UNDERGROUND STORAGE TANK CLOSURE AND REMEDIAL INVESTIGATION REPORT

MAIN POST WEST – BLDG. 3010
NJDEP UST REGISTRATION NO.: 192486-25
RELEASE NO.: 09-01-30-1415-32

JUNE 2011

PREPARED FOR:

U.S. ARMY GARRISON, FORT MONMOUTH, NJ
DIRECTORATE OF PUBLIC WORKS
BUILDING 173
FORT MONMOUTH, NJ 07703

PREPARED BY:

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EXECUTIVE SUMMARY

On January 30, 2009, one underground storage tank (UST) was closed by removal in accordance with the Directorate of Public Works (DPW) UST Management Plan for the U.S. Army Garrison, Fort Monmouth, New Jersey. The UST was located next to Building 3010 in the Pine Brook Housing area of Fort Monmouth. UST No. 192486-25 was a 10,000-gallon, single-walled steel tank that had been previously abandoned in place. The fill port and supply and return lines were present in the excavation. During the removal of the previously abandoned tank, potentially impacted soils were encountered, NJDEP was notified and a discharge number of 09-01-30-1415-32 was assigned.

The site assessment was performed by TECOM-Vinnell Services (TVS) personnel in accordance with the New Jersey Department of Environmental Protection (NJDEP) *Technical Requirements for Site Remediation* (TRSR) and the NJDEP *Field Sampling Procedures Manual (FSPM)*. Soils surrounding the tanks were screened visually and with a calibrated hand held Mini-Rae Photo-Ionization air monitoring instrument for evidence of contamination. A small area of petroleum impacted soil was observed in the area of the UST. A grab sample was collected and the visibly impacted soils were removed and taken to the ID 27 soil storage pad for subsequent disposal. Following removal, the UST was inspected for holes. No holes or evidence of impacted soils were observed after the removal of the tank from the ground. After removing the UST and associated piping, post-excavation soil samples were collected. Samples 3010-A through 3010-E were collected from five (5) locations along the sidewalls and bottom of the excavation. On March 30, 2009 two samples were collected along the remote fill line. All samples were analyzed for total petroleum hydrocarbons (TPH). Groundwater was encountered at approximately 5.5 feet below ground surface grade in the excavation.

All sampling was performed by a NJDEP Certified Subsurface Evaluator according to the methods described in the NJDEP *Field Sampling Procedures Manual* (FSPM August 2005). Sampling frequency and parameters analyzed complied with the NJDEP document *Technical Requirements for Site Remediation* (TRSR) 7:26E-3.9 which was the applicable regulation at the date of the closure.

The post-excavation soil samples collected from the UST excavation associated with former UST No. 192486-25 contained TPH concentrations less than the NJDEP health based standard of 4,800 milligrams per kilogram (mg/kg) for total organic contaminants (N.J.A.C. 7:26E). None of the samples collected for post remedial confirmation were in excess of the additional analytical threshold of 1,000 ppm. The soil analytical data confirmed that no release had occurred from the excavated UST.

Following receipt of all post-excavation soil sampling results, the excavation was backfilled to grade with a combination of uncontaminated excavated soil and crushed stone. The excavation site was then restored to its original condition with four inches of top soil and grass seed.

Based on the post-excavation soil sampling results, soils present are less than the NJDEP health based standard for total organic compounds as diesel fuel/#2-fuel oil.

No further action is proposed in regard to the closure and site assessment of USTs No. 192486-25 at Building 3010.

1.0 UNDERGROUND STORAGE TANK DECOMMISSIONING ACTIVITIES

1.1 OVERVIEW

One underground storage tank (UST), New Jersey Department of Environmental Protection (NJDEP) Registration No 192486-25, was closed in the area of Bldg. 3010 located in Pine Brook Housing at U.S. Army Garrison, Fort Monmouth, New Jersey on February 9, 2009. Refer to the site location map included as Figure 1. This report presents the results of the implementation of the DPW's UST Management Plan, March, 1996. UST No. 192486-25 was a 10,000-gallon #2 home heating oil tank used for a fuel supply to a boiler plant for the several residential units.

Decommissioning activities for the USTs complied with all applicable federal, state and local laws and ordinances in effect at the date of decommissioning. These laws included, but were not limited to: N.J.A.C. 7:14B-1 et seq., N.J.A.C. 5:23-1 et seq., and Occupational Safety and Health Administration (OSHA) 1910.146 & 1910.120. The closure and subsurface evaluation of the UST was conducted by a NJDEP licensed US Army employee. During the removal of the previously abandoned tank, a potential discharge was observed and NJDEP was notified of the release. The release number 09-01-30-1415-32 was assigned. A sample of the visibly impacted soil was collected and submitted for analysis. TPHC analysis from the laboratory revealed concentrations of total organic compounds as #2-heating oil to be greater than 33,000 milligram/kilogram (mg/kg).

This UST Closure and Remedial Investigation Report (RIR) has been prepared by TVS to assist the US Army Garrison DPW in complying with the NJDEP - Underground Storage Tanks regulations. The applicable NJDEP regulations at the date of closure were the *Closure of Underground Storage Tank Systems* (N.J.A.C. 7:14B-9 et seq. December 1987 and revisions dated May 19, 2003).

