

# EPA's Radiological Studies

Santa Susana Field Laboratory

Presented by: EPA Region 9

Presented For: SSFL Interagency Workgroup

May 3, 2011



# Tonight's Presentation

- Radiological Background Study
- Radiological Study of Area IV and Northern Buffer Zone
- Key Project Schedule Dates



# Radiological Background Study

Activity	Status
Laboratory Analysis Completion	Done
Issue Data Technical Memorandum	Done
All Data Validation Completion	Done
Issue Draft Report and Accept Public Comments	June 2011
Respond to Public Comments	July 2011
Issue Final Report	August 2011

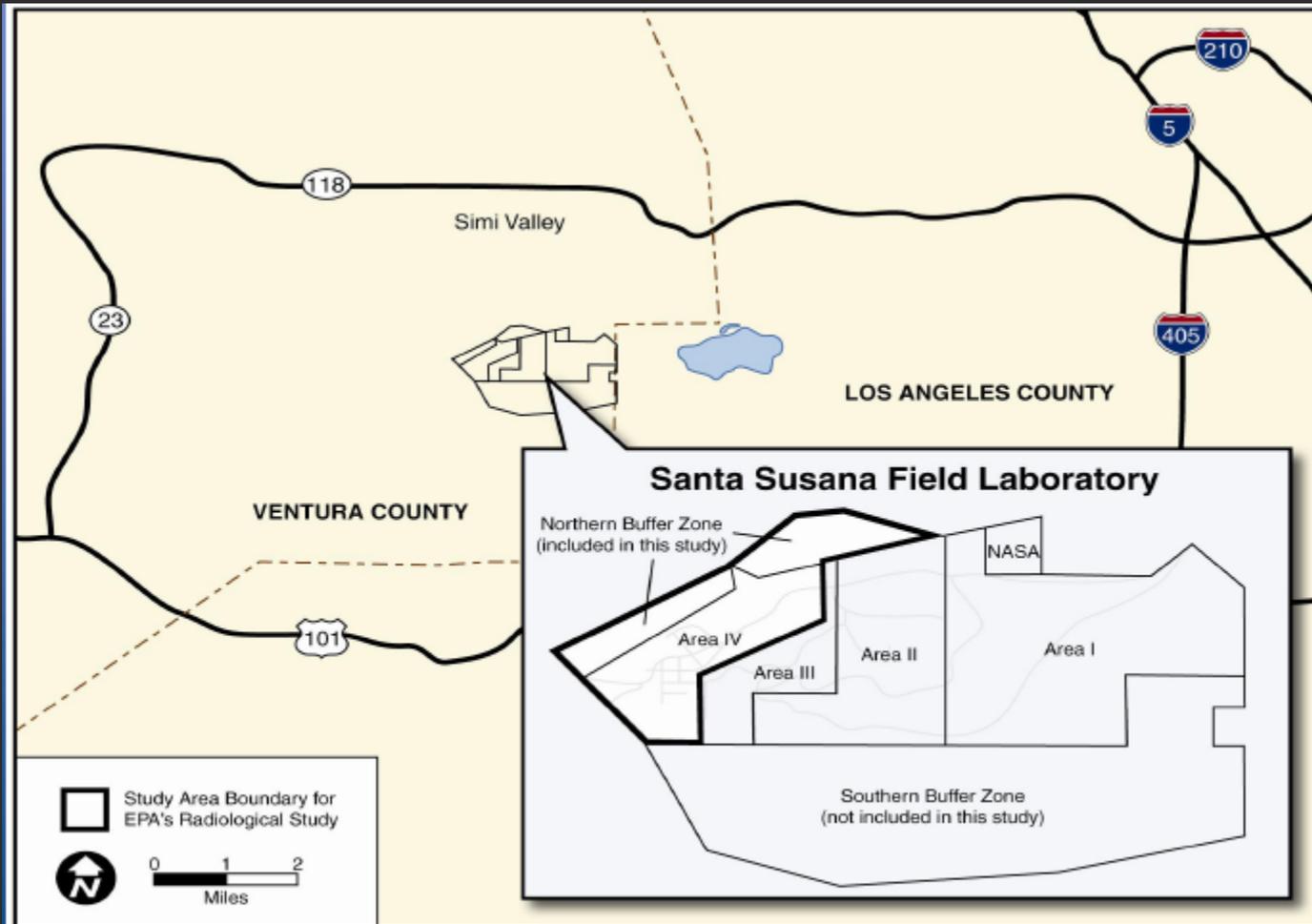
The purpose of the Background Study is to determine the level of “ambient or background” radioactivity found in soil.



