

# ***Norwalk Tank Farm Update***

*Presented to the Norwalk Tank Farm  
Restoration Advisory Board*

*September 25, 1997*

# ***Presentation Overview***

## *Topics to be Covered*

- SFPP Carson to Norwalk Pipeline Project
- SFPP Pressure Testing
- Noise Reduction
- 24" Valve Remediation
- Chang Property Issues
- Well HL- 4 Information
- Groundwater/Cleanup Monitoring Update

# ***SFPP Carson to Norwalk Pipeline Project***

- Proposing a new 16" pipeline to meet projected customer demands
- Working with a number of agencies in approval process
- Several public meetings
- Turn over to Dave Cornman

# ***SFPP Pressure Testing***

What is pressure testing & why do we do it ?

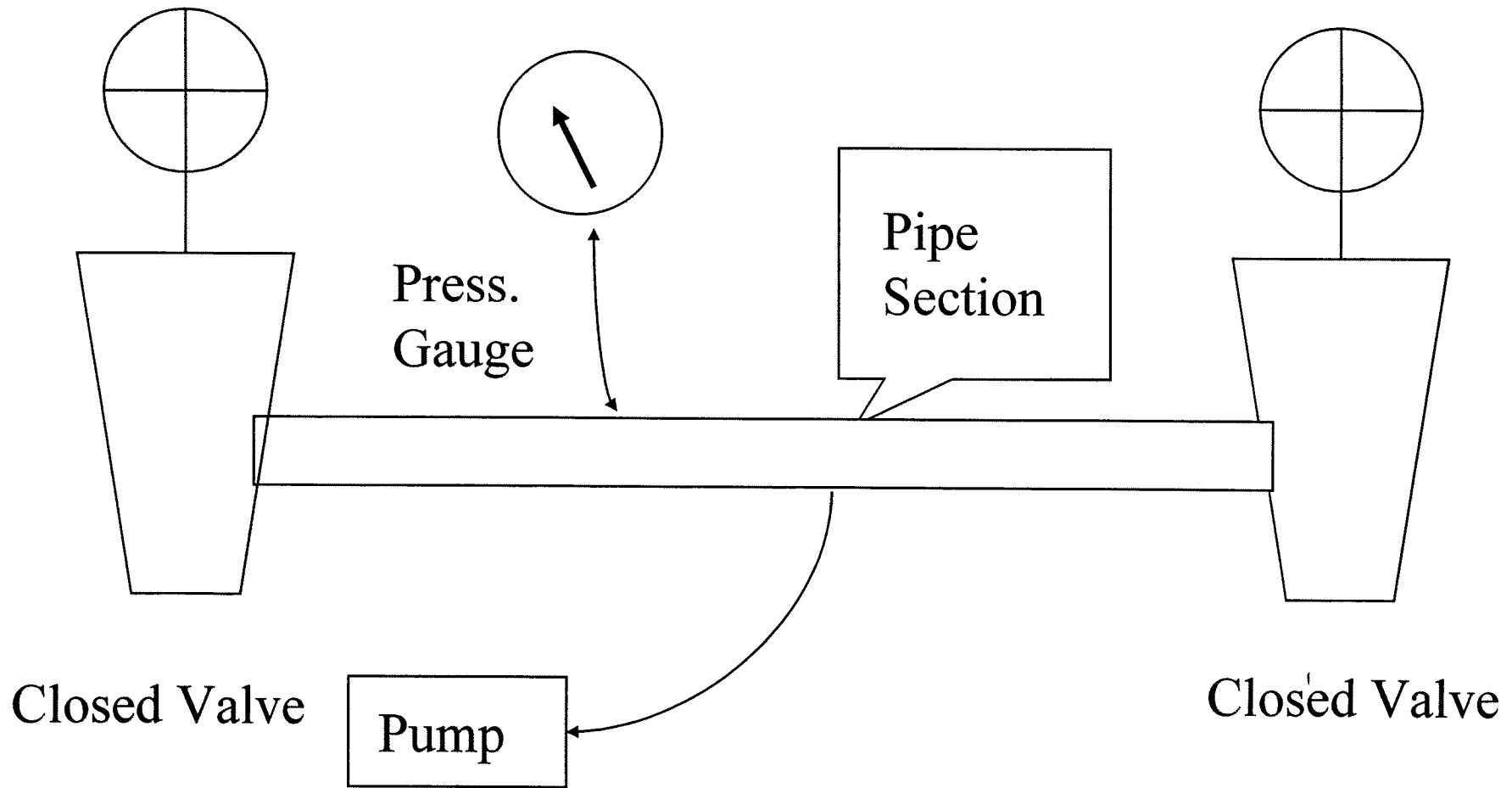
- Pressure up a static section of buried pipe and monitor for pressure loss (fuel/water)
- A drop in pressure outside of an acceptable range may indicate a leak
- Pressure test pipelines & “in-station” piping
- Also run “Smart Pigs” in pipelines, but cant use them in-station

