

# Groundwater Activities

Community Update Meeting  
for Santa Susana Field Laboratory

November 13, 2014



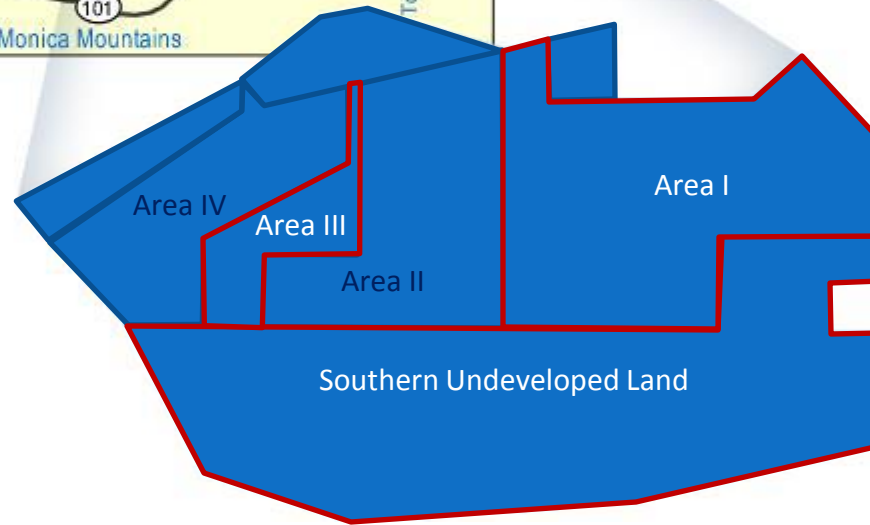
**Department of Toxic Substances Control**

# Groundwater Update

Tonight we' ll discuss...

- Progress made – work completed
- Upcoming work - next 6 months

# Santa Susana Field Laboratory-



# Groundwater Activities

- Groundwater Characterization
- Groundwater Interim Measures
- Chatsworth Formation Treatability Studies
- Ongoing Groundwater Monitoring Program

