UST CLOSURE ASSESSMENT

NETC
Building 33, Gould Island
Newport, Rhode Island

prepared for

ALCO Environmental Services, Inc.
400 George Washington Highway
Smithfield, Rhode Island

prepared by

Triangle Environmental
175 Metro Center Blvd., Suite 7
Warwick, Rhode Island 02886
Phone: (401)-737-0570
FAX: (401)-732-5607

Submitted: November, 1994

TRIANGLE
ENVIRONMENTAL

ENGINEERING
CONSULTING
PERMITTING

November 22, 1994

Mr. Alfred Constantino
ALCO Environmental Services, Inc.
400 George Washington Highway
Smithfield, Rhode Island

Re: UST Closure Assessment
NETC
Building 33, Gould Island
Newport, RI

Dear Mr. Wilbur:

In response to your request, Triangle Environmental has completed a UST Closure Assessment at the above referenced property. The UST Closure Assessment was completed per the guidelines specified in Section 15.10, Closure Assessment of the Regulations for Petroleum Storage Facilities Used for Petroleum Products and Hazardous Materials dated August, 1993.

For reasons outlined in this report, the underground storage tank (UST) closure procedure was conducted over a period of several weeks. The tank closure was witnessed by the undersigned, who is an employee of Triangle Environmental, a firm which is independent of the UST facility owner.

We appreciate the opportunity to provide you with our environmental services. If there are any questions about this report, please do not hesitate to contact us.

Sincerely,

Gary C. Lamond
Project Engineer

175 METRO CENTER BLVD. • SUITE SEVEN • WARWICK, RI 02886 • PHONE 401 • 737 • 0570 • FAX 401 • 732 • 5607

UST Closure Report
NETC Building 33, Gould Island
Newport, RI

SECTION 1.0 INTRODUCTION

This Underground Storage Tank Closure Assessment has been completed per the requirements outlined in Section 15.10 of the Rhode Island Department of Environmental Management (RIDEM) Underground Storage Tank (UST) Regulations. It has been completed for the United States Navy at their facility on Gould Island in Newport, Rhode Island. The site, which is currently vacant and undergoing demolition, is known as the U.S. Naval Underwater Ordnance Station (NUOS).

The closure procedure involved two phases. The first phase was the removal of one (1) 500 gallon UST used for the storage of gasoline. The second phase involved the removal of three (3) USTs, one (1) 5000 gallon diesel fuel and two (2) 3000 gallon lube oil USTs, from an underground concrete vault. Following the removal of the tanks from the vault, it was to be demolished and removed. The tanks within the vault were emptied and cleaned under a separate contract and was not witnessed by Triangle Environmental. The concrete vault which contained the tanks is considered an underground storage tank and therefore, the closure of this structure is governed under RIDEM UST Regulations.

SECTION 2.0 CLOSURE

2.1 Closure Application

Per Section 15.06 of the RIDEM UST Regulations, ALCO Environmental Services, Inc. submitted a Closure Application to the Department's Underground Storage Tank Section for the removal of one (1) 500 gallon UST used to store gasoline.

2.2 Closure

Closure proceedings at the NUOS commenced on August 17, 1994. At approximately 2:00 P.M. Mr. Dan Russell of the RIDEM UST Section, along with representatives of the U.S. Navy, ALCO Environmental, and Triangle Environmental were transported to Gould Island to witness the removal of the 500 gallon gasoline UST.

Representatives of ALCO Environmental Services, Inc. pumped the contents of the UST into seven (7) 55 gallon drums. Approximately 350 gallons of gasoline was pumped from the UST. Approximately 2 inches of product/sludge remained in the UST. Following the removal of the UST, the tank was cut and cleaned. All of the wastes generated during the cleaning of the tank were transported to Northland Environmental for disposal. A letter issued by Northland Environmental documenting receipt of this material is attached in Appendix C.

As the soil surrounding the tank was excavated, samples of the material were screened for Total Organic Vapor (TOV) concentrations by the jar headspace method using a Hnu Meter Model PI-1000 (PID). The soil in the excavation was screened and found to be free of organic vapors. There was no visual evidence of soil contamination. Groundwater was not encountered during the excavation of this tank. The depth of the excavated area was approximately five feet.

Following the removal of the UST, Mr. Russell was able to observe the condition of the tank. It showed only minor corrosion. No obvious holes or structural defects observed in the tank during its inspection. Based on the condition of the tank and field PID readings, Mr. Russell did not require laboratory analysis of the soils surrounding the tank. Mr. Russell issued the necessary paperwork to transport the UST (A copy of the RIDEM Closure Inspection Report is attached in Appendix B). As of the date of this report, a copy of the tank disposal receipt had not been received by Triangle Environmental. According to ALCO Environmental, the tank has been cut and cleaned and will be disposed of in the near future, along with debris from the demolition one or more structures on Gould Island.

Based on field TOV readings and visual observations of the condition of the tank and surrounding soil, it does not appear, at this time, that a significant threat to human health and safety exists, at this property, as a result of the 500 gallon gasoline UST which is the subject of this report.

Following the inspection of the 500 gallon gasoline UST, the concrete vault was inspected. As noted previously, the tanks had already been removed from the vault. The concrete floor of the vault did not show significant evidence of a release of petroleum product. Several small puddles were observed on the floor of the vault from which a slight petroleum sheen was visible.

Originally, it was the intention of the Navy to fill the vault in place. In keeping with this plan, a hole was cut in the 18 " concrete floor of the slab so that a sample of the underlying soil could be collected. Once the hole was complete in the floor of the vault, water began flowing into the hole. The groundwater table was determined to be approximately one foot below the surface of the concrete floor of the vault.

Following the inspection of the 500 gallon gasoline UST removal, the Navy had decided to demolish and remove the concrete walls and slab of the vault. A plan for sampling the soil and groundwater in the areas surrounding the vault was discussed with the RIDEM and Navy representatives. The purpose of this sampling was to provide data to confirm that a release of petroleum product had not occurred from either the vault or the steel tanks within the vault.

On August 19, 1994, representatives of ALCO Environmental Services and Triangle Environmental returned to the NUOS to conduct sampling of the soils surrounding the vault. It was the intention of Triangle Environmental to sample underneath the vault along its northerly, southerly, and westerly sides. Due to site constraints, composite soil samples were collected from the southerly and westerly sides only. These samples were analyzed in the laboratory for volatile organic compounds (VOCs, EPA Method 8240) and total lead.

