Time Critical Removal Actions at Hunters Point Shipyard: Case Studies

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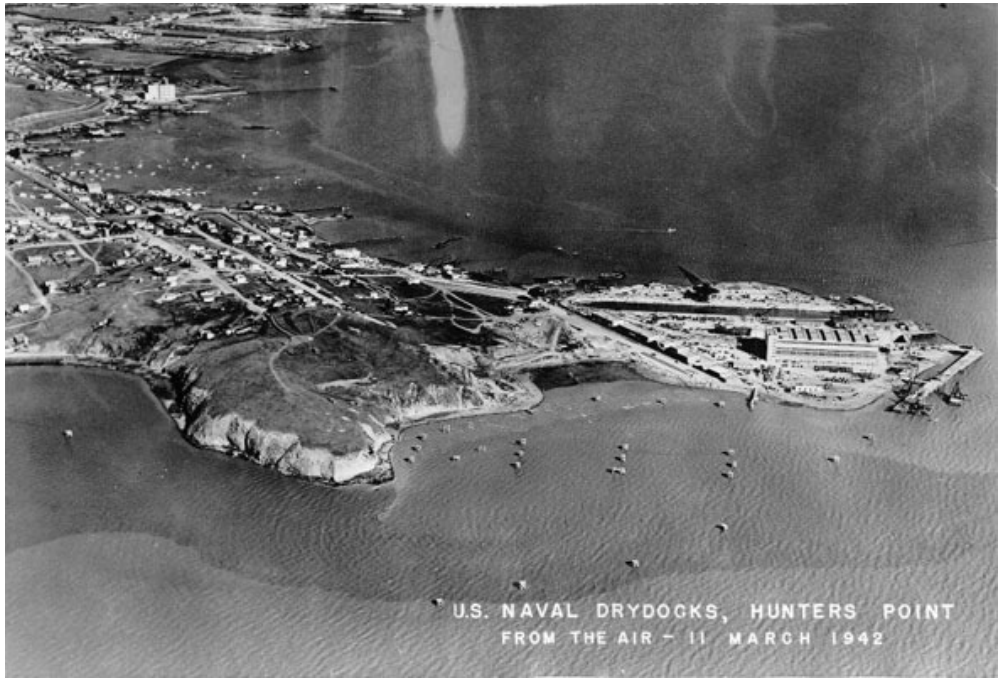
Hunters Point Shipyard

