

Norwalk Tank Farm Update

*Presented to the Norwalk Tank Farm
Restoration Advisory Board*

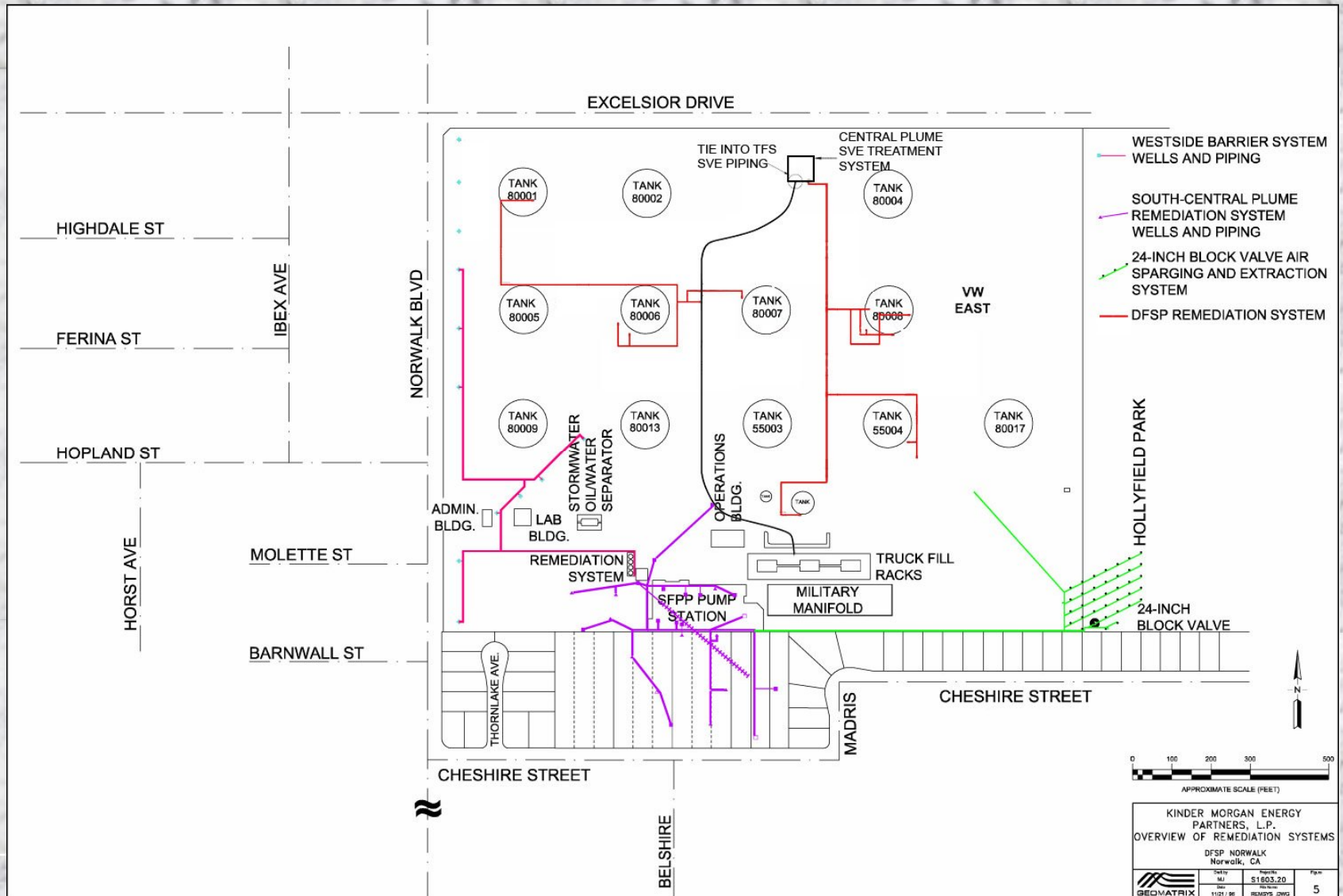
April 27, 2006

Presentation Overview

Topics to be Covered

- Remediation Operations Update
- HHRA Update
- Sentry Event Update
- 10-Year Plume Maps

