Pemaco Superfund Site

January 25, 2011

Community Meeting

Site Update

PEMACO SUPERFUND SITE

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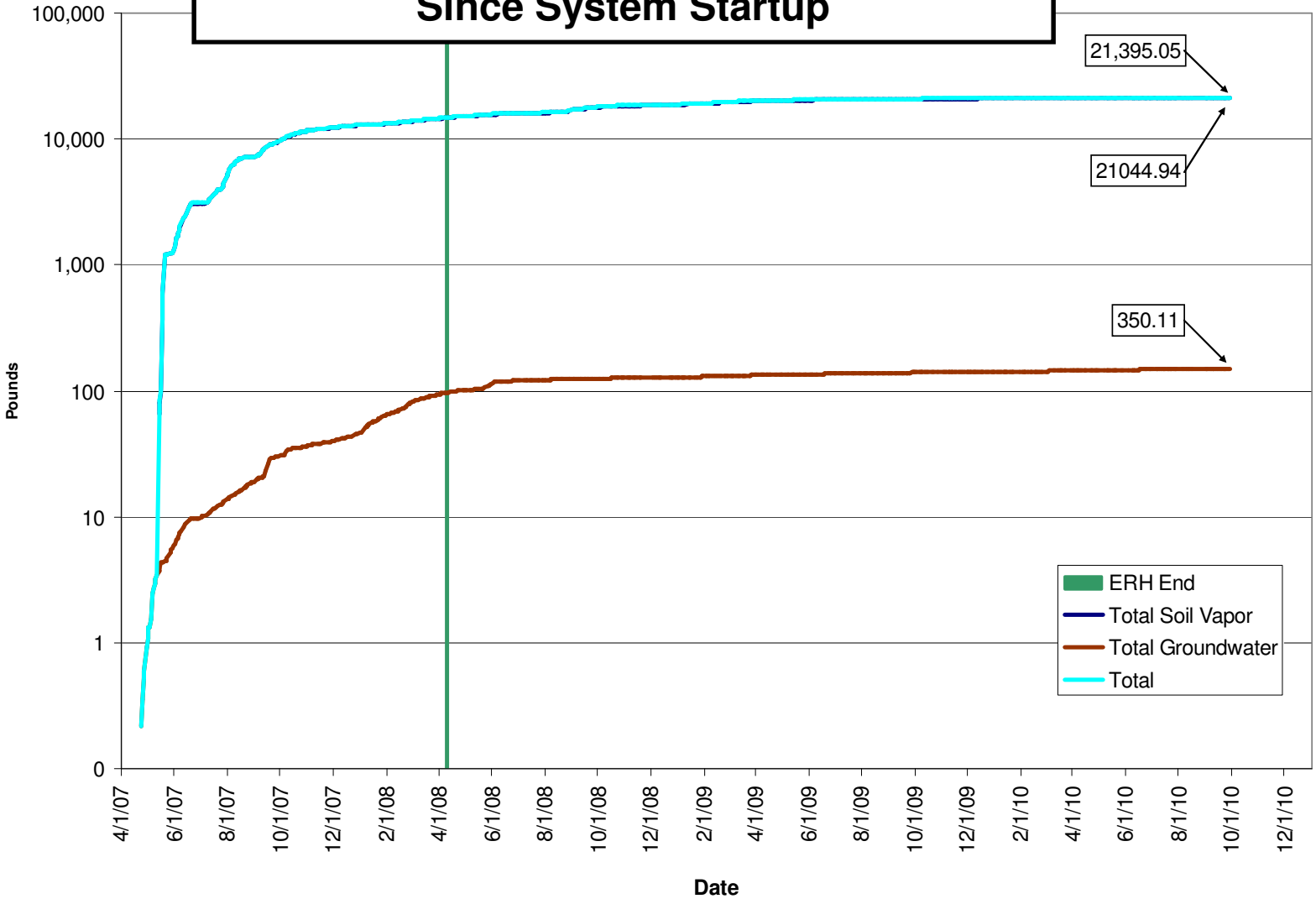
Summary of System Operations

- Active remedial systems include:
  - Extraction of soil vapor and groundwater
  - Treatment of extracted vapors and water
- Monitoring Program includes:
  - Discharge of treated vapors and water
  - Soil vapor
  - groundwater

