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NAS CECIL FIELD, FL  
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PROPOSED PLAN FOR OPERABLE UNIT 12 (OU 12) SITE 44 DITCH FROM DEFENSE  
REUTILIZATION AND MARKETING OFFICE TO WASTEWATER TREATMENT PLANT NAS  
CECIL FIELD FL  
6/3/2002  
TETRA TECH NUS INC



# INSTALLATION RESTORATION PROGRAM

June 2002



## Proposed Plan for Operable Unit 12, Site 44 DRMO to Wastewater Treatment Plant Naval Air Station Cecil Field Jacksonville, Florida

### Facility Description

Naval Air Station (NAS) Cecil Field (see Figure 1) was established in 1941 and provided facilities, services, and material support for naval operations. It was added to the **National Priorities List (NPL)** in 1989. In July 1993, the Base Realignment and Closure (BRAC) Commission recommended the closure of NAS Cecil Field. On September 30, 1999, the base was closed and the majority of the flightline was transferred to the Jacksonville Airport Authority (formerly Jacksonville Port Authority). In September 2000, most of the balance of the base was transferred to the city of Jacksonville.

### Site Description

**Operable Unit (OU) 12, Site 44.** the Ditch From the Defense Reutilization and Marketing Office (DRMO) to Wastewater Treatment Plant (WWTP), is located in the western portion of the Main Base (see Figure 1). The site consists of areas investigated previously as part of Area of Interest (AOI) 33 (former DRMO Office Area), Unnumbered Facility (UNF) 6 (Aircraft Wash Rack), and Facility 15 (Base WWTP) (see Figure 2). The Site 44 ditch is parallel to the western side of the AOI 33 fenced area, turns west along the northern side of a parking lot, and then extends through for approximately 1,100 feet where it enters an inlet to Lake Fretwell located west of Facility 15. The Site 44 ditch receives stormwater runoff from the western end of the flightline, the AOI 33 DRMO storage area and nearby areas, and the UNF 6 wash rack. The area around AOI 33 and **Potential Source of Contamination (PSC) 32**, the DRMO Storage Yard, is an industrial setting, and the remaining area through which the ditch extends is generally undeveloped. According to the reuse plan, the Site 44 area will be used for industrial purposes.

Site activities have resulted in contamination of soil with **polychlorinated biphenyls (PCBs)**. A soil **Preliminary Remedial Goal (PRG)** was established for **PCBs** on the basis that human health would be adequately protected if the 95-percent **upper confidence level (UCL)** of the detected concentrations of these **chemicals of concern (COCs)** did not exceed the Florida Department of Environmental Protection (FDEP) Soil Cleanup Target Levels (SCTL) for residential exposure of 0.5 milligrams per kilogram (mg/kg) and if no detected concentrations exceeded three times the residential SCTL, or 1.5 mg/kg. As part of a time-critical **Interim Removal Action (IRA)** based on the location of samples where **PCBs** were detected in excess of **PRGs**, 292 tons of soil were excavated (see Figure 3) and disposed off-base at a Subtitle D landfill.

### About This Document

In accordance with Section 117 of the **Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)**, the law that established the Superfund program, this document summarizes the Navy's proposal for site cleanup to help the public understand and comment on it. This plan has been developed by the NAS Cecil Field **BRAC Cleanup Team (BCT)** that consists of representatives from the Navy, the United States Environmental Protection Agency (U.S. EPA), and the FDEP. The **BCT**, in consultation with the **Restoration Advisory Board (RAB)**, will select a final remedy for **OU 12, Site 44** after public comments have been addressed. One of the purposes of this plan is to solicit the public's views and comments on the proposal for site cleanup. This plan highlights the key information from the Technical Memorandum for No Further Action report, but is not a substitute for that document. More complete information can be found in that report and other documents within the **Administrative Record**.

