

# Naval Base Ventura County Port Hueneme Site and Point Mugu Site

## INSTALLATION RESTORATION PROGRAM

### A Word from the Commanding Officer of Naval Base Ventura County...

The community is very important to all of us at NBVC and the Navy. As the largest employer in Ventura County, I am aware of just how important our bases are to the local economy. We offer jobs to our civilian counterparts; our Sailors live in the local neighborhoods, shop, educate their children in local schools, and we all enjoy the wonderful environment unique to Southern California. For these and many other reasons, maintaining an effective working relationship with our community is paramount.

Such a relationship depends on good communication. This fact sheet is one of a series, designed to communicate information about the cleanup program at NBVC and to enlist community support and involvement in this program. I hope you will find these pages useful and informative about our efforts to effectively clean up, protect, and restore the environment at NBVC.

For years, the Navy has been at the forefront of the design and implementation of technology that will help us protect

and preserve our precious resources and the environment in which we live and function every day. At our Point Mugu site, we continue to research and protect the wetlands and endangered wildlife that flourish there. Our Port Hueneme site has the Navy's National Environmental Technology Test Site, where we partner with industry, academia, government, and the community to demonstrate innovative clean up technologies for gasoline spills, especially methyl tertiary-butyl ether (MTBE), the fuel additive that is a threat to drinking water in California and nationwide.

Underlying NBVC's environmental management approach is the belief that everyone is part of the program. We try to keep you informed about our environmental activities through public meetings, newsletters such as this one, base tours, and other special events. I encourage you to share your concerns and ideas with us. You will be improving your quality of life as well as ours by getting involved. Thank you for your continued support.

### In This Issue...

This fact sheet provides information about the environmental investigation and cleanup activities, known as the Installation Restoration (IR) program, at Ventura County's Naval Bases – Port Hueneme and Point Mugu.

Through the Restoration Advisory Board (RAB) a partnership of citizens, regulators, and Navy members, NBVC conducts outreach and provides information about the environmental investigations and cleanup activities at both Port Hueneme and Point Mugu. For more information or to find out how to join the RAB, please see the coupon on page 7 of this booklet.

This fact sheet describes:

- The IR Program.
- The status and progress of environmental investigation and cleanup activities at Port Hueneme and Point Mugu.

# What is the IR Program? A Refresher Course

The Department of Defense established the IR program in 1975 to provide guidance and funding for the investigation and cleanup of sites that have soil and/or groundwater contamination. The fundamental goal of the program is to protect human health and the environment.

The sites resulted from historical operations and practices that involved the use and disposal of substances such as oils, solvents, and fuels at military installations. While the operations and practices were acceptable years ago, environmental science and technology have improved current methods significantly.

The most reliable and up-to-date scientific methods and technologies are used to gather information at the sites and select the right cleanup approach. The Navy accomplishes this by eliminating, or reducing to prescribed safe levels, any potential risks from the sites that would be caused by exposure to them.

The Navy works closely with regulatory agencies such as the U.S. Environmental Protection Agency (EPA), the California Department of Toxic Substances Control (DTSC) and the Regional Water Quality Control Board (RWQCB). The IR



Program is carried out in accordance with all federal, state and local laws. The primary federal laws are CERCLA, the Comprehensive Environmental Response, Compensation and Liability Act and SARA, the Superfund Amendments and Reauthorization Act.

For your reference, a chart showing how the IR process works is drawn below. Also, we've provided some terminology and definitions that we hope are helpful.

## Some key phrases to know:

**Preliminary Assessment (PA):** Discovers potential hazardous waste releases using records and interviews.

**Site Inspection (SI):** Verifies the potential for hazardous waste releases by sampling and analysis.

**Remedial Investigation (RI):** A comprehensive site study involving additional data collection; risk assessments are conducted to determine potential risk to human health and the environment.

**Feasibility Study (FS):** Identifies various cleanup solutions.

**Proposed Plan (PP):** The plan that outlines how to proceed based on the findings of the FS.

**Record of Decision (ROD):** Documents the selected cleanup solution or the legal determination to close a site with no further action.

