



U.S. DEPARTMENT OF
ENERGY

Savannah River Site

A Presentation to the
Facilities Disposition and Site Remediation Committee
SRS Citizens Advisory Board

Regulatory Strategy for Accelerating Recovery Act Work Scope

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Acronyms

ACP	Area Completion Projects
ARRA	American Reinvestment and Recovery Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
DOE	Department of Energy
EE/CA	Engineering Evaluation / Cost Analysis
EPA	Environmental Protection Agency
FFA	Federal Facility Agreement
FS	Feasibility Study
PP	Proposed Plan
RAIP	Remedial Action Implementation Plan
RI / BRA	Remedial Investigation / Baseline Risk Assessment
ROD	Record of Decision
SCDHEC	South Carolina Department of Health and Environmental Control
SRS	Savannah River Site
VOC	Volatile Organic Compound
WP	Work Plan





Purpose

- To describe the Regulatory Strategy being implemented by the Department of Energy (DOE), the Environmental Protection Agency (EPA), and the South Carolina Department of Health and Environmental Control (SCDHEC) to accelerate cleanup under the Recovery Act





Normal Cleanup Process

- **REMEDIAL** process, outlined in the FFA, with assumed documents as milestones:

- Typically
three
to
five
years
to begin
cleanup
- Pre-Work Plan (WP) characterization and review existing info
 - RI WP
 - Investigation (field data collection)
 - Remedial Investigation / Baseline Risk Assessment (RI/BRA) – identifies problems warranting action
 - FS – evaluation of alternatives
 - PP/ROD
 - RAIP, *then* cleanup action
 - Remedial Action Completion Report (after project completion)





Removal Action

- Lead Agency (DOE) has removal authority under CERCLA
- Removal action is appropriate ***AT ANY TIME*** when:
 - Problem is clear
 - Solution (response action) is straightforward
 - Cleanup objectives are agreeable and verifiable
 - Action will not preclude potential future actions
- Still a ROD to document long-term remedial decision, but not needed prior to action





Removal Action Processes

- **Non-time-critical Removal Action, normally used (>6 months planning)**
 - **Engineering Evaluation / Cost Analysis (EE/CA)**
 - States problem and performs a comparative analysis of two or more response actions
 - 30-Day Public Comment Period
 - Regulators review
 - **Action Memorandum**
 - **Removal Action Report after completion**
- **Time-critical Removal Action, when there is more perceived urgency and a short planning period (<6 months)**
 - **Action Memorandum**
 - **Removal Action Report after completion**





Removal Action Benefits

- Can be planned and implemented quickly
- We do not have to comprehensively investigate and document conditions first
 - RI/BRA and FS not necessary before taking action
- Do not have to set and meet FINAL cleanup goals
 - Do not have to meet all applicable or relevant and appropriate requirements, although SRS removal actions generally do
 - Most American Reinvestment and Recovery Act (ARRA) removals will meet final cleanup goals, “complete remediation”
- Still have regulator and public review
- EPA and SCDHEC support this approach, and are supporting it through project scoping and timely reviews





Example of Acceleration Strategy

D Area Operable Unit

- **Bubble Tower Subunit EE/CA**
 - Deploy passive soil vapor extraction (i.e., MicroBlowers, BaroBalls) to address VOC and petroleum products contamination in the vadose zone
- **Moderator Processing Subunit EE/CA**
 - Construct three additional Thermal Tritium Treatment Cells to remediate concrete slabs and soil
- **Coal Pile Runoff Subunit and D-006 Outfall EE/CA**
 - Excavate sediment contaminated with arsenic and pesticides from the Outfall and consolidate with sediments contaminated with arsenic and metals under a soil cover at the Coal Pile Runoff Basin





Results...

- **Cleanups that will be completed as Removal Actions during the Recovery Act funding period (by 9/30/11):**

Funding Period (by 9/30/2011)	Remedial Action FFA Start
– R-Area Operable Unit	January 2011
– P-Area Operable Unit	August 2010
– D-Area Operable Unit	December 2011
– Heavy Water Components Test Reactor	None
– Gunsite 012	March 2012
– P-Area Ash Basin	October 2012
– R-Area Ash Basin	October 2012





Path Forward

- **Evaluate applicability of EE/CAs for future cleanup actions**
- **Enforceable Milestones acceleration**
 - None for FY 2009
 - For FY 2010, the Three Parties (DOE, EPA, and SCDHEC) will evaluate and decide during FFA Appendix E update

