



Hunters Point Naval Shipyard Environmental Cleanup Program Update

Hunters Point Shipyard Citizens Advisory Committee Environmental & Reuse Subcommittee Meeting

July 28, 2025

Michael Pound – BRAC Environmental Coordinator

Agenda

Topic

- Introductions
- Parcel G Building Radiological Scans Summary
- Natural Hazard Assessment at HPNS: Tech Memo and Modeling
- Parcel G Record of Decision: Explanation of Significant Differences
- Parcel C Soil and Groundwater Cleanup
- Fieldwork Update Soil Cleanup at Parcel B Installation Restoration Site 10 (IR-10)
- Cleanup Progress Update
- Upcoming Navy Outreach Activities
- Contacts
- Questions

Parcel G Building Scans

Remediation Summary





Parcel G Building Scans Remediation Summary

Building 401

Former Use: Supply storehouse, trades shop, general stores, maintenance shop and office

Contamination Identified: None

Building 411

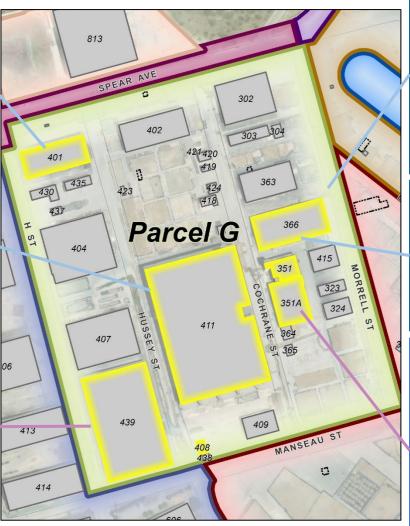
Former Use: Radiography Shop, cafeteria, shipfitters' and boilermakers' shops, and ship repair shop

Contamination Identified: None

Building 439

Former Use: Equipment Storage and private laboratory (processed metals)

Contamination Identified: 54 ft² remediation performed in 2008, no contamination identified in 2022 surveys



Building 366

Former Use: NRDL for Instrument Calibration and Management Engineering and Comptroller Department; Administrative offices and other various uses

Contamination Identified: Identified equipment decontaminated and disposed of properly

Building 351

Former Use: Electronics work area/shop, optical laboratories, and various other uses

Contamination Identified : Identified equipment decontaminated and disposed of properly

Building 351A

Former Use: Radiation Detection Equipment Shop and NRDL Chemistry Laboratory

Contamination Identified: Contamination identified in sinks and drains in earlier surveys (1974, 2001, and 2002); Three spots identified and remediated in 2008 surveys (2 in²; 4 in²; and 47 in²); 10 ft² identified and remediated in 2022 survey

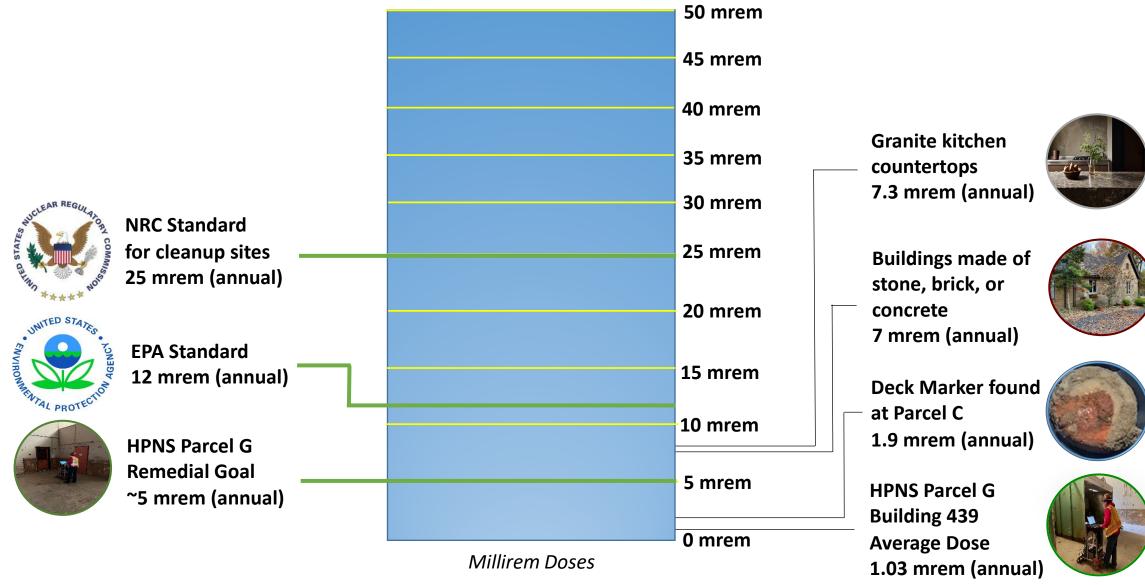
Parcel G Building Scans Remediation Summary

