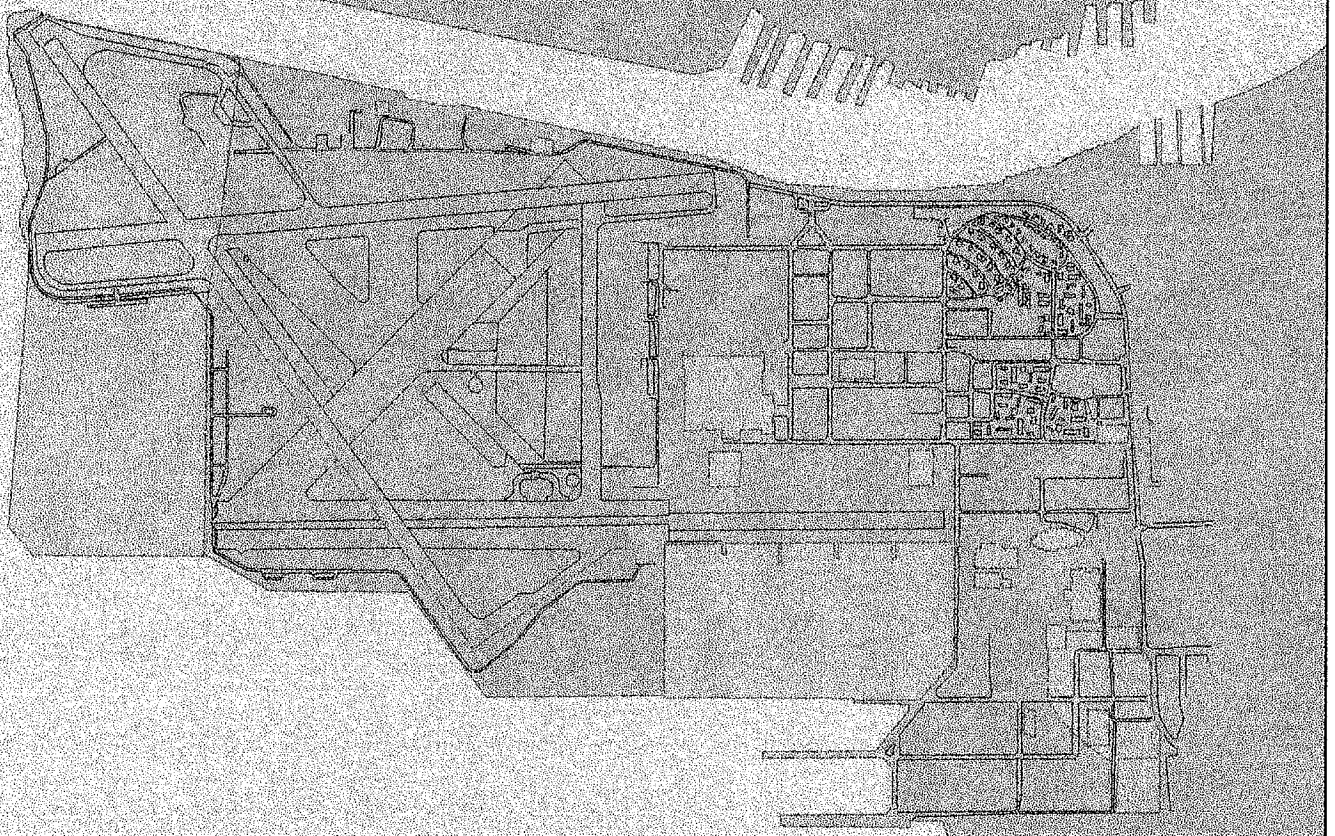
Installation Restoration Program
Community Relations Plan

Final

NAVAL AIR STATION ALAMEDA • ALAMEDA, CALIFORNIA

Prepared For
Engineering Field Activity West
Naval Facilities Engineering Command



December 1996

EXECUTIVE SUMMARY

The U.S. Department of the Navy has prepared this updated Community Relations Plan (CRP) to provide a road map for involving and informing the Alameda community throughout the environmental cleanup program at Naval Air Station (NAS) Alameda. The cleanup program is called the Installation Restoration Program. Because of the scheduled closure of NAS Alameda in 1997, obtaining community input on the environmental cleanup is especially critical to ensure that community reuse needs are addressed.

The primary objectives of the CRP are (1) to identify key community concerns, interests, and information needs related to the environmental cleanup at NAS Alameda and (2) to present a strategy to address those concerns, interests, and information needs in a manner most effective and suitable for both the general community and targeted organizations within the community.

Preparation of the CRP was based largely on interviews with a cross-section of key community representatives. A total of 17 community members were interviewed, reflecting a range of community interests. The interviewees were asked to characterize their awareness of, and interest in, the Installation Restoration Program; identify key concerns and information needs; and suggest the most effective techniques for informing the community of ongoing environmental activities and issues. Additionally, interviewees were asked how frequently they would like to receive information and at what level of detail. Community members of the NAS Alameda Restoration Advisory Board (RAB) also participated in the community interview process by completing a written questionnaire asking questions similar to those asked of interviewees.

The CRP provides the following:

- The history of NAS Alameda
- An overview of Installation Restoration Program activities at NAS Aalmeda
- A profile of the Alameda community
- Results of the interviews and completed questionnaires
- An outline of legally required community relations activities
- The Navy's strategy to address key concerns and involve and inform the community throughout the Installation Restoration process.

REPLACEMENT PAGES
FOR

FINAL
COMMUNITY RELATIONS PLAN

DATED 07 APRIL 1997

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Appendix

FIGURES

TABLES

ABBREVIATIONS AND ACRONYMS

ALMAT	Alameda Labor/Management Team
AR	Administrative Record
ARRA	Alameda Reuse and Redevelopment Authority
BCP	BRAC Cleanup Plan
BCT	BRAC Cleanup Team
BEC	BRAC Environmental Coordinator
BRAC	Base Realignment and Closure
BRAG	Base Reuse Advisory Group
Cal/EPA	California Environmental Protection Agency
CARE	Concerned Alamedans for Racial Equality
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CERFA	Community Environmental Response Facilitation Act
CRP	Community Relations Plan
DERA	Defense Environmental Restoration Account
DoD	U.S. Department of Defense
DTSC	Cal/EPA Department of Toxic Substances Control
EBCRC	East Bay Conversion and Reinvestment Commission
EBS	Environmental Baseline Survey
EDAB	Economic Development Advisory Board
EE/CA	Engineering Evaluation/Cost Analysis
EIS	Environmental Impact Statement
FFSRA	Federal Facility Site Remediation Agreement
FOSL	Finding of Suitability to Lease
FOST	Finding of Suitability to Transfer
FS	Feasibility Study
GABA	Greater Alameda Business Association
IR	Installation Restoration
NAS	Naval Air Station
NCP	National Oil and Hazardous Substances Pollution Contingency Plan
NEPA	National Environmental Policy Act
NPDES	National Pollutant Discharge Elimination System
NPL	National Priorities List
PA	Preliminary Assessment
PABA	Park Street Alameda Business Association
PAO	Public Affairs Office
PCB	Polychlorinated Biphenyl
PTA	Parent-Teacher Association
PWC	Public Works Center
RA	Remedial Action
RAB	Restoration Advisory Board
RCRA	Resource Conservation and Recovery Act
RD	Remedial Design
RI	Remedial Investigation
RI/FS	Remedial Investigation/Feasibility Study
ROD	Record of Decision
RPM	Remedial Project Manager

ABBREVIATIONS AND ACRONYMS (Continued)

SARA	Superfund Amendments and Reauthorization Act
SI	Site Inspection
TRC	Technical Review Committee
UST	Underground Storage Tank
U.S. EPA	U.S. Environmental Protection Agency
WABA	West End Alameda Business Association

1.0 INTRODUCTION

The U.S. Department of the Navy is conducting environmental activities at the Naval Air Station (NAS) Alameda located in Alameda, California, to identify and clean up environmental contamination that may have resulted from past activities at the facility. These environmental cleanup activities are being conducted under the Navy's **Installation Restoration (IR) program***. The IR program was developed to identify, assess, and clean up or control contamination from past hazardous waste disposal operations and hazardous materials management practices. The IR program is designed to be consistent with the requirements of the **Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)** of 1980 as amended by the **Superfund Amendments and Reauthorization Act (SARA)** of 1986. The IR program is consistent with the requirements of state laws and regulations, including Chapter 6.8 of the California Health and Safety Code. This law governs hazardous substance release site remediation at non-National Priorities List (NPL) sites in the State of California.

As part of the IR process, the Navy is required to establish a program to inform and involve the community throughout the decision-making process. That program is embodied in a community relations plan (CRP), a road map for community involvement and outreach activities throughout the IR process. In accordance with state and federal requirements, a CRP was prepared for NAS Alameda in February 1989. The original CRP is available for public review at the local **information repository** listed in Table 1.

In 1990, Congress enacted the **Base Realignment and Closure (BRAC) Act** which calls for military base closures across the country. Under BRAC, NAS Alameda is scheduled to close in 1997. The base closure decision creates economic challenges for the community, and the community's economic recovery requires timely and effective reuse of base property. Timely reuse of the base property depends on timely and effective environmental cleanup of the property that is protective of human health and the environment. As a result, the extent and degree of community interest in the cleanup program at NAS Alameda is expected to increase as cleanup progresses. Therefore, the Navy is updating the CRP to identify new concerns and interests in the cleanup program at NAS Alameda and identify strategies that may be implemented by the Navy for addressing community concerns and interests.

Terms presented in **bold-face** type are defined in the glossary on page 61.

Fast Track Cleanup Program

In 1993, President Clinton announced a five-part program to speed the economic recovery at communities where military bases are slated to close. To implement the President's plan, the Department of Defense (DoD) issued guidance entitled "Fast Track Cleanup at Closing Installations." A key element of DoD's guidance is the emphasis on improving and expanding public involvement in the cleanup process, including the establishment of Restoration Advisory Boards (RAB) (see Section 7.2.1). This CRP provides another important tool to enhance community involvement in the cleanup process.

This CRP was prepared in accordance with community relations requirements of both the IR program and the U.S. Environmental Protection Agency (U.S. EPA). Published documents used in preparing the CRP include: the U.S. EPA guidance document *Community Relations in Superfund: A Handbook* (1992); the *National Oil and Hazardous Substances Pollution Contingency Plan (NCP), Title 40 of the Code of Federal Regulations, Part 300; the DTSC Public Participation and Guidance Manual;* and, *California Health and Safety Code Sections 25356.1(e) and 25358.7.* Information gathered during community interviews, as well as technical documents from environmental investigations conducted at NAS Alameda, were also used in preparing this CRP.

The Navy works closely with the California Environmental Protection Agency (Cal/EPA) Department of Toxic Substances Control (DTSC) and the U.S. EPA in conducting the cleanup program at NAS Alameda. A more detailed description of the roles of the Navy and the regulatory agencies in the cleanup process is provided in Section 4.1.

An **Information Repository** has been established for the public at the Alameda Library to provide information on the NAS Alameda IR program. The information repository contains general information about the cleanup process and technical documents regarding specific cleanup activities. Additionally, a library has been established for the NAS Alameda RAB.

Table 1 indicates the locations of the information repository and RAB library. The table also identifies Navy and DTSC points of contact for NAS Alameda.

TABLE 1

COMMUNITY RELATIONS CONTACTS AND INFORMATION REPOSITORY NAVAL AIR STATION ALAMEDA

The NAS Alameda Contact for Community Relations Activities
Hans Petersen
Community Relations Director, Environmental Office
NAS Alameda
250 Mall Square, Building 1
Alameda, California 94502-5000
Phone: (510) 263-3706

Base Realignment and Closure Cleanup Team (BCT)
Steve Edde
BRAC Environmental Coordinator
NAS Alameda
250 Mall Square, Building 1
Alameda, California 94502-5000
Phone: (510) 263-3706

Tom Lanphar
Department of Toxic Substances Control
700 Heinz Avenue, Suite 200
Berkeley, California 94710-2737
Phone: (510) 540-3809

James Ricks
Environmental Protection Agency
75 Hawthorne Street
San Francisco, California 94105-3901
Phone: (415) 744-2402

The DTSC Contact for Community Relations Activities
Shirley Buford
Public Participation Specialist
Department of Toxic Substances Control
700 Heinz Avenue, Suite 200
Berkeley, California 94710-2737
Phone: (510) 540-3409

The EPA Contact for Community Relations
Dorothy Wilson
Public Participation Specialist
Environmental Protection Agency
75 Hawthorne Street
San Francisco, California 94105-3901
Phone: (415) 744-2179

TABLE 1 (Continued)

COMMUNITY RELATIONS CONTACTS AND INFORMATION REPOSITORY
NAVAL AIR STATION ALAMEDA

Information Repository
Alameda Public Library, Main Branch
2264 Santa Clara Street
Alameda, California 94501
Phone: (510) 748-4660
Hours: Mon/Wed - 9:30 a.m. to 9:00 p.m.
Tues /Thurs/Fri/Sat - 9:30 a.m. to 5:30 p.m.
Sun - closed

RAB Library
Building 1, Second Floor
NAS Alameda
RAB information hotline: 510/869-5087

2.0 OVERVIEW OF THE COMMUNITY RELATIONS PLAN

The purpose of this CRP is to establish and maintain an open and meaningful **community relations program** that informs and involves the public throughout the IR process at NAS Alameda. This updated CRP identifies the concerns of community members who may be affected by, and are interested in, current and planned cleanup activities at the facility. The CRP also outlines procedures to address those concerns, establishes a means for maintaining dialogue between the Navy and the community, and identifies opportunities for the community to participate in decisions regarding the investigation of contamination and the selection of appropriate cleanup methods.

Interviews were conducted in July 1995 with a cross-section of community members to identify community concerns. Those interviewed included local elected officials, public agency officials, base personnel, RAB members, and representatives from local businesses, the public school system, environmental groups, and base reuse entities. The interviews were conducted to (1) learn about the community's level of understanding regarding environmental cleanup activities at NAS Alameda, (2) assess the community's information needs, (3) identify the community's concerns regarding potential impacts related to the cleanup activities, and (4) gain insight into the relationship between NAS Alameda and the community. The information gained from the interviews provided the foundation for developing the community outreach and involvement program reflected in this CRP.

This CRP will continue to be updated as needed to address evolving concerns and public information needs, as well as new IR developments that may occur at NAS Alameda.

This CRP is organized as follows:

- Section 1.0 provides an introduction to the CRP and identifies points of contact and location of information repository.
- Section 2.0 presents an overview of the CRP.
- Section 3.0 provides background information about NAS Alameda, including its location, physical description, and history.
- Section 4.0 presents an overview of the IR sites at NAS Alameda.

- Section 7.0 states the objectives of the IR community relations program; presents a matrix of required and recommended community relations activities; discusses the establishment and implementation of the RAB; and presents a strategy for maintaining meaningful dialogue with the community.

- Section 8.0 discusses the schedule for conducting community outreach activities throughout the IR process.

A list of references cited in this CRP and a glossary of terms used in the CRP follow Section 8.0.

Appendices A through O provide supplemental information as follows:

- Appendix A Key Regulatory Agencies Involved in the IR Process
- Appendix B Interview Questionnaire Guide and List of Interviewees
- Appendix C Installation Restoration Program Overview
- Appendix D NAS Alameda Environmental Newspaper Articles
- Appendix E NAS Alameda Community Mailing List
- Appendix F Suggested Public Meeting Locations
- Appendix G NAS Alameda Environmental Fact Sheets
- Appendix H Relationship of Community Relations Activities to the Superfund Remedial Process
- Appendix I Examples of Community Relations Activities Conducted to Date at NAS Alameda
- Appendix J Public School District
- Appendix K DoD/U.S. EPA Restoration and Department of Toxic Substances Control Advisory Board Procedures
- Appendix L Integration of the Environmental Cleanup, Compliance, and Reuse Planning Processes at NAS Alameda
- Appendix M NAS Alameda Restoration Advisory Board Membership
- Appendix N Other Environmental Programs at NAS Alameda

3.0 BACKGROUND OF NAVAL AIR STATION ALAMEDA

This section presents the background of NAS Alameda. Section 3.1 describes the station's physical setting including NAS Alameda's location as well as its historic, cultural, and natural resources. Section 3.2 presents a history of NAS Alameda.

3.1 PHYSICAL SETTING OF NAS ALAMEDA

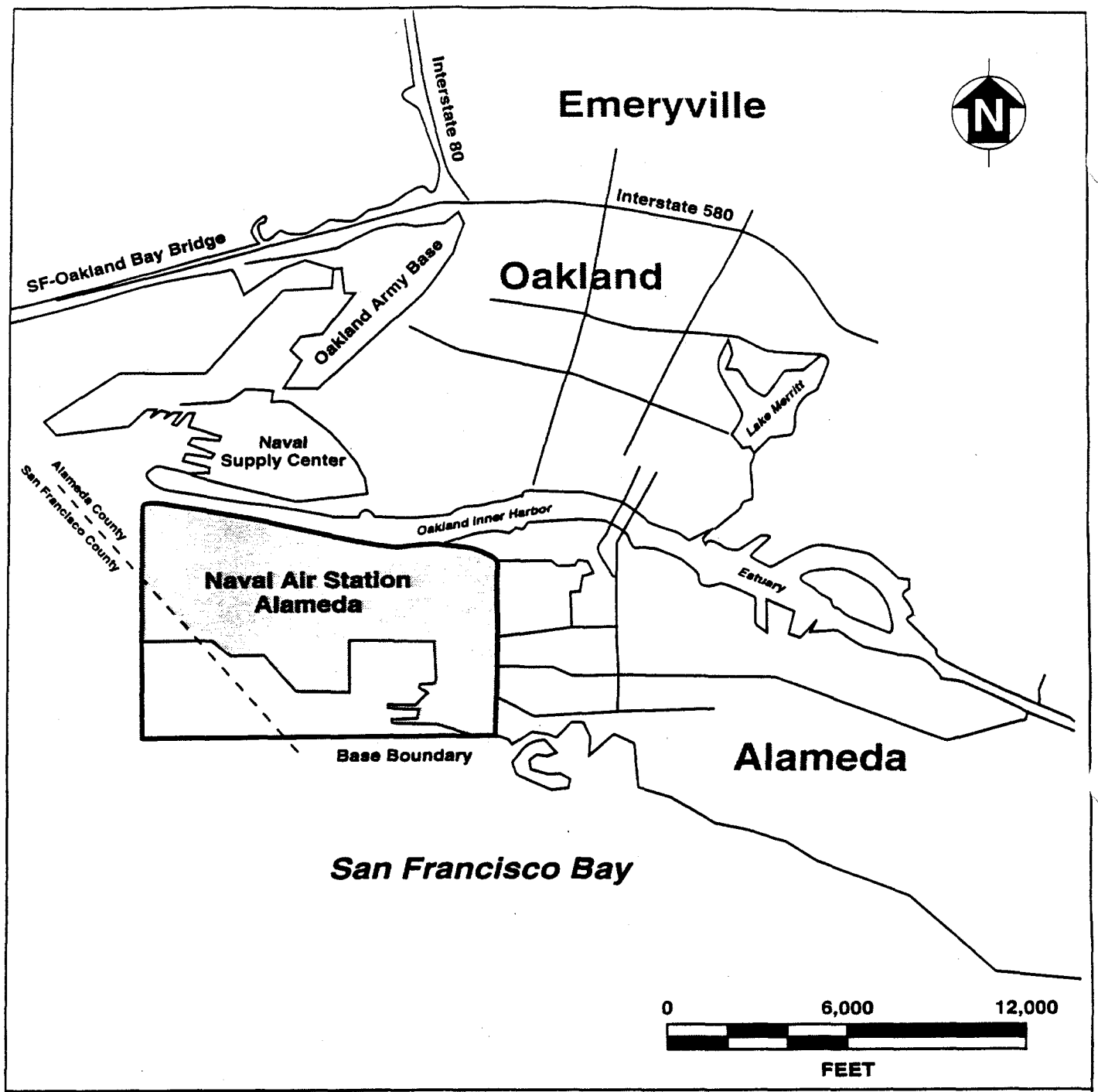
This section briefly describes the location, and historic, cultural, and natural resources of NAS Alameda.

3.1.1 Location

NAS Alameda is located at the west end of the island of Alameda, in Alameda and San Francisco Counties, California (Figure 1). NAS Alameda occupies 2,634 acres and is approximately 2 miles long and 1 mile wide. Land use in the vicinity of NAS Alameda is primarily residential and military. The base is bordered to the north by the Oakland Inner Harbor, north of which is the main side of the Fleet and Industrial Supply Center Oakland. Located to the west and south of NAS Alameda is the San Francisco Bay. To the east is a mixture of industrial, residential, and public land uses.

3.1.2 Historic and Cultural Resources

None of the buildings at NAS Alameda were found to be individually eligible for listing on the National Register of Historic Places. However, of the 70 buildings documented at the central core, 38 were found to contribute to a historic district. An additional 47 buildings located in the officer housing area also contribute, making a total of 85 buildings in the historic district. The NAS Alameda Historic District is now protected as it is eligible for listing on the National Register of Historic Places because of its association with events that have made a significant contribution to the broad patterns of our history, specifically, the base's involvement in World War II (Navy 1995).



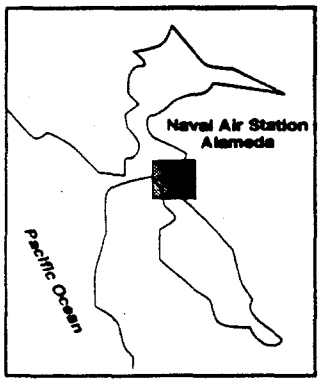


FIGURE 1
REGIONAL LOCATION
NAVAL AIR STATION ALAMEDA

3.1.3 Natural Resources

Natural resource management activities have been under way at NAS Alameda since 1980 and are documented in the NAS Alameda natural resource management plan (Navy 1995). Natural resources at NAS Alameda include tidal wetlands, brackish ponds, rural areas, grasslands, bird nesting and roosting areas, neighboring San Francisco Bay waters, and the species associated with these habitats (Navy 1995).

The endangered California least tern courts, breeds, and nests at NAS Alameda. The NAS Alameda nest site is the northern most nesting colony and the only currently stable nesting colony in the San Francisco Bay area; it is the largest colony north of Venice Beach in Los Angeles, California (Navy 1995). The least tern colony at NAS Alameda is consistently one of the top 10 colonies in the state in numbers of breeding pairs, and in the top five in the state in number of young fledged. The NAS Alameda community has increased from 47 nesting pairs in 1984 to 128 nesting pairs in 1993. This increase has been primarily attributed to a proactive program that includes taking a daily census of least terns and the active management and removal of predators that may impact least tern nesting areas.

3.2 HISTORY OF NAS ALAMEDA

The western tip of the Alameda peninsula, known as Point Alameda, was originally farmed before becoming an industrial center and ferry and rail transit center. Railroad yards and right-of-ways for Southern Pacific, Central Pacific, and small local railways were built over the site and the sloughs to the north. The western terminus for the transcontinental railroad was at the southeast corner of the base for a short period in 1869.

Before 1930, at least two large industrial sites (a borax processing plant and an oil refinery) were located on Alameda Island within what is now NAS Alameda. The oil refinery was located in the southeast corner of the air station. The borax plant was also located on the dry land at the southeast corner of Atlantic and Eighth Streets.

The U.S. Army acquired the NAS Alameda site from the City of Alameda in 1930 and began construction activities in 1931. In 1936, the Navy acquired title to the land from the Army and began building the air station in response to military buildup in Europe before World War II. The construction

involved filling considerable area between the Oakland Estuary (Oakland Inner Harbor) and the old Alameda Point.

After the U.S. entered the war in 1941, more land was acquired and the water areas filled adjacent to the air station. NAS Alameda played a crucial role in supplying the military on the Pacific front. The local population increased rapidly from 36,000 in 1940 to more than double during the war. Following the end of the war, NAS Alameda returned to its original primary mission of providing facilities and support for fleet aviation activities (Navy 1995).

4.0 OVERVIEW OF ACTIVITIES AT INSTALLATION RESTORATION PROGRAM SITES

Hazardous waste contamination at NAS Alameda is the result of numerous routine operations conducted at the facility between the 1940s and late 1970s. Although practices were consistent with applicable standards at that time, current federal and state hazardous waste disposal regulations are more stringent than those first created when little was know about the impacts of hazardous materials on the environment. Typical NAS Alameda operations during this time included metal plating; paint removal; aircraft maintenance, fueling, and engine testing; vehicle fueling; pest control; missile reworking; operation of a power plant and a fire station; and waste disposal at two landfill sites on base.

The known or suspected contaminants that have been identified to date include heavy metals; aviation fuel; organic compounds including benzene, toluene, and xylene; metal plating chemicals; **solvents**; paint; pesticides; oil and grease; and **polychlorinated biphenyls** (PCB). Preliminary studies indicate that contamination at most sites poses no immediate threat to public health or the environment. Sites found to pose a potential threat have been identified as candidates for early actions. The Navy is continuing investigations of the base and protective action will be taken if any condition is found to pose a potential or an immediate threat to human health and the environment.

4.1 REGULATORY AGENCY INVOLVEMENT

Key state and federal regulators are very involved in environmental activities underway at NAS Alameda. The following sections describe regulatory agency involvement at NAS Alameda through participation on the **BRAC Cleanup Team (BCT)** and development of the **BRAC Cleanup Plan (BCP)**.

NAS Alameda is not a National Priorities List (NPL) site. The State of California is represented by the Department of Toxic Substances Control (DTSC). DTSC has been designated as the lead state regulatory agency to coordinate California's environmental responsibilities at military facilities. DTSC will ensure that state statutes and regulations are addressed in the decision-making process for site-specific response actions. The California Regional Water Quality Control Board, San Francisco Bay Region (RWQCB) is a support agency for water quality issues.

4.1.1 BRAC Cleanup Team

All closing military bases are required to establish a BCT. This requirement is part of the President's Fast Track Program to expedite cleanup at closing bases by creating a cooperative and efficient relationship between regulatory agencies and the Navy. The BCT established at NAS Alameda is a unique partnership between the Navy, the U.S. EPA, and the DTSC, each of which contributes one key member to the BCT. The BCT directs the cleanup activities and is accountable for expediting the cleanup schedule and ensuring that all cleanup programs follow applicable laws and regulations and are protective of the public health and environment. The BCT also interacts with the RAB and the greater community regarding cleanup activities. A primary benefit of establishing the BCT is the assurance that all cleanup decisions receive joint acceptance from the Navy and state and federal regulators.

The Navy's representative on the BCT serves as the BRAC Environmental Coordinator (BEC) as well as the RAB Navy Co-Chair with a community RAB member. The RAB co-chairs jointly coordinate RAB activities and set the agenda for RAB meetings.

Appendix A provides a list of additional regulatory agencies involved in cleanup activities underway at NAS Alameda.

4.1.2 Federal Facilities Site Remediation Agreement

The Navy has entered into a Federal Facilities Site Remediation Agreement (FFSRA) with the DTSC. The FFSRA is a binding agreement that establishes schedules for completion of cleanup activities and defines roles and responsibilities of the Navy and the DTSC.

According to the FFSRA, the Navy is the lead agency responsible for conducting cleanup activities and making cleanup decisions at NAS Alameda. The DTSC functions as the lead regulatory agency to oversee the Navy's cleanup activities and ensure that those activities comply with applicable state laws and regulations. While not included in the FFSRA, the U.S. EPA also works in partnership with the Navy and DTSC under the umbrella of the BRAC Cleanup Team (see Section 4.1.1) to conduct the environmental cleanup of NAS Alameda and ensure that applicable Federal laws and regulations are adhered to.

4.1.3 BRAC Cleanup Plan

The BCT also jointly develops the BCP. The BCP serves as a road map to direct the complex task of environmental cleanup and timely reuse of the base property. The BCP includes an evaluation of all environmental activities at NAS Alameda and identifies opportunities to streamline those activities, avoid duplication, and expedite cleanup schedules. At federal facilities like NAS Alameda, several different environmental programs exist, and close coordination of these programs is necessary to accelerate transfer of property. The BCT also presents how the base property is divided into property parcels for the purpose of prioritizing cleanup activities and expediting property transfer to the community.

The BCP embodies five guiding principles of the BCT:

- Protect human health and the environment
- Support the community's reuse plan
- Promote active public involvement
- Initiate cleanup as early as possible in the process
- Keep an open mind toward the potential advantages of innovative technologies

As a guiding principle, the BCT is committed to promoting public involvement by creating an environment where interaction among the Navy, regulatory agencies, and the community can take place. The BCP provides the community with an important information source. It describes the history of waste management at NAS Alameda and explains the status and strategy of all environmental programs including those activities that are not related to the IR process. The BCP is updated at least annually to reflect environmental cleanup progress at NAS Alameda and the status of property transfer and reuse. The 1995 BCP is currently available in the NAS Alameda information repository.

4.2 INSTALLATION RESTORATION PROGRAM SITES

The following subsections provide a brief summary of the 23 IR sites currently undergoing environmental investigation and cleanup at NAS Alameda. Fact sheets on specific actions taken at many of the sites are included in Appendix G. Table 2 lists the sites and their names; Figure 2 presents a map identifying the 23 IR site locations. Investigations are ongoing or have been completed at each site.

Consistent with the guiding principles presented in the BCP, the BCT is seeking to accelerate the cleanup process through the use of **removal actions** and **treatability studies**. These actions may be conducted at any time during the IR process and may include a variety of measures. For example, a removal action may consist of removing contaminated soils or groundwater, or it may involve steps to prevent and contain migration of contaminants. Treatability studies allow for the possible use of innovative technologies that may provide accelerated and more efficient cleanup than some standard remedies. Removal actions and the IR process are described in greater detail in Appendix C.

For more detailed information on investigation and cleanup activities conducted and planned, the BCP is available for review at the information repository.

4.2.1 1943-1956 Disposal Area (Site 1)

The 1943-1956 Disposal Area encompasses 120 acres in the northwestern corner of NAS Alameda. Approximately 15,000 to 200,000 tons of waste were disposed of at the site. The disposal method consisted of digging trenches, filling them with waste, and compacting the material with a bulldozer. Cover material was applied irregularly. Investigations of the 1943-1956 Disposal Area have been completed and a groundwater **treatability study** may be conducted to evaluate the effectiveness of cleanup technologies applied to contaminated groundwater. A **remedial investigation** report and a **feasibility study** report are being completed for Site 1 to determine appropriate long-term cleanup measures for the site. This site will also be included in an **ecological and human health risk assessment**.

TABLE 2

NAS ALAMEDA INSTALLATION RESTORATION SITES

Site Number	Site Name
1	1943-1956 Disposal Area
2	West Beach Landfill
3	Area 97
4	Building 360
5	Building 5
6	Building 41
7	Buildings 459
8	Building 114 (Pest Control and Separator Pit)
9	Building 410 (Paint Stripping)
10	Building 400
11	Building 14 (Test Shop)
12	Building 10 (Power Plant)
13	Oil Refinery (Historical)
14	Fire Training Area
15	Buildings 301 and 389
16	CANs C-2 Area
17	Seaplane Lagoon
18	Station Sewer System (not indicated on maps)
19	Yard D-13
20	Oakland Inner Harbor
21	Building 162
22	Building 547
23	Building 530 (Missile Rework Operations)

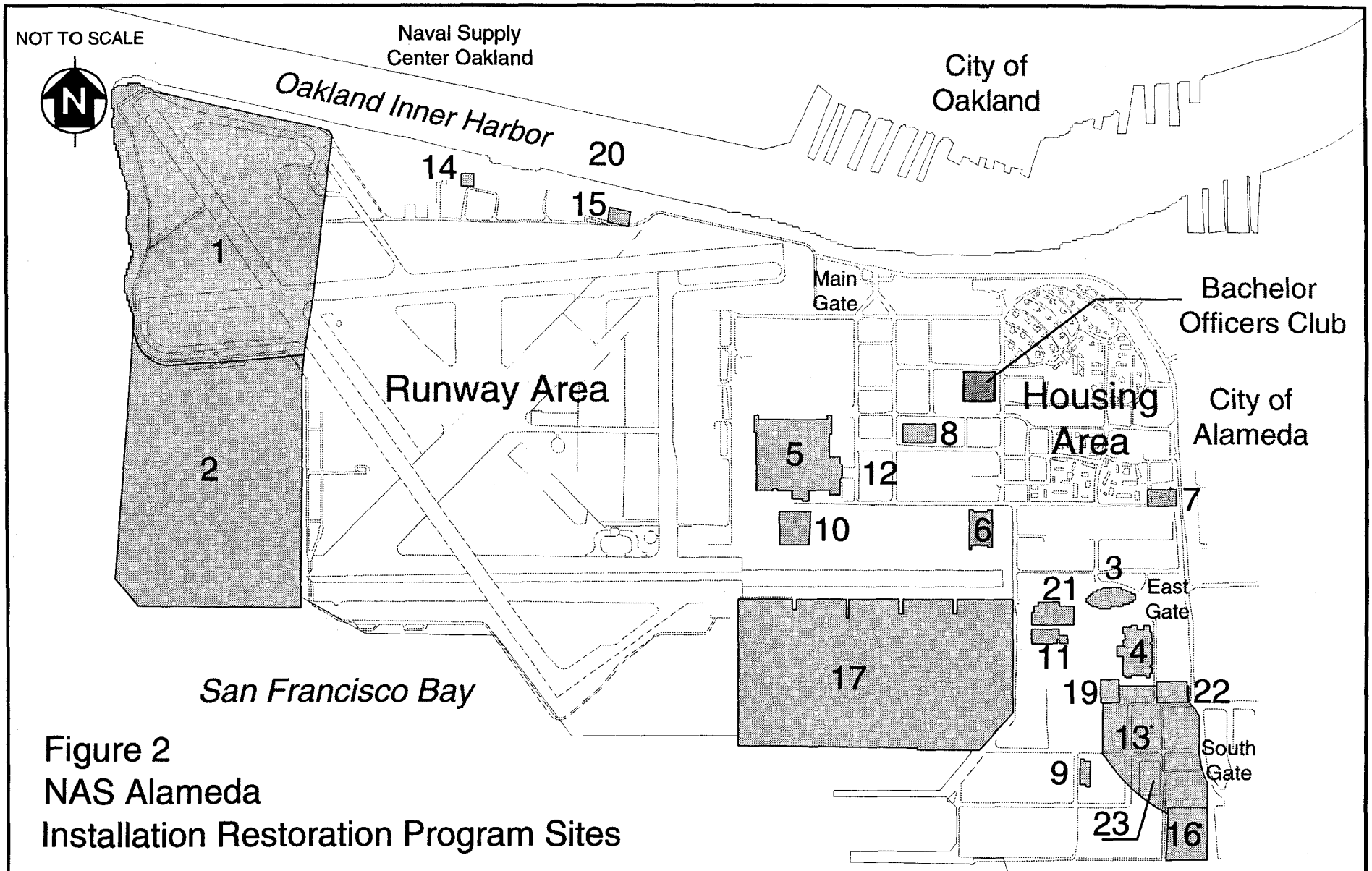


Figure 2
NAS Alameda
Installation Restoration Program Sites

Site No.	Site Description
1	1943-1956 Disposal Area
2	West Beach Landfill
3	Area 97, Abandoned Fuel Storage Area
4	Building 360, including Plating Shop
5	Building 5, including Plating Shop
6	Building 41, Aircraft Intermediate Maint. Fac.
7	Building 459, NEX Service Station
8	Building 114, Pest Control Area
9	Building 410, Paint Stripping
10	Buililng 400, Missile Rework Facility
11	Building 14, Engine Test Cells
12	Building 10, Power Plant
13	Former Oil Refinery
14	Fire Training Area
15	Former Transformer Storage Area
16	CANS C-2 Area
17	Seaplane Lagoon
18	Station-Wide Storm Sewer System (not shown)
19	Yard D-13, HazMat/Waste Storage
20	Oakland Inner Harbor (portion only)
21	Building 162, Small Engine Repair
22	Building 547, Former Service Station
23	Building 530, Missile Rework Facility

Note: *
The area of Site 13 includes the areas of Sites 10 and 16.

4.2.2 West Beach Landfill (Site 2)

West Beach Landfill covers 110 acres in the southwestern corner of NAS Alameda, adjacent to and south of the 1943-1956 Disposal Area. The site has vegetation and wetlands and contains a 5-acre pond that supports diverse wildlife. A maximum of 992,800 tons of municipal garbage, which included 30,000 to 300,000 tons of hazardous waste, were disposed of at the landfill between 1958 and 1978. In 1978, disposal operations ceased. Investigations revealed that surface soils at the site are contaminated with pesticides and **polychlorinated biphenyls (PCB)** and the groundwater contains **solvents**. Additional investigations of the West Beach Landfill wetlands will be conducted to evaluate ecological risks and define appropriate cleanup measures. In the interim, measures were taken to reduce hazards caused by methane gas buildup at the landfill. These measures included installing vents to release the gas and constructing a fence around the landfill. A remedial investigation report and feasibility study report are being completed for Site 2. This site will also be included in an ecological and human health risk assessment.

4.2.3 Area 97 (Site 3)

Area 97 is a 30- to 40-acre spill area located immediately west of the East Gate. The site is currently covered by grass, and a model aircraft is mounted for display in the center of the area. A 2-acre parcel of the area previously contained five partially buried aviation gasoline tanks. Up to 365,000 gallons of aviation gasoline may have leaked from the tanks into the shallow groundwater from the 1960s until 1978. In 1979, concentrations of gasoline vapors were discovered in sewers and utility ducts. A removal action was conducted to remove the gasoline vapors. Additionally, the University of California at Berkeley may conduct a treatability study to evaluate the effectiveness of **bioremediation** of soil containing petroleum contaminants. A remedial investigation report and feasibility study report are being completed for Site 3. This site will also be included in an ecological and human health risk assessment.

4.2.4 Building 360 (Site 4)

Building 360, the aircraft engine facility, covers 5.5 acres and houses specialized process shops for the repair and testing of aircraft engines. In operation since 1954, the building includes a plating shop, painting shop, stripping and machine shops, and parts assembly areas. Prior to 1975, plating wastes from the plating shop were discharged to the Seaplane Lagoon (Site 17) through the industrial waste

sewage system. Solvents have also been detected in the groundwater beneath Site 4. A remedial investigation report and feasibility study report are being completed for Site 4. This site will also be included in an ecological and human health risk assessment.

4.2.5 Building 5 (Site 5)

Building 5, the aircraft rework facility, covers 18.5 acres and houses shops used for cleaning, reworking, and manufacturing metal parts, as well as tool maintenance, plating, and painting operations. Contaminants have been detected in both soil and groundwater near the site. A treatability study may be conducted to evaluate the effectiveness of innovative cleanup technology to clean up heavy metals in soils beneath Building 5. Radiation contamination from radium was also found in some of the pipes in Building 5. Radium paint was used to illuminate instruments such as compasses and watches. Some radium waste was poured into the drains of Building 5. Contaminated pipes and drains are being removed or are scheduled for removal. A remedial investigation report and feasibility study report are being completed for Site 5. This site will also be included in an ecological and human health risk assessment.