This RIR was prepared using information required by the Technical Requirements for Site Remediation (TRSR). Section 1 of this UST Closure and RIR provides a summary of the UST decommissioning activities. Section 2 of this report describes the site investigation activities. Conclusions and recommendations, including the results of the soil sampling investigation, are presented in Section 3 of this report.

1.2 SITE DESCRIPTION

Building 3010 is located in the Pine Brook Housing area of Fort Monmouth, as shown on Figure 1. The UST was located to the west of Building 3010. The fill port and appurtenant piping were encountered in the excavation.

1.2.1 Geological/Hydrogeological Setting

The following is a description of the geological/hydrogeological setting of Bldg. 3010. Included is a description of the regional geology of the area surrounding Fort Monmouth as well as descriptions of the local geology and hydrogeology of the Pine Brook Housing area.

Fort Monmouth lies within the Outer Coastal Plain subprovince of the New Jersey section of the Atlantic Coastal Plain physiographic province, which generally consists of a seaward-dipping wedge of unconsolidated sediments including interbedded clay, silt, sand, and gravel. To the northwest is the boundary between the Outer and Inner Coastal Plains, marked by a line of hills extending southwest, from the Atlantic Highlands overlooking Sandy Hook Bay, to a point southeast of Freehold, New Jersey, and then across the state to the Delaware Bay. These formations of clay, silt, sand, and gravel formations were deposited on Precambrian and lower Paleozoic rocks and typically strike northeast-southwest, with a dip that ranges from 10 – 60 feet per mile. Coastal Plain sediments date from the Cretaceous through the Quaternary Periods and are predominantly derived from deltaic, shallow marine, and continental shelf environments.

The property is located within the outer fringe of the Atlantic Coastal Plain Physiographic Province, of New Jersey, approximately 20 miles south of Raritan Bay. This province is characterized by a wedge-shaped mass of unconsolidated to semi-consolidated marine, marginal marine and non-marine deposits of clay, silt, sand, and gravel. These sediments range in age from Cretaceous to Holocene and lie unconformably on pre-Cretaceous bedrock consisting of metamorphic schists and gneiss, with local occurrences of basalts, sandstone, and shale (Zapecza, 1984). These sediments trend northeast-southwest and dip southeast toward the Atlantic Ocean. These sediments thicken southeastward from the Piedmont-Coastal Plain Province boundary to approximately 4,500 feet near Atlantic City, New Jersey. During the Cretaceous and Tertiary time period, sediments were deposited alternately in flood plains and in marine environments during sea transgression and sea regression periods. The formations record several major transgressive/regressive cycles and contain units that are generally thicker to the southeast and reflect a deeper water environment.

Over 20 regional geologic units are present within the sediments of the Coastal Plain. Regressive, upward coarsening deposits are usually aquifers (e.g., Englishtown and Kirkwood Formations, and the Cohansey Sand) while the transgressive deposits act as confining units (e.g., the Merchantville, Marshalltown, and Navesink Formations).

Regressive upward coarsening deposits, such as Englishtown and Kirkwood Formations and the Cohansey Sand are usually aquifers, while transgressive deposits, such as the Merchantville, Marshalltown, and Navesink Formations, act as confining units. The thicknesses of these units vary greatly, ranging from several feet to several hundred feet, and thicken to the southeast. For a visual representation refer to Figure 2

The eastern half of the Main Post is underlain by the Red Bank Formation, ranging in thickness from 20-30 feet, while the western half is underlain by the Hornerstown Formation, ranging in thickness from 20-30 feet. The predominant formation underlying the Charles Wood Area is also the Hornerstown, with small areas of Vincentown Formation intruding in the southwest corner. Sand and gravel deposited in recent geologic times lie above these formations. Interbedded sequences of clay serve as semi-confining units for groundwater. The mineralogy ranges from quartz to glauconite.

Udorthents-Urban land is the primary classification of soils on Fort Monmouth, which have been modified by excavating or filling. Soils at the Main Post include Freehold sandy loam, Downer sandy loam, and Kresson loam. Freehold and Downer are somewhat well drained, while Kresson is a poorly drained soil. The Charles Wood Area has sandy loams of the Freehold, Shrewsbury, and Holmdel types. Shrewsbury is a hydric soil; Kresson and Holmdel are hydric due to inclusions of Shrewsbury. Downer is not generally hydric, but can be.

Local Geology

Fort Monmouth lies in the Atlantic and Eastern Gulf Coastal Plain groundwater region and is underlain by underformed, unconsolidated to semi-consolidated sedimentary deposits. The chemistry of the water near the surface is variable with generally low dissolved solids and high iron concentrations. In areas underlain by glauconitic sediments, the water chemistry is dominated by calcium, magnesium, and iron (*e.g.* Red Bank and Tinton sands). The sediments in the vicinity of Fort Monmouth were deposited in fluvial-deltaic to nearshore environments. The water table is generally shallow at the installation; water is typically encountered at depths ranging from 2 to 9 feet below ground surface (bgs) and in certain areas fluctuates with the tidal action in Parkers and Oceanport creeks at the Main Post.

Based on the regional geologic map (Jablonski, 1968 see Fig. 3), the Cretaceous age Red Bank and Tinton Sands outcrop at the Main Post area. The Red Bank sand conformably overlies the Navesink Formation and dips to the southeast at 35 feet per mile.