# Radiological Study of Area IV and Northern Buffer Zone



# EPA Study Area Boundaries



**Figure 1: Study Area Boundary for EPA's Radiological Study, Santa Susana Field Laboratory**



### Subarea Designation Santa Susana Field Laboratory

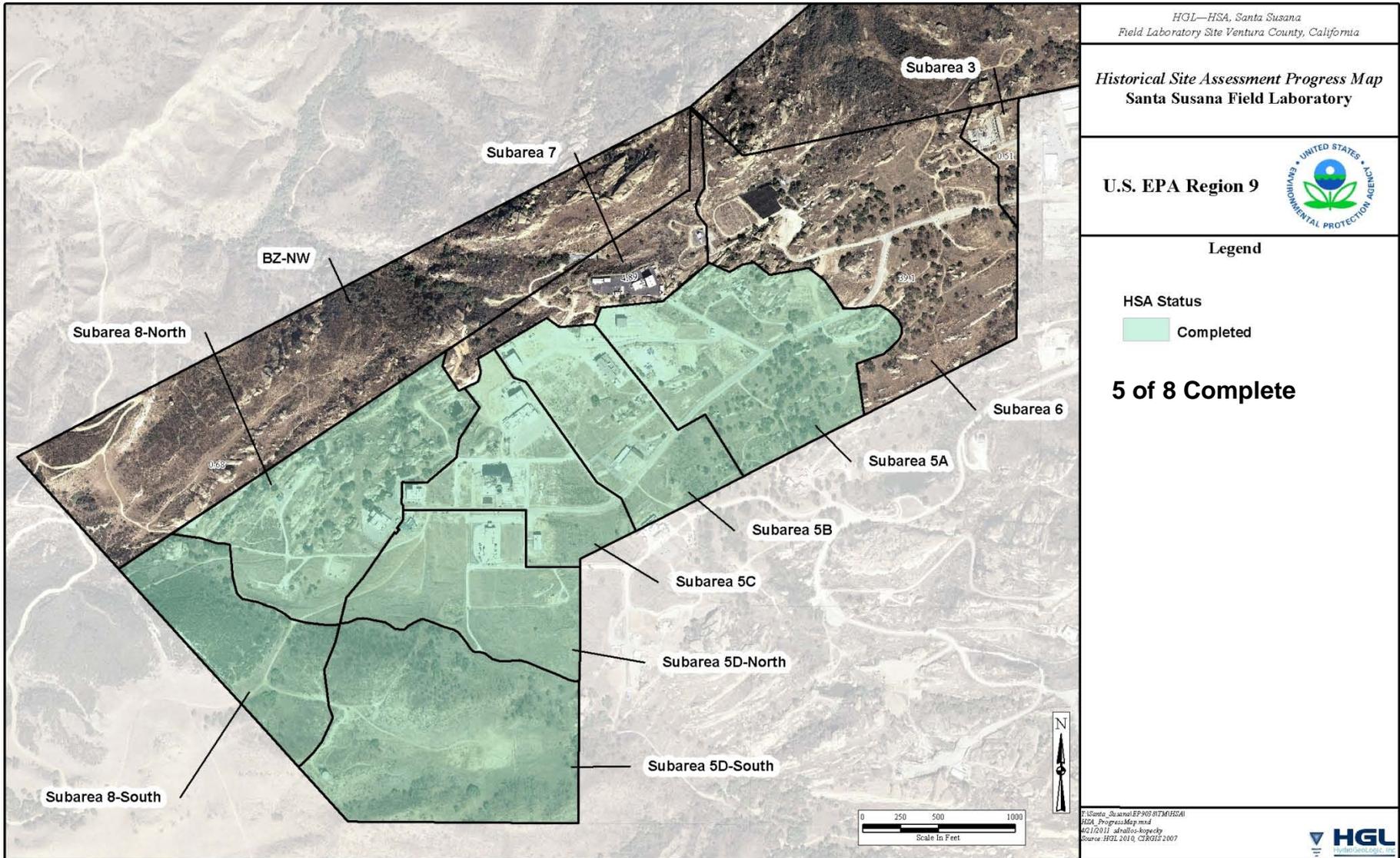
U.S. EPA Region 9

Legend

-  Sub area
-  Area IV & North
- Centerline Roads**
  -  Primary
  -  Secondary
  -  Tertiary



