

# ***Norwalk Tank Farm Update***

*Presented to the Norwalk Tank Farm  
Restoration Advisory Board*

*January 31, 2002*

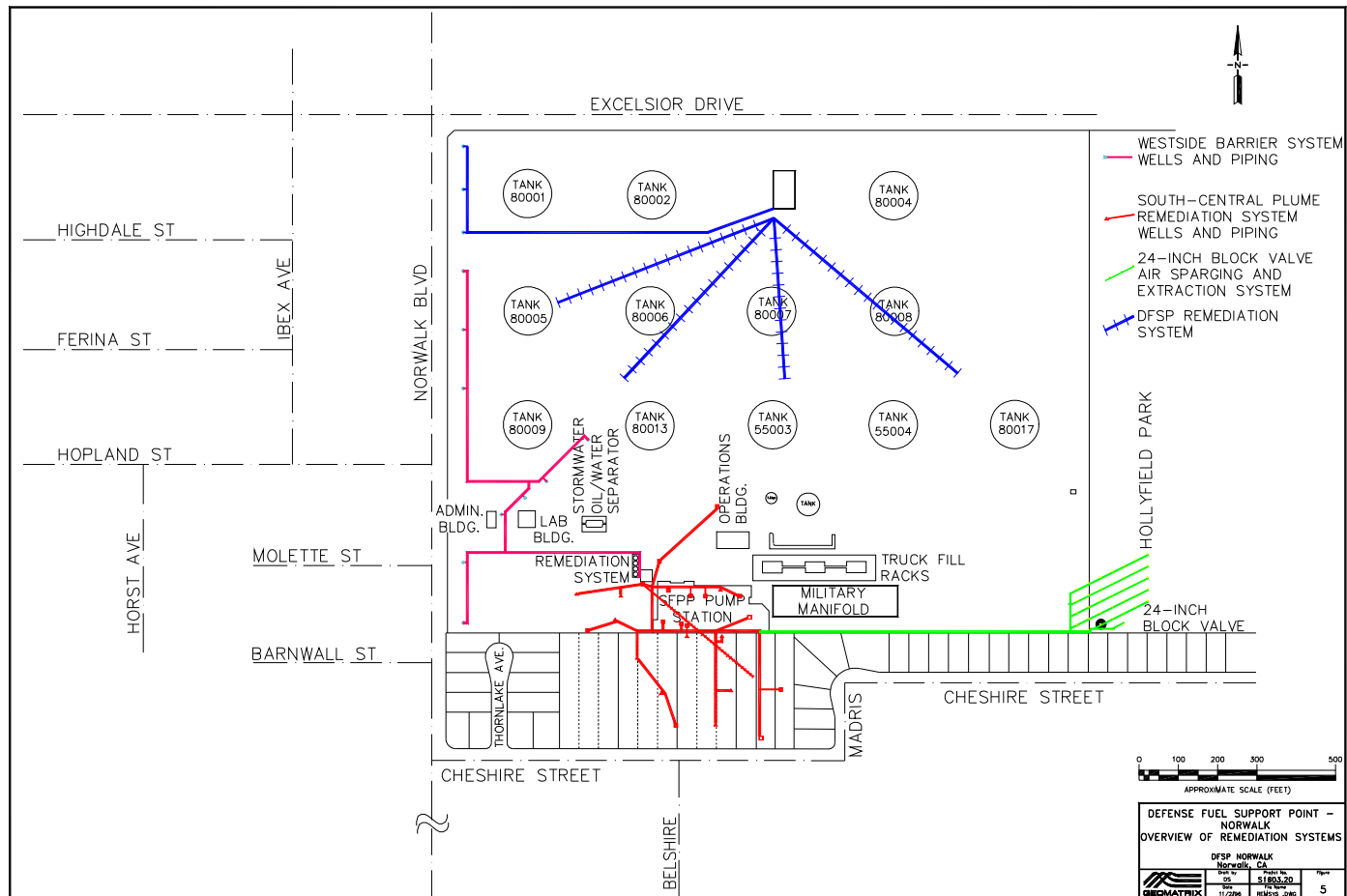
# Presentation Overview

## Topics to be Covered

- Remediation Operations Update
- November 2001 Semi-Annual Monitoring Event



# Map of Current Remediation Systems



# Soil Vapor Extraction System

- 16 onsite and 7 offsite vapor extraction wells in the South-Central Plume area.
- 2 vapor extraction wells in the 24-inch Valve area.

