

Basewide Groundwater and Soil Gas Monitoring Program

Former Naval Station Treasure Island

March 2020 RAB Meeting
Navy BRAC

Overview



PURPOSE

Collect groundwater* samples and soil gas data to support ongoing environmental restoration efforts

SITES BEING MONITORED

- IR Site 6 Former Fire Training School
- IR Site 12 Old Bunker Area
- •IR Site 21 Vessel Waste Oil Recovery Area
- •IR Site 24 Former Dry Cleaning Facility

^{*}groundwater is not used for drinking water at TI

Map of Monitoring Sites







- Past use?
 - -Historical fire fighter training area, use of Aqueous Film Forming Foam (AFFF), USTs, open fires
- When was the last monitored?
 - -Nine (9) GW wells June 2018 and Spring 2017 (PFAS)
- What are we monitoring for?
 - -Arsenic, PFAS, petroleum
- What are the five year review findings?
 - Toxicity criteria changed for arsenic additional evaluation needed
- Path forward: investigations for PFAS; additional monitoring for arsenic & petroleum

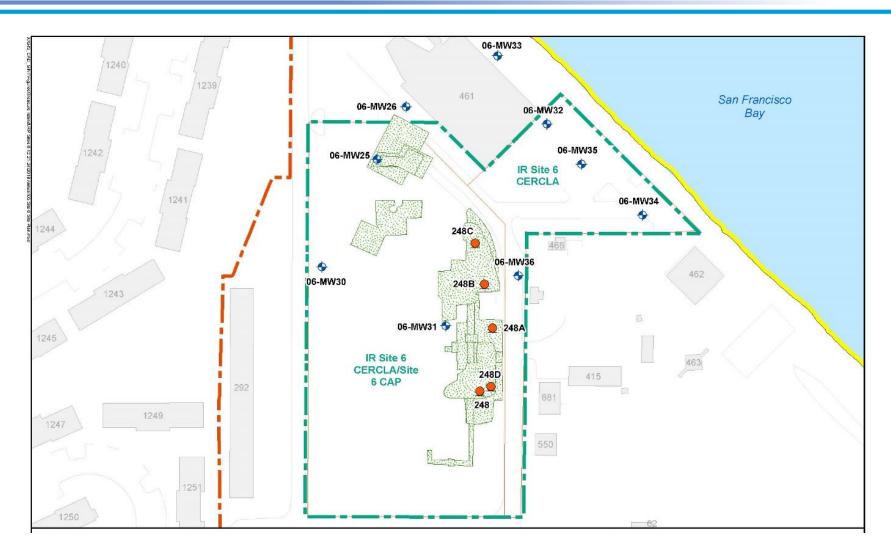
IR Site 6 Burn Pit





IR Site 6 Layout



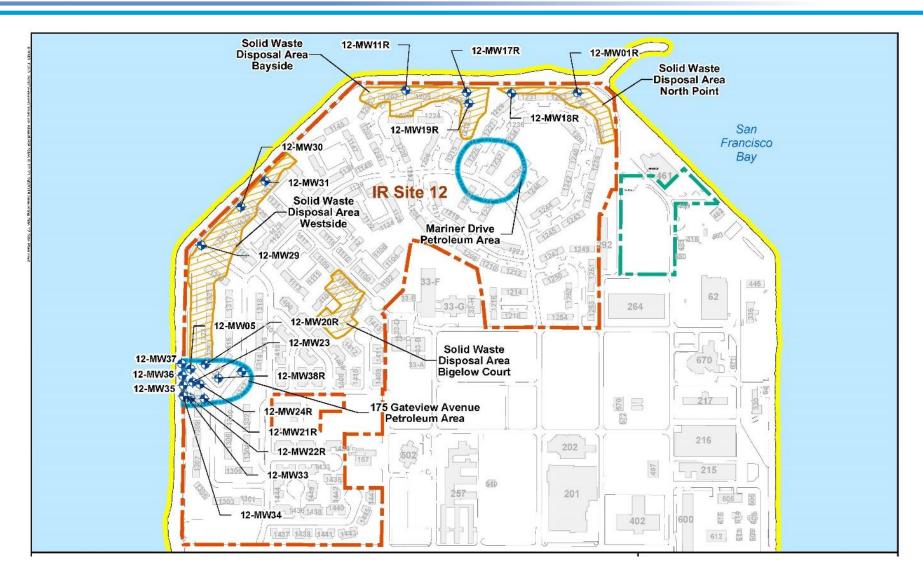




- When was the last monitored?
 - -Twenty-one (21) wells in 2019 within SWDAs & Gateview excavation
- What are we monitoring for?
 - -Petroleum & arsenic (Gateview Ave), and radionuclide due to disposal areas
- What are the findings?
 - -TPH and arsenic present at Gateview Avenue
 - -No exceedances of Ra-226
- Path forward
 - -Continue Monitoring Gateview Avenue arsenic/TPH area
 - Establish post remedial action trends for arsenic in groundwater
 - -Continue monitoring Ra-226
 - Support for Site 12 radiological feasibility study