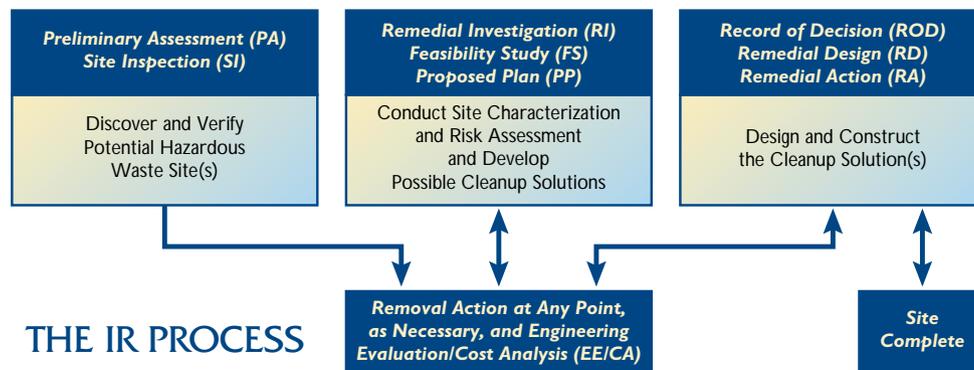
**Remedial Design/Remedial Action (RD/RA):** Design and implementation of the cleanup solution.

**Removal Action:** An expeditious way to address a site when immediate action is needed to mitigate the threat to human health. Varies from installing a fence to completely removing a source of hazardous substance.

**Engineering Evaluation/Cost Analysis (EE/CA):** Comparatively evaluates removal alternatives and designates a preferred alternative.

**Action Memorandum (AM):** Documents the selected removal action alternative.

**Institutional Controls:** A type of remedy involving administrative controls over land uses at the site as opposed to a physical remedy. The remedy may change if the land use changes.



## Update for the Port Hueneme Sites

There are 21 sites at Port Hueneme listed under the IR program. They are either in various stages of cleanup or investigation or they require no further action and are considered “response complete.”

**SITES 7, 13, 16, 17, 18, 22, AND 23:** These sites are considered “response complete.” Site 7, called the “Antarctic Rock” Site is a paved area composed of crushed rock covered with asphalt. The rock contains very small quantities of low-level radioactive material. The site is licensed by the Nuclear Regulatory Commission and has been monitored by the Navy for 25 years. The routine groundwater sampling event for this site occurred this spring with no radiation detected. Sites 13 and 16 were found to have no contamination. Sites 18 and 22 were former fuel storage tanks that were closed under the underground fuel storage tank program. Site 17 was closed on May 21, 2002 as part of the Resource Conservation and Recovery Act Facility Assessment program. An Engineering Evaluation/Cost Analysis (EE/CA) was completed for Site 23, and an Action Memorandum was signed on February 6, 2002, declaring that the appropriate action for this site was to remove the contaminated soil and backfill the excavated areas with clean fill dirt. The work at Site 23 was completed in March 2002.

**SITES 4, 5, 8, 12A, 15, AND 21:** These sites are part of an ongoing Feasibility Study. The study was begun following an initial site inspection during which very low levels of contamination were found. The study is designed to determine what the final action for each site should be. Based on preliminary results of the study, the Navy and DTSC agreed that a revised risk assessment that incorporates DTSC’s toxic slope factors should be performed. When the risk assessments are complete next year, expectations are that for Sites 4 and 8 an asphalt cover will be applied and institutional controls put in place making the sites safe for industrial land use purposes and considered “response complete.” Site 5 may require additional site characterization with potential “hot spot” removals. Sites 12A and 15 are expected to require only that institutional controls be put in place so that they can be used for industrial land use purposes and will also be considered “response complete.” Site 21 is expected to require no further action and can be considered “response complete” as well.

**SITES 6, 10 AND 11:** These sites were part of the same Feasibility Study referenced above. However, the Navy expects that DTSC would concur with the findings that no further action is required in these cases. A decision document describing how the results led to this conclusion is being prepared this year. These sites are expected to be considered “response complete” by next year.

**SITE 9:** Commonly referred to as the “Burn Pit” because it was used for firefighter training exercises. This site was originally part of a removal action that also involved Sites 12B and 23. Confirmation sampling conducted at this site caused it to be put on hold until a revised risk assessment is completed next year.

