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NAS CECIL FIELD, FL
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FACT SHEET 13 PROPOSED REMEDIAL ACTIONS FOR OPERABLE UNIT 2 (OU 2) SITE 5
AND SITE 17 NAS CECIL FIELD FL
7/1/1995
ABB ENVIRONMENTAL SERVICES INC



NAS CECIL FIELD Installation Restoration Program

FACT SHEET 13: Proposed Remedial Actions for Sites 5 and 17

The Installation Restoration (IR) Program is a Department of Defense program conducted at bases nationwide to identify and address contamination resulting from past practices, which do not meet today's environmental standards. This fact sheet is one in a series informing interested citizens of IR Program activities at NAS Cecil Field. Fact sheets will be produced at program milestones and in response to other items of public interest. Distribution is coordinated through the Public Affairs Office at NAS Cecil Field, telephone: (904) 778-6055.

INTRODUCTION

This fact sheet outlines proposed environmental actions (called remedial actions) for two disposal sites, called Site 5, the Oil Disposal Area Northwest, and Site 17, the Oil and Sludge Disposal Area, Southwest. Technical documents prepared for Sites 5 and 17 refer to the Sites as *Operable Unit 2* because both sites contain similar wastes and are located in close proximity to each other. This fact sheet will refer to the study areas as Site 5 and Site 17.

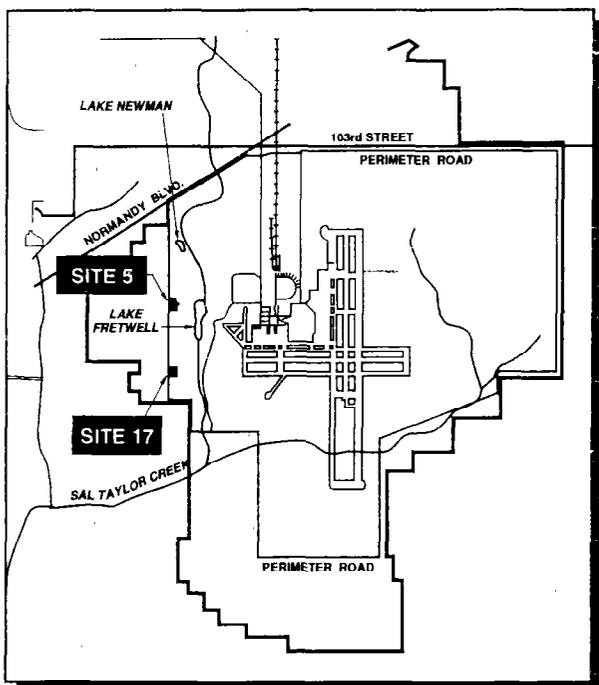


Figure 1. Location of Sites 5 and 17

DESCRIPTION OF SITES 5 AND 17

Figure 1 shows the locations of Sites 5 and 17. During operation, both sites were open, unlined pits, approximately one-half acre or less in size and 4 to 5 feet deep. Waste liquids such as fuel mixed with solvents, paint, and paint thinners, were reportedly dumped into the open pits and allowed to evaporate or drain into the ground. The exact volume of disposed materials is not known.

THE REMEDIAL ACTION PROCESS

The Proposed Plan for Sites 5 and 17, described in this fact sheet, is part of the remedial action process. This process includes:

- A **Remedial Investigation/Risk Assessment** to locate and evaluate chemicals that pose adverse human health and ecological effects at the site;
- A **Feasibility Study (FS)** to identify and evaluate appropriate remedial actions for the site;
- A **Proposed Plan** to summarize and recommend the best remedial actions for the site;
- **Public participation** to encourage interested citizens to review and provide input on the Proposed Plan;
- A **Record of Decision (ROD)** to document the selected action and to respond to any comments

raised during the public comment period; and

- **Remedial Action** to implement the selected action.

The remedial action process for Sites 5 and 17 is currently at the *public participation stage*.

INTERIM REMEDIAL ACTIONS

An interim remedial action may be performed at any time during the remedial action process. These actions are not designed to be the final action at the site, but rather to keep the environmental conditions at the site from getting worse. Two interim remedial actions at Sites 5 and 17 were initiated during the remedial investigation stage of the remedial action process.

The interim remedial actions at Site 5 began in March 1995 to remove and/or (1) treat soil contaminated with fuels and solvents, and (2) treat an oily liquid (referred to as free product) containing low levels of polychlorinated biphenyls (PCBs). Actions include excavation and treatment of soil and disposal of free product containing PCBs. Soil saturated with free product will first be drained to remove excess from product and the remaining soil will be biologically treated using nutrients and mechanical mixing to enhance breakdown of the remaining fuel and solvent products by naturally occurring bacteria. This action will be completed in late 1997. Site 5 is further described in Fact Sheets 8 and 12.

The interim remedial action at Site 17 was initiated in February 1995 and will be completed later this year. This action will include excavation and on-site thermal treatment of solvent- and fuel-contaminated soil. Fact Sheets 7 and 9 further describe the interim action at Site 17.

