

Feasibility Study/Remedial Action Plan for Black Granular Material in the Investigation Area C3 Triangle Area

**Public Meeting
June 24, 2009**

**Caroline Ziegler
Project Manager**



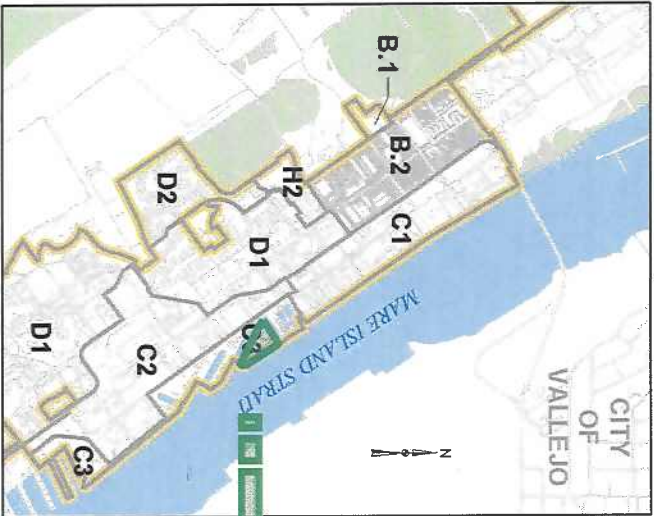
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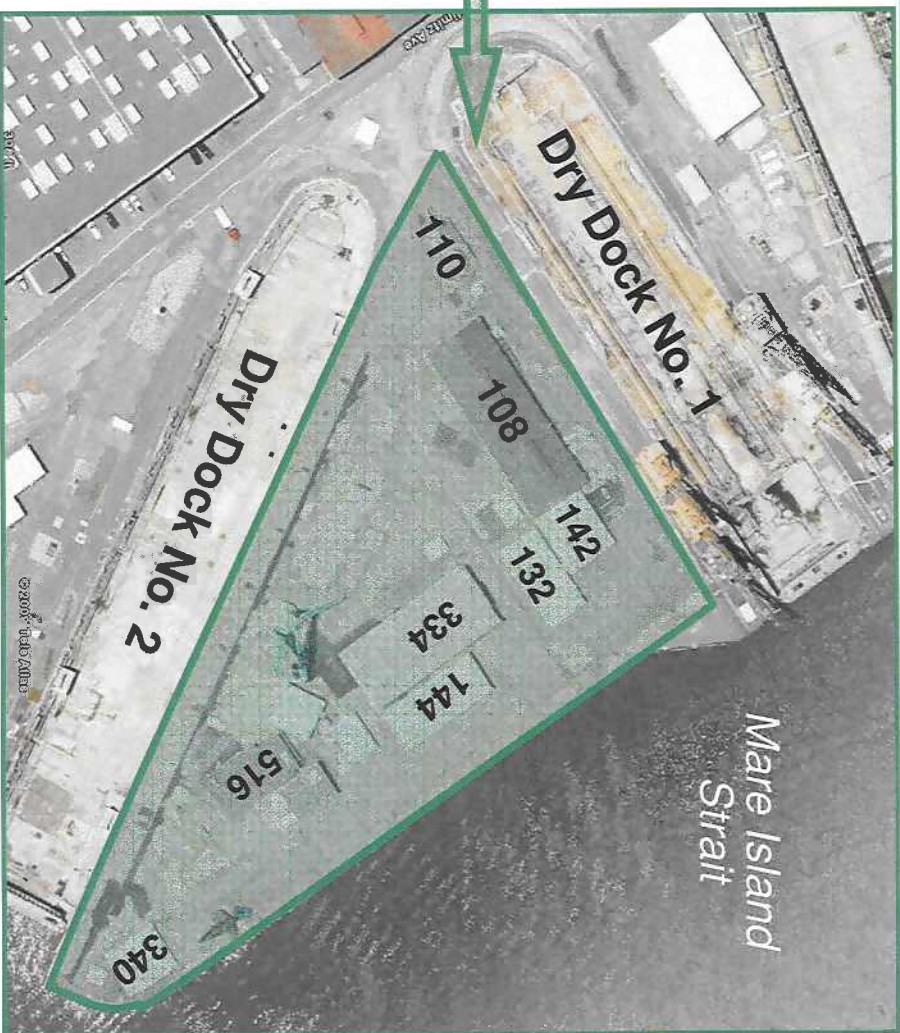
Agenda