On September 26, 1994, representatives of ALCO Environmental Services and Triangle Environmental returned to the NUOS to conduct further sampling of the vault area. On that date, an additional composite soil sample was collected from beneath the concrete vault which had been removed since the last sampling date (8/19/94). Also, a sample of the groundwater beneath the vault was collected.

Under a separate Navy contract prior to the 500 gallon UST Closure date, liquid (approximately 3000 gallons) which had accumulated inside the vault area was pumped from the vault into a nearby above ground storage tank (AST). Triangle Environmental was on site on September 26, 1994 to witness the liquid being pumped and to obtain two liquid samples during the first and last half hours of the carbon operation. Prior to allowing this liquid discharge onto the ground, it was pumped through a carbon filtration treatment system. Each sample was analyzed in the laboratory for VOCs (BTEX only, EPA Method 602). The results of all laboratory analysis are indicated in Table 1. The laboratory Certificates of Analysis are attached in Appendix D.

SECTION 3.0 SITE HYDROGEOLOGY

3.1 Soil Description

According to the United States Department of Agriculture's Soil Survey of Rhode Island, this area of Portsmouth is classified as Newport silt loam. This area consists of gently sloping, well drained soil on the side slopes of drumlins and glacial till plains in southeastern Rhode Island. The permeability of the surface layer and subsoil is moderate or moderately rapid. The permeability of the substratum is slow or very slow.

Typically, these soils are characterized by a surface layer, approximately 8 inches thick, of very dark brown silt loam. The subsoil is olive brown and olive silt loam 16 inches thick. The substratum is olive gray channery silt loam to a depth of 60 inches or more.

3.2 Groundwater

Groundwater was encountered at a depth of approximately nine feet below grade during the removal of the underground storage tank at the subject site.

3.3 Groundwater Classification

The groundwater classification maps for the subject property were reviewed at the RIDEM Groundwater Section. The groundwater at the project area is classified as GA. The GA designation states that the groundwater in this area may be suitable for public or private drinking water use without prior treatment.

SECTION 4.0 FINDINGS AND CONCLUSIONS

The facts obtained during the course of the closure procedures suggest that there has not been a release of petroleum product from any of the USTs which are the subject of this report. Despite the fact that no visual signs of contamination were observed during the tank closure, Triangle Environmental collected several soil samples from the area beneath the concrete vault. These samples were analyzed as indicated in Table 1.

The most significant levels of contamination encountered were present in the composite soil sample collected from directly below the concrete vault. This sample indicated levels of Total Petroleum Hydrocarbons (TPH) at 1530 ppm. The source of these elevated results is unclear at the present time. According to ALCO Environmental, Inc., based on the condition of the USTs which were removed on the subject site, it is not likely that a release occurred from a structural defect in any of the tanks. It is possible that residual oil from the top of the concrete slab may have been transported in stormwater runoff and through the sampling hole on the floor of the vault and into the underlying soils.

According to Mr. Dave Dorocz, five (5) 20,000 USTs containing petroleum product were filled-in-place along the northerly side of Building 33. Mr. Dorocz indicated that large amounts of free product were observed floating on the groundwater in the area surrounding these USTs. It is possible that the migration of this product could be a potential source of the elevated TPH levels encountered in the soil sample collected from below the concrete vault.

Based on past usage of the property, it is possible that other potential sources of petroleum contamination, USTs or otherwise, are present in proximity to Building 33. Based on the information gathered to date, it does not appear likely that a significant threat to human health and safety exists on the subject property as a result of the USTs which were removed from the site.

Triangle Environmental directed the excavation to be backfilled and recommends that no further action is required on the site in reference to the closure of the USTs which are the subject of this report.

SECTION 5.0 LIMITATIONS

Triangle Environmental has based its conclusions and recommendations on visual observations and field data obtained during the UST Closure. As such, our findings should not be considered scientific certainties, but as probabilities based on our professional knowledge and judgment pertaining to the relevance and importance of the limited data collected during our investigation.

All observations documented in this report were made under the conditions existing at the time of the UST Closure. Should changes from the existing conditions that warrant analysis occur in the future, they should be brought to the attention of Triangle Environmental for subsequent investigation and documentation. Future discoveries, after review by Triangle Environmental may merit modifications of conclusions stated in this report.

This report was prepared exclusively for the United States Navy and is for the sole use of the client and should not be represented, reproduced or disseminated without the prior written approval of Triangle Environmental. No warranties other than those expressed in the contract for this project are expressed or implied.

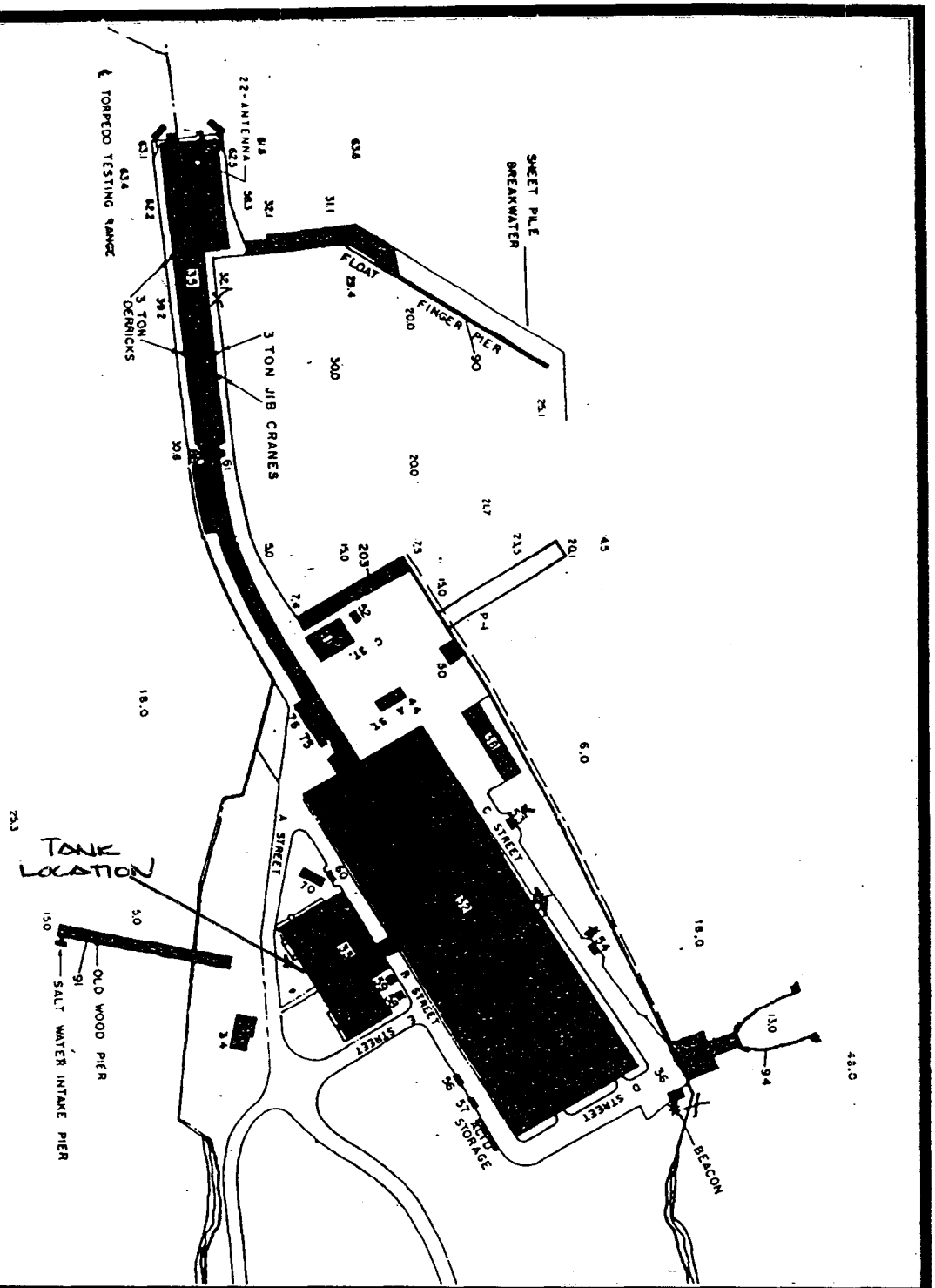
TRIANGLE ENVIRONMENTAL
145 Metro Center Blvd
Warwick, RI 02886

