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NAS CECIL FIELD, FL
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SOURCE REMOVAL REPORT EXCAVATION OF ARSENIC-CONTAMINATED SOIL AT
FACILITY 647 NAS CECIL FIELD FL
2/1/2000
CH2MHILL CONSTRUCTORS INC

**SOURCE REMOVAL REPORT
EXCAVATION OF ARSENIC-CONTAMINATED SOIL AT
FACILITY 647**

**NAVAL AIR STATION CECIL FIELD
JACKSONVILLE, FLORIDA**

Revision No. 00

Unit Identification Code: N60200

**Contract Task Order NO. 0005
CONTRACT NO. N62467-98-D-0995**

February 2000

Prepared for:



**Department of the Navy, Southern Division
Naval Facilities Engineering Command
2155 Eagle Drive
North Charleston, South Carolina 29418**

**Release of this document requires the prior notification
of the chief official of the activity studied.**

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Source Removal Report
Excavation of Arsenic-Contaminated Soil at Facility 647
Naval Air Station Cecil Field
Jacksonville, Florida

Revision No. 00

Contract Task Order No. 0005
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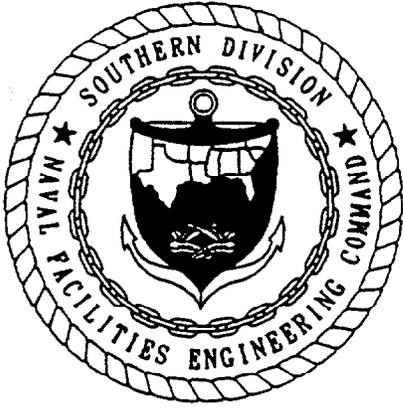
Submitted to
Department of the Navy, Southern Division
Naval Facilities Engineering Command

Prepared by



115 Perimeter Center Place, N.E.
Suite 700
Atlanta, GA 30346

February 2000



**CERTIFICATION OF TECHNICAL
DATA CONFORMITY (FEBRUARY 2000)**

The contractor, CH2M HILL Constructors, Inc., hereby certifies that, to the best of its knowledge and belief, the technical data delivered herewith under Contract No. N62467-98-D-0995, Contract Task Order (CTO) No. 0005 is complete and accurate and complies with all requirements of this contract.

DATE: February 10, 2000

NAME AND TITLE OF CERTIFYING OFFICIAL:

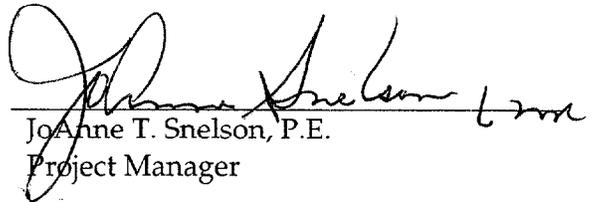

JoAnne T. Snelson, P.E.
Project Manager

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GLOSSARY

bls	below land surface
CCI CTO	CH2M HILL Constructors, Inc. Contract Task Order
HLA	Harding Lawson Associates
mg/kg	milligrams per kilogram
NAS NAVFAC	Naval Air Station Naval Facilities Engineering Command

1.0 INTRODUCTION

CH2M HILL Constructors, Inc. (CCI) was contracted by the Southern Division, Naval Facilities Engineering Command (Southern Division, NAVFAC) to perform excavation, transportation, and disposal of arsenic-contaminated soil and prepare a Source Removal Report for Facility 647 at Naval Air Station (NAS) Cecil Field in Jacksonville, Florida. The Source Removal was conducted in accordance with the *Sampling and Analysis Outline and Report for Facility 647, Revision 01*, dated January 1999, prepared by Harding Lawson Associates (HLA).

The scope of services for excavation of arsenic-contaminated soil at Facility 647 is described in detail in the *NAS Cecil Field Basewide Work Plan, Revision 1* (CCI, 1998) and the *Work Plan Addendum No. 2, Excavation of Lead-, Arsenic-, PCB-, and/or Petroleum-Contaminated Soil from Various Grey Sites* (CCI, 1999). This work was authorized under the Remedial Action Contract No. N62467-98-D-0995, CTO No. 0005.

