2021

ANNUAL

UPDATE OF

CLEANUP

ACHIEVEMENTS

# HPNS info

Preparing for Tomorrow

# Hunters Point Naval Shipyard (HPNS):

A History of Maritime Service

The Hunters Point Naval Shipyard, or HPNS, is located on approximately 935 acres of waterfront in the southeast corner of San Francisco, California. It was founded as a commercial dry dock 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 II, the shipyard provided needed deepwater 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.



# Navy Cleanup at HPNS: Evaluating the Environment

In 1988, HPNS 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, which can be found on the Internet at http://sfocii.org.

## Community Resources

HPNS Email: info@sfhpns.com HPNS Information Line: (415) 295-4742

### **Navy HPNS Web Pages**

Main Page: www.bracpmo.navy.mil/hpns

Radiological Cleanup Program: www.bracpmo.navy.mil/hpnsrc

## **Program Outreach**

Each year, the Navy reaches more than 18,000 community members with information on meetings, events, bus tours, surveys, and other program communications.

#### Highlights include:

- Provided updates to more than 1,275 members of the community at over 90 in-person and virtual meetings and events since 2009
- Conducted guided tours of cleanup sites at HPNS for more than 750 people since 2011
- Provided a technical radiological expert to answer community member questions at almost 30 events since 2017

## Navy continues retesting at HPNS

In late 2017, the Navy completed a comprehensive evaluation of radiological data collected by Tetra Tech EC (TtEC).

The Navy concluded that TtEC results are unreliable and that new data is required.

#### **New Data for Accurate Results**

The Navy started to gather new radiological data at Parcel G in September 2020. Trench excavations, trench soil borings, building swipes, building scans, and building area soil samples will be included in the effort.

#### Independent Oversight and Review

Several layers of oversight and review have been established to objectively verify data collection and results.

#### Oversight includes:

- independent oversight of data collection;
- analysis at off-site laboratories;
- review by independent experts; and
- regulatory agency confirmation samples.

Upon review of Parcel G soil results in 2021, the Navy will begin retesting additional parcels.

Radiological retesting information and updates are available at www.bracpmo.navy.mil/hpnsrc

# 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 USEPA is the lead regulatory agency and provides federal oversight for the environmental cleanup at HPNS.

#### **DTSC**

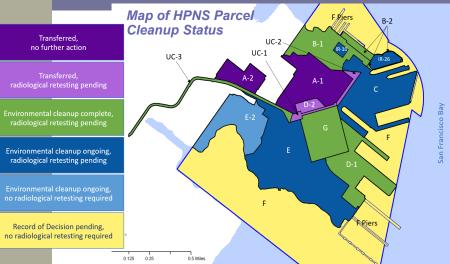
The California Department of Toxic Substances Control (DTSC) is the lead state agency that oversees the cleanup of hazardous wastes and ensures that California laws and regulations are followed.

#### **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 BRAC Program manages the cleanup program at HPNS. The Navy works closely with USEPA, DTSC, Water Board, other agencies, and the City of San Francisco. Together, they ensure that HNPS will be safe for planned redevelopment activities.



# HPNS Parcel Background and Cleanup Status

Cleanup is ongoing at HPNS, with radiological retesting pending at several parcels. As cleanup, retesting, and transfer is complete, the property will be ready for redevelopment by the City of San Francisco.

Under the BRAC Program, HPNS consists of approximately 935 acres. For remediation (cleanup) it was broken up into smaller areas, or parcels.

Parcel A was cleaned up by the Navy and transferred to the San Francisco Redevelopment Agency (SFRA) in December 2004. Parcels D-2, UC-1, and UC-2 were transferred to the Office of Community Investment and Infrastructure (OCII), Successor Agency to the San Francisco Redevelopment Agency, in 2015.

Read more about the ongoing radiological data evaluation at HPNS on Page 1 of this Annual Update, or visit the Navy's website at www.bracpmo.navy.mil/hpnsrc.

#### Parcels B-1 and B-2

Parcels B-1 and B-2 were used to provide support and services for the repair and maintenance of submarines and ships. Parcels B-1 and B-2 have been further sub-divided to assist with property transfer activities: subsites include Installation Restoration (IR)-10 (Parcel B-1) and IR-26 (Parcel B-2).

