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DATA SUMMARY LETTER REPORT FOR SOIL PESTICIDE CONTAMINATION STUDY NCBC
GULFPORT MS
2/14/2008
TETRA TECH NUS

Mr. Harold McGill
Naval Facilities Engineering Command Southeast
November 27, 2006

TtNUS/TAL-08-

February 14, 2008

Commander, Southeast
Naval Facilities Engineering Command, Southeast
Attn: Mr. Harold McGill
2155 Eagle Drive
North Charleston, South Carolina 29406

Reference: Clean Contract No. N62467-04-D-0055
A/E Contract No. N62467-01-D-0396
Contract Task Order No. 0012

Subject: Data Summary Letter Report: Soil Study
United States Department of Agriculture
Animal and Plant Health Inspection Service Facility
Gulfport, Mississippi

Dear Mr. Harold McGill:

Tetra Tech NUS, Inc. (TtNUS), under contract to the United States Department of the Navy, Naval Facilities Command Southeast (NAVFAC SE), has prepared this Data Summary Letter Report for the United States Department of Agriculture (USDA) Animal and Plant Health Inspection Service (APHIS) in Gulfport, Mississippi. This report was prepared under the Comprehensive Long-term Environmental Action Navy (CLEAN) IV, Contract No. N62467-04-D-0055.

INTRODUCTION

This report presents and summarizes the analysis of soil samples collected from the USDA APHIS Facility in Gulfport, Mississippi on November 19, 2007. The goal of the study was to further investigate pesticide detections in soil reported in *Data Summary Report – Event 2* (December, 2006). This study was focused on the area near sample ESI-04 (collected at 32-34 feet bls), located immediately south of Building 14. The DDT concentration in ESI-04 was 8400 ug/kg, exceeding the MDEQ Tier 1 Unrestricted TRG of 1880 ug/kg. The Dieldrin concentration in ESI-04 was 68 ug/kg, exceeding the MDEQ Tier 1 Unrestricted TRG of 39.9 ug/kg.

Field activities were conducted in accordance with the ESI Work Plan Addendum Letter (TtNUS, 2006) and the Site Specific Health and Safety Plan (TtNUS, 2006). Detailed descriptions of field procedures are located in the SI Work Plan (TtNUS, 2004).

SOIL SAMPLING

Five boring locations were selected in the area adjacent to Building 14 and ESI-04 (Figure 1). Two grab soil samples were collected from each boring location: 1) a surface soil sample at 0-1 foot bls and 2) a subsurface soil sample at 2-3 feet bls. Samples were collected with a stainless steel hand auger, thoroughly mixed using a stainless steel bowl and spoon, then transferred into the laboratory sample container. Samples were labeled, bagged, and packed in ice prior to shipment to the laboratory. Samples were analyzed by Katahdin Analytical Services, Inc., Westbrook, ME.

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Figure 1 presents the exceedances at each of the five soil boring locations. A complete analytical data table is also provided. Results of the soil study are discussed below.

In addition, sample ESI-1123FT was collected in triplicate to evaluate the laboratory precision of the analytical method SW-846 8081A. Results of the triplicate study are discussed below.

RESULTS

Dieldrin exceedances were detected at each boring location and at multiple depths. Four of the five surface soil samples collected (0-1 foot bls) exceeded the MDEQ Tier 1 Restricted TRG of 358 ug/kg. The remaining surface soil sample exceeded the MDEQ Tier 1 Unrestricted TRG of 39.9 ug/kg. The highest reported concentration was 4200 ug/kg; nearly 12 times the Restricted TRG

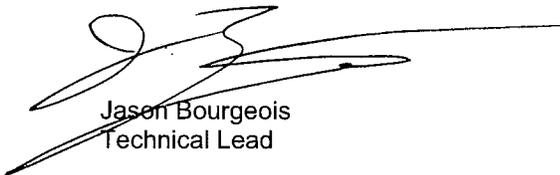
Two of the five subsurface soil samples collected (2-3 feet bls) exceeded the MDEQ Tier 1 Unrestricted TRG of 39.9 ug/kg.

The results of the triplicate study indicate that Katahdin's testing precision is consistent with the SW-846 8081A method.

CONCLUSIONS

Dieldrin is present in a significant area of the surface and subsurface soil near Building 14, above MDEQ screening levels. The highest concentrations indicate the likelihood of an onsite source. The concentrations decrease with depth indicating a previous surface release; possibly a testing application or surface spill. The proximity of the western property line raises the question of possible contaminant migration beyond the facility's boundary. A comprehensive delineation of the surface and shallow subsurface soil over the entire USDA APHIS Facility is recommended.

Sincerely,



Jason Bourgeois
Technical Lead

Enclosures

c: Debbie Humbert (Cover Letter Only)
Mark Perry/File (Unbound)