

Norwalk Tank Farm Update

*Presented to the Norwalk Tank Farm
Restoration Advisory Board*

October 18, 2001

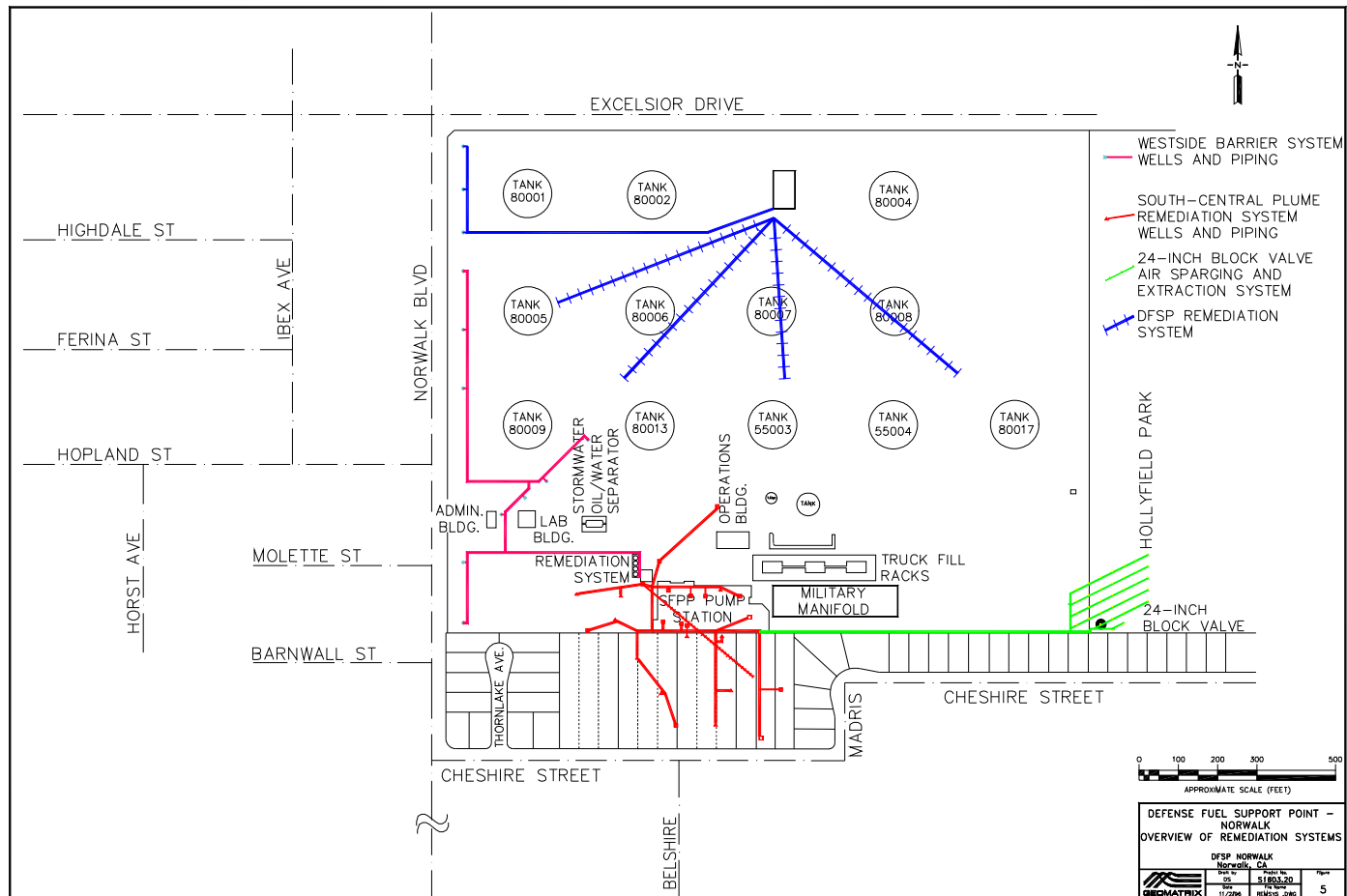
Presentation Overview

Topics to be Covered

- RBCA Update

- Remediation Operations Update
 - September 2001 Sentry Event
 - Remediation System Enhancements