Cleanup Systems Data

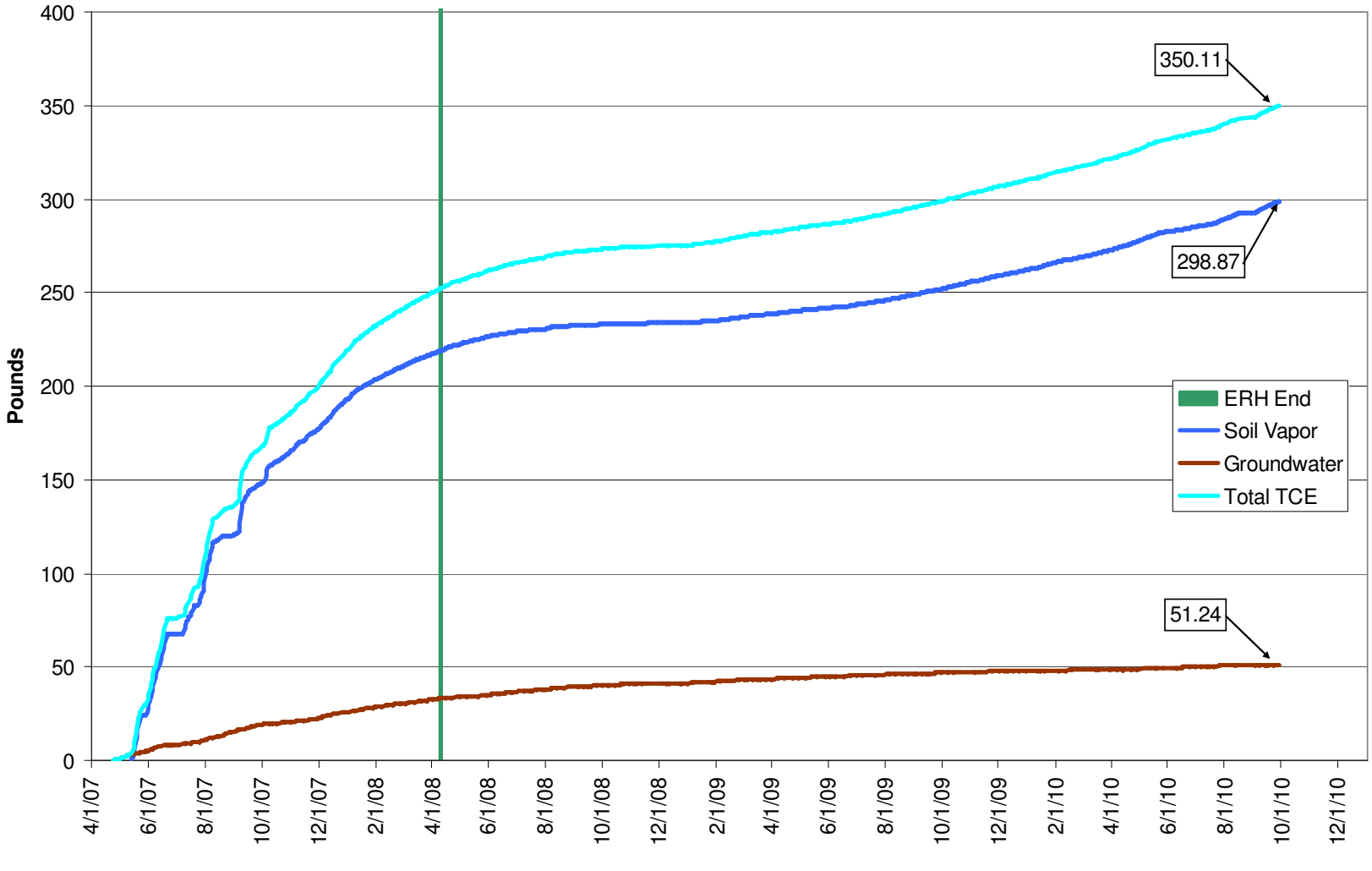
- The next few slides cover sample data from the treatment systems
  - How much contamination has been removed
  - How much groundwater has been extracted and treated
  - Contaminant levels in extracted groundwater
  - Treated vapor emissions concentrations