- Surveyed 191 Survey Units
- Collected over 3,900,000 scan measurements
- Scanned over 198,500 ft²
- Collected over 5,500 static measurements
- Collected over 5,100 smear samples
- Limited amount of contaminated equipment found has been removed and disposed
- Limited amount of contaminated building material has been removed and the areas resurveyed to confirmed remedial goals have been met

Radiological scans conducted and surface samples collected in Parcel G buildings



Parcel G Building Remedial Goal Comparisons



Natural Hazard Assessment at HPNS

Groundwater Flow Model





Why Is a Natural Hazard Assessment Being Prepared at HPNS?

Background

As part of the Fifth Five-Year Review, the Navy completed a
 Climate Resilience Assessment (CRA) to examine how natural hazards may affect the long-term safety of cleanup remedies

CRA Focus

- Sea level rise
- Rising groundwater
- Storm events and flooding

CRA Findings

- Some areas at HPNS may face new risks over time—especially from rising groundwater and storm-related flooding
- Agencies and community members recommended the Navy take
 a closer look through parcel-specific natural hazard assessments

Next Steps Based on CRA Recommendations

The Navy is preparing Natural Hazard Assessments to help ensure cleanup remedies remain protective as conditions change over time

- Short-Term (2035)
 - Study planned for wetlands (Parcels D-1 and E-2)
- Long-Term (2065)
 - Studies planned for IR-07/18 and wetland areas
 (Parcels B-1, B-2, C, D-1, E, and E-2)
- Ongoing Work Includes
 - Validating CRA findings
 - Developing a basewide groundwater flow model
 - Planning for future conditions under changing climate

Why is the Navy preparing a Groundwater Flow Model?

A basewide model is required as a first step:

- Many IR sites are not near the shoreline but are impacted when sea level rises and groundwater rises in response and need to model the rising sea level at the shoreline and the resulting groundwater response at upland IR sites
- Drainage features (e.g., ditches berms) in neighboring sites could impact the level of groundwater table rise at a given site – not including neighboring features may give an inaccurate picture of groundwater table rise and flow directions



Current image of the shoreline at Parcel D-1

 Tracking the source and migration of chemicals of concern (CoCs) depends greatly on having an accurate picture of where the rising groundwater, and where the groundwater subsequently flows and emerges and any intersects residual CoCs Draft GW Flow Modeling Tech Memo

February 28, 2025

Final GW Flow Modeling
Tech Memo

July 31, 2025

Data Gathering

August 31, 2025

Task 1: Model Setup

December 31, 2025

Task 2: Model Calibration

January 31, 2026

Task 3: Model Simulations

May 31, 2026

Draft Groundwater Flow Modeling Report

August 1, 2026

Site Specific Evaluations for Parcels D-1 and E-2

TBD

Parcel G Record of Decision Explanation of Significant Differences

A **Record of Decision (ROD)** is a public document that outlines the decision for a clean up plan at a Superfund site, it details the basis for the selected remedy for contamination.

The Parcel G ROD was approved in 2009.





What is an ESD?

