N61331.AR.001892
NSA PANAMA CITY
5090.3a

TECHNICAL MEMORANDUM REGARDING PATH FORWARD FOR NAVAL OPERATIONS SUPPORT CENTER TALLAHASSEE BUILDING 98 AT NSA PANAMA CITY FL

1/3/2013

TETRA TECH INC

TETRA TECH

To: Project Team

From: John Schoolfield, Prakash Paraswamy, Larry Smith

Subject: **Tallahassee NOSC Building 98**

Date: Jan 3, 2013

Overview:

- A 1000-gallon steel UST and its associated piping used for the storage of diesel fuel were removed on October 2, 1991.
- A closure report was submitted to FDEP.
- FDEP reviewed the closure report and requested a SAR based on the detection of BTEX and TCE.

Goal: Execute SAR Work-plan as approved by FDEP to attain site closure.

Path forward: Review data generated to date and complete SAR Workplan to fulfill requirements of FDEP to close Site.

History: UST 2-B was a 1000-gallon steel UST used for the storage of diesel fuel. On October 2, 1991, UST 2-B and its associated piping were excavated and removed. The tank pit was excavated to a depth of 12 feet below ground surface (bgs.). Soil samples were collected during the excavation and analyzed using an organic vapor analyzer (OVA). All OVA readings were below 1 part per million. A boring was then advanced to a depth of 20 feet bgs. Groundwater was encountered at a depth of 17 feet bgs. Groundwater was sampled and analyzed for PAHs, VOCs, petroleum hydrocarbons, and lead. Analytes detected above respective Florida Primary Drinking Water Standards.

Groundwater contamination at UST 2- B was documented in the Closure Assessment Report (Cherokee Groundwater Consultants, 1991). Because of the detection of contaminants in groundwater, additional site characterization was required. A workplan (NAVFAC, 2011) was developed in CY2011 following FDEP guidance and procedures for conducting a site assessment. The first component, the installation of the monitoring well was completed in February 2012.

Initial Field Work

In February 2012, one groundwater monitoring well (NOSC-1-MW-01) was installed near the former UST location. The drilling was completed using a hollow-stem auger. The boring was terminated at 60 ft. bgs. The first 10 ft. bgs. consisted of sand mixed with silty clay. As depth progressed the percentage of clay increased. Limerock was encountered approximately 49 ft. Perched groundwater was measured at 43.7 ft. bgs., which was in the impermeable clay layer above the limestone. Subsurface samples from two locations (i.e., BH03 and BH04) and one groundwater sample (i.e., MW-01) were collected during this sampling event. Soil samples were collected using a hand auger. In both borings, the first 16 ft. bgs. was primarily clayey, silty, sand. At greater depth, the soil was primarily clay. A PID was used to measure OVA

readings during soil borings. No organic vapors were detected. Samples were collected at 17.5- 18 ft. bgs. and shipped to a fixed based laboratory for analysis.

MW-01: The water level was 43.7 ft. bgs. from a measurement collected on June 8, 2012. With the exception of manganese (988 µg/L); no analytes were detected above Florida GCTLs. The Florida GCTL is equivalent to the Federal secondary drinking water standard (0.05 mg/L). The high level is not likely attributable to any waste disposal practices at NOSC.

Location BH-03 is downgradient from the former UST location. A hand-auger was used to collect a soil sample from a depth of 17.5 -18 ft. bgs. (where clay was encountered). No analytes were detected above Florida residential risk-based or leachability-based SCTLs.

Location BH-04 is near the former UST location. A hand-auger was used to collect a soil sample from a depth of 17.5 -18 ft. bgs. (where clay was encountered). No analytes were detected above Florida residential risk-based or leachability-based SCTLs.