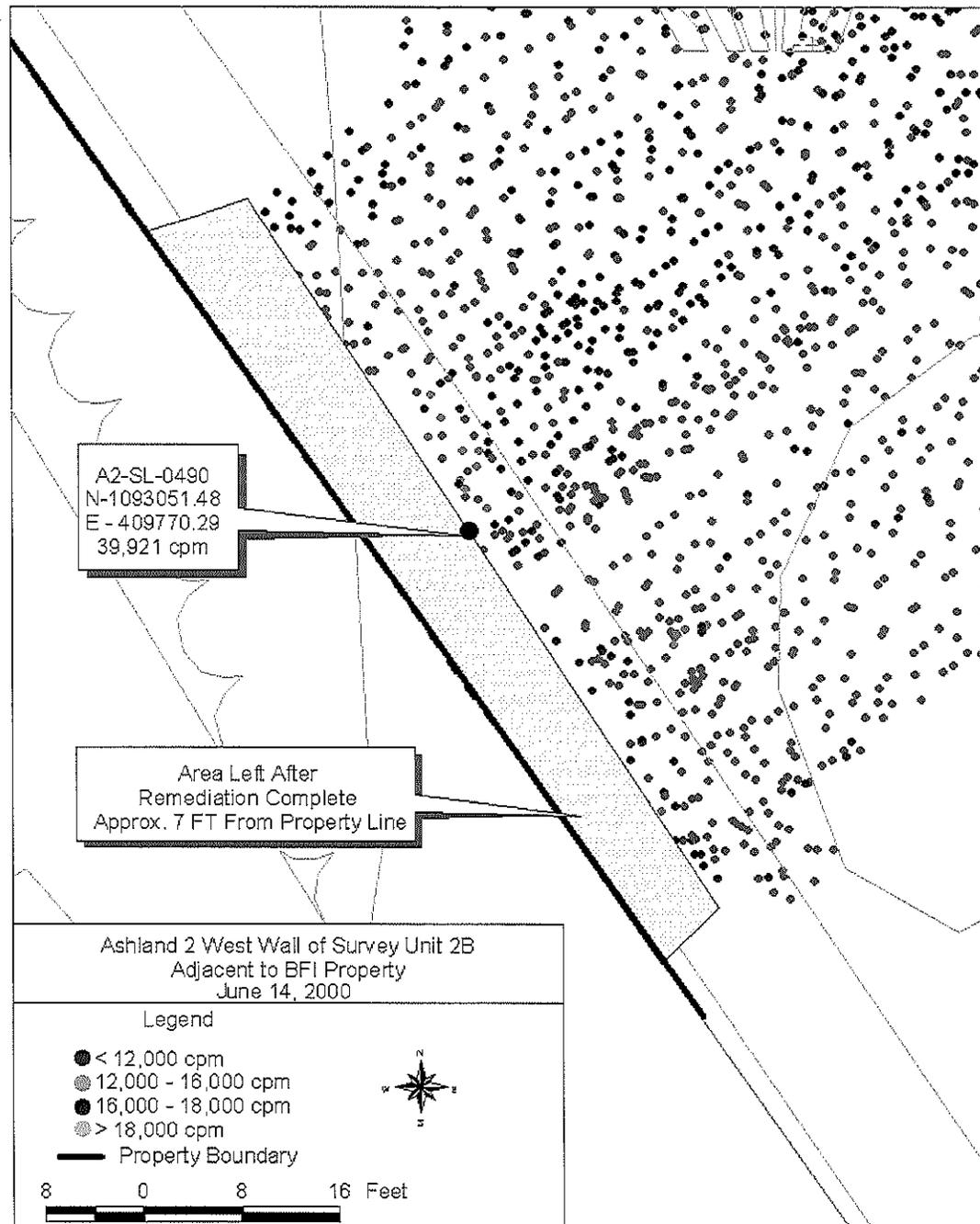
**RE:** Ashland 2 Data – FSS Unit 2b – Boundary with Seaway Landfill

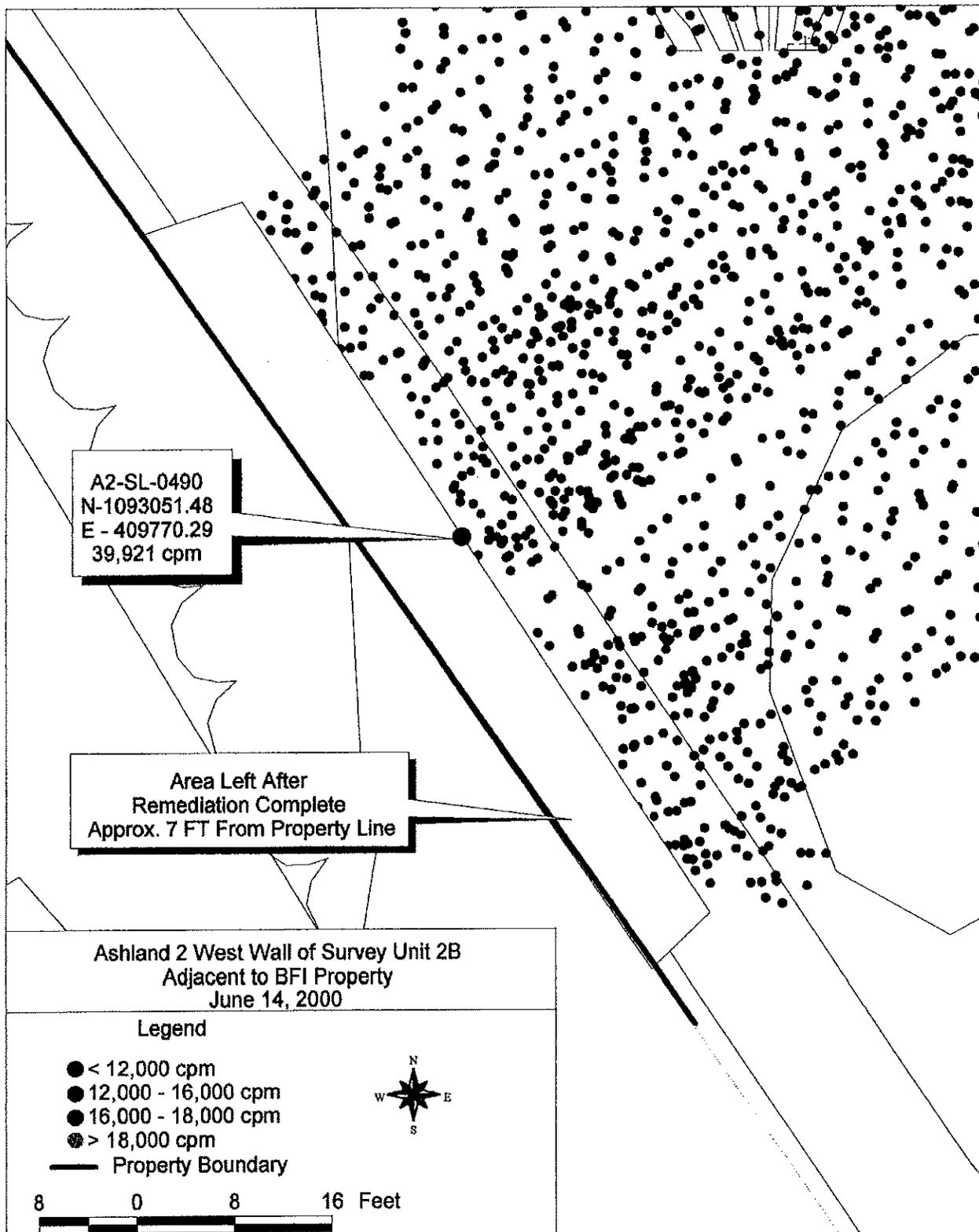
**Dear** [REDACTED] [REDACTED]:

As requested by [REDACTED], attached is gamma spectroscopy data and gamma walkover data collected at the Ashland 2 site. The data is relative to an area of elevated activity encountered along the western edge of FSS Unit 2b where it abuts with the adjacent property (Seaway). An electronic copy of the data is also provided.

Very truly yours,  
IT Corporation

[REDACTED]  
Quality Control Manager





Sample ID	Date Collected	Date Analyzed	SDG ID	LAB ID	Vol.	W/D	Sample Type	Analyte	Result	Error	Units	Analytical Method	MDA
A2SL0490	09/28/98	09/29/98	98ASH046		576.5	DRY	SOIL	K-40	20.41	1.16	PCI/G	GAMMASPEC	1.33
A2SL0490	09/28/98	09/29/98	98ASH046		576.5	DRY	SOIL	CS-137	0.22	0.02	PCI/G	GAMMASPEC	0.08
A2SL0490	09/28/98	09/29/98	98ASH046		576.5	DRY	SOIL	RA-226	13.87	0.29	PCI/G	GAMMASPEC	0.21
A2SL0490	09/28/98	09/29/98	98ASH046		576.5	DRY	SOIL	AC-227	11.62	0.32	PCI/G	GAMMASPEC	0.61
A2SL0490	09/28/98	09/29/98	98ASH046		576.5	DRY	SOIL	RA-228	1.26	0.07	PCI/G	GAMMASPEC	0.29
A2SL0490	09/28/98	09/29/98	98ASH046		576.5	DRY	SOIL	TH-228	1.26	0.07	PCI/G	GAMMASPEC	0.29
A2SL0490	09/28/98	09/29/98	98ASH046		576.5	DRY	SOIL	TH-232	1.26	0.07	PCI/G	GAMMASPEC	0.29
A2SL0490	09/28/98	09/29/98	98ASH046		576.5	DRY	SOIL	TH-230	395.86	18.93	PCI/G	GAMMASPEC	54.40
A2SL0490	09/28/98	09/29/98	98ASH046		576.5	DRY	SOIL	PA-231	12.37	0.67	PCI/G	GAMMASPEC	2.65
A2SL0490	09/28/98	09/29/98	98ASH046		576.5	DRY	SOIL	U-238	21.52	1.33	PCI/G	GAMMASPEC	5.63
A2SL0490	09/28/98	09/29/98	98ASH046		576.5	DRY	SOIL	AM-241	0.68	0.00	PCI/G	GAMMASPEC	0.68

\*\*\*\*\*  
\*\*\*\*\* GAMMA SPECTRUM ANALYSIS \*\*\*\*\*  
\*\*\*\*\*

Filename: C:\PCNT2K\CAMFILES\SOIL\SL00820.CNF

Report Generated On : 9/29/98 9:31:03 AM

Sample Title : SOIL SAMPLES  
Spectrum Description : *A' dig west wall under fence 39, 92' east*  
Sample Identification : A2SL0490  
Sample Type : SL  
Sample Geometry : 500 MARINELLI

Peak Locate Threshold : 3.00  
Peak Locate Range (in channels) : 1 - 4096  
Peak Area Range (in channels) : 1 - 4096  
Identification Energy Tolerance : 1.500 keV

Sample Size : 5.765E+002 GRAM

Sample Taken On : 9/28/98 10:00:00 AM  
Acquisition Started : 9/29/98 8:30:02 AM

Live Time : 3600.0 seconds  
Real Time : 3643.6 seconds  
Dead Time : 1.20 %

Energy Calibration Used Done On : 7/20/98  
Efficiency Calibration Used Done On : 7/20/98  
Efficiency Geometry ID : 500 MARINELLI

\*\*\*\*\*  
 \*\*\*\*\* P E A K A N A L Y S I S R E P O R T \*\*\*\*\*  
 \*\*\*\*\*

Detector Name: DET001  
 Sample Title: SOIL SAMPLES  
 Peak Analysis Performed on: 9/29/98 9:31:02 AM  
 Peak Analysis From Channel: 1  
 Peak Analysis To Channel: 4096

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	50-	57	54.36	24.98	1.00E+003	71.96	1.37E+003
M 2	94-	108	97.88	46.78	4.86E+002	50.18	3.12E+003
m 3	94-	108	105.00	50.35	4.78E+002	50.35	2.62E+003
M 4	127-	143	131.39	63.58	1.22E+003	60.53	4.47E+003
m 5	127-	143	140.03	67.90	2.41E+003	76.98	4.98E+003
M 6	150-	183	154.33	75.07	1.85E+003	68.45	4.74E+003
m 7	150-	183	158.84	77.33	3.32E+003	79.08	4.76E+003
m 8	150-	183	166.75	81.29	3.35E+003	78.73	4.81E+003
m 9	150-	183	172.19	84.02	6.13E+003	98.70	5.54E+003
m 10	150-	183	179.50	87.68	7.18E+002	59.91	4.89E+003
M 11	185-	203	189.91	92.90	2.10E+003	69.16	4.73E+003
m 12	185-	203	193.82	94.85	2.20E+003	67.93	4.84E+003
m 13	185-	203	200.08	97.99	4.22E+002	50.06	3.75E+003
14	226-	234	230.36	113.16	3.69E+002	101.56	3.03E+003
15	244-	253	249.03	122.52	4.11E+002	107.82	3.17E+003
16	288-	296	292.46	144.28	2.01E+003	108.86	3.02E+003
M 17	308-	335	312.70	154.42	2.08E+003	63.07	2.23E+003
m 18	308-	335	321.83	158.99	2.71E+002	37.58	2.10E+003
m 19	308-	335	330.82	163.50	1.66E+002	37.04	2.00E+003
20	371-	380	376.24	186.25	4.56E+003	113.43	2.37E+003
21	420-	429	425.05	210.71	4.81E+002	84.59	1.89E+003
M 22	471-	492	475.79	236.13	3.34E+003	63.95	1.46E+003
m 23	471-	492	481.09	238.79	1.30E+003	44.34	1.39E+003
m 24	471-	492	487.75	242.13	2.41E+003	55.71	1.31E+003
25	511-	521	516.38	256.47	1.68E+003	92.60	1.81E+003
M 26	537-	551	542.55	269.59	3.34E+003	64.04	1.05E+003
m 27	537-	551	546.12	271.37	2.60E+003	58.45	1.13E+003
M 28	568-	580	570.94	283.81	4.12E+002	31.58	7.24E+002
m 29	568-	580	575.87	286.28	4.21E+002	31.33	7.90E+002
M 30	588-	617	593.96	295.35	5.09E+003	74.59	8.46E+002
m 31	588-	617	603.49	300.12	1.28E+003	41.04	7.31E+002
m 32	588-	617	608.64	302.70	6.58E+002	32.92	7.73E+002
m 33	588-	617	612.29	304.53	2.74E+002	26.43	6.67E+002
M 34	623-	638	628.87	312.84	1.55E+002	22.55	7.24E+002
m 35	623-	638	632.94	314.88	1.42E+002	22.46	7.31E+002
M 36	646-	685	651.07	323.96	7.60E+002	33.36	6.03E+002
m 37	646-	685	663.02	329.95	8.68E+002	35.09	6.52E+002
m 38	646-	685	671.52	334.20	2.13E+002	23.64	6.84E+002
m 39	646-	685	679.93	338.42	6.64E+002	33.10	8.04E+002
40	701-	712	706.87	351.92	1.14E+004	117.72	8.33E+002
41	741-	751	746.65	371.85	1.32E+002	42.95	6.02E+002