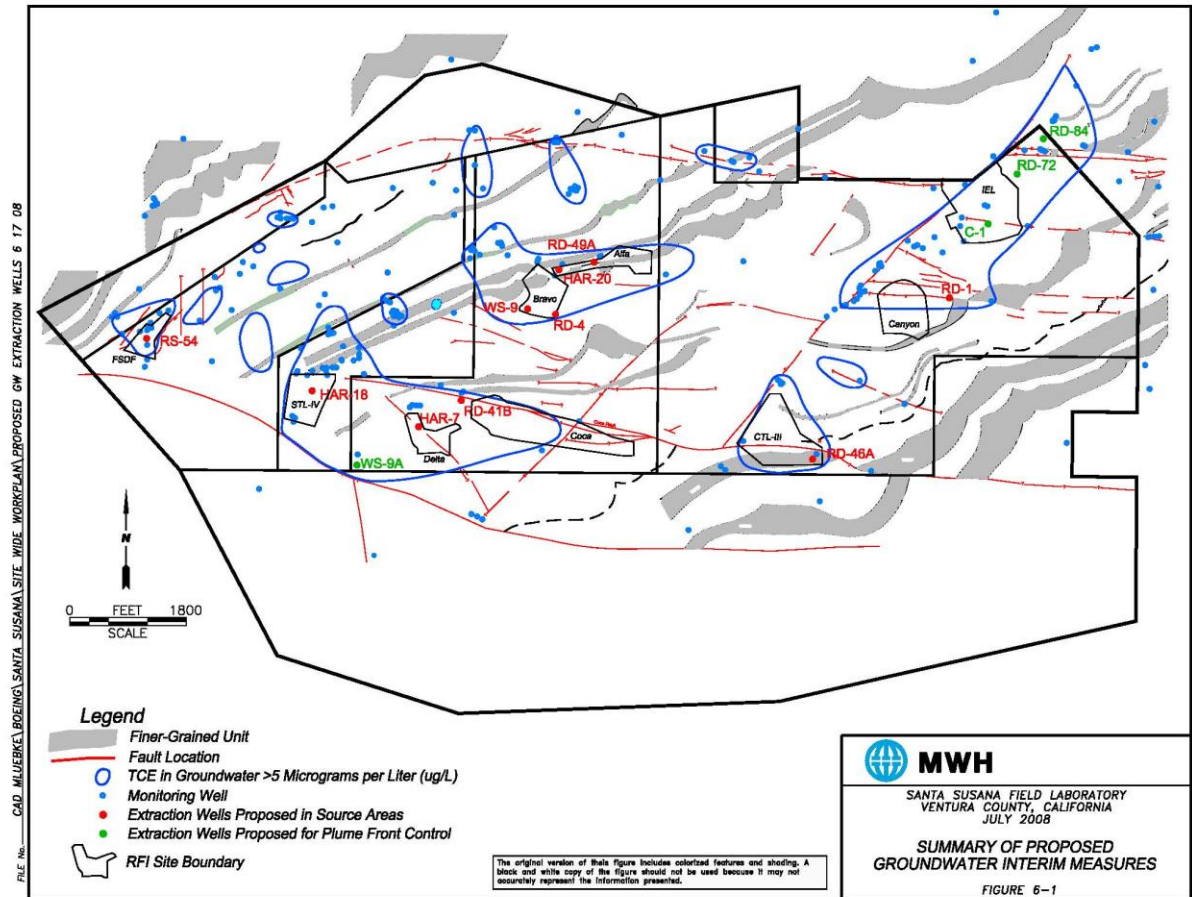
# Groundwater Characterization

The following activities address data gaps identified in the 2009 Sitewide Groundwater Remedial Investigation (RI) Report:

<b>Activity</b>	<b>Status</b>	<b>Documentation</b>
Seeps/Spring Sampling	Field Work Completed	Report due December 2014
Area I and III Fault Investigation	Field Work Completed	Report due 1 <sup>st</sup> Quarter 2015
Source Zone Characterization for sites in Area I and III	Field Work in Progress	Work documented in Site RFI Reports. Reports will be submitted beginning December 2014
Evaluation of Areas of Impacted Groundwater in Area II	2 of 4 Work Plans submitted; Field work in progress	Reports anticipated to be submitted 3 <sup>rd</sup> quarter 2015
Evaluation of Areas of Impacted Groundwater in Area IV	Work Plans in preparation	Work plans to be submitted 1 <sup>st</sup> quarter 2015

# Groundwater Interim Measures

- Objectives: **Source Area Remediation** and **Plume Front Containment**
- Startup in 1<sup>st</sup> quarter 2015
- Source Area Remediation:** ten (10) well locations.  
**Plume Front Containment:** four (4) well locations
- Projected pump rate from all wells is 53 gallons per minute
- Water conveyed via above- and below grade double-contained pipeline to the groundwater extraction treatment system (permitted by Ventura County) and discharged under RWQCB permit.



# Chatsworth Formation

## Treatability Studies

- Bedrock Vapor Extraction Treatability Study
  - Testing Completed
  - Test Results being evaluated
- Biostimulation Laboratory Study
  - Microcosm Study Implemented
- In-Situ Chemical Oxidation (ISCO) Treatability Study
  - Ongoing
- Bench-scale Thermal Desorption Study
  - In development

# Groundwater Monitoring Program

- There are over 450 monitoring wells/piezometers at the site and the area surrounding the site.
- Over 280 monitoring wells/piezometers are monitored quarterly.
- Over 170 monitoring wells/piezometers are sampled routinely either semi-annually or annually.
- Shallow groundwater wells at seeps/springs are being installed around the site.
- Additional wells are being installed and sampled as needed to meet various data quality objectives at the site.



