



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC-103

Release Tracking Number

RELEASE NOTIFICATION & NOTIFICATION RETRACTION
FORM Pursuant to 310 CMR 40.0335 and 310 CMR 40.0371 (Subpart C)

2 - 11210

If assigned by DEP

A. RELEASE OR THREAT OF RELEASE LOCATION:

Street: Jackson Road Location Aid: Building 2730
City/Town: Devens ZIP Code: 01433

B. THIS FORM IS BEING USED TO: (check one)

- ☒ Submit a **Release Notification** (complete all sections of this form).
☐ Submit a **Retraction of a Previously Reported Notification** of a Release or Threat of Release (complete Sections A, B, E, F and G of this form). You **MUST** attach the supporting documentation required by 310 CMR 40.0335.

C. INFORMATION DESCRIBING THE RELEASE OR THREAT OF RELEASE (TOR):

Date and time you obtained knowledge of the Release or TOR. Date: 6/28/96 Time: _____ Specify: ☐ AM ☐ PM

The date you obtained knowledge is always required. The time you obtained knowledge is not required if reporting only 120 Day Conditions.

IF KNOWN, record date and time release or TOR occurred. Date: _____ Time: _____ Specify: ☐ AM ☐ PM

☐ Check here if you previously provided an Oral Notification to DEP (2 Hour and 72 Hour Reporting Conditions only).

Provide date and time of Oral Notification. Date: _____ Time: _____ Specify: ☐ AM ☐ PM

Check all Notification Thresholds that apply to the Release or Threat of Release: (for more information see 310 CMR 40.0310 - 40.0315)

2 HOUR REPORTING CONDITIONS

- ☐ Sudden Release
☐ Threat of Sudden Release
☐ Oil Sheen on Surface Water
☐ Poses Imminent Hazard
☐ Could Pose Imminent Hazard
☐ Release Detected in Private Well
☐ Release to Storm Drain
☐ Sanitary Sewer Release (Imminent Hazard Only)

72 HOUR REPORTING CONDITIONS

- ☐ Subsurface Non-Aqueous Phase Liquid (NAPL) Equal to or Greater than 1/2 Inch
☐ Underground Storage Tank (UST) Release
☐ Threat of UST Release
☐ Release to Groundwater near Water Supply
☐ Release to Groundwater near School or Residence

120 DAY REPORTING CONDITIONS

- ☐ Release of Hazardous Material(s) to Soil or Groundwater Exceeding Reportable Concentration(s)
☒ Release of Oil to Soil Exceeding Reportable Concentration(s) and Affecting More than 2 Cubic Yards
☐ Release of Oil to Groundwater Exceeding Reportable Concentration(s)
☐ Subsurface Non-Aqueous Phase Liquid (NAPL) Equal to or Greater than 1/8 Inch and Less than 1/2 Inch

List below the Oils or Hazardous Materials that exceed their Reportable Concentration or Reportable Quantity by the greatest amount. If necessary, attach a list of additional Oil and Hazardous Material substances subject to reporting.

Name and Quantities of Oils (O) and Hazardous Materials (HM) Released:

O or HM Released	O HM (check one)	CAS # (if known)	Amount or Concentration	Units	Reportable Concentrations Exceeded, if Applicable (RCS-1, RCS-2, RCGW-1, RCGW-2)
Fuel Oil No. 2	<input checked="" type="checkbox"/> <input type="checkbox"/>		TPH > 2500	mg/kg	RCS-2
	<input type="checkbox"/> <input type="checkbox"/>				
	<input type="checkbox"/> <input type="checkbox"/>				

D. ADDITIONAL INVOLVED PARTIES:

- ☐ Check here if attaching names and addresses of owners of properties affected by the Release or Threat of Release, other than an owner who is submitting this Release Notification (required).
☐ Check here if attaching Licensed Site Professional (LSP) name and address (optional).

You may write in names and addresses on the bottom of the second page of this form.



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC-103
BUILDING 2730
Release Tracking Number

RELEASE NOTIFICATION & NOTIFICATION RETRACTION
FORM Pursuant to 310 CMR 40.0335 and 310 CMR 40.0371 (Subpart C)

2 - 11210
If assigned by DEP

E. PERSON REQUIRED TO NOTIFY:

Name of Organization: Devens Commerce Center / Massachusetts Government Land Bank
Name of Contact: Mr. Ron J. Ostrowski Title: Environmental Manager
Street: 43 Buena Vista Street, P-12
City/Town: Devens State: MA ZIP Code: 01433
Telephone: (508) 772-6340 Ext.: 303 FAX: (optional) (508) 772-7577

F. RELATIONSHIP OF PERSON REQUIRED TO NOTIFY TO RELEASE OR THREAT OF RELEASE: (check one)

- ☒ RP or PRP Specify: ☐ Owner ☐ Operator ☒ Generator ☐ Transporter Other RP or PRP: _____
☐ Fiduciary, Secured Lender or Municipality with Exempt Status (as defined by M.G.L. c. 21E, s. 2)
☐ Agency or Public Utility on a Right of Way (as defined by M.G.L. c. 21E, s. 5(j))
☐ Any Person Otherwise Required to Notify Specify Relationship: _____

G. CERTIFICATION OF PERSON REQUIRED TO NOTIFY:

I, Ron J. Ostrowski, attest under the pains and penalties of perjury (i) that I have personally examined and am familiar with the information contained in this submittal, including any and all documents accompanying this transmittal form, (ii) that, based on my inquiry of those individuals immediately responsible for obtaining the information, the material information contained in this submittal is, to the best of my knowledge and belief, true, accurate and complete, and (iii) that I am fully authorized to make this attestation on behalf of the entity legally responsible for this submittal. I/the person or entity on whose behalf this submittal is made am/is aware that there are significant penalties, including, but not limited to, possible fines and imprisonment, for willfully submitting false, inaccurate, or incomplete information.

By: RJ Ostrowski Title: ENV SVS
(signature)
For: RONALD J. OSTROWSKI Date: 9/24/96
(print name of person or entity recorded in Section E)

Enter address of the person providing certification, if different from address recorded in Section E:

Street: _____
City/Town: _____ State: _____ ZIP Code: _____
Telephone: _____ Ext.: _____ FAX: (optional) _____

YOU MUST COMPLETE ALL RELEVANT SECTIONS OF THIS FORM OR DEP MAY RETURN THE DOCUMENT AS INCOMPLETE. IF YOU SUBMIT AN INCOMPLETE FORM, YOU MAY BE PENALIZED FOR MISSING A REQUIRED DEADLINE.



IMMEDIATE RESPONSE ACTION (IRA)

TRANSMITTAL FORM Pursuant to 310 CMR 40.0424 - 40.0427 (Subpart D)

Release Tracking Number

2 - 11210

A. RELEASE OR THREAT OF RELEASE LOCATION:

Release Name: (optional) _____

Street: Jackson Road Location Aid: Building 2730

City/Town: Devens ZIP Code: 01433

☒ Check here if a Tier Classification Submittal has been provided to DEP for this Release Tracking Number.

☐ Check here if this location is Adequately Regulated, pursuant to 310 CMR 40.0110-0114.

Specify Program: ☐ CERCLA ☐ HSWA Corrective Action ☐ Solid Waste Management ☐ RCRA State Program (21C Facilities)

Related Release Tracking Numbers That This IRA Addresses: _____

B. THIS FORM IS BEING USED TO: (check all that apply)

☐ Submit an **IRA Plan** (complete Sections A, B, C, D, E, H, I, J and K).

☐ Check here if this IRA Plan is an update or modification of a previously approved written IRA Plan. Date Submitted: _____

☐ Submit an **Imminent Hazard Evaluation** (complete Sections A, B, C, F, H, I, J and K).

☐ Submit an **IRA Status Report** (complete Sections A, B, C, E, H, I, J and K).

☐ Submit a **Request to Terminate an Active Remedial System and/or Terminate a Continuing Response Action(s) Taken to Address an Imminent Hazard** (complete Sections A, B, C, D, E, H, I, J and K).

☒ Submit an **IRA Completion Statement** (complete Sections A, B, C, D, E, G, H, I, J and K).

You must attach all supporting documentation required for each use of form indicated, including copies of any Legal Notices and Notices to Public Officials required by 310 CMR 40.1400.

C. RELEASE OR THREAT OF RELEASE CONDITIONS THAT WARRANT IRA:

Identify Media and Receptors Affected: (check all that apply) ☐ Air ☒ Groundwater ☐ Surface Water ☐ Sediments ☒ Soil
☐ Wetland ☐ Storm Drain ☐ Paved Surface ☐ Private Well ☐ Public Water Supply ☐ Zone 2 ☐ Residence
☐ School ☐ Unknown ☐ Other Specify: _____

Identify Conditions That Require IRA, Pursuant to 310 CMR 40.0412: (check all that apply) ☐ 2 Hour Reporting Condition(s)

☐ 72 Hour Reporting Condition(s) ☐ Substantial Release Migration ☐ Other Condition(s)

Describe: IRA required per DEP letter dated 3/19/96 (attached)

Identify Oils and Hazardous Materials Released: (check all that apply) ☒ Oils ☐ Chlorinated Solvents ☐ Heavy Metals
☐ Others Specify: No. 2 Oil

D. DESCRIPTION OF RESPONSE ACTIONS: (check all that apply)

☐ Assessment and/or Monitoring Only

☒ Excavation of Contaminated Soils

☒ Re-use, Recycling or Treatment

☐ On Site ☐ Off Site Est. Vol.: _____ cubic yards

Describe: _____

☐ Store ☐ On Site ☐ Off Site Est. Vol.: _____ cubic yards

☒ Landfill ☒ Cover ☐ Disposal Est. Vol.: 84 cubic yards

☒ Removal of Drums, Tanks or Containers

Describe: 5,000-gallon and 1,000-gallon UST

☐ Deployment of Absorbent or Containment Materials

☐ Temporary Covers or Caps

☐ Bioremediation

☐ Soil Vapor Extraction

☐ Structure Venting System

☐ Product or NAPL Recovery

☐ Groundwater Treatment Systems

☐ Air Sparging

☐ Temporary Water Supplies

SECTION D IS CONTINUED ON THE NEXT PAGE.



Building 2730

IMMEDIATE RESPONSE ACTION (IRA)

TRANSMITTAL FORM Pursuant to 310 CMR 40.0424 - 40.0427 (Subpart D)

Release Tracking Number

2 - 11210

D. DESCRIPTION OF RESPONSE ACTIONS (continued):

- ☐ Removal of Other Contaminated Media
Specify Type and Volume: _____
- ☐ Temporary Evacuation or Relocation of Residents
- ☐ Other Response Actions Describe: _____
- ☐ Fencing and Sign Posting
- ☐ Check here if this IRA involves the use of Innovative Technologies (DEP is interested in using this information to aid in creating an Innovative Technologies Clearinghouse).
Describe Technologies: _____

E. TRANSPORT OF REMEDIATION WASTE: (if Remediation Waste has been sent to an off-site facility, answer the following questions)

Name of Facility: Laidlaw Waste Systems, Inc. (LWS) Plainville Landfill

Town and State: Plainville, MA

Quantity of Remediation Waste Transported to Date: 84 cubic yards

F. IMMINENT HAZARD EVALUATION SUMMARY: (check one of the following)

- ☐ Based upon an evaluation, an Imminent Hazard exists in connection with this Release or Threat of Release.
- ☐ Based upon an evaluation, an Imminent Hazard does not exist in connection with this Release or Threat of Release.
- ☐ Based upon an evaluation, it is unknown whether an Imminent Hazard exists in connection with this Release or Threat of Release, and further assessment activities will be undertaken.
- ☐ Based upon an evaluation, it is unknown whether an Imminent Hazard exists in connection with this Release or Threat of Release. However, response actions will address those conditions that could pose an Imminent Hazard.

G. IRA COMPLETION STATEMENT:

- ☐ Check here if future response actions addressing this Release or Threat of Release will be conducted as part of the Response Actions planned for a Site that has already been Tier Classified under a different Release Tracking Number, or a Site that is identified on the Transition List as described in 310 CMR 40.0600 (i. e., a Transition Site, which includes Sites with approved Waivers). These additional response actions must occur according to the deadlines applicable to the earlier Release Tracking Number (i. e., Site ID Number).