SCALE: N.T.S.
DRAWN BY: JFS
DATE: 9/26/94
REVISED:

NEW, Newport, RI

Soil Survey Map

NORTH

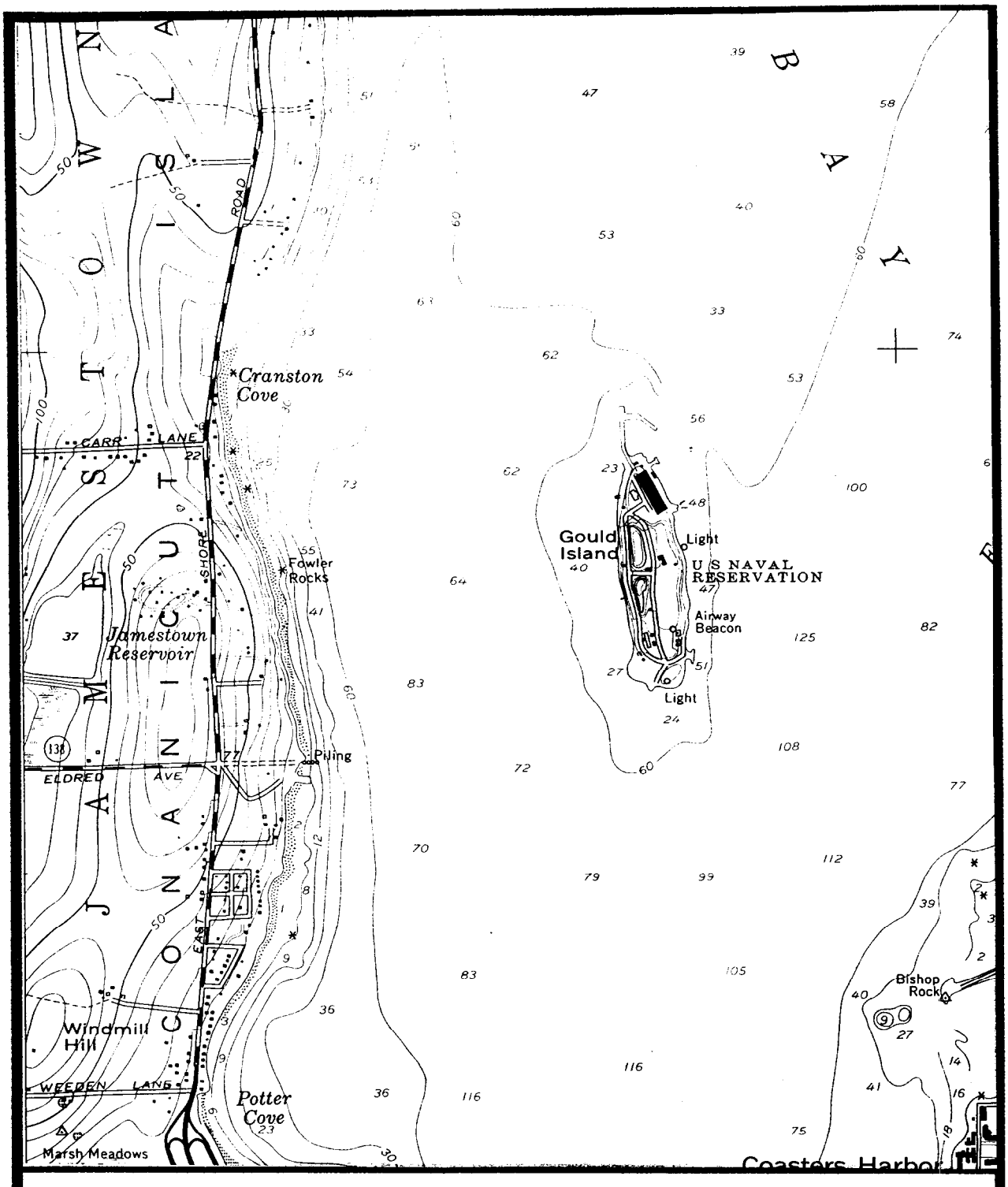


SITE PLAN

TRIANGLE ENVIRONMENTAL
175 Metro Center Blvd.
Warwick, R.I. 02886

SCALE: N.T.S.		DRAWN BY: JP3
DATE: 10/5/94		REVISED:
NETC, Newport, RI		

NORTH



TRIANGLE ENVIRONMENTAL

175 Metro Center Blvd.
Warwick, R.I. 02886

SCALE: 1"=100 FT		DRAWN BY: JP3
DATE: 10/5/94		REVISED:

USGS Topographical Map of the Jamestown, RI Quadrangle

NETC, Newport, RI

SITE LOCUS

NORTH

ALCO ENVIRONMENTAL SERVICES, INC.

