Citizens Advisory Board Briefing
Salt Disposal Unit (SDU) 2 Status

Mark Schmitz
07/26/2010
Current and Future Salt Disposal Units

Note: Not to Scale - Figure presents the anticipated FDC locations, numbered disposal units are per existing construction & Geotechnical Investigation Report K-ESR-Z-00002.

SRR-ORG-2010-00025, Rev. 2
Requirements

- SCDHEC Saltstone Disposal Facility Permit
  - Water-tight tank using engineered containment system

- Consent Order of Dismissal
  - Water-tight design to prevent infiltration during waste emplacement and limit infiltration after closure

- Performance Assessment
  - Models 8” of Type V water-tight concrete for radionuclide/chemical transport
• SDU 2A and 2B are in the construction phase with initial acceptance testing currently in progress.

• As a result of hydrostatic testing with dye, SDU 2A and 2B have not demonstrated water-tightness to date.

• Engineering pathforward, recovery schedule, and cost are under development.
Dampness at Floor Mud Mat Seam
Actions

- **Focused Management Attention**
  - Issue Meetings, War Room

- **Resource Augmentation**
  - Project Director Realignment
  - Additional Project Manager War Room Leadership
  - Corporate Reachback Support

- **Engineered Improvements Team**
  - Evaluation with Recommendation to Senior Management and DOE-SR by 7/31/2010
  - Necessary Project changes Implemented
Disposal Unit 2B Water Tightness Test

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- Type V Concrete Vault Wall
- Steel Diaphragm
- Epoxy
- Post Tension Steel Wire
- Waterstop Greenstreak #700
- Ruberlite F5013 Pad
- Shotcrete
- E-Bond 1717 Epoxy
- Injecto Tube

- Vault Water
- Sulfate Resistant Coating
- Pathway
- CANT Strip Typ. 2 Locations
- Anchor Bolt
- Tank Floor
- HDPE Layer
- GCL Layer
- Upper Mud Mat
- Lower Mud Mat
- Lockstop Mastic Waterstop
- 40 Duroshore Bearing Pad

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Summary

• Engineering Pathforward is under development
• A water-tight unit will be produced
• Expect to meet operational need date of October 2011
• Lessons Learned will be applied to future units
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<tr>
<td>DOE-SR</td>
<td>Department of Energy, Savannah River</td>
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<tr>
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<tr>
<td>SCDHEC</td>
<td>South Carolina, Department of Health and Environmental Control</td>
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<tr>
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