

ENVIRONMENTAL CLEANUP



NEWSLETTER

January-March 2001

This Environmental Cleanup News-letter is the fourth in a series of quarterly newsletters describing the Navy's environmental cleanup program at Hunters Point Shipyard. Each quarterly newsletter includes articles and information updating various environmental cleanup activities, project progress, and key milestones. The Navy has contracted with a local community organization for the distribution of this newsletter to those individuals on the current mailing list.

NEWSLETTER NOW AVAILABLE VIA INTERNET AND E-MAIL

Did you know that the *Environmental Cleanup Newsletter* is available on the web? To provide greater access to environmental cleanup information at Hunters Point Shipyard, this newsletter is now available on the internet. Point your browser to http://www.efdsw.navfac.navy.mil/DEP/ENV/PAGES/hpnl.htm for this newsletter and the three volumes published last year.

If you would prefer to receive future volumes of the *Environmental Cleanup Newsletter* via e-mail use the **Hunters Point Shipyard Mailing List Update Form** on the back page of this newsletter and give us your e-mail address. We will make sure to send you the next issue via e-mail when it is published. You will be helping the Navy save your tax dollars and precious natural resources.

The mailing list update form is also available to add people to the distribution list or update your mailing address. Please fill out and return the form or pass it along to someone else who may be interested—we'll take care of the rest!

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Parcel E—Smoldering Area at Landfill Capped and Extinguished

he Navy recently completed the final stages of the landfill capping effort that extinguished the landfill fire which initially occurred in August 2000 at Parcel E at Hunters Point Shipyard. The landfill cap covers approximately 13 acres where the surface fire had been present. Installation of the landfill cap, consisting of soil layers and a system of liners to prevent combustion by preventing the infiltration of air (oxygen) and surface water into the landfill, was completed in March 2001.

The Navy imported 172,000 cubic yards of soil (16,353 truckloads) and installed 1,900,000 square feet of liner material to construct the cap. Also, 63 truckloads of waste from the landfill surface were hauled away and disposed of off-site. Inclement weather and rain forced the delay in completing the cap from January to March 2001. However, the rainfall provided engineers with an opportunity to observe water runoff and develop an improved stormwater runoff control system for the cap.

The Navy has completed monitoring of subsurface conditions at the landfill. Nine existing groundwater wells and one newly installed vapor-monitoring well were used to collect subsurface air samples. Analytical results indicate that the smoldering has been extinguished. The Navy also determined, through an extensive air sampling program, that the local community and Shipyard tenants were not at risk from the smoldering areas. A complete summary of this entire project will be provided in a report scheduled to be completed on June 1, 2001.

Information on the fire, air sampling, and landfill capping activities are available via the internet on the Navy's Hunters Point Shipyard Parcel E web site at http://w4.efdsw.navfac.navy.mil/dep/HP/HntPt/indexHP.htm

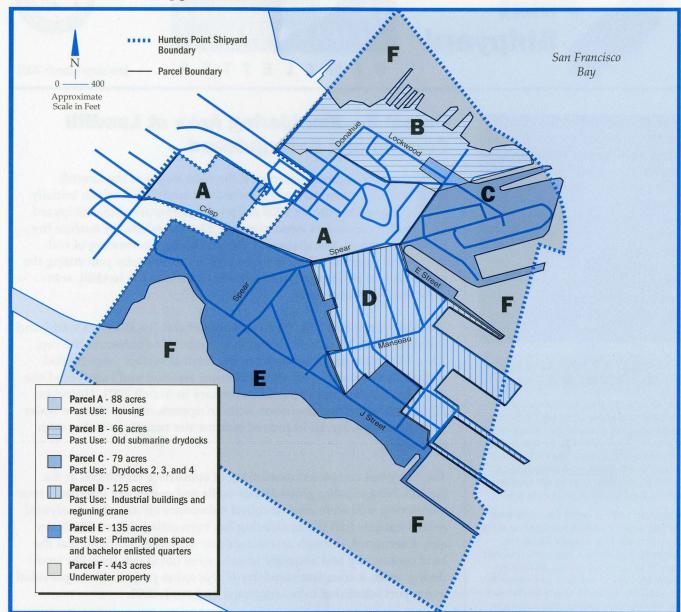
EMERGENCY RESPONSE PLAN



The Navy met with the Emergency Response Plan Committee on January 12, February 9, and March 9, 2001, at the Bayview Police Station, to continue working on development of the community Emergency Response Plan (ERP). The team has made great strides to identify the community concerns over the past several months. The team has identified specific goals to be

met to complete the community notification plan and is working at addressing each of these goals in a systematic fashion. The next meeting will be held from 9:00 to 11:00 a.m. on May 11, 2001, at the Bayview Police Station. All are welcome to attend and participate in this meeting.