- **Overview of Presentation**
- **Description of the Investigation Area C3 Triangle Area**
- **Purpose and Findings of the FS/RAP**
- **Summary of the Recommended Remedy**
- **Schedule**
- **Public Comment Period**
- **Questions and/or Comments**

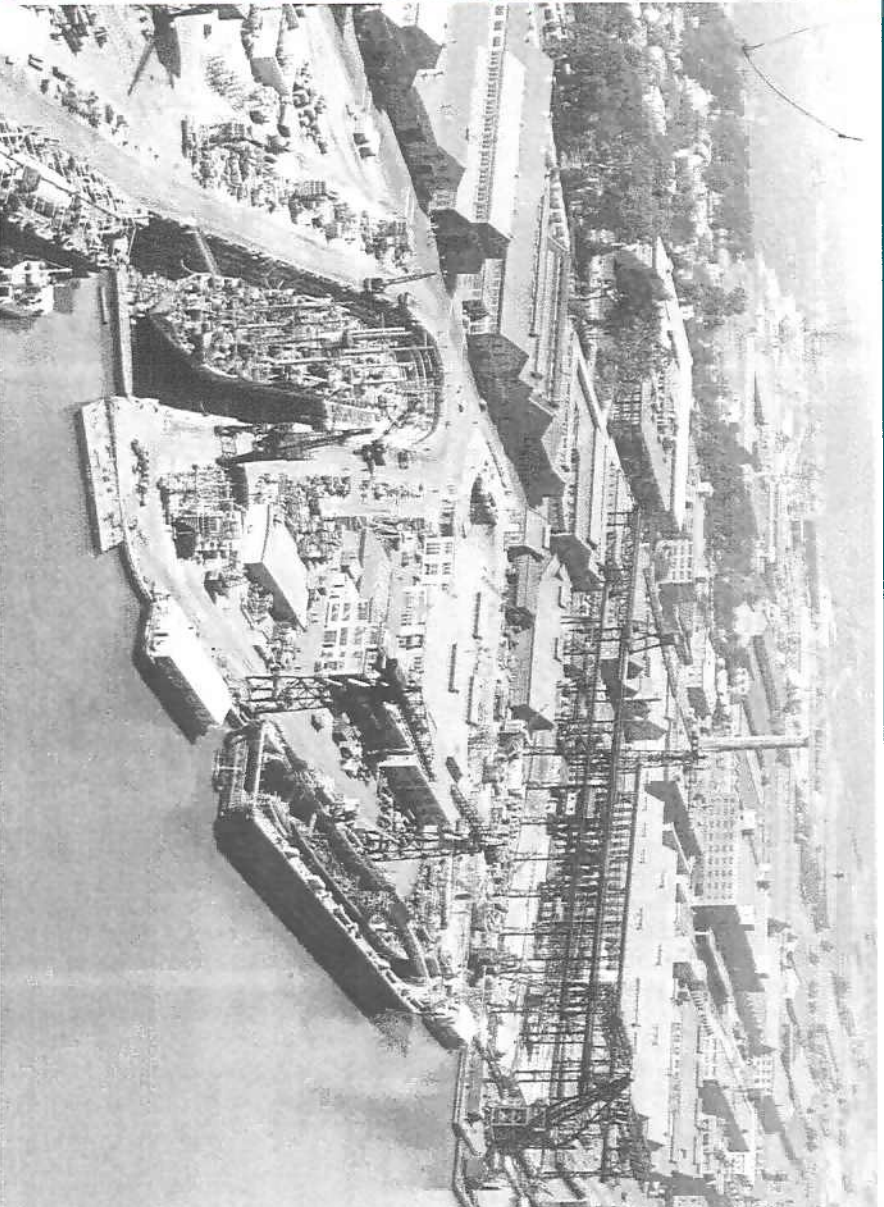
Description of the Investigation Area C3 Triangle Area: Current Use



