

N60200.AR.002050
NAS CECIL FIELD, FL
5090.3a

PHASE 3 SAMPLING AND ANALYSIS WORK PLAN FOR POTENTIAL SOURCE OF
CONTAMINATION 46 BUILDINGS 72 AND 177 NAS CECIL FIELD FL

8/23/1999

TETRA TECH NUS INC

**Phase III Sampling and Analysis Work Plan
PSC 46, Buildings 72 and 177
Naval Air Station Cecil Field
Jacksonville, Florida**

August 23, 1999

Phase III sampling and analysis of surface soils is proposed for PSC 46 to further delineate soil excavation boundaries as shown in Figure A. PSC 46, located to the southeast of the South Fuel Farm, is comprised of the grassy area south of Building 72 and west of Building 177 at Naval Air Station (NAS) Cecil Field. Building 72 is the Crash Fire Station, which has the primary purpose of responding to crashes on the flightline. Building 177 is a Quonset Hut that holds various supplies. Previous surface soil sampling at this site identified several sample locations containing benzo(a)pyrene (BaP) at levels which exceed the Florida Department of Environmental Protection (FDEP) cleanup criteria. Total recoverable petroleum hydrocarbons (TRPH) was detected above criteria in one sample during previous sampling. In addition, further delineation of soil contamination detected west of Building 177 during the Sites 36/37 Remedial Investigation (RI) will be conducted during Phase III sampling activities at PSC 46.

Because of the proximity to active runways and taxiways, this sampling must be coordinated with Cecil Field Air Operations. Ramp safety requirements must be followed. At least one field crewmember shall have ramp training.

A total of 19 Phase III soil samples will be collected from the approximate locations identified on Figure A and described in Table 1. In addition, 3 samples from Phase II locations will be collected for additional analyses. Analytical requirements also are listed in Table 1.

The sampling activities and procedures as described in this Work Plan will be performed in accordance with the United States Environmental Protection Agency (U.S. EPA) Region 4 Environmental Investigation Standard Operating Procedures and Quality Assurance Manual (EISOPQAM) and the Base-Wide Generic Work Plan for NAS Cecil Field. Specifically, the Base-Wide Generic Work Plan includes the procedures for management of IDW in Volume I, and the SOPs are in the Project Operations Plan in Volume II.

The surface soil samples will be collected as grab samples using plastic, disposable trowels. Because disposable trowels will be used, decontamination of surface soil sampling equipment will not be necessary.

The location of the proposed samples will be identified by a registered surveyor in the field and marked with a wooden stake labeled with the sample identification. The sampling crew will work with the survey crew to establish the best procedures to limit the time the wooden stakes or pin flags are in the area. The sampling crew will collect the samples from the locations identified.

Personal protection equipment and other waste trash (e.g., disposable trowels) will not be considered hazardous and will be disposed of in a municipal landfill. Such trash will be collected in a plastic bag and disposed of in a suitable trash receptacle. Removed soil in excess of sampling volume requirements will be placed back in the ground, and turf will be replaced or repaired.

Sample 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
PAHs	SW-846 8310	8-oz. glass jar	Cool to 4° C	14 days to extraction; 40 days to analysis
TCL VOCs	SW-846 5035/8260B	Encore samplers	Cool to 4° C Preservation by laboratory	48 hours to preservation; 14 days to analysis
TCL SVOCs	SW-846 8270C	8-oz. glass jar	Cool to 4° C	14 days to extraction; 40 days to analysis
TCL Pesticides	SW-846 8081A	8-oz. glass jar	Cool to 4° C	14 days to extraction; 40 days to analysis
Chromium	SW-846 6010B	8-oz. glass jar	Cool to 4° C	180 days to analysis
TPRH	Florida PRO	8-oz. glass jar	Cool to 4° C	14 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 time.

The laboratory contracted to do this work is as follows:

ACCUTEST SOUTHEAST
 4405 Vineland Rd., Suite C-15
 Orlando, Florida 32811
 Attention: Susan Gaudios
 (407) 425-6700
 Fax: (407) 425-0707

As agreed by the Base Closure Team (BCT), the collection of rinsate and trip blanks has been eliminated at NAS Cecil Field. In accordance with these changes, the following table summarizes the frequency and type of field Quality Assurance/Quality Control (QA/QC) samples to be collected for this confirmatory sampling program.