1.1 SITE BACKGROUND. Facility 647 is located on the west side of "C" Street in the Yellow Water Weapons Area north of NAS Cecil Field. Facility 647 is a former weapons magazine, and was utilized by the station environmental department for storage of empty 55-gallon drums and other supplies and as a former temporary storage facility for hazardous waste. In addition, double-bagged asbestos, beryllium-containing waste, and low-level radioactive materials stored in 55-gallon drums, including spent uranium counterweights from aircraft control surfaces, security sensors, divers watches, and xenon light bulbs, have been previously staged at the facility.

Soil samples were collected on the north side of Facility 647 by HLA to determine whether past activities at the facility had impacted the environment. Arsenic was detected at a concentration in excess of the NAS Cecil Field inorganic screening criteria and the arsenic soil clean-up target level of 0.8 milligrams per kilogram (mg/kg) for a residential exposure scenario at one surface soil sample location.

A site plan showing the proposed soil excavation limits prior to this Source Removal is presented in Figure 2-1.

1.2 PROJECT OBJECTIVES. The primary objective of the soil excavation was to remove arsenic-contaminated soil to the horizontal excavation limits shown on Figure 2-1 and the vertical excavation limit of 1 foot below land surface (bls) as specified in the *Sampling and Analysis Outline and Report for Facility 647, Revision 01* (HLA, 1999). Soils were to be excavated until the vertical and horizontal excavation limits were reached, and then the excavated area backfilled with clean fill material imported from offsite.

2.0 SOURCE REMOVAL ACTIVITIES

A Source Removal was conducted at Facility 647 from December 2 and 3, 1999, with a total of 18.05 tons of arsenic-contaminated soil excavated. The excavated soil was transported and disposed of off site on December 8, 1999. Photographs showing the site before, during, and after the Source Removal are presented in Appendix A.

2.1 SITE PREPARATION. In preparation for excavation, utility locations were conducted by the base maintenance contractor for Navy-owned utilities and Sunshine State One-call of Florida for privately owned utilities. No active utilities were located or encountered during the excavation.

2.2 SOIL EXCAVATION AND DISPOSAL

2.2.1 Soil Excavation. Soils were excavated to the horizontal excavation limits shown on Figure 2-1 and the vertical excavation limit of one ft bls as specified in the *Sampling and Analysis Outline and Report for Facility 647, Revision 01* (HLA, 1999).

The soil was excavated using a backhoe and was stockpiled, bermed, and covered prior to being loaded into a truck for transportation and disposal. Based on the manifest and truck weight ticket, 18.05 tons of arsenic-contaminated soil were excavated and disposed of off site. The actual horizontal excavation limits matched the proposed horizontal excavation limits specified in the HLA document and are shown on Figure 2-1.

2.2.2 Soil Transportation and Disposal. Soil transportation and disposal was coordinated by Clark Environmental, Inc. The arsenic-contaminated soil was transported off site by a truck provided by Pritchett Trucking to the Chesser Island Road Landfill in Folkston, Georgia. A summary of the manifest is presented in Table 2-1, and a copy of the manifest and of the certificate of disposal are presented in Appendices B and C, respectively.