- The change affects cost, not the remedy's protectiveness or objectives
- The ESD documents this significant cost change
- An Explanation of Significant Differences
 (ESD) is a formal update to the Record of
 Decision (ROD) when:
 - The selected remedy has changed in a significant way
 - > BUT the change does not alter the remedy



Naval Facilities Engineering Systems Command Southwest BRAC PMO West, San Diego, California

Final

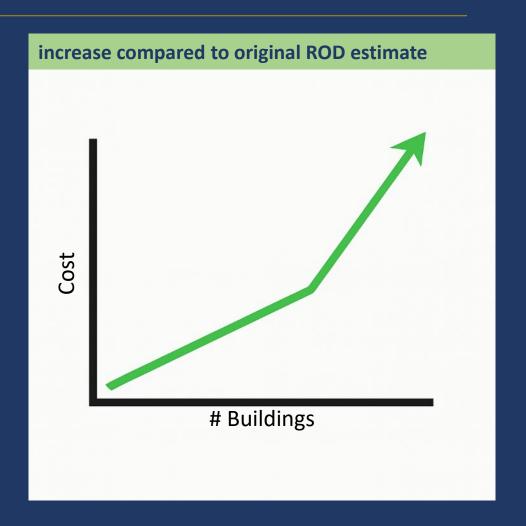
Explanation of Significant Differences to the Final Record of Decision for Parcel G

Hunters Point Naval Shipyard San Francisco, California July 2025

Distribution Statement A. Approved for public rele

Demolition of Parcel G buildings require a change in 2009 ROD

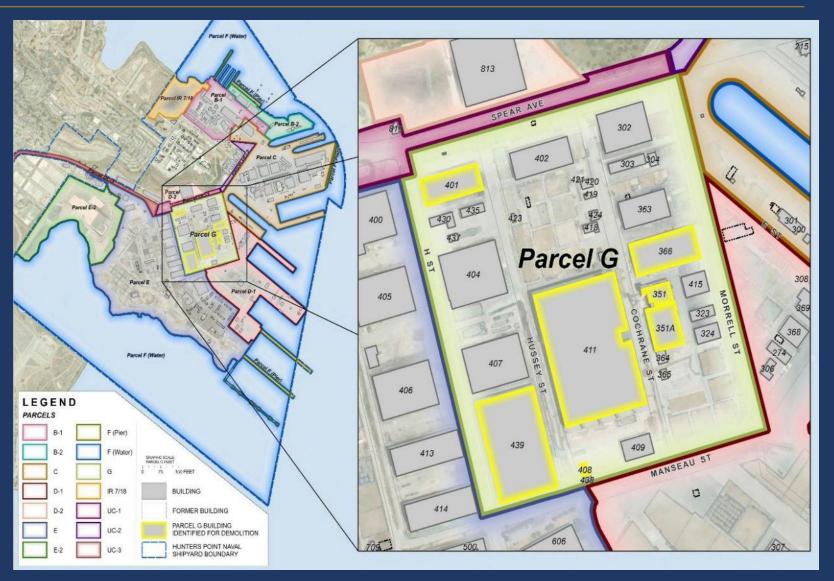
- The 2009 ROD included demolition of buildings "if necessary"
- The Navy determined that demolition is necessary for 6 radiologically impacted buildings
- The change affects cost, not the remedy's protectiveness or objectives
- The cost increased from \$1.4 million to \$78 million



Neval Facilities Engineering Systems Comm

What will be demolished at Parcel G?

- Building 351
- Building 351A
- Building 366
- Building 401
- Building 411
- Building 439



Neval Facilities Engineering Systems Com

Parcel G ROD Significant Change: Cost

Original ROD estimate: \$1.4 million

Limited building demolition included

Total Government estimate: ~ \$78 million

- Demolition of 6 buildings
- o Overview
 - Building Demo Estimate \$50.3 million
 - Contingency \$12.6 million
 - Project Management/Oversight/
 Miscellaneous \$15 million
- Task Award \$28.4 million
 - Competitive bid from Multiple Award
 Contract
 - Multiple bidders with selection based on low price, technical acceptable

APPENDIX A COST ESTIMATE SUMMARY OF THE SELECTED REMEDY Parcel G Building Demolition

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Building:	351/351A/366/401/411/439*
Location:	Hunters Point Naval Shipyard, San Francisco, CA
Phase:	Planning
Date:	October 2024

