

N60200.AR.002309  
NAS CECIL FIELD, FL  
5090.3a

PHASE 9 SAMPLING AND ANALYSIS WORK PLAN FOR POTENTIAL SOURCE OF  
CONTAMINATION 21 GOLF COURSE PESTICIDE MIXING AREA NAS CECIL FIELD FL  
2/11/2000  
TETRA TECH NUS INC

**Phase IX Sampling and Analysis Work Plan  
PSC 21, Golf Course Pesticide Mixing Area  
Naval Air Station Cecil Field  
Jacksonville, Florida**

**February 11, 2000**

Phase IX sampling and analysis is proposed for PSC 21, Golf Course Pesticide Mixing Area. Pesticides, arsenic, vanadium, polycyclic aromatic hydrocarbons (PAHs), and total petroleum hydrocarbons (TPH) have been detected in excess of screening criteria in soil and groundwater samples at this site during previous sampling. A total of 2 surface soil samples will be collected during Phase IX from the approximate locations identified on Figure A and described in Table 1.

The surface soil samples will be collected as a grab sample using plastic, disposable trowels. The locations of the samples collected will be located by a registered surveyor in the field 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.

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.

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. 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 <sup>(1)</sup>
Arsenic	SW-846 6010B	8-oz. glass jar	Cool to 4 °C	180 days to analysis
Pesticides	SW-846 8081A	3 8-oz. glass jars	Cool to 4 °C	14 days to extraction; 40 days to analysis

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

Analytical results will be reported 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 minimal 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	0
Lab MS/MSD	1/20 samples/matrix	1 <sup>(1)</sup>

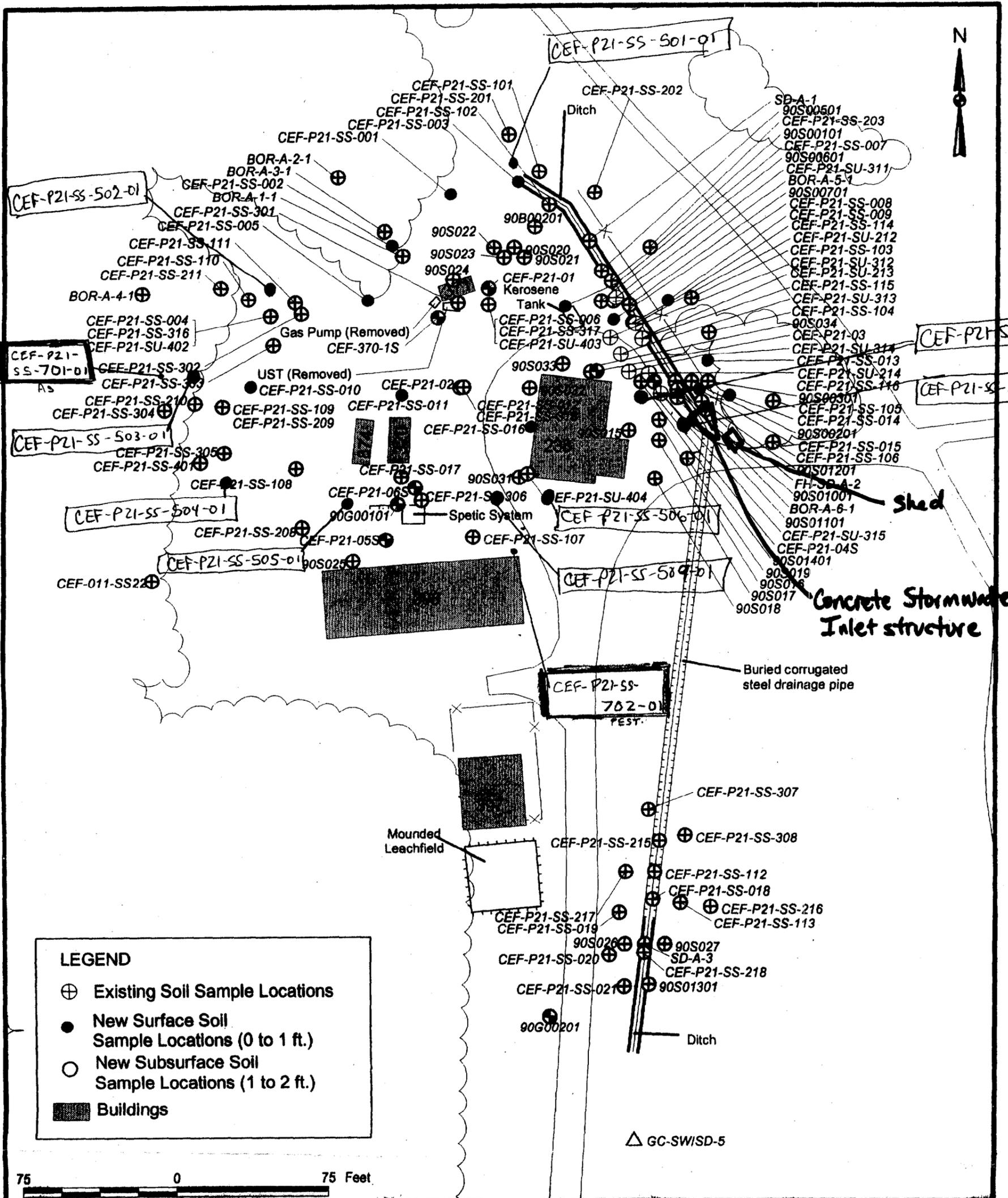
(1) MS/MSD is a Laboratory QA/QC requirement; separate sample not required, only additional volume.

As agreed upon by the BCT, formal data validation has been eliminated from the installation restoration program at NAS Cecil Field. However, 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 IX Sampling and Analysis  
PSC 21, Golf Course Pesticide Mixing Area**

Sample ID CEF-P21-	Location	Analysis	
		Arsenic	Pesticides
SS-701-01	15 feet west of CEF-P21-SS-503 location	X	
SS-702-01	About 25 feet south of CEF-P21-SS-509 location, about 1 to 2 feet north of the Northeast corner of Building 398		X



**LEGEND**

- ⊕ Existing Soil Sample Locations
- New Surface Soil Sample Locations (0 to 1 ft.)
- New Subsurface Soil Sample Locations (1 to 2 ft.)
- Buildings

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**Phase IX**  
**SAMPLE LOCATIONS**  
 PSC 21, GOLF COURSE PESTICIDE MIXING AREA  
 NAVAL AIR STATION CECIL FIELD  
 JACKSONVILLE, FLORIDA

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