4.2.6 Building 41 (Site 6)

Site 6 consists of Building 41, the aircraft intermediate maintenance facility. Building 41 is a former aircraft hanger used for seaplanes. The Navy used the building to store drums of waste solvents, paint strippers, and used hydraulic fluids. A remedial investigation report and feasibility study report are being completed for Site 6. This site will also be included in an ecological and human health risk assessment.

4.2.7 Buildings 459, 162, 547 (Service Stations) (Sites 7, 21, and 22)

Building 459 (Site 7) lies one-half mile north of the east gate. Building 459 has served as the NAS Alameda fuel station since 1966. An auto repair shop and a small convenience store are also part of the station facilities. The site contained eight USTs, three of which are still active gasoline USTs. Recently, all but the active USTs were removed.

Building 162 (Site 21) lies adjacent to the eastern side of the Seaplane Lagoon (Site 17). Building 162 was reportedly used by the Naval Exchange as a service station. Previous investigations could not confirm this.

Initial soil and groundwater samples collected in 1991 revealed that possible underground storage tank (UST) vent pipes were present at the northeast corner of the building. Two small empty gasoline USTs were found and removed.

Building 547 (Site 22) encompasses 2 acres and was used as a former on-base annex service station. The site contains three 12,000-gallon fiberglass USTs used to store fuel, and two waste oil USTs. In 1980, one of the fuel USTs ruptured. It was repaired sometime between 1980 and 1987. Fuel lines from the same tank failed a leak test in 1987; after failing a tank tightness test in 1988, the tank was drained. Currently, the site is not in operation as a service station and a removal action is planned to clean up contaminated soil. A remedial investigation report and feasibility study report are being completed for Sites 7, 21, and 22. All three sites will also be included in an ecological and human health risk assessment.

4.2.8 Building 114 (Pest Control and Separator Pit) (Site 8)

Prior to 1974, Building 114 was used as the center for weed and pest control on the base. The Navy's Public Works Center (PWC) stored herbicides and pesticides in Building 114 and rinsed equipment in the yard at the site. PWC also maintained other shops at the site, including woodworking, painting, and steam cleaning areas. Wastewaters from these activities were discharged to storm drains. The storm drains are being cleaned as part of Site 18. A remedial investigation report and feasibility study report are being completed for Site 8. This site will also be included in an ecological and human health risk assessment.

4.2.9 Building 410 (Paint Stripping) (Site 9)

Site 9 includes Building 410 and the area east of it, covering about 1 acre. Building 410 was operating as recently as 1990 as an aircraft paint stripping facility. Wastewater from the paint stripping operation contained oil, paint, paint skins, detergent, and paint stripper solvents. A remedial investigation report and feasibility study report are being completed for Site 9. This site will also be included in an ecological and human health risk assessment.

4.2.10 Buildings 400 and 530 (Missile Rework Operations) (Sites 10 and 23)

Building 400 (Site 10), a missile rework facility, operated from the 1950s until 1972. Wastes generated at this site include paint sludge, metal shavings, cleaning solvents, testing fluids and waste oils, and

grease. Wastewaters were discharged to the industrial sewer system after 1972. Prior to 1972, wastewaters were discharged directly to the Seaplane Lagoon (Site 17).

Site 23 includes Building 530, the missile rework facility that replaced Building 400 in 1972. Active operations at Building 530 include electrical maintenance, cleaning, grinding, welding, painting, paint stripping, and parts fabrication. Waste streams are reportedly carefully managed and waste fluids are containerized and disposed of off site. A remedial investigation report and feasibility study report are being completed for Sites 10 and 23. Both sites will also be included in an ecological and human health risk assessment.

4.2.11 Building 14 (Test Shop) (Site 11)

Building 14 was constructed in 1946 and served for many years as the primary site for aircraft engine testing. Two engine testing areas are still in use at the building. Engine fuels have been used at the site, as well as various cleaning solvents. In addition, Building 14 contained laboratories on the second floor where instruments containing mercury were used. A remedial investigation report and feasibility study report are being completed for Site 11. This site will also be included in an ecological and human health risk assessment.

4.2.12 Building 10 (Power Plant) (Site 12)

Site 12 is the power plant for NAS Alameda located in Building 10. The facility burned bunker fuel for generating electricity until the early 1970s. Bunker fuel was stored in five USTs. These tanks were abandoned in place in 1980. Currently, the power plant runs on natural gas, but diesel fuel is stored on site in nine aboveground tanks as backup fuel for the power plant boilers. In the past, boiler system waters containing caustic contaminants were discharged into the industrial waste sewer system. A remedial investigation report and feasibility study report are being completed. This site will also be included in an ecological and human health risk assessment.

4.2.13 Oil Refinery (Site 13)

Site 13 covers about 30 acres and is largely undeveloped and unpaved. The site covers the area formerly occupied by the Pacific Coast Oil Works refinery, which operated between 1879 and 1903. The oil refinery is known to have consisted of pump and lubricating houses, stills, laboratories, and at least 19 aboveground oil storage tanks, 6 underground iron storage tanks, and a storage area of barrels (drums

most likely made of wood) containing oil products. University of California at Berkeley may conduct a treatability study to evaluate the effectiveness of a bioremediation technology to clean up soil contaminated with petroleum products related to the oil refinery. Soil removal has been performed at two locations within the site. The first removal was conducted to eliminate fuel-contaminated soil, and the second removal was conducted to remove lead-contaminated soils. A remedial investigation report and feasibility study report are being completed for Site 13. This site will also be included in an ecological and human health risk assessment.

4.2.14 Fire Training Area (Site 14)

Site 14 encompasses the Fire Training Area along the perimeter road near the Oakland Inner Harbor (Site 20). The site consists of concrete pads, berms, and an aboveground storage tank (waste fuels from plane defueling operations were burned in this tank). A removal action is planned for this site to remove soil contaminated with petroleum contaminants. A remedial investigation report and feasibility study report are being completed for Site 14. This site will also be included in an ecological and human health risk assessment.

4.2.15 Buildings 301 and 389 (Site 15)

Site 15 includes the former transformer storage areas within and adjacent to Buildings 301 and 389. Building 301 was used for storage of electrical equipment, oil filled transformers, and old, unused machinery. Before Building 389 was torn down, it was also used for storage of transformers. An interim removal action is on-going at this site to remove PCBs and lead in the surface soils. A remedial investigation report and feasibility study report are being completed for Site 15. This site will also be included in an ecological and human health risk assessment. PCB and lead-contaminated soil were removed from Site 15 and stockpiled in an adjacent area.

4.2.16 CANs C-2 Area (Site 16)

Site 16 consists of the CANs C-2 Area, covering about 6.2 acres. CANs are large shipping containers (tractor trailer-size boxes transportable by truck, train, or cargo ship) that have been converted at the site for use as storage lockers. These containers and the remainder of the storage yard were used to store paints, solvents, acids and bases, and PCB-containing transformers. Except for a couple of CANs stored at site, this yard is no longer in use. A removal action is planned to remove PCB and lead-contaminated

soil. A remedial investigation report and feasibility study report are being completed for Site 16. This site will also be included in an ecological and human health risk assessment.

4.2.17 Seaplane Lagoon (Site 17)

The Seaplane Lagoon encompasses an area of 110 acres and is about 12 to 15 feet deep. The Seaplane Lagoon is the discharge point for much of NAS Alameda's storm sewer system, which prior to 1975, was used as part of the industrial waste sewer system. From 1940 to 1975, the lagoon received approximately 300 million gallons of wastewater from industrial and storm sewer outfalls. In 1975, industrial discharge to the lagoon stopped; the lagoon now receives only storm sewer discharges and surface water runoff. Additional sampling is being conducted to evaluate the extent of contamination in lagoon sediments. An ecological assessment of the area has been conducted and is available in the information repository. University of California at Berkeley may conduct treatability studies to evaluate the ability of bioremediation technologies to clean up the contaminated sediments. A remedial investigation report and feasibility study report are being completed for Site 17.

4.2.18 Station Sewer System (Site 18)

The station sewer system consists of storm sewer pipes, up to 30 inches in diameter, that empty into the Seaplane Lagoon (Site 17), Oakland Inner Harbor (Site 20), and San Francisco Bay. From 1943 to 1975, the station sewer system received wastes from the industrial processes occurring in the buildings it served. A removal action is being conducted to remove contaminated sediments in the storm sewer lines and drains. A remedial investigation report and feasibility study report are being completed for Site 18. This site will also be included in an ecological and human health risk assessment.

4.2.19 Yard D-13 (Site 19)

Yard D-13 is a 1.5-acre fenced facility used to store a variety of containerized hazardous materials and wastes. In compliance with applicable laws, hazardous wastes are stored in designated storage areas within the yard. However, groundwater beneath the site will be studied. A remedial investigation report and feasibility study report are being completed for Site 19. This site will also be included in an ecological and human health risk assessment.

4.2.20 Oakland Inner Harbor (Site 20)

The Oakland Inner Harbor lies along the northern edge of NAS Alameda. This channel is dredged annually to a depth of about 38 feet below mean sea level. Historically, the Oakland Inner Harbor may have received up to 150 million gallons of untreated industrial and nonindustrial wastes containing organic compounds, metals, oils, detergents, and pesticides. An ecological assessment has been conducted and is available for review in the information repository. A remedial investigation report and feasibility study report are being completed for Site 20. This site will also be included in an ecological and human health risk assessment.

5.0 COMMUNITY PROFILE

This section provides a brief profile of the Alameda community, including its demographics, economics, physical setting, educational resources, and involvement with NAS Alameda.

5.1 DEMOGRAPHICS

The City of Alameda is the nearest population center to NAS Alameda and is located directly east of the facility (Figure 1). Alameda's population is estimated at 80,000 (Alameda Chamber of Commerce 1992). Alameda's ethnic background is 60 percent white, 19 percent Asian, 9 percent Hispanic, and 7 percent African American. Alameda's median age is approximately 35.2 years (Upclose Publishing 1991).

5.2 ECONOMICS

The military is Alameda's largest nonmanufacturing employer, with 17,000 civilian and military personnel (Alameda Chamber of Commerce 1992). NAS Alameda represents the fourth largest civilian employer in Alameda County, just behind the County of Alameda, Lawrence Livermore National Laboratory, and the University of California (ICF Technologies 1989). The top three private employers in Alameda are Alameda Hospital (497 employees), Mervyns Department Store (225 employees), and Hillhaven Nursing Center (180 employees). The median income for Alameda households is $38,122 (Alameda Chamber of Commerce 1992).

Several business associations are active within Alameda including the Greater Alameda Business Association (GABA), Park Street Alameda Business Association (PABA), and West End Alameda Business Association (WABA). These organizations work closely with the Alameda Chamber of Commerce and the Alameda Reuse and Redevelopment Authority (ARRA).

Over the next few years, the City of Alameda will go through major changes. The naval air station has been located in Alameda for over half a century. However, due to the U.S. Congress decision to downsize the military nationwide, NAS Alameda will be closed. Many military and civilian jobs will be lost; others who made their living indirectly from the bases, such as restaurants, repair shops, and car dealers, also will be affected. On the positive side, 2,000 acres of choice land will become available,

creating the possibility of many new jobs. New businesses may locate in Alameda in light of expected leasing opportunities within NAS Alameda.

The Navy has an active leasing program to facilitate the community's early reuse of base property prior to closure. This process includes completing a finding of suitability to lease (FOSL). Buildings with the most marketability have been identified and several FOSLs have been completed. In September of 1995, CALSTART, an electric car developer, leased Building 20. Also, a lot in the southeast corner of the base has been leased as a soccer field and a parking lot. NAS Alameda possesses land that is both highly marketable and currently being pursued for reuse.

5.3 PHYSICAL SETTING OF THE CITY OF ALAMEDA

Alameda is an island city, 12.4 square miles in size, located 12 miles east of San Francisco and in the San Francisco Bay; it is separated from the City of Oakland by an estuary. Alameda was incorporated as a city in 1884 (Upclose Publishing 1991). Alameda has what most East Bay cities lack: an open, approachable shoreline with about 6 miles of sandy beach. Alameda also has marinas (2,000 berths), first-class restaurants, a golf course, 14 parks, a hospital, and a shopping center (Alameda Chamber of Commerce 1992).

Alameda also enjoys the advantages of city life. Oakland International Airport, Bay Area Rapid Transit (BART), Interstate 580, which runs west to the San Francisco Bay Area, and Interstate 80, which runs east through Reno, Nevada, are all easily accessible.

5.4 EDUCATIONAL RESOURCES

A board of education oversees Alameda's nine elementary schools, three high schools (including one vocational school), and continuing education school for adults. Excellent private and parochial schools (K-12) are also available. The College of Alameda is located within the Peralta Community College District (Alameda Chamber of Commerce 1992). The Alameda school system received a school ranking of middle to 90th percentile. Alameda High, in 1993, won a national Blue Ribbon for academic achievement. As a result of the closing military bases, approximately 2,500 students will leave the

school district, along with a $10 million annual subsidy. Also, some schools will have to close. Appendix J provides a list of contacts for Alameda's public school district.

5.5 COMMUNITY INVOLVEMENT

Because Alameda is physically situated on an island, it enjoys the benefits of a small town atmosphere in which local organizations provide a common means for transfer of information. Several local organizations are quite active within Alameda including the Lions, Rotary, and Kiwanis Clubs, Association of Realtors, NAS Alameda restoration advisory board (RAB), and Base Reuse Advisory Group (BRAG). For a more extensive listing refer to Section 6.2.4. Alameda is a charter city that has a City Manager appointed by the City Council (Alameda Chamber of Commerce 1992).

5.6 LOCAL MEDIA

The primary local newspapers in Alameda are the *Alameda Journal* and the *Alameda Times Star;* the *Alameda Times Star* is published weekly and the *Alameda Journal* is published biweekly. Because the *Alameda Times Star* and the *Oakland Tribune* have the same publisher, similar articles appear in both newspapers. Therefore, readers of the *Oakland Tribune* may opt to read the *Alameda Journal* if they already read the *Oakland Tribune*. All three papers have a wide readership within Alameda. There are also several radio and television stations in the area that may be utilized. Local radio stations include KCBS, KGO, and CBS Radio Network.

6.0 COMMUNITY INTERVIEWS AND CONCERNS

The following sections describe the interviews conducted to develop this updated CRP. Section 6.1 describes the approach taken to arrange and conduct interviews. Section 6.2 summarizes community members' awareness, concerns, perceptions, and information needs raised during the community interviews with regard to the Navy's IR program. The summary of community concerns and interests reflects solely the views of the interviewees and should not be construed as reflecting the views of the Navy.

6.1 COMMUNITY INTERVIEWS

The interviews were conducted over a two-week period in July 1995 by the Navy as well as representatives from DTSC.

Interviews were arranged with a cross-section of individuals living and working within Alameda and surrounding communities. Interviewees included representatives from schools, environmental groups, and business and community organizations, as well as local residents, state and local elected officials, and base personnel. NAS Alameda RAB members were also surveyed with a written questionnaire. Appendix B provides a list of the interviewees and the interview guide.

While the interview responses represent comments from a cross-section of community organizations and interest groups, the views expressed by the interviewees should not be construed as a formal statement for their respective organizations or constituencies. Section 6.2 presents a summary of community interviews; it reflects solely the views of each interviewee. As discussions with each interviewee are kept confidential, specific comments are not attributed to individuals.

The community interviews served several primary goals. First, the face-to-face interviews helped to establish a relationship between community members, the Navy, and regulatory agencies. Second, information was gathered regarding the community's concerns, information needs, and interest in participating in the cleanup process. Finally, the interviews served to better inform community members about NAS Alameda's IR program and the program's significance to eventual reuse of base property. The information obtained through the interviews will help the Navy tailor its community outreach

program to the specific needs of the NAS Alameda community. Community concerns will also be considered throughout execution of the IR program.

6.2 COMMUNITY AWARENESS, CONCERNS, PERCEPTIONS, AND INFORMATION OUTREACH NEEDS

This section summarizes the key concerns, interests, suggestions, and information needs expressed by the interviewees. The following summary of community interviews is divided into five broad categories: (1) community awareness of the Navy's IR program, (2) key community concerns, (3) community perceptions of the Navy, (4) community information and outreach needs, and (5) community's familiarity with the NAS Alameda RAB.

6.2.1 Community Awareness of the Navy's Installation Restoration Program

With one exception, all interviewees were aware that environmental restoration activities were being conducted at NAS Alameda. Interviewees who participate in various capacities in local reuse organizations appeared to understand the basic steps involved in the IR program; one environmental group representative, who also sits on the NAS Alameda RAB, was integrally familiar with environmental activities underway at NAS Alameda.

Most of the interviewees also expressed a belief that the general community has very little knowledge about the Navy's IR program. While the interviewees claimed to be aware that pollution problems exist within NAS Alameda, they could not state exactly what the Navy is doing to address the pollution. Several interviewees noted that most of the local focus has been on reuse plans for NAS Alameda, particularly proposals for using the base to help the homeless. Several interviewees asserted that much of the general community is "in denial" about the base closure decision and its impact on their individual lives. However, many of these interviewees believe that as the Navy increasingly downsizes NAS Alameda operations, and the community starts to feel the impact on the local economy, interest in base property transfer and reuse (and thus, cleanup as the precursor to property transfer) will grow significantly.

The majority of interviewees cited newspapers and the media as their primary source of information about the Navy's environmental program. Several interviewees noted that Alameda is a small community in which a lot of information is passed along through "word of mouth."

6.2.2 Key Community Concerns

Two overriding concerns were expressed by the majority of interviewees: (1) accelerating cleanup to allow for quick property reuse, and (2) ensuring that adequate funds are available to complete the cleanup, thereby allowing for property transfer by deed. These concerns are discussed below under "Property Reuse and Related Issues."

Unlike interviewees from the general community, members of the NAS Alameda RAB who completed the interview questionnaire focused more on specific environmental concerns than reuse issues. The most frequently cited environmental issues involved protection of the least tern habitat and other habitats present at NAS Alameda and contamination of San Francisco Bay and its resources.

Following is a summary of these and other key concerns cited during the community interviews.

6.2.2.1 Property Reuse and Related Issues

Almost all interviewees cited the base closure decision as the primary reason for their increased interest in the cleanup process at NAS Alameda. Eight interviewees expressed concern about whether adequate funds will be available to complete the cleanup; one interviewee noted that the community fears it may "be stuck footing the bill." Many interviewees also expressed concern about the pace of the cleanup and cited a need to accelerate cleanup to generate jobs through property reuse. These same interviewees stressed the importance of demonstrating progress in the cleanup process in order to attract business investors. They explained that investors need to see timelines associated with interim leasing opportunities to reduce uncertainty and enable them to plan their future investments. One interviewee urged the Navy to present "statistical evidence" of acreage that has been cleaned up and is now available for reuse in order to attract new business. Another interviewee asserted that the private sector is hesitant to invest in NAS Alameda property due to concern about inheriting liability for environmental cleanup.

Several interviewees encouraged the Navy to clean up the sites with greatest reuse value first; others expressed support of a perceived push within the community to maintain portions of the base as open space to protect existing wildlife. However, the majority of interviewees supported a balanced approach that placed priority on remediating both sites with high reuse value as well as sites that could pose environmental and health risks. Similarly, several interviewees noted that economic pressures for property development are not inconsistent with pressures to maintain open space areas within the base;

for example, one interviewee cited construction of a golf course as providing protection to the least tern. Another interviewee commented about controversy within the East Bay Conversion and Reinvestment Commission (EBCRC) over the level of cleanup necessary; some members are advocating cleanup to levels that could quickly satisfy a reuse need, while others believe the cleanup should be more protective. One interviewee suggested that as the cleanup proceeds from the eastern to the western base property boundary, the Navy could continually transfer the remediated property and thereby "move the [base] fence westward." Another interviewee urged the Navy to facilitate interim leasing of facilities now ready for use to generate jobs and tax revenues. This same interviewee expressed a belief that different levels of cleanup are appropriate for different types of use.

Several interviewees emphasized the need to ensure that the property cleanup and reuse planning processes are effectively integrated to ensure that the ultimate cleanup levels achieved are compatible with property reuse plans. Toward that end, interviewees suggested that the BCT maintain continuous dialogue with the ARRA and the BRAG. One interviewee noted that ARRA and BRAG comprise politically appointed members "who do not like to be told" in the event the cleanup levels do not allow for a planned reuse.

A couple of interviewees questioned how future property users will be monitored to ensure that their activities do not contribute to the existing environmental contamination at NAS Alameda; one interviewee noted that the Navy will be ultimately responsible for cleaning up any contamination caused by a lessee.

6.2.2.2 Least Tern and Other Habitats

Protection of the least tern and other habitats on NAS Alameda were cited by seven interviewees (including several RAB members) as an important consideration in the cleanup and reuse of NAS Alameda. One interviewee commented that he receives ongoing calls from his constituents inquiring about the future of the least tern population in light of the scheduled closure of NAS Alameda. Two of the interviewees representing environmental groups supported the establishment of a wildlife refuge or protected open area for the least tern and other wildlife at NAS Alameda. One interviewee asserted that approximately 75 percent of the Caspian tern breeding population on the west coast exists at NAS Alameda. This interviewee also suggested that the Navy conduct cleanup in phases according to seasons compatible with the terns' migration patterns.

6.2.2.3 Contamination of San Francisco Bay and its Resources

Potential contamination of San Francisco Bay and its resources from surface runoff and groundwater migration was cited by many interviewees, especially RAB members, as a key concern. One interviewee specifically pointed to the storm drains at NAS Alameda as a source of contamination to the bay and its fisheries; however, this interviewee acknowledged that the source of contaminants in the storm drains is not always clear and may be associated with historical operations at the base. This interviewee also asserted his group received reports that 20 to 30 dead fish were found off the southwest corner of Alameda during one month over the summer. Although he recognized that fish kills are more likely in the summer due to lower oxygen levels, he stated that four similar reports within one month is unusual.

One interviewee representing the local fishing industry stated that most fishing in Alameda occurs off the ramp next to Encinal High School; the majority of fish caught there are contaminated and are thrown back into the bay. He stated that it is common knowledge among the fishing community that the fish are contaminated and should not be eaten. He noted that more fish have been caught over the past year, which seems to indicate that bay waters have improved; however, the fish are still contaminated.

6.2.2.4 Ecological and Wetland Concerns

Eight interviewees cited ecological and wetlands issues as concerns; however, the manner in which each interviewee would address these concerns varied. Several interviewees stated that wetland areas should receive priority attention in the cleanup process, yet they did not specify how the wetlands should be addressed. A couple of interviewees cited particular concern that the wetlands should continue to provide feeding areas for various habitats. One of these interviewees called for including the wetlands in a proposed wildlife refuge that would include 375 acres of bay wetland and water areas. However, this same interviewee recognized the need to generate revenues and stated that as long as future development of base property does not impact wildlife, "go where the money is." Another interviewee recognized the importance of the wetlands but did not believe that they should be a priority for cleanup. Rather, he suggested that the wetlands be left in their current state, with public access for walking and biking, "which does not impact wildlife." One interviewee stated that many people have expressed an interest in a quick conversion of the wetland area to marina use, and possibly creating a waterfront recreational area around the island. Finally, a couple of interviewees expressed opposition to capping the wetland area as a potential cleanup option, asserting that capping would stop the natural flow of the ecosystem.

6.2.2.5 Use of Local Contractors in the Cleanup Process

Three interviewees stated that they often receive inquiries about how to obtain jobs at NAS Alameda, particularly jobs in the installation's cleanup program. Several interviewees encouraged the Navy to prepare a fact sheet describing the contractor bidding process and how to obtain jobs in the cleanup program at NAS Alameda.

6.2.2.6 Timelines and Accuracy of Information

Two interviewees who hold key positions within the education and business community of Alameda cited a primary concern in receiving timely and accurate information about upcoming cleanup activities and issues. They requested that they receive plenty of advance notice of significant cleanup developments so that they can respond to inquiries from their respective organizations and constituencies. For example, the business community is continually interested in job and leasing opportunities, while the education community will be interested in any cleanup activities adjacent to local school properties.

6.2.2.7 Site-Specific Concerns

Several interviewees, particularly RAB members, cited specific IR sites as priority concerns. Five interviewees stated that the Seaplane Lagoon (Site 17) should receive priority attention in the cleanup program. One non-RAB interviewee commented that his constituents have expressed support for declaring the Seaplane Lagoon a wildlife refuge area. Another interviewee stated that he receives many calls from potential investors about the Seaplane Lagoon area. Still another interviewee observed that the community has expressed concern that "over the years the lagoon was used to dump stuff" and should be cleaned up.

Three interviewees stated concern about the two landfills (Sites 1 and 2) and potential leaching of contaminants from the landfills to the Bay. One interviewee asserted that the Navy has not provided clear estimates of the cost to address the landfills and the Seaplane Lagoon since those costs "will drive up the overall cleanup costs so much and interfere with the mission of the installation."

6.2.2.8 Nuclear Issues

Only one interviewee expressed concern about whether nuclear materials exist on the base. She had read an article in which the Navy could "neither confirm nor deny" the presence of nuclear materials; to her, this response reflected a confirmation.

6.2.2.9 Potential Health Impacts

Only a few of the interviewees cited potential health impacts associated with contamination at NAS Alameda as a specific concern; a couple of interviewees stated that if a site poses a health risk, it should receive priority attention. Several interviewees specifically pointed out that they have not received calls from their constituencies regarding potential health impacts. However, health and safety concerns were cited by several interviewees as a potential concern of future users. Finally, base workers were cited by one interviewee as sharing a "fear of the unknown" regarding the potential impact of chemicals used on base.

6.2.2.10 Groundwater Contamination

Only two interviewees, one of whom was a RAB member, cited contamination to the groundwater as a concern. Both interviewees stated their concerns using the community interviewee questionnaire and neither elaborated on their specific concerns regarding groundwater contamination.

6.2.3 Perception of the Navy

Perceptions of the Navy varied among interviewees. Most of the interviewees appeared to view the Navy as a good neighbor who will adequately complete the cleanup; however, several expected the pace of cleanup will be slow due to bureaucratic delays. A couple of interviewees, particularly environmental representatives, expressed skepticism regarding the Navy's overall commitment to cleanup. However, two of these interviewees distinguished NAS Alameda from other bay area military installations by noting that NAS Alameda seems to be further along in the cleanup process and more receptive to community needs and concerns. Three of the five RAB interviewees expressed the opinion that the Navy is committed to cleanup and making an "honest effort" to get the task done. Two other interviewees asserted that the general community views military installations as "cesspools of environmental contamination" and urged the Navy to change that perception by "presenting the facts" to the community.

6.2.4 Information Needs and Community Outreach

As discussed in Section 5.5, a network of local grassroots organizations exists within Alameda and offers NAS Alameda an opportunity rare in larger metropolitan areas. A great deal of information appears to be circulated through "word of mouth" among the local organizations and businesses. The community interviews identified numerous opportunities for the Navy to effectively inform and involve the community on issues related to the IR program. Such opportunities include use of the school system, reuse entities, civic and business organizations, local newspapers, public events, and public outreach materials. These opportunities are identified below and are discussed in Section 7.0 as specific community outreach tools and techniques.

Generally, the interviewees want to be kept informed about the general IR program as it progresses at NAS Alameda, particularly as it relates to reuse. In terms of frequency, interviewees are generally interested in major cleanup actions (though not for every site) as well as periodic progress reports.

With respect to specific vehicles for informing the community about IR activities and developments, the most commonly cited vehicles were the local newspapers and a "road show" presentation to community organizations. The majority of interviewees cited local newspapers as their primary information source. Many of these interviewees encouraged the Navy to place an article in the "My Turn" column of the *Alameda Times Star*, or to periodically brief the editorial boards of the *Alameda Journal* and the *Alameda Times Star*.

Local organizations cited as likely audiences for a "roadshow" include the following:

- Alameda Chamber of Commerce
- Women's Town Hall (comprised of presidents and directors of every woman-run organization or business in Alameda)
- Greater Alameda Business Association (GABA)
- Park Street Alameda Business Association (PABA)
- West End Alameda Business Association (WABA)
- Churches
- Schools

- Alameda Democratic and Republican Clubs
- Kiwanis Club
- Rotary Club
- Concerned Alamedans for Racial Equality (CARE)
- Alameda Board of Realtors
- Parent-Teacher Association (PTA)
- Economic Development Advisory Board (EDAB)
- Base Reuse Advisory Group (BRAG)
- East Bay Conversion and Reinvestment Commission (EBCRC)
- Alameda Reuse and Redevelopment Authority (ARRA)
- Alameda City Council
- Alameda Board of Supervisors
- Sierra Club, Northern Alameda Chapter
- Audubon Society, Golden Gate Chapter
- Ballena Bay Yacht Club
- Encinal Yacht Club
- Oakland Yacht Club
- Island Yacht Club
- Aeolian Yacht Club

Many interviewees suggested providing informational materials to schools for placement in (or attached to) school bulletins or to other community organizations for placement in their respective newsletters. For example, the Sierra Club, Audubon Society, and the Alameda Chamber of Commerce have a newsletter; interviewees representing these organizations offered to include information on NAS Alameda's cleanup program in their newsletters. A couple of interviewees also suggested using local public television (Channel 3) to present information to the public. However, several of the interviewees stressed that direct and informal verbal communication is the most effective technique for keeping the community informed. In the event a significant issue is expected to arise at a site (for example, a major

removal action), these interviewees stressed the need for a verbal explanation from the Navy to equip the interviewees to respond to questions from their respective organizations or constituencies.

Additionally, several interviewees offered to assist the Navy in its outreach efforts (for example, the Chamber of Commerce and the Unified School District).

The most effective means cited for notifying base workers about upcoming cleanup activities or removal actions is through weekly shop meetings. However, because information provided at shop meetings must be channeled through the base department heads and several layers of management, there is no certainty that the information would actually reach the base workers. Therefore, another avenue that may be more effective is an "all hands" distribution through the NAS Alameda Administration mailing list of on-site workers. Information could also be placed in areas frequented by workers (for example, where workers clock in and out every day). Finally, the Alameda Labor/Management Team (ALMAT) was another vehicle cited for informing base workers. ALMAT consists of NAS Alameda personnel and management and representatives from local businesses and Congressman Dellum's office, and its biweekly meetings are well attended.

Newsletters and fact sheets were also recognized as good information dissemination tools; however, several interviewees questioned whether they would be widely read. Topics suggested by interviewees included (1) a summary progress report on NAS Alameda cleanup and its relationship to reuse, (2) an overview of the historical operations at NAS Alameda that may have contributed to environmental contamination, (3) a general description of the basic process for investigating and remediating pollutants on site, and (4) an overview of the contract bidding process and potential cleanup work at NAS Alameda. With regard to the first topic, one interviewee urged the Navy to "provide statistics" on the amount of acreage cleaned up and ready for transfer, as well as a "realistic" estimate of acreage projected for future cleanup completion and the associated schedule. These topics were also cited for the "road show" presentations. Interviewees stressed that any information presented, whether through a newsletter or presentation, should be simple, clear, and limited to about 20 minutes (in the case of a presentation).

Finally, events such as open houses, site tours, and workshops on special issues were cited as useful tools to inform the community; however, a couple of interviewees questioned whether such events would be well attended. A site tour was recommended by one interviewee as an effective means to show that "the Navy has nothing to hide."

6.2.5 NAS Alameda Restoration Advisory Board

Based on interviews with the general public, there does not appear to be a strong connection between the NAS Alameda RAB and the general community. While several of the interviewees were aware of the RAB's existence, the majority of interviewees had little or no knowledge of RAB activities. Based on the interviews, it seems that steps are necessary to facilitate communication between members of the general community and the NAS Alameda RAB.

Two interviewees (one who was a former RAB member) stated that although the NAS Alameda RAB may represent diverse interests, "it is not reflective of the community of Alameda." They observed that RAB members do not appear to be communicating IR issues and activities to the general public, nor are they soliciting input from their respective constituencies or organizations within the community.

Another interviewee compared the NAS Alameda RAB with the BRAG, asserting that since the BRAG is composed of mayoral-appointees, it is "home grown so people identify with the BRAG more than the RAB." This interviewee also noted a survey he conducted across RABs at various installations that identified "a high degree of dissatisfaction about getting information." He emphasized that the Navy will gain greater credibility by talking more openly with the public about the challenges faced in the cleanup process and the issues on which the Navy and regulators disagreed and how they resolved the issue. He added that "people do not want to be window dressing."

A detailed description of the NAS Alameda RAB is provided in Section 7.2.

7.0 OBJECTIVES AND HIGHLIGHTS OF THE INSTALLATION RESTORATION COMMUNITY RELATIONS PROGRAM

The Navy is committed to maintaining continuous dialogue with the community throughout the IR program. With the decision to close NAS Alameda in 1997 and transfer base property to the community, the community's stake in the cleanup process becomes even more critical. The Navy's community relations program seeks to establish a strong relationship between the Navy and the Alameda community, built on trust and cooperation, that will facilitate the cleanup process and ultimate property transfer. To achieve this broad objective, steps must be taken to:

- Ensure ongoing community participation
- Foster communication of community concerns
- Foster ongoing and meaningful dialogue between the Navy and community
- Provide timely, accurate, and appropriate information to the community
- Ensure communication and coordination between the property cleanup and reuse planning processes
- Ensure compliance with all community relations requirements

This section discusses the Navy's overall community relations program and approach. Section 7.1 describes the Navy's community relations requirements; Section 7.2 discusses the RAB; Section 7.3 summarizes past community relations activities at NAS Alameda; and Section 7.4 presents an overall strategy for continuing an effective community relations program at NAS Alameda. A summary of community relations activities conducted to date is presented in Appendix I.

7.1 NAVY COMMUNITY RELATIONS REQUIREMENTS

The Navy has developed policy guidelines for community relations activities to be conducted during IR program activities. Table 3 provides a matrix of the required activities, as well as suggested activities throughout the IR process. Table 4 delineates the community relations activities required during removal actions. These activities are consistent with U.S. EPA guidelines established under CERCLA, SARA,

and the NCP which are more fully explained in Appendix H. The following subsections describe the community relations activities required throughout the IR process.

TABLE 3

COMMUNITY RELATIONS ACTIVITIES THROUGHOUT THE INSTALLATION RESTORATION PROGRAM

Technical Milestones	Remedial Investigation (RI)	Feasibility Study (FS)	Draft Record of Decision (ROD)	Final ROD	Remedial Design (RD) / Remedial Action (RA)
Community Relations Activities Specified by Federal Law (CERCLA, SARA, NCP)	• Community relations plan (CRP) • Information repositories • Administrative record (AR) • Point of contact • Establish restoration advisory board (RAB)	-- -- -- -- -- --	• Public notice of availability of FS and proposed plan • Fact sheet on proposed plan** • 30-day public comment period (60 days upon request). • Public meeting	• Public notice of availability of ROD • Meeting transcript • Preparation of response to comments • Public notification of responsiveness summary • Availability of ROD and summary in AR and information repositories	• Public notice of availability of RD • CRP revision as necessary • Fact sheet on RD • Opportunity for public meeting
Ongoing Community Outreach Activities	• Dialogue with key community members and media (periodic phone calls and visits) • Open house/site tours • Semi-annual newsletters* • Site/issue-specific fact sheets* • Workshops (local contractors and as requested/needed) • Presentations to community groups/elected officials • CRP updates as necessary • Information repository updates • Mailing list updates • Poster board displays • Regular restoration advisory board (RAB) meetings • RAB minutes and handouts placed in information repositories • Videotapes				
Techniques to Respond to Key Issues	• Press releases (as needed) • Door-to-door flyers • Briefings				

Notes: * Standard Newsletters = 2 pages/4 sides, Standard Fact Sheets = 1 page/2 sides

** Proposed Plan Fact Sheet = approximately 5-6 pages/10-12 sides

TABLE 4

COMMUNITY RELATIONS REQUIREMENTS FOR REMOVAL ACTIONS

ACTIVITY	EMERGENCY Those releases or threats of releases requiring that cleanup activities begin on site within hours of the lead agency's determination that a removal action is appropriate. **Where a site activity lasts less than 30 days**	TIME SENSITIVE Including emergencies lasting longer than 30 days, those releases requiring that cleanup activities begin on site within 6 months of the lead agency's determination, based on the site evaluation, that a removal action is appropriate. **Where a site activity lasts less than 120 days**	TIME SENSITIVE Including emergencies lasting longer than 30 days, those releases requiring that cleanup activities begin on site within 6 months of the lead agency's determination, based on the site evaluation, that a removal action is appropriate. **Where a site activity is expected to last more than 120 days**	NON-TIME SENSITIVE Those releases or threats of releases not requiring that cleanup activities begin on site within 6 months after the lead agency's determination, based on the site evaluation, that a removal action is appropriate. **Where a site activity lasts more than 120 days**
Designate spokesperson	√	√	√	√
Notify affected citizens	√	√	√	√
Establish administrative record (AR) files	√	√	√	√
Make AR available when action memorandum is signed				√
Make AR available within 60 days of initiation of site activity	√	√	√	
Place AR in central location	√	√	√	√
Place AR at or near facility		√	√	√
Publish a notice of availability of AR	√	√	√	√
Publish a notice of availability and brief description of engineering evaluation/cost analysis (EE/CA)				√
Provide a 30-day comment period from date EE/CA is completed				√

ABLE 4
COMMUNITY RELATIONS REQUIREMENTS FOR REMOVAL ACTIONS
(Continued)

ACTIVITY	EMERGENCY Those releases or threats of releases requiring that cleanup activities begin on site within hours of the lead agency's determination that a removal action is appropriate.	TIME SENSITIVE Including emergencies lasting longer than 30 days, those releases requiring that cleanup activities begin on site within 6 months of the lead agency's determination, based on the site evaluation, that a removal action is appropriate.	TIME SENSITIVE Including emergencies lasting longer than 30 days, those releases requiring that cleanup activities begin on site within 6 months of the lead agency's determination, based on the site evaluation, that a removal action is appropriate.	NON-TIME SENSITIVE Those releases or threats of releases not requiring that cleanup activities begin on site within 6 months after the lead agency's determination, based on the site evaluation, that a removal action is appropriate.
	Where a site activity lasts less than 30 days	**Where a site activity lasts less than 120 days**	**Where a site activity is expected to last more than 120 days**	**Where a site activity lasts more than 120 days**
Provide a 30-day comment period from date AR is available		√	√	
Prepare responsiveness summary		√	√	√
Conduct community interviews			√	√
Establish information repository near facility			√	√
Prepare community relations plan			√	√

Note: Community relations requirements for removal actions are specified in CERCLA, SARA, and the NCP.

7.1.1 Contact Person

The Navy has designated a contact to whom citizens or groups can direct their concerns, questions, and input. The Navy's contact person is as follows:

Hans Petersen
Community Relations, Environmental Office
Naval Air Station Alameda
250 Mall Square, Building 1
Alameda, California 94501-5000
Phone: (510) 263-3706

7.1.2 Public Notice and Comment Period

The Navy will place a public notice in the local newspapers at the following milestones:

- Completion of the remedial investigation/feasibility study (RI/FS) and proposed plan (announcing comment period/public meeting)
- Completion of the engineering evaluation/cost analysis (announcing comment period)
- Establishment of the administrative record (AR) and information repository
- Outset of an emergency response action
- Selection of the response action and signing of a record of decision (ROD)
- Amendment of a ROD (announcing comment period/public meeting)
- Preparation of the remedial design (announcing comment period/public meeting)
- Availability of notice of intent to delete a site from the National Priorities List (NPL) (announcing comment period)

As appropriate and necessary, the public notice will announce the start of a 30-day **public comment period**. At the community's request, the Navy may extend this comment period by an additional 30 days to allow citizens adequate time to review and comment on proposed cleanup measures.

