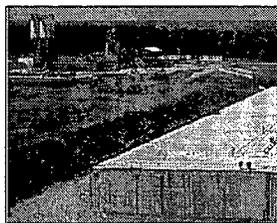
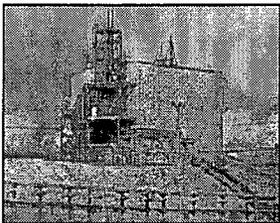
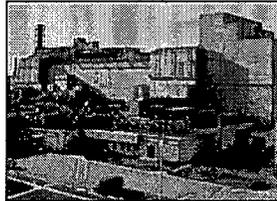
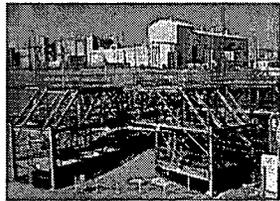




Salt Processing Update



David Little

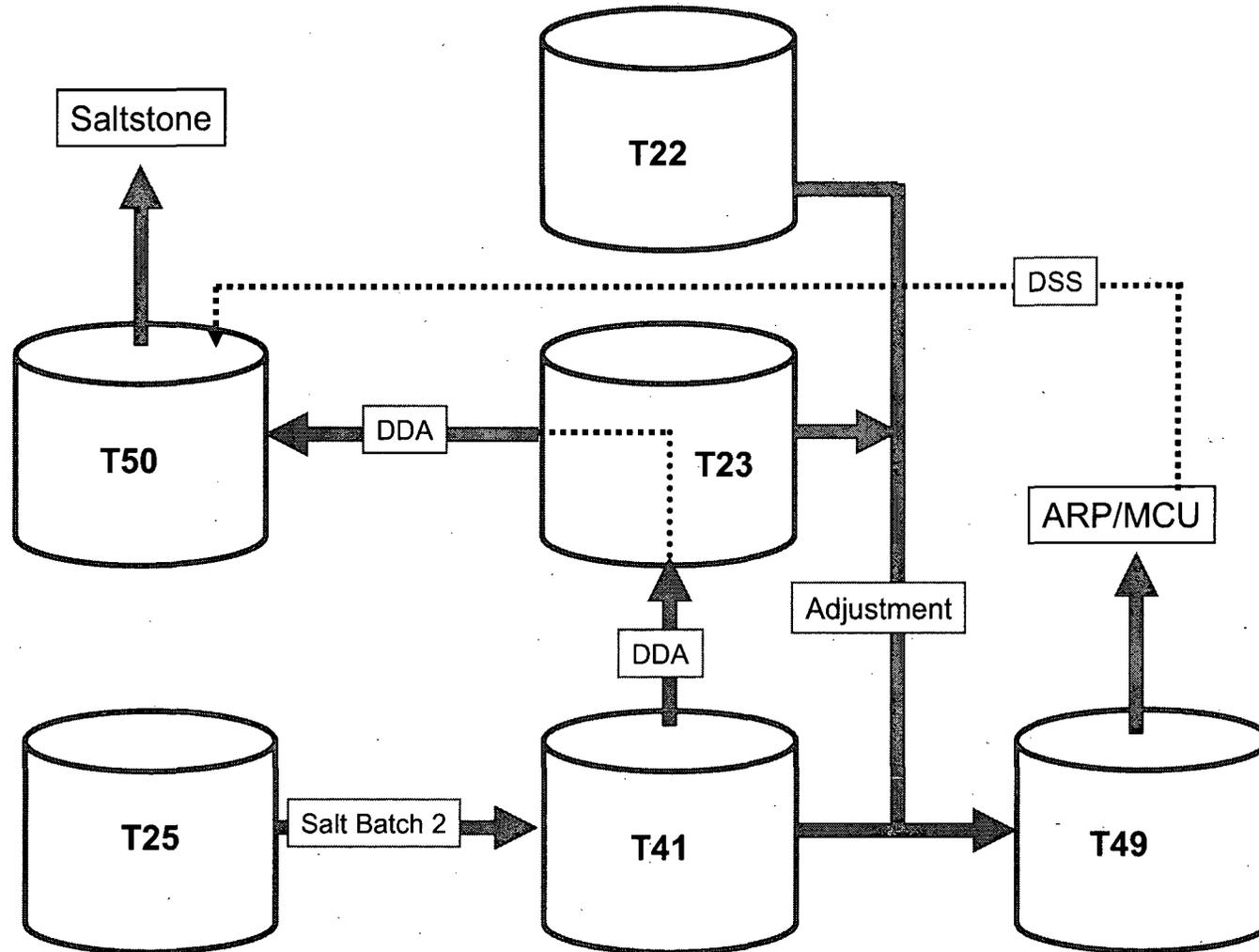
LWO Deputy Chief Engineer
Washington Savannah River Company

