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FACT SHEET 9 FOR FINAL PROPOSED PLAN SITE 42 NAS PENSACOLA FL
12/1/1997
NAS PENSACOLA

Naval Air Station Pensacola
Installation Restoration Program (IRP)

This is one in a series of fact sheets informing interested citizens about the environmental investigations and remedial actions at NAS Pensacola. Other fact sheets will be written at appropriate points in the program and in response to public interest. Distribution is coordinated through the Public Affairs Office at NAS Pensacola, (904) 452-2311.

FACT SHEET 9: U.S. Navy Final Proposed Plan
Site 42 (Operable Unit 17), Pensacola Bay, Naval Air Station, Pensacola

INTRODUCTION

The U.S. Navy, as the lead agency cleaning up Naval Air Station (NAS) Pensacola, is issuing this **Proposed Plan** for Site 42 (Operable Unit 17) — Pensacola Bay — to provide an opportunity for public comment on **cleanup** alternatives. The Navy, in consultation with the U.S. Environmental Protection Agency (USEPA) and the Florida Department of Environmental Protection (FDEP), will not select a final alternative until public comment has been considered.

The Navy is issuing this proposed plan as part of its public participation program as defined by federal law and to encourage community involvement in selecting the alternative. This plan provides background information on the site and presents the preferred "no-action alternative." Also, this plan outlines the public's role in helping the Navy make a final decision.

Words that first appear in **bold** print are defined in the glossary, starting on page 4.

This plan summarizes information described in the *Final Remedial Investigation (RI) Report* and other documents contained in the Administrative Record (AR). The AR and **Information Repositories** for NAS Pensacola may be found at the following locations:

NAS Pensacola Library
Building 633
Hours of Operation:
M-F: 8 a.m. to 6 p.m.
Sat: 9:30 a.m. to 5 p.m.

John C. Pace Library
University of West Florida
Hours of Operation:
M-Th: 8 a.m. to 10 p.m.
Fri: 8 a.m. to 5 p.m.
Sat: 9 a.m. to 5 p.m.
Sun: 10 a.m. to 9 p.m.

COMMUNITY PARTICIPATION

The U.S. Navy relies on public comments to ensure that the selected alternative is fully understood and that community concerns have been considered. The U.S. Navy will be accepting written comments from December 8, to January 22, 1998, to encourage public participation in the selection process. The **comment period** includes the opportunity for a public meeting at which the Navy would present the RI Report and Proposed Plan, answer questions, and receive comments from the public. The meeting will be held if there is a timely request from the public to have one. Comments will be summarized and responses provided in the **responsiveness summary** section of the **Record of Decision** (ROD). The public can send written comments to the following person, from whom they also can request additional information:

Commanding Officer
NAS Pensacola, Code 00500
Attn: Ron Joyner
190 Radford Blvd
Pensacola, Florida 32508-5217

SITE BACKGROUND

NAS Pensacola was placed on USEPA's **National Priorities List** (NPL) in December 1989. The **Comprehensive Environmental Response, Compensation, and Liability Act** (CERCLA) governs cleanup for sites on this list. In addition, an environmental permit was issued in 1988 under the **Resource Conservation and Recovery Act** (RCRA). This permit ensures that ongoing activities are conducted in an environmentally sound manner and that any spills or leaks of hazardous waste and/or constituents are investigated and cleaned up. The Federal Facilities Agreement (FFA), signed in October 1990, outlines NAS Pensacola's regulatory path through these federal laws. Operable Unit 17, which consists of Site 42, is one of 13 operable units within NAS Pensacola. The purpose of each operable unit is defined in the *FY 1997 Site Management Plan* for NAS Pensacola which is in the Administrative Record.

Site 42 — Pensacola Bay — is a surface water body next to NAS Pensacola's eastern and southern borders. It includes the Intercoastal Waterway from Trout Point east to NAS Pensacola's Pier 303, and terminates at the mouth of Bayou Grande. Approximately 10 miles of Pensacola Bay coastline border NAS Pensacola. During contamination assessment investigations, metals total recoverable petroleum hydrocarbons , polynuclear aromatic hydrocarbons, and volatile organic compounds were detected in sediment samples collected along the southeastern waterfront of the Naval Air Station. From 1939 to 1973, industrial waste was discharged from NAS Pensacola into Pensacola Bay. This area was identified and investigated as a separate operable unit (Site 2; Operable Unit 3). Other potential impacts may have occurred from vessel operations at pier and docking facilities. Additionally, offsite sources (other non-Navy vessels or operations) may have impacted the site due to the fluctuating nature of bay waters and sediment.