The Navy will place the public notice in the local newspaper with the greatest readership within the affected community (see Section 5.6 for identification of the major local newspapers). Notices will also be posted in the locations of the proposed removal or remedial actions. Additionally, public notices

regarding the completion of the RI/FS and announced proposed plan will be sent to those on the community mailing list along with a fact sheet on the proposed plan (see Section 7.1.6).

7.1.3 Public Meetings

The Navy is required to hold a public meeting to present (1) a proposed cleanup plan, (2) an amended ROD, (3) the proposed remedial design, and (4) non-time-critical removal actions as applicable in accordance with the California Health and Safety Code. The public meeting will be held two weeks into the public comment period on the proposed action. The purpose of the meeting is to present the proposed action and solicit community input and comments. Public meetings or workshops are recommended when a major removal action is planned that has direct impact on the community.

Suggested locations for holding public meetings are listed in Appendix F.

7.1.4 Community Mailing List

Preparation of a comprehensive community mailing list is a critical step toward ensuring that all affected parties are informed regarding IR activities. An NAS Alameda community mailing list has been established that includes interested and affected individuals, local officials, and media representatives in the surrounding area. The mailing list will be used to distribute public notices, newsletters, and fact sheets and will be updated regularly. The Navy will include information in all fact sheets about how individuals and groups can be added to the NAS Alameda mailing list. In addition, individuals who contact the Navy with inquiries about the site will be added to the mailing list at their request. The mailing list is provided in Appendix E. Due to the Privacy Act, home addresses and phone numbers for private community members are not included in the list presented in Appendix E.

7.1.5 Administrative Record and Information Repository

An administrative record (AR) will be established to house all documentation upon which the Navy bases the selection of a cleanup remedy. An information repository will be established to provide the community the opportunity to review documents related to the IR program. The information repository may contain the major documents included in the AR, as well as more general information made available to the public such as information releases, fact sheets, CRPs, and other materials that describe the overall cleanup process and activities underway at NAS Alameda. Draft documents that are released

to the public (for example, the RAB) for review and comment are included in the AR at the time they are released to the public.

An information repository has been established for NAS Alameda, at the Alameda Public Library; additionally, a RAB library has been set up in Building 1, Second Floor on the NAS Alameda base property.

7.1.6 Fact Sheets

Fact sheets will be prepared at the completion of the RI/FS, when the proposed cleanup plan becomes available ("proposed plan" fact sheet), and when the draft remedial design is complete. Additionally, if the final ROD is significantly modified from the proposed cleanup plan, a fact sheet will be prepared to explain the changes. These fact sheets are usually 4 to 6 pages (8 to 12 sides) in length. (Note: consistent with the Navy's terminology, fact sheets as defined under recommended activities below are usually 1 to 2 pages, 2 to 4 sides; newsletters are usually 2 to 4 pages, 4 to 6 sides).

The proposed plan fact sheet should (1) summarize the findings of the RI, (2) briefly describe the remedial action alternatives considered and their associated benefits and limitations, and (3) provide other information related to the IR program and sites, information sources, and the public comment period and public meeting on the proposed plan.

The Navy will send the proposed plan fact sheets to the comprehensive NAS Alameda mailing list. All fact sheets will include the name, address, and telephone number of the Navy point of contact for inquiries about the Navy's proposed action or overall IR program.

7.1.7 Technical Review Committee

In accordance with CERCLA and the NCP, a technical review committee (TRC) was established for NAS Alameda in September 1990. The TRC included two community members and functioned as a technical advisory body for the cleanup activities at NAS Alameda to provide input on planned technical actions such as selection of remedial action alternatives, proposed removal actions, and recommendations for no further action at IR sites. The TRC was chaired by the Navy and was composed of representatives from federal, state, and local regulatory agencies, the City Alameda, and the local community. TRC meetings were held quarterly. Consistent with BRAC guidelines, the Navy has since

expanded the TRC to a RAB that includes a broader representation of community members. The RAB is discussed in detail in Section 7.2.

7.1.8 Meeting Transcripts and Responsiveness Summaries

A transcript of required public meetings is required; a **responsiveness summary** to oral and written comments received is also required. As indicated in Section 7.1.3, public meetings (and thus transcripts and responsiveness summaries) are required when (1) the proposed plan becomes available, (2) a ROD is amended, and (3) the remedial design is completed. A responsiveness summary is also required for any response action which requires a public comment period and for which comments are subsequently received. A certified court reporter should prepare the transcript of the public meeting. A responsiveness summary is also required for any response action that requires a public comment period during which comments are received. The responsiveness summary should be written to describe and document (1) the community's comments and concerns presented at the meeting or in writing and (2) the Navy's responses to these concerns. The Navy will consider these comments and concerns and may revise the proposed action, if appropriate. Both the meeting transcripts and the responsiveness summaries will be available to the public in the AR and information repository.

7.1.9 Community Relations Plan Update

The Navy's policy is to prepare a CRP for any installation undertaking IR activities. The CRP is a working document that will be revised and updated as necessary to address new community information needs, interests, and concerns. It will be updated as necessary to add new information regarding the progress of the IR program and steps to be taken by the Navy. This document reflects an update of the original NAS Alameda CRP that was prepared in February 1989.

7.2 RESTORATION ADVISORY BOARD

A key component of the Navy's IR program community outreach effort for NAS Alameda is the establishment of the NAS Alameda RAB. This section describes the background, goals, and membership of the NAS Alameda RAB, and identifies issues associated with execution of the RAB.

7.2.1 Background and Goals

Due to the impact of closing military bases on local communities, Department of Defense (DoD) has expanded the existing TRCs to RABs to involve a greater number and broader range of community members. The objective of the RAB is to provide a forum through which local community members, the military, and the regulatory agencies can work together in an atmosphere that encourages discussion and exchange of information regarding the Navy's environmental activities. RAB members meet on a regular basis to review and provide input on technical documents and activities related to the IR program. Although RAB members do not make decisions about the cleanup process, their concerns and comments are very important in helping the Navy frame its approach to the cleanup process. The RAB provides a valuable forum for ongoing discussions between the Navy, regulators, and the community, in addition to the formal public notice and comment period required for specific documents (see Section 7.1). To ensure two-way communication between the RAB and the community, RAB members are expected to (1) communicate with local community members and groups who may have specific base cleanup interests or concerns, (2) present those concerns to the RAB, and (3) report feedback from the RAB to the respective community members or groups.

t is important to note that the RAB is not a replacement for other community relations activities required by law, regulation, or policy; rather, it is intended to supplement existing community relations requirements. Although RAB members are selected to represent the diverse views of the community, the RAB cannot be expected to communicate all concerns and interests of the general community. Therefore, in order to reach segments of the community outside of the RAB's representation, additional community outreach activities are recommended in Section 7.4. The DoD/U.S. EPA RAB procedures are specified in Appendix L.

7.2.2 Membership

Membership on the RAB includes a representative from the Navy, DTSC, and U.S. EPA, members of the TRC, and a cross section of community interests, including reuse entities, environmental organizations, the business community, local government, base personnel, and other local organizations. The primary goal in selecting RAB members is to ensure that the diverse views of the community are represented and heard. Each member of the RAB has an equal voice. The RAB is co-chaired by one Navy representative and one community representative.

Community members on the NAS Alameda RAB were selected through steps consistent with federal and state guidelines. Steps undertaken to set up the RAB are provided in Appendix M. In 1996, the RAB established a charter for implementing its responsibilities as well as governing its internal operations.

A RAB information hotline has been set up: the phone number is (510) 869-5087.

7.3 PAST COMMUNITY RELATIONS ACTIVITIES AT NAVAL AIR STATION ALAMEDA

The Navy has been conducting community relations activities associated with the IR program at NAS Alameda since 1989. Such activities included preparation of the first CRP in 1989, establishment of the TRC in 1990, development of a community mailing list, and preparation and distribution of public notices and fact sheets. Additionally, an AR and information repository have been established and the TRC has been expanded to a RAB. An outline of specific community relations activities conducted to date is included in Appendix I.

7.4 ESTABLISHING AND MAINTAINING DIALOGUE BEYOND THE MINIMUM REQUIREMENTS

The Navy's goal in establishing its community relations program is to keep the public informed, solicit the public's input and concerns, and provide public involvement opportunities during each phase of the investigation and remedial process. The Navy seeks to ensure that the community relations activities are closely integrated with technical activities. Ongoing dialogue between the Navy and the community throughout the cleanup process is necessary for the Navy to understand the community's concerns on environmental issues related to NAS Alameda and to be kept apprised of the community's information needs. This ongoing dialogue is critical to the success of the IR program by helping to ensure that the final cleanup plans are responsive to community needs and concerns.

Many outreach techniques beyond the minimum community relations requirements may be implemented at any time in the IR process to build a stronger relationship with the community. The timing of activities and the techniques selected will depend on the particular site and impacted community; however, a number of activities are recommended for implementation on a routine basis. Additional outreach activities are outlined in Section 7.4.1. Additional techniques are suggested in Section 7.4.2 in

the event an issue arises that is of particular community concern. Section 7.4.3 highlights several information outreach opportunities for specific sectors of the community identified during the community interviews. Finally, Section 7.4.4 briefly describes community involvement in other environmental and closure programs outside of the IR program. A tentative schedule of activities for each program, as well as opportunities for public involvement, are presented in Appendix L.

7.4.1 Community Outreach Strategies

The following community outreach strategies have been developed based on information received during community interviews and the Navy's experience with ongoing community involvement activities. As needed or on request, the following activities may be conducted.

- RAB meetings
- Monthly BCT tracking meetings (as approved by the RAB and the BRAC Environmental
- Coordinator [BEC])
- Ongoing dialogue with key community members
- Informal presentations to local organizations
- Quarterly newsletters
- Issue-specific fact sheets
- Annual open house and site tour
- Informal workshops or meetings
- Media activities
- Poster board displays
- Videotapes

Ongoing Dialogue with Key Community Members

One of the most effective means of achieving a strong relationship with the community is through ongoing informal dialogue with key community members. Such informal dialogue was often noted during the interviews as the most valuable and appreciated source of information. Maintaining dialogue may simply entail a periodic telephone call or visit with selected community members to apprise them of the status of a site-specific activity or to inquire whether they need any further information regarding

NAS Alameda's IR program. Key community members who could be periodically contacted include (but are not limited to) elected officials, school district representatives and school principals, active environmental group leaders, church leaders, and representatives from the Alameda Chamber of Commerce. The key is to cultivate relationships built on trust so that community members turn to the Navy first when questions or concerns arise.

Informal Presentations to Local Organizations

One-on-one interface with community members may be facilitated though informal presentations or "road shows." This community outreach technique was repeatedly cited by interviewees as an effective means of communication. Presentations could be provided at regularly scheduled meetings of organized groups in the community to explain the goals, constraints, and progress of the IR program and how the cleanup process is coordinated with the future property reuse planning. Additionally, several interviewees suggested presentations describing the acreage cleaned up and leased, the types of leases in place at NAS Alameda, and the projected schedule for cleanup completion and future property leasing/transfer opportunities. Such presentations may be particularly useful at meetings of the BRAG, EBCRC, and the ARRA. Major school functions and meetings of elected officials, civic groups, and the Alameda Chamber of Commerce provide other valuable forums for Navy presentations on the IR program. Many additional organizations were cited during the community interviews as potentially interested in a presentation on cleanup activities underway at NAS Alameda. Those organizations are listed in Section 6.2.4.

Standard presentations on the overall IR program should be developed for delivery across a range of audiences. In the event an audience is interested in a particular site, the standard presentation package should be supplemented or slightly revised to address the issues associated with that site. The presentation team may include BCT members accompanied by designated RAB members. Many benefits are associated with designating an established team of presenters: a consistent message will be communicated, the presentations will continually improve over time, and these individuals will cultivate relationships with community members and function as additional conduits for information exchange between the community and the Navy, and the BCT.

Quarterly Newsletters

Newsletters should be prepared quarterly and sent to those on the community mailing list. Newsletters are usually two to four pages (four to eight sides) and are designed to provide a progress report on the overall IR program at NAS Alameda, as well as present site-specific information that may be of interest to the community. Additionally, the newsletters may provide updates on reuse developments as they impact cleanup and may profile RAB activities and focus groups.

In addition to the above information, each newsletter should include the following standard components:

- Brief summary of the IR process
- Map of sites
- How to obtain further information (cite a point of contact, the information repository, and the next RAB meeting)

Again, these standard components would be supplemented by articles on various aspects of the IR program and other related activities. Text should be kept simple and concise; the narrative should be written for an 8th grade reading level. The newsletter layout should facilitate the reader's ability to focus on a story or piece of information by segmenting the information into pieces. For example, information on the IR process or a particular concern ("Is My Drinking Water Safe?") could be placed in a separate box. Additionally, graphics such as photographs of site work, schedules, and maps should also help focus the reader's attention.

A number of organizations were cited during the community interviews that could include information provided by the Navy in the organizations newsletters: Alameda Bureau of Electricity, local schools, Alameda Unified School District, BRAG, EBCRC, Alameda Chamber of Commerce, Sierra Club, and Audubon Society. Each of these entities prepares regular newsletters that are sent to individuals on their own mailing lists. In the case of local schools, school bulletins are sent home with the students weekly.

Issue-Specific Fact Sheets

Fact sheets should be prepared to address issues of concern to the community as well as to summarize particular milestones in the IR process. Fact sheets may be distinguished from newsletters in that they

are usually topic- or issue-specific and are one to two pages (two to four sides) in length. Fact sheets on the following topics are recommended:

- History and geology of NAS Alameda
- How the cleanup and reuse programs are integrated
- The environmental baseline survey (EBS) and finding of suitability to lease and transfer (FOSL and FOST) process; interim and long-term leasing (See section 7.4.4)
- The overall environmental condition of the property (is it safe?)
- Results from the human health risk assessment
- Results from the ecological risk assessment

As noted in Section 7.2.5, fact sheets are required at specific milestones: at completion of the proposed cleanup plan ("proposed plan"), completion of a final ROD (if it differs significantly from the draft ROD), completion of a remedial design, and as applicable, removal actions. These required fact sheets will be lengthier than the standard fact sheet.

As noted above, newsletters and fact sheets may be provided to various local organizations to be incorporated in or attached to their own newsletters.

Annual Open House and Site Tour

The Navy may also provide the public with current information regarding the IR program through an annual open house and site tour. The open house can be conducted in a public location, such as those listed in Appendix F, where people can talk to agency officials on a one-to-one, informal basis. The open house would host poster board displays and possibly video presentations. Technical and community relations staff would be available to answer specific questions about the NAS Alameda cleanup effort.

A site tour was recommended by several interviewees as an effective means to inform the community and to illustrate that the installation is safe. A site tour immediately followed by an open house is especially effective because the tour allows community members to actually see the sites and then discuss them informally at the open house. A site tour may also help to dispel fears about the risks of a site and foster a better understanding within the community about the nature of the IR program.

Informal Workshops or Meetings

Over the course of the cleanup process, issues may arise that are of particular significance to a specific interest group or organization. As requested or needed, presentations or informal workshops on a particular issue may also be held for such groups. For example, several environmental groups have expressed a strong interest in the future of wildlife habitat within NAS Alameda; an overview of the ecological risk assessment and its relationship to reuse planning may be valuable to these groups. Face-to-face dialogue can help to foster a better understanding among all parties of the issues at stake and the challenges involved in the process.

Media Activities

As emphasized above, the most effective means to achieving a strong and trusting relationship with the community is through ongoing informal dialogue. This approach applies to the media as well as to key community members. The Navy's public affairs office (PAO) could check with key media contacts (for example, reporters at the major local newspapers) about once every 4 to 6 weeks (or as deemed appropriate) to apprise them of IR activities or ask whether they need any information regarding NAS Alameda's IR program. Additionally, fact sheets and newsletters will be sent to the media contacts listed on the community mailing list. It is critical that in releasing information and responding to media inquiries, the Navy speaks with "one voice." The primary points of contact for all media inquiries regarding the IR program are Hans Petersen (510-263-3706) at NAS Alameda. Press releases and briefings are also effective means for providing information to the media. These are discussed in Section 7.4.2.

Poster Board Displays

Poster board displays can include a large visual displays of maps, charts, diagrams, and photographs accompanied by brief text explaining the graphics. Displays are an effective means for communicating technical information in an accessible and understandable manner. Topics depicted on the display may describe the history of operations at the installation, contamination and remedial actions, and the Navy's community relations program.

Poster board displays may be set up at a variety of events or locations: NAS Alameda open houses, RAB meetings, popular shopping malls, banks, school open houses or parents' events, neighborhood board

meetings, or meetings of elected officials. The poster boards should be manned by individuals who are familiar with the subject matter and are effective communicators.

Videotapes

Videotapes may be developed for several topics. For example, an overview of the IR program that illustrates selected remedial and removal activities and the related sites may be useful as a supplemental communication mechanism at open houses and RAB meetings. Additionally, RAB meetings or RAB workshops on special issues may also be videotaped and made available to interested community organizations. The videotapes could also be provided to the local television stations and placed in the information repository.

7.4.2 Techniques to Address Issues of Particular Concern to the Community

The following techniques are recommended in the event an issue arises that is of particular concern to the community. The primary objective of each of these techniques is to provide the community with accurate and timely information. Ensuring that the community has the facts should help to prevent misinformation and unfounded concerns from magnifying the issue.

Community Workshops

Technical issues may arise over the course of the IR program that warrant special attention. For example, activities such as a major removal action or release, or the ecological and human health risk assessments may require extra outreach efforts to the affected community. An informal workshop to present the issue and answer questions will help provide the community with accurate and timely information. A critical factor to a workshop's success is holding the workshop in a timely manner, if possible prior to the event, or in the case of an unexpected event, very quickly once the event occurs. Another important factor to the workshop's success is anticipating questions and community concerns ahead of the event, identifying in advance who will respond to particular questions, and practicing the presentation and responses (as feasible).

Door-to-Door Flyers

In the event that an unexpected release or emergency removal action occurs at a site, a one-page flyer may need to be distributed to the immediate neighborhood door-to-door. Sending information through the mail in the event of an emergency will not inform the affected community of the facts quickly enough. Community members may seek information through sources that do not have actual facts and, therefore, misinform the general community. Although door-to-door flyers require additional labor, they provide an effective means of informing the community in a timely manner and preventing the spread of misinformation.

Press Releases and Media Contacts

As noted above, the Navy should seek to develop solid relationships with key media contacts. In the event a significant issue emerges, the media would be more likely to obtain information first from a Navy contact with whom a solid relationship has been established. The Navy should consider issuing a press release and calling selected media contacts to address an emergency situation. However, it is critical that the key Navy technical and public affairs personnel first meet to define the Navy's message and designate channels of communication; this step will help to ensure that a consistent message is delivered.

Briefings

Briefings to impacted community members, organizations, elected officials or the media, or other key community groups provide community members an opportunity to ask questions, get the facts, and better understand the risks facing the public's health and environment, if any. Briefings may be provided at City Council meetings; it should be noted, however, that according to several interviewees, any presentation to City Council must involve a request for action.

7.4.3 Outreach Opportunities to Specific Sectors of the Community

Many of the interviewees offered or suggested mechanisms within their respective organizations or constituencies to facilitate the Navy's community outreach efforts. This section identifies specific information dissemination vehicles offered by various interviewees to reach out to targeted communities. These techniques are meant to supplement the techniques cited throughout Section 7.

- **NAS Alameda Base Personnel**. Workers within NAS Alameda represent an important component of the Alameda community. Base workers should be notified of upcoming removal and remedial actions through notices posted around the area of activity as well as in areas frequented by the workers. Additionally, as noted in Section 6.2.4, information could be disseminated to all base workers through an "all hands" distribution via the NAS Alameda Administration mailing list. Finally, ALMAT provides another tool for informing base workers about upcoming IR actions.

- **Business Community**. The Alameda Chamber of Commerce offered to co-sponsor and create education outreach workshops and events to targeted business and development sectors. A suggested topic was the integration of cleanup, reuse, and job stimulation. Additionally, the chamber publishes a newsletter that could include Navy information and announcements.

- **School System**. The Alameda Unified School District offered to assist the Navy in disseminating information to the school system through the following mechanisms: (1) by attaching Navy information to local school newsletters or school bulletins and (2) including Navy announcements or progress reports in the district's monthly updates to the school board. Additionally, district representatives offered to assist the Navy in preparing presentations and announcements to the community. It was also suggested that the Navy make classroom presentations on the cleanup process and specific topics related to the ecological assessment and cleanup technologies.

- **Reuse Entities**. Although not specifically cited by any of the interviewees, the BRAG publishes a newsletter, *The Navigator*, that has a wide readership. This newsletter offers NAS Alameda a valuable tool for maintaining communication with reuse interests regarding cleanup progress and issues that may affect reuse planning efforts.

- **Environmental Community**. The Sierra Club publishes a monthly newsletter, *The Yodler*, that could possibly include information regarding NAS Alameda's IR program. Additionally, the Sierra Club's Northern Alameda Chapter may be interested in a presentation on the cleanup program. The Audubon Society Golden Gate Chapter also issues a monthly newsletter that may include Navy information and announcements; however, the information must be provided by the first day of the previous month (for example, by September 1 to be included in the October issue).

- **Fishing Community**. Fact sheets and announcements could be distributed to the fishing community through the local bait and tackle shops; any information presented should be presented in very simple terms. Although local fisherman include many ethnicity's, all speaking different languages and dialects (including Vietnamese, Chinese, Laotian, and Thai), English is the most common language.

- **Boating Community**. There is a large boating community in and around Alameda. Fact sheets and announcements could be distributed to the boating community through local yacht clubs, marinas, and boat yards.

7.4.4 Community Involvement Opportunities in Non-IR Environmental Programs

While the IR program is focused on cleaning up contamination, several other environmental programs are carried out at NAS Alameda to ensure compliance with federal and state requirements in the management and disposal of hazardous materials. For example, environmental compliance programs underway at NAS Alameda include lead and asbestos abatement, as well as the **Clean Water Act** program, the **Resource Conservation and Recovery Act** (RCRA), and the **National Environmental Policy Act** (NEPA). Navy IR staff work closely with the environmental compliance staff to ensure that the programs and activities are coordinated and effectively integrated. Each of these laws have a public involvement component and are briefly described in the glossary on page 61.

In order to successfully convert NAS Alameda to civilian use, three interrelated activities must be completed: cleanup, closure, and development of a community reuse plan. To facilitate property reuse prior to final basewide cleanup, the **Community Environmental Response Facilitation Act** (CERFA) was passed in 1990. Under CERFA, the Navy is conducting an environmental baseline survey (EBS) to evaluate all property within NAS Alameda, from "fence-line to fence-line." The purpose of the EBS is to inventory and evaluate the property's environmental condition; property parcels identified in good environmental condition may be made available to the public for reuse through interim leases. As a result of CERFA, several interim leases are currently in place at NAS Alameda. Property parcels that are found to be contaminated and are not currently undergoing IR investigation and cleanup, may be incorporated into the IR or compliance programs.

The Navy is preparing both a base-wide EBS report and more detailed parcel-specific EBS documents. These documents provide valuable information to the Alameda reuse entities (for example, the ARRA, BRAG, and EBCRC) in planning appropriate future uses for NAS Alameda. As the environmental cleanup and EBS activities proceed, the Navy will work closely with the reuse entities to ensure that cleanup goals are consistent with plans for future use of the property.

The vehicles used to lease or transfer property at NAS Alameda are called, respectively, a finding of suitability to lease (FOSL) and a finding of suitability to transfer (FOST). The parcel-specific EBS will be attached to the FOSL or FOST to inform future land users of the past and current conditions of the parcel of interest. The FOSL or FOST will include any lease or deed restrictions based on the intended use of the property. Interim leases will terminate at the time the base's cleanup is completed.

Concurrent with the cleanup and EBS process, the ARRA is developing the community reuse plan for NAS Alameda. The long-term plan is expected to be completed by the end of 1995. The Navy will have the benefit of reviewing the long-term reuse plan well before the final cleanup decisions are made (projected for 1997). The final reuse plan adopted by the ARRA will be presented in an environmental impact statement (EIS) prepared by the Navy. The EIS is a federal document required by NEPA to identify and document all environmental impacts associated with a federal action; in this case, the disposal (and subsequent reuse) of NAS Alameda property. The EIS will include several alternatives for property reuse and the impacts of each; the preferred alternative contained in the EIS will be ARRA's reuse plan. The EIS must be completed within 12 months from the Navy's receipt of ARRA's final approved reuse plan. Upon completion of the draft EIS, it will announced in the local papers and made available for public comment. Public comments will be reviewed and addressed by the Navy prior to adoption of a final EIS (and its preferred reuse alternative). Appendix L presents a time line of reuse planning activities, as well as IR and environmental compliance activities.

8.0 SCHEDULE OF COMMUNITY RELATIONS ACTIVITIES

The Navy will seek to establish a timeline of community relations activities that satisfies the public's interests and concerns regarding the IR program. Community relations activities will be tied to key technical milestones throughout the RI/FS process as well as to site-specific needs. Throughout the course of the IR process, the Navy will evaluate its community outreach activities to determine whether the schedule of community relations should be revised. Table 3 presents a general schedule of required and recommended activities throughout the IR process; Table 4 presents required community relations activities associated with removal actions. Appendix H provides a more detailed description of required and recommended community relations activities throughout the IR process.

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U.S. Environmental Protection Agency. 1992. "Community Relations in Superfund, a Handbook."

GLOSSARY

Administrative Record: A file containing documents that were considered or relied on, which form the basis for the selection of a cleanup action.

Base Realignment and Closure (BRAC) Act of 1990: A federal law that calls for the closure of selected military bases across the country. Under BRAC, NAS Alameda is scheduled to close in 1997.

Bioremediation: A range of treatment options to enhance naturally-occurring remediation; for example, increasing the population of bioorganisms that may destroy contaminants at a site.

BRAC Cleanup Plan (BCP): A document outlining the approach, schedule, and priorities for implementing environmental cleanup activities at NAS Alameda. The BCP identifies opportunities for streamlining activities and accelerating the cleanup process.

BRAC Cleanup Team (BCT): A three-member team of technical specialists consisting of one representative each from the Navy, U.S. Environmental Protection Agency, and California Department of Toxic Substances Control. A BCT is required to be established at all closing military bases undertaking environmental cleanup activities. The BCT is responsible for directing the cleanup, expediting the cleanup schedules, and ensuring that all cleanup activities follow applicable laws and regulations and are protective of public health and the environment.

Clean Water Act: A federal law (initially enacted as the Federal Water Pollution Control Act of 1970 and subsequently amended) to restrict industrial discharges into U.S. surface waters. Establishes national pollutant discharge elimination system (NPDES) permit requirements for industrial operations as well as stormwater system discharge requirements.

Community Environmental Response Facilitation Act of 1990 (CERFA): A federal law enacted in 1990 that calls for an inventory of all closing military installation properties to determine the history of hazardous waste storage, handling, or releases on every property parcel. The law is designed to facilitate reuse of closing military base properties.

Community Relations Program: A proactive program to inform and involve the public in the Installation Restoration planning process and to respond to the surrounding community's concerns.

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 (Superfund) to investigate and remediate inactive, abandoned, or uncontrolled hazardous waste sites. Under the act, the U.S. Environmental Protection Agency can either (1) pay for site remediation when parties responsible for the contamination cannot be located or are unwilling or unable to perform the work or (2) take enforcement action against the parties responsible for site contamination and oversee its remediation.

Ecological Risk Assessment: An evaluation performed as part of the remedial investigation to assess conditions at a site and estimate the risk posed to the ecology at the site.

Engineering Evaluation/Cost Analysis: Identifies the objectives of a removal action and outlines steps and costs associated with that action.

Feasibility Study (FS): See Remedial Investigation and Feasibility Study.

Human Health Risk Assessment: An evaluation performed as part of the remedial investigation to assess conditions at a site and estimate the risk posed to human health from potential exposure to contaminants at the site.

Information Repository: A file stored in a public location that contains current information, technical reports, and documents regarding remedial and removal activities at a site.

Installation Restoration (IR) Program: U.S. Department of Defense program to assess and clean up old hazardous waste disposal sites. This project is funded by the Defense Environmental Restoration Account (DERA), an account earmarked for environmental cleanup of military property.

National Environmental Policy Act (NEPA): Federal law requiring preparation of an environmental impact statement (EIS) whenever a federal government action is undertaken that may have a significant impact on the environment. The EIS identifies and documents all associated environmental impacts and outlines several alternative actions, including a "preferred alternative." NEPA requires public notification of the draft and final EIS and a 30-day public comment period on the draft EIS.

National Oil and Hazardous Substances Contingency Plan (NCP): The federal regulation that guides determination of the sites to be cleaned up under the CERCLA/SARA program.

National Priorities List (NPL): The U.S. Environmental Protection Agency's list of the most serious uncontrolled or abandoned hazardous waste sites identified for possible long-term remedial action under Superfund. A site must be on the NPL to receive money from the trust fund (Superfund) for remedial action. The list is based primarily on the score a site receives from the Hazard Ranking System. U.S. EPA is required to update the NPL at least once a year.

Polychlorinated Biphenyls (PCB): Any family of highly toxic compounds, now banned in the United States. PCBs are known to cause skin diseases in humans and are suspected of causing birth defects and cancer in animals.

Proposed Plan: A document which reviews the cleanup alternatives presented in the feasibility study, summarizes the recommended cleanup actions, explains the reasons for recommending them, and solicits comments from the community.

Public Comment Period: A period of time during which the public can review and comment on a particular cleanup action being proposed for a site under the Installation Restoration program, including various documents and actions taken by the BCT.

Record of Decision (ROD): A public document that explains which cleanup alternative(s) will be used at an IR site.

Remedial Action: The actual construction or implementation phase of a site cleanup that follows the remedial design.

Remedial Design (RD): An engineering phase that follows the record of decision (for sites on the National Priorities List) during which technical drawings and specifications are developed for the final remedial action plan.

Remedial Investigation and Feasibility Study (RI/FS): Two distinct but related studies that are performed concurrently. The RI is intended to:

1. Gather necessary data to determine type and extent of contamination at a site
2. Establish criteria for site remediation; if necessary

The FS is intended to:

1. Identify and screen options for remedial actions
2. Analyze technology and cost benefits of remedial options

Remediation: Actions taken at sites to clean up existing hazardous substances and contamination caused by past or present human activities.

Removal Action: An action taken over a relatively short time period to address a release or threatened release of hazardous substances.

Resource Conservation and Recovery Act (RCRA): A federal law that established a regulatory system to track hazardous substances from their generation to disposal. The law requires safe and secure procedures to be used in treating, transporting, storing, and disposing of hazardous substances. Contains public involvement requirements in the issuance of new hazardous waste management and disposal permits.

Responsiveness Summary: A summary of oral and/or written public comments received during the comment period on key documents and the Navy's responses to those comments. The responsiveness summary is especially valuable during the remedial action planning phase (or the record of decision phase at a site on the National Priorities List) where it highlights community concerns for the decision-makers.

Restoration Advisory Board (RAB): A board whose membership includes community members representing a diverse cross section of the community, and representatives from the Navy, the California Department of Toxic Substances Control, and the U.S. Environmental Protection Agency. The RAB's principle objective is to provide opportunities for community stakeholders to participate in the review and formulation of base cleanup plans and documents.

Site Investigation (SI): A technical phase that follows a preliminary assessment, the SI is designed to collect more extensive information on a hazardous waste site. The information may be used to score the site to determine whether response action is needed.

Solvent: A liquid capable of dissolving another substance; commonly used in cleaning solutions.

Superfund: The common name used for the trust fund established by the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA); also referred to as the Trust Fund.

Superfund Amendments and Reauthorization Act (SARA): Amendments to CERCLA expanding its scope, enacted on October 17, 1986.

Treatability Study: A pilot study to determine the suitability of a particular cleanup remedy; the study may be conducted in a laboratory setting or in the field.

APPENDIX A

KEY REGULATORY AGENCIES INVOLVED IN THE IR PROCESS

APPENDIX A

KEY REGULATORY AGENCIES INVOLVED IN THE IR PROCESS

- California Environmental Protection Agency
  Department of Toxic Substances Control (lead regulatory agency)
  700 Heinz Avenue, Suite 200
  Berkeley, California 94710
  (510) 540-3809

- U.S. Environmental Protection Agency
  75 Hawthorne Street
  San Francisco, California 94105-3901
  (415) 744-2402

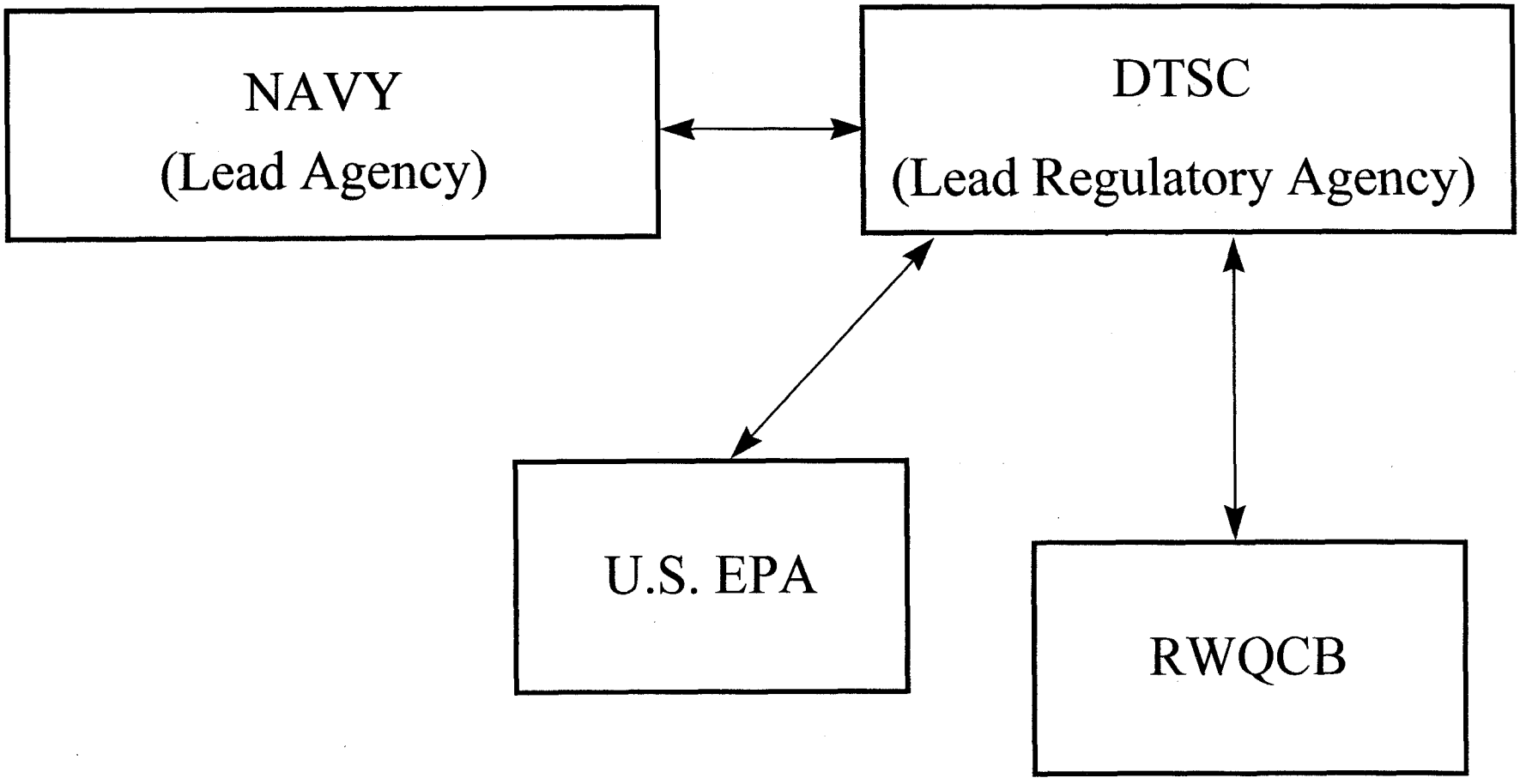
- Regional Water Quality Control Board
  2101 Webster Street, Suite 500
  Oakland, California 94612
  (510) 286-0688

- U.S. Fish and Wildlife Service
  2800 Cottage Way, Room. E 1803
  Sacramento, California 95825
  (916) 978-5603

- California Department of Fish and Game
  20 Lower Ragsdale Drive, Suite 100
  Monterey, California 93940
  (408) 649-7178

- National Oceanic and Atmospheric Administration
  75 Hawthorne Street
  San Francisco, California 94105
  (415) 744-3126

Lead Agency and Lead Regulatory Agency Status for non-National Priorities List Environmental Cleanup Programs at California Military Facilities



APPENDIX B

INTERVIEW QUESTIONNAIRE GUIDE AND LIST OF INTERVIEWEES

APPENDIX B

NAVAL AIR STATION ALAMEDA COMMUNITY RELATIONS PLAN INTERVIEW QUESTIONNAIRE GUIDE

1. Awareness

- How familiar are you with environmental investigation and cleanup activities underway at NAS Alameda? When did you become aware of possible environmental contamination at the installation?
- If you are familiar with environmental programs at NAS Alameda, do you believe that they are being conducted effectively?
- Do residents and workers at the installation appear to be familiar with the environmental investigations and the cleanup process underway at NAS Alameda?
- How do you feel about the Navy's cleanup efforts at NAS Alameda? What contacts have you had with government officials about the installation?
- Are Navy officials perceived as credible and responsive to community concerns?

2. Concerns

- What are your major concerns related to NAS Alameda? For example, do you have specific concerns regarding:
  - your health or the health of others?
  - transportation routes for hazardous wastes to off-site disposal facilities?
  - any particular sites or activities within the NAS Alameda complex?
  - chemical contamination to the San Francisco Bay and its fisheries resource?
  - decreased property values?
  - other?
- Are there particular areas that you feel should receive priority attention: groundwater, airborne pollutants, endangered species, wetlands, fisheries?

APPENDIX B
NAVAL AIR STATION ALAMEDA COMMUNITY RELATIONS PLAN
INTERVIEW QUESTIONNAIRE GUIDE
(Continued)

3. Community Involvement/Information Needs

- Have you participated in any activities related to the environmental program at NAS Alameda or other installations in the vicinity?

- To what extent would you like to be involved in the investigation and cleanup process?

- Are you on the NAS Alameda mailing list to receive information regarding environmental activities at NAS Alameda? (If the interviewee is already on the mailing list, verify current address.)

- How often would you like to receive information (e.g. at milestones only) and how much detail would you like to receive (e.g. technical details vs. overview in layman's terms)?