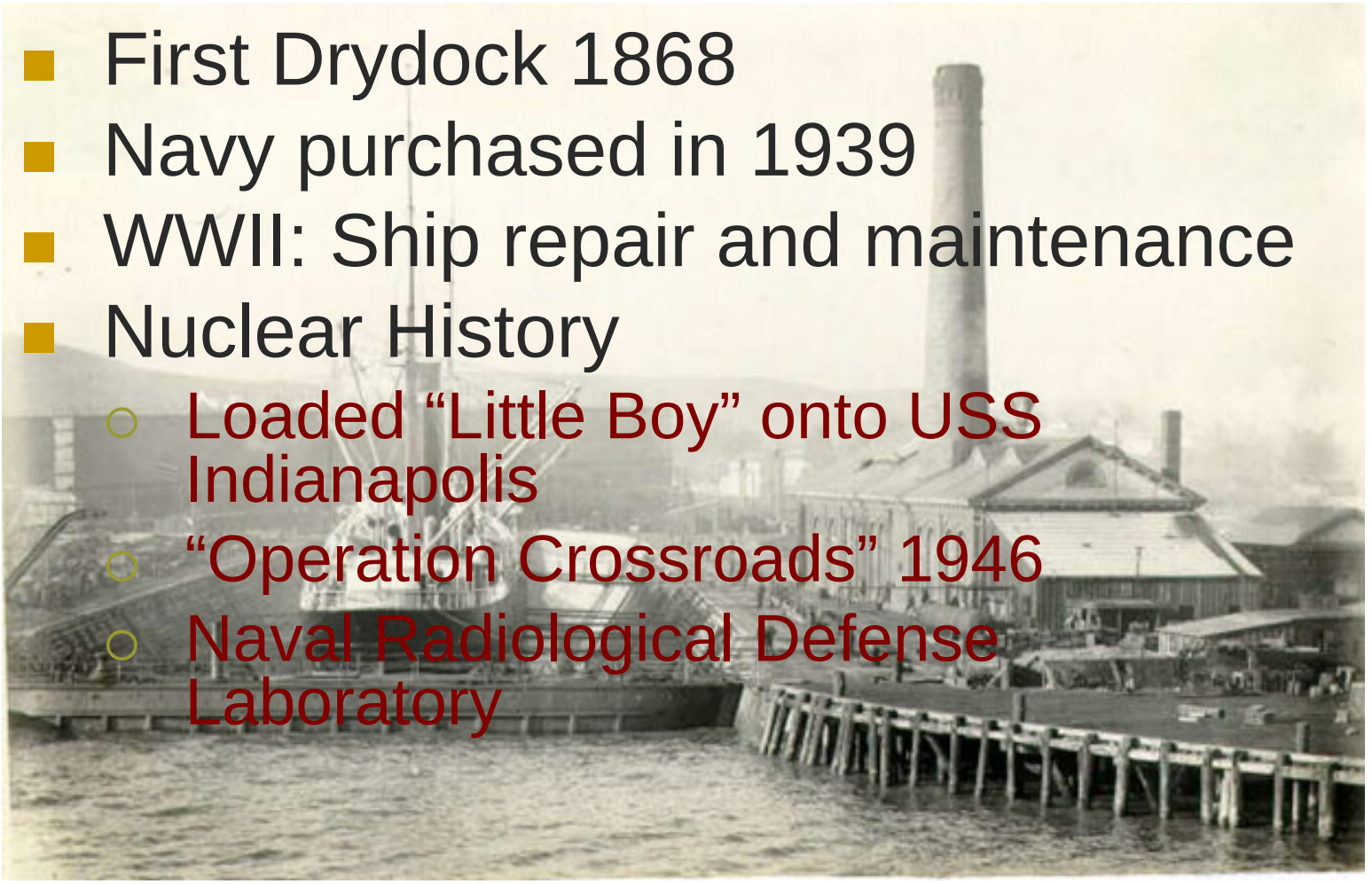
- Identified New Responsible Party

Overview

- History of HPS
- Issues
- Case Studies
  - PCB Hot Spot
  - IR-02 Radiological
- Conclusion

