IR Site 32 Update

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Agenda

- Site background
- Remedial Investigation Summary (2008)
- Time Critical Removal Action Summary (2009)
- New Groundwater Monitoring Wells (2010)
- Radiological Survey (2012)
- Revised Remedial Investigation/Feasibility Study
- Next steps

Site Location

Site Background

- Historic structure (Alameda Training Wall)
- Two underground fuel storage tanks removed in 1994
- Two buildings built in 1977, neither used for ordnance storage
- Site used for equipment staging and storage prior to 1953

Remedial Investigation Summary (2008)

- No further action for soil
- Groundwater not a drinking water source
- Potentially unacceptable risk under residential scenario for VOCs in groundwater (indoor air pathway)

Time Critical Removal Action Summary

- ✓ Time Critical Removal Action (Sites 1, 2, and 32) Report – August 2009

Conclusions:

- Low levels of radium-226 found in soil to a greater extend than anticipated.
- Lateral extent of radium-226 not defined to the south of Site 32 and east of Site 1.
- Include portions of Site 1 into Site 32 (Areas 2b, 3a, and 3b)

Groundwater Monitoring Wells

✓ Installation of three monitoring wells – June 2010.

Objective:

- Confirm the current maximum concentrations in the VOC groundwater plumes for the three chemicals of concern: TCE, chlorobenzene, and vinyl chloride.
- Assess whether radiological contamination has affected groundwater

Sampling results:

- VOC results below the screening criteria
- Radiological concentrations below drinking water standards

Groundwater Monitoring Wells

Radiological Characterization Survey

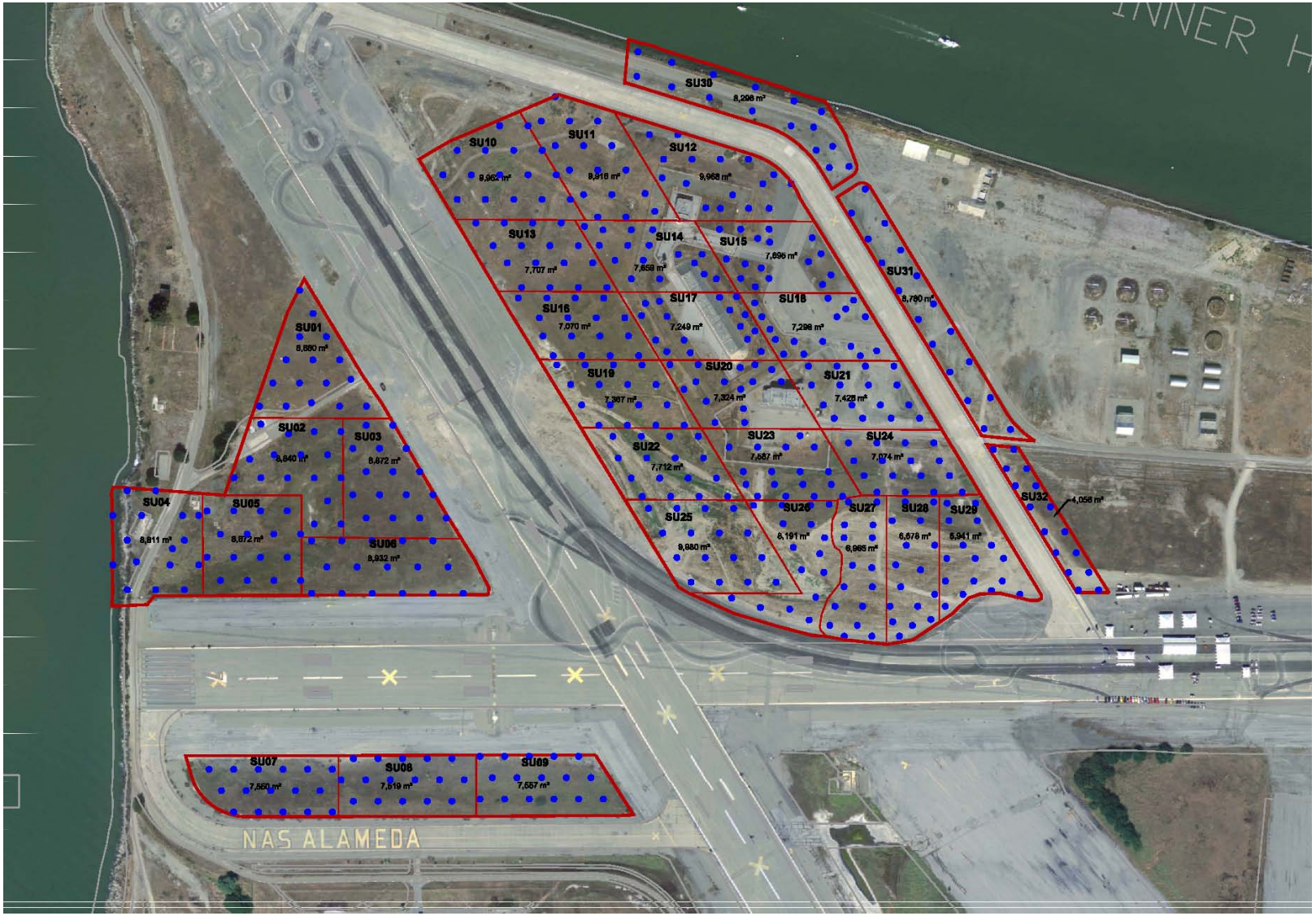
Tasks:

- Surface gamma scan to identify radiological anomalies
- Soil sampling and laboratory analysis

Results:

- Localized areas of elevated radioactivity greater than established investigation levels
- No systematic soil samples results exceed the release criteria for radium-226
- Discrete radium-226 in soils in four of the twenty five biased sampling locations and two anomalies were found and removed during biased sampling activities

Radiological Survey Units and Systematic Soil Sampling



Revised Remedial Investigation/ Feasibility Study

- ✓ Final Feasibility Study Report – 2008
- ✓ Radiological Characterization Survey - 2012
- Update the Conceptual Site Model for IR Site 32 to reflect the expanded area and addition of Site 1 areas
- Update radiological risk assessment
- Evaluate remedial alternatives for soil

Revised Remedial Investigation/ Feasibility Study

Potential remedial alternatives for soil:

- No Action
- Pavement Maintenance/Hotspot Removal/Institutional Controls
- Pavement Maintenance/Partial Soil Cover in Unpaved Areas/Institutional Controls
- Complete Removal/Backfill/Unrestricted Reuse

Next Steps

- Additional Radiological Investigation – March 2013
- Revised Remedial Investigation/Feasibility Study – June 2013
- Proposed Plan – December 2013
- Record of Decision - 2014