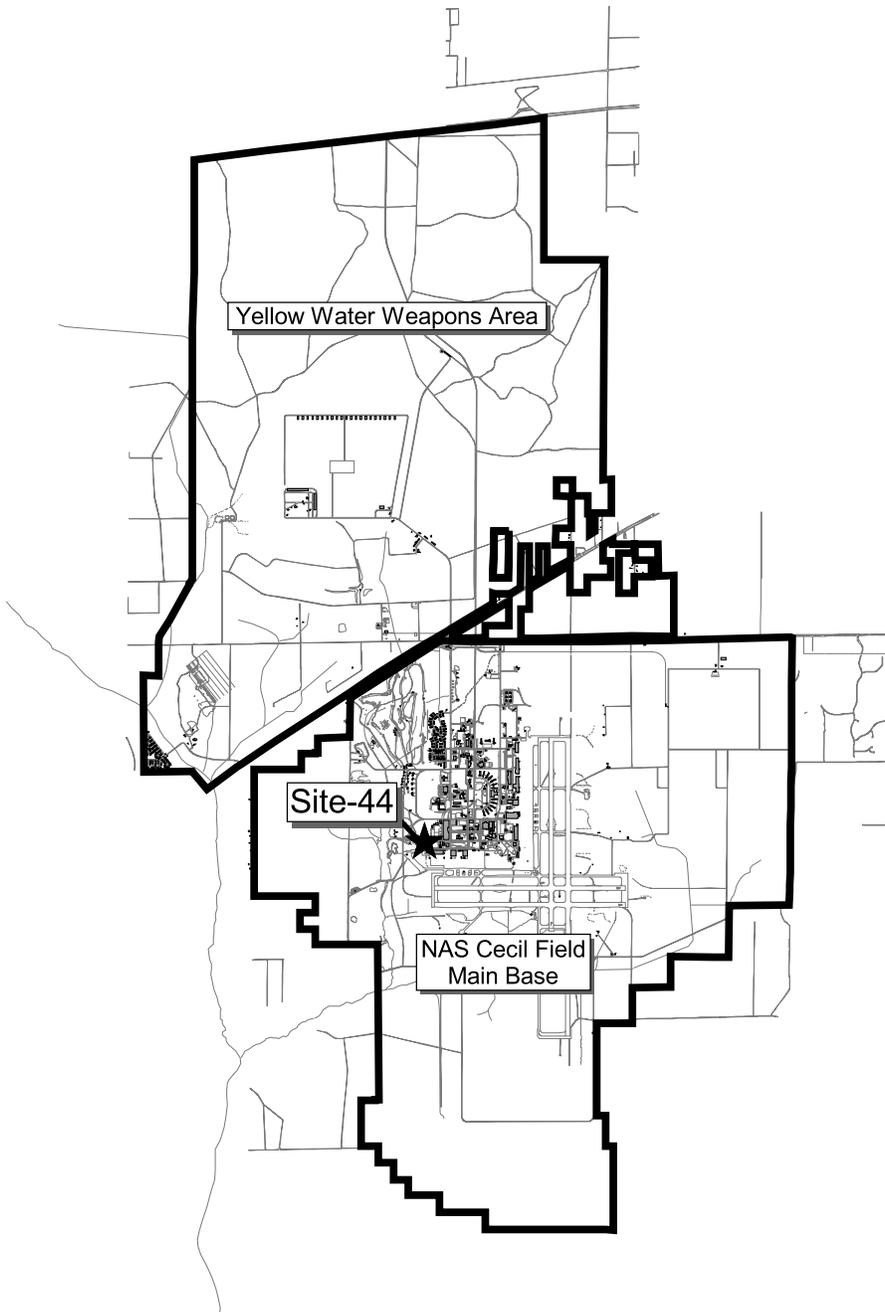
### The Proposed Clean-Up Plan

Based on an evaluation of findings from detailed environmental studies and the results of an **IRA** as presented in the Technical Memorandum for No Further Action for Site 44, No Further Action (NFA) has been proposed for the site.

NFA has been proposed because the time-critical **IRA** conducted at Site 44 is protective of human health and the environment. In addition, no **land use controls (LUCs)** are required because the **IRA** was conducted to meet **PRGs** that allow unrestricted site use. U.S. EPA and FDEP concur with the proposed clean-up plan.