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
m	43	801-	818	812.64	404.92	6.68E+002	30.96	5.51E+002
	44	851-	862	857.02	427.15	2.56E+002	47.57	6.68E+002
	45	887-	897	892.50	444.93	1.41E+002	38.85	4.81E+002
	46	970-	979	976.51	487.02	5.58E+001	30.00	3.16E+002
	47	1018-	1029	1023.83	510.73	1.90E+002	36.57	3.82E+002
	48	1064-	1073	1070.46	534.10	1.55E+001	28.27	2.92E+002
	49	1135-	1147	1141.28	569.58	8.61E+001	35.61	3.69E+002
	50	1165-	1174	1168.41	583.17	2.82E+002	34.07	3.25E+002
	51	1214-	1226	1220.39	609.22	6.26E+003	85.10	3.09E+002
M	52	1318-	1338	1324.89	661.58	1.90E+002	17.79	2.00E+002
m	53	1318-	1338	1332.55	665.42	9.79E+001	14.11	2.03E+002
	54	1379-	1385	1381.84	690.11	3.80E+000	17.75	1.43E+002
	55	1437-	1443	1440.59	719.55	7.95E-001	18.28	1.50E+002
	56	1531-	1544	1537.88	768.30	6.55E+002	41.17	3.10E+002
	57	1566-	1579	1572.75	785.77	1.76E+002	32.18	2.58E+002
	58	1584-	1597	1590.80	794.82	7.80E+001	28.22	2.15E+002
	59	1608-	1619	1612.88	805.88	1.59E+002	26.77	1.86E+002
M	60	1657-	1684	1664.47	831.73	4.15E+002	22.13	1.74E+002
m	61	1657-	1684	1678.36	838.68	1.09E+002	13.65	1.79E+002
	62	1815-	1829	1822.40	910.86	2.27E+002	32.97	2.45E+002
	63	1861-	1874	1868.34	933.87	2.99E+002	31.82	2.14E+002
M	64	1921-	1944	1928.55	964.04	6.69E+001	12.03	1.71E+002
m	65	1921-	1944	1938.06	968.81	1.57E+002	15.22	1.76E+002
	66	1999-	2008	2001.96	1000.83	1.31E+002	23.91	1.56E+002
	67	2119-	2133	2126.54	1063.25	6.21E+001	27.53	1.98E+002
	68	2232-	2246	2239.54	1119.87	1.31E+003	42.55	1.73E+002
	69	2301-	2316	2309.02	1154.68	1.60E+002	26.23	1.76E+002
	70	2467-	2481	2474.64	1237.66	4.91E+002	32.00	1.85E+002
	71	2552-	2567	2560.11	1280.49	1.18E+002	23.81	1.49E+002
	72	2745-	2760	2752.86	1377.07	3.50E+002	25.71	1.03E+002
M	73	2793-	2820	2800.77	1401.07	9.34E+001	11.46	7.95E+001
m	74	2793-	2820	2813.25	1407.32	1.59E+002	14.19	8.96E+001
	75	2911-	2926	2918.67	1460.15	1.11E+003	39.30	1.45E+002
	76	3010-	3022	3015.25	1508.54	1.44E+002	20.50	1.05E+002
	77	3078-	3090	3082.92	1542.44	3.38E+001	16.42	8.92E+001
	78	3314-	3324	3319.09	1660.78	6.96E+001	12.31	3.44E+001
	79	3446-	3462	3454.46	1728.60	2.37E+002	18.88	3.82E+001
	80	3516-	3532	3524.29	1763.59	1.04E+003	34.91	5.75E+001
	81	3681-	3697	3689.56	1846.40	1.34E+002	15.92	3.83E+001

M = First peak in a multiplet region

m = Other peak in a multiplet region

F = Fitted singlet

Errors quoted at 1.000 sigma

\*\*\*\*\*  
 \*\*\*\*\* N U C L I D E I D E N T I F I C A T I O N R E P O R T \*\*\*\*\*  
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Sample Title: SOIL SAMPLES  
 Nuclide Library Used: C:\GENIE2K\CAMFILES\ASHLAND.NLB

..... IDENTIFIED NUCLIDES .....

Nuclide Name	Id Confidence	Energy (keV)	Yield (%)	Activity (pCi/GRAM)	Activity Uncertainty
K-40	0.969	1460.81*	10.67	2.04095E+001	1.15824E+000
CS-137	1.000	661.65*	85.21	2.23317E-001	2.27239E-002
RA-226	0.992	186.21*	3.28	4.81182E+001	2.60001E+000
		295.21*	19.20	1.19902E+001	5.85715E-001
		351.92*	37.20	1.60633E+001	7.57149E-001
		609.31*	46.30	1.24040E+001	5.43884E-001
		1120.29*	15.10	1.43386E+001	5.87501E-001
		1764.49*	15.80	1.40754E+001	1.15423E+000
AC-227	0.998	236.00*	11.50	1.12367E+001	5.75568E-001
		256.20*	6.30	1.08581E+001	7.88696E-001
		329.70*	2.90	1.48648E+001	9.12525E-001
		401.81*	6.50	1.01815E+001	5.76740E-001
		404.84*	2.90	1.38605E+001	8.99886E-001
AC-228	0.998	338.32*	11.40	2.95931E+000	2.00921E-001
		583.14*	30.25	7.92197E-001	1.04439E-001
		911.07*	27.70	1.12889E+000	1.67327E-001
		969.11*	16.60	1.37565E+000	1.38879E-001
TH-230	0.996	67.67*	0.37	3.95864E+002	1.89300E+001
PA-231	0.999	283.67*	1.60	1.13117E+001	1.01476E+000
		302.65*	2.30	1.32142E+001	9.02452E-001
U-238	0.995	63.29*	3.80	2.13178E+001	1.39581E+000
		1001.03*	0.84	2.34695E+001	4.31462E+000

\* = Energy line found in the spectrum.

@ = Energy line not used for Weighted Mean Activity

Energy Tolerance : 1.500 keV

Nuclide confidence index threshold = 0.30

Errors quoted at 2.000 sigma

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\*\*\*\*\* INTERFERENCE CORRECTED REPORT \*\*\*\*\*  
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Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/GRAM)	Wt mean Activity Uncertainty
K-40	0.969	2.040946E+001	1.158239E+000
CS-137	1.000	2.233172E-001	2.272386E-002
RA-226	0.992	1.386735E+001	2.906729E-001
AC-227	0.998	1.161573E+001	3.151524E-001
AC-228	0.998	1.262546E+000	7.001147E-002
TH-230	0.996	3.958643E+002	1.892999E+001
PA-231	0.999	1.237406E+001	6.743547E-001
U-238	0.995	2.152168E+001	1.328048E+000

? = nuclide is part of an undetermined solution

X = nuclide rejected by the interference analysis

@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 2.000 sigma

## \*\*\*\*\* UNIDENTIFIED PEAKS \*\*\*\*\*

Peak Locate Performed on: 9/29/98 9:31:02 AM  
 Peak Locate From Channel: 1  
 Peak Locate To Channel: 4096

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
1	24.98	2.6098E-001	15.36
M 2	46.78	1.3253E-001	21.09
m 3	50.35	1.3281E-001	21.06
M 6	75.07	5.1051E-001	7.45
m 7	77.33	9.2017E-001	4.78
m 8	81.29	9.2973E-001	4.70
m 9	84.02	1.7017E+000	3.22
m 10	87.68	1.9950E-001	16.68
M 11	92.90	5.7167E-001	6.74
m 12	94.85	6.1035E-001	6.18
m 13	97.99	1.1727E-001	23.71
14	113.16	1.0262E-001	54.98
15	122.52	1.1412E-001	52.49
16	144.28	5.5839E-001	10.83
M 17	154.42	5.7856E-001	6.06
m 18	158.99	7.5204E-002	27.76
m 19	163.50	4.6189E-002	44.55
21	210.71	1.3365E-001	35.16
m 23	238.79	3.5223E-001	7.06
m 24	242.13	6.6982E-001	4.62
M 26	269.59	9.2671E-001	3.84
m 27	271.37	7.2252E-001	4.49
m 29	286.28	1.1695E-001	14.88
m 31	300.12	3.5441E-001	6.43
m 33	304.53	7.6100E-002	19.30
M 34	312.84	4.2956E-002	29.17
m 35	314.88	3.9421E-002	31.66
M 36	323.96	2.1114E-001	8.78
m 38	334.20	5.9192E-002	22.19
41	371.85	3.6769E-002	64.90
44	427.15	7.1195E-002	37.12
45	444.93	3.9045E-002	55.27
46	487.02	1.5509E-002	107.45
47	510.73	3.2109E-002	63.86
48	534.10	4.3071E-003	364.64
49	569.58	-9.4882E-004	-2098.7
m 53	665.42	2.7207E-002	28.81
54	690.11	1.0544E-003	935.15
55	719.55	2.2075E-004	4601.51
56	768.30	1.8208E-001	12.56
57	785.77	4.8982E-002	36.50
58	794.82	2.1667E-002	72.36
59	805.88	4.4280E-002	33.59
M 60	831.73	1.1538E-001	10.66
m 61	838.68	3.0216E-002	25.09
63	933.87	8.3070E-002	21.28

Interference Corrected Activity Report

9/29/98 9:31:03 AM Page 7

69 1154.68

4.4454E-002

32.78

Peak No.	Energy (keV)	Channel	Peak Size in Counts per Second	Peak CPS % Uncertainty
70	1237.66		1.3626E-001	13.05
71	1280.49		3.2876E-002	40.24
72	1377.07		9.7315E-002	14.68
M 73	1401.07		2.5952E-002	24.53
m 74	1407.32		4.4227E-002	17.82
76	1508.54		4.0084E-002	28.41
77	1542.44		9.3829E-003	97.20
78	1660.78		1.9335E-002	35.38
79	1728.60		6.5780E-002	15.94
81	1846.40		3.7153E-002	23.80

M = First peak in a multiplet region  
m = Other peak in a multiplet region  
F = Fitted singlet

Errors quoted at 2.000 sigma

\*\*\*\*\*  
 \*\*\*\*\* N U C L I D E M D A R E P O R T \*\*\*\*\*  
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Detector Name: DET001  
 Sample Geometry: 500 MARINELLI  
 Sample Title: SOIL SAMPLES  
 Nuclide Library Used: C:\GENIE2K\CAMFILES\ASHLAND.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)
+	K-40	1460.81*	10.67	1.33E+000	1.33E+000
+	CS-137	661.65*	85.21	8.04E-002	8.04E-002
+	RA-226	186.21*	3.28	3.21E+000	2.12E-001
		295.21*	19.20	3.25E-001	
		351.92*	37.20	2.37E-001	
		609.31*	46.30	2.12E-001	
		1120.29*	15.10	8.31E-001	
		1764.49*	15.80	6.40E-001	
+	AC-227	236.00*	11.50	6.09E-001	6.09E-001
		256.20*	6.30	1.79E+000	
		329.70*	2.90	2.08E+000	
		401.81*	6.50	1.01E+000	
		404.84*	2.90	2.32E+000	
+	AC-228	338.32*	11.40	6.00E-001	2.92E-001
		583.14*	30.25	2.92E-001	
		911.07*	27.70	4.93E-001	
		969.11*	16.60	5.66E-001	
+	TH-230	67.67*	0.37	5.44E+001	5.44E+001
+	PA-231	283.67*	1.60	3.51E+000	2.65E+000
		302.65*	2.30	2.65E+000	
+	U-238	63.29*	3.80	5.63E+000	5.63E+000
		1001.03*	0.84	1.28E+001	
	AM-241	59.54	35.90	6.84E-001	6.84E-001

+ = Nuclide identified during the nuclide identification  
 \* = Energy line found in the spectrum  
 > = MDA value not calculated  
 @ = Half-life too short to be able to perform the decay correction

