Federal Facility Agreement
Appendix E

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Department of Energy - Savannah River
Facility Disposition & Site Remediation Committee
July 26, 2016
• **Provide information discussed in responses to Citizens Advisory Board Recommendation #279, Federal Facility Agreement Update Provided Annually**
  — Information briefing on Revision 1 Fiscal Year 2016 Appendix E Submittal

• **Meet Citizens Advisory Board Facilities Disposition and Site Remediation Committee Annual Work Plan Commitment**
Federal Facility Agreement Appendix E

- Provides a lifecycle list of cleanup milestones for Savannah River Site Waste Sites
  - Made up of Appendices E.1, E.2, and E.3
    - Appendix E.1 contains Enforceable Milestones for the current Fiscal Year + 1
    - Appendix E.2 contains Enforceable Milestones for current Fiscal Year + 2
    - Appendix E.3 contains Planning Milestones for current Fiscal Year + 3 and beyond

- Department of Energy updates Appendix E annually and submits for approval to South Carolina Department of Health and Environmental Control and Environmental Protection Agency – Region 4 in November.
Documents

• Remedial Investigation Work Plan
  – Plan used as the basis to determine the extent of contamination

• Remedial Investigation Report with Baseline Risk Assessment
  – An assessment of the nature and extent of contamination and the associated health and environmental risks

• Feasibility Study
  – Development and analysis of the range of cleanup alternatives for the unit
Documents (cont.)

• Proposed Plan
  – Identifies the remedial alternative preferred by Department of Energy, South Carolina Department of Health and Environmental Control, and Environmental Protection Agency for the unit, and allows for public comment
    • 30 days Comprehensive Environmental Response, Compensation and Liability Act only
    • 45 days for Resource Conservation and Recovery Act/Comprehensive Environmental Response, Compensation and Liability Act

• Record of Decision
  – The official report documenting the chosen remedy and why it was selected, after consideration of public comments

• Remedial Action Implementation Plan
  – Plan describing how the selected remedy for the unit will be done: design summary, construction & operation, maintenance, land use controls
Work Activities

• “Field Start” – beginning of remedial investigation (typically sampling or well construction) after approval of RI Work Plan
• Remedial Action Start – beginning of construction or site preparation activities after approval of RA Implementation Plan

For liquid waste tanks

• “Complete Operational Closure” – isolated and filled with grout, in accordance with Industrial Wastewater Closure Module
• “Complete Bulk Waste Removal Efforts” -- completing efforts to remove bulk (most) of the waste (incl. salt cake, sludge solids, and contaminated liquids) from a tank, leaving only a residual heel
Major Changes

Five-Year Remedy Review

- The review of remedies every five years to ensure their continued protectiveness and effectiveness is required by CERCLA, whenever the remedy (cleanup) results in hazardous substances remaining at levels that do not allow unrestricted/residential use.
- Last comprehensive five-year review was issued in January 2014
  - 52 remedies reviewed; over 2,000 pages
- DOE, SCDHEC, and EPA agreed to divide the remedies into five groups/types, and review one group per year, to make reviews more manageable.
- This year’s Appendix E is the first to incorporate milestone dates for the phased remedy reviews:

<table>
<thead>
<tr>
<th>Milestone</th>
<th>Revision 0 Submittal Date</th>
<th>Issuance Date</th>
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<tbody>
<tr>
<td>Fifth Five-Year Remedy Review Report for Savannah River Site Operable Units with Groundwater Remedies</td>
<td>December 22, 2015 (Actual)</td>
<td>February 5, 2017</td>
</tr>
<tr>
<td>Fifth Five-Year Remedy Review Report for Savannah River Site Operable Units with Compacted Clay Cover Systems</td>
<td>December 20, 2016</td>
<td>February 7, 2018</td>
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<tr>
<td>Fifth Five-Year Remedy Review Report for Savannah River Site Operable Units with Geosynthetic or Stabilization / Solidification Cover Systems</td>
<td>December 21, 2016</td>
<td>February 7, 2018</td>
</tr>
<tr>
<td>Fifth Five-Year Remedy Review Report for Savannah River Site Operable Units with Operating Equipment</td>
<td>December 21, 2017</td>
<td>February 7, 2019</td>
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</table>
An implementation schedule for the G-Area Oil Seepage Basin (761-13G) Operable Unit was agreed upon by the U. S. Environmental Protection Agency and the South Carolina Department of Health and Environmental Control.

<table>
<thead>
<tr>
<th>Milestone</th>
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<tbody>
<tr>
<td>Field Start (Characterization)</td>
<td>September 30, 2016</td>
</tr>
<tr>
<td>RCRA Facility Investigation / Remedial Investigation Report with Baseline Risk Assessment and Corrective Measures Study / Feasibility Study (Revision 0)</td>
<td>September 29, 2017</td>
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<tr>
<td>Statement of Basis / Proposed Plan (Revision 0)</td>
<td>June 11, 2018</td>
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<td>Record of Decision (Revision 0)</td>
<td>January 28, 2019</td>
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<td>Issue Record of Decision</td>
<td>September 30, 2019</td>
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<tr>
<td>Remedial Action Start</td>
<td>September 30, 2020</td>
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Other Key Milestones
FY 2017-2018

• D-Area Operable Unit
  • 488-1D Ash Basin Removal Action Start 10/2016
  • Early Action Statement of Basis/Proposed Plan 2/2018

• Wetland Area at Dunbarton Bay
  • Issue Record of Decision 6/2017
  • Remedial Action Start 9/2018

• Lower Three Runs Integrator Operable Unit
  • Remedial Investigation Report w/ Baseline Risk Assessment 7/2017

• Liquid Waste Tanks
  • Complete Bulk Waste Removal Efforts for 3 Tanks 9/2017
  • Complete Operational Closure of 2 Tanks 9/2017
The South Carolina Department of Health and Environmental Control and U. S. Environmental Protection Agency conditionally approved the Revision 1 Appendix E for Fiscal Year 2016 on February 22, 2016 and March 2, 2106, respectively. The conditions are:

- Report on the outcome of efforts to explore options for the disposition of heavy water stored in the C Reactor Building – August 30, 2016

- Schedule a meeting to discuss the use of the C Reactor Building for national training and technical exercises with respect to the Early Action Record of Decision for In-Situ Disposition – September 30, 2016
• Submit Revision.0 D-Area Ash Basin (488-1D) Removal Site Evaluation Report/Engineering Evaluation/Cost Analysis to the South Carolina Department of Health and Environmental Control and Environmental Protection Agency - February 24, 2016 (actual)
  – Projected to be made available for a 30-day public comment period, starting in May 2016
The Federal Facility Agreement and Supporting Documentation, including Federal Facility Annual Progress Report for Fiscal Year 2015, Land Use Control Assurance Plan, Savannah River Site Community Involvement Plan, etc. is available online at:

http://www.srs.gov/general/programs/soil/ffa/ffa.html

– The Federal Facility Agreement for the Savannah River Site is available at

Questions and Answers

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