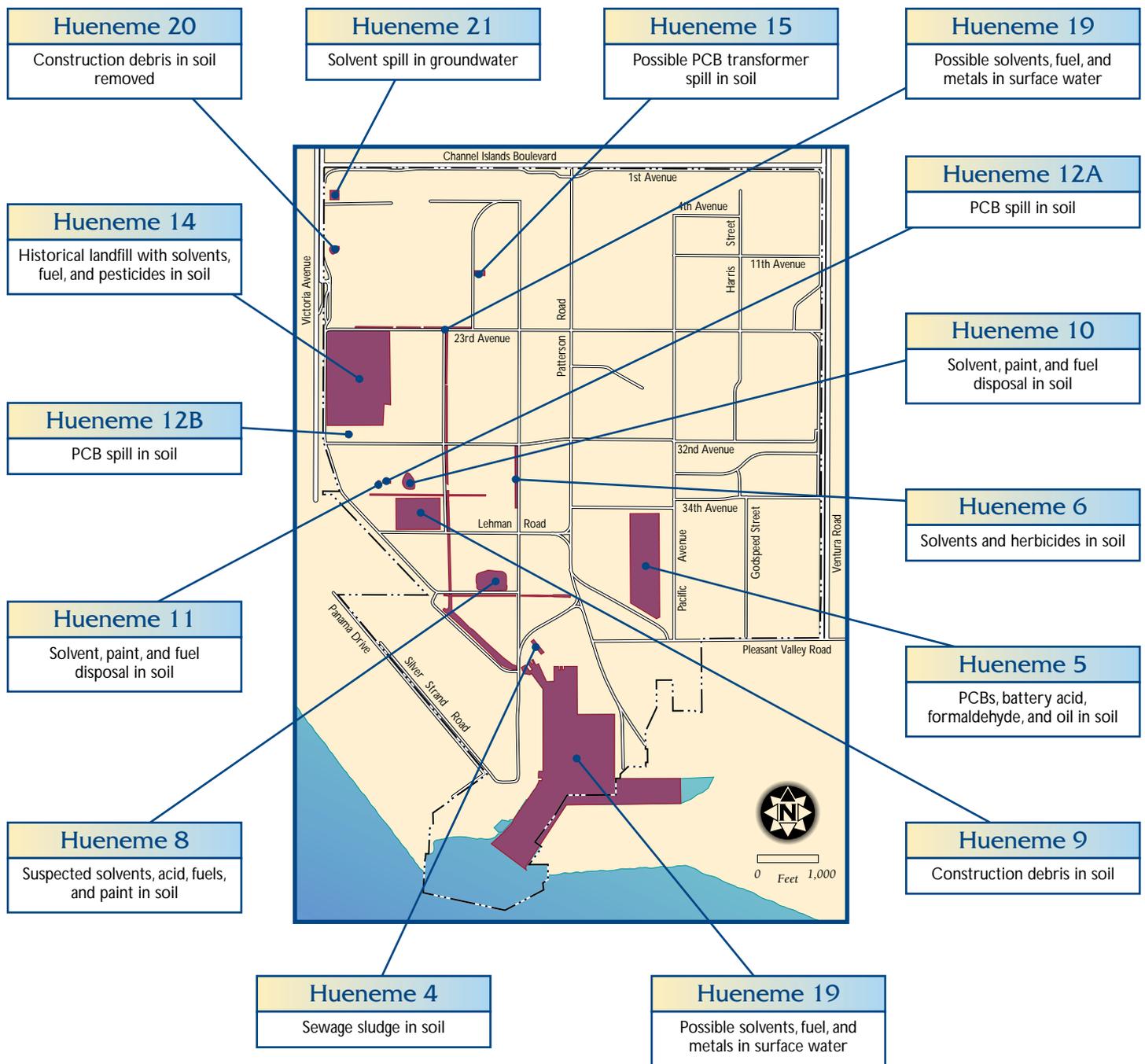
**SITE 12B:** An Engineering Evaluation/Cost Analysis (EE/CA) was completed and an Action Memorandum was signed on February 2, 2002, declaring that the appropriate action for this site was to remove the contaminated soil and backfill the excavated areas with clean fill dirt. The work is still ongoing at Site 12B. By next year, this site is expected to require no further action and will be considered “response complete.”