# ***SFPP Pressure Testing***

## How is it done ?

- Isolate the section of buried pipe you want to test (close valves/blind flanges)
- Tap line to install pressure gauge & calibrated dead-weight tester
- Tap line to pressure up with compressor pump or use main-line pressure
- Start test & record pressure readings over time
- Failure to hold pressure or a steady drop may indicate a leak

# *Schematic of Press. Test*



# ***SFPP Pressure Testing***

## Good points & bad points

- May not detect the smallest slowest leaks
- Have to account for thermal pressure variables-pressure drops in cold, rises in heat
- A good proven system , but not perfect
- Newer technologies sometimes sound promising but also have their limitations too

# ***SFPP Pressure Testing***

## SFPP testing at NW

- Conducted pressure testing of approx. 17 sections of buried pipe within the station
- Pipes tested included small diam. Gravity drain down lines as well as larger 16" to 24 " sections of pipe
- Used low pressure on gravity lines (10 psi for 1 hr)
- Use high pressure on other lines (500 psi to 650 psi for 4hrs)



# ***SFPP Pressure Testing***

## SFPP testing at NW

- Took about a month
- The testing contractor did not detect any leaks during the program
- Still planning to install leak detectors around buried valves, we are weighing up the benefits in light of the potential dismantling of the station if the pipeline project is completed

