Norwalk Tank Farm Update

Presented to the Norwalk Tank Farm Restoration Advisory Board

January 23, 2003

Presentation Overview

Topics to be Covered RBCA Update

Remediation Operations Update

24-Inch Block Valve Area

Pipeline Testing Update

Decommissioning Activities

RBCA Update

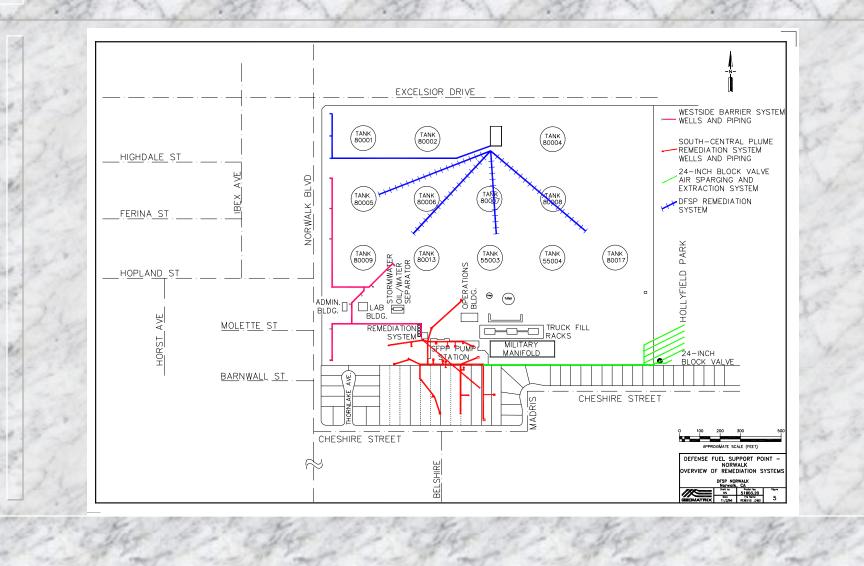
Response to Additional Comments from RWQCB and OEHHA

October 1, 2000 - Submitted initial response to comments (including Sensitivity Analysis document)
October 23, 2001 - Received additional RWCB comments
January 30, 2002 - Received additional OEHHA comments
February 22, 2002 - Submitted draft of response to OCCS
March 7, 2002 - Met with OCCS
March 29, 2002 - Submitted response to additional comments

RBCA Update cont.

The RWQCB and OEHHA comments addressed technical clarification and revisions/additions to the sensitivity analysis. The proposed responses were reviewed with the OCCS prior to submittal to the RWQCB. The RWQCB has not responded since the response was submitted.

Map of Current Remediation Systems



Soil Vapor Extraction System

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

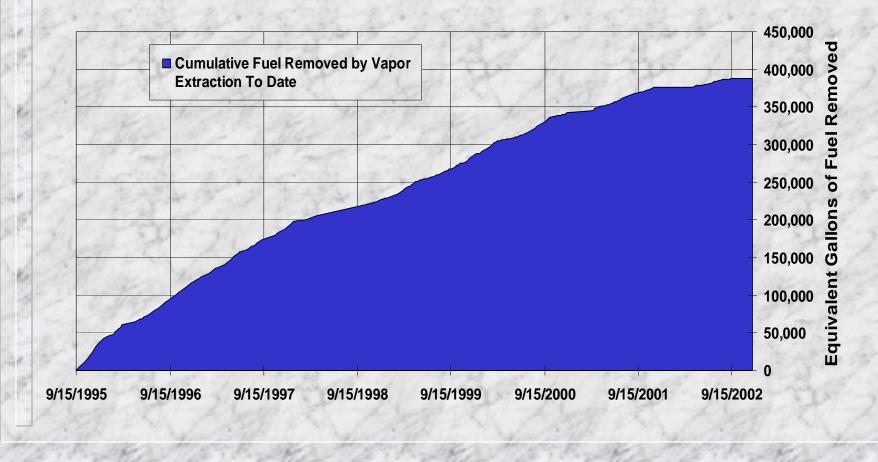
2 vapor extraction wells in the 24-inch Valve area.

Soil Vapor Extraction System Operations Summary

- 4,270 gallons equivalent of fuel removed from soil and destroyed by thermal oxidation since July 2002 RAB meeting.
- 388,450 gallons equivalent of fuel removed from soil and destroyed by thermal oxidation since September 1995.
- Soil vapor extraction system was shut down during December 2002 for system repairs.