State Release Tracking Number (i. e., Site ID Number) of Tier Classified Site or Transition Site: _____

If any Remediation Waste will be stored, treated, managed, recycled or reused at the site following submission of the IRA Completion Statement, you must submit either a Release Abatement Measure (RAM) Plan or a Phase IV Remedy Implementation Plan, along with the appropriate transmittal form, as an attachment to the IRA Completion Statement.

H. LSP OPINION:

I attest under the pains and penalties of perjury that I have personally examined and am familiar with this transmittal form, including any and all documents accompanying this submittal. In my professional opinion and judgment based upon application of (i) the standard of care in 309 CMR 4.02(1), (ii) the applicable provisions of 309 CMR 4.02(2) and (3), and (iii) the provisions of 309 CMR 4.03(5), to the best of my knowledge, information and belief,

• if Section B of this form indicates that an **Immediate Response Action Plan** is being submitted, the response action(s) that is (are) the subject of this submittal (i) has (have) been developed in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, (ii) is (are) appropriate and reasonable to accomplish the purposes of such response action(s) as set forth in the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000 and (iii) complies(y) with the identified provisions of all orders, permits, and approvals identified in this submittal;

• if Section B of this form indicates that an **Imminent Hazard Evaluation** is being submitted, this Imminent Hazard Evaluation was developed in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, and all assessment activities(y) undertaken to support this Imminent Hazard Evaluation complies(y) with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000;

• if Section B of this form indicates that an **Immediate Response Status Report** is being submitted, the response action(s) that is (are) the subject of this submittal (i) is (are) being implemented in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, (ii) is (are) appropriate and reasonable to accomplish the purposes of such response action(s) as set forth in the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000 and (iii) complies(y) with the identified provisions of all orders, permits, and approvals identified in this submittal;

• if Section B of this form indicates that an **Immediate Response Action Completion Statement** or a **Request to Terminate an Active Remedial System and/or Terminate a Continuing Response Action(s) Taken to Address an Imminent Hazard** is being submitted, the response action(s) that is (are) the subject of this submittal (i) has (have) been developed and implemented in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, (ii) is (are) appropriate and reasonable to accomplish the purposes of such response action(s) as set forth in the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000 and (iii) complies(y) with the identified provisions of all orders, permits, and approvals identified in this submittal.

SECTION H IS CONTINUED ON THE NEXT PAGE.



BUILDING 2730

Release Tracking Number

IMMEDIATE RESPONSE ACTION (IRA)

TRANSMITTAL FORM Pursuant to 310 CMR 40.0424 - 40.0427 (Subpart D)

2 - 11210

H. LSP Opinion (continued):

I am aware that significant penalties may result, including, but not limited to, possible fines and imprisonment, if I submit information which I know to be false, inaccurate or materially incomplete.

☐ Check here if the Response Action(s) on which this opinion is based, if any, are (were) subject to any order(s), permit(s) and/or approval(s) issued by DEP or EPA. If the box is checked, you MUST attach a statement identifying the applicable provisions thereof.

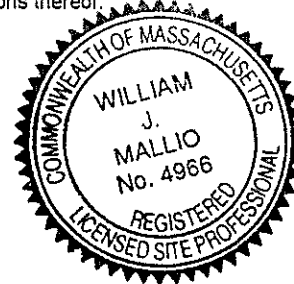
LSP Name: William J. Mallio LSP #: 4966 Stamp:

Telephone: (617) 498-4635 Ext.: _____

FAX: (optional) (617) 498-4623

Signature: William J. Mallio

Date: 9/15/96



I. PERSON UNDERTAKING IRA:

Name of Organization: Devens Commerce Center/Massachusetts Government Land Bank

Name of Contact: Ronald J. Ostrowski Title: Environmental Manager

Street: 43 Buena Vista St., P-12

City/Town: Devens State: MA ZIP Code: 01433

Telephone: (508) 772-6340 Ext.: _____ FAX: (optional) (508) 772-7577

☐ Check here if there has been a change in the person undertaking the IRA.

J. RELATIONSHIP TO RELEASE OR THREAT OF RELEASE OF PERSON UNDERTAKING IRA: (check one)

☒ RP or PRP Specify: ☐ Owner ☐ Operator ☒ Generator ☐ Transporter Other RP or PRP: _____

☐ Fiduciary, Secured Lender or Municipality with Exempt Status (as defined by M.G.L. c. 21E, s. 2)

☐ Agency or Public Utility on a Right of Way (as defined by M.G.L. c. 21E, s. 5(j))

☐ Any Other Person Undertaking IRA Specify Relationship: _____

K. CERTIFICATION OF PERSON UNDERTAKING IRA:

I, Ronald J. Ostrowski, attest under the pains and penalties of perjury (i) that I have personally examined and am familiar with the information contained in this submittal, including any and all documents accompanying this transmittal form, (ii) that, based on my inquiry of those individuals immediately responsible for obtaining the information, the material information contained in this submittal is, to the best of my knowledge and belief, true, accurate and complete, and (iii) that I am fully authorized to make this attestation on behalf of the entity legally responsible for this submittal. I/the person or entity on whose behalf this submittal is made am/is aware that there are significant penalties, including, but not limited to, possible fines and imprisonment, for willfully submitting false, inaccurate, or incomplete information.

By: RJO Ostrowski Title: ENV SVS
(signature)

For: RONALD J. OSTROWSKI Date: 9/24/96
(print name of person or entity recorded in Section I)

Enter address of the person providing certification, if different from address recorded in Section I:

Street: _____

City/Town: _____ State: _____ ZIP Code: _____

Telephone: _____ Ext.: _____ FAX: (optional) _____

YOU MUST COMPLETE ALL RELEVANT SECTIONS OF THIS FORM OR DEP MAY RETURN THE DOCUMENT AS INCOMPLETE. IF YOU SUBMIT AN INCOMPLETE FORM, YOU MAY BE PENALIZED FOR MISSING A REQUIRED DEADLINE.



COMMONWEALTH OF MASSACHUSETTS
EXECUTIVE OFFICE OF ENVIRONMENTAL AFFAIRS
DEPARTMENT OF ENVIRONMENTAL PROTECTION
CENTRAL REGIONAL OFFICE

cc Fahy

WILLIAM F. WELD
Governor

ARGEO PAUL CELLUCCI
Lt. Governor

TRUDY COXE
Secretary

DAVID B. STRUHS
Commissioner

March 19, 1996

Devens Commerce Center
43 Buena Vista Street, P-12
Ft. Devens, MA 01433

RE: Removal of
Underground
Storage Tanks
Phase II

Attention: Mr. William Burke and Mr. Ron Ostrowski

Dear Gentlemen:

On March 7, 1996 a meeting was held at the Devens Commerce Center (DCC) to discuss the removal of underground storage tanks (UST) being planned for the building 1600 area, after the transfer of properties to the Government Landbank. This letter serves to clarify issues discussed at the meeting.

The following issues were discussed and resolved as set out below;

1) At UST removal sites where petroleum contaminated soil is encountered, a limit of 100 cubic yards (yd³) of soil can be excavated under a Immediate Response Action (IRA) with presumptive approval at a classified Tier 1A Disposal Site. The Responsible Parties must notify the MADEP within 72 hours after reaching the contaminated soil limit of 100 (yd³). MADEP reminds the DCC that the Massachusetts Contingency Plan (MCP) Subpart C: 40.0311, 2 hour notification conditions, can be experienced during UST removals.

2) Field screening of soils for total petroleum hydrocarbon and volatile organic hydrocarbons will be conducted using the best available equipment utilizing accepted methods, i.e., non-dispersive infrared and photoionization detector respectively. Due to the large number of USTs scheduled for removal, MADEP recommends that an on-site field laboratory be set up to properly manage field screening samples.

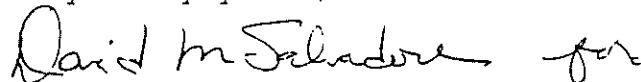
Removal of Underground Storage Tanks Phase II,
Page 2.

3) MADEP is aware that the future use of area 1600 will be commercial/industrial. Where MCP soil category (S2) standards apply, however, a best effort must be conducted during clean-up action at former UST sites to meet (S1) soil standards.

4) Petroleum contaminated soils generated on Post during UST removals are to be handled in accordance with MADEP Policies # WSC-94-400 and BWP-94-037 and General Management Procedures Excavated Waste Sites Soils Fort Devens, Massachusetts, developed by the BCT. Please inform this office of how waste soil will be managed.

If you have any questions regarding this communication, please contact David M. Salvadore, or myself at the letterhead address or call (508) 792-7653.

Very truly yours,

A handwritten signature in dark ink, appearing to read "David M. Salvadore", followed by a small flourish or "for" written in cursive.

D. Lynne Welsh
Section Chief
Federal Facilities, CERO

P:/DSAL/MLB1

cc: Information Repositories
Jim Byrne, EPA
Jim Chambers BRAC
Judith Kohn, MGLB
Mark Applebee, ACPOE
Bill Mallio, SEA

**THE COMMONWEALTH OF MASSACHUSETTS
GOVERNMENT LAND BANK
Devens Commerce Center
Devens, Massachusetts**

Closure Report

RELEASE TRACKING NO. 2-11210

USTs NO. 2730a/2730b

SEPTEMBER 1996

Attachment to:

**IMMEDIATE RESPONSE ACTION (IRA) COMPLETION STATEMENT
(BWSC-105)**

**Prepared by:
S E A CONSULTANTS INC.
Science/Engineering/Architecture
Cambridge, Massachusetts
Rocky Hill, Connecticut
Rochester, New York
Londonderry, New Hampshire**

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1.0 INTRODUCTION

This Immediate Response Action Completion Report has been completed in accordance with 310 CMR 40.0427. The response action was conducted as a result of a historical release of No. 2 heating oil from two (2) nested 5,000-gallon and 1,000-gallon steel underground storage tanks (USTs) located at Building No. 2730, Jackson Road, Devens, Massachusetts (north/east [North American Datum, 1983] coordinates N3020372/E622748).

The UST closure was conducted in accordance with the Commonwealth of Massachusetts Underground Storage Tank Closure Assessment Manual, dated April 9, 1996, and the Devens Commerce Center's (DCC) "*Underground Storage Tank Closure Protocol*" (Addendum to a Department of Environmental Protection (DEP) approved Tier 1A permit), dated June 14, 1996.

The nested 5,000-gallon and 1,000-gallon steel USTs, storing No. 2 heating oil, were removed on June 10, 1996. Petroleum-impacted soil above RCS-2 Reportable Concentrations was identified during tank closure through laboratory analysis of soil samples. Per 310 CMR 40.0361(1)(b), the RCS-2 reporting category applies to this site because it is outside the geographic boundaries of soil areas categorized as RCS-1. The release at the site is, therefore, subject to the DEP's 120-day notification requirements, as per 310 CMR 40.0300.

Because the DCC was conducting a large number of these UST removals, the DEP had issued the DCC a Presumptive Letter of Approval on March 19, 1996 to conduct an Immediate Response Action (IRA) at the UST excavation if impacted soil was detected above Reportable Concentrations outlined in the Massachusetts Contingency Plan (MCP) [310 CMR 40.1600].

As part of the IRA, approximately eighty-four (84) cubic yards of petroleum-impacted soil was removed and disposed of by the DCC. After soil was detected within the excavation

above RCS-2 Reportable Concentrations, and groundwater was observed at the base of the excavation, the site was transferred to the U.S. Army for further investigation.

2.0 BACKGROUND

The USTs at Building 2730 were originally installed in 1966 by the U.S. Army to store No. 2 fuel oil for Building 2730. Upon the closure of Fort Devens, the UST's ownership was transferred from the U.S. Army to the DCC. As part of the DCC's goal to develop Fort Devens, a number of USTs, including these USTs at Building 2730, were removed. The 5,000-gallon steel UST (2730a) had a diameter of six (6) feet and nine (9) inches, and a length of eighteen (18) feet. The 1,000-gallon UST (2730b) had a diameter of four (4) feet and a length of eleven (11) feet. The associated piping was copper tubing.

