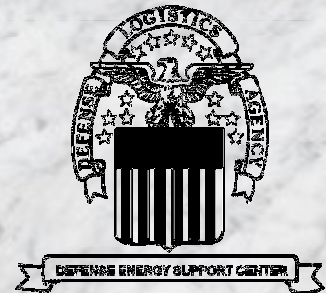


# *Norwalk Tank Farm Update*

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

*April 22, 2004*



# Presentation Overview

## Topics to be Covered

- Central Plume Remediation System Update
- Oily Waste Area
- Truck Fill Stand VES Implementation
- Aboveground Storage Tanks Activities
- Eastern Boundary Well Installations



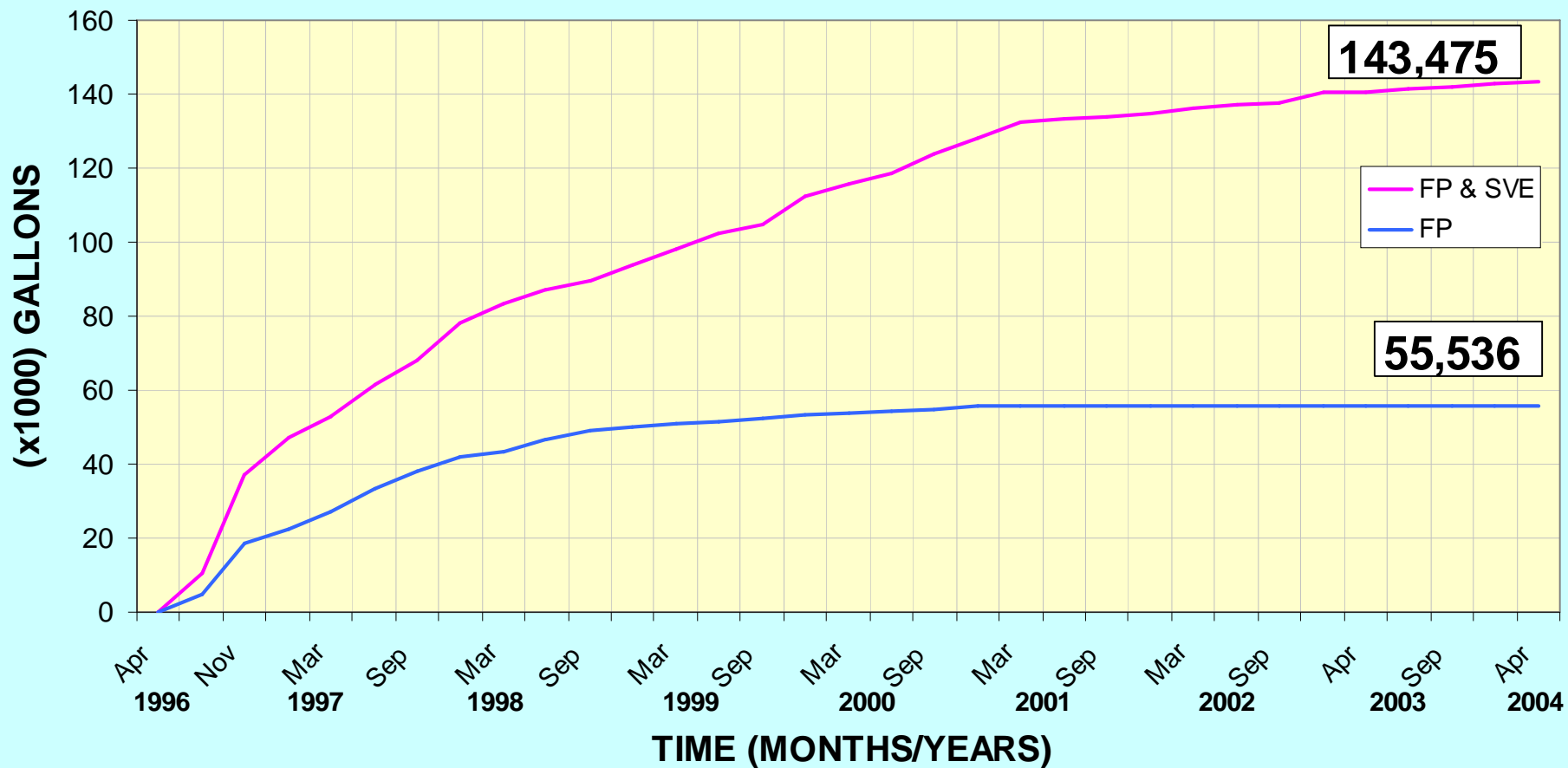
# Central Plume Remediation

- System Performance First Quarter 2004
  - Total Hydrocarbons Mass Removed:  
3,373 gallons
    - Approx. 805 gallons recycled and destroyed
      - 0 gallons of free product recovered
      - 805 gallons of volatile hydrocarbons recovered through soil vapor extraction
      - 0 gallon of dissolved phase hydrocarbons recovered
    - Estimated 2,568 gallons of hydrocarbons destroyed due to enhanced biodegradation
  - 26,387 gallons of water treated

# Central Plume Remediation

- System Performance since April 1996
  - Total Hydrocarbons Mass Removed:  
261,367 gallons
    - Approx. 143,475 gallons recycled and destroyed
      - 55,536 gallons of free product recovered
      - 86,542 gallons of volatile hydrocarbons recovered through soil vapor extraction
      - 1,397 gallons of dissolved phase hydrocarbons recovered
    - Estimated 117,892 gallons of hydrocarbons destroyed due to enhanced biodegradation
  - 42.2 M gallons of water treated

## HYDROCARBONS & FREE PRODUCT-CENTRAL PLUME





# Oily Waste Area

- Report submitted to RWQCB in February
- Findings from the two soil borings installed
  - VOCs at surface and at GW; none in between
  - Metals within CA background concentrations
  - No leaching potential to the GW
  - No further action recommended
- Awaiting RWQCB response

# Truck Fill Stand VES Implementation

- Vapor extraction system installed at former truck rack
  - 5 soil borings
  - 3 vapor monitoring points
  - 8 vapor extraction wells (incl. 2 existing)
- Connected using HDPE pipe to Central Treatment Plant
- Field measurements indicate elevated vapor concentrations--Awaiting laboratory results
- Extraction started on April 20



**FIGURE 1 – HDPE PIPE INSTALLATION**





**FIGURE 2 – TRUCK FIELD STAND MANIFOLD**





**FIGURE 3 – HDPE PIPE ROUTE**





**FIGURE 4 – FINAL CONNECTION TO SVE SYSTEM**





# Aboveground Storage Tanks Activities



**FIGURE 1 – HYDRAULIC  
SHEAR CUT**



**FIGURE 2 – SHEAR CUTTING FOR ACCESS**





**FIGURE 3 – FLOATING ROOF INSIDE OF TANK**





**FIGURE 4 – FLOATING ROOFTOP DEBRIS**





**FIGURE 5 – HAULING OF DEBRIS**





# Eastern Boundary Well Installations

- Installed April 14
- Wells developed April 26
- Soil and groundwater sample results will be available at a later date