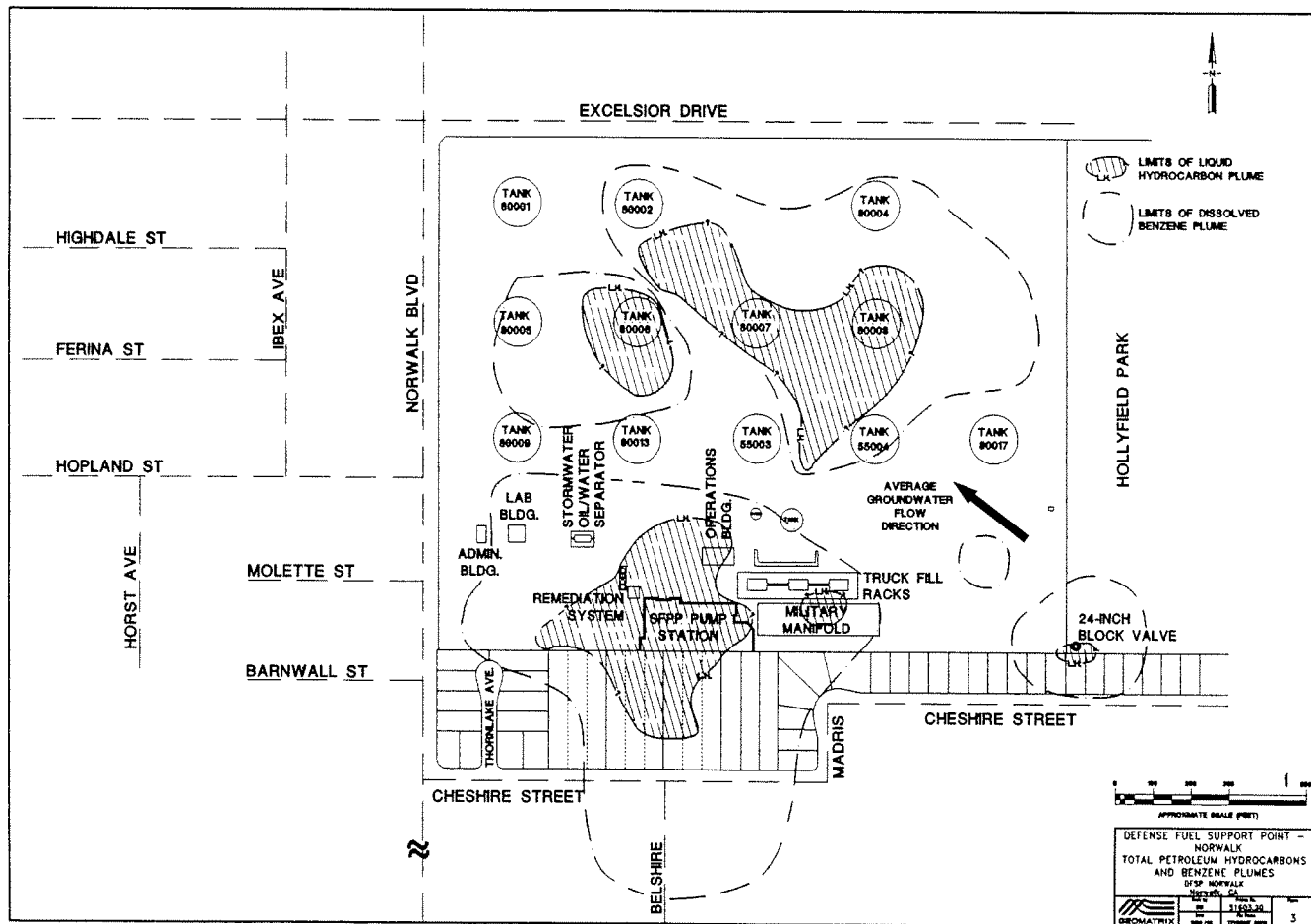
# ***Noise Issues***

- SFPP Mainline pumps, golden west valve & Oxidizer blower are the three big noise sources
- In conjunction with a RAB member, conducted a series of noise surveys to determine decibel levels on adjacent properties
- Put noise dampening shield around GW valve, & changes oxidizer blower gearing to lower noise levels

