



## Reports Available for Review

**San Francisco Main Public Library**  
Government Information Center, 5th Floor  
100 Larkin Street  
San Francisco, CA 94102  
(415) 557-4500

**Hunters Point Naval Shipyard Site Trailer**  
(near HPNS security entrance)  
690 Hudson Avenue  
San Francisco, CA 94124

**Navy's HPNS Website**  
[www.bracpmo.navy.mil](http://www.bracpmo.navy.mil)  
⇒ Click on "BRAC Bases"  
⇒ Click on "California"  
⇒ Select "Former Naval Shipyard Hunters Point"

## Reaching Out to the HPNS Community

A detailed Community Involvement Plan, or CIP, was written in 2011 to help the Navy work more closely with the community. The Navy updated the CIP in 2013. The final CIP will be available at the San Francisco Main Public Library, the HPNS Site Trailer, and online on the Navy's website. The CIP presents a description of the types of activities and other materials the Navy is planning to involve community members in during the HPNS Cleanup Program. For more information:

### • Attend a Community Meeting or Bus Tour

The Navy presents updates at scheduled community meetings to inform people about cleanup at HPNS. Meetings are typically held three times per year, and bus tours are offered each summer. Check the Navy's HPNS website for the annual calendar of meetings, bus tours, and other events held in the community.

### • Call Our Local Information Line

The HPNS Info Line at (415) 295-4742 provides up-to-date information about outreach activities planned for the former Shipyard, including meeting locations and times, and events in which the Navy will participate. A message can also be left with any questions or comments on the HPNS Cleanup Program.

### • Join Our Email and Mailing Lists

If you would like to join HPNS' e-mail and/or USPS mailing list(s), please send your information to the Navy at [info@sfnps.com](mailto:info@sfnps.com). This HPNS email address can be used to communicate with the Navy, allowing community members to send questions or comments on cleanup activities, offer suggestions for a topic at an upcoming meeting, or sign up for a bus tour.

### ◆ Visit Our Website

Program information is available on the HPNS pages of the Navy's website at <http://www.bracpmo.navy.mil>.

## HPNS Parcel Background and Cleanup Status

*(Continued from page 3)*

### Parcels UC-1, UC-2, and UC-3

The Navy is investigating and cleaning up the utility corridors, referred to as Parcels UC-1, UC-2, and UC-3. They are more commonly known as Spear Avenue, Fisher Avenue, Robinson Street, and Crisp Avenue. The Navy has removed all sewer and storm drain lines in the utility corridors. A clean soil and asphalt cover was placed over Parcels UC-1 and UC-2. Groundwater monitoring at UC-2 will continue to evaluate the natural reduction of contaminants in the groundwater. The Navy plans to transfer Parcels UC-1 and UC-2 to the City of San Francisco in 2014.

The ROD for Parcel UC-3 was signed in January 2014. The remedy will include soil excavation and offsite disposal, placement of soil and asphalt covers over the Parcel, closure of steam lines, treatment of groundwater contamination, soil gas and groundwater monitoring.

## contacts

The Navy and regulatory agencies working to clean up HPNS are available to answer questions.



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# 2014

ANNUAL  
UPDATE OF  
CLEANUP  
ACHIEVEMENTS

# HPNS info

Hunters Point Naval Shipyard  
*Preparing for Tomorrow*

## what's inside

- HPNS History [Page 1](#)
- Program Successes to Date [Page 1](#)
- Parcel Background & Cleanup Status [Page 2](#)
- Cleanup Laws & Agencies Involved [Page 2](#)
- Cleanup Programs on HPNS [Page 3](#)
- Contaminants Found at HPNS [Page 3](#)
- Reaching Out to the HPNS Community [Page 4](#)
- Contacts [Page 4](#)



## Solutions for Cleanup and Redevelopment

The Navy is committed to cleaning up the property that makes up HPNS and looks forward to completing cleanup and transferring the parcels for redevelopment.