Groundwater: Groundwater monitoring ongoing at Parcels B-1 and B-2

Soil gas: Soil Vapor Extraction (SVE) complete at IR-10

Soil/sediment: Excavation and durable cover complete at Parcels B-1 (except IR-10) and B-2

Radiological: Additional scanning and sampling of identified buildings, excavation or soil borings along the former sanitary sewer and storm drain trenches upcoming

Next steps: Additional cleanup and monitoring to continue at IR-10; additional groundwater monitoring at IR-26; complete radiological retesting evaluation

#### 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.

Groundwater: Bioremediation and groundwater monitoring ongoing

Soil gas: SVE ongoing

Soil/sediment: Excavation ongoing at Building

251

Radiological: Building 253/211 undergoing additional characterization and cleanup; removal of small section of remaining sanitary sewer and storm drain line will be completed in 2021; additional scanning and sampling of identified buildings and excavation or soil borings along former sanitary sewer and storm drain trenches upcoming

Next steps: Groundwater remediation; complete Building 251 excavation; complete radiological retesting evaluation

#### Parcel D-1

Parcel D-1 was used for ship repair and maintenance, as well as radiological research.

Groundwater: Bioremediation complete; groundwater monitoring ongoing Soil/sediment: Excavation complete; durable cover remedy complete

Radiological: All radiological work complete at this time; final radiological remedy under evaluation

Next steps: Complete radiological retesting evaluation

#### Parcel E

Parcel E was used for industrial operations and radiological research.

Groundwater: Underground barriers, thermal bioremediation, and remediation began in 2020 Soil gas: Final solution for SVE under evaluation Soil: Excavation, installation of durable cover, and/or construction of shoreline protection features began in 2020

Radiological: Removal of final remaining sections of storm water and sanitary sewer lines; additional scanning and sampling of identified buildings and excavation or soil borings along former sanitary sewer and storm drain trenches upcoming

Next steps: Remedial design complete; continue planned fieldwork; complete radiological retesting evaluation

#### Parcel E-2

Parcel E-2 is the site of the HPNS landfill. Groundwater: Construction of underground barriers complete

Soil gas: Evaluation and upgraded system upcoming

Soil and sediment: Excavation completed in 2016; shoreline revetment completed in 2018; construction of final cover began in 2020

Radiological: Surface scan of HPNS landfill area to ensure it is safe for future reuse as a public park and green space upcoming

Next steps: Continue with construction of site remedy; conduct final radiological surface scan after installation of final cover is complete

#### Parcel F

The portion of San Francisco Bay (off-shore area) surrounding HPNS. Historic shippard activities, coupled with soil erosion, resulted in contamination of Bay sediment.

Sediment: Remedy pending

Next steps: The Navy to choose cleanup remedy with regulatory agencies' concurrence and input from the public in 2018; ROD is scheduled in 2021 and will memorialize the remedy

Radiological: Finger Piers (adjacent to Parcels D-1 and E) and Submarine Pens (adjacent to Parcel B-1 and B-2) radiologically scanned and surveyed in 2019

Next steps: Finalize ROD; conduct characterization survey of piers and sub pens

#### Parcel G

Parcel G was used for ship repair and maintenance, as well as radiological research.

Groundwater: Bioremediation complete; groundwater monitoring ongoing

Soil: Excavation and containment complete

Radiological: Additional scanning/sampling of identified buildings, excavation or soil borings along former sanitary sewer and storm drain trenches upcoming; fieldwork began in September 2020 and is scheduled through May 2022

Next Steps: Complete radiological retesting evaluation; all other environmental cleanup complete

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

Parcel D-2 is approximately 5.3-acres and includes one building (Building 813, surrounded by asphalt parking areas) which was historically used as a warehouse, office, supply storehouse and a Disaster Control Center. Parcels UC-1, UC-2, and UC-3, are former utility corridors that served HPNS.

Soil: Focused excavation complete; durable cover complete

Radiological: Additional scanning/sampling of Building 813 and excavation or soil borings along former sanitary sewer/storm drain trenches upcoming

Next steps: Complete radiological retesting evaluation; all other environmental cleanup complete

# Cleanup Programs on HPNS

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

#### **Chemical Cleanup**

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

#### **Petroleum Cleanup**

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 Cleanup

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 sewers, storm drain lines, and buildings that were used by the Naval Radiological Defense Laboratory (NRDL) for radiological research that could have resulted in contamination from historical activities.

