DEPARTMENT OF THE ARMY

OFFICE OF ASSISTANT CHIEF OF STAFF FOR INSTALLATION MANAGEMENT
U.S. ARMY FORT MONMOUTH
P.O. 148
OCEANPORT, NEW JERSEY 07757

6 December 2016

Ms. Linda Range
New Jersey Department of Environmental Protection
Bureau of Case Management
401 East State Street
PO Box 420/Mail Code 401-05F
Trenton, NJ 08625-0028

SUBJECT: Clarification of Underground Storage Tanks at Howard Commons Fort Monmouth, New Jersey

Attachments:

- Errata sheets for Attachment I of previous 26 April 2016 Howard Commons submittal

Dear Ms. Range:

The U.S. Army Fort Monmouth (FTMM) team is providing this clarification of the registration identification (ID) for the underground storage tank (UST) associated with Building 3216 (UST 3216). This clarification was requested in the New Jersey Department of Environmental Protection (NJDEP) letter dated 28 November 2016, as follows:

> Clarification is requested for the following UST.
>
> - UST 3216 – Although historic figures appear to indicate there was only one UST in the area, and it is agreed the information within the submittal demonstrates no discharge is associated with the UST evaluated within same, the UST is alternately referred to in various parts of the submittal as UST Registration No 192486-11 or 192486-25, as well as 192486-26 (Table 2) or 192486-31 (GPS Points). As this would typically refer to different USTs, please clarify.

The correct Registration ID for UST 3216 is 192486-31, which is consistent with the FTMM UST database, the Phase 1 Finding of Suitability to Transfer (FOST), and Attachment A and Attachment B of the Army's previous 26 April 2016 submittal for the Howard Commons USTs.

There were typographical errors in the report that was previously submitted as Attachment I of the Army's 26 April 2016 submittal. Attached is a corrected version of the text of this report, which is provided as errata sheets for replacement of the comparable sheets in Attachment I of the Army's previous 26 April 2016 submittal for the Howard Commons USTs.

The NJDEP is correct in understanding that the other Registration IDs represent other USTs. Registration IDs 192486-25 (UST 3010) and 192486-26 (UST 3015) were approved for NFA in the 28 November 2016 NJDEP letter. Registration ID 192486-11 (UST 2030) refers to a residential fuel oil tank removed from a house along Magill Drive on the Charles Wood Area, where there were no

indications of a release based on the closure soil sample results. We do not anticipate requesting an NFA determination for the UST 2030 tank location.

I apologize for any inconvenience or additional work these reporting errors have caused. With the above clarification we request NJDEP's approval of an NFA determination for UST 3216 (Registration ID 192486-31).

Regarding UST 3035 (Registration ID 192486-29) at Howard Commons, the Army anticipates collecting soil samples from three borings (one boring for each 5 ft of former tank length) to support a future NFA request. Two soil samples will be collected from each boring. At each boring, a sample will be collected from approximately 8.0-8.5 feet below ground surface (ft bgs) or another interval representative of the vadose zone below the removed tank and from a deeper 6-inch interval just above the water table. One of these two soil samples will be collected from the most contaminated interval encountered based on field evidence (visual, olfactory, or photoionization detector [PID] screening). If there is no field evidence of petroleum contamination, then the two soil samples will be collected from 8.0-8.5 ft bgs and from just above the water table. Each soil sample will be analyzed for total extractible petroleum hydrocarbons (EPH) with additional contingency semivolatile organic compounds (SVOCs) analysis (25 percent) for naphthalene and 2-methylnaphthalene in the event that EPH concentrations exceed 1,000 mg/kg. These soil analyses are consistent with the requirements for No. 2 fuel oil in Table 2-1 of the NJAC 7:26E Technical Requirements for Site Remediation. I would appreciate any comments you have regarding the work planned for the former UST 3035 area.

The technical Point of Contact (POC) is Kent Friesen at (732) 383-7201 or by email at kent.friesen@parsons.com. Should you have any questions or require additional information, please contact me by phone at (732) 380-7064 or by email at william.r.colvin18.civ@mail.mil.

