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NAS CECIL FIELD, FL
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PROPOSED PLAN FOR OPERABLE UNIT 12 (OU 12) OLD GOLF COURSE NAS CECIL
FIELD FL
6/3/2002
TETRA TECH NUS INC



INSTALLATION RESTORATION PROGRAM

June 2002



Proposed Plan for Operable Unit 12, Old Golf Course 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, the Old Golf Course (OGC) site is located in the northern portion of the Main Base (see Figure 1). The OGC occupied the area bound by New World Avenue (formerly "D" Avenue) on the east, Lake Newman Street (formerly 6th Street) on the north, Lake Fretwell Street (formerly 4th Street) on the south, and Residence Avenue (formerly "G" Avenue) on the west. The eastern one-third of the OGC is occupied by Building 331 (Bachelor Officer Quarters), Building 800 (Memorial Chapel), and Building 808 (Dispensary/Dental Clinic) (see Figure 2). The OGC was identified from historic aerial photographs, as shown in Figure 3. The eastern portion was reworked during the construction of buildings and parking lots. The remainder of the site has not significantly changed and is overgrown with vegetation. The area currently is a commercial and undeveloped setting, and the reuse plan identifies this area for offices and parks.

Use of pesticides during the period of time when the OGC served as an active golf course had resulted in residual contamination of soil with arsenic in some of the areas formerly occupied by tees and greens. Various pesticides and inorganic compounds were evaluated to estimate risk, but only arsenic was detected at concentrations in excess of residential exposure criteria. **Preliminary Remedial Goals (PRGs)** for soil were established for arsenic on the basis that human health would be adequately protected if the 95-percent **upper confidence level (UCL)** of the detected concentrations of this **chemical of concern (COC)** did not exceed the NAS Cecil Field site-specific **Inorganic Background Data Set (IBDS)** value of 2.04 mg/kg for arsenic. The residential Florida Department of Environmental Protection (FDEP) Soil Cleanup Target Level (SCTL) for arsenic (0.8 mg/kg) was not used because its **IBDS** value was greater. As part of a time-critical **Interim Removal Action (IRA)** based on the location of samples where arsenic was detected in excess of **PRGs**, 483 tons of soil were excavated (see Figure 4) 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 the proposed alternatives. This plan has been developed by the NAS Cecil Field **BRAC Cleanup Team (BCT)**, which consists of representatives from the Navy, the United States