Map of Current Remediation Systems

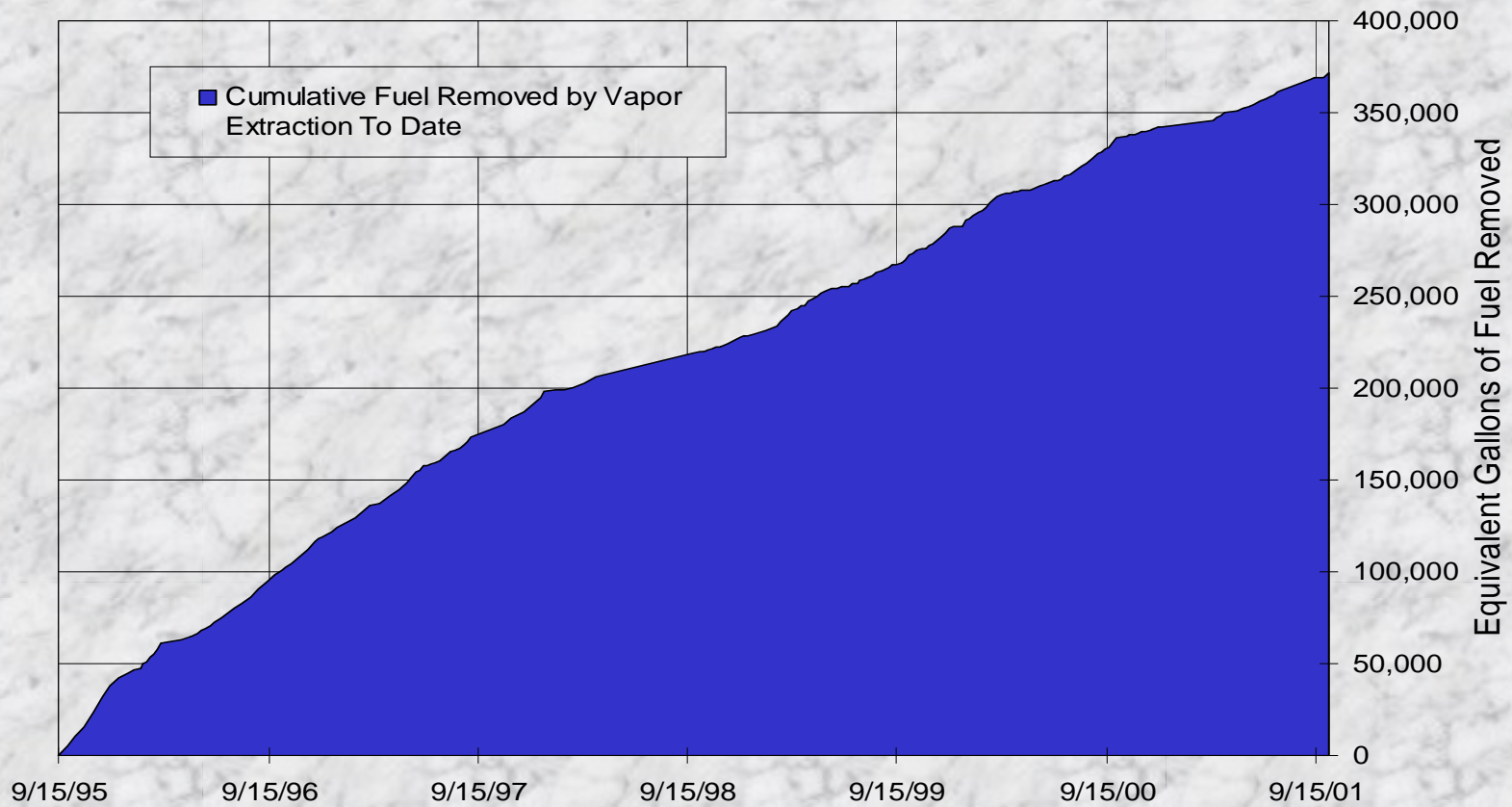


Soil Vapor Extraction System Operations Summary

- 9,069 gallons equivalent of fuel removed from soil and destroyed by thermal oxidation since August 2001 RAB meeting
- 371,392 gallons equivalent of fuel removed from soil and destroyed by thermal oxidation since September 1995