**SITE 14:** A 33-acre training area for Seabees learning to operate heavy equipment, this site is a former landfill. Last year it was capped with a geosynthetic clay cap as recommended in the Action Memorandum. Groundwater monitoring stations were installed, as were settlement markers. An aerial photo of the site was taken to establish a benchmark to help the Navy evaluate the performance of the cap in the future. The site was fenced off to prevent unauthorized vehicle traffic from entering and damaging the cap. A basewide groundwater study being conducted has shown no contaminants in the groundwater below or adjacent to the site. The monitoring specific to this site will continue for 30 years.

**SITE 19:** This site consists of the surface water drainage ditches that carry storm water runoff to the Navy harbor. The harbor is also considered part of the site. No action under the IR program is ongoing; however, portions of the harbor are scheduled for dredging by the Army Corps of Engineers within the next year. To ensure proper handling and disposal of potentially contaminated dredge spoils, the Navy sampled and analyzed sediment from 20 locations in the harbor. A risk assessment, based on the results, was conducted. The assessment determined that the sediment would be safe to place in the near shore waters of Hueneme Beach; however, the U.S. EPA and DTSC did not concur with the Navy’s determination. Placing dredge spoils in the near shore waters would benefit the beach, which has serious erosion problems. Still being discussed is the issue of potential ordnance, although previous dredging events have not resulted in any ordnance being found.

**SITE 20:** A focused site inspection was conducted last year. Levels of volatile organic compounds (including petroleum and non-petroleum products) were found to exceed acceptable limits associated with industrial uses of the property. Results of the inspection are summarized in a document that is currently under review by the Navy and state regulators. Next year, an EE/CA will be prepared outlining specific actions to be taken as part of the cleanup process.

