



Milestones

Navy Progress in the Environmental Cleanup Program

News of Environmental Restoration Programs at Alameda Point

Fall 1999

Alameda Point Added to Nation's Superfund List

The former Naval Air Station Alameda, now known as Alameda Point, was added to the federal facilities National Priorities List (NPL), or Superfund site, list in summer 1999. The Navy has been following the Superfund cleanup process since the environmental investigation and cleanup program began back in the early 1980s.

The most noticeable change of the new NPL designation will be the change in the lead regulatory oversight responsibilities.

Previously, lead regulatory oversight for the environmental investigation and cleanup of the 2,700-acre base was performed by the Department of Toxic Substances Control, a division of the California Environmental Protection Agency.

The U.S. Environmental Protection Agency (U.S. EPA) also provided oversight along with other agencies such as the Regional Water Quality Control Board and National Oceanic and Atmospheric Administration (NOAA).

Now the U.S. EPA will perform lead regulatory oversight responsibility for the environmental investigation and cleanup effort. The Navy will continue as the lead agency responsible for the investigation and cleanup activities.

Another change made by the new



(Photo courtesy of Navy Transition Office, Alameda Point.)

NPL listing is the development of a Federal Facilities Agreement. This document provides a framework of schedules and lays out dispute resolution guidelines in

the event that there is a disagreement between the parties over aspects of the investigation and cleanup process. A draft of this agreement is currently available at the Alameda Main Library in the Alameda Point Information Repository for review.

The NPL designation also allows the community to apply for a Technical Assistance for public participation Grant, or TAG. This grant of up to \$50,000 provides a non-profit community group with financial resources; to pay for technical assistance from firms specializing in environmental work and for public outreach.

Currently, the U.S. EPA has received a grant application *(Continued on page 2)*

Inside this Issue:

- **What Is Superfund?**
- **Site Bioremediation**
- **How You Can Be Involved**
- **Meet the New BEC**
- **Site-seeing for the RAB**

Superfund List

(continued from page 1)

from a non-profit group located in Alameda. The U.S. EPA encourages other community groups interested in the TAG program to contact David Cooper of the U.S. EPA Community Support Group at 1-800-231-3075.

The National Priorities List is intended primarily to guide the EPA in determining which sites warrant further investigation in order to assess the nature and extent of public health and environmental risks associated with a release of hazardous substances.

The NPL is a list of national priorities among the known release or threatened release of hazardous substances, pollutants, or contaminants throughout the United States.

A site may be included on the NPL if it scores sufficiently high on the U.S. EPA Hazard Ranking System (HRS).

The HRS serves as a screening device to evaluate the relative potential of uncontrolled hazardous substances to pose a threat to human health or the environment. The HRS evaluates four ways we can come into contact with groundwater, surface water, soil, and air contaminants.

At Alameda Point more than 50 years of industrial aircraft repair and overhaul activity resulted in several sites being contaminated with petroleum products, chlorinated solvents, PCBs, metals, radium paint, and products caused by incomplete combustion or polycyclic aromatic hydrocarbons in the soil and/or the groundwater.

An extensive environmental investigation continues, some cleanup activity has already been conducted.

During 1996, the entire underground storm sewer system was cleaned out, removing contaminated sediments.

Lead and PCB contaminated soil was removed from two sites in the fall of 1997. Thirteen miles of under-

What Is Superfund?

S

uperfund is the commonly used name for the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), a federal law passed in 1980. CERCLA enables EPA to respond to hazardous waste sites that threaten public health and the environment.

Under Superfund, EPA tracks many types of contaminated sites. The 1,275 most serious of those sites are now listed on the National Priorities List (NPL). Former Naval Air Station (NAS) Alameda was added to the Superfund list in July 1999.

The EPA has been working with the California Department of Toxic Substances Control (DTSC) and the Navy since 1993 to study the nature and extent of contamination on the 2,700-acre installation.

ground fuel lines were removed or sealed in place in the fall of 1998, and 105 underground storage tanks (USTs) were removed by December of last year.

Radiological removal work in two buildings and the removal of associated underground piping continues, along with radium paint removal at two former landfills.