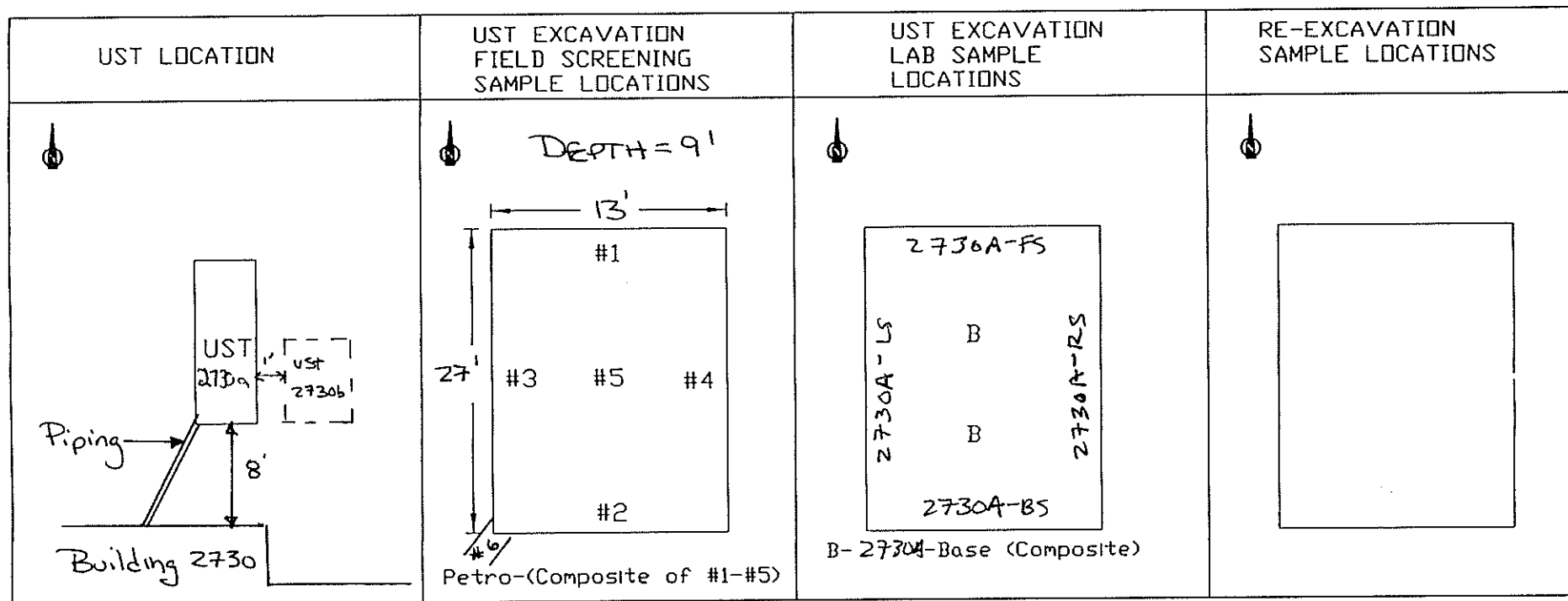
3.0 UST REMOVAL

On June 7, 1996, D&C Construction Co., Inc. of Rockland, Massachusetts, as part of its UST removal contract with the DCC, removed product from the USTs at Building 2730 with a vacuum truck. Later, soil above the USTs and its associated piping were removed with an excavator and by hand. The USTs were then tilted by the excavator to allow the remaining product to pool at the USTs' bottom corner. Two-foot by two-foot access holes were cut in the USTs after they had been tested for combustible gases and oxygen. A laborer made entry into the tank, and using squeegee wipers, rags and a vacuum hose, cleaned out the remaining product from the tanks. All product was transported off-site as hazardous waste. The manifests are included as Appendix A. On June 10, 1996, the USTs were removed and transported off-site. Copies of transfer documentation (Forms FP290R and 291) are included as Appendix B. A total of thirty-four (34) cubic yards of soil were excavated in the process of removing the USTs.

4.0 FIELD OBSERVATIONS, EXCAVATION, AND ASSESSMENT

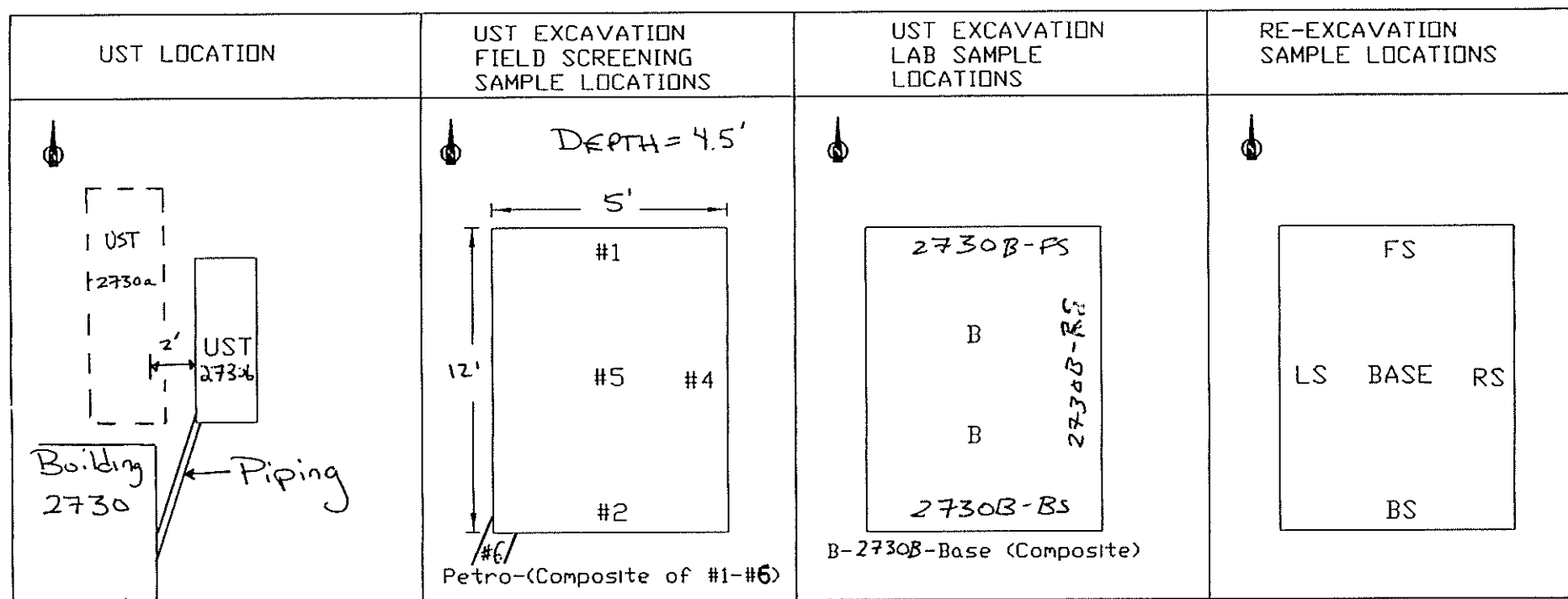
Upon removal of the USTs, both were observed to be intact with no sign that the integrity of the tank skin had been compromised. There was some visual evidence of petroleum-impacted soil near the fill area of the UST, which was likely due to overfilling. Groundwater was observed in the excavation beneath UST 2730a during tank removal. Soil samples were screened by the Jar Headspace method using a Photoionization Detector (PID). PID readings within the excavation around UST 2730a ranged from **0.5** to **88.0** parts per million by volume (ppmv) as benzene. PID readings within the excavation around 2730b ranged from **0.2** to **5.1** parts per million by volume (ppmv) as benzene. A composite sample collected from the sidewalls and base of the excavation around UST 2730b was screened using the Petroflag Hydrocarbon Analyzer system. The sample measured **451** ppm of Total Petroleum Hydrocarbons (TPH). Results and sampling locations are shown in Figure 1 and Figure 2. Due to the high headspace reading from the soil sample collected from the base of the excavation around UST 2730a, an additional fifty (50) cubic yards of soil was excavated. Petroflag samples collected from the base of this excavation measured between **1,500** and **1,898** ppm TPH. At nine (9) feet below grade, groundwater was observed infiltrating the excavation and no further excavation was conducted. Closure samples were collected from the excavation. Samples were also collected from the soil stockpiles for characterization and disposal. The following laboratory analyses were conducted:

LOCATION DESCRIPTION	LABORATORY ANALYSES METHOD
Sidewalls and Stockpile for UST 2730a	TPH (EPA Method 418.1)
Base of UST 2730a	TPH (EPA Method 8100) Polynuclear Aromatic Hydrocarbons (EPA Method 8270) Volatile Organic Compounds (EPA Method 8260)
Base, Sidewalls, and Stockpile for UST 2730b	TPH (EPA Method 418.1)



FIELD SCREENING					FIELD SCREENING				
SAMPLE #	DEPTH	TPH SCREEN	HEAD SPACE	LAB ANAL METHOD	SAMPLE #	DEPTH	TPH SCREEN	HEAD SPACE	LAB ANAL METHOD
#1			1.0						
#2			18.5						
#3	0		0.7						
#4			4.0						
#5	8		88.0						
#6			0.5						
PETRO		1898							
2730A-BASE				586					
2730A-FS				354					
2730A-B5				131					
2730A-LS				309					
2730A-RS				109					

Figure 1
UST and Sample Locations
Massachusetts Land Bank
Devens, Massachusetts



FIELD SCREENING					FIELD SCREENING				
SAMPLE #	DEPTH	TPH SCREEN	HEAD SPACE	LAB ANAL METHOD	SAMPLE #	DEPTH	TPH SCREEN	HEAD SPACE	LAB ANAL METHOD
#1	2-4'		0.8						
#2	2-4'		4.1						
#4	2-4'		5.1						
#5	4.5'		3.0						
#6	1'		0.2						
PETRO		451							
2730B-BASE				632					
2730B-FS				4430					
2730B-Bs				386					
2730B-RS				168					

Figure 2
UST and Sample Locations
Massachusetts Land Bank
Devens, Massachusetts

The base of the excavation around UST 2730a was tested for extra analytes due to its higher headspace reading. Laboratory results indicated that the TPH level from the sample collected from the front sidewall of the excavation around UST 2730b was above the RCS-2 Reportable Concentration, but within the acceptable range for recycling. All other soil samples had TPH levels below RCS-2 Reportable Concentrations. Results and sampling locations are shown in Table 1 and Figures 1 and 2, respectively. The laboratory analytical data package is contained in Appendix C.

After receipt of the laboratory data, the stockpiled soil was transported off-site under an LSP-approved Bill of Lading (Appendix E). Off-site clean fill was later backfilled into the excavation and compacted in accordance with the contract documents to bring the excavation back to grade. Soil compaction documentation is contained in Appendix D.

5.0 METHOD 1 RISK CHARACTERIZATION

Analytical results from the environmental sampling were compared to MCP "Reportable Concentrations" and "Applicable Cleanup Standards" to assess site constraints. The soil and groundwater cleanup standards for the subject site were selected as per 310 CMR 40.0970 for both current and foreseeable site uses. A Method 1 Risk Characterization was conducted in order to select the applicable cleanup standards for soil and groundwater on-site. The basis for the selected cleanup standards for current and foreseeable uses is presented below.

Current Use:

The site was formerly the U.S. Army's Fort Devens. Currently, the tanks' location is part of the DCC's Innovation and Technology Business Use Development. The site is unpaved and there are no residences on the site.