Map of Current Remediation Systems



Soil Vapor Extraction System Repairs



Soil Vapor Extraction System Repairs



Soil Vapor Extraction System Repairs



Soil Vapor Extraction System Repairs

- Thermal oxidizer stack knocked over by strong winds in January 2006.
- Activities performed during stack repair:
 - Continued to operate West Side Barrier System
 - Continued to manually remove free product
 - Replaced oxidizer insulation
 - Installed fabricated flange and stack
- Stack repair completed and system restarted.

Soil Vapor Extraction System

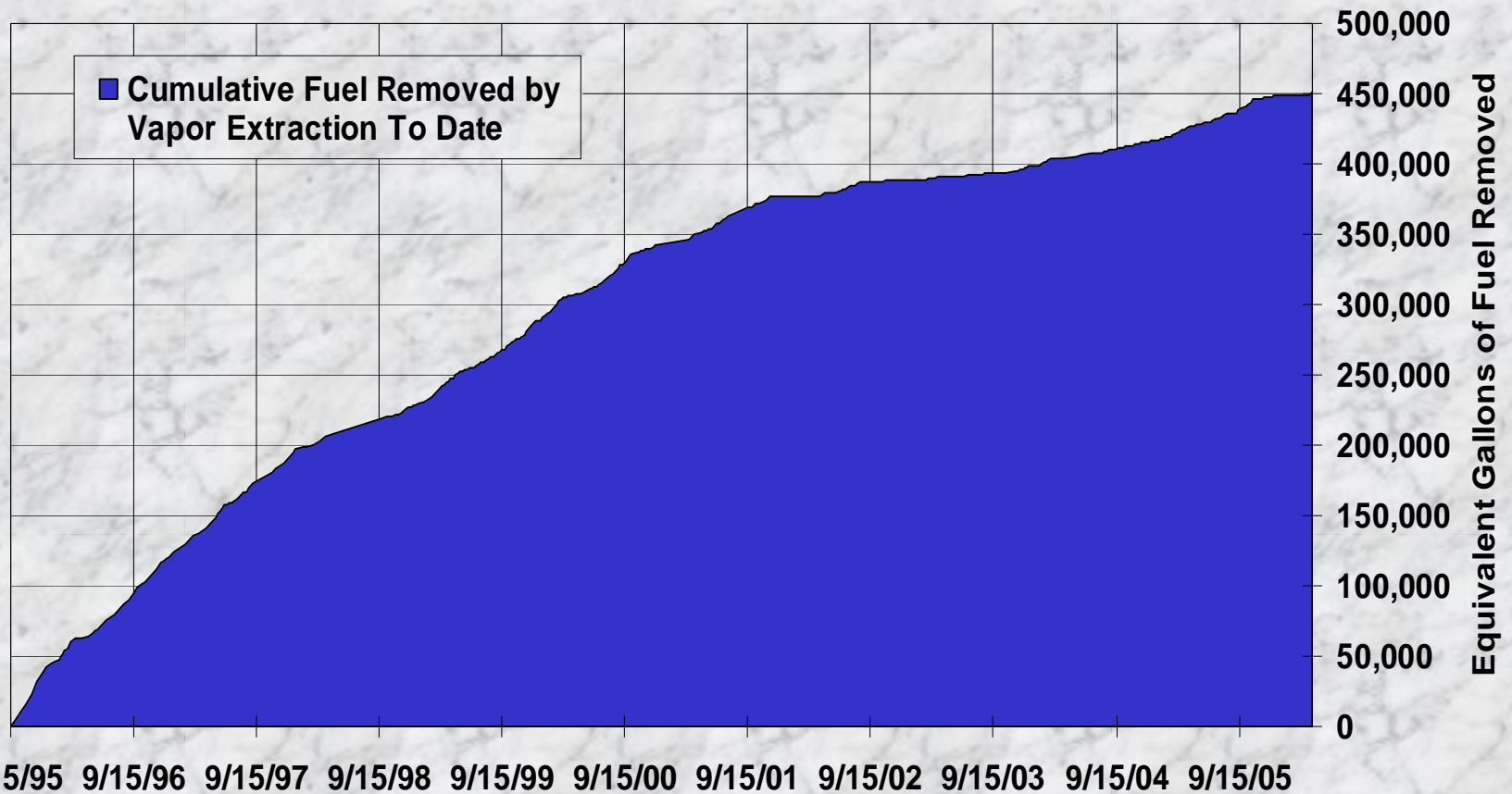
- 17 onsite and 6 off-site vapor extraction wells in the South-Central Plume area.
- 2 vapor extraction wells in the Southeastern 24-Inch Block Valve area.