# Historical Site Assessment Memos



# Gamma Scanning Technologies





# Geophysical Surveys

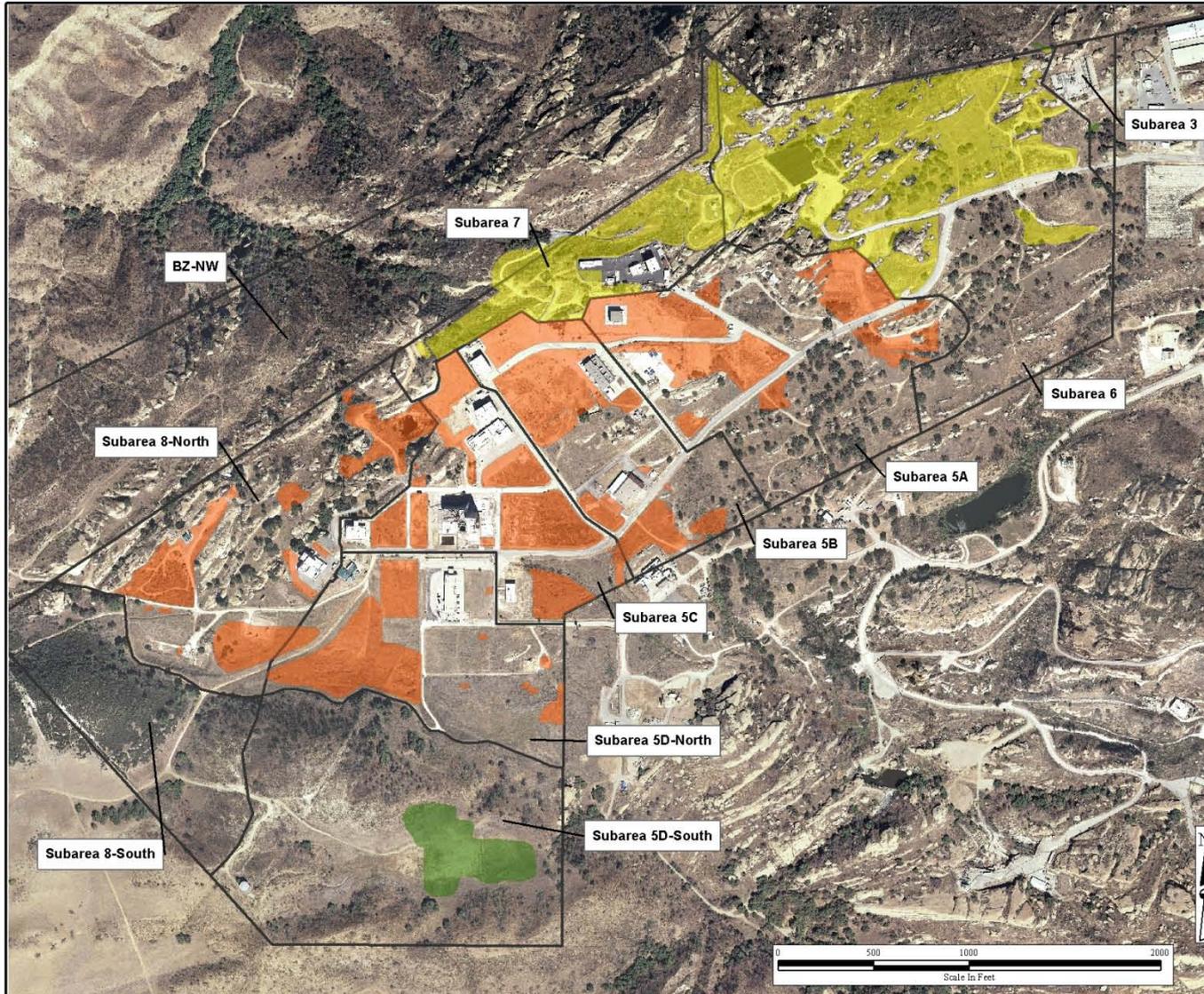


EPA is using three different technologies to find potential buried material



# Geophysical Progress

## April 25, 2011



HGL—SSFL—Ventura County, California

### Geophysical Progress Santa Susana Field Laboratory

U.S. EPA Region 9



#### Legend

##### Geophysical Areas

##### Status

- Completed
- Planned
- In Progress

Geophysical Target Areas Completed: 70 Acres

Updated as of April 25, 2011

