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SAMPLING AND ANALYSIS OUTLINE FOR BUILDING 824A OIL-WATER SEPARATOR 824A-OW BASE REALIGNMENT AND CLOSURE NAS CECIL FIELD FL

1/1/2000

TETRA TECH NUS INC

Sampling and Analysis Outline
for
Building 824A, Oil-Water Separator
824A-OW
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

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SAMPLING AND ANALYSIS OUTLINE
FOR
BUILDING 824A, OIL-WATER SEPARATOR 824A-OW
BASE REALIGNMENT AND CLOSURE

NAVAL AIR STATION CECIL FIELD
JACKSONVILLE, FLORIDA

COMPREHENSIVE LONG-TERM
ENVIRONMENTAL ACTION NAVY (CLEAN) CONTRACT

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

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PREPARED UNDER THE SUPERVISION OF:

MARK SPERANZA, P.E.
TASK ORDER MANAGER
TETRA TECH NUS, INC.
PITTSBURGH, PENNSYLVANIA

APPROVED FOR SUBMITTAL BY:

DEBBIE WROBLEWSKI
PROGRAM MANAGER
TETRA TECH NUS, INC.
PITTSBURGH, PENNSYLVANIA

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ACRONYMS

BRAC	Base Realignment and Closure
CLP	Contract Laboratory Program
CSR	Confirmatory Sampling Report
HLA	Harding Lawson Associates
NAS	Naval Air Station
PAHs	Polycyclic aromatic hydrocarbons
SAO	Sample and Analysis Outline
TtNUS	Tetra Tech NUS, Inc.

1.0 SITE DESCRIPTION

This Base Realignment and Closure (BRAC) Phase II Sampling and Analysis Outline (SAO) briefly describes and proposes a plan for additional sampling at Building 824A, Oil-Water Separator 824A-OW located at the Main Base, Naval Air Station (NAS) Cecil Field. The oil-water separator is located on the south side of Building 824A (Figure 1).

According to the Confirmatory Sampling Report (CSR) [Harding Lawson Associates (HLA), 1999], the installation date and size of the oil-water separator are unknown. In the CSR investigation, four borings for field screening were advanced, one monitoring well (CEF-824A-1S) was installed, and one subsurface soil sample was collected. The sampling described in this SAO is to address the high detection limits in the polycyclic aromatic hydrocarbon (PAH) fraction in the CSR groundwater sample, and to address the high lead concentration in the CSR groundwater sample.

Figure 1 (8 ½ x 11)

2.0 ENVIRONMENTAL BASELINE SURVEY COLOR DESIGNATION

Building 824A is currently coded Blue (Yellow). The tank itself does not have a designation.

3.0 RECOMMENDATIONS

Completion of the following program is recommended to assess the contamination in groundwater near the Oil-Water Separator 824A-OW. To evaluate the groundwater, analysis for PAHs (Method 8310) and total and dissolved lead (Method 6010B) is recommended. Groundwater samples are to be collected using low flow purge methods.

Applicable sample collection techniques, quality assurance objectives, quality control requirements, and sample handling and shipping procedures are outlined in the Base-wide Generic Work Plan [Tetra Tech NUS (TtNUS), 1998]. The proposed sampling locations are shown on Figure 1. The sample locations and analyses are summarized on Table 3-1.

One groundwater sample will be collected from the existing well (CEF-824A-1S) using low flow purge techniques and will be analyzed for total lead, dissolved lead (1-micron filter), and PAHs by Method 8310.

Sampling handling requirements, the bottleware required, preservation, and holding time requirements for the analysis proposed for this sampling event are as identified in the following table:

Analysis	Analytical Method	Bottleware	Preservation	Holding Time[1]
GROUNDWATER				
Lead	SW-846 6010B	1 1-liter glass or polyethylene	pH < 2 with HNO_3, Cool to 4°C,	180 days to analysis
PAHs	SW-846 8310	1 1-liter amber glass; Teflon-lined lid	Cool to 4°C	7 days to extraction; 40 days to analysis

1 Holding times are measured from the date/time of sample collection.

Analytical results will be provided on a 14-day turn around basis.

TABLE 3-1

GROUNDWATER SAMPLING AND ANALYSIS
BUILDING 824A, OIL-WATER SEPARATOR 824A-OW

Sample ID	Location	Analysis		
		Total Lead	Dissolved Lead	PAHs 8310
GROUNDWATER				
CEF-824A-GW-01S-01	From well CEF-824A-01S, next to oil-water separator	X		X
CEF-824A-GF-01S-01	From well CEF-824A-01S, next to oil-water separator, filtered through **1-micron** filter		X	

PAHs = Polycyclic Aromatic Hydrocarbons

REFERENCES

Harding Lawson Associates (HLA), 1999. Confirmatory Sampling Report, Building 824A, Oil-Water Separator 824A-OW, NAS Cecil Field, Jacksonville, Florida, April.

Tetra Tech NUS, Inc. (TtNUS), 1998. Base-wide Generic Work Plan, Naval Air Station Cecil Field, Jacksonville, Florida. Pittsburgh, PA.