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NAS CECIL FIELD, FL
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DIG AND HAUL PACKAGE FOR BUILDING 290A TANK G290A NAS CECIL FIELD FL

11/16/2007

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Project Number 112GN4248

Mr. David Grabka
Florida Department of Environmental Protection
Twin Towers Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Reference: CLEAN III Contract Number N62467-94-D-0888
Contract Task Order 0248

Subject: Dig and Haul Package, Building 290A, Tank G290A
Naval Air Station Cecil Field
Jacksonville, Florida

Dear Mr. Grabka:

Tetra Tech NUS, Inc. (TtNUS) is pleased to submit this Dig and Haul Package for the subject site. This package has been prepared for the United States Navy, Naval Facilities Engineering Command Southeast (NAVFAC SE) under Contract Task Order 0248 for the Comprehensive Long-term Environmental Action Navy (CLEAN) III Contract Number N62467-94-D-0888.

SITE BACKGROUND

Tank G290-A was an aboveground storage tank (AST) located immediately north of Building 290A and southeast of the intersection of the north-south and east-west runways at Naval Air Station (NAS) Cecil Field. Building 290A houses a standby generator for Building 290. Tank G290-A, with a capacity of 250 gallons, was installed in 1995 and was in compliance with State of Florida tank regulations. Tank G290-A replaced Tank G290-U, which was an underground storage tank located west of Building 290A. Tank G290-U was removed in November 1995 by Innovative Services International and received a clean closure. According to Mr. Roy Craigue of Jacksonville Aviation Authority (JAA), Tank G290-A was removed in June 2007 by the JAA Maintenance Department. The concrete secondary containment pad remained in place.

A Contamination Assessment Plan was prepared by ABB Environmental Services, Inc. (ABB-ES) in November 1996 for the assessment of soil and groundwater at Tank G290-A. Confirmatory soil screening was conducted by ABB-ES in 1998. Three soil borings were installed around the AST, and soil samples were collected for screening with an organic vapor analyzer (OVA). The results of that investigation indicated that contaminated soil was not present at the site. Because the tanks could not be taken out of service at that time, it was agreed that supplemental confirmatory sampling would be conducted when the tanks were taken out of service or transferred to confirm that no releases had occurred subsequent to the original investigation.

A field investigation was conducted by TtNUS between June 7 and 16, 2000. The Sampling and Analysis Plan (SAP) specified that existing monitoring well CEF-290-2S be sampled as part of the field investigation. However, when TtNUS personnel arrived at the site to conduct the investigation, the

monitoring well could not be located. Therefore, a replacement monitoring well was installed and sampled in accordance with the SAP. Replacement well CEF-290A-2SR was installed on September 12, 2000, and sampled on September 26, 2000. The soil investigation indicated that soil boring B290-A-SB-005 (SB-005), located directly under the secondary containment drain, exhibited an OVA equipped with a flame ionization detector (FID) response of approximately 100 parts per million (ppm) at the 0- to 1-foot interval. The 1- to 3- and 3- to 5-foot sample intervals both exhibited responses of 20 ppm. There was no observed OVA-FID response for soil borings B290-A-SB-001, B290-A-SB-002, B290-A-SB-003, and B290-A-SB-004. Laboratory analytical results from the groundwater sample collected from this well indicated that concentrations of contaminants of concern were less than detection limits, and the detection limits were less than the Groundwater Cleanup Target Levels specified in Chapter 62-777, Florida Administrative Code (FAC). Based on the findings of this investigation and of the previous investigation conducted by ABB-ES, TtNUS recommended No Further Action for Tank Site G290-A.

A comment letter from the Florida Department of Environmental Protection (FDEP) dated April 5, 2002, stated that the Department could not concur with the recommendation for No Further Action because an elevated OVA-FID response was detected in a surface soil sample collected from under the secondary containment drain, possibly indicating petroleum-impacted soil. The letter requested that a soil sample be collected from that location and analyzed for Gasoline Analytical Group (GAG) and Kerosene Analytical Group (KAG) parameters as listed in Chapter 62-770, FAC, to determine if there has been a petroleum release requiring further assessment.

On April 12, 2002, TtNUS collected a soil sample from under the secondary containment drain, at the approximate location and depth interval of the elevated OVA-FID response [SB-005 at 0 to 1 foot below ground surface (bgs)]. The sample was analyzed for GAG and KAG constituents as defined by Chapter 62-770, FAC. The laboratory analytical results indicated that the total recoverable petroleum hydrocarbon (TRPH) concentration exceeded the Soil Cleanup Target Level (SCTL) specified in Chapter 62-777, FAC. In addition, detection limits for several polynuclear aromatic hydrocarbons (PAHs) were elevated due to matrix interference. TtNUS recommended that a source removal be conducted to remove petroleum-impacted soil from the site. Prior to initiating the source removal, additional soil samples were recommended to delineate the extent of contaminated soil and to define the limits of the excavation. An FDEP comment letter, dated March 10, 2004, stated that the Department concurred that additional delineation to determine the extent of contaminated soil should be conducted prior to initiating source removal.

