



# Marine Corps Combat Development Command

## PESTICIDE BURIAL AREA (SITE 1) PROPOSED PLAN

### Introduction

In accordance with Sections 113(k)(2)(b), 117(a), and 121(f)(1)(G) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), the law more commonly known as Superfund, this Proposed Plan summarizes the Navy's preferred option for the Pesticide Burial Area (PBA, Site 1) at Marine Corps Combat Development Command (MCCDC) (Figure 1). This site is one of five RI sites currently being addressed by the Base's Installation Restoration (IR) Program. The goal of the IR Program is to identify, assess, characterize, and cleanup or control contamination from past disposal operations at CERCLA/Superfund sites.

This Proposed Plan recommends No Further Action for Site 1 with monitoring of the **groundwater** within five years in accordance with a regulator-approved plan, at which time the effectiveness of the alternative will be evaluated. Detailed descriptions of Site 1 are provided in the December 1998 **Remedial Investigation (RI)** report which is available at the locations identified on page 3. The RI report concluded that as a result of the 1994 removal action there were no longer significant human health or ecological risks associated with the site, therefore No Further Action is proposed.

### The Cleanup Proposal...

After careful study of Site 1, the Navy proposes the following plan:

- No Further Action
- Long-term monitoring of contaminants in **groundwater**.
- An additional review to evaluate site status and whether further response action is warranted.

### What Do You Think?

The Navy is accepting public comments on this Proposed Plan from August 5 to September 18, 1999. You do not have to be a technical expert to comment. If you have a comment or concern, the Navy wants to hear it before making a final decision.

There are two ways to formally register a comment:

1. Offer oral comments during the August 17th public meeting, or
2. Send written comments postmarked no later than September 18, 1999 to:

Ms. Kelli Ackiewicz  
Engineering Field Activity, Chesapeake  
Washington Naval Yard  
901 M St. S.E.  
Building 212  
Washington, D.C. 20374-5018  
ackiewiczka@efaches-03.efaches.navfac.navy.mil

To the extent possible, the Navy will respond to your oral comments during the August 17th public meeting. In addition, regulations require the Navy to respond to all significant comments in writing. The Navy will review the transcript of the comments received at the meeting, and all written comments received during the formal comment period, before making a final decision and providing a written response to the comments in a document called a **Responsiveness Summary**.

### Learn More About the Proposed Plan

The Navy will describe the proposed plan and hear your questions at an informal public meeting.

August  
17

### PUBLIC MEETING

Meeting: 7:00 P.M.



Date: Tuesday  
August 17, 1999

#### Location:

Quantico Crossroad Inn  
3018 Russell Road  
Quantico, Virginia

**Technical terms shown in bold print are defined in the glossary on page 3.**

For further information regarding the public meeting, contact Mr. Matias Santiago at the Marine Corps Combat Development Command, Installation Restoration Program, (703)784-4030, santiagom@nt.quantico.usmc.mil