Soil Vapor Extraction System Operations Summary

- Approximately 1,692 gallons equivalent of fuel removed from soil and destroyed by thermal oxidation since the January 2006 RAB meeting.
- Approximately 450,900 gallons equivalent of fuel removed from soil and destroyed by thermal oxidation since September 1995.
- Approximately 50,200 hours of operation since September 1995.

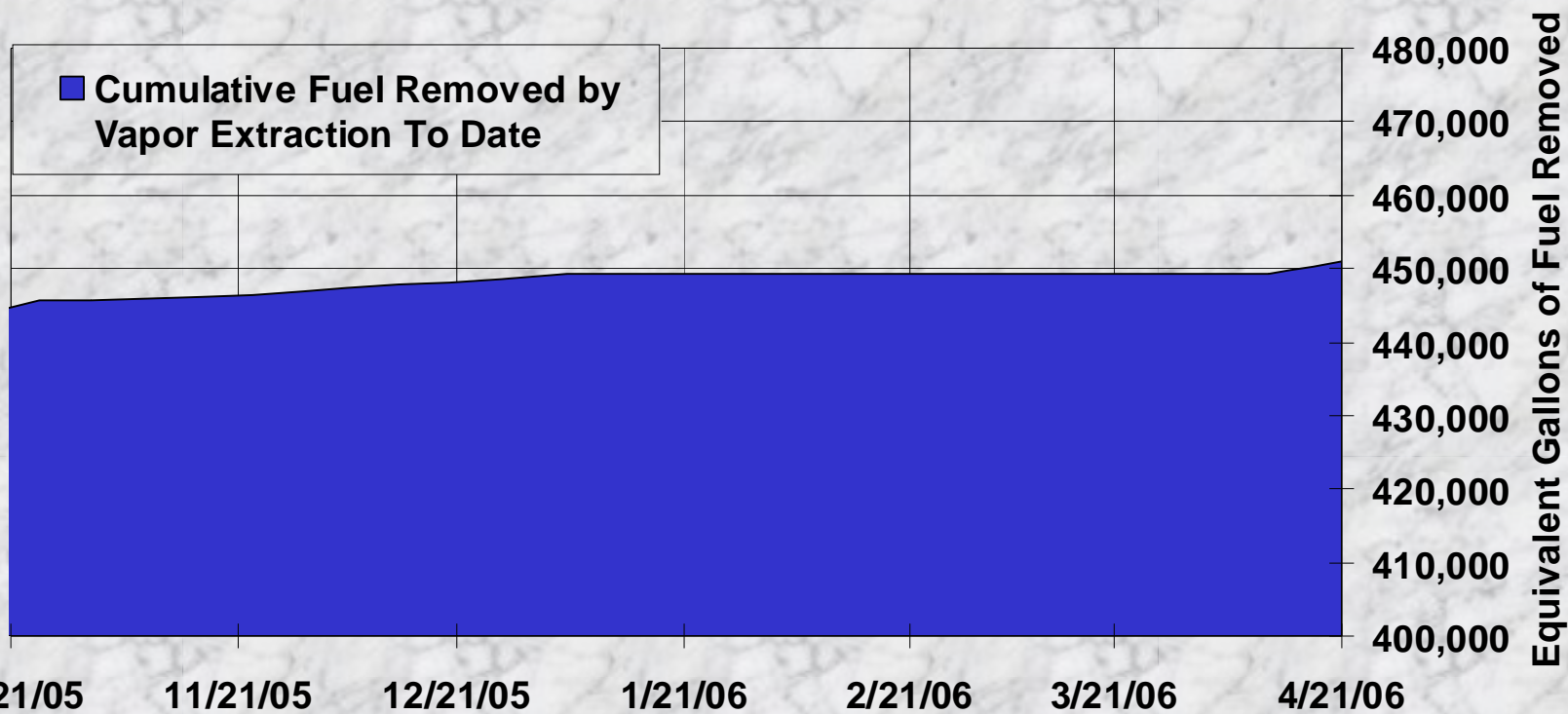
Soil Vapor Extraction System Operations Summary