Cumulative Pounds of COCs Extracted Since System Startup



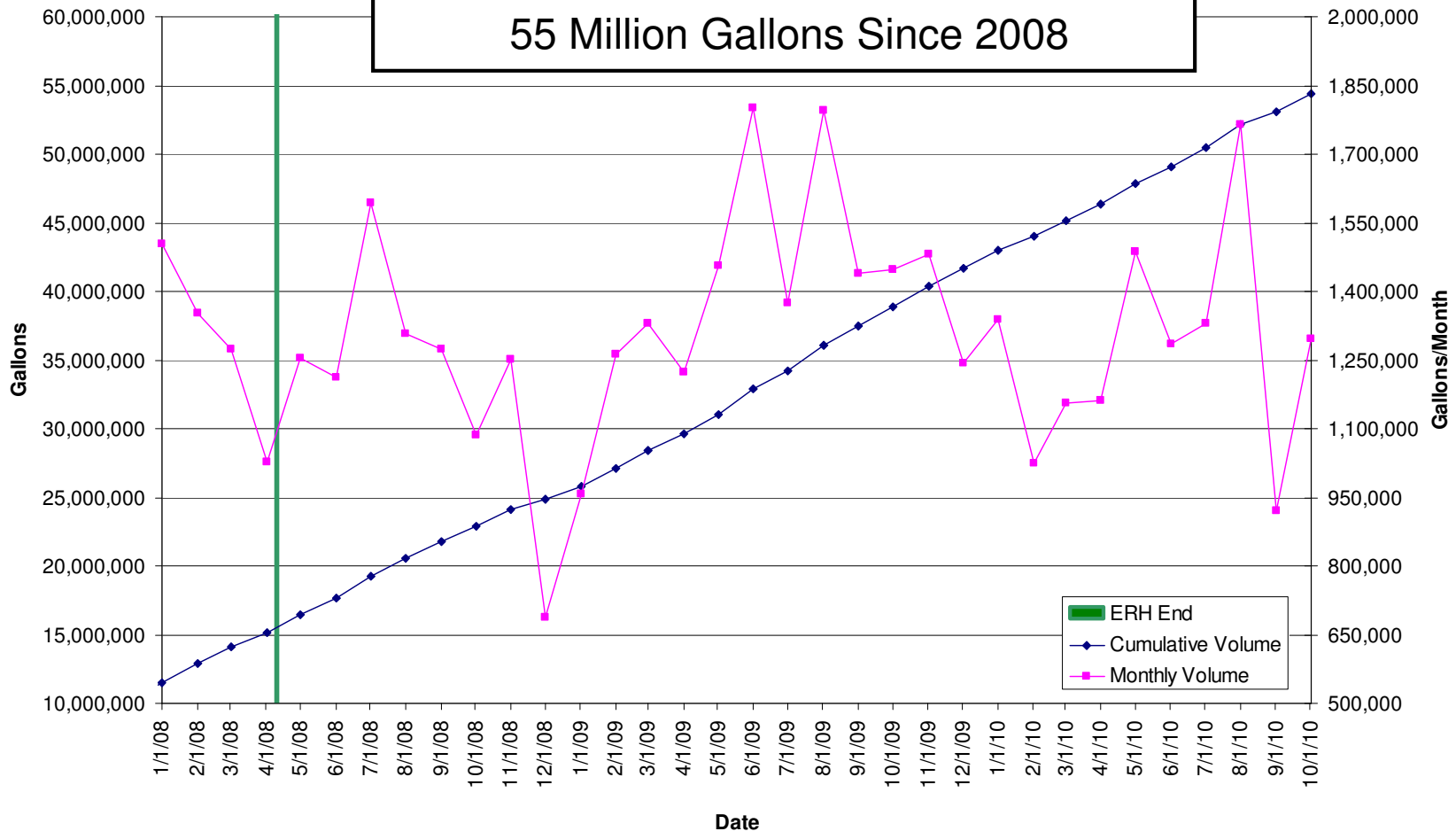
Groundwater analysis does not include tentatively identified compounds that are reported in Soil Vapor Analyses