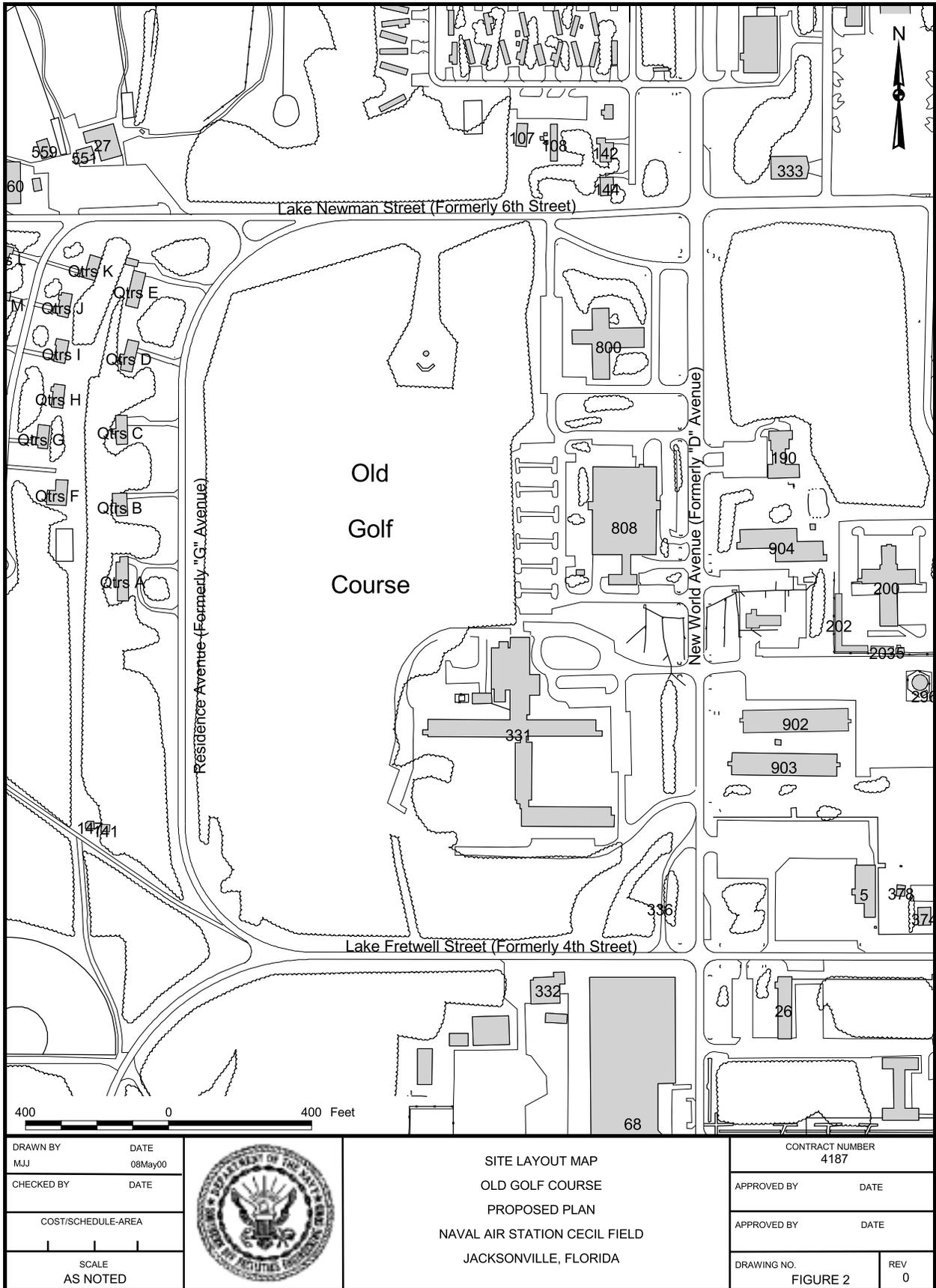
The Proposed Cleanup Plan

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 Operable Unit 12, Old Golf Course, Main Base Area 3, No Further Action (NFA) has been proposed for the site. NFA is proposed because the time-critical **IRA**

conducted at the OGC Site was protective of human health and the environment. In addition, no **land use controls (LUCs)** are required because the **IRA** was conducted to meet site-specific **IBDS** values and therefore the site meets the requirements for residential 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, Old Golf Course**, consult the documents contained within the **Administrative Record**, which 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 pages 7 and 8.