Cumulative Fuel Removed by Vapor Extraction To Date



Soil Vapor Extraction System Operations Summary

Cumulative Fuel Removed by Vapor Extraction - Past Six Months



Groundwater/Product Extraction System

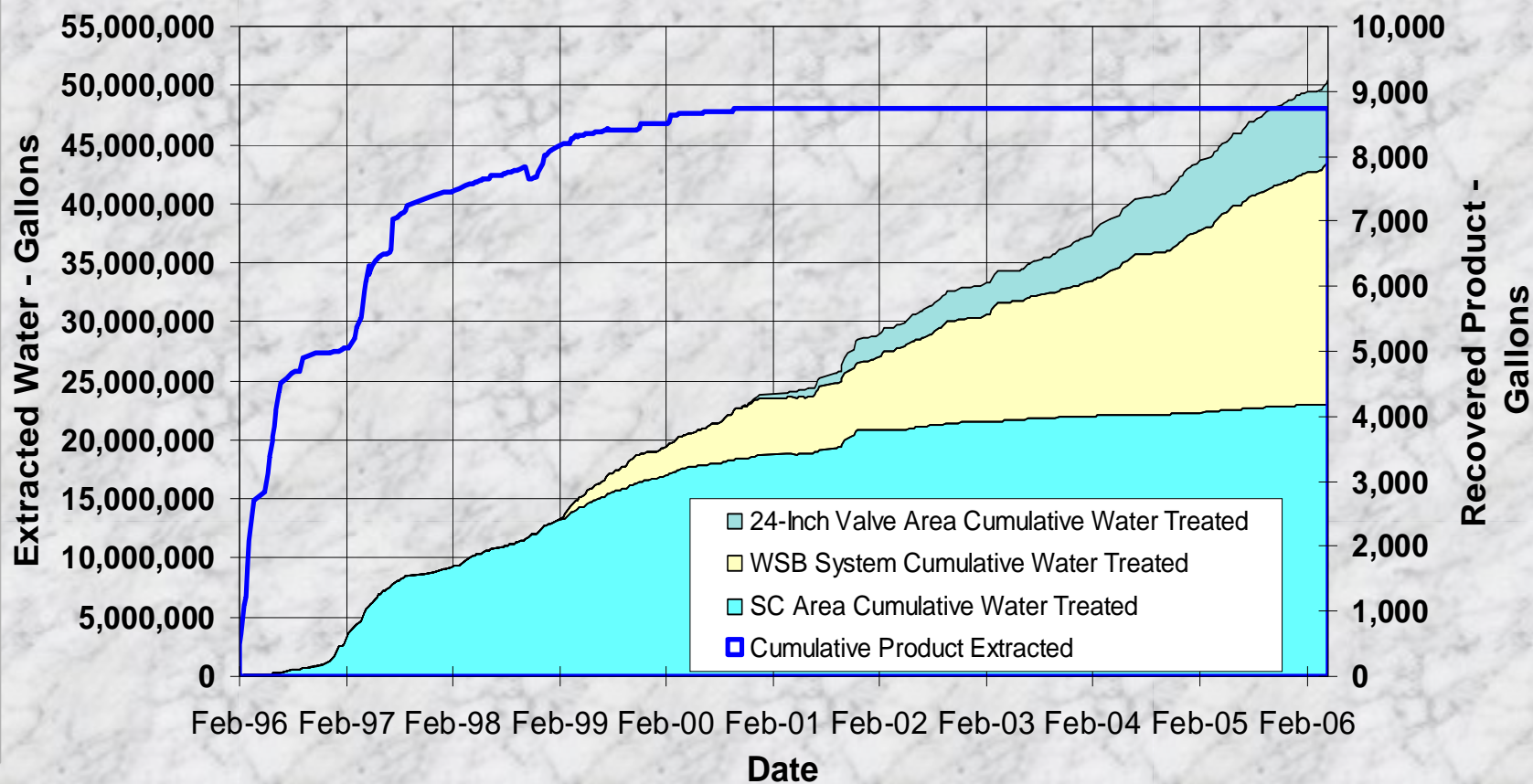
- 8 groundwater extraction wells in the West Side Barrier area
- 4 total fluids (product and groundwater) extraction wells and 4 groundwater extraction wells in the South-Central Plume area
- 2 total fluids (product and groundwater) extraction wells and 1 groundwater extraction well in the Southeastern 24-Inch Block Valve area