TABLE 1
SUMMARY OF LABORATORY ANALYTICAL RESULTS

SAMPLE I.D. NUMBER	ANALYTE	LABORATORY RESULT (PPM)	S-1/GW-1/GW-2/GW-3* (PPM)
2730a-Base 2730b-Base	TPH	586 632	500
2730a-FS 2730b-FS	TPH	354 4,430	500
2730a-BS 2730b-BS	TPH	131 386	500
2730a-RS 2730b-RS	TPH	109 168	500
2730a-LS 2730b-LS	TPH	309 No Left Side	500
2730a-Stock 2730b-Stock	TPH	685 2,400	500
2730a-Base	Fluorene	ND	400
2730a-Base	Phenanthrene	ND	700
2730a-Base	Anthracene	ND	1,000
2730a-Base	Fluoranthene	ND	600
2730a-Base	Pyrene	ND	500
2730a-Base	Benzo(a)anthracene	ND	0.7
2730a-Base	Chrysene	ND	7
2730a-Base	Benzo(b)fluoranthene	ND	0.7
2730a-Base	Benzo(k)fluoranthene	ND	7
2730a-Base	Benzo(a)pyrene	ND	0.7
2730a-Base	Indeno(1,2,3-cd)pyrene	ND	0.7
2730a-Base	Toluene	ND	90
2730a-Base	Ethyl Benzene	ND	80
2730a-Base	Xylenes	ND	500

*Soil/Groundwater Category S-1/GW-1/GW-2/GW-3 [310 CMR 40.0975(6)(a)].

ND = Not detected above laboratory detection limits.

reports\fddevens\UST2730.rpt

7

S E A CONSULTANTS INC.

UNDERGROUND STORAGE TANK CLOSURE REPORT
UST No. 2730A/2730B

Applicable Groundwater Standards:

The applicable "Groundwater Category" for the subject site, as defined under the MCP (310 CMR 40.0932), was identified based on the following considerations:

1. **Groundwater Category "GW-1" Standards:** GW-1 groundwater standards are applicable to groundwater that is or could be used as drinking water (e.g., within a "Zone II" aquifer protection area, interim wellhead protection area, "Potentially Productive" aquifer, or Zone A/Class A surface water body). Currently, the site is not within a Zone II delineated area, and, therefore, this GW-1 groundwater category does not apply. This Zone II delineation is based on a 3-layer model drafted by ETA, Inc. on August 15, 1995. The DEP is currently using this delineation on an interim basis (phone conversation Ron Ostrowski (DCC)/Lynne Welsh (DEP), July 24, 1996).
2. **Groundwater Category "GW-2" Standards:** GW-2 groundwater standards are applicable to groundwater located within thirty (30) feet of an existing occupied structure when depth to groundwater is fifteen (15) feet or less. GW-2 standards account for potential exposure to vapors resulting from compounds in groundwater. The average depth to groundwater in the area is less than twenty (20) feet, and, therefore, this classification does apply.
3. **Groundwater Category "GW-3" Standards:** Due to ecological exposure considerations, all groundwater in Massachusetts is classified as Category GW-3 (per 310 CMR 40.0932 [3]), including groundwater classified as Groundwater Category GW-1 or GW-2. This means that for those compounds for which GW-3 standards are more stringent than GW-1 or GW-2 standards, the GW-3 standards apply.

Applicable Soil Standards:

Soil Standards are determined based on potential exposure scenarios. Pertinent aspects of the exposure scenario developed for the site, using current site conditions, are summarized as follows:

- Potential receptors include adult contract workers engaged in demolition or construction activities;
- Potential frequency of use is "high" (since the site contractors are walking over the site daily);
- Potential intensity of use is "high" (since there is routine disturbance of surface and subsurface soils); and
- The soil is considered "accessible" (impacted soil is present less than three (3) feet below grade and the area is unpaved).

Based on the potential exposure scenario, and the provisions outlined under 310 CMR 40.0933, Soil Category "S-1", standards have been identified as applicable for characterization of risk of soil exposure on the site.

In addition to considerations of direct exposure to soil, indirect exposures could result from leaching of contaminants from soil into groundwater. As such, cleanup standards are also based in part on the category of groundwater, as defined under 310 CMR 40.0932, at or near potentially accessible soil.

Therefore, based upon the potential exposure scenario and the above groundwater classification, Soil Category S-1/GW-2/GW-3 has been identified as applicable for the site's current uses.

Future or Foreseeable Use:

The foreseeable future use for the site is to be as part of the DCC's Innovation and Technology Business Use development.

Applicable Groundwater Standards:

As the groundwater category and elevation are not expected to change, GW-2/GW-3 standards will still apply to the site.

Applicable Soil Standards:

Soil Standards applicable for risk characterization using Method 1 (per 310 CMR 40.0970) are determined based on potential exposure scenarios. Pertinent aspects of the exposure scenario developed for the site, assuming future site conditions, are summarized as follows:

- Receptors include employees and possibly children;
- Potential frequency of use is "high" for adults (since it is a workplace and large numbers of adults may be present at any given time, regardless of any one person's frequency of use) and "low" for children (infrequent visitors);
- Potential intensity of use is "high" (since activity will likely result in the inhalation of soil-derived dust); and

- The contaminated soil is "accessible" (less than three feet (3) below grade on an unpaved area).

Based on the potential exposure scenario, and the provisions outlined under 310 CMR 40.0933, soil standards have been identified as applicable for characterization of risk of soil on-site. Soil Category "S-1" would apply to the site.

Therefore, based upon the potential exposure scenario and the above groundwater classification, Soil Category S-1/GW-2/GW-3 has been identified as applicable for the site's foreseeable future uses.

In order to make future use of the site unrestricted, and due to the possibility that in future years the site may be classified as being within a Zone II aquifer, the DCC preferred the remediation of impacted soil to continue until soil contaminant levels were below more restrictive soil-groundwater limits (S-1/GW-1/GW-2/GW-3). Therefore, soil/groundwater category S-1/GW-1/GW-2/GW-3 has been selected as a goal by the DCC as a standard that will allow unrestricted use in the future.

Discussion of Results:

As presented in Figure 1 and Figure 2, final soil samples from the excavation sidewalls and base have TPH concentrations above the S-1/GW-1/GW-2/GW-3 Method 1 Risk standard of 500 mg/kg.

6.0 FINDINGS AND CONCLUSIONS

Based upon subsurface investigations indicating the presence of impacted soil around USTs 2730a and 2730b, D&C excavated approximately eighty-four (84) cubic yards of impacted soil.

Closure samples were collected from the sidewalls and base of the excavation, as determined by visual observation, jar headspace readings, and the Petroflag Hydrocarbon Analyzer system. TPH at the front sidewall of the excavation around UST 2730b was detected at concentrations above RCS-2 concentrations. In addition, the bases of the excavations around UST 2730a and UST 2730b were above the S-1/GW-1/GW-2/GW-3 cleanup standard, which was the goal of the DCC in order to allow for unrestricted use in the future. Because groundwater was detected at the base of the excavation of UST 2730a, the DCC, in accordance with their UST closure protocol, transferred the site to the U.S. Army for further investigation. The stockpile associated with the USTs' excavation was transported off-site under an LSP-approved Bill of Lading. The USTs' tank graves were backfilled with off-site fill and compacted.

As per 310 CMR 40.0427, this IRA is considered complete because the site conditions which triggered this IRA (threat of 2-hour or 72-hour release condition or Substantial Release Condition during a UST removal) have been properly assessed to a degree that has ensured that both (1) the site condition has been stabilized and (2) there is no imminent hazard to health, safety, public welfare, and the environment.

APPENDIX A

UNIFORM HAZARDOUS WASTE MANIFESTS



COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF HAZARDOUS WASTE

One Winter Street
Boston, Massachusetts 02108

FOR IN-STATE WASTE
OIL ONLY
OR
IN-STATE VSQG HW/WO

se print or type. (Form designed for use on elite (12-pitch) typewriter.)

P.O. #96-6-9

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator US EPA ID No.	Manifest Document No.	2. Page 1 of 1	Information in the shaded areas is not required by Federal law.	
3. Generator's Name and Mailing Address Devens Commerce Center 43 Buena Vista Street, Fort Devens, MA 01433		4. Generator's Phone (508) 772-6340		A. State Manifest Document Number MA H495517		
5. Transporter 1 Company Name Fleet Environmental Services Inc		6. US EPA ID Number MA D 985290907		B. State Gen. ID Same		
7. Transporter 2 Company Name		8. US EPA ID Number		C. State Trans. ID MA 16403		
9. Designated Facility Name and Site Address Olsons Greenhouse 590 South St. East Raynham, MA 02767		10. US EPA ID Number MA D 059733378		D. Transporter's Phone (508) 644-3003		
				E. State Trans. ID		
				F. Transporter's Phone		
				G. State Facility's ID Not Required		
				H. Facility's Phone (508) 822-1151		
11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)		12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	15. Waste No.
a. Waste Petroleum Liquid UN1993, PGIII		0101	TI	2430	G	MA-9.8
b.						
c.						
d.						
J. Additional Descriptions for Materials Listed Above (include physical state and hazard code.)		K. Handling Codes for Wastes Listed Above				
a. Oil/water		a. 8.4				
b.		b.				
15. Special Handling Instructions and Additional Information		Emergency Contact: Fleet Environmental (508) 644-3003 DURANT FOR Ewing				
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.						
Printed/Typed Name JAMES E. ARMSTRONG		Signature 			Date 5/6/96	
17. Transporter 1 Acknowledgement of Receipt of Materials		Printed/Typed Name MARC A. TERRO			Signature MARC A. TERRO	
18. Transporter 2 Acknowledgement of Receipt of Materials		Printed/Typed Name			Signature	
19. Discrepancy Indication Space						
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.		Printed/Typed Name Anthony J. Carrales			Signature 	
					Date 5/6/96	

APPENDIX B

TANK MANIFESTS AND RECEIPTS

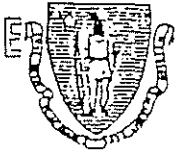
JUN 17 1996

The Commonwealth of Massachusetts

S.A.N.I.T

1A

6/10



Department of Public Safety—Division of Fire Prevention

APPLICATION FOR PERMIT FOR REMOVAL AND TRANSPORTATION TO APPROVED TANK YARD

June 19 1996

C.82 S.40 M.G.L.

DIG SAFE NUMBER

961907225

Start Date 6-7-96

To: HEAD OF FIRE DEPARTMENT

Chief Carpenter
City or TownIn accordance with the provisions of Chapter 148, G.L. as provided in
Section 38A Application is hereby made by

(Name of Person, Firm or Corporation)

248 River St Norwell MA 02061
Address

For permission to remove and transport underground steel storage tank(s) from

DEVENS COMMERCE CENTER
Street address (city or town)

FDID# 17919 to approved Tank Yard# 008

State clearly type of
Inert gas used in
steel storage tank

Type of inert gas used

Name of Person, Firm, Corporation disposing tank J.G. Grant Leachville MA.

Date issued - rejected 19

By:

Date of expiration 19 paid/due

Signature of Applicant

Fee \$5.00 per (MGL C-148, S-10A)

The Commonwealth of Massachusetts

DEPARTMENT OF PUBLIC SAFETY—DIVISION OF FIRE PREVENTION

PERMIT

FOR REMOVAL AND TRANSPORTATION TO APPROVED TANK YARD

In accordance with the provisions of Chapter 148, G.L. as provided in
Section 38A this permit is granted toName: O and C Construction
Full name of person, firm or CorporationTo transport underground steel storage tank(s)
to Approved tank yard#State clearly type of
Inert gas used in
steel storage tank

steel tank: method

FDID# 17919

Fee paid \$ 25.00

Name and address of contractor
disposing tankLocation to which tank will
be transported

This permit will expire 19

Approved Tank yard#

Signature of official granting permit (TITLE)
(Head of Fire Dept.)

C.82 S.40 M.G.L.

DIG SAFE NUMBER

961907225

Start Date 6-7-96

Tank Data

Gallons 6000

Previous Contents #2 F.O.

Diameter _____ Length _____

Date Received 6-11-96

Serial # (if available) _____

Tank I.D. # (Form FP-290) _____

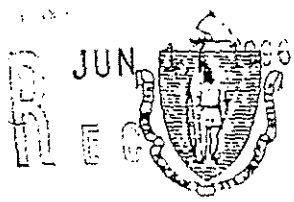
Tank Removed From:

Dover's Commerce Ctr.
(No. and Street)

Ayer
(City or Town)

Fire Dept. Permit # N/A

Owner/Operator to mail revised copy of Notification Form(FP-290, or Fp-290R) to: UST Compliance, Office of the State Fire Marshal, 1010 Commonwealth Avenue, Boston, Ma. 02215.