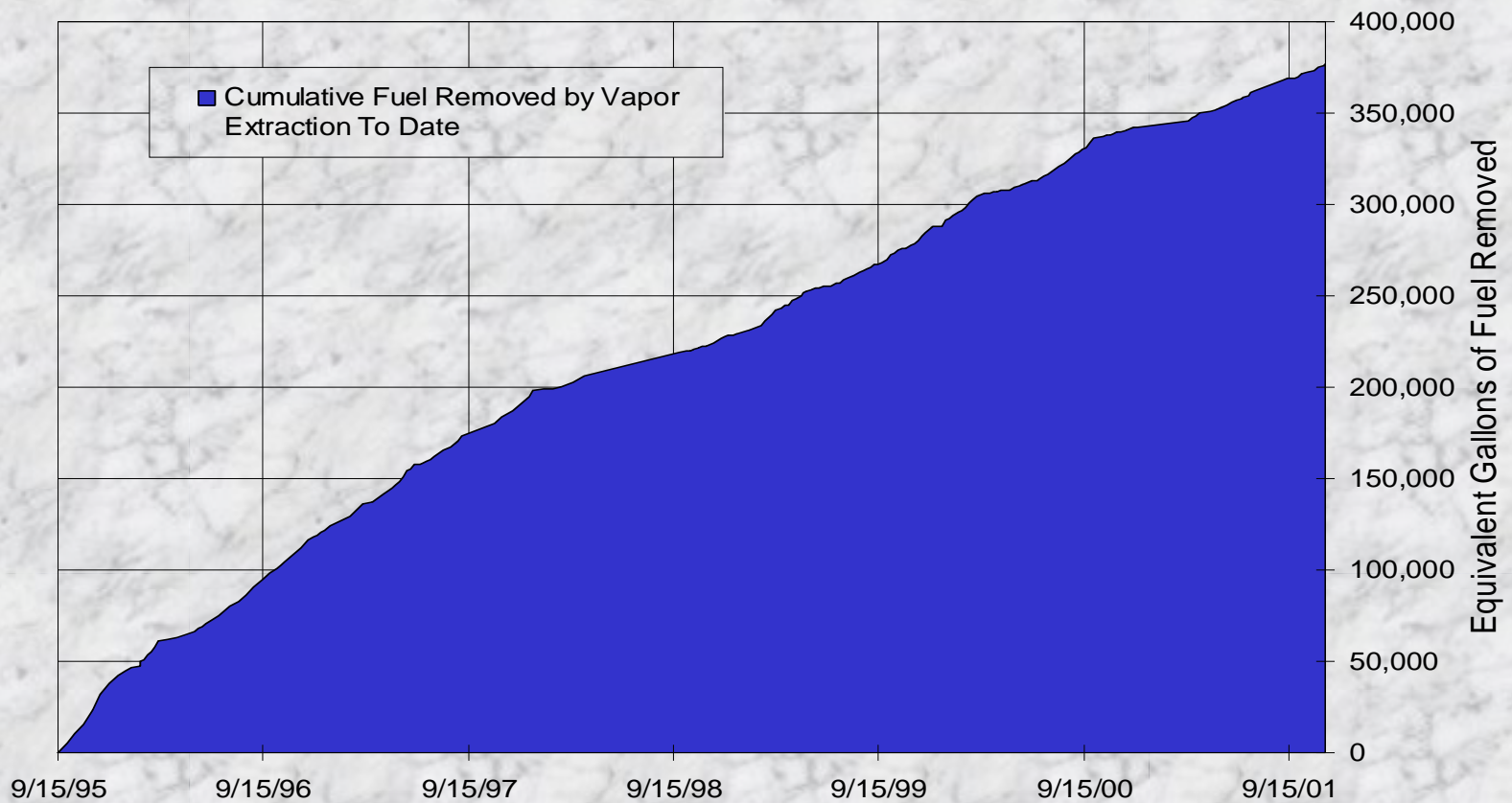


# Soil Vapor Extraction System Operations Summary

- 5,030 gallons equivalent of fuel removed from soil and destroyed by thermal oxidation since October 2001 RAB meeting.
- 376,421 gallons equivalent of fuel removed from soil and destroyed by thermal oxidation since September 1995.
- System is currently off for repair of thermal oxidizer.

