

Norwalk Tank Farm Update

*Defense Energy Support Center-
Americas West
Norwalk Tank Farm
Restoration Advisory Board*

April 27, 2006



Presentation Overview

Topics to be Covered

- Central plume remediation system update
- General site activities
- Eastern Boundary Area Update

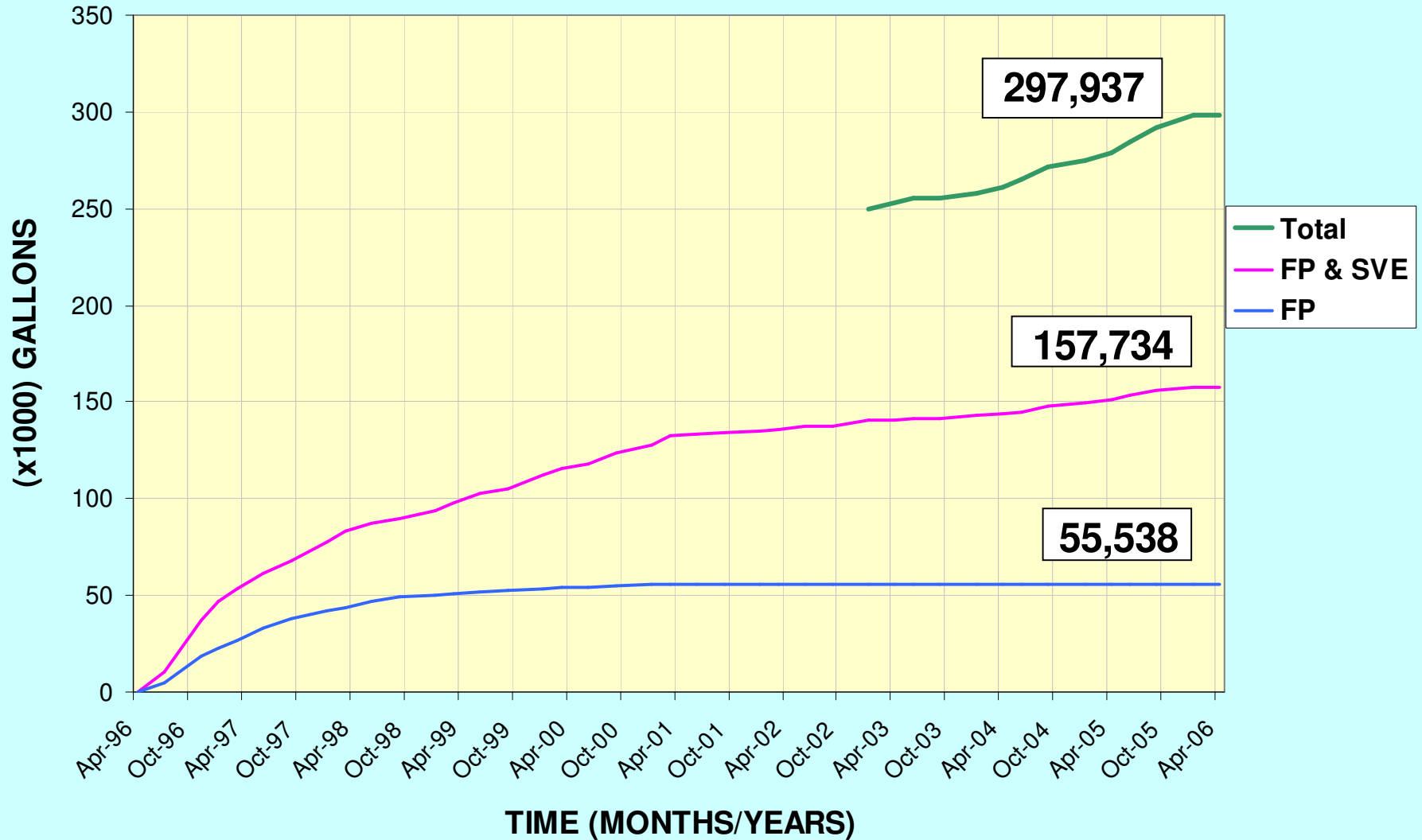
Central Plume Remediation

- System Performance First Quarter 2006
 - ❖ Total Hydrocarbons Removed: 5,866 gallons
 - No gallons of hydrocarbons recycled/destroyed by FPR/GWT system
 - ❖ 0 gallons of water treated

Central Plume Remediation

- System Performance since April 1996
 - ❖ Total Hydrocarbons Mass Removed: 297,937 gallons.
 - Approx. 157,734 gallons recycled and destroyed
 - 55,538 gallons of free product recovered
 - 1,397 gallons of dissolved-phase hydrocarbons recovered
 - 100,799 gallons of volatile hydrocarbons recovered through SVE
 - Estimated 140,000+ gallons of hydrocarbons destroyed due to enhanced biodegradation
 - ❖ 42.2 M gallons of water treated

