

**US ARMY
FORT MONMOUTH NJ**

**DIRECTORATE OF
ENGINEERING AND HOUSING
ENVIRONMENTAL OFFICE**

**UNDERGROUND STORAGE TANK
CLOSURE PLAN**

**BUILDING 166
NJDEPE UST NO.0090010 - 17**

PREPARED BY

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**ENVIRONMENTAL PROTECTION SPECIALIST
NJDEPE UST SUBSURFACE CERTIFICATION # 002056**

MAY 25, 1994

U.S. Army
DEH Bldg. 167
SELFM-PW-EV
Fort Monmouth, NJ 07703

Date: 25 MAY 1994
Building No.: 166
NJDEPE UST Reg. No.: 0090010 - 17

**UNDERGROUND STORAGE TANK (UST)
DECOMMISSIONING / CLOSURE PLAN**

A. General Requirements:

All activities associated with the decommissioning of any underground storage tank (UST) shall comply with all applicable Federal, State and Local laws and ordinances. These laws include but are not limited to: NJAC 7:14B et seq., 5:23 et seq. and OSHA 1910.146, 1910.120. All permits including but not limited to this document, the NJDEP Closure Plan Approval Package, etc..., shall be posted on site for inspection. The Contractor conducting the decommissioning activities shall be registered and certified by the NJDEP for performing said activities.

B. Safety and Health:

Before, during, and after all activities, the work site shall be made free of all hazards which may pose a threat to the health and safety of all personnel who are involved with, or are affected by, the decommissioning of the UST. All areas which pose, or may be suspected of posing, a vapor hazard shall be monitored by a qualified individual utilizing approved equipment. This individual will ascertain if the area is properly vented to render the area safe, as defined by OSHA.

C. UST Excavation:

1. All underground obstructions (utilities,... etc.) shall be marked out by the contractor performing the excavation.
2. All activities shall be carried out with the greatest regard to safety and health and the safeguarding of the environment.
3. All excavated soils will be evaluated as to the possibility of contamination. Soils suspected to be contaminated with product shall be staged on poly-sheeting separate from soils not suspected to be contaminated (see Section E - Excavated Soils Management).
4. Surface materials (ie. asphalt, concrete, etc...) shall be excavated and staged separate from all soils.

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5. Soil will be excavated to expose the UST and associated piping. The piping shall not be removed/disturbed until all free product is drained into the UST. The UST will be rendered vapor free by purging or addition of dry ice prior to any cutting or access. After the removal of the associated piping, a manway will be made in the UST to allow for the proper cleaning of the UST. The UST will be completely emptied of all liquids prior to removal of the UST from the ground. All of the openings in the tank will be plugged except for one vent hole.

6. After the UST is removed from the ground, it will be staged on poly-sheeting and examined for corrosion holes. The presence or absence of corrosion holes will be documented by the Sub-Surface Evaluator. If corrosion holes are observed, or if upon inspection of the excavation site evidence of a discharge to the environment exists, the NJDEPE hotline shall be notified at (609) 292-7172.

7. In the event of a discharge to the environment, additional soils will be excavated as needed. Site assessment activities under the direct supervision of the Sub-Surface Evaluator will determine to what extent the contractor will excavate.

8. After completion of the Site Assessment activities, the excavation will be backfilled to grade with noncontaminated soils from the site and additional certified clean fill provided by the contractor.

D. UST Transport/Disposal:

1. The tank will be transported and disposed/recycled in compliance with all applicable regulations and laws.
2. The contractor shall label the tank with the following information:
 - a. site of origin
 - b. generator/contact person
 - c. NJDEPE UST ID number
 - d. product previously stored
 - e. name of transporter/contract person
 - f. destination site/contact person
 - g. other information as required

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3. The contractor shall provide Fort Monmouth with sufficient documentation certifying that transport/disposal (recycling) of the tank was completed according to all applicable Federal and State regulations.

E. Excavated Soils Management:

1. All excavated soils suspected to be contaminated will be transported, by the contractor, to a designated staging area within Fort Monmouth. The designated area will contain the soils and direct all stormwater runoff away from any contact with the soil.
2. All soils stored in the designated staging areas will be maintained in piles no larger than 100 cubic yards each. Each pile will be lined and covered with poly-sheeting and weighted to ensure proper containment.
3. Each soil pile will be sampled and analyzed for waste classification as outlined in the NJDEPE document titled "Management of Excavated Soils" dated August 17, 1990.
4. All soils categorized as Hazardous waste or nonhazardous waste will be managed as such, in accordance with N.J.A.C. 7:26-1 et seq..
5. All soils that contain levels of contaminants below the Category 3 soil limits will be used in accordance with Federal and State requirements.

