Savannah River Site
Citizens Advisory Board Meeting

Update on
Savannah River Recovery Act Program

Presented by
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Savannah River Recovery Act Program
U.S. Department of Energy
Savannah River Operations Office
Discussion Topics

- Jobs
- Contracts
- Cost
- Portfolio Planning Update
- Portfolio Overview
- Portfolio Structure
- Scope Summaries
Job collection data will be revised to reflect FTE methodology prescribed by OMB Memo M-10-08 (12/18/2009)

- If a normal full-time schedule is 40 hours a week, multiply 40 hours x 52 weeks = 2,080 Total Hours per year
- Divide 2,080 Total Hours by 4 to equal 520 regular quarterly hours.
- If two full-time employees each worked 520 hours (1,040 hours) for the quarter and another half-time employee worked 260 hours, the Total Hours for the three employees is 1300 (520 + 520 + 260 = 1300).
- Divide 1300 by 520 to equal 2.5 Recovery funded jobs during that quarter.
Contracts

- Savannah River Nuclear Solutions, LLC
  - Total Recovery Act contracts awarded = $266,429,784
    - Total Small Business contracts awarded = $195,088,355
    - Local contracts awarded = $115,100,184
- Savannah River Remediation (SRR)
  - Total Recovery Act contracts awarded = $7,942,285
    - Total Small Business contracts awarded = $6,404,763
    - Local contracts awarded = $5,643,994
Monthly Planned Costs and Actual Costs ($K)

<table>
<thead>
<tr>
<th>Month</th>
<th>Jul-09</th>
<th>Aug-09</th>
<th>Sep-09</th>
<th>Oct-09</th>
<th>Nov-09</th>
<th>Dec-09</th>
<th>Jan-10</th>
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<td>Costs</td>
<td>$91,289</td>
<td>$158,208</td>
<td>$225,612</td>
<td>$283,444</td>
<td>$327,821</td>
<td>$386,170</td>
<td>$463,446</td>
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- **Planned Costs**
- **Actual Costs**
Portfolio Planning Update

- External Independent Review (EIR)
  - Assessed P-Area and R-Area completion baselines (8/10/2009)
  - Corrective Action Plan (CAP) completed/closed-out (12/17/2009)
  - DOE’s Office of Engineering and Construction Management independently validated performance baselines (12/17/2009)

- Independent Project Review (IPR)
  - Addressed balance of SRRAP work baselines (7/27/2009)
  - CAP completed/closed-out (12/17/2009)
  - EM’s Office of Strategic Planning & Analysis independently validated performance baselines (1/6/2010)

- Start of construction/remedial action approved for major projects
- Work continues on general plant projects and EM operations
## Portfolio Breakdown

<table>
<thead>
<tr>
<th>Budget &amp; Reporting Code</th>
<th>Capital Asset Projects</th>
<th>General Plant Projects</th>
<th>Operations &amp; Programs</th>
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**SRRAP GRAND TOTAL ($M)**: 1,615.4
## Portfolio Reporting Structure

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<th>IPABS PBS Levels</th>
<th>Title</th>
<th>Cost ($M)</th>
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TOTAL 1,615.4
SR-0013.R1.1, Solid Waste Disposition

- Dispose of ARRA Generated Sanitary, Hazardous, Mixed and Low Level Waste
- Completion: 9/30/2011
- Cost: $324.5M
- Major Work Activities
  - Newly generated LLW shall not exceed 500 m$^3$ in inventory at any time over a three month rolling average
  - Treat and dispose of all SRS newly generated mixed low level (MLLW) and hazardous waste (HW) to prevent future waste accumulation
  - DU & U packaged for disposition = 9,403 metric tons
  - MLLW disposed = 1,109 cubic meters
  - LLW disposed (legacy and NGW) = 24,554 cubic meters
  - LLW disposed (legacy, NGW and DUO) = 27,781 cubic meters
  - ER and D&D debris and remediated soil disposed (MLLW, LLW, Industrial) = 209,995 cubic meters
  - LLW trenches closed = 5 trenches
  - Drums of DUO shipped offsite = 15,606 drums
SR-0013.R1.2, Accelerated TRU Waste Disposition

- Dispose of 4,200 m³ TRU Waste
- Compliantly Package 800 m³ of TRU Waste in SLB-2’s
- Completion: 12/31/2012
- Cost: $303.6M

**Major Work Activities**
- Dispose of 4,200 m³
- Remediate, repackage and characterize 800 m³ to ensure ready to ship status
SR-0014C.R1.1, Liquid Waste System Recapitalization