**ATTACHMENT C1**  
**ANALYTICAL DATA SUMMARY STATISTICS**

*Combined Dataset Summary Statistics*

Contaminant	Number Sampled	Number Detected	Min. Detect	Max. Detect	Arith. Mean	St. Dev.	Dist.	95% UCL	EPC
<b>Area A Soil</b>									
Ac-227	29	29	1.80E-01	2.39E+01	3.76E+00	6.34E+00	X	8.89E+00	8.89E+00
Pa-231	29	9	3.90E+00	3.88E+01	4.33E+00	1.02E+01	D	1.26E+01	1.26E+01
Pb-210 (a)	0	--	--	--	--	--	--	--	2.78E+01
Ra-226	29	28	7.30E-01	8.70E+01	1.13E+01	2.03E+01	X	2.78E+01	2.78E+01
Ra-228	29	29	3.90E-01	1.54E+00	9.02E-01	2.99E-01	N	9.96E-01	9.96E-01
Th-228	29	29	5.10E-01	1.87E+00	1.01E+00	3.68E-01	L	1.14E+00	1.14E+00
Th-230	29	29	7.50E-01	6.59E+02	9.37E+01	1.76E+02	X	2.36E+02	2.36E+02
Th-232	29	29	4.62E-01	2.00E+00	1.05E+00	4.15E-01	L	1.20E+00	1.20E+00
U-234 (b)	29	29	6.60E-01	5.42E+01	7.95E+00	1.27E+01	X	1.83E+01	1.83E+01
U-235	29	29	2.60E-02	2.45E+00	4.21E-01	5.99E-01	L	8.04E-01	8.04E-01
U-238	29	29	6.30E-01	5.83E+01	8.19E+00	1.34E+01	X	1.90E+01	1.90E+01
<b>Area B Soil</b>									
Ac-227	31	19	4.70E-01	7.80E+00	1.90E+00	2.20E+00	X	3.62E+00	3.62E+00
Pa-231	31	4	1.75E+00	6.45E+00	1.14E+00	2.10E+00	D	2.78E+00	2.78E+00
Pb-210 (a)	0	--	--	--	--	--	--	--	2.28E+00
Ra-226	31	28	1.20E-01	8.82E+00	1.28E+00	2.20E+00	L	2.28E+00	2.28E+00
Ra-228	16	16	5.30E-01	1.05E+00	7.43E-01	1.29E-01	N	8.00E-01	8.00E-01
Th-228	16	16	5.30E-01	1.05E+00	7.43E-01	1.29E-01	N	8.00E-01	8.00E-01
Th-230	31	23	7.80E-01	2.01E+02	1.92E+01	4.51E+01	X	5.46E+01	5.46E+01
Th-232	31	31	5.10E-01	1.65E+00	8.75E-01	2.94E-01	L	9.64E-01	9.64E-01
U-234 (b)	15	15	1.02E+00	2.60E+00	1.67E+00	4.72E-01	N	1.88E+00	1.88E+00
U-235	31	5	1.30E-01	2.06E+00	3.56E-01	5.51E-01	D	7.88E-01	7.88E-01
U-238	31	26	8.80E-01	1.02E+01	2.16E+00	2.43E+00	X	4.06E+00	4.06E+00
<b>Area C Soil</b>									
Ac-227	104	72	2.20E-01	3.29E+01	3.82E+00	6.19E+00	X	6.46E+00	6.46E+00
Pa-231	105	43	1.58E+00	5.11E+01	4.91E+00	8.92E+00	D	8.71E+00	8.71E+00
Pb-210 (a)	0	--	--	--	--	--	--	--	4.55E+00
Ra-226	105	98	1.60E-01	2.11E+01	2.89E+00	3.72E+00	L	4.55E+00	4.55E+00
Ra-228	80	79	2.40E-01	1.41E+00	7.02E-01	1.98E-01	N	7.39E-01	7.39E-01
Th-228	81	80	3.60E-01	1.41E+00	7.50E-01	2.21E-01	L	8.06E-01	8.06E-01
Th-230	105	83	5.30E-01	5.47E+02	8.06E+01	1.33E+02	X	1.37E+02	1.37E+02
Th-232	105	104	3.60E-01	2.50E+00	7.83E-01	2.93E-01	L	8.35E-01	8.35E-01
U-234 (b)	46	46	6.00E-01	4.71E+01	8.63E+00	1.10E+01	X	1.57E+01	1.57E+01
U-235	104	52	4.90E-02	4.71E+00	8.46E-01	1.06E+00	X	1.30E+00	1.30E+00
U-238	105	93	5.00E-01	4.38E+01	7.74E+00	1.02E+01	X	1.21E+01	1.21E+01

(a) No direct-measurement Pb-210 data available; "--" indicates no data then Ra-226 EPC assigned for exposure calculations.

(b) Although some U-234 data are available, the U-238 values are systematically assigned to eliminate possible bias and inconsistencies.

EPC - Exposure point concentration is lesser of 95% UCL and maximum detection.

D - Distribution not determined due to less than 50% frequency of detection. 95% UCL calculated using Chebyshev Theorem.

L - Distribution is lognormal. 95% UCL calculated using Land's H method.

N - Distribution is normal. 95% UCL calculated using Student's t-statistic.

X - Distribution is nonparametric. 95% UCL calculated using Chebyshev Theorem.

*On-site Dataset Summary Statistics*

Contaminant	Number Sampled	Number Detected	Min. Detect	Max. Detect	Arith. Mean	St. Dev.	Dist.	95% UCL	EPC
<b>Area A Soil</b>									
Ac-227	29	12	2.60E-01	2.33E+01	3.27E+00	6.58E+00	D	8.60E+00	8.60E+00
Pa-231	29	8	3.30E+00	2.19E+01	4.32E+00	6.49E+00	D	9.58E+00	9.58E+00
Pb-210 (a)	0	--	--	--	--	--	--	--	1.17E+01
Ra-226	29	29	5.80E-01	3.17E+01	5.19E+00	8.06E+00	X	1.17E+01	1.17E+01
Ra-228	29	29	3.90E-01	1.54E+00	9.02E-01	2.99E-01	N	9.96E-01	9.96E-01
Th-228	29	29	3.90E-01	1.54E+00	9.02E-01	2.99E-01	N	9.96E-01	9.96E-01
Th-230	29	11	1.08E+01	7.77E+02	1.15E+02	2.13E+02	D	2.88E+02	2.88E+02
Th-232	29	29	3.90E-01	1.54E+00	9.02E-01	2.99E-01	N	9.96E-01	9.96E-01
U-234 (b)	0	--	--	--	--	--	--	--	3.14E+00
U-235	29	6	1.73E+00	6.14E+00	1.33E+00	2.24E+00	D	3.14E+00	3.14E+00
U-238	29	24	1.32E+00	5.24E+01	8.29E+00	1.30E+01	X	1.88E+01	1.88E+01
<b>Area B Soil</b>									
Ac-227	16	7	4.70E-01	5.98E+00	1.01E+00	1.88E+00	D	3.07E+00	3.07E+00
Pa-231	16	4	1.75E+00	6.45E+00	1.97E+00	1.87E+00	D	4.01E+00	4.01E+00
Pb-210 (a)	0	--	--	--	--	--	--	--	5.26E+00
Ra-226	16	16	5.70E-01	8.82E+00	2.30E+00	2.71E+00	X	5.26E+00	5.26E+00
Ra-228	16	16	5.30E-01	1.05E+00	7.43E-01	1.29E-01	N	8.00E-01	8.00E-01
Th-228	16	16	5.30E-01	1.05E+00	7.43E-01	1.29E-01	N	8.00E-01	8.00E-01
Th-230	16	8	8.06E+00	2.01E+02	3.56E+01	5.90E+01	X	9.99E+01	9.99E+01
Th-232	16	16	5.30E-01	1.05E+00	7.43E-01	1.29E-01	N	8.00E-01	8.00E-01
U-234 (b)	0	--	--	--	--	--	--	--	1.34E+00
U-235	16	2	1.42E+00	2.06E+00	5.78E-01	7.03E-01	D	1.34E+00	1.34E+00
U-238	16	11	8.80E-01	1.02E+01	2.73E+00	3.31E+00	X	6.33E+00	6.33E+00
<b>Area C Soil</b>									
Ac-227	80	50	3.20E-01	2.51E+01	3.41E+00	5.34E+00	X	6.01E+00	6.01E+00
Pa-231	80	38	1.02E+00	2.81E+01	3.94E+00	5.83E+00	D	6.79E+00	6.79E+00
Pb-210 (a)	0	--	--	--	--	--	--	--	3.56E+00
Ra-226	80	78	2.80E-01	1.44E+01	2.70E+00	2.91E+00	L	3.56E+00	3.56E+00
Ra-228	80	79	2.40E-01	1.41E+00	7.02E-01	1.98E-01	N	7.39E-01	7.39E-01
Th-228	80	79	2.40E-01	1.41E+00	7.02E-01	1.98E-01	N	7.39E-01	7.39E-01
Th-230	80	51	8.17E+00	5.47E+02	8.99E+01	1.37E+02	X	1.57E+02	1.57E+02
Th-232	80	79	2.40E-01	1.41E+00	7.02E-01	1.98E-01	N	7.39E-01	7.39E-01
U-234 (b)	0	--	--	--	--	--	--	--	1.69E+00
U-235	80	28	5.10E-01	4.71E+00	1.12E+00	1.18E+00	D	1.69E+00	1.69E+00
U-238	80	63	6.40E-01	3.75E+01	6.97E+00	8.84E+00	X	1.13E+01	1.13E+01

(a) No direct-measurement Pb-210 data available; "--" indicates no data then Ra-226 EPC assigned for exposure calculations.

(b) No direct-measurement U-234 data available; "--" indicates no data then U-238 EPC assigned for exposure calculations.

EPC - Exposure point concentration is lesser of 95% UCL and maximum detection.

D - Distribution not determined due to less than 50% frequency of detection. 95% UCL calculated using Chebyshev Theorem.

L - Distribution is lognormal. 95% UCL calculated using Land's H method.

N - Distribution is normal. 95% UCL calculated using Student's t-statistic.

X - Distribution is nonparametric. 95% UCL calculated using Chebyshev Theorem.

 <b>LSRS</b>   A <b>LATA</b> COMPANY	<b>Title</b> LSRS Waste Management, Transportation and Disposal Plan	<b>Document No.:</b> SWY-PLA-WP-013	<b>Revision No.:</b> 1
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**Attachment D Environmental Rail Solutions, Inc. – Certificate of Registration**

**UNITED STATES OF AMERICA  
DEPARTMENT OF TRANSPORTATION  
PIPELINE AND HAZARDOUS MATERIALS SAFETY ADMINISTRATION**



**HAZARDOUS MATERIALS  
CERTIFICATE OF REGISTRATION  
FOR REGISTRATION YEAR(S) 2012-2015**

**Registrant:** ENVIRONMENTAL RAIL SOLUTIONS INC

████████████████████  
621 SHREWSBURY AVE., STE.152  
SHREWSBURY, NJ 07702

This certifies that the registrant is registered with the U.S. Department of Transportation as required by 49 CFR Part 107, Subpart G.

This certificate is issued under the authority of 49 U.S.C. 5108. It is unlawful to alter or falsify this document.

**Reg. No: 051812 551 097UW**

**Issued: 05/18/2012**

**Expires: 06/30/2015**

**HM Company ID: 066878**

**Record Keeping Requirements for the Registration Program**

The following must be maintained at the principal place of business for a period of three years from the date of issuance of this Certificate of Registration:

- (1) A copy of the registration statement filed with PHMSA; and
- (2) This Certificate of Registration

Each person subject to the registration requirement must furnish that person's Certificate of Registration (or a copy) and all other records and information pertaining to the information contained in the registration statement to an authorized representative or special agent of the U. S. Department of Transportation upon request.

Each motor carrier (private or for-hire) and each vessel operator subject to the registration requirement must keep a copy of the current Certificate of Registration or another document bearing the registration number identified as the "U.S. DOT Hazmat Reg. No." in each truck and truck tractor or vessel (trailers and semi-trailers not included) used to transport hazardous materials subject to the registration requirement. The Certificate of Registration or document bearing the registration number must be made available, upon request, to enforcement personnel.

For information, contact the Hazardous Materials Registration Manager, PHH-52, Pipeline and Hazardous Materials Safety Administration, U.S. Department of Transportation, 1200 New Jersey Avenue, SE, Washington, DC 20590, telephone (202) 366-4109.

 <b>LSRS</b>   A <b>LATA</b> COMPANY	<b>Title</b> LSRS Waste Management, Transportation and Disposal Plan	<b>Document No.:</b> SWY-PLA-WP-013	<b>Revision No.:</b> 1
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**Attachment E Tonawanda Tank Transport Services, Inc. - Waste Transporter  
Permit**

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NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
DIVISION OF MATERIALS MANAGEMENT

**PART 364**  
**WASTE TRANSPORTER PERMIT NO. 9A-080**

Pursuant to Article 27, Titles 3 and 15 of the Environmental Conservation Law and 6 NYCRR 364

**PERMIT ISSUED TO:**

TONAWANDA TANK TRANSPORT SERVICE, INC.  
P.O. BOX H  
BUFFALO, NY 14217

**PERMIT TYPE:**

- NEW  
 RENEWAL  
 MODIFICATION

CONTACT NAME: [REDACTED]  
COUNTY: ERIE  
TELEPHONE NO: (716)873-9703

EFFECTIVE DATE: 04/01/2015  
EXPIRATION DATE: 03/31/2016  
US EPA ID NUMBER: NYD097644801

**AUTHORIZED WASTE TYPES BY DESTINATION FACILITY:**

The Permittee is Authorized to Transport the Following Waste Type(s) to the Destination Facility listed :

Destination Facility	Location	Waste Type(s)	Note
AES ENVIRONMENTAL, LLC	Morgantown , VA	Non-Hazardous Industrial/Commercial Hazardous Industrial/Commercial	
AGMET	MAPLE HEIGHTS , OH	Non-Hazardous Industrial/Commercial Hazardous Industrial/Commercial	
AGMET METALS, INC.	OAKWOOD VILLAGE , OH	Non-Hazardous Industrial/Commercial Hazardous Industrial/Commercial	
Allegany County Landfill	Angelica , NY	Petroleum Contaminated Soil	
Allied Waste Niagara Falls Landfill	Niagara Falls , NY	Non-Hazardous Industrial/Commercial Asbestos Petroleum Contaminated Soil	
AMERICAN ENVIRONMENTAL SERVICES	CALVERT CITY , KY	Non-Hazardous Industrial/Commercial Hazardous Industrial/Commercial	
AMERICAN RECYCLERS COMPANY, INC.	TONAWANDA , NY	Non-Hazardous Industrial/Commercial	
BATTERY SOLUTIONS INC.	HOWELL , MI	Non-Hazardous Industrial/Commercial	
BETHLEHEM APPARATUS	HELLERTOWN , PA	Non-Hazardous Industrial/Commercial Hazardous Industrial/Commercial	
BUFFALO SEWER AUTHORITY	BUFFALO , NY	Non-Hazardous Industrial/Commercial	
CALGON CARBON CORP	N. TONAWANDA , NY	Non-Hazardous Industrial/Commercial	
CALGON CARBON CORPORATION	CATLETTSBURG , KY	Non-Hazardous Industrial/Commercial	
CALGON CARBON CORPORATION	TONAWANDA , NY	Non-Hazardous Industrial/Commercial	

\*\*\* AUTHORIZED WASTE TYPES BY DESTINATION FACILITY LISTING (continued on next page) \*\*\*

**NOTE:** By acceptance of this permit, the permittee agrees that the permit is contingent upon strict compliance with the Environmental Conservation Law, all applicable regulations, and the General Conditions printed on the back of this page.

