NEW HAMPSHIRE DEPARTMENT OF
Environmental Services

Hazardous Waste Transfer Facility Permit Application Form

Pursuant to the Requirements of RSA 147-A
and
Section Env-Hw 304 of the New Hampshire Hazardous Waste Rules

N.H. Department of Environmental Services
Waste Management Division
Hazardous Waste Compliance Bureau
PO Box 95, 29 Hazen Drive
Concord, New Hampshire 03302-0095
Phone #: (603) 271-2942; Fax #: (603) 271-0869

For Office Use Only	
Date Rec'd:	
⬇ Fee Received ➥➥➥	☐ New Application ☐ Renewal ☐ Modification
Amount:	$
Check:	#

I. Use of Form:

(1) This application form is to be used by applicants requesting a permit for either a new or an existing hazardous waste transfer facility. As defined by Env-Hw 104.60, "Transfer facility means all land and structures, including loading docks, parking, storage and other areas, where hazardous wastes in transit are transferred from vehicle to vehicle or are removed from a transport vehicle, and temporarily stored for 10 days or less".

Facilities that store hazardous waste for 10 days or more must obtain a Standard Permit for Hazardous Waste Storage in accordance with the applicable requirements of Part Env-Hw 304. This form can not be used for these purposes.

(2) Applications which are filed for existing hazardous waste transfer facilities must be for facilities which have first obtained Interim Status pursuant to Env-Hw 304.02. In accordance with Env-Hw 304.10, existing facilities which are operating under the terms of Interim Status must complete and submit this application within 180 days of receipt of this form.

(3) This form provides the applicant with guidance for properly preparing a complete application. Reference is frequently made throughout this form to various rules and regulations. In order to fully understand what must be submitted in this application, it is important that the applicant obtain copies of and review all pertinent regulatory citations.

II. Preparing Your Application: Your application for a hazardous waste transfer facility permit must be organized in the following sections. Instructions for completing each section are attached.

Section 1 Identification
Section 2 Site and Facility Description
Section 3 Other Permits
Section 4 Notifications
Section 5 Siting Assessment/Hydrogeological Analysis
Section 6 Plans and Specifications
Section 7 Facility Operation
Section 8 Performance History
Section 9 Signature

The above information must be collated in a loose leaf binder, with each section separated by labeled and tabbed dividers. When information is prepared on blueprints or other paper of a size larger than the application binder, the oversized documents may be submitted separately from the binder, with a referral index included with the applicable section of the loose leaf binder.

The information you provide in this application must be presented in a clear and concise manner. Avoid vague or imprecise answers. Likewise, avoid the presentation of lengthy detailed information unrelated to the question.

III. Filing Your Application:

Your application must be prepared on this form and must be filed by the person to whom the permit is proposed to be issued.

A fee of **$3,000.00** must accompany the application. Checks should be made payable to TREASURER, STATE OF NEW HAMPSHIRE.

Submit your application to the Waste Management Division (WMD) in quadruplicate, with the required fee, to the following address:

New Hampshire Department of Environmental Services
Waste Management Division
Hazardous Waste Compliance Bureau
PO Box 95, 29 Hazen Drive
Concord, N.H. 03302-0095

(4) Upon receipt of an application, the WMD will determine whether the correct fee and number of copies have been submitted and whether the application has been signed. APPLICATIONS SUBMITTED WITHOUT THE CORRECT FEE OR CORRECT NUMBER OF COPIES OR WITHOUT SIGNATURE WILL NOT BE ACCEPTED FOR PROCESSING, BUT WILL BE HELD BY THE WMD WHILE THE APPLICANT IS NOTIFIED IN WRITING OF THE DEFICIENCY AND GIVEN AN OPPORTUNITY TO CORRECT THE DEFICIENCY.

IV. Application Processing:

(1) Transfer facility permit applications will be processed in accordance with Sections Env-Hw 304.16, Env-Hw 304.17(b), Env-Hw 304.21, Env-Hw 304.22 and Env-Hw 304.23 of the New Hampshire Hazardous Waste Rules.

V. Additional Information:

(1) The New Hampshire Hazardous Waste Rules, Env-Hw 100 – 1100 ("Rules"), are available for your convenience on the Department of Environmental Service's website at http://des.nh.gov/. "Official" copies of the Rules are available from the Department's Public Information and Permitting Office at (603) 271-2975 for a fee of $20.00 made payable to Treasurer, State of New Hampshire.

(2) Specific questions regarding your application may be directed to the WMD at the address shown in Item III (3) above or via telephone (603) 271-2942.

(3) **Before** preparing or filing your application, you should confirm that this application form remains current. Telephone the Hazardous Waste Compliance Bureau at (603) 271-2942 and provide the revision date at the bottom of this page.

SECTION 1 IDENTIFICATION

Provide ALL of the following information as specified. Please print or type.

(A) **FACILITY IDENTIFICATION:** Plot the facility location on a USGS topographic map or copy thereof and include the map in **Section 1** of this application.

Facility Name: United Oil Recovery, Inc.

Facility EPA Identification Number: NHD980521843

Street Address: 410 Shattuck Way

Town: Newington Local Tax Map/Lot #s: Map 7/Lot 14

Deed Ref.: County: Rockingham Book: 1612 Page: 60

Latitude/Longitude: 43° 6' 52" N 70° 49' 6" W

(B) **IDENTIFICATION OF PARTIES:** Note - If any party identified below is other than an individual, the information required below must be provided for each officer, director, partner, key employee, and person holding 10 percent or more of the equity or debt liability of the party. Use separate paper as necessary. Collate all additional pages into this section of the application.

Facility Operator/ Permit Applicant:

Name: United Oil Recovery, Inc. Telephone: (203) 238-6745

Mailing Address: 47 Gracey Avenue, Meriden, CT 06451

Facility Owner:

Name: David Carabetta Telephone: (203) 238-6745

Mailing Address: 47 Gracey Avenue, Meriden, CT 06451

Principal Facility Contact:

Name: Kris Fournier Telephone: (603) 431-2420

Mailing Address: 410 Shattuck Way, Newington, NH 03801

Land Owner:

Name: Sprague Energy Telephone: (603) 431-1000

Mailing Address: Two International Drive, Suite 200, Portsmouth, NH 03801

(C) **FACILITY STATUS:** Indicate whether the facility is:

_____ NEW ___X___ EXISTING (date facility established: 10/85)

If an EXISTING facility, have you obtained Interim Status in accordance with Env-Hw 304.02?

X YES Date notified WMD: Facility is beyond interim status and holds Transfer Facility Permit No.: DES-HW-TF-2000-01

_____ NO

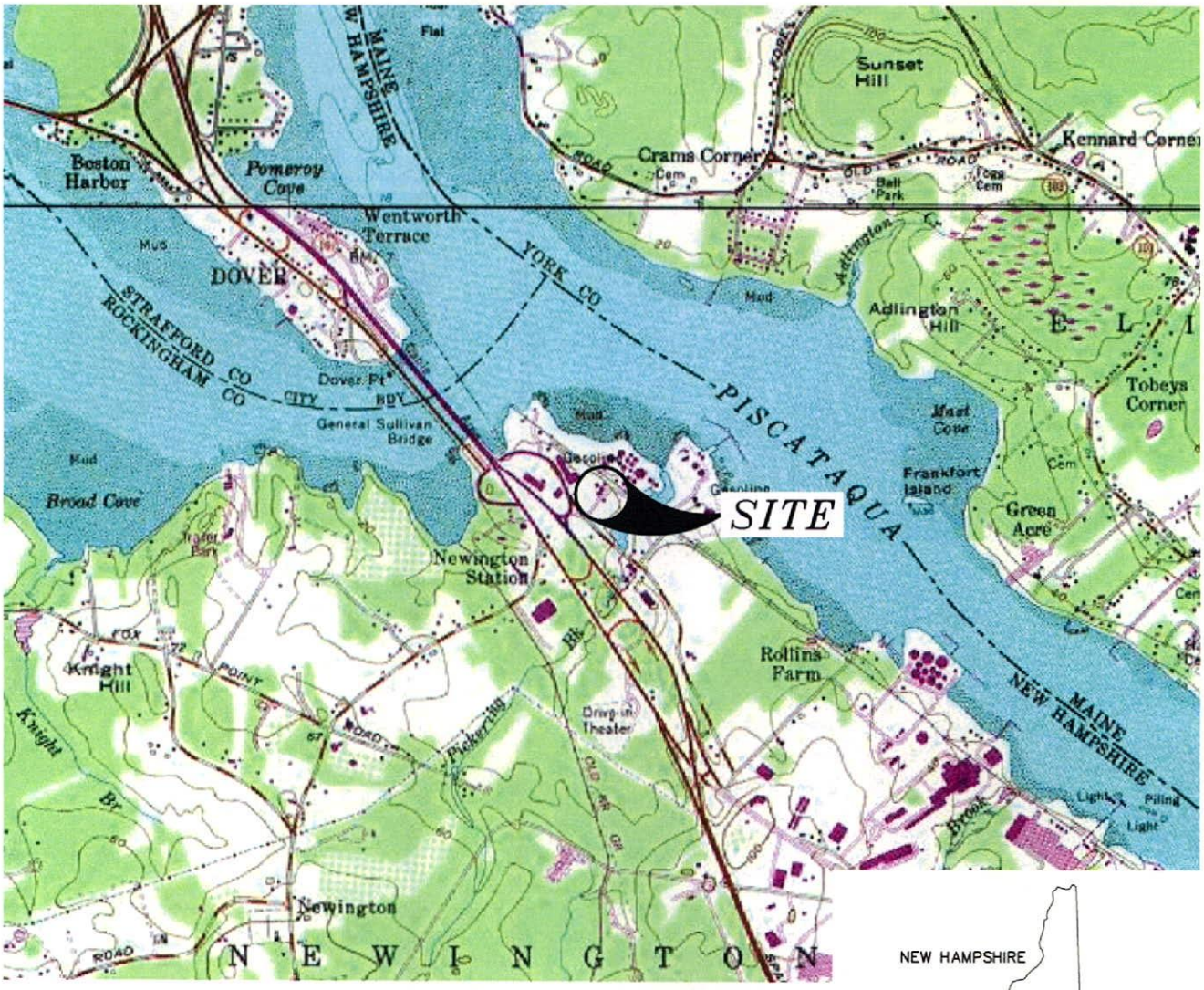
(D) **APPLICATION STATUS:** This application is:

_____ Original Submittal ___X___ Revised Application (date of original submittal: 5/1/06)

ATTACHMENT FOR SECTION 1(A)

Site Location Map

Hazardous Waste Transfer Facility Permit Renewal Application
United Oil Recovery, Inc.
410 Shattuck Way
Newington, New Hampshire



TAKEN FROM U.S.G.S. 7.5x15 MINUTE SERIES TOPOGRAPHIC MAP OF PORTSMOUTH, NEW HAMPSHIRE–1956 (REVISED 1993).

CONTOUR INTERVAL IS 20 FEET

SITE COORDINATES: LATITUDE 43°06'52"
LONGITUDE 70°49'06"

UTM COORDINATES: 47:74:939mN
3:52:103mE

QUADRANGLE LOCATION

0 1000 2000 3000 4000

SCALE in FEET
1:25,000

RANSOM Environmental Consultants, Inc.

SITE LOCATION MAP

PREPARED FOR:	SITE:	
UNITED OIL RECOVERY, INC.	410 SHATTUCK WAY NEWINGTON, NEW HAMPSHIRE	DATE: MARCH 2006 PROJECT: 055044 FIGURE: 1.1

\\snl\er\projects\NH-DWGS\2005\055044\055044.00.dwg

SECTION 2 SITE AND FACILITY DESCRIPTION

Address each of the following items as instructed. Do not skip any item. Please print or type. Use separate paper as necessary.

(A) **FACILITY FUNCTION:** A Transfer Facility is restricted to the following activity:
As defined by Env-Hw 104.60 "Transfer facility means all land and structures, including loading docks and parking, storage, and other areas, where hazardous wastes in transit are transferred from vehicle to vehicle or are removed from a transport vehicle, and temporarily stored for 10 days or less".

Indicate the type(s) of waste management activities being proposed at this site, for which this permit application is being filed. Check all that apply:

__X__ Transfer will occur in the original container(s) as received; not opened or bulked

__X__ Transfer will involve the opening of containers or tanks for the purpose of bulking or consolidating hazardous wastes

(B) **FACILITY LIFE EXPECTANCY:** Specify the life expectancy of the facility:

__50__ Years

(C) **SERVICE AREA:** Identify the facility's proposed service area.

United Oil Recovery, Inc. primarily services the New England states of ME, NH, VT, MA, CT, and RI. They additionally serve clients in NY, NJ, and PA. Note that this list of states represents the majority of the service area however UOR may serve customers from outside this region.

(D) **PRODUCTS/ SERVICES:** Using up to four Standard Industrial Classification (SIC) or North American Industry Classification System (NAICS) codes, list those which best reflect the principal products or services provided by the facility.

1. 562211
2. 562219
3. 424710
4.

(E) **NEW CONSTRUCTION:** Is any new construction planned? ☐ YES ☒ NO

If yes, provide a brief general description for any proposed new construction projects at the facility. Refer to **Section 6** of this form for additional requirements.

SECTION 3 STATUS OF OTHER PERMITS/ APPROVALS

Using the chart below, provide a complete list that identifies all existing and pending federal, state and local permits or approvals which are or may be required for this facility. Some of the most commonly required permits have been listed for you. Indicate whether they apply and supply information relevant to their status, as shown. Add to the list as necessary. Use separate paper as necessary. Please print or type.

PERMIT IDENTIFICATION	IS PERMIT REQUIRED?	DATE APPLICATION FILED/TO BE FILED	DATE ISSUED/ APPROVED (Attach copy if issued)	DATE EXPIRES
NHDES Hazardous Waste Limited Permit for treatment or neutralization of hazardous wastewaters, per Env-Hw 304.04	No			
NHDES Hazardous Waste Transporter Registration, per Env-Hw 600	No[1]		4/22/10	6/30/11
NHDES Solid Waste Standard Permit or Permit-by-Notification, per RSA 149-M and Env-Sw 101-2100	Yes		See footnote[2]	
NHDES Hazardous Waste Remediation Bureau Groundwater Release Detection Permit, per RSA 485-C and Env-Or 700	No[3]			
Permit from NHDES Air Resources Division, per RSA 125-C, RSA 125-I and Env-A 100-4800	No			
NHDES Watershed Management Bureau Groundwater Discharge Permit or Underground Injection Control Registration, per RSA 485-A & 485-C and Env-Wq 402	No			
NHDES Water Quality Engineering Bureau permit to dredge, fill, or significantly alter the terrain, etc., per RSA 485-A:17 and Env-Wq 1500	No			
NHDES Wetlands Bureau permit to dredge, fill, or construct structures in or adjacent to the wetlands and surface waters of the State, per RSA 482-A and Env-Wt 100-800	No			
USEPA National Pollution Discharge Elimination System (NPDES) Permit, per Section 402 of the federal Clean Water Act; NHDES Wastewater Engineering Bureau State Surface Water Discharge Permit, per RSA 485-A:13 and Env-Wq 400, 1700	Yes - EPA Stormwater Multi-Sector General Permit		9/29/08	9/29/13
NH Department of Transportation (DOT) Driveway Permit for driveway access onto any Class I or Class III highway or State- maintained portion of a Class 11 highway, per RSA 236:13	No			
Local Zoning approval or zoning variance, as may be necessary	No[4]			
Local building permits and site plan approval(s)	No			
Federal Permits (specify):	No			
Other (specify):	NA			

Footnotes to Section 3 chart:

[1] United Oil Recovery, Inc. does not have a hazardous waste transporter license. United Industrial Services, a division of United Oil Recovery, Inc. does have a NH Hazardous Waste Transporter Permit, a copy of which is attached. Note that other licensed transporters may use the dock area.
[2] Temporary Permit No. DES-SW-TP-97-018 issued 10/27/97 and modified 8/8/01. Permit application for permanent permit being submitted in 2010.
[3] Please see attached letters to NH DES Public Information and Permitting (PIP) Unit dated 2/14/06 and DES reply to Ransom Environmental dated 6/5/06 stating that hydrogeology information and groundwater permitting are not required. Also, see Env-Hw 701.02(b) which states that transfer facilities are exempt from the groundwater monitoring requirements of Env-Hw 707.02(a)(10).
[4] Per February 2006 conversation between Don Littlefield, UOR and Tom Morgan, Newington Town Planner, no further approvals are needed.

ATTACHMENT 1 FOR SECTION 3

United Industrial Services, Inc. NH Hazardous Waste Transporter License

Hazardous Waste Transfer Facility Permit Renewal Application
United Oil Recovery, Inc.
410 Shattuck Way
Newington, New Hampshire

Ransom Environmental Consultants, Inc.
Project 055044

The State of New Hampshire

DEPARTMENT OF ENVIRONMENTAL SERVICES

Thomas S. Burack, Commissioner

HAZARDOUS WASTE TRANSPORTER ANNUAL REGISTRATION RENEWAL FORM

1. TNH Number:	TNH-0162
2. Transporter Name:	UNITED INDUSTRIAL SERVICES
3. Transporter's Office Mailing Address:	47 GRACEY AVENUE MERIDEN CT 06450
4. Transporter's Office Telephone Number:	203-238-6745
5. Name and Title of Contact Person:	DAVID CARABETTA
6. Contact Person E-Mail Address:	dcarabetta@unitedindustrialservices.com
7. Transporter's U.S. EPA Identification Number:	CTD021816889
8. Transporter's U.S.DOT Motor Carrier Census Number or Interstate Commerce Commission Number:	331151
9. Transporter's U.S. DOT Hazardous Material Registration Number (if applicable). If this number is not applicable, so indicate:	~~061305009050NC~~ 051607 550 024PR

10. Verification/ Attestation Statement:

I, the undersigned, certify that the transporter above named is in full compliance with the financial responsibility requirements of 49 C.F.R. section 387.9

David J. Carabetta

Signature of Transporter

(Signatory must be owner, operator, or responsible company official).

President 3-9-09

Title Date

NOTE: it is the sole responsibility of the transporter that all the above information is correct; If the information is found incorrect the State of NH has the right not to renew the transporters registration.

NEW HAMPSHIRE DEPARTMENT OF
Environmental Services

NEW HAMPSHIRE DEPARTMENT OF ENVIRONMENTAL SERVICES
WASTE MANAGEMENT DIVISION

HAZARDOUS WASTE TRANSPORTER
CLEAN-UP SERVICES

Dear Transporter:

The New Hampshire Department of Environmental, Waste Management Division (DES) frequently receives requests for a list of companies currently providing hazardous waste clean-up services. If your company provides such services and if you wish to have your company's name added to an informational distribution list, please so indicate below:

Company Name: United Industrial Services, Division of United Oil Recovery, Inc.

Registration Number: TNH- 0162

X YES, please add our company's name to your list of active hazardous waste clean-up contractors.

____ NO, do not add our company's name to your list of active hazardous waste clean-up contractors.

Please return this survey with your New Hampshire Hazardous Waste Transporter Renewal Registration submittal.

Should you have any questions relative to this inquiry or the hazardous waste transporter registration, *Cheryl McGary* can be reached at 603-559-1506.

01/29/09

NITED STATES OF AMERICA
DEPARTMENT OF TRANSPORTATION
PIPELINE AND HAZARDOUS MATERIALS SAFETY ADMINISTRATION

HAZARDOUS MATERIALS CERTIFICATE OF REGISTRATION FOR REGISTRATION YEAR(S) 2007-2010

Registrant: UNITED OIL RECOVERY INC.
Attn: LEO F CARABETTA
14 WEST MAIN STREET
MERIDEN, CT 06451

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: 051607 550 024PR **Issued: 5/16/2007** **Expires: 6/30/2010**

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-60, Pipeline and Hazardous Materials Safety Administration, U.S. Department of Transportation, 1200 New Jersey Avenue, SE, Washington, DC 20590, telephone (202) 366-4109.

The State of New Hampshire
DEPARTMENT OF ENVIRONMENTAL SERVICES

Thomas S. Burack, Commissioner

April 27, 2009

DAVID CARABETTA
UNITED INDUSTRIAL SERVICES
47 GRACEY AVENUE
MERIDEN CT 06450

Subject: Hazardous Waste Transporter Registration Renewal Confirmation

Dear DAVID CARABETTA:

Your hazardous waste transporter renewal registration application has been received and accepted by the Department of Environmental Services (DES).

This letter shall be proof of registration. A copy of this letter must be carried in each vehicle used to transport federal and state listed or characteristic hazardous wastes, including used oil, in and through the State of New Hampshire. Hazardous waste transporters and their employees shall display a copy of this letter upon request of any law enforcement officer or agent of the Waste Management Division.

Registration number TNH-0162 is assigned to your company. This number should be referenced in all correspondence with this office. Display this number on all vehicles used to transport hazardous wastes in and through New Hampshire in accordance with Env-Wm 603.06.

Please refer to the applicable transporter regulations at http://des.nh.gov/orcb/transporters_program.htm. By registering to transport hazardous waste in New Hampshire the registered transporter has agreed to comply with the regulations as they pertain to the transportation of hazardous waste in New Hampshire. Failure to comply with the regulations may result in enforcement action by DES.

Transporters shall maintain financial responsibility as required under 49 CFR section 387.9. Discontinuance of this responsibility by the transporter may result in revocation of your company's eligibility to transport hazardous waste in New Hampshire.

This registration shall expire on June 30, 2010. Forms for renewal of your registration will be supplied by the Waste Management Division. Completed renewal registration forms shall be returned to the Waste Management Division by May 15.

If you need further information or have any questions on transportation registration, please contact Ms. Cheryl McGary at 603-559-1506.

Sincerely,

Richard Berry

Richard Berry, Administrator
Oil Remediation and Compliance Bureau
Tel: (603) 271-3440
Fax: (603) 271-0653
Email: richard.berry@des.nh.gov

The State of New Hampshire

Department of Environmental Services

Michael P. Nolin
Commissioner

May 21, 2005

DAVID CARABETTA
UNITED INDUSTRIAL SERVICES
14-16 WEST MAIN STREET
MERIDEN CT 06451

RE: Hazardous Waste Transporter Renewal Registration Confirmation

Dear Transporter:

Your hazardous waste transporter's renewal registration has been received and accepted by the Department of Environmental Services (DES).

This letter shall be proof of registration. A copy of this letter must be carried in each vehicle used to transport federal and state listed or characteristic hazardous wastes, including used oil, in and through the State of New Hampshire. Hazardous waste transporters and their employees shall display a copy of this letter upon request of any law enforcement officer or agent of the Waste Management Division.

Registration number TNH-0162 has been assigned to your company. This number should be referenced in all correspondence with this office. Display this number on all vehicles used to transport hazardous wastes in and through New Hampshire in accordance with Env-Wm 603.06.

Under this cover you will find a copy of the regulations which pertain to hazardous waste transportation in and through New Hampshire. By registering to transport hazardous waste in New Hampshire the registered transporter has agreed to comply with the regulations as they pertain to the transportation of hazardous waste in New Hampshire. Failure to comply with the regulations may result in enforcement action by DES.

Transporters shall maintain financial responsibility as required under 49 CFR section 387.9. Discontinuance of this responsibility by the transporter may result in revocation of your company's eligibility to transport hazardous waste in New Hampshire.

This registration shall expire on June 30, 2006. Forms for renewal of your registration will be supplied by the Waste Management Division. Completed renewal registration forms shall be returned to the Waste Management Division by May 15.

If you need further information or have any questions on transportation registration, please contact Ms. Tammy Calligandes at 603-271-3899.

Sincerely,

Anthony P. Giunta, P.G.
Director
Waste Management Division

cc: DB/TRANS
Enclosures: Env-Wm 600, Env-Wm 807, RSA 147-A:6, Survey

P.O. Box 95, 29 Hazen Drive, Concord, New Hampshire 03302-0095
Telephone: (603) 271-3644 • Fax: (603) 271-2181 • TDD Access: Relay NH 1-800-735-2964
DES Web site: **www.des.nh.gov**

ATTACHMENT 2 FOR SECTION 3

Temporary Solid Waste Permit and Modification

Hazardous Waste Transfer Facility Permit Renewal Application
United Oil Recovery, Inc.
410 Shattuck Way
Newington, New Hampshire

Ransom Environmental Consultants, Inc.
Project 055044

State of New Hampshire
DEPARTMENT OF ENVIRONMENTAL SERVICES
6 Hazen Drive, P.O. Box 95, Concord, NH 03302-0095
(603) 271-2900 FAX (603) 271-2456

October 27, 1997

Mr. Donald Littlefield, President
Total Waste Management Corporation
142 River Road
Newington, NH 03801

SUBJECT: Temporary Permit No. DES-SW-TP-97-018 Total Waste Management Corporation 142 River Road, Newington, New Hampshire

Dear Mr. Littlefield:

Enclosed herewith is Temporary Permit, No. DES-SW-TP-97-018, which temporarily authorizes the continued transfer and processing of solid waste materials at the above noted location. This permit has been issued by the New Hampshire Department of Environmental Services (Department) pursuant to the provisions of RSA 149-M:10 and Part Env-Wm 315 of the New Hampshire Solid Waste Rules (Rules).

Please note that Temporary Permits are issued to solid waste facilities which have not previously held written permits from the Department, as required by RSA 149-M:10. As such, you are further required to notify the Department within sixty (60) days receipt of the issue date for Temporary Permit DES-SW-TP-97-018 of your intent to either close the facility or your intent to seek authorization to continue operating the facility for the long-term at the present location. For your convenience in fulfilling the requirement, we have enclosed a Notice-of-Intent form which is to be completed, signed and returned to the Department within the required sixty (60) day time frame.

Please maintain a copy of this Permit with your facility records for future reference and conspicuously post a copy of the Permit at the facility. Amended Solid Waste Rules will become effective on October 29, 1997. A copy of the amended Rules including the administrative provisions for your Temporary Permit will be sent to you under separate cover in the near future. Copies of the Rules are available from the Public Information and Permitting Office at 271-2975.

Questions regarding the issuance of this Permit or questions regarding operational compliance should be directed to Mr. Douglas Kemp of the Solid Waste Compliance Section, Waste Management Division at (603) 271-2925.

Sincerely,

Richard S. Reed
Administrator
Solid Waste Management Bureau

RSR/DWK/dwk/twmltp
Enclosure: DES Permit Process Questionnaire
cc: Pamela H. Sprague, PADRS
Newington Town File/DB
PIP

NEW HAMPSHIRE DEPARTMENT OF Environmental Services

SOLID WASTE MANAGEMENT FACILITY TEMPORARY PERMIT

as authorized by the
NH Department of Environmental Services, Waste Management Division
pursuant to RSA 149-M and Part Env-Wm 315 of the New Hampshire Solid Waste Rules

I. **PERMIT/FACILITY IDENTIFICATION:**
Facility No.: DES-SW-TP-97-018
Facility Type: Processing and Transfer Facility
Facility Name: Total Waste Management Corporation
Facility Location: 142 River Road, Newington, New Hampshire; NH/Deed Ref. Rockingham County, Book 1612, Page 60; Tax Map 7, Lot Number 14; Latitude 43° 06' 33" N, Longitude 70° 47' 30" W
Permittee/Facility Operator: Total Waste Management Corporation
Service Type: Limited Private
Facility Owner: Total Waste Management Corporation; 142 River Road, Newington, NH 03801
Property Owner: C.H. Sprague & Son, One Parade Mall, Portsmouth, NH 03801
Facility Capacity: 35,000 gallons of oily water and 150 tons of other non-hazardous materials per month.

II. **FILE REFERENCE/RECORD:**
Date(s) Env-Wm 315 Notification received: March 1, 1995, WMD LOG # 199500090; September 19, 1997, WMD LOG # 199700497; and October 21, 1997, WMD LOG #199700511.

III. **TERMS AND CONDITIONS:**
This facility operates as a transfer facility for non-hazardous oily solids, water, and sewage, latex paint and sludges, non-hazardous industrial wastes, and unused industrial chemicals. Facility operations shall comply with Sections Env-Wm 307.05 through 307.09 of the New Hampshire Solid Wast Rules (Rules) as they may be amended from time to time and is subject to the terms and conditions of Attachment A.

IV. **EFFECTIVE DATE:** From date of signature below.

V. **AUTHORIZATION:** Pursuant to RSA Chapter 149-M:10 and Part Env-Wm 315 of the New Hampshire Solid Waste Rules, this permit is hereby issued to the permittee as identified in Section I pursuant to the requirements of Section III above. **BY EXERCISING ANY RIGHTS UNDER THIS PERMIT, THE PERMITTEE HAS AGREED TO ALL TERMS AND CONDITIONS OF THE PERMIT.** Failure to comply with these terms and conditions could result in civil or criminal penalties, suspension or revocation of this permit. No liability is incurred by the State of New Hampshire by reason of any approval of this solid waste facility. No warranty/guarantee is intended or implied by reason of any advice given by the Department or its staff.

This temporary permit shall not eliminate the need to obtain all requisite federal, state or local permits, licences, or approvals, or to comply with all other applicable federal, state, district, and local permits, ordinances, laws, approvals or conditions for the operation of the facility.

This temporary permit shall not be construed in any way as (1) an authorization of any activity which occurred prior to the effective date of the temporary permit; (2) an authorization of any activity that does not comply with the terms of the permit as set forth above; or (3) a waiver of any cause of action for violation(s) of RSA 149-M or of rules in effect when the violation(s) occurred.

Philip J. O'Brien, Ph.D., Director

Date

Contact the Waste Management Division, Solid Waste Compliance Section, 6 Hazen Drive, Concord, N.H. (telephone (603) 271-2925) if there are questions.

Environmental Services

Permit No.: DES-SW-TP-97-018
Permittee: Total Waste Management Corporation
Facility Name: Total Waste Management Corporation
Facility Location: 142 River Road, Newington, NH
Date: October 27, 1997

ATTACHMENT A
TERMS AND CONDITIONS

1. All references herein to the New Hampshire Solid Waste Rules (Rules) shall mean Rules effective on October 29, 1997.

2. This facility shall operate in conformance with Chapter Env-Wm 2700, 2800, and 2100 of the Rules, as they may be amended from time to time, and in accordance with an approved operational plan as prescribed in Section Env-Wm 2805.05.11 of the Rules.

3. This facility shall serve as a transfer facility, in accordance with the provisions of Part Env-Wm 2100 of the Rules, for only those authorized solid waste types specified in condition (4) below.

4. This facility is authorized to accept the following types of non-hazardous solid waste only, except if restricted by Condition (5) below:

   (a) oily water and oily solids;
   (b) latex paints, sludges, and adhesives;
   (c) industrial wastes, and
   (d) unused industrial chemicals

5. This facility is not permitted to accept:

   (a) hazardous waste listed and identified in Chapter 400 of the New Hampshire Hazardous Waste Rules;
   (b) waste water treatment plant sludge or septage waste;
   (c) contained gaseous waste;
   (d) infectious waste;
   (e) explosives;
   (f) asbestos; and
   (g) other waste not authorized per condition (4) to include waste for which the facility has not been designed; or which may be detrimental or hazardous to the facility, its operators or its users; or for which the facility has no provisions for removal to a permitted facility or marketplace for re-use.