The upper member (Shrewsbury) of the Red Bank sand is a yellowish-gray to reddish brown clayey, medium- to coarse-grained sand that contains abundant rock fragments, minor mica and glauconite (Jablonski). The lower member (Sandy Hook) is a dark gray to black, medium-to-fine grained sand with abundant clay, mica, and glauconite.

The Tinton sand conformably overlies the Red Bank Sand and ranges from a clayey medium to very coarse-grained feldspathic quartz and glauconite sand to a glauconitic coarse sand. The color varies from dark yellowish orange or light brown to moderate brown and from light olive to grayish olive.

Glauconite may constitute 60 to 80 percent of the sand fraction in the upper part of the unit (Minard, 1969). The upper part of the Tinton is often highly oxidized and iron oxide encrusted (Minard).

Hydrogeology

The water table aquifer in the Pine Brook Housing area is identified as part of the "composite confining units", or minor aquifers. The minor aquifers include the Navesink formation, Red Bank Sand, Tinton Sand, Hornerstown Sand, Vincentown Formation, Manasquan Formation, Shark River Formation, Piney Point Formation, and the basal clay of the Kirkwood Formation. The Hornerstown Formation acts as an upper boundary of the Red Bank aquifer, but it might yield enough water within its outcrop to supply individual household needs. The Red Bank outcrops along the northern edges of the Installation, and contains two members, an upper sand member and a lower clayey sand member. The upper sand member functions as the aquifer and is probably present on some of the surface of the Main Post and at a shallow depth below the Charles Wood Area. The Hornerstown and Red Bank formations overlay the larger Wenonah-Mount Laurel aquifer.

Based on records of wells drilled in the Main Post area, water is typically encountered at depths ranging from 2 to 9 feet below ground surface (bgs). According to Jablonski, wells drilled in the Red Bank and Tinton Sands may yield 2 to 25 gallons per minute (gpm). Some local well owners have reported acidic water that requires treatment to remove iron. Acid sulfate soils are naturally occurring soils, sediments or organic substrates (e.g. peat) that are formed under waterlogged conditions. Soil and sediment materials rich in iron sulfide (black ooze) tend to be very dark and soft. Iron sulfides can react rapidly when they are disturbed (i.e. exposed to oxygen). Pyrite will tend to occur as more discrete crystals in soil and organic matter matrices and will react more slowly when disturbed. The oxidation of iron sulfide in the potential acid sulfate soil materials (sulfidic material) may result in the formation of actual acid sulfate soil material or sulfuric material. These soils contain iron sulfide minerals (predominantly as the mineral pyrite) or their oxidation products. Soil horizons that contain sulfides are called 'sulfidic materials' (Isbell 1996; Soil Survey Staff 2003) and can be environmentally damaging if exposed to air by disturbance. Exposure results in the oxidation of pyrite.

The area of Bldg. 3010 is located approximately 700 feet south-southeast of Wampum Brook, the nearest water body. Based on the Pine Brook Housing topography, the groundwater flow in the area of Bldg. 3010 is anticipated to be to the northwest. The wells in this area are not considered to be tidally influenced.

1.3 HEALTH AND SAFETY

Work site health and safety hazards were minimized during all decommissioning activities. All areas that posed a vapor hazard were monitored by a qualified individual utilizing a calibrated photo-ionization detector (PID) Thermo Instruments Organic Vapor Monitor (OVM) – Model #580-B. The individual ascertained if the area was properly vented to render the area safe, as defined by OSHA. All work areas were properly vented to insure that there were no contaminants present in the breathing zone above permissible exposure limits (PELs).

1.4 Removal of Underground Storage TankS

1.4.1 General Procedures

- All underground utilities were marked out by the respective shops and/or utility contractor prior to excavation activities.
- All activities were carried out with regard to safety and health and the safeguarding of the environment.
- All excavated soils were visually examined and screened with an OVM for evidence of contamination. No impacted soils were encountered during the tank excavations. These soils were used to backfill the excavation upon clearance.
- Surface materials (i.e., asphalt, concrete, etc.) were excavated and staged separately from all soil and recycled in accordance with all applicable regulations and laws.
- A certified Subsurface Evaluator was present during all closure activities.

1.4.2 Underground Storage Tank Excavations

During decommissioning activities, surficial soil was removed to expose the USTs. The tank was completely emptied of all residual liquids prior to removal from the ground. The contents of the tanks were dispersed throughout the post and were used for off-road diesel engines and in above ground storage tanks (ASTs) associated with portable generators.

After the UST was removed from the excavation, it was staged on the ground, labeled and examined for holes. No holes in the tank were observed during the inspection by the Subsurface Evaluator. Soils surrounding the UST were screened visually and with an Organic Vapor Monitor (OVM) for evidence of petroleum contamination. A small heavily stained area was observed. The area was over excavated and re-sampled. After removal, the tank was transported for storage at the Bldg. 108 pad for subsequent cutting and disposal.

1.5 UNDERGROUND STORAGE TANK DECOMMISSIONING AND DISPOSAL

In 1989, the tank contents were transferred to other USTs where #2-home heating oil was used. The tank was purged to remove any potentially combustible vapors; the top of the tank was removed to allow free access to the void. The UST was cleaned first with rubber squeegees and adsorbent material broomed onto the sidewalls and bottom. The adsorbent materials were then drummed and subsequently put into Ft. Monmouth's 'Oil Spill Debris' roll-off container for proper disposal. The atmosphere in and around the tank was monitored using an OVM and an Oxygen/Lower Explosive Level (LEL) meter to ensure safe working conditions during cutting and cleaning activities. Clean bank run sands were placed into the tank void and the overburden was replaced and the filled tank was again covered.