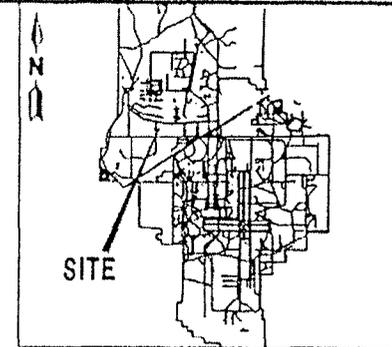
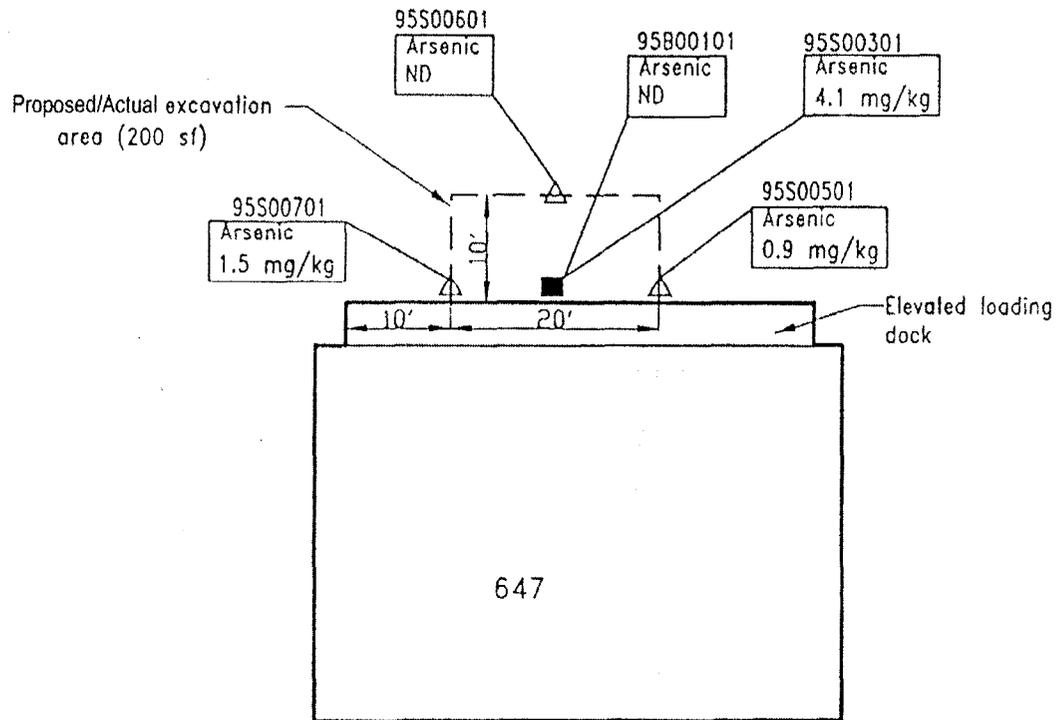
**TABLE 2-1
Summary of the Manifest for Soil Disposal**

Date	Truck No.	Company	Manifest No.	Weight (pounds)	Tare (pounds)	Net (pounds)	Net (tons)
12/8/99	750	Pritchett Trucking	1	62,480	26,380	36,100	18.05

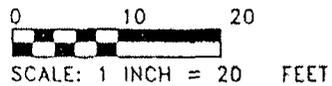
2.2.3 Backfilling and Site Restoration. The material used to backfill the excavation was clean fill brought in from the Stratton Road fill dirt pit operated by Marietta Sand Corporation. A copy of the letter certifying that the material was clean fill is presented in Appendix D.

Once the excavation area was backfilled, the site was graded and seeded with a mixture of rye and bahia grass.

2.3 CONFIRMATORY SAMPLING AND ANALYSIS. The No confirmatory sampling and analyses were performed based on the *Sampling and Analysis Outline and Report for Facility 647, Revision 1.0* (HLA, 1999) and the Baseline PSC Dig and Haul Schedule and Status prepared by Tetra Tech NUS, Inc. in December 1999.



LEGEND	
95S00701	Surface soil location and sample designation
△	
95B00101	Subsurface soil location and sample designation
■	
— —	Area excavated
ND	Not detected
mg/kg	Milligrams per kilogram
sf	Square feet



**FIGURE 2-1
FACILITY 647
PROPOSED/ACTUAL SOIL EXCAVATION LIMITS**



NAVAL AIR STATION CECIL FIELD
JACKSONVILLE, FLORIDA

3.0 CONCLUSIONS

A total of 18.05 tons of arsenic-contaminated soil at Facility 647 were removed and disposed of off site during this Source Removal. The soil was excavated to the vertical excavation limit of one foot bls and the horizontal excavation limits shown on Figure 2-1. The actual vertical and horizontal excavation limits matched the proposed vertical and horizontal excavation limits specified in the HLA document. No confirmatory sampling and analyses were performed based on the HLA document and the Baseline PSC Dig and Haul Schedule and Status prepared by Tetra Tech NUS, Inc. in December 1999.