6. This facility's approved capacity shall be that quantity of authorized wastes which can be handled by the facility within the terms of this permit, in a safe and environmentally protective manner and which is not in excess of 35,000 gallons of oily water and 150 tons of non-hazardous waste per month.

7. The maximum storage limits for the facility shall not exceed 170,000 gallons in tanks, 40,000 gallons in trucks, a total of 600 drums, and 26 tons in roll-off containers. All authorized wastes shall be transferred to a marketplace or to a permitted waste management facility.

Environmental Services

Permit No.: DES-SW-TP-97-016
Permittee: Total Waste Management Corporation
Facility Name: Total Waste Management Corporation
Facility Location: 142 River Road, Newington, NH
Date: October 27, 1997

8. The facility shall be exempt from the design standards as defined by Part Env-Wm 2104 of the Rules.

9. The facility shall be closed in conformance with a closure plan which meets the performance standards found in Parts Env-Wm 2106, 2706, and 2806 of the Rules.

10 The attached Notice of Intent form is to be completed, attached to this permit, and a copy submitted to the Department within 60 days of receipt of this permit.

NEW HAMPSHIRE DEPARTMENT OF Environmental Services

RECORD OF MODIFICATION TO SOLID WASTE MANAGEMENT FACILITY PERMIT

as authorized by the
NH Department of Environmental Services, Waste Management Division (Department)
pursuant to RSA 149-M and Part Env-Wm 315 of the New Hampshire Solid Waste Rules (Rules)

I. **PERMIT/FACILITY IDENTIFICATION:**
Permit No.: DES-SW-TP-97-018
Permittee: Total Waste Management Corporation, 142 River Road, Newington, NH 03801 (TWM)
Facility Name: Total Waste Management Corporation
Facility Location: 142 River Road, Newington, NH 03801
Facility Type: Processing and Transfer Facility
Permit Modification Type: IV

II. **FILE REFERENCE/RECORD OF APPLICATION:**
Date(s) Received: August 18, 2000; February 21, 2001
WMD Log #(s): 200000230; 200100047

III. **MODIFICATION:** This document acknowledges the transfer of ownership from Total Waste Management Corporation to United Oil Recovery, Inc., 14 West Main Street, Meriden, CT. 06451.

IV. **TERMS AND CONDITIONS:**
No conditions are attached.

V. **EFFECTIVE DATE:** Date of signature below.

VI. **AUTHORIZING SIGNATURE:** The permit identified in Section I above is hereby modified as specified in Section III above. This authorization is based on information and representations provided to the Department by the permittee, in documents referenced in Section II above. If the information is false, misleading or incomplete, the modification may be revoked or suspended in accordance with Part Env-Wm 306 of the Rules.

BY EXERCISING ANY RIGHTS UNDER THIS AUTHORIZATION, THE PERMITTEE HAS AGREED TO ALL TERMS AND CONDITIONS OF THE PERMIT, AS MODIFIED. Failure to comply with the terms and conditions of the permit could result in civil or criminal penalties, suspension or revocation of the permit, or administrative fine. No liability is incurred by the State of New Hampshire by reason of any approval of this solid waste facility. No warranty/guarantee is intended or implied by reason of any advice given by the Department or its staff.

This permit shall not eliminate the permittee's obligation to obtain all requisite federal, state or local permits, licenses or approvals, or to comply with all other applicable federal, state, district and local permits, ordinances, laws, approvals or conditions relating to the facility.

Philip J. O'Brien, Ph.D., Director
Waste Management Division

August 8, 2001
Date

Contact the Waste Management Division, 6 Hazen Drive, Concord, New Hampshire [telephone (603) 271-2900] if there are questions.

ATTACHMENT 3 FOR SECTION 3

Letter to NH DES Public Information and Permitting Unit

Hazardous Waste Transfer Facility Permit Renewal Application
United Oil Recovery, Inc.
410 Shattuck Way
Newington, New Hampshire

RANSOM
Environmental
Consultants, Inc.

February 15, 2006

Project # 055044-02

Mr. Tim Drew, Administrator
Public Information and Permitting (PIP) Unit
New Hampshire Department of Environmental Services
P.O. Box 95
29 Hazen Drive
Concord, NH 03302-0095

Re: United Oil Recovery, Inc. (DES-HW-TF-2000-01)
410 Shattuck Way
Newington, New Hampshire 03801

Dear Mr. Drew:

Ransom Environmental, Consultants, Inc. (Ransom) is in the process of completing a Hazardous Waste Transfer Facility Permit Application (Application) for the above-referenced facility.

Section (G) Part (11) of the Application requires "written confirmation from the department whether a ground water permit is required" and directs that inquiry to the PIP Unit. This inquiry is as required under Env-Wm 353.11(a)(8)k. Your response to this inquiry will be included in support of the application.

Please note that in filing for the initial Hazardous Waste Transfer Facility Permit, Total Waste Management Corp. (former owner/operator of the facility) prepared correspondence on November 5, 1993, and on January 3, 1993 to address this same requirement, and the permit was issued without requiring a ground water permit.

It is Ransom's opinion that Hazardous Waste Transfer Facilities are not specifically identified as regulated under Env Ws 1500 and Env Wm 1403.

We look forward to your determination as to whether a ground water permit is required for the subject facility.

■ 195 Commerce Way, Suite D, Portsmouth, New Hampshire 03801, Tel (603) 436-1490, Fax (603) 436-6037
400 Commercial Street, Suite 404, Portland, Maine 04101, Tel (207) 772-2891
Brown's Wharf, Newburyport, Massachusetts 01950, Tel (978) 465-1822
2127 Hamilton Avenue Hamilton, New Jersey 08619, Tel (609) 584-0090
1445 Wampanoag Trail, Suite 108A, East Providence Rhode Island 02915, Tel (401) 433-2160

www.ransomenv.com

If you have any questions or if we can be of assistance feel free to contact either Eileen Sewall or Steve Rickerich at (603) 436-1490.

Sincerely,

RANSOM ENVIRONMENTAL CONSULTANTS, INC.

SFR for

Eileen B. Sewall
Environmental Specialist

SFR

Steven F. Rickerich, P.G.
Vice President

EBS/SFR:adt

SECTION 4 SITING ASSESSMENT/ HYDROGEOLOGICAL ANALYSIS

GENERAL INSTRUCTIONS: *Address the following issues in a clear and concise manner. Use separate paper as necessary and collate all extra pages into this section of the application.*

(A) **GENERAL DESCRIPTION AND SITE HISTORY**: Provide a narrative description of the site, including a physical description and a 50-year history of the use(s) of the site. Use extra paper as necessary. (include all extra pages with this section of the application).

Please see attached discussion.

(B) **SURROUNDING LAND USE**: Briefly describe land use surrounding the proposed facility and discuss how the proposed facility will conform to or affect surrounding land use. Specifically indicate whether the proposed facility is located on or adjacent to property now or formerly used for waste management activities, either solid or hazardous waste. Use separate paper, if necessary, and attach to this section of the application.

Please see attached discussion.

(C) **ZONING**: Identify the zoning designation of the proposed facility location. If the proposed facility does not conform to local zoning requirements, indicate what measures have been or are being undertaken to address the issue at the local level. Attach maps as necessary and/or minutes of relevant meetings with local officials. Use separate paper if necessary, and attach to this section of the application.

Zoning Type: General Industrial

Conforming Use? YES

Comment:

(D) **LAND OWNERSHIP**: Is this facility wholly located on land owned by the permit applicant?

☐ YES ☒ NO (If the applicant is leasing the property upon which the transfer facility is located, the applicant must provide a written statement from the owner of the property verifying that such a lease exists and specifying the duration of the lease to show that authorization exists to site or operate this facility as proposed). Additionally, see **Section 8** of this application form. **Please see letter attached.**

(E) **FLOODPLAIN LOCATION INFORMATION**: Provide 100-year flood plain identification information and a copy of the relevant FIA flood map required by Env-Hw 304.09(b) and 40 CFR Part 270.14(b)(11)(iii).

Is this facility located within the 100-year flood plain? ☐ YES ☒ NO
Please see attached information.

If yes, provide in **Sections 5 and 6** of this form information to demonstrate that an existing facility complies with Env-Hw 304.08(a). *New transfer facilities shall not be located within the 100-year floodplain per Env-Hw 304.09(d).*

(F) **SITING REQUIREMENTS**: Indicate below, by writing YES or NO, whether the transfer facility is, or is proposed to be, located within the areas specified in Env-Hw 304.09. Provide facility site maps/plans and other technical documentation as necessary to support your response. Additionally see **Section 6**, Item (D)(1) for specific site plan submittal requirements. NEW Transfer Facilities must meet the siting requirements of Env-Hw 304.09 (except for 304.09(e) and 304.09(f)(6)) and therefore must answer NO to all of the items below.

YES (1) Within 1,000 feet of a residence that exists at the time this application is submitted.

NO (2) Within 1,000 feet of a school, hospital, or home for the elderly that exists at the time this application is submitted.

NO (3) Within 200 feet of an adjacent property line.

NO* (4) within an area that has hydrologic characteristics such that an accidental discharge of hazardous waste from the active portion could take less than one year to migrate through the ground to:

NO* a. The proposed property line of the transfer facility;

NO* b. A down gradient discharge of groundwater to surface water as defined in Env-Hw 304.09(f) (9), (10), and (12); or

NO* c. An aquifer as defined in Env-Hw 304.09(f)(6).

***Based on hydrogeological studies conducted at Pease Air Force Base and extrapolations to the United Oil Recovery, Inc. subsurface conditions observed during the 1993 construction activities. Also based on a soils permeability study done by GeoInsight in 2008-2009.**

NO (5) Within 1,000 feet of a surface water public water system intake or of the zone of contribution for a groundwater public water system intake.

NO (6) Within the watershed of a river designated as a Class A river pursuant to RSA 485-A:9 as of the time this application is submitted.

NO (7) Within 250 feet of the edge of a river or stream having a drainage area of one square mile or more.

NO (8) Within 250 feet of a pond, lake, or reservoir whose surface area exceeds 10 acres.

NO (9) Within 250 feet of the edge of a river or stream whose normal width is 100 feet or more.

NO (10) Within 250 feet of a wetland, as regulated under RSA 482-A, when its surface area exceeds 25 acres.

NO (11) Within the corridor of a river designated as a natural river pursuant to RSA 483.

NO (12) Within any salt dome formation, salt bed formation, underground mine or cave.

(G) **HYDROGEOLOGICAL ANALYSIS**: Applicants for a Transfer Facility Permit shall submit a Hydrogeological Analysis as prescribed in Env-Hw 304.11(a)(8), which includes Items (1) through (11) listed below, only if the exemption at Env-Hw 303.02(f) can not be met. To qualify for the exemption, the applicant must provide technical documentation to demonstrate the facility meets the following conditions as described in Env-Hw 303.02(f): (1) The facility is operated so that all waste handling occurs in an enclosed building with an impervious floor designed in accordance with the criteria defined in 40 CFR Part 264, Subpart I and Subpart J, 7-1-99 edition; (2) All hazardous waste containers, tanks and transportation vehicles are not located or stored at any time outside of the transfer facility building; and (3) The location of the transfer facility does not contravene the siting requirements of Items (E) and (F) above.

Please see information attached.

(1) Information required by 40 CFR 264.97;
(2) An accumulation and evaluation of hydrogeological information;
(3) An accumulation and evaluation of geological structural controls at the site to determine the site's relationship with intermediate and regional flow systems;
(4) An assessment of the geophysical characteristics of the underlying materials so that proper evaluation of the hydrogeological characteristics of the site can be determined;
(5) A determination of the configuration of the groundwater table, including groundwater gradients of the unconfined and, where appropriate, confined aquifers;
(6) Saturated thickness of the aquifers and the hydraulic interconnection between them shall be established;
(7) Field data to represent high and low water table conditions;

(8) The installation of groundwater monitoring wells that are designed and located so as to yield the following data from which site impacts can be formulated:
   1. Test pits;
   2. Well logs;
   3. Boring logs; and
   4. Well construction specifications;
(9) An evaluation of pump tests to determine hydraulic conductivity, migration rates, and aquifer transmissivities and storativities;
(10) A determination of background water quality, and a submittal of the sampling and analysis methods used for such determination; and
(11) A written confirmation from the department whether a groundwater permit is required. Applicants should contact the NHDES Public Information and Permitting Unit at (603) 271-2975 or pip@des.nh.gov to request such confirmation.

ATTACHMENT FOR SECTION 4(A)

Site History

Hazardous Waste Transfer Facility Permit Renewal Application
United Oil Recovery, Inc.
410 Shattuck Way
Newington, New Hampshire

Ransom Environmental Consultants, Inc.
Project 055044

Section 4(A)

GENERAL DESCRIPTION AND SITE HISTORY

The United Oil Recovery, Inc. (UOR) transfer facility is located on a parcel of approximately 5 acres, owned by Sprague Energy Corporation[1] (Sprague) at 410 Shattuck Way, Newington, New Hampshire. The Sprague facility consists of approximately 87 acres of land that is zoned industrial and waterfront industrial.

The UOR transfer facility is located on a small portion of a larger parcel of land with a varied history. In the mid 1800's the parcel of land was owned by the Pickering family and was used as farmland. In the late 1800's or early 1900's the farm land was sold. In 1917 a parcel of the land was purchased by L. H. Shattuck of Manchester, New Hampshire. While L. H. Shattuck owned the property a shipyard, hotel, office building, hospital and store were built on it. The shipyard built wooden steamships during 1917 and 1918. The shipyard and supporting buildings were closed in 1919 and sold to the American Dye and Chemical Company (Atlantic Dye Stuff Company) in 1920. This company manufactured dyes on-site from raw material stored on site. The property was owned by the Atlantic Dye Stuff Company until 1931.

In 1931 the land was purchased by Atlantic Terminal Corporation and used as an oil terminal wholesaling #2 fuel oil. Fuel was brought in by barge and pumped to an above ground storage tank for distribution. In 1956 the property was purchased by Sprague which presently owns the property and operates a bulk fuel storage and wholesale terminal for # 2 fuel oil, kerosene and diesel fuel. Sprague expanded the dock in the mid 1950's to reach deeper water so larger vessels could dock and deliver larger amounts of fuel. During the 1970's two large aboveground tanks were constructed on site. The first tank was a 217,000 barrel tank and the second tank was a 250,000 barrel tank.

A small refinery was also put into operation late in 1974 or early in 1975. The refinery was located just northeast of the current UOR site. It was capable of producing 12,000 to 14,000 Bbl. per day refined from crude oil shipped into the marine terminal.

In the same time period, Sprague constructed the Oil Reclamation Unit, a used oil reclamation facility on a previously vacant portion of the property which is now a portion of the present United Oil Recovery facility. The Oil Reclamation Unit consisted of a building housing Lamella/Anderson process equipment, a below ground drop tank where product and water was off loaded from trucks, and three 3,000 Bbl. above ground storage tanks for used oil. There were also eight 2,000 gallon and one 10,000 gallon above ground tanks used to temporarily store water removed from the used oil pending offsite disposal. Various of the tanks and equipment were interconnected by above ground piping. Oil processed through the Oil Reclamation Unit was used as a supplementary feed stock to the refinery.

The Oil Reclamation Unit processed used oil from its startup in late 1974 or early 1975 until February 1981 when it was shut down due to a proposed Federal regulatory change. At shutdown, all equipment was cleaned, including the processing equipment, the underground drop tank, the above ground oil and water storage tanks and the piping. Sprague also closed the refinery in June 1981 due to changes in Federal subsidies which had supported the operation of smaller refineries.

In 1981 Sprague expanded the terminal operation from oil transportation and storage to other bulk liquids such as tallow, caustic soda and liquid asphalt. Dry products were introduced to the site in 1989. These products were gypsum, salt and dry cement.

Total Waste Management Corp. (TWM) occupied the Oil Reclamation Unit site in October of 1985 for use as a used oil marketing terminal, using the three 3,000 Bbl product tanks, the underground drop tank and various other smaller above ground tanks to store non-hazardous used oil and oily water. TWM also used the same facility as a transportation terminal for hazardous waste and as a hazardous waste transfer facility, although hazardous wastes were managed solely in transport vehicles and were never introduced into the tank storage which was reserved for non-hazardous materials. The former Lamella/Anderson used oil processing equipment was disassembled by TWM and the Oil Reclamation Unit building was used to house facilities supporting other operational activities such as equipment storage and maintenance areas, a lunch room and a Quality Assurance area for checking used oil.

On April 17, 1991 TWM filed for Interim Status to Operate a Hazardous Waste Transfer Facility. An application, with subsequent revisions, was submitted to the NH DES and was approved on April 6, 2000.

In the late 1990's, KTI, Inc. purchased TWM and continued to operate the transfer facility in the same manner, using the business name of Total Waste Management. Eighteen (18) months later Casella Waste Systems, Inc. purchased KTI, Inc., though the operation of the facility remained the same. In February 2001, United Oil Recovery, Inc. (UOR) purchased the assets of Total Waste Management from Casella Waste Systems. Transfer of the Hazardous Waste Transfer Facility Permit No. DES-HW-TF-2000-01 was approved by the NH DES on February 2, 2001.

UOR amended the plans for the Hazardous Waste Transfer Dock, which were approved by the NH DES. The dock was constructed in 2003, and NH DES approved its use on January 14, 2004.

[1]Sprague Energy Corporation was formerly known as C.H. Sprague and Sons. For the purposes of this discussion we shall refer to both Sprague Energy and C.H. Sprague and Sons as "Sprague".

ATTACHMENT FOR SECTION 4(B)

Surrounding Land Use

Hazardous Waste Transfer Facility Permit Renewal Application
United Oil Recovery, Inc.
410 Shattuck Way
Newington, New Hampshire

Ransom Environmental Consultants, Inc.
Project 055044

Section 4(B) Surrounding Land Use

Property ownership and land use information for properties within a 1,000 foot radius of the United Oil Recovery, Inc. (UOR) transfer facility were obtained from the records of the Newington Tax Assessor. Pertinent information is summarized in the table below:

SURROUNDING LAND USE AND OWNERS

Map Number	Lot Number	Owner / Use
7	12	Mooney Associates Warehouse/Commercial
7	12a	Sprague Energy/Marine Terminal
7	6	Rockingham Electrical Supply/Commercial
7		State of New Hampshire Spaulding Turnpike
7	13	NH DOT/Vacant Land
7	2	Russel Bernard/ Vacant Land
7	24	State of New Hampshire/Vacant land
7	19	Cumberland Farms, Inc./ Gasoline Station
7	20	Thomas Y. Butler/Vacant Land
7	16	Short Family LTD Partnership/ Residence
7	23	State of New Hampshire/Vacant Land
7	14	C.H. Sprague & Sons/Marine Terminal
8	8	Newington Waste Water Treatment Plant (owner or easement)/ Pump Station
8	2	B & M Railroad/Vacant
8	1	Short Family LTD Partnership/Commercial
8	6	Town of Newington/Pump Station
13	15	Clara Butler/Light Manufacturing
13	1	Mo Y Wong/Commercial
13	1A	Yuk Yin Wong/Vacant Land
13	5	Public Service Co of New Hampshire/Industrial

The UOR facility and the surrounding properties are supplied by a municipal water system, which is provided by the Portsmouth Public Works Department and is supplied by the Bellamy Reservoir located in Dover and Madbury.

Based on the above research, the proposed facility conforms to the surrounding land use. The key points that illustrate the conformance of the transfer facility with the surrounding land use are as follows:

- High volume petroleum storage and processing activities have been located on this site since 1931.

- The bulk of UOR's activities are related to hazardous and non-hazardous waste petroleum product management. The facility, under different ownership has been utilized for these types of activities at this location since 1985.

- UOR's activities are centered on the processing of used oil, and the transfer of hazardous wastes commonly used in industry. These materials are similar in nature to the petroleum products currently used or stored in bulk quantities at Sprague, Cumberland Farms, and the auto body shop.

- The area is zoned for industrial use and a number of significant industrial enterprises are present along this industrial section of the Piscataqua River.

- The close proximity and direct access of Shattuck Way to the Spaulding Turnpike allows easy, but secure, access to the facility and minimizes community exposure to truck traffic.

- The area is serviced by a municipal water supply of sufficient pressure and volume to operate fire hydrants for fire fighting purposes.

ATTACHMENT FOR SECTION 4(D)

Letter from Sprague Energy, Inc. Verifying Lease

Hazardous Waste Transfer Facility Permit Renewal Application
United Oil Recovery, Inc.
410 Shattuck Way
Newington, New Hampshire

October 7, 2005

David J. Carabetta
President
United Industrial Services
144 West Main Street
P.O. Box 902
Meriden, CT 06450-0902

Re: Notice of Renewal of Lease

Dear Mr. Carabetta,

Thank you for you letter indicating Untied Oil Recovery's intent to extend the lease for a term of five years beginning February 1, 2006.

As always, your business is greatly appreciated, and we are pleased to extend the lease in Newington, NH through January 31, 2011.

Kind regards,

Jennifer R. Muñoz
Materials Handling Supervisor

ATTACHMENT FOR SECTION 4(E)

Floodplain Location Information

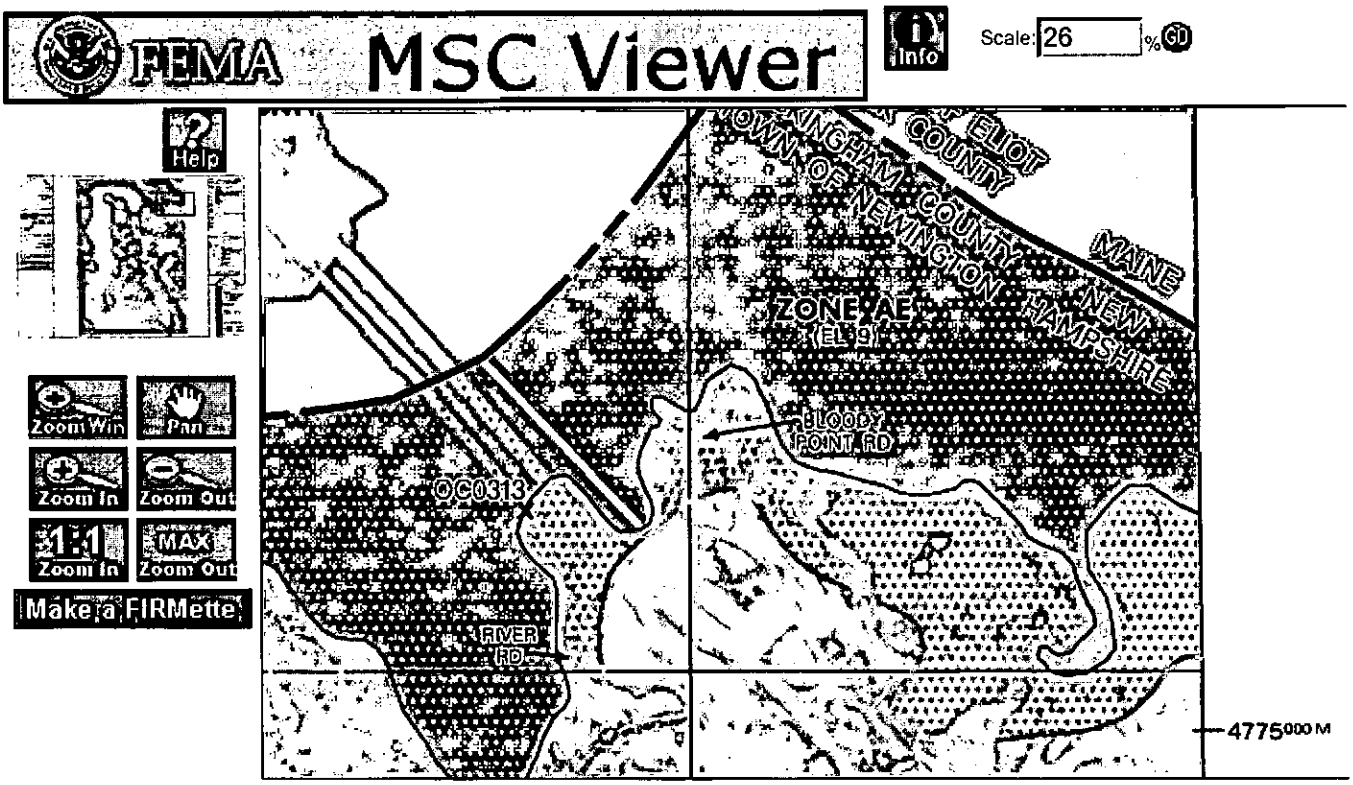
Hazardous Waste Transfer Facility Permit Renewal Application
United Oil Recovery, Inc.
410 Shattuck Way
Newington, New Hampshire

Ransom Environmental Consultants, Inc.
Project 055044

Section 4(E)

FLOODPLAIN LOCATION INFORMATION

Attached is a copy of the relevant FEMA floodplain map. It would appear that the UOR facility is on the edge, but outside of, the designated floodplain area. Furthermore, the base flood elevation in this area is indicated to be 9 feet. Based on topographic information referenced from site surveys as well as the USGS topographic map, the elevation of the UOR transfer facility is above the 9 feet elevation, and thus outside of the flood zone.


FEMA
MSC Viewer
Info
Scale: 26 %
Help
Zoom Win
Pan
Zoom In
Zoom Out
1:1 Zoom In
MAX Zoom Out
Make a FIRMette
ELIOT
COUNTY
TOWN OF NEWINGTON
ROCKINGHAM COUNTY
MAINE
NEW HAMPSHIRE
ZONE AE
(EL 9)
BLOODY POINT RD
OC0313
RIVER RD
4775000 M

ATTACHMENT FOR SECTION 4(G)

Hydrogeological Analysis

Hazardous Waste Transfer Facility Permit Renewal Application
United Oil Recovery, Inc.
410 Shattuck Way
Newington, New Hampshire

Ransom Environmental Consultants, Inc.
Project 055044

Section 4(G)

HYDROGEOLOGICAL ANALYSIS

Roy F. Weston, Inc. prepared this hydrogeological analysis for the original application submittal to NH DES for a Hazardous Waste Transfer Facility Permit for this facility. At that time, the operator of the facility was Total Waste Management Corp.

With the concurrence of the NH DES, this original hydrogeological analysis is included as part of this renewal application in fulfillment of this section. Please note that the plan contains references to "Total Waste Management Corp. (TWM)" instead of UOR. Also note that in the original application, this hydrogeological report was included as Section 5 and contains these original markings.

5.0 (4) SITING ASSESSMENT/HYDROGEOLOGICAL ANALYSIS (addressing 353.14(d))

INTRODUCTION

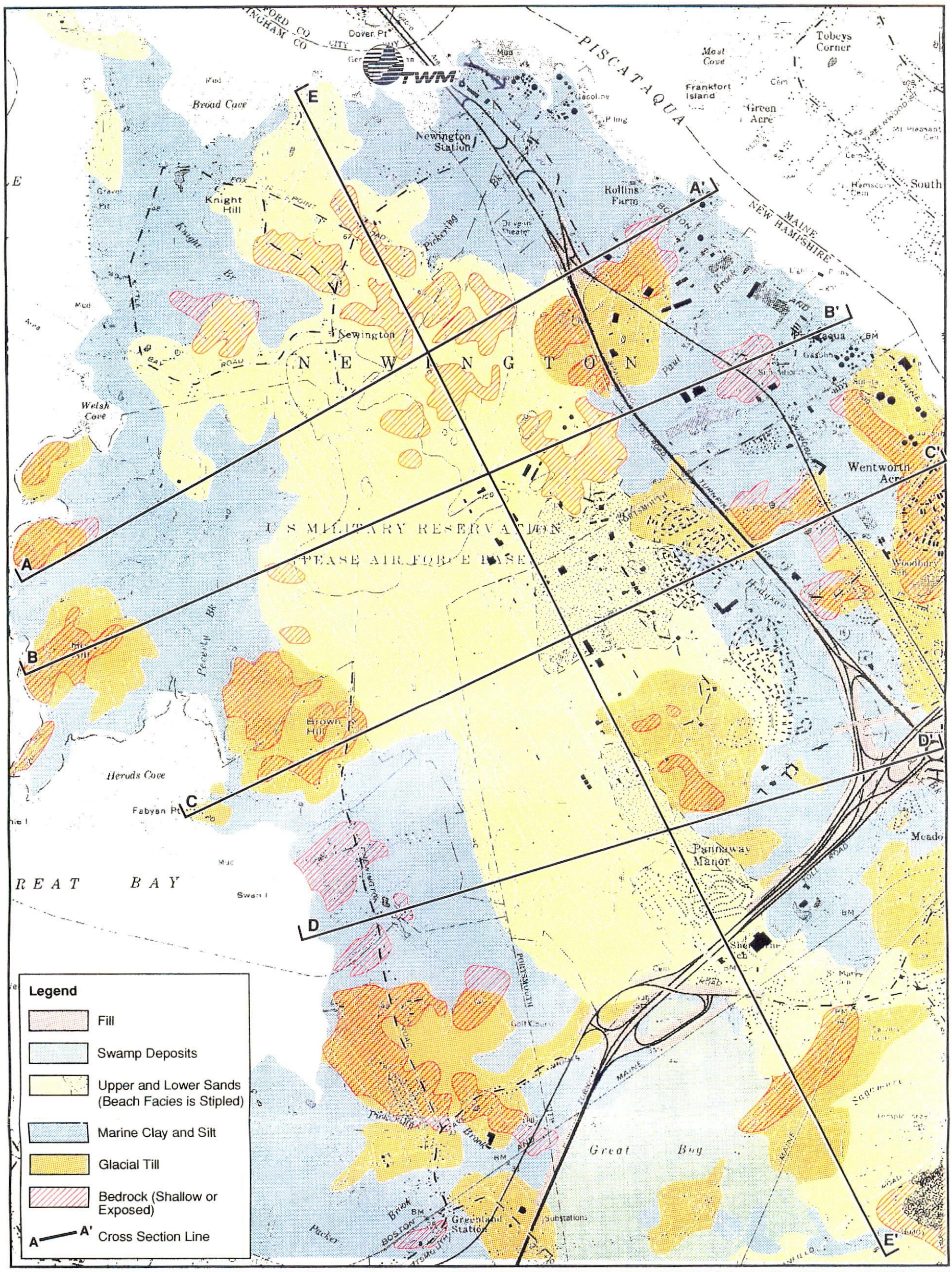
The TWM waste transfer facility is located at the northeastern end of the Newington Peninsula. The peninsula trends north-south, and is bounded to the northwest by Little Bay, to the southwest by Great Bay, and to the east by the Piscataqua River. Data used to assess hydrogeological conditions at the TWM waste transfer facility was gathered from several sources including logs from borings drilled at Pease AFB by WESTON, ICF-Kaiser Engineering, The Earth Technology Corporation, U.S. Army Corps of Engineers, and the USGS; local outcrops; logs from geotechnical borings drilled by the NH Department of Transportation (NHDOT) for the construction of the Newington-Dover Turnpike Bridge; a hydrogeologic study of a nearby portion of the Sprague property by Aries Engineering, and visual inspection of recent excavations at the transfer facility.