*This document summarizes the NAS Cecil Field **BCT** proposed cleanup plan. For detailed information on the options evaluated for **OU 12, Site 44**, consult the documents contained within the **Administrative Record** that is available for review at the information repository located at Building 907, 13357 Lake Newman Street, Cecil Commerce Center, Jacksonville, Florida.*

Bolded terms throughout this Proposed Plan are explained in the Glossary of Terms presented on page 7.



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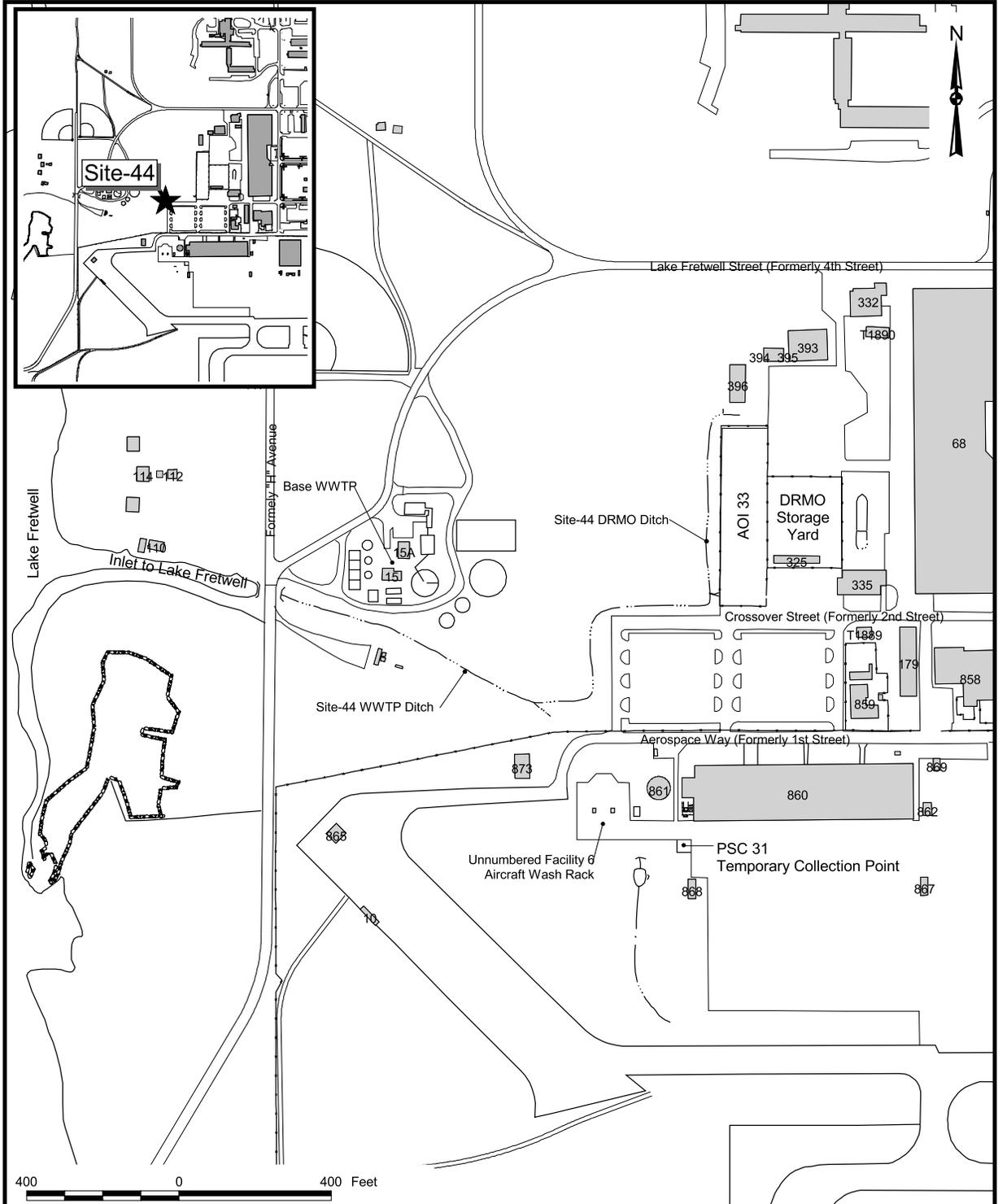
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GENERAL LOCATION MAP  
OU12, SITE 44, DITCH FROM DRMO TO WWTP  
PROPOSED PLAN  
NAVAL AIR STATION CECIL FIELD  
JACKSONVILLE, FLORIDA

