



## **Current Hunters Point Projects and Dust Mitigation Practices**

Hunters Point Shipyard Community Meeting April 14, 2009



#### **Overview**



- Navy Introductions
- Project Update
- Site Walk
- Dust Best Management Practices Presentation
- Questions and Comments



#### Introduction



- Facilitator Sally Smith (Pendergrass & Associates)
- Base Closure Manager Doug Gilkey (Navy)
- Hunters Point BRAC Environmental Coordinator Keith Forman (Navy)
- Hunters Point Lead Remedial Project Manager (LRPM) Melanie Kito (Navy)
- Hunters Point Deputy Lead RPM Dane Jensen (Navy)
- Hunters Point Community Liaison Carolyn Hunter (Tetra Tech EMI)



#### **Project Update**



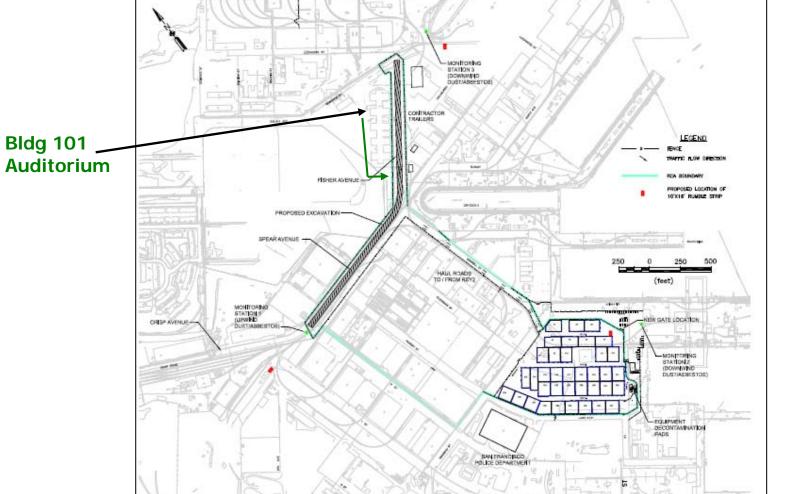
- Current Field Projects
  - Continue Sewer and Storm Drain Removals
  - Ongoing transportation and disposal trucking operations
- Upcoming Spring and Summer Field 2009 Projects
  - Begin next phase of groundwater treatability studies
  - Begin petroleum program corrective actions in Parcel B
- We're here to discuss Dust Control measures for these projects at Hunters Point Shipyard
  - Primary focus will be on most extensive field activities, which is Fisher and Spear storm drain and sewer line removal.



**Bldg 101** 

### **Site Walk**







### How the Navy Manages Dust Control Program



- Establish Dust Control Measures and Planning requirements in key contract documents and project planning documents
  - Contract Scope of Work Statements
  - Project Work Plans
  - Require air monitoring during active field work activities
- Navy Oversight of Contractors by
  - Remedial Project Manager Visits
  - Spot visits by Caretaker Site Office (CSO)
  - The Resident Officer In Charge of Construction (ROICC)
- Regulator Oversight by
  - Bay Area Air Quality Management District
  - BCT review of Work Plans, Operating Procedures, and Site Walks