GEOLOGY OF NEWINGTON PENINSULA

As illustrated on the attached geologic map of the Newington Peninsula (Figure 5-3), one-third of the peninsula is a low, broad, northwest-southeast trending ridge composed of up to 100 feet of unconsolidated sand and gravel, with lesser amounts of silt and clay. The ridge-top is distinctly planar with elevations reaching up to 110 feet above mean sea level (MSL) to the northwest and gradually decreasing to about 60 feet MSL to the southeast. The remaining portions of the peninsula consist of a knobby bedrock surface largely veneered with basal till and silty clay. These units are described in more detail below.

The bedrock found beneath Newington Peninsula is comprised of two formations of Precambrian age metasedimentary rock. The northern portion of the peninsula is underlain by the Eliot Formation, with the southern portion underlain by the Kittery Formation (Novotny, D.F. 1963). Both formations consist of interbedded, strongly foliated phyllite, schistose quartzite, and metagreywacke. The bedding of the bedrock strikes northeast and generally dips steeply to the northwest. Numerous diabase dikes of presumed Mesozoic age are known to cut the bedrock, and trend northeast at a low angle to bedding. Cores drilled during the Pease Air Force closure program show that bedrock fracturing is laterally variable, but fracture density consistently decreases with depth. The surface elevation of the bedrock unit ranges from -5 to 105 feet above mean sea level (MSL), with the highest elevations found near the center of the peninsula. As shown by numerous borings drilled as part of the Pease Air Force Base closure program, the bedrock surface beneath the sand ridge is knobby and largely overlain by till.

Lodgement (basal) and ablation tills were deposited over the bedrock of the Newington Peninsula during glacial advances and retreats, respectively (Bloom, A.L. 1960; Thompson, W.B. 1979; Smith, G.W. and L.E. Hunter 1989). The lodgement till is very dense and compact, found only in small, isolated pockets in the center of the peninsula, and more



NORTH

0 2200 4400
Scale In Feet

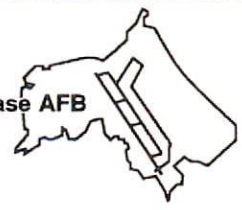


FIGURE 5-3
SURFICIAL GEOLOGIC MAP OF NEWINGTON PENINSULA

extensively away from the peninsula ridge. Where present, lodgement till may act as an aquitard. The ablation till is less compact, with hydrologic properties similar to that of a sand unit, and is most frequently encountered beneath the sandy ridge of the peninsula.

Borings completed for the Pease Air Force Base closure program show that the sand and gravel that rest on the till can be differentiated into two units referred to as the Lower Sand and Upper Sand (Weston 1993; Thompson et.al. 1989). These units are typically separated by several feet of clayey silt of the Presumpscot Formation. Typically, the till unit is overlain by the Lower Sand, which is characterized by sand and gravel, with traces of silt and some clay, representing outwash material from the retreating glaciers.

As the glaciers further retreated, the seas advanced over the peninsula and deposited the Presumpscot marine silts and clays (Bloom, A.L. 1960; Goldthwait, et.al. 1951). Cross sections constructed from exposures and boring logs (Figure 5-4) indicate that the Presumpscot Formation, typically found deposited over the Lower Sand, is a single stratigraphic unit and that its upper surface is erosionally bevelled. Collective evidence suggests that the unit formerly consisted of a laterally continuous blanket across all of the older materials of the peninsula, but was partially eroded away by subsequent coastal processes when, as a result of crustal rebound, the ridge emerged as an island.

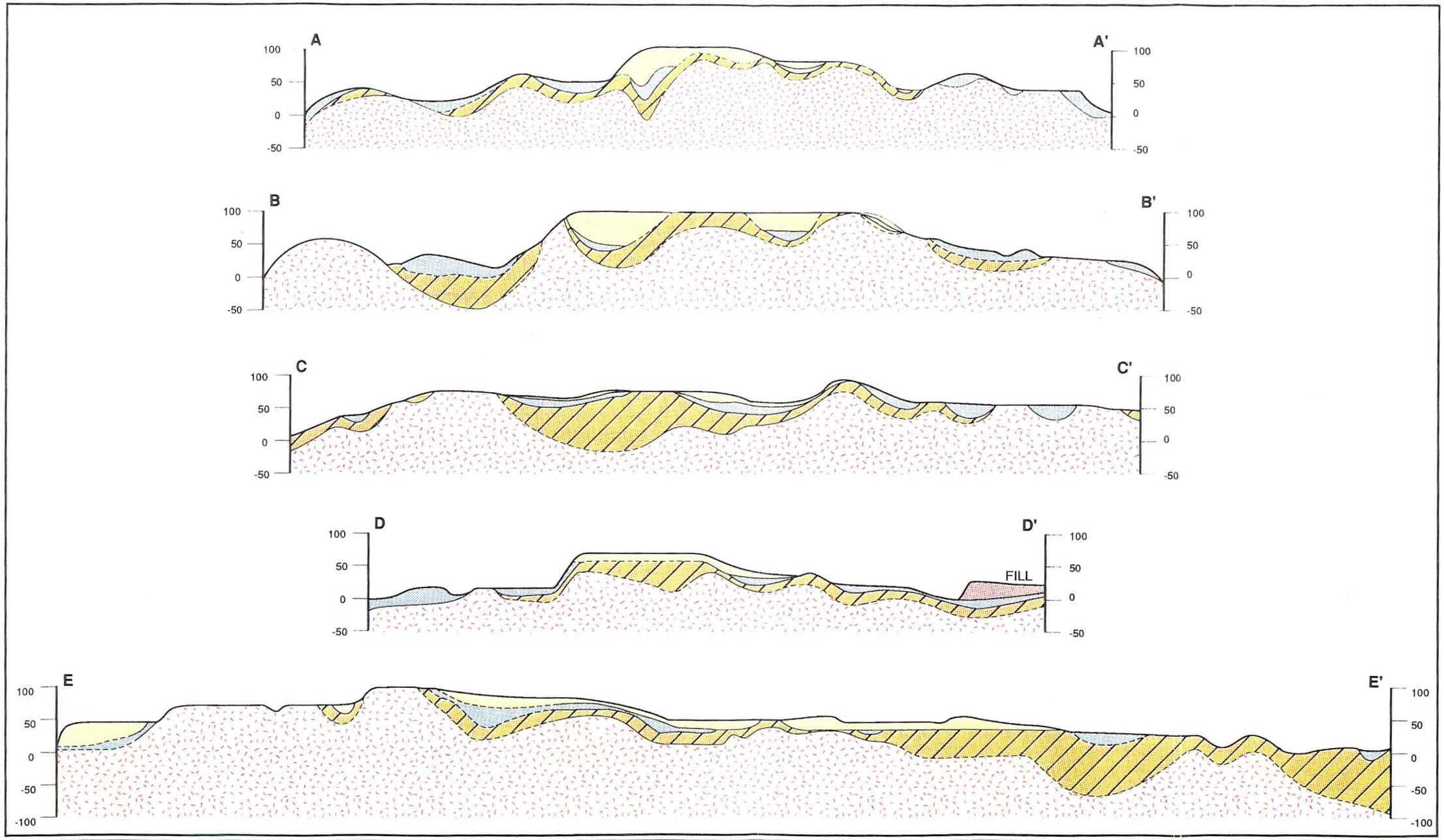
The Upper Sand was deposited during this crustal rebound period as reworked deltaic material along these coastal areas. This unit is usually found as a thin veneer over the Presumpscot Formation. Lithologically, the Upper Sand is indistinguishable from the Lower Sand without the presence of the Presumpscot clays between the two units (Weston 1993).

HYDROGEOLOGY OF THE NEWINGTON PENINSULA

Hydrogeologic data was gathered from results of tests conducted on many wells installed at Pease AFB including over fifty long- and short-term and stepped-discharge pumping tests and several hundred slug tests. These tests have been conducted across Pease AFB, and have lead to a comprehensive understanding of the hydrology of the overburden and bedrock units found on the Newington Peninsula.

Groundwater can be found beneath the peninsula in the overburden and bedrock units under both confined and unconfined conditions, depending on location. Typically, in areas of higher elevation, the Presumpscot Formation is thin and discontinuous, and therefore groundwater is usually found under unconfined conditions. In lower areas of the peninsula, and especially in areas distant from the central ridge such as the TWM site, thick sequences of lodgement till and Presumpscot silts and clays predominate the surficial geology. These units combine to inhibit vertical groundwater movement and tend to produce confining conditions in areas distant from the central ridge.

Water levels from several wells installed on Pease AFB for the past several years are presented in Figure 5-5. This figure demonstrates the natural fluctuations of the water table resulting



Legend

- Upper Sand
- Marine Clay and Silt
- Glacial Till and Lower Sand
- Bedrock

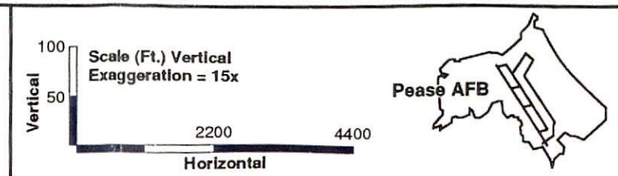


FIGURE 5-4
GEOLOGIC CROSS SECTIONS OF THE NEWINGTON PENINSULA

Typical Water-Table Fluctuations
Pease AFB, New Hampshire

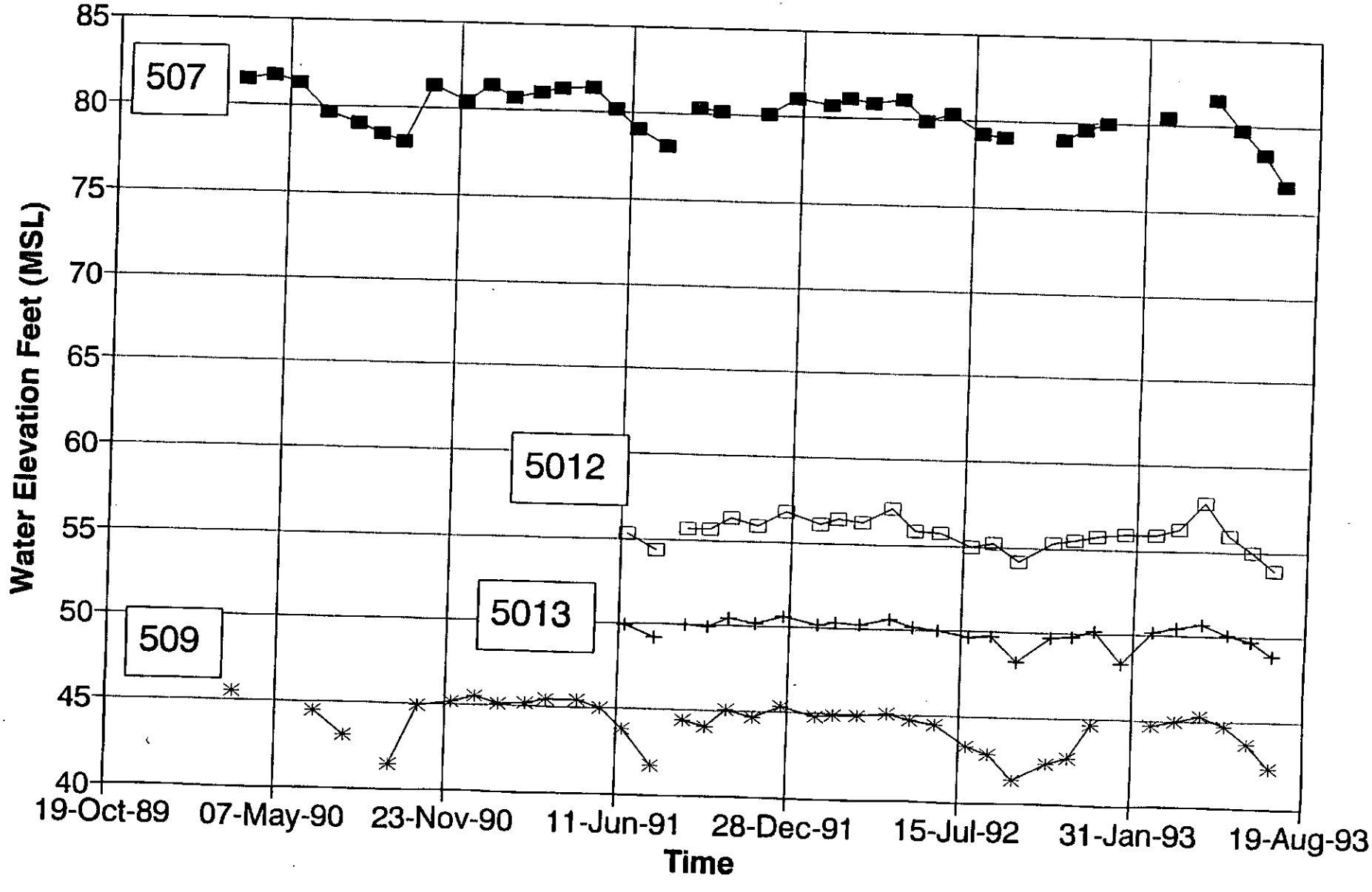


FIGURE 5-5

from annually high precipitation periods. A consistent trend can be observed in all four of the wells presented here. Water levels typically drop between one and six feet during the summer months, and rise again during the winter months in response to increased precipitation. While the fluctuations do not generally exceed six feet in any particular well, a wide range of the water-table elevations can be found at Pease AFB. The elevations presented here are considerably higher than those observed in excavations at the TWM facility, as groundwater levels decrease with proximity to the river.

Recharge to the peninsula occurs predominantly near the central, sandy ridge. Recharge rates vary locally with vegetation, soils, and surface water drainage systems. Precipitation that is not evaporated or removed as runoff either enters the overburden units and discharges to surface drainage systems (i.e., streams, culverts, etc.), or passes through the overburden units and enters the bedrock, flowing radially away from the central portion of the peninsula. The water table is highest beneath the central ridge of the peninsula, and is characterized by three mounds with elevations ranging from 86 to 104 ft MSL. The elevation of the water table decreases radially away from these mounds until reaching either the Piscataqua River, Little Bay, or Great Bay. Recharge rates at the TWM property are likely to be comparatively small due to the clayey overburden deposits.

The vertical gradients near the central ridge of the Newington Peninsula are predominantly downward (as observed across Pease AFB), reflecting the central zone of recharge. Downward vertical gradients decrease with increasing distance from the center of the peninsula, until, near the coastline, vertical gradients are expected to be predominantly upward, reflecting a coastal zone of discharge. Upward gradients are expected at the TWM property due to its close proximity to the Piscataqua River.

Hydrogeologic tests completed at the Pease AFB during the base closure program include long term pumping tests, short-term pumping tests, single well, stepped-discharge pumping tests, and slug tests. The geologic units noted above have each been tested by at least one of these methods, and estimated transmissivities and storativities have been calculated using several methods of data analysis. The average horizontal and vertical hydraulic conductivities of each geologic unit found in the northernmost portion of Pease AFB (the portion nearest the TWM facility) are listed below:

Lithology	Horizontal	Vertical
Upper Sand	2.0 ft/day	0.5 ft/day
Presumpscot Fm.	0.05 ft/day	0.005 ft/day
Lower Sand	4.0 ft/day	0.4 ft/day (estimated)
Glacial Till	0.5 ft/day	0.01 ft/day
Shallow Bedrock	3.0 ft/day	0.5 ft/day
Deep Bedrock	2.0 ft/day	0.0009 ft/day

At least two long-term pumping tests, conducted in the northernmost portion of Pease AFB on the confined bedrock water-bearing unit, yielded storativities of 3.4×10^{-3} and 4.3×10^{-4},

respectively. Tests conducted on the Upper and Lower Sands across Pease AFB have yielded storativities ranging from 10^{-5} to 10^{-2}, depending on whether the unit is confined or not.

Typical safe yields of the overburden units, as found on Pease AFB, do not exceed 10 gallons per minute (gpm). The Upper and Lower Sand units generally produce more water than either the Presumpscot Fm. or the till unit. The primary source of water on Pease AFB is derived from a local sand and gravel unit found near the midsection of the runway. The production well, referred to as the Haven well, yields slightly over 1000 gpm intermittently daily. A long-term pumping test conducted on the Haven well concluded that its safe yield is slightly lower than this rate. The Haven aquifer, as the local sand and gravel unit is called, lies upgradient of and slightly more than 2 miles to the south of the TWM facility.

Groundwater movement through the bedrock is controlled by secondary porosity features (i.e., bedding planes, fractures, etc.). Numerous pumping tests performed at Pease AFB have indicated that the bedrock water-bearing-zone is anisotropic with the long axis trending northeast/southwest paralleling the regional strike of the local formations. Anisotropy in the overburden units, when observed during pumping tests, varies considerably over relatively short distances.

SITE GEOLOGY

The geology of the TWM site is believed to be similar to that found at Pease AFB with some small variations. It is likely that the Upper Sand unit identified at Pease AFB is absent or very thin in the vicinity of the site. This is due to the fact that the site is near the edge of the peninsula and the Presumpscot Formation thickens as the Upper Sand thins along the coast. This scenario is supported by boring logs from the Newington-Dover Turnpike bridge which show a sand and gravel unit underlain by till which overlies the bedrock. The boring closest to the site, on the southern shore of the channel, revealed seven feet of a sandy silt overlying a six-foot-thick unit of sand and gravel. The sandy silt likely corresponds to the Presumpscot Formation while the sand and gravel unit may represent the Lower Sand and till units. The blow counts for the lower two feet of the sand and gravel unit are very high, indicating that the material is very dense and is likely a lodgement till.

Additional evidence that the site generally conforms to the conceptual model of the peninsula described above includes observations made of two excavations at the TWM facility shown in Figure 5-6. An excavation (Exc #1) was performed in the southern portion of the site for the installation of a concrete holding tank. A geologist from WESTON inspected the excavation and noted that the soils consisted of a clay-rich silt unit underlying or adjacent to a more dominantly clay unit (see Photo #1). The upper portion of the west wall at the northern and southern ends of the excavation consist of a gray, clayey silt matrix; however, a brown, clayey sand unit with a significant percentage of gravel is found between these two ends. It is possible that the brown clayey sand unit represents a reworked portion of the Presumpscot Formation and Upper Sand. The gray clay unit is similar to the Presumpscot Formation as described on Pease AFB. The brown clayey sand unit appears to dip downward to the east,

FILE NAME: G:\WP\TWM\MONITOR.DWG

NO.	DATE	APPR.	REVISION	NO.	DATE	APPR.	REVISION

TOTAL WASTE MANAGEMENT CORPORATION
HAZARDOUS WASTE TRANSFER FACILITY
NEWINGTON, NEW HAMPSHIRE

WESTON
CONCORD NEW HAMPSHIRE

CHECKED	DATE	CLIENT APPROVALS	DATE
DES. ENG.			
PROJ. ENG.			
PROJ. MGR.			
APPROVED			
APPROVED		ISSUED FOR	DATE

APPROXIMATE LOCATIONS OF EXCAVATIONS AND MONITOR WELLS

DRAWN SRR	DATE FEB 1993	DWG. NO. FIGURE 5-6	REV. NO.
SCALE AS SHOWN	W.O. NO. 10210-002-005	SHT. SHEET OF SHEET	

Photo #1. First excavation, looking west.

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3 SCIENCE PARK
YAVAPAI, NJ

as it was not observed in the second excavation as described below. The total depth of the excavation approximated 12 feet, and during its construction water infiltrated to fill the bottom foot.

A concrete lined pit was removed shortly after the first excavation was completed, and the resultant excavation (Exc #2 on Figure 5-6) was also observed by a WESTON geologist. This excavation was immediately east of the first excavation. The total depth of the excavation was 10 feet, 11 inches. Two apparent lithologies can be seen on the west wall of the excavation (Photo #2). The upper 7.5 feet of the excavation consisted of what appears to be the same clay-rich silt observed at the northern end of the first excavation. The lower three to four feet also consisted of clay, however with a more distinctly blue-gray color. Sand stringers were also noted in the clay at the bottom of the excavation. The lithology of the clay unit is generally consistent between both excavations, and the contact between this and the brown clayey sand unit was most defined at the northern end of both excavations. Although very little water was seen in the second excavation, the clay unit at the bottom was saturated.

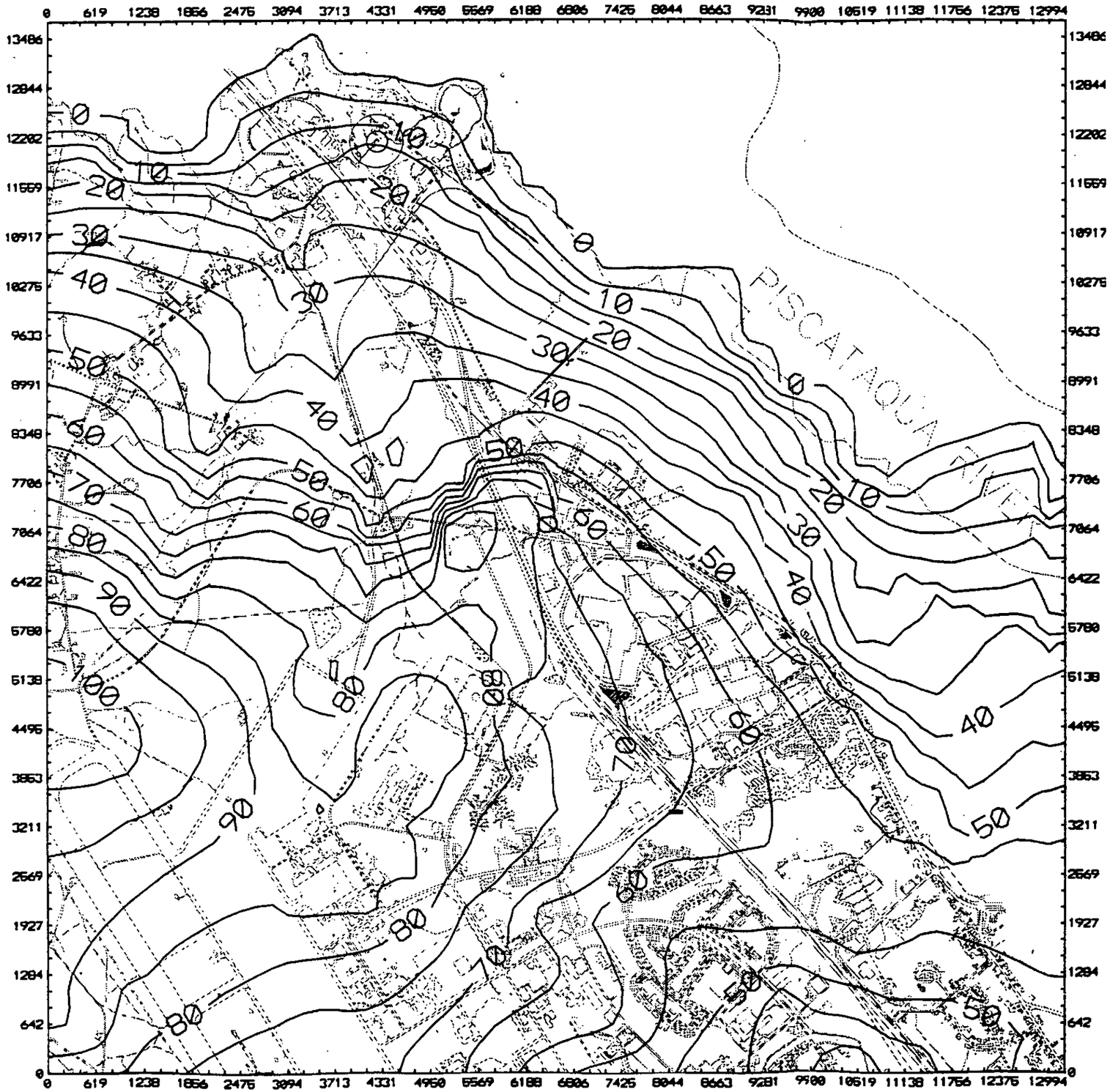
Although a color change can be observed in both excavations about 7 to 8 feet below grade, it should be noted that both excavations have been completed in a predominantly clay unit, as evidenced by the near-vertical side walls and "smearing" marks of the backhoe teeth. This clay unit is considered representative of the Presumpscot Formation as shown in the cross-sections of Figure 5-4.

A hydrogeologic study of an area of the Sprague property near the TWM facility was conducted by Aries Engineering in 1987. The study included the completion of 14 test pits to approximately 8 feet and 6 test borings to depths ranging from 7 feet to 27 feet. The approximate locations of the borings are shown in Figure 5-6. Logs of these borings are included as Attachment 5-A to this section (Aries 1987). The borings were completed as monitor wells. Most of the material encountered in this these borings and test pits was gray-brown silty clay. The material that Aries describes is very similar to that seen by the WESTON geologists in the test pits on the TWM property and the native marine clay described in the discussion above dealing with regional geology.

SITE HYDROGEOLOGY

Groundwater in the overburden and bedrock zones is believed to flow to the north into the Piscataqua River based on regional water-table maps developed for Pease AFB. Figure 5-7 shows water table elevation contours for the northern portion of the peninsula. The groundwater map shows water-table elevations ranging from 12 to 16 feet MSL in the vicinity of the TWM facility, which agrees with the observations made during the excavations. Based on the conceptual model of the peninsula, groundwater at the site is expected to exist under unconfined conditions above and within the Presumpscot Formation and under confined conditions in the Lower Sand and shallow bedrock. The confining nature of groundwater in the till and bedrock units at the TWM site could not be determined by observations of either excavation, since neither fully penetrated the Presumpscot Formation.

Photo #2. Second excavation, looking west.



LEGEND

Surface contour/elevation (Ft/MSL) 10 foot interval

Roads (asphalt/paved)

Unpaved roads and trails

Buildings

Proposed TWM Transfer Facility Site

NORTH

0 500 1000 2000 3000

SCALE IN FEET

Pease AFB

Base Map Source:
Detail area of photogrammetric compilation of PAFB from aerial photography dated 11/23/87.

852-9883

4/24/93

FIGURE 5-7
MODEL CALCUALTED WATER TABLE ELEVATION CONTOUR MAP

Although groundwater can be found in both the overburden units (lower sand/till and the Presumpscot Fm.) and the bedrock, significant movement probably only occurs within the bedrock. Hydraulic conductivities of the till and the Presumpscot Formation have been estimated at Pease AFB to average 0.5 and 0.05 ft/day, respectively. In contrast, the shallow portion of the bedrock has measured hydraulic conductivities averaging 3.2 ft/day.

Due to the close proximity of the site with respect to Little Bay and the Piscataqua River, the horizontal gradient of the groundwater is expected to be small, although the vertical gradients may be significant. The horizontal gradient of the water table, based on groundwater modeling conducted for Pease AFB, is expected to be about 0.0125 ft/ft. Using a conservative hydraulic conductivity of 1 ft/day, an effective porosity of 20% (from published values), and a hydraulic gradient of 0.0125 ft/ft, the average linear velocity of groundwater beneath the TWM site is 23 ft/yr.

Since the Piscataqua River demonstrates large tidal fluctuations, the groundwater beneath the TWM site is also expected to be influenced by tides. The documented tidal bore observed in the Piscataqua River near Dover Point is about 7 feet. Although the water level fluctuation will reflect tidal influence, attenuation within the water-bearing unit will reduce the magnitude of the change with distance from the river. Tidal influences on the order of 0.1 to 0.3 feet have been observed in the bedrock at Pease AFB. Based on location, the water table beneath the TWM facility is expected to change on the order of one foot in response to tides in the Piscataqua River.

CONCLUSIONS

WESTON has accumulated information on the geology and hydrogeology of the Newington Peninsula from field work and modelling for the Pease Air Force Base study. WESTON has also made observations from test pits on the TWM property and has reviewed boring logs from the Newington-Dover Turnpike bridge, and an Aries Engineering study of a nearby portion of the Sprague property. Because the geologic/hydrogeologic information from these three sources corroborate one another, the following conclusions regarding the geology and hydrogeology of the TWM property can be made with some confidence.

- The site is underlain by a compact marine clay unit and a sandy silt (the Presumpscot Formation) both of which are expected to have very low permeabilities, and both of which appear to be significant in aerial extent.

- Groundwater flow direction in the horizontal direction is towards the river, away from any potential drinking water receptors.

- Groundwater flow in the vertical direction is likely to be upward, because of the proximity of the property to the river.

These three factors make the geology at the TWM property favorable for a transfer facility.

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Weston (Roy F. Weston) 1993. Installation Restoration Program., Zone 1 Remedial Investigation Report, Pease Air Force Base, Draft Final, October 1993.

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ATTACHMENT 5-A

BORING LOGS FROM ARIES ENGINEERING STUDY OF SPRAGUE FACILITY

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SOIL BORING LOG

Well Installation and Completion Data

Sprague - Newington — Client: C.H. Sprague & Son — Job No. 87040D — Surveyed Elevation: Ground _____

Date Drilled: 8/20/87 — Boring No.: MW-7 — Driller: Miller Testing — Top of Casing: 27.31' — Screen Length: 10'

Boring Depth: 27 ft. — Boring Method Used: 3 1/4" HSA — Casing Size & Type: 2" PVC

Geologist/Engineer: G. Draper — Soil Screening Instruments: HNU — Observed Water Table Depth(feet): 30.56

Depth (feet)	Samp. No.	Blows per 6' lbs.	Sample Interval	Adv/Recov	Instru Read -PPM	Sample Description	Strata. Change	Equipment Installed	Notes
								Curb Box	2
							Fill, Clayey SAND	Concrete Grout	
5	S-1	2-1-2	5-6.5'	18"/12	ND	Clayey SAND, little f. Gravel, loose, moist, grayish-brown. FILL. SC.		Sand	
10	S-2	2-7-3	10-11.5'	18"/9	9	Clayey SAND, little f. Gravel, trace wood, loose, moist, brown and gray, Fill. SC.		13.5'	
							CLAY	Bentonite Seal	
	S-3	1-2-4	15-16.5'	18"/14	0.2	CLAY, med. soft, moist, blueish-gray, CH.		16.5 Sand	
20	S-4	6-14-16	20-21.5'	18"/13	ND	20'-21' Clayey SILT, trace f. sand, hard, saturated, brown. ML. 21-21.5' SAND, poorly graded, dense, saturated, white and brown, SP	Gravelly SAND	.010 Slotted Screen, 10 feet	
25	S-5	19-63-68	25-26.5'	16"/15		Gravelly SAND, little Silt, poorly graded, very dense, saturated, brown, TILL, GM		27'	1
						Bottom at 27'.			