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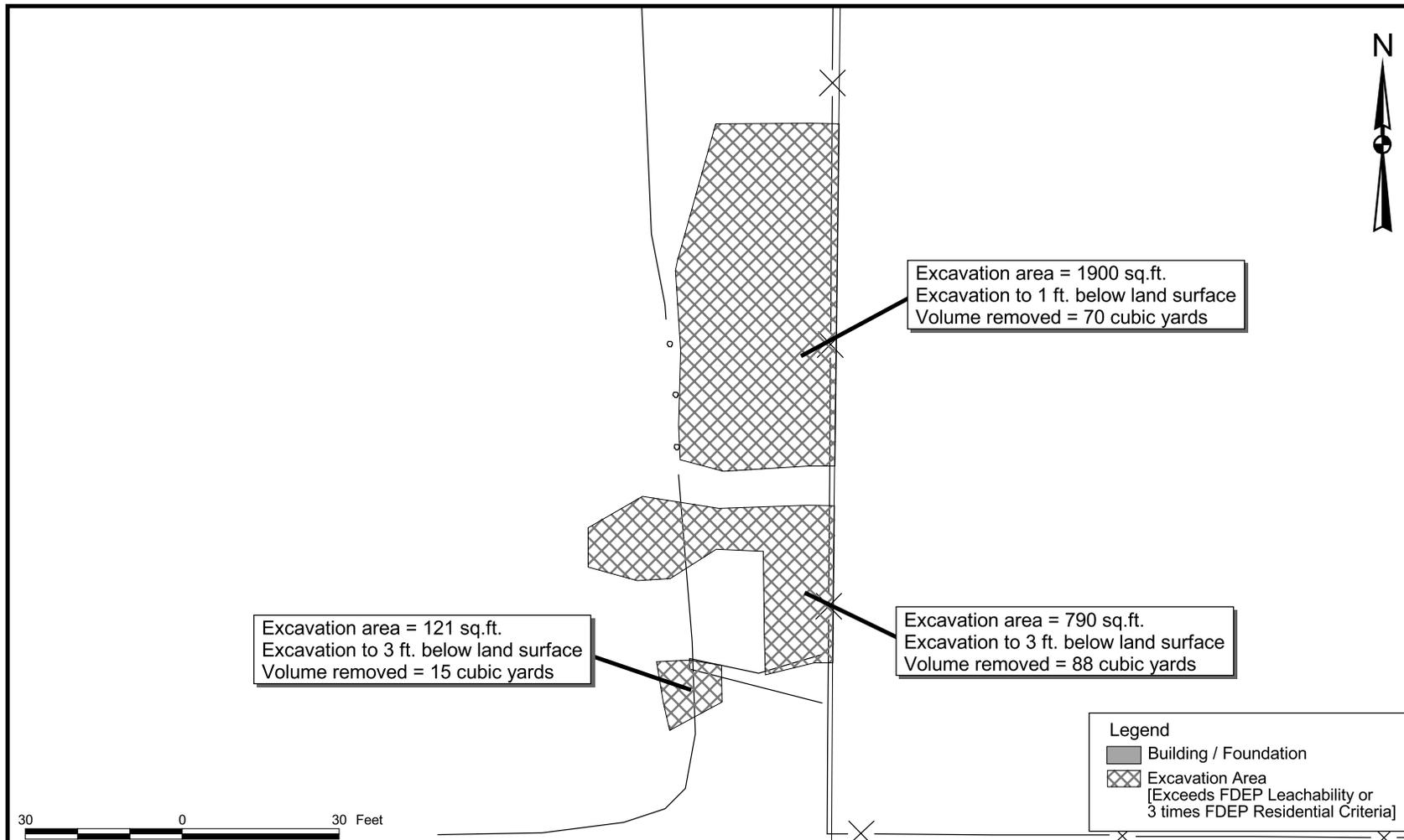
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**SITE MAP**  
 OU12, SITE 44, DITCH FROM DRMO TO WWTP  
**PROPOSED PLAN**  
 NAVAL AIR STATION CECIL FIELD  
 JACKSONVILLE, FLORIDA