On March 22, 2005, TtNUS collected three additional soil samples in the vicinity of Tank G290-A to delineate the extent of contaminated soil. Sample CEF-B290A-SB-006-01 was collected approximately 5 feet due north of CEF-B290A-SB-005. Additionally, samples CEF-B290A-SB-001-01 and CEF-B290A-SB-002-01 were collected west and east, respectively, of CEF-B290A-SB-005. The samples were collected at the 0- to 1-foot depth interval. The samples were analyzed for PAHs using United States Environmental Protection Agency Method SW-846 8310 and TRPH using the Florida Petroleum Range Organics method. The laboratory analytical results indicated that PAH and TRPH concentrations for all three locations were less than the SCTLs specified in Chapter 62-777, FAC. TtNUS recommended that a source removal be conducted to remove petroleum-impacted soil from an approximate 10-foot by 10-foot area as delineated by the locations of the three soil samples collected in 2005 (CEF-B290A-SB-001-01, CEF-B290A-SB-002-01, and CEF-B290A-SB-006-01) as well as soil sampling locations previously screened by OVA-FID on June 16, 2000 (CEF-B290A-SB-003 and CEF-B290A-SB-004). The Supplemental Soil Assessment Letter Report stated that the area should be excavated to the top of the water table and replaced with clean fill material.

On September 14, 2007, TtNUS conducted confirmatory soil sampling in the vicinity of former Tank G290-A to delineate the southern boundary of the proposed soil removal area. Sample CEF-290A-SB007 was collected from the area adjacent to the northern edge of the concrete secondary containment at 2 feet bgs and analyzed for PAHs and TRPHs. Naphthalene was detected with a concentration of 0.0021 milligram per kilogram (mg/kg), less than its residential SCTL of 55 mg/kg. All of

the other target analytes were not detected in soil sample CEF-290A-SB-007. Additionally, a soil boring was advanced at the location of the previously collected sample SB-005 to confirm the depth of observed contamination. Samples were collected from depths of 2 and 4 feet bgs and submitted for laboratory analyses of PAHs and TRPHs. In the sample collected from the 2-foot depth, naphthalene was detected at a concentration of 0.0019 mg/kg, less than its residential SCTL of 55 mg/kg. In the sample collected from the 4-foot depth, TRPH was detected at a concentration of 8.2 mg/kg less than its residential SCTL of 460 mg/kg. Based on the September 2007 sampling results, TtNUS recommends that the proposed excavation area include the area north of the secondary containment basin as shown on Figure 1 to a depth of 2 feet bgs.

To obtain site closure, post-excavation groundwater monitoring will be necessary in accordance with Chapter 62-770.750, FAC. TtNUS will supervise the installation of a shallow monitoring well at soil boring location SB005 and subsequently collect a groundwater sample for fixed base laboratory analysis after the dig and haul to confirm that naphthalene and TRPH have not leached into the groundwater.

GUIDANCE NOTES

This information is provided for general guidance purposes only. The approximate area of excavation is shown on Figure 1. The actual extent of excavation will be defined in the field by TtNUS with white spraydown paint (or equivalent) prior to the execution of the removal action.

The Remedial Action Contractor shall be responsible for the following:

- The schedule and methods of excavation.
- All aspects of work site health and safety.
- Identification and avoidance of all aboveground and underground utilities or other manmade structures.
- Waste characterization, transport (both on and off site), and disposal of all excavated soil.
- Notification of TtNUS and the Navy if observations indicate that contaminants may extend beyond the planned lateral or vertical limits of the excavation.
- Depth of excavation is 2 feet bgs. Except where necessary for avoidance of structures or utilities or where otherwise specified by TtNUS, the excavations should extend to the depths presented in this Dig and Haul Package.
- Excavated soil shall be stockpiled on and covered with heavy-duty polyethylene sheeting at the site. This shall be done in a manner to avoid the potential for contaminating surrounding soil or surface water. Alternately, soils may be stockpiled in properly covered roll-off containers.
- Stockpiling and combining of materials from different sites is permitted with prior approval of the NAS Cecil Field Base Realignment and Closure Cleanup Team, if similar types and concentrations of contaminants are involved and contaminants were generated by similar processes.
- Materials used to backfill the excavation shall be from an uncontaminated source and be capable of supporting the same type of vegetation as the soil removed. The ground surface shall be restored to a similar or better condition than existed prior to excavation.

If you have any questions regarding the information presented in this document, please contact me by phone at (904) 730-4669, extension 213, or via e-mail at Mark.Peterson@TetraTech.com.