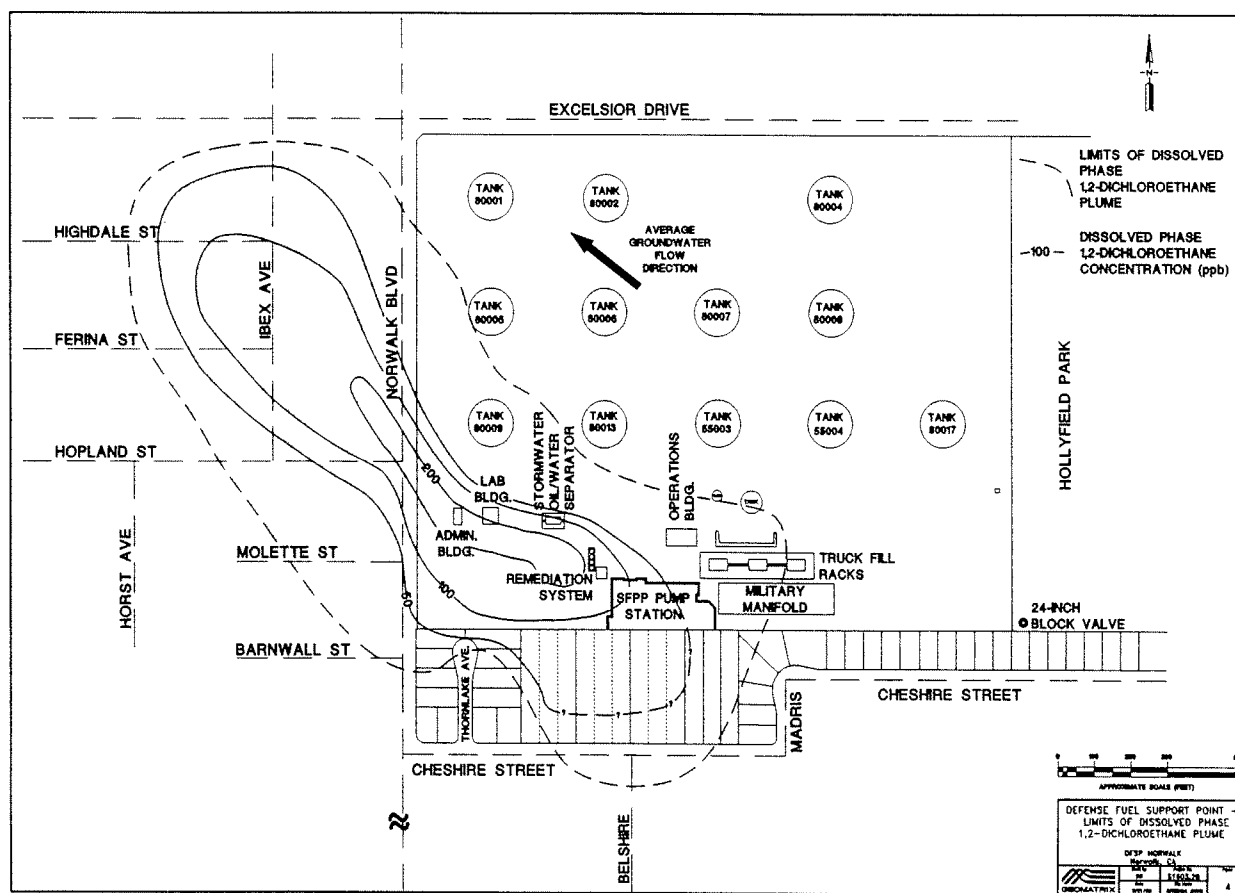
# ***Noise Issues***

- Got an estimate from a contractor to build a sound shield that consists of a “hanging blanket” arrangement
- I owe an apology to the residents, I have been focused on the RBCA plan and have not given this the priority it deserves
- I will work with our operations people to see if this equipment can be installed.