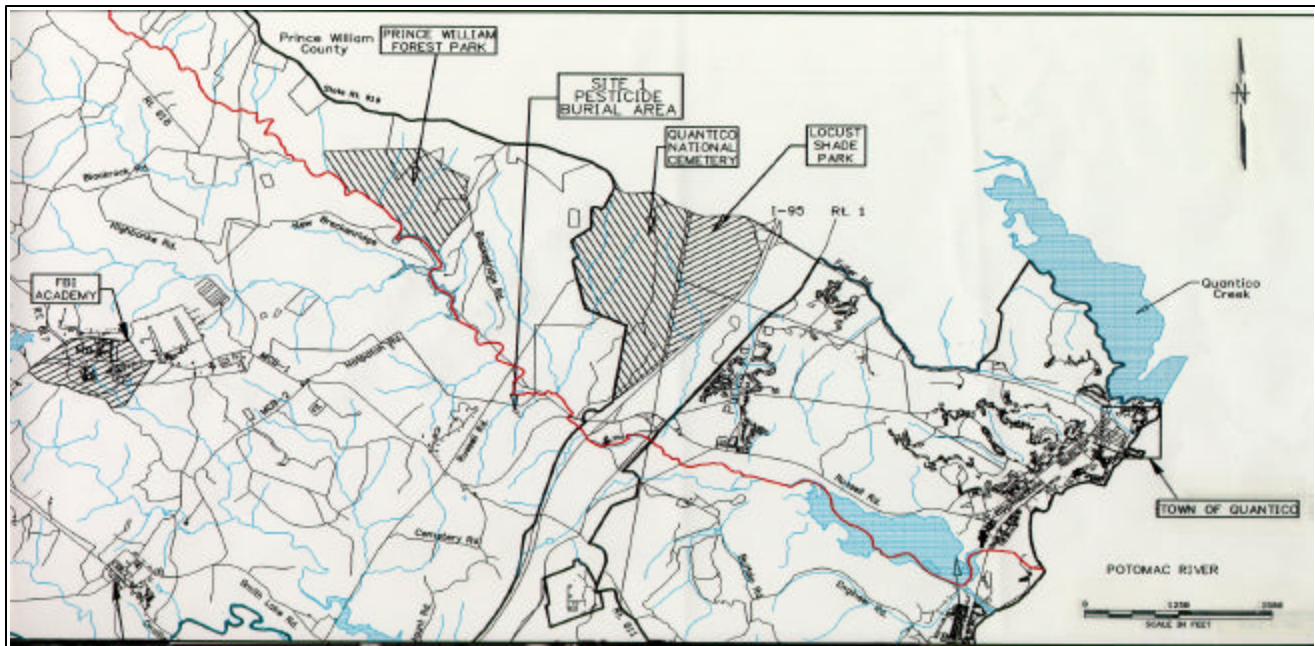


Figure 1. Installation Map

## History

Site 1, PBA (Figure 2) consisted of a pit that received pesticides from the Pest Control Shop near the intersection of Russell Road and MCB Route 1 (MCB-1) in the southeastern section of MCCDC. The area reportedly consisted of a pit that was 16 feet in diameter and 8 feet deep. The pit was excavated in June 1974 for a one-time disposal of waste pesticides. In addition, several additional IRP sites are located adjacent to the PBA: Building 2427 Burn Area (L-17), Building 2427 Disposal Area (L-18), and Building 27135 Drum Disposal Area (M-29). L-17 was used for open burning, wastes were placed randomly in the vegetation at L-18, and at M-29 a drum containing approximately 10 gallons of PD-680 or fuel was identified. In addition, a fourth area was identified by the **Quantico Project Management Team** during a site visit in July 1997 which consisted of an area where miscellaneous debris and drums were scattered on the ground surface. These drums have subsequently been disposed off site.

In 1994, a source removal action was performed in which approximately 137 tons of pesticide-contaminated soil were excavated and disposed offsite. Post-removal sampling concluded that Site 1 no longer presented an unacceptable risk to residential receptors under current or future land use scenarios.

## Finding of the Field Investigations

The Navy, in cooperation with the United States Environmental Protection Agency Region III and Virginia Department of Environmental Quality, conducted several field investigations from 1984 to 1998 to assess the type and distribution of **contaminants** at Site 1. A **risk assessment** was performed to evaluate the potential effects of the **contaminants** on human health and the environment.

The investigation of Site 1 included a High-Resolution Electromagnetic (HREM) terrain conductivity survey to determine the absence or presence of additional disposal areas, the **excavation** and sampling of test pits, and the sampling and analysis of soil and groundwater. The HREM survey identified two locations of potential disposal areas which were further investigated by excavating test pits to determine the presence of subsurface debris and collect soil samples.