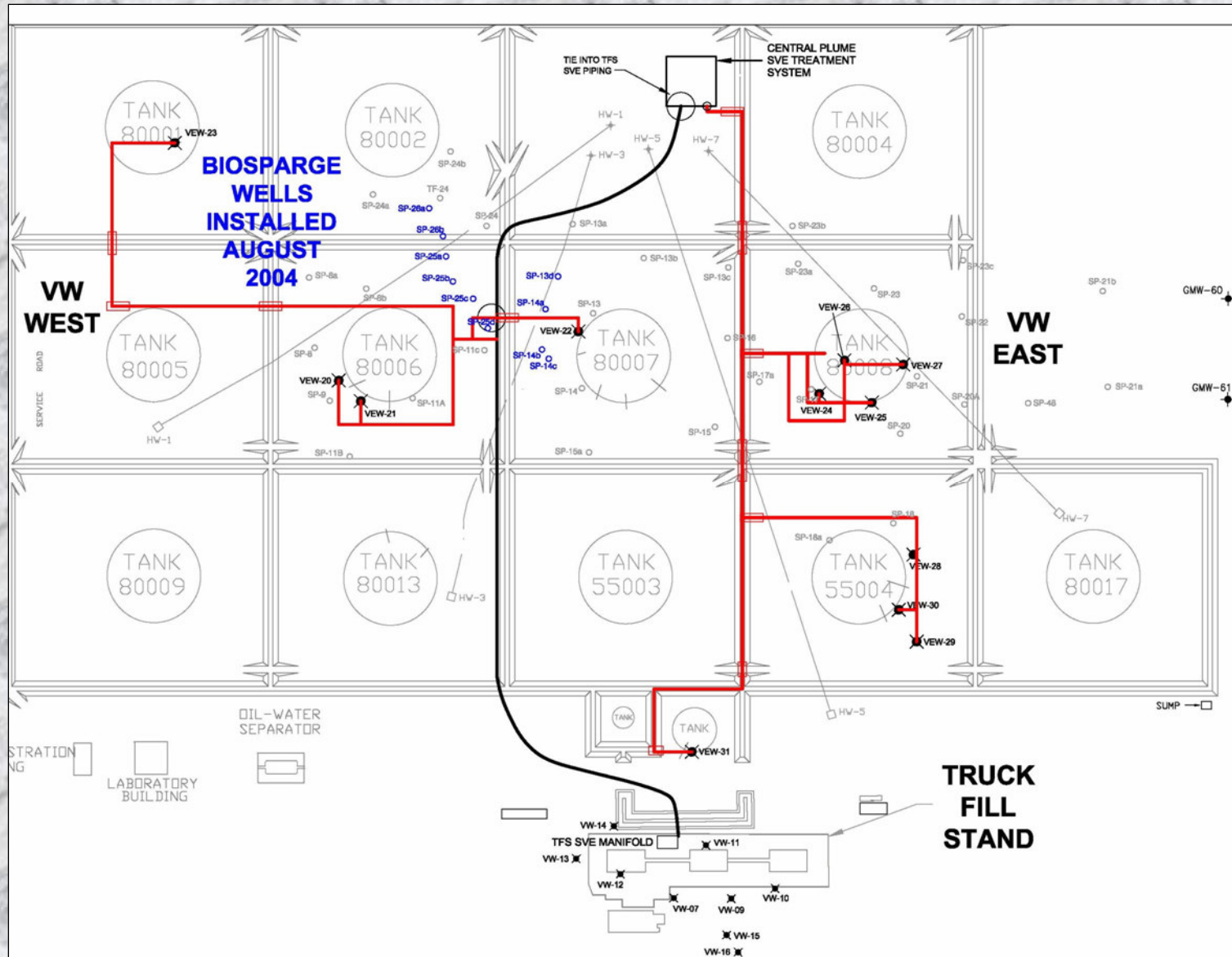
HYDROCARBONS, FREE PRODUCT, AND BIODEGRADATION - CENTRAL PLUME



Remediation Optimization

- Continued soil remediation through SVE.
 - ❖ SVE removed ~600 gallons within tank farm and water tank
 - ❖ SVE removed > 2800 gallons from truck fill stand (TFS)
- Continued operation of biosparging wells
- Working to update DFSP groundwater treatment system PLC controls to allow continued extraction from Total Fluid (TF) wells

Layout of DESC Remedial Systems



General Site Activities

- System Conversion to Bioventing
 - ❖ Work began April 25, 2006 with dismantling inlet to THERMOX.
 - ❖ Vacuum blower will be turned around to introduce oxygen into vapor extraction wells.
 - ❖ Monitoring following system conversion will establish bioventing schedule.

System Conversion



System Conversion (cont.)



System Conversion (cont.)



System Conversion (cont.)



System Conversion (cont.)



System Conversion (cont.)



General Site Activities

- Re-programming the PLC
 - ❖ Ladder logic has been entered into the EPROM.
 - ❖ Electrician scheduled to rewire system first week of May.
 - ❖ FPR/GWT system will be turned back on following rewire.
 - ❖ Effluent water monitoring will determine effectiveness of system and arsenic removal drum.

Eastern Boundary Update

- Access Agreement with the City of Norwalk is still pending for final approval.
- Remediation system expansion into the Eastern Boundary area is funded, and is in progress.
- Both bioparging and bioventing will be employed to treat the soil and groundwater in this area.

Discussion