Hunters Point Shipyard Parcel Boundaries



Installation Restoration Program Process

Preliminary Assessment/ Site Inspection (PA/SI)	Remedial Investigation (RI)	Feasibility Study (FS)	Proposed Plan/Public Comment Period	Record of Decision (ROD)/ Responsiveness Summary	Remedial Design	Remedial Action	Property Transfer and Reuse
The PA/SI results in the discovery and verification of potential sites.	The RI identifies and confirms the sources and areas of soil and groundwater contamination.	The FS identifies remedial alternatives for soil and groundwater cleanup.	The public has the opportunity to comment on the preferred remedy and other proposed alternatives.	The selected remedial alternative and responses to public comments are documented in the ROD.	Detailed specifications for the selected remedies are developed.	A qualified con- tractor begins the closure actions according to specifications.	A Finding of Suitability to Transfer (FOST) is prepared.

Note: The Navy's IR Program is consistent with the guidelines outlined in the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). Interim actions or Removal Actions, may be performed at sites at any point in this process. The Navy meets on an ongoing basis with the BRAC [Base Realignment and Closure Act] Cleanup Team (BCT) to determine ways to accelerate the cleanup of Hunters Point Shipyard.

Parcel-by-Parcel Current Status

unters Point Shipyard is divided into six parcels (Parcels A through F) to more effectively manage the cleanup effort and efficiently transfer the property to the City of San Francisco (See the figure on page 2). Although chemical contamination resulting from the Shipyard activities varies from site-to-site on each parcel, chemical contaminants at a site may include compounds present in industrial solvents, polychlorinated biphenyls (PCBs), pesticides, gasoline, diesel, motor oil, and/or metals. Following are brief descriptions of environmental investigation/cleanup accomplishments that occurred during January–March 2001 and a look ahead at upcoming activities.

PARCEL B

INVESTIGATION/CLEANUP ACCOMPLISHMENTS January - March 2001

- ➤ Submitted the final Bay Mud Aquitard Technical Memorandum on February 19, 2001.
- ➤ Submitted the final Remedial Design Amendment on February 20, 2001.
- Submitted the draft Technical Memorandum for calculation and implementation of Supplemental Manganese Levels (SMALs) on February 28, 2001.
- ➤ Submitted the final Storm Drain Infiltration Study Report on February 28, 2001.
- ➤ Submitted the final October–December 2000 Groundwater Monitoring Quarterly Report on March 2, 2001.
- ➤ Submitted the draft final Land Use Control Implementation Plan (LUCIP), Revision 1, on March 6, 2001.
- ➤ Conducted soil vapor extraction (SVE) tests for the Phase II SVE treatability study at Building 123.
- Conducted colloidal borescope study at Parcel B western boundary to evaluate groundwater flow direction and velocities.
- Continued delineation and confirmation soil sampling at excavations not currently meeting the cleanup goals.
- Continued perimeter air monitoring and cleanup actions at delineated remedial action areas.

WHAT'S NEXT?

- ➤ Complete soil excavation and backfill operations.
- Conduct April 2001 quarterly groundwater sampling event.
- ➤ Conduct soil and groundwater sampling for petroleum hydrocarbon Corrective Action Plan (CAP) implementation.
- ➤ Prepare and submit the January–March 2001 Quarterly Groundwater Monitoring Report on April 20, 2001.
- ➤ Prepare and submit draft Explanation of Significant Differences to the Parcel B ROD on April 26, 2001.
- ➤ Prepare and submit the final LUCIP on May 15, 2001.
- ➤ Prepare and submit the draft Aboveground/ Underground Storage Tank Report on May 25, 2001.
- Revise the SMALs Technical Memorandum as necessary based on regulatory agency comments.