Asbestos Removal & Disposal
Lead Abatement

May 9, 1994

Letter #25

Ensign James Maiocco
NAVFAC Navy Contracts
NETC, Building #1
Simonpietri Drive
Newport, RI 2841-1712

Re: Contract N62472-93-D-0811
Demolition and Debris Removal, Connector Building #35,
Gould Island, Tank Removal, Additional Work

Dear Ensign James Maiocco:

As per your request for tank removal, dated December 9, 1993, we are submitting a lump sum price for the following scope of work:

A. Three tanks are in a concrete vault adjacent to a building. It is Alco's understanding that the tanks have been emptied under a prior contract. Alco Environmental Services Inc., will perform the following:

1. Clear all brush from work area.
2. Dismantle and dispose of shed enclosure as asbestos containing material.
   *Note-Metal coating is indicative of wood frame connector sheeting
3. Excavate top soil down to concrete roof of vault and 3' below all concrete walls.
4. Pump ground water from bottom of concrete vault.
   *Note-Water shall be disposed of as non-contaminated. Ground water shall be pumped into the basement of the adjacent building. A carbon sock filter shall be attached to the end of the discharge hose.

   The last 1" of water shall remain in the vault and be disposed of as sludge waste.

400 George Washington Highway, Smithfield, Rhode Island 02917 (401) 232-1000 FAX (401) 232-7140

All sludge shall be containerized in D.O.T. approved containers, properly labeled and disposed as lead containing sludge, as per test results.

5. Dismantle and remove all piping in the vault.
6. Using an impact hammer on a rubber tired excavator, demolish concrete roof.
7. Remove three tanks and place above ground for the dismantle operation as per update of Site Safety and Health Plan.
   *Note-Proper venting, use of gas meter, dry ice and non sparking tools, etc.
8. Remove concrete walls, 3' below finish grades, using impact hammer. Prior to backfilling concrete vault the floor shall be exposed for inspection of sub-surface soil for contamination by D.E.M. and Government Personnel. Puncture concrete floor for drainage, placing broken concrete in vault.
9. Back fill with existing fill from island.
   a. There is a location approximately 200' from the tanks where there is a grade chance between two walkways. We will cut the brush and remove a uniform depth of soil for back fill at the tank's site.

B. The fourth tank is buried in the ground and has been tested. Alco will remove and place gasoline and sludge in D.O.T. approved containers for proper disposal as per test results. Once the tank is pumped Alco will perform the following:
   1. Purge tank with dry ice, use gas meter and open top of tank with non-sparking tools as per Site Safety and Health Plan update.
   2. Excavate tank and place above ground.
   3. Request inspection by State Department of Environmental Management and Government Personnel for inspection of sub-surface soil for contamination prior to backfill
   4. Dismantle tank.
   5. Back fill tank excavation.

ALCO ENVIRONMENTAL SERVICES, INC.

Asbestos Removal & Disposal
Lead Abatement

Tank soils shall be tested using an Intrinsic Model 580S Portable Organic Vapor Meter, manufactured by Thermo Environmental Instruments.

Gas vapors shall be tested using a Safe-T-Mate Gas Monitor 400 by GASTECH.

Price includes permitting process to D.E.M., and all enclosure assessment reports.

Alco shall notify D.E.M. and Government Environmental Personnel for all inspections. In addition Alco shall submit to D.E.M. requirements of the Emergency Response Vessel.

Site, Safety and Health plan shall be amended for tank removal procedures.

Price does not include testing or removal of contaminated soil if encountered during excavation from possible deteriorated leaking tanks.

Please note that Alco Environmental Services, Inc. personnel have 40 hours Hazardous Waste Training for tank removal and that we have removed tanks for the Government under the Department for Defense, Environmental Restoration Program.

Respectfully,

Alfred Costantino
President

400 George Washington Highway, Smithfield, Rhode Island 02917 **(401) 232-1000 FAX (401) 232-7140**

5, 7.5 BV

R.I. DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
Division of Water Resources

APPLICATION(S) FEES FORM

Please complete the information below and **submit this completed form and your check (payable to "R.I. General Treasurer") for the appropriate fee directly to:**

R.I. Department of Environmental Management
Office of Business Affairs
22 Hayes Street
Providence, R.I. 02908

***** FEES ARE NOT REFUNDABLE *****

APPLICANT'S NAME: ALCO ENVIRONMENTAL SERVICES

OWNER'S NAME: U.S. NAVY

SITE LOCATION: GOULD ISLAND

APPLICATION TYPE (permit, Order of Approval): ORDER OF APPROVAL

NOTE: The application and all accompanying documents should be submitted to the appropriate section of the Division of Water Resources, 291 Promenade Street, Providence, RI 02908-5767. Application review will be initiated only upon receipt of the complete application fee.

FOR OFFICE USE ONLY

OBA Receipt Date:_____

Fee Amount Received:_____

Processor Initials:_____

DWR Telephone Number (401) 277-3961
DWR Telefax Number (401) 521-4230
DEM Telecommunications for the Deaf (401) 277-6800

ALCO ENVIRONMENTAL SERVICES, INC
SMITHFIELD, RHODE ISLAND 02917

0491

CHECK DATE: 06/02/94 CHECK NUMBER: 491
AMOUNT: *******$347.00
PAID TO: R.I. GENERAL TREASURER
FOR: APPLICATION FEE

ACCOUNT:	AMOUNT:	ACCOUNT:	AMOUNT:
5850	347.00		

ALCO ENVIRONMENTAL SERVICES, INC.

400 GEORGE WASHINGTON HIGHWAY
SMITHFIELD, RHODE ISLAND 02917
(401) 232-1000

Fleet Bank
57-1/115

0491
NUMBER
491

'AY: THREE HUNDRED FORTY-SEVEN DOLLARS

DATE: 06/02/94

AMOUNT: *******$347.00

ALCO ENVIRONMENTAL SERVICES, INC.

TO THE ORDER OF: R.I. GENERAL TREASURER

Alfred Costantino
AUTHORIZED SIGNATURE

Division of Water Resources/Site-Gould Island

⑈000491⑈ ⑆011500010⑆93650 71216⑈

PERMANENT CLOSURE APPLICATION FOR UNDERGROUND STORAGE FACILITIES

A: Date of application: 1/26/94

B: UST Facility I.D.: _____

(Note: If the tank(s) listed below are not registered with DEM, a registration fee of $50.00 per tank must be submitted along with this application.)