### Program Successes to Date

- ◆ Received approval to transfer Parcel D-2 (2012) and Parcel B IR Site 7/18 to the City of San Francisco (2013)
- ◆ 10 Records of Decision (RODs) signed!
- ◆ Removed 338,635 cubic yards of non-radiological soil and 156,171 cubic yards of radiological soil
- ◆ Treated 4,562,500 gallons of groundwater
- ◆ Removed 155,500 linear feet of sewer/storm drain lines
- ◆ Closed 51 Petroleum Sites
- ◆ Completed 20 Time-Critical Removal Actions; 1 in progress
- ◆ Completed 17 Treatability Studies
- ◆ Achieved "radiological free release" for 44 radiological buildings/sites out of 62 sites

## Hunters Point Naval Shipyard (HPNS): A History of Maritime Service

The Hunters Point Naval Shipyard, or HPNS, is located on 934 acres of waterfront in the southeast corner of San Francisco, California. It was founded as a commercial drydock in 1869 and owned privately by Union Iron Works and later Bethlehem Shipbuilding Company. The shipyard was purchased by the United States Navy in 1939, beginning its important role in service to our country. During World War I and World War II, the shipyard provided needed deep-water facilities between San Diego and Bremerton, Washington, where the Navy could conduct ship repair and maintenance of Naval vessels.

In addition to these activities, a portion of HPNS was used by the Naval Radiological Defense Laboratory (NRDL) from 1948 to 1969. NRDL decontaminated ships exposed to atomic weapons testing and also conducted research on the effects of radiation. The shipyard was an active Navy base until 1974. In 1976, much of the property was leased to a commercial ship repair company, Triple A Machine Shop, which repaired commercial and

Naval vessels on the site until 1986 when the Navy reclaimed the shipyard.

### Evaluating the Environment

In 1988, the former Shipyard entered the Base Realignment and Closure (BRAC) Program, a federal program created to oversee the cleanup and transfer of military installations to public or private entities for redevelopment. In 1989, the United States Environmental Protection Agency (USEPA) evaluated HPNS and placed it on the National Priorities List in response to concerns about the effects of past hazardous wastes created by historical shipyard activities by both the Navy and private companies. The Navy is completing its extensive investigation of contaminated areas of the base and cleaning up the land and groundwater where contamination is found. The Navy's cleanup program is tailored to meet the City of San Francisco's current Redevelopment Plan.

### Quick Community Resources

- Navy HPNS Email: [info@sfnps.com](mailto:info@sfnps.com)
- Navy HPNS Cleanup Info Line: (415) 295-4742
- Navy Website: [www.bracpmo.navy.mil](http://www.bracpmo.navy.mil)

## The Laws and Agencies Involved in HPNS Cleanup

### CERCLA and NPL

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), also known as Superfund, was created by Congress in 1980 to create a program to identify, investigate, and clean up hazardous wastes. The National Priorities List (NPL) was developed under CERCLA to guide the United States Environmental Protection Agency (USEPA) in determining which sites need additional investigation. The Navy's environmental cleanup at HPNS follows the requirements in CERCLA.

### USEPA

The U.S. Environmental Protection Agency (USEPA) is the lead regulatory agency and provides federal oversight for the environmental cleanup at HPNS.

### DTSC

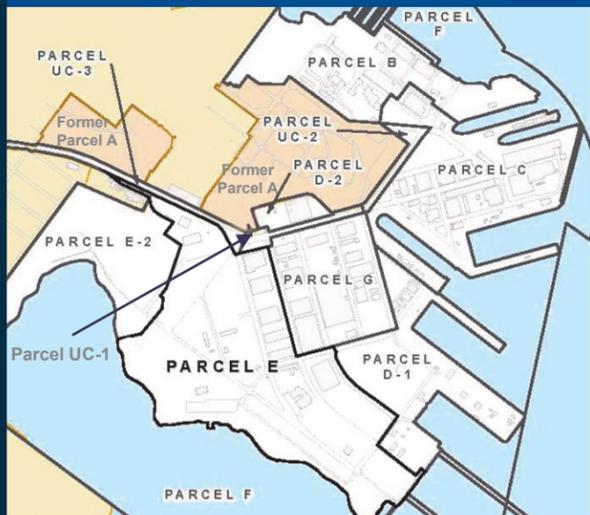
The California Department of Toxic Substances Control (DTSC) is the lead state agency that oversees the cleanup of hazardous wastes and ensures that California laws and regulations are followed.