PARCEL C

INVESTIGATION/CLEANUP ACCOMPLISHMENTS January – March 2001

- ➤ Submitted the revised Phase I Groundwater Information Package and Phase II Field Sampling Plan and Quality Assurance Project Plan (FSP/QAPP) Addenda on January 8, 2001.
- Submitted the final Sampling and Analysis Plan for Parcel C Soil Site Delineation on January 18, 2001.
- ➤ Submitted the draft CAP for Parcels C, D, and E on March 21, 2001.
- Completed well development for Phase II groundwater data gaps investigation.
- Conducted SVE above-ground piping installation, treatment equipment installation, and system start-up for the Phase II SVE treatability study at volatile organic contaminant (VOC) areas (also includes portions of Parcels B and E).
- ➤ Conducted bench tests, injection/monitoring well construction, baseline groundwater sampling, and slug testing for chemical oxidation treatability study at VOC groundwater areas.
- Began delineation sampling for soil removal actions.
- Began groundwater sampling for Phase II groundwater data gaps investigation.
- Began fuel and steam line inspections for pipeline removal actions.

WHAT'S NEXT?

- ➤ Complete steam and fuel line inspection and characterization.
- Continue groundwater sampling for Phase II groundwater data gaps investigation.
- ➤ Continue soil delineation activities for the soil removal actions.
- ➤ Prepare and submit responses to comments and errata pages for the Phase II Groundwater Data Gap FSP/QAPP Addendum on April 12, 2001.
- ➤ Prepare and submit the final Beneficial Use Determination Letter, due April 12, 2001.
- Prepare and submit the Parcel C groundwater information package on May 29, 2001.
- ➤ Begin chemical injection for chemical oxidation treatability study at VOC groundwater areas.

PARCEL D

INVESTIGATION/CLEANUP ACCOMPLISHMENTS January - March 2001

- ➤ Submitted the revised Phase I Groundwater Information Package and Phase II FSP/QAPP Addenda on January 8, 2001.
- ➤ Submitted Basewide Fuel and Steam Line Removal Work Plan on March 6, 2001.
- Submitted the draft CAP for Parcels C, D, and E on March 21, 2001.
- ➤ Completed groundwater sampling for Phase II groundwater data gaps investigation.
- ➤ Completed soil delineation activities for the soil removal actions.
- Began fuel and steam line removal action activities.

WHAT'S NEXT?

- ➤ Complete fuel and steam line removal actions.
- ➤ Complete soil delineation activities and begin excavation for the soil removal actions.
- > Complete radiation removal action activities.
- ➤ Prepare and submit the final Beneficial Use Determination Letter on April 12, 2001.
- ➤ Prepare and submit response to comments and errata pages for the Phase II Groundwater Data Gap FSP/QAPP Addendum on April 12, 2001.
- ➤ Prepare and submit Parcel D Groundwater Information Package on May 8, 2001.
- ➤ Prepare and submit draft Soil and Pipeline Removal Action Closeout Report on May 25, 2001.
- ➤ Prepare and submit draft Parcel D Feasibility Study Report on July 30, 2001.

PARCEL E

INVESTIGATION/CLEANUP ACCOMPLISHMENTS January - March 2001

- ➤ Submitted the final Radiation Removal Action Work Plan on January 19, 2001.
- ➤ Submitted the Soil Data Gaps Investigation Work Plan for Parcel E on March 6, 2001.
- ➤ Submitted the draft CAP for Parcels C, D, and E on March 21, 2001.
- Completed emergency removal action to cap the smoldering area of the landfill as an interim action.
- Collected air samples around the landfill fire area during working hours of cap construction.
- ➤ Conducted SVE above-ground piping installation, treatment equipment installation, and system start-up for Phase II SVE treatability study at Building 406 (limited field activities in Parcel E).
- Conducted radiological removal action activities.
- ➤ Began groundwater sampling for Phase II groundwater data gaps investigation.

WHAT'S NEXT?

- ➤ Complete radiation removal action activities.
- ➤ Continue groundwater sampling for Phase II groundwater data gaps investigation.
- ➤ Prepare and submit errata pages and responses to comments for the Phase II Groundwater Data Gap FSP/QAPP Addendum on April 12, 2001.
- ➤ Prepare and submit the final Beneficial Use Determination Letter on April 12, 2001.
- ➤ Prepare and submit Landfill Cap Closeout Report on June 1, 2001.
- ➤ Prepare and submit Radiation Removal Action Closeout Report on June 19, 2001.