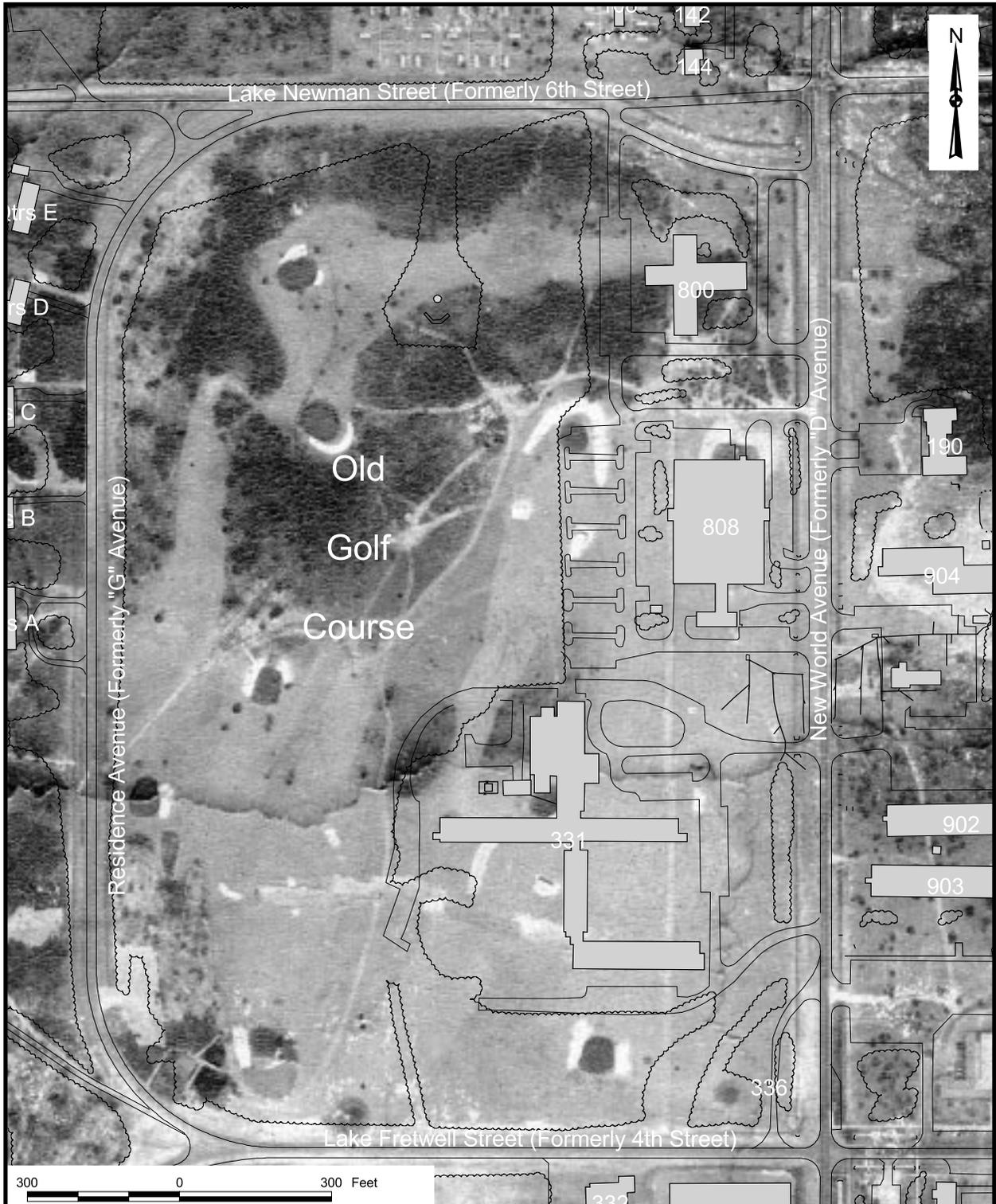
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SITE LAYOUT MAP
 OLD GOLF COURSE
 PROPOSED PLAN
 NAVAL AIR STATION CECIL FIELD
 JACKSONVILLE, FLORIDA

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CURRENT (OUTLINE) AND
 HISTORIC (AERIAL PHOTOGRAPH) CONDITIONS
 OLD GOLF COURSE
 PROPOSED PLAN
 NAVAL AIR STATION CECIL FIELD
 JACKSONVILLE, FLORIDA

CONTRACT NUMBER 4187	
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P:\GISINAS_CecilField\OGC_ProposedPlan.apr 17Apr02 MJJ 2a_Facility Location Layout

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**, OGC after public comments have been addressed. One of the purposes of this plan is to solicit the public's views and comments on the proposed alternative. 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.

