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NCBC GULFPORT
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LETTER REGARDING DETAILS OF FIRST PHASE OFF BASE AREAS OF CONCERN
INVESTIGATION ACTIVITIES BETWEEN 4 SEPTEMBER AND 7 SEPTEMBER 2007 NCBC
GULFPORT MS
9/10/2007
TETRA TECH NUS

TtNUS/TAL-0049

September 10, 2007

Project Number 00521

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

Reference: CLEAN Contract No. N62467-04-D-0055
Contract Task Order No. 0049

Subject: Offbase AOC Investigation
Naval Construction Battalion Center
Gulfport, Mississippi

Dear Mr. Conrad:

The following letter provides details for the first phase of Off Base Areas of Concern (AOC) Investigation activities. The work was completed between September 4th and September 7th, 2007. The results will be provided as quickly as possible to facilitate the decisions for additional investigative and sampling activities as requested by MDEQ in their letter dated July 12, 2007.

Introduction

The fieldwork began by walking each of the identified areas of concern and noting any obvious disposal activities. Tetra Tech NUS, was able to investigate all of the areas we planned with our original scope of work and the initial observations are discussed below. The sample analysis will take approximately 30 days, so we will be able to discuss preliminary results in on or near October 4th, 2007

Area of Concern 2

AOC 2 (Item 2), the Turkey Creek soil piles: AOC 2 was investigated by collecting discrete samples from the piles from both the north and south side of Turkey Creek. In total 7 samples were collected – 4 south of Turkey Creek and 3 north of Turkey Creek.

We observed two distinct levels of soil piles along Turkey Creek: the first was a broad area, clearly associated with the initial excavation in the late 1950's and a second smaller set of piles placed on top of the broad piles – reportedly excavated in the mid-1970's. Our samples were collected from the newer, smaller piles identified by Marie Hansen and her family as suspected of containing dioxin associated with Site 8. In fact, Marie Hansen accompanied the sampling team into Area of Concern 2 to observe the team and to ensure her concerns were addressed.

The soil piles on the south side of Turkey Creek began approximately 250 feet east of Canal Road and were generally continuous over the entire study area (2500 feet). The piles ranged from as little as 2 feet to as much as 12 feet high. The 4 soil samples on the south side of Turkey Creek were distributed nearly evenly approximately 300 feet apart.

The soil piles north of Turkey Creek were much more discontinuous and smaller. The 3 locations selected coincided with the back of Marie Hansen's family property. The most notable observations were a significant amount of private disposal: including drums, tanks, a general refuse disposal area, and an outlet from a family operated sewer system (associated with the adjacent trailer park). See Images 1 through 6 at the end of the report.

Taken as a whole, these disposal practices could represent a significant threat to the local human health. Note: We estimated that the sewage disposal line produced approximately 10 gallons per minute and was within 100 feet of shallow-well drinking water sources. The drums and tanks shown were within 200 feet of shallow drinking water wells.

The samples will be analyzed for high resolution dioxins and furans using USEPA Method 8290.

Area of Concern 3

AOC 3 (Item 3), the Trench Disposal area: Two sediment samples were collected in AOC 3. One sample was collected from Ravine #1 (southern ravine) and Ravine #2 to the north. The most notable observation was significant sediment staining. The rust color material shown in Image 7 was traced back to the currently operating landfill. The samples were collected approximately 50 upstream from the junction with Turkey Creek. The samples will be analyzed for high resolution dioxins and furans using USEPA Method 8290.

Area of Concern 5

AOC 5 (Item 5), the Turkey Creek Sediment: Two sediment samples were collected from Turkey Creek to evaluate current conditions of the sediment. The samples were collected approximately 250 feet east and 800 feet east of Canal Road. These samples replace samples collected in the 1990's that were not reported in any Navy document. The samples will be analyzed for high resolution dioxins and furans using USEPA Method 8290.

Area of Concern 6

AOC 6 (Item 7), the surface water pathway adjacent to the permitted landfill: AOC 6 was investigated by collecting 2 sediment samples equally spaced from this potential pathway within the coordinate area provided by MDEQ. The samples were collected in standing water with the same rust-colored staining as was noted in AOC 3. The samples will be analyzed for high resolution dioxins and furans using USEPA Method 8290.

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@ttnus.com

Sincerely,

Robert Fisher, P.G.
Task Order Manager
Date: September 10, 2007

Image 1: Tanks



Image 2: Drums Dispsal



Image 3: Household Wastes



Images 4, 5 and 6: Sewage Disposal to Turkey Creek



Image 7: Ravine #1