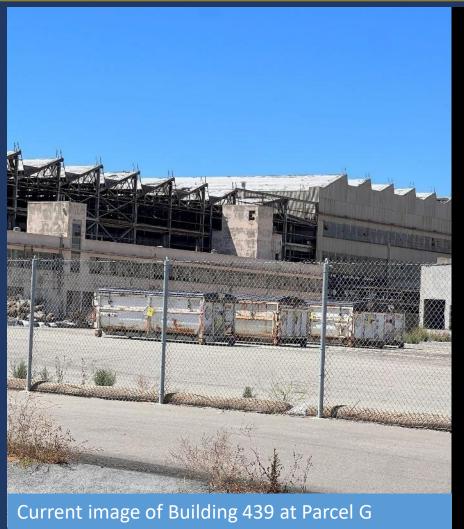
CAPITAL COSTS

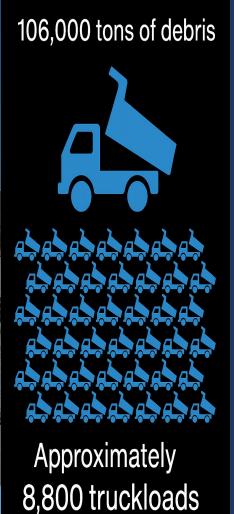
Site Preparation/Preconstruction Activities 1	UNIT								
Mobilization/Site Setup/Demobilization 1	DESCRIPTION	QUANTITY	UNIT			TOTAL	NOTES		
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Temporary Facilities/Air Monitoring	•			-					
Hazmat Removal including T&D for Hazmat		ė							
Waste Removal Oversight 230 DY \$ 9,400 2,162,000				•			Ashestos containing material is included below		
Building Demolition 380,000 SF \$ 40 15,200,000 T&D T&D T&D T&D T&D T&D T&D Non-radiological waste 105,427 TN \$ 205.00 21,812,535 T&D as RCRA Haz and CA Haz (metals, asbestos, PCB) 760 TN \$ 330.00 250,800 Waste characterization (1 per 150 CY) 710 EA \$ 2,800 \$1,988,000 Site Restoration 16,300 CY \$ 80.00 \$978,000 Subtotal** \$12,584,559 Subtotal (rounded) \$62,923,000 Program/Project Management (Owner) 1 LS \$ 3,124,000.00 \$3,124,000 Remedial Action Workplan (including a Waste Management Plan and Environmental Compliance Plan [that will include a Stormwater Plan, Air Monitoring Plan, and Dust Control Plan]) and Design 1 LS \$ 4,988,000.00 \$3,498,000 \$1,24	•			•		4-11	risestes containing material is modern selection.		
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Waste characterization (1 per 150 CY) 710 EA \$ 2,800 \$ 1,988,000	T&D Non-radiological waste	105,427	TN	\$	205.00	21,612,535	mix of non-hazardous and RCRA waste.		
Waste characterization (1 per 150 CY)	T&D as RCRA Haz and CA Haz (metals, asbestos, PCB)	760	TN	\$	330.00	250.800			
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Closure Report 1 LS \$ 70,000.00 \$70,000	Agency Oversight	1	LS	\$	3,124,000.00	\$3,124,000			
,		1		\$	3,749,000.00	\$3,749,000	EPA 2000 Guidelines p. 5-13		
Subtotal \$15,065,000		1	LS	\$	70,000.00				
413,000,000	Subtotal				_	\$15,065,000			
Total Capital Cost \$77,988,000 This is a consequable presentation for the building demolition contract was competitively bid under a Multiple Award Contract and was awarded in April 2025 for \$28.8 million	•				=				

[&]quot;This is a conservative government estimate. The building demolition contract was competitively bid under a Multiple Award Contract and was awarded in April 2025 for \$28.4 million

Demolition Project Highlights

- About 106,000 tons of debris will be removed
- All buildings have been radiologically scanned, remediated as necessary, and cleared for demolition
- Demolition will take 15 months
- Site restoration will take 3 months