- Would you attend public meetings or workshops sponsored by the Navy to present activities and issues related to the environmental program underway at NAS Alameda?

- Are you familiar with the NAS Alameda Restoration Advisory Board? (As appropriate, explain the RAB and its purpose; encourage interviewee to attend RAB meetings; provide date and location of next RAB meeting.)

- What are some of the ways you would suggest that the Navy provide you with information regarding hazardous waste cleanup activities?

- Federal and state laws require public comments to be considered before a final decision is made on how a site will be cleaned up. A formal comment period and public meeting will be conducted to solicit public input on the proposed cleanup plan. Are there other ways the Navy can obtain public input on planned environmental activities? What are your suggestions?

- Can you suggest other individuals or groups the Navy should contact for additional information?

- Is there anything you wish to mention regarding the cleanup process that we have not yet discussed?

APPENDIX B

NAVAL AIR STATION ALAMEDA
LIST OF INTERVIEWEES

Note: Due to the Privacy Act, the names of private individuals are not included; however, names of public officials are included.

Elected Officials:

Mayor of Alameda, Ralph Appezzato
U.S. Congressman Ron Dellums (interviewed staff member)
City Council Member Charles Mannix
City Council Member Al Dewitt
State Representative Wilma Chan (interviewed staff member)

Interest Groups:

BayKeeper
Sierra Club
Audubon Society
Arms Control Research Center (ARC Ecology)

Community Schools, Business, and Civic Organizations:

Alameda Unified School District
Alameda Chamber of Commerce
East Bay Conversion and Reinvestment Commission
West End Alameda Business Association
St. Barnabus School Parent-Teacher Association
Central Avenue Bait and Tackle Shop
Port of Oakland

Base Personnel:

International Association of Machinists and Aerospace Workers

NAS Alameda RAB:

Five members (via questionnaire)

APPENDIX C

INSTALLATION RESTORATION PROGRAM OVERVIEW

APPENDIX C

INSTALLATION RESTORATION PROGRAM OVERVIEW

In 1980, Congress passed the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), commonly referred to as Superfund, to implement hazardous waste site cleanup nationwide. The law made the U.S. Environmental Protection Agency (U.S. EPA) responsible for oversight of the cleanup of private sector uncontrolled hazardous waste sites listed on the National Priorities List (NPL). In 1986, CERCLA was amended by the Superfund Amendments and Reauthorization Act (SARA), making CERCLA applicable to federal agency lands as well as private sector properties. SARA further requires that applicable state laws concerning removal or remedial actions apply to federal facilities not listed on the NPL. (Note: NAS Alameda is not an NPL site; however, the cleanup program is carried out at NAS Alameda in accordance with CERCLA and SARA requirements.)

Investigation of hazardous waste disposal sites at Navy facilities began in 1980 as part of the Navy Assessment and Control of Installation Pollutants (NACIP) program. The NACIP program, subsequently renamed the Installation Restoration (IR) program (see glossary for definition), was developed to facilitate identification and control of environmental contamination from past hazardous materials use and disposal operations at Navy and Marine Corps installations. The IR program is modeled after U.S. EPA's Superfund program, and applies to both NPL and non-NPL sites. To date, sites that need to be addressed through the IR program have been identified at virtually all naval installations, and actions are either underway or in the planning stage to address any sites where threats to human health and/or the environment are known or suspected. By conducting the IR program, the Navy is complying with both its legal obligations and its obligation to the community to protect public health, natural resources, and the environment. The IR program underway at Naval Air Station Alameda consists of the following primary steps:

- Preliminary Assessment
- Site Investigation
- Remedial Investigation and Feasibility Study
- Remedial Design
- Remedial Action

PRELIMINARY ASSESSMENT

The preliminary assessment (PA) is essentially an initial analysis of existing information to determine whether a site within a facility requires additional investigation. Information sources may include historical records about past operations at the site, employee interviews, reports, and findings from a site walk-through.

SITE INVESTIGATION

If initial information gathered during the PA indicates that contamination may be present at a site and further analysis is warranted, a site investigation (SI) will be conducted. The SI may involve an on-site inspection to assess whether there has been a release of hazardous materials and, if so, the nature of any associated threats to human health and/or the environment. If necessary, the scope of the site evaluation may include collecting field samples for analysis. The SI is intended to support a decision on whether further action or investigation is appropriate.

REMEDIAL INVESTIGATION AND FEASIBILITY STUDY

Sites identified in the SI as possibly posing threats to human health or the environment are subject to a comprehensive investigation called a remedial investigation and feasibility study (RI/FS). The RI/FS is an extensive technical study conducted to evaluate the nature and extent of the constituents of concern at the site (the RI) as well as to provide a basis for deciding what action, if any, will be taken to clean up the site (the FS).

Specific objectives of the RI are as follows:

- Characterize the lateral and vertical extent of constituents of concern in soil and groundwater at each site.
- Supplement and refine the existing geologic, hydrogeologic, and chemical database for the study sites.
- Identify potential contaminant migration pathways and receptors associated with each site and assess the extent, nature, and rates of contaminant migration from each site.

As part of the RI, a study known as a baseline risk assessment is performed to assess whether the identified constituents of concern could have a potential impact on human health or the environment. The baseline risk assessment considers the results of site sampling and analysis and all factors that might influence exposure to chemicals from the site, such as location of human or wildlife receptor populations and the presence of pathways for the exposure to occur. Results of the baseline risk assessment may either (1) suggest that cleanup is not required because the site poses no significant threat to human health or the environment or (2) be used during the FS to develop and evaluate potential cleanup plans.

The data collected during the RI will be used to evaluate alternative remedial technologies during the FS process. The primary objective of the FS is "to ensure that appropriate remedial alternatives are developed and evaluated such that relevant information concerning the remedial action options can be presented to a decision maker and an appropriate remedy selected" (Title 40 of the Code of Federal Regulations 300.430 [e][1]).

The FS is based on interim final guidance issued by the U.S. EPA and on the revised National Contingency Plan. At the completion of the RI/FS process, a report will be prepared and submitted to the regulatory agencies and the Restoration Advisory Board for review and comment along with a proposed plan for remedial action.

Environmental regulations set the following requirements for the FS step of remedial response:

- Remedies selected must protect human health and the environment, be cost effective, and emphasize use of permanent solutions that encourage treatment or recycling rather than land disposal.
- Remedies selected must meet all applicable or relevant and appropriate federal and state standards for protecting human health and the environment.

Following receipt of public comments on a proposed plan, a record of decision (ROD) is developed that describes the selected cleanup measure(s). The ROD is followed by design of cleanup measures and ultimately by implementation of the selected measures.

REMEDIAL DESIGN AND REMEDIAL ACTION

Once the RI/FS is completed and the cleanup plan is selected, a cleanup plan design is proposed. The design, referred to as the remedial design (RD), provides specifications and cost estimates to implement the cleanup plan. Following completion of the RD, the cleanup plan is actually implemented through the remedial action (RA) step, the physical cleanup of the site.

Throughout the IR process, removal actions may be performed at any time to quickly remove contamination. A removal action may involve different activities such as removal of the contaminated soil, or measures to prevent or minimize the spread of contamination. Because removal actions represent a quick and efficient approach to cleanup, removal actions have either been conducted, or are planned, at many of the 23 IR sites within NAS Alameda. Removal actions that are not time critical involve a formal public comment period prior to formalizing any decisions.

APPENDIX D

NAS ALAMEDA ENVIRONMENTAL NEWSPAPER ARTICLES

Federal grant is first step for environmental technology venture proposed for base

By David Quigg
Staff Writer

On the heels of a multi-million dollar federal contract for an electric car project at Naval Air Station Alameda, the U.S. Department of Commerce awarded a $400,000 grant to a planned environmental technology venture on the base.

Rep. Ron Dellums announced the grant for the Alameda Center for Environmental Technologies. Neither ACET nor the Alameda Reuse and Redevelopment Authority have received official word of the grant. ACET applied for the grant along with the reuse authority and California State University, Hayward.

Reuse authority Executive Director Kay Miller said ACET will bring together industry and the academic community to find opportunities for bringing environmental technology to the marketplace.

"The whole idea is to create as many ideas as they can come up with," she said.

Sam Doctors, chief executive officer of ACET, said the company "hopes to be able to create a lot of quality jobs and business development for the community."

"It's the first money we've had," said Doctors, who is a professor of business administration at Cal State Hayward. "It's the beginning. It's our seed money."

In a prepared statement, Dellums called the grant "another example of President Clinton and his administration's commitment to successfully converting the military bases in Alameda County."

On Labor Day, Clinton announced a $2.5 million federal contract for the CALSTART electric car venture at NAS. The reuse authority is now close to signing a lease with CALSTART.

Doctors, who runs two other environmental research centers, said ACET still needs funding from public and private sources to succeed on a large scale. ACET's original budget called for $10 million.

"We're a long way from there at the moment," he said. "It's a relatively small start."

Miller said, along with CALSTART, ACET offers "very new kinds of breakthrough technologies," which have the potential to fuel base reuse at NAS.

'SNOW GAME SPORTS DAY
'94 Winter Olympics open in Lillehammer

RENAISSANCE MAN
Steve Allen doesn't take himself too seriously CUE

Alameda Times-Star

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Navy releases cleanup plan for base

By Kathleen Kleinwood
STAFF WRITER

A cleanup strategy for Naval Air Station Alameda was released this week, detailing what's known — and still unknown — about 50 years of hazardous waste that's accumulated at the base.

A draft "Base Cleanup Plan" gives projected time lines for investigation and cleanup of 23 sites at the base, with an overall completion targeted for 1999.

But the dates and time lines will change as more is known about the extent of contamination and cleanup methods, said Lt. Mike Petouhoff, NAS environmental officer.

The plan includes a map detailing areas where soil and ground water contamination is subject to cleanup response and liability laws and shows that about one-quarter of the base will need action. But studies of buildings and sites around the rest of the base will also be conducted for other hazards, such as asbestos and lead paint.

"Our goal is to address 100 percent of environmental issues at 100 percent of the base," Petouhoff said.

Petouhoff calls the cleanup plan a "living document" that will transform as more is known about sites at the base.

Some residents expressed concerns that the Navy doesn't plan to use a "residential standard" for cleanup of sites that haven't yet been earmarked for civilian reuse.

"The Base Reuse Advisory Group did express that residential standards should be the given policy," said Roberta Hough, a member of the group's environmental sub-

Please see Base, page A-17

IN THE NAVY'S WAKE
CONVERTING THE BASES

Friday
Alameda Journal
Published every Tuesday and Friday
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Navy asks residents to monitor cleanup

By Ann Schuyler
Staff Writer

In a new era of Navy openness, the Navy is following a presidential order by inviting Alamedans to join a new committee to keep an eye on the toxic cleanup of the Alameda Naval Air Station.

How carefully the Navy cleans up the toxic land and water on the base in preparation for civilian use depends on the watchfulness and participation of Alamedans, according to Robert Hough, who serves on the environmental subcommittee of the Base Reuse Advisory Group.

Regulators agree with Hough. At a Senate committee hearing held in Alameda by Senator Barbara Boxer on Dec. 7, Jeff Zelikson of the United States Environmental Protection Agency lamented past military reluctance to allow public input in toxic cleanup monitoring, and said that the new committees being formed nationwide are an important opportunity for community members.

The Navy sent out 15,000 invitations this week to residents and to 900 businesses within one-half mile of the base to consider membership on a Restoration Advisory Board. The new committee is being set up in compliance with President Bill Clinton's Fast Track Cleanup Plan.

The Restoration Advisory Board is intended to review cleanup reports and plans, and to provide feedback to the Navy, according to the letter sent out by Capt. Denny Major, commanding officer of Naval Air Station Alameda.

"Members of the community are invited to be full partners in the decision-making process for cleanup efforts at NAS Alameda," the letter states.

Members of the new committee will be chosen by a panel that will most likely include representatives of the state's Department of Toxic Substances Control, the U.S. EPA, the Naval Air Station, and a community member, according to Sherri Withrow of the air station's environmental office.

The committee will be co-chaired by a member of the community.

Upcoming meetings of the new committee will determine the number of community members on the committee, who chooses the membership, and what the role of the committee will be, according to Withrow.

"It depends on the response from the community," Withrow said. "We hope we'll get a significant number of people who are committed to being members and the next two meetings will give us more perspective."

NAS environmental officer Lt. Mike Petahouff has said that the public has not shown a significant interest in cleanup issues so far, and community membership on the Technical Review Committee, the predecessor to the Restoration Advisory Board, was low.

The first planning meeting for the Restoration Advisory Board will be held Jan. 12 at 9 a.m. at the Department of Toxic Substances Control, 700 Heinz Ave. in Berkeley. The second meeting

see CLEANUP, page 9

Cleanup

continued from page 1

will be held Feb. 9 at 7 p.m. at Woodstock Elementary School, 1900 Third St., in Alameda.

Community applications for membership on the new board will be accepted through February 28. Application forms and more information may be obtained by calling the NAS environmental office at 263-3724 or 263-3706.

Alameda Journal

Tuesday and Friday

August 24 - August 26, 1993 ■ Volume 7, Nu

Navy, UC Berkeley join forces

Partnership will concentrate on cleaning up toxins at NAS

By [illegible]
Staff Writer

Navy and local officials are hoping a partnership between the Navy and the University of California will be the impetus to finally clean up toxic waste dump sites at Naval Air Station Alameda.

It has been 13 years since the Navy first embarked on a plan — called site restoration — to clean up 20 sites of toxic waste at NAS. Some of the sites date back to World War II, when little was known about waste disposal and the approach was simple: bulldoze it into a ditch.

Although some older and more polluting facilities, such as a plating facility at the Naval Aviation Depot at NAS, have been replaced with newer and less polluting facilities, little or no actual cleanup of the already polluted land has taken place. With the likely closure of the base, cleanup, estimated to be a $195 million job that could take 20 years or more under older plans, is considered the biggest obstacle to turning over the base for civilian use.

The Navy and local leaders are banking that a new plan, which includes a partnership between the Navy and UC Berkeley, will be the key to faster cleanup and turnover.

Under the "fast track" plan, which was presented to President Bill Clinton during his Aug. 13 tour of the base, some cleanup could occur even before the base closes in 1997. The older approach would not have started cleanup and conversion until 1999 at the earliest.

According to Lt. Mike Petouhoff, the partnership of UC Berkeley and the Navy will make NAS not only a model for new cleanup technologies, but also a model for effective administration. Besides the partnership, a Federal Facilities Site Remediation Agreement (FFSRA) was made between the Navy and the California Department of Toxic Substances Control to regulate the cleanup.

Petouhoff said since NAS is the lead agency in that agree-

see CLEANUP, page 10

City officials tour base; Capt. Major urges action

By [illegible]
Correspondent

[illegible] Factory, [illegible] Air [illegible] morning of Aug. 21 for city officials.

[illegible] Development [illegible] were given a [illegible] tour [illegible] Capt. Denny Major, commanding officer of the base.

The tour, given in a bus chartered by the City Council, was to give city planning groups a first-hand look at what Alameda will inherit when the Navy ships out for good at the end of 1997.

After actually seeing everything from a complete metal plating shop to a movie theater that seats over 600 and hearing Capt. Major describe the economic potential of the base, the greatest concern of the tour group was if the Navy was going to leave [illegible] just a stripped-out shell of a base.

According to Capt. Major's [illegible] metal plating structure, were designed from the ground up for a certain [illegible]. Without that specific [illegible] left behind, the building would be useless.

[illegible] these questions, Major said, "I'm not going to [illegible] behind every table and chair, but I also don't want to have the base crumble away when the Navy leaves. The problem we have is that this whole process is new. The system doesn't know yet how to handle the idea of military base conversions."

Using Hamilton Air Force Base in Novato as an example of what he hopes not to see here, Major said, "Look what happened to Hamilton — what are they using the base for now?"

Except for a small Coast Guard unit and a military hous-

see TOUR, page 10

Cleanup

continued from page 1

ment, it can make cleanup decisions and take responsibility for a cleanup plan for a particular site without having to wait for a regulatory agency to come up with one for them. He said that will greatly speed up the process.

According to him, the fast track plan is an improvement over the Pentagon's former contingency plan for environmental cleanup, which has been widely criticized because it emphasizes study rather than cleanup, and requires an adversarial relationship rather than a cooperative relationship among regulators and the Department of Defense.

Some of the key aspects of the fast track plan are:

■ The turnover of sites to civilian use as they are deemed clean, as opposed to an all-or-nothing approach.

■ A willingness, according to Petouhoff, to clean up a site even before a complete study of it is done. Before the plan was made, the base was just starting, after about 13 years, the process of studying the identified toxic sites.

■ NAS will become a testing ground for new toxic cleanup technologies that are being devised at UC.

"We will use technology that we know enough about to be confident that it will work, but that has not been used in civilian industry yet," Petouhoff said.

Two technologies developed at Lawrence Livermore Laboratory that they are already planning to use are steam injection — which would force contaminants out of underground sites into a system that could recycle fuel from fuel spills — and the use of toxin-ingesting microorganisms, according to Petouhoff. Research has found both techniques to be faster than existing approaches. In the case of steam injection, Petouhoff said, it's 1[illegible] times faster.

The new approach will be funded through the Defense Department's Base Realignment and Closure Budget, assuming Congress approves the base closure list. Petouhoff said although there are some estimates as to the cost of cleaning up, the actual cost will not be known until the work actually begins.

"(The partnership) makes sense. Combining the resources of UC Berkeley with the Navy's resources makes sense," said Mayor Bill Withrow. "It means they're not going to study it to death. They'll get right in there with a shovel and start cleaning up."

Although the Navy has vowed to work with the city and the East Bay Conversion and Reinvestment Commission, Withrow is concerned that the city is not a part of the FFSRA. "The city of Alameda should be party to all agreements involving sites within the city," he said.

And while Withrow expressed confidence in the new approach he said he would rather see a separate agency oversee the cleanup process.

He said with a separate agency, Congress can ensure the money goes only to the cleanup,

Tour

continued from page 1

ing section, the majority of Hamilton is deserted and in growing disrepair, while different Marin County special-interest groups fight over its planned use.

According to Major, at NAS, what actual nuts, bolts, and machinery get left behind will depend on how quickly various city groups can come up with a concrete plan of action.

"Some people are betting me that the city can't do it — I'm betting that you can," he said.

The base includes 210 significant structures; 71 were built after 1991. These new buildings meet the toughest environmental standards in the nation, according to Major, who said he stays awake at night thinking [illegible] of Alameda, it could be fabu-

about the potential of the nontraditional buildings at NAS.

"Do you know the largest pizza joint in Alameda is located here at NAS, just a block away from a high school? We have a marina, a bowling alley, new tennis courts, an indoor pool, a gym, a bayside RV park, and 1,512 on- and off-base housing units," he said. "Picture what this place will look like without a fenceline and start thinking how your community can incorporate it. Hopefully, we can make this come out good."

As the tour bus returned to City Hall, one member of the Economic Development Commission said, "If this is done right, for the

Alameda Times-Star

CALIFORNIA'S BEST LITTLE DAILY NEWSPAPER, SERVING THE ISLAND CITY SINCE 1885

...da, California Saturday, August 21, 1993 ...15 cents

Cleanup for NAS a model for U.S.

Alameda will be a demonstration site for advanced environmental cleanup of military bases

By Susan Jackson
STAFF WRITER

Steam injection and pollutant-eating bacteria will be some of the technologies used in a multi-million dollar environmental cleanup project at Naval Air Station Alameda.

Navy officials have announced a partnership with the University of California to develop new technologies for removing toxins from the base. The plan was presented to President Bill Clinton during his visit to the base last week. As a result of the visit, NAS will be designated as a national demonstration site for environmental cleanup.

UC Berkeley researchers have been working with Lawrence Livermore and Lawrence Berkeley national laboratories to create new cleanup technology. This summer they have been using one of the methods, thermally enhanced remediation technology, to clean up a gasoline spill at Lawrence Berkeley. The project should be completed by the end of the summer.

In this technology, researchers inject steam into contaminated ground and then extract fluid and vapors. Some of the materials extracted will be recycled and others will be burned to power equipment on the site, according to Kent Udell, the UC Berkeley mechanical engineering professor who will be the principal investigator of the NAS cleanup project.

Another possible method for cleaning up years of dumping is using naturally occurring bacteria to counteract toxins, Udell said.

Initial cleanup efforts will probably be performed by UC researchers and professors, but once the systems are in

NAS: Cleanup will be a model for country

Continued from page A-1

place, blue-collar workers, in particular those now employed at NAS, could be employed in the cleanup process.

The Navy is investigating 20 toxic sites on the base, according to Lt. Mike Petouhoff, the environmental officer for the base. Navy officials are working with the California Environmental Protection Agency on the evaluation, a process Petouhoff expects will take two years. He hopes that the cleanup will begin before that. So do the people working on base conversion.

"Since the environmental cleanup activity is essential before any kind of reuse can be attained at that facility, it needs to happen on the fast track," said Sandre Swanson, who is district director for U.S. Rep. Ron Dellums, D-Oakland, and a member of the East Bay Conversion and Reinvestment Commission.

Swanson hopes that, when sites are cleaned up, they can immediately be turned over to the community for reuse.

If, as expected, NAS Alameda remains on the federal base closure list, cleanup funds will come out of federal Base Realignment and Closure funds, but Petouhoff said he could not put a price on the project. Udell said it would eventually cost millions of dollars to clean up the base.

APPENDIX E

NAS ALAMEDA COMMUNITY MAILING LIST

APPENDIX E

NAS ALAMEDA COMMUNITY MAILING LIST

NOTE: Except for those individuals officially affiliated with an agency, private citizens are not listed in this document to protect their privacy; however, these individuals will receive mailings as part of a comprehensive mailing list that is maintained separately from this community relations plan.

NAVAL AIR STATION ALAMEDA
ENVIRONMENTAL PROGRAM
MAILING LIST

The following is a partial mailing list. For the complete mailing list, please contact the NAS Alameda Environmental Offic

Earthshare of CA
116 New Montgomery, #800
San Francisco, CA 94105

ARC Ecology
833 Market St., #1107
San Francisco, CA 94103

Sierra Club
923 - 12th Street, #200
Sacramento, CA 95814

Environmental Defense Fund
Rockridge Market Mall
5655 College Ave.
Oakland, CA 94618

Sacramento Valley Tox. Campaign
1912 F Street, #100
Sacramento, CA 95814

Environmental Health Coalition
1717 Kettner Blvd., #100
San Diego, CA 92101

CA Council for Env. & Economic Bal.
100 Spear Street, #805
San Francisco, CA 94105

Center for Community Action
and Environmental Justice
P.O. Box 33124
Riverside, CA 92519

CALPIRG
926 J. Street, #713
Sacramento, CA 95814

Sierra Club
730 Polk St.
San Francisco, CA 94102

Citizens for a Better Env.
501 Second St., #305
San Francisco, CA 94107

Toxics Assessment Group
P.O. Box 73620
Davis, CA 95617

League of Women Voters
521 Guadalupe Dr.
Lost Altos, CA 94022

Greenpeace
139 Towsend St., 4th floor
San Francisco, CA 94107

Clean Water Action
944 Market St., #600
San Francisco, CA 94102

Mayor of the
City of Alameda
2263 Santa Clara Avenue
Alameda, CA 94501

Desert Citizens Against Pollution
3813 50th Street West
Rosamond, CA 93560

The Bay Institute of SF
625 Grand Ave., #250
San Rafael, CA 94901

ARRA
Naval Air Station, Alameda
Building 90
Alameda, CA 94501-5012

EBCRC
530 Water St., 5th Floor
Oakland, CA 94607

Alameda Police Chief
1555 Oak
Alameda, CA 94501

Superintendent, Alameda Schools
2200 Central Avenue
Alameda, CA 94501

EDAW
753 Davis St.
San Francisco, CA 94111

ACET/EDAB
Alameda City. Economic Development
1221 Oak Street #555
Oakland, CA 94612

Executive Director
Alameda Chamber of Commerce
2447 Santa Clara Ave. #302
Alameda, CA 94501

Park Street Business Association
2447 Santa Clara Ave., #302
Alameda, CA 94501

West End Business Association
P.O. Box 215
Alameda, CA 94501

Greater Alameda Business Assoc.
P.O. Box 2892
Alameda, CA 94501

Alameda Bus. and Prof. Women
P.O. Box 2831
Alameda, CA 94501

Isle City Business
and Professional Women
1309 Broadway # C
Alameda, CA 94501

American Assoc. of Univ. Women
P.O. Box 2932
Alameda, CA 94501

Ballena Isle Marina
1150 Ballena Blvd, #111
Alameda, CA 94501

Alameda Board of Realtors
2420 Webb Avenue
Alameda, CA 94501

Beachcomber Condo. Home. Assoc.
1170 Ninth Street
Alameda, CA 94501

Casitas Alameda Homeowners
1040 Verdemar Dr.
Alameda, CA 94502

Gallagher & Lindsay Inc. Realtors
2424 Central Ave.
Alameda, CA 94501

Alameda West Lagoon Home. Assoc.
P.O. Box 1044
Alameda, CA 94501

Alameda Alliance of Homowners
P.O. Box 4020
Alameda, CA 94501

Bay Farm Island Improve. League
P.O. Box 1606
Alameda, CA 94501

President
League of Women Voters
1212 Broadway, #830
Oakland, CA 94612

Lions Breakfast Club
1547 Webster St.
Alameda, CA 94501

Rotary Club of America
2510 Santa Clara Ave.
Alameda, CA 94501

st Bay Coalition for a
militarized Bay
6348 Heather Ridge Way
Oakland, CA 94611

Bay Institute
5080 Paradise Dr.
Tiburon, CA 94920

Golden Gate Audubon Society
2530 San Pablo Ave. STE. G
Berkeley, CA 94702

Aquatic Habitat Institute
1301 - 46th St.
Richmond Field Sta., Bldg 1
Richmond, CA 94804

Bay Area Peace Navy
52 Dardel Place #2
San Francisco, CA 94133

CISPES
3181 Mission St., Box 20
San Francisco, CA 94110

United Press I'ntl.
451 Hayes St., Suite 3
San Francisco, CA 94102

Wildlife Committee
5237 College Ave.
Oakland, CA 94618

Save San Francisco Bay
1736 Franklin St., 3rd floor
Oakland, CA 94612

Coordinator
The Northcoast Env. Center
879 - 9th St.
Arcata, CA 95521

Bay Area Council
200 Pine St., #300
San Francisco, CA 94104-2702

Women's International League
for Peace Freedom
2302 Elsworth
Berkeley, CA

Mayor of the
City of Berkeley
2180 Milvia Street
Berkeley, CA 94704

Mayor of the
City of San Leandro
835 - E. 14th St.
San Leandro, CA 94577

Mayor of the
City of San Francisco
400 Van Ness Avenue, #200
San Francisco, CA 94102

Mayor of the
City of Richmond
2600 Barrett Avenue
Vallejo, CA 94804

Senator Diane Feinstein
1700 Montgomery St, #305
San Francisco, CA 94111

Senator Barbara Boxer
1700 Montgomery St., #240
San Francisco, CA 94111

Congressman George Miller
7th District
367 Civic Dr., #14
Pleasant Hill, CA 94523

Congressman Pete Stark
13th District
22320 Foothill Blvd., #500
Hayward, CA 94541

Congresswoman Nancy Pelosi
8th District
450 Golden Gate Avenue
San Francisco, CA 94102

Governor Pete Wilson
State of California
1st Floor, Capitol Bldg
Sacramento, CA 95814

Lt. Governor Leo McCarthy
State of California
1114 State Capitol
Sacramento, CA 95814

Congressman Ron Dellums
9th District
1301 Clay St., #1000 N
Oakland, CA 94604

Tom Bates, 14th Dist.
California State Assembly
3923 Grand Ave.
Oakland, CA 94610-1005

Carole Migden, 13th Dist.
California State Assembly
1388 Sutter St., #1002
San Francisco, CA 94109

S.F. Bay Conservation and
Development Commission
Alan Pendleton, Exec. Dir.
30 Van Ness Ave., #2011
San Francisco, CA 94102

John Burton, 12th Dist.
California State Assembly
455 Golden Gate Ave., #2202
San Francisco, CA 94102

Robert Campbell, 11th Dist.
California State Assembly
815 Estudillo St.
Martinez, CA 94553

Delaine Eastin, 20th Dist.
California State Assembly
39650 Liberty St., #160
Fremont, CA 94538

Johan Klehs, 18th Dist.
California State Assembly
2450 Washington Ave., #270
San Leandro, CA 94577

Barbara Lee, 16th Dist.
California State Assembly
1440 Broadway, #810
Oakland, CA 94612

Richard Rainey, 15th Dist.
California State Assembly
1948 Mt. Diablo Blvd.
Walnut Creek, CA 94596

Quentin Kopp, 8th Dist.
California State Senate
363 El Camino Real, #205
S. San Francisco, CA 94080

Bill Lockyer, 10th Dist.
California State Senate
22634 Second St., #104
Hayward, CA 94541

Nicholas Petris, 9th District
California State Senate
1970 Broadway, #1030
Oakland, CA 94612

Association of Bay Area Governments
P.O. Box 2050
Oakland, CA 94604

Professor Kent Udell
Environmental Rest. Lab
Dept. of Mech. Engineers
University of California
Berkeley, CA 94720

Kathleen Kirkwood
Alameda Times Star
66 Jack London Sq.
Oakland, CA 94607

Philippine News
156 Spruce Ave., #207
So. San Francisco, CA 94080

Brad Mohler
Alameda Journal
1416 Park Ave.
Alameda, CA 94501

City Editor
Asian Week
809 Sacramento
San Francisco, CA 94108

S.F. Chronicle
East Bay Bureau
827 Broadway, #340
Oakland, CA 94607

The Oakland Tribune
P.O. Box 28884
Oakland, CA 94607

Contra Costa Times
P.O. Box 5088
Walnut Creek, CA 94596

News Director
KRON TV-4
P.O. Box 3412
San Francisco, CA 94119

News Director
KPIX TV-5
855 Battery Street
San Francisco, CA 94130

S.F. Examiner
Oakland Bureau
1221 Oak
Oakland, CA 94612

News Director
KDTV TV-14
2200 Palou Ave.
San Francisco, CA 94124

News Director
TCI Cable of Alameda
2061 Challenger
Alameda, CA 94501

News Director
KGO TV-7
900 Front St.
San Francisco, CA 94130

News Director
KGO Radio
900 Front St.
San Francisco, CA 94111

News Director
KMEL Radio
55 Francisco, #400
San Francisco, CA 94133

News Director
KCBS Radio
1 Embarcadero Center
Suite 32
San Francisco, CA 94111

News Director
KNEW Radio
750 Battery, #200
San Francisco, CA 94111

Holly Quan-KQED Radio
2601 Mariposa St.
San Francisco, CA 94110

News Director
KNBR Radio
55 Hawthorne St., 11th floor
San Francisco, CA 94105

Associated Press
P.O. Box 7247
San Francisco, CA 94124

Bay City News Service
Fox Plaza, Suite 324
1300 Market Street
San Francisco, CA 94102

News Director
KSFO/KYA Radio
300 Broadway
San Francisco, CA 94133

APPENDIX F

SUGGESTED PUBLIC MEETING LOCATIONS

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SUGGESTED PUBLIC MEETING LOCATIONS

1. NAS Alameda Officer's Club
   Building 80
   NAS Alameda
   Alameda, California 94501-5000
   510/263-3225

   *No gate pass necessary to access building.

2. Bachelor Officer's Quarters (BOQ)
   NAS Alameda
   Alameda, California 94501
   510/263-3649

   *Gate pass necessary to access building.

3. College of Alameda
   555 Atlantic Avenue
   Alameda, California 94501
   510/748-2235

4. Miller School
   250 Singleton Avenue
   Alameda, California 94501
   510/748-4011

Other Alameda schools are also available as meeting locations for a minimal cost. Contact the Alameda Unified School District at 510/337-7028 for more information.

APPENDIX G

NAS ALAMEDA ENVIRONMENTAL FACT SHEETS

NAVAL AIR STATION ALAMEDA

FACT SHEET #1: REMEDIAL INVESTIGATION/ FEASIBILITY STUDY UPDATE

MARCH 1990

INTRODUCTION

In the early 1980s, the U.S. Navy began investigating potential contamination of the environment from past use of hazardous materials at the Naval Air Station (NAS) in Alameda, California. These investigations identified 20 sites with actual or potential contamination on the NAS Alameda property.

This fact sheet explains the Navy's Installation Restoration (IR) Program, under which cleanup activities are conducted; discusses the contamination problems at the sites; summarizes proposed sampling work to be conducted starting this spring at NAS Alameda and future activities planned; discusses potential health risks from the contaminants; and announces an upcoming public meeting on April 3, 1990.

INSTALLATION RESTORATION (IR) PROGRAM

The IR program is the U.S. Department of Defense's effort to identify and clean up environmental contamination at all U.S. military installations across the country. The IR program complies with all State and Federal laws regarding cleanup of hazardous waste sites. Since 1980, the Navy has been actively involved in the IR program and has taken an aggressive approach to the problem of hazardous waste sites at Navy installations.

The IR process involves seven steps, as illustrated in Exhibit 1. At NAS Alameda, the first two steps -- the **Preliminary Assessment/Site Inspection** and **Scoping/Planning** -- have been completed. The next major milestone will be the completion of the **Remedial Investigation/Feasibility Study (RI/FS).**

The California Department of Health Services (DHS) is the lead regulatory agency for the IR cleanup at NAS Alameda. The Department ensures that all cleanup activities continue to comply with State and Federal laws.

OPPORTUNITIES FOR COMMUNITY INVOLVEMENT

Community Meeting

You are invited to attend a public meeting regarding hazardous waste investigations at NAS Alameda.

Tuesday, April 3, 1990
7:30 p.m.
Alameda High School Little Theatre
2200 Central Avenue
Alameda, California

At the meeting, the Navy and California Department of Health Services will discuss upcoming site activity.

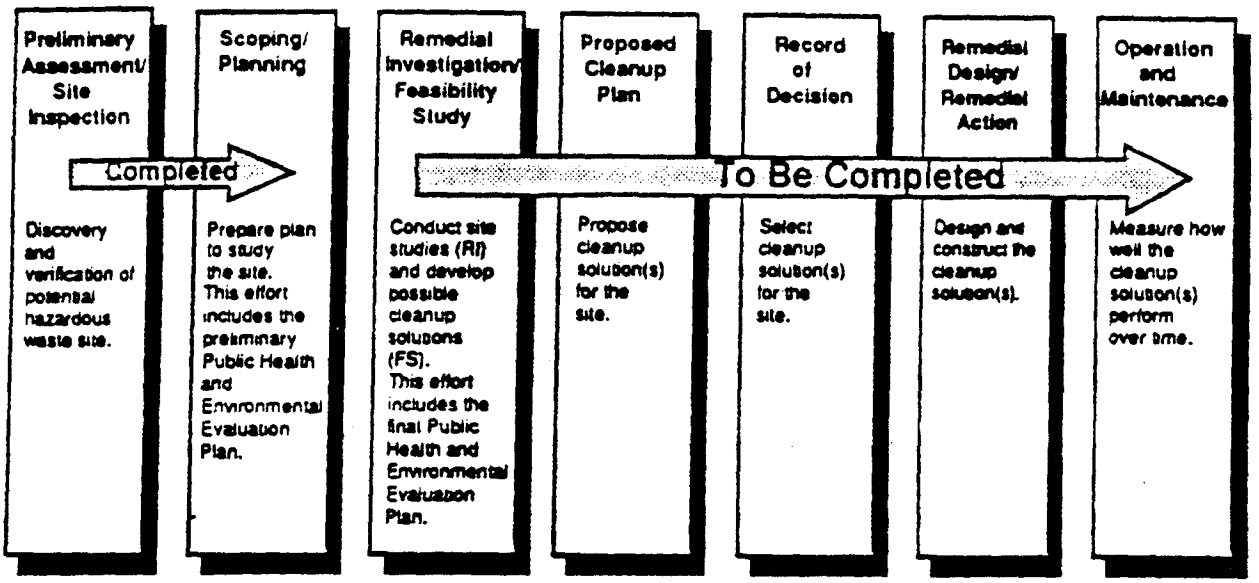
SITE OVERVIEW

NAS Alameda is located at the west end of the island of Alameda, in Alameda and San Francisco Counties, California. Alameda occupies 2,634 acres and is approximately two miles long and one mile wide. Most of the eastern portion of the Air Station has been developed with offices and industrial facilities, while runways and support facilities occupy the western part.

Hazardous waste contamination at NAS Alameda is the result of numerous routine operations conducted at the facility between the 1940s and late 1970s, a period when relatively little was known about the impacts of hazardous materials and when stringent Federal and State hazardous waste disposal regulations were not in effect. Typical NAS Alameda operations during this time included metal plating; paint removal; aircraft maintenance, fueling and engine testing; vehicle fueling; pest control; missile reworking; operation of a power plant and a fire station; and waste disposal at two landfill sites on base.

Exhibit 1

NAS ALAMEDA SITE STUDY AND CLEANUP PROCESS



In 1980, under its IR program, the Navy began to identify, assess, and control contamination resulting from past practices at NAS Alameda. During the first phase of this program, the Navy investigated 12 sites believed to be potential areas of contamination, and recommended seven of these sites for further study.

In May 1985, the Navy completed the second phase of the program for these seven sites. During this investigation, sampling and analysis of soils and groundwater at each of the seven sites was conducted. This study found that four of the seven sites had contaminant concentrations high enough to warrant additional investigation. These four sites include the 1943-1956 Disposal Area, the West Beach Landfill, Area 97, and Building 360, identified in Exhibit 2 as Sites 1 - 4 respectively. Sixteen other sites within the facility were identified during this investigation. Studies to determine the extent of contamination and develop cleanup solutions for the twenty identified sites will start in Spring 1990.

The known or suspected contaminants that have been identified to date include heavy metals; aviation fuel; organic compounds, including benzene, toluene, and xylene; plating chemicals; solvents; paint; pesticides; oil and grease; and polychlorinated biphenyls (PCBs).