For additional information on the Navy's environmental cleanup at HPNS visit the Navy's website at www.bracpmo.navy.mil/hpns.

## Historical wastes at HPNS

The following hazardous wastes, or contaminants, relating to historical use at HPNS by private companies and the Navy have been continue to be investigated under the Navy's 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.

(Parcels B-1, B-2, C, D-1, E, E-2, F, G, and UC-3)

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

(Parcels B-1, B-2, C, E, and E-2)

**PCBs:** Prior to banning in 1979, PCBs, or polychlorinated biphenyls, were commonly used to cool electrical equipment and lubricants. (*Parcels B-1, B-2, C, E, E-2, and F*)

**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.

(Parcels C, D-1, and G)

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

(Parcels B-1, B-2, C, D-1, E, E-2, F, and G)

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

(Parcels B-1, B-2, and C)

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

(Parcels B-2, C, E, E-2, and UC-3)

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

(Parcels B-1, B-2, C, D-1, E, E-2, and G)



#### **Navy Community Meetings & Navy-sponsored Events**

offer opportunities for one-on-one and small group discussions with subject-matter experts



#### **Presentations to Local Groups & Organizations**

share information and answer questions from organization members and guests (e.g. local homeowners groups, Hunters Point Shipyard Citizens Advisory Committee)



#### **Updates to Elected Officials**

present data to City and County representatives to best serve the needs of their constituents (e.g. SF Board of Supervisors)



### **Small Group Site Tours & Meetings**

host focused site visits to clarify understanding, enhance open discussion with individuals and groups (e.g. San Francisco Shipyard Residents Group)



#### **Guided Bus Tours**

offer up-close views of cleanup sites, provide historical context, share progress



#### **Local Community Events**

provide opportunities for Navy to share HPNS program information with different neighborhoods and groups



#### Radiological Technical Advisor

answers radiological health and safety questions at meetings and events, during virtual office hours, by phone and email, or by appointment

# How to get more information on the Navy's cleanup at HPNS

Subscribe to HPNS Newsletters https://tinyurl.com/hpnsinfo

Request Program Information info@sfhpns.com

Leave a Message on the HPNS Info Line (415) 295-4742

Attend a Navy-sponsored Meeting or Request a Navy Presentation info@sfhpns.com

Attend a Navy Presentation to an Established Local Organization Hunters Point Shipyard Artists, Hunters Point Shipyard Citizens Advisory Committee, San Francisco Shipyard Homeowners Association

Visit an HPNS Information Repository
or the Navy's Website

San Francisco Public Library Government Information Center, 5th Floor 100 Larkin Street, San Francisco, CA 94102

Bayview Linda Brooks-Burton Branch Library 5075 3rd Street, San Francisco, 94124 \*informational materials only

Navy's HPNS Website www.bracpmo.navy.mil/hpns

## contacts

The Navy and regulatory agencies working to clean up HPNS are available to answer your questions and provide program information.



#### Derek J. Robinson, P.E.



#### Dr. Kathryn Higley

Radiological Technical Advisor
Oregon State University
School of Nuclear Science & Engineering
(541) 737-0675 <u>kathryn.higley@oregonstate.edu</u>
www.ne.oregonstate.edu/kathryn-higley

#### Wayne Praskins

Project Manager
US EPA, Region 9
75 Hawthorne Street, Mailcode SFD-7-3
San Francisco, CA 94105
(415) 972-3181 praskins.wayne@epa.gov



#### Nina Bacey

Project Manager
California Department of
Toxic Substances Control
700 Heinz Avenue
Berkeley, CA 94710-2721
(510) 540-2480 Juanita.Bacey@dtsc.ca.gov



#### **Tina Low**

Program Manager
San Francisco Bay
Regional Water Quality Control Board
1515 Clay Street, Ste. 1400
Oakland, CA 94612
(510) 622-2445 TLow@waterboards.ca.gov



Para más información sobre el programa de limpieza de la Marina en Hunters Point Naval Shipyard,

favor de dejar un mensaje en (833) 202-5888.