Sincerely,

William R. Colvin, PMP, PG, CHMM
BRAC Environmental Coordinator

cc: Linda Range, NJDEP (e-mail and 3 hard copies)
Delight Balducci, HQDA ACSIM (e-mail)
Joseph Pearson, Calibre (e-mail)
James Moore, USACE (e-mail)
Jim Kelly, USACE (e-mail)
Cris Grill, Parsons (e-mail)

U.S. Army Garrison
Fort Monmouth, New Jersey

Underground Storage Tank Report

Pine Brook Housing – Bldg. 3216

NJDEP UST Registration No. 192486-XX 31

June 2011

UNDERGROUND STORAGE TANK CLOSURE AND REMEDIAL INVESTIGATION REPORT

PINE BROOK HOUSING – BLDG. 3216
NJDEP UST REGISTRATION NO.: 192486-XX

JUNE 2011

PROJECT NO.: 05-41615

PREPARED FOR:

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

PREPARED BY:

TECOM-VINNELL SERVICES, INC.
P.O. BOX 60
FT. MONMOUTH, NJ 07703

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EXECUTIVE SUMMARY

On March 19, 2009, one regulated 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 3216 in the Pine Brook Housing area of Fort Monmouth. UST No. 192486-~~xx~~31 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 not present in the excavation.

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. 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 3216-A through ~~3~~3216-F were collected from six (6) locations along the sidewalls and bottom of the excavation. 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-~~xx~~31 contained TPH concentrations less than the NJDEP health based criterion 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 criteria for total organic compounds and there are no Volatile organic compounds (VOCs) that were detected greater than NJDEP Residential Direct Contact Soil Cleanup Criteria. (RDCSCC)No further action is proposed in regard to the closure and site assessment of USTs No. 192486-~~xx~~31 at Building 3216.

1.0 UNDERGROUND STORAGE TANK DECOMMISSIONING ACTIVITIES

1.1 OVERVIEW

One regulated underground storage tank (UST), New Jersey Department of Environmental Protection (NJDEP) Registration No 192486-~~25~~31, was closed in the area of Bldg. 3216 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~~31 was a 10,000-gallon #2 home heating oil tank used for a fuel supply to a boiler plant for the several residential units. Prior to the ultimate removal of the UST, the tank was drained of its contents and abandoned in place. During the abandonment procedures, no releases or sign or release were noted. Once emptied of its contents, the top of the tank was removed and the tank void was filled with bank run sands. Upon completion, the overburden was returned to the excavation. For additional information regarding the tank abandonment process, refer to Appendix A of this document.

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

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 3216 is located in the Pine Brook Housing area of Fort Monmouth, as shown on Figure 1. The UST was located to the south of Building 3216. The fill port and appurtenant piping were not encountered in the excavation.

1.2.1 Geological/Hydrogeological Setting

The following is a description of the geological/hydrogeological setting of Bldg. 3216. 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). See Figure 2 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). The thicknesses of these units vary greatly, ranging from several feet to several hundred feet, and thicken to the southeast.

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. 3216 is located approximately 700 feet south-southeast and upgradient of Wampum Brook, the nearest water body. Based on the Pine Brook Housing topography, the groundwater flow in the area of Bldg. 3216 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 UST. The tank was completely emptied of all residual materials prior to removal from the ground. Prior to abandonment, the fuel oil contents of the tank was 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. No soil staining and an odor of fuel were observed. 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

The top of the tank was removed to allow for access during the abandonment process. The tank was filled with sand and left in place. The sand was removed from the tank and taken to the ID 27 storage area for subsequent disposal. The UST was then cleaned with rubber squeegees and the remaining material broomed from the sidewalls and bottom. The 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.

The steel tank was cut into manageable pieces and placed into a 7 cubic yard dump truck and shipped off site to be recycled. Refer to Appendix C for UST disposal certificate. The tank contents were sampled and used as clean back fill materials in the excavation. See Table 2 for results.

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, CHMM
  Phone Number: (732) 532-2692

- Subsurface Evaluator: Charles Appleby
  Employer: US Army, CECOM
  Phone Number: (732) 532-6254
  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. No impacted soils were encountered during the tank removal procedures. Clean overburden soils were stockpiled for later reuse.

2.3 SOIL SAMPLING

On March 23, 2009, post-excavation soil samples 3216-A through 3216-F were collected from six (6) locations along the sidewalls, the bottom and the piping run of the UST excavation. 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 *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

The post-excavation soil sample results were compared to the NJDEP health based criterion 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 criteria 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-~~11~~ 31 were below all applicable NJDEP soil cleanup criteria for total organic contaminants.