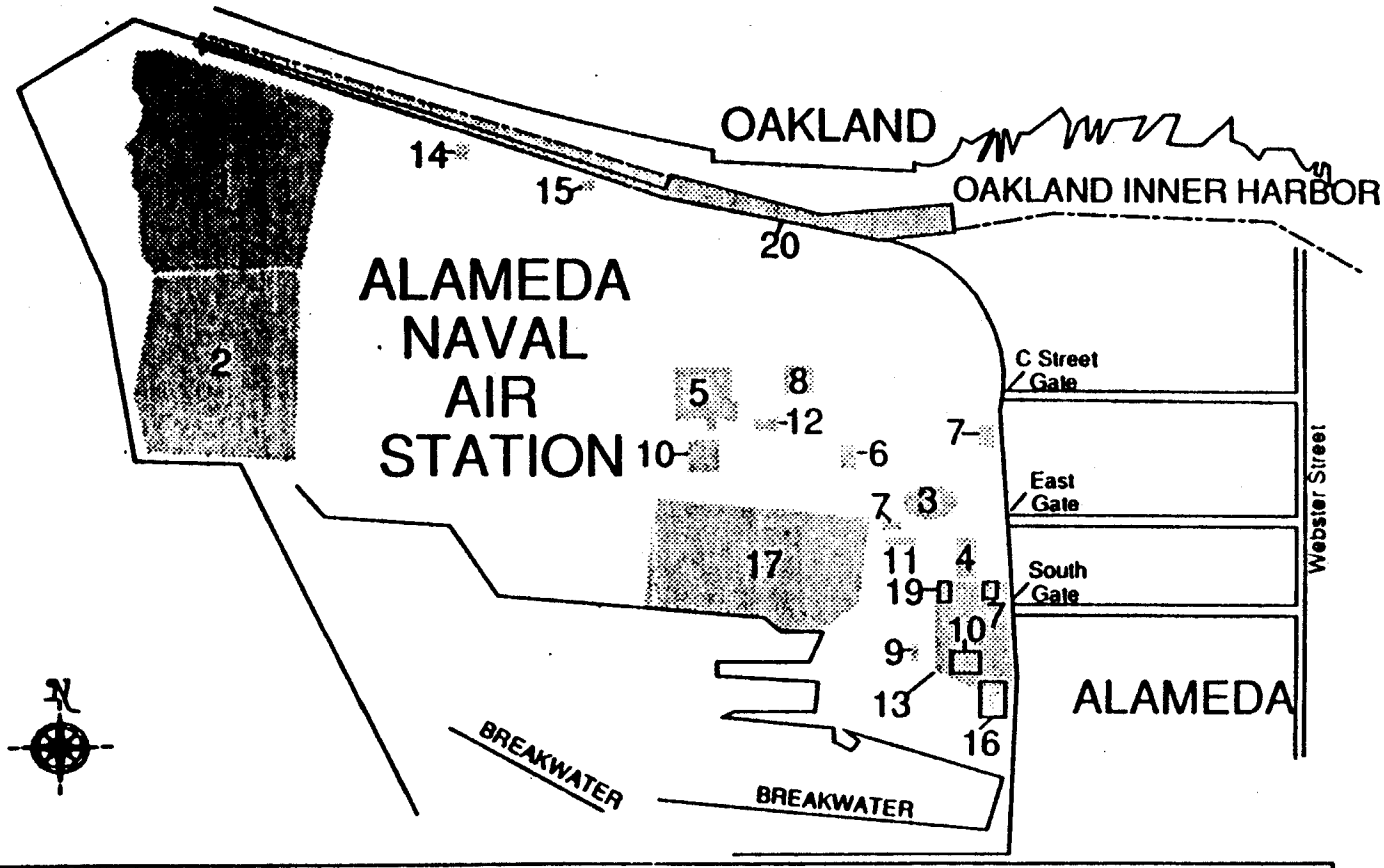
POTENTIAL HEALTH RISKS FROM CONTAMINATION

A preliminary Public Health and Environmental Evaluation (PHEE) Plan was prepared for NAS Alameda in June 1989. A preliminary PHEE is performed to identify the ways in which a person can come in contact with contaminants at a site and to determine what data must be collected during the Remedial Investigation (RI) to estimate the potential health risks of exposure to these contaminants.

A final PHEE will be conducted after all the data are collected during the RI. The results of this study will then be used in evaluating cleanup alternatives to identify which are protective of public health and the environment. Exhibit 1 demonstrates how the preliminary PHEE Plan and the final PHEE Plan fit into the overall cleanup strategy at NAS Alameda.

At this time, there are no data that can be used to quantify potential human health risks that may be posed by contaminants at NAS Alameda. Those data will be collected during the RI. If evidence of health threats are discovered at any point during the RI, the Navy will take all necessary steps to protect the public health.

Exhibit 2
NAS Alameda Site Map



LEGEND

SITES CURRENTLY UNDER INVESTIGATION

1. 1943-1956 Disposal Area
2. West Beach Landfill
3. Area 97
4. Building 360
5. Building 5
6. Building 41
7. Buildings 162, 459, 547
8. Building 114
9. Building 410
10. Buildings 400 and 530
11. Building 14
12. Building 10
13. Oil Refinery
14. Fire Training Area
15. Buildings 301 and 389
16. Cans C-2 Area
17. Seaplane Lagoon
18. Station Sewer System (not on map)
19. Yard D-13
20. Estuary

UPCOMING SITE SAMPLING

The California Department of Health Services (DHS) is expected to approve NAS Alameda's Work Plans for a Remedial Investigation and Feasibility Study (RI/FS) by the end of March 1990. These studies will determine if soil or groundwater is contaminated in areas identified as potential waste release sites. In addition, the investigation will:

- Determine the nature and extent of hazardous substances in the air, soil, surface water, and groundwater at the site;

- Identify directions in which the contaminants may travel;

- Determine the probability and extent of any potential threat to public health and the environment from the contamination;

- Identify and evaluate appropriate cleanup actions to prevent future contaminant releases and to clean up any releases that have occurred already; and

- Collect and evaluate the information necessary to prepare a cleanup plan in accordance with appropriate State and Federal regulations.

As part of this RI/FS, soil and groundwater samples will be taken at the site beginning in Spring 1990. The sampling program will proceed in several stages. Initially, sampling at NAS Alameda will include approximately 100 groundwater monitoring wells and 200 soil borings. Monitoring wells will be sampled at intervals to check groundwater for contamination. Each soil boring will be used to obtain about five soil samples for laboratory analysis.

The number of samples taken at each of the twenty sites under study will vary considerably, depending on the nature of contamination and the size of the particular site. For example, Site 10A is a missile rework operations building that was used for electrical maintenance, welding, and painting. Its area is relatively small, and activities at the building were confined to a specific area. At that Site, approximately three monitoring wells will be installed, and four soil borings will be taken (see Exhibit 3).

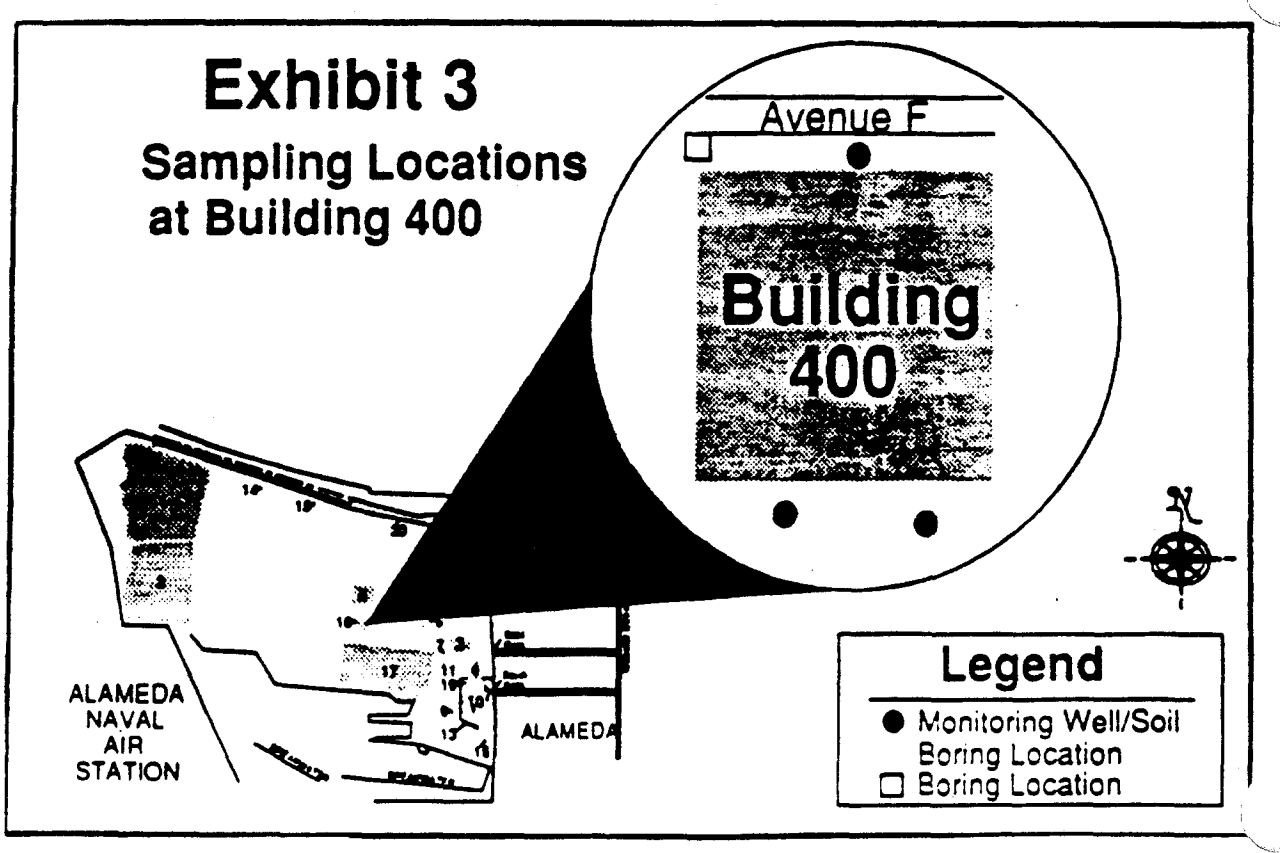
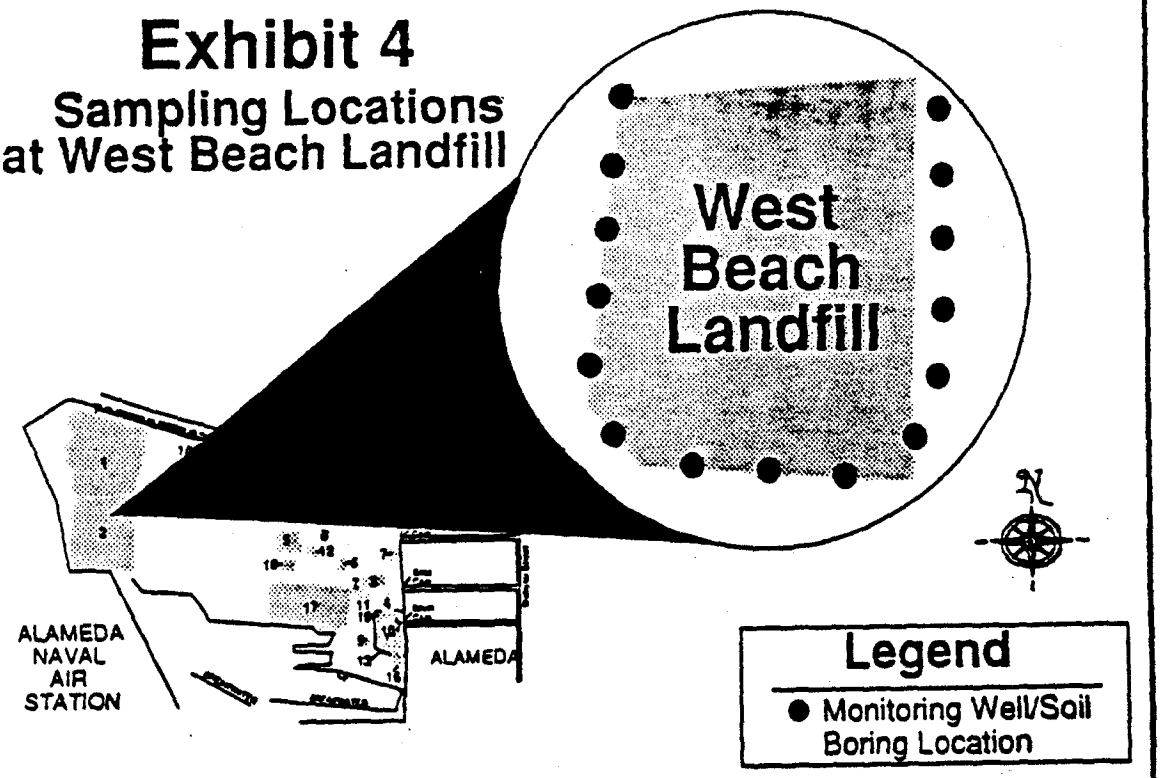


Exhibit 4

Sampling Locations at West Beach Landfill



At Site 2, the West Beach Landfill, more sampling is necessary because of the size of the area and the nature of the contamination. The Landfill covers approximately 110 acres, and was used to dispose of refuse and hazardous wastes for a period of twenty years, from 1958 to 1978. Investigators will begin to characterize contamination at the Landfill by installing approximately fifteen monitoring wells and taking an equal number of soil borings (see Exhibit 4).

These initial samples will determine what additional sampling information is needed, and will point to appropriate cleanup strategies that should be considered for particular sites. As the sampling and analysis proceeds, NAS Alameda, in cooperation with the Department of Health Services, will analyze the various cleanup alternatives and produce a draft site cleanup plan for public comment.

MAILING LIST

If you **did not receive** this fact sheet in the mail, and would like to be placed on the NAS Alameda site mailing list, **please fill** out this coupon and return to **Virginia Felker-Thorpe, NAS Alameda** (address on back cover).

NAME: _____

ADDRESS: _____

CITY/STATE: _____

ZIP CODE: _____

TELEPHONE (optional): _____

FOR MORE INFORMATION

This fact sheet is part of the on-going community relations program to keep individuals informed of cleanup activities at NAS Alameda. In October and November 1988, interviews were conducted in Alameda with residents and local officials to gather input for the site's community relations plan. In addition, a public meeting to discuss the site was held on September 26, 1988, and an information release was sent to NAS Alameda departments and tenant activities in January 1990 to update them on site activities.

If you have any questions about the upcoming investigations at NAS Alameda, please contact:

Virginia Felker-Thorpe
Public Affairs Officer
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Building 1, Room 161
Alameda, CA 94501-5000
(415) 263-3079

or

Randy Cate
Environmental Officer (Code 52)
NAS Alameda
Building 114, Room 207
Alameda, CA 94501-5000
(415) 263-3716

Copies of the community relations plan and all site-related documents are available at the information repository in Alameda:

Alameda Public Library
Main Branch
2264 Santa Clara Avenue
Alameda, California 94501
(415) 522-5413

HOURS	
Monday & Wednesday	9:30 a.m. - 9:00 p.m.
Tuesday, Thursday, Friday & Saturday	9:30 a.m. - 5:30 p.m.
Sunday	Closed

Virginia Felker-Thorpe
Public Affairs Office
NAS Alameda
Alameda, CA 94501-5000

NAVAL AIR STATION (NAS) ALAMEDA

FACT SHEET # 2: REMEDIAL INVESTIGATION/ FEASIBILITY STUDY UPDATE

SEPTEMBER 1990

START OF FIELD WORK FOR NAS ALAMEDA REMEDIAL INVESTIGATION:

Field work for the NAS Alameda Remedial Investigation began in April 1990 following approval of the planning documents and the Remedial Investigation/Feasibility Study (RI/FS) schedule by the California Department of Health Services. The purpose of the Remedial Investigation is to characterize potential soil and groundwater contamination at twenty sites at NAS Alameda. The Feasibility Study will evaluate remediation alternatives for each site.

The schedule has been divided into eight phases with each phase having particular tasks and activities. The RI/FS is scheduled to take two years to complete with the expected completion date in May 1992. A copy of the schedule is available in the information repository in the Alameda Main Library at the corner of Oak and Santa Clara Streets.

BACKGROUND INFORMATION ON PHASE 1 SITES:

Phase 1 sites include the 1943-1956 Landfill, the West Beach Landfill, and a part of the Oil Refinery Area, a former project site for a new Air Intermdediate Maintenance Facility hangar that was found to be contaminated in the fall of 1989. Please refer to the site map on page 5 of this Fact Sheet for the locations of all of the sites under investigation.

The 1943-1956 Landfill was used for disposing aircraft engines, scrap metal, construction debris, as well as hazardous waste from 1943-1956. This area is located on the northwestern corner or the Station with a total area of approximately 120 acres.

The West Beach Landfill was used for disposal of municipal garbage and hazardous waste between 1958 and 1978. This area is located on the southwestern corner of the Station with a total area of approximately 110 acres.

Both landfills are scheduled to have a Solid Waste Assessment Test (SWAT) to be performed in Phases 5 and 6, which consists of numerous soil borings, encircling the landfills with monitoring wells, and conducting air sampling. The main purpose of the SWAT is to determine whether hazardous waste is leaching into San Francisco Bay. The Phase 1 field work in the landfill areas includes performing a radiation survey, surface soil sampling, air monitoring (to be included in the

SWAT), and drilling exploratory soil borings. The exploratory soil borings will serve to provide background geotechnical information for the planning of monitoring well installation for the SWAT which is planned to be started in late 1990.

The Oil Refinery Area is located in the southeastern corner of the Air Station. The former site for a new Air Intermediate Maintenance Facility, located just south of Building 397, was found to have significant soil contamination with petroleum hydrocarbons in the fall of 1989. A considerable amount of soil and groundwater sampling has already been completed at this site. An additional exploratory soil boring was planned for this site under Phase 1.

SUMMARY OF PHASE 1 FIELD WORK COMPLETED IN APRIL - JUNE 1990:

An air sampling program was completed in the 1943-1956 Landfill and the West Beach Landfill areas; background air sampling and monitoring was also done at the Oil Refinery Site and residential areas at NAS Alameda;

Utility clearance, location, marking, and drilling of exploratory soil borings was completed in the 1943-1956 Landfill, the West Beach Landfill, and the Oil Refinery Site;

A radiation survey was completed at the 1943-1956 Landfill and the West Beach Landfill areas;

Surface soil sampling was completed in the 1943-1956 Landfill area.

Surveying was performed for both Phase 1 exploratory boring and surface soil sampling locations and elevations;

Movement of the Phase 1 soil boring waste barrels from the landfill boring locations to the Navy-designated storage area near the Perimeter Road Pistol Range was completed.

SUMMARY OF PHASE 1 LAB DATA SUBMITTED IN AUGUST 1990:

The following Phase 1 lab data was submitted to Western Division, Naval Facilities Engineering Command personnel during August 1990:

Lab Data	Date of Submittal
Phase 1 Background Air Sampling Results	6 August 1990
Phase 1 Analytical Results for Metals, Pesticides/PCBs, and Semivolatile Organics For Surface Soil Samples at the 1943-1956 Landfill Area	9 August 1990

Lab Data	Date of Submittal
Phase 1 Boring Logs and Site Plan (submitted to the Alameda County Flood Control and Water Conservation District under Permit No. 90227)	22 August 1990
Phase 1 Boring Logs and Geotechnical Test Results	22 August 1990
Phase 1 Laboratory Analyses on soil Samples (1943-1956 Landfill Area, West Beach Landfill, and Oil Refinery Area)	27 August 1990

A summary of all data collected as a result of the Phase 1 field work will be available in the Alameda information repository in October 1990.

BACKGROUND INFORMATION ON PHASE 2A SITES:

The sites under investigation in Phase 2A of the Remedial Investigation are all located close to the Oil Refinery Area near the southeastern corner of the Air Station extending north up to the east gate. These sites include Building 360, Building 547, Yard D-13, Building 410, Building 530, the Oil Refinery Area, the CANS C-2 Area, and Area 97. The Phase 2A sites have been prioritized for investigation because of known contamination at the Oil Refinery Area, Area 97, and Building 360, as well as the proximity of these sites to nearby residential areas east of the base boundary.

Building 360 is known to have soil contamination beneath the floor of the plating shop. Other areas of concern include the engine cleaning shop, and the paint shop.

Building 547 is a gasoline station no longer being used which has several underground storage tanks for gasoline which may have leaked in the past.

Yard D-13 is a hazardous waste storage area for the Naval Aviation Depot, Alameda, which is currently in use.

Building 410 is an inactive Naval Aviation Depot, Alameda paint stripping hangar.

Building 530 is a Naval Aviation Depot, Alameda building which is used for missile rework operations.

The Oil Refinery Area is a former disposal area for refinery waste and asphalt-type residue used by the Pacific Coast Oil Refinery from 1879 to 1903.

The CANS C-2 Area is an area currently used for storing equipment. This area had a PCB transformer leak in 1982 and had PCBs sprayed for

weed control until 1963.

Area 97, located near the east gate of the Air Station, is the former site of five large partially underground storage tanks for aviation gasoline which had leaks into the soil and groundwater.

SUMMARY OF PHASE 2A FIELD WORK COMPLETED IN JUNE - AUGUST 1990:

Fifty-five soil borings and thirty-one monitoring wells were completed at the Phase 2A sites.

Soil gas surveys were completed for Area 97 (121 survey points) and Building 547 (62 survey points).

Water sampling was completed for thirty out of thirty-one monitoring wells at the Phase 2A sites.

Surface soil sampling was completed in the CANS C-2 Area.

Surveying was completed for 151 out of a total of 324 locations in the soil gas surveys, surface soil sampling, soil borings, and monitoring well installations.

A summary of all data collected as a result of the Phase 2A field work will be available at the Alameda information repository in November 1990.

For More Information

This fact sheet is part of the on-going community relations program to keep individuals informed of cleanup activities at NAS Alameda. If you have any questions on any items discussed in this information release, please contact:

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Coordinator
California Department
of Health Services
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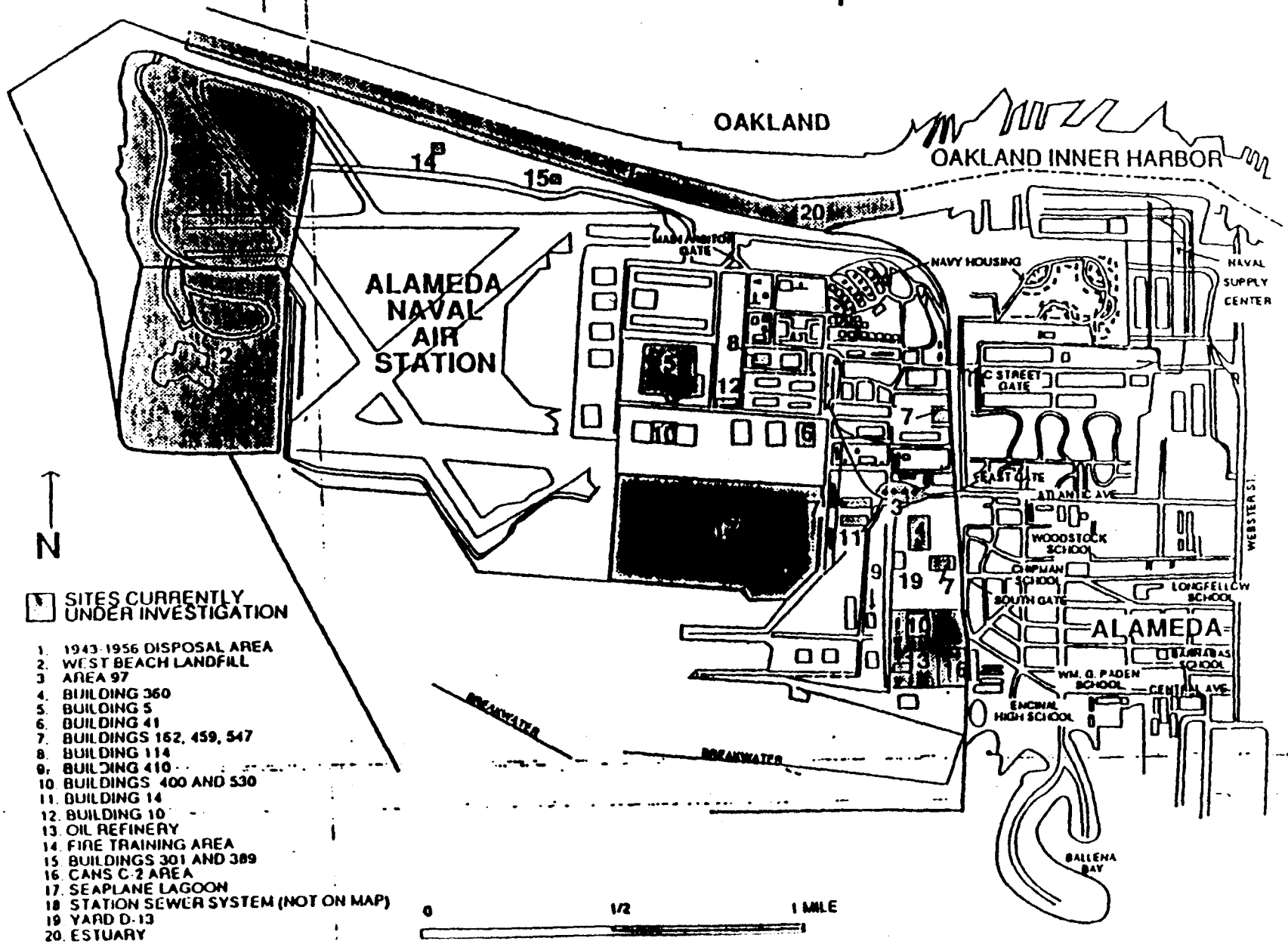
Site Map


OAKLAND
OAKLAND INNER HARBOR
ALAMEDA NAVAL AIR STATION
NAVY HOUSING
NAVAL SUPPLY CENTER
C STREET GATE
ATLANTIC AVE
WOODSTOCK SCHOOL
LONGFELLOW SCHOOL
SOUTH GATE
ALAMEDA
WM. G. PADEN SCHOOL
CENTRAL AVE
ENCINAL HIGH SCHOOL
WEBSTER ST
BREAKWATER
BREAKWATER
BALLENA BAY
N
SITES CURRENTLY UNDER INVESTIGATION
1. 1943-1956 DISPOSAL AREA
2. WEST BEACH LANDFILL
3. AREA 97
4. BUILDING 360
5. BUILDING 5
6. BUILDING 41
7. BUILDINGS 162, 459, 547
8. BUILDING 114
9. BUILDING 410
10. BUILDINGS 400 AND 530
11. BUILDING 14
12. BUILDING 10
13. OIL REFINERY
14. FIRE TRAINING AREA
15. BUILDINGS 301 AND 389
16. CANS C-2 AREA
17. SEAPLANE LAGOON
18. STATION SEWER SYSTEM (NOT ON MAP)
19. YARD D-13
20. ESTUARY
0
1/2
1 MILE

Virginia Felker-Thorpe
Public Affairs Office
Naval Air Station
Alameda, CA 94501-5000

NAVAL AIR STATION ALAMEDA

FACT SHEET #3: REMEDIAL INVESTIGATION/ FEASIBILITY STUDY UPDATE

MAY 1991

INTRODUCTION

Since the early 1980s, the U.S. Navy has been investigating potential contamination of the environment from past use of hazardous materials at the Naval Air Station (NAS) in Alameda, California. These investigations are being conducted under the U.S. Department of Defense's Installation Restoration (IR) program, overseen by the California Department of Health Services (DHS) and the California Regional Water Quality Control Board (RWQCB). Investigations have identified 20 sites with actual or potential contamination on the NAS Alameda property.

NAS Alameda began sampling soil and groundwater at these 20 sites in spring 1990 to determine the nature and extent of the contamination problems. This fact sheet summarizes the progress that has been made in sampling work at NAS Alameda; the results of the work that has been done; the results of the preliminary public health evaluation; and the future activities that are planned for further investigation and cleanup of the site.

SITE OVERVIEW

NAS Alameda is located at the west end of the island of Alameda, in Alameda and San Francisco Counties, California. NAS Alameda occupies 2,634 acres and is approximately two miles long and one mile wide. Most of the eastern portion of the Air Station has been developed with offices and industrial facilities, while runways and support facilities occupy the western part. (See Exhibit 2).

Hazardous waste contamination at NAS Alameda is the result of numerous routine operations conducted at the facility between the 1940s and late 1970s. This was a period when relatively little was known about the impacts of hazardous materials and when stringent federal and State hazardous waste disposal regulations were not in effect. Typical NAS Alameda operations during this time included metal plating; paint removal; aircraft maintenance, fueling and engine testing; vehicle fueling; pest control; missile reworking; operation of a power plant and a fire station; and waste disposal at two landfill sites on base.

The known or suspected contaminants that have been identified to date include heavy metals; aviation fuel; organic compounds, including benzene, toluene, and xylene; plating chemicals; solvents; paint; pesticides; oil and grease; and polychlorinated biphenyls (PCBs). The preliminary studies indicate that none of the identified sites poses an immediate threat to public health. NAS Alameda has distributed a fact sheet to workers on the base that gives details on the areas of contamination and proper safety procedures to avoid exposure to contaminated materials.

THE INSTALLATION RESTORATION (IR) PROGRAM

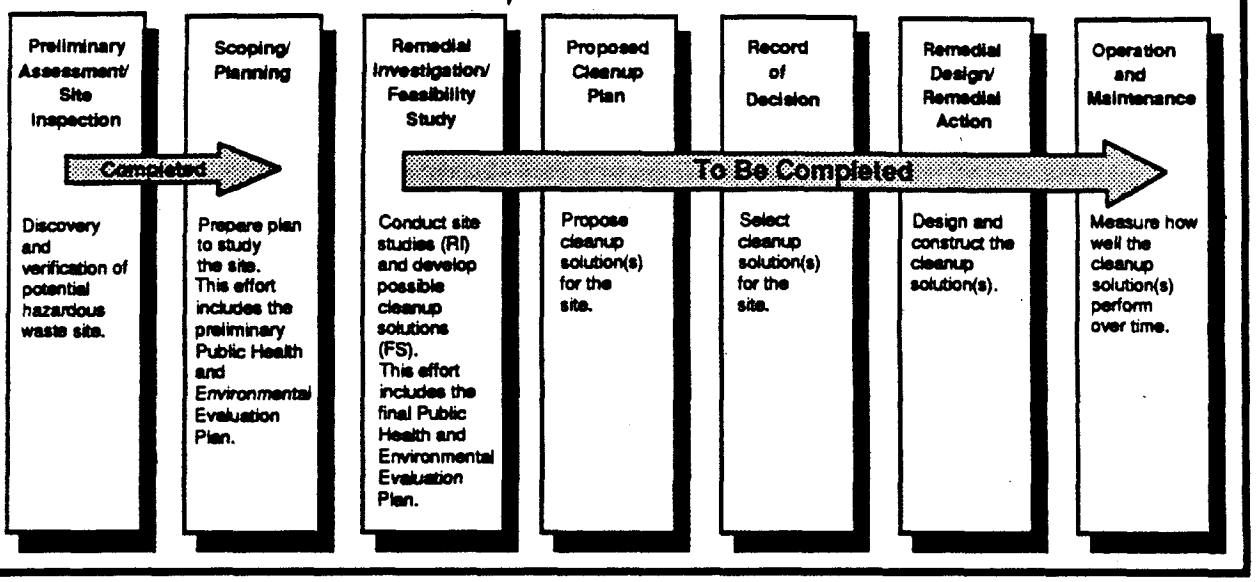
The IR program is the U.S. Department of Defense's effort to identify and clean up environmental contamination from past operations at all U.S. military installations across the country. The IR program complies with all State and federal laws regarding cleanup of hazardous waste sites. Since 1980, the Navy has been actively involved in the IR program and has taken an aggressive approach to addressing the problem of hazardous waste sites at Navy installations nationwide.

The IR process involves seven steps, as illustrated in Exhibit 1. At NAS Alameda, the first two steps -- the Preliminary Assessment/Site Inspection and Scoping/Planning -- have been completed. The next major milestone will be the completion of the Remedial Investigation and Feasibility Study (RI/FS). The RI/FS serves to determine the extent of soil or groundwater contamination in areas identified as potential waste release sites.

The California Department of Health Services (DHS) is the lead regulatory agency for the IR cleanup at NAS Alameda. DHS reviews work plans and reports and meets with the Navy to ensure that all cleanup activities continue to comply with State and federal laws.

Exhibit 1

NAS ALAMEDA SITE STUDY AND CLEANUP PROCESS



PROGRESS ON SITE SAMPLING TO DATE

Sampling at NAS Alameda began in March 1990. Phase 1 and Phase 2A of the RI/FS have been completed. The results of these studies are expected to be released in June 1991.

Phase 1 investigations focused on the 1943-1956 Disposal Area and the West Beach Landfill (Numbers 1 and 2 on Exhibit 2). Included among the activities was the initiation of the Solid Waste Assessment Test (SWAT). The SWAT has two purposes: to check for the presence of landfill contaminants in groundwater underneath the landfills that may be moving away from the area and spreading the contamination, and to check for possible emissions of landfill gases to the air. The SWAT is being performed to fulfill the requirements of the California Regional Water Quality Control Board and the Bay Area Air Quality Management District.

Phase 1 activities for the two landfill areas also included radiation surveying, surface soil sampling, air sampling, deep exploratory borings, laboratory chemical analysis of air and soil samples, geotechnical testing, and surveying.

Phase 2A investigations covered Building 360, Building 547, Building 410, Building 530, the Cans C-2 area, the Oil Refinery area, Yard D-13, and Area 97 (Numbers 4, 7, 9, 10, 16, 13, 19, and 3 on Exhibit 2, respectively). Work included 55 soil borings, 31 monitoring wells, soil gas surveying, air sampling, ground water sampling, laboratory chemical analysis on soil, air, and ground water samples, geotechnical testing, and surveying.

The results of Phases 1 and 2A will be used to identify and evaluate appropriate remedial action measures to mitigate any contamination that has already occurred on the Base.

CURRENT SITE SAMPLING ACTIVITIES: PHASES 5 AND 6

The collection of soil and groundwater data for the Solid Waste Assessment Test (SWAT) is included in Phases 5 and 6 of the sampling program. These activities include the installation of 72 groundwater monitoring wells at the two landfills. Also included are geophysical surveys, geotechnical analyses, laboratory chemical analyses of soil and groundwater samples, and preparation of the SWAT report. Data generated from these activities will be used to assess groundwater quality and hydrogeological conditions underneath the landfills. These data also will be included in the RI/FS. Phases 5 and 6 sampling activities were initiated during Fall 1990 and are scheduled to be completed during Fall 1992.

UPCOMING SITE SAMPLING ACTIVITIES

Phases 2B and 3: Phases 2B and 3 activities will include investigations at the Fire Training Area; Building 360; Building 5; Building 41; Building 162; Building 459; Building 114; Building 400; Building 14; Building 10; Building 301; and Building 389. The investigations will include soil gas surveys, air monitoring, the installation of groundwater monitoring wells, geotechnical analyses, and laboratory chemical analyses of groundwater, soil and air samples. Sampling activities for Phases 2B and 3 will begin in Spring 1991, and are scheduled to be completed during Winter 1991. As with the other RI/FS phases, results of these investigations will be used to identify and evaluate appropriate remedial action measures.

Phase 4: Sampling at the Seaplane Lagoon and estuary, geared towards public health, has been approved by DHS as part of the RI/FS. However, other regulatory agencies including the RWQCB, the National Oceanic and Atmospheric Administration (NOAA), the U.S. Department of Interior, and the California Fish and Game are concerned about the adequacy of sampling in terms of environmental assessment. An Ecological Assessment Plan will be prepared to address both the public health and environmental concerns. The preparation of this Plan may be completed within three months.

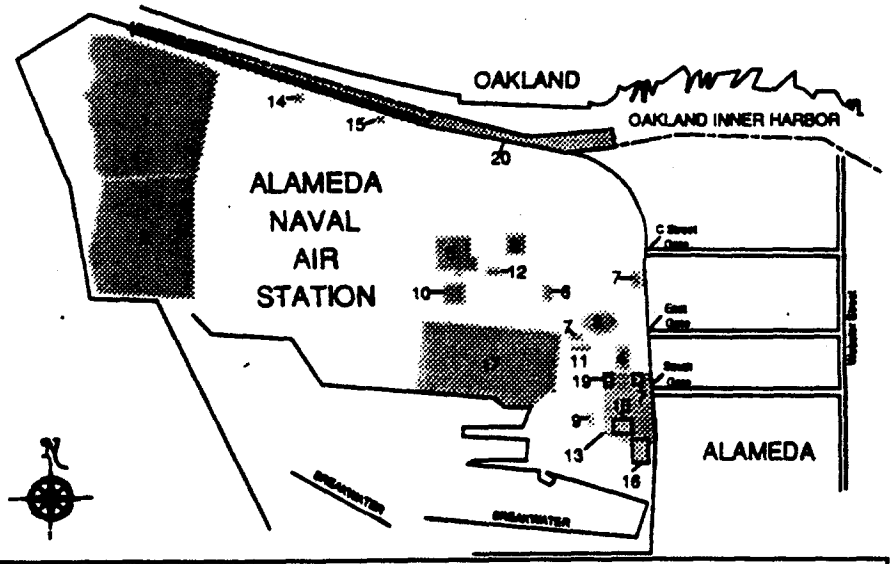
JP-5 JET FUEL SPILL AT BUILDING 397

A bleed valve for JP-5 jet fuel on a test cell at NAS Alameda was inadvertently left open during testing from January 21 through March 1, 1991. As much as 17,000 gallons of JP-5 fuel (a hazardous substance) may have been released to the oil/water separators outside the building. Heavy rainfall caused the separators to overflow into the adjacent storm and industrial sewers. Both sewers had been previously blocked; the JP-5 fuel was contained in them.

In immediate response, 34,350 gallons of rainwater contaminated with JP-5 was hauled away as hazardous waste. An additional 63,550 gallons were temporarily stored in the concrete augmentor pit beneath the test cells, then disposed of as hazardous waste. For safety, the roadway area next to the spill was barricaded.

A thorough engineering investigation has begun to determine the cause(s) of the spill, to identify other source(s) of contamination, and to recommend clean-up measures for the site. A workplan will be submitted to the regulatory agencies for approval. The work could include drilling soil borings and groundwater monitoring wells. Remediation could begin following regulatory approval of a clean-up measure.

Exhibit 2
NAS Alameda Site Map



NEW DOCUMENTS AVAILABLE AT THE INFORMATION REPOSITORY

A number of new technical documents are available for public review at the Information Repository for NAS Alameda (see below for location and hours). NAS Alameda has placed the laboratory chemical analyses for the ten areas investigated in Phases 1 and 2A of the RI/FS in the repository. Individual technical reports on air sampling, geotechnical activities, boring and well drilling logs, soil-gas investigations, and survey data are included.

FOR MORE INFORMATION

This fact sheet is part of the on-going community relations program to keep individuals informed of cleanup activities at NAS Alameda.

If you have any questions about the upcoming investigations at NAS Alameda, please contact:

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Public Affairs Office
NAS Alameda
Alameda, CA 94501-5000

NAVAL AIR STATION ALAMEDA

FACT SHEET #4: INSTALLATION RESTORATION PROGRAM UPDATE

MARCH 1993

The U.S. Navy is continuing to investigate 20 sites with actual or potential contamination at the Naval Air Station (NAS) in Alameda, California. The purpose of this fact sheet is to update you on activities that have been conducted at NAS Alameda and future activities that are planned.

Inside --

***Terms highlighted in boldface type are explained in the glossary on page 5 of this fact sheet.**

Background

Since the early 1980s, the U.S. Navy has been investigating potential contamination of the environment from past use of hazardous materials at NAS Alameda. These investigations are being conducted under the U.S. Department of Defense's Installation Restoration (IR) program, overseen by the California Department of Toxic Substances Control (DTSC) and the California Regional Water Quality Control Board (RWQCB). The IR program is explained more fully in the article on page 4.