1. Auger refusal at 27 feet.
2. A protective curb box was grouted in place and is set flush with the ground surface.

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SOIL BORING LOG

Well Installation and Completion Data

Sprague - Newington — Client: C.H. Sprague & Son — Job No. 87040D — Surveyed Elevation: Ground ____

Date Drilled 8/21/87 — Boring No. MW-8 — Driller Terry Gumalka — Top of Casing 20.72' — Screen Length 10

Boring Depth ____ — Boring Method Used Auger/Hollow Stem - 3 1/4 inch — Casing Size & Type 2" PVC

Geologist/Engineer P. McGlew — Soil Screening Instruments HNU PI-101 — Observed Water Table Depth(feet) 11.43

Depth (feet)	Sample No.	Blows per 6' lbs.	Sample Interval	Adv/Recov	Instru Read -PPM	Sample Description	Strata Change	Equipment Installed	Notes
0			of Auger 1-4'			FILL, silty SAND, (brick pieces), wood, poorly graded, loose, brown	FILL	Curb Box	
	1	6-11-13	4-5.5'	18"/18	100	dry, SC. Silty CLAY, med. plastic, soft, damp, brown-gray, SC.	Silty CLAY	Grout, Sand	
10	2	6-8-17	10-10.5'	10"/18	150	CLAY, highly plastic, soft, moist, brown-gray, CH, silty Sand, poorly graded, Sand, dense, trace Gravel. SC.	CLAY	Bentonite Seal	1
	3	16-23-31	12-13.5'	12"/18			Silty SAND	Sand Pack, .010 Slot Screen 10 feet	2
20	4	122/6" refusal	19-19.5'		50 ppm	Silty, GRAVEL, poorly graded, very dense, saturated, light-brown, GC.	Silty GRAVEL	19.5'	
						Bottom of Boring at 19.5'.			

1. [illegible] detected in SS-2 at a depth of 9-10.5 feet, gasoline-type odor.
2. [illegible] feet - auger was grinding - possible rock, took ss.

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SOIL BORING LOG

Well Installation and Completion Data

Sprague - Newington **Client** C.H. Sprague & Son **Job No.** 87040D **Surveyed Elevation: Ground** _____

Date Drilled 8/21/87 **Boring No.** MW-9 **Driller** Miller Testing **Top of Casing** 23.06 ft **Screen Length** 10'

Boring Depth 20.0' **Boring Method Used** 3 1/4" I.D. HSA **Casing Size & Type** 2" Sch. 40 PVC

Geologist/Engineer G. Draper **Soil Screening Instruments** HNU PI-101 **Observed Water Table Depth(feet)** 10.13 ft.

Depth (feet)	Sample No	Blows per 6" lbs.	Sample Interval	Adv/Recov	Instru Read -PPM	Sample Description	Strata. Change	Equipment Installed	Notes
								Curb Box	3
	S-1	1-2-3	4.5-6'	18"/6	ND	CLAY, highly plastic, med-soft, moist, mottled black and grey, CH or DH.	Gravel FILL; CLAY	Concrete Grout; Bentonite Seal; 5'	
	S-2	3-6-9	9.5-11'	18"/17	.1	Silty CLAY, med. plastic, soft, damp, brownish-gray, CL. Weathering surfaces along horizontal and vertical fractures.		9.5'; Filter Sand	
	S-3	2-1-1	14.5-16'	18"/12	.1	CLAY, mod. to highly plastic, med. soft, moist, brown to grey, CH.		.010 Slotted Screen, 10 feet	1
	S-4	23-56/0"	19.5-20'	5'/0	.4	Clayey GRAVEL, poorly graded, dense, sat., brown and black, GC. Cobble in nose of spoon.		19.5'	2
						Refusal at 20'			

1. Groundwater encountered at 14 feet.
2. Refusal to spoon at 20 feet. Cobble in nose of spoon assumed bedrock.
3. A protective curb box was installed and grouted in to set flush with the ground surface.

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SOIL BORING LOG

Well Installation and Completion Data

e Sprague - Newington Client C.H. Sprague & Son Job No. 87040D Surveyed Elevation: Ground

e Drilled 8/20/87 Boring No. MW-10 Driller Miller Testing Top of Casing 14.51 ft Screen Length 10'

oring Depth 24.5 Boring Method Used Hollow Stem Auger Casing Size & Type 4 in. I.D. Auger

ologist/Engineer P. McGlew Soil Screening Instruments HNU-PI-101 Observed Water Table Depth(feet) 7.72

epth eet)	Sample No.	Blows per 6' lbs.	Sample Interval	Adv/Recov	Instru Read -PPM	Sample Description	Strata. Change	Equipment Installed	Notes
								Guard Pipi Concrete Grout	1
	1	3-5-6	4'-5.5'	18"/18	0	CLAY, highly plastic, soft, damp, brown-gray CH or DH.			
5								Sand	
	2	1-1-1	9'-10.5'	18"/18	0	CLAY, highly plastic, very soft, moist, brown-gray, CH or DH.			
10									
	3	17-20-6	14-15.5'	18"/18	0	CLAY, highly plastic, stiff, saturated, brown-gray, CH or DH.		Bentonite Seal 14.5'	
	4	9-10-11	19-20.5'	18"/3	0	Silty CLAY, med. plastic, stiff, brown-gray, SC.		.010 Slotted Screen	
20									
	5	79/6"	24-24.5'	6"/6	0	Bottom at 24.5 feet.		24.5'	
25									

1. Protective guard pipe is grouted in place with a locking cap.

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SOIL BORING LOG

Well Installation and Completion Data

Sprague - Newington **Client** C.H. Sprague & Son **Job No.** 87040D **Surveyed Elevation: Ground** _____

e Drilled 8/21/87 **Boring No.** P-1 **Driller** Miller Testing **Top of Casing** 10.50 ft **Screen Length** 1 foot

ring Depth 7 Feet **Boring Method Used** 3 1/4" I.D. HSA **Casing Size & Type** 2" PVC

ologist/Engineer G. Draper **Soil Screening Instruments** HNU **Observed Water Table Depth(feet)** 4.31

epth eet)	Samp. No.	Blows per 6' lbs.	Sample Interval	Adv./ Recov.	Instru Read -PPM	Sample Description	Strata. Change	Equipment Installed	Notes
								Guard Pipe	1
					3	Silty SAND, litte Gravel, little Silt, widely graded, SM.	Silty SAND	3' Concrete Grout; Bentonite Seal 4'; 6'; 7'; .010 Slotted Screen	
5						Bottom of Boring at 7'.			

Piezometer construction consists of a 2-inch PVC 0.010 slotted well screen from 6 to 7 feet. The annulus is sand-packed from 4 to 7 feet and a one-foot bentonite seal was set from 3 to 4 feet. The remainder of the well has a protective guard pipe grouted in place with a locking cover.

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SOIL BORING LOG

Well Installation and Completion Data

e Sprague - Newington Client C.H. Sprague & Son Job No. 87040D Surveyed Elevation: Ground

:te Drilled 8/21/87 Boring No. P-2 Driller Miller Testing Top of Casing 10.34 ft Screen Length 1 foot

ring Depth 11 ft. Boring Method Used 3 1/4" I.D. HSA Casing Size & Type 2" PVC

ologist/Engineer G. Draper Soil Screening Instruments HNU Observed Water Table Depth(feet) 4.39 ft.

Depth (feet)	Sample No	Blows per 6" lbs.	Sample Interval	Adv/Recov	Instru Read -PPM	Sample Description	Strata Change	Equipment Installed	Notes
								Guard Pipe	
5					3	Silty SAND, little Gravel, little Silt, widely graded, SM.	Silty SAND	3' Concrete Grout; Bentonite; 5' Caved Formation	1
									2
0								10' .010 Slotted Screen; 11'	
						Refusal			3

1. Groundwater encountered at 5 feet.
2. Refusal to auger at 11.5 feet.
3. Piezometer construction consists of a 2-inch I.D. PVC 0.010 slot well screen set from 10 to 11 feet; the annulus is sand-packed from 11 to 5 feet. A two-foot thick bentonite seal is set at 3 to 5 feet and a protective guard pipe is grouted in place with a locking cover.

SECTION 5 PLANS AND SPECIFICATIONS

(A) **GENERAL INSTRUCTIONS**: For a NEW facility, you must prepare design plans and specifications for the proposed facility in accordance with the requirements listed below. For an EXISTING facility, you must provide facility design plans and specifications which clearly show all existing facility features, as well as any proposed improvements/new construction projects. If the information is prepared on blueprints or other paper of a size larger than the application binder, the oversized documents may be submitted separately from the binder, with a referral index included with this section of the application. The information listed is provided as general guidance and does not necessarily constitute a complete list.

(B) **APPLICABLE REGULATIONS**: Design plans and specifications must be of sufficient quality and detail to demonstrate compliance with Env-Hw 708 and Env-Hw 702.09 and the applicable technical requirements of 40 CFR Part 264. Please refer to **Section 6**, Item (C) of this application form for the specific requirements.

(C) **FORMAT**: All plans and specifications must be prepared in accordance with the following requirements:

(1) Be stamped by a qualified professional engineer licensed by the State of New Hampshire;

(2) Be clearly readable and dated;

(3) Be dimensioned, labeled, detailed and graphically prepared in accordance with standard engineering practices;

(4) Be in sufficient detail to provide complete information to a contractor hired to build the transfer facility;

(5) Site plans should be at a scale of 1” = 20 feet. Floor plans and building elevations should be at a scale of 1/4" = 1 foot. Floor/berm cross sections should be shown at a scale of 1/2" = 1 foot.

(6) Show elevations of the building floor surface to the nearest 0.1 foot;

(7) Show elevations of the piping, sewer, and tank inverts to the nearest 0.01 foot; and

(8) Report all site elevations in feet and tenths and reference all elevations to a standard datum, which must be indicated on the plans and which must be mean sea level [unless the applicant demonstrates that using mean sea level would create a hardship, in which case the standard datum shall be a known fixed point]. Include topographic cross sections where necessary;

(D) **CONTENT**: Include all information and detail necessary to fully depict the location, layout and planned operation of the facility, normally to include the following:

(1) SITE PLANS: must be provided in accordance with 40 CFR 270.13(I) and 270.14(b)(19) and must also include the following:

a. Location of all subsurface utilities (drainage, sewage, gas, water, electrical, etc.);

b. Rights-of-way and/or easements, as applicable;

c. Facility siting documentation as required by **Section 5**, Items (E) and (F).

(2) FACILITY PLANS AND SPECIFICATIONS: must provide information to demonstrate compliance with Env-Hw 708 and 40 CFR Part 264 as applicable, and must also include the following:

1. Structures, walls, roof, floor, sump, containment berms;

2. Equipment, pumps, piping/valves/controls, including material specifications;

3. Waste delivery/inspection areas, laboratory; emergency/safety equipment;

4. Waste storage areas, including container/tank locations, capacity, aisle space;
5. Waste bulking/consolidating areas, empty container storage areas.

(3) TRAFFIC PLANS to depict on-site traffic patterns, ref. 40 CFR 270.14(b)(10).

(4) DRAINAGE PLANS to include stormwater management plans and drainage schematics for any drainage systems which are located within areas of potential discharge from the facility, including surface runoff and/or closed drainage systems, wash-down water collection systems, etc., as applicable.

(5) EROSION CONTROL PLANS to include on-site erosion control plans (both temporary and permanent).

(6) OTHER PLANS AND SPECIFICATIONS, as necessary to fully describe all existing and proposed improvements/activities at the site to demonstrate the facility design conforms to all applicable design and operating requirements.

(7) Supporting documentation for the facility design, including calculations, material specifications, equipment manufacturer specifications, etc.

(8) Construction phasing plan, with estimated construction schedule.

(9) Existing facilities must also provide:

a. A scale drawing of the facility showing the location of all past, present, and future treatment; storage, and disposal areas; and

b. Photographs of the facility clearly showing all existing structures; tanks, existing storage areas; and future storage areas.

STORAGE TANK (SPRAGUE)
BOILER HOUSE (SPRAGUE)
UTILITY POLE
FRONT EDGE OF ELEVATED PIPE LINES APPROX. 12' WIDE
TAX MAP 7 LOT 11
TAX MAP 8 LOT 2A
HYDRANT
CONCRETE DRAINAGE SWALE WITH METAL GRATE
CONCRETE DRAINAGE SWALE
STORMWATER OUTFALL #3
LIMITS OF CONTAINMENT AREA B
STORMWATER OUTFALL #2
CONCRETE DRAINAGE SWALE
8" PVC
12" CONCRETE WALL
EMERGENCY AND OTHER EQUIPMENT STORAGE
ASPHALT BERM
CB (CLOSED)
CB (CLOSED)
OVERHEAD FUEL LINES
ASPHALT BERM
EXISTING PAVEMENT
CATCH BASIN
T-3
2000 GAL FORMER FUEL OIL TANK (OUT OF SERVICE)
CURRENT SOLID WASTE PROCESSING, STAGING/STORAGE AND TRANSFER AREA
GATE VALVE
8"C.I.P.
8"C.I.P.
BACK OPERATIONS AREA
10,000 GALLON USED ANTIFREEZE–UNIVERSAL WASTE
OIL/WATER SEPARATOR
OVERHEAD STEAM LINES
PAST HAZARDOUS WASTE PROCESSING & STAGING AREA
750 GAL LUBE OIL TANK
ABOVE GROUND STEAM LINE
ASPHALT BERM
DRAINAGE SWALE W/METAL GRATE
TANKER TRUCK CLEANOUT AREA (GENERAL LOCATION)
EXISTING GRAVEL
PAST SOLID WASTE PROCESSING, STORAGE & TRANSFER AREA
CURRENT HAZARDOUS & SOLID WASTE PROCESSING, STAGING/STORAGE AND TRANSFER AREA
T-1
GARAGE BLDG #4
T-2
PUMP HOUSE
ELEC ROOM
CONCRETE PAD
5,500 GALLON WINDSHIELD WASHER BLEND
10,000 GALLON WINDOW WASH CONCENTRATE–METHANOL
10,000 GALLON VIRGIN ANTIFREEZE
WALKWAY
CONCRETE DRAINAGE SWALE
DOUBLE WALLED CONCRETE SOLIDS PROCESSING UNITS 16.5'x10.5'x11' DEEP
3" WATER
WV
W
SOLIDIFICATION MATERIAL STORAGE AREA
T-4
T-7
T-5
T-6
DOCK AREA
(2) 8'x22'x4' ROLL OFF BINS COVERED IN GRATING. SERVES AS LOADING DOCK FOR TANKS
8"C.I.P.
ABOVE GROUND TRANSFER LINE
ABOVE GROUND STEAM LINE
IN-GROUND CONTAINMENT TANKS
EXISTING PIT WITH BACKFLOW PREVENTER
10,000 GALLON VIRGIN ANTIFREEZE
GATE VALVE
PUMP
DRIVERS ROOM LOCKER ROOM
RAMP TO TOP OF TANK
3003 RECEIPT TANK
WALKWAY
3002 FINAL PRODUCT TANK
BLDG #3
BLDG #2
1" SERVICE
500 GALLON FORMER FUEL OIL TANK (OUT OF SERVICE)
OFFICE TRAILER
STORMWATER OUTFALL #4
10–INCH CONCRETE WALL
ABOVE GROUND TRANSFER LINES
WALKWAY
BLDG #1
CURRENT HAZARDOUS & SOLID WASTE PROCESSING, STAGING/STORAGE AND TRANSFER AREA
CURRENT SOLID WASTE PROCESSING, STAGING/STORAGE AND TRANSFER AREA
3005
FILTER HOUSE BLDG #5
3001 RECEIPT TANK
LAB TRAILER
GATE VALVE
T-8
TAX MAP 7 LOT 12
8"C.I.P.
3004
ABOVE GROUND HEATING LINES
4" SPVC
OFFICE BUILDING
BLDG #6
CURRENT SOLID WASTE PROCESSING, STAGING/STORAGE AND TRANSFER AREA
FRONT OPERATIONS AREA
BERM
275 GAL HEATING OIL TANK IN BASEMENT
HAZARDOUS WASTE TRANSFER DOCK
OFFICE TRAILER
4" CLEANOUT
CURRENT SOLID WASTE PROCESSING, STAGING/STORAGE AND TRANSFER AREA
EDGE OF WETLAND
EXISTING FENCE
LIMITS OF CONTAINMENT AREA A
PARKING LOT
STORMWATER OUTFALL #5
VERY POORLY DRAINED AREAS

LEGEND

- VERY POORLY DRAINED SOILS
- VERY POORLY DRAINED WETLAND FLAG NUMBER & LOCATION
- EDGE OF WETLANDS
- WETLAND FLAG NUMBER & LOCATION
- TREE LINE
- EXISTING CONTOUR
- EXISTING 6' HIGH CHAIN LINK FENCE
- W — EXISTING WATER LINE
- S — EXISTING SEWER LINE
- UNITED OIL RECOVERY, INC. LEASE LINE
- D — STORMWATER DRAIN LINE

NORTH

PE STAMP

REVISIONS:

UNITED OIL RECOVERY, INC.
410 SHATTUCK WAY NEWINGTON, NH 03801

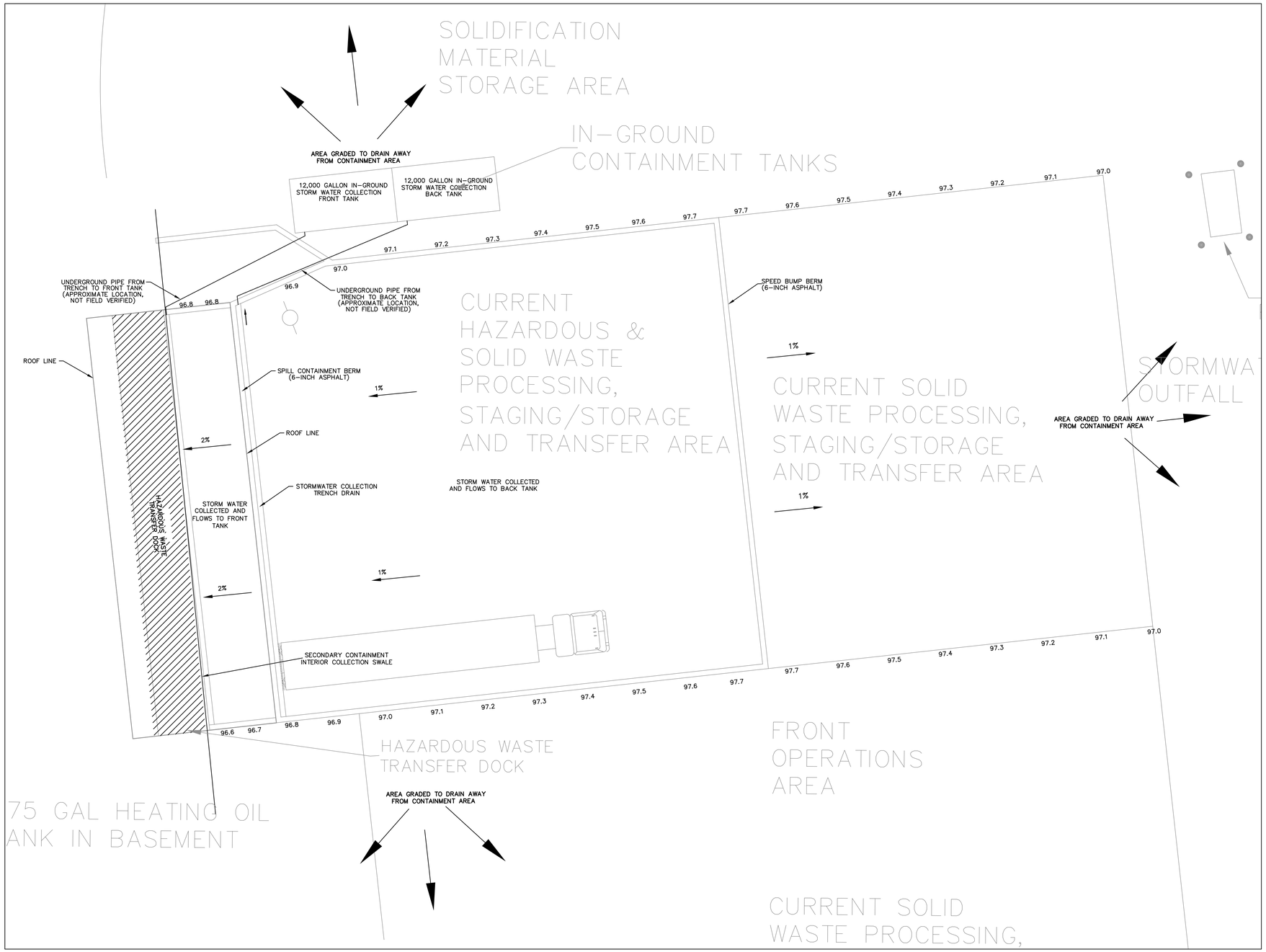
DESIGNED: –	CHECKED: TPR	SCALE: 1" = 20'
DRAWN: GRC	APPROVED: TPR	DATE: 06–29–10

NOTES:

SE FSR#: 210144B
HAZARDOUS WASTE

DWG. TITLE: SITE PLAN

DWG NO.
NH-1



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410 SHATTUCK WAY NEWINGTON, NH 03801

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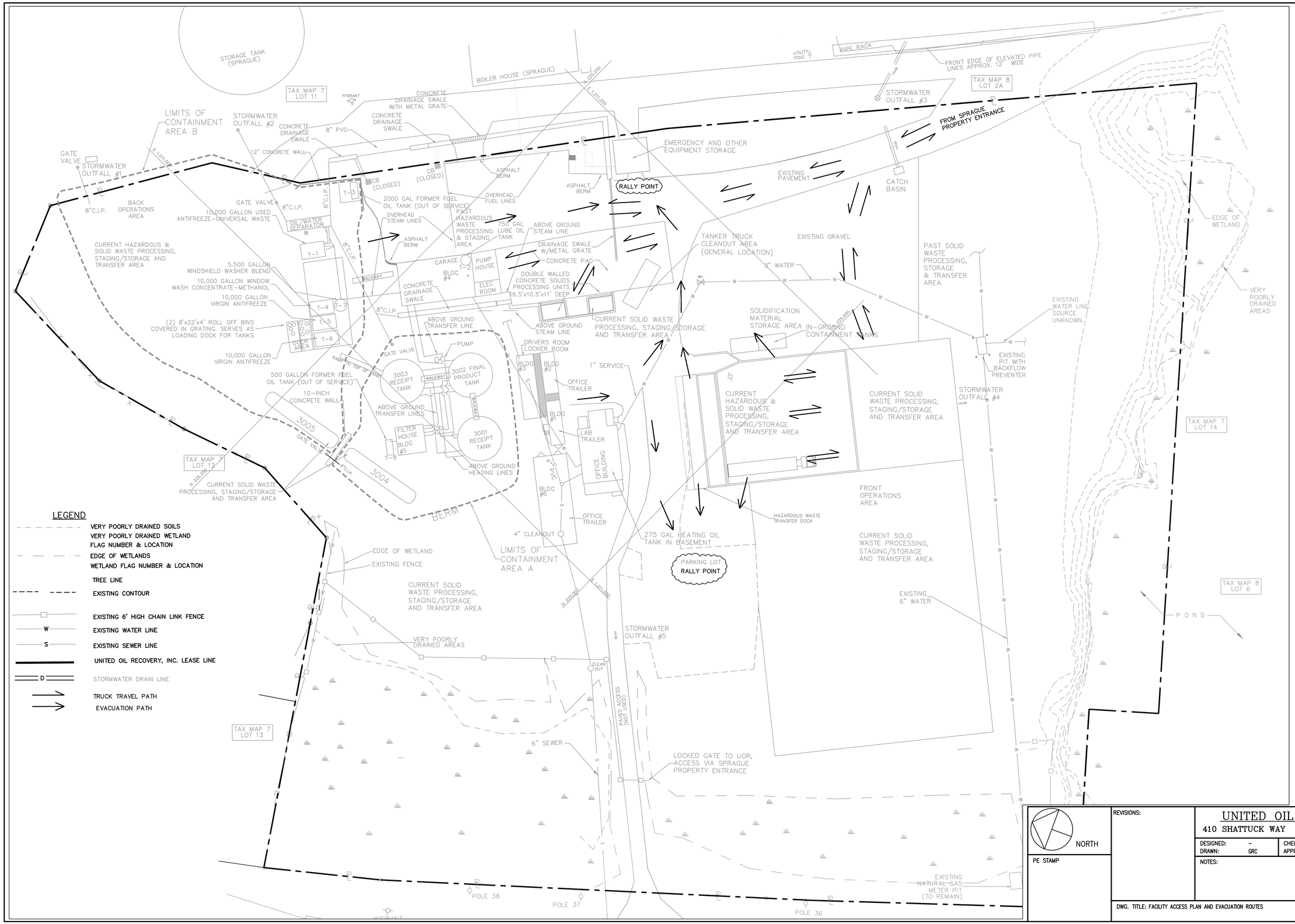
DRAWN: GRC	APPROVED: TPR	DATE: 06-28-10	
NOTES:		SE FSR#: 210144B HAZARDOUS WASTE	
		DWG NO. NH-2	

DWG. TITLE: HAZARDOUS WASTE TRANSFER DOCK – GRADING/DRAINAGE PLAN



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UNITED OIL RECOVERY, INC.

410 SHATTUCK WAY NEWINGTON, NH 03801

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DRAWN: GRC	APPROVED: TPR	DATE: 06–28–10	
NOTES:		SE FSR#: 210144B HAZARDOUS WASTE	
		DWG NO. NH-3	

DWG. TITLE: FACILITY ACCESS PLAN AND EVACUATION ROUTES

TAX MAP 7 LOT 11
HYDRANT
CONCRETE DRAINAGE SWALE WITH METAL GRATE
CONCRETE DRAINAGE SWALE
8" PVC
CONCRETE DRAINAGE SWALE
12" CONCRETE WALL
LIMITS OF CONTAINMENT AREA B
STORMWATER OUTFALL #2
GATE VALVE
STORMWATER OUTFALL #1
E 1,211,000
E 1,211,250
STORMWATER OUTFALL #3
EMERGENCY AND OTHER EQUIPMENT STORAGE
EXISTING PAVEMENT
CATCH BASIN
CB (CLOSED)
CB (CLOSED)
ASPHALT BERM
ASPHALT BERM
CURRENT SOLID WASTE PROCESSING, STAGING/STORAGE AND TRANSFER AREA
BACK OPERATIONS AREA
8"C.I.P.
GATE VALVE
8"C.I.P.
8"C.I.P.
T-3
2000 GAL FORMER FUEL OIL TANK (OUT OF SERVICE)
OVERHEAD FUEL LINES
10,000 GALLON USED ANTIFREEZE-UNIVERSAL WASTE
OIL/WATER SEPARATOR
OVERHEAD STEAM LINES
PAST HAZARDOUS WASTE PROCESSING & STAGING AREA
750 GAL LUBE OIL TANK
ABOVE GROUND STEAM LINE
TANKER TRUCK CLEANOUT AREA (GENERAL LOCATION)
EXISTING GRAVEL
PAST SOLID WASTE PROCESSING, STORAGE & TRANSFER AREA
CURRENT HAZARDOUS & SOLID WASTE PROCESSING, STAGING/STORAGE AND TRANSFER AREA
T-1
8"C.I.P.
ASPHALT BERM
TANK HOUSE
DRAINAGE SWALE W/METAL GRATE
CONCRETE PAD
5,500 GALLON WINDSHIELD WASHER BLEND
GARAGE
T-2
ELEC ROOM
BLDG #4
WALKWAY
SWALE
CONCRETE DRAINAGE
DOUBLE WALLED CONCRETE SOLIDS PROCESSING UNITS 16.5'x10.5'x11' DEEP
3" WATER
SOLIDIFICATION MATERIAL STORAGE AREA
10,000 GALLON WINDOW WASH CONCENTRATE-METHANOL
10,000 GALLON VIRGIN ANTIFREEZE
T-4
T-7
T-5
T-6
8"C.I.P.
(2) 8'x22'x4' ROLL OFF BINS COVERED IN GRATING. SERVES AS LOADING DOCK FOR TANKS
DOCK AREA
ABOVE GROUND TRANSFER LINE
LOCKER ROOM
ABOVE GROUND STEAM LINE
PUMP
IN-GROUND CONTAINMENT TANKS
N 225,000
DRIVERS ROOM
10,000 GALLON VIRGIN ANTIFREEZE
GATE VALVE
PUMP
RAMP TO TOP OF TANK
3003 RECEIPT TANK
WALKWAY
3002 FINAL PRODUCT TANK
BLDG #3
BLDG #2
1" SERVICE
CURRENT SOLID WASTE PROCESSING, STAGING/STORAGE AND TRANSFER AREA
500 GALLON FORMER FUEL OIL TANK (OUT OF SERVICE)
10-INCH CONCRETE WALL
OFFICE TRAILER
SEE FIGURE NH-2 FOR DETAILS OF THIS AREA
ABOVE GROUND TRANSFER LINES
WALKWAY
BLDG #1
CURRENT HAZARDOUS & SOLID WASTE PROCESSING, STAGING/STORAGE AND TRANSFER AREA
3005
FILTER HOUSE BLDG #5
3001 RECEIPT TANK
LAB TRAILER
T-8
GATE VALVE
TAX MAP 7 LOT 12
8"C.I.P.
3004
ABOVE GROUND HEATING LINES
4" S PVC
OFFICE BUILDING
N 225,250
CURRENT SOLID WASTE PROCESSING, STAGING/STORAGE AND TRANSFER AREA
BLDG #6
FRONT OPERATIONS AREA
BERM
OFFICE TRAILER
275 GAL HEATING OIL TANK IN BASEMENT
HAZARDOUS WASTE TRANSFER DOCK
4" CLEANOUT
EDGE OF WETLAND
EXISTING FENCE
LIMITS OF CONTAINMENT AREA A
CURRENT SOLID WASTE PROCESSING, STAGING/STORAGE AND TRANSFER AREA
PARKING LOT
N 225,000
E 1,211,000
EXISTING 6" WATER
VERY POORLY DRAINED AREAS
STORMWATER OUTFALL #5
CLEAN OUT

LEGEND

- VERY POORLY DRAINED SOILS
- VERY POORLY DRAINED WETLAND
- FLAG NUMBER & LOCATION
- EDGE OF WETLANDS
- WETLAND FLAG NUMBER & LOCATION
- STORMWATER FLOW ARROW
- EXISTING CONTOUR
- EXISTING 6' HIGH CHAIN LINK FENCE
- W — EXISTING WATER LINE
- S — EXISTING SEWER LINE
- UNITED OIL RECOVERY, INC. LEASE LINE
- D — STORMWATER DRAIN LINE

NORTH

PE STAMP

REVISIONS:

UNITED OIL RECOVERY, INC.
410 SHATTUCK WAY NEWINGTON, NH 03801

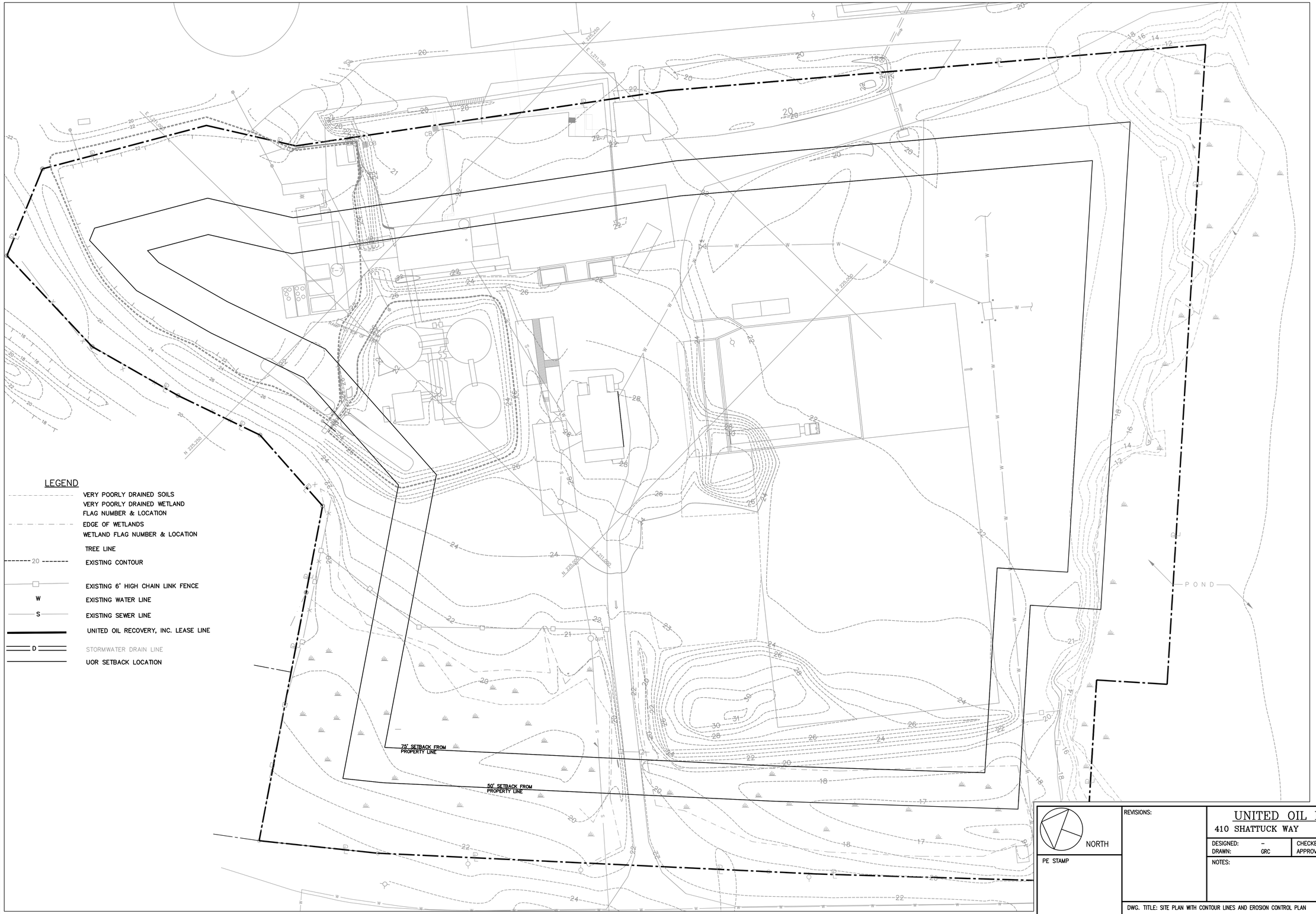
DESIGNED: –	CHECKED: GPF	SCALE: 1" = 20'
DRAWN: GRC	APPROVED: TPR	DATE: 06-29-10

NOTES:

SE FSR#: 210144B HAZARDOUS WASTE

DWG. TITLE: STORMWATER MANAGEMENT PLAN

DWG NO. NH-4



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PE STAMP

REVISIONS:

UNITED OIL RECOVERY, INC.