C: Proposed date of tank closure: 3/21/94
(Reminder: This date must be confirmed by phone with DEM at least 3 business days in advance of the closure.)

D: Facility Name: Bldg 33 Gould Island Power Plant
Street Address: NETC, PWD, Bldg 1, 1 Simonpietri Dr
City/Town: Newport RI 02841

E: Tank Owner: NETC
Street Address: _____
City/Town/State: _____
Contact Person: _____
Telephone Number: _____

F: Property Owner: same
Street Address: _____
City/Town/State: _____

G: FIRM/CONTRACTOR TO PERFORM TANK CLOSURE WORK

Name: ALCO Environmental Services
Address: 400 Geo. Washington Highway Smithfield RI
Contact Person: Al Constatino
Phone Number: 232-1000

H: FIRM/CONSULTANT TO PERFORM TANK CLOSURE ASSESSMENT (check one)

x Professional Engineer ___ Certified Professional Geologist

____ Other; A statement of qualifications must be submitted with this application.

Name: Triangle Environmental
Address: 175 Metro Center Blvd Warwick RI
Contact Person: Michael Del Rossi
Phone Number: 732-5600

Post-it™ brand fax transmittal memo 7671 | # of pages ▸ 8

To AL	From GARY
Co. ALCO	Co. NAVY
Dept.	Phone # 841-1564

I: DESCRIPTION OF TANKS TO BE CLOSED

TANK NO.	AGE	DATE LAST USED	VOLUME	CONSTRUCTION MATERIAL	STORED MATERIAL
84	51	Unknown	5000	steel	diesel
85	51	" "	3000	" "	lube oil
86	51	" "	3000	" "	" "
87	51	" "	3000	" "	Unknown

(If there are more tanks being closed please list on an attachment)

J: **FEES:**
Closure: NUMBER OF TANKS 4 X $75.00 PER TANK = 300.00
Registration: NUMBER OF TANKS _____ X $50.00 PER TANK = _____

K. Have these tanks ever held non-petroleum, hazardous materials?

_____YES __x__NO

If yes, then list materials:_____

L. After the closure(s) have been completed on the aforementioned tanks, will there be any underground storage tanks remaining in existence at this facility? _____YES __x__NO

Will any new UST(s) be installed on the site?
_____YES __x__NO

CLOSURE PROCEDURE (select one):

1._____ Precision test and fill with inert material (Section 15.12).

Material used for filling tank:_____

NOTE: APPROVED PRECISION TEST METHOD MUST BE CONDUCTED BY A LICENSED TESTER AND RESULTS MUST BE SUBMITTED TO DEM PRIOR TO FILLING THE TANK IN PLACE.

2. x Excavate, clean, and dispose (Section 15.11)

a. Specify method of tank cleaning: Purge tank with non-sparking tools. Wipe inside of tank with non chemical cleaning agents.

b. Specify method for disposing of tank sludges or wastes generated by cleaning process. List name of waste hauler. Pump out tank contents into 55 gallon drums. Lincoln Environmental

c. Specify whether cleaning will take place...
onsite x off-site

i. If offsite, indicate location of final tank cleaning:
Firm/Address: _____

ii. Indicate firm which will transport tank(s) to site indicated in c(i) above:
Firm/Address: _____

NOTE: FIRMS TRANSPORTING TANK SLUDGE AND WASTE OR TANKS WHICH REQUIRE FURTHER CLEANING MUST BE PERMITTED BY DEM (DIVISION OF AIR AND HAZARDOUS MATERIALS) AS HAZARDOUS WASTE TRANSPORTERS.

d. Will tank(s) be ...

rendered unfit for use and disposed of x or reused ____?

NOTE: REUSE OF A TANK IN THE GROUND REQUIRES COMPLIANCE WITH SECTION 12.03 OF STATE UST REGULATIONS.

Location for final tank(s) disposal:

State Line Scrap
PO Box 3032
S. Attleboro MA 02703
508-399-8300

If tank is to be reused, specify:

Proposed use: _____

Name/address of intended user: _____

CERTIFICATION BY TANK OWNER

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

NAME OF OWNER (please print): W.H. Rigby, Capt, CEC, USN
SIGNATURE: [signature]
TITLE: Director for Public Works
ADDRESS: NETC, PWD, Bldg 1, 1 Simonpietri Dr Newport RI 02841
TELEPHONE: 841-3841

NOTIFICATION OF LOCAL FIRE DEPARTMENT

The authorized signature of the local fire department below indicates that the local fire officials have been notified that you are planning to close an underground storage tank at the above location. **YOU MUST ALSO NOTIFY THE LOCAL FIRE DEPARTMENT OF THE EXACT CLOSURE DATE AFTER YOU HAVE CONFIRMED THIS DATE WITH DEM.**

[signature]
Authorized Local Fire Department Representative

1/27/94
Date

NETC FIRE
Name Of Local Fire Department

841-2225
Telephone Number

This signature does not serve as notice to the town, does not guarantee town approval, and does not relieve you of your obligations to other applicable town officials. Any violation, deficiency or requirement which may have been overlooked is also subject to correction under the provision of any applicable code.

DEM
DIVISION OF BUSINESS AFFAIRS USE ONLY

A. NO. OF TANKS _____ X 75.00 = _____
B. NO. OF TANKS _____ X 50.00 = _____
TOTAL FEE = _____ (A) + _____ (B) = _____

FULL PAYMENT RECEIVED ON _____ (DATE)

SUPPLEMENT TO THE PERMANENT CLOSURE APPLICATION FOR USTs

This supplement must accompany all Permanent Closure Applications for UST (as revised 2/93 and earlier) received by the Rhode Island Department of Environmental Management on or after August 25, 1993.

FACILITY NAME: Bldg 33 Gould Island

FACILITY ADDRESS: Bldg 33 Gould Island
NETC, PWD, Bldg 1, 1 Simonpietri Dr
Newport RI 02841

PROPOSED CLOSURE DATE: 3/21/94

FACILITY REGISTRATION #: _____

*Please note that the UST registration fee has increased to $50.00 per tank. Payment of all unregistered tanks must be submitted with this application.

