

N60200.AR.002396
NAS CECIL FIELD, FL
5090.3a

PHASE 8 SAMPLING AND ANALYSIS WORK PLAN FOR POTENTIAL SOURCE OF
CONTAMINATION 42 STEAM PLANT NAS CECIL FIELD FL
4/10/2000
TETRA TECH NUS INC

**Phase VIII Sampling and Analysis Work Plan
PSC 42, Steam Plant
Naval Air Station Cecil Field
Jacksonville, Florida**

April 10, 2000

Phase VIII sampling and analysis of surface soils is proposed for PSC 42, the Steam Plant Yellow Water Public Works Area, as shown in Figure A. Sampling and analysis will be conducted to further delineate polynuclear aromatic hydrocarbon (PAH), total recoverable petroleum hydrocarbon (TRPH), and metals (arsenic, barium, and antimony) contamination. A total of 14 soil samples will be collected from approximate locations as shown on Figure A and described in Table 1.

The sampling activities and procedures described in this Work Plan will be performed in accordance with the U.S. EPA Region 4 Environmental Investigation Standard Operating Procedures and Quality Assurance Manual (EISOPQAM) and the Base-Wide Generic Work Plan for Naval Air Station (NAS) Cecil Field. Specifically, the Base-Wide Generic Work Plan includes procedures for management of investigation-derived wastes in Volume I and standard operating procedures 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 sampling equipment for surface soil sampling will not be necessary. The location shall be located in the field by a registered surveyor and marked with a wooden stake or pin flag 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. If the locations of the sampling points are moved, based on field conditions, then the location where the sample was collected will be re-surveyed. **Samples located beneath the foundation of the former building in the southern portion of the site (or other paved areas) will be cored and collected at depths measured from the top of underlying soil material.**

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

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⁾
PAHs	SW-846 8310	8-oz. glass jar	Cool to 4°C	14 days to extraction; 40 days to analysis
TRPH	Florida PRO	8-oz. glass jar	Cool to 4°C	14 days to analysis
Arsenic, Barium, Antimony	SW-846 6010B	8-oz. glass jar	Cool to 4°C	180 days to analysis

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

Analytical results will be provided on a 7-day turn around basis.

The laboratory contracted to do this work is as follows:

ACCUTEST SOUTHEAST
4405 Vineland Road, Suite C-15
Orlando, Florida 32881
Attention: Linda Williams
(407) 425-6700
Fax: (407) 425-0707

As agreed upon by the BCT, the collection of rinsate and trip blanks has been eliminated at NAS Cecil Field. In addition, field blanks will not be collected during this sampling program because there will be no decontamination of sampling equipment. 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 sampling program.

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

(1) MS/MSD samples are a laboratory QA/QC requirement. Separate samples are not required, only additional volume (2X),

As agreed upon by the BCT, formal data validation has been eliminated from the installation restoration program at NAS Cecil Field. However, the analytical data packages generated by the analytical laboratory will be reviewed by Tetra Tech NUS personnel to eliminate false positives and false negative results.

Table 1
Phase VIII Sampling and Analysis
PSC 42, Steam Plant

Sample ID CEF-P42-	Location	Analysis		
		PAHs	TRPH	Arsenic, Barium, Antimony
SS-701-02	At CEF-P42-SS-201-01/SS-619 location (1 to 2')	X	X	X
SU-702-03	At CEF-P42-SS-201-01/SS-701-02 location (2 to 3')	X	X	X
SU-703-03	At CEF-P42-615-02 location (2 to 3')	X		X
SS-704-02	At CEF-P42-SS-205/SS-620 location (1 to 2')	X	X	X
SU-705-03	At CEF-P42-SS-205/SS-620/SS-704-02 location (2 to 3')	X	X	X
SS-706-02	At CEF-P42-SS-206/SS-618 location (1 to 2')	X		
SU-707-03	At CEF-P42-SS-206/SS-618/SS-704-02 location (2 to 3')	X		
SU-708-03*	At CEF-P42-SS-213-01 location (beneath concrete 2 to 3')	X	X	X
SS-709-01*	Approximately 22 feet east and 6 feet south of CEF-P42-SS-116 location (beneath concrete 0 to 1')	X	X	X
SS-710-01*	Approximately 55 feet east of CEF-P42-SS-709-01 location (beneath concrete 0 to 1')	X	X	X
SS-711-01*	Approximately 55 feet east of CEF-P42-SS-710-01 location (beneath concrete 0 to 1')	X	X	X
SS-712-01*	Approximately 23 feet east and 23 feet south of CEF-P42-SS-709-01 location (beneath concrete 0 to 1')	X	X	X
SS-713-01*	Approximately 55 feet east of CEF-P42-SS-712-01 location (beneath concrete 0 to 1')	X	X	X
SS-714-01*	Approximately 25 feet south of CEF-P42-SS-713-01 location (beneath concrete 0 to 1')	X	X	X