Upon location of the tank, the overburden was removed and segregated. During the removal process, an area of petroleum impacted soil was remediated. Soil samples were collected and the area of potentially impacted soils were removed and placed onto the ID 27 soil pile. One seven yard dump truck of petroleum impacted soils was moved off-site to the staging area for subsequent recycling. The tank was then removed from the site and taken to the staging area where it was cut.

The steel tank was cut as to be placed into a 7 cubic yard dump truck and shipped off site for recycling. Refer to Appendix C for UST disposal certificate.

The Subsurface Evaluator labeled the UST with the following information:

- site of origin
- NJDEP UST Facility ID number
- date of removal
- size of tank
- previous contents of tank

Photographic documentation of the UST closure activities included in Appendix D.

2.0 REMEDIAL INVESTIGATION ACTIVITIES

2.1 OVERVIEW

The Remedial Investigation was managed and carried out by U.S. Army DPW personnel. All analyses were performed and reported by Fort Monmouth Environmental Testing Laboratory, a NJDEP-certified testing laboratory. All sampling was performed by a NJDEP Certified Subsurface Evaluator according to the methods described in the NJDEP Field Sampling Procedures Manual (August 2005,). Sampling frequency and parameters analyzed complied with the NJDEP document *TRSR* which was the applicable regulation at the date of the closure. All records of the Remedial Investigation activities are maintained by the Fort Monmouth DPW Environmental Office.

The following Parties participated in closure and remedial investigation activities.

- Ft. Monmouth Directorate of Public Works-Environmental Division
  Contact Person: Joe Fallon
  Phone Number: (732) 532-2692

- Subsurface Evaluator: Charles Appleby/Frank Accorsi
  Employer: US Army, CECOM/TECOM-Vinnell Services
  Phone Number: (732) 532-2692(732) 532-5241
  NJDEP License No.: 9974/ No.: 0010042
  (TVS) NJDEP License No.: US252302
  NJDEP License No.: 9974

- Analytical Laboratory: Fort Monmouth Environmental Testing Laboratory
  Contact Person: Jackie Hamer
  Phone Number: (732) 532-4359
  NJDEP Laboratory Certification No.: 13461

2.2 FIELD SCREENING/MONITORING

Field screening was performed by a NJDEP-certified Subsurface Evaluator using an OVM and visual observations to identify potentially contaminated material. Clean overburden soils were stockpiled for later reuse. A small area of petroleum impacted soil was observed. This area was sampled and excavated. NJDEP was notified of the release by US ARMY personnel.

2.3 SOIL SAMPLING

On January 30, 2009, post-excavation soil samples 3010-A through 3010-E were collected from a total of five (5) locations along the sidewalls, the bottom and the piping run of the UST excavation. On March 30, 2009 two soil samples were collected along the remote fill line. Refer to Soil Sampling Location map included as Figure 4. All samples were analyzed for Total Petroleum Hydrocarbons (TPH) in accordance with the requirements of the *TRSR*.

The site assessment was performed by TVS personnel in accordance with the NJDEP TRSR and the NJDEP FSPM. A summary of sampling activities including parameters analyzed is provided on Table 1. The post-excavation soil samples were collected using stainless steel trowels. After collection, the soil samples were immediately placed on ice in a cooler and delivered to Fort Monmouth Environmental Testing Laboratory (FMETL) for analysis.

3.0 CONCLUSIONS AND RECOMMENDATIONS

3.1 SOIL SAMPLING RESULTS

Grab samples of visibly stained soils were collected and after the collection the area was over excavated. The ensuing post-excavation soil sample results were compared to the NJDEP health based standard of 4,800 mg/kg for total organic contaminants (N.J.A.C. 7:26D and revisions dated September 8, 2008). A summary of the analytical results and comparison to the NJDEP soil cleanup standard is provided on Table 2. The soil analytical data package, including associated quality control data, is provided in Appendix E.

3.2 CONCLUSIONS AND RECOMMENDATIONS

The analytical results for all post-excavation soil samples collected from the UST closure excavation at UST No. 192486-25 were below all applicable NJDEP soil cleanup standards for total organic contaminants.

No further action is proposed in regard to the closure and site assessment of UST 1924886-25 at Building 3010.

TABLES

TABLE 1

SUMMARY OF LABORATORY ANALYSIS
FT. MONMOUTH, BUILDING 3010, UST No.192486-25
January 30, 2009

SAMPLE ID	LABORATORY SAMPLE ID	SAMPLE DATE	SAMPLE MATRIX	ANALYTICAL PARAMETER	ANALYTICAL METHOD
3010-1	9002601	1/28/09	Soil	TPH	OQA-QAM-25
3010-A NE Wall	9002901	1/30/09	Soil	TPH	OQA-QAM-25
3010-B SW Wall	9002902	1/30/09	Soil	TPH	OQA-QAM-25
3010-C NW Wall	9002903	1/30/09	Soil	TPH	OQA-QAM-25
3010-D SE Wall	9002904	1/30/09	Soil	TPH	OQA-QAM-25
3010-E Piping	9002905	1/30/09	Soil	TPH	OQA-QAM-25
3010-F Remote fill	9013201	3/30/09	Soil	TPH	OQA-QAM-25
3010-G Remote Fill	9013302	3/30/09	Soil	TPH	OQA-QAM-25