Type of samples	Frequency	Samples to be collected
Field Duplicate	1/10 samples/matrix	2
Lab MS/MSD	1/20 samples	1 ⁽¹⁾

1 MS/MSD is a laboratory QA/QC requirement, separate sample not required, only additional volume.

As agreed upon by the BCT, formal data validation has been eliminated from the installation restoration program at NAS Cecil Field. However, TtNUS personnel will review the analytical data packages generated by the analytical laboratory to eliminate false positive and false negative results.

Table 1

**Phase III Sampling and Analysis Work Plan
PSC 46, Buildings 72 and 177**

Sample ID	Location	Sample Depth	Analysis			
			TCL VOCs, SVOCs, Pest.	Cr	TRPH	PAHs
SURFACE SOIL SAMPLES						
CEF-P46-SS-201-01	15 feet east of CEF-P46-SS-009	0 – 1 ft				X
CEF-P46-SS-202-01	15 feet north of sample 35S00401	0 – 1 ft				X
CEF-P46-SS-203-01	15 feet west and 15 feet north of 35S00701	0 – 1 ft				X
CEF-P46-SS-204-01	15 feet south of CEF-P46-SS-009	0 – 1 ft				X
CEF-P46-SS-205-01	15 feet west of 35S00401	0 – 1 ft				X
CEF-P46-SS-206-01	15 feet east of 35S00401	0 – 1 ft				X
CEF-P46-SS-207-01	15 feet north of 35S00201	0 – 1 ft				X
CEF-P46-SS-208-01	15 feet north and 15 feet west of CEF-P46-SS-110-02	0 – 1 ft			X	X
CEF-P46-SS-209-01	15 feet north of CEF-P46-SS-004	0 – 1 ft				X
CEF-P46-SS-210-01	15 feet west of CEF-P46-SS-004	0 – 1 ft				X
CEF-P46-SS-211-01	15 feet north of CEF-P46-SS-011	0 – 1 ft				X
CEF-P46-SS-212-01	15 feet west of CEF-P46-SS-011	0 – 1 ft				X
CEF-P46-SS-213-01	15 feet east of CEF-P46-SS-114-01	0 – 1 ft				X
CEF-P46-SS-214-01	15 feet north of CEF-P46-SS-114-01	0 – 1 ft				X
CEF-P46-SS-215-01	15 feet north of CEF-P46-SS-117-01	0 – 1 ft				X
CEF-P46-SS-216-01	15 feet east of CEF-P46-SS-117-01	0 – 1 ft				X
CEF-P46-SS-217-01	15 feet west of CEF-P46-SS-117-01	0 – 1 ft				X
SUBSURFACE SOIL SAMPLES						
CEF-P46-SU-218-03	At CEF-P46-SS-110-02 location	2 – 3 ft				X
CEF-P46-SU-219-03	At 35S01201 / CEF-P46-SS-122-02 location	2 – 3 ft				X
RESAMPLES OF PHASE II LOCATIONS						
CEF-P46-SS-111-02	15 feet west of CEF-036-SB-B01A	1 – 2 ft	X	X	X	
CEF-P46-SS-112-02	15 feet west of CEF-036-SB-B001	1 – 2 ft	X	X	X	
CEF-P46-SS-123-02	15 feet south of CEF-036-SB-B001	1 – 2 ft	X	X	X	

TCL VOCs, SVOCs, Pest. = Target compound list volatiles, semivolatiles, and pesticides

Cr = Chromium

TRPH = Total recoverable petroleum hydrocarbons

Document Page Holder

DOC. NAME: _____ 00494 _____ A _____ 01 Z

FIGURE NO.: _____ A _____

BOX

DOC. NAME: _____ _____ _____ _____ _____ _____ _____ _____ _____

FIGURE NO.: _____

BOX

DOC. NAME: _____ _____ _____ _____ _____ _____ _____ _____ _____

FIGURE NO.: _____

BOX

DOC. NAME: _____ _____ _____ _____ _____ _____ _____ _____ _____

FIGURE NO.: _____

BOX

DOC. NAME: _____ _____ _____ _____ _____ _____ _____ _____ _____

FIGURE NO.: _____

Z = B & W 11 X 17

Y = COLOR

X = OVERSIZE