Cumulative Pounds of TCE Extracted Since System Startup

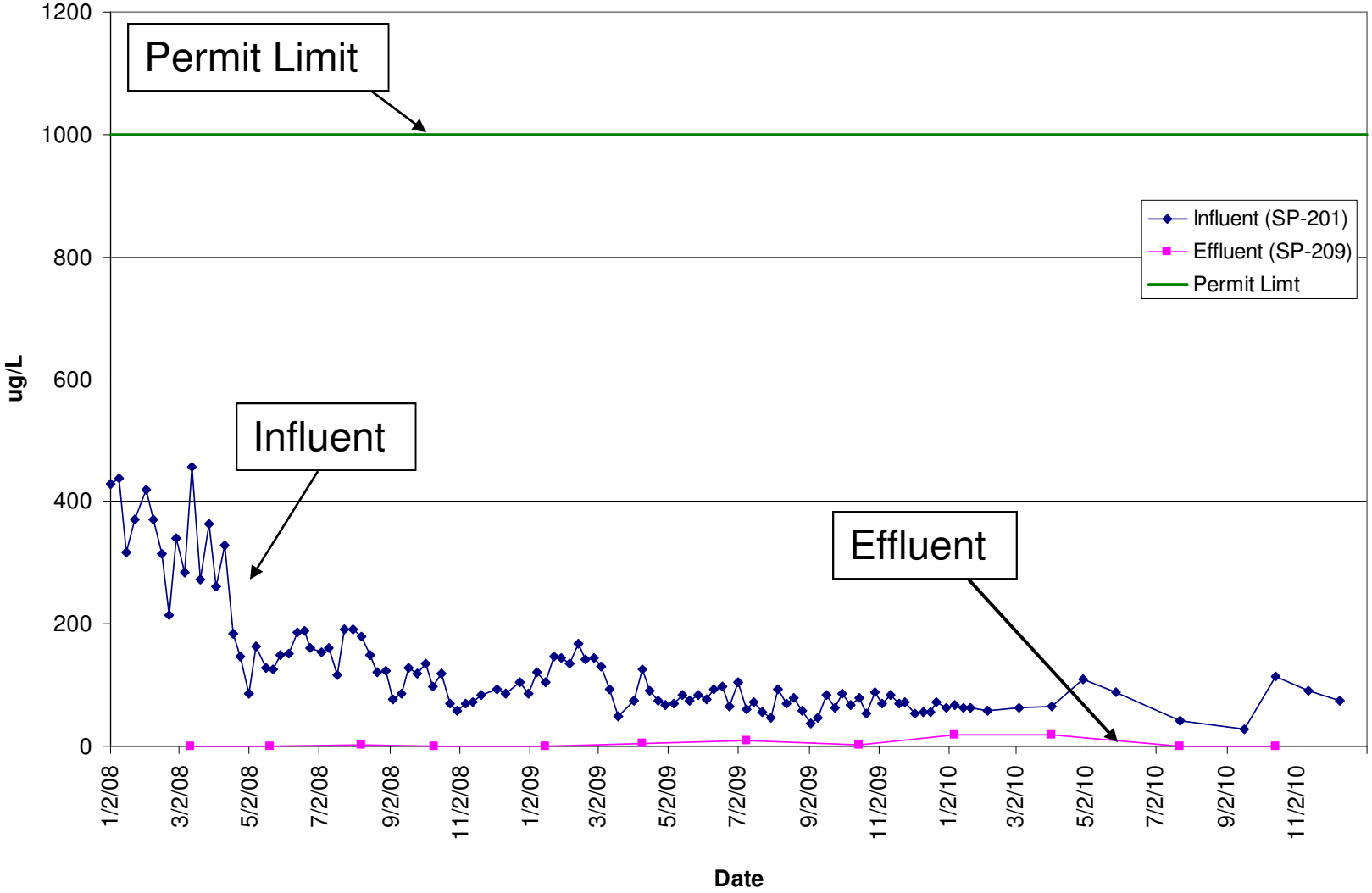


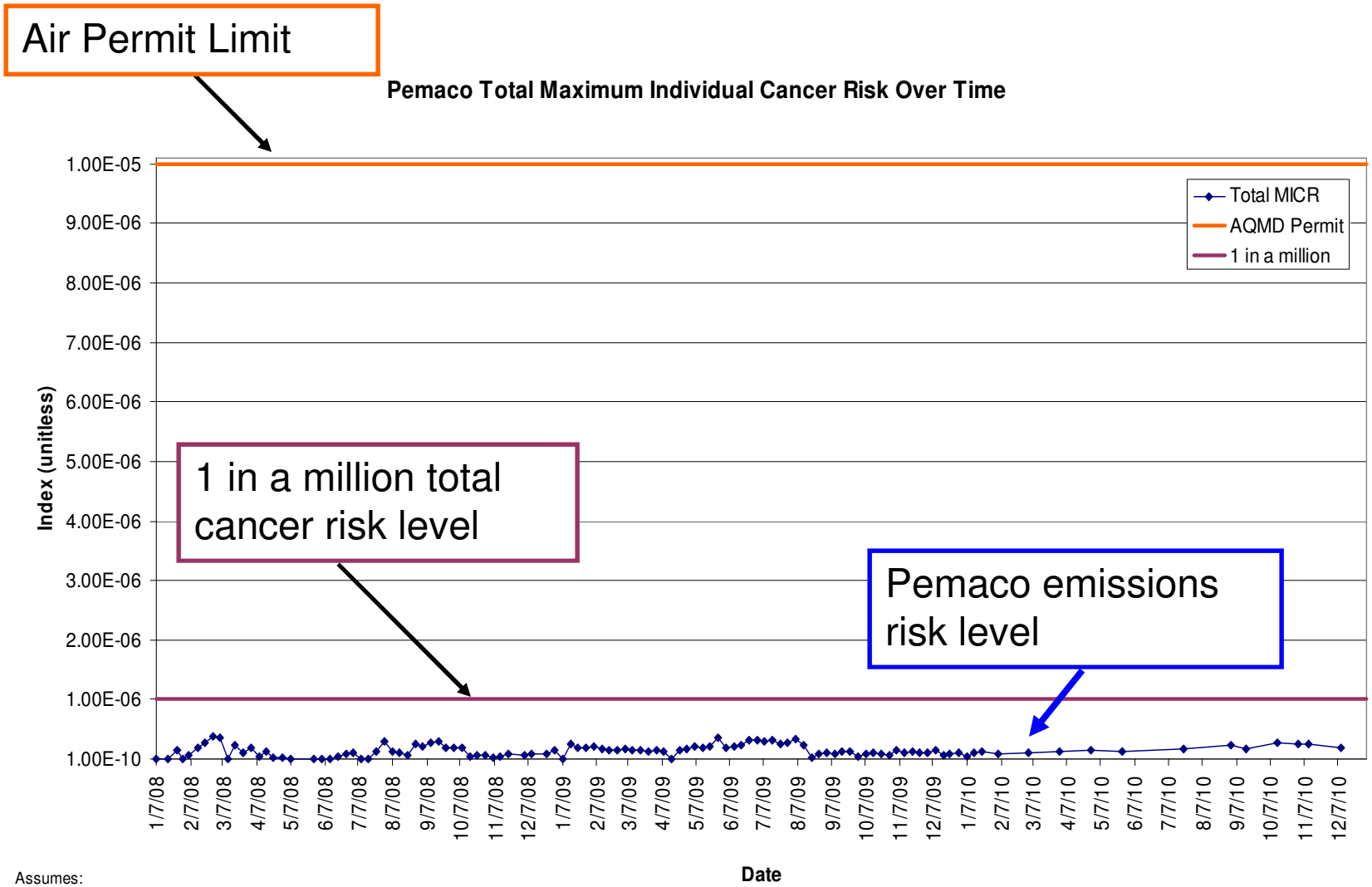
Groundwater Pumped And Treated:

55 Million Gallons Since 2008



Total VOCs in Groundwater Treatment Process



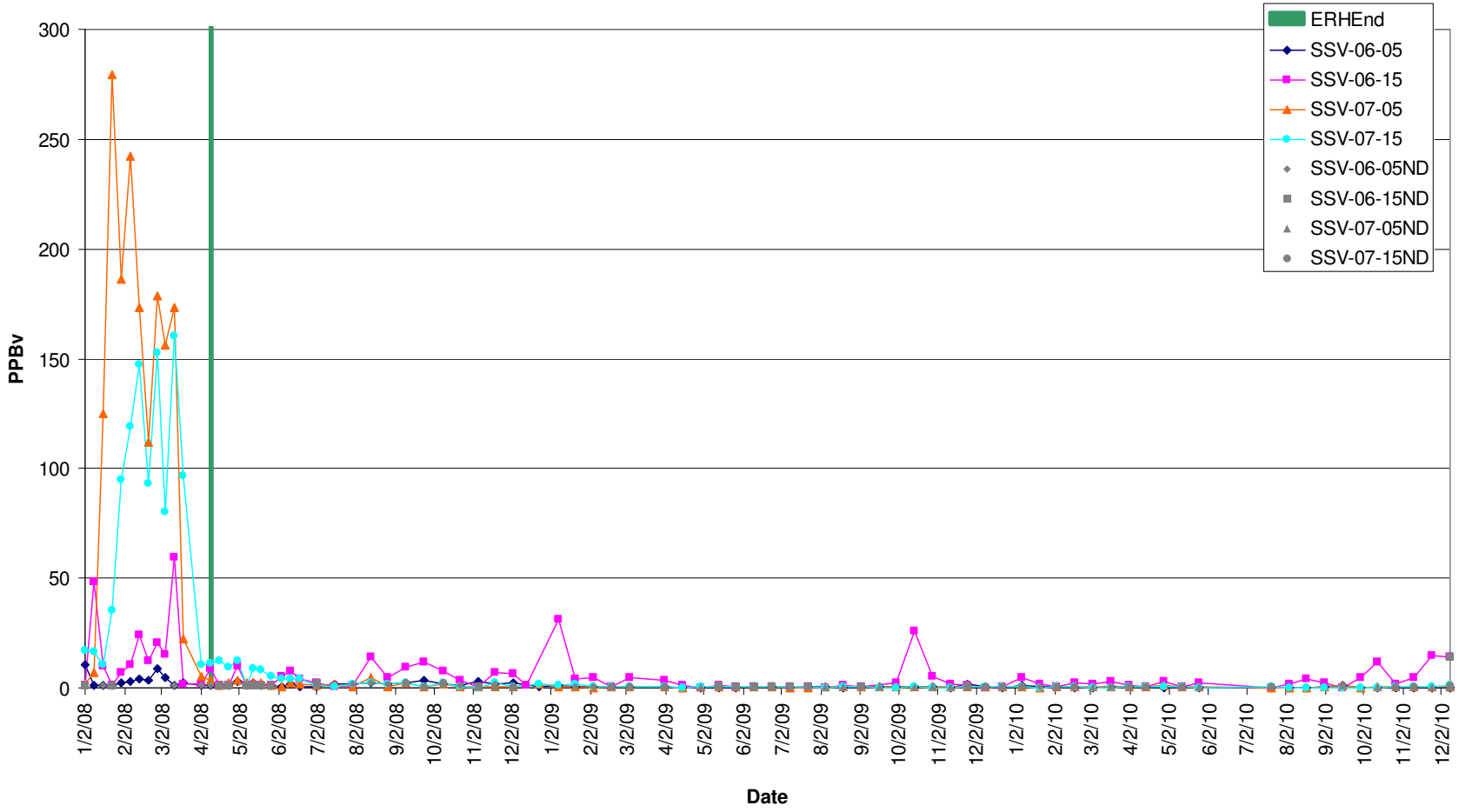


Assumes:
an average flow rate of 626 scfm when actual flow rate not known
nearest receptor approximately 75 meters from stack

