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NCBC GULFPORT
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WORK PLAN FOR PRE REMEDIAL INVESTIGATION EVALUATION SITE 3 WITH
TRANSMITTAL NCBC GULFPORT MS
6/1/2006
TETRA TECH NUS

Comprehensive Long-term Environmental Action Navy

CONTRACT NUMBER N62467-04-D-0055



Rev. 0
06/27/06

Work Plan for Site 3 Pre-Remedial Investigation Evaluation

Naval Construction Battalion Center
Gulfport, Mississippi

Contract Task Order 0040

June 2006

 **NAVFAC**
Naval Facilities Engineering Command
Southeast
2155 Eagle Drive
North Charleston, South Carolina 29406



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TtNUS/TAL-06-049/0040

June 27, 2006

Project Number 00458

Commander, Southeast
Naval Facilities Engineering Command Southeast
Attn: Art Conrad (5520)
Remedial Project Manager
2155 Eagle Drive
North Charleston, South Carolina 29419-9010

Reference: CLEAN Contract No. N62467-04-D-0055
Contract Task Order No. 0040

Subject: Workplan Letter
Site 3 Pre-Remedial Investigation Evaluation
Naval Construction Battalion Center
Gulfport, Mississippi

Dear Mr. Conrad:

The following letter provides details for the Site 3 pre-Remedial Investigation activities. The work is scheduled to begin on July 5, 2006 and is scheduled to be complete on July 21, 2006. The results will be provided as quickly as possible to facilitate the decisions for onbase housing currently projected for the area near Site 3.

Introduction

Tetra Tech NUS (TtNUS), under contract to the U. S. Department of the Navy, Southern Division, Naval Facilities Engineering Command (NAVFAC SOUTHEAST), has prepared this Workplan Letter to guide the pre-Remedial Investigation activities at Site 3. This letter was prepared under the Comprehensive Long-term Environmental Action Navy (CLEAN) IV, Contract No. N62467-04-D-0055. This letter and the field activities discussed below are included in Contract Task Order 0040 (CTO 0040). The more extensive Remedial Investigation (and associated workplan) is contained in CTO 0041.

The primary objective of this initial phase of work is to determine the extent of the site and determine if significant contaminant plumes exist as a result of disposal activities at Site 3. This effort is not a complete characterization of potential contaminants at the site, but the results of this study will significantly improve the upcoming Remedial Investigation and provide important data for making land use decisions near Site 3.

Site Background and History

Site 3, referred to as the northwest landfill/burning pit, encompasses approximately 3.5 acres near the intersection of 8th Street and Colby Ave. The site was operated as a landfill from 1948 until the mid-1960's. There was also a fire-fighting training pit that was frequently used from the mid-1950's until 1966. During the time this landfill was operated, nearly all of the solid waste and some of the liquid/chemical waste generated at the facility was disposed of at this site. The landfill was a trench and fill landfill, with daily burning of the wastes. Waste fuel, oil, solvents, paint, and paint thinners from throughout the installation were also transported to the burning pit in bowsers or 55-gallon drums. During a practice burn, the waste liquids were drained into the unlined pit and ignited. An estimated 130,000 gallons of waste fuels, oils, solvents (MEK, toluene, and xylene), paints, and paint thinners, were burned at the fire-fighting training pit. In addition, an estimated 30,000 tons of solid waste (including some additional liquid wastes) were disposed in the trenches. The receptors of greatest concern are the shallow surficial aquifer, the adjacent Canal No.1, and several water supply wells (although those are screened 500 feet below the surface with a significant confining layer at 150 to 250 feet bls). The site is currently used as a fairway for the Pine Bayou Golf Course, operated by NCBC Gulfport.

Field Activities

Field activities will take place in two shifts. Shift 1 will include a geophysical survey to determine site disposal boundaries and identification of individual disposal cells. Based on the results of the geophysical investigation, 120 passive sampling modules will be installed on a grid pattern biased towards significant anomalies and the suspected location of the fire-fighting training pit. Shift 2 will involve the retrieval of the passive sample modules and shipment to the contract laboratory. Field activities are described in detail below.

Geophysical Investigation

Prior to the initiation of activities, a grid with a spacing of 10 feet will be established over the entire 4 acre study area. The majority of this area is golf course fairway; however, the northern site of the study area will encroach on a lightly wooded area overgrown with brush. Brush clearing will take place as necessary with weed trimming equipment.

The EM-61 time-domain metal detector will be used to survey a 4-acre area with 10-foot grid node spacing and the magnetometer and EM-31 survey will be conducted over the same area with 20-foot grid node spacing. Locational information will be provided by using a differentially corrected global position satellite (GPS) receiver during all surveying activities.

Passive Gas Soil Sampling

The installation of the passive gas sampling modules will take place on grid with a spacing of 50 feet. The placement of the modules will be biased towards significant anomalies and the location of the fire-fighting training pit. The modules will be installed to a depth of 3 feet by using a powered drill with a 36 inch long, $\frac{3}{4}$ inch diameter bit. The module is suspended in the boring with filament (provided) and capped with the rubber stopper. In total, 120 modules will be installed. The module should remain in the ground for 10 days. Retrieval and shipping of the modules to the vendor will happen in Shift 2. The vendor (WL Gore) will analyze the samples for volatile organic compounds (VOCs) and semivolatile organic compounds (SVOCs).