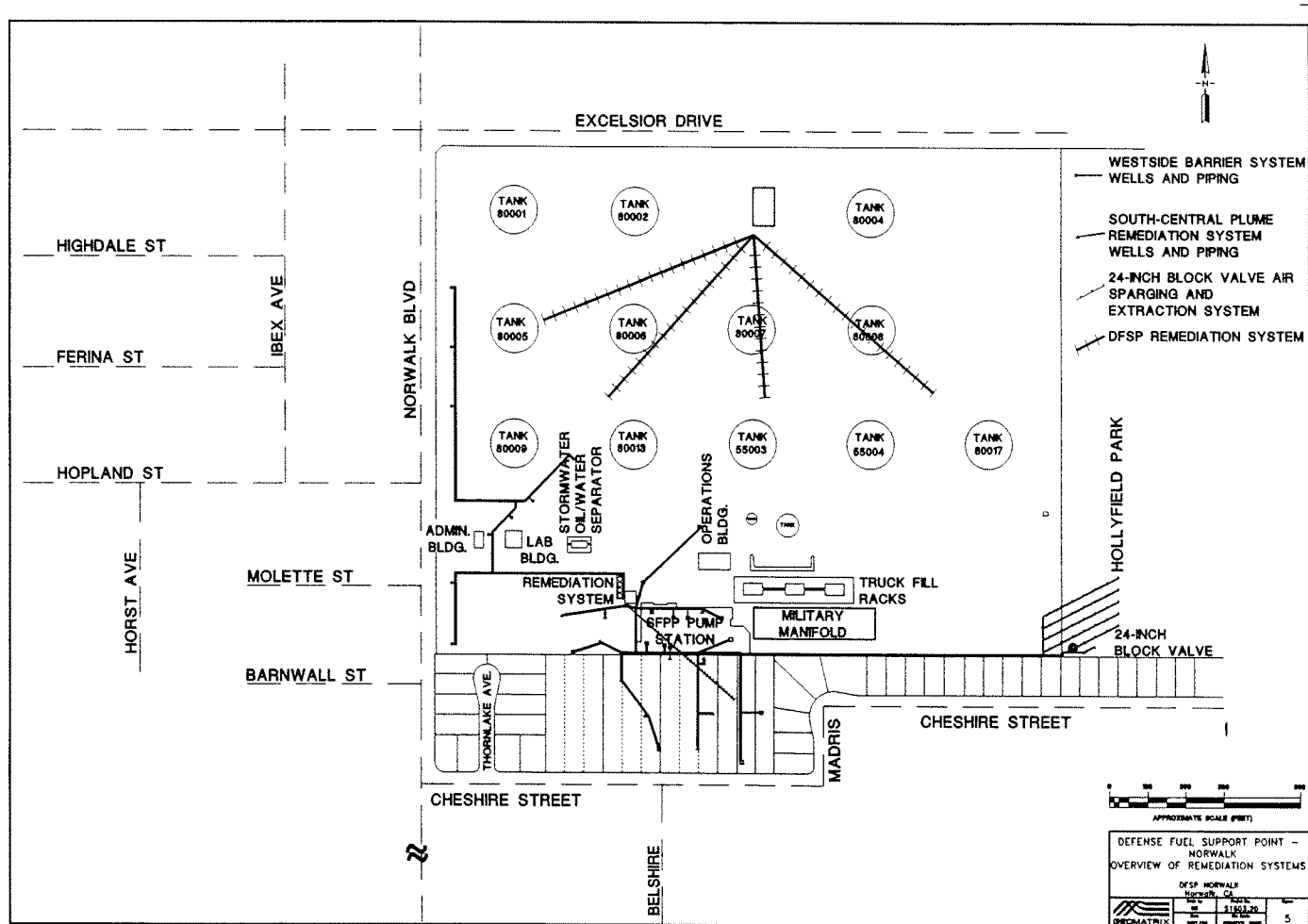
# Groundwater Plumes-Free Product /BTEX



# Groundwater Plume-1,2 DCA



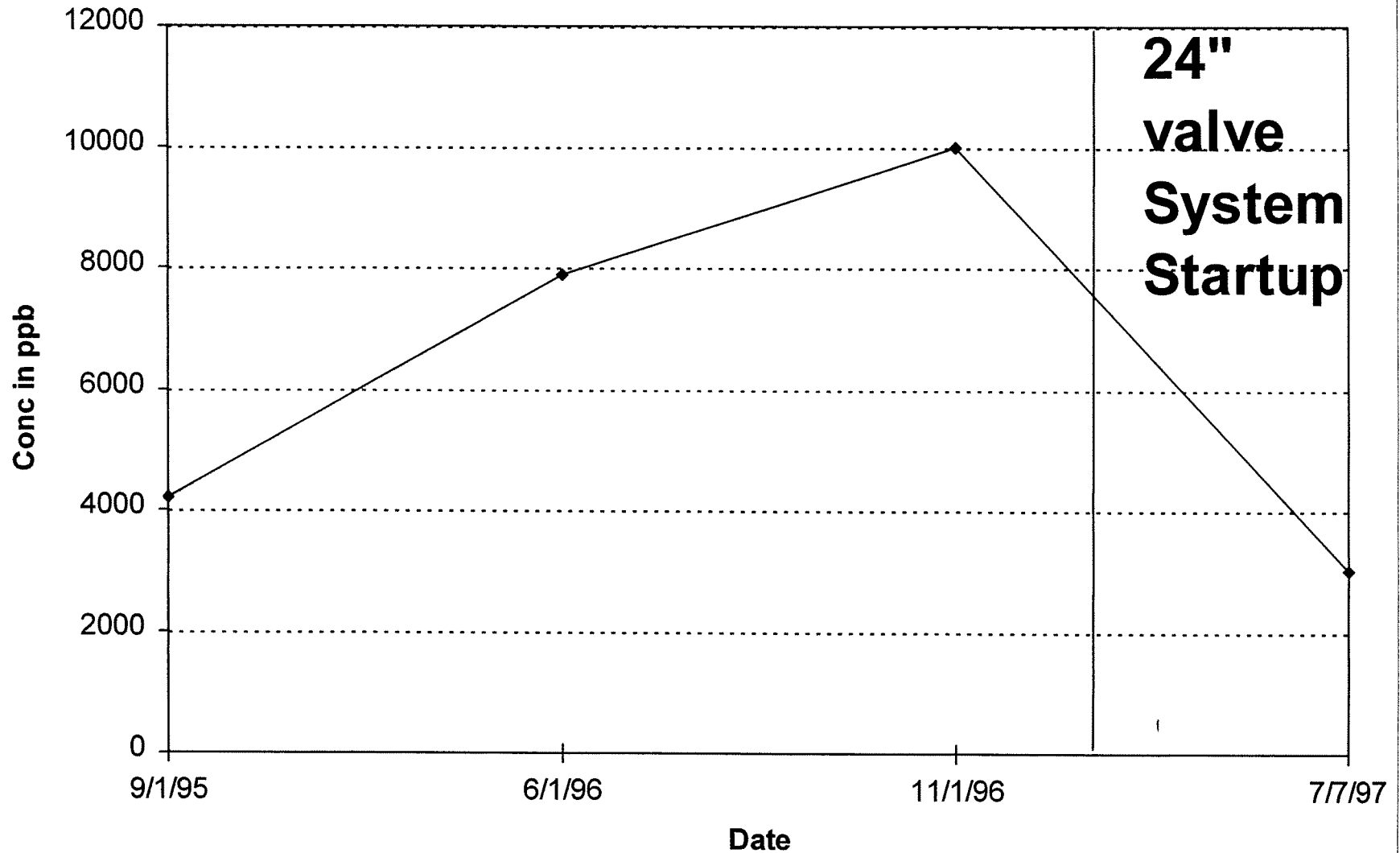
# Map of Current Remediation Systems



# ***24" Valve Remediation***

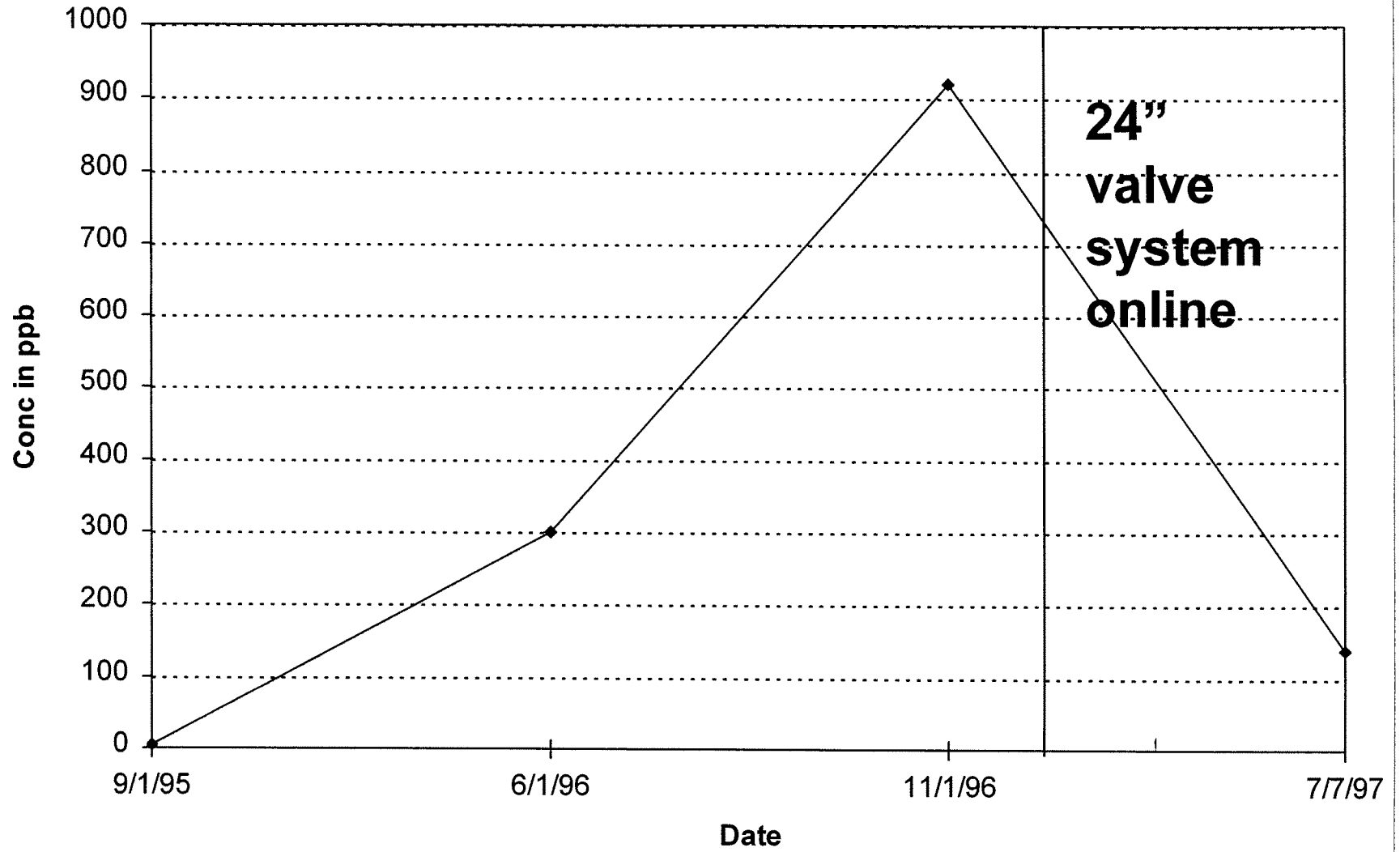
- System came on line in April 1997
- Consists of a combination air- sparging, groundwater-pumping and vapor extraction system
- Designed to deal with MTBE
- Latest data shows it's working very well

**MTBE Concentrations at GMW-O-18**





### MTBE Concentrations at GMW-SF-8



# ***SOUTH CENTRAL PLUME AND WEST SIDE BARRIER SYSTEM SUMMARY OF REMEDIATION PROGRESS***

- **System placed in operation September 15, 1995**
- **System has operated 11650 hours since startup**
  - Soil Vapor Extraction System Operations Summary**
- **22 Vapor extraction wells online and in use**
- **2 New offsite vapor and product extraction wells placed online in July**
- **Approximately 173,000 gallons of fuel removed from soil and destroyed**
- **Approximately 18,000 gallons of fuel removed since June RAB meeting**

# ***SOUTH CENTRAL PLUME AND WEST SIDE BARRIER SYSTEM SUMMARY OF REMEDIATION PROGRESS***

## **Product Recovery/West Side Barrier System Operations Summary**

- **6 Product/groundwater extraction wells online in South/Central Plume area**
- **9 West Side Barrier wells operating**
- **Approximately 8.5 million gallons of water pumped and treated (1.5 million gallons since June RAB meeting)**
- **Approximately 7,250 gallons of liquid fuel recovered**
- **Approximately 750 gallons of liquid fuel recovered since March RAB meeting**

## **24-Inch Valve Plume System**

- **System brought online in April - 30 air sparging point, 8 vapor extraction wells, and one product extraction well online and operating**