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 ES3)
2155 Eagle Drive
North Charleston, SC 29406
Tel: 843-820-5587

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

glasssa@efdsouth.navfac.navy.mil

Why No Further Action Was Selected

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

- Areas of soil where arsenic concentrations were greater than the **PRG** established by statistical analyses have been excavated and disposed at a Subtitle D landfill. This resulted in a 95 percent **UCL** concentration of arsenic below the site-specific **IBDS** value for arsenic and allows for unrestricted reuse of the site.
- The excavated area was restored to pre-excavation conditions with certified clean fill material.
- Arsenic concentrations in the soil samples collected outside the excavation area do not exceed the cleanup level established by the statistical analysis, based on the site-specific background value.

Site History

Following is a brief environmental history of the Old Golf Course:

- **Early 1940s - 1946** - Site was operated as a golf course.
- **1957 - 1986** - Building 331 (1957), Building 800 (1965), and Building 808 (1976) were constructed on the eastern side of the site. The railroad tracks that passed through the southeastern corner of the site were removed in 1986.
- **1994 - 1998** - During the BRAC investigation, the OGC was identified as Main Base Area 3 (MB3). In the BRAC Environmental Baseline Survey (EBS) Report, MB3 and Buildings 331, 800, and 808 were determined to be grey sites requiring additional evaluation. A Phase II Sampling and Analysis Program for MB3 was begun in 1997, and the results of the investigation were presented in the 1998 Sampling and Analysis Outline and Report (SAOR) for Main Base Area 3. Based on the activities in Buildings 331, 800, and 808, no reports were required for these facilities. The SAOR recommended no further action at MB3.
- **1999 - 2000** - In late 1999, the **BCT** reconsidered the OGC and determined that additional investigation was required at the former locations of the tee boxes and greens. From November 1999 through May 2000, four sampling events were conducted to identify **COCs** for soil, to establish **PRGs**, and to delineate **COC** contamination in the surface soil. It was determined that arsenic, which was detected at concentrations in excess of its site-specific **IBDS** value, was the only **COC**. No groundwater investigation was deemed to be necessary because all arsenic

concentrations in the soil were less than the FDEP SCTL for leachability to groundwater.

- **2000** - Old Golf Course Action Memorandum. Based on the extent of soil contamination found during the field investigations, the OGC was moved into the CERCLA program, re-designated as an **Installation Restoration (IR)** site, and grouped into **OU 12**. An Action Memorandum for the Old Golf Course was prepared in July 2000 to identify the need for an **IRA**, to present the proposed **IRA** to be conducted, and to estimate the cost for the **IRA**. The proposed action included the excavation and disposal of arsenic-contaminated soils off site in a time-critical manner. The **IRA** would comply with residential land use standards.
- **2000 - IRA**. During August 2000, 297 yd³ (483 tons) of contaminated soil were excavated from the areas containing the highest arsenic concentrations. The depth of the excavations was 1 to 2 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** - A Technical Memorandum for No Further Action was prepared in August 2001. This document summarized the results of previous investigations, discussed the field investigations, and described the nature and extent of contamination. It also presented human health and ecological **Preliminary Risk Evaluations (PREs)**, summarized the **IRA** at the site, and recommended that the OGC be designated as an NFA site.

- Based on the low levels of soil contamination, no groundwater investigation was necessary at the OGC. Since the **IRA** has been conducted, no contaminants or pathways pose a threat to public health or the environment.

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 in 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). This law created a special tax that goes into a trust fund to investigate and cleanup abandoned or uncontrolled hazardous waste sites.

Inorganic Background Data Set (IBDS): A compendium of the concentrations of non-organic substances, mostly metals, detected in soil, surface water, sediments, and groundwater in uncontaminated areas of NAS Cecil Field.

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 operable unit 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, OUs have often been organized to group multiple sites with similar characteristics and environmental concerns.

Preliminary Remedial Goal (PRG): A numerical concentration agreed upon by the BCT as having to be reached for a certain chemical of concern 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 cleanup 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 ES3)
2155 Eagle Drive
North Charleston, SC 29406



Federal regulations require the BCT to distinguish between "formal" and "informal" comments. Although the BCT uses both your comments and 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 cleanup 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