410 SHATTUCK WAY NEWINGTON, NH 03801

DESIGNED: –	CHECKED: TPR	SCALE: 1" = 30'	
DRAWN: GRC	APPROVED: TPR	DATE: 06-28-10	

NOTES:

SE FSR#: 210144B
HAZARDOUS WASTE

DWG. TITLE: SITE PLAN WITH CONTOUR LINES AND EROSION CONTROL PLAN

DWG NO.

NH-5

ATTACHMENT FOR SECTION 5(D)(9)b

Photographs of United Oil Recovery, Inc. Hazardous Waste Transfer Facility

Hazardous Waste Transfer Facility Permit Renewal Application
United Oil Recovery, Inc.
410 Shattuck Way
Newington, New Hampshire

Ransom Environmental Consultants, Inc.
Project 055044

Photo 1: View of UOR transfer dock from northeast to southwest.

Photo 2: View of UOR transfer dock from southwest to northeast.

Photo 3: View of UOR transfer facility from south corner, facing north.

Photo 4: View of UOR transfer facility from east corner, facing west.

SECTION 6 FACILITY OPERATIONS

(A) **APPLICABLE REGULATIONS**: Facility operations must comply with Parts Env-Hw 702, 703, 704, 706 and 708 of the New Hampshire Hazardous Waste Rules, as well as the applicable sections of 40 CFR Part 264 - Standards for Owners and Operators of Hazardous Waste Treatment, Storage and Disposal Facilities as referenced below under Item (C)(6).

Transfer facilities may be permitted to bulk/consolidate hazardous waste in containers/tanks at the facility. However, the applicant must provide a detailed waste analysis plan and specific bulk handling procedures that ensure the transfer facility will be managed safely, with completely controlled operations, and all bulked or consolidated wastes will be removed from the facility in less than or equal to 10 days.

(B) **CONTAINER AND TANK STORAGE**: Provide the following information; use and attach additional paper as necessary.

(1) CONTAINER STORAGE INFORMATION:

a. Provide the following storage capacity information for hazardous waste containers that will be stored at the facility for less than or equal to 10 consecutive days.

DOT Container Type (drums, rolloffs, tank trucks, etc.)	Maximum Number of Containers	Total Quantity (specify gallons, cubic yards, tons, etc.)
Drums[1]	704	38,720 gallons
Tanker Trucks and Other Bulk Vehicles	7	~~59,500 gallons~~[2]
Roll-Off Containers and Other Portable Tank Units	10	300 cubic yards
Total Facility Container Storage Capacity:		38,720 gallons in drums[1], ~~59,500 gallons in~~ bulk vehicles, and 300 cubic yards in roll-offs or other portable tank units

[1] This category is called "drums" but is intended to include any DOT container, such as 5 gallon pails and cubic yard boxes. Intermediate bulk containers (IBCs) as defined by DOT to be > 119 gallons are also included. Therefore, more or less than 704 containers may be staged as long as the total quantity does not exceed 38,720 gallons. Since the dock is a shared area, this maximum quantity includes any combination of hazardous waste, non-hazardous waste, solid waste, universal waste, and used oils.

[2] Assuming a maximum truck capacity of 8,500 gallons per vehicle and 7 vehicles. Note that smaller capacity vehicles are typically used.

NOTE: Non-hazardous waste, solid waste, universal waste, and used oils may also be received, stored, and processed at the Hazardous Waste Transfer Dock and Back Operations Area.

b. List all hazardous wastes that will be received at the facility in original containers and consolidated if needed. These waste are not allowed to be bulked prior to removal from the transfer facility unless approved per 6(B)c on the following page.

Names/ Descriptions of Hazardous Waste	EPA Hazardous Waste Number *
1. Characteristic Hazardous Wastes identified as follows:	
a. Env-Hw 403.03 (Ignitability)	D001
b. Env-Hw 403.04 (Corrosivity)	D002 & NH02
c. Env-Hw 403.05 (Reactivity)	D003
d. Env-Hw 403.06 (Toxicity Characteristic)	D004-D043
2. Acutely Hazardous Wastes listed in Env-Hw 402.04	P waste code listed & NH03
3. Toxic Hazardous Wastes listed in Env-Hw 402.05	U waste code listed
4. Generic Industrial Process Wastes listed in Env-Hw 402.06	F waste code listed & NH01
5. Specific Industrial Process Wastes listed in Env-Hw 402.07	K waste code listed
6. Hazardous Waste Mixtures as defined in Env-Hw 404.01	Applicable RCRA or NH code
7. Spills, Residues, and Contaminated Soil, Water, and Debris as defined in Env-Hw 404.02	Applicable RCRA or NH code
8. Treatment Storage and Disposal Residues as defined in Env-Hw 404.03	Applicable RCRA or NH code including NH98
9. Hazardous Waste Residues in Empty Containers as defined in Env-Hw 404.04	Applicable RCRA or NH code
10. Waste contaminated Polychlorinated Biphenyls (PCBs) either above or below Toxic Substances Control Act (TSCA) levels	No federal ~~or state~~ code applies

* NOTE: Any of the waste streams listed in 6(B)(1)b above may also carry other state waste codes.

c. List all hazardous wastes that will be received at the facility in containers and then consolidated and bulked if needed into other containers prior to removal from the transfer facility.

Names/ Descriptions of Hazardous Waste	EPA Hazardous Waste Number *
1. Antifreeze contaminated with ignitability characteristic materials, process solvents listed in Env-Hw 402.06, organic solvents listed in Env-Hw 402.05, and/or characteristic metals and organics listed in Env-Hw 403.06	D001, F001, F002, F003 and F005, U waste code listed, and/or D004 to D043
2. Water soluble coolants contaminated with process solvents listed in Env-Hw 402.06, organic solvents listed in Env-Hw 402.05, and/or characteristic metals and organics listed in Env-Hw 403.06	F001, F002, F003 and F005, U waste code listed, and/or D004 to D043
3. Corrosive wastes, meeting the characteristics of Env-Hw 403.04, and/or contaminated with characteristic metals listed in Env-Hw 403.06	D002, NH02, and/or D004 to D011
4. Mineral spirits, gasoline, aviation fuel, and/or paint-related wastes both contaminated and uncontaminated with process solvents listed in Env-Hw 402.06, organic solvents listed in Env-Hw 402.05, and/or characteristic metals and organics listed in Env-Hw 403.06	D001, F001, F002, F003 and F005, U waste code listed, and/or D004 to D043
5. Waters contaminated with process solvents listed in Env-Hw 402.06, organic solvents listed in Env-Hw 402.05, and/or characteristic metals and organics listed in Env-Hw 403.06	F001, F002, F003 and F005, U waste code listed, and/or D004 to D043
6. Waste oil or used oil, unsuitable for recycling under Env-Hw 807, contaminated with process solvents listed in Env-Hw 402.06, organic solvents listed in Env-Hw 402.05, and/or characteristic metals and organics listed in Env-Hw 403.06	F001, F002, F003 and F005, U waste code listed, and/or D004 to D043
7. Oily sludge contaminated with process solvents listed in Env-Hw 402.06, organic solvents listed in Env-Hw 402.05, and/or characteristic metals and organics listed in Env-Hw 403.06	F001, F002, F003 and F005, U waste code listed, and/or D004 to D043
8. Small volume containers of ignitability characteristic materials, process solvents listed in Env-Hw-402.06, organic solvents listed in Env-Hw-402.05, and/or characteristic metals and organics listed in Env-Hw-403.06.	F001, F002, F003 and F005, U waste code listed, and/or D004 to D043
9. ~~Household hazardous wastes that would carry the following codes if not exempt from the hazardous waste regulations.~~	~~D001, F001, F002, F003 and F005, U waste code listed, and/or D004 to D043~~

* NOTES:

1. Any of the waste streams listed in 6(B)(1)c above may also be contaminated with water.
2. Any of the waste streams listed in 6(B)(1)c above may also carry other state waste codes.
3. Non-hazardous waste, solid waste, universal waste, and used oils may also processed on-site through consolidation or bulking.

(2) TANK STORAGE CAPACITY: **Not Applicable**

(a) Provide the following storage capacity information for hazardous waste tanks at the transfer facility.

Tank Identification Number	Tank Physical Description	Tank Capacity (Gallons)	Name/Description of Hazardous Waste	EPA Hazardous Waste ID No.

(b) List all hazardous wastes that will be received at the facility in original containers and not bulked ~~or consolidated~~ prior to removal from the transfer facility.

Names/Descriptions of Hazardous Wastes	EPA Hazardous Waste Number

(c) List all hazardous wastes that will be received at the transfer facility in containers ~~tank trucks~~ and then bulked ~~into a tank~~.

Names/Descriptions of Hazardous Wastes	EPA Hazardous Waste Number

(C) **<u>OPERATIONS PLAN CONTENT</u>:** The operations plan section of the permit application must provide the following information. Provide separate detailed responses to these items in the Facility Operations Section of your application. **Please see Appendix 6A**

(1) Provide a routine operations plan which describes how hazardous wastes will be managed at the facility in accordance with the requirements specified in Env-Hw 703 through 706. The plan must also include the following:

(a) Hours of operation;

(b) On-site traffic patterns, access control;

(c) Description of vehicle handling procedures including number of vehicles/day, capacity of vehicles;

(d) Unloading procedures;

(e) Sorting and inspection procedures;

(f) The procedure by which the quantity and source of wastes received are recorded;

(g) Manifesting documentation procedures; and

(h) Storage and removal procedures.

(2) For all hazardous waste listed in **Section 6** Items (B)(1) and (B)(2), provide detailed, technically specific procedures to describe hazardous waste transfer, consolidation or bulking procedures for containers and/or tanks. Include technical specifications for all equipment used, including pumps, and tank piping diagrams. **Please see Attachment for Appendix 6A.**

(3) Provide detailed procedures that will be used to ensure that all hazardous wastes, including wastes which are bulked/consolidated, will not remain at the transfer facility for periods of 10 consecutive days or longer. **Please see Waste Management Plan, Appendix 6B.**

(4) Provide detailed procedures to describe how empty containers will be handled, stored and removed from the facility. If plans include cleaning/rinsing empty containers provide complete procedures and descriptions. **Please see Container Management Plan, Appendix 6K.**

(5) Provide procedures and criteria that describe how generator wastes are accepted/rejected and provide provisions for determining contamination and returning rejected loads.
Please see Waste Management Plan, Appendix 6B.

(6) Provide specific technical procedures, documentation, and engineering drawings/plans to address the following items. Please refer to the appropriate code of federal regulations reference for the specific requirements for each item. Provide separate detailed information for each item in the Facility Operations Section of your application.

(a) Chemical and physical analyses of the hazardous waste to be handled at the facility; **Please see Waste Management Plan, Appendix 6B**.

(b) Security Procedures (40 CFR Part 264.14);
Please see Security Procedures, Appendix 6C.

(c) General Inspection Requirements and Schedule (40 CFR Part 264.15);
Please see General Inspection Program, Appendix 6D.

(d) Personnel Training Program (40 CFR Part 264.16);
Please see Personnel Training Program, Appendix 6E.

(e) General Requirements for Ignitable, Reactive, or Incompatible Wastes (40 CFR Part 264.17); **Please see Special Management Requirements for Ignitable, Reactive and Incompatible Wastes, Appendix 6F.**

(f) Preparedness and Prevention Procedures and Equipment; (40 CFR Part 264, Subpart C) to include a description of procedures, structures, or equipment used at the facility to:

Please see Preparedness and Prevention Program, Appendix 6G.

(i) Prevent hazards in unloading operations (for example, ramps, special forklifts);

(ii) Prevent runoff from hazardous waste handling areas to other areas of the facility or environment, or to prevent flooding (for example, berms, dikes, trenches);

(iii) Prevent contamination of water supplies;

(iv) Mitigate effects of equipment failure and power outages; and

(v) Prevent undue exposure of personnel to hazardous waste (for example, protective clothing).

(g) Contingency Plan and Emergency Procedures (40 CFR Part 264, Subpart D);
Please see Contingency Plan and Emergency Procedures, Appendix 6H.

(h) Closure Plan, (40 CFR Part 264, Subpart G);
Please see Closure Plan, Appendix 6I.

(i) Financial Assurance Requirements for Closure and Liability Operating Requirements (40 CFR Part 264, Subpart H);
Please see Financial Assurance for Closure, Appendix 6J.

(j) Use and Management of Containers (40 CFR Part 264, Subpart I);
Please see Container Use and Management Program, Appendix 6K.

(k) Specific Part B information Requirements for Containers (40 CFR Part 270.15);
Please see Specific Part B Information Requirements for Containers.

(l) Tank Systems (40 CFR Part 264, Subpart J);
This section is Not Applicable.

(m) Specific Part B Information Requirements for Tank Systems (40 CFR Part 270.16).
This section is Not Applicable.

Appendix 6A

FACILITY OPERATIONS PLAN

1.0 INTRODUCTION

Section 6(C)(1) of the Hazardous Waste Transfer Facility Application requests a Routine Operations Plan in accordance with the requirements specified in Env-Hw 703 through 706. Many of the provisions in Env-Hw 703 through 706 do not apply to transfer facilities; they describe procedures appropriate to a Treatment, Storage, and Disposal Facility (TSDF). For example, Env-Hw 703 and Env-Hw 704 describe procedures by which a TSDF receives wastes, inspects the shipment, and signs off on the manifest. The United Oil Recovery, Inc. (UOR) transfer facility manages wastes as part of a transportation function, but does not accept custody of waste shipments.

Env-Hw 705 describes reporting requirements for facilities. Again, Hazardous Waste Transfer Facilities are exempt from many of these requirements (see Env-Hw 701.02(b)). Portions of Env-Hw 703 through 706 that do apply are addressed in other sections of this application, most notably:

- Waste Management Plan (Appendix 6B)
- Inspection Program (Appendix 6D)
- Contingency Plan (Appendix 6H)

Pertinent information stated elsewhere in this application has not been restated in this Facility Operations Plan. Sections that are not addressed elsewhere in this application are presented below.

2.0 HOURS OF OPERATION

Most hazardous waste transfer operations occur between the hours of 7 AM and 7 PM, Monday through Friday. Emergency Response services are available 24 hours a day, 7 days a week.

3.0 TRAFFIC AND ACCESS CONTROL

Figure NH-3 shows the route of traffic flow for the Hazardous Waste Transfer Facility. The access route for all vehicles is via Shattuck Way through a manned gate at the entrance to the Sprague Energy Corp. (Sprague) facility. After checking in with the security personnel at the Sprague gate, the vehicles travel on controlled (non-public) roads to the border of the UOR facility. Vehicles accessing the Hazardous Waste Transfer Dock then proceed up the accessway to the paved Hazardous Waste Transfer Operations Area. Vehicles destined for other portions of the facility (non-hazardous wastes, service vehicles, employee vehicles, etc.) do not enter the Hazardous Waste Transfer Operations Area, but are routed along other accessways to their destination.

As described elsewhere in this application, the transfer facility does not operate transport vehicles, so information on specific vehicles and their capacities is not presented here. United Industrial Services, a Division of UOR does operate transport vehicles that use the facility, as do other third party licensed Hazardous Waste Transporters. In sum, these vehicles generate approximately 5 to 10 vehicle round trips per week. The UOR facility is also accessed by additional non-hazardous waste vehicles, vehicles delivering virgin products, and the vehicles of vendors and employees.

4.0 STANDARD PROCEDURES FOR HAZARDOUS WASTE TRANSFER

Please see the Attachment for these procedures.

ATTACHMENT FOR APPENDIX 6A

Standard Hazardous Waste Transfer Procedures

Hazardous Waste Transfer Facility Permit Renewal Application
United Oil Recovery, Inc.
410 Shattuck Way
Newington, New Hampshire

UNITED OIL RECOVERY, INC.
STANDARD PROCEDURES-HAZARDOUS WASTE TRANSFER DOCK

The following general operating procedures are followed for loading and unloading both bulk and non-bulk containers at the hazardous waste transfer dock.

- Only qualified trained operators are permitted to load or unload at the dock.

- Operators must be in constant attendance of the operation.

- Non-UOR waste transport vehicles are only loaded or unloaded by outside transporters that have received approval from UOR.

- The following precautions are taken to prevent spills during truck to truck transfer of bulk liquids:

  - The volume of product in the truck to be unloaded and available capacity in the truck to be loaded are verified by the employee overseeing the operation.
  - Hoses are always capped when not in use.
  - A containment device is placed under vehicle valves before they are uncapped.
  - Hoses are positioned when uncapping so any residual product will stay in the hose and are fastened immediately to the vehicle valve or placed in the dome in the case of "over the top" loading.
  - Suction is reversed on the hose to empty it before disconnecting from the vehicle valve.
  - Disconnected hoses are removed and held so that no product will drip out and then capped.
  - Vehicle valves are immediately capped.
  - Spill containment and cleanup material and emergency communications are available.
  - All loading/unloading is done within the confines of the hazardous waste transfer dock.

- Vehicles containing flammables are grounded and bonded before loading or unloading.

- Spark proof tools are used when working near flammables.

- No smoking or open ignition sources are allowed in hazardous waste transfer dock (even when loading is not in process) without a hot work permit.

- The identity of the product in containers or vehicles is confirmed prior to processing.

- Solids or water may be separated from oil by visual observation during the unloading process and loaded to a different location at the direction of the operator.

- Identity, quantity, and qualitative composition of product are checked against the shipping document and work order. These documents are revised if a correction is required.

- For drums or other containers, the quantity of drums/containers for each waste stream is verified against the shipping paper.

- Shipping paper to actual count or disposition discrepancies are brought to the attention of the Plant Manager and handled accordingly.

- For containers, the conditions of the container and label are evaluated during unloading or transfer. Problems are corrected or brought to the attention of the Plant Manager.

Specific loading and unloading procedures follow.

Transfer by Pressure Unload - Bulk Liquid or Solid

Used for transfer from vacuum trucks to other bulk trucks. Hose is connected to vehicle to be unloaded using all spill prevention precautions and procedures previously described. Hose is either connected to the bottom valve of vehicle to be loaded using the same procedure or put into the dome cover or over the top in the case of a roll-off container. Vehicles containing flammables are grounded and bonded before loading/unloading. If loading is over the top, the outlet end of the hose is lowered below the existing liquid line of the receiving vehicle, or to the bottom to minimize splash. Appropriate pressure is achieved in the vessel. Valve of the receiving vehicle is opened if applicable. Valve of unloading vehicle is opened. Transfer occurs. Hose is removed from product of receiving vehicle if applicable or valve of receiving vehicle is closed and valve connection cracked. Vacuum is applied to hose by unloading vehicle to empty hose. Hoses are disconnected and capped as previously described. Dome cover is secured, if applicable.

Transfer by Pump Unload - Bulk Liquid

Used for transfer from vehicles to other bulk liquid vehicles. Hose is connected to vehicle to be unloaded using spill prevention precautions and procedures previously described. If the pump of the unloading vehicle is not directly plumbed to the cargo piping, hose is connected from the inlet side of the pump to the cargo compartment valve or placed through the dome cover as

previously described. Hose is connected from the outlet side of pump to the valve of receiving vehicle if applicable or through the dome cover as described previously. Valve is opened on receiving vehicle and unloading vehicle and pump is set to forward pressure. At completion, valve is closed on receiving vehicle, valve connections cracked, pump is used in reverse to empty hose, and valve is closed on unloaded vehicle. Hoses are disconnected and capped as previously described. Dome cover is secured, if applicable.

Transfer by Vacuum Unload - Bulk Liquid or Solid

Used for transfer to vacuum vehicles from other bulk vehicles. Hose is connected to vehicle to be loaded using spill prevention precautions and procedures previously described. Hose is either connected to the bottom valve of vehicle to be unloaded using the same procedure, or put into the dome cover or over the top in the case of a roll-off container. Procedures for grounding are as previously described. Appropriate vacuum is achieved in the receiving vehicle. Valve of receiving vehicle is opened, if applicable. Valve of unloading vehicle is opened, transfer occurs. Hose is removed from tank of unloaded vehicle, if applicable, or valve of unloaded vehicle is closed and valve connection cracked. Vacuum is applied to hose by loading vehicle to empty hose. Hoses are disconnected and capped as previously described. Dome cover is secured, if applicable.

Transfer by Vacuum - Drum to Truck

Used for transfer from drums to vacuum trucks. Hose is connected to vehicle to be loaded using spill prevention precautions and procedures previously described. Drum probe is connected to hose and placed into drum. If necessary, procedures for grounding are followed. Appropriate vacuum is achieved in the receiving vehicle and transfer occurs. At completion, probe is lifted above product level in drum and suction is applied to hose by unloading vehicle to empty hose. Probe is wiped down as it is lifted out of drum to prevent drips and inserted into next drum. At completion of all drums to be transferred, the probe is removed and that end of the hose is capped and the tanker end of the hose is disconnected and capped as previously described.

Transfer by Pump - Truck to Drum

Used for transfer from trucks to drums. Hose is connected to outlet side of pump using spill prevention precautions and procedures previously described. If the pump of the offloading vehicle is not directly plumbed to the cargo piping, hose is connected from the inset side of the pump to the cargo compartment valve or placed through the dome cover as previously described. Drum probe is connected to hose attached to the outlet side of the pump and placed into drum. Valve is opened on unloading vehicle and pump is engaged. Transfer occurs. At completion, probe is lifted above product level in drum and suction is applied to hose by unloading vehicle to empty hose. Probe is wiped down as it is lifted out of drum to prevent drips and inserted into next drum. At completion of filling all drums the probe is removed and that end of the hose is capped and the tanker end of the hose is disconnected and capped as previously described.

Transfer by Pump - Drum to Drum

Used for transfer from drums to other drums. A cargo tanker or tanker-mounted pump is typically used to make this transfer. Hose is connected to the outlet side of the pump and to a drum probe which is inserted into the receiving drum. Another hose is connected to inlet side of pump and to drum probe which is inserted into the drum to be pumped. Connections are made using spill prevention precautions and procedures previously described. Pump is engaged. Transfer occurs. At completion, suction is applied to hose by the vehicle to empty next drum. At completion of pumping the drums, the probes are removed and the probe ends of the hose are capped. The hoses are disconnected at the pump and capped as previously described. This operation may also be accomplished using a portable drum pump.

Transfer by Pour Off - Small Containers to Larger Containers

Hazardous wastes received in small quantity containers (such as those encountered during a household hazardous waste collection or a facility clean out) will be opened by hand to be transferred from their small packaging to a larger container, such as a drum. This operation will be conducting in the Hazardous Waste Transfer Area such that containment and safety can be maximized. Personnel performing this operation shall take precautions including wearing the proper personnel protective equipment to assure that the operation is performed in a safe and environmentally sound manner.

Transfer and Consolidation of Hazardous Waste Solids Between Roll-Offs

Hazardous wastes to be transferred between roll-offs are done within the confines of the dock area. Roll-offs are parked close to each other for ease of processing. Roll-offs are inspected for integrity prior to processing. Items checked include closed and locked doors. If the roll-off to be loaded into is empty and the material to be loaded into it requires one, a liner is placed on the roll-off interior. Processing of roll-offs is performed typically using heavy equipment such as a backhoe or front-end loader. When processing is complete, tarps are placed on the roll-off(s) that contain waste and the roll-off(s) are moved to another area of the facility prior to transport off-site.

Transfer of Sealed Drums from Truck to Truck

Alternative Number 1: Truck to be unloaded is backed up to the loading dock and drums are moved by drum dolly, forklift or other suitable equipment out of the unloading truck onto the dock. Loading truck is backed up to the dock and drums are loaded by moving the drum dolly, forklift or other suitable equipment onto the loading truck. When loading vehicles for staging at dock, DOT compatibility requirements of hazardous materials are followed.

Alternative Number 2: Trucks are backed up back-to-back and transfer is made using the drum dolly, forklift or other suitable equipment directly from the unloading truck to the loading truck. When loading vehicles for staging at dock, DOT compatibility requirements of hazardous materials are followed.

Storage, Processing, and Transfer of Solid Waste, Non-Hazardous Waste and Used Oil Containers through the Dock and Back Operations Areas

Containers of solid waste, non-hazardous waste, and used oil are also received through the hazardous waste dock and Back Operations Area (large containers such as roll-offs and portable tank units only in this area). These waste streams may be stored, processed, bulked, consolidated, and/or transferred from the site. Used oils for recycling are exempt from regulation as hazardous wastes and are therefore not included in a site permit. Solid wastes and most non-hazardous wastes are included under the facility's Solid Waste Permit. It is important to note that two operational areas and their allowed capacities are shared in both permits. These are the Hazardous Waste Transfer Dock and the Back Operations Area. As also stated in the Solid Waste Operating Plan, the combined capacity of wastes stored in these shared areas shall not exceed the aggregate volume allowed in these areas. For example, the dock area is allowed a maximum capacity of 38,720 gallons of hazardous waste in this permit. UOR may stage this much hazardous waste alone or a combination of hazardous and solid wastes together. The bottom line is the full capacity of any wastes/products shall not exceed 38,720 gallons.

Universal Waste

United Oil Recovery, Inc. is also a transfer facility for universal wastes. Included on this list are the following categories of universal wastes:

- Batteries;
- Pesticides;
- Thermostats;
- Lamps;
- Antifreeze; and
- Cathode Ray Tubes.

UOR is not a destination or process facility for any of these wastes, but the facility does accept them for bulking and consolidation prior to shipment to an off-site recycling or disposal facility. Antifreeze is the only universal waste that may be opened and bulked prior to shipment off-site (this operation is currently performed on-site by Safety-Kleen). The other universal wastes are received and stored in their original containers until shipment off-site. UOR will replace a damaged shipping container if necessary. The only other time UOR will open a shipping container of universal waste is to perform a piece count prior to shipment out. UOR takes precautions such that if pieces are damaged in the shipping container, they are either not opened or are opened with extreme care such that the damaged material stays in the shipping container. Should UOR determine that the damage to a universal waste in a container will allow the material to leak/empty out of the container upon opening, UOR will not open the container.

Empty Container Management

Following the bulking of wastes, UOR will typically rinse out the original container and either re-use it or dispose of it as a waste. Containers may also be recycled by shipping them off-site to a drum/container re-conditioner.

Leaking or Otherwise Impaired Containers

Containers received are inspected upon arrival for their condition. If a container is found to be leaking it will either immediately be bulked if it is a waste stream that is allowed to be bulked per the permit, or it will be overpacked. Released material will be cleaned up. This same procedure will be followed for containers that are found to be impaired and in danger of releasing their contents.

Note that procedures contained in this document may change or alter based on new or different equipment/vehicles at the facility. Minor alterations will not be cause for this document to be updated.

Appendix 6B

WASTE MANAGEMENT PLAN

1.0 PURPOSE

This Waste Management Plan (WMP) is provided as part of United Oil Recovery's (UOR's) hazardous waste transfer facility permit application. While the Application Form refers to a Waste Analysis Plan in Section 6(C) (6) (b), transfer facilities are technically exempt from this requirement (see Env-Hw 701.02(b) of the New Hampshire Hazardous Waste Rules). The following discussion outlines UOR's hazardous waste transfer operations and are intended to address the following items in the Hazardous Waste Transfer Facility Permit Application:

- Section 6(C)(1)(g),
- Section 6(C)(1)(h),
- Section 6(C)(3),
- Section 6(C)(5), and
- Section 6(C) (6) (a).

Due to the exemption from the requirement for a Waste Analysis Plan, we have renamed this section the Waste Management Plan to avoid confusion.