Groundwater/Product Extraction System Operations Summary

- Total groundwater extracted since January 2005 RAB meeting:
 - South-Central Plume area: 76,800 gallons
 - Southeastern 24-Inch Valve area: 62,000 gallons
 - West Side Barrier area: 1,027,800 gallons
 - Manual product recovery: 42 gallons
- Total groundwater extracted since September 1995:
 - South-Central Plume area: 23.0 million gallons
 - Southeastern 24-Inch Valve area: 6.9 million gallons
 - West Side Barrier area: 20.6 million gallons
 - Total groundwater extracted: 50.5 million gallons
 - 8,787 gallons free product removed

Groundwater/Product Extraction System Operations Summary

Producted Extracted and Water Treated Summary



Remediation System Expansion

- KMEP and RWQCB discussed preliminary plans for further modifying the south-central remediation system.
- Currently evaluating the following modifications:
 - Reconfiguring up to four existing wells to perform total fluids extraction.
 - Installation of an additional 5 to 10 soil vapor extraction wells.
 - Enhancing selected existing remediation wells (i.e., redeveloping wells, upgrading vapor conveyance lines, etc.).

HHRA Update

- KMEP evaluated potential sub-slab vapor sample locations and presented proposed sub-slab and crawl space vapor sample locations to RWQCB on March 17, 2006.
- The RWQCB concurred with the proposed sample locations and requested submittal of revised HHRA work plan in a letter dated March 29, 2006.
- The HHRA work plan will be implemented upon confirming access agreement with the residents.