NAS Alameda has sampled soil and **groundwater*** at the 20 sites. This process is referred to as the **Remedial Investigation** and involves collecting and analyzing information to determine the nature and extent of any contamination, and how these conditions may affect human health or the environment. A Remedial Investigation may take a few months or several years to complete, depending on the size and complexity of the site being investigated.

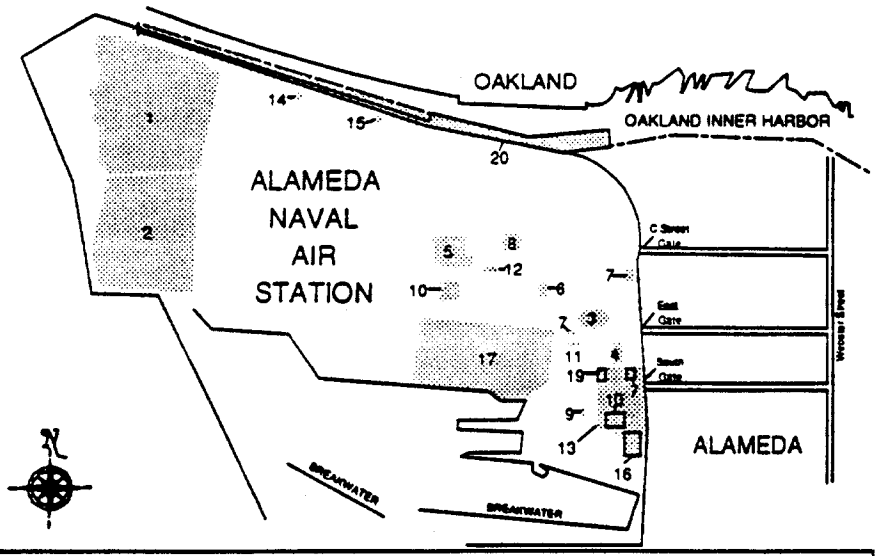
The 20 sites are illustrated in Exhibit 1. They can be divided into four broad categories:

- LANDFILLS: The landfill areas, including the 1943-1956 Disposal Area and the West Beach Landfill (numbers 1 and 2 on Exhibit 1).
- INDUSTRIAL SITES AND TRAINING AREAS: The areas around buildings and training areas, including Area 97, Building 360, Building 5, Building 41, Buildings 162 & 459, Building 114, Building 410, Buildings 400 & 530, Building 14, Building 10, the Oil Refinery area, the Fire Training Area, Buildings 301 & 389, the Cans C-2 area, and Yard D-13 (numbers 3-16 & 19 on Exhibit 1, respectively).
- SEAPLANE LAGOON AND ESTUARY: The water areas including the Seaplane Lagoon and the Estuary (numbers 17 & 20 on Exhibit 1).
- STATION STORM DRAIN SYSTEM: The Station sewer system (number 18 on Exhibit 1).

In addition to the sites being investigated as part of the Remedial Investigation, NAS Alameda has investigated a jet fuel spill at Building 397 and potential contamination at the Intermediate Maintenance Facility.

Exhibit 1

NAS Alameda Site Map



What's Been Done To Date

Soil, groundwater, and air samples have been analyzed to determine the nature and extent of contamination at NAS Alameda. Based on the information gathered, the Navy has identified areas that will require further sampling to give a clearer definition of the areas needing cleanup. A sampling plan for new work will be submitted to the regulatory agencies and additional work will begin in early 1993.

The results of all investigations will be available in a final **Remedial Investigation/Feasibility Study (RI/FS)** report. The feasibility study part of the report will identify and evaluate clean-up alternatives for contamination that has occurred at NAS Alameda.

A detailed explanation of activities at the landfills, around the buildings, and in the water areas follows.

Landfills:

The investigations at the landfills areas include what is known as a Solid Waste Assessment Test, or SWAT. The SWAT uses soil and groundwater sample data to analyze the potential for materials in the landfills to get into the groundwater or the Bay. NAS Alameda installed 72 groundwater monitoring wells at the two landfills and conducted other surveys and analyses to assess groundwater quality and hydrogeological conditions underneath the landfills. A draft final SWAT report is currently being reviewed and the information from the final SWAT report will be included in the RI/FS report. The final SWAT report will be available for public review by mid-1993.

In addition to the SWAT, NAS Alameda conducted a Tidal Influence Study to see how tidal movements in the Bay affect the groundwater underneath the landfills and to see if the chemicals in the groundwater could contaminate the Bay. The study also investigated what direction the groundwater flows. The results of the Tidal Influence Study will be included in the SWAT report.

Industrial Sites and Training Areas:

The first phase of the soil and groundwater sampling for the Remedial Investigation has been completed. After the regulatory agencies approve the sampling plan for additional work, NAS Alameda will take more samples, prepare a risk assessment to evaluate the potential effects of contamination on public health and the environment, analyze clean-up options, and design the cleanup, if necessary.

(continued on page 4)

Future Activities

Investigations of the seaplane lagoon and estuary, the JP-5 jet fuel spill at Building 397, and the Intermediate Maintenance Facility site have begun.

Seaplane Lagoon and Estuary:

Investigations at the Seaplane Lagoon and along the estuary began early this year. The Ecological Assessment will identify possible effects from contamination at NAS Alameda on living things within the area including the Seaplane Lagoon, the Western Bayside, the Oakland Inner Harbor, the Runway Wetland, and the West Beach Landfill Wetland. These investigations will last about one year.

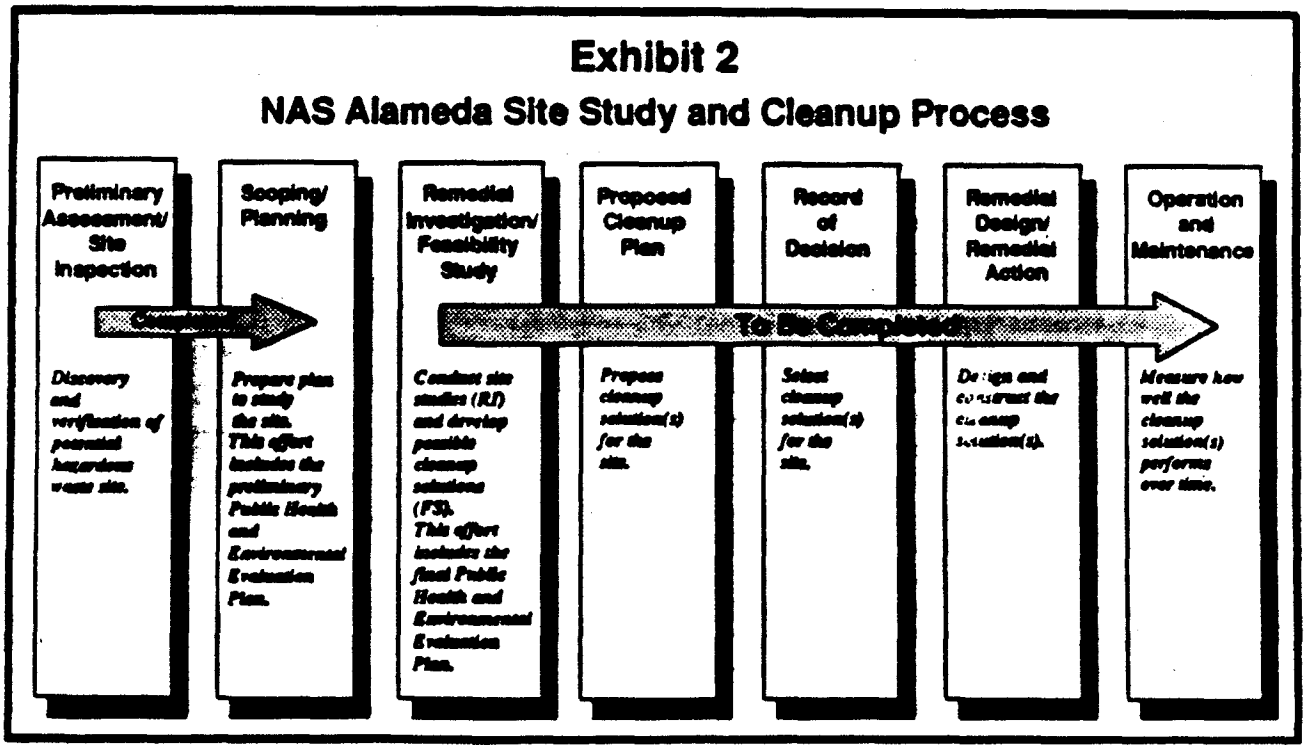
JP-5 Jet Fuel Spill at Building 397:

There was a spill of approximately 17,000 gallons of jet fuel at Building 397 as the result of an open valve. An investigation of the JP-5 jet fuel spill at Building 397 was completed in Fall 1991. A report summarizing the findings and making recommendations for further work was submitted to the agencies in March 1992. The report concluded that JP-5 was in the storm and industrial drain system and may be in the surrounding soil and groundwater.

NAS Alameda is currently removing contaminated soil and an extraction well will be installed to remove additional contaminated groundwater.

Intermediate Maintenance Facility Site:

Sampling conducted at the Intermediate Maintenance Facility (IMF) site in April 1992 indicated the presence of low pH (acidic) conditions and elevated levels of lead in soil and groundwater. Further investigations also indicated the presence of petroleum hydrocarbons. DTSC requested that the Navy perform an evaluation to determine alternatives for cleanup at the IMF. The evaluation will be submitted to DTSC for approval before any cleanup work is begun. The Navy will also prepare a public notice in the form of a fact sheet to let the community know about the interim remedial approach for the IMF site.



The Installation Restoration (IR) Program

The IR program is the U.S. Department of Defense's effort to identify and clean up environmental contamination from past operations at all U.S. military installations across the country. The IR program complies with all State and federal laws regarding cleanup of hazardous waste sites. Since 1980, the Navy has been actively involved in the IR program and has taken an aggressive approach to addressing the problem of hazardous wastes sites at Navy installations nationwide.

The IR process involves seven steps, as illustrated in Exhibit 2. At NAS Alameda, the first two steps -- the Preliminary Assessment/Site Inspection and Scoping/Planning -- have been completed. The next major milestone will be the completion of the Remedial Investigation and Feasibility Study (RI/FS). The RI/FS is a process that involves collecting and analyzing information at a site to determine the type and extent of contamination at a site; establish criteria for cleaning up the site; identify and screen cleanup alternatives for remedial action; and analyze in detail the technology and costs of the alternatives.

The California Department of Toxic Substances Control (DTSC) is the lead regulatory agency for the IR cleanup at NAS Alameda. DTSC reviews work plans and reports and meets with the Navy to ensure that all cleanup activities continue to comply with State and federal laws.

Site Overview

NAS Alameda is located at the west end of the island of Alameda, in Alameda and San Francisco Counties, California. NAS Alameda occupies 2,634 acres and is approximately two miles long and one mile wide. Most of the eastern portion of the Air Station has been developed with offices and industrial facilities, while runways and support facilities occupy the western part. (See Exhibit 1).

Hazardous waste contamination at NAS Alameda is the result of numerous routine operations conducted at the facility between the 1940s and late 1970s. This was a period when relatively little was known about the impacts of hazardous materials and when stringent federal and State hazardous waste disposal regulations were not in effect. Typical NAS Alameda operations during this time included: metal plating; paint removal; aircraft maintenance, fueling and engine testing; vehicle fueling; pest control; missile reworking; operation of a power plant and a fire station; and waste disposal at two landfill sites on base.

The known or suspected contaminants that have been identified to date at NAS Alameda include heavy metals (such as lead and cadmium); some organic compounds including petroleum products (aviation fuel, oil, and grease), solvents, pesticides, and the chemicals benzene, toluene, and xylene; plating chemicals; paint; and polychlorinated biphenyls (PCBs). The preliminary studies indicate that none of the identified sites poses an immediate threat to public health. NAS Alameda has distributed a fact sheet to workers on the base that gives details on the areas of contamination and proper safety procedures to avoid exposure to contaminated materials.

What's Been Done To Date
(continued from page 2)

Water Areas:

Studies are currently being made in the Seaplane Lagoon and the Estuary. NAS Alameda submitted an Ecological Assessment Plan to the agencies to address both public health and environmental concerns. The Ecological Assessment Work Plan was approved by the agencies in June 1992.

Glossary

Benzene
A highly flammable chemical compound found in dyes, varnishes, and lacquers. Inhaling or swallowing benzene can irritate the linings of the lungs and stomach, and can cause restlessness and convulsions. Exposure to benzene over a long period of time can harm bone marrow and can cause leukemia on rare occasions.

Groundwater
Water beneath the earth's surface that flows through spaces between soil and rock. Groundwater supplies wells and springs.

Heavy Metals
Any of the high atomic weight metals such as lead, mercury, cadmium and zinc. All constitute a serious pollution threat because of their toxicity in relatively low concentrations and their tendency to accumulate in living tissues.

Hydrogeological/Hydrogeology
A branch of science that studies how water flows on the surface and through the ground.

Monitoring Well
Special groundwater wells installed to sample groundwater from various depths. Samples from monitoring wells are analyzed to determine the direction of groundwater movement, the types of contamination present, and how far the contamination has traveled.

Organic compounds
One of two classes of chemicals, organic and inorganic. Organic compounds are distinct from inorganic chemicals because they contain both carbon and hydrogen. Petroleum, solvents, and pesticides are examples of organic compounds.

pH
A measure of the acidity or alkalinity of a substance. The pH scale goes from 0 to 14, with 0 being the most acidic and 14 being the most alkaline. Water has a pH of 7, which is neutral.

Petroleum hydrocarbons
Organic compounds found in fossil fuels, some of which are major contributors to air pollution.

Polychlorinated biphenyls (PCBs)
PCBs are a family of chemical compounds used from 1926 to 1976 in electric transformers as insulators and coolants, in adhesives, and in caulking compounds. PCBs were banned in 1976 by the U.S. Environmental Protection Agency due to hazard to human health. PCBs are stored in the fatty tissues of humans and animals, and large doses or exposure over a long period of time can lead to liver damage; they also are suspected to cause cancer.

Remedial Design
The engineering phase when technical drawings and design plans are developed for the remedial action chosen for a site.

Remedial Investigation/Feasibility Study,
A two-part study in which information is gathered and analyzed to define the nature and extent of contamination at a site, to identify and screen cleanup alternatives for remedial action, and to analyze in detail the technology and costs of the alternatives.

Risk Assessment
A study performed to determine the actual or possible risks to human health and the environment posed by hazardous substances at a site. The risk assessment evaluates both cancerous and noncancerous health effects.

Toluene
A chemical compound found in solvents, medicines, dyes, airplane fuels, and explosives. Pregnant women exposed to toluene can increase the chance of cleft palate in their unborn babies.

Xylene
A chemical compound commonly found in airplane fuel, solvents, enamels, and rubber cement. Exposure to xylene can damage the brain and spinal cord and can irritate the lungs, nose, and throat.

Where To Get More Information

This fact sheet is part of the on-going community relations program to keep individuals informed of cleanup activities at NAS Alameda.

If you have any questions about the upcoming investigations at NAS Alameda or would like to be placed on our mailing list, please contact:

Sherri Withrow
Environmental Office
Community Relations
NAS Alameda, (Code 524)
Building 114, Room 209
Alameda, CA 94501-5000
(510) 263-3724

or

Lt. Mike Petouhoff
Environmental Officer
NAS Alameda, (Code 52)
Building 114, Room 211
Alameda, CA 94501-5000
(510) 263-3726

Copies of the community relations plan and all site-related documents are available at the information repository in Alameda:

Alameda Public Library
Main Branch
2264 Santa Clara Avenue
Alameda, CA 94501
(510) 522-5413

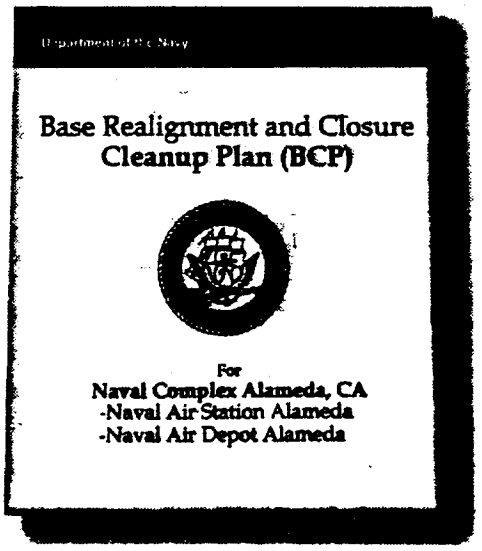
Hours: Monday and Wednesday – 9:30 a.m. to 9 p.m.
Tuesday, Thursday, Friday and Saturday – 9:30 a.m. to 5:30 p.m.
Sunday – closed

Sherri Withrow
Environmental Office (Code 524)
NAS Alameda, Bldg. 114, Room 209
Alameda, CA 94501-5000

Naval Air Station Alameda
Base Realignment and Closure Cleanup Plan Fact Sheet

U.S. Department of the Navy, Engineering Field Activity West
San Bruno, California • May 1995

The Base Realignment and Closure (BRAC) Act of 1990 calls for the closure of selected military bases across the country. Under BRAC, Naval Air Station (NAS) Alameda is scheduled to close in 1997. The Navy recognizes that base closure creates economic challenges for the community, and that economic recovery requires timely and effective reuse of base property by the community. For this reason, the Navy is committed to cleaning up property at NAS Alameda as quickly as possible in order to transfer the property to the community for reuse. At the same time, however, it is the Navy's policy to ensure that the ultimate cleanup achieved is fully protective of public health and the environment.



This fact sheet describes the cleanup plan developed for NAS Alameda, known as the BRAC Cleanup Plan (BCP), and steps identified in that plan to accelerate the cleanup and transfer of property as well as create greater opportunities for community involvement in the process. The BCP was prepared by the BRAC Cleanup Team (BCT) established at NAS Alameda.

This Fact Sheet Contains Information on the:

- **BRAC Cleanup Team**
- **BRAC Cleanup Plan**
- **Alameda Reuse Plans**
- **Environmental Programs at NAS Alameda**
- **Opportunities for Community Involvement**

BRAC CLEANUP TEAM

Each closing base is required to establish a BRAC Cleanup Team (BCT). The BCT established at NAS Alameda is a unique partnership among the Navy, U.S. Environmental Protection Agency (EPA), and California Environmental Protection Agency Department of Toxic Substances Control (DTSC). Each agency is represented on the BCT. The BCT directs the cleanup activities and is accountable for expediting the cleanup schedule, and ensuring that all cleanup programs follow applicable laws and regulations and are protective of the public health and environment. A primary benefit of establishing the BCT is the assurance that all cleanup decisions receive joint acceptance from the Navy and state and federal regulators.

Members of the NAS Alameda BCT are Navy Lieutenant Commander (LCDR) Michael Petouhoff; James Ricks, U.S. EPA, Region IX; and Thomas Lanphar, DTSC. LCDR Petouhoff, the Navy's representative

on the BCT, also serves as the BRAC Environmental Coordinator. As the BRAC Environmental Coordinator, LCDR Petouhoff serves as co-chair of the Restoration Advisory Board (RAB) (described later in this fact sheet) and helps to facilitate communication between the RAB and the community's reuse group. This link is important because cleanup decisions are often dependent upon reuse plans as well as community concerns just as reuse plans require an understanding of the environmental condition of property.

BRAC CLEANUP PLAN

In March 1995, NAS Alameda submitted its BRAC Cleanup Plan (BCP) to Washington D.C. The cleanup plan, serves as a road map directing the complex task of environmental cleanup and timely reuse of property at closing military bases.

The BCP summarizes the status of all environmental programs at NAS Alameda. These programs are evaluated to identify areas that may be streamlined. The programs are also assessed for areas of overlap where communication between programs is necessary. At federal facilities like NAS Alameda many different environmental programs exist; for example, some programs focus on past hazardous waste management practices and disposal sites, while other programs address substances such as asbestos and PCBs. Close coordination of these programs is necessary to accelerate transfer of property. The BCP also presents how the base property is divided into property parcels for the purpose of prioritizing cleanup activities and expediting property transfer to the community.

In addition to expediting cleanup efforts, the BCP provides the community with an important information source. It describes the history of waste management at NAS Alameda and explains the status and strategy of all environmental programs. The BCP is a "living document" that will be updated at least annually to reflect environmental cleanup progress and the status of property transfer and reuse.

The 1995 NAS Alameda BCP is currently available in the NAS Alameda information repository at the Alameda Public Library, Main Branch. The highlights of the BCP are summarized below.

BRAC Cleanup Plan Vision

The vision of the NAS Alameda BRAC Cleanup Team (BCT) is set forth in the following guiding principles:

1. Protect human health and the environment
2. Support the community's reuse plan
3. Promote active public involvement
4. Initiate cleanup as early as possible in the process
5. Keep an open mind toward the potential advantages of innovative technologies

The BCT at NAS Alameda has developed a strategy to achieve each of these principles or goals. The first two goals are the foundation of the BCP process. Neither goal can be considered in isolation; decisions must be made with simultaneous awareness of both objectives. The BCT endeavors to accomplish the following in support of the first two principles:

- Identify all clean property that can be transferred by the scheduled base closure date in April 1997.
- Pursue leasing as an interim measure to accommodate the community's short-term reuse plan.
- Pursue long-term cleanup consistent with the community's long-term reuse plan.

Each of the remaining principles support the first two. Strategies to promote active public involvement include establishing the Alameda Restoration Advisory Board (RAB), described below. In support of the fourth principle, the BCT is working to speed up the cleanup process by expediting site characterization and beginning cleanup sooner through early actions. Early actions might include immediately removing contaminated soil or implementing cleanup technologies on a small scale to test their effectiveness before implementing the technology on a larger scale. The BCT's vision to begin cleanup where necessary as early as possible is also supported by the BCT's interest in pursuing innovative technologies. Innovative technologies can provide better and less expensive means of characterizing and cleaning up sites. The BCT has already applied an innovative technology at Site 13. The technology, the Site Characterization and Analysis Penetrometer System (SCAPS), was used recently to help delineate a contaminated area at the site in less time than conventional sampling methods require. The sooner a site is fully characterized and the extent of contamination understood, the sooner site cleanup can begin. In addition, the BCT is currently evaluating several cleanup technologies to establish their potential effectiveness at NAS Alameda.

Figure 1

Property Reuse and the Environment

After cleanup and conversion, the future of NAS Alameda belongs to the community. For this reason, the Navy is committed to working closely with the reuse authority to cleanup, lease, and transfer property in a manner that protects human health and the environment and supports the community's reuse plan.

Property Reuse and Environmental Cleanup.

What's Required?

- Community develops a short-term reuse plan (April 1995)
- Navy leases clean property consistent with the short-term reuse plan
- Community develops long-term reuse plan (December 1996)
- Navy prepares an "Environmental Impact Statement" (EIS) that incorporates the community reuse plan; EIS submitted to public for review and comment (December 1996)
- Navy and Regulators with public involvement prepare cleanup "Record of Decision" (1997) which spells out cleanup plan
- Navy completes cleanup and eventually transfers property consistent with planned reuse

Alameda Reuse Plans

The conversion of NAS Alameda to civilian use involves three interrelated activities: the closure of NAS Alameda, the development of a community reuse plan, and the cleanup of base properties necessary for the transfer and reuse of real estate. The BCP provides a valuable tool for ensuring that cleanup and reuse planning are integrated. Although no property is currently available for transfer to the community, the BCP describes in detail the requirements for leasing and transferring federal property. The first step in the property transfer process is called the environmental baseline survey (EBS), which is already underway at NAS Alameda. The EBS is an inventory of all base property that identifies areas where hazardous substances have been handled. Only those property parcels that are considered clean or have been cleaned up to a level that adequately protects public health and the environment will be considered suitable for lease or transfer. The Navy's primary goal is protection of public health and the environment; this goal must be met before any parcel of property can be considered for community reuse.

The community's reuse plan is being developed by the Alameda Reuse and Redevelopment Authority (ARRA), a nine-member panel recognized by the

Department of Defense as the legal body that will receive property from the Navy. The ARRA consists of five Alameda city council members, the mayors of Oakland and San Leandro, a county of Alameda representative, and a representative from Congressman Dellum's office. For more information on the ARRA and the reuse plan, call Dave Louk, City of Alameda Base Conversion Facilities Manager, at 510/263-2870.

The ARRA is developing both short-term and long-term reuse plans and expects to complete them in April and December 1995, respectively. The short-term plan will focus on making use of existing facilities for immediate re-employment opportunities, while the long-term plan looks beyond current use for other potential uses, including land development. Figure 1, on page 3 outlines the reuse process.

Environmental Programs at NAS Alameda

Environmental programs at NAS Alameda can be grouped into several categories: the Installation Restoration (IR) Program, environmental compliance programs, management of natural and cultural resources, and the EBS required by the base closure process. The BCP describes the current status and future approach to implementing these programs.

The goal of the IR Program is to protect human health and the environment by identifying, investigating, and cleaning up sites where a past release of a hazardous substance has occurred. The military has historically used hazardous materials for operations such as ship and aircraft maintenance and repair, fuel storage, metal finishing, and other industrial activities. The Navy handles and disposes of these materials consistent with today's knowledge and standards. Currently there are 23 sites at NAS Alameda undergoing investigation and cleanup as part of the IR Program. The map on page 5 identifies the locations of these IR sites.

Environmental compliance programs at NAS Alameda involve the regulated management of:

Chemical and petroleum storage tanks
Solid waste
Asbestos
Lead paint
Stormwater
Wastewater
Hazardous materials/waste
Fuel lines
Polychlorinated biphenyls
Radon
Dredge material
Air emissions
Oil/water separators

The BCP also discusses natural and cultural resource issues being addressed at NAS Alameda and the Navy's strategy for addressing related issues in the future. For example, natural resources include wetlands and endangered or threatened wildlife Cultural resources at NAS Alameda include historic buildings. Early identification and evaluation of natural and cultural resources is necessary to ensure they are considered in cleanup and reuse decisions. Finally, the BCP summarizes the first phase of the EBS, including identification of property that may be available for early transfer.

Schedule and Funding

The BCP provides a cleanup schedule and estimated cleanup costs. As additional information becomes available, schedules and cost estimates will be updated and presented in the annually updated BCP.

OPPORTUNITIES FOR COMMUNITY INVOLVEMENT

The Navy is committed to facilitating community involvement in base cleanup and closure activities. A

new forum for community involvement is the Restoration Advisory Board (RAB). The RAB was established to represent a cross-section of community interests and provide opportunity for the early and continued exchange of information, concerns, and issues between the community and the Navy. It is important that community concerns and suggestions are identified early in the process so they can be addressed in cleanup decisions. The NAS Alameda RAB is currently composed of 30 community members and representatives of the Navy, U.S. EPA, DTSC, and other regulatory and civic agencies.

In establishing the NAS Alameda RAB, the Navy sought to represent the diverse interests within the community. Applications were sent to over 14,000 households and businesses within one-quarter mile of NAS Alameda. Advertisements were placed in local newspapers, and employee notifications were published in the base newspaper and Plan of the Day. Two public meetings were held, January 12 and February 9, 1994, to discuss the IR Program and the upcoming RAB. The result was over 70 applications for membership in the NAS Alameda RAB. A panel from U.S. EPA, DTSC, Navy, and the local community selected the formal RAB membership to repre-

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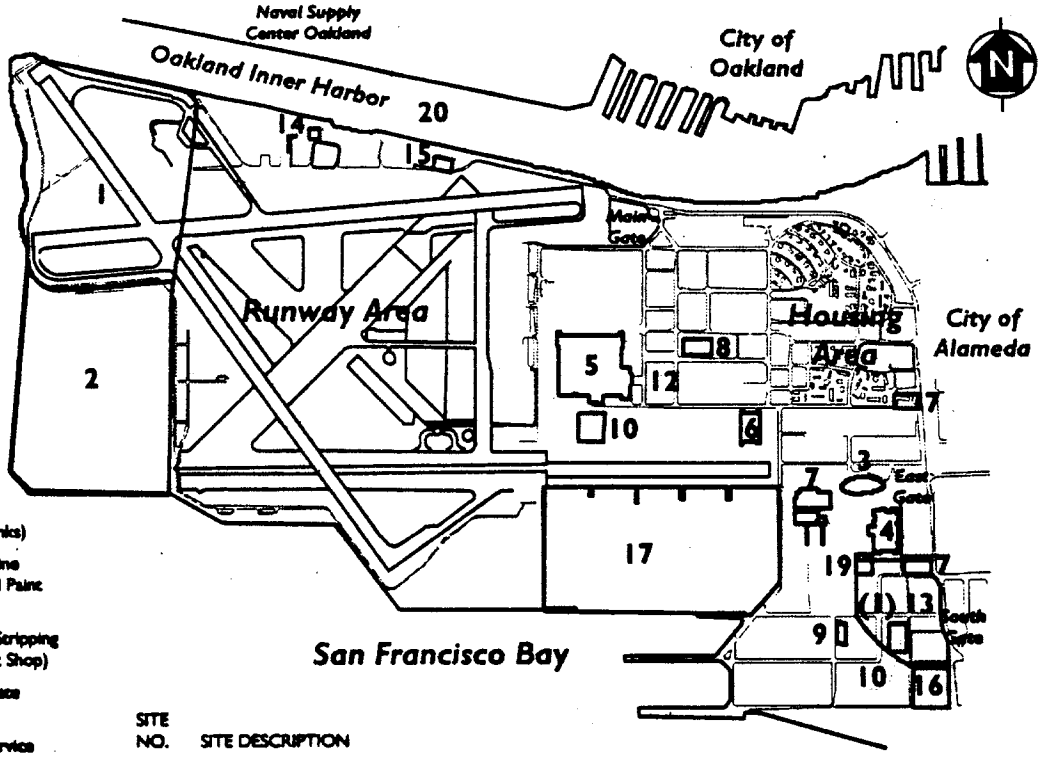


LEGEND:

SITE NO.	SITE DESCRIPTION
1	1943-1956 Disposal Site
2	West Beach Landfill
3	Area 97 (Aviation Gasoline Tanks)
4	Building 360 (Plating Shop, Engine Cleaning Shop, Paint Shop, And Paint Stripping Shop)
5	Building 5 (Plating Shop, Paint Stripping Shop, Cleaning Shop, And Paint Shop)
6	Building 41 (Aircraft Intermediate Maintenance Dept.)
7	Building 162, 459, And 547 (Service Stations)
8	Building 114 (Pest Control Area And Separator Pit)
9	Building 410 (Paint Stripping)
10	Buildings 400 And 530 (Missile Rework Operations)
11	Building 14 (Engine Test Cell)
12	Building 10 (Power Plant)
13	Oil Refinery

SITE NO.	SITE DESCRIPTION
14	Fire Training Area
15	Buildings 301 And 389 (Storage Area)
16	Cans C-2 Area
17	Seaplane Lagoon
18	Station Sewer System (Not Shown)
19	Yard D-13 (Hazardous Waste Solvents)
20	Estuary (Oakland Inner Harbor)

NOTES:

(1.) The Area Of Site 13 Includes The Areas Of Sites 10 And 16.

NAS Alameda
Installation Restoration Program Sites

sent a cross-section of the community's diverse interests. The first meeting of the full RAB was held on April 19, 1994, and meetings have since been monthly. RAB members have since elected a community member to co-chair the RAB with the Navy's BRAC Environmental Coordinator.

RAB members facilitate the two-way exchange of information between the community and the Navy by acting as liaisons. RAB members are expected to communicate with local community members whose interests they are appointed to represent concerning specific base cleanup issues, and report any comments, suggestions, or concerns to the full RAB. RAB members must also report to the community on RAB and base activities. The RAB also provides input into base environmental cleanup activities by commenting on documents produced by the Navy.

The public is encouraged to attend the monthly RAB meetings. For meeting times and locations call Sherri Withrow, NAS Alameda Public Affairs Office, at 510/263-3724.

Other opportunities for community involvement include the following:

- Review documents during public comment periods
- Visit the information repository (See Table 1 for location)
- Read fact sheets and newsletters (call Sherri Withrow at NAS Alameda to be added to the NAS Alameda community mailing list)
- Call one of the points of contact listed in Table 1 with your comments and concerns
- Attend workshops, open houses, tours, and public meetings
- Attend RAB meetings

Table 1

NAS ALAMEDA COMMUNITY INVOLVEMENT INFORMATION

The following individuals can provide additional information.

BRAC Cleanup Team

Lieutenant Commander Mike Petouhoff
NAS Alameda Environmental Officer
510/263-3726

James Ricks
U.S. Environmental Protection Agency
415/744-2402

Thomas Lanphar
California Environmental Protection Agency
Department of Toxic Substances Control
510/540-3809

Community Involvement Contacts

Sherri Withrow
NAS Alameda
Environmental Public Relations Specialist
510/263-3724

Susan Jun
California Environmental Protection Agency
Public Participation Specialist
510/540-3935
(return address for mailing label)

Commanding Officer
Naval Air Station Alameda
250 Mall Square (Code 015)
Alameda, CA 94501-5000
Attention: Sherri Withrow

Information Repository Location

Alameda Public Library
Main Branch
2264 Santa Clara Avenue
Alameda, CA 94501
510/748-4661
(call for current library hours)

Fact Sheet #6 | NAS Alameda | August 1995

Waterfront Actions

Storm Water Pollution Prevention and Source Reduction

What is NAS Alameda doing to protect the waterfront?

Introduction

The Navy is committed to cleaning up and protecting the environment at the Naval Air Station (NAS) Alameda waterfront. This fact sheet explains the Navy's efforts. Examples range from a new prototype treatment system to joint efforts with U.C. Berkeley to develop new methods to clean up contamination. The Navy's past, present and future efforts will protect the San Francisco Bay.

How Does NAS Alameda's Effort Fit into the Big Picture?

Past

What's Been Done Until Now?

In 1972, the Clean Water Act (CWA) made major changes in the release of pollutants to San Francisco Bay. Discharge of industrial waste water was stopped. Treatment was required before waste water could be sent to municipal (city) treatment plants. Direct release to the Bay was limited.

At Alameda, the Navy took action in the 1970s by rerouting any industrial waste water going through storm drains to new treatment plants on base before sending it to the East Bay Municipal Utilities District (EBMUD) for final treatment. It worked. San Francisco Bay has become cleaner. However, more environmental measures are needed to finish the job.

Present

What's Being Done Now?

Local Bay Area governments have recently taken steps to let their communities know that the water in storm drains goes directly to the Bay, by painting a picture of a fish at storm drain openings along public streets. Also, bill boards in the community inform people that household chemicals should be kept out of storm drains.

Similarly, NAS Alameda has a program on base that controls "storm water runoff." What is this?

It is a rainwater that flows over the land. Along the way it can pick up debris and pollutants. Storm drains then deposit this runoff in the Bay. NAS Alameda has a permit managed by EBMUD to control storm water runoff. Key elements of the program are inspections, repairs, and reducing pollution at the source.

Inspections and Repairs

The Navy conducts three types of inspections--Annual, dry weather and wet weather:

1) The annual inspection identifies areas of pollution on the ground. We look at housekeeping improvements like making sure the drip pans under engine repair work are large enough to prevent oil from spilling on the ground.

2) We do dry weather inspections where we check for other pollutants getting into the storm drains. For example, we check to see if water from airplane washing goes into the storm drain. If so, we look for equipment, such as sumps, to remove these pollutants.

3) We inspect monthly during the rainy season between October and April. We look for floating materials, oil or odors in storm water runoff. This tells us how good our program is.

In addition, we also repair pollution treatment systems when needed, like cleaning out an oil/water separator to prevent spills onto the ground.

Reducing Pollution at the Source

The Navy is actively taking steps to reduce pollution sources. Prevention measures include training workers on how to correctly dispose of chemicals used in their work.

NAS Alameda has also started up a new and improved system for treating bilge water from ships. It is one of three prototypes in California. "Bilge water" is water that collects in the bilge (underwater portion) of a ship. Water in the bilge can pick up oil and grease from the machinery it comes in contact with. This new system, called the "Bilge and Oily Water Treatment System", reduces the pollution released to the Bay. Water treated through this system is sent to EBMUD, under a permit, for final treatment.

Future

Cleanup Actions at NAS Alameda

The on-base cleanup of soil and groundwater (water directly below the land surface), as well as the waterfront, is done under the Navy's Installation Restoration Program (IRP). Under this program, the Navy will continue to get new cleanup and pollution prevention plans in motion. These cleanup plans will deal with pollution that was released before the Clean Water Act was passed.

For example, the Navy has a plan to remove any pollution that might remain in the storm drains from the days when industrial waste water was still discharged through some of them. This work is planned to be completed by November 1995, prior to the start of the next rainy season.

Further Investigations

The IRP is also doing careful studies on how the ecology of the bay and land my be affected by the pollution. They have looked into the amount of polluted sediment in some parts of the Bay. "Sediments" are a mixture of soil, dirt, and other debris from a variety of sources that gets into the Bay water and sinks down to rest on the floor of the Bay. Some of the pollution found may affect marine life living in the sediments. Because

other higher forms of life, like fish and birds, depend on these sediment marine life for food, the Navy understands that the quality of the sediment is very important for the well-being of all other Bay wildlife.

The Navy IRP will do additional studies on sediment pollution in the Seaplane Lagoon, the Oakland Inner Harbor, and Western Bayside (See Figure 1). They have also joined forces with scientists at U.C. Berkeley and Lawrence Livermore National Laboratory to explore new ways to clean up the sediment pollution they find.

BRAC Cleanup Team
Points of Contact

LCDR Mike Petouhoff (510)263-3724
Naval Air Station, Alameda

Tom Lanphar (510)540-3809
Department of Toxic Substances Control

James Ricks (415)744-2402
U.S. Environmental Protection Agency

The Navy is working closely with the California Environmental Protection Agency, Department of Toxic Substances Control (DTSC), the Regional Water Quality Control Board (RWQCB), the U.S. Fish and Wildlife Service, and the U.S. Environmental Protection Agency (U.S. EPA) in planning the investigations to lead to timely and effective cleanup decisions.

How You Can Get Involved

The Navy implements a community involvement program to ensure that the community's concerns and interests are heard throughout the environmental cleanup process. To learn more about the Navy's environmental program or how you can get involved, contact Sherri Withrow, NAS Alameda Public Affairs Office, at (510)263-3724.