2.0 FACILITY OPERATIONS OVERVIEW

UOR provides temporary storage (maximum 10 days) for hazardous wastes that have been characterized by the waste generator in accordance with state and federal requirements (using waste analysis data and/or generator knowledge regarding the waste-generating processes), assigned the appropriate waste codes and shipping information, and accepted at a licensed Treatment, Storage and Disposal Facility (TSDF) under a waste profile. UOR's primary concern is the safe handling and storage of wastes at the facility while the materials await transport to a destination facility. Specific steps taken by UOR to ensure that wastes are properly managed in accordance with applicable environmental, health, and safety requirements include the following:

- Pre-approval and Transportation - ensuring that shipments arriving at the facility are properly manifested to a destination facility, and are accompanied by proper shipping documentation in accordance with NH DES, EPA, and DOT requirements;

- Inspections - performing an initial inspection to document that all containers upon arrival are in good condition, and meets NH DES/DOT specifications; ensuring that containers are properly marked and labeled in accordance with NH DES and DOT requirements; ensuring that containers are properly stored so that labels and container integrity can be inspected during temporary storage at the transfer facility; and conducting daily inspections of containers and transport vehicles during temporary storage.

- Container Tracking - ensuring that all hazardous waste shipments are tracked such that they are removed from the facility within 10 days of the arrival date.

- Compatibility - ensuring that waste shipments include only compatible materials, or if incompatible materials are present, that they are identified and properly segregated during transportation and handling;

- Procedures for co-mingling of wastes in bulk containers - ensuring that only compatible wastes based on chemical characteristics and DOT hazard classes are bulked, and that wastes are properly handled during bulking to avoid spillage or other problems.

- Manifesting - ensuring that the Hazardous Waste Manifest is properly executed and stored in a manner that ensures its availability for emergency response.

- Emergency Response/Hazard Communication - providing records regarding waste types and quantities stored on site at any one time so that facility personnel have immediate access to this information and can respond accordingly in case of emergency.

- Waste Rejection Procedures – procedures to be followed by UOR in the event wastes are not properly packaged or identified.

3.0 PRE-APPROVAL AND TRANSPORTATION

3.1 Pre-approval

The pre-approval process is the procedure by which UOR ensures that wastes arriving at the facility can be managed in accordance with UOR's permit conditions and environmental, health and safety requirements. Procedures for waste analysis, characterization, profiling, and acceptance by a TSDF are the joint responsibility of the waste generator and the destination (TSDF) facility. Under state and federal hazardous waste regulations, waste generators assume primary responsibility for proper identification of their wastes, and TSDFs are responsible for performing verification testing to ensure that wastes arriving at their facilities match the physical and chemical characteristics specified by the generator in the waste profile.

This pre-approval process begins with the generator, who is responsible for describing the waste stream and signing a certification attesting to the accuracy of the information. Frequently, a sample of the waste stream is analyzed by either the TSDF who will accept the waste, or by an independent lab to confirm the waste characteristics. Based on this information provided by the generator, the TSDF can approve the waste profile for transport to the TSDF. While the commitment of acceptance by a TSDF is essential to waste being transported to the transfer facility, UOR does not always have a direct role in this pre-approval process.

3.2 Bulking or co-mingling of wastes.

The UOR transfer facility may choose to bulk wastes of the same composition from different generators for ease of transport. These wastes are similar wastes generated by different generators. The following criteria must be met for a waste to be approved for co-mingling at the UOR transfer facility.

- Both wastes have similar or compatible EPA/NH DES waste code(s) or chemical constituents; and

- Both wastes have compatible DOT hazard classes. Generally, these wastes have the same DOT hazard class.

It is important to note that this sort of co-mingling of wastes is common industry practice among licensed Hazardous Waste Transporters. A tank truck may stop at multiple generator sites and pick up and co-mingle wastes in one compartment before transport to the TSDF. The UOR transfer facility provides another location at which such transfers may take place.

Bulking does not involve mixing of materials that chemically react in a manner that would constitute hazardous waste treatment, nor does bulking involve mixing of hazardous wastes for the purpose of dilution, both of which are specifically prohibited by NH DES regulations.

3.3 Transportation

The licensed Hazardous Waste Transporter transports the waste, using a completed hazardous waste manifest. The manifest includes:

- Generator's certification;

- DOT hazardous materials shipping name;

- DOT required emergency response information;

- Special handling requirements (if applicable);

- The EPA/NH Waste Codes for the waste stream;

- And frequently, the TSDF approved waste profile number.

When the licensed transporter picks up the waste, the driver checks that containers are in good condition and properly labeled. The waste is then transported to the UOR Hazardous Waste Transfer Facility.

The information gathered in the process of pre-approval and transportation is reviewed by the UOR Hazardous Waste Transfer Facility to ensure that wastes being managed at the facility have proper documentation, and have been accepted by the designated TSDF.

In addition, this pre-approval process marks the beginning of the container tracking process, and is the critical first step in ensuring that wastes are properly managed at the facility with respect to compatibility, special storage requirements, emergency preparedness/response, and hazard communication.

4.0 MANAGEMENT OF CONTAINERS

4.1 Inspections

Hazardous waste shipments are inspected initially by operations personnel upon arrival at the UOR facility, and regularly thereafter during short-term storage. UOR's inspection program is described in detail in Appendix 6D of the Hazardous Waste Transfer Permit Application. Inspections are conducted to check for the presence of leaks or spills; ensure that all containers are in good condition (no bulging, damaged, or leaking containers); ensure that appropriate marks and labels are in place and readily visible for inspection; ensure that that fire protection and emergency response equipment is in place and operational; and that special storage provisions have been taken for ignitable, reactive, incompatible, or other "special handling" category wastes.

4.2 Container Tracking

Hazardous waste transport vehicles arriving at the UOR facility are subject to standardized check-in procedures. These procedures involve review of shipping documentation (hazardous waste manifest copies and associated information) and physical inspection of each load and vehicle by the Facility Manager or his designee. Loads that do not pass initial inspection requirements are not allowed to remain at the facility.

Upon arrival, containerized wastes are checked at the facility and compared to their shipping paper to identify such items as the manifest number, transporter name, waste type, and the date.

The container tracking system provides several very important assurances:

- Each drum is accounted for during its time at the facility, whether it is to be pumped out at the facility and co-mingled with other wastes, transferred to another load in its original container, or temporarily staged prior to shipment to its destination facility. Thus, tracking is maintained for all containers while under UOR's control and management.

- The length of stay for each container is tracked to ensure that UOR does not violate its 10-day transfer facility staging time limit.

- The tracking system provides up-to-date information on hazardous wastes that are staged on-site at any particular time. This is an important step in ensuring that UOR employees and outside contractors have adequate information to respond to emergency situations such as fires or releases.

4.3 Container Transfer

Containers can be transferred from one vehicle to another using the transfer procedures in Section 6(C) (2). In the event some of the drums hold ignitable or reactive wastes, or wastes that are incompatible with other wastes on the transport vehicle, the procedures outlined in Appendix 6F of this Application (Ignitable, Reactive, or Incompatible Wastes) will be followed.

Containers that are destined to be pumped out are managed under the procedures in Section 5.0 Management of Bulk Loads (below).

4.4 Hazardous Waste Manifest

Transfers are noted on the Hazardous Waste Manifest by completion of the line for the second transporter (if applicable).

The procedure is the same for both the transfer of containers and wastes that have been bulked with the wastes of other generators. The only difference is that if a container (such as a drum) is pumped into a bulk tanker, there is an additional notation to indicate the change of container from drum (DM) to tank truck (TT).

For waste to be opened, bulked, or consolidated, if observation of the waste reveals a discrepancy from how the waste was characterized, the generator is contacted. The generator can authorize changes to the hazardous waste manifest to properly describe the waste. In the event the generator is unwilling to authorize such changes, UOR will make a notation in Box 18 of the manifest describing the nature of the discrepancy found, and the transporter will return the waste to the generator or an alternate facility.

In the case of a discrepancy in the number of containers or volumes of waste, the Facility Manager, or his designee, will conduct an investigation to determine the actual quantity. Such investigation may include, but is not limited to, checking of ancillary records associated with the waste stream such as work orders, profiles sheets, customer orders, or purchase orders; making inquiry of both UOR and generator personnel who have moved or otherwise handled the waste; and physical inventorying of vehicles and storage areas where the material was or may have been located at any time. Such investigation will continue until the source of the discrepancy has been identified or due diligence efforts are exhausted and the source of the discrepancy is still unidentified. If the source of the discrepancy remains unidentified, it is assumed that the original manifest is in error. Appropriate corrections are then made on the manifest with the approval of the generator, who is then sent a copy of the corrected manifest.

Within 15 days of identifying a discrepant waste shipment, UOR will send a discrepancy report to the NH DES, including a copy of the manifest and a letter describing the discrepancy and the attempts to reconcile it.

5.0 MANAGEMENT OF BULK LOADS

5.1 Inspections

The inspection procedures are the same for bulk loads as they are for non-bulk containers. See section 4.1 above.

5.2 Tracking of Waste

The manifests for each vehicle are held separately to provide ease of reference for the contents of each vehicle. This system insures up-to-date information on the hazardous wastes on-site at any time. It also allows the information to be readily available in an emergency at a location that is separate from the vehicle itself.

5.3 Waste Transfer and Co-mingling

Once screened, the load can be transferred into another vehicle and co-mingled with the waste of other generators. This may be waste transferring from one tank truck to another or from a drum or

similar container to a truck. Detailed procedures for these transfers are contained in Section 6(C) (2) of this application.

5.4 Hazardous Waste Manifest

Manifest procedures are the same as described in Section 4.5 above.

6.0 COMPATIBILITY/SPECIAL HANDLING REQUIREMENTS

A critical aspect of safe handling and staging of hazardous wastes at UOR is determining waste compatibility, and ensuring that potentially incompatible wastes are identified and managed accordingly. To accomplish this, UOR relies on generator-supplied information provided during the pre-approval process to identify and properly manage potentially incompatible materials.

Upon receipt of waste on-site, a compatibility determination is conducted in accordance with the Department of Transportation requirements of 40 CFR Part 177.848(e), Hazardous Materials Load and Segregation Chart. Through this process, wastes that are determined to be potentially incompatible are identified, and appropriate steps are taken to manage these materials once they arrive on-site. Special handling procedures may include physical segregation (staging of certain incompatible materials in different transport vehicles, or storage on the same vehicle with a barrier between the incompatible wastes).

Additional information regarding UOR procedures for determining waste compatibility and managing potentially incompatible wastes is provided in Appendix 7-F of this application.

7.0 EMERGENCY RESPONSE/HAZARD COMMUNICATION

As a hazardous waste transfer facility handling a wide variety of wastes, UOR must maintain an effective system for ensuring that information on the types and quantities of wastes that are staged on-site is readily available to facility workers and emergency response personnel. This is accomplished through the previously described container tracking system and by maintaining a separate storage location of the manifests per vehicle. This system provides facility workers and emergency response personnel with readily available information needed for rapid response to emergencies. This information includes:

- The number, contents, and principal hazards of containers that are staged on that vehicle;
- The waste type and principal hazards associated with materials that are stored in each bulk transport vehicle (e.g., transport vehicle 1 contains flammable liquids); and
- Special precautions for acutely hazardous or other materials with special hazards (e.g., DOT Division 6.1 poisons, poisonous by inhalation materials, reactive wastes, incompatible materials).

8.0 WASTE REJECTION PROCEDURES

Wastes may be rejected at UOR for several reasons, and at several points in the approval/management process. Rejection may occur if:

- Pre-Approval: If UOR's pre-approval procedures reveal serious deficiencies in the shipping documentation that is to accompany the hazardous waste shipment, and the generator does not comply with UOR's specific and detailed requests to remedy these problems, the load may not be accepted for management at the Transfer Facility. UOR may also reject wastes during the pre-approval process if it determines that these wastes cannot be safety managed at the facility (e.g. radioactive or explosive wastes, or wastes that require special handling that UOR cannot provide).

- Upon Arrival at the facility: UOR may reject a hazardous waste shipment based on its initial inspection of the container load (e.g., leaking, damaged, improperly labeled, or non-DOT-specification containers). Typically UOR would manage these loads on-site through overpacking, transfer, or re-labeling. Containers that are deemed unsafe would not be sent over the road.

- During Transfer Period: If UOR encounters a problem with a hazardous waste during the 10-day transfer period because of storage problem (e.g., leaking or bulging container) or failure of a transporter to meet UOR's storage requirements, UOR may require that a container or load be removed from the facility at any time.

- During Bulking: If UOR accepts a waste for bulking and, at the time of consolidation, finds that the waste does not meet the specifications of the profile (e.g., material was represented to be waste antifreeze with gasoline, but upon opening the container is found to actually consist of waste oil), UOR may reject this material based on improper waste characterization by the generator.

The above-described situations do not describe all of the potential circumstances in which a hazardous waste stream may be rejected by UOR. Conversely, UOR may not choose to reject a waste stream under the circumstances noted above. For example, under certain conditions, a leaking drum may be overpacked and transferred to its destination facility rather than rejecting it and returning it to the generator. Within the specific guidelines provided by the NH DES hazardous waste regulations and UOR's hazardous waste transfer permit, UOR reserves the right to evaluate rejection/approval decisions on a case-by-case basis.

In the event that a waste shipment is found to have cause for rejection after leaving the generator's site, UOR will contact the generator and attempt to remedy the situation. In the event that the discrepancy cannot be resolved, the waste will be returned to the generator.

Appendix 6C

SECURITY PROCEDURES

1.0 PURPOSE (40 CFR 264.14(A))

The United Oil Recovery, Inc. (UOR) hazardous waste transfer facility is secured to prevent unknowing entry and minimize the possibility for unauthorized entry to the active portion of the facility.

1.1 Access Restriction (40 CFR 264.14(b))

The facility is located on property leased from Sprague Energy Corp. (Sprague). A six-foot-high chain-link fence secures the Sprague property. Waste transport vehicles enter and exit the UOR transfer facility by passing through the gate-controlled entrance on Shattuck Way, which is manned on a 24-hour basis by a Sprague employee. Employee vehicles, general deliveries, and other small vehicles also access the facility through the gated Sprague entrance. There is another driveway that provides direct access to the UOR facility, but this entrance is secured by a gate that is kept locked at all times. Procedures for emergency access to the dedicated UOR located gate is described in the Contingency Plan.

United Industrial Services and the third party transporters who utilize the dock have all prepared a DOT Hazardous Materials Security Plan. Furthermore, Sprague has a U.S. Coast Guard approved security plan meeting Department of Homeland Security regulations for marine terminals. UOR is subject to the security requirements of this plan. Attachment 2 is a letter from Timothy W. Kipp, Manager of Safety, Training, and Environmental Compliance for Sprague certifying that the confidential security plan is in place.

1.2 Posting (40 CFR 264.14(c))

The facility is posted with warning signs as required by 40 CFR 264.14(c). The legend states "Danger – Unauthorized Personnel Keep Out" and is of a size to be legible from a distance of a least 25 feet. Signs are inspected regularly to ensure that they remain in place and are legible.

ATTACHMENT 1

Certification of Sprague Energy Corp. Security Plan

Hazardous Waste Transfer Facility Renewal Application
United Oil Recovery, Inc.
410 Shattuck Way
Newington, New Hampshire

Appendix 6D

GENERAL INSPECTION PROGRAM (40 CFR 264.15)

1.0 PURPOSE

The intent of the general inspection program is to detect malfunctions and deterioration, operator errors, and discharges which could cause or lead to a release of hazardous waste constituents or otherwise cause a threat to human health or the environment. The frequency of inspection is intended to detect and remedy any problem which might lead to such a release before a hazard results.

2.0 RESPONSIBILITY

Inspections are conducted by the Facility Manager or his designee.

3.0 INSPECTION CHECKLIST AND FREQUENCY OF INSPECTION

Attachment 1 to this appendix is an example of the daily inspection checklist The form notes items to be inspected, the frequency of inspection, the types of problems to be looked for, and also has a place for the date and time of the inspection and the name of the inspector. In the event there is an item that needs repair or remedy, this repair will be noted on the form along with the date the repair was completed. The daily inspection log will have the information discussed on this list at a minimum; however, the format of the form may be changed and items may be added.

4.0 REMEDY OF PROBLEMS FOUND DURING INSPECTION

United Oil Recovery will remedy major deteriorations or malfunctions which could lead to an environmental or human health hazard as soon as possible after identification, in an effort to prevent such hazard. More minor problems noted during an inspection will be responded to in a timely manner, consistent with the magnitude of the problem. If a problem has already caused such hazard, or if such hazard is imminent, an action remedying the problem will be initiated as soon as the problem is noted.

5.0 MAINTENANCE OF INSPECTION RECORDS

Completed inspection forms will be kept for a period of three years from the date of inspection.

ATTACHMENT 1 FOR APPENDIX 6D

Sample Inspection Logs

Hazardous Waste Transfer Facility Permit Renewal Application
United Oil Recovery, Inc.
410 Shattuck Way
Newington, New Hampshire

United Oil Recovery, Inc. - Daily Inspection Log (page 1 of 2)
Transfer Dock

Inspector's Name_____ **Week of**_____

Time of Inspection: Monday_____ **Tuesday**_____ **Wednesday**_____ **Thursday**_____ **Friday**_____

Item	**Types of Problems**	**Acceptable**	**Unacceptable**	**Observations - Date**	**Date & Nature of Repairs/Remediation**
Transfer Dock - Hazardous & Solid Waste Staging/Storage		**M T W Th F**	**M T W Th F**		
Floor/Walls Inside Trailers	Leaks, Spilled Material	| | | |	| | | |		
Staging Dock Outside of Trailers	Leaks, Spilled Material, Accumulated Liquid	| | | |	| | | |		
Asphalt Base/Foundation	Leaks, Spilled Material, Accumulated Liquid	| | | |	| | | |		
Staging Time (Drum Labels & Inventory)	>10 Calendar Days (hazardous waste only)	| | | |	| | | |		
Storage Capacity	Exceeds 38,720 gallons (total hazardous and/or solid waste)	| | | |	| | | |		
Sealing of Drums/Containers	Open or Insecure Covers	| | | |	| | | |		
Drums/Containers	Leaks, Corrosion, Deterioration, Do Not Meet DOT Compatibility Requirements	| | | |	| | | |		

Repair problems immediately if a hazardous situation has occurred or is imminent.
Otherwise, use best management practices in timing the repair.

United Oil Recovery, Inc. - Daily Inspection Log (page 2 of 2)
Back Operations Area, Security, & Safety/Emergency

Inspector's Name_____ **Week of**_____

Time of Inspection: Monday_____ **Tuesday**_____ **Wednesday**_____ **Thursday**_____ **Friday**_____

Item	Types of Problems	Acceptable	Unacceptable	Observations - Date	Date & Nature of Repairs/Remediation
Back Operations Area Hazardous & Solid Waste Staging/Storage		**M T W Th F**	**M T W Th F**		
Roll-Offs or Other Portable Tank Units (incl. frac tanks, vacuum boxes) & Drums/ Containers (incl. IBCs, totes, cubic yard boxes, T-packs)	Leaks, Corrosion, Deterioration, Open or Insecure Covers, Staging Time >10 Days (hazardous waste only)	| | | |	| | | |		
Storage Capacity	Exceeds 600 cubic yards plus excess solid waste if dock is not full (maximum of 300 cubic yards hazardous waste)	| | | |	| | | |		
Base/Foundation of Area	Leaks, Spilled Material	| | | |	| | | |		
Security		**M T W Th F**	**M T W Th F**		
Facility Gate on Shattuck Way (not Sprague's)	Unlocked When Not In Use, Damaged	| | | |	| | | |		
Safety & Emergency		**M T W Th F**	**M T W Th F**		
Evacuation Routes	Obstructed	| | | |	| | | |		

Repair problems immediately if a hazardous situation has occurred or is imminent.
Otherwise, use best management practices in timing the repair.

United Oil Recovery, Inc. - Weekly Inspection Log (page 1 of 1)
Transfer Dock & Safety/Emergency

Inspector's Name_____ **Date/Time of Inspection**_____

Item	**Types of Problems**	**Acceptable**	**Unacceptable**	**Observations**	**Date & Nature of Repairs**
Transfer Dock					
Asphalt Base/Foundation	Cracks, Sprawling, Uneven Settlement, Wet Spots, Wear				
2 Stormwater Collection Tanks	Covers Not Sealed, Full, Leaks, Releases				
2 Collection Trenches	Not Flowing, Clogged				
Safety & Emergency					
Eyewashes	Damaged, Missing, Not Accessible				
Goggles/Glasses/Faceshields	Broken, Dirty, Out of Stock				
Respirators/Cartridges	Broken, Dirty, Out of Stock				
Overpack & Empty Drums	Out of Stock, Structural Damage				
Telephone System	Power Failure, Inoperative				
Direct Communication Devices (i.e., Nextels)	Operational				

Repair problems immediately if a hazardous situation has occurred or is imminent.
Otherwise, use best management practices in timing the repair.

United Oil Recovery, Inc. - Monthly Inspection Log (page 1 of 1)
Security & Safety/Emergency

Inspector's Name_____ **Date/Time of Inspection**_____

Item	Types of Problems	Acceptable	Unacceptable	Observations	Date & Nature of Repairs
Security					
Floodlights	Operational				
Warning Signs on Exterior Fences	Missing, Damaged, Overall Condition				
Safety & Emergency					
Absorbent Material (e.g., Speedi Dri, sausage boom, pads)	Damaged, Out of Stock				
Fire Extinguishers	Needs Recharge, Accessible, Seals/Tamper Indicators Intact, Tagged as Serviced Within Last Year				
Gloves and Boots	Damaged, Out of Stock				
First Aid Equipment	Damaged, Out of Stock				
Shovels and Squeegees	Damaged, Out of Stock				
Cloth and Tyvek Coveralls	Damaged, Out of Stock				
4-Way Confined Space Entry Meter	Inoperative				
Vacuum Truck	Inoperative, No Vacuum				

Repair problems immediately if a hazardous situation has occurred or is imminent.
Otherwise, use best management practices in timing the repair.

Appendix 6E

PERSONNEL TRAINING

1.0 REGULATORY REQUIREMENTS (40 CFR 264.16)

Federal regulations require owners and operators of hazardous waste management (HWM) facilities to prepare an outline of introductory and continuing training programs "to prepare persons to operate or maintain the HWM facility in a safe manner." The regulatory requirements contained in 40 CFR 264.16 regarding employee training are as follows:

- Facility personnel must successfully complete a program of classroom instruction or on-the-job training that teaches them to perform their duties in a way that ensures the facility's compliance with the requirements of this part.

- This program must be directed by a person trained in hazardous waste management procedures and shall include instructions which teach facility personnel hazardous waste management procedures (including Contingency Plan implementation) relevant to the positions in which they are employed.

- At a minimum, the training program must be designed to ensure that facility personnel are able to respond effectively to emergencies by familiarizing them with emergency procedures, emergency equipment, and emergency systems, including, where applicable:

    1. Procedures for using, inspecting, repairing, and replacing facility emergency and monitoring equipment;

    2. Key parameters for automatic waste feed cutoff systems;

    3. Communications or alarm systems;

    4. Response to fires or explosions;

    5. Response to spills or similar incidents;

    6. Shutdown of operations; and

    7. Properties and hazardous nature of the hazardous waste at the facility.

- The program presented in this plan includes training relevant to the actual tasks at this facility. This may include training in the following actual tasks at the facility:

    1. Use of personal protective equipment;

    2. Safety measures;

    3. Shipping paper use (e.g., manifests);

    4. Facility operations and maintenance;

5. Contingency measures;

6. Facility inspection;

7. Regulatory requirements;

8. Facility recordkeeping;

9. Maintaining site security;

10. Prevention of fires, spills, and explosions; and

11. Familiarizing employees with the types of wastes handled at the facility and the hazards inherent in the handling of these wastes.

- Facility personnel must successfully complete the training program within six months of their employment, assignment to the facility, or transfer to a new position within the facility; and must take part in an annual review of the program.

- Facility personnel engaged in hazardous waste activities will not work in unsupervised positions until their training is complete.

- The owner or operator must maintain documentation applicable to the training program outlined in 40 CFR 264.16.

In accordance with 29 CFR 1910.120 (OSHA Hazardous Waste Operations and Emergency Response regulations), personnel at United Oil Recovery, Inc. who are involved with hazardous waste operations will receive either 24 or 40 hours initial training and 8 hours of refresher training annually, thereafter.

2.0 TRAINING OUTLINE

The four elements of personnel training critical to safe hazardous waste management, are as listed below.

1. Personnel Safety Training

    - Hazards and characteristics of chemical wastes;

    - Selection and use of protective clothing and equipment for emergency situations; and

    - Health effects of chemicals in the work environment.

2. Emergency Planning

    - Emergency response; and

    - Contingency planning.

3. Facility Operations and Maintenance

- Hazard minimization through proper facility operations and maintenance.

4. Maintaining Records

- Regulatory compliance.

Personnel activities related to hazardous waste are distinguished as follows:

- Routine day-to-day hazardous waste handling, storage, and treatment operations; and
- Emergency response activities in accordance with the Contingency Plan.

Personnel engaged in either of these activities are trained in pertinent aspects of proper hazardous waste handling.

The training course encompasses the four elements listed previously for safe hazardous waste management. Emergency response training is conducted in accordance with the site-specific Contingency Plan. Personnel having a role in the Contingency Plan will be trained in his/her specific duties per the Contingency Plan. It is anticipated that some minimum level of training in emergency response procedures should be administered to all persons who will be on-site. In many cases this training will be limited to evacuation procedures. Some individuals, however, must be trained in specific activities depending upon the type and extent of emergency; (e.g., reporting of the event to the proper individuals and departments, and implementation of mitigative measures).

The training program presented herein has been developed based upon training guidance manuals specifically prepared by the US EPA and the US Department of Labor/OSHA to meet requirements for training hazardous waste management personnel.

Facility personnel involved in handling hazardous waste will be trained in aspects of hazardous waste management pertinent to the facility. The Training Program is designed to provide facility personnel with the necessary background and perspective for the safe conduct of the facility's hazardous waste operations. This level of instruction is comprehensive and constitutes a detailed overview of pertinent aspects of hazardous materials and hazardous waste management.

3.0 TRAINING STAFF

Either internal corporate/facility staff or a third party trainer will conduct initial and continuing training of personnel at UOR. An internal staff's requirements to be a trainer would be a minimum of 5 years experience in the environmental field (not necessary with the company). A college degree with a major in a relevant topic (e.g., science, engineering, etc.) can be substituted for the experience on an individual basis. Examples of some internal staff who are capable of performing training are the corporate President, corporate Environmental Director, corporate Field Services Manager, corporate EHS Manager, corporate Operations Manager, and facility Plant Manager. This list is not exhaustive. There are many qualified third party trainers who perform RCRA/OSHA training. The trainer's level of experience and background vary, but for the most part they are people who have worked in the waste or chemical industry, or who were/are firefighters. UOR does not have set criteria for choosing these

trainers, other than a case-by-case judgment based on qualifications, reputation, and past training experience with UOR.

4.0 SAFETY AND OTHER TRAINING

OSHA 24 and 40 HAZWOPER training includes topics such as hazardous materials identification, personal protective equipment selection and use, respiratory protection including a respirator fit test, and basic toxicology. Operations and laboratory personnel (includes all staff except clerical) receive initial HAZWOPER training of 24 or 40 hours and an 8-hour annual refresher. Lab personnel are the only staff who receives 24 hour initially; all others receive 40 hour. Personnel who are involved in the shipping papers (clerical staff and possibly others) receive hazardous and non-hazardous waste manifest (i.e., RCRA and non-RCRA) and DOT training.

5.0 CONTINGENCY PLANNING

Personnel are trained in relevant aspects of the Contingency Plan for the facility. Special attention is placed on notifications, evacuations, and response to spills. UOR does not train employees in firefighting. The Contingency Plan is submitted as Appendix 6H of this Application. Please reference this section to view the contents of what would be taught during Contingency Plan training.

6.0 FACILITY OPERATIONS/MAINTENANCE

New operations staff members train with experienced operators on-the-job to learn the various systems and equipment found at the facility. This training includes such tasks as unloading and transfer operations, drum handling and stacking, and product loading and transfer operations. The experienced operator and Plant Manager determine when the new staff member has demonstrated adequate competence to work on his or her own.

7.0 RECORDKEEPING

Training records for current personnel will be kept on file until closure of the facility. Training records for former employees are kept on file for a minimum of three years from the date their employment terminated. Training records consist of a completion certificate for the 24 or 40-hour HAZWOPER course, an attendance sheet or certificate for the completion of an 8-hour HAZWOPER refresher course, and an attendance sheet or other written record for all other trainings.

Appendix 6F

SPECIAL MANAGEMENT REQUIREMENTS FOR IGNITABLE, REACTIVE, AND INCOMPATIBLE WASTES

1.0 INTRODUCTION

New Hampshire Hazardous Waste Regulations (Env-Hw 509.02) require special precautions for managing ignitable, reactive, and incompatible hazardous wastes in order to prevent fire, explosion, violent reaction, creation of toxic vapors, or other hazardous condition. The New Hampshire Regulations incorporate federal requirements for management of these waste types (40 CFR 264.17) and the National Fire Protection Association guidelines (NFPA 30) for management of ignitable wastes.

This appendix describes precautions and procedures taken by United Oil Recovery, Inc. (UOR) to ensure proper management of these waste types. The following sections present UOR's approach for ensuring that:

- potentially incompatible wastes are identified prior to receipt at the facility and are managed effectively while on-site to prevent mixing and potential reactions;
- wastes are prevented from contact with other materials (raw materials, products, and/or non-hazardous wastes) with which they may be incompatible;
- ignitable wastes are managed appropriately to prevent potential ignition or explosion of these wastes, both during storage and transfer; and
- reactive wastes are managed to prevent potential reactions with other incompatible wastes or materials, and to prevent self-reactions which may lead to hazardous conditions.

2.0 INCOMPATIBLE WASTES

Incompatible wastes are materials that have the potential to react with other wastes or materials to produce a hazardous condition, including:

- Generating extreme heat or pressure, fire or explosion, or violent reaction;
- Producing uncontrolled toxic mists, fumes, dusts, or gases in sufficient quantities to threat human health;
- Producing uncontrolled flammable fumes or gases in sufficient quantities to pose a risk of fire or explosion;
- Damaging the structural integrity of the device containing the waste; or
- Through other like means causing a threat to human health or the environment.

Potentially incompatible wastes include materials that may react with each other if mixing occurs during storage or transfer, as well as wastes which may react with raw materials, products, or non-hazardous wastes that may be stored at the facility.

2.1 **Identification:** UOR reviews Department of Transportation (DOT) shipping documentation and emergency response information to evaluate the potential for reaction of incompatible materials, either among wastes in the same shipment, or with other wastes or raw materials that may be encountered during shipment, storage, or transfer. Information that is reviewed includes DOT shipping names and hazard class designations, packing groups, and the appropriate DOT emergency response guide (ERG) for the material. Attention is also given to subsidiary hazard classes and technical name information to ensure that materials do not contain an additional constituent or hazard that could lead to potential incompatibilities.