## What the Navy samples for in the air monitoring program

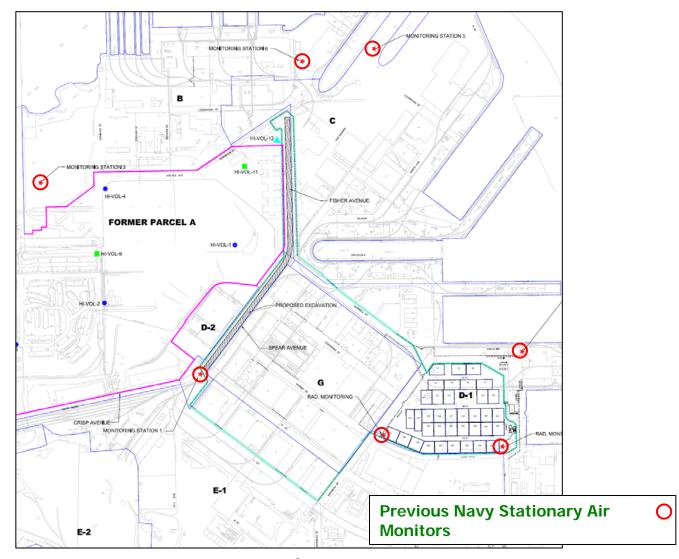


- Asbestos
- Manganese
- Lead
- Radiological Activities
- Particulate Matter



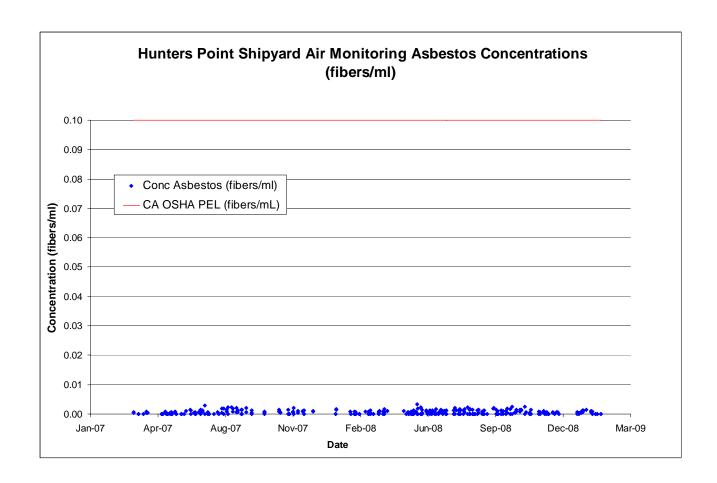
## Navy Sewer and Storm Drain Previous Air Monitoring Stations