Relatively low concentrations of pesticides and metals were detected in soil following the removal action. These same constituents were also detected infrequently and at low concentrations in the **groundwater**. The baseline human health risk assessment did not identify any potential risks under the current nonresidential land use condition. Risks identified under a future residential land use scenario were mainly contributed by iron for exposures to soil and a single detection of the pesticide, dieldrin for exposure to groundwater. Iron is an essential human nutrient and concentrations were within literature background values. The detection of dieldrin in **groundwater** is believed to be the result of the temporary well installation and may not be indicative of a contaminant problem. Maximum detected concentrations of arsenic in **groundwater** exceeded U.S. Environmental Protection Agency Region III residential risk-based concentrations but were less than federal/state drinking water standards. The baseline human health risk assessment showed that risks for residential exposures to groundwater from arsenic were within acceptable levels. Since future residential use of this area is unlikely, the estimated risks were presented for informational purposes only. The ecological risk assessment concluded that the potential for this site to negatively impact ecological receptors is low. Specific information regarding contaminant concentrations and screening criteria is provided in the RI. The RI, including the **risk assessment**, is in the Administrative Record for review as part of this action.

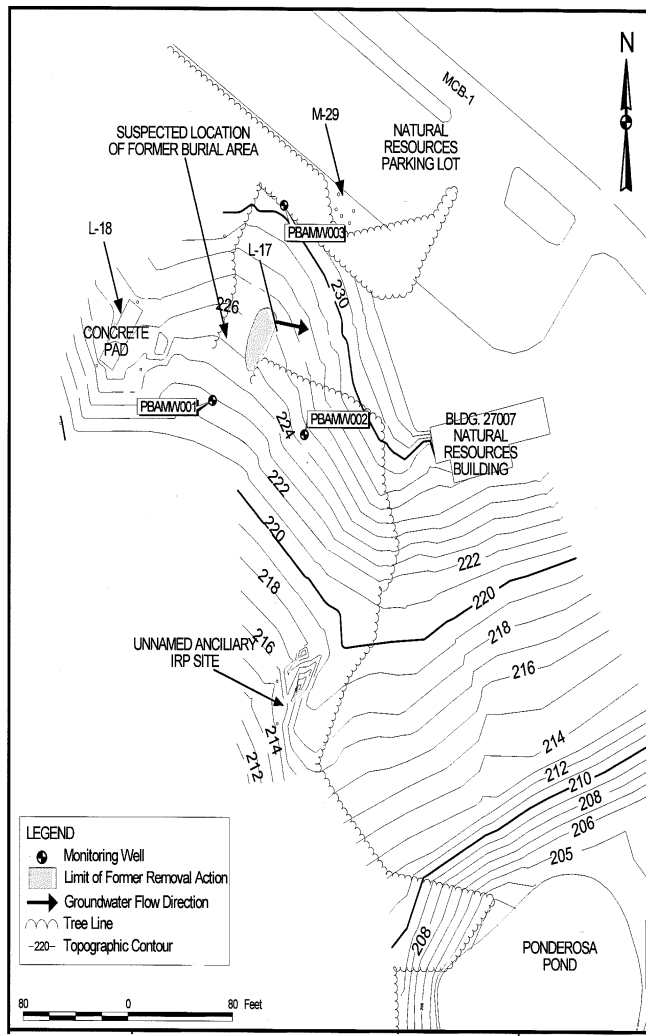


Figure 2. Site Location Map

Due to the single detection of dieldrin in **groundwater**, it is proposed that the **groundwater** be monitored to verify that the detection is a result of temporary well installation. Monitoring will consist of sampling and analysis of **groundwater** obtained from several monitoring wells across the site. Monitoring will also include an additional site review to evaluate site status and whether further response action is warranted.

