Preliminary Options for Addressing DOE’s Purpose and Need

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Then and Now

ETEC in Operation

ETEC in 2005

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Santa Susana Field Laboratory (SSFL)

SSFL is divided into four areas and two buffer zones.
SSFL Land Ownership

Boeing owns

- Area I (671 acres)
- Area III (114 acres)
- Area IV (290 acres)
- North Undeveloped Land (182 acres)
- South Undeveloped Land (1143 acres)

NASA owns

- Area I (42 acres)
- Area II (410 acres)

DOE leases

- 90 acres within Area IV
- Energy Technology Engineering Center (ETEC)

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**EIS Process (High Level)**

- Decision to Prepare EIS
- Notice of Intent (§§1508.22, 1501.7)
  - Scoping (§1501.7)
  - Draft EIS (§1502.9(a)
  - Public Comment (§1503)
  - Final EIS (§1502.9(b))
- Record of Decision (ROD) (§1505.2)
The proposed action and alternatives are built around the purpose and need.

“DOE needs to complete cleanup of Area IV and the Northern Buffer Zone in compliance with regulations, orders and agreements, including the 2007 Consent Order (groundwater) and the 2010 Administrative Order on Consent (soils and debris). The purpose of the project is to remove the remaining structures in Area IV of the SSFL and cleanup the affected environment in a manner that is protective of the environment and the health and safety of the public and Area IV workers.”
Elements Common to All Alternatives

- DOE will use Best Management Practices (BMPs) – like dust control measures, erosion control measures, etc.
- For contamination in drainages, DOE will continue using surface water controls specified under the National Pollutant Discharge Elimination System permit and in compliance with the Resource Conservation and Recovery Act
- Groundwater contamination outside the boundaries of Area IV will be handled separately (that decision-making process is outside the scope to be addressed by this EIS)
- Implementation of any alternative must comply with all environmental laws
Components of Cleanup

• In addition to the actions that will be common to all alternatives, each alternative to be evaluated in the EIS must address six components:
  – Structures and infrastructure
  – Soil
  – Waste disposal
  – Transportation
  – Groundwater
  – Condition of the property at transfer to Boeing
Components of Cleanup

For all six components, this presentation will briefly summarize:

• Objective to be accomplished during cleanup
• Situation – at this point in time
• Considerations that shape our current thinking

And present:

• Possible proposed action (what seems most likely at this stage of the game)
• Possible options for achieving the stated objective
Structures and Infrastructure

- Objective: to remove contaminated above-ground structures, sub-surface structures, infrastructure, debris, concrete slabs, and other man-made materials

- Status
  - Some buildings have not yet been characterized for radiological contamination

- Considerations:
  - Roads, parking lots, and utilities belong to the land owner
  - The AOC does not require removal of non-contaminated infrastructure and building foundations
  - Worker safety
Structures and Infrastructure

- DOE’s proposed action may entail decontamination, demolition, and removal of contaminated above-ground structures, debris, and concrete slabs
- Possible options for addressing structures and infrastructure:
  - Decontamination, demolition, and removal of contaminated above-ground structures, debris, and concrete slabs
  - Removal of uncontaminated concrete slabs
  - Retain uncontaminated structure(s) for historical preservation purposes
  - Other ideas?
Soil Contamination

• Objective: to meet the standards established in the look-up tables (still being developed)
• Status: investigations ongoing, Look-Up tables in development, Soil Treatability Study ongoing
• Considerations:
  – Overall volume not yet known
  – 2010 AOC prohibits on-site landfilling and stabilization
  – Potential impacts on cultural and biological resources
  – Northern drainages pose special challenges for remediation
Soil Contamination

• DOE’s proposed action may entail on-site treatment using proven technologies and excavation in locations where on-site technologies could not accomplish the standards

• Possible options for addressing soil contamination:
  – Excavation (includes off-site transportation and disposal)
  – On-site treatment
  – Combination
  – Other ideas?
Objective: Disposal of excavated materials at appropriate disposal facilities, including
- soil/debris with radiological contamination,
- soil/debris with chemical contamination
- soil/debris with combination of radiological and chemical contamination
- uncontaminated metal
- uncontaminated debris

Status
- Presently unknown quantities of all waste categories
- Some uncontaminated metals may be recyclable
Waste Disposal

• Considerations:
  – All waste will be sent to permitted disposal facilities
  – All waste must meet facility’s waste acceptance criteria
  – Some waste disposal facilities have volume constraints
  – Increasing distance to disposal facilities increases costs and transportation impacts and risks

• DOE’s proposed action possibly may entail selection of disposal sites for each waste category (in consideration of waste acceptance criteria and volume restrictions for each potential disposal site) based on criteria to minimize cost and transportation impacts
Waste Disposal

- Possible options for addressing disposal requirements:
  - for soil/debris with radiological contamination
    - Nevada National Security Site (NV)
    - Energy Solutions (UT)
    - Waste Control Specialists (TX)
  - for soil/debris with combination of radiological and chemical contamination, same choices as above
  - for soil/debris with chemical contamination, a RCRA licensed facility (California or not)
  - uncontaminated metal – metal recycling facilities
  - uncontaminated debris – A California Class 3 Facility
Transportation

• Objective: to transport excavated materials (construction debris and contaminated soils) to disposal sites and transport backfill soil to the site (if appropriate and necessary)

• Status
  – Quantity of soil to be excavated still being developed
  – Quantity of backfill needed to be determined
  – Quantity of on-site borrow available to DOE not presently known
  – Not yet identified source for off-site backfill material
Transportation

- Considerations:
  - Boeing and NASA also conducting cleanup; air emissions from all activities must be considered
  - Safety considerations could limit daily number of trucks

- DOE’s proposed action may entail
  - truck transport down Woolsey Canyon Rd to Valley Circle, to Roscoe, to Topanga Canyon Blvd, to the 118
  - Reverse route to transport off-site fill material
  - Structural improvements to Woolsey Canyon Rd
Transportation

• Possible options for transportation:
  – Truck transport down Woolsey Canyon Rd to Valley Circle, to Roscoe, to Topanga Canyon Blvd, to the 118
  – Truck transport down Woolsey Canyon Rd to Valley Circle, to the 101, and then to selected disposal sites
  – Another road to replace Woolsey Canyon Road (analysis would require consideration of impacts of new road)
  – Truck to rail (where would transfer occur?)
  – Conveyor belt (route, where would transfer occur?)
  – Other ideas?
Groundwater

Objective: Cleanup of groundwater contamination that beneath Area IV to cleanup standards established by the 2007 Consent Order

• Status
  – Investigation is ongoing
  – Treatability Studies are ongoing
  – Investigation is ongoing

• Considerations:
  – There is a Tritium plume in Area IV
  – Strontium has been detected below Area IV
Groundwater

• DOE’s proposed action may entail a combination of remedies as demonstrated effective in the treatability study

• Possible options for addressing groundwater contamination:
  – Pump and treat
  – Soil vapor extraction
  – Chemical injection
  – Natural transformation (monitored)
  – Other ideas?
Condition of Property at Transfer

- **Objective:** To transfer the property after completion of all of the above actions

- **Status**
  - No course of action at this point

- **Considerations:**
  - Boeing is the property owner

- **DOE’s proposed action may entail stabilization in addition to the other actions as required to accomplish the purpose and need**
Condition of Property at Transfer

- Possible options for consideration before transferring the property:
  - No backfilling
  - Backfill for areas of extensive excavation
  - Revegetation
  - Restoration of natural contours
  - Other ideas?