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Geophysical\_Progress\_20110426.mxd  
4/26/2011 sdrallo-kopecny  
Source: HGL 2011, CIRGIS 2007, Boeing 2009



# Radiological Soil Testing

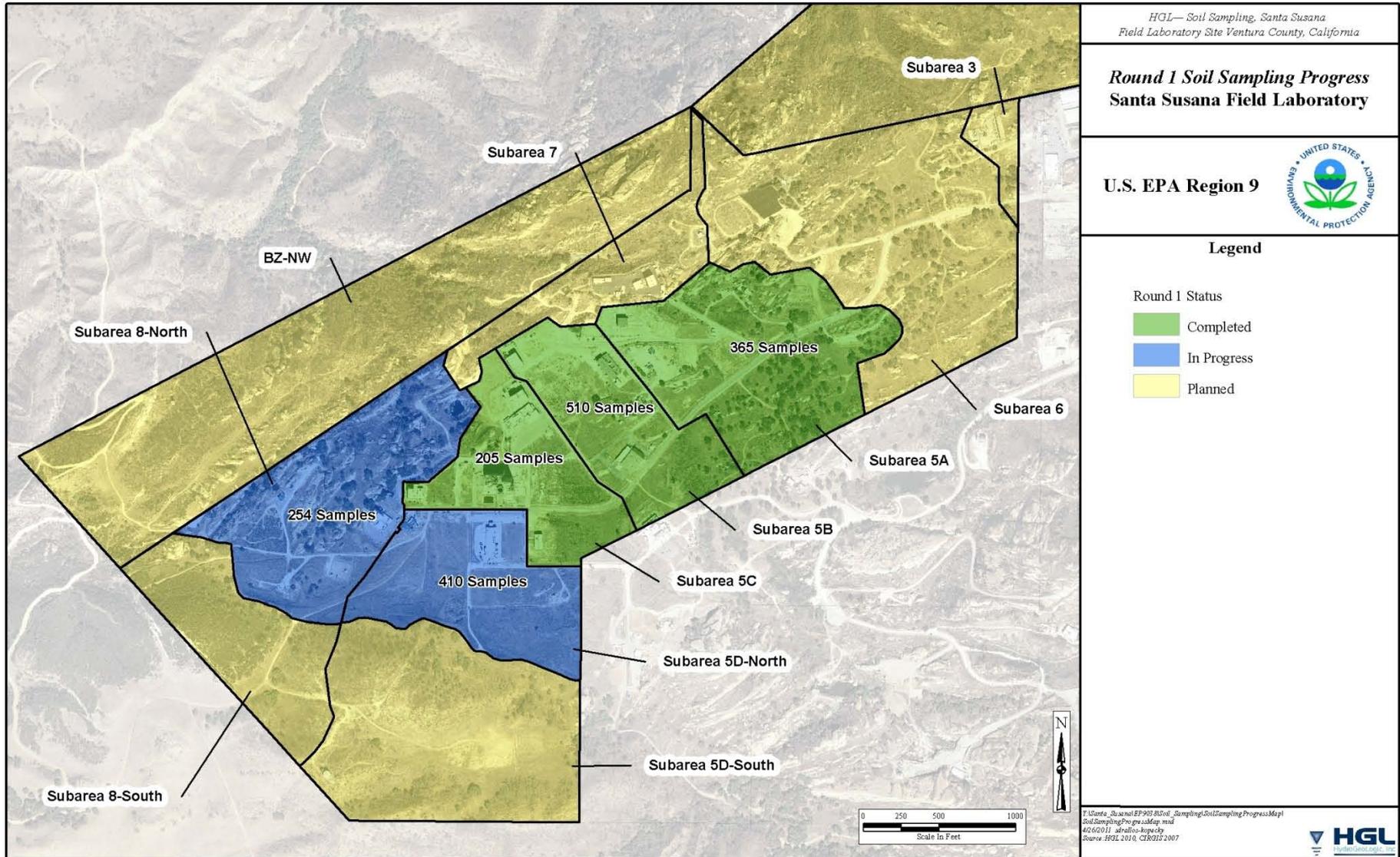
- ▣ EPA is collecting and testing soil at the ground surface and generally 10 feet below ground surface
- ▣ EPA is also collecting DTSC's soil samples for chemical contamination testing
- ▣ 1420 radiological soil samples have been collected to date
- ▣ EPA's data results to start arriving this summer



