

NAVFAC
Naval Facilities Engineering Systems Command

Environmental Program Overview

Treasure Island Restoration Advisory Board Meeting

9 May 2023

Presentation Overview

- Site 12 Update
- PFAS Path Forward
- ESD – LUC RD Update
- Five Year Review
- YF3



Major Progress To Date at Site 12

- **Non-radiological remedy implemented on majority of Site 12**
 - Documented in 2017 Record of Decision
 - Did not address some landfill (SWDA) areas
 - Excavation of non-radiological chemicals of concern
 - Addressing groundwater at Gateview Avenue shoreline
- **Completion of Westside Solid Waste Disposal Area (SWDA) Phase IV Non-Time Critical Removal Action (NTCRA)**
- **Conceptual Site Model (CSM) Update**
- **1400 Series Radiological No Further Action (NFA)**

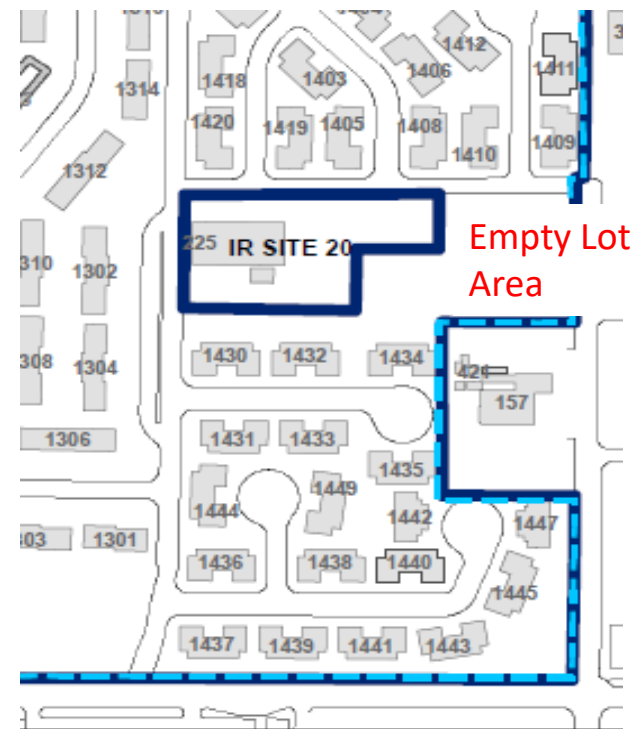
Site 12 Next Step – Feasibility Study Addendum #2

- Identify a Site 12 Remedy (potential combination of multiple tasks) that conforms to overall goals of the environmental program including:
 - Protection of human health and the environment
 - Taking into account the reasonably anticipated future reuse
- Major future goal:
 - Memorialize remedy in record of decision



Additional Work Ongoing in Support of FS Addendum #2

- **Post-Construction Summary Report (PCSR) for Westside SWDA Phase IV NTCRA**
- **Explanation of Significant Differences (ESD)**
 - Site 12: Establish arsenic groundwater remedial goal at Gateview Ave petroleum area.
- **Additional excavation in Site 12, (empty lot area)**
 - Extend previous excavation to remove residual PAH/TPH-contaminated soil



Site 12 Development Areas

- **12 Development Area:**
 - Planned residential within this footprint
 - No further for radiological in part of the area
 - Limited non-radiological issues remaining
- **Remedy in place for groundwater (Gateview Ave TPH) will remain.**
- **Limited remaining non radiological issues to be addressed**



Site 12 Open Space Areas

- **12 Open Spaces**
 - **Include Identified Landfill Areas**
 - Presumptive remedy would include an engineer cover
 - **Perimeter seawall to be upgraded**



PFAS Path Forward

Planned PFAS Activities

- **Establish Background Area for Nearshore Sampling**
 - Sediment – Porewater – Surface Water
- **IR Site 6 PFAS RI Addendum**
 - Risk Assessment Development (Site 6)
- **IR Site 6 PFAS Reactive Barrier Pilot Test**
- **Continue Basewide PFAS Evaluation**

