



Department of Navy Naval Weapons Industrial Reserve Plant Bethpage Restoration Advisory Board Meeting

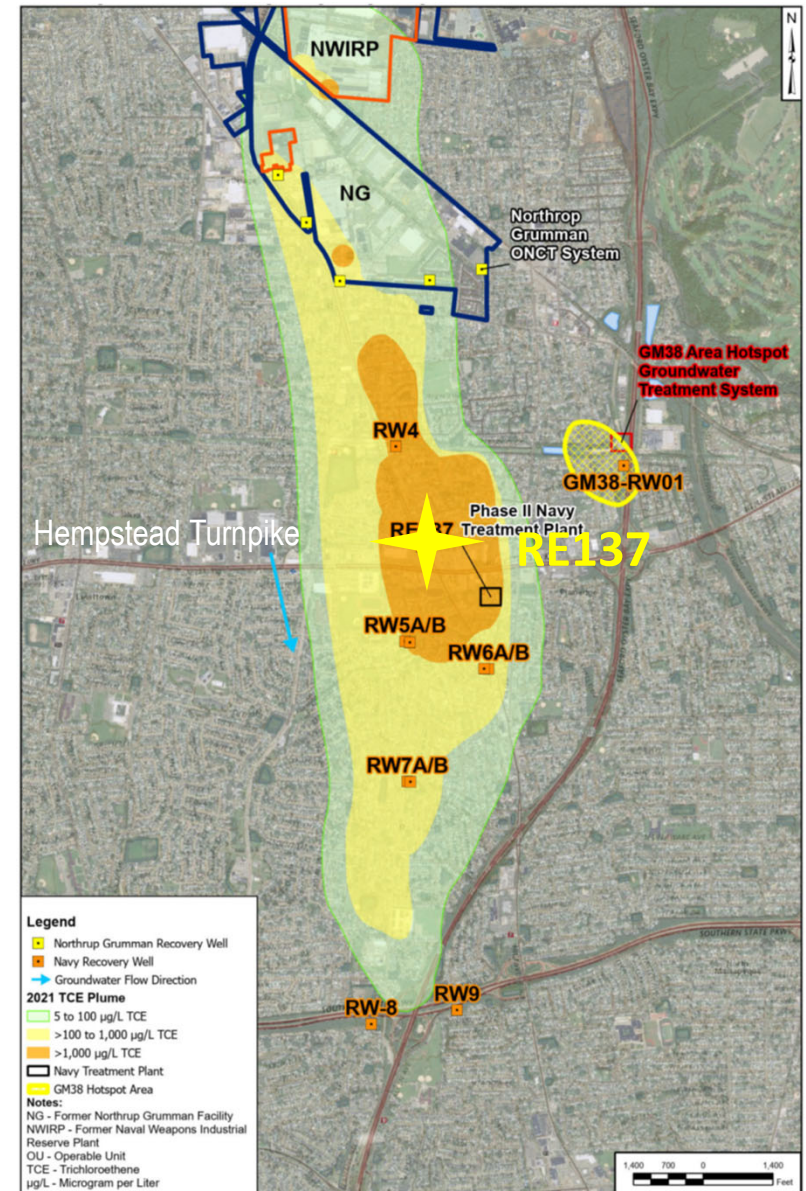
Recovery Well RE137 Interim Action Update

Presented by:
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Tetra Tech
17 May 2023