ABBREVIATIONS:
TPH = Total Petroleum Hydrocarbons, Method NJDEP OQA-QAM-25
VOA = Volatile Organic Analysis, EPA SW-846 Method 8260

TABLE 2

SUMMARY OF LABORATORY ANALYTICAL RESULTS
FT. MONMOUTH, BUILDING 3010, UST No.192486-26
January 30, 2009

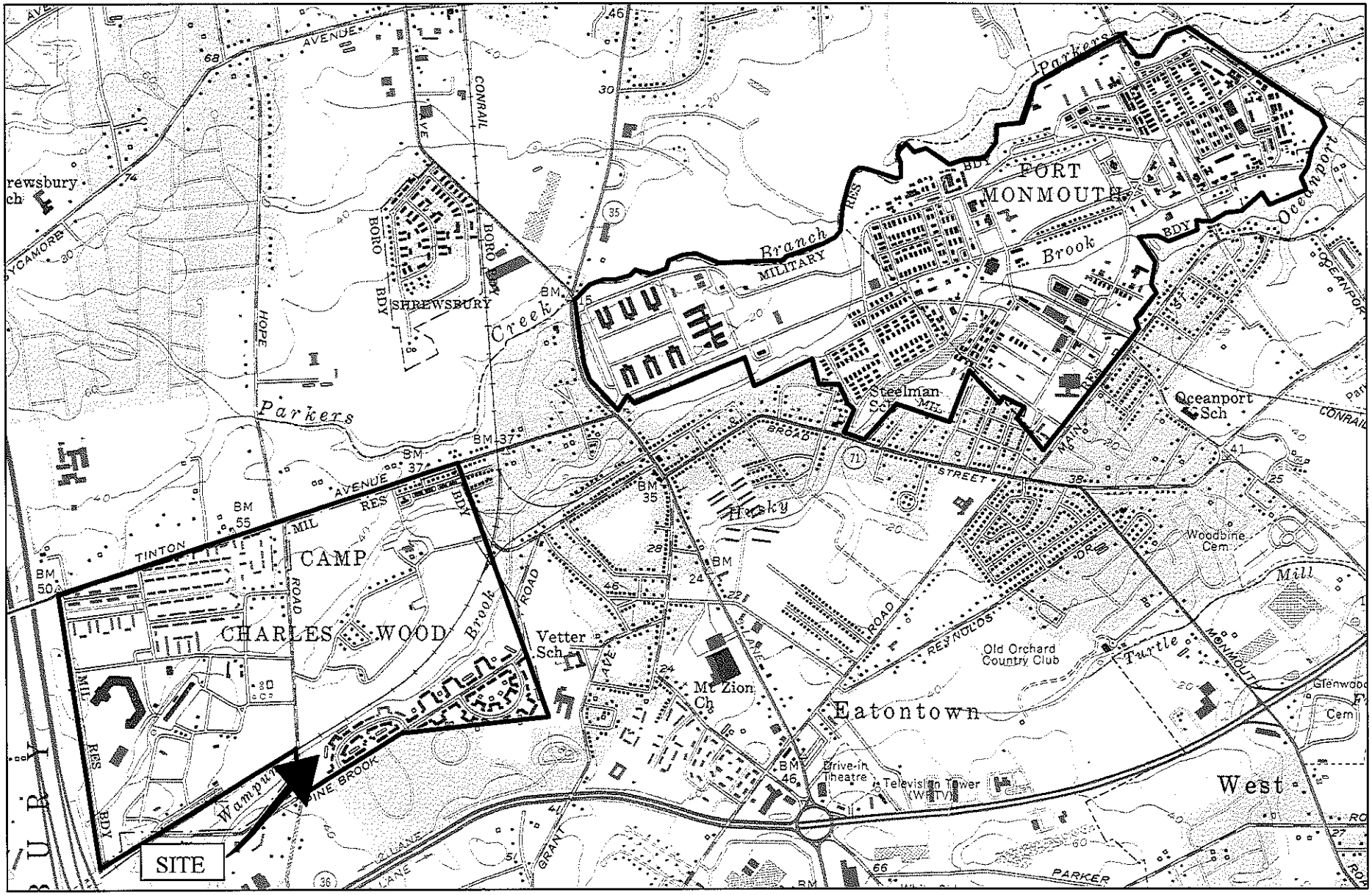
TOTAL PETROLEUM HYDROCARBONS (results in mg/kg)

SAMPLE ID	LABORATORY SAMPLE ID	SAMPLE LOCATION	SAMPLE DEPTH (in feet)	MATRIX	TPH RESULTS
3010-1	9002601	grab	6.0 - 6.5'	Soil	**33323.10**
3010-A	9002901	NE Wall	5.0 – 5.5	Soil	ND
3010-B	9002902	SW Wall	5.0 – 5.5	Soil	ND
3010-C	9002903	NW Wall	5.0 – 5.5	Soil	ND
3010-D	9002904	SE Wall	5.0 – 5.5	Soil	ND
3010-E	9002905	Piping	5.0 – 5.5	Soil	ND
3010-F	9013201	Remote fill	1.0 – 1.5'	Soil	25.56
3010-G	9013202	Remote Fill +15'	1.0 -1.5'	Soil	ND

ABBREVIATIONS:
mg/kg = Milligrams Per Kilogram = parts per million
ND = Compound Not Detected

Notes:
Gray shading indicates exceedance of NJDEP health based standard of 4,800 ppm total organic contaminants

FIGURES



NEW JERSEY

QUADRANGLE LOCATION

LONG BRANCH, N. J.

