



Savannah River  
Remediation

*We do the right thing.*

# Nuclear Regulatory Commission Staff Salt Disposal Unit (SDU) 2 Status

Mark Schmitz

07/28/2010



## Chronological Perspective

	2B	2A
Initiate fill with domestic water for hydrostatic testing	4-Apr	24-May
Initial indications of damp spots	8-Apr	8-Jun
Subcontractor initiates intrusive investigation of source of water	14-Apr	8-Jun
Subcontractor submits dye test procedure*	30-Apr	30-Apr
Subcontractor initiates dye test	30-Apr	29-Jun
Rhodamine Dye detected	10-May	4-Jul
External repairs initiated	14-May	15-Jun
Initiated filling for 2nd dye test	1-Jul	TBD
Fluorescence Dye detected	12-Jul	TBD

\* Procedure applicable to both cells

## Current Status

### • Cell 2A

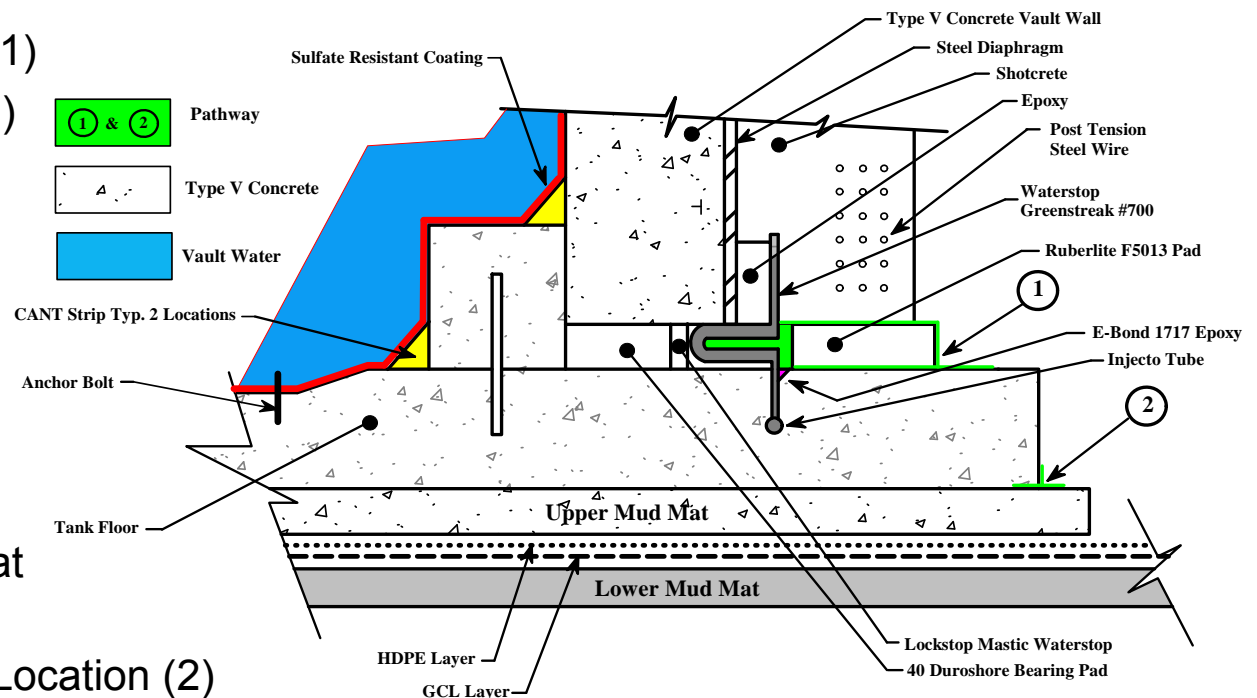
Undergoing internal assessment, 1<sup>st</sup>  
Water Tightness Test

- Two spots, Location (1)
- One spot, Location (2)

### • Cell 2B

Undergoing drain down,  
2<sup>nd</sup> round of Testing.

- Resolved 19+ Spots at Location (1)
- Two spots remain at Location (2)



## Corrective Action Activities to Date:

- Internal

### Both 2A and 2B

- Coatings have been inspected by both the coatings installer and the coating manufacturer using combination of visual, soundings, and magnifying devices.
- Coatings flaws associated with installation.
- Rework activities initiated to remove inadequate coatings and reinstall under direct oversight of the coating manufacturer.
- More flexible CIM 1000 used in sensitive areas such as the curb and around anchor bolt locations.

### Corrective Action Activities to Date:

- External (Location 1)

#### 2B Inspection Only

- Inspection found deficiencies with the waterstop (Snakebite) and epoxy injection tubes.

#### Both 2A and 2B Repairs

- Shotcrete has been removed to expose potential leak sites.
- Suspect epoxy injection tubes have been repaired.
- Waterstop has been repaired.
- 2B repairs were confirmed with second hydrostatic test.
- 2A repairs will be assessed with second hydrostatic test.

## Remaining Corrective Actions:

- External (Location 2)

### Both 2A and 2B

- Both 2A and 2B display evidence of dye on the cell floor – upper mud mat interface.
- SRR Engineered Improvements Team formed to evaluate potential corrective actions for 2A and 2B to address stakeholder concerns with the conditions observed at the cell floor – upper mud mat interface.
  - Recommendations will be provided to the Department of Energy August 2010.



# Disposal Unit 2 Status Update

**SRR-CWDA-2010-00099**



- Focused Management Attention
  - Issue Meetings, War Room
- Resource Augmentation
  - Project Director Realignment
  - Additional Project Manager War Room Leadership
  - Corporate Reachback Support
- SRR Engineered Improvements Team
  - PA, DHEC permit, and consent order requirements are represented
  - Objective is to evaluate solutions that meet expectations of stakeholders
  - Evaluation with Recommendation to Senior Management and DOE-SR



- Engineering path forward is still under development. Specific stakeholder objectives are:
  - The unit will be watertight
  - The unit will be consistent with the Performance Assessment
- Expect to meet operational need date of October 2011
- Lessons Learned and design recommendations will be incorporated into future units

# Acronym List

**SRR-CWDA-2010-00099**

- DOE-SR Department of Energy, Savannah River
- FDC Future Disposal Cell
- SCDHEC South Carolina, Department of Health and Environmental Control
- SDF Saltstone Disposal Facility
- SDU Salt Disposal Unit
- SPF Saltstone Processing Facility
- SRR Savannah River Remediation LLC