PARCEL F

INVESTIGATION/CLEANUP ACCOMPLISHMENTS January – March 2001

- ➤ Met to discuss the Human Health Risk Assessment (HHRA) Work Plan on January 11, 2001.
- ➤ Submitted the draft Human Health Evaluation Work Plan on January 16, 2001.
- ➤ Submitted the response to comments on the draft Validation Study (VS) and the Toxicity Identification Evaluation on February 20, 2001.
- Completed the winter sediment dynamics fieldwork.

WHAT'S NEXT?

- ➤ Prepare and submit the Winter Sediment Dynamics Study Field Report on April 6, 2001.
- ➤ Prepare and submit the final VS Work Plan Response to Comments and errata pages on April 23, 2001.
- ➤ Prepare and submit the draft final HHRA Work Plan on May 3, 2001.
- ➤ Prepare and submit the draft Sediment Dynamics Memorandum on May 31, 2001.
- ➤ Conduct the validation study beginning in late April 2001.

RAB MEETING INFORMATION

unters Point Shipyard Restoration Advisory Board (RAB) members and the interested public have been regularly informed of the cleanup work underway at the Shipyard. The RAB, composed of representatives from the community

regulatory agencies, and the Navy, meets to review, comment, and make recommendations on matters pertaining to the restoration and environmental cleanup of the Shipyard. RAB meetings are typically held from 6:00 to 8:00 p.m., on the fourth Thursday of each month at the Bayview Police Station Community Room. Approximately 40 people regularly attend and participate at the monthly RAB meetings. For additional schedule information, please contact Mr. Richard G. Mach, Jr., P.E., Base Realignment and Closure Environmental Coordinator and RAB Navy Co-chair at (619) 532-0913 or toll free (866) 281-5605.

If you are interested in becoming a RAB member, please indicate your preference on the Hunters Point Shipyard Mailing List Update Form—see the back page.

Chem-Ox Treatability Study is Underway at Parcel C

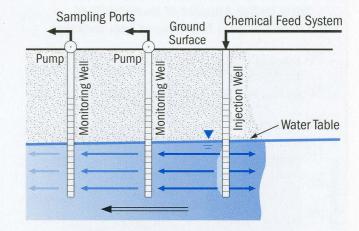
njection of a potassium permanganate solution is scheduled to begin in early April 2001 at Parcel C, Building 253, as part of the chemical oxidation treatability study. The solution will be injected into the aquifer (groundwater) at a rate of approximately 8,500 gallons a day for approximately 2 weeks. Three more sites will undergo similar injections over the next couple of months. One more site will also be treated with the potassium permanganate solution while the remaining two sites will be treated with a solution commonly referred to as "Fenton's chemistry" (a mixture of hydrogen peroxide and ferrous iron). Injection of potassium permanganate and Fenton's chemistry has been very effective at several sites throughout the United States, with some sites experiencing up to 99 percent reduction of trichloroethene (TCE) and tetrachloroethene (PCE) in groundwater of affected aquifers.

Based on the results of the treatability study, the Navy may recommend full-scale implementation of the technology. If the technology is not effective, the Navy will be able to use the study results to evaluate additional treatment alternatives.

These chemical oxidation processes were presented in past issues of the *Environmental Cleanup Newsletter* (September 2000 and October-December 2000). Copies of the newsletter may be viewed via the internet at http://www.efdsw.navfac.navy.mil/DEP/ENV/PAGES/hpnl.htm

Chemical Oxidation Process - Parcel C

Volatile organic compounds (VOCs) are chemically converted into carbon dioxide, water, and simple organic salts.



Chemical oxidation is a relatively new technology that can destroy VOCs in groundwater. Chemical oxidation involves the controlled injection of chemicals into the groundwater. These chemicals react with VOCs to convert them into carbon dioxide, water, and simple organic salts.

Removal Action for Radiological Soil Nearly Complete

n March 1, 2001, the Navy completed soil excavations at four sites in Parcels D and E that were identified with low-levels of radiological contamination. All of the excavated soil was collected and stored in locked, steel roll-off bins that are being temporarily stored inside one of the larger buildings on the base. These roll-off bins are expected to be shipped to the federally licensed low-level radiation disposal facility, Envirocare, in Clive, Utah, by the end of April 2001.

