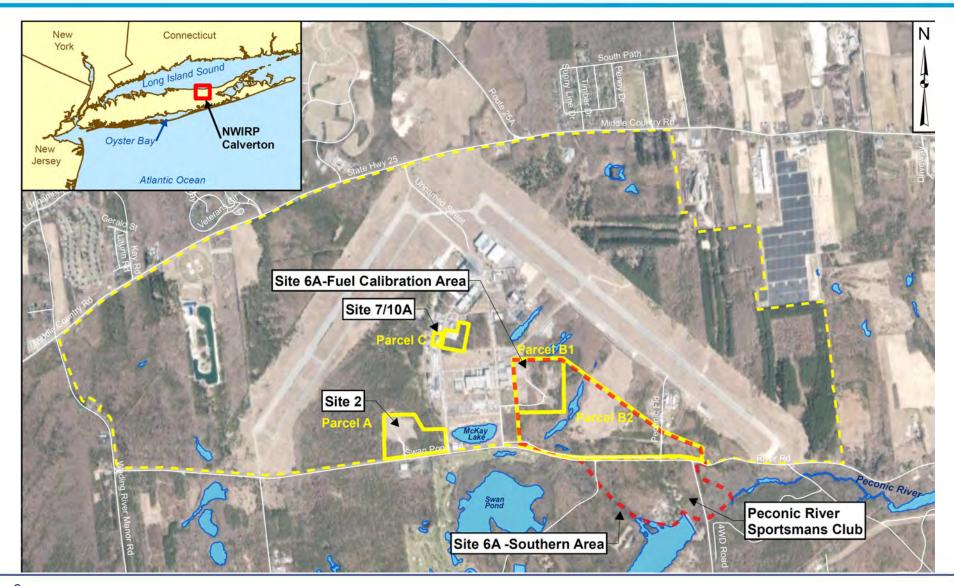


Site 7 – Fuel Depot Biosparge System Evaluation and Preliminary Recommendations

Presented by:
Tetra Tech, Inc
NAVFAC Mid-Atlantic
5 April 2022

Site 7 – Fuel Depot





Site 7 History and Current Status

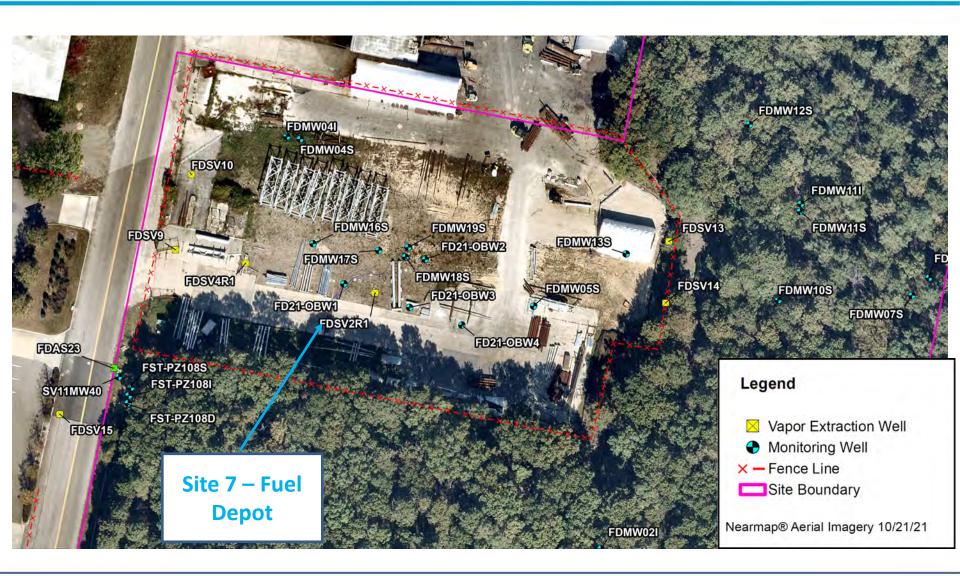


• Site History:

- Fuel depot area used for storage and distribution of jet fuel.
- Fuel was stored in underground storage tanks (USTs).
- Fuel was transferred to trucks for use in flight preparation areas.
- Remedial Activities:
- 1997: Removal of USTs and fueling structures.
- 2006 to 2013: Operation of air sparge/soil vapor extraction system
- 2019: Removal of tank saddles, concrete pad, and contaminated soil associated with fueling structures and USTs. Resulted in effective cleanup of the source area.
- 2021: Operation of a biosparge system south of source area.

Site 7 Layout





Data Evaluation



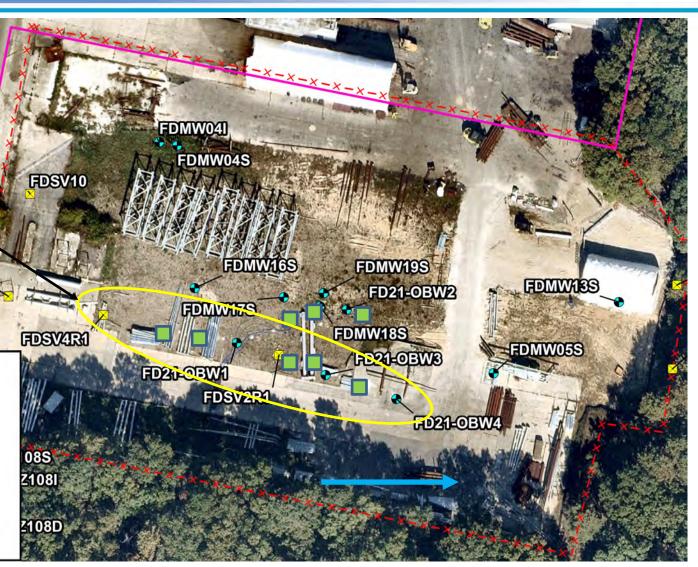
Most Recent Analytical Results (February 2022):

- Overall, the operation of the biosparge system further reduced the concentrations of petroleum related compounds.
- Concentrations of petroleum related compounds (ethylbenzene and xylenes) remain above the cleanup levels at 5 wells.
- These wells are located on southern portion of the site.
- Maximum concentration of ethylbenzene was 61 ug/L (cleanup goal is 5 ug/L).
- Maximum concentration of total xylenes was 75 ug/L (cleanup goal is 5 ug/L).

Locations Where Groundwater Results Remain Above the Cleanup Goals



Area Where Groundwater Concentrations Remain Above Cleanup Levels



Legend

- Air Sparge
- Vapor Extraction Well
- Monitoring Well
- × Fence Line
- Site Boundary

Nearmap® Aerial Imagery 10/21/21

Preliminary Recommendations and Path Forward



- Remobilize biosparge system in Summer 2022.
- Operate biosparge system for an additional 6 months. System will target southern portion of Site 7 where concentrations remain above the cleanup goals. Includes installation of new air sparge well to refine remedial system.
- Complete second round of monitoring in Fall 2022 to assess residual concentrations of volatile organic compounds (VOCs).



QUESTIONS?