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P:\GIS\INAS\_CecilField\PSC44\_ProposedPlan.apr 22Apr02 MJJ Excavation Area Layout

## What do you think?

The Navy, as the lead agency, is accepting formal public comments on this proposal from June 7, 2002 to July 7, 2002. You don't have to be a technical expert to comment. If you have a concern or preference, the **BCT** wants to hear it before making a final decision on how to protect your community. To comment formally:

- Offer oral comments during the comment portion of the public hearing, if such a hearing is requested (see page 8 for details).
- Send written comments postmarked no later than July 7, 2002 to:

Commander  
Department of the Navy  
Southern Division  
Naval Facilities Engineering Command  
Attn: Scott Glass, P.E. (Code ES3SG)  
2155 Eagle Drive  
North Charleston, SC 29406  
Tel: 843-820-5587

**E-mail comments** by July 7, 2002 to:

glasssa@efdsouth.navfac.navy.mil

### **Site History**

Following is a brief environmental history of Site 44:

- **1942** – Facility 15, that contributes runoff to the downstream portion of the Site 44 ditch, was constructed.
- **1961 - 1988** – AOI 33, that contributes runoff to the upstream portion of the Site 44 ditch, was used to store equipment, hazardous and non-hazardous materials, and miscellaneous items, such as furniture, office equipment, clothing and aircraft parts.
- **1976** – UNF 6, that is connected to the midstream portion of the Site 44 ditch through a gate valve, was built and used to wash aircraft using water and various solvents.
- **1994** - During the BRAC Environmental Baseline Survey (EBS), the Site 44 ditch was investigated as part of AOI 33 (upstream portion), UNF 6 (midstream portion), and Facility 15 (downstream portion). The EBS report indicated that hazardous materials were reportedly handled at AOI 33, that on at least one occasion the gate valve connecting UNF 6 to the Site 44 ditch was accidentally opened and washwater discharged to the ditch, and that sewage spills had occurred and underground storage tanks (USTs) were present at Facility 15. The EBS report concluded that further investigations were required.
- **1996** – Sampling and Analysis Report (SAR) investigations were conducted at AOI 33, UNF 6, and Facility 15. Results of the SAR investigations indicated **PCB** contamination in soil and sediment at the west end of AOI 33, **polynuclear aromatic hydrocarbon (PAH)** contamination of the ditch north of UNF 6, and **PCB** and **PAH** contamination in the ditch south of Facility 15 that was likely to have originated upstream. The SAR concluded that the entire length of the drainage ditch from the DRMO to Lake Fretwell should be investigated separately and designated as **PSC 44**.
- **1999 - 2000** – Additional investigations were conducted at **PSC 44** to delineate the extent of soil, sediment, and surface water contamination. A total of 59 soil, 7 sediment, and 2 surface water samples were collected and analyzed in seven phases between June 1999 and April 2000. As a result of these investigations, **PCBs** were identified as the only soil **COCs**, with concentrations exceeding the residential FDEP SCTLs. No sediment or surface water **COCs** were identified.
- **2000** – An Action Memorandum for **PSC 44** was prepared in June 2000 to identify the need for an **IRA** and to describe and estimate the costs of the proposed **IRA**. The proposed **IRA** included the excavation and disposal of **PCB**-contaminated soils off site in a time-critical manner. The **IRA** would comply with residential land use standards.
- **2000** – **IRA**. During September 2000, 290 tons (approximately 173 cubic yards) of soil were excavated from three areas of contamination. The depth of the excavation ranged from 1 to 3 feet below grade. Prior to excavation, the soil was characterized for disposal. Following excavation, the soil was transported and disposed off site on the same day that the removal occurred. The excavation was then backfilled with certified clean fill prior to being graded and seeded.
- **2001** – In May 2001, the **BCT** decided that, because of the extent of soil contamination delineated during the field investigations and **IRA**, **PSC 44** should be moved into the CERCLA program. The site was re-designated as **Installation Restoration (IR) Site 44** and grouped into **OU 12**.
- **2002** – A Technical Memorandum for No Further Action was prepared in January 2002. This document summarized the results of previous investigations, discussed the additional investigations, and determined the nature and extent of contamination. This document also presented human health and ecological **Preliminary Risk Evaluations (PREs)**, summarized the **IRA**, and recommended that Site 44 be designated as an NFA site.

