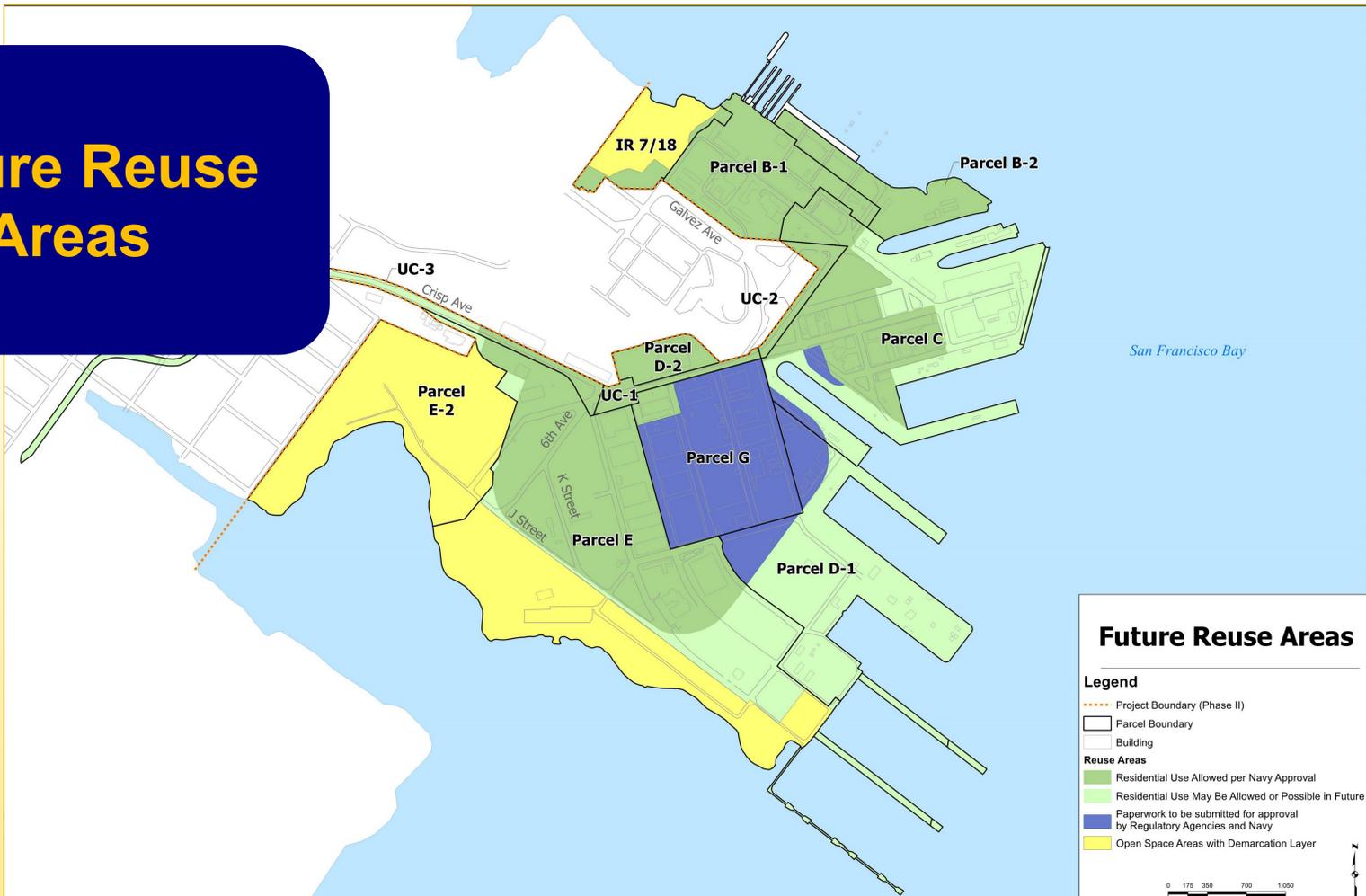


## Development Plan



## Future Reuse Areas



## Parcel G Cleanup Actions

The Navy and EPA jointly selected the cleanup remedy for Parcel G, which is described in the Final Record of Decision (ROD) and was concurred on by DTSC and the Water Board. The Navy has performed the ROD Selected Remedy with the exception of implementing Institutional Controls. Prior to property transfer, the Navy will issue a Finding of Suitability to Transfer for Regulatory Agency Approval to document completion of the ROD Selected Remedy.