ADDRESS: New York State Department of Environmental Conservation  
Division of Materials Management - Waste Transporter Program  
625 Broadway, 9th Floor  
Albany, NY 12233-7251

AUTHORIZED SIGNATURE



Date: 3 / 12 / 15

**NOTICE**

This renewed permit is not valid until  
the effective date listed on the permit

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
DIVISION OF MATERIALS MANAGEMENT

**PART 364**  
**WASTE TRANSPORTER PERMIT NO. 9A-080**

Pursuant to Article 27, Titles 3 and 15 of the Environmental Conservation Law and 6 NYCRR 364

**PERMIT ISSUED TO:**

TONAWANDA TANK TRANSPORT SERVICE, INC.  
P.O. BOX H  
BUFFALO, NY 14217

**PERMIT TYPE:**

- NEW  
 RENEWAL  
 MODIFICATION

CONTACT NAME: [REDACTED]  
COUNTY: ERIE  
TELEPHONE NO: (716)873-9703

EFFECTIVE DATE: 04/01/2015  
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**AUTHORIZED WASTE TYPES BY DESTINATION FACILITY: (Continued)**

The Permittee is Authorized to Transport the Following Waste Type(s) to the Destination Facility listed :

Destination Facility	Location	Waste Type(s)	Note
CALGON CARBON WAREHOUSE	NORTH TONAWANDA , NY	Non-Hazardous Industrial/Commercial	
CARBON LIMESTONE LANDFILL, LLC	LOWELVILLE , OH	Non-Hazardous Industrial/Commercial Waste Oil	
CDS ENVIRONMENTAL SERVICES	BARRIE , ON	Non-Hazardous Industrial/Commercial Hazardous Industrial/Commercial	
CHAUTAUQUA COUNTY LANDFILL	JAMESTOWN , NY	Non-Hazardous Industrial/Commercial Asbestos Petroleum Contaminated Soil	
CHEMICAL SOLVENTS, INC.	CLEVELAND , OH	Non-Hazardous Industrial/Commercial Hazardous Industrial/Commercial Waste Oil	
CHEMICAL WASTE MANAGEMENT	EMELLE , AL	Non-Hazardous Industrial/Commercial Hazardous Industrial/Commercial Asbestos	
CHEMICAL WASTE MANAGEMENT	ARLINGTON , OR	Non-Hazardous Industrial/Commercial Hazardous Industrial/Commercial	
CHEMICAL WASTE MANAGEMENT, INC.	CARLYSS , LA	Non-Hazardous Industrial/Commercial Hazardous Industrial/Commercial	
CHEMTRON CORPORATION	AVON , OH	Non-Hazardous Industrial/Commercial Asbestos Petroleum Contaminated Soil Hazardous Industrial/Commercial Waste Oil	
CLEAN HARBOR ENVIRONMENTAL SERVICES	CLEVELAND , OH	Non-Hazardous Industrial/Commercial Hazardous Industrial/Commercial	
CLEAN HARBORS CANADA INC	LONDON , ON	Non-Hazardous Industrial/Commercial Petroleum Contaminated Soil Hazardous Industrial/Commercial Waste Oil	
CLEAN HARBORS DEER PARK	LAPORTE , TX	Non-Hazardous Industrial/Commercial Petroleum Contaminated Soil Hazardous Industrial/Commercial	

\*\*\* AUTHORIZED WASTE TYPES BY DESTINATION FACILITY LISTING (continued on next page) \*\*\*

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
DIVISION OF MATERIALS MANAGEMENT

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TONAWANDA TANK TRANSPORT SERVICE, INC.  
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**AUTHORIZED WASTE TYPES BY DESTINATION FACILITY: (Continued)**

The Permittee is Authorized to Transport the Following Waste Type(s) to the Destination Facility listed :

Destination Facility	Location	Waste Type(s)	Note
CLEAN HARBORS DEER PARK	LAPORTE , TX	Waste Oil	
CLEAN HARBORS ENVIRONMENTAL	ARAGONITE , UT	Non-Hazardous Industrial/Commercial Petroleum Contaminated Soil Hazardous Industrial/Commercial Waste Oil	
CLEAN HARBORS KIMBALL, NE	KIMBALL , NE	Non-Hazardous Industrial/Commercial Petroleum Contaminated Soil Hazardous Industrial/Commercial Waste Oil	
CLEAN HARBORS LONE MOUNTAIN	WAYNOKA , OK	Non-Hazardous Industrial/Commercial Petroleum Contaminated Soil Hazardous Industrial/Commercial Waste Oil	
CLEAN HARBORS OF CANADA	CORUNNA , ON	Non-Hazardous Industrial/Commercial Hazardous Industrial/Commercial	
CLEAN HARBORS OF CONNECTICUT	BRISTOL , CT	Non-Hazardous Industrial/Commercial Hazardous Industrial/Commercial	
CLEAN HARBORS PPM, LLC	TWINSBURG , OH	Non-Hazardous Industrial/Commercial Hazardous Industrial/Commercial	
CLEAN HARBORS RECYCLING SERVICES OF HEBRON	HEBRON , OH	Non-Hazardous Industrial/Commercial Hazardous Industrial/Commercial Waste Oil	
CLEAN HARBORS SERVICES INC.	CHICAGO , IL	Non-Hazardous Industrial/Commercial Hazardous Industrial/Commercial	
CLEANLITES RECYCLING	CINCINNATI , OH	Non-Hazardous Industrial/Commercial	Univ. Waste
CLEANLITES RECYCLING, INC.	MASON , MI	Non-Hazardous Industrial/Commercial	
COVANTA ENERGY OF ONONDAGA	JAMESVILLE , NY	Non-Hazardous Industrial/Commercial	
Covanta Niagara, L.P.	Niagara Falls , NY	Non-Hazardous Industrial/Commercial Waste Oil	
CWM CHEMICAL SERVICES LLC	MODEL CITY , NY	Non-Hazardous Industrial/Commercial Asbestos Petroleum Contaminated Soil	

\*\*\* AUTHORIZED WASTE TYPES BY DESTINATION FACILITY LISTING (continued on next page) \*\*\*

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
DIVISION OF MATERIALS MANAGEMENT

**PART 364**

**WASTE TRANSPORTER PERMIT NO. 9A-080**

Pursuant to Article 27, Titles 3 and 15 of the Environmental Conservation Law and 6 NYCRR 364

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TONAWANDA TANK TRANSPORT SERVICE, INC.  
P.O. BOX H  
BUFFALO, NY 14217

**PERMIT TYPE:**

- NEW  
 RENEWAL  
 MODIFICATION

CONTACT NAME: [REDACTED]  
COUNTY: ERIE  
TELEPHONE NO: (716)873-9703

EFFECTIVE DATE: 04/01/2015  
EXPIRATION DATE: 03/31/2016  
US EPA ID NUMBER: NYD097644801

**AUTHORIZED WASTE TYPES BY DESTINATION FACILITY: (Continued)**

The Permittee is Authorized to Transport the Following Waste Type(s) to the Destination Facility listed :

Destination Facility	Location	Waste Type(s)	Note
CWM CHEMICAL SERVICES LLC	MODEL CITY , NY	Hazardous Industrial/Commercial Waste Oil	
CYCLE CHEM (PA)	LEWISBERRY , PA	Non-Hazardous Industrial/Commercial Asbestos Petroleum Contaminated Soil Hazardous Industrial/Commercial Waste Oil	
DYNECOL, INC.	DETROIT , MI	Non-Hazardous Industrial/Commercial Hazardous Industrial/Commercial Waste Oil	
ELKEN METALS	ASHTABULA , OH	Non-Hazardous Industrial/Commercial Asbestos	
ELLERY LANDFILL LEACHATE TREATMENT FACIL	ELLERY , NY	Non-Hazardous Industrial/Commercial Petroleum Contaminated Soil	
ENVIRITE OF PENNSYLVANIA	YORK , PA	Non-Hazardous Industrial/Commercial Petroleum Contaminated Soil Hazardous Industrial/Commercial	
ENVIRONMENTAL & INDUSTRIAL CONT SERVICES	NIAGARA , NY	Non-Hazardous Industrial/Commercial Petroleum Contaminated Soil	
ENVIRONMENTAL DISPOSAL SYSTEMS, INC.	ROMULUS , MI	Non-Hazardous Industrial/Commercial Hazardous Industrial/Commercial	
ENVIRONMENTAL ENTERPRISES, INC.	CINCINNATI , OH	Non-Hazardous Industrial/Commercial Hazardous Industrial/Commercial	
ENVIRONMENTAL PRODUCTS & SERVICES	SYRACUSE , NY	Non-Hazardous Industrial/Commercial Asbestos Petroleum Contaminated Soil Waste Oil	
ENVIRONMENTAL RECOVERY CORPORATION	LANCASTER , PA	Non-Hazardous Industrial/Commercial Waste Oil	
ENVIRONMENTAL RECYCLING	BOWLING GREEN , OH	Non-Hazardous Industrial/Commercial	
ENVIRONMENTAL SOIL MANAGEMENT INC	LOUDON , NH	Non-Hazardous Industrial/Commercial Petroleum Contaminated Soil	

\*\*\* AUTHORIZED WASTE TYPES BY DESTINATION FACILITY LISTING (continued on next page) \*\*\*

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
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TONAWANDA TANK TRANSPORT SERVICE, INC.  
P.O. BOX H  
BUFFALO, NY 14217

**PERMIT TYPE:**

- NEW  
 RENEWAL  
 MODIFICATION

CONTACT NAME: BERKLEY D. TURNER  
COUNTY: ERIE  
TELEPHONE NO: (716)873-9703

EFFECTIVE DATE: 04/01/2015  
EXPIRATION DATE: 03/31/2016  
US EPA ID NUMBER: NYD097644801

**AUTHORIZED WASTE TYPES BY DESTINATION FACILITY: (Continued)**

The Permittee is Authorized to Transport the Following Waste Type(s) to the Destination Facility listed :

Destination Facility	Location	Waste Type(s)	Note
ENVIRONMENTAL SPECIALISTS	YOUNGSTOWN , OH	Non-Hazardous Industrial/Commercial Waste Oil	
Envirosafe Services of Ohio, Inc.	Oregon , OH	Hazardous Industrial/Commercial	
EQ DETROIT	DETROIT , MI	Non-Hazardous Industrial/Commercial Petroleum Contaminated Soil Hazardous Industrial/Commercial Waste Oil	
EQ OF CANTON (FORMERLY ENVIRITE OF CANTON , OH OHIO, INC.)		Non-Hazardous Industrial/Commercial Hazardous Industrial/Commercial	
EQ TRANSFER & PROCESSING	DETROIT , MI	Non-Hazardous Industrial/Commercial	
EQIS	INDIANAPOLIS , IN	Non-Hazardous Industrial/Commercial Petroleum Contaminated Soil Hazardous Industrial/Commercial Waste Oil	
ESSROC MATERIALS INC.	LOGANSPOUT , IN	Non-Hazardous Industrial/Commercial Hazardous Industrial/Commercial	
EVERCLEAR	AUSTINTOWN , OH	Non-Hazardous Industrial/Commercial	
EVERGREEN RDF	NORTHWOOD , OH	Non-Hazardous Industrial/Commercial	
EVOQUA WATER TECHNOLOGIES, LLC	DARLINGTON , PA	Non-Hazardous Industrial/Commercial Hazardous Industrial/Commercial	
FALCONBRIDGE LIMITED-HORNE SMELTER DIVISION	ROUYN NORANDA , QC	Non-Hazardous Industrial/Commercial Hazardous Industrial/Commercial	
GAGE PRODUCTS	FERNDALE , MI	Non-Hazardous Industrial/Commercial Hazardous Industrial/Commercial	
GENERAL ENVIRONMENTAL MANAGEMENT	CLEVELAND , OH	Non-Hazardous Industrial/Commercial Petroleum Contaminated Soil Grease Trap Waste Hazardous Industrial/Commercial Waste Oil	
GIANT CEMENT COMPANY	HARLEYVILLE , SC	Non-Hazardous Industrial/Commercial Hazardous Industrial/Commercial Waste Oil	

\*\*\* AUTHORIZED WASTE TYPES BY DESTINATION FACILITY LISTING (continued on next page) \*\*\*

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
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CONTACT NAME: [REDACTED]  
COUNTY: ERIE  
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EFFECTIVE DATE: 04/01/2015  
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**AUTHORIZED WASTE TYPES BY DESTINATION FACILITY: (Continued)**

The Permittee is Authorized to Transport the Following Waste Type(s) to the Destination Facility listed :

Destination Facility	Location	Waste Type(s)	Note
Greencastle WDF Facility	Greencastle , IN	Non-Hazardous Industrial/Commercial Hazardous Industrial/Commercial	
HERITAGE ENVIRONMENTAL SERVICES, LLC	INDIANAPOLIS , IN	Non-Hazardous Industrial/Commercial Hazardous Industrial/Commercial	
HERITAGE TECHNOLOGES LLC	INDIANAPOLIS , IN	Non-Hazardous Industrial/Commercial	
HERITAGE WTI, INC.	EAST LIVERPOOL , OH	Non-Hazardous Industrial/Commercial Petroleum Contaminated Soil Hazardous Industrial/Commercial Waste Oil	
High Acres Western Expansion Landfill	Fairport , NY	Non-Hazardous Industrial/Commercial Petroleum Contaminated Soil	
HIGHLAND ASSOCIATES	ANGELICA , NY	Non-Hazardous Industrial/Commercial	
HORIZON ENVIRONMENTAL	GRANDE-PILES , QC	Non-Hazardous Industrial/Commercial Petroleum Contaminated Soil Hazardous Industrial/Commercial	
HYLAND LANDFILL	ANGELICA , NY	Non-Hazardous Industrial/Commercial Petroleum Contaminated Soil Sludge from Sewage or Water Supply Treatment Plant	
INDUSTRIAL OIL TANK SERVICE CORPORATION	ORISKANY , NY	Non-Hazardous Industrial/Commercial Petroleum Contaminated Soil Waste Oil	
INMETCO	ELLWOOD CITY , PA	Non-Hazardous Industrial/Commercial Hazardous Industrial/Commercial	
INTERNATIONAL MARINE SALVAGE	BUFFALO , NY	Non-Hazardous Industrial/Commercial	
INTERNATIONAL MARINE SALVAGE, INC	PORT COLBORNE , ON	Non-Hazardous Industrial/Commercial Hazardous Industrial/Commercial	
JB1 RE#1 INC	NIAGARA FALLS , NY	Non-Hazardous Industrial/Commercial	
KEYSTONE CEMENT CO.	BATH , PA	Non-Hazardous Industrial/Commercial Hazardous Industrial/Commercial	
LAKEVIEW LANDFILL	ERIE , PA	Non-Hazardous Industrial/Commercial Asbestos Petroleum Contaminated Soil	