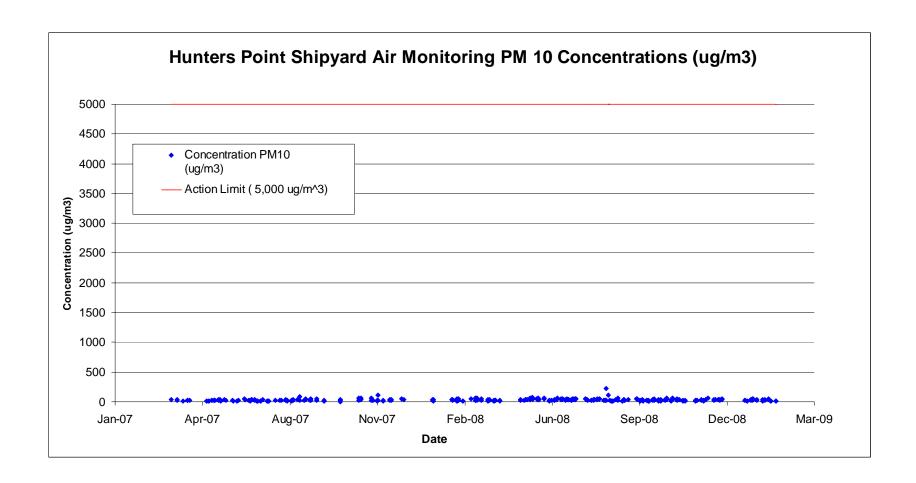






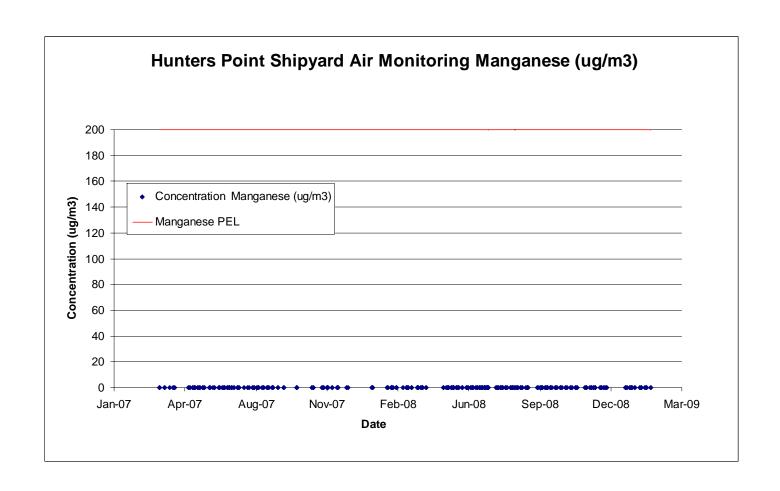






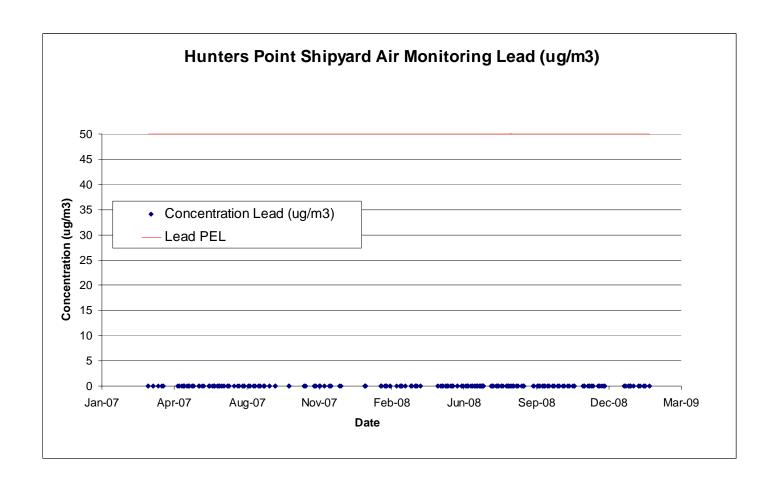














### **How this Applies to Current Projects**



- Current Field Projects
  - Continue Sewer and Storm Drain Removals
    - Parcels B, G, and UC-1/UC-2
  - Ongoing transportation and disposal trucking operations
- Upcoming Spring and Summer Field 2009 Projects
  - Begin next phase of groundwater treatability studies in Parcel C and Parcel E.
  - Begin petroleum program corrective actions in Parcel B



### Dust Mitigation at Hunters Point for Sewer and Storm Drain Removal



The next phase of the sewer and storm drain removal is unique in many ways.

- The Fisher and Spear Street sewer and storm drain removals are the first of the deep utility corridor excavations. Excavations will range from 15 to 25 ft deep.
- Fisher and Spear Streets are adjacent to Parcel A's eastern edge.
- Fisher and Spear Street are within the footprint of the original Hunters Point headland. Excavations will dig through serpentinite bedrock to remove the sewer and storm drains.



### Dust Mitigation at Hunters Point for Sewer and Storm Drain Removal



The Design Plan for the sewer line removals along Fisher and Spear Avenues stated that the work would comply with the substantive portions of the applicable provisions of the Asbestos Airborne Toxic Control Measure for Construction, Grading, Quarrying, and Surface Mining Operations Section 93105. Some key substantive requirements of this regulation include:

- adequate wetting of unpaved areas
- a 15 mph limit on truck speed
- stabilization of storage piles and disturbed areas not subject to vehicular traffic
- and no track-out from any road construction project on any paved roadway open to the public



#### Dust Mitigation at Hunters Point for Sewer and Storm Drain Removal



## Compliance with these requirements is achieved through the following measures:

- A 2,500-gallon water truck and a 500-gallon water buffalo are on site and are used to wet down haul roadways and excavation sites
- Stockpiles are covered with soil stabilizer to control wind blown dust.
- Trucks used on-site are equipped with tarping systems to cover loads during soil transport
- A 15 MPH Speed limit is enforced for all government and government contractor vehicles used on-site, with a 5 MPH speed limit in work areas
- Accumulated dirt is routinely removed from non-traffic areas such as gutters and curbs
- Trucks are loaded on plastic and brushed off at excavation area



## Fisher and Spear Avenue Dust Mitigation



To account for the special circumstances of the Fisher and Spear Street excavations, the Navy will:

- Place soil stabilizer on soil in open trenches.
- Place fence fabric in fencing along both sides of Fisher Ave and from Building 813 to I Street.
- A "water mister system" has been installed along the fence adjacent to Bldg 101 facing Fisher Ave and above the work area.
- Tire cleaning rumble grid panels will be utilized to remove debris from truck tires prior to exiting work sites.
- Truck traffic route will be controlled and minimized to the excavation area and between Parcel G and RSY #2.
- Air monitoring continues to be conducted upwind and downwind of the work areas.