Below is a summary of the cleanup performed by the Navy at Parcel G:

- ⇒ Excavation and Off-haul of Contaminated Soil
- ⇒ Groundwater Treatment, Monitoring, and Institutional Controls
- ⇒ Soil Vapor Survey and Institutional Controls
- ⇒ Durable covers and Institutional Controls
- ⇒ Survey, Decontamination and Removal of Radiologically-impacted Structures and Soil

### Excavation and Off-Haul of Contaminated Soil

The cleanup remedy for soil included targeted excavation of soil contaminated with concentrations of lead and polycyclic aromatic hydrocarbons (PAHs) that exceeded industrial remediation goals (RGs) and removal and off-site disposal of two soil stockpiles.

An example excavation effort is shown below:



### Groundwater Treatment, Monitoring, and Institutional Controls

The Navy treated chemicals of concern (COCs) in groundwater at Parcel G with zero valent iron (ZVI). This elemental metallic iron was injected into the subsurface to drive degradation of dissolved chemicals and successfully reduced chemical concentrations in groundwater.



The cleanup remedy also requires Institutional Controls (ICs) that prohibit use of groundwater due to the presence of residual chemicals. The Navy implements an ongoing groundwater monitoring program at Parcel G so that the Navy and Regulatory Agencies can continue to review and track changes in residual concentrations and identify any potential migration of chemicals of concern.

### Survey, Decontamination and Removal of Radiologically-impacted Structures and Soil

By 2004, the Navy completed an investigation for radiologically-impacted buildings, equipment and infrastructure at Parcel G. The Navy addressed these radiologically-impacted areas in buildings, fill areas, former building sites, storm drains and sanitary sewers by removing them. Typical radiological survey instrumentation is shown below:



### Soil Vapor Survey and Institutional Controls

The Navy implemented a soil vapor survey at Parcel G in 2010 to find out where volatile and semi-volatile organic compounds exceed action levels and if those areas require cleanup or institutional controls (ICs) to minimize potential vapor intrusion inhalation risk.

Based on the results of the soil vapor survey, areas requiring institutional controls (ARICs) for potential vapor intrusion risk have been identified at Parcel G. These restricted areas will require the use of engineering controls, such as vapor barriers and venting systems, at future buildings constructed at Parcel G.

Example engineering controls are shown below:



### Durable Covers

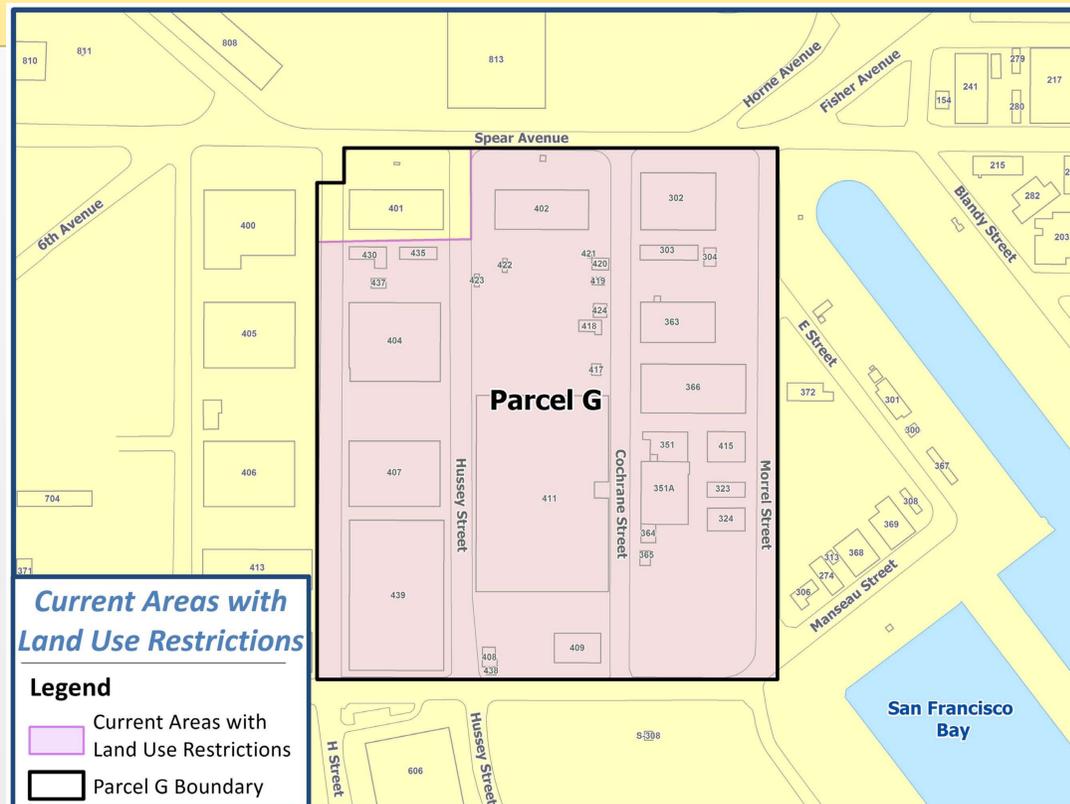
The cleanup remedy at Parcel G included construction of a durable cover, primarily asphalt pavement. The purpose of the durable cover is to provide a continuous cover that minimizes physical contact and exposure to soil below. All areas of Parcel G will require a durable cover. After redevelopment, city roads, building foundations, or two-feet of clean tested soil may serve as the durable cover.



# Proposal to Update the Parcel G Record of Decision

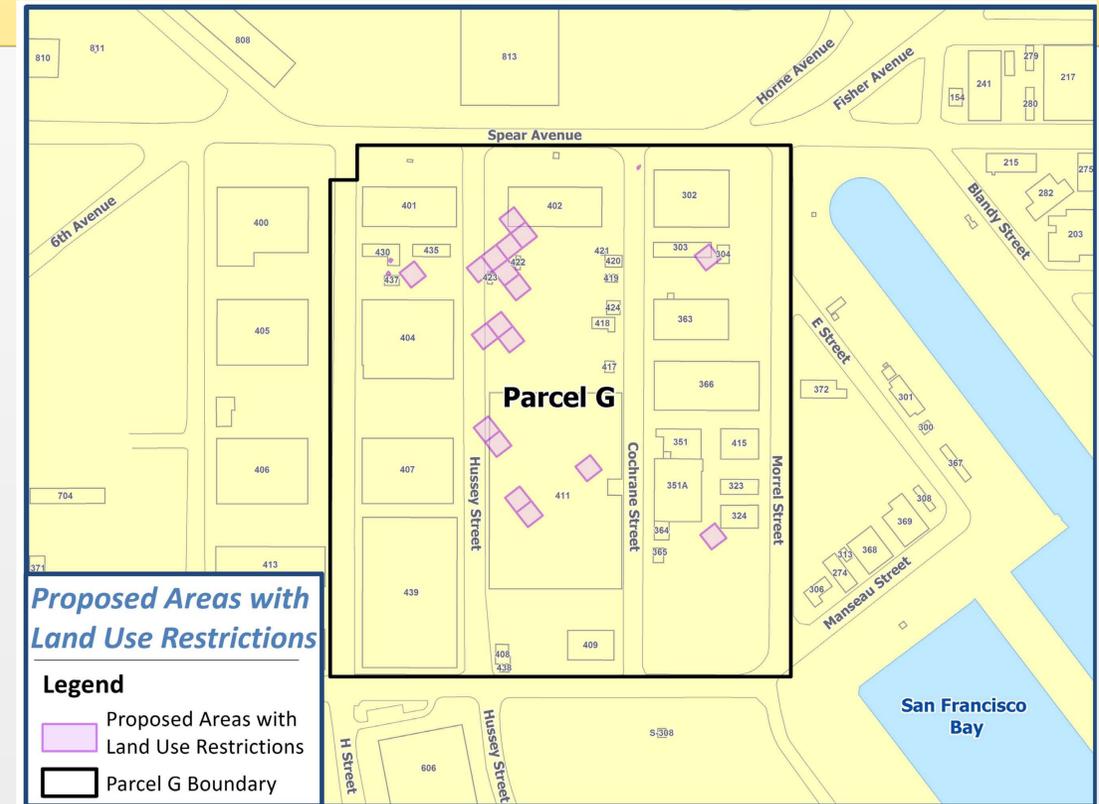
## Proposed Update to Parcel G Areas with Residential Land Use Restrictions

