

N60200.AR.009454
NAS CECIL FIELD
5090.3a

RESPONSE TO COMMENTS ACTION MEMORANDUM FOR POTENTIAL SOURCE OF
CONTAMINATION 42 (PSC 42) FORMER BOILER HOUSE/ STEAM PLANT AND GENERAL
STOREHOUSE NAS CECIL FIELD FL

4/30/2001
TETRA TECH



TETRA TECH NUS, INC.

661 Andersen Drive ■ Pittsburgh, Pennsylvania 15220-2745
(412) 921-7090 ■ FAX (412) 921-4040 ■ www.tetrattech.com

PITT-04-1-013

April 30, 2001

Project Number 0039

Mr. David P. Grabka
Florida Department of Environmental Protection
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Reference: Clean Contract No. N62467-94-D-0888
Contract Task Order No. 0078

Subject: Response to Comments - Action Memorandum for Potential Source of
Contamination 42 (PSC 42) – Former Boiler House/Steam Plant and General
Storehouse (Yellow Water Weapons Area)
Naval Air Station Cecil Field
Jacksonville, Florida

Dear Mr. Grabka:

Your letter of February 6, 2001 (Attachment A) about the subject document noted that the concentration of total chromium in sample CEF-P42-SS-301 was greater than the chromium leachability-based SCTL. This SCTL is for hexavalent chromium rather than total chromium. This sample location is outside of the excavation limits presented in the Action Memorandum. This comment was subsequently discussed during the BCT telephone conference meeting on March 13, 2001, and during that meeting, it was decided to collect a sample at the CEF-P42-SS-301 location for hexavalent chromium analysis.

On March 15, 2001, a soil sample was collected at the CEF-P42-SS-301 location and analyzed for hexavalent chromium by Method SW-846 3060A/7196A and for total chromium by Method SW-846 6010B. Sufficient sample volume was collected so that additional tests that are recommended in the hexavalent chromium method - oxidation/reduction potential (ORP), pH, sulfide, and Fe(II) – could also be performed. The additional analyses are recommended to evaluate the reducing characteristics of the soil that can interfere with the matrix spike recovery of the hexavalent chromium analysis. Reducing properties in some soil samples will consume the hexavalent chromium used in the matrix spike solution and yield poor spike recovery results.

Hexavalent chromium was not detected at a detection limit of 20 mg/kg, and the total chromium result was 3 mg/kg. Both values are less than the leachability-based hexavalent chromium SCTL of 38 mg/kg. A copy of the analytical results is attached (Attachment B).

The results of the ORP and pH analyses suggest that reducing conditions are present in the soil. Thus, chromium is most likely to be in the trivalent rather than the hexavalent form (SW-846 3060A/7196A).

Because total and hexavalent chromium concentrations are less than the leachability-based SCTL for hexavalent chromium, the chromium concentration at this sample location no longer needs to be considered. Therefore, no delineation is needed at this location, and no additional

Mr. David Grabka
FDEP
April 30, 2001 – Page 2

excavation is required. Thus, overall site risk for the entire site (after excavation is completed) will be protective for residential uses.

This information will be reiterated in the PSC 42 Technical Memorandum to be prepared after excavation is completed and the Construction Completion Report is submitted by the RAC.

If you have any questions, please call Joseph Logan at 412-921-7231 or me at 412-921-8916.

Very truly yours,



Mark Speranza, P.E.
Task Order Manager

Attachment

cc: M. Davidson, SOUTHDIV
S. Glass, SOUTHDIV
D. Vaughn-Wright, U. S. EPA
S. Ross, J. A. Jones
J. Flowe, City of Jacksonville
D. Wroblewski, TtNUS (Cover Letter Only)
M. Perry, TtNUS/File CTO 78

ATTACHMENT A



Jeb Bush
Governor

Department of Environmental Protection

Twin Towers Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

David B. Struhs
Secretary

February 6, 2001

Commanding Officer
Mr. Mark Davidson, Code 1879
SOUTHNAVFACENGCOM
Post Office Box 190010
North Charleston, SC 29419-9010

RE: Action Memorandum for Potential Source of Contamination 42 (PSC 42) - Former Boiler House/Steam Plant and General Storehouse (Yellow Water Weapons Area), Naval Air Station Cecil Field, Florida.