The volume of soil and debris excavated during the removal action filled 26 roll-off bins. The EPA inspected the activities conducted at the remedial action sites and the roll-off bins on March 19, 2001. The cleanup progress met with EPA's approval.

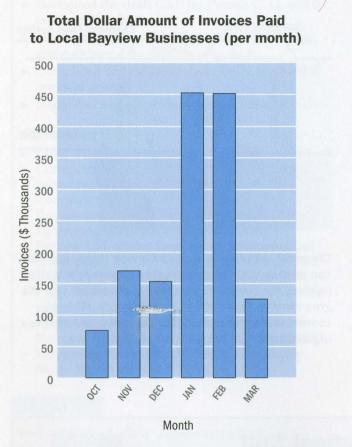
The Navy is presently reviewing confirmation sample data collected at each excavation to confirm that all low-level radioactive materials have been removed. Once this data is verified, the Navy will conduct the final confirmation survey, backfill all excavations, and complete the Removal Action Closeout Report required to document the effectiveness of the removal action.

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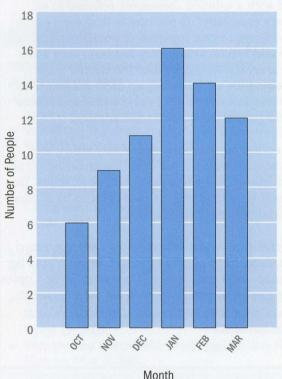
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Job Opportunities in the Bayview/Hunters Point Community

he Navy and their contractors have continued to explore new opportunities for hiring workers from the local community. The two graphs below illustrate the Navy's success over the past six months from October 2000 to March 2001. The first graph shows the total invoices paid to local Bayview/Hunters Point businesses. The second graph shows the number of people hired or otherwise employed by the Navy's three major contractors (Bechtel, IT, and Tetra Tech) from within the local community. The cumulative total of invoices paid during this six-month period is approximately \$1.5 million; the number of community members working part- or full-time on the Hunters Point Shipyard cleanup averages approximately 11 per month.



Average Number of People Employed (part- and full-time) from the Bayview Community (per month)



Hunters Point Shipyard Information Repositories

The Navy maintains two information repositories for Hunters Point Shipyard that contain project documents and other reference materials. The Main Library in downtown San Francisco contains most copies of the documents related to the cleanup of Hunters Point Shipyard. The Bayview/Anna E. Waden Branch Library contains report copies of the major investigations for each parcel as well as documents related to more current activities. The Navy encourages you to review the documents prepared for Hunters Point Shipyard to gain a more complete understanding of the cleanup investigations.

CITY OF SAN FRANCISCO MAIN LIBRARY

Science, Technical, and Government Documents Room 100 Larkin Street San Francisco, CA 94102 (415) 557-4500

BAYVIEW/ANNA E. WADEN BRANCH LIBRARY

5075 Third Street San Francisco, CA 94124 (415) 715-4100

NOTE: Hunters Point Shipyard RAB meeting minutes and agendas will continue to be available to the public at the Information Repositories (listed above) established for the Hunters Point Shipyard cleanup program. This information is also available on the Southwest Division Naval Facilities Engineering Command (SWDIV) web page http://www.efdsw.navfac.navy.mil/dep/env/PAGES/hpoint.htm

For more information on the cleanup program at Hunters Point Shipyard, please contact Mr. Richard G. Mach, Jr., P.E., Base Realignment and Closure Environmental Coordinator and RAB Navy Co-chair at (619) 532-0913 or toll free (866) 281-5605.

Agencies and Organizations Involved in the Environmental Cleanup Program

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Mr. Dave DeMars Lead Remedial Project Mgr.	Naval Facilities Engineering Command, Southwest Division	(619) 532-0912 Fax: (619) 532-0995	demarsdb@ efdsw.navfac.navy.mil
Ms. Claire Trombadore Project Manager for Parcels A, B, and D	U.S. Environmental Protection Agency	(415) 744-2409 Fax: (415) 744-1916	trombadore.claire@epa.gov
Mr. Michael Work Project Manager for Parcels C, E, and F	U.S. Environmental Protection Agency	(415) 744-2392 Fax: (415) 744-1916	work.michael@epa.gov
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Mr. Brad Job Project Manager	California Regional Water Quality Control Board	(510) 622-2400 Fax: (510) 622-2458	lbj@rb2.swrcb.ca.gov
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