- 5.4 acres commercial/ industrial waterfront covered in asphalt concrete, with several structures

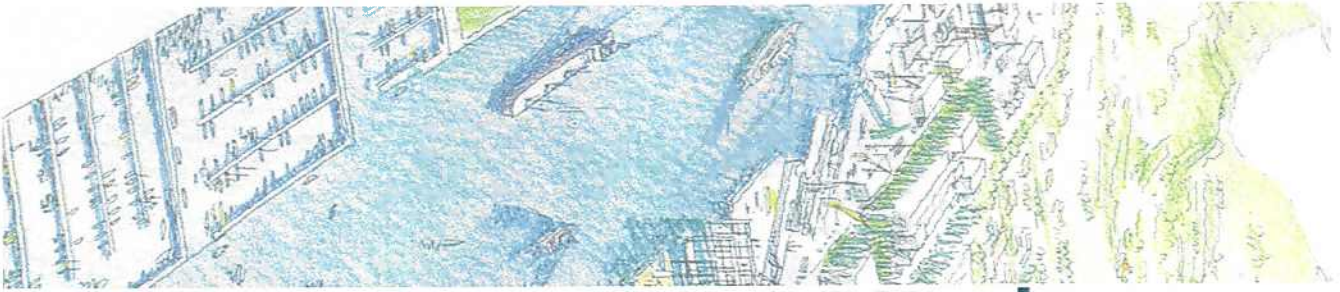


Description of the Investigation Area C3 Triangle Area: Historical Use



c. 1949

- Ship and submarine building and maintenance
- Ship and submarine refueling
- Paint varnish plant and machine shop



Description of the Investigation Area

C3 Triangle Area: Future Use?