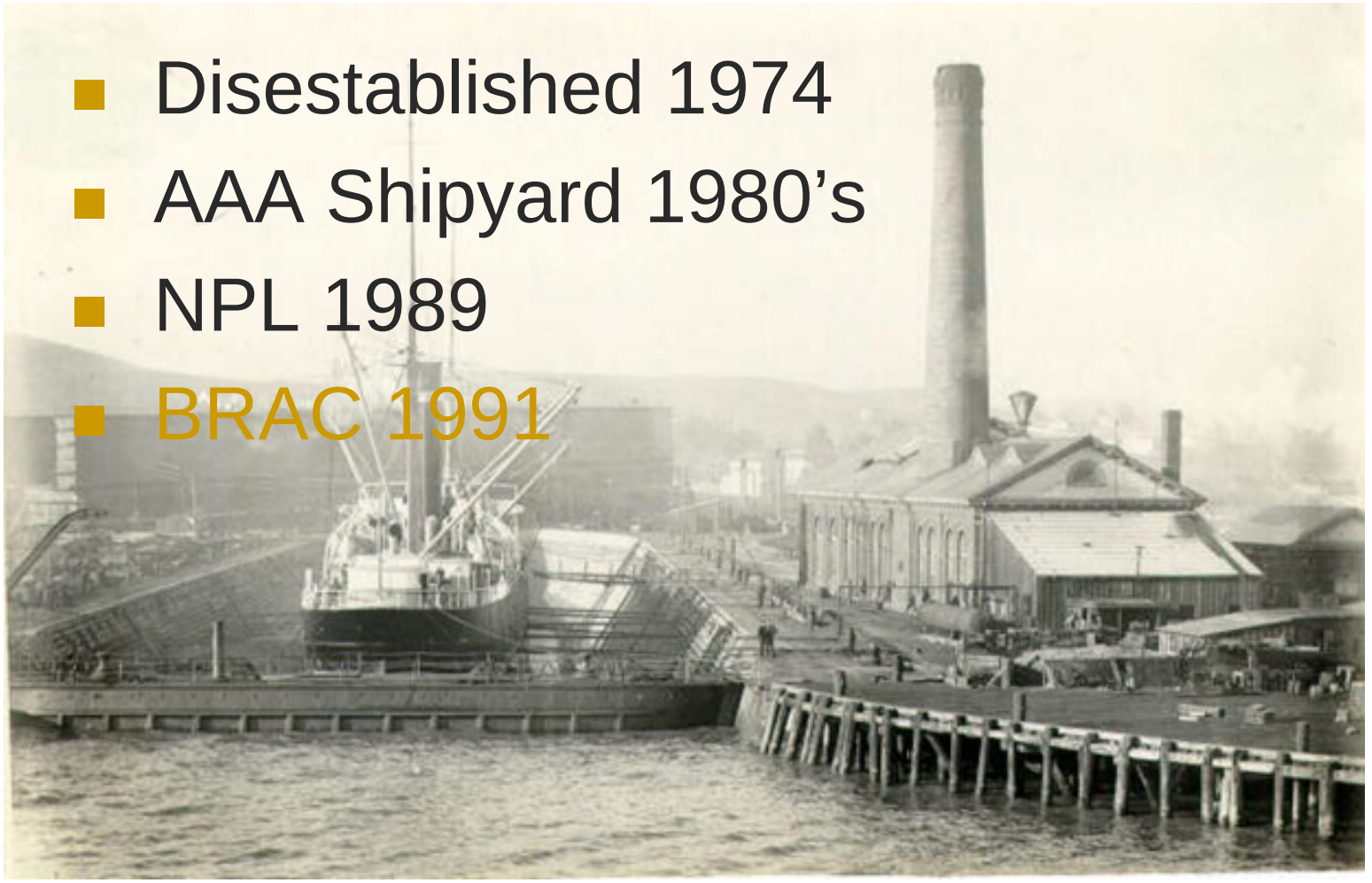


History



- First Drydock 1868
- Navy purchased in 1939
- WWII: Ship repair and maintenance
- Nuclear History
  - Loaded “Little Boy” onto USS Indianapolis
  - “Operation Crossroads” 1946
  - Naval Radiological Defense Laboratory

History

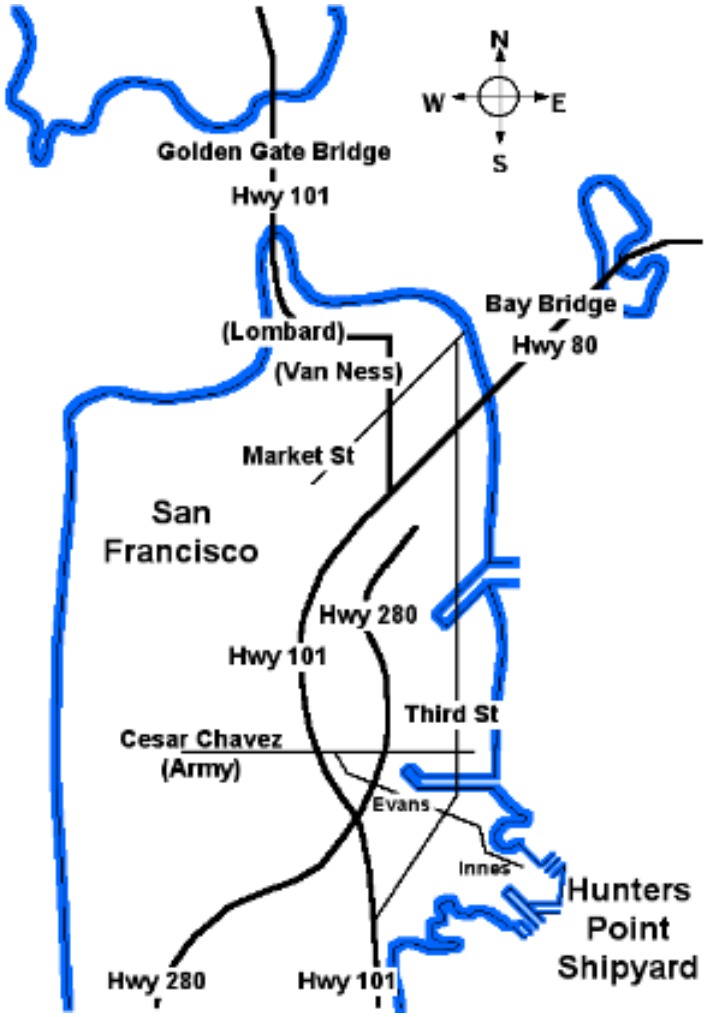


- Disestablished 1974
- AAA Shipyard 1980’s
- NPL 1989
- BRAC 1991

Hunters Point Shipyard: WWII

Hunters Point Shipyard

- San Francisco, CA
- Minority Community
- Land: 420
- Bay Water: 443
- Seven Parcels (i.e. Operable Units)
- Parcel A Transferred 2005