Sentry Event Update

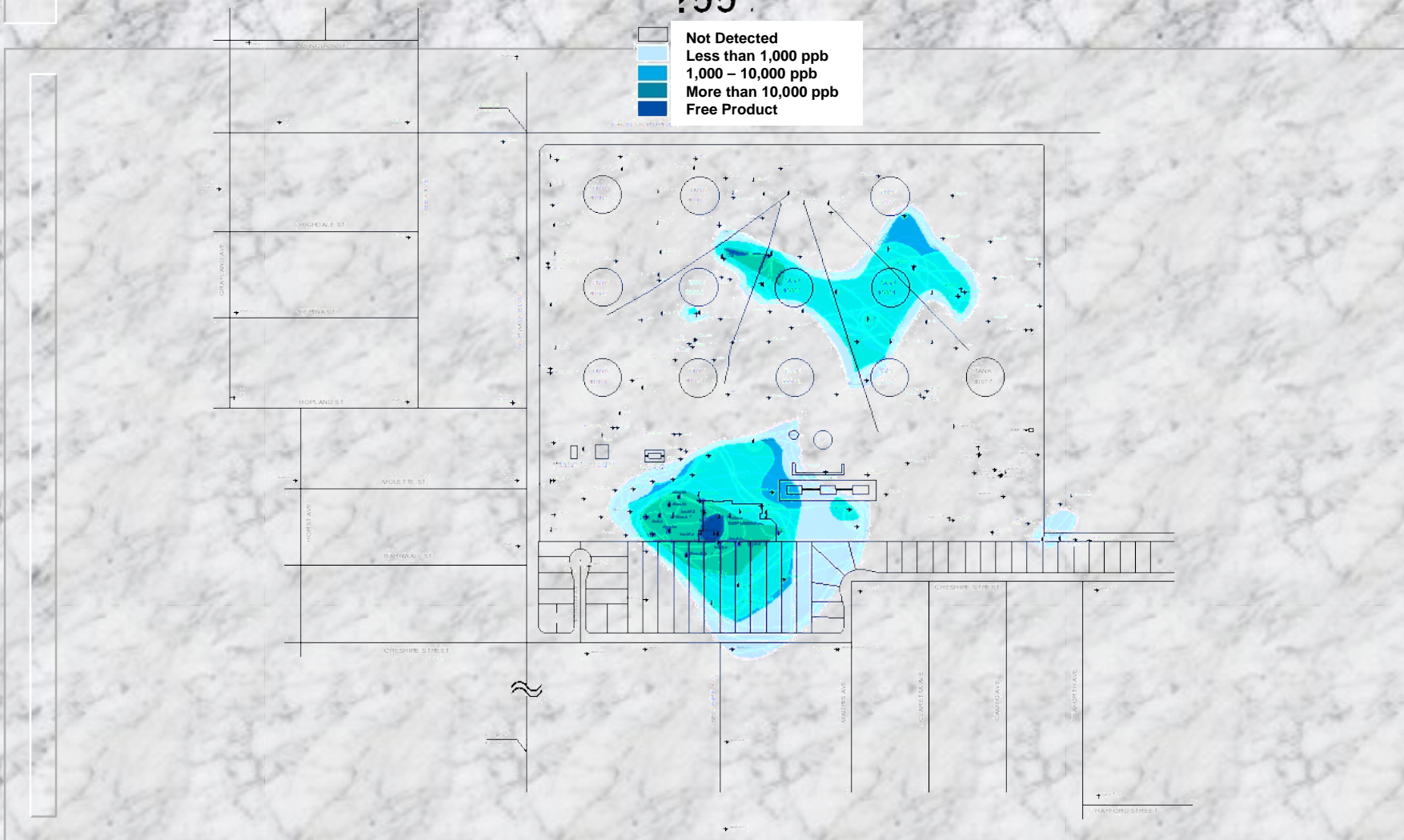
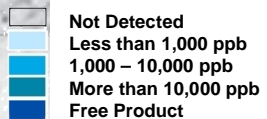
- 23 wells sampled, including 4 Exposition wells.
- Groundwater elevations generally decreased since November 2005 in the uppermost aquifer beneath the site.
- No VOCs were detected in Exposition wells.
- In the south-central off-site area, VOC concentrations remained non-detect in wells GMW-O-1 and GMW-O-2 and decreased in GMW-O-3 since November 2005.
- The benzene concentration in GMW-O-14 increased since November 2005 but remained less than that observed one year ago. Concentrations of other COCs decreased in this well since November 2005.

Sentry Event Update

- In the intermediate block valve area, the MTBE concentration increased in PZ-10 but remained lower than the MCL of 13 ppb.
- In southeastern area, concentrations of MTBE decreased in PZ-5. In other southeastern wells, MTBE concentrations remained low (less than MCL) or non-detected.
- In the western off-site area, 1,2-DCA concentrations decreased in wells WCW-3 and WCW-7. MTBE concentrations decreased in WCW-7 and remained non-detected in WCW-3.