REFERENCES

CH2M HILL Constructors, Inc.; *Basewide Work Plan, Revision 1*; NAS Cecil Field, Jacksonville, Florida; November 1998.

CH2M HILL Constructors, Inc.; *CTO No. 0005 Work Plan Addendum No. 2, Revision 0, Excavation of Lead-, Arsenic-, PCB-, and/or Petroleum-Contaminated Soil from Various Grey Sites*; NAS Cecil Field, Jacksonville, Florida; June 1999.

Harding Lawson Associates; *Sampling and Analysis Outline and Report, Facility 647, Base Realignment and Closure, Zone A, Yellow Water Weapons Area, Revision 1.0*; NAS Cecil Field, Jacksonville, Florida; January 1999.

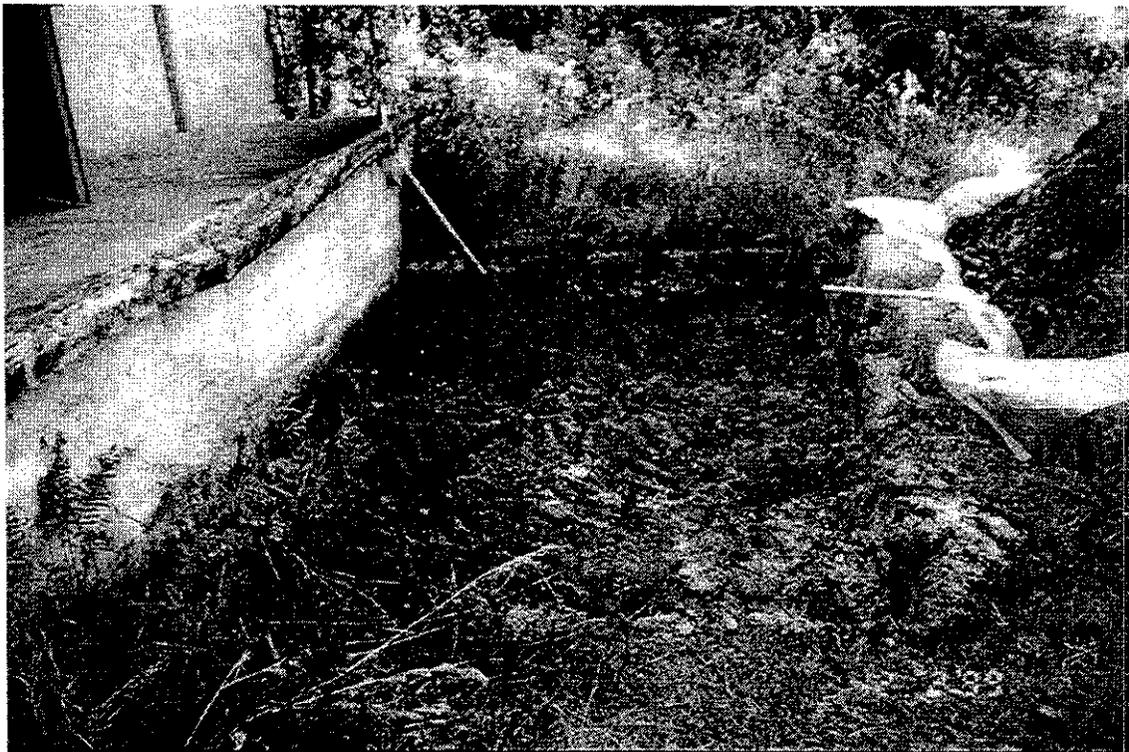
Tetra Tech NUS, Inc.; *Baseline PSC Dig and Haul Status and Schedule*; NAS Cecil Field, Jacksonville, Florida; December 1999.