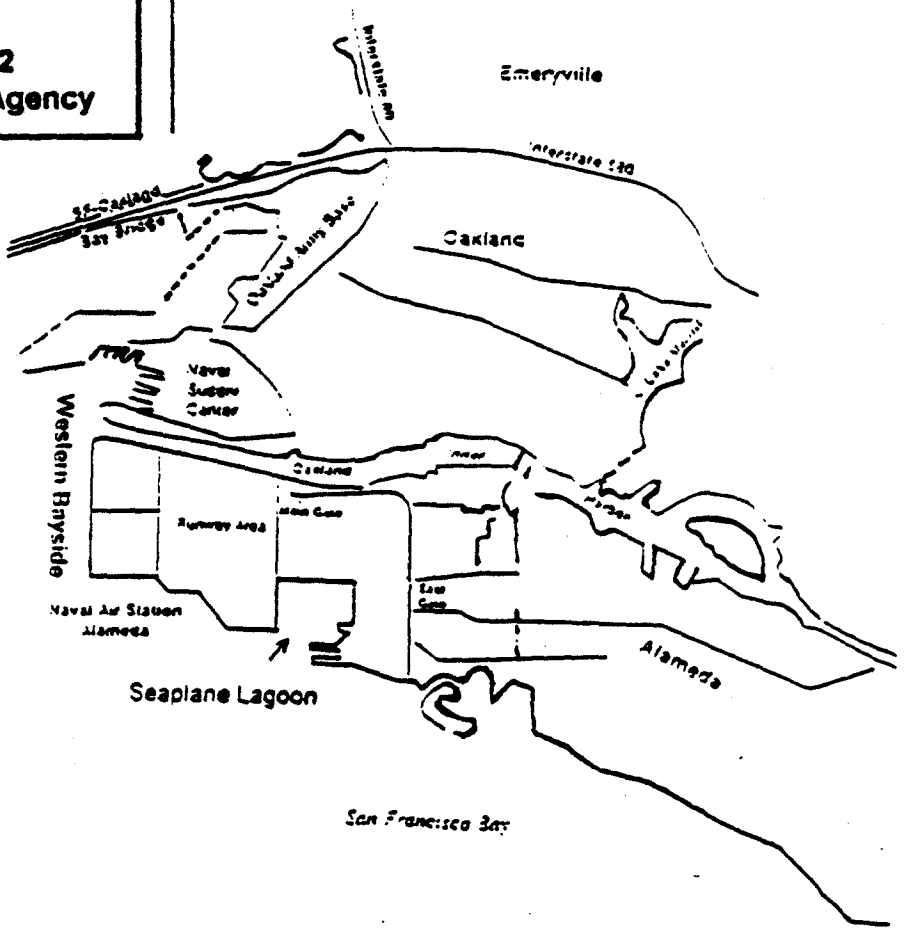


Figure 1
Location Map

Naval Air Station Alameda

History & Geology Fact Sheet • Number 7 • June 1996

To understand the environmental conditions and ongoing cleanup process at Naval Air Station (NAS) Alameda, it is important to understand the history of the Alameda region. By understanding the history of previous industry in the Alameda region, the Navy can more accurately identify and address current environmental problems. The Navy is committed to protecting human health and the environment.

This fact sheet is one in a series of ...t sheets that highlight environmental activities and related issues at NAS Alameda. Following is a brief description of the people and industry that came before and that led up to the creation of NAS Alameda.

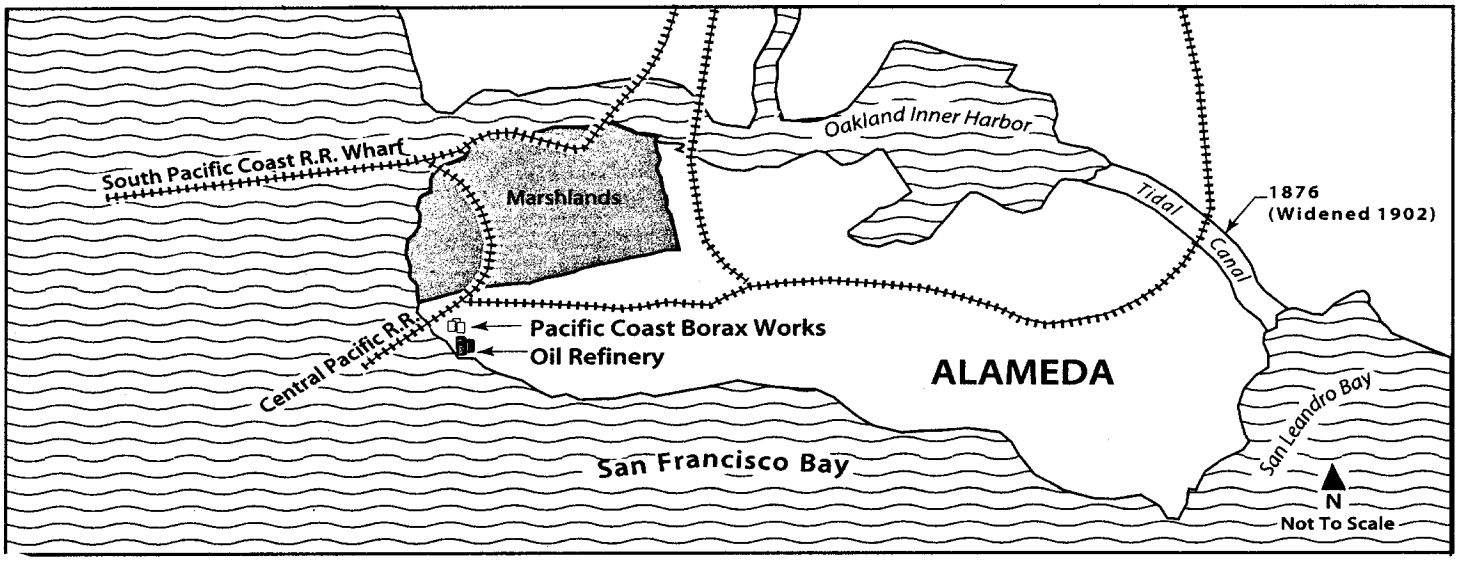
History Through the Turn of The Century

Prior to the arrival of European settlers, Alameda was a peninsula covered with giant oaks and thick undergrowth, and was inhabited by Native Americans. The peninsula was surrounded by extensive marshlands. In the 1700s, the Spanish government granted the peninsula to a Spanish official who subdivided and sold the land to local settlers. These early settlers cleared the higher land for farming fruits and vegetables. In 1853, the settled area on the peninsula was descriptively named Alameda, which means "grove of poplar trees" or "tree lined avenue" in Spanish.

Industry in the region began in the mid-19th century as the industrial revolution gained momentum. Railroad yards and rights-of-way for the Southern Pacific and Central Pacific Railroads

Early Industry at NAS Alameda Site:

- **1864:** Railroad yards, stations, and rights-of-way
- **1879 to 1903:** Oil refinery
- **Late 1800s to 1903:** Borax plant



gure 1 Late 19th Century Alameda

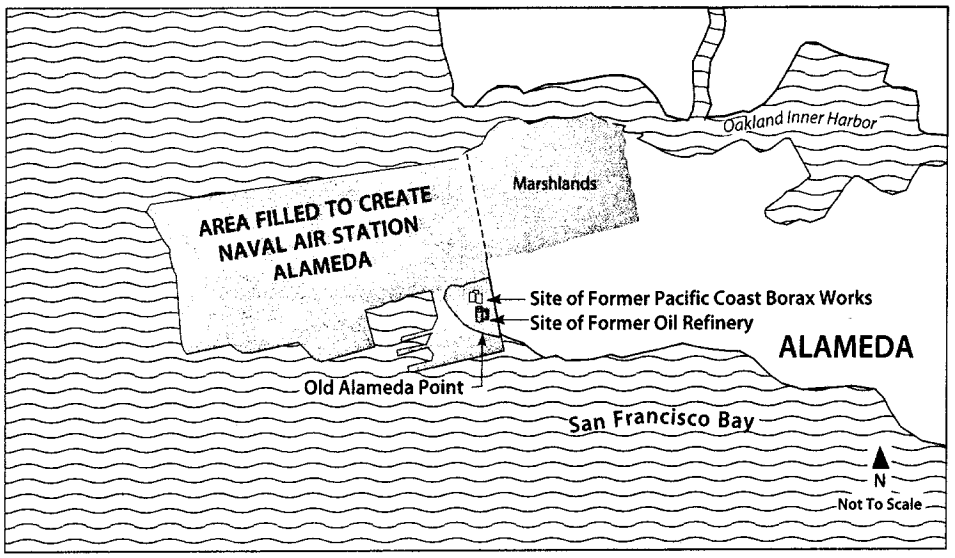
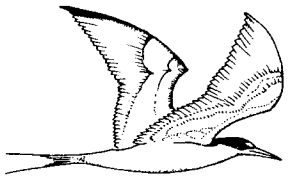


FIGURE 2 The land that is now NAS Alameda was created by filling tidelands and marshlands with material dredged from San Francisco Bay and Oakland Inner Harbor.

were built in 1864. In 1869, the western ending terminal for the Central Pacific Railroad was operated at the southwest corner of the original Alameda peninsula (see Figure 1).

In 1876, Alameda became an island when a channel was cut and dredged to link San Leandro Bay with the Oakland Inner Harbor. In 1879, the Pacific Coast Oil Company constructed and operated an oil refinery at old Alameda Point. The refinery was later purchased by Standard Oil Company, which operated the plant until 1903.

Other industry in the area included Alameda's Pacific Coast Borax Works, a soap plant that operated in the late 1800s through 1903. (Twenty-mule teams hauled raw borax out of Death Valley for railroad shipment to the borax plant.) Both the oil refinery and the borax plant operated in what is now the southeast corner of NAS Alameda. These activities were part of an overall increase in industrial activity in the San Francisco Bay Area that pre-dated the existence of NAS Alameda.



History After The Turn of The Century

In 1911, hinting at the future of the site, pilot Eugene Ely made the first aircraft landing on board a Navy vessel, the USS Pennsylvania anchored in the San Francisco Bay. In 1927, the city of Alameda established an airport on the western tip of the island. Pan American Airways took over the airport in 1935 to provide a link between the United States and Asia.

Between 1900 and 1930, some of the shallow waters and sloughs along the western end of Alameda Island and the south side of the Oakland Inner Harbor were filled with dredge material. The dredge material came from the San Francisco Bay and the Oakland Inner Harbor. This area was filled to extend the Southern Pacific Railroad right-of-way.

In 1930 the U.S. Army acquired a small piece of land at the western tip of the island from the city of Alameda and began construction of roads, utilities, a runway, and a well. In 1936, the Navy acquired the land, and the citizens of Alameda overwhelmingly approved a grant of additional tidelands for the creation of NAS Alameda. Construction efforts hastened in response to World War II. The island was again expanded using material dredged from the bay (See Figures 2 and 3). In 1940 NAS Alameda was commissioned (opened) at an informal ceremony.

After the December 7, 1941, attack at Pearl Harbor, NAS Alameda immediately shifted to wartime status. To meet the wartime needs, additional land was acquired and larger buildings were constructed. The creation and expansion of NAS Alameda caused the local civilian and military populations to boom. According to the 1940 census, 36,000 people were living in Alameda; the wartime population more than doubled this figure. NAS Alameda was dubbed the "Keystone to the Pacific" and the "Gateway to the Pacific." NAS Alameda served as a critical component during World War II, the Korean War, the Vietnam Conflict, and Operation Desert Storm.

Geology: How NAS Alameda was Created

To understand how activities at NAS Alameda have affected the environment, it is essential to understand the geology of the region. This section describes the geological formation of the NAS Alameda area.

The San Francisco Bay sits in a low area between two mountain ranges. Two active faults run along these mountain ranges: the Hayward fault along the base of the Berkeley hills to the the east of the bay, and the San Andreas fault as it passes through the San Francisco peninsula. Over the past 60 million years or more, bedrock was broken by faults, and subsequently uplifted and eroded.

During the last 2 million years, a variety of younger sediments (sands, silts, and muds) have been deposited

on the older bedrock. Beneath NAS Alameda, the observed younger sediments can be divided into four major units (or layers), as shown in Figure 3. These four layers, from oldest to youngest, are the San Antonio formation, the Merritt Sand, the Bay Mud Sediments, and dredged fill soils used to fill in marshlands that rested on Merritt Sand and Bay Mud Sediments.

Figure 3 shows the history of fill placement under what is now NAS Alameda. The majority of the air station is now above sea level and was created by dredging and pumping sediments from the surrounding bay bottom. The filling process occurred over a 75-year period as shown in Figure 4. Sediments used for fill material are believed to be part of the Merritt Sand and/or Bay Mud Sediments.

During the ongoing environmental investigations at NAS Alameda, hydrocarbon wastes were found in the dredged fill soils. Hydrocarbon wastes were also found along the contact between the bottom of the fill (the old bay bottom) and the underlying Merritt Sand and Bay Mud sediments. These waste materials are thought to have been deposited along the bay bottom in the vicinity of Alameda Island, as a result of industrial activities prior to the construction of NAS Alameda. The presence of hydrocarbon wastes in the fill soils and underlying sediments, and the manner in which the Navy will address them, will be discussed in a future fact sheet.

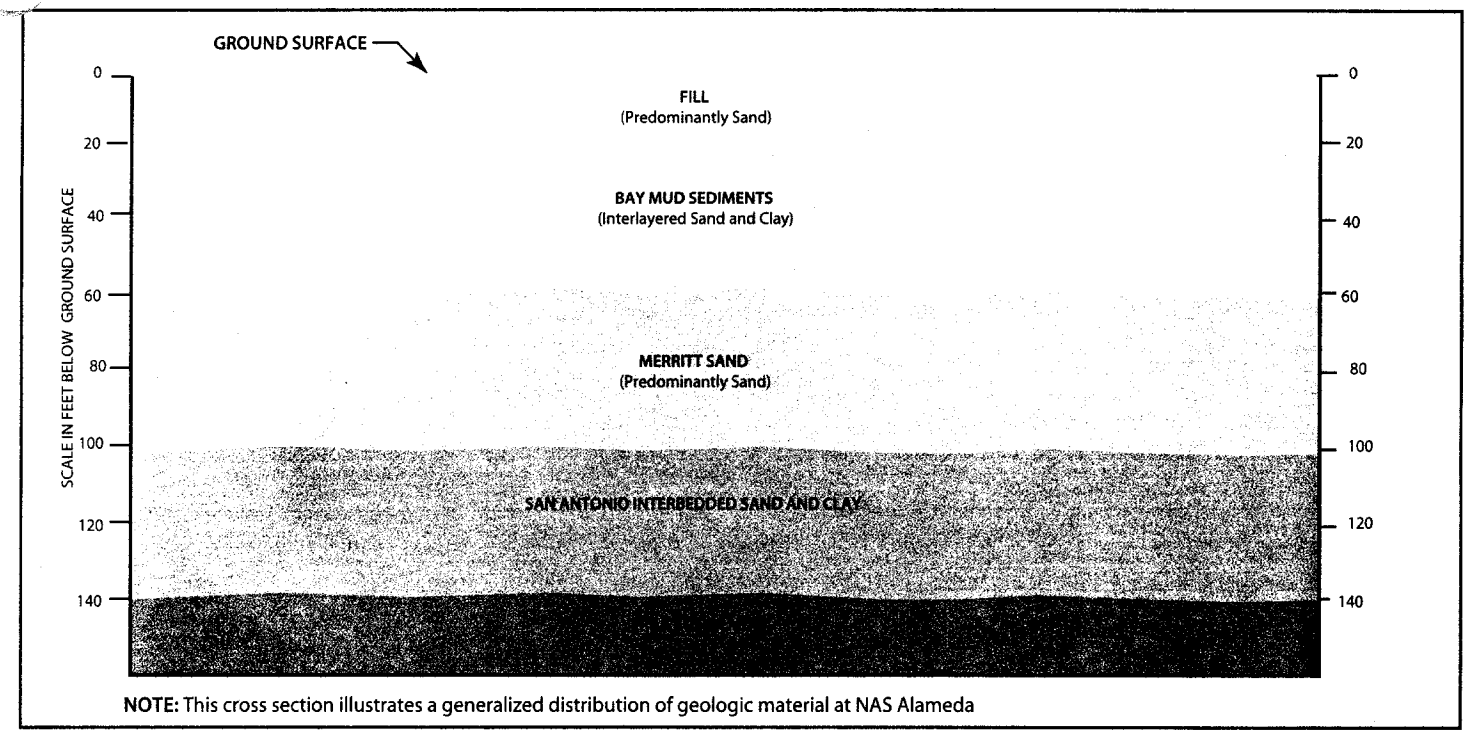
The geology at NAS Alameda also influences the presence and extent of water beneath NAS Alameda. Current investigations at NAS Alameda are concentrating on two shallow water zones recognized within the artificial fill and within sandier portions of the Bay Mud Sediments. Most chemical impacts are limited to within the uppermost water zone found in the artificial fill soils and sandier portions of the Bay Mud Sediments. The Navy has investigated these water zones and their impacts and is assessing appropriate cleanup approaches.

The Navy and regulatory agencies continue to look at the groundwater beneath NAS Alameda to determine if the water may be used for industrial purposes or as a drinking water source. However, the groundwater is not known to have been used for either purpose. East Bay Municipal Utility District (EBMUD) supplies water to NAS Alameda. Issues concerning groundwater will be discussed in a future fact sheet.

For More Information

Call
Hans Petersen
NAS Alameda Environmental Office
(510)263-3726

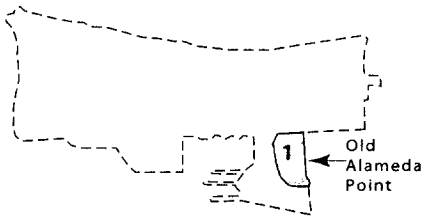
Or Visit
The NAS Alameda
Information Repository
Alameda Public Library
Main Branch
2264 Santa Clara Avenue
Alameda, CA 94501
(510)748-4661



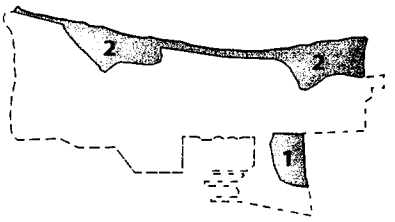
NOTE: This cross section illustrates a generalized distribution of geologic material at NAS Alameda

Figure 3 The land that is now NAS Alameda was created by filling shallow tidelands with material from San Francisco Bay and Oakland Inner Harbor. Dredged fill materials rest on top of bay sediments.

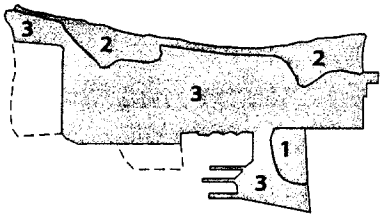
1. Dry Land Prior to 1900



2. Area filled between 1900 and 1929



3. Area filled between 1930 and 1946



4. Area filled between 1953 and 1975

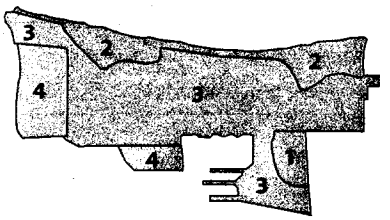


Figure 4 Progression of area filled at what is now NAS Alameda between 1900 and 1975. The land that is now NAS Almeda was created by a phased filling of shallow tidelands with material dredged from San Francisco Bay and Oakland Inner Harbor over a period of 75 years.

Naval Air Station Alameda
Environmental Office
250 Mall Square, Building 1
Alameda, CA 94502-5000

APPENDIX H

RELATIONSHIP OF COMMUNITY RELATIONS ACTIVITIES TO THE SUPERFUND REMEDIAL PROCESS

Relationship of Community Relations Activities to the Superfund Remedial Process From Remedial Investigation/Feasibility Study to Remedial Design

Remedial Process

Prepare RI/FS Workplans

Establish Administrative Record

Conduct Site Characterization/ Treatability Study

Conduct Post-Screening Field Investigation (as Necessary)

Conduct Detailed Analysis of Alternatives

Develop and Screen Alternatives

Note: Activities in This Shaded Box Are Done Concurrently.

Prepare RI/FS Report

Identify Preferred Alternative; Prepare Proposed Plan

Prepare Record of Decision Document

Sign ROD

Prepare ROD Amendment (if Necessary)

Note: Activities in This Shaded Box Are Done Only if ROD Amendment Is Necessary.

Prepare Remedial Design

Required Community Relations Activities

Develop CRP

- Conduct Community Interviews

Inform Public of Availability of TAG; Describe TAG Program to Community

- Brief Technical Staff
- Telephone Officials/Citizens

Establish Information Repository

- Inform Interested Parties of Availability

Notify Public of Availability of Proposed Plan; Include Brief Analysis

- Prepare and Publish Notice
- Make Proposed Plan and RI/FS Available in Administrative Record and Information Repository

Conduct Public Comment Period

- Announce 30-Day Comment Period with Notice (and, upon Timely Request, a Minimum 30-Day Extension)
- Consider Written/Oral Comments

Provide Opportunity for Public Meeting

- Prepare Meeting Transcripts and Make Available in Administrative Record and Information Repository
- Hand out TAG Fact Sheet

Prepare Responsiveness Summary Explain Significant Changes to Proposed Plan (if Any)

Notify Public of Availability of ROD & Responsiveness Summary

- Prepare and Publish Notice

Prepare Explanation of Significant Differences (if Any)

- Prepare and Publish Notice
- Make Available in Administrative Record and Information Repository

Notify Public of Intended ROD Amendment Including Rationale and Analysis

- Prepare Public Notice
- Make New Proposed Plan Available in Administrative Record and Information Repository

Conduct Public Comment Period

- Announce 30-Day Comment Period with Notice (and, upon Timely Request, a Minimum 30-Day Extension)
- Consider Written/Oral Comments

Provide Opportunity for Public Meeting

- Provide Meeting Transcripts and Make Available Administrative Record and Information Repository

Prepare Record of Decision Document

Prepare Responsiveness Summary and Explain Significant Changes

Sign Amended ROD

Notify Public of Availability of ROD and Responsiveness Summary

- Prepare and Publish Notice
- Make ROD and Responsiveness Summary Available to Public at or near Site

Revise CRP (if Necessary)

- Conduct Community Interviews (as Needed)

Notify Public of Availability of Remedial Design; Prepare Fact Sheet on Remedial Design

- Prepare and Publish Notice
- Make Remedial Design Available in Administrative Record and Information Repository
- Distribute Fact Sheet

Provide Opportunity for Public Meeting

- Prepare Meeting Transcripts and Make Available in Administrative Record and Information Repository

Suggested Community Relations Activities[1]

Maintain Community Dialogue

- Telephone Officials/Citizens
- Conduct Meetings with Community
- Prepare "Kickoff" Fact Sheet
- Develop Mailing List
- Designate Agency Contact
- Conduct Workshops
- Remind Community of TAG Option, as Necessary

Contact Community Members

- Maintain Telephone Contact with Key Community Representatives
- Solicit Citizen Input for Evaluating FS Alternatives
- Respond to Media Inquiries
- Mail TAG Fact Sheet to Key Community Representatives as Necessary

Discuss RI/FS and Proposed Plan

- Develop and Distribute Fact Sheet
- Issue News Release
- Mention TAG Option in Public Notices

Announce Responsiveness Summary

- Distribute Responsiveness Summary to Public Commenters and Mailing List

Announce Responsiveness Summary

- Distribute Responsiveness Summary to Public Commenters and Mailing List

Maintain Community Dialogue

- Update Mailing List
- Designate Agency Contact

Maintain Community Dialogue

- Maintain Telephone Contact
- Conduct Workshop

[1] Ongoing throughout RI/FS Process

APPENDIX I

EXAMPLES OF COMMUNITY RELATIONS ACTIVITIES CONDUCTED TO DATE NAS ALAMEDA

APPENDIX I

EXAMPLES OF COMMUNITY RELATIONS ACTIVITIES CONDUCTED TO DATE NAS ALAMEDA

- February 1989 -- Community relations plan was prepared for the Naval Facilities Engineering Command, Western Division. The community relations plan outlines a strategy for involving the community in base-wide cleanup activities at NAS Alameda.
- September 1990 -- Technical Review Committee (TRC) was established in accordance with the National Contingency Plan (NCP). TRC meetings were held quarterly at a location determined by the Navy
- June 1992 -- Placement of Installation Restoration (IR) program display at Trans Pacific Bank, Alameda.
- July 1992 -- Placement of IR program display at Navy Exchange, NAS Alameda.
- August 1992 -- Placement of IR program display at City Bank, Alameda.
- September 1992 -- Placement of IR program display at Alpha Federal Credit Union, NAS Alameda Branch.
- October 1992 -- Placement of IR program display at Alpha Federal Credit Union, South Shore Alameda Branch.
- November 1992 -- Placement of IR program display at Alameda City Hall.
- April 1993 -- Placement of IR program display at Marina Village Shopping Center, Earth Day Celebration (staffed booth).
- July 1993 -- Placement of IR program display at NAS Alameda, Building 1 Command Headquarters (month-long display).
- November 1993 -- Publication of notice regarding toxic air emissions.
- December 1993 -- Community meeting held to discuss the potential for exposure to routine emissions of toxic air contaminants and to explain the findings of an associated health risk assessment.
- December 1993 -- Community members notified of the formation of the RAB through mailings to 14,000 residents and 900 businesses within 1/2-mile of NAS Alameda.
- January 1994 -- The first transitional meeting held between the TRC and the RAB.
- April 1994 -- RAB meetings commenced; RAB meetings are normally held on the first Tuesday of every month and public notification of each RAB meeting is printed in the *Alameda Journal*, the *Alameda Times Star*, and the *Oakland Tribune*.

- April 1994 -- Placement of IR program display at College of Alameda Earth Day.
- April 1994 -- Placement of IR program display at South Shore Shopping Center
- October 1994 -- Placement of IR program display at Fleet Week, San Francisco.
- Six fact sheets sent to community mailing lists and distributed at RAB meetings.
- April 27, 1996 – Display and presentations at the Lawrence Hall of Science in Berkeley.

Additionally, a series of workshops for RAB members were held on the following topics:

- March 18, 1995 -- Documents and Decision
- April 8, 1995 -- Early Actions
- April 28, 1995 -- Chemicals of Concern and Toxicology
- July 22, 1995 -- Site Characterization and Geology

APPENDIX J

PUBLIC SCHOOL DISTRICT

APPENDIX J

PUBLIC SCHOOL DISTRICT

The following contacts may provide assistance in obtaining information on schools within the Alameda school system:

Alameda Unified School District Board of Education
2309 Santa Clara Avenue
Alameda, California
(510) 337-7060

Alameda Unified Schools
2200 Central Avenue
Alameda, California
(510) 748-4000

APPENDIX K

DOD/U.S. EPA RESTORATION ADVISORY BOARD PROCEDURES AND CALIFORNIA HEALTH AND SAFETY CODE SECTION ~~2536.1~~ 25356.1

THE DEPARTMENT OF DEFENSE AND THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, DC

SEP 27 1994

SUBJECT: Restoration Advisory Board (RAB) Implementation Guidelines

The Department of Defense (DoD) is taking steps to increase public participation in its cleanup program. New DoD policy, which resulted from DoD's participation in the Federal Facilities Environmental Restoration Dialogue Committee, calls for Restoration Advisory Boards (RABs) to be formed at all closing installations and at non-closing installations where the local community expresses interest.

RABs are an expansion of DoD's Technical Review Committee (TRC) concept. The boards are a forum for exchange of information and partnership among citizens, the installation, EPA, and State. Most importantly, they offer an opportunity for communities to provide input to the cleanup process. It is our view that RABs will improve DoD's cleanup program by increasing community understanding and support for cleanup efforts, improving the soundness of government decisions, and ensuring cleanups are responsive to community needs.

The attached document entitled "Restoration Advisory Board Implementation Guidelines" provides recommended procedures for establishing and operating RABs. It is intended to be a resource for installation, EPA, and State personnel and citizens who participate in RABs. The guidelines were developed by a joint DoD/EPA working group which is a model for interagency cooperation.

The agency points of contact on RABs are, for DoD, Ms. Marcia Read, 703-697-9793; for EPA, Ms. Marilyn Null 202-260-5686.

Sherri W. Goodman
Deputy Under Secretary of Defense
(Environmental Security)
Department of Defense

Elliott P. Laws
Assistant Administrator
Office of Solid Waste and Emergency Response
U.S. Environmental Protection Agency

Attachment

DEPARTMENT OF DEFENSE
AND
UNITED STATES ENVIRONMENTAL
PROTECTION AGENCY

Restoration Advisory Board Implementation Guidelines

September 1994

TABLE OF CONTENTS

These guidelines are based on the "Interim Guidance for Implementing Restoration Advisory Boards", November 1993, drafted by California Environmental Protection Agency, Department of Toxic Substances Control.

U.S. ENVIRONMENTAL PROTECTION AGENCY AND DEPARTMENT OF DEFENSE RESTORATION ADVISORY BOARD IMPLEMENTATION GUIDELINES

I. BACKGROUND

The United States Environmental Protection Agency (EPA) and the Department of Defense (DoD) recognize the importance of public involvement at military installations that require environmental restoration. Therefore, EPA and DoD have developed joint Restoration Advisory Board (RAB) guidelines. DoD policies on community involvement can be found in the "*Management Guidance for Execution of the FY94/95 and Development of the FY96 Defense Environmental Restoration Program*," April 14, 1994.

RABs bring together people who reflect the diverse interests within the local community, enabling the early and continued flow of information between the affected community, DoD and environmental oversight agencies. DOD is creating RABs to ensure that all stakeholders have a voice and can actively participate in a timely and thorough manner in the review of restoration documents. RAB community members will provide advice as individuals to the decision-makers on restoration issues. It is a forum to be used for the expression and careful consideration of diverse points of view. The RAB complements other community involvement efforts, but does not replace them. The DoD installation will continue to be responsible for fulfilling all statutorily mandated public involvement requirements.

This document provides guidelines to assist DoD installations on how to develop and implement a RAB and the role of environmental oversight agencies in this process. It is intended to be flexible so the DoD installation can adapt the RAB to meet the individual needs of the community.

The guidelines are based on recommendations contained in the February 1993, "Interim Report of the Federal Facilities Environmental Restoration Dialogue Committee." While not identical, they are generally consistent with the Committee's recommendations.

Although these guidelines are intended to apply at all military installations, EPA's involvement on a RAB will vary based on the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) National Priorities List (NPL) status of the installation. EPA is committed to full involvement on RABs as the Federal regulatory agency for all DoD installations on the NPL or at base closure sites where EPA has received resources from DoD. EPA's involvement will be at the discretion of EPA's regional office for non-NPL, non-base closure or base closure installations where EPA has not been given resources from DoD.

For this document, the term "stakeholder" is defined as parties that are actually or potentially affected by restoration activities at an installation.

II. RAB DEVELOPMENT

Most DoD installations have already established Technical Review Committees (TRCs) to provide interested parties with a forum to discuss and provide input into site restoration activities as required by 10 USC 2705(c) and Executive Order 12580, "Superfund Implementation." The DoD RAB policy calls for existing TRCs or similar groups to be expanded or modified to become RABs rather than create a separate committee, as long as the RABs meet the statutory requirements for TRCs. RABs provide an expanded opportunity for ongoing community input and participation in all phases of installation restoration activities and decision-making.

The RAB is not a replacement for other types of community outreach and participation activities required by law, regulation, or policy. Therefore, all existing public involvement requirements must still be completed, including the community relations requirements of CERCLA as amended by the Superfund Amendments and Reauthorization Act (SARA); and public involvement requirements of the Resource Conservation and Recovery Act (RCRA), National Environmental Policy Act (NEPA), and any state environmental regulations.

Although the DoD installation has the lead responsibility for the formulation and implementation of the RABs, the state and EPA, as appropriate, should be involved in all phases of RAB planning and operation.

Preparing for the Initial RAB Information Meeting

Before the initial RAB information meeting, the DoD installation should begin the process of informing and educating the community about the purpose of the RAB and opportunities for membership and participation. This is especially important at installations where a TRC has not been formed or where the community has had limited participation in the TRC. This can be accomplished by completing the following suggested activities.

Fact Sheet

The DoD installation should prepare and distribute a brief, one-page fact sheet describing the RAB prior to the initial RAB information meeting. This should be done in consultation with the existing TRC, the state, and EPA, as appropriate. It may be advisable to distribute the fact sheet using any existing public participation mailing lists unless a wider distribution is deemed desirable. The fact sheet should describe the purpose of the RAB, membership opportunities, the membership selection process, and state the responsibilities of RAB members. Copies of the fact sheet should be made available to the public in

information repositories established by the installation and widely accessible to the community. If a significant segment of the community is non-English speaking or visually impaired, the fact sheet should be translated. A sample RAB fact sheet is included as Enclosure 1.

Public Notice

A paid public notice should be issued to advertise the initial RAB information meeting in at least one newspaper of general circulation serving the affected communities around the installation, as well as in the installation newspaper. The public notice should be published in advance of the meeting and include the following information:

- time and location of the meeting
- notice of the intent to establish a RAB or transition the TRC to become a RAB, if applicable
- RAB purpose
- membership opportunities
- meeting is open for public attendance and participation
- name and phone number of contact person(s) for more information
- topics for consideration at the initial RAB information meeting

The public notice should be placed in a prominent section of the newspaper likely to be read by the majority of community members. A sample public notice is included as Enclosure 2.

Agenda

An agenda for the meeting should be developed by the DoD installation in consultation with the state and EPA, as appropriate. The agenda should reflect community restoration concerns as identified by existing community involvement activities (i.e., interview with key community leaders, review of correspondence, review of media coverage, etc.).

Press Release

The DoD installation's public affairs office should prepare and distribute a press release to explain the purpose of the RAB and the time and location of the meeting. Depending on local media coverage of installation environmental issues, it may be appropriate to prepare a more extensive media packet of information to update the local media regarding installation restoration issues and activities.

Initial RAB Information Meeting

The initial RAB information meeting should be sponsored by the DoD installation as

soon as possible to ensure the expeditious e an be accomplished
at the next regularly scheduled TRC meetin : notice is given, or
at a community meeting held specifically fc : currently exists,
the TRC must evaluate its member composi.. RAB criteria and
modify, as appropriate. The DoD installation ..lt with the state and the EPA, as
appropriate, well in advance of the initial RAB information meeting on all matters related to the meeting.

The initial RAB information meeting may be facilitated by the DoD installation. If appropriate, the meeting could be facilitated by a professional facilitator with meeting facilitation skills and experience. A professional facilitator should be considered where a controversial situation is anticipated and a sense of independence will avoid, minimize, or even diffuse acrimonious deliberations.

The focus of the meeting should be to introduce the RAB concept to the community and begin the membership solicitation process. Some of the suggested topics to address include:

- overview and purpose of the RAB
- goal of representing diverse community interests
- difference between the RAB and the TRC
- membership opportunities
- member selection process and time table
- member responsibilities and what is expected of members
- overview of installation restoration and/or conversion activities and plans (as appropriate)
- open discussion/question and answer period
- co-chair opportunities
- potential conflict of interest concerns

The date and location of the meeting should be chosen with the goal of making it convenient for a majority of community members to attend and participate. The meeting, as with all RAB meetings, should be held in a central location. Input from the community should be strongly considered regarding convenient meeting locations and times. The DoD, the state, and EPA should ensure that a representative and/or designee is in attendance at all RAB meetings.

The DoD installation should prepare meeting minutes summarizing the topics discussed at the meeting. The minutes should be a concise summary of the meeting rather than verbatim transcripts. Translation of meeting minutes should be provided if a large segment of the local community speaks a language other than English or members of the community are visually impaired. The minutes should be made available to the public at the information repositories and/or other places within two weeks of the meeting. The DoD installation may want to consider mailing copies of the minutes to all community members

who attended the meeting, existing TRC members and/or to people identified on the installation's community relations mailing list.

Converting a TRC to a RAB

If an installation already has a functioning TRC, it should be converted into a RAB instead of establishing a separate committee. Some of the tasks that need to be done to accomplish the conversion are: adding a community co-chair; increasing community representation; and making all meetings open to the public. The ultimate goal of the RAB is to improve communications among stakeholders and solicit input to be used in the decision process.

As a part of the initial member selection process, the DoD installation, with input from the EPA, as appropriate, and the state, should evaluate diversity of the current membership of the TRC. DoD membership should consist of 1 to 2 members. As a general rule, TRC members should be given preference for a seat on the RAB to preserve continuity and the "institutional history" of the restoration process. This should be balanced against the preeminent need to form a RAB truly representative of the community's diverse interests.

Formulating the RAB

Ensuring Membership Diversity and Balance

RAB members should be identified by a selection panel, see "Selecting Community Members." The RAB should be comprised of members from the local community and representatives from DoD, the state, and EPA, as appropriate. Community members selected for RAB membership should reflect the diverse interests within the local community. RAB members should live/work in the affected community or be impacted by the restoration program. The following list of potential interests should be considered for representation on the RAB. This list is illustrative and not all inclusive. Each RAB should be developed to reflect the unique mix of interests and concerns within the local community.

- local residents/community members (including minorities and low income)
- local reuse committees
- Technical Assistance Grant (TAG) recipient
- current TRC members
- local government officials/agencies
- business community
- school districts
- installation employees/residents
- local environmental groups/activists
- civic/public interest organizations
- religious community
- other regulatory agencies

- local homeowners organizations
- medical community
- Native American tribes

DoD, the state, and EPA, as appropriate, will generally have one member each on the RAB. While it is anticipated that other members of the installation and regulatory agencies will regularly attend and participate in RAB meetings as resources, the majority of RAB members should be from the local community.

Soliciting Community Members

For an effective RAB to be established quickly, the DoD installation, in coordination with the EPA, as appropriate, and the state, needs to inform and educate the local community about the formulation of the RAB, its purpose, and the opportunities for membership. The public outreach effort should be tailored to the individual community at each installation and may include letters to local government officials and community members. This is especially important at installations where there has been limited community involvement opportunities or where there has been minimal community and media interest in the installation.

Every effort should be made to ensure that all individuals or groups representing the community's interests are informed about the RAB and given the opportunity for RAB participation. Based on the results of member recruitment efforts, it may be necessary to directly solicit some groups or organizations. A sample RAB member recruiting letter is included as Enclosure 3 and may be useful in such efforts. For ease in tracking community interest, a community interest form, Enclosure 4, can be developed and distributed at the initial meeting, made available at local information repositories or other suitable locations, and mailed to persons who write or call.

Determining the Size of RAB

The initial size of the RAB will be determined by the RAB selection panel. Once the RAB is operational, procedures should be developed to address the addition and removal of RAB members. The RAB may want to re-evaluate the current RAB size, diversity and balance, and add members. To facilitate constructive dialogue, the RAB should generally be no larger than 20 individuals but no smaller than is necessary to adequately reflect the diversity of community interests regarding installation restoration. If RAB membership significantly exceeds 20, efforts should be made to consolidate and eliminate any duplicate representation of similar view points. If the RAB is larger than 20, the use of sub-committees should be considered.

Selecting RAB Members

The transition period between the meeting to initiate RAB formulation and the

implementation of a fully functioning RAB will likely be a busy, challenging period. Although the length of time required to complete the transition to a RAB will vary from installation to installation, most RABs should set a goal to be in full operation within six months from the meeting to initiate RAB formulation. During this period of time the following key activities should be completed to ensure successful development and implementation of the RAB.