Sincerely,

Mark A. Peterson, P.G.
Florida License Number PG-0001852

Enclosures (1)

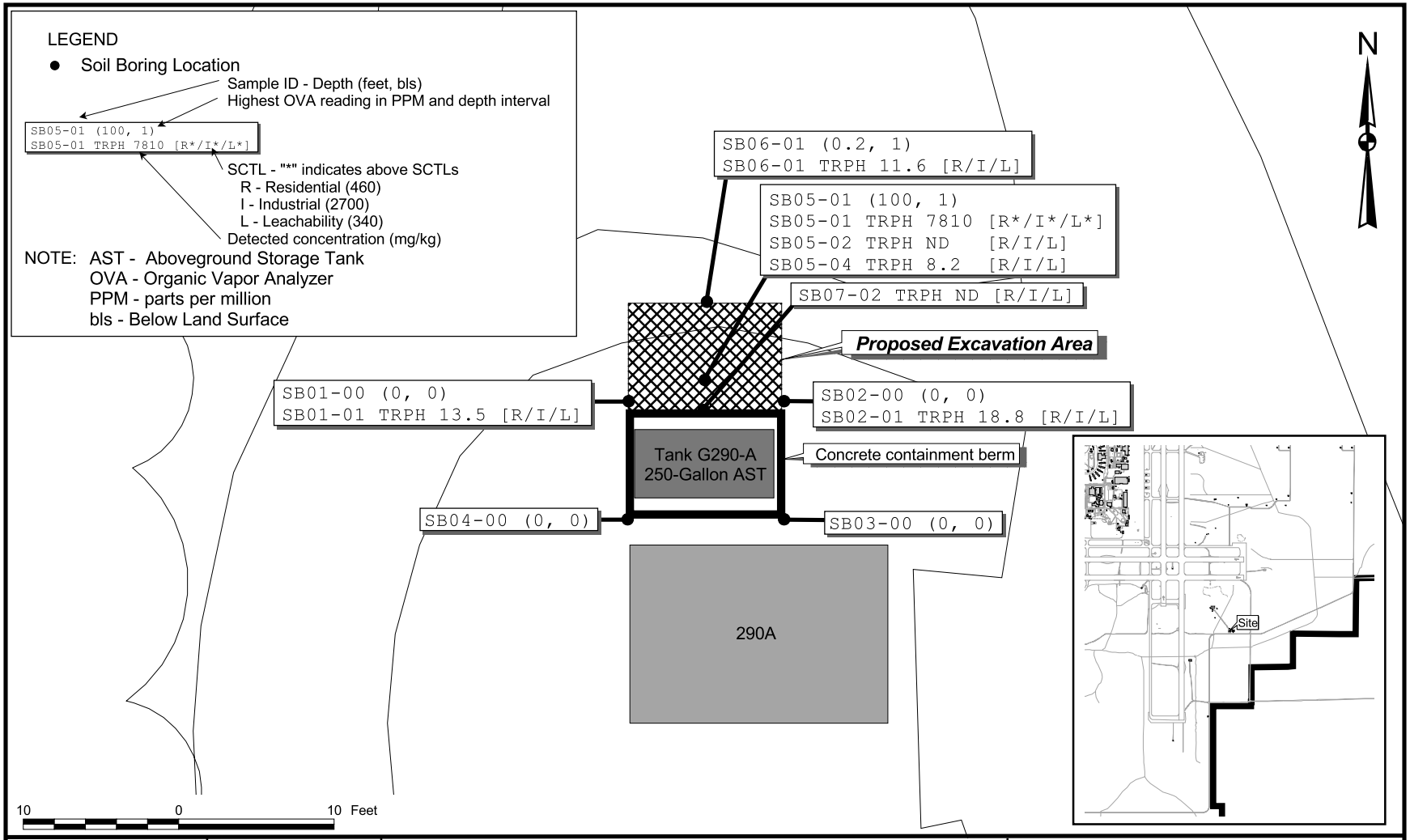
c: M. Davidson, NAVFAC SE
M. Halil, CH2M Hill
J. Logan, TtNUS
R. Simcik, TtNUS (Bookcase File)
M. Johnet, TtNUS (Cecil DMS)
M. Perry, TtNUS (unbound)
M. Speranza, TtNUS (letter only)
D. Humbert, TtNUS (letter only)
J. Johnson, TtNUS (Information Repository)
CTO 0248 Project File

CERTIFICATION

The information contained herein is based on the geologic investigation and associated information detailed in the text and appended to this report. If conditions are determined to exist that differ from those described, the undersigned geologist should be notified to evaluate the effects of any additional information on the information described in this report. This Dig and Haul Package was developed for the Building 290 A, Tank 290A, and should not be construed to apply to any other site.

November 16, 2007
Mark A. Peterson, P.G.
Florida License Number PG-0001852

FIGURE



DRAWN BY	DATE
MJJ	25Aug05
CHECKED BY	DATE
COST/SCHEDULE-AREA	
SCALE	AS NOTED

NAVFAC

PROPOSED SOIL REMOVAL AREA
BUILDING 290A, TANK G290-A
NAVAL AIR STATION CECIL FIELD
JACKSONVILLE, FLORIDA

CONTRACT NUMBER	248
APPROVED BY	DATE
APPROVED BY	DATE
DRAWING NO.	FIGURE 3
REV	0

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