The Navy performed cleanup at Parcel G according to requirements of a document called a Record of Decision (ROD). A ROD is a public document that explains the solution chosen to clean up a site. The Navy proposes to update the ROD to clarify which areas in Parcel G are suitable for future residential use. A new analysis by the local reuse authority reviewed current levels of residual chemicals in soil and compared them with residential Action Levels based on current health-based regulatory standards. The analysis identified some areas containing chemicals in soil above residential Action Levels and other areas with no chemicals above residential Action Levels. The proposed update to the ROD will remove the residential land use restriction in areas with no chemicals above residential Action Levels. All other restrictions required by the ROD will remain in place. After considering community comments, the final decision about land uses will be documented in an Explanation of Significant Differences (ESD). In addition, residential use will occur only after the Regulatory Agencies find Parcel G suitable for transfer and the Navy transfers the property.



### Current Areas with Land Use Restrictions

This figure shows the current areas with residential land use restrictions in purple. The cleanup remedy placed residential land use restrictions on areas previously planned for non-residential land use such as parks. Land use restrictions were applied to areas based on assumed future land use without determining whether future residential land use would be allowable.



### Proposed Areas with Land Use Restrictions

This figure shows the proposed areas with residential land use restrictions in purple. The local reuse authority analyzed current site conditions using current health-based regulatory standards to see which areas are appropriate for future residential use. This analysis found that current conditions are appropriate for residential use in some areas that are currently restricted against residential land use.

## What guides the Navy's cleanup activities at HPNS?

The Navy's environmental cleanup at HPNS follows the requirements set forth in the **Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980**. CERCLA was amended by the **Superfund Amendments and Reauthorization Act (SARA)** in 1986.

## What is CERCLA?

CERCLA, also known as Superfund, was created by Congress in 1980 to create a program to identify, investigate, and clean up identified sites in response to environmental problems created by past hazardous waste disposal practices.

CERCLA also established the **National Priorities List (NPL)**, which guides federal agencies in determining which sites require further investigation. HPNS was placed on the NPL in 1989.

## How can the public be sure that the Navy is following CERCLA?

Several regulatory agencies provide oversight of the environmental cleanup program activities and the environmental closeout process at HPNS. These regulatory agency representatives and Navy program personnel work together as members of the BRAC Cleanup Team (BCT) to evaluate and monitor the schedule for completing the investigation and cleanup of sites at HPNS.

## The CERCLA Cleanup Process

Preliminary Assessment /  
Site Inspection (PA/SI)

Remedial Investigation /  
Feasibility Study (RI/FS)

Proposed Plan /  
Public Comment Period

Record of Decision (ROD)

Remedial Design /  
Remedial Action (RD/RA)

Operation & Maintenance /  
Land Use & Institutional Controls

Site Closure /  
Transfer to City of San Francisco