Hunters Point Parcel Map

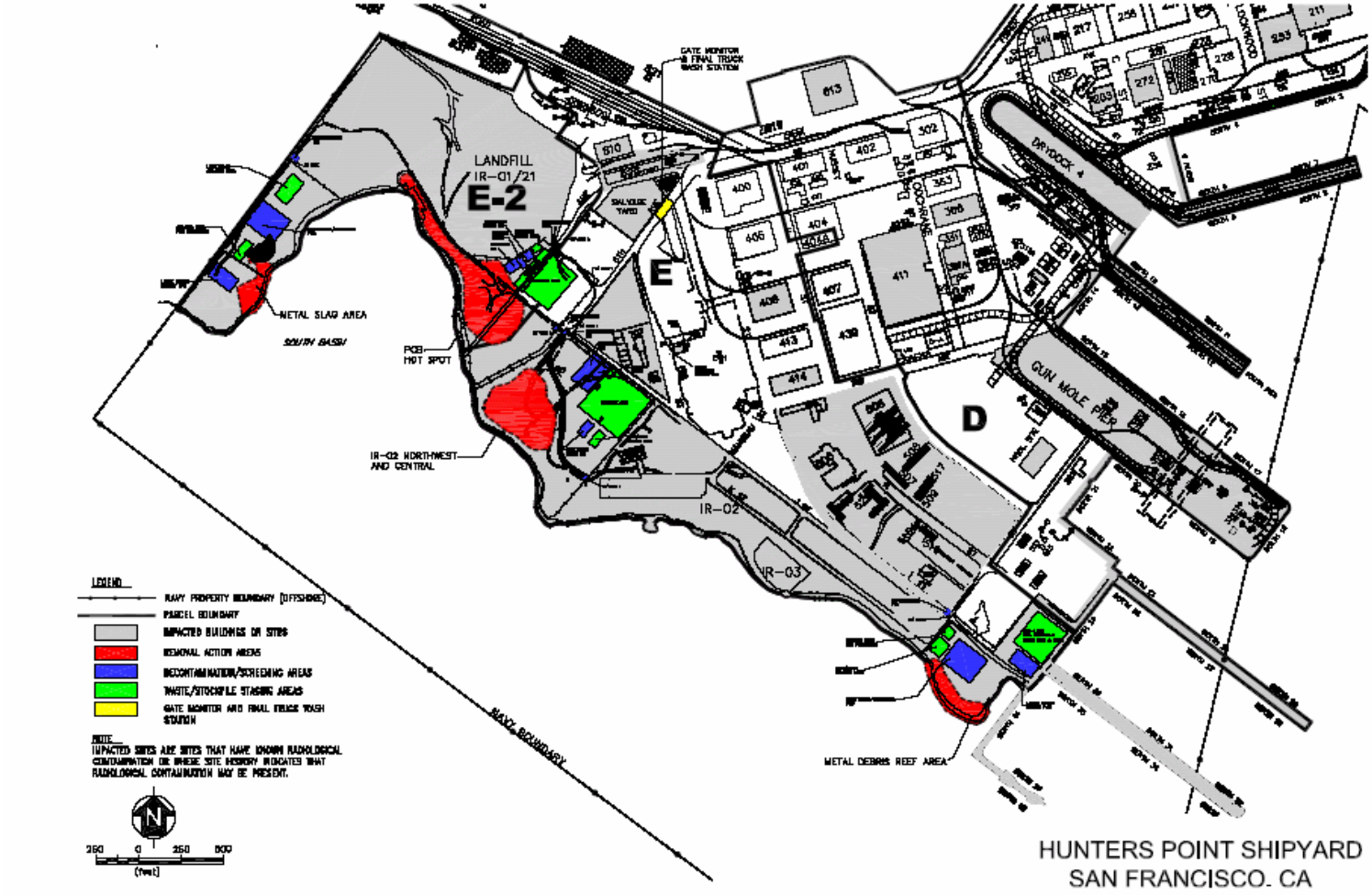
Issues

- Time Critical Removal Actions
  - What is Time Critical?
  - Six Month Planning Period (NCP 300.415(b)(4)
- Removal Action or Remedial Action
  - Benefits vs. Costs of Early Actions
- DOD's Removal Authority
  - Application of DOD Leadership
  - Role of Regulatory Agencies
  - Cooperative Relationship
- Community Involvement