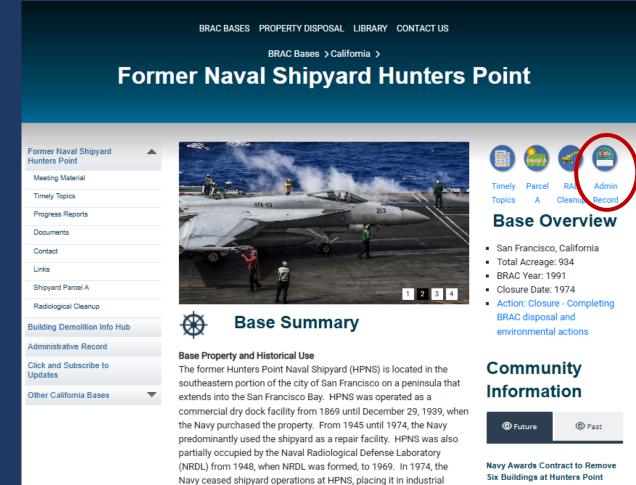




Public Notification Requirements

Once the ESD is signed by the Navy and EPA

- Public Notice of its availability will be published in the San Francisco
 Chronicle and posted on the Navy's HPNS website
- Will be included in the Administrative Record (available on-line)



reserve and transferring control of the property to the Office of the

Shipyard

Naval Facilities Engineering Systems Com

Parcel C Soil and Groundwater Cleanup

Implementing approved remedies to protect health and the environment





Parcel C Overview

- Contamination is the result of historic shippard operations
- Historically used for ship repair, industrial support, and office operations, including:
 - foundry
 - power plant
 - sheet metal shop
 - paint shop
 - machine shops
- Cleanup guided by the 2010 Record of Decision (ROD)
- Upcoming work is focused on Remedial Units (RU)-C2,
 RU-C5-1, and RU-C5-3

What is being cleaned up?

Soil

- Volatile organic compounds (VOCs)
- Polycyclic aromatic hydrocarbons
- Metals
- Polychlorinated biphenyls

Groundwater

- VOCs
- Petroleum

Remedies Selected in the Parcel C ROD (2010)

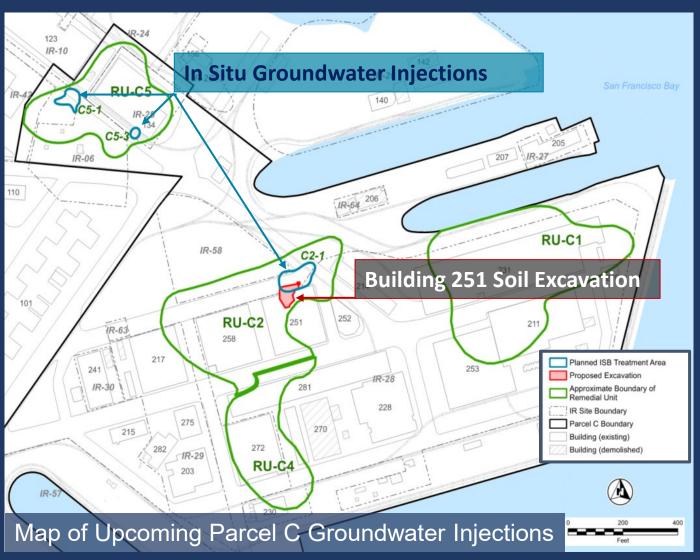
(upcoming fieldwork in yellow)

Soil:

- Excavation
- Soil Vapor Extraction (SVE)
- Durable Cover

Groundwater:

- In Situ Bioremediation (ISB)
- Zero Valent Iron (ZVI)
- Groundwater Monitoring
- Monitored Natural Attenuation
 Institutional Controls



Parcel C Remedial Action: Groundwater (RU-C5-1 and RU-C5-3)



- Groundwater treatment uses in situ (in place) bioremediation
- Food-grade materials are blended in tanks and injected to help bacteria break down contaminants
- Groundwater monitoring wells used track effectiveness
- Institutional controls remain in place to restrict groundwater use





Images of equipment used to mix and inject environmentally-friendly materials to clean up groundwater

Parcel C Remedial Action: Soil (RU-C2)