Preliminary PFAS CERCLA Document Status

- **Reporting for the IR Site 6 PFAS RI is currently underway**
 - Draft Document out April 2023
- **Evaluating how data will be integrated into the new planning documents for the Site 6 PFAS RI Addendum**
- **Reporting for the Basewide PFAS SI in process**
 - Draft Document out April 2023
- **Evaluating path forward for further Basewide PFAS evaluation**

Explanation of Significant Differences (ESD) Land Use Controls Remedial Design (LUC RD) Document Summary

Site 24

- **ESD**

- ROD/Final RAP (2015) identified chlorinated solvents in groundwater for construction workers working in a trench based on direct contact and inhalation
- Second Five Year Review (2020) identified soil gas Remedial Goals (RG)s needed evaluation based on revised regulations
- Revised chlorinated solvent soil gas RGs for residential and commercial/industrial workers
- No new Applicable or Relevant and Appropriate Requirement (ARARs) identified

- **LUC RD**

- Review recent soil gas monitoring data – determine if plume extent is bounded
- Revise area requiring institutional controls if needed (ARIC)

Site 6

- **ESD**

- ROD/Final RAP identified arsenic in groundwater for the future construction worker exposure pathway
- Proposed RG revisions from 250 ug/l to 35 ug/l
- No new ARARs identified

- **LUC RD**

- Review recent groundwater monitoring data – determine if plume extent is bounded
- If not, expand monitoring well network to delineate new RG
- Revise area requiring institutional controls (ARIC)

Site 12

- **ESD**

- ROD/Final RAP identified arsenic in groundwater as contaminant of ecological concern for off-site aquatic receptors
- Proposed RG establishment of 35 ug/l
- No new ARARs identified

- **LUC RD**

- Establish an ARIC
- Implement contaminated groundwater management plan to be followed during construction activities
- Evaluate land use controls as needed

Document Delivery Timeline

Document	Delivery Date
Final Site 24 ESD	April 2023
Draft Site 6 ESD	March 2023
Draft Site 12 ESD	April 2023
Draft Site 24 LUC RD	July 2023
Draft Site 12 LUC RD	October 2023
Draft 6 LUC RD	November 2023

Treasure Island Five-Year Review

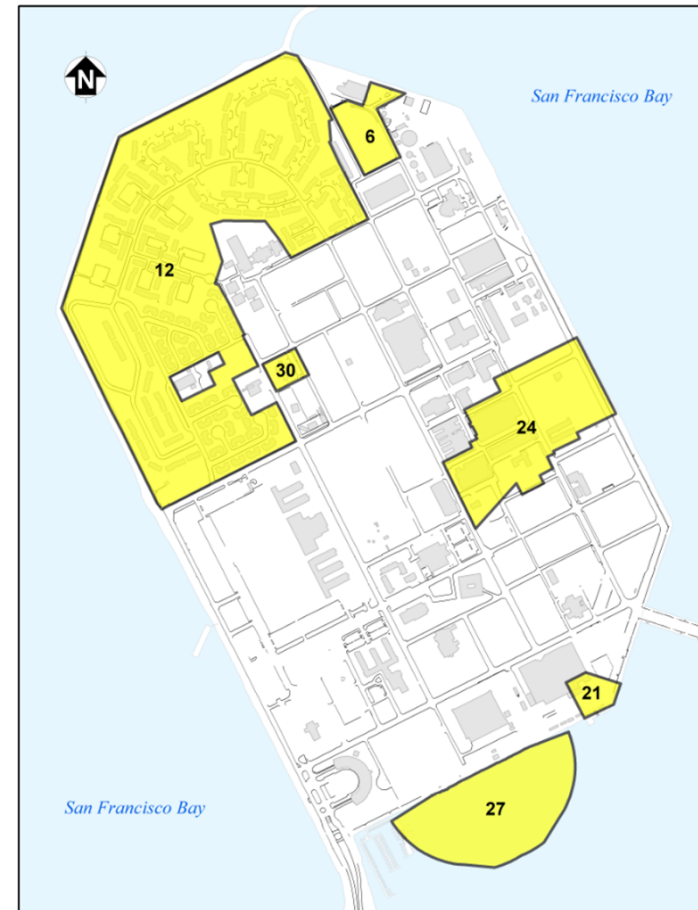
Focus of the Five Year Review

- To evaluate the implementation and performance of the remedy for subject sites to whether the remedy is, or will be protective of human health and the environment