GRANT
(3)
17

The Commonwealth of Massachusetts

Department of Public Safety—Division of Fire Prevention

APPLICATION FOR PERMIT FOR REMOVAL AND TRANSPORTATION TO APPROVED TANK YARD

To: HEAD OF FIRE DEPARTMENT
CITY OF WORCESTER
City or Town

C.82 S.40 M.G.L.

DIG SAFE NUMBER

961907225Start Date 6-7-96In accordance with the provisions of Chapter 148, G.L. as provided in
Section 38A Application is hereby made by Jim Mowles

(Name of Person, Firm or Corporation)

248 River St. WORCESTER MA 02061
Address

For permission to remove and transport underground steel storage tank(s) from

DEVENS Commerce Center DEVENS MA 01433
Street address (city or town)FOID# 17919 to approved Tank Yard# 008State clearly type of
Inert gas used in
steel storage tank

Type of Inert gas used

Name of Person, Firm, Corporation disposing tank J.G. Grant REDDVILLE MA.

Date issued - rejected _____ 19

By: [Signature]

Date of expiration: _____ 19 paid/due

Signature of Applicant

Fee 25.00 (MGL C-148, S-10A)

The Commonwealth of Massachusetts

DEPARTMENT OF PUBLIC SAFETY—DIVISION OF FIRE PREVENTION

PERMIT

FOR REMOVAL AND TRANSPORTATION TO APPROVED TANK YARD

In accordance with the provisions of Chapter 148, G.L. as provided in
Section 38A this permit is granted toName: DAN C. Construction
Full name of person, firm or CorporationTo transport underground steel storage tank(s)
to Approved tank yard# _____State clearly type of
Inert gas used in
steel storage tank

steel tank: _____

method

FOID# 17919Fee paid \$ 25.00Name and address of contractor
disposing tankLocation to which tank will
be transported

This permit will expire _____ 19

Approved tank yard# _____

Signature of official granting permit

RECEIPT OF DISPOSAL OF UNDERGROUND STEEL STORAGE TANK

NAME AND ADDRESS JAMES G. GILFILLAN CO., INC.

OF

R. 28 WOOD GLEN ST.

APPROVED TANK YARD

BEANVILLE TAA 02137

APPROVED TANK YARD NO. _____

Tank Yard Ledger 502 CMR 3.03(4) Number: 96 2 2 4 6 2

I certify under penalty of law I have personally examined the underground steel storage tank delivered to this "approved tank yard" by firm, corporation or partnership Jim Morris/D+C

Cont. and accepted same in conformance with Massachusetts Fire Prevention Regulation 502 CMR 3.00 Provisions for Approving Underground Steel Storage Tank dismantling yards.

A valid permit was issued by LOCAL Head of Fire Department FDID# 12212 to transport this tank to this yard.

Name and official title of approved tank yard owner or owners authorized representative:

Edward V. Marin

SIGNATURE

Manager

TITLE

6-11-96

DATE SIGNED

This signed receipt of disposal must be returned to the local head of the fire department FDID# 12212 pursuant to 502 CMR 3.00. (EACH TANK MUST HAVE A RECEIPT OF DISPOSAL.)



Received: 06/20/96

Results by Sample

SAMPLE ID 2730a-BASEFRACTION 02ATEST CODE 827PAHNAME 8270 PAH ONLYDate & Time Collected 06/19/96 11:00:00Category SOIL

BASE NEUTRAL EXTRACTABLES

	RESULT	LIMIT
Naphthalene	ND	370
Acenaphthylene	ND	370
Acenaphthene	ND	370
Fluorene	ND	370
Phenanthrene	ND	370
Anthracene	ND	370
Fluoranthene	ND	370
Pyrene	ND	370
Benzo (a) anthracene	ND	370
Chrysene	ND	370
Benzo(b)fluoranthene	ND	370
Benzo(k)fluoranthene	ND	370
Benzo(a)pyrene	ND	370
Indeno(1,2,3-cd)pyrene	ND	370
Dibenz(a,h)anthracene	ND	370
Benzo(g,h,i)perylene	ND	370
2-Methylnaphthalene	ND	370

Notes and Definitions for this Report:

UNITS: ug/KgEXTRACTED: 06/21/96DATE RUN: 06/24/96ANALYST: PACINSTRUMENT: CDIL. FACTOR: 1

ND = not detected at detection limit

Received: 06/20/96

Results by Sample

SAMPLE ID 2730a-BASEFRACTION 02ATEST CODE GC PETNAME PETROLEUM SCAN BY GCDate & Time Collected 06/19/96 11:00:00Category SOIL**TPH by Modified EPA Method 8100**

PARAMETER	RESULT
JP-4	ND
Gasoline	ND
Kerosene	ND
Diesel	ND
No. 2 Fuel Oil	ND
No. 4 Fuel Oil	ND
No. 6 Fuel Oil	ND
Waste Oil	ND
Petroleum Constituent	586 mg/Kg
Total Petro. Hydrocarbons	586 mg/Kg

DETECTION LIMIT

Water Matrix	*
Solid Matrix	10.0 mg/Kg

Notes and Definitions for this Report:EXTRACTED 06/21/96DATE RUN 06/22/96ANALYST STINSTRUMENT HP 5

N.O.S. = Not Otherwise Specified

ND = Compound(s) not detected
above detection limitComments C11-C28

Received: 06/20/96

Results by Sample

SAMPLE ID <u>2730a-FS</u>	SAMPLE # <u>03</u> FRACTIONS: <u>A</u>
	Date & Time Collected <u>06/19/96 11:00:00</u> Category <u>SOIL</u>
TPH_IR <u>354</u>	
mg/kg DL=40.0	

SAMPLE ID <u>2730a-BS</u>	SAMPLE # <u>04</u> FRACTIONS: <u>A</u>
	Date & Time Collected <u>06/19/96 11:00:00</u> Category <u>SOIL</u>
TPH_IR <u>131</u>	
mg/kg DL=40.0	

SAMPLE ID <u>2730a-RS</u>	SAMPLE # <u>05</u> FRACTIONS: <u>A</u>
	Date & Time Collected <u>06/19/96 11:00:00</u> Category <u>SOIL</u>
TPH_IR <u>109</u>	
mg/kg DL=40.0	

SAMPLE ID <u>2730a-LS</u>	SAMPLE # <u>06</u> FRACTIONS: <u>A</u>
	Date & Time Collected <u>06/19/96 11:00:00</u> Category <u>SOIL</u>
TPH_IR <u>309</u>	
mg/kg DL=40.0	

SAMPLE ID <u>2730b-STOCK</u>	SAMPLE # <u>07</u> FRACTIONS: <u>A</u>
	Date & Time Collected <u>06/19/96 12:00:00</u> Category <u>SOIL</u>
TPH_IR <u>2400</u>	
mg/kg DL=40.0	

SAMPLE ID <u>2730b-BASE</u>	SAMPLE # <u>08</u> FRACTIONS: <u>A</u>
	Date & Time Collected <u>06/19/96 12:00:00</u> Category <u>SOIL</u>
TPH_IR <u>632</u>	
mg/kg DL=40.0	

SAMPLE ID <u>2730b-RS</u>	SAMPLE # <u>09</u> FRACTIONS: <u>A</u>
	Date & Time Collected <u>06/19/96 12:00:00</u> Category <u>SOIL</u>
TPH_IR <u>168</u>	
mg/kg DL=40.0	

SAMPLE ID <u>2730b-FS</u>	SAMPLE # <u>10</u> FRACTIONS: <u>A</u>
	Date & Time Collected <u>06/19/96 12:00:00</u> Category <u>SOIL</u>
TPH_IR <u>4430</u>	
mg/kg DL=40.0	

Received: 06/20/96

Results by Sample

SAMPLE ID <u>2730b-BS</u>	SAMPLE # <u>11</u> FRACTIONS: <u>A</u>
Date & Time Collected <u>06/19/96 12:00:00</u> Category <u>SOIL</u>	
TPH_IR <u>386</u>	
mg/kg DL=40.0	

SAMPLE ID <u>1669-RS2</u>	SAMPLE # <u>12</u> FRACTIONS: <u>A</u>
Date & Time Collected <u>06/19/96 10:00:00</u> Category <u>SOIL</u>	
TPH_IR <u>108</u>	
mg/kg DL=40.0	

SAMPLE ID <u>242-BS2</u>	SAMPLE # <u>13</u> FRACTIONS: <u>A</u>
Date & Time Collected <u>06/19/96 16:00:00</u> Category <u>SOIL</u>	
TPH_IR <u>112</u>	
mg/kg DL=40.0	

SAMPLE ID <u>242-FS2</u>	SAMPLE # <u>14</u> FRACTIONS: <u>A</u>
Date & Time Collected <u>06/19/96 16:00:00</u> Category <u>SOIL</u>	
TPH_IR <u>113</u>	
mg/kg DL=40.0	

SAMPLE ID <u>242-LS2</u>	SAMPLE # <u>15</u> FRACTIONS: <u>A</u>
Date & Time Collected <u>06/19/96 16:00:00</u> Category <u>SOIL</u>	
TPH_IR <u>96.0</u>	
mg/kg DL=40.0	

SAMPLE ID <u>242-RS2</u>	SAMPLE # <u>16</u> FRACTIONS: <u>A</u>
Date & Time Collected <u>06/19/96 16:00:00</u> Category <u>SOIL</u>	
TPH_IR <u>96.4</u>	
mg/kg DL=40.0	

Received: 06/20/96

Test Methodology

TEST CODE 8260 NAME PURGEABLE ORGANICS VOA

EPA METHOD: 8260: Gas Chromatography/Mass Spectrometry for Volatile Organics.

Reference: Test Methods for Evaluating Solid Wastes: Physical/Chemical Methods.
EPA SW-846 (Third Edition) 1986. Office of Solid Waste, USEPA.

RESULTS ARE REPORTED ON A DRY WEIGHT BASIS.

TEST CODE 8270 NAME PAH ONLYEPA METHOD: 8270 GAS CHROMATOGRAPHY / MASS SPECTROMETRY FOR SEMIVOLATILE
ORGANICS; CAPILLARY COLUMN TECHNIQUE. BASE NEUTRAL ONLY.REFERENCE: TEST METHODS FOR EVALUATING SOLID WASTES: PHYSICAL/CHEMICAL METHODS.
EPA SW-846 (THIRD EDITION) 1986. OFFICE OF SOLID WASTE, USEPA.

RESULTS ARE REPORTED ON A DRY WEIGHT BASIS.

TEST CODE EPETS NAME EXTRACTION GC PET SOIL

EPA METHOD: 3540: Soxhlet Extraction.

Reference: Test Methods for Evaluating Solid Wastes: Physical/Chemical Methods.
EPA SW-846 (Third Edition) 1986. Office of Solid Waste, USEPA.TEST CODE GC PET NAME PETROLEUM SCAN BY GC

EPA Method: 8100 Modified

Reference: Test Methods for Evaluating Solid Waste: Physical/Chemical
Methods. EPA SW-846 (Third Edition) 1986.
Office of Solid Waste, USEPA.This method utilizes analytical procedures consistent with EPA
Method 8100. The identity of petroleum contaminants is subject to
comparison with commercially supplied standards.

Alternate Method: ASTM Method D 3328

TEST CODE TPH IR NAME TPH BY IR

EPA METHOD: 418.1 for water sample.

Reference: Methods for Chemical Analysis of Water and Wastes.
EPA 600/4-79-020 (Revised, March 1983). EPA/EMSL, Cincinnati, OH.

Page 10

TOXIKON CORP.

REPORT

Work Order # 96-06-355

Received: 06/20/96

Test Methodology

Continued From Above

TEST CODE TPH IR NAME TPH BY IR

Reference: Test Methods for Evaluating Solid Waste: Physical/Chemical Methods.
EPA SW-846 (Third Edition) 1986. Office of Solid Waste, USEPA.

