

WELCOME!



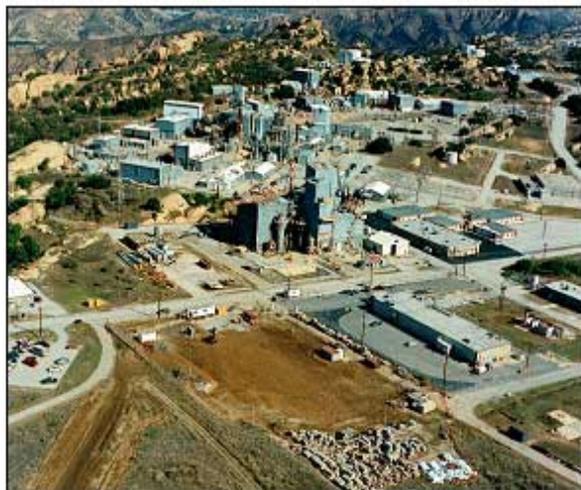
March 22, 2005

U.S. DEPARTMENT OF ENERGY



<http://apps.em.doe.gov/etec>

Restoring the Site



Removing
buildings



Cleaning
groundwater



Cleaning soil



Where we started...

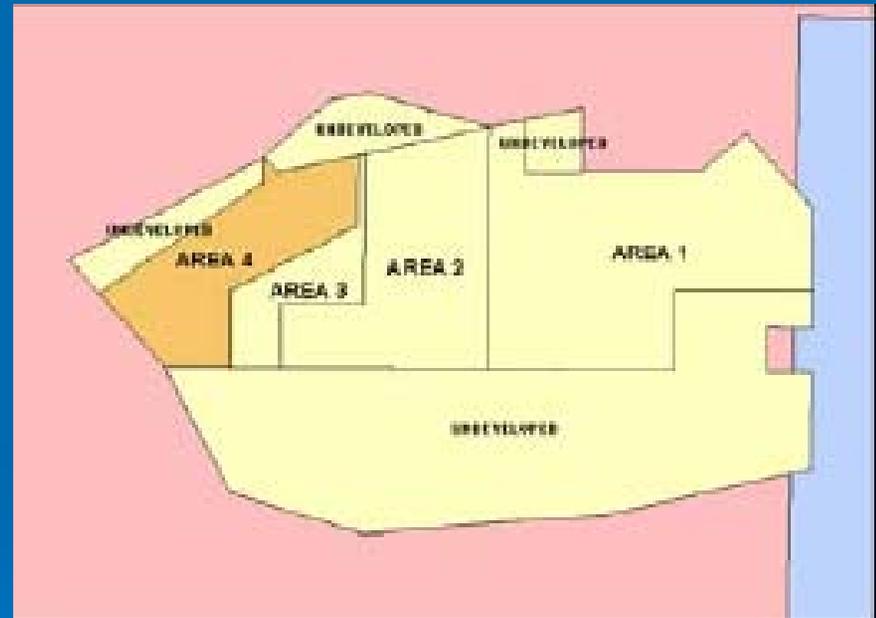
...where we are headed

Why are we completing a historical site assessment now?

- To bring together a comprehensive review of all DOE Radiological Activities
 - A building-by-building historical review to evaluate the need for additional sampling
 - Permanent searchable record that will be on website
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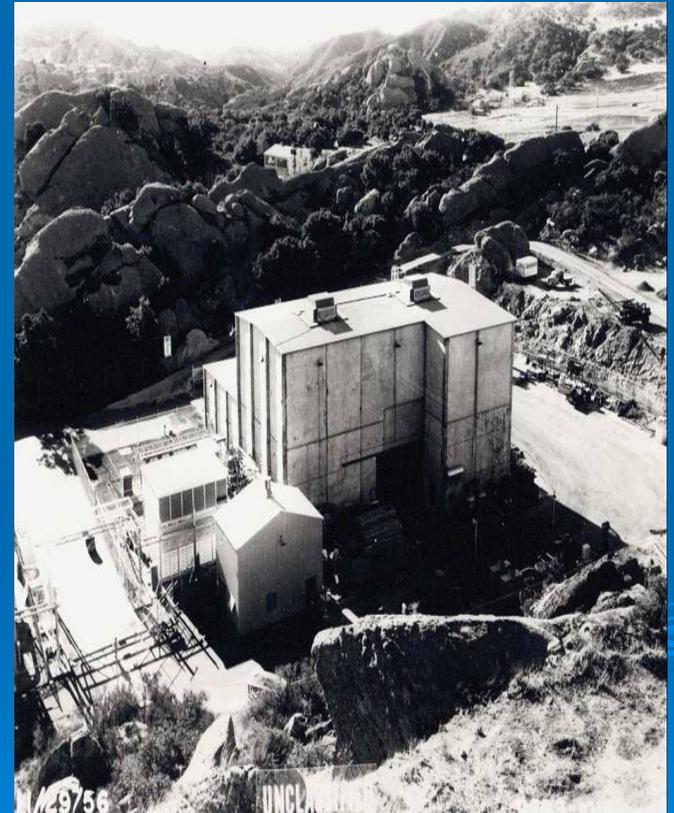
History of Area IV