**Figure 1: NBVC: Port Hueneme Site (Formerly, Naval Construction Battalion Center)**



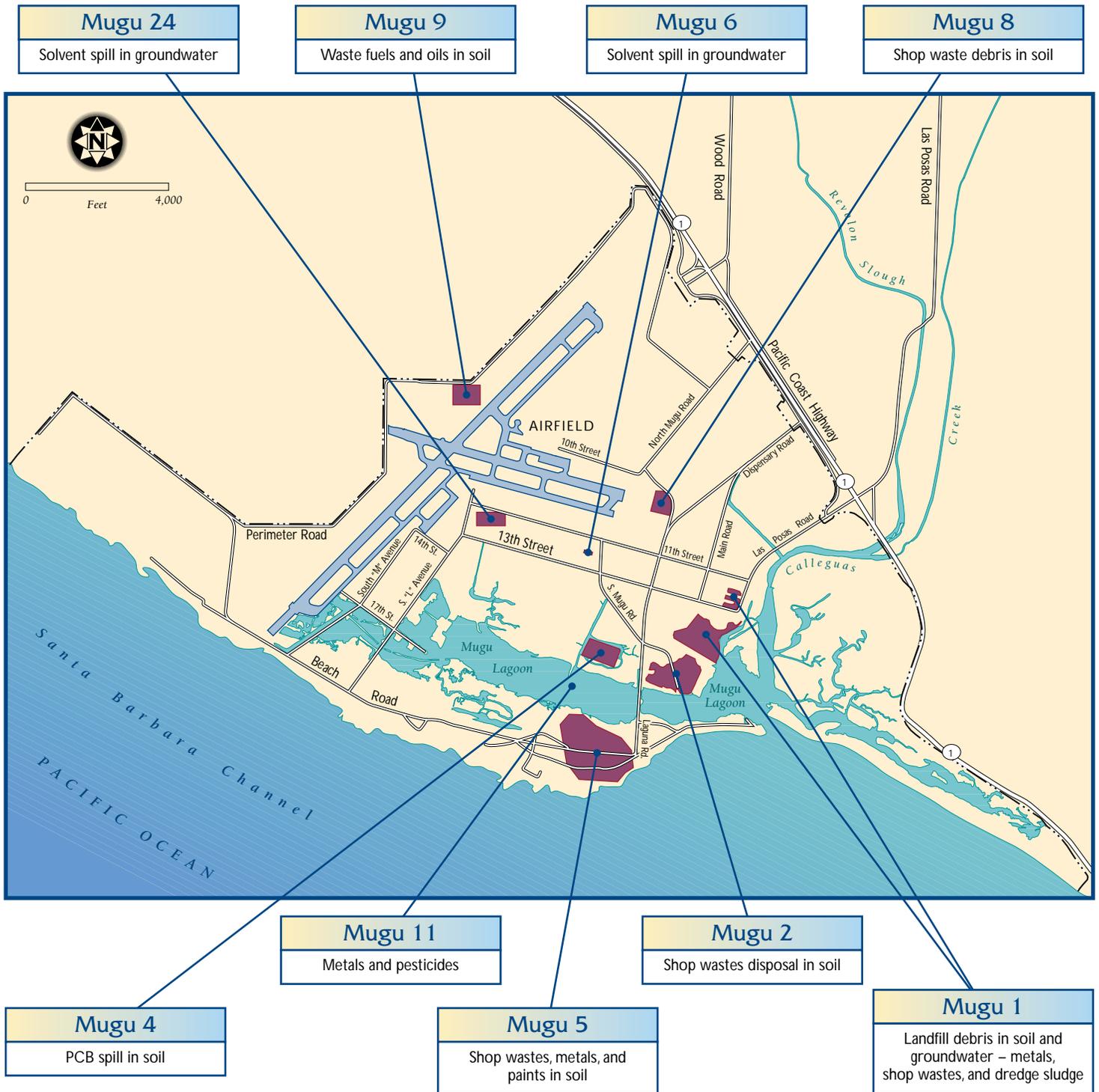
**SITES AT PORT HUENEME**

- |   |   |  |
|---|---|--|
| Site 4 – Sewage Sludge Pits                   | Site 10 – Construction Equipment Department (CED) Wash Rack | Site 15 – Transformer Storage Yard                         |
| Site 5 – Old Defense Property Disposal Office | Site 11 – CED Paint Shop                                    | Site 19 – Surface Water, Ditches, Harbor, and Canals       |
| Site 6 – Track No. 13 Road Fenceline          | Site 12A – CED Spray Paint Shop Area                        | Site 20 – Naval Construction Training Center Building Site |
| Site 8 – Oly's Lake                           | Site 12B – CED PCB Spill Area                               | Site 21 – Old Waste Disposal Pit                           |
| Site 9 – Burning Pit                          | Site 14 – Former Earth Moving Area                          |  |

Note: Seven sites are not shown because they are closed.

PCB = polychlorinated bephynyls.

Figure 2: NBVC: Point Mugu Site (Formerly, NAS Point Mugu)



**SITES AT POINT MUGU**

Site 1 - Lagoon Landfill	Site 5 - Old 6 Area Shops	Site 9 - Fire Training Area
Site 2 - Old Shops Area	Site 6 - Building 311 Yard	Site 11 - Mugu Lagoon and Drainage Ditches
Site 4 - Public Works Storage Yard	Site 8 - Runway Landfill	Site 24 - Underground Storage Tank Sites

Note: Three sites are not shown because they are closed. PCB = polychlorinated bephenyls.

## Update for the Point Mugu Sites

There are 12 sites at Point Mugu listed under the IR program. As at Port Hueneme, they are either in various stages of cleanup or investigation or require no further action and are considered "response complete."

**SITES 7, 10, AND 20:** As a result of site investigations, these three sites were determined to have very low levels or no contamination present. As a result, the Navy proposed no further action at these sites, which are now considered "response complete."

**SITES 2, 4, 8, AND 9:** These sites are all part of an ongoing Feasibility Study, which is designed to prescribe an appropriate course of action. The study is scheduled to be complete in September 2002. For all 4 sites, the draft study results indicate that **no further action** is required.

**SITES 6 AND 24:** Referred to as the "Got Milk?" sites, these two sites had solvent spills that have contaminated the groundwater. A Feasibility Study was conducted to determine the best course of action. A draft was completed in November 2001 with a recommendation to use a bioremediation cleanup process for both sites. A pilot test, using lactic acid (hence the name, the "Got Milk?" site) had begun at Site 24 in 1998; phase one of the cleanup followed. Both the pilot and phase one results demonstrated great promise for this method as a cleanup strategy that not only worked well, but also would save time and money. In March 2002, additional equipment was installed as part of phase two; the system uses methane and oxygen to stimulate microorganisms to eat the chlorinated solvents. **This phase of the project will be completed by December 2002.** Results at Site 24 prompted the same cleanup strategy

to be used at Site 6; **phase two work at this site will begin in September 2002.**

**SITE 1:** The Lagoon Landfill site was the subject of a Feasibility Study that resulted in a draft report in September 2001. The report recommended maintenance of the current landfill cover. **Sampling is ongoing** to support this recommendation, with a final report due in September 2002.