1. Has a check in the total amount of $50.00 per unregistered tank been submitted with this application? N/A

2. In the space provided below, please draw an informal sketch of the location of each UST to be permanently closed. Number each tank to coincide with the tank numbers on your UST registration form.

3. Describe the method to be used to empty the tank(s) prior to excavation. Use explosion proof pump. Last few inches of liquid, use hand pump.

4. Describe the method to be used to remove the tank from excavation. Excavate around tank, hoist and place tank on 6 mil poly with vented plug at highest point.

5. Describe the method(s) to be used to properly and safely vent the tank(s) and properly make openings in the tank(s). dry ice- 1.5 pounds per 100 gallons of tank size. Vented with eductor (venturi) or a diffused air blower.

*NOTE: Appropriate venting must be carried out both before the cutting of any tank and before off-site transport of any tank which has not been completely cleaned per Rule 15.11(c) of the UST Regs.

6. Describe the instruments used to verify that the tank(s) have been properly vented. LEL/Combustible Gas Meter, Photoionization detector.

7. Describe how any residues remaining in the tank(s) will be managed. Tank will be opened using non-sparking tools and wiped down with a non-chemical cleaning agent. Rags and residue will be disposed as contaminated oily waste.

STATE OF RHODE ISLAND
UNDERGROUND STORAGE TANK
REGISTRATION FORM
FOR EXISTING TANKS, REPLACEMENT TANKS, AND INSTALLATION OF NEW TANKS

DEM USE ONLY
Registration #
Town Code
Sub Code
Data Entry Initials

MARK ONLY ONE ITEM	☐ New Facility	☑ Existing Facility

I. FACILITY INFORMATION

Name: Bldg 33 Gould Island Power Plant			
Mailing Address: NETC PWD Bldg 1, 1 Simonpietri Dr			
City: Newport	State: RI	Zip: 02841	Phone: (401) 841-3735
Contact Person: Dave Dorocz	Title: Environmental Engineer		
Assessor's Plat:	Assessor's Lot:		

II. FACILITY OWNER INFORMATION

Name: W.H. Rigby, Capt, CEC, USN, Director for Public Works			
Mailing Address: NETC PWD Bldg 1			
City: Newport	State: RI	Zip: 02841	Phone: (401) 841-3841
Contact Person: Dave Dorocz	Title: Environmetal Engineer		

Ownership (please check one):

☐ Corporate/Ltd. Partnership ☐ Municipal ☐ State ☐ Individual/Partnership

☑ Federal (GSA Facility ID# _____)

☐ Other (please specify): _____ Date Ownership Acquired: _____

III. OPERATOR INFORMATION (☒ Same as Facility Owner)

Name:			
Mailing Address:			
City:	State:	Zip:	Phone: ( )
Contact Person:	Title:		
Date Operation Commenced:			

VII. TANK & PIPING INFORMATION (con't.)

TANK	Tank No. 1	Tank No. 2	Tank No. 3	Tank No. 4	Tank No. 5
Monitoring & Leak Detection System:					
line leak detection (piping)	☐	☐	☐	☐	☐
sump monitoring (piping)	☐	☐	☐	☐	☐
continuous in-tank gauging system	☐	☐	☐	☐	☐
continuous interstitial space tank monitoring	☐	☐	☐	☐	☐
groundwater monitoring wells	☐	☐	☐	☐	☐
precision test (tank & piping) (provide copies)	☐	☐	☐	☐	☐
other (specify) _____					
Spill & Overfill Prevention Equipment:					
high-level alarm	☐	☐	☐	☐	☐
flow restriction float vent valve	☐	☐	☐	☐	☐
automatic shut-off valve	☐	☐	☐	☐	☐
spill containment basin	☐	☐	☐	☐	☐
shear valve/impact valve (pressurized piping)	☐	☐	☐	☐	☐
check valve (suction piping)	☑	☑	☑	☐	☐
other (specify) CONTAINED IN CONRETE VAULT					
Substance Stored or to be Stored (mark only one box):					
(02) heating oil (No. 2)	☐	☐	☐	☐	☐
(2C) heating oil (No. 2) - consumed on site	☐	☐	☐	☐	☐
(04) heating oil (No. 4)	☐	☐	☐	☐	☐
(4C) heating oil (No. 4) - consumed on site	☐	☐	☐	☐	☐
(05) heating oil (No. 5)	☐	☐	☐	☐	☐
(5C) heating oil (No. 5) - consumed on site	☐	☐	☐	☐	☐
(06) heating oil (No. 6)	☐	☐	☐	☐	☐
(6C) heating oil (No. 6) - consumed on site	☐	☐	☐	☐	☐
(1D) light diesel fuel (No. 1-D)	☐	☐	☐	☐	☐
(2D) medium diesel fuel (No. 2-D)	☑	☐	☐	☐	☐
(01) number 1 kerosene	☐	☐	☐	☐	☐
(UG) regular/midgrade unleaded gasoline	☐	☐	☐	☐	☐
(SU) super unleaded gasoline	☐	☐	☐	☐	☐
(GH) gasohol (alcohol-gasoline blend)	☐	☐	☐	☐	☐
(DS) diesel	☐	☐	☐	☐	☐
(AG) aviation gasoline	☐	☐	☐	☐	☐
(JA) jet A	☐	☐	☐	☐	☐
(WO) waste oil	☐	☐	☐	☐	☐
(MO) motor oil	☐	☐	☐	☐	☐
(MX) mixture (specify) _____					
hazardous material	☐	☐	☐	☐	☐
(specify) _____					
CERCLA number: _____					
CAS number: _____					
(98) empty/no contents	☐	☐	☐	☐	☐
(99) unknown	☐	☑	☑	☑ (UNKNOWN)	☐
other (specify) Lube Oil					