REMEDIAL INVESTIGATION AND RISK ASSESSMENT RESULTS

The Remedial Investigation and Baseline Risk Assessment for Sites 5 and 17 were completed in May 1995. The investigation included collecting

and analyzing surface water, sediment, ground water, and soil samples. Approximately 500 gallons of free product, consisting of either weathered jet fuel or kerosene containing levels of PCBs, were found in the northeast part of the Site 5 pit. Laboratory analysis of 5 samples showed organic compounds, petrol products, pesticides, PCBs, and metals. Laboratory analysis of Site 17 samples showed organic compounds, petroleum products, pesticides, and metals. PCBs were not detected at Site 17.

A risk assessment was performed to determine if the chemicals at the site were safe for humans and the environment. The results of the Baseline Assessment, summarized in Table 1, show no human health risks only if groundwater at either site is used for drinking water. A possible ecological risk for organisms living in the surface soil and sediment at Site 5 was identified.

**Table 1
Risk Assessment Results**

<i>Media</i>	<i>Human Health Risks</i>	<i>Ecological Risks</i>
Soil*	None	None
Groundwater	Possible risks if used for drinking water.	None
Surface Water	None	None
Sediment	None	Possible risk for Site 5. None for Site 17.

* One surface soil location adjacent to the ditch at Site 5 poses an ecological risk. Surface soil at that location should pose no risk after sediment remedial action.

FEASIBILITY STUDY RESULTS

The Feasibility Study was completed in July 1995. The study identified the following cleanup goals:

- Protect human health by preventing use of groundwater as a drinking water source where concentrations of contaminants are higher

regulatory standards or health-based values calculated in the risk assessment:

- Protect the environment by preventing exposure of sediment-dwelling organisms to elevated levels of PCBs and petroleum products.

Based on these objectives, the Feasibility Study evaluated three alternatives for cleanup and/or management of contaminated sediment at Site 5 and six alternatives for cleanup and/or management of contaminated groundwater at Sites 5 and 17. These alternatives are summarized in Tables 2 and 3 and are illustrated in Figures 2 through 10.

PROPOSED PLAN

After evaluating the proposed alternatives, the Navy, in consultation with the United States Environmental Protection Agency, the Florida Department of Environmental Protection, and the NAS Cecil Field Restoration Advisory Board, have recommended the following:

Preferred Sediment Alternative for Site 5: SD-2, Excavation and Biological Treatment. This alternative is recommended because it:

- Does not involve off-site transportation and disposal;
- Utilizes an existing treatment facility located on NAS Cecil Field; and
- Removes contaminants in the ditch sediments that are causing environmental risk.

Preferred Groundwater Alternatives for Site 5: GW-3, Air Sparging or GW-6, In Situ Air Stripping and Biological Treatment. Air sparging and air stripping are both effective technologies. Following further evaluation, the most effective technology will be selected. These technologies are recommended because they both:

- Use technologies that would not depend on the existing Federally-owned wastewater treatment

plant or the construction of a water treatment facility:

- Would not require the removal of ground to meet treatment goals and thereby avoid necessity for locating and permitting an appropriate location for discharge of treated water;
- Would prevent continued release of contaminants to a nearby drainage ditch; and
- Would minimize costs, labor, and expenses associated with above ground facilities.

Preferred Groundwater Alternative for Site 5: GW-2, Natural Attenuation. This alternative is recommended because:

- A provision would be made for treatment of groundwater containing elevated concentrations of fuels and solvents to accelerate the natural attenuation process;
- The contaminants in groundwater do not discharge into nearby surface water, nor are they expected to in the near future;
- Measurements indicate that natural attenuation processes are already effective and are the reason that contaminants are not expected to discharge to the wetlands and Rowell Creek;
- Deed restrictions would prevent groundwater use as a source of drinking water; and
- Would include a provision for treatment of groundwater containing elevated concentrations of fuels and solvents, for example: air sparging or air stripping.

WHAT'S NEXT?

Public Comment Period. The public comment period for the Proposed Plan will be open from 17 July through 17 August, 1995.

Record of Decision. The Record of Decision is scheduled to be signed in the Fall of 1995.

Remedial Action. Implementation of the selected alternatives is scheduled for Spring 1996.

Completion of Interim Remedial Action at Site 17. Scheduled for completion in late 1995.

Completion of Interim Remedial Action at Site 5. Scheduled for completion in late 1997.

Community Participation Activities

Public Comment Period. The public comment period for the Operable Unit 2 Feasibility Study and Proposed Plan will be held from **July 17 to August 17, 1995.**

Public Meeting. The public meeting will be held on **Tuesday, July 25, 1995 at 7:00 p.m.** at **Chimney Lakes Elementary School**, 9335 Staples Mill Drive, Jacksonville, Florida.

Public Notices. Look for public notices to be published in the **Florida Times Union** newspaper.

Information Availability. An Information Repository has been established at the **Charles D. Webb Wesconnett Branch of the Jacksonville Public Library**, 6887 103rd Street, Jacksonville, FL 32210, (904) 778-7305. This repository contains documents prepared in connection with Operable Unit 2 as well as other Installation Restoration Program information and is available for your review.

Point of Contact. For further information or if you would like to be added to the mailing list, please contact **Mr. Bert Byers, Public Affairs Officer**, NAS Cecil Field, P.O. Box 111, Jacksonville, FL 32215-0111, (904) 778-6055.