Soil Vapor Extraction System Operations Summary

Cumulative Fuel Removed by Vapor Extraction To Date



Groundwater/Product Extraction System

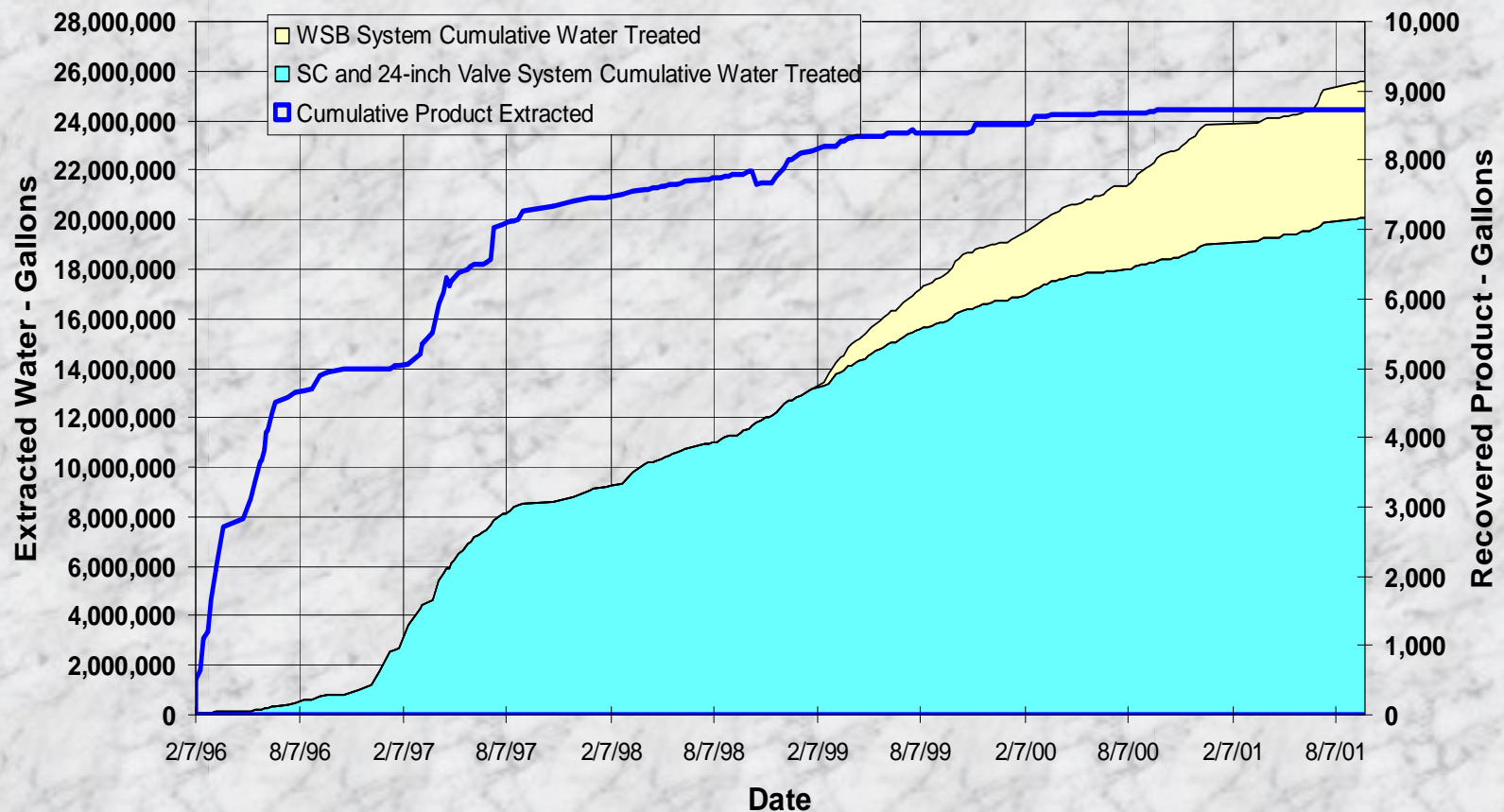
- 8 groundwater wells in West-Side Barrier area
- 6 groundwater/product wells in South-Central Plume area
 - Pump installed in GWR-3
- 2 groundwater/product wells in 24-inch Valve area

Groundwater/Product Extraction System Operations Summary

- Total groundwater extracted since August 2001 RAB meeting
 - South-Central Plume area, more than 67,000 gallons*
 - 24-inch Valve area, 613,345 gallons
 - West-Side Barrier area, more than 250,000 gallons*
 - No free product removed
- Total groundwater extracted since September 1995
 - South-Central/24-inch Valve areas, 20.2 million gallons
 - West-Side Barrier area, 5.6 million gallons
 - Total groundwater extracted 25.8 million gallons
 - 8,735 gallons free product removed

* Flow meters for South-Central Plume and West-Side Barrier treatment system are malfunctioning and will be replaced. Thus, actual volumes extracted are greater than volumes recorded and listed here.

Groundwater/Product Extraction System Operations Summary



September 2001 Sentry Well Monitoring Event

- Sentry event provides seasonal data and early warning of significant changes
- 23 sentry wells, including 5 Exposition wells
- Chemical concentrations in sentry wells similar to previous sampling events
- No chemicals detected in Exposition wells

September 2001

Sentry Well Monitoring Event

- Re-sampled well MW-20(MID)
 - Concentrations in historical range (MTBE - 11ppb; 1,2-DCA - 23 ppb).
 - May 2001 results appear to be anomalous
- Monitored GMW-4 and MW-9 at the request of a resident
 - Sheen observed; wells were not sampled
 - Canisters remain in the wells
- Continued decrease in MTBE concentrations
 - GMW-36 from 1,600 to 1,000 ppb
 - MW-19(MID) from 490 to 200 ppb
- MTBE concentration in MW-8
 - Increase from 480 to 1,000 ppb
 - Much lower than historical high of 26,000 ppb.

Remediation System Enhancements

- Redeveloping selected West Side Barrier Wells to increase flow rates and system efficiency
- Installing flow meters for individual West Side Barrier Wells
- Pilot study for the air sparging restart at 24-inch Valve area