VIII. CERTIFICATION

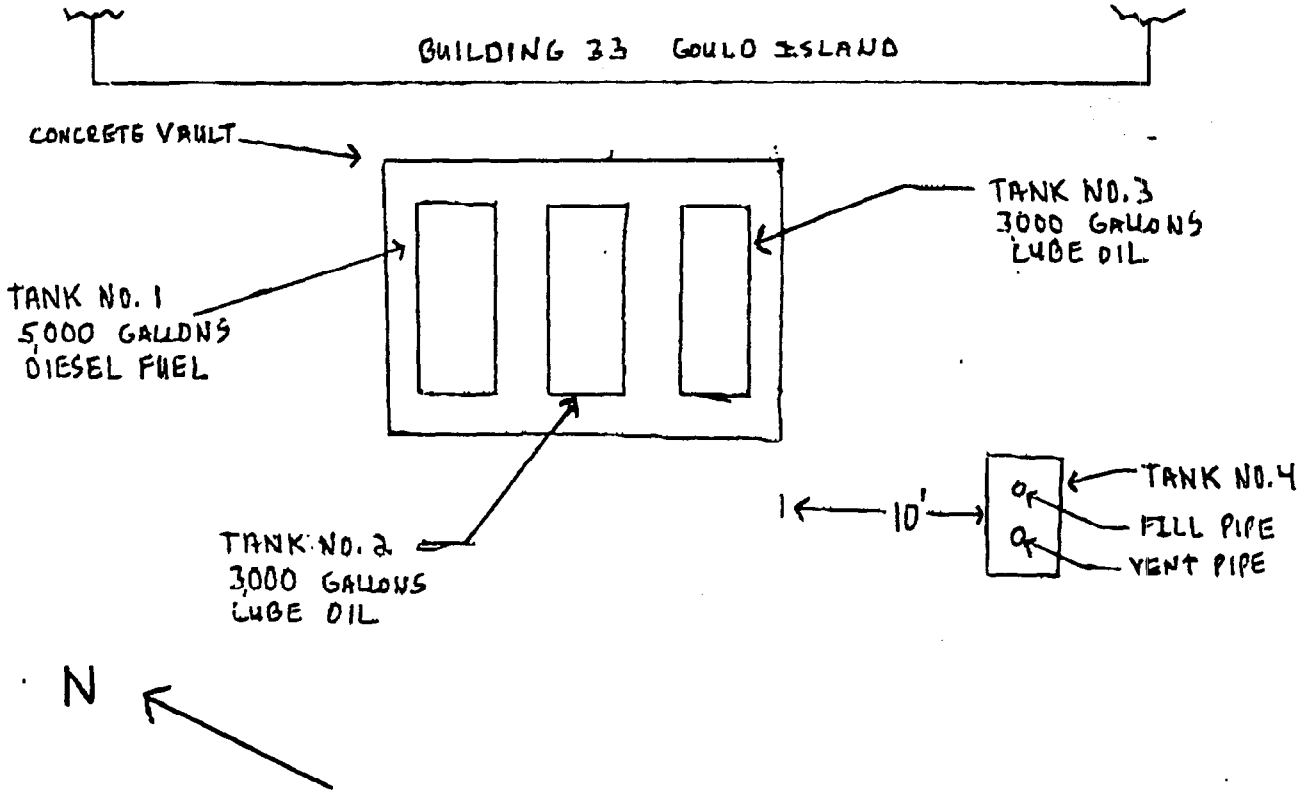
I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage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

Authorized Signature	Date	W.H. Rigby, Capt, CEC, USN Director for Public Works Print Name and Title

IX. ADDITIONAL INFORMATION

EXISTING FACILITY

If a detailed plan is not available, this space is provided for a site plan drawing of all equipment locations for facilities already in existence (see requirements in Section 8.04.B.3 of regulations).



NEW FACILITY

If a new facility, a set of detailed engineering plans certified by a Registered Professional Engineer and project specifications including operation and maintenance requirements is required with this application (see Section 8.04.A.3 of regulations). This form cannot be used for new facilities.

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
UNDERGROUND STORAGE TANK SECTION
291 Promenade Street
Providence, Rhode Island 02908
(401) 277-2234

FACILITY ID_____

CLOSURE INSPECTION REPORT FOR UNDERGROUND STORAGE FACILITIES

On the 17th of August 1994 (date) I, DANIEL RUSSELL (inspector)

witnessed the permanent closure of the following underground storage tanks owned/operated by

Gould Island, Bldg. 33 (Power Plant) (owner/operator)

and located at

NETC, Newport (address)

TANK ID	VOLUME	STORED MATERIAL	DATE LAST USED	TANK STATUS (F=Filled R=Removed)
1	5,000 Gal	Diesel	in concrete vault	R
2	3,000 gal	Lube Oil		R
3	3,000 gal	Lube Oil		R
4	500 gal	Gasoline		R

Signature: Daniel Russell

Title: Environ. Sci,
Underground Storage Tank Section
Department of Environmental Management

A closure assessment must be submitted to the Division of Waste Management, Underground Storage Tank Section within 30 working days.

NOTE: This is not a document to approve or certify that tanks are safe or clean to transport.

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATION

Department of Environmental Management
DIVISION OF WATER RESOURCES
291 Promenade Street
Providence, R.I. 02908 - 5767
(401) 277-6519

CERTIFIED MAIL

July 20, 1994

Mr. Albert Costantino
Alco Environmental Services
400 George Washington Highway
Smithfield, RI 02917

Dear Mr. Costantino:

Enclosed please find Order of Approval No. RIO-220 permitting the United States Navy to discharge treated effluent associated with the dewatering and removal of a concrete vault, formerly used to house fuel storage tanks.

If you have any questions feel free to contact Christopher Feeney of the State Permits staff at (401) 277-6519.

Sincerely,

Angelo S. Liberti, P.E.
Supervising Sanitary Engineer
Permits Section
Division of Water Resources
Department of Environmental Management

ASL/CF/alm

Enclosure

cc: Leanne DeCosta, DEM, Permits
Eric Beck, DEM, UST

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

In the matter of the United State Navy's Approval to Discharge treated effluent associated with the dewatering and removal of a concrete vault, formerly used to house fuel storage tanks.

Order of Approval
RIO - 220

In the above entitled matter wherein Alco Environmental, submitted on behalf of the United States Navy, plans to discharge treated effluent associated with the dewatering and removal of a concrete vault, formerly used to house fuel storage tanks.

Upon consideration thereof, DEM hereby issues the following Order of Approval:

1) The applicant may discharge water from a groundwater remediation/treatment system into the Narragansett Bay, provided the conditions set forth in Attachment A are met.

2) The applicant shall notify the Division of Water Resources at least twenty-four (24) hours prior to commencement of the discharge.

3) This order shall be subject to modification or revocation in accordance with the law.

ENTERED as the Order of the Department of Environmental Management in accordance with RIPDES Rule 9(c) this 20 day of July 1994.

For the Director

Alicia M. Good, P.E., Chief
Division of Water Resources
Department of Environmental Management

ATTACHMENT A.

I. The period of discharge shall not exceed twenty-four (24) hours.

II. All groundwater pumped at the site shall be treated using the filtration system, which employs a five (5) micron particulate filter and four (4) GAC filters in series, described in the plans submitted to the Division of Water Resources on May 31, 1994.

