

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

C-Area Operable Unit Removal Action Status

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Purpose

- Provide a status report in accordance with the Facilities Disposition and Site Remediation Committee's Work Plan.



Background



Aerial of C-Area Showing Disassembly Basin, Evaporator Facility and Auxiliary Items

- 105-C Reactor produced special nuclear material from 1955 to 1985
 - Completed characterization of soil, subsurface, concrete pads, and process sewers
 - Constituents of concern identified are radionuclides
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- The 105-C Reactor Building is being preserved for historical significance
 - Characterization and Remediation performed with Recovery Act funding



Cleanup Actions

Four accelerated actions were performed:

- **Cask Car Railroad Tracks**
 - **Radioactive contamination in soil**
- **105-C Disassembly Basin Water Evaporation & Grouting**
 - **Significant levels of radioactive contamination in basin water and sediment**
- **C Process Sewer Line as Abandoned**
 - **Significant levels of radioactive contamination in portions of the sewer lines**
- **C Area Emergency Retention Basin Tank**
 - **Radioactive contamination in sludge and water**

Regulators strongly supported accelerated cleanup process



Cask Car Railroad Tracks



- In May 2011 removed contaminated gravel/soil that exceeded 10pCi/g of Cesium 137
- Soil/gravel was removed to a depth of 2 feet, a total of 20 cubic yards
- Railroad ties, track and gravel were restored to maintain the historical integrity of the area
- Project Complete in June 2011

Cask Car Railroad Tracks Following Removal Action



105-C Disassembly Basin Water Evaporation & Grouting

Evaporator Facility with 10 Units Operating



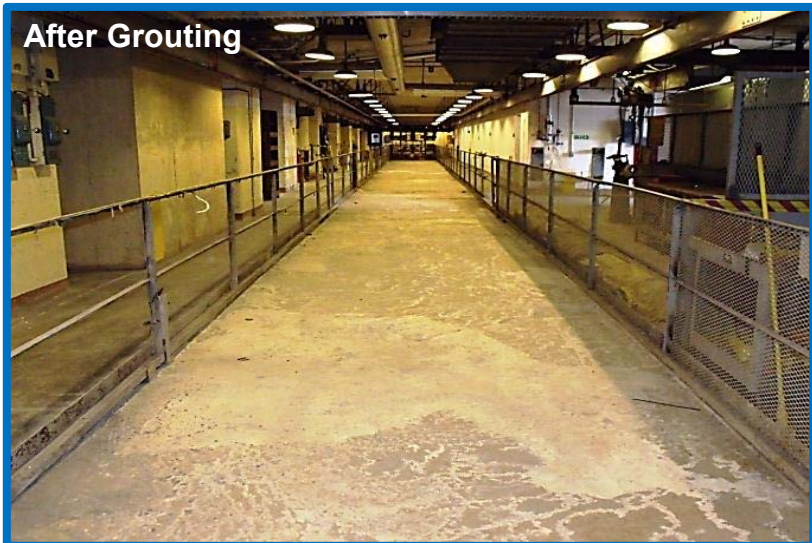
- Grouting completed August 2012 with 14,200 cubic yards of grout having been placed

- Evaporator Operations started January 2012 and completed July 2012, removing 1.9 million gallons of water

Evaporators



105-C Disassembly Basin Water Evaporation & Grouting



C Process Sewer Lines

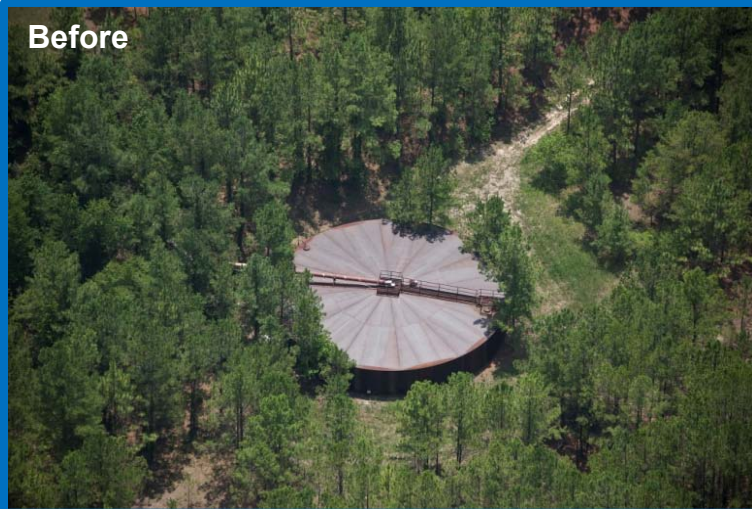


- Grouting of the lines began December 2011 and completed May 2012
- 1,680 cubic yards of grout was used at process tanks, manholes, boxes (access, diversion and junction) and other access points
- The structures were grouted and finished to maintain the historical integrity of the area



C Area Emergency Retention Basin Tank

Before



- Deactivation of 500,000 gallon C Tank started in February 2012
- Decommissioning of C Tank was completed in July 2012.

During



After



Cost

- **Cask Car Railroad Tracks: \$335,000**
- **C Disassembly Basin Water Evaporation & Grouting: \$24,325,000**
- **C Process Sewer Line: \$2,233,000**
- **C Retention Tank: \$1,100,000**



C-Area Cleanup Summary

- **Characterized and remediated all C-Area waste units supporting Area Completion**
- **Removed potential environmental threat by removing contaminated water and grouting Disassembly Basin**
- **Strong Regulatory support**
- **Completed all work safely, on schedule and under budget**