40073-C8-TF-024

1954

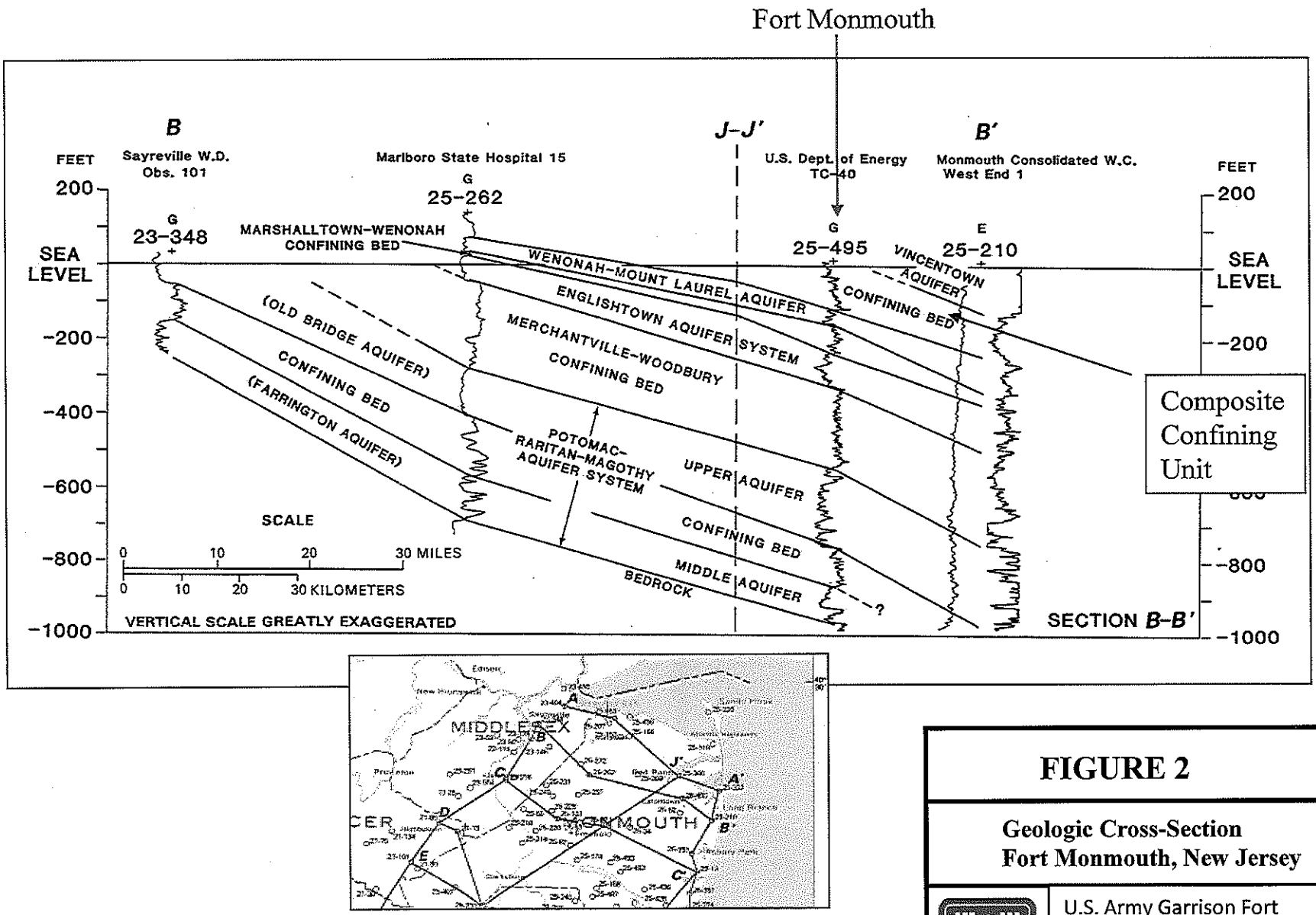
PHOTOREVISED 1981

DMA 6164 I SE-SERIES V822

Mapped, edited and published by the Geological Survey

Figure 1
Site Location Map
Fort Monmouth, New Jersey

U.S. Army Garrison Fort Monmouth Directorate of Public Works

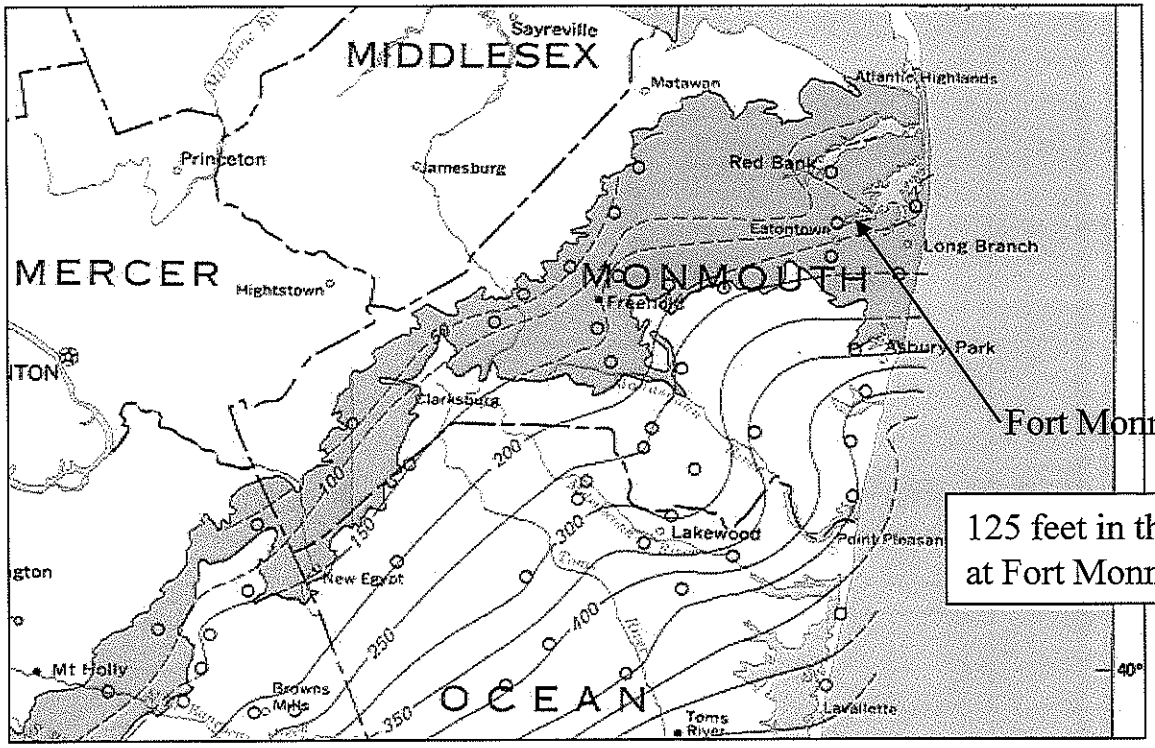


Source: Zapecza, O. 1989. *Hydrogeologic Framework of the New Jersey Coastal Plain.* USGS Professional Paper 1404-B. U.S. Government Printing Office, Washington, DC.

FIGURE 2

Geologic Cross-Section
Fort Monmouth, New Jersey

U.S. Army Garrison Fort Monmouth Directorate of Public Works



EXPLANATION

Outcrop area of the Navesink Formation, Red Bank Sand, Tinton Sand, Hornerstown Sand, Vincentown Formation, and Manasquan Formation

600 **Line of equal thickness of the composite confining bed** Dashed where approximately located. Interval 50 feet

Well location

Source: Zapecza, O. 1989. *Hydrogeologic Framework of the New Jersey Coastal Plain.* USGS Professional Paper 1404-B. U.S. Government Printing Office, Washington, DC.

FIGURE 3

Outcrop and Thickness of Composite Confining Unit Fort Monmouth, New Jersey

U.S. Army Garrison Fort Monmouth Directorate of Public Works

APPENDIX A

CERTIFICATIONS

Let's protect our earth

Bldg. 3015

For State Use Only	
Date Rec'd.	
Auth	
Routing	
UST NO.	

State of New Jersey
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
CN 028
TRENTON, NEW JERSEY 08625
ATTN: BUST Program
(609) 984-3156

STANDARD REPORTING FORM
for the:
Installation (Abandon) Remove/Sale-Transfer/Substantial Modification
Circle Only One — Use One Form Per Activity

(More than one tank can be listed per tank activity)

Answer questions 1 through 5 and others as applicable.