Appendix A

Photographs



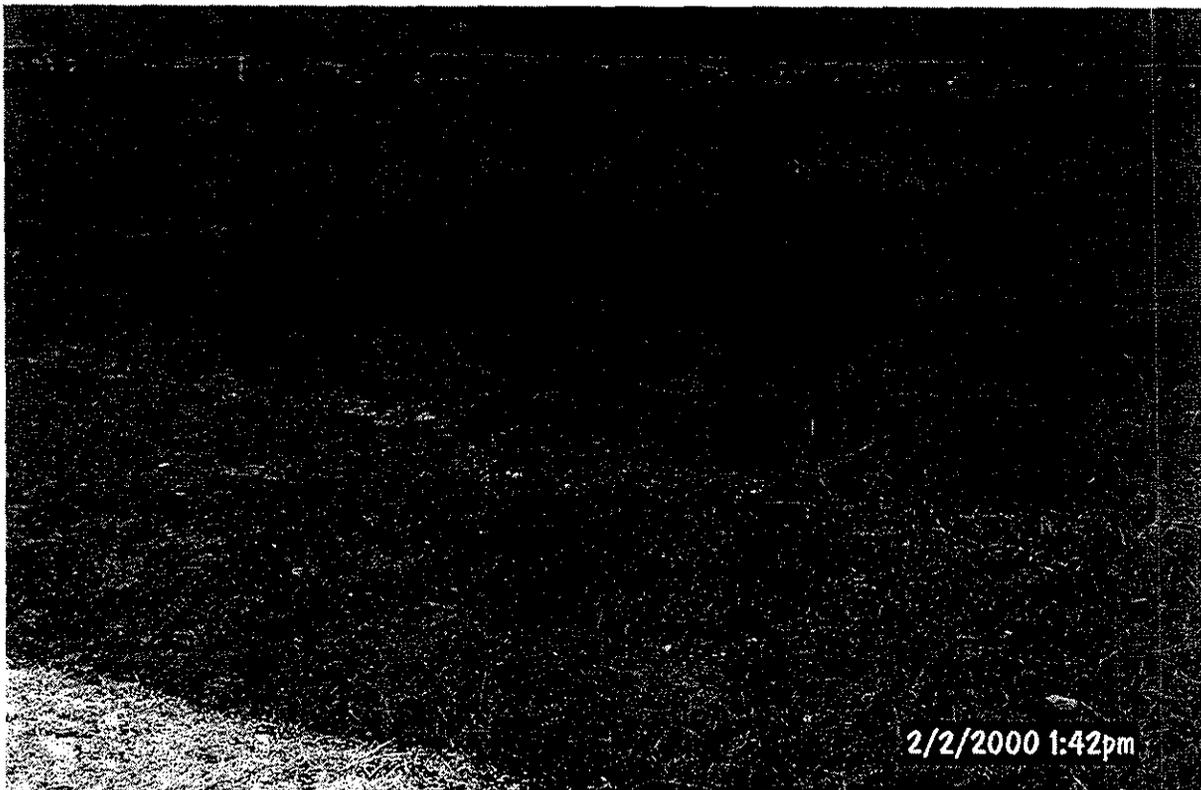
1. View of the Facility 647 site prior to excavation



2. View of the Facility 647 excavation prior to backfilling



3. View of the Facility 647 contaminated soil stockpile



4. View of the backfilled Facility 647 excavation

Appendix B

Copies of Soil Manifests

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.
FL5170022474

Manifest Doc. No. 0.0.13
2. Page 1 of 1

FACILITY 647
TRUCK NO. 750
18.04 TONS

Generator's Name and Mailing Address
U.S. Navy, NAS Cecil Field
P.O. Box 108
Jacksonville FL 32215-

4. Generator's Phone (904) 778-5620

5. Transporter 1 Company Name
Pritchett Trucking, Inc

6. US EPA ID Number

A. Transporter's Phone
(800) 486-7504

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address
Chesser Island Road Landfill
Chesser Island Road
Folkston Ga 31537-

10. US EPA ID Number

C. Facility's Phone
(912) 496-7918

11. Waste Shipping Name and Description

12. Containers
No. Type
13. Total Quantity
14. Unit Wt/Vol

a. Arsenic contaminated soil, Non-Regulated material
Metals - *NA*

.001 DT .00018 Y

b.

c.

d.