**SITE 5:** This old Public Works shop area near the beach, is in the **Remedial Investigation phase**. After removing soil containing high concentrations of metals, confirmatory sampling showed elevated levels of metals remaining. The site is now undergoing pilot testing of electrokinetic technology to determine if this method is viable for cleaning up the remaining metal contamination. In February 2002, the Army Corps of Engineers completed a promising phase two pilot test. Phase three began in May 2002. At about the same time, a microcosm test was started to determine the cause of the **apparent spontaneous cleanup** of chlorinated solvent at the site. Phase three will be complete in May 2003; the microcosm study will have results in December 2002.

**SITE 11:** The Lagoon and Drainage Ditches have also been the subject of a Feasibility Study. In order to fully evaluate the effects of potential contamination in the Lagoon, sediment and tissue sampling of flora and fauna in the waters and sediments was conducted in June 2002 to determine if contaminants are bioaccumulating up the food chain. **Surface water samples** from Calleguas Creek and the Revolon Slough **will occur during the next year** to document potential ongoing pollution of the Lagoon. A draft Ecological Risk Assessment, based on the results, will be available in September 2002.



## Did You Know?

- There are 91 RABs at active and closing Navy and Marine Corps installations.
- In FY01, the Navy dedicated \$293.3 million to environmental restoration; in FY02, the funding level is \$255.2 million; and in FY03 it will be \$256.9 million. The Navy's cost to complete the program at all Navy and Marine Corps bases is now estimated at \$3.9 billion.
- The Navy planned to complete work at 156 sites in FY01; it completed work at 256 sites.
- The Navy planned to complete ALL work at 6 installations during FY01; it completed work at 12 installations.
- There are 3,668 sites in the Navy's restoration program: 2,048 (56%) are considered response complete; 921 (25%) have investigations in progress; 311 (8%) have cleanups in progress; and 388 (11%) have work planned in the future.
- The Navy held a RAB training workshop in Denver in May 2001; more than 120 community members and RAB co-chairs attended (including our own, Anna Spanopoulos!)

## Websites

California Department of Toxic Substances Control: [www.dtsc.ca.gov](http://www.dtsc.ca.gov)

California Environmental Protection Agency, Los Angeles Regional Water Quality Control Board: [www.swrcb.ca.gov/rwqcb4/](http://www.swrcb.ca.gov/rwqcb4/)

Defense Environmental Restoration Program: <http://www.dtic.mil/envirodod/DERP/DERP.htm>

Department of Defense's Cleanup Office: [www.dtic.mil/envirodod](http://www.dtic.mil/envirodod)

Department of the Navy Environmental Restoration: [5yrplan.nfesc.navy.mil](http://5yrplan.nfesc.navy.mil)

Southwest Division Naval Facilities Engineering Command, Restoration Advisory Boards (RAB): [www.efdswnavfac.navy.mil/environmental/RAB.htm](http://www.efdswnavfac.navy.mil/environmental/RAB.htm)

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## Mailing List Coupon

If you would like to receive further information, please fill out this coupon and mail it to:

**Gail Pringle**

Restoration Advisory Board Administrator

311 Main Road, Suite 1, Code: N45V

Point Mugu, California, 93042-5033

*Please note that the mailing list is public information. Copies of the list may be requested under the Public Records Act or the Freedom of Information Act.*

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## Additional Information/Contacts

An Information Repository/Administrative Record has been established for easy public access to project-related documents. Although the Record is no longer available at its previous location (Oxnard Public Library), it can be found at the [Environmental Division Office at Point Mugu](#). This record will soon be available on CD.



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You can also join the RAB. The RAB is a partnership of citizens, regulators, and Navy members involved in the cleanup process. Please call Teri Reid if you are interested in joining.

*Si usted quiere obtener el informe en español sobre el ambiente, las investigaciones, y las actividades en proceso a la restauración, y la limpieza de las instalaciones navales NBVC Port Hueneme y Point Mugu, por favor llene el cupón que se encuentra en la página 7 y envíelo a la dirección indicada.*

### DEPARTMENT OF THE NAVY

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