F. Changes/Authorizations:

All deviations in activities related to the closure of a UST as outlined in this document shall require prior authorization from the NJDEPE-DWR-BUST.

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UNDERGROUND STORAGE TANK (UST) SITE ASSESSMENT PLAN

General:

This site specific assessment plan will be managed and carried out by U.S. Army DEH and Serv-Air Inc. personnel. All analyses will be performed and reported by NJDEPE certified testing laboratories. All sampling will be performed under the direct supervision of a NJDEPE Certified Sub-Surface Evaluator and according to the methods described in the 1992 NJDEP Field Sampling Procedures Manual. All records of the Site Assessment will be maintained by DEH and submitted to the NJDEPE-DWR-Bust in accordance with NJAC 7:14B-9.2 and 9.3.

PHASE I UST DECOMMISSIONING

A. Initial Soil Excavation:

1. Soil will be excavated from the UST site and screened utilizing a Photo Ionization Detector (PID) and/or a Flame Ionization Detector (FID).
2. All soils suspected to be contaminated will be treated in accordance with the UST Decommissioning Plan.

B. Continued Excavation:

1. Excavation of suspect contaminated soil will continue until one of the following situations is encountered:
 - a. groundwater
 - b. excavated soils no longer exhibit characteristics of contamination determined in the field by the Sub-Surface Evaluator
 - c. excavation equipment can no longer remove soils due to the depth of the excavation or other restrictive cause.

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**PHASE II
Site Survey**

A. Vapor Screening:

1. An individual under the direct supervision of a NJDEPE Sub-Surface Evaluator and trained in the operation of a FID and/or PID shall evaluate the sides and pit bottom of the excavation.
2. All observed instrument readings will be documented and included in the Site Assessment Survey report. This documentation will include all factory and daily calibrations of the instrument.

**PHASE III
Site Sampling**

A. Soil samples will be collected from the UST excavation and analyzed according to the following schedule:

PRODUCT	SIZE (gal.)	# TPHC SAMPLES	VOA+15 (if TPHC >10000)
#2 HEATING OIL	4000	8	8
FIELD BLANKS		1	1
DUPLICATE SAMPLES		1	1
TOTAL # SAMPLES		10	10

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B. Soil samples will be collected from the Pipe excavation at the same time as UST pit sampling and analyzed according to the following schedule:

PRODUCT	LENGTH OF PIPING	# TPHC SAMPLES	VOA+15 (if TPHC >10000)
#2 HEATING OIL	15 FEET	1	1
FIELD BLANKS		0	0
DUPLICATE SAMPLES		0	0
TOTAL # SAMPLES		1	1

C. All TPHC samples will be taken in the native soil below the bedding material. The sample locations should be along the mid-lines of the tank outline except for at least two of the samples which should be taken within one foot of each of the two highest field survey readings. All of the soil samples should be discrete samples taken within a 6" vertical interval. All samples will be collected by utilizing laboratory decontaminated stainless steel trowels dedicated to each sample location. All VOA+15 samples will be taken within 24 hours of UST excavation at a depth of 0-6" with the use of a laboratory decontaminated stainless steel core sampler. Each VOA+15 sample will be screened with an FID and/or PID and recorded immediately after collection.

D. The excavations of USTs containing #2 Fuel Oil will remain open until laboratory results determine all TPHC samples are less than 10000 ppm. If levels greater than 10000 ppm are reported, further excavation and resampling may be requested by the Sub-Surface Evaluator for those contaminated areas. If further excavation is not possible, additional VOA+15 analyses on 25% of the TPHC samples with the highest results will be performed and the excavation will be filled to grade with certified clean fill.