\*\*\* AUTHORIZED WASTE TYPES BY DESTINATION FACILITY LISTING (continued on next page) \*\*\*

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
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**AUTHORIZED WASTE TYPES BY DESTINATION FACILITY: (Continued)**

The Permittee is Authorized to Transport the Following Waste Type(s) to the Destination Facility listed :

Destination Facility	Location	Waste Type(s)	Note
LONE STAR ALTERNATE FUELS	GREENCASTLE , IN	Non-Hazardous Industrial/Commercial Hazardous Industrial/Commercial Waste Oil	
LONE STAR INDUSTRIES	CAPE GIRARDEAU , MO	Non-Hazardous Industrial/Commercial Hazardous Industrial/Commercial Waste Oil	
MAX ENVIROMENTAL TECHNOLOGIES	YUKON , PA	Non-Hazardous Industrial/Commercial Hazardous Industrial/Commercial	
MCKEAN COUNTY LANDFILL	KANE , PA	Non-Hazardous Industrial/Commercial Petroleum Contaminated Soil Hazardous Industrial/Commercial Waste Oil	
MICHIGAN DISPOSAL WTP	BELLEVILLE , MI	Non-Hazardous Industrial/Commercial Asbestos Petroleum Contaminated Soil Hazardous Industrial/Commercial Waste Oil	
MILL SEAT LANDFILL	BERGEN , NY	Non-Hazardous Industrial/Commercial	
MINERVA ENTERPRISES INC	WAYNESBURG , OH	Non-Hazardous Industrial/Commercial Asbestos	
MODERN LANDFILL	YORK , PA	Non-Hazardous Industrial/Commercial Petroleum Contaminated Soil	
MODERN LANDFILL, INC.	MODEL CITY , NY	Non-Hazardous Industrial/Commercial Asbestos Petroleum Contaminated Soil Waste Tires	
NEWALTA CORPORATION	FORT ERIE , ON	Non-Hazardous Industrial/Commercial Petroleum Contaminated Soil Hazardous Industrial/Commercial	
NEWALTA CORPORATION	BARRIE , ON	Non-Hazardous Industrial/Commercial Petroleum Contaminated Soil Hazardous Industrial/Commercial	

\*\*\* AUTHORIZED WASTE TYPES BY DESTINATION FACILITY LISTING (continued on next page) \*\*\*

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
DIVISION OF MATERIALS MANAGEMENT

**PART 364**  
**WASTE TRANSPORTER PERMIT NO. 9A-080**

Pursuant to Article 27, Titles 3 and 15 of the Environmental Conservation Law and 6 NYCRR 364

**PERMIT ISSUED TO:**

TONAWANDA TANK TRANSPORT SERVICE, INC.  
P.O. BOX H  
BUFFALO, NY 14217

**PERMIT TYPE:**

- NEW  
 RENEWAL  
 MODIFICATION

CONTACT NAME: [REDACTED]  
COUNTY: ERIE  
TELEPHONE NO: (716)873-9703

EFFECTIVE DATE: 04/01/2015  
EXPIRATION DATE: 03/31/2016  
US EPA ID NUMBER: NYD097644801

**AUTHORIZED WASTE TYPES BY DESTINATION FACILITY: (Continued)**

The Permittee is Authorized to Transport the Following Waste Type(s) to the Destination Facility listed :

Destination Facility	Location	Waste Type(s)	Note
NEWALTA CORPORATION	BARRIE , ON	Waste Oil	
NIAGARA FALLS WWTP	NIAGARA FALLS , NY	Non-Hazardous Industrial/Commercial	
NLR INC. FORMERLY NORTHEAST LAMP RECYCLING, INC	EAST WINDSOR , CT	Non-Hazardous Industrial/Commercial	
NOCO ENERGY CORPORATION	TONAWANDA , NY	Waste Oil	
NORLITE, LLC	COHOES , NY	Non-Hazardous Industrial/Commercial Hazardous Industrial/Commercial Waste Oil	
Ontario County Sanitary Landfill	Stanley , NY	Non-Hazardous Industrial/Commercial Petroleum Contaminated Soil	
PERMA-FIX OF DAYTON, INC.	DAYTON , OH	Non-Hazardous Industrial/Commercial Petroleum Contaminated Soil Hazardous Industrial/Commercial Waste Oil	
PERMA-FIX OF ORLANDO INC.	ORLANDO , FL	Non-Hazardous Industrial/Commercial Hazardous Industrial/Commercial	
PERMA-FIX OF SOUTH GEORGIA INC.	VALDOSTA , GA	Non-Hazardous Industrial/Commercial Hazardous Industrial/Commercial	
PETRO CHEM PROCESSING, INC.	DETROIT , MI	Non-Hazardous Industrial/Commercial Hazardous Industrial/Commercial Waste Oil	
RECYCLING & TREATMENT TECHNOLOGIES OF DETROIT LLC	DETROIT , MI	Non-Hazardous Industrial/Commercial Waste Oil	
RECYCLING & TREATMENT TECHNOLOGIES, LLC	PAINSVILLE , OH	Non-Hazardous Industrial/Commercial Grease Trap Waste Waste Oil	
REPUBLIC ENVIRONMENTAL SYSTEMS (PA) INC.	HATFIELD , PA	Non-Hazardous Industrial/Commercial Petroleum Contaminated Soil Hazardous Industrial/Commercial	
RESERVE ENVIRONMENTAL SERVICES	ASHTABULA , OH	Non-Hazardous Industrial/Commercial Hazardous Industrial/Commercial	
RETRIEV TECHNOLOGIES, INC. (FORMERLY TOXCO)	BALTIMORE , OH	Non-Hazardous Industrial/Commercial Hazardous Industrial/Commercial	

\*\*\* AUTHORIZED WASTE TYPES BY DESTINATION FACILITY LISTING (continued on next page) \*\*\*

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
DIVISION OF MATERIALS MANAGEMENT

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EFFECTIVE DATE: 04/01/2015  
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US EPA ID NUMBER: NYD097644801

**AUTHORIZED WASTE TYPES BY DESTINATION FACILITY: (Continued)**

The Permittee is Authorized to Transport the Following Waste Type(s) to the Destination Facility listed :

Destination Facility	Location	Waste Type(s)	Note
REVERE SMELTING & REFINING CORPORATION	MIDDLETOWN , NY	Non-Hazardous Industrial/Commercial	
ROCKWOOD LANDFILL	NEWPORT , MI	Non-Hazardous Industrial/Commercial	
ROSS INCINERATION SERVICES, INC.	GRAFTON , OH	Non-Hazardous Industrial/Commercial Petroleum Contaminated Soil Hazardous Industrial/Commercial Waste Oil	
SAFETY-KLEEN SYSTEMS, INC.	BUFFALO , NY	Waste Oil	
SCEPTER INC.	BICKNELL , IN	Non-Hazardous Industrial/Commercial	
Seneca Meadows LF	Waterloo , NY	Non-Hazardous Industrial/Commercial Petroleum Contaminated Soil	
SOLVENTS & PETROLEUM SERVICE	SYRACUSE , NY	Non-Hazardous Industrial/Commercial Hazardous Industrial/Commercial	
SOLVENTS & PETROLEUM SERVICE - FAYETTE ST.	SYRACUSE , NY	Non-Hazardous Industrial/Commercial	
Stalex Canada Inc.	Blainville , QC	Non-Hazardous Industrial/Commercial Hazardous Industrial/Commercial	
STEBEN CO SLF#4	BATH , NY	Non-Hazardous Industrial/Commercial Asbestos Petroleum Contaminated Soil Sludge from Sewage or Water Supply Treatment Plant	
STONY HOLLOW RECYCLING AND DISPOSAL CENTER	DAYTON , OH	Non-Hazardous Industrial/Commercial Petroleum Contaminated Soil	
SUBURBAN SOUTH RECYCLING	GLENFORD , OH	Non-Hazardous Industrial/Commercial Asbestos Petroleum Contaminated Soil Grease Trap Waste	
SYSTECH ENVIRONMENTAL	PAULDING , OH	Non-Hazardous Industrial/Commercial Hazardous Industrial/Commercial Waste Oil	
TERIS LLC	EL DORADO , AR	Non-Hazardous Industrial/Commercial Petroleum Contaminated Soil Hazardous Industrial/Commercial	
TIER ENVIRONMENTAL, LLC	BEDFORD , OH	Non-Hazardous Industrial/Commercial	

\*\*\* AUTHORIZED WASTE TYPES BY DESTINATION FACILITY LISTING (continued on next page) \*\*\*

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
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**AUTHORIZED WASTE TYPES BY DESTINATION FACILITY:** (Continued)

The Permittee is Authorized to Transport the Following Waste Type(s) to the Destination Facility listed :

Destination Facility	Location	Waste Type(s)	Note
TIER ENVIRONMENTAL, LLC	BEDFORD , OH	Petroleum Contaminated Soil Hazardous Industrial/Commercial Waste Oil	
TONAWANDA TERMINAL TREATMENT FACILITY	TONAWANDA , NY	Non-Hazardous Industrial/Commercial	
TRANSFORMER SALVAGE, INC.	DUDLEY , NC	Hazardous Industrial/Commercial	
TRI-RINSE, INC.	ST. LOUIS , MO	Non-Hazardous Industrial/Commercial Hazardous Industrial/Commercial	
TULIP MOLDED PLASTICS CORPORATION	NIAGARA FALLS , NY	Non-Hazardous Industrial/Commercial Hazardous Industrial/Commercial	
UNITED WATER WASTE SERVICES	MIDDLETOWN , OH	Non-Hazardous Industrial/Commercial Waste Oil	
US ECOLOGY IDAHO, INC.	GRAND VIEW , ID	Non-Hazardous Industrial/Commercial Petroleum Contaminated Soil Hazardous Industrial/Commercial	
VALICOR ENVIRONMENTAL SERVICES	CINCINNATI , OH	Non-Hazardous Industrial/Commercial Waste Oil	
VEOLIA ENVIRONMENTAL SERVICES	PORT AUTHOR , TX	Non-Hazardous Industrial/Commercial Hazardous Industrial/Commercial Waste Oil	
VEOLIA ES TECHNICAL SOLUTIONS, LLC	SAUGET , IL	Non-Hazardous Industrial/Commercial Petroleum Contaminated Soil Sludge from Sewage or Water Supply Treatment Plant Hazardous Industrial/Commercial	
VEOLIA ES TECHNICAL SOLUTIONS, LLC	WEST CARROLLTON , OH	Non-Hazardous Industrial/Commercial Asbestos Petroleum Contaminated Soil Hazardous Industrial/Commercial Waste Oil	
VEOLIA ES TECHNICAL SOLUTIONS, LLC	PORT WASHINGTON , WI	Non-Hazardous Industrial/Commercial Hazardous Industrial/Commercial	
VEXOR TECHNOLOGY, INC	MEDINA , OH	Non-Hazardous Industrial/Commercial Waste Oil	

\*\*\* AUTHORIZED WASTE TYPES BY DESTINATION FACILITY LISTING (continued on next page) \*\*\*

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
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**AUTHORIZED WASTE TYPES BY DESTINATION FACILITY:** (Continued)

The Permittee is Authorized to Transport the Following Waste Type(s) to the Destination Facility listed :

Destination Facility	Location	Waste Type(s)	Note
WASTE MANAGEMENT	CHAFFEE , NY	Non-Hazardous Industrial/Commercial Asbestos Petroleum Contaminated Soil	
WASTE MANAGEMENT - VICKERY ENVIRONMENTAL, INC.	VICKERY , OH	Non-Hazardous Industrial/Commercial Hazardous Industrial/Commercial	
WASTE MANAGEMENT AMERICAN	WAYNESBURG , OH	Non-Hazardous Industrial/Commercial Asbestos Petroleum Contaminated Soil	
WASTE MANAGEMENT MAHONING LANDFILL, INC.	NEW SPRINGFIELD , OH	Non-Hazardous Industrial/Commercial	
WAYNE DISPOSAL, INC	BELLEVILLE , MI	Non-Hazardous Industrial/Commercial Asbestos Petroleum Contaminated Soil Hazardous Industrial/Commercial	
WHEELABRATOR BALTIMORE L.P.	BALTIMORE , MD	Non-Hazardous Industrial/Commercial	
WHEELABRATOR HUDSON FALLS, LLC	HUDSON FALLS , NY	Non-Hazardous Industrial/Commercial	

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
DIVISION OF MATERIALS MANAGEMENT

**PART 364**

**WASTE TRANSPORTER PERMIT NO. 9A-080**

Pursuant to Article 27, Titles 3 and 15 of the Environmental Conservation Law and 6 NYCRR 364

**PERMIT ISSUED TO:**

TONAWANDA TANK TRANSPORT SERVICE, INC.  
P.O. BOX H  
BUFFALO, NY 14217

**PERMIT TYPE:**

- NEW  
 RENEWAL  
 MODIFICATION

CONTACT NAME: [REDACTED]  
COUNTY: ERIE  
TELEPHONE NO: (716)873-9703

EFFECTIVE DATE: 04/01/2015  
EXPIRATION DATE: **03/31/2016**  
US EPA ID NUMBER: NYD097644801

**AUTHORIZED VEHICLES:**

The Permittee is Authorized to Operate the Following Vehicles to Transport Waste:

(Vehicles enclosed in <>'s are authorized to haul Residential Raw Sewage and/or Septage only)

57 (Fifty Seven) Permitted Vehicle(s)

ME 2060415	NY AU14701
ME 2060416	NY AU14804
ME 2060417	NY AU73034
ME 2060418	NY AX21617
ME A456583	NY AX21618
ME E37431	NY BA78586
ME H83738	NY BA78587
NY 2728C7	NY BC12825
NY 3503C6	NY BD12007
NY 3513C6	NY BD12008
NY 3514C6	NY BD83139
NY 3527C7	NY BG61771
NY 3538C7	End of List
NY 3686C7	
NY 4252C9	
NY 4253C9	
NY 4254C9	
NY 4255C9	
NY 4313CO	
NY 80680JR	
NY 88982JB	
NY AB31968	
NY AB33227	
NY AC25355	
NY AC25357	
NY AC25359	
NY AC25363	
NY AC25367	
NY AC25369	
NY AC25370	
NY AC25387	
NY AC25392	
NY AC25395	
NY AC25397	
NY AC25398	
NY AD89299	
NY AD89300	
NY AG85926	
NY AL64954	
NY AM43885	
NY AR86148	
NY AR86149	
NY AR87218	
NY AR87219	
NY AR88121	

	<b>Title</b> LSRS Waste Management, Transportation and Disposal Plan	<b>Document No.:</b> SWY-PLA-WP-013	<b>Revision No.:</b> 1
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**Attachment F P&H Warehouse WNY – NYSDEC Transload Exemption**

**Subject:** FW: Truck to rail exemption

**From:** [REDACTED]  
**Sent:** Monday, April 27, 2015 3:09 PM  
**To:** [REDACTED]  
**Subject:** Truck to rail exemption

Exemptions -6NYCRR Part 360-1.7(b)(7)

(7) A transporter storing shipments of nonputrescible industrial and nonputrescible commercial waste, other than regulated medical waste, in containers or in vehicles at its own transfer facility for a period of five calendar days or less, if the transporter:

(i) maintains a log of the time and date on which each container or transport vehicle of waste is received or shipped;

(ii) does not open any container or transport vehicle for any purpose, including sampling, transfer, treatment or addition of absorbent;

(iii) stores the waste in a container or transport vehicle that meets the design requirements specified by the United States Department of Transportation for each type of waste stored. During storage and shipment, these containers or transport vehicles must be packaged, labeled and marked in accordance with 49 CFR, parts 171, 173, 178 and 179 (see section 360-1.3 of this Part);

(iv) stores containers or transport vehicles in a manner which will not rupture the container or transport vehicle or cause it to leak;

(v) complies with the standards for hazardous waste discharges from transporters specified in subdivision 372.3(d) of this Title;

(vi) immediately notifies the appropriate regional office of the department in which a spill or leak occurs of that spill or leak; and

(vii) inspects the containers or transport vehicles daily for leaks and deterioration, caused by corrosion or other factors, and keeps a written log of the inspections.

[REDACTED]  
*NYSDEC*

*Environmental Engineering Technician III*

*270 Michigan Ave*

*Buffalo, NY 14203*  
[REDACTED]  
[REDACTED]

 <b>LSRS</b>   A <b>LATA</b> COMPANY	<b>Title</b> LSRS Waste Management, Transportation and Disposal Plan	<b>Document No.:</b> SWY-PLA-WP-013	<b>Revision No.:</b> 1
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**Attachment G US Ecology Idaho, Inc. – EPA Part B Permit (Signature Page  
and Renewal Application)**

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STATE OF IDAHO  
DEPARTMENT OF  
ENVIRONMENTAL QUALITY

1410 North Hilton • Boise, Idaho 83706-1255 • (208) 373-0502

Dirk Kempthorne, Governor  
[REDACTED], Director

**Permittee: U.S. Ecology Idaho Inc.**  
**Facility Identification/Permit Number: IDD073114654**

### INTRODUCTION AND SIGNATURE PAGE

Pursuant to the Idaho Hazardous Waste Management Act of 1983 (HWMA), as amended, Idaho Code 39-4401 et seq., and the *Rules and Standards for Hazardous Waste*, as amended, IDAPA 58.01.05.000 et seq., a Hazardous Waste Treatment, Storage, and Disposal Permit is hereby issued to U.S. Ecology Idaho Inc. (USEI or Permittee) for operation of USEI's Site B facility, located in Owyhee county near Grand View, Idaho, on Lemley Road, at latitude 43° 03' 056" North and longitude 116° 15' 044" West.

The Permittee shall comply with all terms and conditions of this Permit, including Attachments 1 through 26. The Permittee must comply with all applicable state and federal regulations, including IDAPA 58.01.05.004 through 58.01.05.008 and 58.01.05.010 through 58.01.05.013 [40 Code of Federal Regulations (CFR), Parts 260 through 266, 268, 270, and 124] and as specified in this Permit. Any reference in this Permit to the Resource Conservation and Recovery Act (RCRA) or the Hazardous and Solid Waste Amendments of 1984 (HSWA), or federal regulations promulgated thereunder in 40 CFR, shall be deemed to include the equivalent HWMA statute or state regulation promulgated thereunder.

Applicable state and federal regulations are those that are in effect on the date of final administrative action on this Permit and any self implementing statutory provisions and related regulations that, according to the requirements of HWMA and/or HSWA, as amended, are automatically applicable to the Permittee's hazardous waste management activities, notwithstanding the conditions of this Permit.

This Permit is based upon the Administrative Record, as required by IDAPA 58.01.05.013 [40 CFR § 124.9]. The Permittee's failure, in the application or during the permit issuance process, to disclose fully all relevant facts, or the Permittee's misrepresentation of any relevant facts, at any time, shall be grounds for the termination or modification of this Permit and/or initiation of an enforcement action. To the extent there are inconsistencies between the Permit and the attachments, the language of the Permit shall prevail. The Permittee must inform the Director of the Idaho Department of Environmental Quality (Director) of any deviation from the permit conditions, or changes in the information on which the application is based that would affect the Permittee's ability to comply, or actual compliance with the applicable regulations or permit conditions, or which alters any permit condition in any way.

The Director shall enforce all conditions of this Permit. Any challenges of any permit condition shall be appealed to the Idaho Board of Environmental Quality, in accordance with IDAPA 58.01.05.013 [40 CFR § 124.19], and in accordance with the Idaho Department of Environmental Quality "Rules Governing Declaratory Rulings and Contested Case Proceedings," IDAPA 58.01.23.043.

The United States Environmental Protection Agency (EPA) shall maintain an oversight role of the state-authorized program, and in such capacity, shall enforce any permit condition based on state requirements if, in the Agency's judgement, the Director should fail to enforce that permit condition. Any challenges to the Agency-enforced conditions shall be appealed to the Agency, in accordance with 40 CFR § 124.19.

This Permit is effective as of November 12, 2004 and shall remain in effect until November 12, 2014, unless, in accordance with IDAPA 58.01.05.012, the Permit is: revoked and reissued [40 CFR § 270.41], terminated [40 CFR § 270.43], modified [40 CFR § 270.42 Appendix I.A.6], or continued [40 CFR § 270.51].

November 12, 2004  
Date



Department of Environmental Quality

This space intentionally left blank.



May 1, 2014

██████████, Hazardous Waste Program Manager  
*Waste Management and Remediation Division*  
Idaho Department of Environmental Quality  
1410 North Hilton  
Boise ID, 83706-1255

**RE: US Ecology Idaho, Inc. (USEI) – IDD073114654  
RCRA Part B Permit Renewal Application**

Dear ██████████:

Pursuant to Permit Condition I.H., USEI is submitting its RCRA Part B Permit Renewal Application in accordance with IDAPA 58.01.05.012 [40 CFR §270.30(b)] at least 180 days prior to the expiration date of its current Permit, November 12, 2014, in accordance with IDAPA 58.01.05.012 [40 CFR §270.10(h)].

If you have any questions or comments, please feel free to contact me or ██████████ ██████████

*I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.*

Regards,

██████████

General Manager

Attachments

Cc: ██████████ – IDEQ (w/ attachment)  
██████████ – EPA Region X (w/ enclosure)

 The logo for LSRS, a LATA Company, featuring the letters 'LSRS' in a bold, sans-serif font with a green leaf-like graphic to the left of the 'S'. To the right of 'LSRS' is a vertical line, followed by the text 'A LATA COMPANY' in a smaller, all-caps font.	<b>Title</b> LSRS Waste Management, Transportation and Disposal Plan	<b>Document No.:</b> SWY-PLA-WP-013	<b>Revision No.:</b> 1
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**Attachment H USEI Waste Profile**



WASTE PROFILE FORM

US Ecology Nevada (Beatty) 800-239-3943
US Ecology Idaho (Grand View) 800-274-1516
US Ecology Texas (Robstown) 800-242-3209
US Ecology Michigan (Detroit) 800-396-3265

PROFILE # \_\_\_\_\_

Form with sections A (Generator Information), B (Shipping Information), and C (General Material & Regulatory Information). Includes fields for generator name, address, contact info, shipping details, and waste characteristics.

D. MATERIAL COMPOSITION (use additional form if necessary)						
Constituent	Units	TCLP	Totals	Range total ≥ 100%		
				Typical	Min	Max
Soils and Soil-Like Materials	%	<input type="checkbox"/>	<input type="checkbox"/>		90%	100%
Debris - PPE, Rocks, Trees, Paper, Glass, Metal,	%	<input type="checkbox"/>	<input type="checkbox"/>		0%	10%
		<input type="checkbox"/>	<input type="checkbox"/>			
		<input type="checkbox"/>	<input type="checkbox"/>			
		<input type="checkbox"/>	<input type="checkbox"/>			
		<input type="checkbox"/>	<input type="checkbox"/>			
		<input type="checkbox"/>	<input type="checkbox"/>			
		<input type="checkbox"/>	<input type="checkbox"/>			
		<input type="checkbox"/>	<input type="checkbox"/>			
		<input type="checkbox"/>	<input type="checkbox"/>			

**E. WASTE CHARACTERISTICS**

1. Oxidizer	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	9. Reactive sulfides _____ ppm	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
2. Explosive	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	10. Reactive cyanides _____ ppm	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
3. Organic peroxide	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	11. Water/air reactive	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
4. Shock sensitive	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	12. Thermally unstable	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
5. Tires	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	13. TSCA regulated PCB waste (control sheet required with shipment)	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
6. Pyrophoric	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	14. Medical/infectious waste	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
7. Compressed gas	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	15. Radioactive (If yes, complete Profile Supplement for Radioactive Waste)	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
8. Halogenated organics	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No			

16. Possibility of incidental liquids from transportation?  Yes  No

17. Is waste a solid using the paint filter test?  Yes (solid)  No (not solid)

18. pH: (If solid, what is pH if mixed with water?) Range \_\_\_\_\_ to \_\_\_\_\_ Typical \_\_\_\_\_  ≤ 2  2 < 12.5  ≥ 12.5

19. Flash Point: N/A ° F  < 140 ° F

20. Is the waste oil bearing waste from Petroleum Refining, Production or Transportation practices?  Yes  No

**F. GENERATOR'S CERTIFICATION**

Yes  No I certify this material may be disposed without further treatment.

I authorize US Ecology to correct inconsistencies on the waste profile form that impact waste management decisions with my oral or written authorization. US Ecology will require re-submittal of the waste profile information if substantial changes are determined necessary. I understand material that does not conform to specifications described in this profile may be rejected by US Ecology unless other contractual arrangements have been agreed to by both parties. I certify, under penalty of law, that I am familiar with this waste stream through analysis and/or process knowledge, and that all information provided is true, accurate, representative and complete, that all known or suspected hazards have been disclosed, and that this form was completed in accordance with the instructions provided.

<div style="background-color: black; width: 100%; height: 100%;"></div>	Title <i>Civil Engineer</i>	Date <i>6/30/15</i>
---	--------------------------------	------------------------

	<b>Title</b> LSRS Waste Management, Transportation and Disposal Plan	<b>Document No.:</b> SWY-PLA-WP-013	<b>Revision No.:</b> 1
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**Attachment I USEI Waste Acceptance Criteria Supplement**