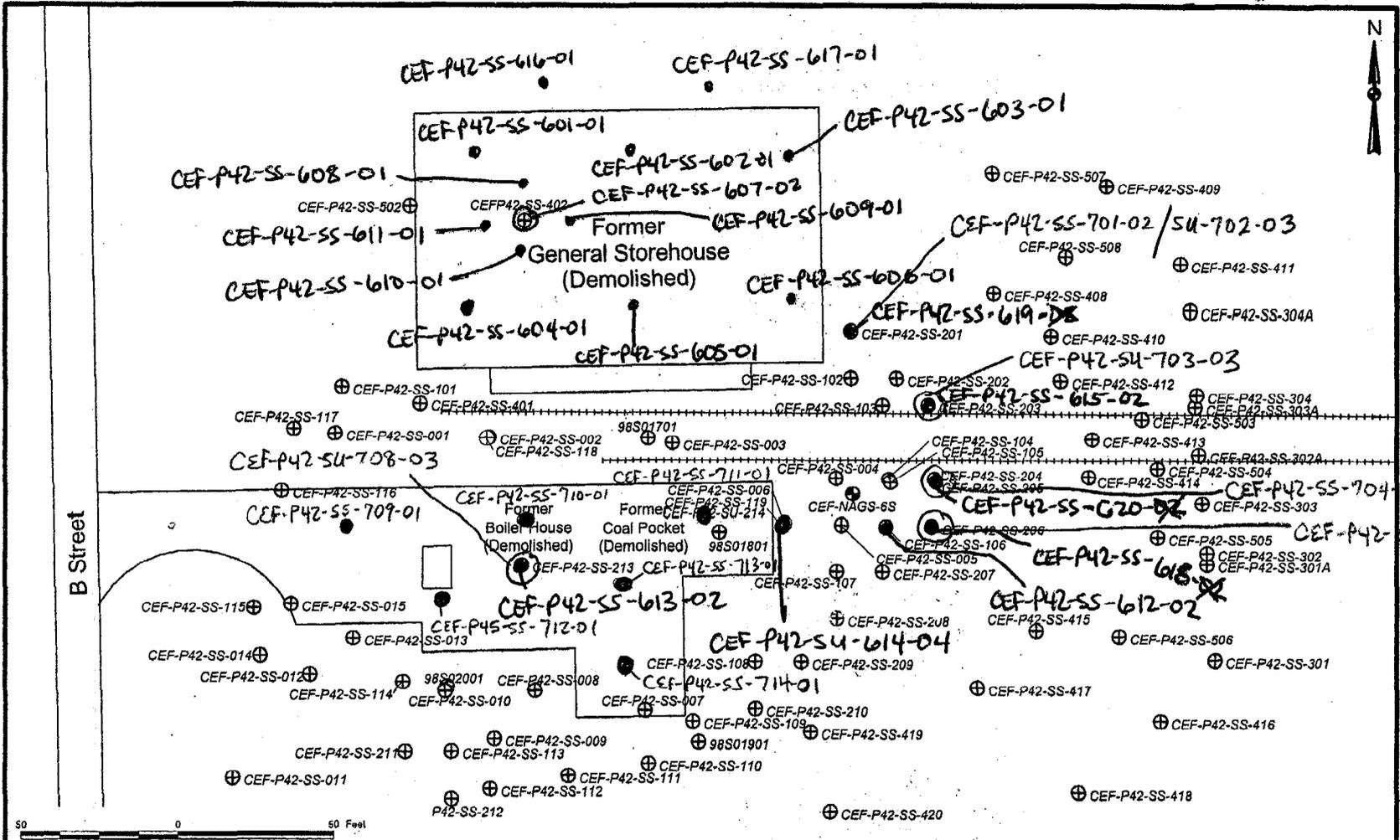
PAHs = Polynuclear aromatic hydrocarbons

TRPH = Total recoverable petroleum hydrocarbons

* To be cored (if required) and sampled at specified depth below top of soil.

04519

04-10-99-00



DRAWN BY YLI	DATE 04/06/99
CHECKED BY	DATE
COST/SCHEDULE-AREA	
SCALE AS NOTED	



PHASE VIII
SAMPLE LOCATIONS
PSC 42, STEAM PLANT
NAVAL AIR STATION CECIL FIELD
JACKSONVILLE, FLORIDA

CONTRACT NUMBER 0039	
APPROVED BY	DATE
APPROVED BY	DATE
DRAWING NO. FIGURE A	REV 0