**Glossary of Technical Terms**

- **Contaminants:** Any physical, biological, or radiological substance or matter that, at a certain concentration, could have an adverse effect on human health and the environment.
- **Excavation:** Earth removal with construction equipment such as backhoe, trencher, front-end loader, etc.
- **Groundwater:** Water found beneath the earth's surface. Groundwater may transport substances that have percolated downward from the ground surface as it flows towards its point of discharge.
- **Quantico Project Management Team:** Consists of the remedial project managers for the U.S. Environmental Protection Agency, Virginia Department of Environmental Quality, Engineering Field Activity Chesapeake, Marine Corps Base, and their subcontractors.
- **Record of Decision (ROD):** An official document that describes the selected Superfund remedy for a site. The ROD documents the remedy selection process and is issued by the Navy and U.S. EPA following the public comment period.
- **Remedial Investigation (RI):** A report which describes the site, documents the type and distribution of contaminants detected at the site, and present the results of the risk assessment.
- **Responsiveness Summary:** A summary of written and oral comments received during the public comment period, together with the Navy's and U.S. EPA's responses to these comments.
- **Risk Assessment:** Evaluation and estimation of the current and future potential for adverse human health or environmental effects from exposure to contaminants.

**The Navy's Proposed Remedy**

The Navy's proposed remedy for Site 1 is No Further Action with monitoring of the **groundwater** within 5 years in accordance with a regulator-approved plan. This Proposed Plan has been developed in conjunction with the United States Environmental Protection Agency Region III and Virginia Department of Environmental Quality.

**The Public's Role in Remedy Selection**

Community input is integral to the remedy selection process. The Navy and regulatory agencies will review and consider all comments before selecting a final remedy for Site 1 and prior to signing the **Record of Decision (ROD)**. The public is encouraged to participate in the decision-making process.

This Proposed Plan for Site 1 is available for review, along with supplemental documentation, at the:

☞ Chinn Park Regional Library Management and Government Information Center  
 13065 Chinn Park Dr.  
 Prince William, VA 22193  
 (703) 792-4810  
 Hours:  
 Mon.-Thurs.: 10:00 AM - 9:00 PM  
 Fri. & Sat: 10:00 AM - 5:00 PM  
 Sun.: 12:00 noon - 5:00 PM

☞ John Porter Memorial Library Hours:  
 Reference Section (R975.52732UH)  
 2001 Parkway Blvd.  
 Stafford, VA 22554  
 (540) 659-4909  
 Mon.-Thurs.: 9:00 AM - 9:00 PM  
 Fri. & Sat.: 9:00 AM - 5:30 PM  
 Sun.: 1:00 PM - 5:00 PM

☞ Marine Corps Research Center Hours:  
 Quantico Marine Base  
 2040 Broadway Street  
 Quantico, VA 22134  
 Mon - Thurs: 7:00 AM - 6:00 PM  
 Fri: 7:30 AM - 6:00 PM  
 Sat: 10:00 AM - 6:00 PM  
 Sun: 1:00 PM - 6:00 PM

For further information, please contact:

☞ Matias Santiago  
Remedial Project Manager  
Commanding General  
NREA Branch (B046)  
Marine Corps Base  
3250 Catlin Avenue  
Quantico, VA 22134-5001  
(703) 784-4030  
santiagom@nt.quantico.usmc.mil

☞ Kelli Ackiewicz  
Remedial Project Manager  
Engineering Field Activity, Chesapeake  
Washington Naval Yard  
901 M. Street S.E.  
Building 212  
Washington, D.C. 20374-5018  
(202) 685-3281  
ackiewiczka@efaches-03.efaches.navfac.navy.mil

☞ Lisa Bradford  
Remedial Project Manager  
U.S. Environmental Protection Agency  
1650 Arch Street (3HS50)  
Philadelphia, PA 10103-2029  
(215) 814-3363  
bradford.lisa@epamail.epa.gov

☞ David Grimes  
Remedial Project Manager  
Virginia Department of Environmental Quality  
Division of Waste Operations  
629 East Main Street  
Richmond, VA 23219  
(804) 698-4203  
dvgrimes@deq.state.va.us



Commanding General  
NREA Branch (B046)  
Marine Corps Base  
3250 Catlin Avenue  
Quantico, VA 2134-5001

Place Label Here