July 31, 2008

Areas of Discussion

1. Saltstone Feed Status
2. ARP/MCU Feed Status
3. Actinide Removal Process (ARP) and Modular Caustic Side Solvent Extraction Unit (MCU) Facilities Status
4. Saltstone Disposal Facility (SDF) Operations Status
5. Looking to the Near Future

Facility Overview



Tank Farm Background Information

- **Tank 22** contains low-activity waste from DWPF recycle waste
 - Used to adjust the waste for processing in the ARP/MCU Facilities
- **Tank 23** contains low-activity waste from historical site processes
 - Used to adjust the waste for processing in the Saltstone Facilities
- **Tank 25** contains salt waste that will be qualified for ARP/MCU feed as Salt Batch 2
- **Tank 41** contains salt waste that is permitted to be processed as “DDA” waste
 - Some of the saltcake in Tank 41 has been dissolved and transferred to Tank 49
 - Some of the saltcake in Tank 41 has been dissolved and transferred to Tank 23
- **Tank 49** was the settling tank for DDA Batches 1 through 3 processing and is currently the feed tank for the ARP/MCU process.
- **Tank 50** is the low-level waste feed tank for the Saltstone Production Facility & receipt tank for decontaminated salt solution from MCU

Saltstone Feed Status

- Processing of DDA Batch 3 Feed at SPF Was Completed in this Quarter (4/9/08)
- Preparation of Next Saltstone Feed Batch Completed
 - Dissolution of Tank 41 Saltcake (DDA) Was Completed (July 2008)
 - Tank 23 Status
 - TK41 > TK23 Transfers Completed (July 2008)
 - Waste Acceptance Criteria Sample Pulled (July 2008)
 - Tank isolated from remainder of Tank Farm

ARP/MCU Feed Status

- Preparation of Salt Batch 2 Underway
 - Dissolution of Tank 25 Saltcake (ARP/MCU feed) Was Initiated And Is In Progress (July 2008)
 - Tank 22 Status
 - Influent Transfers Completed (July 2008)
 - Waste Acceptance Criteria Sample Pulled (July 2008)
 - Tank isolated from remainder of the Tank Farm

ARP / MCU Facilities Status

- Start-up Activities Completed During this Quarter
 - Completed Final Facility Tie-ins
 - Completed Initial Tank 49 Transfer to ARP (4/21/08)
- ARP/MCU Operated Successfully under Management Control Plan
- Operating Results As Expected
 - DF's & CF's as Expected
 - Sr, Pu, & U Indicating Adequate ARP Performance
 - Cs Indicating Adequate MCU Performance
 - DSS and SE Organic Carryover Below Process Limit
- Typical Start-Up Equipment Lessons Learned
- 61K Gallons Processed Out of Tank 49 (thru July)

Saltstone Operations Status

- DDA Batch 3 Processing Was Completed in April 2008
- During the Quarter Saltstone Processed ~ 154 kgals of Salt Solution from Tank 50
 - Resulted in ~ 220 kgals of Saltstone
 - Disposal Occurred in Vault 4, Cell D
- 34 kCi Disposed in Saltstone Vaults in 2Q CY2008
- Total DDA Curies Disposed in Vaults is 134 kCi
- Modifications to the Saltstone Vaults Are in Progress to Handle Any Potential Solvent Carryover from the MCU Facility

Activities During the Current Quarter

- ~~ARP / MCU Operations (Salt Batch 1) Will Continue~~
Processing from Tank 49
- Dissolution of Tank 25 Saltcake (ARP/MCU feed) to Tank 41 Will Be Performed
- Salt Batch 2 (ARP/MCU) Qualification Planning in Progress
- Saltstone Outage to Install Modifications Necessary to Support Receipt of DSS Containing Low Levels of MCU Solvent Carry-over Will Complete
- Saltstone Will Initiate Processing of ISDP Batch 1 Material on 8/28/08 (DDA Material with Minimal Solvent Carryover from MCU)