## Why No Further Action Was Selected

The Navy's studies of **OU 12**, Site 44 have resulted in the following conclusions:

- Although Site 44 is programmed for industrial development, contaminant levels are such that the site can support residential development.
- Areas of soil with **PCB** concentrations greater than 1.5 mg/kg have been excavated and disposed at a Subtitle D landfill. This resulted in a 95 percent **UCL** concentration of **PCB** below the residential FDEP SCTL of 0.5 mg/kg and allows for unrestricted reuse of the site.
- The excavated area was restored to pre-excavation conditions with certified clean fill material.
- Based on the low level of soil contamination, no groundwater investigation was necessary at Site 44. Since the **IRA** has been conducted, no contaminants or pathways pose a threat to public health or the environment.
- Based on analytical data from surface soil, sediment, and surface water samples and available habitat, potential ecological risks associated with Site 44 are expected to be low. Also, the Site 44 drainage ditch provides only limited habitat for piscivorous receptors because of its small size and lack of a large fish population and terrestrial receptors at the site consist of species acclimated to urban and industrial conditions.

## Next Steps:

By September 9, 2002, the **BCT** expects to have reviewed comments and signed the **ROD** describing the chosen cleanup plan. The **ROD**, which includes a summary of responses to public comments, will then be made available to the public at the Information Repository at Building 907, 13357 Lake Newman Street, Cecil Commerce Center, Jacksonville, Florida. The **BCT** will also announce its decision through the local news media and the community mailing list.

## Glossary of Terms

This glossary defines the terms used in this Proposed Plan. The definitions in this glossary apply specifically to this Proposed Plan and may have other meanings when used in different circumstances.

**Administrative Record:** The complete body of documents pertaining to the investigation and restoration of an environmental site. This body of documents is kept at a location where it can be accessed by the general public.

**BRAC Cleanup Team (BCT):** A team of representatives from several governmental agencies and private sector companies that cooperates toward the resolution of environmental concerns associated with the closure of Navy facilities. In addition to representatives of the Navy and their contractors, the NAS Cecil Field BCT includes representatives of U.S. EPA and FDEP.

**Chemical of Concern (COC):** A substance detected at a concentration and/or in a location where it could have an adverse effect on human health and the environment.

**Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA):** A Federal law also known as "Superfund". This law was passed in 1980 and modified in 1986 by the Superfund Amendments and Reauthorization Act (SARA) and in 1992 by the Community Environmental Response Facilitation Act (CERFA). This law created a special tax that goes into a trust fund to investigate and cleanup abandoned or uncontrolled hazardous waste sites.

**Installation Restoration (IR):** A program established by the Navy for the investigation and cleanup of Superfund sites at their facilities.

**Interim Removal Action (IRA):** An interim cleanup action performed to address an immediate environmental threat.

**Land Use Control (LUC):** Institutional controls formulated and enforced to regulate current and future land use. **LUCs** most often consist of property deed restrictions that prohibit residential development of an environmental site.

