

Baker

9/8/00-01467

Baker Environmental, Inc.

A Unit of Michael Baker Corporation

Airport Office Park, Building 3
420 Rouser Road
Coraopolis, Pennsylvania 15108

(412) 269-6000
FAX (412) 269-6097

September 8, 2000

Commander
Atlantic Division
Naval Facilities Engineering Command
1510 Gilbert Street (Building N-26)
Norfolk, Virginia 23511-2699

Attn: Mr. Robert Schirmer, P.E.
Code 18222

Re: Navy CLEAN II Program
Contract N62470-95-D-6007
Contract Task Order (CTO) 0104
Draft Final Site Inspection Report – Site 4 and AOC 1
Naval Weapons Station Yorktown
Yorktown, Virginia
Cheatham Annex Site

Dear Mr. Schirmer:

Baker Environmental, Inc. (Baker) is pleased to submit three copies of the Draft Final Site Inspection Report for Site 4 and AOC 1 at Naval Weapons Station Yorktown, Cheatham Annex Site (CAX). In order to stay on schedule for the Draft Final submittal, please provide review comments no later than October 10, 2000.

Baker appreciates the opportunity to provide continued service to LANTDIV and looks forward to serving the Navy on future project activities at CAX. If you have any comments regarding the enclosed Site Inspection Report, please contact me at (412) 269-6014.

Sincerely,

BAKER ENVIRONMENTAL, INC.


Karen T. Wood
Project Manager

KTW/lp

cc: Ms. Barbara Spruill, Code 0211T (letter only)
Ms. Carolyn Neill, Code 09E (letter only)
Mr. Dennis Brittin, Code BX0 (letter only)
Mr. Jeffrey Harlow, Code 09217 (five copies)
Ms. Donna Caldwell, P.G., CH2M Hill (one copy)
Ms. Sharon Wilcox, CHMM, VDEQ (2 copies)
Mr. Robert Thomson, P.E., USEPA (6 copies)





Baker Environmental, Inc.
 420 Rouser Road
 Airport Office Park Bldg. 3
 Coraopolis, PA 15108
 Telephone: (412) 269-6000
 Fax: (412) 269-2002

Letter of Transmittal

To: Mr. Jay N. Dewing
 Community Co-Chair
 236 Kings Grant Drive
 Yorktown, Virginia 23692

S.O. No. 26007-104-0000-SRN
 Project: Draft Final Site Inspection Report
 Date: September 8, 2000

We are forwarding the following: Attached Under Separate Cover

DWG. NO.	NO. COPIES	TITLE OR DESCRIPTION	COMMENTS
	1	Draft Final Site Inspection Report - Site 4 and AOC 1 Naval Weapons Station Yorktown Cheatham Annex Site Williamsburg, Virginia	

THESE ARE TRANSMITTED as checked below:

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|--|---|---|
| <input type="checkbox"/> As requested | <input type="checkbox"/> No exceptions taken | <input type="checkbox"/> Revise and resubmit |
| <input type="checkbox"/> For review and comment | <input type="checkbox"/> Rejected - See remarks | <input type="checkbox"/> Submit specified items |
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GENERAL COMMENTS:

cc: Mr. Robert Schirmer, LANTDIV, (Code 18222)

BAKER ENVIRONMENTAL, INC.

By: Karren T. Wood
 Title: Project Manager
 Page 1 of 1



Baker Environmental, Inc.
 420 Rouser Road
 Airport Office Park Bldg. 3
 Coraopolis, PA 15108
 Telephone: (412) 269-6000
 Fax: (412) 269-2002

Letter of Transmittal

To: U.S. National Park Service-Ranger Station
 Colonial National Historic Park
 P.O. Box 210 - 209 Read Street
 Yorktown, Virginia 23690

S.O. No. 26007-104-0000-SRN
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Attn: Mr. Chuck Rafkind

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- Submit specified items
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GENERAL COMMENTS:

cc: Mr. Robert Schirmer, LANTDIV, (Code 18222)

BAKER ENVIRONMENTAL, INC.

By: Karren T. Wood
 Title: Project Manager
 Page 1 of 1

Letter of Transmittal

To: Department of Environmental Sciences
 Virginia Institute of Marine Science
 P.O. Box 1346 - Great Road
 Gloucester Point, Virginia 23602-1346

S.O. No. 26007-104-0000-SRN
 Project: Draft Final Site Inspection Report
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Attn: Mr. Morris H. Roberts, Jr.

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cc: Mr. Robert Schirmer, LANTDIV, (Code 18222)

BAKER ENVIRONMENTAL, INC.

By: Karren T. Wood

Title: Project Manager

Page 1 of 1

Letter of Transmittal

To: Department of Environmental Services
 County of York, Virginia
 201 Goodwin Neck Road
 Yorktown, Virginia 23692

S.O. No. 26007-104-0000-SRN
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Attn: Mr. John T. Dunn, P.E., Director

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BAKER ENVIRONMENTAL, INC.

By: Karren T. Wood

Title: Project Manager

Page 1 of 1

Letter of Transmittal

To: James City County Fire Department
 5077 John Tyler Highway
 Williamsburg, Virginia 23185
 Attn: Mr. Richard M. Miller, Chief

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BAKER ENVIRONMENTAL, INC.