### Water Board

The San Francisco Bay Regional Water Quality Control Board (Water Board) is responsible for making sure that the waters of the Bay Area are clean and that laws and regulations are followed. The Water Board oversees cleanup activities that affect water and the Navy's Petroleum Program.

### Coordination at HPNS

The Navy's Base Realignment and Closure (BRAC) Program manages the cleanup program at HPNS. The Navy works closely with USEPA, DTSC, Water Board, other natural resource agencies, and the City of San Francisco. Together, they ensure that HPNS will be safe for planned redevelopment activities.



## HPNS Parcel Background and Cleanup Status

There are currently 11 parcels that the Navy is cleaning up at HPNS. When cleanup is completed, the property will be ready for redevelopment.

When HPNS was assigned to the BRAC Program, it was decided that the best way to manage the cleanup of the 934 acres would be to break it up into smaller areas, or parcels. HPNS is currently made up of 11 parcels: Parcels B, C, D-1, D-2, E, E-2, F, G, UC-1, UC-2, and UC-3. Parcel A was cleaned up by the Navy and transferred to the San Francisco Redevelopment Agency (SFRA) in December 2004.

### Parcel B

Parcel B was used to provide support and services for the repair and maintenance of submarines and ships. The Navy completed a cleanup action at Parcel B that included soil removal, groundwater treatment, placement of asphalt and soil covers, and is in the process of constructing a shoreline revetment to prevent eroded soil from reaching San Francisco Bay. The Navy is also operating a soil vapor extraction (SVE) treatment unit. The Water Board has found No Further Action is required at 26 petroleum sites. Groundwater monitoring will continue to confirm that groundwater cleanup was successful. A Finding of Suitability to Transfer (FOST) a portion of Parcel B was finalized in February 2013. The Navy plans to complete the rest of the cleanup actions in 2014 and transfer Parcel B to the City of San Francisco soon after.

### Parcel C

Portions of Parcel C were used for ship repair and radiological research, as well as a power plant and machine, metalworking, and paint shops. The Navy completed work plans for four remediation areas, received regulatory agreement and began

implementation of the cleanup. The remedial action addresses soil, soil gases, and groundwater contamination. Up to 26,300 cubic yards of contaminated soil will be removed from 27 areas and backfilled with crushed recycled concrete and clean soil. Groundwater cleanup is underway using state-of-the-art environmental technologies. Placement of a soil and asphalt cover and operation of SVE units will be the final step.

### Parcel D-1

Parcel D-1 was used for ship repair and maintenance, as well as radiological research. A work plan is being finalized to carry out the selected cleanup actions at this site, which involves removal of contaminated soil and placement of a cover of clean soil and asphalt over the parcel. The groundwater is also being cleaned up. The Water Board found No Further Action is required at five petroleum sites.

### Parcel D-2

Parcel D-2 contained a radiological equipment area and underground storage tanks. During radiological cleanup at Parcel D-2, the Navy removed 1,434 cubic yards of soil from 1,988 linear feet of sanitary sewer and storm drain lines, scanned and released one building, and disposed of approximately 45 cubic yards of low level radiological waste offsite. A FOST was finalized for Parcel D-2 in April 2012. The Navy is preparing to transfer this parcel to the City of San Francisco in 2014.

### Parcel E

Parcel E was used for industrial operations and

radiological research. The 2013 ROD identified the cleanup plan for Parcel E, which includes removal and disposal of contaminated soil, installation of soil and asphalt covers over the entire parcel, treatment of groundwater, placement of a shoreline revetment to prevent eroded soil from entering the Bay, and installation of underground barriers to block contaminated water from reaching the Bay. In addition, radiological surveys will be conducted and low-level radiologically-contaminated

soil will be removed and disposed offsite.