- Excavation of approximately 2,025 cubic yards of contaminated soil near Building 251
- Contaminated soil transported off-site to a licensed disposal facility
- Clean soil will be used for backfilling excavated areas
- Any disturbed durable cover will be repaired
- Real-time air monitors and dust control will be used during soil disturbance



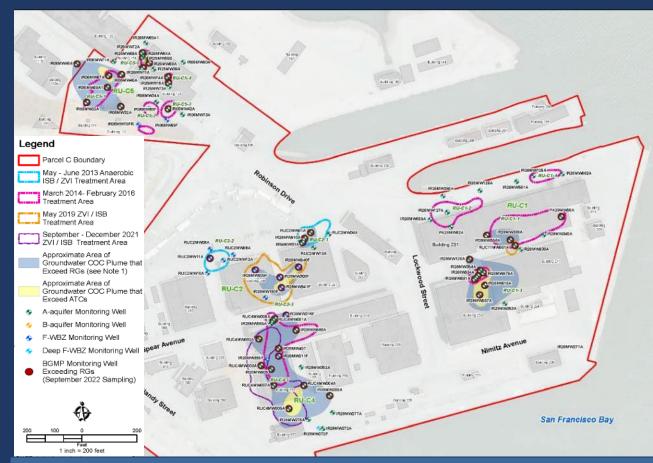
Images of Building 251





Naval Facilities Engineering Systems Command

Parcel C Groundwater Monitoring and Performance Evaluation of Groundwater Remedial Actions



Map of Parcel C Groundwater Monitoring Wells

- New wells will monitor changes in groundwater quality.
- Monitoring results will show whether cleanup goals have been met:
 - If goals <u>are met</u>: transition to long-term monitoring
 - If not: additional injections may be needed
- Institutional controls remain in place to restrict groundwater use



Groundwater monitoring at Parcel C

What Happens Next?

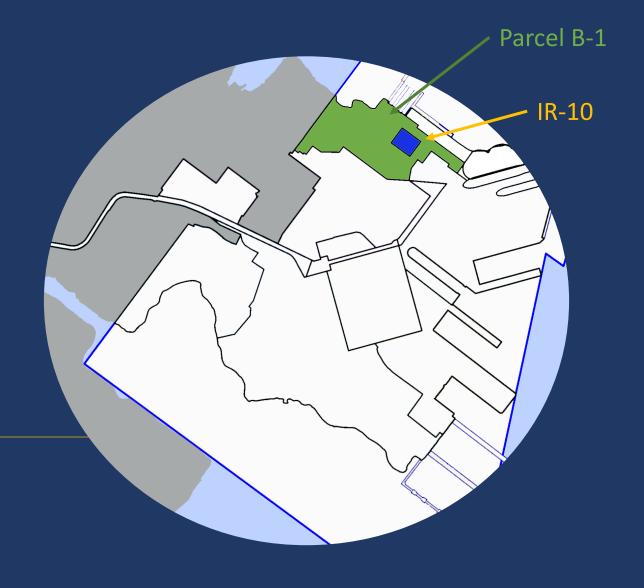
- Excavation will start in Fall 2025 followed by groundwater treatment in Spring 2026.
- Soil excavation and groundwater treatment will take about one year
- Groundwater monitoring will continue beyond 2025
- Updates will be shared at CAC meetings and online
- Air monitoring data and fieldwork summaries will remain publicly available
- Health and safety measures will minimize community impacts:
 - Truck routes are designed to avoid residential areas in the Bayview neighborhood
 - Dust control will follow a project-specific plan approved by regulatory agencies
 - Real-time air monitors will be used during all soil disturbance
- Truck Route and Dust Control fact sheet, available on the Navy's website at www.bracpmo.navy.mil/hpns under Timely Topics on March 26, 2024

Dust Control and Air Monitoring During Excavations

- Water spray, tarps, and sprayon coatings used to control dust
- Work pauses when wind exceeds 25 mph
- Trucks covered and cleaned before leaving site
- Real-time air monitors track dust and contaminants
- Data reviewed by regulatory agencies and made public

Parcel B Installation IR Site (IR-10)