How Can You Be More Involved in the RAB?

To learn more about the environmental cleanup program at Alameda Point, the Navy encourages you to attend the open monthly meetings of the Restoration Advisory Board (RAB).

You may also visit the two information repositories where copies of all documents relating to cleanup of the former base are available for public view.

The repositories are located at the Main Alameda Public Library, 2200A

Milestones is published biannually by the Navy to inform the citizens of Alameda and others about the



Navy's progress in the environmental cleanup program at former Naval Air Station (NAS) Alameda, now known as

Alameda Point. Although

every attempt is made to provide complete and accurate information, events and times are subject to change. If you do not receive *Milestones* by mail and would like to be added to our mailing list, please contact Gutierrez-Palmenberg, Inc. (GPI) at (510) 749-8277.

Central Avenue, (510) 748-4661 and the NAS Alameda IR library, Building 1, Suite 141, Alameda Point, (510) 749-5951.

For information on how to contact RAB members use the library, or contact technical experts, call the Navy Transition Office at (510) 749-5951.

Meet the New BEC

Mike McClelland to lead cleanup team

Although Mike McClelland, former BRAC Environmental Coordinator (BEC) for Hunters Point Shipyard, recently moved himself, his wife Rebecca, and their belongings to San Diego, in January his job will be focused 500 miles north on Alameda Point!

As part of the reorganization of Engineering Field Activity (EFA) West and transfer of its operations to the Naval Facilities Engineering Command Southwest Division in San Diego, McClelland will take the helm as BEC of Alameda Point's cleanup program.

Meanwhile, the move to southern California is a fortuitous one for the new BEC. McClelland holds a B.S. in civil and environmental engineering from the University of California, Irvine, and his wife grew up in the area.

The McClelland's twin daughters also call southern California home; one lives in San Diego and the other is a

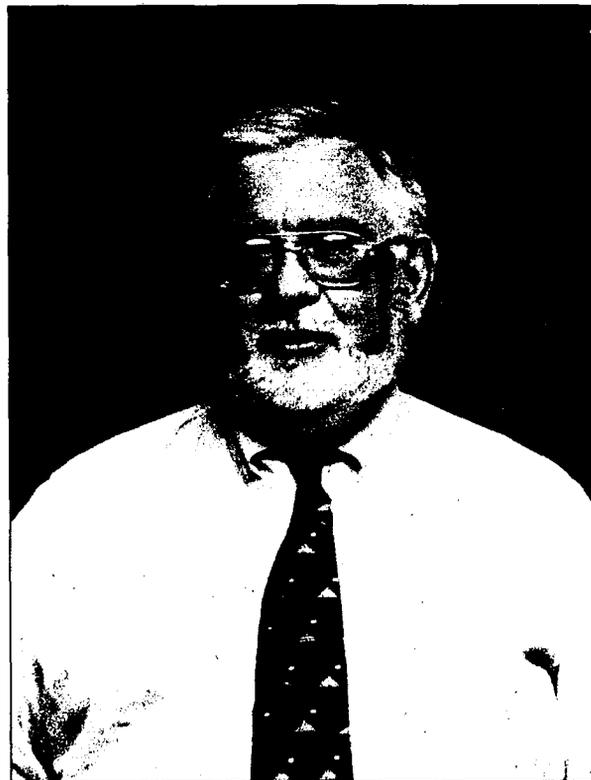
student at U.C.L.A.

McClelland's long connection with the U.S. Navy goes back to the 1970s, when he served as gunner's mate in two Western Pacific cruises in the combat zone of the Gulf of Tonkin in Vietnam.

Between 1976-1992, McClelland worked as a civil engineer in the Navy's Civil Design branch, spending five years of that period in Madrid, Spain.

Since 1987, he has lived in the Bay Area, serving one year as a remedial project manager (RPM) and five years as BEC at Hunters Point.

McClelland says that Alameda Point has the same kinds of pollutant problems as Hunters Point. As BEC, he will head the effort to get the former Naval Air Sta-



(Photo by K. Ellis)

tion cleaned up and into effective reuse in the hands of the City of Alameda.