### Parcel E-2

Parcel E-2 is the site of the HPNS landfill. The landfill contains construction debris, crushed bedrock, municipal trash, and many different industrial wastes. To date, the Navy has removed more than 127,000 tons of contaminated soil and debris in Parcel E-2. The 2013 ROD identified the cleanup plan for Parcel E-2, which includes removal and disposal of contaminated soil from hot spots, installation of soil covers with a protective liner in some locations, placement of a shoreline revetment to prevent eroded soil from entering the Bay, installation of underground barriers to block contaminated water from reaching the Bay, installation of a new landfill gas collection and treatment system, and construction of wetlands.



Shoreline near Site 03, Parcel E.

### Parcel F

The portion of San Francisco Bay (off-shore area) surrounding HPNS is known as Parcel F. Historic shipyard activities, coupled with soil erosion, resulted in contamination of bay sediment. The Navy has completed numerous investigations and Feasibility Studies. The Navy is preparing for the next phase of work to identify the best method for cleanup at the site.

### Parcel G

Parcel G was used for ship repair and maintenance, as well as radiological research. The Navy investigated and removed contaminated soil, cleaned up areas of groundwater contamination, and placed a cover of clean soil and asphalt on parts of Parcel G. The Navy has submitted final cleanup reports, and plans to transfer Parcel G to the City of San Francisco in 2014.

(Continued on page 4)

## Contaminants Found at HPNS

### What type of hazardous wastes are at HPNS?

Several hazardous wastes, or contaminants, relating to historical use at HPNS are being investigated under the cleanup programs.

**Metals:** Includes elements such as copper, mercury, lead, manganese, and nickel. Metals are both naturally-occurring and related to shipyard activities. Although not metals, asbestos and arsenic are also present in soil.

**Pesticides/Herbicides:** Chemicals used to kill rodents, insects or unwanted plants.

**PCBs:** Prior to banning in 1979, PCBs, or polychlorinated biphenyls, were commonly used to cool electrical equipment and lubricants.

**PAHs:** Polycyclic aromatic hydrocarbons are a group of compounds created when oil, gasoline, garbage, wood or coal are burned. They are also present in tar and asphalt.

**Radionuclides:** A radioactive element that occurs naturally or is man-made.

**SVOCs:** Semi-volatile organic compounds are a class of organic chemicals that turn into vapor above room temperature. They are associated with petroleum products.

**TPH:** Total petroleum hydrocarbons are a mixture of chemicals that come from crude oil.

**VOCs:** Volatile organic compounds are chemicals that easily evaporate into the air, for example paint thinner.

## Cleanup Programs on HPNS

The Navy is investigating hazardous wastes at HPNS under three cleanup programs.

### Base Cleanup Program

The Base Cleanup Program was created by the Department of Defense in 1986 to identify, evaluate, and cleanup contamination at US Navy and Marine Corps bases. The Base Cleanup Program meets the requirements of CERCLA. The chemicals regulated under CERCLA include things like chemicals used to manufacture solvents, pesticides, and metals.

### Petroleum Program

The Petroleum Program, also referred to as the TPH Program, focuses on the cleanup of fuels left over from historical activities and uses. Former fueling stations, distribution lines, and maintenance areas may have leaked fuels, including diesel, gasoline, and motor oil into the soil and groundwater at HPNS. The Water Board oversees this portion of the cleanup.

### Radiological Program

The Radiological Program focuses on identifying and cleaning up specific items that are radioactive, like glow-in-the-dark buttons and dials, as well as buildings, sewers, and storm drain lines from buildings that were used by the Naval Radiological Defense Laboratory (NRDL) for radiological research.

The Navy's goal is to clean up HPNS so the area can be redeveloped for San Franciscans to live, work & play there.

For additional information on these contaminants or the BRAC cleanup program at HPNS, visit <http://www.bracpmo.navy.mil>.