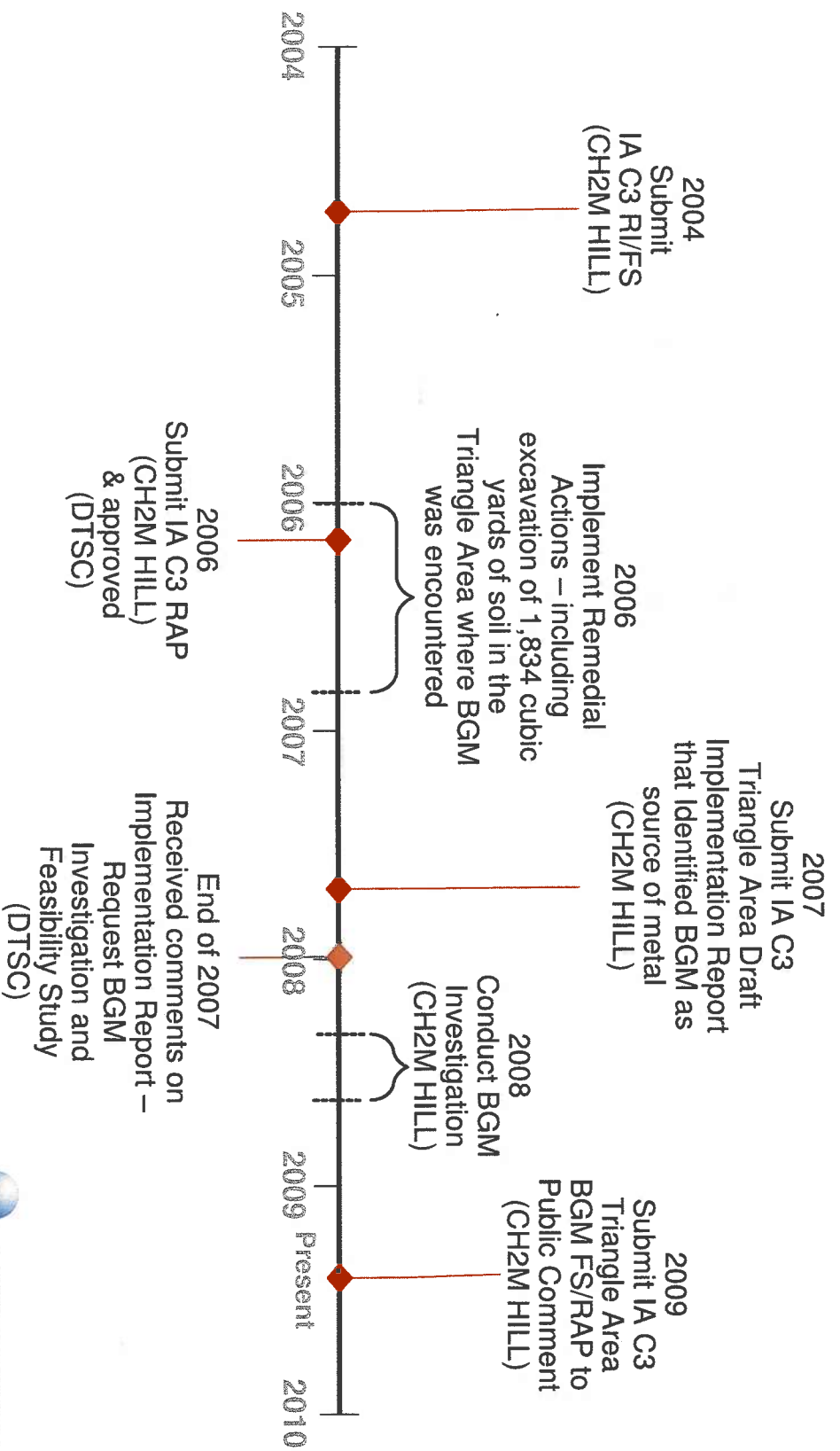


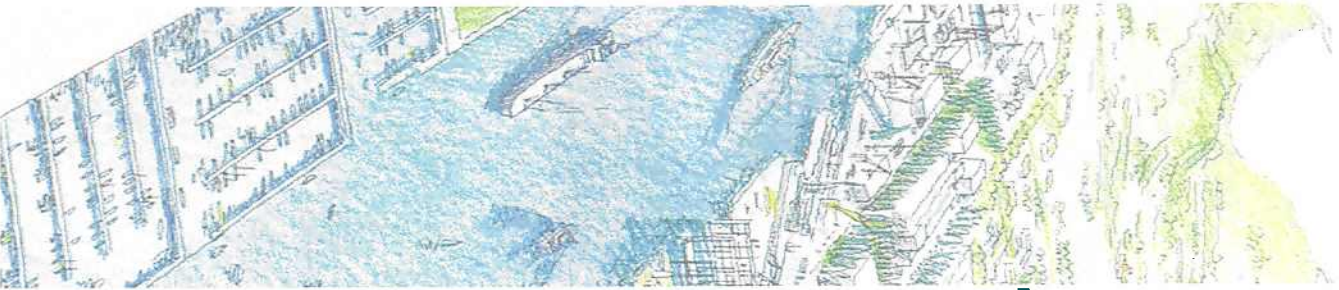
- Ship Construction/Deconstruction
- Ship Maintenance
- Historic Preservation (USS Iowa)

- Possible Future Uses
 - Maritime Operations and Marine Industry



Major Events and Documents Preceding the FS/RAP for BGM in the IA C3 Triangle Area