By: Karren T. Wood

Title: Project Manager

Page 1 of 1

Letter of Transmittal

To: York County Fire and Life Safety
 P.O. Box 532, 126 Ballard Street
 Yorktown, Virginia 23690

S.O. No. 26007-104-0000-SRN
 Project: Draft Final Site Inspection Report
 Date: September 8, 2000

Attn: Mr. Stephen P. Kopczynski, Fire Chief

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Page 1 of 1



Baker Environmental, Inc.
 420 Rouser Road
 Airport Office Park Bldg. 3
 Coraopolis, PA 15108
 Telephone: (412) 269-6000
 Fax: (412) 269-2002

Letter of Transmittal

To: Newport News Fire Department
 Station 6
 685 Oyster Point Road
 Newport News, Virginia 23602
 Attn: CAPT Glen Cox

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 420 Rouser Road
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 Telephone: (412) 269-6000
 Fax: (412) 269-2002

Letter of Transmittal

To: Chesapeake Bay Foundation
 130 Lafayette Road
 Yorktown, Virginia 23690
 Attn: Mr. Dexter Haven

S.O. No. 26007-104-0000-SRN
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BAKER ENVIRONMENTAL, INC.

By: Karren T. Wood

Title: Project Manager

Page 1 of 1

Letter of Transmittal

To: Ms. Elizabeth Rogers
 210 West Queens Drive
 Williamsburg, Virginia 23185

S.O. No. 26007-104-0000-SRN
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BAKER ENVIRONMENTAL, INC.

By: Karren T. Wood

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Page 1 of 1

EXECUTIVE SUMMARY

This document presents the results of the Site Inspection which was conducted at Site 4 – Medical Supplies Disposal Area and Area of Concern (AOC) 1 – Scrap Metal Dump at Naval Weapons Station Yorktown, Yorktown, Virginia, Cheatham Annex Site (CAX), Williamsburg, Virginia, by Baker Environmental, Inc. (Baker). The Site Inspection was performed under contract to the Atlantic Division, Naval Facilities Engineering Command (LANTDIV), under the Comprehensive Long-Term Environmental Action – Navy (CLEAN II) Contract N62470-95-D-6007, Contract Task Order (CTO) 0104.

HISTORY AND SITE CONDITIONS

Site 4 - Medical Supplies Disposal Area

Site 4, Medical Supplies Disposal Area, is located along the pond just upgradient of Youth Pond, between buildings CAD 11 and CAD 12. In 1968 or 1969, out-of-date medical supplies possibly including syringes and empty intravenous (I.V.) bottles, and one-inch metal banding were unloaded down a bank in this area and covered with soil. It was reported that as much as 7,000 cubic yards of material was disposed at this site (NEESA, 1984). Observations in Initial Assessment Study (IAS) field notes show that it is possible dyes were disposed of at the site. In May 1998, Reactives Management, Inc. performed routine housekeeping activities at Site 4 to remove surficial debris. I.V. injection sets, many contained in aluminum or plastic bags, were encountered.

Summary of Investigative Findings for Site 4

The field investigation consisted of soil and sediment investigations. All samples were submitted for laboratory analysis of Target Compound List (TCL) organics, Target Analyte List (TAL) inorganics and cyanide, and explosives (nitramines/nitroaromatics). Volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), pesticides, polychlorinated biphenyls (PCBs), inorganics, and cyanide were detected in the soil samples. VOCs, SVOCs, pesticides, PCBs, and inorganics were detected in the sediment samples.

The presence of the organic contaminants could be attributable to the extensive debris that is buried at the site. The detected concentrations of inorganics could result from the pieces of scrap metal present at the site.

Recommendations

- Implement an inspection program that includes periodic site visits with perimeter walks to locate medical supplies within and around Youth Pond and the York River shoreline.
- Install inlet protection controls to prevent medical supplies from entering the culvert that conveys flows from the upstream pond to Youth Pond.
- Perform a limited investigation to define the lateral extent of debris at the site.
- Complete an Engineering Evaluation/Cost Analysis (EE/CA) to evaluate the most appropriate means of removing or covering the debris that is present at the site.

Area of Concern 1 – Scrap Metal Dump

AOC 1 is a debris disposal area located just west of Chapman Road within two ravines associated with unnamed tributaries to Jones Pond. Wood and metal debris outcrop from the banks of the ravines, with debris being more extensive within the southern ravine.

Summary of Investigative Findings

The field investigation consisted of a geophysical survey and soil and surface water/sediment investigations. All samples were submitted for laboratory analysis of TCL organics, TAL inorganics and cyanide, and explosives (nitramines/nitroaromatics). VOCs, SVOCs, pesticides, PCBs, inorganics, and cyanide were detected in the soil samples. SVOCs and inorganics were detected in the surface water at low levels. VOCs, SVOCs, PCBs, and inorganics were detected at low levels in the sediment samples. The extensive volume of debris at the AOC is a potential source of contamination.

Recommendations

- Perform a limited investigation to evaluate disposal parameters.
- Complete an Engineering Evaluation/Cost Analysis (EE/CA) to evaluate the most appropriate means of removing or covering the debris that is present at the site.
- Review treatment plant effluent and analytical requirements to verify that fluoranthene, ethylbenzene, xylene, and Aroclor-1260 are not present in unacceptable levels in either the distributed water or the effluent.