# 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
- 2 groundwater/product wells in 24-inch Valve area

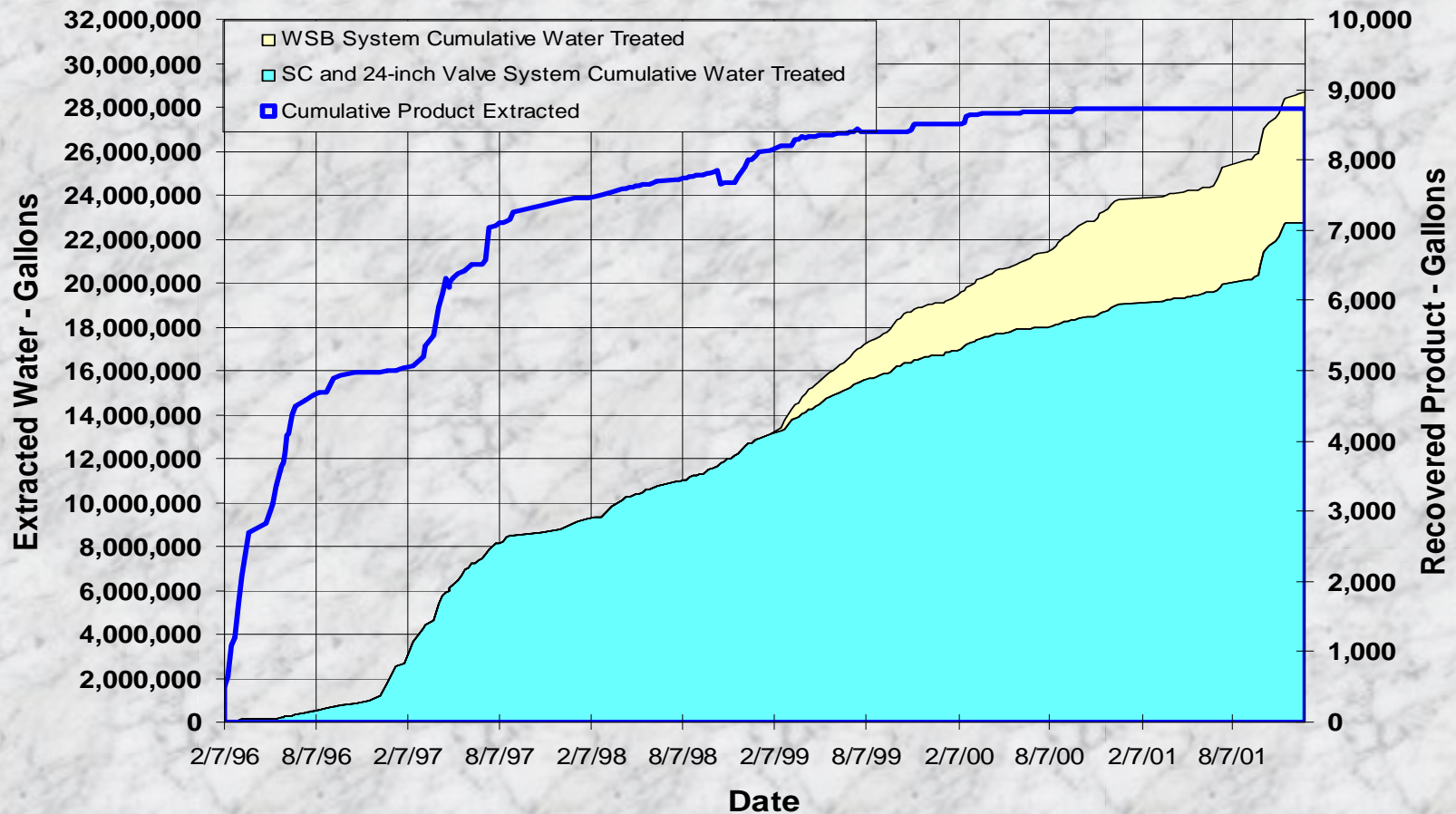
# Groundwater/Product Extraction System Operations Summary

- Total groundwater extracted since October 2001 RAB meeting:
  - South-Central Plume area, 798,003 gallons
  - 24-inch Valve area, 557,788 gallons
  - West-Side Barrier area, 311,349 gallons
  - No free product removed
- Total groundwater extracted since September 1995:
  - South-Central Plume/24-inch Valve areas, 22.7 million gallons
  - West-Side Barrier area, 5.9 million gallons
  - Total groundwater extracted, more than 28.6 million gallons
  - 8,735 gallons free product removed
- The South-Central Plume/ 24-inch Valve system is currently off for repair of the thermal oxidizer.
- The West-Side Barrier groundwater extraction system is currently operating independently of the thermal oxidizer.



# Groundwater/Product Extraction System Operations Summary

Produced Extracted and Water Treated Summary



# Remediation System Enhancements

- Redevelopment of West-Side Barrier wells BW-5 through BW-8 in October 2001 to enhance system operation.
- Successful installation and operation of flow meters in two West-Side Barrier wells. Will install additional flow meters in other West-Side Barrier wells.
- Reconfiguration of the West-Side Barrier system to operate independently from the South-Central remediation system.
- Optimized placement of extraction pumps in South-Central Plume area to improve plume containment.



# November 2001

## Semi-Annual Monitoring Event

- 97 wells sampled, including 5 Exposition wells.
- No chemicals detected in Exposition wells except low concentrations of benzene and toluene in one sample from EXP-3; no chemicals detected in duplicate sample from EXP-3.
- Free product detected in 17 wells.
- South-Central free product plume decreased in lateral extent along southern and eastern boundaries.
- No free product observed in 24-inch valve area.
- Two wells northwest of the 24-inch valve area had detectable concentrations of MTBE. Will resample wells MW-16 and MW-29 and selected wells in the vicinity.

# November 2001 Semi-Annual Monitoring Event

- TPH concentrations decreased to non-detect levels in area near the West-Side Barrier wells.
- Non-detect TPH concentrations in wells GMW-26 and HL-3 indicate improved containment of South-Central plume.
- 1,2-DCA plume west of the site decreased since May 2001; 1,2-DCA not detected in WCW-13.
- 1,2-DCA concentration in WCW-3 has been decreasing since the startup of the West-Side Barrier wells and continues to decrease.