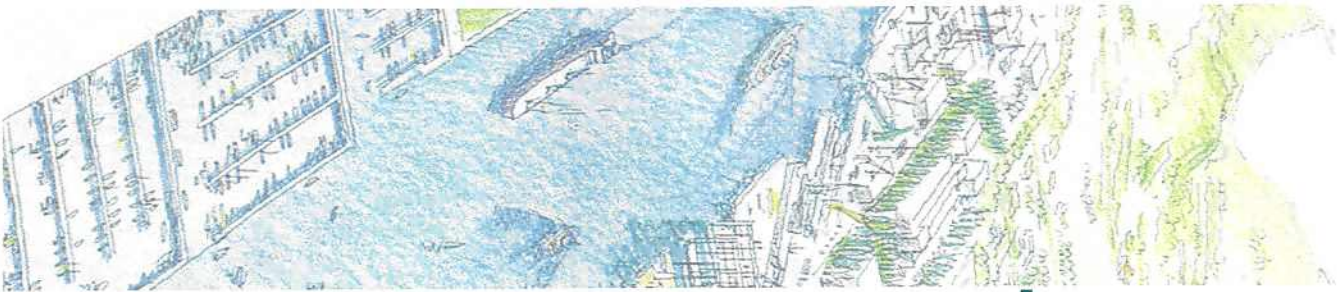
Purpose and Scope of the FS/RAP

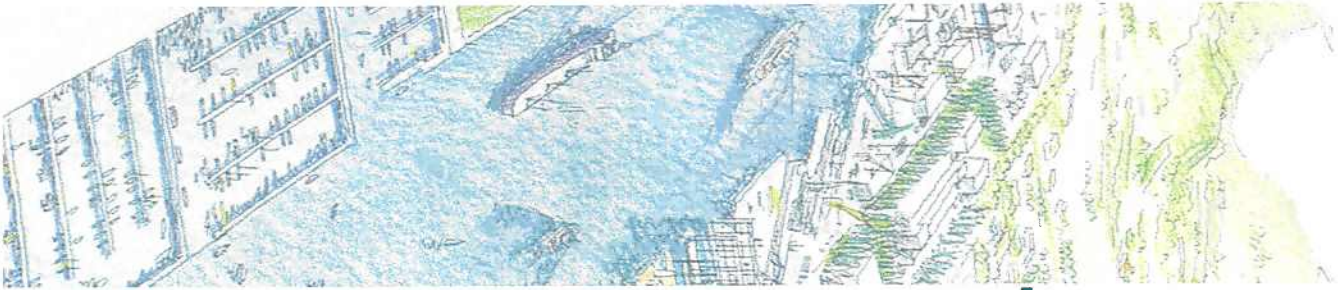
The FS/RAP includes:

- Summary of nature and extent of lead contamination related to presence of black granular material (BGM)
 - Includes comparison of constituent levels to health-based criteria
- Results of human health and ecological risk assessments
- Evaluation of potential remedial alternatives
- Rationale for selection of the proposed cleanup remedy
- Recommended remedy

Findings of the FS/RAP

- **BGM conclusions from visual evidence:**
 - appears to be generated from foundry, smelting, or blast furnace operations
 - appears to have been placed during area development as fill material
 - observed in multiple locations at various depths in the Triangle area

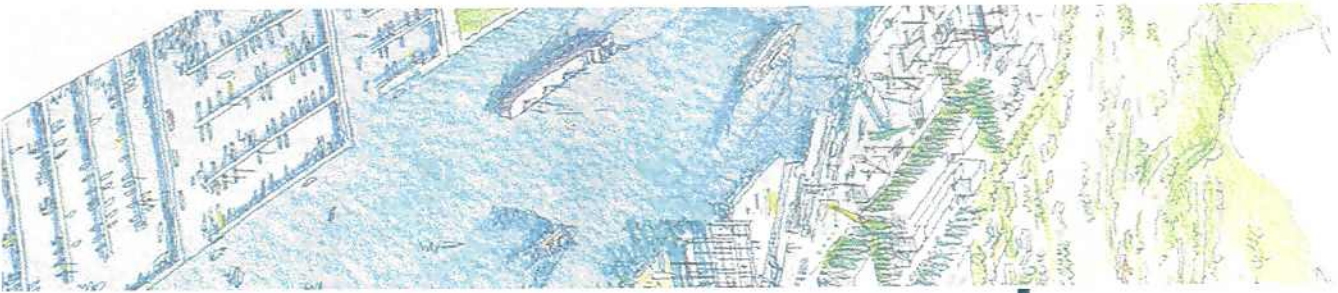




Findings of the FS/RAP - Continued

Where is BGM found in the IA C3 Triangle Area?