15 Wiggins Ave., Bedford, MA 01730
Telephone: (617) 275-3330
Fax: (617) 274-1136

1/2 DUE DATE : 7-3-96

COMPANY: D+C Construction Co., Inc.
ADDRESS: 415 VFW Drive.
P.O. Box 415 Rockland, MA 02374
PHONE #: (617) 871-8200 FAX #: (617) 871-8871
P.O. #: _____
PROJECT MANAGER: Whitney Morris
PROJECT ID/LOCATION: Devens.

SAMPLE TYPE
1. WASTEWATER
2. SOIL
3. SLUDGE
4. OIL
5. DRINKING WATER
6. WATER (GW/MW/SW)
7. OTHER (SPECIFY)

CONTAINER TYPE
P - PLASTIC
G - GLASS
V - VOA

ANALYSES

TOXIKON #	SAMPLE IDENTIFICATION	SAMPLE TYPE	CONTAINER			SAMPLING		PRESERVATIVE	ANALYSES										SPECIAL INSTRUCTIONS/COMMENTS
			SIZE	TYPE	#	DATE	TIME		TPH(418.1)	PAHs(8270)	VOCs(8260)	TPH(8100) m							
1	2730a-stock	S	20mm	G	1	6/19/96	1100	—	X										
2	2730a-base						1100		X	X	X								No TPH(418.1)
3	2730a-FS						1100		X										
4	2730a-BS						1100												
5	2730a-RS						1100												
6	2730a-LS						1100												
7	2730b-stock						1200												
8	2730b-base						1200												
9	2730b-RS						1200												
10	2730b-FS						1200												
11	2730b-BS						1200												
	1669-base																		No
12	1669-RS2						1000												

SAMPLED BY: CCF

DATE: 6-20-96
TIME: 07:30

QUOTATION #:

RELINQUISHED BY:

DATE: - -
TIME: - -

RECEIVED BY:

DATE: 6-20-96
TIME: 7:30

RELINQUISHED BY:

DATE: - -
TIME: - -

RECEIVED FOR LAB BY:

DATE: 6-20-96
TIME: 3:00

METHOD OF PAYMENT

COOLER TEMPERATURE

☐ RUSH BUSINESS DAY TURN AROUND

☐ ROUTINE

Sample disposal information

Are there any other known or suspected contaminants in these samples other than those listed above?

Yes _____ No _____ If Yes, 1st Know _____

APPENDIX D

COMPACTION TESTS



Briggs Associates
400 Hingham Street
Rockland, MA 02370
A Tundra Corporation Company

SOILS COMPACTION REPORT

PROJECT: Fort Devens
PROJECT #: 60904
DATE: 6/28/94
INSPECTOR: Andy Cooney

EMP.#: 323	REPORT #: 2	CODE:	LAB #:
ARR. TIME: 7:30 AM	JOB HOURS: 8	T.T.:	MILEAGE:
TEMP.: (H) L	WIND: H (L)	HUMID.: (H) (L)	(SUNNY) CLOUDY

MAXIMUM DRY DENSITY: $m-956 = 130.8 \text{ pcf}$ and $m-957 = 118.3 \text{ pcf}$

OPTIMUM MOISTURE CONTENT: $m-956 = 8.3\%$ and $m-957 = 9.5\%$

METHOD OF TESTING (CHECK ONE): SAND CONE: ☐ NUCLEAR DENSOMETER: ☒

Test No:	Location	Estimated Area Tested	Elevation	Test Results % compaction	Min. % Comp. Req.	Moist. Content %	Optimum Moisture %
	Bldg. 149/ center of hole	20 sq Ft.	10' Deep	97.0%	95.0%	8.1%	8.3%
		"	8' "	100.0	"	7.6	"
		"	6' "	96.0	"	8.0	"
		"	4' "	100.0	"	7.1	"
		"	2' "	97.5	"	6.0	"
		"	Surface	95.5	"	5.2	"
	Bldg. 2730 center of hole	"	10' Deep	95.0	"	5.0	"
		"	8' Deep	96.0	"	5.3	"
		"	6' "	95.5	"	8.1	"
		"	4' "	99.0	"	7.0	"
		"	2' "	98.0	"	5.6	"
		"	Surface	99.0	"	7.2	"
	Bldg. 140/ center of hole	"	10' Deep	96.5	"	6.4	9.5%
		"	8' "	96.0	"	3.3	"
		"	6' "	99.0	"	5.3	"
		"	4' "	98.5	"	5.9	"
		"	2' "	99.0	"	5.1	"
		"	Surface	95.0	"	5.2	"

Tests not meeting requirements: NONE

Who notified: Bob

Recommendations: NONE

REMARKS: All compactions met specified requirements of 95% compaction or better.

TECHNICIAN: Andrew W. Cooney
APPROVED: ROBERT A. BONICA, P.E.



Tundra Corporation

D & C Construction / Ft. Devens
Briggs # 60904
Tested: 6-5-96

1.

<u>Sample No.</u>	<u>Description</u>	<u>Source</u>
M-956	Gravelly Sand with silt	Site

*Keating
Sand + Gravel
Fitchburg.*

2. Sieve Analysis {ASTM C 136, and ASTM C 117}

<u>Sieve Size</u>	<u>Results</u> (% Passing by Wt.)	<u>Specs.</u>
4"	100	
3"	100	
2-1/2"	100	
2"	100	
1-1/2"	86	
1"	86	
3/4"	75	
1/2"	71	
3/8"	67	
#4	55	
#10	45	
#20	36	
#40	30	
#80	23	
#100	20	
#200	17.8	

3. No specifications provided.

4. Proctor Density {four point procedure - ASTM D 1557 Method C, and ASTM D 4718}.

	<u>Results</u>
Maximum Dry Unit Weight (pcf)	130.8
Optimum Moisture Content (%)	8.3

400 Hingham Street, Rockland, Massachusetts 02370

Tel (617) 871-6040 • Fax (617) 871-7982

Offices located throughout the United States and Canada



Briggs Associates

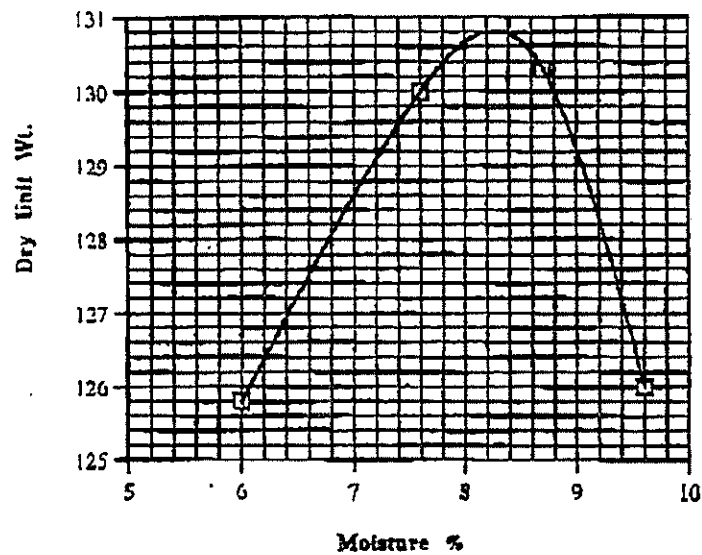
A Tundra Corporation Company

Project: D & C Construction / Ft. Devens

Sample no. M-956

Date: 6/5/96

Proctor



Max. Dry Density
130.8 pcf

**Optimum
Moisture**
8.3 %



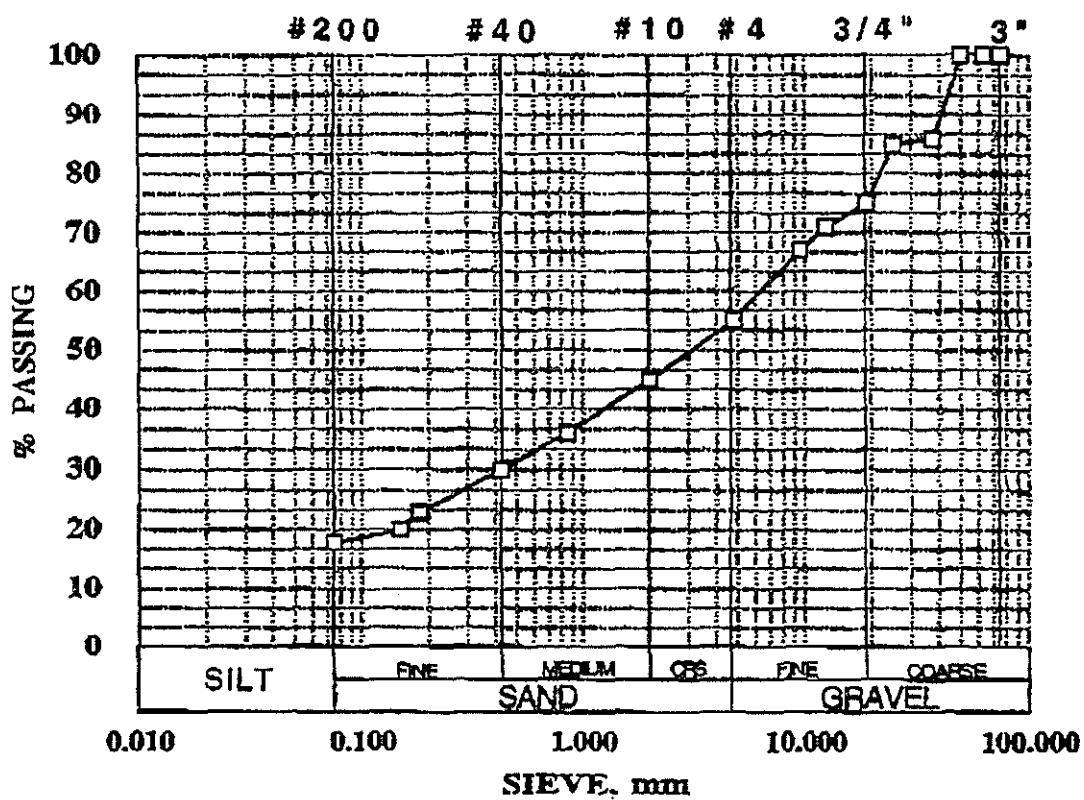
Briggs Associates
A Tundra Corporation Company

Project: D & C Construction / Ft. Devens

Sample No. M-956

Date: 6/3/96

SIEVE





Tundra Corporation

D & C Construction / Ft. Devens
Briggs # 60904
Tested: 6-5-96

1.	<u>Sample No.</u>	<u>Description</u>	<u>Source</u>
	M-957	Gravelly Sand	Site

2. Sieve Analysis {ASTM C 136, and ASTM C 117}

<u>Sieve Size</u>	<u>Results</u> { % Passing by Wt. }	<u>Specs.</u>
4"	100	
3"	100	
2-1/2"	100	
2"	100	
1-1/2"	100	
1"	100	
3/4"	98	
1/2"	96	
3/8"	95	
#4	90	
#10	85	
#20	70	
#40	38	
#80	11	
#100	9	
#200	5.4	

3. No specifications provided.

4. Proctor Density {four point procedure - ASTM D 1557 Method C, and ASTM D 4718}.

	<u>Results</u>
Maximum Dry Unit Weight (pcf)	118.3
Optimum Moisture Content (%)	9.5

400 Flingham Street, Rockland, Massachusetts 02370

Tel (617) 871-6010 • Fax (617) 871-7982

Offices located throughout the United States and Canada



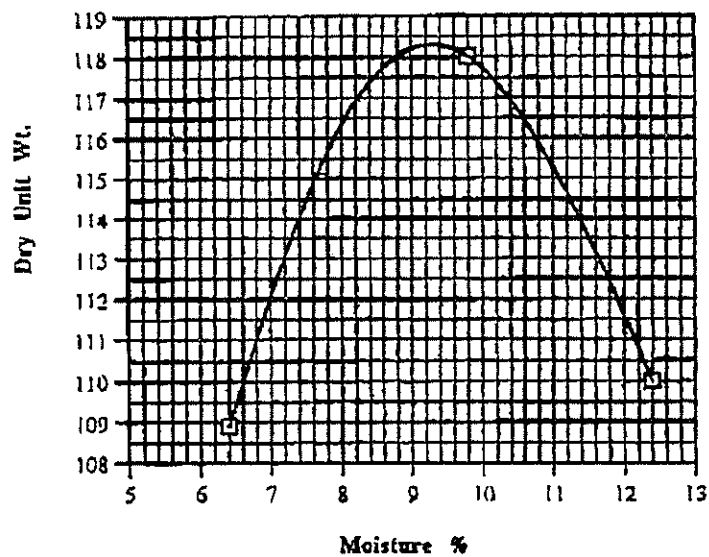
Briggs Associates
A Tundra Corporation Company