Since the early 1950s, numerous environmental investigations have been conducted in and around the Pensacola Bay system to monitor the ecological health of the bay and determine the impact of commercial, industrial, and municipal activities. Previous investigations have documented Navy and other industrial activities discharging to Pensacola Bay.

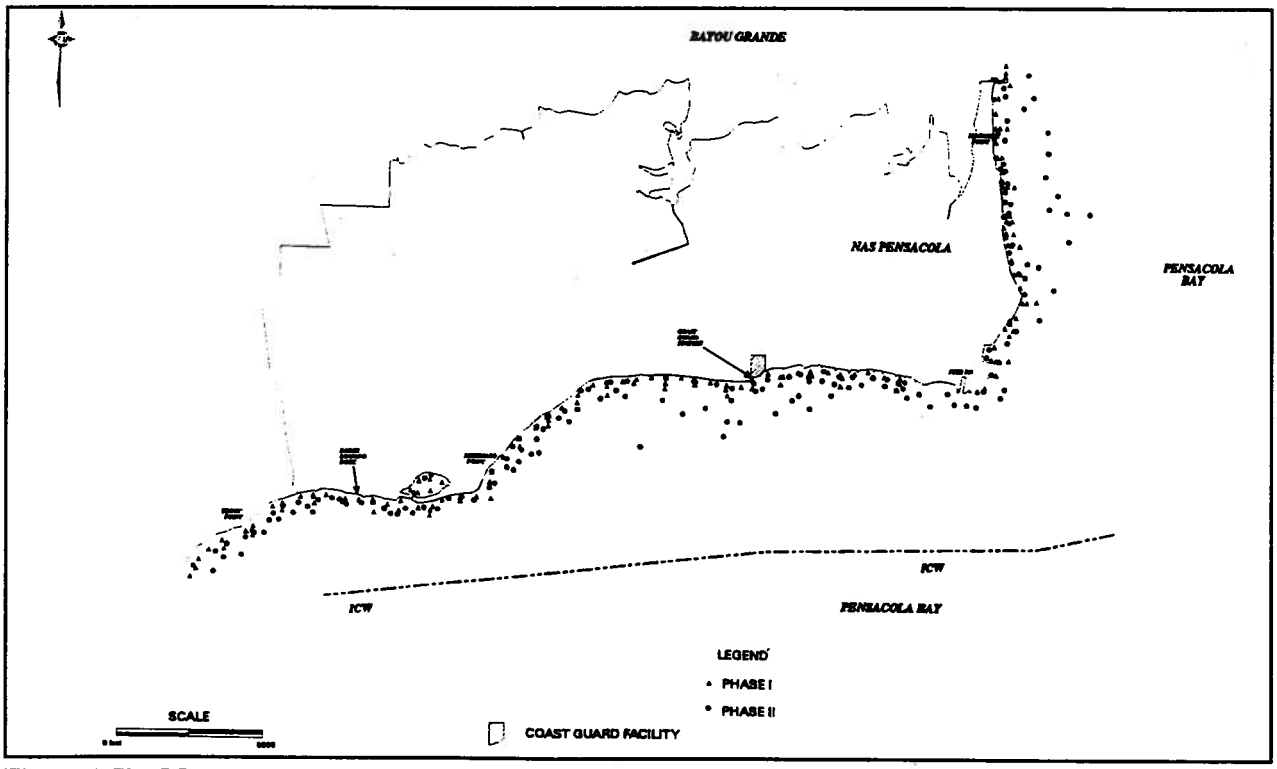

Figure 1 Site Map

REMEDIAL INVESTIGATION FINDINGS

From June 1994 to September 1997, a remedial investigation was conducted at Site 42 to assess the nature and extent of any contaminants potentially resulting from Navy activities. Contamination was limited to several sediment areas

abutting the base shoreline. The *Final Remedial Investigation Report* identifies the sediment contamination found at Site 42.

Areas with elevated contaminant concentrations include the barge loading dock, Coast Guard Station, concrete seawall and quay, and the industrial wastewater treatment plant (IWTP). The contaminants near the barge loading dock suggest the source to be fuels from the activities in that area. The seawall and quay contaminants indicate the source to be storm water runoff from asphalt roads and roofs. At the IWTP, groundwater and storm water discharges, and past **National Pollutant Discharge Elimination System** (NPDES) discharge violations are thought to be the source of contamination. Based on the studies at Operable Unit 3 (Site 2) the exceedances at the Coast Guard Station are below levels that posed a risk to ecological receptors. Areas of contamination are limited in extent.