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**UNDERGROUND STORAGE TANK REMOVAL
 IMPLEMENTATION SCHEDULE**

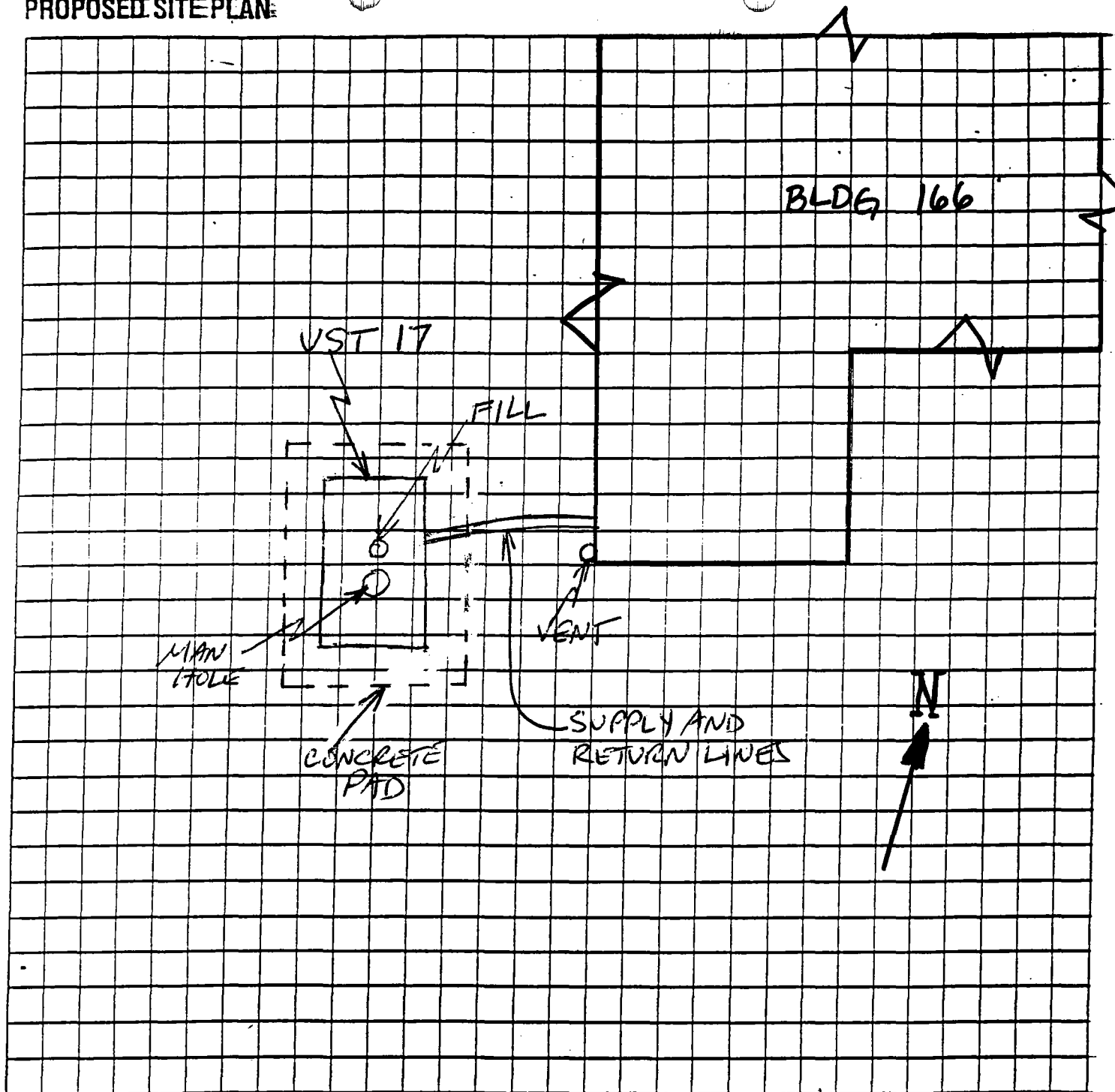
Facility Name: U.S. Army, Fort Monmouth
 Facility Location: Building #166
 Fort Monmouth, NJ 07703
 Owner's Mailing Address: DEH Bldg. #167
 Fort Monmouth, NJ 07703
 Owner's Name: U.S. Army
 Contact Person: Charles Appleby
 Phone Number: (908) 532-6224
 UST Registration Number: 0090010

TANK ID #	PRODUCT	CAPACITY (gal.)	SITE ASSESS. REQUIRED	MONITORING WELL REQ.
17	#2 FUEL OIL	4000	YES	NO

SCHEDULE

ACTIVITY	START DATE	COMPLETION
TANK REMOVAL	6-14-94	6-14-94
SITE ASSESSMENT	6-14-94	6-14-94
MONITORING WELL INSTALL	N/A	
ANALYTICAL RESULTS		
SITE ASSESSMENT	6-16-94	6-16-94
MONITORING WELL	N/A	
SITE ASSESSMENT SUMMARY	10/16-94	10-16-94

PROPOSED SITE PLAN



NOTE: Indicate scale and compass direction.