2.2 **Segregation:** UOR will ensure that containerized wastes staged in each trailer are compatible. A compatibility determination will be conducted in accordance with the Department of Transportation requirements of 40 CFR Part 177.848(e), Hazardous Materials Load and Segregation Chart. When staging containers that are designated as "O" in the Hazardous Materials Load and Segregation Chart, UOR will separate these materials in the trailer such that, in the event of leakage from containers, co-mingling of hazardous materials will not occur. The requirement for separation will not be applied when processing/moving containers within a trailer or on the transfer dock. UOR will assure that materials designated as "X" on the Hazardous Materials Load and Segregation Chart are not staged in the same trailer.

2.3 **DOT Exemptions:** Many transporters have specific DOT exemptions that allow containers of small quantities of incompatible wastes to be shipped together on the same transport vehicle. As all wastes at the UOR transfer facility are on licensed transport vehicles, these exemptions will be recognized as suitable segregation, even though they may represent a situation less stringent than the Hazardous Materials Load and Segregation Chart.

2.4 **Special Requirements for Bulk Transfer:** As described in the Waste Management Plan, UOR's policy for hazardous waste consolidation is that no two materials are mixed for consolidation unless they meet the following requirements:

- Similar or compatible EPA/NH DES waste codes or chemical constituents; and
- Compatible DOT hazard classes.

In many instances, materials that are mixed have the same DOT shipping name. However, in some cases, like materials may not be assigned the same DOT shipping name by different generators, even though they are essentially the same material (e.g., gasoline and aviation fuel). In such cases, UOR relies on hazard class, technical names, and waste code information to ensure compatibility.

The majority of hazardous wastes that UOR consolidates in bulk are ignitable (i.e., waste code D001), or wastes that are characteristic or listed because of a certain specific constituent or constituent group (e.g., benzene-waste code D018 or xylene-waste code F003). UOR does not mix or consolidate reactive or incompatible corrosive wastes under any circumstances.

UOR also takes the following precautions to ensure that wastes do not contact incompatible wastes or materials during transfer:

- No drums are located in outside or open areas of the facility except for those immediately awaiting transfer.

- Bulking operations are conducted in Hazardous Waste Transfer Dock Area. This area has secondary containment to prevent escape and possible co-mingling of hazardous wastes with other materials (such as waste oil) that are stored/handled at the facility. UOR also maintains spill cleanup equipment and trained emergency response personnel on-site and can quickly respond to rapidly contain and clean up any spills that occur, minimizing the potential for contact between incompatible materials.

3.0 IGNITABLE WASTES

When UOR manages ignitable hazardous wastes, precautions and procedures are taken to prevent potential hazards; including buildup of ignitable vapors, ignition, fire, or explosion.

3.1 **Identification**: Ignitable wastes most commonly include materials that are considered hazardous based on the characteristic of ignitability (flash point less than or equal to 140 degrees F), but also include DOT oxidizers, fire through friction/spontaneously combustible materials, and ignitable compressed gases.

3.2 **Management**: To safely manage these materials during staging at the transfer facility, UOR takes the following precautions:

- Ignitable wastes must be stored in DOT-specification containers appropriate for their specific DOT hazard class and packing group;

- Containers must be appropriately marked and labeled in accordance with DOT requirements, and transport vehicles must be appropriately placarded;

- Electrical wiring and lighting at the transfer dock complies with NFPA requirements;

- No activity involving metal-cutting, welding, frictional heat, sparks, or other ignition source is allowed within 50 feet of an ignitable waste storage area, unless neither the work or the ignitable wastes can be relocated, in which case a "hot-work" permit will be required, including a task-specific risk analysis, use of non-sparking tools, and appropriate monitoring and fire-prevention procedures.

3.3 **Managing Ignitable Wastes During Bulk Transfer:** Certain ignitable wastes are accepted by UOR for bulking into larger containers (e.g., tank trucks) for more economical transport. Wastes most typically accepted for consolidation are common waste streams, such as gasoline/water or antifreeze/gasoline mixtures. As previously described, UOR does not consolidate wastes unless they have similar EPA waste codes and chemical composition and compatible DOT hazard classes. Also taken into account is a review of waste characterization data to show that the wastes do not contain underlying constituents or subsidiary hazards that could present a hazard during mixing.

Detailed waste transfer procedures, including precautions taken to prevent ignition of wastes, are described in Section 6(C)(2) of this application.

4.0 REACTIVE WASTES

UOR does not routinely handle large quantities of reactive wastes, and no reactive wastes are transferred from their original containers (i.e., consolidated) at the facility. Reactive wastes that are handled at the facility are managed in closed containers.

4.1 **Identification**: A wide variety of reactive wastes may be temporarily staged at the facility, including cyanide and sulfide wastes; labpacks containing unstable substances (wetted picric acid or other potentially self-reactive or shock-sensitive materials); and water-reactive materials. Reactive wastes are identified as such during the pre-approval process, by information presented on the Hazardous Waste Manifest.

4.2 **Segregation:** The transporter must provide documentation to UOR that the wastes are being transported with other compatible wastes, or under a US DOT exemption with specific precautions taken to segregate the reactive wastes during transport and temporary storage.

5.0 EMERGENCY RESPONSE

Information describing potentially incompatible materials is contained on the Hazardous Waste Manifest. UOR's system of storing manifests for each trailer in a separate storage bin aids in rapidly identifying waste materials on each vehicle. This aids the facility in continuing to evaluate and ensure that potentially incompatible wastes are identified and segregated as additional wastes continue to arrive on site. Additionally, in case of a facility emergency, response personnel have easy access to information pertaining to potential incompatibility issues, and can take appropriate action to ensure that these materials do not contact other incompatible materials (either wastes or other materials, such as fire-suppressants) during the response action. This identification of waste materials also allows emergency response personnel to take appropriate precautions for personal protection to guard against exposure to potential hazards (e.g., toxic vapors) that could occur during emergency response action.

Appendix 6G

PREPAREDNESS AND PREVENTION PROGRAM

1.0 PURPOSE

The purpose of this Preparedness and Prevention Program (Program) is to outline the elements of the facility design and operating procedures that are intended to enhance safe handling of the waste accepted for transfer at the facility, thereby preventing an incident which could endanger human health or the environment. In addition to a prevention program that minimizes the possibility of an incident occurring, this program also discusses the steps that United Oil Recovery, Inc. (UOR) takes to be prepared for and respond to an incident such as a spill, fire, or other release.

2.0 DESCRIPTION OF THE HAZARDOUS WASTE TRANSFER FACILITY

UOR operates a hazardous waste transfer facility in Newington, New Hampshire. The active portion of the facility where hazardous waste transfer activities will be conducted is the Hazardous Waste Transfer Dock. This is an elevated, roofed truck loading and unloading dock with parking bays for up to eight transport vehicles, contained within a paved area with stormwater collection and secondary containment. It is used for truck-to-truck transfer and the temporary staging of both containerized and bulk hazardous wastes. Wastes being managed at the facility are in transit to a destination facility (RCRA-permitted treatment, storage and disposal facility (TSDF)). The facility may stage containers and bulk vehicles for no more than 10 days.

3.0 DESIGN AND OPERATION OF THE FACILITY (40 CFR 264.31)

The design and operation of the facility contains many elements specifically intended to minimize the possibility of a fire or any unplanned sudden or non-sudden release of hazardous waste constituents to the air, soil, or surface water.

3.1 Facility Design:

Facility design features that support the safe operation of the facility include:

- Roofed hazardous waste transfer dock. The roof covering the transfer dock minimizes contact with rain or snow during container transfer and mitigates the potential for stormwater to be present in the area where hazardous waste containers are handled.

- Bermed, paved areas with secondary containment. An integrated system of a sloped, paved, and bermed containment area, interceptor trench drains and stormwater holding tanks prevent uncontrolled runoff from hazardous waste handling areas and mitigates the potential for contamination of surface water. All transfer operations are conducted within this area.

- Redundant pumping systems. To mitigate the effects of equipment failure or power outages, most of the hazardous waste transfer operations are not dependent on external power sources; transfer operations can be completed using pumps powered by waste transport vehicles. Small drum pumps appropriate to waste to be transferred may be used for convenience if available.

- Open-air transfer area. Facility design allows for maximum ventilation to reduce ignition/explosion risk. All bulk transfer operations are conducted outdoors, using non-sparking tools as appropriate for flammable wastes. Vehicles and containers are grounded or bonded before transferring flammable materials.

- Facility communications systems. Personnel are equipped with Nextel phones. These portable phones provide access to phone lines for summoning emergency responders and also provide immediate intercom access to additional UOR emergency personnel at other facilities. The UOR facility is equipped with both pull alarms and smoke/heat detectors. These alarms connect directly to the Newington Fire Department in addition to sounding an audible alarm.

- Spill response staging area. To prevent undue exposure of personnel to hazardous waste, personal protective equipment is available on-site and all personnel handling hazardous wastes are trained in its use.

- Security fence. To prevent trespassers from causing a release or being injured on site, the UOR facility is secured by a six-foot high chain link fence located along the Sprague property line. The only 24-hour open access to the facility, the Sprague Energy Corporation (Sprague) entrance on Shattuck Way, is manned around the clock by Sprague security personnel. All hazardous waste management areas and entrances are equipped with appropriate warning signs as required by NH DES and EPA regulations. Appendix 6 C discusses facility security.

- NFPA rated lights and switches, grounding and bonding bars. Explosion and ignition sources are mitigated by these facility features, and non-sparking tools are used when handling flammable materials.

- Loading dock design. The dock is designed to allow the use of drum dollies and/or forklifts to unload or move drums.

3.2 Operations

The following operational procedures, intended to prevent spills and releases, are adhered to by UOR's personnel:

- No trucks or containers are filled without prior gauging. For the hazardous waste transfer operations, this is interpreted to mean that bulk trucks are gauged and the remaining capacities of other containers are determined before filling.

- Pumping and transfer operations are continuously attended and conscientiously monitored. UOR operations personnel are available during a hazardous waste transfer operation even if the vehicle transferring is an outside transporter.

- Periodic training exercises are held on spill prevention, containment, and collection methods.

- Instructions and phone numbers for reporting requirements are contained in the Contingency Plan.

- A routine inspection system of facility structures and emergency equipment is in effect. Additional information on the inspection program is contained in Appendix 6D. Completed inspection forms are retained by UOR for a minimum of three years.

UOR Standard Operating Procedures and Programs detail the operational procedures that minimize the possibility of a fire or release of hazardous constituents or waste. The Facility Operations Plan (Section 6) describes procedures devised to enhance the safety of materials handling and temporary storage. It includes topics such as traffic control, unloading procedures, sorting and inspection procedures, storage and removal procedures, and hazardous waste transfer procedures. The following programs are appendices to the Facility Operations Plan.

- Waste Management Plan (Appendix 6B)- The Waste Management Plan discusses procedures by which UOR makes decisions regarding the safe management of wastes, the manner in which containers are tracked, and manifesting procedures.

- Security Procedures (Appendix 6C) - UOR's security program is intended to prevent trespassers from accessing the facility and either coming to harm themselves or causing a release which could threaten human health or the environment.

- General Inspection Program (Appendix 6D) - many items in the inspection program are intended to provide early warning of conditions which could lead to a release in time to prevent such an incident from occurring.

- Personnel Training Program (Appendix 6E) - this program ensures that each employee involved in the handling of hazardous waste has had instruction in hazardous waste management protocols appropriate for the employee's job class.

- Management of Ignitable, Reactive, or Incompatible Waste (Appendix 6F) - this program is intended to ensure that ignitable, reactive, and incompatible materials are handled safely.

- Contingency Plan and Emergency Procedures (Appendix 6H) - this plan is to be put into effect if an incident occurs to minimize the impact of the incident on human health or the environment.

- Container Use and Management Program (Appendix 6K) - this program includes provisions for use of compatible containers, inspection, and proper storage of containers; the focus of this plan is also to prevent releases or other incidents that could harm human health or the environment.

4.0 REQUIRED EQUIPMENT (40 CFR 264.32 AND 40 CFR 264.33)

4.1 Internal and External Communications Systems

The UOR facility is equipped with multiple communications systems.

Operations personnel are equipped with a portable Nextel phone/radio. These phones can be used to summon emergency responders from area towns, as well as provide immediate radio access to other

facility personnel. Additionally, these phones provide immediate radio access to other UOR employees at other facilities who can offer assistance in an emergency situation.

There is a telephone system in the office. These phones are available to summon emergency assistance from local police departments, fire departments, or State or local emergency response teams.

- The telephone lines and Nextel phones are used frequently throughout the day. Any malfunction in these systems is immediately remedied.

4.2 Emergency Equipment.

- Fire extinguishers. Four (4) fire extinguishers, type ABC, are located at the Hazardous Waste Transfer Dock. Additionally, there are a minimum of 12 additional fire extinguishers, type ABC, at various locations throughout the facility. Fire extinguishers are checked on a monthly basis to make sure they are maintained in a full condition and to ensure that they remain in their set locations. UOR employs a contractor to have the fire extinguishers inspected and recharged on a regular basis.

- Fire hydrants. There are four hydrants connected to city water in the area. Two of these are newly installed and are the closest to the UOR facility. One is located just south of the facility inside the Sprague fence along Shattuck Way, and the other is just west of the facility near the new highway interchange.

- Fire Alarms. The UOR facility is equipped with both pull fire alarms and smoke/heat detectors. The closest pull box to the Hazardous Waste Transfer Dock is on the outside wall of the main office building. These fire alarms connect directly to the Newington Fire Department in addition to sounding an audible alarm. These alarms are tested regularly by the Newington Fire Department.

- Spill control equipment, decontamination equipment, and personal protective equipment are all kept on site. UOR performs emergency response work for clients throughout New England and thus keeps a variety of emergency response equipment at the facility. This equipment includes items such as empty and overpack drums, personal protective equipment (suits, gloves, and boots of various materials to be selected depending on the chemical involved), respirators and cartridges, a 4-way confined space entry meter, sorbent pads and boom, Speedy Dry and other equipment normally associated with this sort of work. This equipment is stored in various locations at the facility. As part of operations, UOR may also have on-site a front-end loader, back hoe, roll-off containers, and a stockpile of pionite dust (sorbent material) that can be used in an emergency response situation. A yard vacuum truck is also maintained on-site. The Inspection Program outlined in Appendix 6D insures that this inventory is kept well stocked. Additionally, this equipment is used frequently in UOR's clean up and remediation work with clients. Any broken or malfunctioning equipment is immediately repaired or replaced.

- The Emergency Response Guidebook published by the U.S. Department of Transportation, Research and Special Programs Administration is available for reference in the facility offices and in transport vehicles.

5.0 ACCESS TO COMMUNICATIONS OR ALARM SYSTEM (40 CFR 264.34)

Operations and office personnel are equipped with a portable Nextel phone/2-way radio/intercom. Thus access to this communication device is available whenever hazardous wastes are being transferred from container to container or when containers are being opened for sampling. The Nextel phone system can be used as a means to summon assistance or alert personnel to an emergency situation. As noted earlier, hard line telephones are located in the office.

6.0 REQUIRED AISLE SPACE (40 CFR 265.35)

Hazardous waste drums and portable containers are staged in transport vehicles and thus, the requirement for aisle space does not apply. When staged, vehicles at the Hazardous Waste Transfer Dock are parked parallel to each other, thus allowing unobstructed movement of personnel, fire protection equipment, and spill control and decontamination equipment to areas of the facility in an emergency.

7.0 ARRANGEMENTS WITH LOCAL AUTHORITIES (40 CFR 264.37)

UOR has conducted tours of the transfer facility for representatives of the Newington Fire Department to familiarize them with the layout of the facility, the wastes handled at the facility, the places where facility personnel would normally be working, entrances to the facility, and possible evacuation routes.

Though the Newington, Portsmouth, and Dover Fire and Police Departments could respond in the event of an emergency, the Newington Fire and Police Departments provide the primary response. The Newington fire department has a mutual aid agreement with area towns through the Interstate Emergency Unit that provides support to the fire department as primary responder. The Newington Fire and Police Departments will be provided a copy of United Oil Recovery, Inc.'s Contingency Plan.

Portsmouth Regional Hospital will also receive a copy of this Contingency Plan so that they will be prepared to treat patients in an emergency situation.

Appendix 6H

CONTINGENCY PLAN AND EMERGENCY PROCEDURES

1.0 PURPOSE (40 CFR 264.51)

This plan discusses contingency planning for United Oil Recovery, Inc.'s (UOR's) hazardous waste transfer facility. It is provided as part of UOR's hazardous waste permit renewal application.

UOR also maintains a Spill Prevention, Control, and Countermeasure (SPCC) Plan for oil and other non-hazardous materials that are handled at the facility. The SPCC Plan provides emergency response planning and procedures for releases of oil or other hazardous materials.

The Contingency Plan and emergency procedures herein are designed to minimize hazards to human health and the environment from fires, explosions, and the unplanned sudden and non-sudden release of hazardous waste constituents to the air, soil, or surface water.

UOR operations personnel are trained in the Contingency Plan and emergency procedures discussed in this document and will carry out its provisions as soon as possible if there is a fire, explosion, or release at the hazardous waste transfer facility.

2.0 EMERGENCY COORDINATOR (40 CFR 264.55)

There will be at least one UOR emergency coordinator either on the facility premises or on call and able to be reached by either home phone or Nextel phone/radio. This person will be thoroughly familiar with the facility's Contingency Plan, operations and activities at the facility, the location and characteristics of waste handled, the location of records relating to the facility and the transfer facility layout. The designated Emergency Coordinator and his alternate have the authority to commit the resources needed to carry out the Contingency Plan.

Contact information of the Emergency Coordinator and his alternate is listed below:

	NAME	HOME ADDRESS & PHONE	WORK ADDRESS & PHONE	NEXTEL 24 HOUR PHONE
Emergency Coordinator	Dave Burditt	5 Plum Street Exeter, NH 03833 (603) 773-5976	410 Shattuck Way Newington, NH 03801 (603) 431-2420	(603) 396-0540
Alternate Emergency Coordinator	Kris Fournier	2 Donigans Way Barrington, NH 03825 (603) 335-0840	410 Shattuck Way Newington, NH 03801 (603) 431-2420	(603) 396-0556

3.0 EMERGENCY NAMES, ADDRESSES, TELEPHONE NUMBERS (40 CFR 264.52(D))

Police, fire, and rescue personnel from Newington and other nearby towns can be contacted in an emergency by dialing **911**. In addition to the 911 emergency dispatch system, direct phone numbers for local, state, and federal authorities are provided in the following list of emergency contacts.

3.1 Main Emergency Numbers

Fire:	Newington Fire Department	911 or (603) 436-9441
Police:	Newington Police Department	911 or (603) 431-5461
Ambulance:	Newington Fire Department	911 or (603) 436-9441
Hospital:	Portsmouth Regional Hospital	(603) 436-5110
New Hampshire 24 hour State Emergency		911 or (800) 852-3411
Response (State Police)		911 or (603) 271-3636
NH DES Waste Management Division (Hazardous Waste)		(603) 271-3899
NH DES Groundwater Protection Bureau (Oil)		(603) 271-3644

3.2 Backup Numbers

Fire:	Dover Fire Department	911 or (603) 742-4646
	Portsmouth Fire Department	911 or (603) 427-1515
Police:	Dover Police Department	911 or (603) 742-4646
	Portsmouth Police Department	911 or (603) 427-1500
Ambulance:	Portsmouth	911 or (603) 427-1500

3.3 Spills

The National Response Center Shall Be Notified if a Reportable Quantity of a Hazardous Material is Released.

National Response Center (800) 424-8802

4.0 EMERGENCY EQUIPMENT AND COMMUNICATION SYSTEMS (40 CFR 264.52(E))

The UOR facility is equipped with a hard-line telephone system. Employees also carry Nextel cellular telephones/2-way radios for internal and external communications.

Emergency equipment includes:

- Fire Hydrants – There are four hydrants connected to city water in the area. Two of these are newly installed and are the closest to the United facility. One is located just south of the facility inside the Sprague fence along Shattuck Way, and the other is just west of the facility on Shattuck Way.

- Fire Extinguishers – A minimum of four fire extinguishers, type ABC, are located at the Hazardous Waste Transfer Dock. At least two are located at ground level, and two are located on the surface of the transfer dock. Additionally, there are a minimum of 12 additional fire extinguishers, type ABC, at various locations throughout the facility. Fire extinguishers are checked on a monthly basis to make sure they are maintained in a full condition and to ensure that they remain in their set locations. UOR employs a contractor to have the fire extinguishers inspected and recharged on a regular basis.

- Fire Alarms – The UOR facility is equipped with both pull alarms and smoke/heat detectors. These alarms connect directly to the Newington Fire Department in addition to sounding an audible alarm. The Fire Department regularly checks these alarms.

- Spill control equipment, decontamination equipment, and personal protective equipment are all kept on site. UOR performs emergency response work for clients throughout New England and thus keeps a variety of emergency response equipment at the facility. This equipment includes items such as empty and overpack drums, personal protective equipment (suits, gloves, and boots of various materials to be selected depending on the chemical involved), respirators and cartridges, a 4-way confined space entry meter, sorbent pads and boom, Speedy Dry and other equipment normally associated with this sort of work. This equipment is stored in various locations at the facility. As part of operations, UOR may also have on-site a front-end loader, back hoe, roll-off containers, and a stockpile of sawdust or a similar sorbent material that can be used in an emergency response situation. A yard vacuum truck is also maintained on-site. The Inspection Program outlined in Appendix 6D (Inspection Program) insures that this inventory is kept well stocked. Additionally, this equipment is used frequently in UOR's clean up and remediation work with clients. Any broken or malfunctioning equipment is immediately repaired or replaced.

- The Emergency Response Guidebook published by the U.S. Department of Transportation, Research and Special Programs Administration is available for reference in the facility office and/or in transport vehicles.

5.0 EVACUATION PLAN (40 CFR 264.52(F))

Facility employees carry Nextel portable phones/2-way radios that are programmed to allow an emergency message to be broadcast to all Nextels. In the event an evacuation is necessary, the Emergency Coordinator will determine the best location for employees to gather based on the location of the release, the wind direction, the path of emergency responders, etc. The Emergency Coordinator will broadcast the evacuation message on the Nextel system, telling employees which evacuation location they should gather at and the best route to get there. The two designated evacuation locations are the Equipment Storage Building and the parking area (shown on Figure NH-3). If an alarm is sounded, operations personnel shall cease all activities, secure any transfer operations in progress and proceed in an orderly manner to the closest usable evacuation location. They will wait at this location until they receive further instruction from the emergency coordinator or his designated alternate.

There is a gated entrance from Shattuck Way direct to the UOR facility that can be used in the event of an emergency to evacuate personnel or to allow entrance for emergency responders. The emergency coordinators carry a key to this gate.

6.0 ARRANGEMENTS WITH LOCAL AND STATE EMERGENCY RESPONSE PERSONNEL (40 CFR 264.52(C))

UOR has conducted tours of the transfer facility for representatives of the Newington Fire Department to familiarize them with the layout of the facility, the wastes handled at the facility, the places where facility personnel would normally be working, entrances to the facility, and possible evacuation routes.

Though the Newington, Portsmouth, and Dover Fire and Police Departments could respond in the event of an emergency, the Newington Fire and Police Departments provide the primary response. The Newington Fire Department has a mutual aid agreement with area towns through the Interstate Emergency Unit that provides support to the fire department as primary responder. The Newington Fire and Police Departments will be provided a copy of United Oil Recovery, Inc.'s Contingency Plan.

Portsmouth Regional Hospital will also receive a copy of this Contingency Plan so that they will be prepared to treat patients in an emergency situation.

7.0 EMERGENCY PROCEDURES (40 CFR 264.56)

Response activities shall be in conformance with 29 CFR 1910.120. In the event of a fire, explosion, or significant release, or the imminent danger of such situation, the Emergency Coordinator (or his alternate) shall:

7.1 Emergency Alert:

1. Using the Nextel system, notify facility personnel of the need to evacuate, specifying the evacuation location and the best route to access this location.

2. Notify the Fire Department, Police, State Emergency Response Team and/or Ambulance as appropriate. Phone numbers for the State and local emergency assistance agencies are listed in this Contingency Plan.

3. Identify the character, source, amount, and extent of any released materials.

4. Assess possible hazards to human health or the environment that may result from the emergency situation. In making this assessment, the Emergency Coordinator shall consider both direct and indirect effects, including hazardous gases or surface water runoff from the material used to control the fire or explosion. If such hazard is determined to exist, the Emergency Coordinator shall:

    - Evaluate whether a local evacuation is advisable, and immediately notify the appropriate local authorities. The Emergency Coordinator will be available to help local officials decide whether local areas should be evacuated.

    - Immediately notify NH DES Waste Management Division (603-271-3899 for hazardous waste and 603-271-3644 for oil), the NH State Police (800-346-4009) and/or the National Response Center (800-424-8802). The notification shall include:

        - the name and telephone number of the reporter;
        - the name and address of the facility;
        - the time and type of incident;
        - the name and quantity of materials involved, if known;
        - the extent of injuries, if any; and
        - the possible hazards to human health or the environment outside the facility.

7.2 Contain the Problem:

- Cease all activities and if possible secure all transfer operations being conducted in the area of the emergency. After ceasing operations, monitor for leaks, pressure buildup, gas generation, or ruptures in valves, pipes, or other equipment where appropriate.

- Make all reasonable attempts to contain the spill or extinguish the fire to prevent any further danger to persons or the environment, following the recommended procedures of the Emergency Response Guide, including donning appropriate personal protective equipment.

- If the release is outside of the Hazardous Waste Operations Area, immediately close the shut-off valves in the three stormwater drainage trenches.

- If the extent or location of the emergency prevents safely containing the spill or extinguishing the fire, isolate the problem to the extent possible until the Fire Department arrives.

- Upon the arrival of a Fire Department, advise the officer in command of the nature of the materials involved, unusual fire fighting or spill control techniques and safety procedures. Provide the officer in command with any information that is requested pertaining to the materials and assist him as requested.

7.3 Follow-up Procedures:

Immediately after the emergency, the Emergency Coordinator shall:

- Provide for treating, storing, or disposing of recovered waste, contaminated soil or surface water, or any other material that results from a release, fire, or explosion at the facility.

- Ensure that incompatible waste does not come in contact with the released waste.

- Emergency equipment used during the emergency is cleaned up and readied for use or replaced before transfer operations resume in the affected area of the facility.

- Ensure that all hazardous waste has been cleaned up within 24 hours of the occurrence. If the hazardous waste discharge cannot be cleaned up with 24 hours of the occurrence, UOR will submit a clean up plan to the NH DES in accordance with Env-Hw 706.02.

Before resuming operations at the affected area of the facility, the owner/operator shall notify the appropriate state and local authorities that the release, fire, or explosion is remedied, and emergency equipment is again ready for use.

The owner/operator shall note in the facility's operating record the time, date, and details of any incident that requires implementing the Contingency Plan. He shall submit a written report of the incident to the NH DES within 15 days of the incident including the following information:

- the name, address, and telephone number of the owner/operator;

- the name, address, and telephone number of the facility;

- the date, time, and type of incident;

- the name and quantity of materials involved;
- the extent of injuries, if any; and
- an assessment of actual or potential hazards to human health of the environment if applicable; and
- the estimated quantity and disposition of recovered material that resulted from the accident.

It should be noted that minor releases and fires that can be extinguished with on-site extinguishers will not cause the full implementation of the Contingency Plan. The Emergency Coordinator or his alternate shall judge what level of implementation is appropriate based on the situation.

8.0 COPIES OF THE CONTINGENCY PLAN (40 CFR 264.53)

Copies of the Contingency Plan are maintained at the facility and have been submitted to the Newington Fire and Police Departments, Portsmouth Regional Hospital, and the NH DES Emergency Response Team.

9.0 AMENDMENT OF THE CONTINGENCY PLAN (40 CFR 264.54)

This plan will be reviewed and amended, if necessary, whenever the facility permit is revised, the plan fails in an emergency, the facility changes in some way that materially increases the potential for fires or releases of hazardous waste constituents, or changes occur affecting the response measures that are required in an emergency. It will also be amended if the list of emergency coordinators changes or the list of emergency equipment changes substantively.

Appendix 6I

CLOSURE PLAN

1.0 INTRODUCTION

United Oil Recovery, Inc. (UOR) operates a hazardous waste transfer facility in Newington, New Hampshire on property leased from Sprague Energy Corporation (Sprague). The portion of this facility where hazardous waste is transferred is subject to permitting under Env-Hw 304 including the requirement to submit a Closure Plan. This closure plan has been prepared to satisfy the requirements of the Hazardous Waste Transfer Facility Permit Application that references 40 CFR 264 Subpart G.

The intent of this plan is to ensure that upon implementation, the transfer facility will be closed in a manner that:

1. Minimizes the need for further maintenance,

2. Controls, minimizes, or eliminates, to the extent necessary threats to human health and the environment and post-closure escape of hazardous waste, hazardous waste constituents, leachate, contaminated rainfall, or waste decomposition products to the ground or surface waters or to the atmosphere; and

3. Complies with the closure requirements of 40 CFR 264 Subpart G and the applicable portions of Subparts I through O.

UOR does not conduct any of the activities regulated by 40 CFR 264 Subparts J through O. Subpart I, Use and Management of Containers is relevant and regulations and guidance relating to the hazardous waste closure of a container storage area have been used in the preparation of this document, even though containers are temporarily staged and not stored at the facility.

Because the construction and operation of the transfer facility is such that waste is managed in containers and releases to the environment are prevented, closure is expected to be clean closure, with no hazardous waste or hazardous waste constituents remaining in the environment and no source of such contamination remaining at the facility. There will therefore be no need for further maintenance, no chance of post-closure escape of hazardous waste, and no need for post-closure monitoring. This is consistent with closure requirements for a container storage area, which is the type of facility most closely related to a transfer facility that manages only containers. 40 CFR 264.110(b) does not require post closure care for a container storage area.

2.0 FACILITY DESCRIPTION

UOR occupies a facility on an 8-acre parcel at 410 Shattuck Way in Newington, New Hampshire. Operations at the facility include transportation, transfer, and temporary storage of non-hazardous and hazardous waste, recycling of used oil, and processing of solid waste. This closure plan addresses areas used in UOR's hazardous waste transfer operations.

Figure NH-1 is a facility map showing the Hazardous Waste Transfer Dock where hazardous waste will be transferred and temporarily staged. A second area, the Back Operations Area is still maintained for the temporary staging of roll-offs (and other portable tank units) that contain waste carrying a NH or federal hazardous waste code. This figure also shows the area formerly used for

hazardous waste transfer activities – the former Front Operations Area. It is labeled "past hazardous waste processing & staging area".

Currently, hazardous waste transfer operations take place at the Hazardous Waste Transfer Dock, which is located within a paved area with secondary containment. A vacuum pump is located at the easterly end of the Transfer Dock and is a stationary resource used to facilitate secure transfer of liquids to a receiving bulk truck.

Historically, hazardous waste transfer operations occurred in the former Front Operations Area, a paved area with provisions for runoff and spill control/containment. The Front Operations Area of the facility underwent Closure in 2004. In correspondence dated January 14, 2004 the NH DES authorized that confirmatory soil sampling required as part of closure could be deferred until final closure of the facility.