Soil Cleanup Update at Former Building 123







Parcel B IR-10 Remediation Update



Environmentally-friendly groundwater treatment successfully completed



Equipment used to extract soil vapors; additional cleanup needed



Building 123 demolished to access soil beneath it



Samples collected to determine extent of soil contamination



Excavate soil and take confirmation samples



Backfill excavation site with clean soil



Install durable asphalt cover to finalize remedy



Conduct 1 year of soil gas monitoring to confirm cleanup complete

Parcel B IR-10 Remediation Update: STAR Student Tour (June 26, 2025)

Navy supported STAR's Education Outreach Program

- 42 students (Grades 3–5), 6 teachers
- Navy coordinated safe viewing area near Building 123 excavation
- Collaborative effort coordinated by the Navy
- Hands-on learning, community engagement

- Air monitoring presentation by a YCD program graduate
- Explanation of excavation activities by STAR's technical expert (funded by DTSC grant)
- Environmental-themed art project









HPNS Cleanup Progress Update





Fiscal Year 2025 (FY25) HPNS New Starts Status

Parcel	Activity
В	 IR-26 follow on mercury groundwater remediation (awarded July 3, work plan under development) Building 123 soil excavation and clean backfill (fieldwork started June 2, 2025)
С	 Implementation of the fractured bedrock zone work plan (Phase 2 – field work August 2025) Additional remediation for RUCs 2 and 5 (step out borings conducted June 2025, Building 251 soil excavation starting November 2025)
D-1	 Award new task order for proposed plan and Record of Decision amendment Select radiological remedy and prepare Proposed Plan
E	• Dispose of remaining 41,500 tons (30,740 cubic yards) of excavated soil/debris (ongoing)
E-2	 Complete permanent landfill gas treatment system Construp efemped and try vetlands Address regulatory Five-Year Review concerns (field work complete, awaiting contractor report)

Fiscal Year 2025 (FY25) HPNS New Starts Status

Parcel	Activity
F	 Award and development of Remedial Design Work Plan (award by 7/31)
G	 Complete Phase 2 radiological retesting (fieldwork 60% complete) Submit Remedial Action Completion Report (RACR) (draft submitted to regulatory agencies by 8/30) Award Task Order for demolition of 6 buildings and a slab (work plan under development)
D-2 and UC's	 Excavate along former sanitary sewer and storm drain lines (all parcels) (Ongoing - fieldwork started March 2025) Radiological scanning/ sampling of Buildings 813 and 819 (Parcel D-2) (coordinating building access with OCII)

\$50.8M to be awarded in FY25; over \$250M in active task orders

Upcoming Navy Outreach Activities and Presentation

SAVE THE DATE

September 22, 2025

HPNS environmental
cleanup program
presentation to HPSCAC
E&R Subcommittee

September '25										
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	1	2	3	4	5	6				
7	8	9	10	11	12	13				
14	15	16	17	18	19	20				
21	22	23	24	25	26	27				
28	29	30								

Resources for More Information



HPNS Program Management



Michael Pound michael.j.pound.civ@us.navy.mil

Navy BRAC PMO West 33000 Nixie Way, Bldg 50, Suite 207 San Diego, CA 92147 www.bracpmo.navy.mil/hpns

Regulatory Agencies

US Environmental Protection Agency

Mike Collins: collins.mike@epa.gov

Nadia Burke: burke.nadiahollan@epa.gov

CA Dept. of Toxic Substances Control

Michael Howley: michael.howley@dtsc.ca.gov

San Francisco Bay Regional Water Quality Control Board

Mary Snow: mary.snow@waterboards.ca.gov

Other Resources



Community Technical Advisor Dr. Kathryn Higley (541) 737-0675

<u>kathryn.higley@oregonstate.edu</u> <u>www.ne.oregonstate.edu</u>

HPNS Online Information Repository



- https://www.bracpmo.navy.mil/hpns
- https://administrativerecords.navfac.navy.mil/?PN24V63WGTUM4VG4WO

HPNS Community Outreach

Send an email or leave a message

- For program information
- To join the HPNS Mailing List
- To request language assistance



info@sfhpns.com



(415) 295-4742