D. Additional Descriptions for Materials Listed Above
a. Arsenic contaminated soil
Metals *NA*

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
Approval #: a. WM-CK9556 WM - ICK 9567 *NA*
Site Address: 13200 Normandy Blvd., Jacksonville, FL
CEI #: 726822

16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name
DAVID J. MAZICKI

Signature
David J. Mazicki

Month Day Year
10 24 99

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name
RICHARD CARNEY

Signature
Richard Carney

Month Day Year
11 21 89

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name
R Henderson

Signature
R Henderson

Month Day Year
11 20 89

GENERATOR
TRANSPORTER
FACILITY

Chesser Island Road Landfill

Post Office Box 128
Folkston, Georgia 31537 - 0128
Telephone (912) 496-7918

17443

Material ^{contaminated} Metals/Soil

Shipper Clark Environmental
#750

Weighter ~~#~~

Remarks OCW - Pritchett - Tax
Cecil Field
R. Cunniff

62460 LB 11:25 AM DE 08 99

26380 LB 11:33 AM DE 08 99

36100 Net

18.05

Appendix C

Certificate of Disposal

CERTIFICATE OF DISPOSAL

This is to document the disposition of waste material(s) removed from your facility located at
U.S. Navy, NAS Cecil Field 13200 Normandy Blvd., Jacksonville, FL

A. The waste material(s) consisted of
a) Metals contaminated soils (Facility # 278) (SG 41) (45.9 Ton)

B. The waste material(s) were transported by
1st Company: Prichett Trucking EPA ID #: N/A

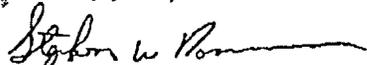
C. The waste material(s) were disposed of at
Facility: Chesser Island Road Landfill EPA ID #: N/A
Address: Chesser Island Road (P.O. Box 128)
Folkston, GA 31537-0128

D. Disposal of your waste material(s) were accomplished by the following method(s):
a) Sub Title D Landfill

E. Date of Disposal: a) December 8, 1999

Thank you for using Clark Environmental, Inc for your complete industrial waste management needs.

Very truly yours,


Stephen W. Donovan, CHMM, REP
General Manager

Appendix D

Certification of Clean Fill



MARIETTA SAND CORPORATION

377 Agmac Avenue
Jacksonville, Florida 32254
(904) 781-7304

Pritchett Trucking
PO Box 311
Lake Butler, FL 32054

August 25, 1999

Attention: Mr. Bobby Lord

Please find attached, testing data on fill dirt pit located on Stratton Road in Jacksonville, Duval County, Florida. As you will notice these results are dated June, 1996. Please be advised that the material from this pit is clean and will meet The Navy specifications. Approximately 330 loads of this material was recently sent to Cecil Field for the Fuel Tank Farm. by another contractor and material was accepted.

If you have any questions or concerns, please contact me at the above listed number.

Respectfully,

Susan Henricks
Marietta Sand Corporation



5109 STEPP AVENUE
JACKSONVILLE, FL 32216-6053
(904)733-0960 OFFICE
(904)445-5534 FAX NUMBER

PROJECT NO: 962-2093

REPORT NO: 6

L&E NO: 0-099

DATE: 06/17/96

- - - - - Continued from previous page - - - - -

SIEVE SIZE	PERCENT PASSING
No. 10	100
No. 20	99.8
No. 40	99.6
No. 60	97.6
No. 80	44.6
No. 100	28.3
No. 140	9.3
No. 140	6.3

SAMPLED BY: Client

INSPECTED BY: R. Kelley

DISTRIBUTION: JEE/dfh
2cc:Client

Respectfully submitted,
ELLIS & ASSOCIATES, INC.

John E. Ellis, II, P.E.

6/17/96