SCALE: 1" = 10'

TANK LOCATION

BLDG# 166
 TANK # $\phi\phi 9\phi\phi 1\phi - 17$
 TANK SIZE 4000 GALS
 TANK CONTENTS #2 FUEL OIL

REMARKS

Empty rectangular box for remarks.

STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
BUREAU OF UNDERGROUND STORAGE TANKS
TANK MANAGEMENT SECTION

CN 029, 401 EAST STATE STREET
TRENTON, N.J. 08625-0029

FOR STATE USE ONLY

UST# _____
Date Rec'd _____
CA # _____
Staff _____

UNDERGROUND STORAGE TANK CLOSURE PLAN
APPROVAL APPLICATION

*Under the provisions of the Underground Storage
of Hazardous Substances Act
in accordance with N.J.A.C. 7:14B-9 et seq.*

This application form shall be used by all applicants who plan to close Underground Storage Tank Systems pursuant to N.J.A.C. 7:14B-9 et seq.

INSTRUCTIONS:

- Before completing application form please refer to the attached Application Instruction Sheet.
- Please print legibly or type.
- Fill in all appropriate blanks. This application form requires that additional sheets be attached for some of the information requested. You may call the Bureau of Underground Storage Tanks/Tank Management Section (609/984-3156) for assistance.
- Return one original of this form (including all attachments required) and a copy of the complete Standard Reporting Form (SRF) to the address above. You must sign all forms as required and attach a check for the proper fee (see the fee schedule on Page 3). Make check payable to the Treasurer, State of New Jersey.
- If the subject facility is not registered the Closure Plan will not be approved.
- Please Note: Make sure that all required information on the Standard Reporting Form (SRF) is submitted. The SRF and this Closure Plan Application must be submitted together.

Date of Application: 25 MAY 1994

FACILITY REGISTRATION #

0090010-17

I. FACILITY NAME AND ADDRESS

U.S. Army Fort Monmouth

DEH Bldg. 167

Fort Monmouth NJ 07703

Telephone No. (908) 532-1475

II. THIS CLOSURE PLAN IS FOR:

A. Substance stored in subject tank(s):

1. Petroleum Products:

Indicate Type of Product No. 2 HEATING OIL
(Write out product name; e.g.)

- a. Gasoline, Jet Fuel, or Kerosene-
- b. Heating Oil (#2, 4, 6), or Diesel-
- c. Waste Oil (Please indicate total storage capacity of waste oil at the facility [including the tank(s) being closed])

4000 gals.

2. Hazardous Substances other than Petroleum Products (Describe)

Indicate Type of Product _____
(Write out product name; add sheet if necessary.)

B. Type of Activity: (Circle one)

1. Abandonment of Tank(s)

Attach the closure plan for abandonment, as required by N.J.A.C. 7:14B-9.2(b) or 9.3(b), which must contain the following items:

- a. Implementation schedule (3 copies per N.J.A.C. 7:14B-9.2(a)3)
- b. Site assessment plan
- c. Tank decommissioning plan
- d. A site map
- e. Attach all justification for abandonment-in-place as required by N.J.A.C. 7:14-9.1(d). Attach the certification statement (on the back page) for abandonment-in-place, if applicable.

2. Removal of Tank(s)

Attach the closure plan for removal as required by N.J.A.C. 7:14B-9.2(b) or 9.3(b). The following items must be included:

- ✓ a. Implementation schedule (3 copies)
- ✓ b. Site assessment plan
- ✓ c. Tank decommissioning plan
- ✓ d. A site map

3. Temporary Closure

Indicate which situation applies and attach appropriate documentation:

- a. Temporary closure for 12 months or less is subject to requirements of N.J.A.C. 7:14B-9.1(a).
- b. Requesting an extension of temporary closure for more than 12 months per N.J.A.C. 7:14B-9.1(b) must perform site assessment and submit results.

4. Change in Service

Attach documentation that the tank system being changed from the storage of a regulated to a non-regulated substance has been emptied and cleaned and that a site assessment has been performed, as required by N.J.A.C. 7:14B-9.1(e).