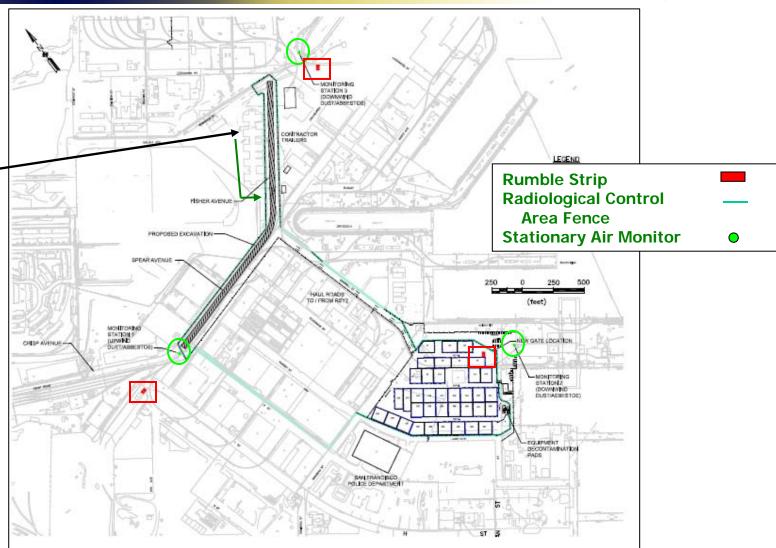


**Bldg 101** 

**Auditorium** 

## **Fisher and Spear Site Map**







### **Air Monitoring Equipment**







Air monitors are located, upwind and downwind, of work activities. Samples are analyzed for: Asbestos, PM10, TSP, lead, and manganese

Air monitors for radiation are also located, upwind and downwind, of all work activities. Samples are analyzed on-site at the end of every day.

Air monitors are operating prior to commencing any soil handling activities



#### **Onsite Dust Control**











Perimeter fencing covered to limit wind blown dust exiting the work sites Water trucks wet down roadways and excavations on a continuous basis A wet sweeping street sweeper is maintained on-site for use as required



#### **Onsite Dust Control**









Water truck are used to wet down roadway and soils prior to transport or excavation. Fencing covered to limit wind blown dust exiting the work sites.



#### **Excavation Methods**





Excavated soil is directly loaded into trucks and transported to radiological screening yard

Vertical excavation methods are used to minimize the quantity of soil that needs to be excavated, scanned, and stockpiled for reuse





## **Chemical Dust Suppressants**









Use of water based soil stabilizer to cover stock piles. Mixture binds with loose soil to develop a exterior crust to the piles. In addition to stockpiles, stabilizer will be applied to trench excavations.



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## **Track Out Control - Tire Cleaning Panels**







Rumble grid panels will be installed in 3 locations to removal rocks and dirt from truck tires prior to exiting HPS.

Equipment used in soil handling activities is decontaminated prior to leaving the site.



#### **Placement of Mister System**









- Upper Left Misters in operation over Spear
- Upper Right Misters above green mesh fencing on hillside above Fisher and Spear intersection
- Lower Left Misters above green mesh fencing on hill above Fisher St. By Building 101.



#### **Other Control Measures**





Radiologically impacted soil is loaded directly into bins with locking covers and placed in secure areas prior to off-site disposal

Asphalt removed prior to excavation is stockpiled and recycled for use on-site. This eliminates hundreds of trucks hauling material through the community to a landfill





# Off Site Trucking Transportation and Disposal Dust Control



- Conduct transportation and disposal load out once every three months.
- Vehicle-generated dust is of primary concern during load out activities.
- Soil stock piles are sprayed with water before loading out.
- A water truck wets road surfaces whenever transportation trucks are onsite.
- A street sweeper is on-site each day that trucks are loaded.
- Loose dirt is removed from outside of trucks with wet brushes before leaving loading zone.
- To prevent track-out of soils, truck tires are pressure-washed before leaving loading zone.
- Each loaded truck's bed is tarped before leaving the site.
- To ensure worker safety, perimeter/personal air monitoring for dust/asbestos is performed daily – no site action levels have been exceeded.



### **Off Site Trucking Dust Control**









- Upper Left Tire cleaning before leaving
- Upper Right Wetting Soil Pile while loading
- Lower Left Truck tarping before leaving



## **Hunters Point Map**



- Main Spring and Summer 2009 Field Work
  - Petroleum Program Actions
  - Ground WaterTreatability Studies
  - Continued

     Radiological
     Remediations and
     Removal Actions





#### **Summary**



- Navy implements a robust dust management program through it's Contractors at Hunters Point Shipyard.
- Navy seeks to implement multiple best management practices to manage and mitigate dust.
- Navy supervises and inspects Contractor activities, while also working with regulators, to make sure our Contractors comply with contractual and regulatory requirements for dust control.
- Navy continues to adapt, tailor, and improve our dust mitigation best management practices based on site characteristics to continue protecting site workers and the neighboring community.





### **Comments, Questions, Concerns?**