Five Year Review Sites (2nd & 3rd FYR)

- Six sites will be evaluated for the 3rd FYR: IR Sites 6, 12*, 21, 24, 27, and 30
 - *For Site 12, the evaluation will include the remedy for groundwater within the Gateview Arsenic/TPH area, as well as the implemented soil remedy.



Five Year Review Process

Step	Purpose
Document Review	<ul style="list-style-type: none">• Review of records of decision, remedial action designs, work plans, completion and monitoring reports, and annual site inspection reports• Confirm remedial action is working as designed and/or how the remedial action is currently functioning
Site Inspection	<ul style="list-style-type: none">• Document current site conditions to evaluate visual evidence of the protectiveness of the remedies at each site
Site Interviews	<ul style="list-style-type: none">• Complete interviews of cross-section stakeholders to identify any problems or concerns with the remedies that remain to be addressed• Stakeholders include: DTSC, Waterboard, TIDA, residents, and local community members
Protectiveness Statement	<ul style="list-style-type: none">• Establishing if the remedy for each site is protective of human health and the environment

2nd FYR Protectiveness Determinations

Protective	Protective in the Short-term	Will be Protective	Protectiveness Deferred	Not Protective
Site 21	Site 24		Site 6	
Site 27			Site 12*	
Site 30				

*Cleanup for 2nd FYR only included GW within Gateview Avenue Arsenic/TPH Area. 3rd FYR will include soil remedy.

2nd FYR Issues & Recommendations

- Issues identified during the Five-Year Review were assigned a follow up action and milestones for completion by the responsible party

Site	Name	Milestone
6	Investigate PFAS	2021
	Revise Arsenic Groundwater Remedial Goal	2023
	Evaluate Redevelopment Plans in Next 5YR	2025
12	Re-evaluate Construction Worker Groundwater Risk	2021
21	Collect Soil Gas Data	2023
24	Ensure Accessible Wells	2021
	Delineate Soil Gas Plume	2021
	Revise Soil Gas Remedial Goals	2023
27	Implement Signage per Site Management Plan	2021
	Speed Limit Enforcement Provisions	2022
30	NONE	--

FYR Addendum – February 2022

- **Site 6 – Protectiveness Determination: Protectiveness Deferred**
 - A protectiveness determination of the remedy for IR Site 6 cannot be made at this time until further information is obtained. Further information will be obtained by completing a remedial investigation, feasibility study, and record of decision for PFAS.
- **Site 12 – Protectiveness Determination: Protective in the Short Term**
 - Non-cancer hazards to the construction worker from dermal exposure to groundwater are greater than 1 because of the arsenic concentrations in two wells.
 - Therefore, establish RG for arsenic via an ESD, along with developing a LUC-RD.