Selecting Community Members:

Selection Panel. The installation Commanding Officer (CO) in consultation with the state and EPA, as appropriate, should identify community interests and solicit names of individuals who can represent these interests on the selection panel. Once the selection panel nominees have been provided, the CO in consultation with the state and EPA, as appropriate, should review the selection panel nominations to ensure balance and diversity. If nominations represent the diversity of the community, they will become the selection panel. The panel should establish and announce the following items:

- procedures for nominating community RAB members
- process for reviewing community interest forms
- criteria for selecting community RAB members
- list of RAB nominees

Final Selection: RAB membership selection should be in an open and fair manner using the panel. The panel will evaluate interest forms and develop a nomination list for the CO. The CO, in consultation with the state and EPA, as appropriate, should review the list to ensure that nominees represent the diversity of the community. If the list lacks diversity, the CO will ask the selection panel to provide a revised list. A lack of diversity or balance is the only reason a list can be rejected.

The selection panel may want to contact those who expressed interest but not selected for RAB membership to thank them for their interest and willingness to participate in the RAB. A letter to them should explain selection criteria, why they were not chosen and should encourage them to attend and participate at the RAB meetings as members of the general public. Their interest forms should be kept on file for consideration when future membership openings occur.

Additions to and removals from the RAB can be made at any time the RAB deems necessary. Procedures for additions and resignations should be outlined in the operating procedures.

NOTE: DOD contractor personnel should not be RAB members. However, for community RAB members who have business interests, membership on the RAB should not limit ability to compete for contracts. All information provided the RAB members should also be made available to the general public.

Selecting Government Members:

The DoD installation, state and local governments, and EPA, as appropriate, should be represented on the RAB. Members may include the Remedial Project Manager (RPM) from the service, state, and EPA, as appropriate, and representatives from local agencies. Representatives should dedicate the time necessary and have sufficient authority to fulfill RAB responsibilities. Whenever, possible, each entity should be represented by one individual. Other government officials such as public health officials from the Agency for Toxic Substances and Disease Registry (ATSDR) may attend RAB meetings as their expertise may be needed.

In the case of closing military installations, the Base Realignment and Closure (BRAC) Cleanup Team (BCT) will be a member of the RAB. The BCT consists of representatives from the DoD service, EPA, and the state.

III. RAB OPERATIONS

This section presents some important issues related to RAB operations. Once the RAB is officially formed, the RAB should develop and implement its operating procedures.

Selecting Co-Chairs

Co-chairs' responsibilities should be jointly held between the installation and community and they will serve as equal partners. Selection of the DoD installation co-chair is by the installation's CO. The community co-chair should be selected by the community members of the RAB. The co-chairs should have sufficient authority and ability to fully undertake RAB chairperson responsibilities.

The length of the term to be served by the co-chairs should be decided upon by the RAB and outlined in the RAB's operating procedures, one- or two-year terms should be considered. This will allow for continuity, but also timely change if necessary. Co-chair termination procedures should be articulated in the RAB's operating procedures.

Distributing a Fact Sheet

After the RAB is established, the RAB should consider preparing and distributing another brief fact sheet to announce that the RAB has been formed and publish the names of RAB members. The fact sheet could also announce the RAB meeting schedule, publicly thank all community members who expressed interest in RAB participation, and encourage ongoing community attendance and participation at future RAB meetings.

Developing a RAB Mission Statement

Each RAB should develop a mission statement that articulates the overall purpose of the RAB. The statement can be brief. For example, "The RAB mission should be to establish and maintain a forum with all stakeholders for the exchange of information in an open and interactive dialogue concerning the installation's restoration program."

Developing RAB Operating Procedures

The RAB should develop a set of operating procedures. The operating procedures should include policies on attendance, meeting frequency, procedures for removing, replacing co-chairs and replacing/adding other members, membership and co-chair length of service, methods for resolving member disputes, process for reviewing and responding to public comments, and procedures for public participation.

Training for RAB Community Members

Once selected, RAB members may need some initial orientation to enable them to perform their duties. The DoD installation should work with the state, EPA and environmental groups to develop methods to quickly inform and educate the RAB members to promote the rapid formation of a fully functioning RAB. This may be accomplished at initial RAB meetings or at special orientation sessions and may include the following:

- formal training sessions
- workshops
- informal briefings
- briefing booklets, past fact sheets, maps
- site tours

Technical support staff from state, federal, and local agencies that have involvement with restoration and reuse issues may be asked to attend RAB meetings to provide information in their areas of expertise and will be available to provide information and explanation to RAB members.

Providing Administrative Support to the RAB

The DoD installation needs to ensure that adequate administrative support is made available to establish and operate the RAB. It is especially important to provide for ongoing administrative support for closing or closed installations. Administrative support will usually include the following:

- meeting facilities
- preparation of meeting minutes and other routine word processing tasks
- copying/printing of RAB documents, notices, fact sheets

- conduct mailings
- distribution of public notices in local newspapers
- management of RAB mailing lists
- translation and distribution of outreach and other RAB materials
- meeting facilitation

Funding for RABs

Administrative and logistical support to meet the RAB's mission should be provided by the DOD installation, using the Defense Environmental Restoration Account at non-BRAC installations, and BRAC funds at closing installations.

Technical Assistance

Community members of the RAB at NPL installations may establish an organization and apply for a Technical Assistance Grant from EPA, provided that a TAG has not already been awarded to another community group at the installation.

Scheduling Meetings

RAB meetings should be scheduled on a regular basis. The individual RAB members should decide the scheduling and frequency of RAB meetings. The frequency of RAB meetings should be to ensure timely and effective communication. Closing installations may require more frequent meetings.

Location

The RAB meetings should be held in a location agreed upon by the RAB members and in a location that is accessible to the physically impaired. The development of the RAB concept was meant to ensure and enhance community involvement in the process; providing the community with the opportunity to suggest meeting locations should assure this.

Special Focus Meetings

When necessary, the RAB may meet for special focus meetings. These are meetings where a single topic or specific document may be reviewed, discussed, and commented on. This may occur when the RAB determines the need for input on specific issues in order to move ahead or the co-chairs agree that a special meeting is necessary.

Attending Meetings

Ongoing and consistent involvement of all board members is essential to the success of the RAB. Regular attendance by all members or designated alternates is expected. Early in the process, the group should jointly establish groundrules for participation, including

meeting attendance. Representatives from the DoD, environmental regulatory agencies, and the community should attend all RAB meetings. This will aid in the operation of the RAB as a team.

If after selection, a RAB member is unable to fully participate, the RAB, using pre-established rules, should ask the member to submit his/her resignation in writing to either of the RAB co-chairpersons. Procedures for replacing/adding members should be decided by the RAB.

Conducting the Meeting

Each meeting should have a purpose and an agenda. Because these meetings are open to the public, a translator should be provided where a large portion of the community is non-English speaking or hearing impaired. If the RAB deems that an outside facilitator is necessary, arrangements should be made accordingly.

Nature of Discussions

DOD will consider all advice provided by the RAB whether consensus in nature or provided on an individual basis, including advice given that represents the minority view of members. However, because DOD does not intend for Federal Advisory Committee Act (FACA) requirements to apply to RABs, consensus is not a prerequisite for RAB recommendations. Each individual should provide advice as an individual, not as a group. At the same time, while consensus is not required or asked of the board members, in the natural course of discussions consensus may evolve.

Format

The meeting format of the RAB will vary. The format will be dictated by the needs of the RAB. Generally, a basic format should include:

- review of "old" business
- presentation or update by project technical staff and RAB member discussions
- question/answer/input/discussion period for non-RAB community participants
- list of action items for the RAB members
- discussion of the next meeting's agenda

Meeting Minutes

The RAB should prepare meeting minutes summarizing the topics discussed at RAB meetings. The minutes should be concise summaries of RAB meetings rather than verbatim transcripts to facilitate effective communication with the local communities. Before copies of the meeting minutes are distributed to existing members of the RAB and made available for public review, the co-chairs should review and approve them. These minutes should be

made available to the public within two weeks of the meeting. A public notice should be prepared to announce the availability of the meeting minutes and the next meeting. The DoD installation may want to consider mailing copies of the minutes to all community members who attend the RAB meetings and to those on the community relations mailing list.

The meeting minutes should be translated if a large segment of the local community speaks a language other than English or members of the community are visually impaired. The DoD installation is responsible for distributing copies of the meeting minutes and all documents to the RAB for review and comment and that this same information is consistently available for public review in the information repositories.

Responding to Comments

The RAB should regularly review, discuss, and provide comments on a wide variety of technical documents and plans. This information should simultaneously be made available for public review and comments at the local information repositories. Public comments should be seriously considered before these documents or plans are finalized.

Public Comment Periods Required by Regulation

The DoD installation should solicit and respond to comments from the public as specified in applicable regulations. In some cases, e.g. RCRA, the regulatory agency is required to obtain public input on corrective actions. Accordingly, it may not be necessary for the DOD installation to seek public comment.

The public is the community at large, not only the RAB.

Other Comments

As a general rule, all draft and final documents deliverable to regulators should be distributed to the RAB and the public for review and comment when they are given to the regulators and should be made available for at least 30 days for review. For documents where a review period shorter than 30 days applies to regulatory staff, this same shorter review period would also apply to the review by the RAB and community members. Every effort should be made to provide the RAB and community members with an adequate review period based on the length and complexity of the document. Where necessary, special focus meetings of the RAB may be called to review and comment on key documents.

To demonstrate commitment to meaningful consideration of comments, the DoD installation should prepare formal written responses to all substantive comments received from the RAB and the general public. In some cases, RAB meeting minutes may suffice to document responses to specific comments.

Addressing Non-restoration Issues

Because RABs provides a direct channel for communication to the installation, community members may raise some non-restoration issues during RAB discussions. Although these issues may not be appropriate for discussion within the context of the RAB, DOD should be responsive to these concerns by referring them to the appropriate offices at the installation or to alternative forums more appropriate for the issue (i.e., at closing installations, non-restoration issues should be referred to the local Reuse Committee, the Base Transition Coordinator, or the BRAC Cleanup Team).

IV. ROLES AND RESPONSIBILITIES

Department of Defense Installation Co-Chair

1. The DoD installation co-chair should coordinate with the community co-chair to prepare and distribute an agenda prior to each RAB meeting. If the RAB will address restoration related to base closure activities, the DoD and community co-chair should coordinate with the BRAC Cleanup Team, the Base Transition Coordinator, and the reuse committee.

2. The DoD installation co-chair should ensure that DoD participates in an open and constructive manner.

3. The DoD installation co-chair should attend all meetings and ensure that the RAB has the opportunity to participate in the restoration decision process.

4. The DoD installation co-chair should ensure that community issues and concerns related to restoration are addressed when raised.

5. The DoD installation co-chair should ensure documents distributed to the RAB are also made available to the general public.

6. The DoD installation co-chair with assistance from the RAB should ensure that an accurate list of interested/affected parties is developed and maintained.

7. The DoD installation co-chair should provide relevant policies and guidance documents to the RAB in order to enhance the RAB's operation.

8. The DoD installation co-chair should ensure that adequate administrative support to the RAB is provided.

9. The DoD installation co-chair should refer issues not related to restoration to appropriate installation official for them to address.

10. The DoD installation co-chair should report back to the installation.

Community Co-Chair

1. The community co-chair should coordinate with the DoD installation co-chair and RAB community members to prepare an agenda prior to each RAB meeting.

2. The community co-chair should ensure that community members participate in an open and constructive manner.

3. The community co-chair should ensure that community issues and concerns related to restoration are raised.

4. The community co-chair should assist with the dissemination of information to the general public.

5. The community co-chair should report back to the community.

6. The community co-chair is expected to serve without compensation.

RAB Community Members

1. The RAB community members are expected to attend meetings.

2. The RAB community members are expected to provide advice and comment on restoration issues to the decision makers.

3. The RAB community members should represent and communicate community interests and concerns to the RAB.

4. The RAB community members should act as a conduit for the exchange of information between the community, DoD installation, and environmental oversight agencies regarding the installation's restoration and reuse programs.

5. The RAB community members should review, evaluate, and comment on documents and other such materials related to installation restoration and closure, where applicable.

6. The RAB community members are expected to serve without compensation on the RAB.

State Regulatory Agency Member

1. The state member should attend RAB meetings.

2. The state member should serve as an information, referral and resource bank for communities, installations and agencies regarding installation restoration.

3. The state member should review documents and other materials related to restoration.

4. The state member should ensure that state environmental standards and regulations are identified and addressed by the DoD installation.

5. The state member should facilitate flexible and innovative resolutions of environmental issues and concerns.

6. The state member should assist in education and training for the RAB members.

U.S. Environmental Protection Agency (EPA) Member

1. The EPA member should attend RAB meetings.

2. The EPA member should serve as an information, referral and resource bank for communities, installations and agencies regarding installation restoration.

3. The EPA member should facilitate flexible and innovative resolutions of environmental issues and concerns.

4. The EPA member should ensure that federal environmental standards and regulations are identified and addressed by the DoD installation.

5. The EPA member should assist in education and training for the RAB members.

BRAC Cleanup Team (BCT) at Closing Installations

1. The BCT should maintain a close working relationship with other members of the RAB.

2. The BCT should provide timely and accurate information to the RAB.

ENCLOSURES

RESTORATION ADVISORY BOARD (RAB)

(name and location of installation)
(add site-specific logo if available)

Background

At *(name of installation)* the *(name of service)* will be pursuing installation restoration activities as part of the Department of Defense's Installation Restoration Program (IRP). *(Provide a brief description of the restoration activities projected at the installation.)*

What is a RAB?

The RAB is an advisory body designed to act as a focal point for the exchange of information between *(name of installation)* and the local community regarding restoration activities. The RAB is intended to bring together community members who reflect the diverse interests within the local community, enabling the early and continued two-way flow of information, concerns, values, and needs between the affected community and the installation.

RAB members will be asked to meet regularly and review and comment on technical documents and plans relating to the ongoing environmental studies and restoration activities at *(name of installation)*. Members will be expected to serve as a liaison with the community and be available to meet with community members and groups. Membership terms will be decided by the RAB. All RAB meetings will be open to the public. Technical support staff will be available to provide informational support and explanation to RAB members.

How to Become a RAB Member

Community members interested in finding out more about the RAB are invited and encouraged to attend a community meeting that *(name of installation)* will conduct on *(date and time)*. At the meeting, you will learn about the purpose of the RAB, membership opportunities and responsibilities, and hear an update on the status of installation restoration activities and future plans. RAB membership applications will be available at the community meeting. The community meeting will be held at the following address:

(List location, address, date, and time of meeting)

If you have questions about the RAB or are interested in applying for RAB membership, community interest forms may also be obtained by contacting:

(List name, title, address, and telephone number of contact)

All Community Interest Forms must be received by *(deadline for forms)*. Forms will be reviewed and approved by the selection panel. The selection panel is organized by the Commanding Officer of *(name of installation)*. The selection panel members are representatives from the DoD installation, state, community and EPA, as appropriate.

Community Expectations

Community members are expected to serve as volunteers on RABs to provide advice to the decision makers about restoration plans for the *(name of installation)*.

PUBLIC NOTICE
(name of installation)
Formation of Restoration Advisory Board
Membership Solicitation

The Department of Defense recognizes the importance of stakeholder participation for Installation Restoration Programs (IRP). Therefore, *(name of installation)* is announcing the establishment of a Restoration Advisory Board (RAB). The RAB is intended to improve public participation by involving the community in the restoration decision-making process.

The existing Technical Review Committee (TRC) will be modified to become a RAB. The RAB will include community members who reflect the diverse interests of the local community. RAB members will be asked to review and comment on plans and activities relating to the ongoing environmental studies and restoration activities at *(name of installation)*. RAB members will have the opportunity to provide input on activities that will accelerate the restoration. Members will also be expected to serve as a voluntary liaison between the community and the RAB and be available to meet with community members and/or groups. RAB meetings will be open to the public.

Community interest forms can be obtained by contacting:

(List name, title, address, and telephone number of contact[s])

Members will be expected to serve a one- to two-year term and attend RAB meetings regularly. Forms will be reviewed and approved by the selection panel. The selection panel members will be representatives from the *(name of installation)*, *(name of state environmental agency)*, the community, and the U.S. Environmental Protection Agency, as appropriate. To qualify, interested parties must be local residents of *(name of cities or counties)* that are impacted/affected by *(name of installation)*.

The initial RAB information meeting will be held:

(list location, date, and time of meeting)

For additional information, please contact *(name, address, and telephone number of contact)*.

Enclosure (3) Sample RAB Recruiting Letter
(Issued by Selection Panel)

RESTORATION ADVISORY BOARD FORMATION

Dear *(name of community member)*:

The Department of Defense recognizes the importance of stakeholder participation in our Installation Restoration Programs (IRP). Therefore, *(name of installation)* is announcing the establishment of a Restoration Advisory Board (RAB). The RAB is intended to improve public participation by involving the community in the restoration decision-making process.

The RAB will include community volunteer members who reflect the diverse interests of the local community. RAB members will have an opportunity to provide input on installation restoration activities. RAB community members can expect to spend *(number of hours/days)* per year supporting the RAB.

RAB members will be asked to meet regularly and review and comment on plans and activities relating to the ongoing environmental studies and restoration activities at *(name of installation)*. RAB members will be expected to serve as a liaison with the community and be available to meet with community members and groups. Members will be expected to serve a term. All RAB meetings will be open to the public.

If you are interested in participating on the RAB for *(name of installation)*, please complete the enclosed Community Interest Form and return it to the following address not later than *(deadline for applications)*:

(List name, address, and telephone number of contact)

Forms will be reviewed by a panel comprised of representatives from the community. The panel will nominate a list of community members for the RAB to the *(name of installation) and appropriate* regulatory agencies.

Sincerely,

(name of selection panel member)

Enclosure

COMMUNITY INTEREST FORM FOR (NAME OF INSTALLATION) RESTORATION ADVISORY BOARD

Conditions for Membership:

Restoration Advisory Board (RAB) members are volunteering to serve a term and attend all RAB meetings. Duties and responsibilities will include reviewing and commenting on plans and activities associated with the Installation Restoration Program at *(name of installation)*. Technical experts will be made available to the RAB. Members will be expected to be available to community members and groups to facilitate the exchange of information and/or concerns between the community and the RAB. RAB community members can expect to devote approximately *(number of hours/days)* per year to support the RAB.

Priority for RAB membership will be given to local residents that are impacted/affected by the *(name of installation)*.

Name: _____

Address: _____
Street Apt.# City State Zip

Phone: (___)_____ (___)_____ (___)_____
Daytime Home Fax

1. (OPTIONAL) Are you affiliated with any group related to restoration or base closure activities? If yes, list the group and your position, if applicable.

2. Briefly state why you would like to participate on the RAB.

3. What has been your experience working as a member of a diverse group with common goals?

department shall periodically update the list of sites by tiers to reflect new information regarding existing sites or the addition of new sites requiring removal and remedial action. No site listed pursuant to paragraph (1) of subdivision (b) shall be listed pursuant to this subdivision.

(d) The department's development and publication of the listings of sites, pursuant to subdivision (b) and the adoption of a minimum hazard threshold and the classification of a site as within that threshold pursuant to subdivision (a), are not subject to Chapter 3.5 (commencing with Section 11340) of Part 1 of Division 3 of Title 2 of the Government Code.

(e) Funds appropriated to the department for remedial action shall be expended in conformance with the priority ranking of sites, as established on the list of sites specified in paragraph (3) of subdivision (b), except that funds appropriated for remedial action may be expended without conforming to the priority ranking if either of the following apply:

(1) The funds are necessary to monitor removal or remedial actions conducted by private parties listed pursuant to paragraph (1) of subdivision (b) or the state funds are necessary for the state share of a removal or remedial action pursuant to Section 104(c)(3) of the federal act (42 U.S.C. Sec. 9604(c)(3)).

(2) The funds are used for either of the following purposes:

(A) To assess, evaluate, and characterize the nature and extent of a hazardous substance release on sites listed pursuant to paragraph (2) of subdivision (b).

(B) To carry out activities pursuant to paragraph (2) or (3) of subdivision (b), or subdivision (c) or (d) of, Section 25355.5.

(f) Funds may be expended on more than one site on the list specified in paragraphs (2) and (3) of subdivision (b) at any one time. In addition, funds may be expended for oversight of any activities conducted by a responsible party on more than one site on the list specified in paragraph (1) of subdivision (b) at any one time.

(g) This section does not require the department to characterize every site listed pursuant to paragraph (2) of subdivision (b) before the department may begin removal or remedial actions at sites listed pursuant to paragraph (3) of subdivision (b).

(Amended by Stats. 1988, Ch. 1387, Sec. 6. Repealed as of July 1, 1998, pursuant to Section 25395.)

25356.1. (a) For purposes of this section, "regional board" means a California regional water quality control board and "state board" means the State Water Resources Control Board.

(b) Except as provided in subdivision (h), the department, or, if appropriate, the regional board shall prepare or approve remedial action plans for all sites listed pursuant to Section 25356.

(c) A potentially responsible party may request the department or the regional board, when appropriate, to prepare or approve a remedial action plan for any site not listed pursuant to Section 25356, if the department or the regional board determines that a removal or remedial action is required to respond to a release of a hazardous substance. The department or the regional board shall respond to a request to prepare or approve a remedial action plan within 90 days of receipt. This subdivision does not affect the authority of any regional board to issue and enforce a cleanup and abatement order pursuant to Section 13304 of the Water Code or a cease and desist order pursuant to Section 13301 of the Water Code.

(d) All remedial action plans prepared or approved pursuant to this section shall be based upon Section 25350, Subpart F of the National Oil and Hazardous Substances Pollution Contingency Plan (40 C.F.R. 300.61 et seq.), and any amendments thereto, and upon all of the following factors, to the extent that these factors are consistent with these federal regulations and do not require a less stringent level of cleanup than these federal regulations:

(1) Health and safety risks posed by the conditions at the site. When considering these risks, the department or the regional board shall consider scientific data and reports which may have a relationship to the site.

(2) The effect of contamination or pollution levels upon present, future, and probable beneficial uses of contaminated, polluted, or threatened resources.

(3) The effect of alternative remedial action measures on the reasonable availability of groundwater resources for present, future, and probable beneficial uses. The department or the regional board shall consider the extent to which remedial action measures are available which use, as a principal element, treatment that significantly reduces the volume, toxicity, or mobility of the hazardous substances, as opposed to remedial actions which do not use this treatment. The department or the regional board shall not select remedial action measures which use offsite transport and disposal of untreated hazardous substances or contaminated materials if practical and cost-effective treatment technologies are available.

(4) Site specific characteristics, including the ential for offsite migration of hazardous substances, surface or subsurface soil, and the hydrogeologic conditions, as well as preexisting background contamination levels.

(5) Cost-effectiveness of alternative remedial action measures. In evaluating the cost-effectiveness of proposed alternative remedial action measures, the department or the regional board shall consider, to the extent possible, the total short-term and long-term costs of these actions and shall use, as a major factor, whether the deferral of a remedial action will result, or is likely to result, in a rapid increase in cost or in the hazard to public health or the environment posed by the site. Land disposal shall not be deemed the most cost-effective measure merely on the basis of lower short-term cost.

(6) The potential environmental impacts of alternative remedial action measures, including, but not limited to, land disposal of the untreated hazardous substances as opposed to treatment of the hazardous substances to remove or reduce its volume, toxicity, or mobility prior to disposal.

(e) A remedial action plan prepared or approved pursuant to this section shall include a statement of ons setting forth the basis for the removal and edial actions selected. The statement shall include an evaluation of each proposed alternative submitted to, or prepared by, the department or the regional board for a particular site. The statement shall also include an evaluation of the consistency of the removal and remedial actions proposed by the plan with the federal regulations and factors specified in subdivision (d) and shall set forth the reasons for rejection of alternative removal and remedial actions. The statement shall also include a nonbinding preliminary allocation of responsibility among all identifiable potentially responsible parties at a particular site, including those parties which may have been released, or may otherwise be immune, from liability pursuant to this chapter or any other provision of law. Before adopting a final remedial action plan, the department or the regional board shall prepare or approve a draft remedial action plan and shall do all of the following:

(1) Circulate the draft plan for at least 30 days for public comment.

(2) Notify affected local and state agencies of the removal and remedial actions proposed in the remedial on plan and publish a notice in a newspaper of ral circulation in the area affected by the draft edial action plan. The department or the regional board shall also post notices in the location where the proposed removal or remedial action would be located and shall notify, by direct mailing, the owners of property contiguous to the site addressed by the plan, as shown in the latest equalized assessment roll.

(3) Hold one or more meetings with the lead and responsible agencies for the removal and remedial actions, the potentially responsible parties for the removal and remedial actions, and the interested public, to provide the public with the information which is necessary to address the issues which concern the public. The information to be provided shall include an assessment of the degree of contamination, the characteristics of the hazardous substances, an estimate of the time required to carry out the removal and remedial actions, and a description of the proposed removal and remedial actions.

(4) Comply with Section 25358.7.

(f) After complying with subdivision (e), the department or the regional board shall review and consider any public comments, and shall revise the draft plan, if appropriate. The department or the regional board shall then issue the final remedial action plan.

(g) (1) A potentially responsible party named in the final remedial action plan issued by the department or the regional board may seek judicial review of the final remedial action plan by filing a petition for writ of mandate pursuant to Section 1085 of the Code of Civil Procedure within 30 days after the final remedial action plan is issued by the department or the regional board. Any other person who has the right to seek judicial review of the final remedial action plan by filing a petition for writ of mandate pursuant to Section 1085 of the Code of Civil Procedure shall do so within one year after the final remedial action plan is issued. No action may be brought by a potentially responsible party to review the final remedial action plan if the petition for writ of mandate is not filed within 30 days of the date that the final remedial action plan was issued. No action may be brought by any other person to review the final remedial action plan if the petition for writ of mandate is not filed within one year of the date that the final remedial action plan was issued. The filing of a petition for writ of mandate to review the final remedial action plan shall not stay any removal or remedial action specified in the final plan.

(2) For purposes of judicial review, the court shall uphold the final remedial action plan if the plan is based upon substantial evidence available to the department or the regional board, as the case may be.

(3) This subdivision does not prohibit the court from granting any appropriate relief within its jurisdiction, including, but not limited to, enjoining the expenditure of funds pursuant to paragraph (2) of subdivision (b) of Section 25385.6.

(h) (1) This section does not require the department or a regional board to prepare a remedial action plan if conditions present at a site present an imminent or substantial endangerment to the public health and safety or to the environment or, if the department, a regional board, or a responsible party takes a removal action at a site and the estimated cost of the removal action is less than one million dollars ($1,000,000). The department or a regional board shall prepare or approve a removal action workplan for all sites where a nonemergency removal action is proposed and where a remedial action plan is not required. For sites where removal actions are planned and are projected to cost less than one million dollars ($1,000,000), the department or a regional board shall make the local community aware of the hazardous substance release site and shall prepare, or direct the parties responsible for the removal action to prepare, a community profile report to determine the level of public interest in the removal action. Based on the level of expressed interest, the department or regional board shall take appropriate action to keep the community informed of project activity and to provide opportunities for public comment which may include conducting a public meeting on proposed removal actions.

(2) A remedial action plan is not required pursuant to subdivision (b) if the site is listed on the National Priority List by the Environmental Protection Agency pursuant to the federal act, if the department or the regional board concurs with the remedy selected by the Environmental Protection Agency's record of decision. The department or the regional board may sign the record of decision issued by the Environmental Protection Agency if the department or the regional board concurs with the remedy selected.

(3) The department may waive the requirement that a remedial action plan meet the requirements specified in subdivision (d) if all of the following apply:

(A) The responsible party adequately characterizes the hazardous substance conditions at a site listed pursuant to Section 25356.

(B) The responsible party submits to the department, in a form acceptable to the department, all of the following:

(i) A description of the techniques and methods to be employed in excavating, storing, handling, transporting, treating, and disposing of materials from the site.

(ii) A listing of the alternative remedial measures which were considered by the responsible party in selecting the proposed removal action.

(iii) A description of methods that will be employed during the removal action to ensure the health and safety of workers and the public during the removal action.

(iv) A description of prior removal actions with similar hazardous substances and with similar public safety and environmental considerations.

(C) The department determines that the remedial action plan provides protection of human health and safety and for the environment at least equivalent to that which would be provided by a remedial action plan prepared in accordance with subdivision (c).

(D) The total cost of the removal action is less than two million dollars ($2,000,000).

(4) For purposes of this section, the cost of a removal action includes the cleanup of removal of released hazardous substances from the environment or the taking of other actions which are necessary to prevent, minimize, or mitigate damage which may otherwise result from a release or threatened release, as further defined by Section 9601 (23) of Title 42 of the United States Code.

(5) Paragraph (2) of this subdivision does not apply to a removal action paid from the Hazardous Substance Cleanup Fund.

(i) Article 2 (commencing with Section 13320), Article 3 (commencing with Section 13330), Article 5 (commencing with Section 13350), and Article 6 (commencing with Section 13360) of Chapter 5 of Division 7 of the Water Code apply to any action or failure to act by a regional board pursuant to this section.

(Amended by Stats. 1994, Ch. 441, Sec. 2. Effective January 1, 1995.. Repealed as of July 1, 1998, pursuant to Section 25395.)

25356.2. (a) There is hereby created in the Office of Environmental Health Hazard Assessment a Hazardous Substance Cleanup Arbitration Panel.

(b) The panel shall apportion liability for the costs of removal and remedial actions in accordance with Sections 25356.3 and 25356.4. All meetings of the panel are exempt from Chapter 3.5 (commencing with Section 6250) of Division 7 of Title 1 of, and Article 9 (commencing with Section 11120) of Chapter 1 of Part 1 of Division 3 of Title 2 of, the Government Code.

APPENDIX L

INTEGRATION OF THE ENVIRONMENTAL CLEANUP, COMPLIANCE, AND REUSE PLANNING PROCESSES AT NAS ALAMEDA

APPENDIX L

INTEGRATION OF THE ENVIRONMENTAL CLEANUP, COMPLIANCE, AND REUSE PLANNING PROCESSES AT NAS ALAMEDA

The integration of land use and cleanup planning is very important and should be an early and continuing effort of the NAS Alameda base realignment and closure (BRAC) cleanup team (BCT) and the local reuse authority (LRA). Following are (1) a description of the roles and responsibilities of the BCT and the LRA to ensure integration of their respective planning processes, and (2) an overview of the relationship among the environmental cleanup, compliance, and reuse planning processes.

The LRA and the BCT

The LRA for NAS Alameda is the Alameda Reuse and Redevelopment Authority (ARRA). The ARRA is responsible for developing the preferred community reuse alternative.

Section 4.1.2 of this CRP describes the BCT. The BCT is responsible for integrating reuse priorities adopted by ARRA into the cleanup process, as well as educating the ARRA and other reuse groups on the environmental condition of the property; the environmental condition of the property should be considered in the ARRA's development of the most appropriate reuse alternatives.

Effective and ongoing communication between the LRA and the BCT is essential to ensure that all factors are considered in both the cleanup and reuse planning processes and to help identify and implement high-priority reuse opportunities.

Relationship Among the Environmental Cleanup, Compliance, and Reuse Programs

In order to successfully convert NAS Alameda to civilian use, three interrelated activities must be completed: cleanup, closure, and development of a community reuse plan for the base. Cleanup activities at NAS Alameda are being conducted under the Installation Restoration (IR) Program and a variety of environmental compliance programs. The IR Program is described in Appendix C; the environmental compliance, closure, and reuse programs are described below.

Environmental Compliance Programs. Compliance programs include: asbestos, lead paint, underground storage tanks, fuel and stormwater lines, and PCB programs.

Environmental Closure and Reuse Programs. Environmental closure and reuse programs include environmental baseline surveys, findings of suitability to lease or transfer, and the community reuse plan and environmental impact statement.

> Environmental Baseline Surveys. Activities that have been initiated at NAS Alameda to address closure and reuse needs include environmental baseline surveys (EBS) and the development of leasing documents. The EBS is being conducted to take inventory of the environmental condition of all properties within NAS Alameda. The EBS reviews the history of hazardous waste storage, handling, or releases on every property parcel within the installation. The EBS is conducted in two phases. Phase I consists of an initial inventory of the entire base to identify property parcels that are considered clean, as defined by law, and can be considered for lease or

transfer. Phase II is a more in-depth survey of specific property parcels and may involve collection of soil and groundwater samples.

The EBS provides a key tool for community reuse planning. It identifies property parcels that can be leased to the community and whether the lease should provide unrestricted or restricted use. The EBS also identifies potentially new areas of contamination within the installation. Newly discovered contaminated areas may be folded into the IR Program or one of the compliance programs for further action.

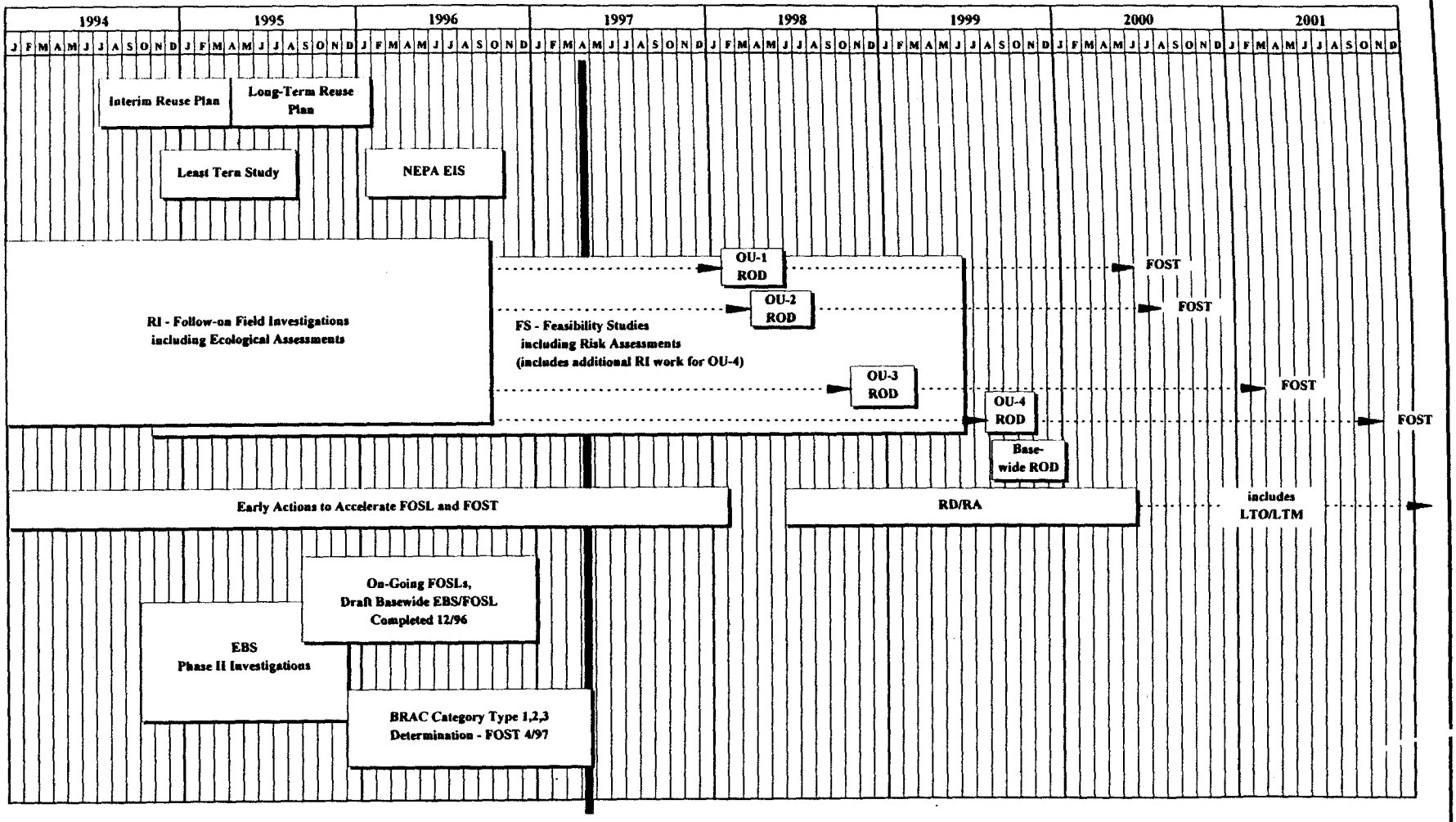
Finding of Suitability to Lease or Transfer. The finding of suitability to lease (FOSL) or finding of suitability to transfer (FOST) are the vehicles to lease or to transfer by deed base properties. The parcel-specific EBS will be attached to the FOSL or FOST to inform future land users of the past and current environmental conditions of the property parcel. The FOSL and FOST will also include any restrictions regarding future use of the property.

No properties may be transferred by deed of sale unless the property has been fully cleaned up or the cleanup remedy is in place and proven to be working (CERCLA 120[h][3]).

Community Reuse Plan and the Environmental Impact Statement. Concurrent with implementation of the cleanup and compliance programs, the ARRA develops the community reuse plan for NAS Alameda. The final reuse plan will be provided to the public for review and comment through a vehicle known as the National Environmental Policy Act (NEPA) environmental impact statement (EIS). The EIS is a federal document required by NEPA to be prepared whenever a federal government action is undertaken that may have an associated environmental impact. The Navy will prepare the EIS. It will identify and document all environmental impacts associated with that federal action. The EIS for NAS Alameda will include several alternatives for property reuse and describe the potential impacts of each alternative. The ARRA's final reuse plan will be included in the EIS as the preferred alternative.

A draft EIS must be completed within 12 months from the date the Navy receives the ARRA's final approved reuse plan. When a draft EIS is completed, its availability will be announced in the local newspaper, and a public comment period and meeting will be conducted. Public comments will be considered prior to adoption of a final EIS.

NAVAL COMPLEX ALAMEDA, PROGRAM INTEGRATION FOR BASE CLOSURE



BASE CLOSURE 4/97

RD/RA - Remedial Design/Remedial Action
RI/FS - Remedial Investigation/Feasibility Study
ROD - Record of Decison
LTO/LTM - Long-term Operations/Monitoring
BRAC - Base Realignment and Closure

EIS - Environmental Impact Statement
EBS - Environmental Baseline Survey
FOSL/FOST - Finding of Suitability to Lease/Transfer
NEPA - National Environmental Policy Act
OU - Operable Unit

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APPENDIX M

NAS ALAMEDA RESTORATION ADVISORY BOARD MEMBERSHIP

APPENDIX M

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APPENDIX N

OTHER ENVIRONMENTAL PROGRAMS AT NAS ALAMEDA

APPENDIX N

OTHER ENVIRONMENTAL PROGRAMS AT NAS ALAMEDA

Following is a brief description of other, non-IR, environmental programs being conducted at NAS Alameda:

Environmental Baseline Survey (EBS) - an inventory of all base property that identifies areas where hazardous substances have been released, been disposed of, or migrated to and categorizes the property according to its environmental condition. Property is found suitable for lease or transfer based upon criteria that are fully protective of public health and the environment.

Resource Conservation and Recovery Act (RCRA) - the federal law enacted in 1976 and amended in 1984, regulating solid waste. Federal regulations implementing the law establish strict requirements for identifying, tracking, handling, storing, transporting and disposing of hazardous wastes.

Underground Storage Tank (UST) Program - a program to identify and clean up leaking USTs: some USTs are located within IR program sites and, therefore, are handled under the IR program.

Additionally, surveys for asbestos, lead, and radon are conducted as necessary, prior to leasing or transferring property for reuse.