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NAS CECIL FIELD, FL
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SAMPLING AND ANALYSIS REPORT ADDENDUM FOR BUILDING 289 BASE REALIGNMENT AND CLOSURE NAS CECIL FIELD FL

7/27/2000

TETRA TECH NUS INC

Sampling and Analysis Report Addendum

for

Building 289
Base Realignment and Closure

Naval Air Station Cecil Field

Jacksonville, Florida

Southern Division
Naval Facilities Engineering Command

Contract Number N62467-94-D-0888

Contract Task Order 0078

July 2000

060029/P

SAMPLING AND ANALYSIS REPORT ADDENDUM
FOR
BUILDING 289
BASE REALIGNMENT AND CLOSURE

NAVAL AIR STATION CECIL FIELD
JACKSONVILLE, FLORIDA

COMPREHENSIVE LONG-TERM
ENVIRONMENTAL ACTION NAVY (CLEAN) CONTRACT N62467-89-D-0088

Submitted to:
Southern Division
Naval Facilities Engineering Command
2155 Eagle Drive
North Charleston, South Carolina 29406

Submitted by:
Tetra Tech NUS, Inc.
661 Andersen Drive
Foster Plaza 7
Pittsburgh, Pennsylvania 15220

CONTRACT NUMBER N62467-94-D-0888
CONTRACT TASK ORDER 0078

JULY 2000

PREPARED UNDER THE SUPERVISION OF:

Mark Speranza

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APPROVED FOR SUBMITTAL BY:

Debbie Wroblewski

DEBBIE WROBLEWSKI
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The professional opinions rendered in this decision document identified as Sampling and Analysis Report Addendum for Building 289, Naval Air Station Cecil Field, Jacksonville, Florida were developed in accordance with commonly accepted procedures consistent with applicable standards of practice. Decision documents are based on information obtained from others and under the supervision of the signing engineer. If conditions are determined to exist differently than those described in this document, then the undersigned professional engineer should be notified to evaluate the effects of any additional information on this project described in this report.

Mark Speranza

Mark Speranza, P.E.
Professional Engineer No. PE0050304

Date: 7/27/00

Mark Speranza

CERTIFICATION OF TECHNICAL
DATA CONFORMITY

The Contractor, Tetra Tech NUS, Inc., hereby certifies that, to the best of its knowledge and belief, the technical data delivered herewith under Contract No. N62467-94-D-0888 are complete and accurate and comply with all requirements of this contract.

DATE: July 7, 2000

NAME AND TITLE OF CERTIFYING OFFICIAL: Mark Speranza, P.E.
Task Order Manager

Sampling and Analysis Report Addendum
Base Realignment and Closure
Building 289

Tetra Tech NUS, Incorporated (TtNUS), under contract to Southern Division, Naval Facilities Engineering Command, has completed additional evaluation of data for Building 289 at Naval Air Station (NAS) Cecil Field. This work was conducted under Contract Number N62467-94-D-088, Contract Task Order (CTO) 0039. This addendum to the Sampling and Analysis Report (SAR) [ABB-Environmental services, Inc. (ABB-ES) 1997] documents the results of this evaluation.

During the Phase II investigation, thallium was detected in the groundwater sample (68G00101) from well CEF-289-1S at a concentration of 5.6 µg/L. The duplicate sample from this location had a thallium concentration of 2.2 µg/L, resulting in an average concentration of 3.9 µg/L. This concentration was compared to the Florida Department of Environmental Protection (FDEP) Groundwater Guidance Concentration (2.2 µg/L) and the United States Environmental Protection Agency (U.S. EPA) Region III risk-based concentration (RBC) of 2.9 µg/L applicable at the time of the SAR (FDEP 1994 and U.S. EPA, 1996). The average thallium concentration of 3.9 µg/L exceeded both the FDEP Groundwater Guidance Concentration and the U.S. EPA Region III RBC. A cumulative hazard index (HI) of 2.2 was calculated based on all detected analytes in groundwater from CEF-289-1S. The HI for thallium represents approximately 85 percent of this value.

Since the SAR was issued, a site-specific Inorganic Background Data Set (IBDS) has been generated for use as NAS Cecil Field background concentrations [Harding Lawson Associates (HLA), 1998]. The thallium concentration was screened against the IBDS concentration of 13.3 µg/L, the FDEP criterion of 2 µg/L, and the U.S. EPA RBC of 2.9 µg/L. It is not appropriate to select a remediation goal that is less than the IBDS value. Because the regulatory and risk-based criteria for thallium are less than the IBDS value, the IBDS value is regarded as the remediation goal. The thallium concentration detected in groundwater from well CEF-289-1S (average of 3.9 µg/L) was less than its IBDS concentration of 13.3 µg/L. Therefore, thallium is not of concern at the concentration detected in groundwater from Building 289.

Based upon the findings of this evaluation, TtNUS concurs with the recommendation of the SAR to change the color code for the Building 289 from Gray to Light Green. No remedial action or further evaluation is recommended.

References

ABB-ES, 1997. Sampling and Analysis Report – Building 289, Naval Air Station Cecil Field, Jacksonville, Florida. November.

FDEP, 1994, Groundwater Guidance Concentrations, Bureau of Drinking Water and Groundwater Resources. June.

HLA, 1998, Inorganic Background Data Set, Naval Air Station Cecil Field, Jacksonville, Florida.

U.S. EPA, 1996, Region III Risk-Based Screening Table, Regional III, Technical Guidance Manual, EPA/903/R-93-001. May.