IR Site 12 Layout



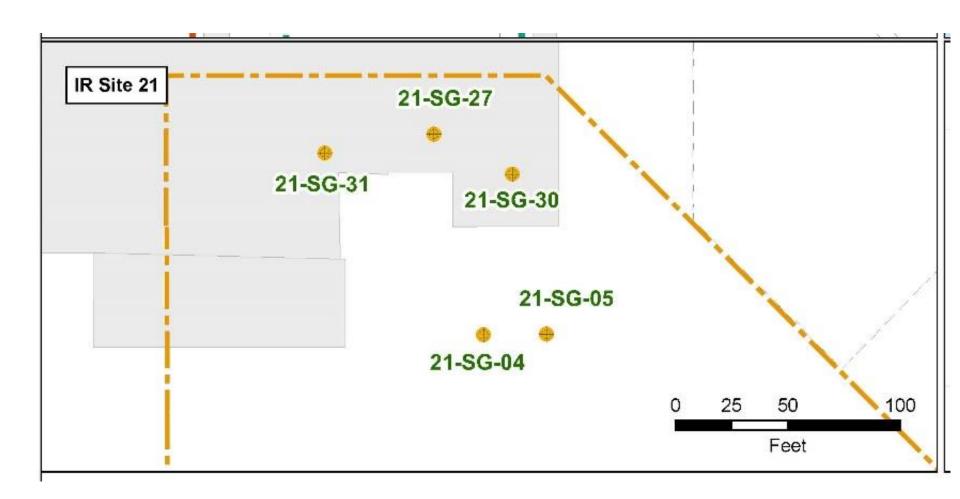




- Past use?
 - Parts washing station using solvents (dip tank)
- When was the last monitored?
 - -Groundwater in 2015 and Soil Gas in June 2018; no monitoring performed in 2019
- What are we monitoring for?
 - -Chlorinated solvents in soil gas, groundwater goals met in 2015
- What are the findings?
 - -Concentrations of chlorinated solvents in soil gas were consistent with or lower than previous results
- Path forward: next soil gas sampling will be in 2023 to support Tl's third Five-Year Review

IR Site 21 Layout



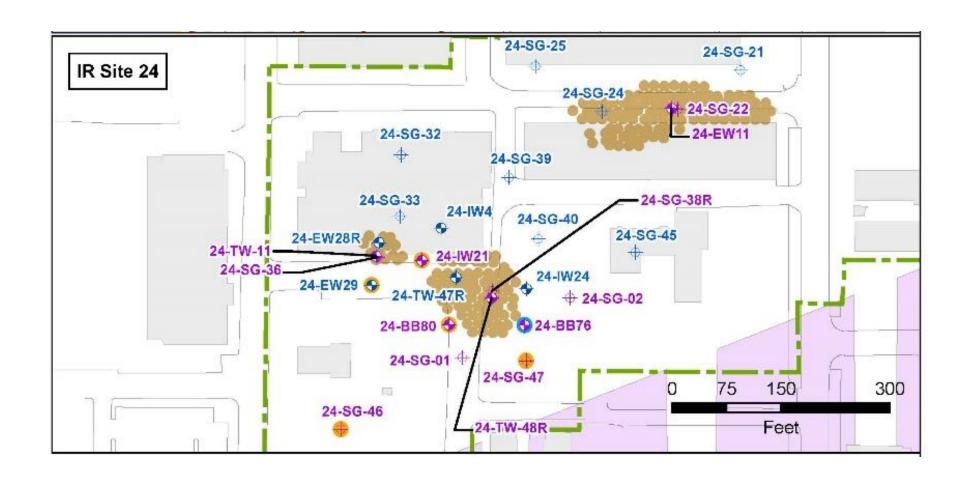




- Past use?
 - -Dry cleaning (solvents) and laundry (closed in 1977)
- When was the last monitored?
 - -Seven (7) groundwater wells & Fourteen (14) soil gas in 2019
- What are we monitoring for?
 - -Chlorinated solvents, arsenic
- What are the findings?
 - -COC concentration exceed RGs; new regulations for soil gas data
- Path forward: evaluate boundaries of LUCs for potential vapor intrusion

IR Site 24 Layout





Questions