- Identified at various depths in non-contiguous intervals in multiple locations
- Below surface paving (approximately 1 foot), observed to extend up to 7.5 feet below ground surface (bgs)
- Maximum observed depth of approximately 11 feet bgs
- Observed maximum thickness of approximately 8 feet



Findings of the FS/RAP - Continued

- Human health risk assessment shows that the lead concentrations found associated with the presence of BGM pose a potential risk which warrants a remedy (> 800 parts per million for commercial/industrial sites)

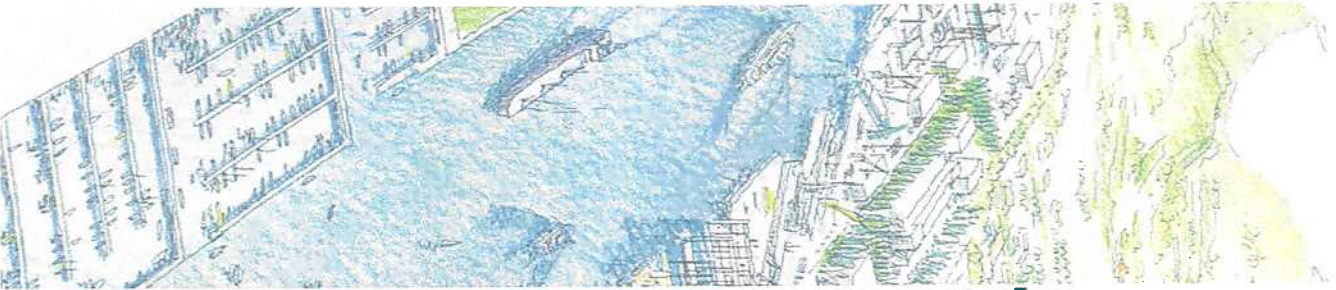
Media	Depth	Maximum Lead Concentration within Triangle Area
Soil	0-2 feet	5,600 parts per million
Soil	0-10 feet	7,940 parts per million
GW	Max depth ~ 9 feet	< 2.5 parts per billion

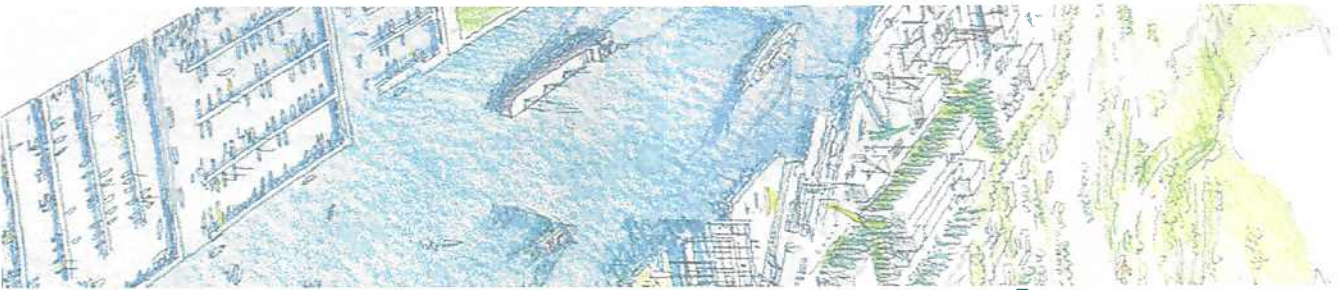
- The potential for human exposure to the lead may occur if the BGM is encountered while working in the subsurface of the Triangle Area
- Lead was not detected in groundwater at concentrations above 2.5 parts per billion, therefore no risk is posed to human health or the environment and a groundwater remedy is not required