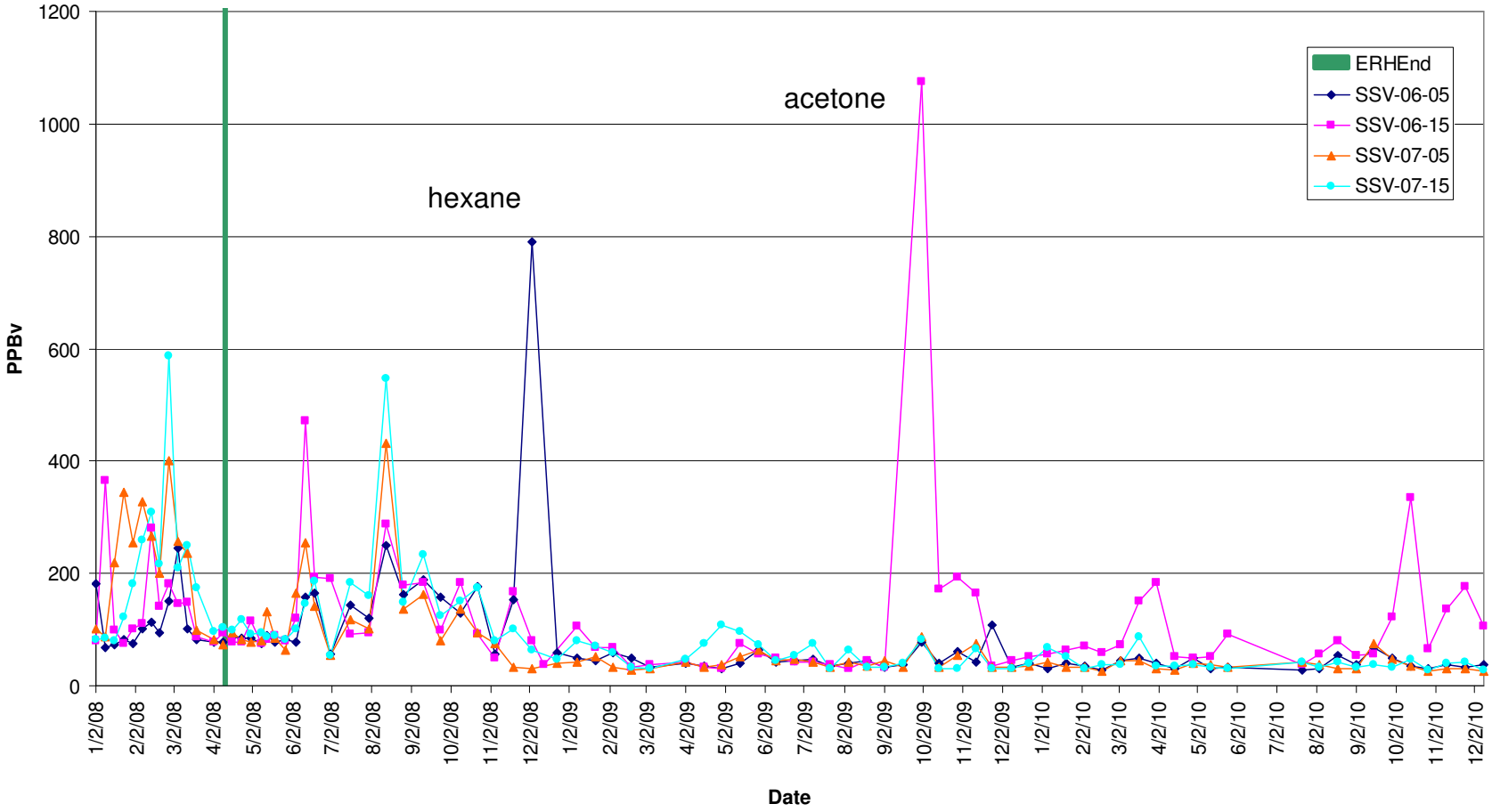
Soil Vapor Concentrations

- What are the soil vapor concentrations in the sentry soil vapor monitoring wells along 59th Street?
  - Trichloroethene (TCE)
  - Total volatile organic compounds (VOCs)