**UNIFORM RADIOACTIVE WASTE ACCEPTANCE CRITERIA SUPPLEMENT**

**PROFILE#** \_\_\_\_\_

A. GENERATOR INFORMATION		B. DISPOSAL SITE	
1. Generator:		<input type="checkbox"/> US Ecology Idaho (complete Pgs 1 <u>and</u> 2)	
2. Common Name of Material:		<input type="checkbox"/> US Ecology Nevada (Complete Pg 1 <u>only</u> )	
3. Material Description:		<input type="checkbox"/> US Ecology Texas (Complete Pg 1 <u>only</u> )	
<b>C. Generally Exempt Unimportant Quantities of Source Material Uniformly Dispersed in Soil or other Media (&lt; 0.05% by weight)</b>			
<b>1. Complete this Section if waste is being profiled as <u>generally exempt</u> source material. Does the material contain? (check all that apply)</b>			
<input type="checkbox"/> Natural, Refined, or Depleted Uranium		<input type="checkbox"/> Thorium (Th-232)	
<input type="checkbox"/> Both Uranium and Thorium			
<b>2. Source Material Sum of Fractions (SOF) Formulas:</b>			
Natural Uranium + Thorium		Refined Uranium + Thorium	
$\frac{Conc_{U-238}}{167pCi/g} + \frac{Conc_{Th-232}}{55pCi/g} \leq 1$		$\frac{Conc_{U-Total}}{333pCi/g} + \frac{Conc_{Th-Total}}{110pCi/g} \leq 1$	
$\frac{Conc_{U-238}}{169pCi/g} + \frac{Conc_{Th-232}}{55pCi/g} \leq 1$			
<b>Notes:</b> <ul style="list-style-type: none"> <li>1. Unless otherwise noted, use parent nuclide in equations</li> <li>2. Th-232 will routinely be considered to be in equilibrium with all progeny.</li> <li>3. Total Uranium = U-234 + U-235 + U-238.</li> <li>4. Total Thorium = Th-232 + Th-228</li> <li>5. Refined Uranium refers to chemical forms where the equilibrium state of the uranium decay chain has been disrupted.</li> <li>6. Depleted Uranium contains U-235 at &lt; 0.71% by weight</li> </ul>			
<b>3. Use this space to perform source material SOF calculations: (if waste only contains U or Th, enter zero for other nuclide)</b>			
<b>D. NORM other than Uranium and Thorium Uniformly Dispersed in Soil or Other Media</b>			
1. Does the waste contain:	<input type="checkbox"/> Ra-226 / Ra-228	<input type="checkbox"/> Pb-210	<input type="checkbox"/> K-40
2. Waste Concentration (pCi/g):			<input type="checkbox"/> Other(s)
Site Limits: USEI	500 / 1500 <sup>(1)</sup>	1500	818 <sup>(4)</sup>
(all in pCi/g) USEN	5 <sup>(2)</sup>	N/A	818 <sup>(4)</sup>
USET	30 <sup>(3)</sup>	150	818 <sup>(4)</sup>
<b>Notes(s):</b> <ul style="list-style-type: none"> <li>1. Limits are for Ra-226+Ra-228 combined. 500 pCi/g is for bulk loads, up to 1500 pCi/g requires sealed IP-1 package.</li> <li>2. USEN limit is for Ra-226 only.</li> <li>3. Limits are for Ra-226 or Ra-228. See TCEQ regulations for other NORM exemptions.</li> <li>4. K-40 may not be enriched beyond its natural concentration.</li> </ul>			
<b>E. NRC or Agreement State Exempted Products, Devices, or Items</b>			
1. Type of exempt item(s) or product(s) _____		No. of Items: _____	
2. The items are exempt under: _____			
(cite regulatory reference, i.e. 10CFR30.14) _____			
<b>Notes:</b> <ul style="list-style-type: none"> <li>1. Material must be transported in accordance with DOT Rules and Regulations.</li> <li>2. The generator must provide an estimated inventory of activity, by isotope, for each container.</li> <li>3. Individual packages may bear White I or Yellow II Labels as long as the maximum surface dose rate on any package does not exceed 10 mrem/hr.</li> <li>4. <b>Am-241 based smoke detectors are prohibited from disposal at USEN.</b></li> </ul>			
<b>F. CERTIFICATION STATEMENT:</b>			
I certify that the contents of the package(s) being shipped to _____ are not licensed or regulated at the point of generation by the US Nuclear Regulatory Commission or an Agreement State, in accordance with _____ (cite regulation or other document that confirms materials are not licensed by the NRC or an agreement state).			
<div style="background-color: black; width: 200px; height: 20px; margin: 0 auto;"></div> _____ Name / Title (please print)			
<div style="background-color: black; width: 150px; height: 30px; margin: 0 auto;"></div> _____ Signature		_____ Date	

**UNIFORM RADIOACTIVE WASTE ACCEPTANCE CRITERIA SUPPLEMENT**

**PROFILE#** \_\_\_\_\_

ADDITIONAL RAD SUPPLEMENT QUESTIONS FOR SHIPMENTS TO US ECOLOGY IDAHO ONLY				
<b>G. Particle Accelerator Produced Radioactive Material (NARM) (USEI WAC Table C.3)</b>				
1. Was the waste generated in a particle accelerator? <input type="checkbox"/> YES <input type="checkbox"/> NO				
2. Estimated inventory of activity, by isotope, for each container: Notes: <ul style="list-style-type: none"> <li>Dose rate may not exceed 10 mrem/hr at any point on the package surface.</li> <li>Containers must be at least 90% full.</li> </ul>				
<b>H. Materials Specifically Exempted by the NRC or NRC Agreement State (USEI WAC Table C.4b)</b>				
1.	Is the material approved for disposal in accordance with 20.2008(b) or equivalent Agreement State regulation? <i>If yes, provide a copy of the exemption.</i>	Yes	<input type="checkbox"/>	No <input type="checkbox"/>
2.	Has the waste been approved by the NRC or an Agreement State for alternative disposal in accordance with 10CFR 20.2002 or an Agreement State equivalent regulation? <i>If yes, provide a copy of the approval request, NRC exemption, and applicable SER/FONSI.</i>	Yes	<input type="checkbox"/>	No <input type="checkbox"/>
3.	Was the material approved for alternate disposal via a decommissioning plan or license amendment? <i>If yes, provide a copy of the license or plan.</i>	Yes	<input type="checkbox"/>	No <input type="checkbox"/>
4.	Is the material acceptable under USEI Table C.4b as not licensed or regulated by the NRC or Agreement State under <u>the Atomic Energy Act</u> ? <i>If yes, provide documentation that the radioactive material is unlicensed and refer to the applicable section(s) below (4a – 4c):</i>	Yes	<input type="checkbox"/>	No <input type="checkbox"/>
	<b>Exempt Material</b>	<b>WAC Limit</b>		
4a.	Byproduct Material (Exempt per 10CFR30.11 or equivalent)	Sum of all isotopes < 3,000 pCi/g		
4b.	Source Material (Exempt per 10CFR40.14 or equivalent)	Sum of all isotopes < 3,000 pCi/g. If waste contains <u>both uranium and thorium</u> , a sum of fractions (SOF) must be calculated using the limits provided below: <ul style="list-style-type: none"> <li><b>Natural Uranium (in equi):</b> <u>U-238 Limit = 214 pCi/g</u> <i>(U-238 * 14 decay progeny &lt; 3, 000 pCi/g)</i></li> <li><b>Depleted Uranium:</b> <u>U-238 Limit = 877 pCi/g</u> <i>(Only contains U-238, Th-234, Pa-234m, U-235, and U-234)</i></li> <li><b>Natural Thorium (in equi):</b> <u>Th-232 Limit = 272 pCi/g</u> <i>(Th-232 * 11 decay progeny &lt; 3, 000 pCi/g)</i></li> </ul> <u>Use this space for SOF calculations:</u>		
4c.	Special Nuclear Material (Exempt per 10CFR 70.17)	Sum of all isotopes < 3,000 pCi/g		

<b>For US Ecology Idaho use only:</b>	
<b>Which of the USEI WAC Tables apply to this profile? (Check all that apply)</b>	<b>Waste Type (check only one)</b>
<input type="checkbox"/> Table C.1 - Unimportant Quantities of Source Material Uniformly Dispersed in Soil or other Media <input type="checkbox"/> Table C.2 - NORM other than Uranium and Thorium Uniformly Dispersed in Soil or Other Media <input type="checkbox"/> Table C.3 - Particle Accelerator Produced Radioactive Material (NARM) <input type="checkbox"/> Table C.4a - NRC Exempted Products, Devices, or Items <input type="checkbox"/> Table C.4b - Materials Specifically Exempted by the US NRC or an NRC Agreement State	<input type="checkbox"/> FUSRAP <input type="checkbox"/> RADIOACTIVE NON-FUSRAP <input type="checkbox"/> RADIOACTIVE EXEMPT ACCEL

**Seaway Table 6 Blended Average Calculation - 6.15.15**

	<b>U234</b>
Specific activity	6.23E-03
pCi/Ci	1.00E+12
Activity of material in pCi/g	7
% by weight	1.124E-07

	<b>Th228</b>
Specific activity	8.22E+02
pCi/Ci	1.00E+12
Activity of material in pCi/g	0
% by weight	0

	<b>U235</b>
Specific activity	2.14E-06
pCi/Ci	1.00E+12
Activity of material in pCi/g	8
% by weight	0.0003738

	<b>Th230</b>
Specific activity	1.90E-02
pCi/Ci	1.00E+12
Activity of material in pCi/g	111
% by weight	5.84211E-07

	<b>U238</b>
Specific activity	3.33E-07
pCi/Ci	1.00E+12
Activity of material in pCi/g	10.07
% by weight	0.003024

	<b>Th232</b>
Specific activity	1.09E-07
pCi/Ci	1.00E+12
Activity of material in pCi/g	
% by weight	0

<b>Unity Equation Must be &lt;1</b>	
total	0.067971047

Total Activity						
<b>U (pCi/g)</b>		<b>Ra (pCi/g)*</b>		<b>Th (pCi/g)</b>		<b>Total Activity (pCi/g)</b>
U Daughters	14	Ra Daughters	10	Th Daughters	10	
Sub Total	0	Sub Total	0	Sub Total	0	

\*If waste is primarily uranium or thorium the radium is assumed to be in equilibrium with the parent. If your radium results are greater than the uranium (Ra 226 is a progeny of uranium 238) or thorium (Ra 228 is a progeny of thorium 232) then enter the difference in values to calculate "total activity"

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**Attachment J USEI Waste Acceptance Criteria**

## **C.3 WASTE ACCEPTANCE CRITERIA**

### ***C.3.1 Pre-acceptance Review***

The preacceptance protocol has been designed to ensure that only hazardous and radioactive material that can be properly and safely stored, treated and/or disposed of by USEI are approved for receipt at the facility. A two-step approach is taken by USEI. The first step is the chemical and/or radiological and physical characterization of the candidate waste stream by the generator. The second step is the preacceptance evaluation performed by USEI to determine the acceptability of the waste for receipt at the facility. Figure C-2 presents a logic diagram of the preacceptance protocol that is utilized at the facility.

### ***C.3.2 Radioactive Material Waste Acceptance Criteria***

The following waste acceptance criteria are established for accepting radiological contaminated waste material that is generally or specifically exempted from regulation by the Nuclear Regulatory Commission (NRC) or an Agreement State under the Atomic Energy Act of 1954 ("AEA"), as amended. Material may also be accepted if it is not regulated or licensed by the NRC or has been authorized for disposal by the IDEQ and is within the numeric waste acceptance criteria. Waste acceptance criteria are consistent with these restrictions.

The following five tables establish types and concentrations of radioactive materials that may be accepted. These tables are based on categories and types of radioactive material not regulated by the NRC based on statute or regulation or specifically approved by the NRC or an Agreement State for alternate disposal. The criteria are consistent with these restrictions and detailed analyses set forth in *Waste Acceptance Criteria and Justification for FUSRAP Material*, prepared by Radiation Safety Associates, Inc. (RSA) as subsequently refined, expanded and updated in *Waste Acceptance Criteria and Justification for Radioactive Material*, prepared by USEI.

Material may be accepted if the material has been specifically exempted from regulation by rule, order, license, license condition, letter of interpretation, or specific authorization under the following conditions: Thirty (30) days prior to intended shipment of such materials to the facility, USEI shall notify IDEQ of its intent to accept such material and submit information describing the material's physical, radiological, and/or chemical properties, impact on the facility radioactive materials performance assessment, and the basis for determining that the material does not require disposal at a facility licensed under the AEA. The IDEQ will have 30 days from receipt of this notification to reject USEI's determination or require further information and review. No response by IDEQ within thirty (30) days following receipt of such notice shall constitute concurrence. IDEQ concurrence is not required for generally exempted material as set forth in Table C.4a.

Based on categories of waste described in the waste acceptance criteria, the concentration of the various radionuclides in the conveyance (e.g., rail car gondola, other container etc.) shall not exceed the concentration limits established in the WAC without the specific written approval of the IDEQ unless generally exempted as set forth in Table C.4a. Radiological surveys will be performed as outlined in ERMP-01 to verify compliance with the WAC. If individual "pockets" of activity are detected indicating the limits may be exceeded, the RSO or RPS shall investigate the discrepancy and estimate the extent or volume of the material with the potentially elevated

radiation levels. The RPS or RSO shall then make a determination on the compliance of the entire conveyance load with the appropriate WAC limits. If the conveyance is determined not to meet the limits, USEI will notify IDEQ's RCRA Program Manager within 24 hours of a concentration based exceedance of the facility WAC to evaluate and discuss management options. The findings and resolution actions shall then be documented and submitted to the IDEQ.

The radioactive material waste acceptance criteria, when used in conjunction with an effective radiation monitoring and protection program as defined in the USEI *Radioactive Material Health and Safety Plan* and *Exempt Radioactive Materials Procedures* provides adequate protection of human health and the environment. Included within this manual are requirements for USEI to submit a written summary report of all radioactive material waste receipts showing volumes and radionuclide concentrations and total activities disposed at the USEI site on a quarterly basis. The 4<sup>th</sup> quarter report of each year will also include an updated analysis of the cumulative impact on the facility performance assessment based upon the previous year's waste receipt.

These criteria and procedures are designed to assure that the highest potential dose to a worker handling radioactive material at USEI shall not exceed 400 mrem/year TEDE dose, and that no member of the public is calculated to receive a potential post closure dose exceeding 15 mrem/year TEDE dose, from the USEI program. TEDE is defined as the "Total Effective Dose Equivalent", which equals the sum of external and internal exposures. The public dose limit during operation activities is limited to 100 mrem/yr TEDE dose. An annual summary report of environmental monitoring results will be submitted to IDEQ by June 1<sup>st</sup> for the preceding year.

Materials that have a radioactive component that meets the criteria described in Tables C.1 through C.4b and are RCRA regulated material will be managed as described within this WAP for the RCRA regulated constituents.