- Remote site – operations started in the mid-1950's
- Used as research and test facility
- DOE mission changed - site closure started in 1998



Three primary types of operations conducted in Area IV

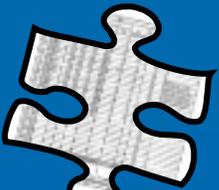
- Development and testing of nuclear reactors
- Reactor program support operations
- Other energy programs and support operation



What is the Area IV Historical Site Assessment (HSA)?

- A documented history of the use of radioactive materials in Area IV
- Expanded to include all numbered structures
 - Past and present
 - Building-by-building evaluation
 - Government and company owned
- Comprehensive review identified 272 sites
 - 270 numbered structures
 - 2 areas of contamination
 - spill location
 - drainage area

What are the steps of the Historical Site Assessment (HSA)?

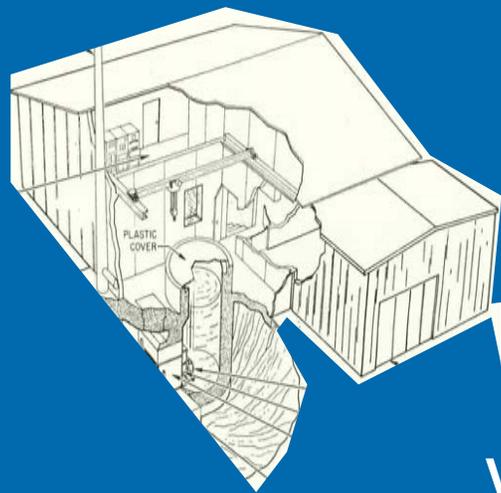
- Identify sites from area maps 
- Investigate operations at that site through:
 - Operation/demolition 
 - Visual examination 
 - Personnel interviews 
 - Radiological surveys 
 - Incident reports 
 - Radiological use authorizations 



Environmental data used in HSA

Source:

Pathways:



Via Stack

Via Building Drains

Via Surface Water Runoff

Via Leaks and Spills

Area 3
Sanitary
Sewer
System

Air

Surface
Soil

Subsurface
soils/
Bedrock

Groundwater

➤ Data collected from 1960's to the present

Site Summaries Include...

- Site Identification
- Operational Use History
- Site Description
- Relevant Site Information
- Radiological Surveys
- Status
- References
- Photographs

Figure 3-3. Example Site Summary

Site Summary – Site 4XXX
Site Identification: <ul style="list-style-type: none">Any name used for the site (site purpose and association changed over time, resulting in several different names). Includes any additional support structures used to service the building not warranting an individual site summary (e.g., substations, guard shacks, time clock structures and construction shacks).
Operational Use/History: <ul style="list-style-type: none">The date the site was constructed, programs the site supported, dates these programs were operating, deactivation/decontamination activities, and demolition date.
Site Description: <ul style="list-style-type: none">A physical description of the site and any holding tanks or other below ground structures, leachfield, or air filter structure (stacks, HEPA filtration) associated with the site.
Relevant Site Information: <ul style="list-style-type: none">Type of radiological material managed at the site, use authorizations, and any incidents that would have resulted in potential releases to the environment.
Radiological Surveys: <ul style="list-style-type: none">Radiological surveys performed at the site, description of survey purpose (routine, characterization, final status, verification), date conducted, agency conducting the survey, survey scope (e.g., interior, exterior), measurements collected, acceptable limits for the survey, and survey results.
Status: <ul style="list-style-type: none">Site release date and releasing agency (if applicable), and demolition date or current use.
References: <ul style="list-style-type: none">Documents, maps, photographs, personnel interviews, review of RSRMS, or any other information used to develop the site summary.
Photograph: <ul style="list-style-type: none">If a photograph of the site was available, it was included in the site summary.

Summary of Area IV HSA findings

272 Sites Identified and Evaluated



177 Sites Non-impacted

95 Sites Impacted



70 Sites No Further Action

25 Sites require additional
sampling

Some questions...

- How did we go from 27 radiological facilities to 95 sites?
- Are there any new ones?
- Any loose ends?



25 Sites Requiring Additional Sampling



RMHF



4019



4023



4024



4028



4030



4093



4100



4363



4583



THANK YOU FOR COMING

DISCUSSION

FOR MORE INFORMATION PLEASE CONTACT

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