III. The discharge shall not contain a visible oil sheen, foam or floating solids at any time.

IV. For the entire discharge period the applicant shall:

1. Monitor flow daily, and submit a daily flow log with the monitoring results. The flow log shall include the rate and duration of flow including the time(s) of day when the flow commences and ceases. This information will be used to coordinate sampling and insure that one sample is taken every four (4) hours. The flow rate shall not exceed twenty (20) gallons per minute.

2. Sample the discharge every four (4) hours for aromatics (benzene, toluene, ethylbenzene, and xylenes) and total petroleum hydrocarbon (TPH). Monitoring for aromatics shall begin at the commencement of discharge and shall be performed using a gas chromatograph.

   Discharge shall cease if any of the aromatics listed above are found in the effluent above the detection limit (1.0 ppb for benzene, toluene, and ethylbenzene, 3.0 ppb for total xylenes and 1 ppm for TPH). The discharge may recommence once the activated carbon filters have been replaced.

3. All monitoring results (required as well as any additional data collected) must be received by the Rhode Island Department of Environmental Management, Division of Water Resources, within fifteen (15) days after the discharge has been terminated.

V. This Order of Approval does not exempt the applicant from any additional requirements of any other State or local agency.

NORTHLAND
ENVIRONMENTAL, INC.

November 16, 1994

Alco Environmental
400 George Washington Highway
Smithfield, R.I. 02917

Attention: Mr. Ron Bowser

RE: U. S. Navy - Gould Island

Dear Ron:

This will confirm our recent conversation with Donald Garant.

The following is the information you requested:

DATE SHIPPED	MANIFEST #	# OF UNITS	ULTIMATE DISPOSAL FACILITY
10/07/94	RIS0002100	7 DRUMS	MATERIAL IN PROCESS

A Certificate of Disposal will be sent to Alco Environmental as soon as the waste material is processed. If you have any other questions, please feel free to contact me.

Very truly yours,

Cheryl A Hartley

Cheryl A. Hartley
Customer Service Representative

CAH:lac

275 Allens Avenue, Providence, RI 02905-5003
Tel.: (401) 781-6340 Fax: (401) 781-9710

R.I. Analytical

Specialists in Environmental Services

CERTIFICATE OF ANALYSIS

Triangle Environmental
Attn: Mr. Gary Lamond
175 Metro Center Blvd., Suite 7
Warwick, RI 02886

DATE RECEIVED: 09/26/94
DATE REPORTED: 10/17/94
P.O. #:
INVOICE #: G5721

SAMPLE DESCRIPTION: One (1) soil sample and three (3) groundwater samples from Alco, Gould Island

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Subject samples have been analyzed by our laboratory with the attached results.

References: Test Methods for Evaluating Solid Waste, Physical/ Chemical Methods, U.S. EPA, SW-846, July 1982, second edition. Revised December 1987

Guidelines Establishing Testing Procedures For The Analysis of Pollutants, 40CFR, Part 136, July 1986.

If you have any questions regarding this work, or if we may be of further assistance, please contact us.

Approved by:

Michael S. Rose
Laboratory Manager

James E. Mich
Vice President

tri:kah

CERTIFICATE OF ANALYSIS

Triangle Environmental
October 17, 1994
G5721

- SOIL -

SAMPLE ID	TOTAL PETROLEUM HYDROCARBONS
# 1 - Soil beneath concrete slab (composite of 2 jars)	1,530 mg/kg*

*** Calculated on dry weight basis**

- WATER -

PARAMETER	SAMPLE #2	SAMPLE #3	SAMPLE #4
Volatile Organic Compounds (Method #602): (µg/l)			
benzene	<1	<1	<1
toluene	<1	<1	<1
ethylbenzene	<1	<1	<1
xylenes	<1	<1	<1

SAMPLE ID:
#2 - Water in tank, first 1/2 hour of carbon operation
#3 - Water in tank, last 1/2 hour of carbon operation
#4 - Water under slab

R.I. ANALYTICAL LABORATORIES, INC.

R.I. Analytical

Specialists in Environmental Services

CERTIFICATE OF ANALYSIS

Triangle Environmental
Attn: Mr. Gary Lamond
175 Metro Center Blvd., Suite 7
Warwick, RI 02886

DATE RECEIVED: 08/22/94
DATE REPORTED: 10/19/94
P.O. #:
INVOICE #: G5147

SAMPLE DESCRIPTION: Two (2) soil samples from Gould Island labelled side concrete vault

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Subject sample has been analyzed by our laboratory with the following results:

PARAMETER	AREA #1	AREA #2
Volatile Organic Compounds (method #8240)	ND	ND
Total Lead	10.2*	7.90*

Results reported in mg/kg

* Calculated on a dry weight basis

Note: A list of volatile organic compounds tested for and their detection limits is attached.

References: Test Methods for Evaluating Solid Waste, Physical/ Chemical Methods, U.S. EPA, SW-846, July 1982, second edition. Revised December 1987

If you have any questions regarding this work, or if we may be of further assistance, please contact us.

Approved by:

Michael S. Rose
Laboratory Manager

James E. Mich
Vice President

tri:kah

CERTIFICATE OF ANALYSIS

Triangle Environmental
October 19, 1994
Invoice # G5147

Volatile Organic Compounds
Method #8240

chloromethane
bromomethane
vinyl chloride
dichlorodifluoromethane
chloroethane
methylene chloride
trichlorofluoromethane
1,1-dichloroethylene
1,1-dichloroethane
trans-1,2-dichloroethylene
chloroform
1,2-dichloroethane
1,1,1-trichloroethane
carbon tetrachloride
bromodichloromethane
1,2-dichloropropane
cis-1,3-dichloropropylene
trichloroethylene
trans-1,3-dichloropropylene
1,1,2-trichloroethane
dibromochloromethane
bromoform
tetrachloroethylene
1,1,2,2-tetrachloroethane
chlorobenzene
2-chloroethyl vinyl ether
dichlorobenzenes
benzene
toluene
ethylbenzene
xylenes
acetone*
carbon disulfide**
2-butanone*
vinyl acetate***
4-methyl-2-pentanone***
2-hexanone***
styrene

Limit of Detection:	0.2 mg/kg
*Limit of Detection:	1.0 "
**Limit of Detection:	0.5 "
***Limit of Detection:	5.0 "

500 GALLON GASOLINE UST

CONCRETE VAULT