- Accelerate Salt Waste Disposition and Sludge Waste Vitrification
- Mechanical Completion: 09/30/2011
- TPC: $200.0M
- Major Work Activities
  - Accelerate connection piping to Salt Waste Processing Facility
  - Expand capacity for salt feed
  - Install infrastructure for salt disposition
  - Increase sludge waste throughput
  - Install infrastructure for faster sludge vitrification
P-Area – Complete Remediation of all 17 Waste Units Within 100 acre Footprint

R-Area - Complete Remediation of all 16 Waste Units Within 120 acre Footprint

Mechanical completion: 9/30/2011

Cost: $165.5M

Major Work Activities

- P Area Cask Car railroad tracks remedial action
- Potential Source Area (PSA) 3A and 3B remedial action
- Process sewer lines
- P007 outfall remedial action
- Groundwater remedial action
- R Area Cask Car railroad tracks remedial action
- Area North of 105-R, Process sewer lines
- Batch plant operations and maintenance
- Development of the regulatory documentation required for P and R Area is also included
SR-0030.R1.2, P-Reactor Decommissioning Project

- *In Situ* decommissioning of reactor building
- Mechanical completion: 9/30/2011
- CD-4 Approval: 1/31/2012
- TPC: $142.2M
- Major Work Activities
  - 105-P Reactor Building
    - Encapsulation of structures, systems & components
      - Grout all below grade spaces
      - Grout reactor vessel
      - Grout disassembly basin
    - Seal all accesses to building
    - Modify roof structures to promote rainwater run-off and minimize water infiltration
  - Remove ventilation stack
  - Install concrete cap over disassembly basin area

Savannah River Site
SR-0030.R1.3, P-Area Ash Basin Remedial Action Project

- *In Situ* closure of residual contamination
- CD-4 Approval: 9/30/2011
- TPC: $30.0M
- Major Work Activities
  - Remove existing vegetation
  - Consolidate remaining ash from areas outside proposed cover boundary
  - Install soil cover (protect against exposure to ash)
  - Install vegetative layer over cover
SR-0030.R1.4, R-Reactor Decommissioning Project

- **In Situ** decommissioning of reactor building
- Mechanical completion: 9/30/2011
- CD-4 Approval: 1/31/2012
- TPC: $149.3M
- Major Work Activities
  - 105-R Reactor Building
    - Encapsulation of structures, systems & components
      - Grout all below grade spaces
      - Grout reactor vessel
      - Grout disassembly basin
    - Seal all accesses to building
    - Modify roof structures to promote rainwater run-off and minimize water infiltration
  - Remove ventilation stack
  - Install concrete cap over disassembly basin area
SR-0030.R1.5, R-Area Ash Basin Remedial Action Project

- **In Situ** closure of residual contamination
- CD-4 Approval: 9/30/2011
- TPC: $11.8M

**Major Work Activities**
- Remove existing vegetation
- Consolidate remaining ash from areas outside proposed cover boundary
- Install soil cover (protect against exposure to ash)
- Install vegetative layer over cover
Remediation activities in M & D Areas, resulting in closure for the M Area

- Mechanical completion: 9/30/2011
- Cost: $17.3M

**Major Work Activities**

- Complete the remediation and closure of M Area including 19 waste units and 45 acres of contaminated soil
- Remove known sources to a 1,500 acre groundwater plume
- Complete remediation of 11 D Area waste units and an estimated 65,100 cubic yards of tritium contaminated soils and concrete
Environmental restoration and deactivation and decommissioning activities site wide

- Mechanical completion: 9/30/2011
- Cost: $226.5M

Major Work Activities

- Pre-characterization of four A Area waste units
- Remediation and D&D of SATA, and the soil remediation associated with the consolidation of SATA to ATTA
- Includes RCRA/CERCLA/FFA compliance, post-closure/post-ROD care and maintenance, operations of soil and groundwater remedial systems and remedial technology development and deployment
- D&D of the K Area Cooling Tower
- Completion of the D&D Basis of interim operation and deactivation project plan for 235-F and 293-F stack height reduction
Places the HWCTR in its final end state, which is in situ decommissioning

- Mechanical completion: 9/30/2011
- CD-4 Approval: 3/31/2010
- TPC: $10.7M

**Major Work Activities**

- Removal /Disposition of the metal dome
- Removal/disposition of the reactor vessel
- Removal/disposition of the two steam generators
- Grouting the spent fuel pool
- Grouting the below grade areas of the building (remaining piping and equipment grouted in-situ)
- Placing a concrete cover over the remaining grouted structure