An area formerly used for some hazardous waste transfer operations, the Back Operations Area, is not paved but is underlain by a low-permeability native marine clay. This area is still maintained for the temporary staging of roll-offs (and other portable tank units) that contain waste carrying a NH or federal hazardous waste code.

A low permeability native marine clay underlies the entire UOR facility. Section 4 of this Application contains information on ground water and soil conditions.

2.1 Secondary Containment Design

Hazardous waste container and bulk transfer operations are conducted at the transfer dock. As noted, the transfer dock is roofed to reduce contact of waste containers with rain or snow. In addition, non-bulk containers are not stored outside on the transfer dock; they are stored on enclosed transport vehicles.

Secondary containment for the Transfer Dock is provided by a combination of an asphalt containment berm, a concrete pad, a grated concrete drainage trench and a 12,000-gallon spill containment holding tank. The concrete paved area under the roof is graded to divert any runoff or spills within the Transfer Dock area to the concrete trench immediately adjacent to the transfer dock. The trench is plumbed to the referenced holding tank. This holding tank has no outfall.

Storm water that collects on the asphalt-paved area adjoining the roofed Transfer Dock and spill containment area is also contained via a collection system. This storm water is directed via sloped pavement and containment berms to a second, separate grated concrete drainage trench plumbed to a second, separate 12,000-gallon holding tank. The contents of this holding tank are plumbed to the UOR storm water collection system, which is equipped with an oil-water separator. Discharge of the contents of the second holding tank to the UOR storm water system is controlled by a manually operated (on/off) electric pump.

Portions of the stormwater from the UOR storm water system is discharged to the Sprague facility by written agreement with Sprague. The stormwater is then managed at the Sprague facility before being discharged to the Piscataqua River under the Sprague terminal's NPDES permit. The concrete drainage trench, asphalt berms, and the sloped pavement of the area provide secondary containment for the transport vehicles in the area. Other portions of the stormwater discharge directly to surface run-offs. Stormwater management is permitted through an EPA Multi-Sector General Stormwater Permit issued to UOR in 2008.

Both the spill containment holding tank and the stormwater containment holding tank are located adjacent to the east side of the Hazardous Waste Transfer Dock. A 24,000-gallon (126" diameter x 39 feet long) steel underground holding tank has been divided into two 12,000-gallon compartments, which serve as the two separate holding tanks. The tank was coated with a sealant before being placed in the ground. Both compartments are sealed but can be accessed for sampling or pumping as necessary.

2.2 Hazardous Waste Management Units

There are no RCRA hazardous waste management units at UOR.

3.0 CLOSURE PROCEDURES

Closure will involve decontamination of the surfaces on which transfer operations take place: the surfaces of the transfer dock; the concrete pad; and the concrete trenches within the secondary containment area. The asphalt surfaces and associated concrete drainage structures, two holding tanks, and UOR storm water oil/water separator will be decontaminated. In the past, some transfers occurred in the Back Operations Area and the former Front Operations Area. Soil samples will be collected from these areas and analyzed according to EPA Methods for the presence of constituents of concern (per section 3.5 below) to verify contaminants are not present in soils above applicable NH DES clean-up standards. The Back Operations Area is still maintained as an area to temporarily stage hazardous (NH and federal regulated) solids in roll-offs (and other portable tank units).

3.1 Waste Disposal

As a transfer facility, hazardous wastes are being managed "in transportation". Wastes managed at the UOR facility are held in transportation containers including bulk trucks, roll-offs and other portable tank units, intermediate bulk containers, and non-bulk containers such as drums. While the UOR transfer facility provides a service to licensed hazardous wastes transporters by managing, staging, and transferring the wastes listed in Sections 6(B)b and 6(B)c, these wastes are not actually in the custody of UOR – they are in the custody of licensed hazardous waste transporters. Wastes at the facility are manifested from a generator to a licensed TSDF, and during transportation are in the possession of the licensed Hazardous Waste Transporter listed on the manifest. At closure, transporters using the UOR facility would be responsible for removing all wastes that are at the site on their transport vehicles. Transporters would be required to transport these wastes to the licensed TSDF listed on the Hazardous Waste Manifest per hazardous waste regulations. Although this is the expected procedure to be followed during actual closure, UOR and DES have agreed that UOR will need to accept and maintain responsibility for the full volume of hazardous wastes in transfer mode at the facility. Therefore the full volume of eight trailers at the Transfer Dock (38,720 gallons) and 10 roll-offs (or other portable tank units) in the Back Operations Area (300 cubic yards) will be taken into account and funded for closure. Typical waste types that the facility has processed in the past can be expected to be on-site at the time of closure and this typical mix of wastes was used for closure cost estimation. *It should be noted that since the dock and the Back Operations Area are "shared" areas with Solid Waste permitted operations, that the full volume at these two areas will be assumed to be hazardous waste. Therefore, in the facility's Solid Waste Closure Plan, the volume of solid waste staged at the dock and Back Operations Area will be assumed to be zero.*

3.2 Decontamination of Structures and Surfaces

Sediment and liquid in the secondary containment and stormwater drainage systems will be removed. Surfaces and structures described in Section 2.1 will be decontaminated using a pressure

washer and a detergent solution. Decontamination will be conducted until the surfaces appear free of staining, or until no further decrease in visible staining can be achieved by this method. The solution used in the decontamination will be collected in the facility's liquid collection holding tanks and will be analyzed prior to disposal for:

- Volatile Organic Compounds (VOCs);
- Semi-volatile Compounds (SVOCs);
- TCLP Metals;
- PCBs;
- Flash point; and
- pH

If the analysis of the cleaning solution indicates the presence of hazardous waste constituents, the area will then be steam cleaned until the cleaning solution is found to be free of hazardous waste constituents.

3.3 Disposal of Rinsewater

The decontamination rinsewater from the surface cleaning will be collected in each of the areas liquid collection and containment systems. The decontamination of the transfer facility is expected to result in approximately 500 gallons of rinsewater. The solution will be pumped into a bulk truck and analyzed for disposal as described above and disposed of at a permitted facility.

3.4 Decontamination of Holding Tanks

After completion of surface decontamination and removal of rinsewater from the holding tanks, the tanks will be entered using Confined Space Entry procedures; sediment will be removed, containerized and sampled for disposal; and tank interior surfaces will be pressure washed until free of visual staining, or until no further decrease in visible staining can be achieved by this method.

The tank sediments will be tested for:

- Volatile Organic Compounds (VOCs);
- Semi-volatile Compounds (SVOCs);
- TCLP Metals;
- PCBs;
- Flash point; and
- pH

Tank sediments will be disposed of at an appropriate disposal facility as indicated by the test results.

The decontamination of the holding tanks is expected to result in approximately 500 gallons of rinsewater. The rinsewater will be tested as described in Section 3.2 above and disposed of as required based on analytical results.

After cleaning the tanks and removal of liquids, the holding tank will be closed in place by filling with sand and sealing all openings. The drainage trenches will be re-piped for direct flow to the Sprague stormwater system.

Soil from adjacent to the tops of the tanks and from adjacent to exposed tank piping will be field screened for evidence of photoionizable compounds and observed for evidence of staining. If evidence of a release is identified, then soil samples will be collected at representative locations and analyzed for constituents of concern.

3.5 Soil Sampling and Removal

The surface areas of the Hazardous Waste Transfer Dock will be inspected for evidence of spillage, or pavement cracks or deterioration. Soil samples will be collected if the surface has cracks or deteriorated areas through which hazardous constituents could migrate to the soil. If this is the case, a sample of soil will be obtained from the 6-inch interval beneath the bedding material, and analyzed as discussed below. Soil sampling of the Front Operations Area that was deferred until final closure of the transfer facility will also be collected this way.

Surface soil samples (0-6 inch, or at the surface fill/clay interface) will be collected in the Back Operations Area where some transfer operations occurred prior to 1992, and NH and federal regulated solids are still temporarily staged in roll-off containers (and other portable tank units). These samples will be collected at low topographic points, where surface drainage tends to collect.

A specific work plan detailing the frequency of soil sampling will be developed in conjunction with NH DES prior to the initiation of closure activities. Soil samples collected will be analyzed for constituents of concern:

- Volatile Organic Compounds (VOCs) (EPA 8260),
- Semi-volatile Organic Compounds (SVOCs) (EPA 8270),
- PCBs (EPA 8080),
- Total Petroleum Hydrocarbons (EPA 8015 diesel range and gasoline range organics),
- RCRA Metals, and
- any additional parameters as necessary based on a review of the facility's spill records.

Note: Equivalent methods may be substituted as approved by NH DES at time of closure.

If soil contamination is detected, the extent of soil to be removed may be characterized by test borings or test pits and additional soils analyses for the constituent(s) of concern. Soil excavation, if warranted based on exceedences of applicable soil standards, may be based on field observations or photoionization detector readings, if appropriate for the contaminant to be removed. Confirmation samples will be collected from the bottom and sides of the excavation after contaminated soils are removed to determine whether additional soil removal is required. Confirmation samples will be analyzed for the constituent (s) of concern that exceed the applicable standard(s). Soil will be removed until confirmation samples show no exceedences of the applicable soil standards.

3.6 Contaminated soil removal

In the former Front Operations Area and the current Hazardous Waste Transfer Dock, no exposed soil areas exist within the containment structures enclosing transfer operations. No recorded spills occurred in the Back Operations Area or the former Front Operations Area during the time that those areas were used for transfer activities. At this time no areas of soil contaminated with hazardous waste constituents are known to exist.

The closure cost estimate assumes 20 soil samples analyzed for the complete list, an additional 15 samples analyzed for two of the parameters (VOCs and TPH-GRO), and that 50 cubic yards of soil requires removal and disposal. It is assumed that evidence of contaminated soil is identified in two places from a hypothetical spill of a gasoline/water mixture. It is assumed that this soil is transported to a permitted facility for disposal or treatment and re-use.

3.7 Disposition of Equipment/structures

After the closure of the hazardous waste transfer facility, UOR may continue its non-hazardous and/or solid waste operations, and could retain the equipment and structures for use in these operations. Structures are also easily adaptable to another trucking operation or other industrial/commercial use.

4.0 DESCRIPTION OF SECURITY SYSTEMS

Security is provided to the active portions of the facility through fencing and posting, and a gatehouse at the entrance to the Sprague facility. After the closure is complete, it is not anticipated that security or posting of the closed facility will be necessary.

5.0 CERTIFICATION OF CLEAN CLOSURE

Within 60 days after final closure of the facility is complete, an independent professional engineer registered in the State of New Hampshire and the facility operator will certify that closure has been conducted in accordance with this Closure Plan.

The professional engineer will inspect closure activities and provide an inspection report including activities conducted during inspections, field reports documenting each facility visit, and a list of in-house records that were reviewed. These inspection reports, along with any results of sampling and analysis related to closure, will be made available to the New Hampshire Department of Environmental Services, Division of Waste Management until UOR is released from closure financial responsibility requirements.

6.0 CLOSURE SCHEDULE

The expected lifetime of the facility is fifty years. The expected year of closure is 2060. Per the NH Hazardous Waste Regulations for Hazardous Waste Transporters, transporters must deliver the waste to its destination TSDF in 10 days or less. Therefore, all wastes will be removed from the transfer facility in that time frame. The only exception to this may be if a waste was mis-profiled. If encountered at time of closure, these wastes will be handled on a case-by-case basis; but should all be removed prior to the end of all closure activities. It is anticipated that all closure activities will be completed within 180 days.

7.0 COST ESTIMATE FOR CLOSURE

TASK	UNIT PRICE	TOTAL COST
Transportation and disposal of the full volume of hazardous wastes staged at the Transfer Dock (38,720 gallons); assumes typical wastes as processed in the past.	$0.62 per gallon	$24,006
Transportation and disposal of the full volume of hazardous wastes staged in the Back Operations Area (300 cubic yards); assumes typical wastes as processed in the past. (300 CY=150 tons).	$160 per ton	$24,000
Decontamination of structures and surfaces by pressure washing	$10,000	$10,000
Analysis of 2 samples of rinsewater from pressure washing for VOCs, SVOCs, TCLP metals, PCBs, flash point, and pH	$600 per sample	$1,200
Transportation and disposal of 1,000 gallons of rinsewater (assume hazardous)	$0.62 per gallon	$620
Confined space entry and cleaning of holding tanks using pressure washer	$2,000	$2,000
Analysis of tank bottom sludge (2 samples) for VOCs, SVOCs, TCLP metals, PCBs, flash point, and pH	$620 per sample	$1,240
Fill and seal holding tanks. Re-pipe drainage trenches.	$1,000	$1,000
Asphalt inspection, soil borings, and soil sampling (assume 35 samples collected & 5 hours total labor)	$25 per hour	$125
Analysis of 20 soil samples for VOCs, SVOCs, PCBs, TPH-GRO, and RCRA metals.	$660 per sample	$13,200
Analysis of 15 soil samples for VOCs and TPH-GRO.	$260 per sample	$3,900
Excavation of 50 cubic yards soil	$$1,200	$1,200
Transportation and disposal of 50 cubic yards of contaminated soil (assume hazardous) (50 CY=25 tons)	$160 per ton	$4,000
Inspection and certification by a Professional Engineer (assume 40 hours)	$3,000 per week	$3,000
SUBTOTAL		$89,491
15% unforeseen contingency cost		$13,423.65
TOTAL CLOSURE COST ESTIMATE		**$102,914.65**

It should be noted that since the dock and the Back Operations Area are "shared" areas with Solid Waste permitted operations, that the full volume at these two areas will be assumed to be hazardous waste. Therefore, in the facility's Solid Waste Closure Plan, the volume of solid waste staged at the dock and Back Operations Area will be assumed to be zero.

Appendix 6J

FINANCIAL ASSURANCE

United Oil Recovery, Inc. (UOR) has a trust agreement in place with JPMorgan Chase. The agreement is funded through cash account number 000000066660262. UOR may re-execute the full agreement after review of the Closure Plan submitted in its application.

Appendix 6K

CONTAINER USE AND MANAGEMENT PROGRAM

1.0 PROGRAM OVERVIEW

Operations at the transfer facility involve the use and management of containers such as roll-off containers, bulk trucks, vacuum trucks, intermediate bulk containers (IBCs), drums, and other non-bulk containers acceptable under U. S. Department of Transportation (US DOT) shipping regulations. For convenience in the text following, the term "container" is used to refer to non-bulk and intermediate bulk shipping containers in general, which includes drums, pails, cubic-yard boxes, liquid totes, and kiln packs. Containers arriving at and leaving the United Oil Recovery, Inc. (UOR) Hazardous Waste Transfer Facility are packaged, labeled, marked, and placarded in accordance with U.S. Department of Transportation (US DOT) regulations (49 CFR 172, 173, 178, and 179), since they are in transportation. The following discussion is to be considered applicable for waste containers in transit from generators to disposal facilities which are passing through the UOR transfer facility.

Container use and management at the UOR transfer facility is accomplished in accordance with US DOT regulations, which are generally more comprehensive than those specified in 40 CFR 264, Subpart I relative to the selection of appropriate containers.

2.0 CONDITION OF CONTAINERS (40 CFR 264.171)

Wastes are not accepted at UOR unless they are in containers which are in good condition, i.e. free of rust, dents, bulging, or defects which appear to threaten the structural integrity of the container. If such a condition should arise during management at the transfer facility, the hazardous waste will be placed into another container which is in good condition. In the case of drums, this may involve placing the entire drum into an overpack designed to contain a leaking drum and its contents or repacking the contents into a new drum in good condition. In the case of IBCs, bulk trucks, roll-offs and other portable tank units, this would involve transferring the waste into a similar container in good condition.

Once at the facility, transfers from containers which are not in good condition will occur within the Hazardous Waste Transfer Area, unless emergency conditions dictate that immediate repackaging at a different location provides a higher level of protection to human health and the environment.

3.0 COMPATIBILITY OF WASTE WITH CONTAINERS (40 CFR 264.172)

Wastes are identified and approved for management at the transfer facility in accordance with the Waste Management Plan (Appendix 6B). Generators shipping wastes select waste containers for hazardous materials based on the requirements of the US DOT regulations, 49 CFR 172.101 which specify the material and construction standard for containers used to ship hazardous materials. Whenever UOR transfers wastes between containers, the selection of containers is made in the same manner. Wastes will be therefore stored in US DOT-authorized containers made of a material compatible with the waste or lined with a material compatible with the waste. Although container selection is made specifically for each waste, it is noted that steel and aluminum trucks are typically appropriate for the bulk materials managed by UOR, with some corrosives being shipped in stainless steel tankers or IBCs/totes, in accordance with 49 CFR 172.101. Steel and plastic drums are most commonly specified in 49 CFR 172.101 for the drummed wastes which UOR commonly handles. Specialized containers are selected if required.

4.0 MANAGEMENT OF CONTAINERS (40 CFR 264.173)

4.1 Bulk Container Management

Transfer operations are conducted under the direction of the Facility Manager or his designee. Transfers from bulk transportation vehicles are conducted only by operators trained in appropriate safety procedures for the material and the vehicle in accordance with US DOT regulations. The operator is in constant attendance during the operation. Loading and unloading of hazardous waste bulk containers will be done in the Hazardous Waste Transfer Area. Transfer procedures are described in detail in the Facility Operations Plan.

4.2 Management of Non-Bulk and Intermediate Bulk Containers

Handling procedures for non-bulk and intermediate bulk containers are intended to ensure that containers holding hazardous waste will not be opened, handled, or stored in a manner which may rupture the containers or cause them to leak. Containers are not moved unnecessarily.

Non-bulk and intermediate bulk containers in transport from generators are stored only in transport vehicles and are removed from transport vehicles only for purposes of sampling, transfer to another vehicle, or for repackaging if necessary. Containers containing flammable materials will be bonded or grounded prior to opening. A grounding bar is present in transport vehicles for this purpose.

Containers are kept closed except when necessary to sample or remove waste. If it becomes necessary to open a container, appropriate health and safety procedures are implemented. These include use of appropriate tools such as non-sparking bung wrenches when appropriate. Personal protective equipment, such as safety glasses, gloves, and splash protection will be used. Emergency equipment such as overpacks and sorbent material is readily available. Containers showing questionable integrity or bulging sides or top are not accepted at the transfer facility. If such conditions were discovered, the containers will be handled with special precautions and carefully evaluated prior to opening.

5.0 INSPECTIONS (40 CFR 264.174)

Inspections of the Hazardous Waste Transfer Area are conducted regularly. The inspection program is described in detail in Appendix 6D of this Application. Manifests are checked to ensure that the 10-day storage period will not be exceeded. Containers are inspected for leaks and deterioration. Waste is removed from containers showing a defect or deterioration which threatens the integrity of the container, or "overpacked" according to US DOT Regulations. The Inspection Program and inspection logs are included in Appendix 6D.

In addition to the items on the inspection logs, workers are instructed to notify the Facility Manager of any spills or leaks or containers not in good condition immediately after these are observed. Procedures to avoid spills and leaks are described in the Preparedness and Prevention Plan, Appendix 6G of this Application. Releases of hazardous waste will be handled according to the Contingency Plan Appendix 6H.

In addition to containers, UOR inspections involve observing the containment systems of the Hazardous Waste Transfer Area for signs of spills, cracks or deterioration. Inspections also include checking the stormwater tanks and their contents. Identified conditions requiring remedy will be corrected in a time frame consistent with the extent of the condition.

6.0 CONTAINMENT (40 CFR 264.175)

Hazardous waste bulk transfer, 10 day storage, and vehicle-to-vehicle transfer of containerized waste occurs in the Hazardous Waste Transfer Area. The Hazardous Waste Transfer Area has secondary containment as shown on Figure NH-2. Secondary containment features were designed to contain releases that could occur during hazardous waste transfer activities.

7.0 SPECIAL REQUIREMENTS FOR IGNITABLE OR REACTIVE WASTE (40 CFR 264.176)

UOR procedures for management of ignitable and reactive wastes are described in Appendix 6F. These wastes will be stored and handled at least 50 feet from the property lines; (Sprague and town).

8.0 INCOMPATIBLE WASTES (40 CFR 264.177)

In order to prevent fires, gaseous emission, leaching, or other discharge of hazardous waste or hazardous waste constituents, containers are handled in such a way that incompatible wastes will not contact each other in the event of a leak or spill. Provisions for management of incompatible wastes are described in Appendix 6F.

Wastes that are to be transferred from their original containers are evaluated for safe handling requirements (including incompatibilities with other wastes at the transfer facility) based on a review of the waste profile and/or Hazardous Waste Manifest. This evaluation process is described in the Waste Management Plan (Appendix 6B)

Additionally, UOR standard operating procedures require thorough cleaning and decontamination of bulk and non-bulk waste containers before they are reused. This procedure is outlined below.

9.0 CONTAINER CLEANING AND REUSE

Empty containers are managed in accordance with the requirements of the NH Hazardous Waste Rules. Bulk vehicles are cleaned whenever:

- a non-hazardous waste is to be loaded to a vehicle which had contained a hazardous waste; or
- the waste being loaded is incompatible with the previous lading.

When they are to be re-used, drums are cleaned. Open top drums are pumped empty of liquids, and solids are removed by shovel, squeegee, scraper, or rag-down, as appropriate. Closed top drums are pumped first, then drained and rinsed.

If drums and containers have held acutely hazardous wastes they are triple rinsed with a solvent capable of removing the material, or if there is an inner liner that has prevented contact of the material with the container, the inner liner is removed and disposed of as hazardous waste; (pursuant to Env-Hw 402.04)

Safety precautions for flammable atmospheres and chemical hazards described in Appendix 6F "Ignitable, Reactive and Incompatible Materials" as well as waste specific chemical safety precautions are followed.

10.0 CLOSURE (40 CFR 264.178)

As described in the Closure Plan (Appendix 6I), all containers, liners, building material, and soil containing or contaminated with hazardous waste will be decontaminated or removed when the transfer facility closes.

Appendix 6L

SPECIFIC PART B INFORMATION REQUIREMENTS FOR CONTAINERS

1.0 OVERVIEW

The Hazardous Waste Transfer Facility Application provided by NH DES requests information that specifically addresses the Part B requirements for Containers.

2.0 DESCRIPTION OF CONTAINMENT SYSTEM (FOR LIQUID HAZARDOUS WASTE) (40 CFR 270.15)

2.1 Basic Design Parameters, Dimensions, and Materials of Construction.

Hazardous waste bulk transfer, 10 day storage, and vehicle-to-vehicle transfer of containerized waste occurs in the Hazardous Waste Transfer Area: The Hazardous Waste Transfer Area has secondary containment as shown on Figure NH-2. Secondary containment features were designed to contain releases that could occur during hazardous waste transfer activities.

2.2 How the Design Promotes Drainage or How Containers are Kept from Contact with Standing Liquids in the Containment System.

Surfaces are sloped to enhance drainage and minimize standing water. Additionally, containers are staged in transport vehicles and are thus not in contact with the ground. The waste carrying portion of bulk trucks and roll off containers are elevated so there is no contact with standing water.

2.3 Capacity of the Containment System Relative to the Number and Volume of Containers to be Stored.

The volume of the vehicle transfer area containment system will be sufficient to contain 100% of the volume of the largest container, or 10 % of the total maximum storage capacity, plus precipitation from a 24-hour 25 year event.

2.4 Provisions for Preventing or Managing Run-On.

All hazardous waste transfers take place in the paved Hazardous Waste Transfer Area, which is surrounded by a raised asphalt berm. In addition, the roof covering the storage dock and adjoining area is pitched to direct roof run-off outside of the lateral margins of the bermed Hazardous Waste Transfer Area. Additionally, to prevent run-on of additional storm water, the area surrounding the berm is graded to slope away from the containment area.

2.5 How Accumulated Liquids will be Analyzed and Removed to Prevent Overflow.

The Inspection Program (Appendix 6D) requires that the Hazardous Waste Transfer Area be inspected regularly to ensure that leakage or spills have not occurred. Additionally, the level of water in the storm water tanks is inspected weekly.

3.0 DESCRIPTION OF STORAGE AREA FOR CONTAINERS HOLDING SOLID HAZARDOUS WASTE (40 CFR 270.15(B))

Containers holding solid hazardous waste may include roll-offs, drums, and other non-bulk shipping containers.

3.1 Non-Bulk Containers

Non-bulk containers holding solid hazardous waste are managed as discussed for drummed liquid waste (above).

3.2 Roll-Off Transfer and Storage Area

Roll-off containers are stored either in the Hazardous Waste Transfer Area or Back Operations Area. Containers will be kept covered so no liquid will contact waste and thus, no hazardous waste constituents will be able to leach from solid wastes to storm water. The waste-containing portion of the roll-off containers is designed so that they are elevated and thus will be kept from contact with standing liquids.

4.0 INFORMATION DEMONSTRATING COMPLIANCE WITH SECTION 264.176, SECTION 264.177, AND SECTIONS 264.17(B) AND (C)

As shown on the site plan, the facilities for hazardous waste transfer and staging will be located at least 50 feet from the Sprague and town property lines. Ignitable, reactive, and incompatible wastes will be managed per the procedures in Appendix 6F.

SECTION 7 PERFORMANCE HISTORY

(A) **DISCLOSURES**: In accordance with the requirements of Env-Hw 304.11(a)(7), the applicant must provide as part of this application certain personal and business disclosure information. The information will be used to facilitate a background investigation by the New Hampshire Department of Justice/Office of Attorney General (NH DoJ/AGO) pursuant to RSA 147-A:4,II-c and II-d. The information is provided by completing two different forms, one for personal disclosure information and one for business disclosure information. The number and type of forms to be completed depends on whether the applicant is an individual or a non-individual and whether the applicant, facility operator and property owner are the same. The forms provide specific instructions for determining which individuals and entities must complete a form. Submit all completed forms directly to the NH DoJ/AGO, Environmental Protection Bureau, 33 Capitol St., Concord, NH 03301-6397 along with a cover letter containing the following information:

(1) Facility identification and location, including facility name, street address and municipality;

(2) The name(s) and mailing address(es) of the applicant, facility owner, facility operator and property owner;

(3) A description of the activity(s) for which a permit is being sought;

(4) Name, title, mailing address and telephone number of the individual associated with the applicant who will respond to inquiries about the application during the application review process;

(5) Name, title, mailing address and telephone number of the individual at DES who may be contacted regarding the application (as of this revision: Linda R. Birmingham, Waste Management Engineer, Department of Environmental Services, P.O. Box 95, Concord, NH 03302-0095, (603) 271-5328); and

(6) This statement: *"As specified by New Hampshire Hazardous Waste Rule Env-Hw 304.11(a)(7), the required Business Concern and Personal History Disclosure Forms have been completed for the subject permit application and are transmitted herewith to your office for processing as part of the subject permit application."*

Do NOT submit copies of the completed personal and business disclosure forms to DES. However, do submit to DES a copy of your cover letter to the NH DoJ/OAG to confirm that you have filed these documents.

Note: The applicant must pay the cost incurred by the NH DoJ/AGO to complete the background investigation and prepare a report to DES. An invoice will be sent by the NH DoJ/AGO and payment will be due upon receipt. If blank copies of the Personal and Business Disclosure Forms were not included with this permit application package, you may obtain copies from the Hazardous Waste Compliance Bureau at (603) 271-2942.

(B) **ADDITIONAL QUESTIONS**: In accordance with the requirements of Env-Hw 304.11(a)(7), answer the following questions. Use separate paper as necessary. In doing so, note that the term "applicant" encompasses not only the named applicant, but also all officers, directors, trustees, trust beneficiaries, ten percent or greater shareholders, and managerial employees of the named applicant. In addition, if any of those entities is a non-natural person such as a corporation, partnership or trust, "applicant" includes as well all officers, directors, and so on of those entities.

(1) In the case of a corporation or business entity, have any of its officers, directors, partners key employees or persons or business entities holding 10 percent or more of its equity or debt liability been convicted of, or plead guilty or no contest to, a felony in any state or federal court during the past five years? ☐ YES ☒ NO

(2) Indicate below whether the applicant is a corporation, partnership or association:

☒ Corporation (go to Item B(3))
☐ Partnership (go to Item B(3))
☐ Association (go to Item B(3))
☐ None of the above (skip Item B(3) and go to **Section 8** of the application)

(3) If the applicant is a corporation, partnership or association, submit the following information, pursuant to RSA 147-A. (Use separate paper as necessary):

(a) State of Incorporation/Formation: Connecticut

(b) Address of principal place of business: 47 Gracey Avenue
Meriden, CT 06451

(c) If the applicant is a corporation, provide the names and addresses of directors, officers and shareholders. If the applicant is a partnership, provide the names and addresses of the partners, whether general or limited. Use separate paper and attach to this section of the application. **See attachment.**

(d) Exact location where the applicant intends to conduct the business for which it is seeking the permit:
410 Shattuck Way
Newington, NH 03801

SECTION 8 SIGNATURE REQUIREMENTS

This permit application shall be signed below by a duly authorized representative of the facility in accordance with the signature requirements of 40 CFR Part 270.11(a).

To the best of my/our knowledge and belief, the data and information which I/we have submitted in this permit application is correct and complete. The submitted application meets all necessary application requirements to render it technically adequate to undergo an engineering review.

I/we acknowledge that the application can be denied if the applicant fails to demonstrate sufficient reliability, expertise, integrity and competence to operate the facility or if the applicant has been convicted of, or pled guilty or no contest to, a felony in any state or federal court during the past 5 years.

I/we acknowledge that RSA 147-A:4,I prohibits operation or construction of a hazardous waste facility without a permit from the Waste Management Division.

I/we certify that the two forms referenced under Section 7 of this application have been transmitted to the NH DoJ/OAG*. Further, I/we acknowledge that the* NH DoJ/OAG *may request additional information to complete its background investigation and that I/we will bear the cost of such investigation, pursuant to RSA 147-A:4, II-c and II-d.*

I/we certify that I/we have complied with all regulations and ordinances relative to the application.

I/we agree to pay all permit application fees for which I/we are invoiced pursuant to the provisions of RSA 147-A:4, II as pertain to the review of this application.

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

Signature of the Operator/Permit Applicant: _____

(Note: Signatory must be authorized to legally bind the facility in accordance with the requirements of 40 CFR 270.11(a)).

Name of the Operator: David Carabetta

Title of the Operator: President

Date Signed: April 27, 2006

Name of Owner: David Carabetta

Title of Owner: President

Date Signed: April 27, 2006

LANDOWNER SIGNATURE

I/we hereby certify that United Oil Recovery, Inc. (the applicant) has the legal right to occupy and use the property on which this proposed facility is or will be sited, as identified below, for the purposes specified in this application.

I/we, as landowner, will allow access to the property for closure and post-closure monitoring of the facility and site.

PROPERTY IDENTIFICATION

Street Address: 410 Shattuck Way

Town: Newington, NH 03801

Deed Reference: County: Rockingham Book: 1612

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Landowner Name (Print or Type): Sprague Energy

Co-Landowner Name (Print or Type): NA

Landowner Signature: _____ **Date:** April 28, 2006

Co-Landowner Signature: NA **Date:** _____