He looks forward "to working with the people of Alameda and preparing the property for transfer and effective reuse."

THE PUBLIC IS INVITED

**RAB meetings
are held the first
Tuesday of the month
at 6:30 PM, Building 1,
Suite 140, Community
Conference Room,
Alameda Point.**

**For information, call
(510) 749-5951.**

Project Update:

Finding a Faster Remedy for Site Remediation

If you ask Mark Hasegawa, project manager of the surfactant-enhanced dense and nonaqueous phase liquids (DNAPL) removal east of Building 5, what he did last summer, he would tell you all about surfactants. Surfactants are common ingredients used in detergents, soaps, shampoos, and foods such as Cool Whip and kosher foods.

In onsite testing using surfactants last summer, Hasegawa and his project team ran experiments to more quickly remediate the soil where oily substances have sunk into the ground.

Hasegawa explains that due to years of waste disposal practices at Naval Air Station (NAS) Alameda, solvents leaked

through the water table, and they accumulated in the soil below where they were confined by the Bay mud.

Twenty years ago, the Navy pumped water out of the area to alleviate the problem, until it was discovered that this process would take hundreds or thousands of years to remediate the soil.

The DNAPL acts as a continuing source of contamination in the groundwater. At this site near Building 5, the solubility of the contaminant is being enhanced to accelerate cleanup time.

Surfactants are surface-active actions, and the molecules have properties like those of oil and water. They make a pseudo-oil drop (Continued on back page)

Navy Transition Office
Attn: Ms. Lisa Fasano
Community Relations
950 W. Mall Square, Suite 200
Alameda, CA 94501

Project Update:

(continued from page 3)

where the contaminants accumulate. Because the solubility of the contaminants can be increased one thousand times, cleanup time can be reduced from thousands of years to one year. This method is used in enhanced oil recovery.

When the solubility is increased to a certain degree, the DNAPL droplets can actually be surrounded by surfactants to allow it to flow with the water.

Cleaning up DNAPL will remove the source of contamination and allow for other remediation techniques, such as pump and treat, or bioremediation.

Surfactant is injected in the injection well and then recovered in the recovery well. After the DNAPL is removed from the soil, it needs to be removed from the solution; the surfactant is then reused.

The first process is the oil-water separation, where the free-phase NAPL is physically separated from the water. The filtration removes any soil, after which it goes through another system where the dissolved contaminants are removed from the solution. It then goes through an ultra filtration, which is the physical filtration of surfactant globs from the solution.

The recovered surfactant is taken to a mixing tank and ultimately injected back into the injection well.

This process still leaves some residual surfactant. One experimental method used to remove soap from the solution is to separate the foam from the water. The remaining solution is then treated and disposed at East Bay Municipal Utilities District (EBMUD) facilities. This test takes about five to seven days of flushing.

Site-seeing at Alameda Point!



An Engineer from SURBEC shows the Restoration Advisory Board what happens to heavy contaminants when you inject their surfactant mixture in the ground to mobilize them so they can more quickly and easily be removed from the soil. (Photo by L. Fasano)

The Work Plan goal is to remove 95 percent of the NAPL. The deepest wells are about 17 feet, and the surfactant is continuously pumped through the wells.

Surfactant-enhanced subsurface remediation is a unique technology for expediting soil remediation. The surfactant system is designed to remove organic contaminants, including chlorinated solvents, from contaminated soil. Surfactant systems can increase the mobility of non-aqueous phase liquids (NAPL). The result can be a significantly reduced remediation time, increased removal efficiency (up to three or four orders of magnitude,) and reduced costs of removal.

Hasegawa says that after the process is completed, a cost analysis will be undertaken to compare this method with others.

FOR MORE INFORMATION ABOUT ALAMEDA POINT

please contact the following:

- Alameda Point
Environmental Issues
Steve Edde
(510) 749-5952
- Community Relations
Lisa Fasano
(510) 749-5951
- City of Alameda Issues
Dina Tasini
(510) 749-5922
- Soil Pile/Urban Runoff Management
Alameda Fire Department
Capt. Steve McKinley
(510) 749-5885