3rd FYR Schedule

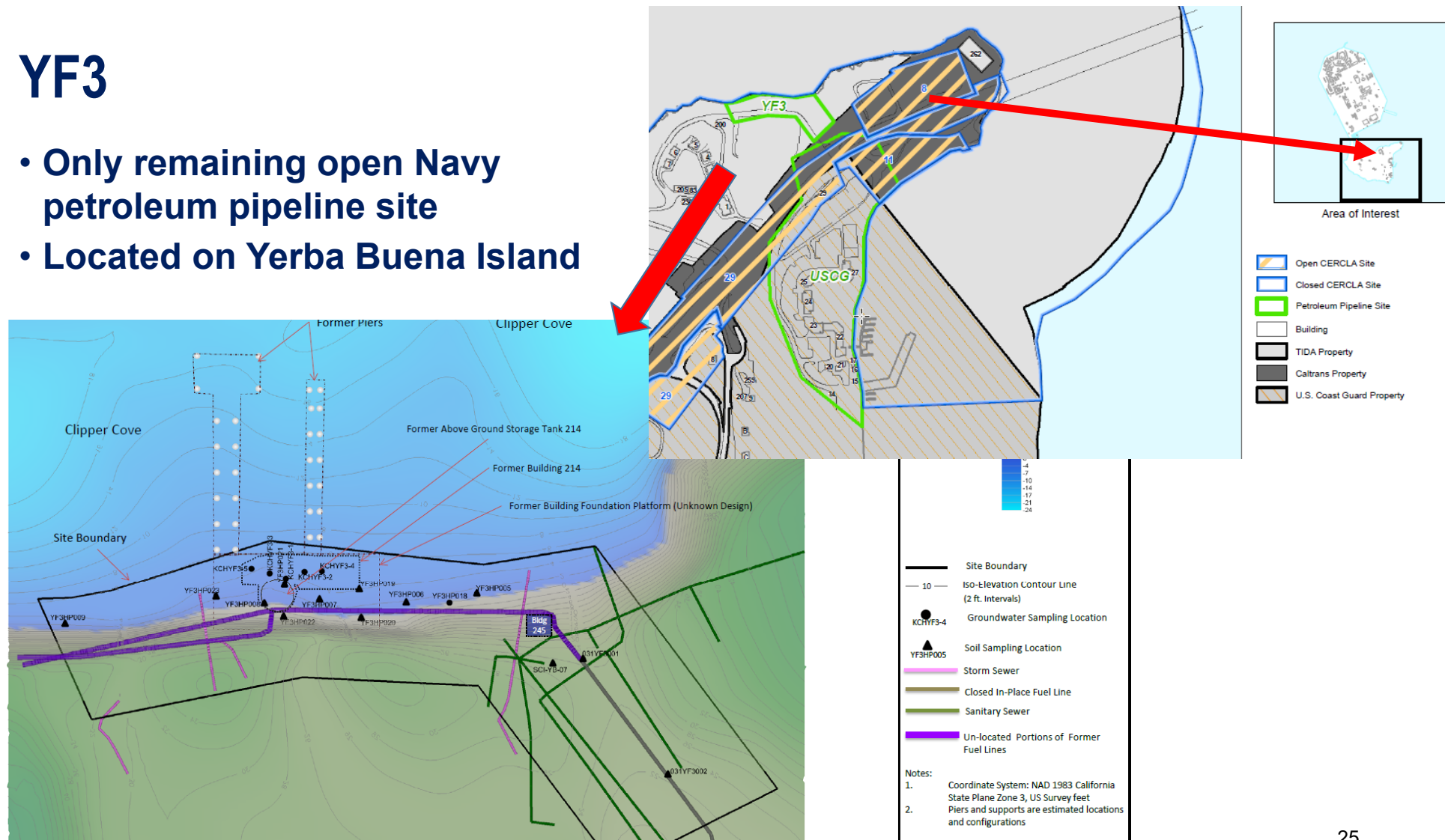
- **End of 2023 – Contract in Place**
- **2024 – Develop Internal Draft***
- **Early 2025 – Draft Completed**
- **May 2025 – Concurrence on RTCs and RLSO**

*Any new rules or regulations should be provided by early 2024

YF3

YF3

- **Only remaining open Navy petroleum pipeline site**
- **Located on Yerba Buena Island**



Additional Data Collection

- Land surveying and a geophysical study to determine the physical boundaries, including bathymetric and topographical delineation, and to further characterize the depth to bedrock using surveys and geophysics of the proposed remedial area.
- Soil boring and porewater assessments to further define the horizontal and vertical extent of residual petroleum contamination Data will be collected and analyzed to supplement the existing site information and delineate the extent of contamination.



YF3 Path Forward

- **2023 – Datagaps Work Plan**
- **2023 to 2024 – Fieldwork**
- **2024 – Evaluate Alternatives**
- **2025 – Corrective Action Workplan**
- **2026 – Implementation**

Questions?