Data Management and Reporting

Onsite data management involves the day-to-day recording of field activities. The project database will be initiated in the field to promote the proper collection and storage of field data and documentation of field activities. The field operations leader (FOL) and/or sample coordinator will be responsible for entering the data into the database in the field. The following data will be entered into the project database:

Mr. Art Conrad
NAVFAC SE
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Sample information (i.e. identification, matrix, sample depth, collection time, analyses)

- Location information
- Chain of custody information
- Shipping data
- Field descriptions
- Photographic logs

Reporting will consist of a letter report containing the results of the geophysical investigation and the location and results of the passive gas sampling. The report will also include figures with results contoured and color-coded to highlight areas of elevated concentrations. Given the time sensitive nature of this project, the reporting will take place immediately following receipt of the sample result data. All information will be maintained in the project database and will be incorporated into the Site 3 Remedial Investigation Workplan and Report.

If you have any questions regarding the information presented in this document, please contact me by phone at (850) 385-9899 or via e-mail at Robert.Fisher@tnus.com

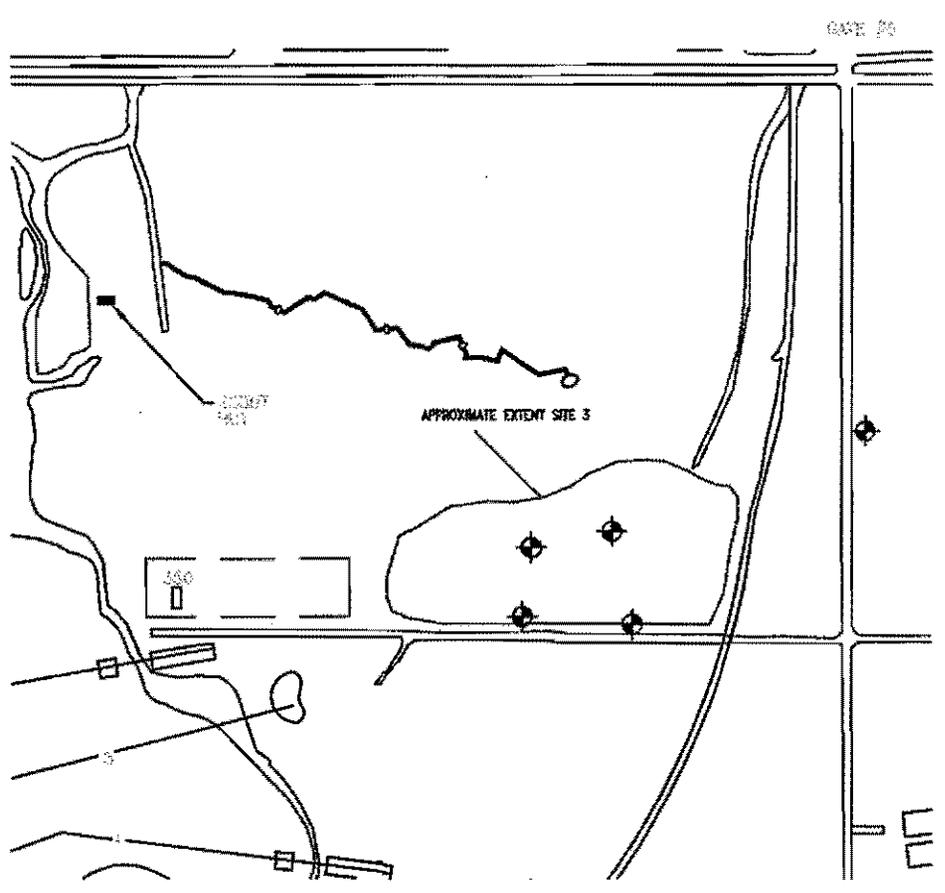
Sincerely,



Robert Fisher, P.G.
Task Order Manager
Date: June 27, 2006

Enclosures

c: Gordon Crane (2 copies)
Debbie Humbert (1 copy)
Mark Perry (1 copy)



SPT-07-01
Diox 77.01

DIOX	2.23
A, D DMC	0.0039
HEPTACHLOR	0.0059
ALDRIN	0.007
D-D DIOXANE	0.0057

LEGEND
 MONITORING WELL

NOTE
 DIOXIN RESULTS ARE SHOWN IN ppq (PARTS PER QUADRILLION). ALL OTHER RESULTS ARE IN ppb (PARTS PER BILLION).

FIGURE
 APPROXIMATE LIMITS OF SITE 3



GROUNDWATER INVESTIGATION
 REPORT
 NAVAL CONSTRUCTION
 BATTALION CENTER
 GULFPORT, MISSISSIPPI



Site 3, circa 1966.

Scale 1" = 200ft (approx.)

Site Boundary

EIGHTH

STREET

AVE

COLBY