No further action is proposed in regard to the closure and site assessment of UST 192486-11 at Building 3216

TABLES

TABLE 1

SUMMARY OF LABORATORY ANALYSIS

FT. MONMOUTH, BUILDING 3216, UST No.192486-25 31

January 30, 2009, March 9, 2009

SAMPLE ID	LABORATORY SAMPLE ID	SAMPLE DATE	SAMPLE MATRIX	ANALYTICAL PARAMETER	ANALYTICAL METHOD
3216-SS1	9011301	3/19/09	Soil	TPH	OQA-QAM-25
3216-SS2	9011302	3/19/09	Soil	TPH	OQA-QAM-25
3216-A, North Wall	9011501	03/23/09	Soil	TPH	OQA-QAM-25
3216-B South Wall	9011502	03/23/09	Soil	TPH	OQA-QAM-25
3216-C East Wall	9011503	03/23/09	Soil	TPH	OQA-QAM-25
3216-D West Wall	9011504	03/23/09	Soil	TPH	OQA-QAM-25
3216-E Piping	9011505	03/23/09	Soil	TPH	OQA-QAM-25
3216-F, Bottom	1150690	3/23/09	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 3216, UST No.192486-2631

January 30, 2009, March 19, 2009

TOTAL PETROLEUM HYDROCARBONS (results in mg/kg)

SAMPLE ID	LABORATORY SAMPLE ID	SAMPLE LOCATION	SAMPLE DEPTH (in feet)	MATRIX	TPH RESULTS
3216-SS1	9011301	Tank fill	N/a	Soil	ND
3216-SS2	9011302	Tank fill	N/a	Soil	ND
3216-A	9011501	North Wall	5.0 – 5.5	Soil	ND
3216-B	9011502	South Wall	5.0 – 5.5	Soil	ND
3216-C	9011503	East Wall	5.0 – 5.5	Soil	ND
3216-D	9011504	West Wall	5.0 – 5.5	Soil	ND
3216-E	9011505	Piping	5.0 – 5.5	Soil	ND
3216-F	9011506	Bottom	5.0 – 5.5	Soil	ND

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

Notes:
Gray shading indicates exceedance of NJDEP health based criterion of 10,000 ppm total organic contaminants

FIGURES

New Jersey Department of Environmental Protection
Site Remediation Program

Report Certifications for RCRA GPRA 2020, CERCLA, and Federal Facility Sites

These certifications are to be used for reports submitted for RCRA GPRA 2020, CERCLA, and Federal Facility Sites. The Department has developed guidance for report certifications for RCRA GPRA 2020, CERCLA, and Federal Facility Sites under traditional oversight. The "Person Responsible for Conducting the Remediation Information and Certification" is required to be submitted with each report. For those sites that are required or opt to use a Licensed Site Remediation Professional (LSRP) the report must also be certified by the LSRP using the "Licensed Site Remediation Professional Information and Statement". For additional guidance regarding the requirement for LSRPs at RCRA GPRA 2020, CERCLA and Federal Facility Sites see http://www.nj.gov/dep/srp/srra/training/matrix/quick_ref/rcra_cercla_fed_facility_sites.pdf.

Documents:

- 6 December 2016 Letter, Subject: "Clarification of Underground Storage Tanks at Howard Commons, Fort Monmouth, New Jersey"

PERSON RESPONSIBLE FOR CONDUCTING THE REMEDIATION INFORMATION AND CERTIFICATION

Full Legal Name of the Person Responsible for Conducting the Remediation: William R. Colvin
Representative First Name: William Representative Last Name: Colvin
Title: Fort Monmouth BRAC Environmental Coordinator (BEC)
Phone Number: (732) 380-7064 Ext: Fax:
Mailing Address: P.O. Box 148
City/Town: Oceanport State: NJ Zip Code: 07757
Email Address: william.r.colvin18.civ@mail.mil

This certification shall be signed by the person responsible for conducting the remediation who is submitting this notification in accordance with Administrative Requirements for the Remediation of Contaminated Sites rule at N.J.A.C. 7:26C-1.5(a).

I certify under penalty of law that I have personally examined and am familiar with the information submitted herein, including all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, to the best of my knowledge, I believe that the submitted information is true, accurate and complete. I am aware that there are significant civil penalties for knowingly submitting false, inaccurate or incomplete information and that I am committing a crime of the fourth degree if I make a written false statement which I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties.

Signature: William R Colvin Date: 6 December 2016

Name/Title: William R. Colvin, PMP, CHMM, PG
BRAC Environmental Coordinator