**Table C.1: Unimportant Quantities of Source Material Uniformly Dispersed\* in Soil or Other Media\*\***

	Status of Equilibrium	Maximum Concentration of Source Material	Sum of Concentrations Parent(s) and all progeny present
a	Natural uranium in equilibrium with progeny	<500 ppm / 167 pCi/g ( <sup>238</sup> U activity)	≤ 3000 pCi/g
	Refined natural uranium	<500 ppm / 167 pCi/g ( <sup>238</sup> U activity)	≤ 2000 pCi/g
	Depleted Uranium	<500 ppm / 169 pCi/g	≤ 2000 pCi/g
b	Natural thorium	<500 ppm / 55 pCi/g ( <sup>232</sup> Th activity)	≤ 2000 pCi/g
	<sup>230</sup> Th (with no progeny)	0.1 ppm / ≤2000 pCi/g	
	Any mixture of Thorium and Uranium	Sum of ratios ≤ 1****	≤2000 pCi/g

\*Refined Uranium includes <sup>238</sup>U, <sup>235</sup>U, <sup>234</sup>U; <sup>234</sup>Th, <sup>234m</sup>Pa, <sup>231</sup>Th

**Table C.2: Naturally Occurring Radioactive Material Other Than Uranium and Thorium Uniformly Dispersed\* in Soil or Other Media\*\***

	Status of Equilibrium	Maximum Concentration of Parent Nuclide	Sum of Concentrations of Parent and All Progeny Present
a	<sup>226</sup> Ra or <sup>228</sup> Ra with progeny in bulk form <sup>1</sup>	500 pCi/g	≤ 4500 pCi/g
b	<sup>226</sup> Ra or <sup>228</sup> Ra with progeny in reinforced IP-1 containers <sup>1</sup>	1500 pCi/g	13,500 pCi/g
c	<sup>210</sup> Pb with progeny( Bi & <sup>210</sup> Po)	1500 pCi/g	4500 pCi/g
	<sup>40</sup> K	818 pCi/g	N/A
	Any other NORM		≤3000 pCi/g

<sup>1</sup> Any material containing <sup>226</sup>Ra greater than 222 pCi/g shall be disposed at least 6 meters from the external point on the completed cell.

**Table C.3: Particle Accelerator Produced Radioactive Material**

Acceptable Material	Activity or Concentration
Any particle accelerator produced radionuclide.	All materials shall be packaged in accordance with USDOT packaging requirements. Any packages containing iodine or volatile radionuclides will have lids or covers sealed to the container with gaskets. Contamination levels on the surface of the packages shall not exceed those allowed at point of receipt by USDOT rules. Gamma or x-ray radiation levels may not exceed 10 millirem per hour anywhere on the surface of the package. All packages received shall be directly disposed in the active cell. All containers shall be certified to be 90% full.

<sup>1</sup> Average over conveyance or container. The use of the phrase "over the conveyance or container" is meant to reflect the variability on the generator side. The concentration limit is the primary acceptance criteria.

\*\*Unless otherwise authorized by IDEQ, other Media does not include radioactively contaminated liquid (except for incidental liquids in materials). See radioactive contaminated liquid definition (definition section of Part B permit).

$$*** \frac{\text{Conc. of U in sample}}{\text{Allowable conc. of U}} + \frac{\text{Conc. of Th in Sample}}{\text{Allowable conc. of Th}} \leq 1$$

**Table C.4a: NRC Exempted Products, Devices or Items**

Exemption 10 CFR Part*	Product, Device or Item	Isotope, Activity or Concentration
30.15	As listed in the regulation	Various isotopes and activities as set forth in 30.15
30.14, 30.18	Other materials, products or devices specifically exempted from regulation by rule, order, license, license condition, concurrence, or letter of interpretation	Radionuclides in concentrations consistent with the exemption
30.19	Self-luminous products containing tritium, <sup>85</sup> Kr, <sup>3</sup> H or <sup>147</sup> Pm	Activity by Manufacturing license
30.20	Gas and aerosol detectors for protection of life and property from fire	Isotope and activity by Manufacturing license
30.21	Capsules containing <sup>14</sup> C urea for <i>in vivo</i> diagnosis of humans	<sup>14</sup> C, one μCi per capsule
40.13(a)	Unimportant quantity of source material: see Table C.1	≤0.05% by weight source material
40.13(b)	Unrefined and unprocessed ore containing source material	As set forth in rule
40.13(c)(1)	Source material in incandescent gas mantles, vacuum tubes, welding rods, electric lamps for illumination	Thorium and uranium, various amounts or concentrations, see rules
40.13(c)(2)	(i) Source material in glazed ceramic tableware  (ii) Piezoelectric ceramic  (iii) Glassware not including glass brick, pane glass, ceramic tile, or other glass or ceramic used in construction	≤20% by weight  ≤2% by weight  ≤10% by weight
40.13(c)(3)	Photographic film, negatives or prints	Uranium or Thorium
40.13(c)(4)	Finished product or part fabricated of or containing tungsten or magnesium-thorium alloys. Cannot treat or process chemically, metallurgically, or physically.	≤4% by weight thorium content.
40.13(c)(5)	Uranium contained in counterweights installed in aircraft, rockets, projectiles and missiles or stored or handled in connection with installation or removal of such counterweights.	Per stated conditions in rule.
40.13(c)(6)	Uranium used as shielding in shipping containers if conspicuously and legibly impressed with legend "CAUTION RADIOACTIVE SHIELDING – URANIUM" and uranium incased in at least 1/8 inch thick steel or fire resistant metal.	Depleted Uranium
40.13(c)(7)	Thorium contained in finished optical lenses	≤30% by weight thorium, per conditions in rule.
40.13(c)(8)	Thorium contained in any finished aircraft engine part containing nickel-thoria alloy.	≤4% by weight thorium, per conditions in rule.

**Table C.4b: Materials Specifically Exempted by the NRC or NRC Agreement State**

Exemption	Materials	Isotope, Activity or Concentration*
10 CFR 30.11**	Byproduct material including production particle accelerator material exempted from NRC or Agreement State regulation by rule, order, license, license condition or letter of interpretation may be accepted as determined by specific NRC or Agreement State exemption.***	Byproduct material at concentrations consistent with the exemption
10 CFR 40.14**	Source material exempted from NRC or Agreement State regulation by rule, order, license, license condition or letter of interpretation may be accepted as determined by specific NRC or Agreement State exemption.***	Source material at concentrations consistent with the exemption.
10 CFR 70.17	Special Nuclear Material (SNM) exempted from NRC regulation by rule, order, license, license condition or letter of interpretation may be accepted as determined by specific NRC or Agreement State exemption.***	SNM at concentrations consistent with the exemption.

\*Sum of all isotopes up to a maximum concentration of 3,000 pCi/gm.

\*\* Alternate disposals authorized by Agreement States also require an NRC exemption for the purposes of disposal in the State of Idaho.

\*\*\* Similar material not regulated or licensed by the NRC may also be accepted. Sum of all isotopes up to a maximum concentration of 3,000 pCi/gm. IDEQ shall be notified prior to the receipt of Special Nuclear Material not regulated or licensed by the NRC.

**Additional Information for USEI's Waste Analysis Plan**

1. US Ecology Idaho, Inc. (USEI) may receive contaminated materials or other materials as described in Tables C.1 - C.4b above. USEI may not accept for disposal any material that by its possession would require USEI to have a radioactive material license from the Nuclear Regulatory Commission (NRC).
2. Unless approved in advance by USEI and IDEQ, average activity concentrations may not exceed those concentrations enumerated in Tables C.1 and C.2. Additionally, for Tables C.1 and C.2, individual pockets of material may exceed the WAC for the radionuclides present as long as the average concentration of all radionuclides within the package or conveyance remains at or below the WAC and the highest dose rate measured on the outside of the unshielded package or conveyance does not exceed those action levels enumerated in ERMP-01.
3. Other items, devices or materials listed in Table C.4a, which are exempted in accordance with 10 CFR Parts 30, 40 or equivalent Agreement State regulations or 10 CFR Part 70 may be accepted at or below the activities (per device or item) or concentrations specified in those exemptions.
4. 10CFR20.2008 authorizes disposal of certain byproduct material as defined in Section 11.e(3) and 11.e(4) of the Atomic Energy Act, as amended, at disposal facilities authorized to dispose of such material in accordance with any Federal or State solid or hazardous waste law, as authorized under the Energy Policy Act of 2005.
5. The generator of particle accelerator produced waste must specify that the waste meets applicable acceptance criteria.
6. In accordance with permit requirements, notification of any exceedance of the WAC will be provided to the RCRA Program Manager within 24 hours, in accordance with the permit.

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**Attachment K Off-Site Compliance Letter from the USEPA Regional Offsite  
Coordinator (ROC)**

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[REDACTED]

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**From:** [REDACTED]  
**Sent:** Wednesday, June 03, 2015 2:52 PM  
**To:** [REDACTED]  
**Subject:** RE: REquest for Off-Site Rule Compliance Letter - US Ecology

You submitted a request to the Region 10 Off-Site Rule Contact to determine if the US Ecology Idaho (RCRA EPA ID # IDD073114654), is acceptable to receive CERCLA waste. The US Ecology Idaho (RCRA EPA ID # IDD073114654) facility continues to be acceptable to receive CERCLA waste at this time.

If you make additional plans in the future to ship CERCLA waste to this facility, please check again with the R10 Off-Site Rule Contact to ensure that the off-site status of the facility has not changed.

[REDACTED]  
U.S. Environmental Protection Agency, Region 10  
Air and RCRA Compliance Unit  
1200 Sixth Ave, Suite 900, OCE-127  
Seattle, Washington 98101

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[REDACTED]  
**Sent:** Wednesday, June 03, 2015 11:31 AM

[REDACTED]  
**Subject:** REquest for Off-Site Rule Compliance Letter - US Ecology

Good Afternoon, [REDACTED] - I am requesting that USEPA Region X provide a letter stating that U.S. Ecology Idaho, Inc. (USEI) is in compliance with Section 121(d)(3) of CERCLA, and the Off-Site Rule (OSR), as set forth in the National Contingency Plan (NCP), and 40 CFR 300.440, and that USEI can receive wastes from our US Army Corps of Engineers (USACE) Seaway CERCLA Remedial Action Site in Tonawanda, NY.

The wastes types being shipped to USEI are:

Non-hazardous, Non-regulated, or Class 7, soils or soil-like with debris (paper, plastic, glass, metal, etc.).

The wastes will be shipped to:

US Ecology ID  
20400 Lemley Rd.  
Grandview, ID 83624  
[www.usecology.com](http://www.usecology.com)  
Part B Permit EPA ID. No.: IDD073114654

The anticipated start-shipment date is:

On or before June 15<sup>th</sup>, 2015

Please call me anytime on my cell or direct line numbers listed below if you have any questions or require additional information.

Thank you for your assistance -- ke



*Manager, Business Development  
LATA-SHARP Remediation Services, LLC  
An Employee-Owned Small Business  
185 Lafayette Drive  
Oak Ridge, TN 37830  
865.294.5028 (direct)  
865.481.3203 (main)  
865.481.3204 (fax)*



[www.lata.com](http://www.lata.com)



\*\*\*\*\*

This message is intended only for use by the individual or entity to which it is addressed. This message may contain information that is confidential or privileged. Any review, retransmission, dissemination, or other use of (or any action taken in reliance upon) this information by persons or entities other than the intended recipient is prohibited. If you received this message in error, please contact the sender via email or LSRS at 865.481.3203.

\*\*\*\*\*

	<b>Title</b> LSRS Waste Management, Transportation and Disposal Plan	<b>Document No.:</b> SWY-PLA-WP-013	<b>Revision No.:</b> 1
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**Attachment L Sample Waste Manifest and Bill-of- Lading**

# NON-HAZARDOUS WASTE MANIFEST

Please print or type (Form designed for use on elite (12 pitch) typewriter)

<b>NON-HAZARDOUS WASTE MANIFEST</b>		1. Generator's US EPA ID No.		Manifest Document No.	2. Page 1 of
3. Generator's Name and Mailing Address					
4. Generator's Phone ( )					
5. Transporter 1 Company Name		6. US EPA ID Number		A. State Transporter's ID	
7. Transporter 2 Company Name		8. US EPA ID Number		B. Transporter 1 Phone	
9. Designated Facility Name and Site Address		10. US EPA ID Number		C. State Transporter's ID	
				D. Transporter 2 Phone	
				E. State Facility's ID	
				F. Facility's Phone	
11. WASTE DESCRIPTION			12. Containers		13. Total Quantity
			No.	Type	14. Unit Wt./Vol.
a.					
b.					
c.					
d.					
G. Additional Descriptions for Materials Listed Above			H. Handling Codes for Wastes Listed Above		
15. Special Handling Instructions and Additional Information					
					
<b>16. GENERATOR'S CERTIFICATION:</b> I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.					
Printed/Typed Name				Signature	
				Date	
				Month Day Year	
17. Transporter 1 Acknowledgement of Receipt of Materials					
Printed/Typed Name				Signature	
				Date	
				Month Day Year	
18. Transporter 2 Acknowledgement of Receipt of Materials					
Printed/Typed Name				Signature	
				Date	
				Month Day Year	
19. Discrepancy Indication Space					
20. Facility Owner or Operator; Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.					
Printed/Typed Name				Signature	
				Date	
				Month Day Year	

NON-HAZARDOUS WASTE

GENERATOR

TRANSPORTER

FACILITY

# STRAIGHT BILL OF LADING

<b>BOL number:</b>
<b>Date Shipped:</b>
<b>Contract #:</b>

Payment is **COLLECT**

<b>Consignee</b>		<b>Shipper</b>		
NAME <b>US Ecology</b>		NAME		
STREET <b>300 E Mallard Dr Ste 300</b>		STREET		
CITY, STATE <b>Simco, ID</b>		ZIP <b>83706</b>		CITY, STATE <b>ZIP</b>
ROUTE <b>CSXT- Chicago – UP</b>				STCC #: <b>4029106</b>
NUMBER CUBIC YARDS	DOT Proper shipping name and description		<b>Weight</b> (Pounds) (SUBJECT TO CORRECTION)	<b>Rate</b> <b>CHARGES</b> (For Carrier use only)
	<b>Soil/Debris, Low-Level Radioactive Contaminated, NEC, Dry</b>			

Car	Containers		

RECEIVED, subject to the classifications and lawfully filed tariffs if applicable, or the individually determined rates in effect on the date of the issue of this Bill of Lading, the property described above in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated above which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to the usual place of delivery at said destination, if on its route, otherwise party at any time interested in all or any said property, that every service to be performed hereunder shall be subject to all the bill of lading terms and conditions in the governing classification on the date of shipment.  
 Shipper hereby certifies that he is familiar with all the bill of lading terms and conditions in the governing classification and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns.

**DO NOT HUMP CARS!**  
 Emergency Response Guide #161. Emergency Contact #: XXXXXXXXXXXXX

Signature:	Date:
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Send Freight Bills to: Environmental Rail Solutions, Inc,  
 621 Shrewsbury Ave,  
 Shrewsbury, NJ 07702