1. Company name and address: (as it appears on registration questionnaire)

U.S. Army
DEH Bldg. #167
Attn: SELFM-EH
Fort Monmouth, NJ 07703

2. Facility name and location: (if different from above)

U.S. Army Fort Monmouth
Charles Wood East

3. Contact person for this activity:

Mr. Dinkerai Desai

Telephone Number: (201) 532-1475

4. The identification number of the affected tank as it appears in Question Number 12 on the Registration Questionnaire: Tank Numbers: 25, 26 + 31

Bldgs. 3010, 3015 + 3216

5. Registration Number (if known): UST - 0192486

(OVER)

6. For TRANSFER OF OWNERSHIP:

New Company Name _____

New Facility Name _____

Address _____

_____

New owner/operator (print) _____

Signature _____

7. For ABANDONMENT or REMOVAL:

a. Describe the proposed procedure in detail on an attached sheet.

b. Specify the product last stored in the tank: #2 Home Heating Oil

c. Date abandoned or removed November 1989 for all three U.S.T.'s

d. Is Site Assessment Compliance Statement being completed? (YES) or NO Form MUST be completed and returned within 90 days of tank closure. (per 40 CFR 280.72)

8. For SUBSTANTIAL MODIFICATIONS:

a. Describe the reason for the modification and, in detail, the proposed procedure to be used on an attached sheet.

b. Specify the product presently stored in the tank: _____

c. Specify the product to be stored in the tank: _____

9. For NEW OR REPLACEMENT INSTALLATIONS:

a. Attach the specifications as required by the attached instructions.

b. Specify the product (s) to be stored in the tank: _____

NOTE: All appropriate and applicable permits, licenses and certificates from any local, state and/or federal agency must be obtained separately from this notification as required by the above stated activity.