RE137 Pilot-Scale Testing



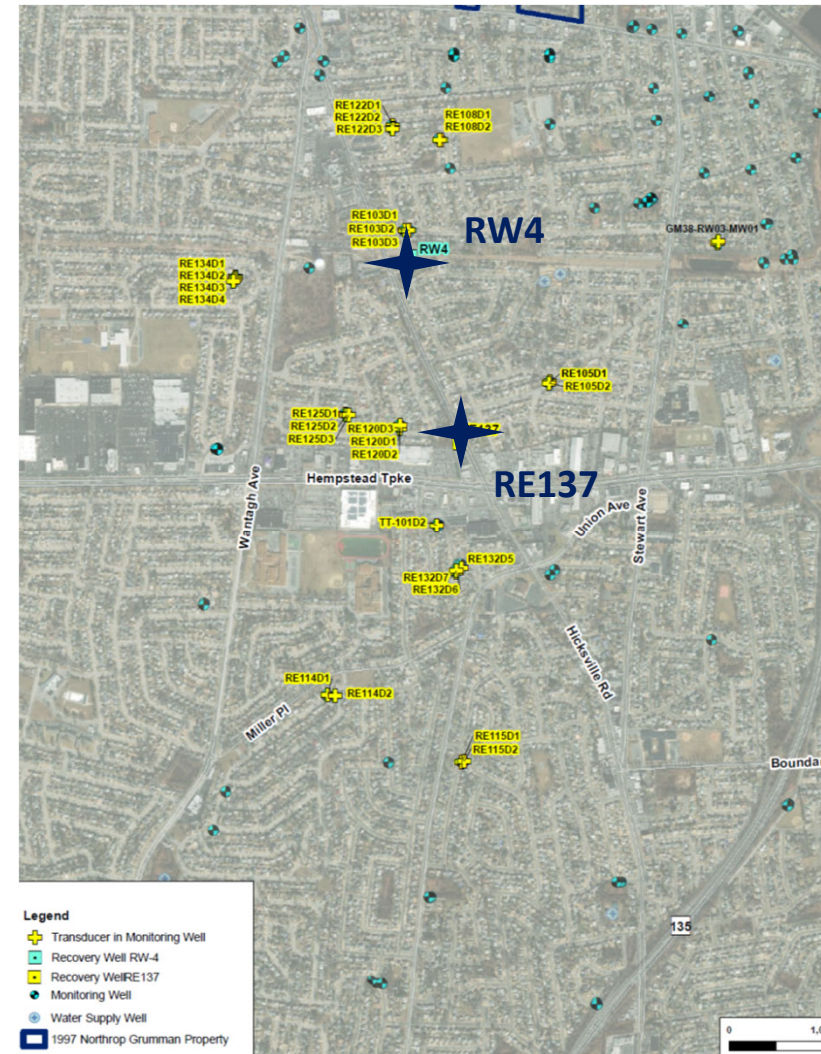
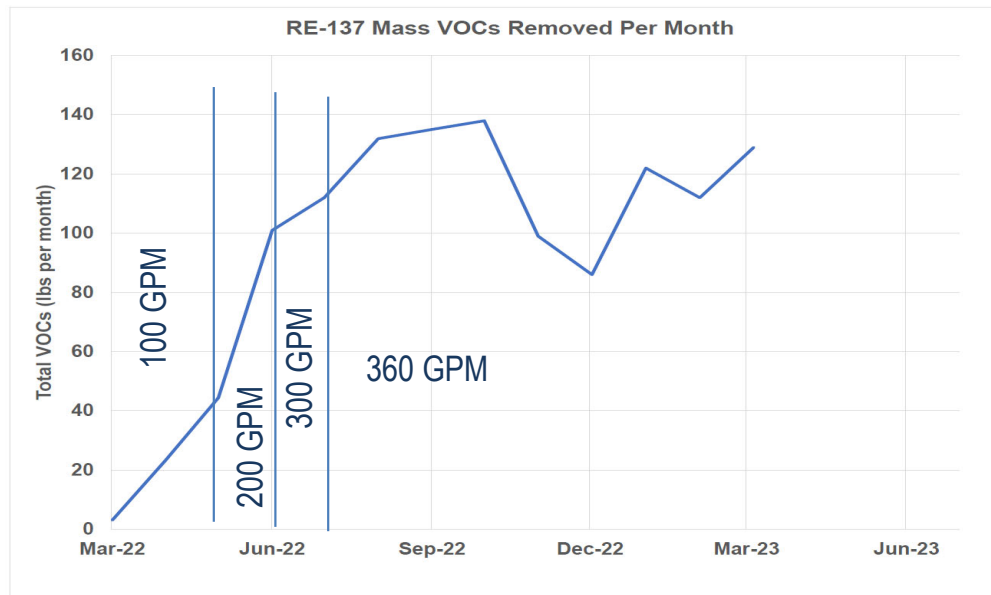
- RE137 was originally considered a groundwater recovery well for Phase II RE108 Area Hotspot Treatment System
- Well was determined to be too far north to intercept the hotspot, but could help slow down migration
- Current test to run for approximately 20 months, potentially longer
- Treatment consists of Advanced Oxidation Process (AOP) technology and granular activated carbon (GAC)
- Water is discharged into a local basin



RE137 Pilot-Scale Testing



- System is running at 190 million gallons per year (360 gallons per minute [GPM])
- System has been very effective at removing VOCs from the aquifer (Over 1,200 pounds since startup)
- Monitoring wells (yellow highlight) are being used to evaluate Recovery Wells RW4 and RE137
- Diminishing returns observed with higher extraction rate



RE137 Pilot-Scale Testing



Sediment Filters



Advanced Oxidation Process (AOP)
Treatment for Removal
of Volatile Organic
Compounds and
Dioxane



Granular Activated Carbon Filters

RE137 Pilot-Scale Testing



- Performance Results: greater than 99 percent removal

Parameter	RE137 - Influent (micrograms per liter)	Treatment System Effluent (micrograms per liter)
1,4-dioxane (8260 SIM)	17	Not detected
1,1,2-Trichloroethane	1.1	Not detected
1,1-Dichloroethane	1	Not detected
1,1-Dichloroethene	6.9	Not detected
Carbon Tetrachloride	2.8	Not detected
Chloroform	1.4	Not detected
cis-1,2-Dichloroethene	3.9	Not detected
Freon 113	25.1	Not detected to 1.9
Tetrachloroethene	3.6	Not detected
Trichloroethene	1,930	Not detected

RAB Member Questions