# Subsurface soil sampling drill rig



# Round 1 Soil Sampling Progress



# Groundwater, Surface Water, Sediment Testing



# Groundwater Testing

- ▣ EPA is testing groundwater in two phases
- ▣ Phase 1 and Phase 2 testing is 99% done
  - 66 wells onsite wells and 14 off-site wells tested
  - Still plan to sample one well in Area II
- ▣ Data being reviewed and validated by EPA
- ▣ Data report out in late Summer 2011



# Sediment Testing

- ▣ EPA is sampling sediment in two phases
- ▣ Phase 1:
  - 40 samples collected inside Area IV and Northern Buffer Zone in December 2010
  - Draft data coming in late May
- ▣ Phase 2:
  - Certain drainages and ponds in Area III and Area II
  - Off-site sediment testing pending Phase 1 test results



# Surface Water & Seep Testing

- ▣ In April 2011, EPA collected 32 surface water samples
- ▣ Data arriving to EPA in late May
- ▣ Data report out in late Summer 2011



# Analytical Laboratory Contracting

- ▣ EPA's primary analytical laboratory will be Test America Laboratory in St. Louis
- ▣ EPA's back-up lab will be selected shortly
- ▣ EPA staff overseeing of all aspects of the laboratory procurement and operational quality
- ▣ Over 200 soil, 40 Sediment and 197 water samples have already be sent to Test America Lab



# Summary of Accomplishments

As of May 3, 2011

- ▣ HSA Tech Memos Completed 5 of 8
- ▣ Acres Gamma Scanned 171 of 405
- ▣ Acres Surveyed by Geophysics 70 of 120
- ▣ Soil Samples Collected 1420
- ▣ Groundwater Samples Collected 165 of 165
- ▣ Surface Water Samples Collected 32 of 32
- ▣ Sediment Samples Collected 40 of 80



# EPA Project Schedule

Task	Start Date	Completion Date
Gamma Scanning	July 2010	December 2011
Ground Water Sampling	August 2010	April 2011
Surface Water & Sediment Sampling	December 2010	September 2011
Soil Sampling	October 2010	March 2012 (?)
Laboratory Analyses	March 2011	June 2012
Data Reports	July 2011	September 2012
<b>EPA Project</b>	<b>May 2010</b>	<b>September 2012</b>

# Questions?

United States Environmental Protection Agency (USEPA)

Mary Aycock

[Aycock.mary@epa.gov](mailto:Aycock.mary@epa.gov)

(415) 271-1253

Craig Cooper

[Cooper.craig@epa.gov](mailto:Cooper.craig@epa.gov)

(415) 972-4148

<http://www.epa.gov/region09/SantaSusana>