Case Study TCRAs

- PCB Hot Spot
- IR02 Northwest

TCRAs: Parcels E and E-2



PCB Hot Spot

PCB Hot Spot

- Suspected Source for PCBs in SF Bay
- Other Contaminants:
  - Petroleum
  - Radionuclides
  - VOCs
  - SVOCs
  - Metals

PCB Hot Spot: Cleanup Goals

- PCBs:
  - 0-3 feet: 1ppm
  - 3 -10 feet: 100ppm
- Total Petroluem:
  - 3,500
- Radiological:
  - “Free Release” Criteria

PCB Hot Spot: Statistics

- Hot Spot: 11,000 ppm PCBs
- 2.73 acres
- Removed and Disposed
  - 46,464 cy soil
  - 600 cy of radiological contaminated soil
  - 1,178 cy of debris
- Costs
  - $9.3 million
  - $4.9 million original estimate

IR-02: Northwest

- Radiological Material Disposal Area
  - Devices
  - Material
  - Markers
- Other Waste
  - Metals, PCBs
  - Asbestos

IR-02 Northwest: Cleanup Goals

- Radiological: “Free Release” Criteria
- No Clean Up Goals for Other COCs

IR-02 Material Excavated

- 49,526 cy Soil
- 9,063 cy Rad. Soil
- 1,952 Rad. Devices
- 262 Rad. Buttons
- 1,813 cy General Debris

Are TCRAs Time Critical?

- Are the TCRAs actually time critical, or would delay cause unacceptable impacts?
  - Justification
  - 6 Month Planning Period
  - Engineering Evaluation Cost Analysis

TCRA: Justification

- PCB Hot Spot and IR-02
  - Proximity to San Francisco Bay
  - High Levels of Contamination at or Near the Surface
  - Weather Conditions May Cause Migration and Releases

TCRA: Justification

TCRA: Six Month Planning

- When Does Planning Period Begin?
  - Navy's Internal Multi-Year Planning and Budgeting Process
  - Action Memorandum
    - PCB Hot Spot
      - Final Action Memorandum: May 2005
      - On-Site Activity Begin: June 2005
    - IR-02
      - Final Action Memorandum: August 2000
      - On-Site Activity Begin: June 2005

TCRA: EE/CA

- Would Actions Benefit From EE/CA?
  - Public Evaluation of Alternatives
  - Alternatives limited because of Radiological Contamination
    - Dig and Haul
  - Added Time and Expense With Limited Benefit

Removal Action vs. Remedial Action

- Actions Completed!
- RODs Projected for 2008
- Better RODs Will Result
  - Critical Information Collected
    - Nature and Extent of Contamination
    - Experience with Radiological Material
  - Information on Cost
  - Experience with Radiological Contamination

Removal Action vs. Remedial Action

- Revisit Cleanup Decisions
  - IR-02:
    - Placement of Contaminated Soil Back Into Excavation
- Parcel B 1997 ROD Being Amended.

Navy Authority

- Appropriate Use of Authority?
- BRAC Cleanup Team Established Cooperative Relationship based on Problem Solving
  - Weekly Conference Calls
  - Site Inspections
  - Issue Resolution

Navy Authority/BCT Cooperation

- PCB Hot Spot
  - Reacted to Changing Conditions
    - Buried Drums
    - More Extensive Contamination
- IR-02
  - Remedial Goals for Rad. Contaminated Soil Only
    - Agreement to Remove All Debris, Sand Blast Grit, Asbestos, and PCB Contaminated Soil
- Storm Sewer Radiological Removal

Was the Public Adequately Involved? PCB Hot Spot

- PCB Hot Spot Action Memorandum
  - Public Notice
  - 30 Day Comment Period
  - Public Repository
  - Public Hearing
- Restoration Advisory Board
  - Meetings, Updates and Tours

Was the Public Adequately Involved? IR-02

- IR-02 Radiological Disposal Area
  - Based on 2000 Action Memorandum
- Restoration Advisory Board
  - Meetings, Updates and Tours

Conclusions

- PCB Hot Spot and IR-02 Appropriate for Removal Actions
- More Clarity Needed on Use of TCRA
  - Joint Guidance
  - New Approaches to Fit with DOD Process
- Better RODs because of TCRAs
- Cooperative Relationship Key to Success
- Public Involvement
  - Beyond Requirements for PCB Hot Spot
  - Restoration Advisory Board for IR-02