Sentry Soil Vapor Probes – Trichloroethene Concentrations Before and After ERH

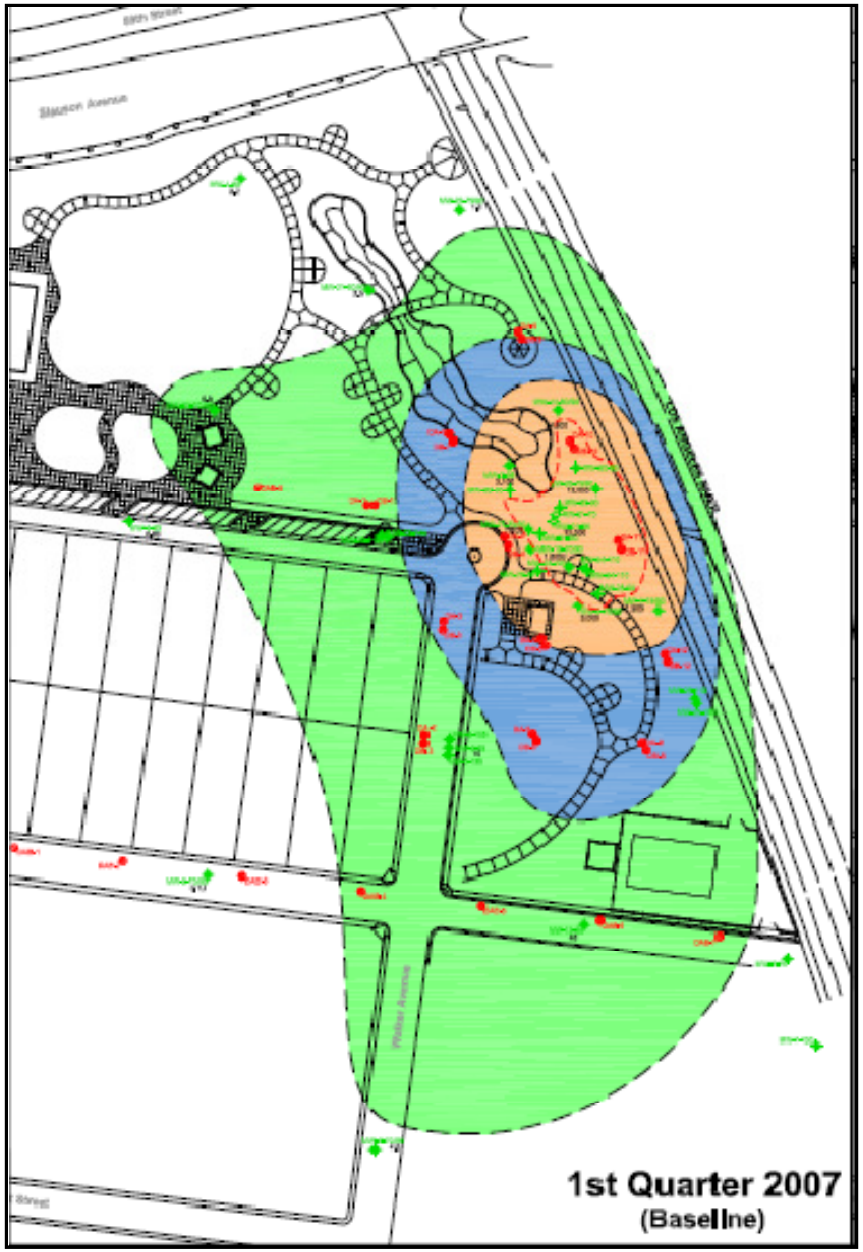


Sentry Soil Vapor Probes – Total VOC Concentrations Before and After ERH

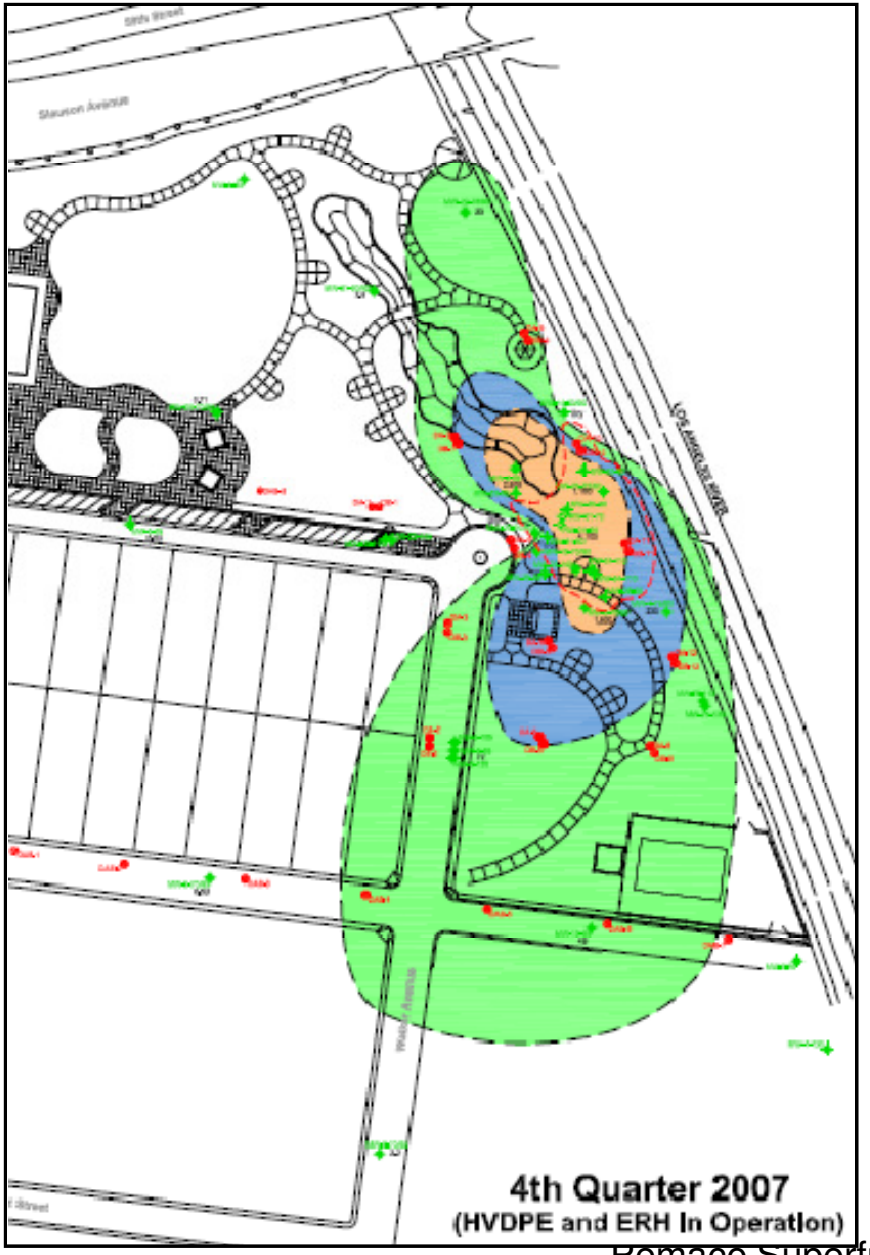


Groundwater Cleanup Progress

- The next few slides present maps showing the extent of the groundwater contaminant plume from pre-remedial action 2007 until late 2010



- TCE in B-Zone Groundwater
- **1st Quarter 2007**
- Baseline before remediation



- TCE in B-Zone Groundwater
- **4th Quarter 2007**
- Remediation started
  - Vacuum Enhanced Groundwater Pumping
  - Electrical resistive heating (ERH)

- TCE in B-Zone Groundwater
- **4th Quarter 2008**
- Vacuum Enhanced Groundwater Pumping
- Electrical resistive heating (ERH) completed

- TCE in B-Zone Groundwater
- **4th Quarter 2009**
- Vacuum Enhanced Groundwater Pumping

- TCE in B-Zone Groundwater
- **4th Quarter 2010**
- Vacuum Enhanced Groundwater Pumping

Conclusions

- Remedial actions at Pemaco have reduced groundwater contamination
- Many areas of the site have met remedial action objectives

- Remedial system operations will continue until all site RAO are met

Questions / Comments

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