Project: D & C Construction / Ft. Devens

Sample no. M-957

Date: 6/5/96

Proctor



Max. Dry Density
118.3 pcf

**Optimum
Moisture**
9.5 %



Briggs Associates
A Tundra Corporation Company

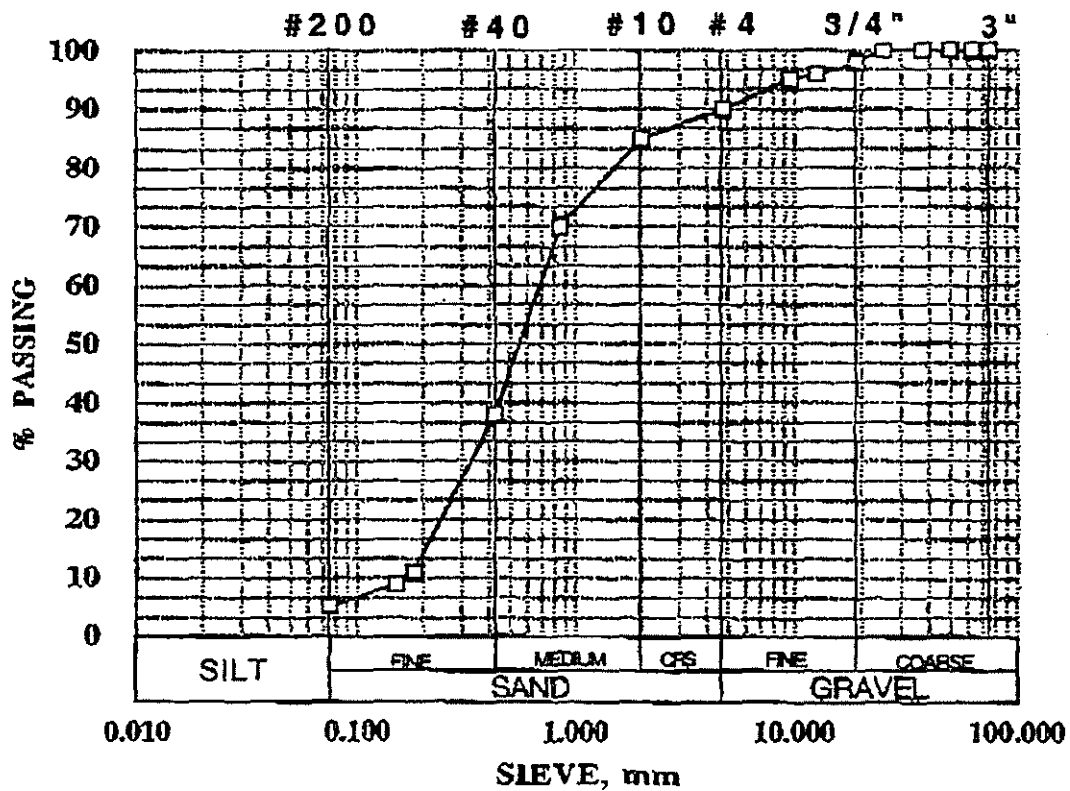
Project: D & C Construction / Ft. Devens

Sample No.

M-957

Date: 6/3/96

SIEVE



APPENDIX E
BILL OF LADING



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC-012A

Release Tracking Number *

BILL OF LADING (pursuant to 310 CMR 40.0030)

2 - 11210

I. LOCATION OF SITE OR DISPOSAL SITE WHERE REMEDIATION WASTE WAS GENERATED:

Release Name (optional):

Street: Location Aid: Bldgs. in 200, 1400, 1600
City/Town: Devens Zip Code: 01433 - 2600, 2700
Date/Period of Generation: 5 / 20 / 96 to 7 / 12 / 96 and 3500-blocks
Additional Release Tracking Numbers Associated with this Bill of Lading:

*Note: If this Bill of Lading is the result of a Limited Removal Action (LRA) taken prior to Notification, a Release Tracking Number is not needed.

II. PERSON CONDUCTING RESPONSE ACTION ASSOCIATED WITH BILL OF LADING:

Name of Organization: Devens Commerce Center
Name of Contact: Ronald J. Ostrowski Title: Env. Mgr.
Street: 43 Buena Vista St., P-12
City/Town: Devens State: MA Zip Code: 01433 -
Telephone: 508 - 772 - 6340 Ext. 303

III. RELATIONSHIP TO RELEASE OR THREAT OF RELEASE OF PERSON CONDUCTING RESPONSE ACTION ASSOCIATED WITH BILL OF LADING:

Check one/specify

- ☐ RP Specify (circle one): Owner Operator Generator Transporter Other RP:
☐ PRP Specify (circle one): Owner Operator Generator Transporter Other PRP:
☐ Fiduciary/Secured Lender
☐ Agency/Public Utility on a Right of Way
☐ Other Person:

If an owner and/or operator is not conducting the response action associated with the Bill of Lading, provide on an attachment the name, contact person, address and telephone number, including any area code and extension, for each, if known.

IV. TRANSPORTER/Common Carrier INFORMATION:

Transporter/Common Carrier Name: Carney Brothers Trucking
Contact Person: Jimmy Casey Title: General Manager
Street: 1958 Broadway
City/Town: Raynham State: MA Zip Code: 02767 -
Telephone: 508 - 824 - 4071 Ext.

V. RECEIVING FACILITY/TEMPORARY STORAGE LOCATION:

Operator/Facility Name: Laidlaw Waste Systems
Contact Person: Angelique Cosgrove Title: Sales Coord.
Street: 14 Belcher St.
City/Town: Plainville State: MA Zip Code: 02762 -
Telephone: 508 - 699 - 2267 Ext.

- Type of Facility: (check one)
☐ Asphalt Batch/Cold Mix ☒ Landfill/Disposal ☐ Incinerator
☐ Asphalt Batch/Hot Mix ☒ Landfill/Daily Cover ☐ Temporary
☐ Thermal Processing ☐ Landfill/Structural Fill ☐ Storage

Other:

Division of Hazardous Waste/Class A Permit #: 15095 Division of Solid Waste Management Permit #: 15095 EPA Identification #: MAD108010729

Actual/Anticipated Period of Temporary Storage (specify dates if applicable): / / to / /

Reason for Temporary Storage (if applicable): N/A



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC-012A

Release Tracking Number:

2 - 11210

BILL OF LADING (pursuant to 310 CMR 40.0030)

E. RECEIVING FACILITY/TEMPORARY STORAGE LOCATION (continued):

Temporary Storage Address:

Street: N / A

City/Town: _____ State: _____ Zip Code: _____

F. DESCRIPTION OF REMEDIATION WASTE:

(check all that apply)

☒ Contaminated Media (circle all that apply): Soil Groundwater Surface Water Other: _____

☐ Contaminated Debris (circle all that apply): Demolition/Construction Waste Vegetation/Organic Materials
Inorganic Absorbant Materials Other: _____

☐ Non-hazardous Uncontainerized Waste (circle all that apply): Non-aqueous Phase Liquid Other: _____

☐ Non-hazardous Containerized Waste (circle all that apply): Tank Bottoms/Sludges Containers Drums
Engineered Impoundments Other: _____

Type of Contamination (circle all that apply): Gasoline Diesel Fuel #2 Oil #4 Oil #6 Oil Waste Oil
Kerosene Jet Fuel Other: _____

Estimated Volume of Materials: Cubic Yards: 1000 Tons: _____ Other: _____

Contaminant Source (check one/specify): ☐ Transportation Accident ☒ Underground Storage Tank ☐ Other: _____

Response Action Associated with Bill of Lading (circle one): Immediate Response Action Release Abatement Measure
Utility-Related Abatement Measure Limited Removal Action (LRA) Comprehensive Response Action
Other (specify): _____

Remediation Waste Characterization Support Documentation attached:

☐ Site History Information ☐ Sampling and Analytical Methods and Procedures ☒ Laboratory Data ☐ Field Screening Data

If supporting documentation is not appended, provide an attachment stating the date and in connection with what document such information was previously submitted to DEP.

G. LICENSED SITE PROFESSIONAL (LSP) OPINION:

Name of Organization: S E A Consultants, Inc.

LSP Name: William J. Mallio Title: Principal Scientist

Telephone: 617 - 498 - 4635 Ext. _____

I attest that I have personally examined and am familiar with the information contained in this submittal, including any and all documents accompanying this submittal, and in my professional opinion and judgment based upon application of
(i) the standard of care in 309 CMR 4.02(1),
(ii) the applicable provisions of 309 CMR 4.02(2) and (3), and
(iii) the provisions of 309 CMR 4.03(5),

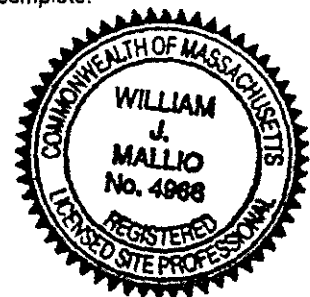
to the best of my knowledge, information and belief, the assessment actions undertaken to characterize the Remediation Waste which is (are) the subject of this submittal for acceptance at the facility identified in this submittal comply with the applicable provisions of 310 CMR 40.0000, and such facility is permitted to accept Remediation Waste having the characteristics described in this submittal. I am aware that significant penalties may result, including, but not limited to, possible fines and imprisonment, if I submit information which I know to be false, inaccurate or materially incomplete.

Signature: William J. Mallio

Seal:

Date: 7/25/96

License Number: 4966





Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC-012A

Release Tracking Number:

2 - 11210

BILL OF LADING (pursuant to 310 CMR 40.0030)

H. CERTIFICATION OF PERSON CONDUCTING RESPONSE ACTION ASSOCIATED WITH THIS BILL OF LADING:

I certify under penalties of law that I have personally examined and am familiar with the information contained in this submittal, including any and all documents accompanying this certification, and that, based on my inquiry of those individuals immediately responsible for obtaining the information, the material information contained herein is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties, including, but not limited to, possible fines and imprisonment, for wilfully submitting false, inaccurate, or incomplete information.