CERTIFICATION

**** This registration form shall be signed by the highest ranking individual at the facility with overall responsibility for that facility. (7:14B-2.3 (a) 1). ****

"I certify under penalty of law that the information provided in this document is true, accurate and complete. I am aware that there are significant civil and criminal penalties for submitting false, inaccurate or incomplete information, including fines and/or imprisonment."

Signature: James Ott

Name (print or type): ~~JAMES OTT~~

Title: Deputy Director ~~Dir, Engineering & Housing~~ Date: 6/19/90

Directorate of Engineering and Housing

US Army Fort Monmouth
Charles Wood East
Registration # 0192486
Tank #'s 25,26,& 31
POC: Dinkerrai Desai (201)532-1475

Abandonment Procedure:

The three underground storage tanks were abandoned in place due to being partially buried underneath the buildings foundation.

All remaining product inside the tanks was removed for disposal by L & L Oil Service of Aberdeen, New Jersey. L & L is a licensed hazardous waste transporter and TSDF. (USEPA ID # NJD011427895).

The top of each tank was excavated and cut open across the entire length of the tank. The soil excavated from the top of the tanks was visually inspected and analyzed by using a HNU Model PI-101, photoionizer. No contamination was found.

The inside of each tank was hand cleaned utilizing a biodegradable detergent. The detergent residue was removed by the Waste Oil Company for proper disposal.

After the tanks were clean, a visual inspection was made inside each tank for signs of leakage. No corrosion was found inside any of the tanks.

After the inspection was complete, the tanks were backfilled with sand and the area was regraded with the excavated soil.

STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
Bureau of Underground Storage Tanks
CN-029, Trenton, NJ 08625

Auth
Routing
UST NO.

SITE ASSESSMENT COMPLIANCE STATEMENT

Supplement to the New Jersey Standard Reporting Form
(Complete for ALL regulated UST abandonments or removals)

Within ninety (90) days of completing the UST closure of any State or Federally-regulated tank, the owner or operator must submit this completed form to the NJDEP Bureau of Underground Storage Tanks. If the facility is located in one of the counties listed on the back, a copy of this form must also be sent to the Health Agency indicated.

The owner or operator of any Federally-regulated tank must also comply with the following:

40 CFR Part 280.72 Assessing the site at closure or change-in-service

"(a) Before permanent closure or a change-in-service is completed, owners and operators must measure for the presence of a release where contamination is most likely to be present at the UST site. In selecting sample types, sample locations, and measurement methods, owners and operators must consider the method of closure, the nature of the stored substance, the type of backfill, the depth to ground water, and other factors appropriate for identifying the presence of a release."

FACILITY U.S. Army Fort Monmouth Charles Wood East UST # 0192486 Tank #'s 25, 26, +31

Check off the following items as appropriate for the site.

✓ The UST facility is only regulated by State law, therefore a site assessment is not mandatory.

____ The UST facility is regulated by Federal law and a site assessment was conducted.

The results of the site assessment indicate:

✓ There was NO release from the UST system.

____ There was a release from the UST system and it was reported to the DEP Environmental Hotline (609-292-7172).

NOTE: The results of the site assessment are not to be submitted to the DEP or Health Agency unless requested to do so. The results are to be available for inspection at the UST facility.

Questions can be directed to the Bureau at (609) 984-3156.

*** This registration form shall be signed by the highest ranking individual at the facility with overall responsibility for that facility (7:14B-2.3 (a) 1). ***

"I certify under penalty of law that the information provided in this document is true, accurate and complete. I am aware that there are significant civil and criminal penalties for submitting false, inaccurate or incomplete information, including fines and/or imprisonment.

SACS-2,1/89

James Ott Date 6/17/90
(SIGNATURE)

JAMES OTT
Deputy Director
Dir, Engineering & Housing
(Title)

APPENDIX B

WASTE MANIFEST

No fuel oil was shipped off-site for disposal as a result of the closure of this underground storage tank (UST). The tank had been previously abandoned in place and at that time the contents were pump out and distributed to above ground storage tanks and off-road diesel vehicles.

— Soil

— Soil was Removed

— Need Disposal Documents

— From Soil Pile. Disposed of

After this Removal Action

— See Report

APPENDIX C

UST DISPOSAL CERTIFICATE

Recycled

UST 3010

JOHN BLEWETT INC.

246 HERBERTSVILLE RD., HOWELL, NJ 07731

(732) 938-5331

AUTO WRECKER • SCRAP RECYCLING • USED AUTO PARTS

DATE

WEIGHT		PRICE	TOTAL
	#1 STEEL		
	#2 STEEL		
	D.M.B		
	CAST IRON		
	COPPER		
	COPPER		
	COPPER		
	BRASS		
	ALUM		
	RADS		
	BATT		
	LITE IRON		
	AL CANS		
	CARS		

I am the owner of said vehicle(s) and I release it to **John Blewett, Inc.**

Signature of Owner: _____

APPENDIX D

PHOTO DOCUMENTATION

PULLING LINES BACK TO ALLOW FOR ACCESS TO TANK

REMOVING SAND FROM TANK

Top of sand filled tank exposed

Fill and return lines to tank

TANK ON THE GROUND WAITING TO BE TAKEN OFF-SITE

APPENDIX E

SOIL ANALYTICAL DATA PACKAGE