RISK

CERCLA directs that a **Baseline Risk Assessment** (BRA) be done to determine if an NPL site poses an unacceptable human health or environmental threat if no cleanup measures are taken. This study provides a basis for determining whether cleanup is needed and what the cleanup levels should be. The BRA for Site 42 addresses both ecological and human health exposure. The entire study is documented in the *Final Remedial Investigation Report* available in the Information Repository.

Incremental lifetime cancer risk (ILCR) refers to the cancer risk that is over and above the background cancer risk in unexposed individuals. ILCRs are determined by multiplying the intake level with the cancer potency factor. The calculated risk are probabilities which are typically expressed in scientific notation (e.g., 1E-6). For example, an ILCR of 1E-4 means that one additional person out of ten thousand may be at risk of developing cancer due to excessive exposure at a site if no actions are conducted. The USEPA's acceptable target risk range is 1E-4 to 1E-6. Florida's acceptable risk is 1E-6. Potential concern for noncarcinogenic effects of a single contaminant in a single medium is expressed as the hazard quotient (HQ). By adding the HQs for all contaminants within a medium or across all media to which a given population may reasonably be exposed, the hazard index (HI) can be generated. The HI provides a useful reference point for gauging the potential significance of multiple contaminant exposures within a single medium or across media. The HI refers to noncarcinogenic effects and is the ratio for the level of exposure to an acceptable level for a contaminant of potential concern. An HI greater than or equal to 1.0 indicated that there may be a concern for noncarcinogenic health effects.

Human Health: The only complete exposure pathway at Site 42 is through eating seafood collected in the area. A study completed during the Site 2 remedial investigation (Site 2 [OU3] is the waterfront sediments within Site 42 where industrial waste was discharged for over 35 years) estimated the risk from eating crab collected in the area. Table 1 summarizes the risk projections based on tissue ingestion. The ILCR is based on the maximum levels detected, and would therefore, overestimate risk.

Table 1
Risk Projections for COPCs Based on Crab Tissue Ingestion

	Child	Adult
HI	0.7	0.2
ILCR LWA		**3E-06**

Notes:
HI = hazard index
ILCR LWA = Incremental Lifetime Cancer Risk Lifetime Weighted Average (Combined Child and Adult Exposure)
Bold values indicate risk levels that exceed acceptable levels.

Ecological Risk: Overall, risk to ecological receptors is limited based on the low number of contaminants detected and the limited area of detections. At Operable Unit 3 (Site 2) which is within Site 42, contaminant levels greater than an HQ of 1 did not correlate to observed benthic community changes or to the results of the toxicological tests.

As shown at Site 2, adverse ecological effects are more likely to occur based on a hazard quotient greater than 10.

At Site 42, HQs calculated for metals were less than five except for a single detection of silver with an HQ equal to 20.2. Because it was detected at only one location, there is a low risk to ecological receptors. Of the three pesticides and one PCB detected, none exhibited an HQ greater than five, indicating a low risk to ecological receptors. Of the SVOCs detected, only the PAHs exhibited an HQ greater than 10 suggesting a higher risk to ecological receptors. The SVOCs were detected in two areas, the barge loading dock and the Coast Guard Station. Both of these areas are active facilities, and the barge loading dock will be investigated under the Florida petroleum program. Based on the studies at Operable Unit 3 (Site 2) the exceedances at the Coast Guard Station are below levels that posed a risk to ecological receptors.

Because there is no excess risk to human or ecological receptors, a feasibility study was not completed for this site and the nine criteria analysis do not apply.

PROPOSED ALTERNATIVE

The alternative proposed for Site 42 is no action. This alternative that considers both current and future reasonable maximum exposure scenarios, will consist of leaving the site as is. No additional sampling or monitoring will be required with this alternative. This alternative would be protective, cost-effective, and would attain all federal and state requirements. The barge loading dock, an area of moderate ecological risk, will be investigated under the Florida petroleum program. This alternative will allow for unrestricted use of the site.

GLOSSARY

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

Baseline Risk Assessment: A study that supplements a remedial investigation to determine the nature and extent of contamination at an NPL site and the risks posed to public health and/or the environment.