Signature: Ronald J. Ostrowski

Date: 7/25/96

Name of Person (print): Ronald J. Ostrowski

Enclosure to Bill of Lading (BWSC -12A)
SUMMARY OF LABORATORY ANALYTICAL RESULTS
Release Tracking No. 2-11210

Analyte	Range/Peak of Lab Results
TPH	2430 ppm
PCB's	Not Detected
Total Arsenic	12.1
Total Cadmium	0.55
Total Chromium	7.66
Total Lead	23.4
Total Mercury	0.066
Total PAH's	< 100 ppm
Listed/Characteristic Hazardous Waste (TCLP)	None
Total VOC's	< 10 ppm

Note: ppm = parts per million



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup Fort Dev. 120313

BWSC-012B

BILL OF LADING (pursuant to 310 CMR 40.0030)
LOG SHEET 1 OF 3

Release Tracking Number:

2-11210

I. LOAD INFORMATION:

LOAD 1: Signature of Transporter Representative:

108518

Date of Shipment: 8/14/96 Time of Shipment: 7:00

(circle one) am/pm

Truck/Tractor Registration:

Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:

Date of Receipt: 8/14/96

Time of Receipt: 8:07

(circle one) am/pm

Load Size (cu. yds./tons):

31.78

LOAD 2: Signature of Transporter Representative:

108514

Date of Shipment: 8/14/96 Time of Shipment: 8:00

(circle one) am/pm

Truck/Tractor Registration:

Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:

Date of Receipt: 8/14/96

Time of Receipt: 8:02

(circle one) am/pm

Load Size (cu. yds./tons):

31.69

LOAD 3: Signature of Transporter Representative:

108515

Date of Shipment: 8/14/96 Time of Shipment: 9:00

(circle one) am/pm

Truck/Tractor Registration:

Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:

Date of Receipt: 8/14/96

Time of Receipt: 8:03

(circle one) am/pm

Load Size (cu. yds./tons):

29.85

LOAD 4: Signature of Transporter Representative:

108512

Date of Shipment: 8/14/96 Time of Shipment: 6:49

(circle one) am/pm

Truck/Tractor Registration:

Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:

Date of Receipt: 8/14/96

Time of Receipt: 7:54

(circle one) am/pm

Load Size (cu. yds./tons):

33.57

LOAD 5: Signature of Transporter Representative:

108521

Date of Shipment: 8/14/96 Time of Shipment: 7:10

(circle one) am/pm

Truck/Tractor Registration:

Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:

Date of Receipt: 8/14/96

Time of Receipt: 8:15

(circle one) am/pm

Load Size (cu. yds./tons):

34.55

LOAD 6: Signature of Transporter Representative:

108620

Date of Shipment: 8/14/96 Time of Shipment: 10:00

(circle one) am/pm

Truck/Tractor Registration:

Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:

Date of Receipt: 8/14/96

Time of Receipt: 11:33

(circle one) am/pm

Load Size (cu. yds./tons):

30.90

LOAD 7: Signature of Transporter Representative:

108625

Date of Shipment: 8/14/96 Time of Shipment: 10:40

(circle one) am/pm

Truck/Tractor Registration:

Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:

Date of Receipt: 8/14/96

Time of Receipt: 11:44

(circle one) am/pm

Load Size (cu. yds./tons):

34.94

. LOG SHEET VOLUME INFORMATION:

Total Volume This Page (cu. yds./tons):

226.42

Total Carried Forward (cu. yds./tons):

0

Total Carried Forward and This Page (cu. yds./tons):

226.42



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC-012B

Release Tracking Number:

BILL OF LADING (pursuant to 310 CMR 40.0030)
LOG SHEET 2 OF 3

2-11210

I. LOAD INFORMATION:

LOAD 1: Signature of Transporter Representative: [Signature] 108639

Date of Shipment: 8/14/96 Time of Shipment: 18:24 (circle one) am/pm

Truck/Tractor Registration: 36075 Trailer Registration (if any): 29615

Receiving Facility/Temporary Storage Representative: [Signature]

Date of Receipt: 8/14/96 Time of Receipt: 11:54 (circle one) am/pm

Load Size (cu. yds./tons): 28.87

LOAD 2: Signature of Transporter Representative: [Signature] 108647

Date of Shipment: 8/14/96 Time of Shipment: 10:05 (circle one) am/pm

Truck/Tractor Registration: 29658 Trailer Registration (if any): 29642

Receiving Facility/Temporary Storage Representative: [Signature]

Date of Receipt: 8/14/96 Time of Receipt: 12:16 (circle one) am/pm

Load Size (cu. yds./tons): 35.92

LOAD 3: Signature of Transporter Representative: [Signature] 108657

Date of Shipment: 8/14/96 Time of Shipment: 11:21 (circle one) am/pm

Truck/Tractor Registration: 1496-535 MA Trailer Registration (if any): 27794 MA

Receiving Facility/Temporary Storage Representative: [Signature]

Date of Receipt: 8/14/96 Time of Receipt: 12:30 (circle one) am/pm

Load Size (cu. yds./tons): 36.97

LOAD 4: Signature of Transporter Representative: [Signature] 108719

Date of Shipment: 8/14/96 Time of Shipment: 1:45 (circle one) am/pm

Truck/Tractor Registration: 32805 Trailer Registration (if any): 29641

Receiving Facility/Temporary Storage Representative: [Signature]

Date of Receipt: 8/14/96 Time of Receipt: 2:46 (circle one) am/pm

Load Size (cu. yds./tons): 34.71

LOAD 5: Signature of Transporter Representative: [Signature] 108723

Date of Shipment: 8/14/96 Time of Shipment: 1:50 (circle one) am/pm

Truck/Tractor Registration: 29658 Trailer Registration (if any): 29642

Receiving Facility/Temporary Storage Representative: [Signature]

Date of Receipt: 8/14/96 Time of Receipt: 2:54 (circle one) am/pm

Load Size (cu. yds./tons): 36.00

LOAD 6: Signature of Transporter Representative: [Signature] 108726

Date of Shipment: 8/14/96 Time of Shipment: 1:58 (circle one) am/pm

Truck/Tractor Registration: 225570 Trailer Registration (if any): 27145

Receiving Facility/Temporary Storage Representative: [Signature]

Date of Receipt: 8/14/96 Time of Receipt: 3:11 (circle one) am/pm

Load Size (cu. yds./tons): 27.31

LOAD 7: Signature of Transporter Representative: [Signature] 108731

Date of Shipment: 8/14/96 Time of Shipment: 2:00 (circle one) am/pm

Truck/Tractor Registration: 36075 Trailer Registration (if any): 29615

Receiving Facility/Temporary Storage Representative: [Signature]

Date of Receipt: 8/14/96 Time of Receipt: 3:32 (circle one) am/pm

Load Size (cu. yds./tons): 35.16

J. LOG SHEET VOLUME INFORMATION:

Total Volume This Page (cu. yds./tons): 236.94

Total Carried Forward (cu. yds./tons): 226.42

Total Carried Forward and This Page (cu. yds./tons): 463.36



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC-0128

BILL OF LADING (pursuant to 310 CMR 40.0030)
LOG SHEET 3 OF 3

Release Tracking Number:

2 - 11210

I. LOAD INFORMATION:

LOAD 1: Signature of Transporter Representative:

Date of Shipment: 8/14/96 Time of Shipment: 2:59 (circle one) am/pm

Truck/Tractor Registration: 296-535 MA Trailer Registration (if any): 297794 MA

Receiving Facility/Temporary Storage Representative:

Date of Receipt: 8/14/96 Time of Receipt: 4:03 (circle one) am/pm

Load Size (cu. yds./tons): 39.79

LOAD 2: Signature of Transporter Representative:

Date of Shipment: / / Time of Shipment: : (circle one) am/pm

Truck/Tractor Registration: Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:

Date of Receipt: / / Time of Receipt: : (circle one) am/pm

Load Size (cu. yds./tons):

LOAD 3: Signature of Transporter Representative:

Date of Shipment: / / Time of Shipment: : (circle one) am/pm

Truck/Tractor Registration: Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:

Date of Receipt: / / Time of Receipt: : (circle one) am/pm

Load Size (cu. yds./tons):

LOAD 4: Signature of Transporter Representative:

Date of Shipment: / / Time of Shipment: : (circle one) am/pm

Truck/Tractor Registration: Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:

Date of Receipt: / / Time of Receipt: : (circle one) am/pm

Load Size (cu. yds./tons):

LOAD 5: Signature of Transporter Representative:

Date of Shipment: / / Time of Shipment: : (circle one) am/pm

Truck/Tractor Registration: Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:

Date of Receipt: / / Time of Receipt: : (circle one) am/pm

Load Size (cu. yds./tons):

LOAD 6: Signature of Transporter Representative:

Date of Shipment: / / Time of Shipment: : (circle one) am/pm

Truck/Tractor Registration: Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:

Date of Receipt: / / Time of Receipt: : (circle one) am/pm

Load Size (cu. yds./tons):

LOAD 7: Signature of Transporter Representative:

Date of Shipment: / / Time of Shipment: : (circle one) am/pm

Truck/Tractor Registration: Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:

Date of Receipt: / / Time of Receipt: : (circle one) am/pm

Load Size (cu. yds./tons):

LOG SHEET VOLUME INFORMATION:

Total Volume This Page (cu. yds./tons): 39.79

Total Carried Forward (cu. yds./tons): 463.36

Total Carried Forward and This Page (cu. yds./tons): 503.15



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC-012B

Port Dev. 120313

Release Tracking Number:

BILL OF LADING (pursuant to 310 CMR 40.0030)
LOG SHEET 1 OF 1

2-11210

LOAD INFORMATION:

LOAD 1: Signature of Transporter Representative:

Date of Shipment: 8/15/96 Time of Shipment: 7:18 (circle one) am/pm

Truck/Tractor Registration: 32985 Trailer Registration (if any): 29641

LOAD 2: Signature of Transporter Representative:

Date of Shipment: 8/15/96 Time of Shipment: 7:30 (circle one) am/pm

Truck/Tractor Registration: 26642 Trailer Registration (if any): 29638

LOAD 3: Signature of Transporter Representative:

Date of Shipment: 8/15/96 Time of Shipment: 7:30 (circle one) am/pm

Truck/Tractor Registration: 32085 Trailer Registration (if any): 29641

LOAD 4: Signature of Transporter Representative:

Date of Shipment: / / Time of Shipment: : (circle one) am/pm

Truck/Tractor Registration: Trailer Registration (if any):

LOAD 5: Signature of Transporter Representative:

Date of Shipment: / / Time of Shipment: : (circle one) am/pm

Truck/Tractor Registration: Trailer Registration (if any):

LOAD 6: Signature of Transporter Representative:

Date of Shipment: / / Time of Shipment: : (circle one) am/pm

Truck/Tractor Registration: Trailer Registration (if any):

LOAD 7: Signature of Transporter Representative:

Date of Shipment: / / Time of Shipment: : (circle one) am/pm

Truck/Tractor Registration: Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:

Date of Receipt: 8/15/96 Time of Receipt: 8:17

(circle one) am/pm

Load Size (cu. yds./tons): 39.65

Receiving Facility/Temporary Storage Representative:

Date of Receipt: 8/15/96 Time of Receipt: 8:45

(circle one) am/pm

Load Size (cu. yds./tons): 35.75

Receiving Facility/Temporary Storage Representative:

Date of Receipt: 8/15/96 Time of Receipt: 12:03

(circle one) am/pm

Load Size (cu. yds./tons): 39.48

Receiving Facility/Temporary Storage Representative:

Date of Receipt: / / Time of Receipt: :

(circle one) am/pm

Load Size (cu. yds./tons):

Receiving Facility/Temporary Storage Representative:

Date of Receipt: / / Time of Receipt: :

(circle one) am/pm

Load Size (cu. yds./tons):

Receiving Facility/Temporary Storage Representative:

Date of Receipt: / / Time of Receipt: :

(circle one) am/pm

Load Size (cu. yds./tons):

Receiving Facility/Temporary Storage Representative:

Date of Receipt: / / Time of Receipt: :

(circle one) am/pm

Load Size (cu. yds./tons):

LOG SHEET VOLUME INFORMATION:

Total Volume This Page (cu. yds./tons): 114.82

Total Carried Forward (cu. yds./tons): 0

Total Carried Forward and This Page (cu. yds./tons): 114.82

Release Tracking Number:

BILL OF LADING (pursuant to 310 CMR 40.0030)
SUMMARY SHEET 1 OF 1

2-11210

K. SUMMARY OF SHIPMENTS:

[illegible]



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC-012C

Release Tracking Number:

BILL OF LADING (pursuant to 310 CMR 40.0030)
SUMMARY SHEET

2-11210

**L. ACKNOWLEDGEMENT OF RECEIPT OF REMEDIATION WASTE AT RECEIVING FACILITY OR
TEMPORARY STORAGE LOCATION:**

Receiving Facility/Temporary
Location Representative (print):

Angeliene Cosgrove

Title:

Sale Coordinator

Signature:

[Signature]

Date:

8/15/96

**M. ACKNOWLEDGEMENT OF SHIPMENT AND RECEIPT OF REMEDIATION WASTE BY PERSON
CONDUCTING RESPONSE ACTION ASSOCIATED WITH THIS BILL OF LADING:**

I certify under penalties of law that I have personally examined and am familiar with the information contained in this submittal, including any and all documents accompanying this certification, and that, based on my inquiry of those individuals immediately responsible for obtaining the information, the material information contained herein is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties, including, but not limited to, possible fines and imprisonment, for wilfully submitting false, inaccurate, or incomplete information.

Signature:

[Signature]

Date:

9/12/96

Name of Person (print):

JAMES E. ARMSTRONG

FOR RON OSTROWSKI