**National Priorities List (NPL):** The list of national Superfund sites.

**Operable Unit (OU):** A discrete entity that comprises an incremental step toward the comprehensive cleanup of one or more environmental sites. An **OU** may address a specific medium within a site (e.g., soil or groundwater), a geographical portion of the site, a specific site environmental concern, or the initial phases of an action. At NAS Cecil Field, **OU**s have often been organized to group multiple sites with similar characteristics and environmental concerns.

**Polynuclear Aromatic Hydrocarbons (PAHs):** High molecular weight, relatively immobile, and moderately toxic solid organic chemical that feature multiple benzenic (aromatic) rings in their chemical formula. **PAHs** are typically formed during the incomplete combustion of coal, oil, gas, garbage, or other organic substance.

**Polychlorinated biphenyls (PCBs):** High molecular weight, moderately mobile, and moderately to highly toxic liquid organic chemicals that feature multiple benzenic rings and chlorine atoms in their chemical formula. In the past, these were commonly used as cooling fluid in electric transformers and, as a result, **PCB** contamination is relatively widespread.

**Potential Source of Contamination (PSC):** An area where environmental contamination was identified but limited to the soil above the groundwater table (vadose or unsaturated zone).

**Preliminary Remedial Goal (PRG):** A numerical concentration agreed upon by the **BCT** as having to be reached for a certain **COC** in order to meet one or more of the remedial action objectives. A **PRG** may be a regulatory-based criterion, a risk-based concentration, or even a background value.

**Preliminary Risk Evaluation (PRE):** A streamlined evaluation of current and future potential for adverse human health or environmental effects from exposure to site contaminants. This evaluation typically uses standard conservative criteria rather than site-specific evaluation parameters.

**Record of Decision (ROD):** An official document that describes the selected Superfund remedy for a specific site. The **ROD** documents the remedy selection process and is issued by the Navy and U.S. EPA following the public comment period.

**Restoration Advisory Board (RAB):** A body of representatives from the general public that meets on a regular basis to be briefed by the Navy and their contractors on the progress of environmental investigations and cleanup activities for a given facility. The **RAB** provides the opportunity for the community to give input into the cleanup program before final decisions are made.

**Upper Confidence Level (UCL):** Statistical term used to define a numerical value that is greater than a certain percentage of the numerical values of a given data set. For example, the 95-percent UCL of a data set of concentrations expresses the concentration value that is greater than 95 percent of the individual concentration values of the data set.



## What's a Formal Comment?

Formal comments are used to improve the clean-up proposal. During the 30-day formal comment period, the BCT will accept formal written comments and hold a hearing, if requested, to accept formal verbal comments.

To make a formal comment, you need to present your views during the public hearing or submit a written comment during the comment period. A request for a public hearing to present your formal comments must be made in writing. The request must be postmarked no later than July 7, 2002. Written comments and requests for a public hearing should be sent to:

Commander  
Department of the Navy  
Southern Division  
Naval Facilities Engineering Command  
Attn: Mr. Scott Glass, P.E. (Code ES3SG)  
2155 Eagle Drive  
North Charleston, SC 29406



Federal regulations require the BCT to distinguish between "formal" and "informal" comments. While the BCT uses both your comments and Restoration Advisory Board (RAB) comments throughout site investigation and clean-up activities, the team is only required to respond in writing to formal comments on the Proposed Plan. If a public hearing is requested, there will be no verbal response to your comments during the formal hearing portion of the meeting. Once the formal hearing portion of the public meeting is closed, the BCT may respond to informal questions.

The BCT will review the transcript of all formal comments received at the hearing and all written comments received during the formal comment period before making a final clean-up decision. They will then prepare a written response to all formal comments. The transcript of formal comments and the BCT's written responses will then be issued in a document called a Responsiveness Summary when the team releases the final ROD.

## For More Detailed Information

To help the public understand and comment on the proposal for the site, this publication summarizes a number of reports and studies. All the technical and public information publications prepared to date for the site are available at the following information repository:

Building 907  
13357 Lake Newman Street  
Cecil Commerce Center  
Jacksonville, Florida 32252  
904-573-0336