10-Year TPH

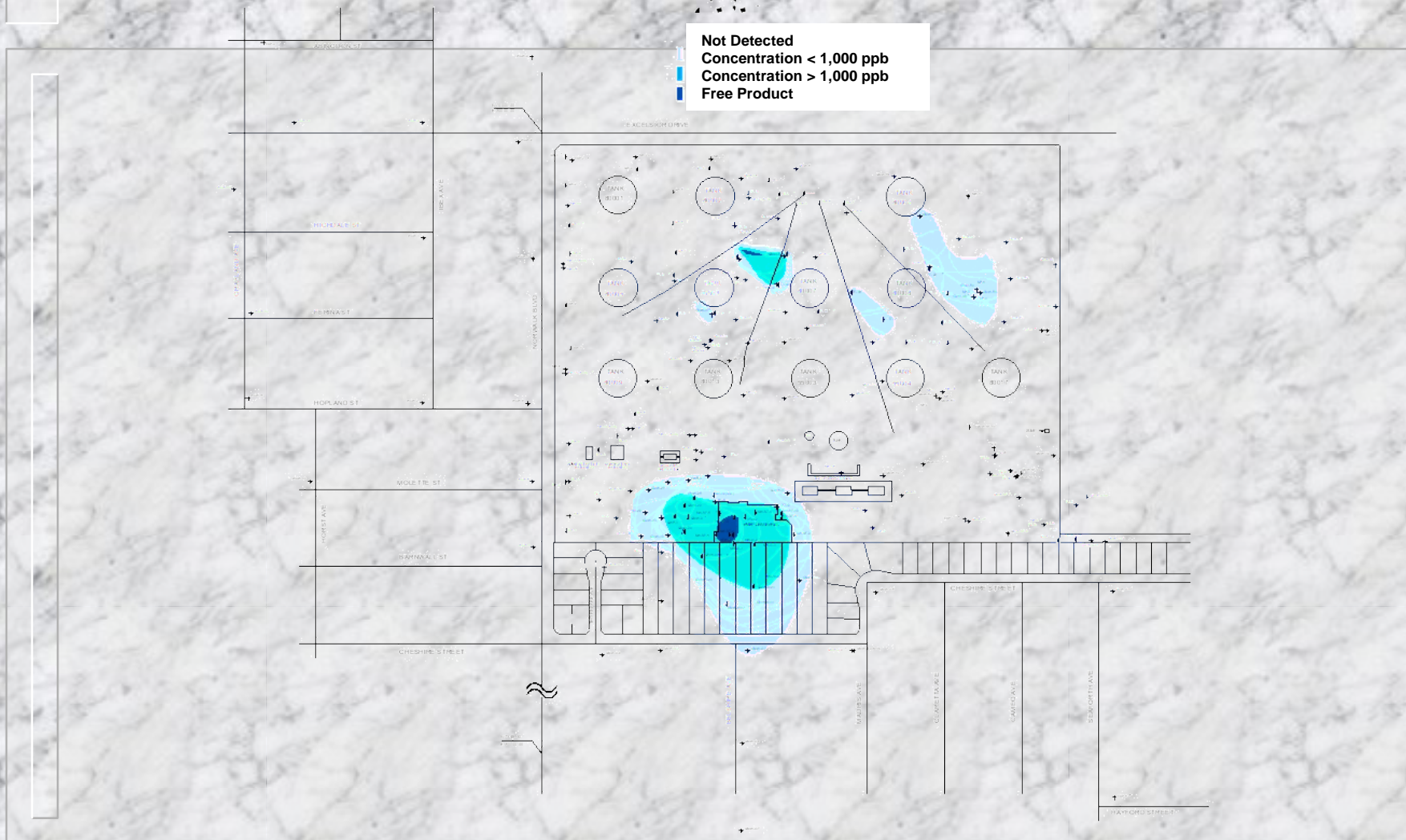
200



10-Year Benzene

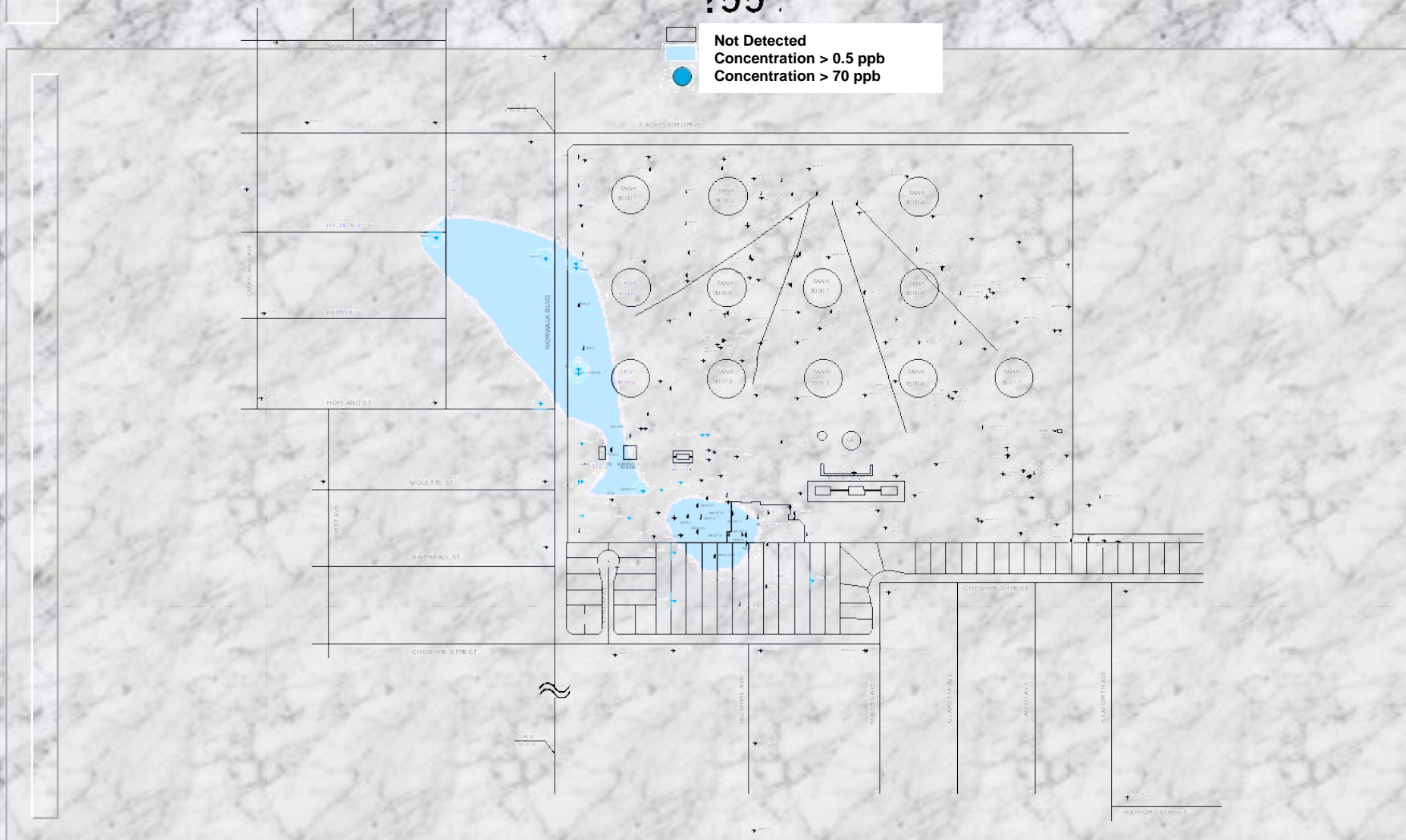
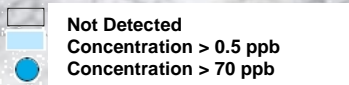


Not Detected
Concentration < 1,000 ppb
Concentration > 1,000 ppb
Free Product



10-Year 1,2-DCA

100'



10-Year MTBE

100'