Soil Vapor Extraction System Operations Summary

Cumulative Fuel Removed by Vapor Extraction To Date



Groundwater/Product Extraction System

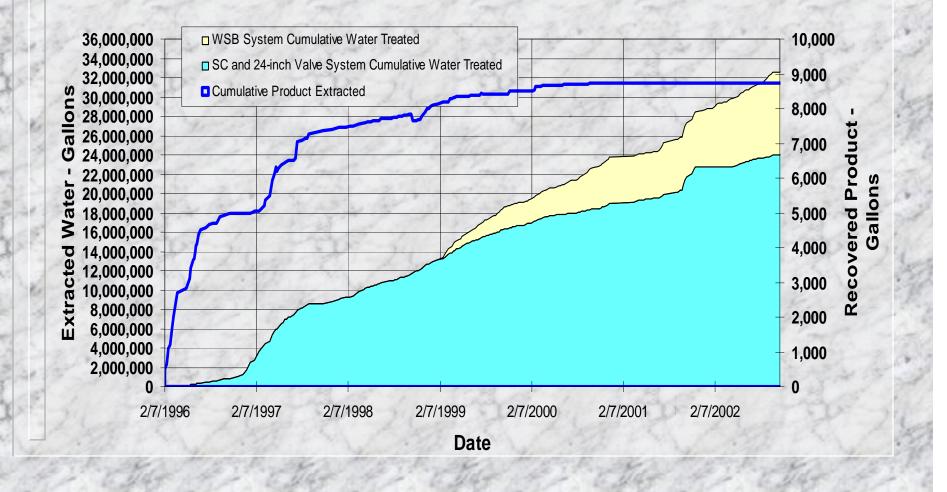
- 8 groundwater wells in West-Side Barrier area
- 6 groundwater/product wells in South-Central Plume area
- 2 groundwater/product wells in 24-inch Valve area

Groundwater/Product Extraction System Operations Summary

- Total groundwater extracted since July 2002 RAB meeting:
 South-Central Plume area, 333,020 gallons
 - 24-inch Valve area, 258,430 gallons
 - West-Side Barrier area, 1.2 million gallons
 - No free product removed
 - Total groundwater extracted since September 1995:
 - South-Central Plume/24-inch Valve areas, 24.1 million gallons
 - West-Side Barrier area, 8.9 million gallons
 - Total groundwater extracted, more than 32.9 million gallons
 - 8,735 gallons free product removed
- The groundwater/product extraction system was shut down during December 2002 for system repairs. The West-Side Barrier groundwater extraction system continued to operate independently of the South-Central/ 24-Inch Valve area remediation system.

Groundwater/Product Extraction System Operations Summary

Producted Extracted and Water Treated Summary



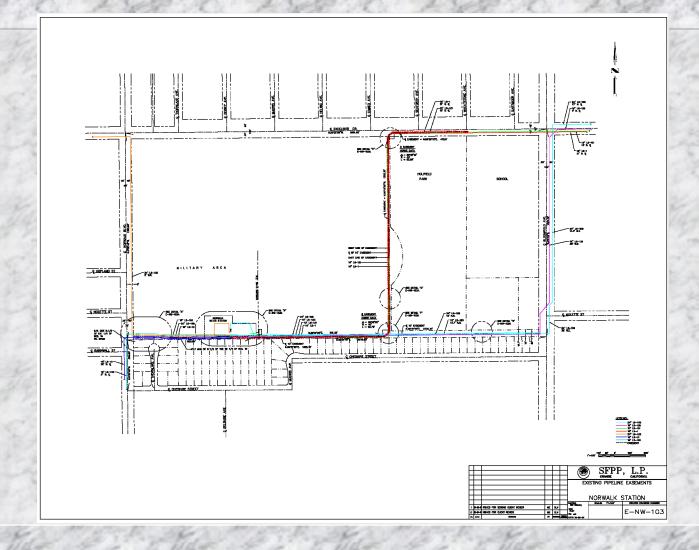
24-Inch Block Valve Area

Submitted Report Supplemental Groundwater Assessment Northwest of the 24-Inch Block Valve Area in September 2002.

Received comments from RWQCB in November 2002 requesting additional on- and off-site assessment in the 43 to 46 feet below ground surface interval.

Submit work plan for Remediation System Expansion in the 24-inch block valve area in January 2003.

Pipeline Testing Update



Pipeline Testing Update

Dec 2002 through January 10, 2003 Preparatory activities: exposure of block valves utility clearances/geophysical survey installation of sample probes January 13 through 15, 2003 Inoculation of three mainline pipelines January 22 through 24, 2003 Sample collection Submittal of samples to offsite laboratory Week of February 17, 2003 Submittal of report by Tracer Research

Decommissioning Activities

- Year 2001
 - Station piping isolated and purged
 - Removal of major equipment
 - (3 mainline pumps, 2 provers)
 - Removal of some ancillary pipes and valves

Current

- Budget constraints require re-assessment mid-year 2003
- Possible phased removal activities



Pipeline Testing Update