Dear Mr. Davidson:

I have completed my review of the Action Memorandum for PSC 42, Naval Air Station Cecil Field, dated January 31, 2001 (received February 2, 2001), prepared and submitted by Tetra Tech NUS, Inc. The Department approves the proposed remedial action to remove soils contaminated by PAHs, TRPH, arsenic, chromium, barium and antimony. The remedial action plan is to excavate soils with contaminant concentrations which exceed three times their respective residential Soil Cleanup Target Level (SCTL) or their leachability-based SCTL, whichever is lower. Removing all soils with contaminant concentrations greater than three times the residential SCTL (hot spots) will reduce the overall site risks so as to be protective for residential use. Removing soils with contaminant concentrations greater than the leachability-based SCTL will be protective of groundwater.

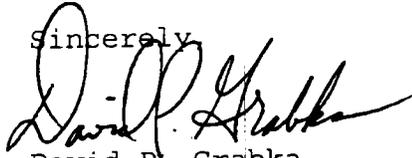
During a review of the report, it was noted that sample location SS-301 is not proposed to be remediated although chromium was detected in that sample at a concentration exceeding its leachability-based SCTL. This location should either be resampled to confirm the chromium concentration, tested to determine the site-specific leachability values using the Synthetic Precipitation Leaching Procedure (SPLP) at that location or should be targeted in the Removal Action Design Package for excavation.

If you have any concerns regarding this letter, please contact me at (850) 488-3693.

"Protect, Conserve and Manage Florida's Environment and Natural Resources"

Mr. Mark Davidson
PSC 42 Action Memorandum
February 6, 2001
Page Two

Sincerely,



David P. Grabka
Remedial Project Manager

CC: Satish Kastury, FDEP
Ashwin Patel, FDEP Northeast District
Debbie Vaughn-Wright, USEPA - Atlanta
John Flowe, City of Jacksonville
Scott Glass, SOUTHNAVFACENGCOM
Mark Speranza, TTNUS - Pittsburgh
Sam Ross, CH2M Hill Constructors - Atlanta

TJB B JJC for ESN for

ATTACHMENT B

Sample Summary

Tetra Tech, NUS

Job No: F9206

NAS Cecil Field 0039

Project No: WORK RELEASE# CF-22

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
F9206-1	03/15/01	09:15 RM	03/16/01	SO	Soil	CEF-P42-SS-915-01
F9206-1A	03/15/01	09:15 RM	03/16/01	SO	Soil	CEF-P42-SS-915-01

Report of Analysis

Client Sample ID: CEF-P42-SS-915-01	Date Sampled: 03/15/01
Lab Sample ID: F9206-1	Date Received: 03/16/01
Matrix: SO - Soil	Percent Solids: 87.8
Project: NAS Cecil Field 0039	

Metals Analysis

Analyte	Result	RL	IDL	Units	DF	Prep	Analyzed By	Method
Chromium	3.0	1.1	0.039	mg/kg	1	03/19/01	03/20/01 JK	SW846 6010B

RL = Reporting Limit
 IDL = Instrument Detection Limit

U = Indicates a result < IDL
 B = Indicates a result >= IDL but < RL

Report of Analysis

Client Sample ID:	CEF-P42-SS-915-01	Date Sampled:	03/15/01
Lab Sample ID:	F9206-1	Date Received:	03/16/01
Matrix:	SO - Soil	Percent Solids:	87.8
Project:	NAS Cecil Field 0039		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed By	Method
Chromium, Hexavalent	< 20	20	mg/kg	10	03/16/01 SJL	SW846 3060/7196A
Solids, Percent	87.8		%	1	03/18/01 SJL	EPA 160.3 M

RL = Reporting Limit

Report of Analysis

Client Sample ID: CEF-P42-SS-915-01	Date Sampled: 03/15/01
Lab Sample ID: F9206-1A	Date Received: 03/16/01
Matrix: SO - Soil	Percent Solids: 87.8
Project: NAS Cecil Field 0039	

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed By	Method
Iron, Ferrous	< 1.1	1.1	mg/l	1	03/20/01 SJL	SM18 3500FED
Redox Potential Vs H2	281		mv	1	03/20/01 SJL	ASTM E1498-76M
Sulfide	< 2.3	2.3	mg/kg	1	03/22/01 AL	SW846 9031
pH	4.8		su	1	03/19/01 TCF	SW846 9045

RL = Reporting Limit