Cleanup: Actions taken to deal with a release or threatened release of hazardous substances that could affect public health and/or the environment. The noun "cleanup" is often used broadly to describe various actions or phases such as Remedial Investigation/Feasibility Study.

Comment period: A time for the public to review and comment on various documents and actions taken, either by the Department of Defense installation or the USEPA. For example, a comment period is provided when USEPA proposes to add sites to the National Priorities List. A minimum 45-day comment period is held to allow community members to review the Administrative Record and review and comment on the Proposed Plan.

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA): A federal law passed in 1980 and modified in 1986 by the Superfund Amendments and Reauthorization Act (SARA). The act created a special tax that goes into a trust fund, commonly known as "Superfund," to investigate and clean up abandoned or uncontrolled hazardous waste sites.

Under the program the USEPA can either:

- Pay for site cleanup when parties responsible for the contamination cannot be located or are unwilling or unable to perform the work.
- Take legal action to force parties responsible for site contamination to clean up the site or pay the federal government for the cost of the cleanup.

Information Repository: A file containing information, technical reports, and reference documents regarding an NPL site. Information repositories for NAS Pensacola are at the John C. Pace Library of the University of West Florida and the NAS Pensacola Library at Building 633, Naval Air Station, Pensacola, Florida.

National Pollutant Discharge Elimination System (NPDES): A provision of the Clean Water Act that prohibits discharge of pollutants into waters of the United States unless a special permit is issued by USEPA.

National Priorities List (NPL): The USEPA's list of the most serious uncontrolled or abandoned hazardous waste sites identified for possible long-term remedial response using money from the trust fund.

Polycyclic Aromatic Hydrocarbons (PAHs): Semivolatile organic compounds that are by-products of combustion of organic matter (e.g., foods, tobacco, garbage, wood, coal, and petroleum products). PAHs may also be found in asphalt.

Proposed Plan: A public participation requirement of SARA in which the lead agency summarizes the preferred cleanup strategy and the rationale for the preference, reviews the alternatives presented in the detailed analysis of the remedial investigation/feasibility study, and presents any waivers to cleanup standards of Section 121(d)(4) that may be proposed. This may be prepared either as a fact sheet or as a separate document. In either case, it must actively solicit public review and comment on all alternatives under agency consideration.

Record of Decision (ROD): A public document that explains which cleanup alternative(s) will be used at NPL sites. The Record of Decision is based on information and technical analysis generated during the remedial investigation/feasibility study and consideration of public comments and community concerns.

Remedial Investigation (RI): Investigation and analytical studies performed to gather the data necessary to determine the type and extent of contamination at an NPL site.

Resource Conservation and Recovery Act (RCRA): A federal law that established a regulatory system to track hazardous substances from the time of generation to disposal. The law requires safe and secure procedures to be used to treat, transport, store, and dispose of hazardous substances. RCRA is designed to prevent new, uncontrolled hazardous waste sites.

Responsiveness Summary: A summary of oral and written public comments received by the lead agency during a comment period on key documents, and the response to these comments prepared by the lead agency. The responsiveness summary is a key part of the ROD and highlighting community concerns for USEPA decision-makers.

NAS PENSACOLA SITE 42
PUBLIC COMMENT SHEET

USE THIS SPACE TO WRITE YOUR COMMENTS

Your input on the Proposed Plan for Site 42 at NAS Pensacola is important in helping the Navy select a final remedy for the site. You may use the space below to write your comments, then fold and mail. Additional comments may be included with this form.

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Name _____

Address _____

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Phone # _____

NAS PENSACOLA SITE 42

Fold on dotted line, staple, stamp and mail

Name _____

Address _____

City _____ **State** ___ **Zip** _____

Place
Stamp
Here

Commanding Officer
NAS Pensacola, Code 00500
Attn: Ron Joyner
190 Radford Blvd
Pensacola, Florida 32508-5217

DEPARTMENT OF THE NAVY

COMMANDING OFFICER
CODE 00500
NAS PENSACOLA
190 RADFORD BLVD
PENSACOLA FL 32508-5217

OFFICIAL BUSINESS

MAILING LIST ADDITIONS/CORRECTIONS

If you would like your name and address placed (or corrected) on the mailing list for the Installation Restoration Program at NAS Pensacola, please complete this form and return to Ron Joyner, NAS Pensacola, 190 Radford Boulevard, Code 00500, Pensacola, Florida 32508-5217.

NAME: _____

AFFILIATION: _____

ADDRESS: _____

_____

TELEPHONE: _____