Summary of the Recommended Remedy



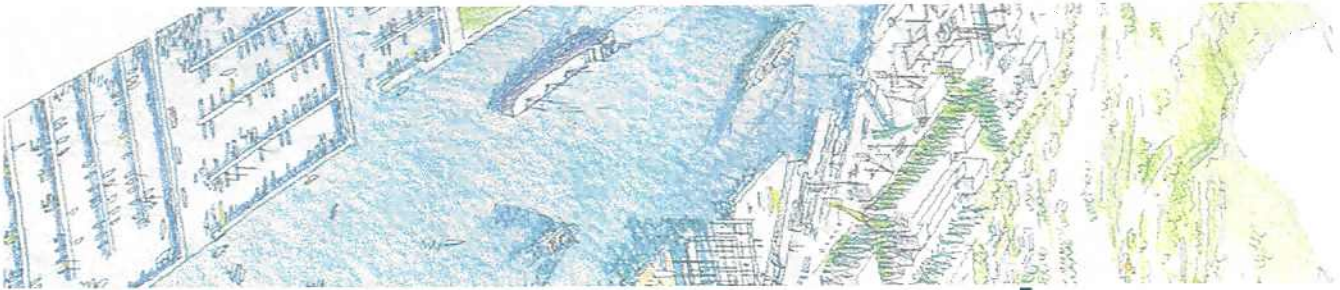
- Repave surface to eliminate potential exposure pathway to humans
- Design the repaved surface to incorporate existing buildings, cranes, and lay-down slabs
- Land use covenant (LUC) recorded to maintain surface integrity and prohibit sensitive uses





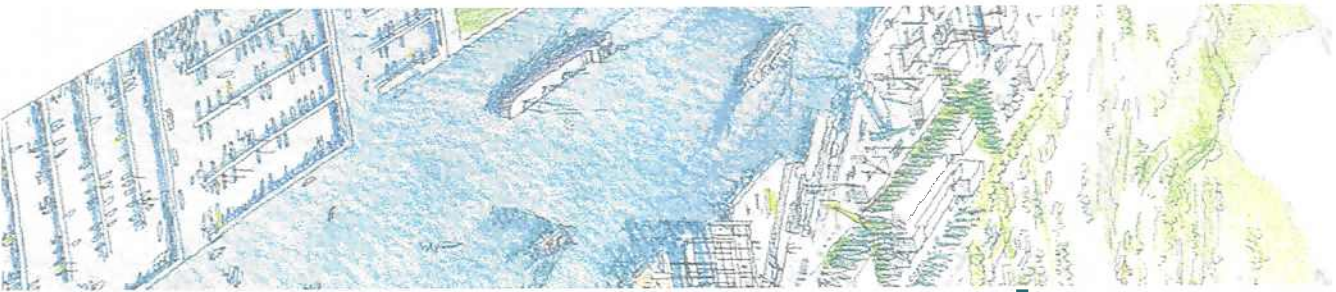
CEQA Initial Study

- **California Environmental Quality Act (CEQA) Initial Study was prepared by DTSC to evaluate environmental impacts from proposed cleanup**
- **DTSC concluded that proposed cleanup remedy will not have significant negative impacts on environment**
- **DTSC will issue CEQA Negative Declaration once the public comments for proposed cleanup remedy are addressed**




IA C3 Schedule

- **Response to public comments – September 2009**
- **Final FS/RAP – October 2009**
- **Implement Remedy – November 2009 through March 2010**
- **Recordation of Land Use Covenants – 2010**
- **IA C3 Site Closure – 2010**



Public Comment Period

- **Public Comment Period is from June 16 to July 15, 2009**
 - Written comments may be submitted to:
Henry Chui
DTSC
700 Heinz Avenue
Berkeley, CA 94710
Phone: (510) 540-3759
HChui@dtsc.ca.gov
- **FS/RAP and associated documents have been available for review at JFK Library (Vallejo) and DTSC Offices (Berkeley) since public comment period start date**
- **Before DTSC makes final decision to approve, modify, or deny recommended remedy in FS/RAP, document is available for public comment during 30-day public comment period**
- **All comments received from public during comment period will be reviewed and responded to before the FS/RAP is finalized**

An aerial architectural rendering of a city, showing a dense grid of buildings and streets. A large, semi-transparent grey rectangle is overlaid on the center of the image, containing the text. The rendering uses a mix of colors: greys for buildings, greens for trees and parks, and blues for water or sky. The style is a detailed line drawing with some color washes.

Questions and/or Comments



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