

Savannah River Site Waste Disposition Project

Status of Waste Determination and Tank Closure

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Purpose & Presentation Overview

Purpose: Describe the status of heel removal in tanks 18 and 19, comments received on the F Tank Farm Performance Assessment and path forward.

Presentation Overview:

- Tanks 18 and 19 Mechanical Cleaning
- F Tank Farm Performance Assessment Comments
- Path Forward



TMR Sand Mantis® Operations in Tanks 19 and 18

- Began Tank 19 waste removal on 12/4/08
 - 4 days, ~ 90 hours operation cleaned ~1/6 tank floor, removed ~ 5000 gallons waste
 - On 12/8/08 back wheel tilt mechanism failed
 - Tank 19 operations suspended and plans to repair initiated
 - Tank 18 crawler modified



TMR Sand Mantis® Tilt Wheel

Original Design



**Tank 18 Sand Mantis
Retaining Screw**



TMR Sand Mantis® Tilt Wheel

Improved Design



**Tank 18 Sand Mantis
Retaining Cover**



TMR Sand Mantis® Operations

- Began Tank 18 waste removal on 1/30/09
 - On 2/4/09 forward/downward water sprays found inoperable
 - On 2/8/09 the wheel on the rear tilt arm assembly disengaged – suspended operations
 - Continued operations 2/13-17/09 removing all mounds of waste, ~ 1 inch waste/water heel remains (~ 3,000 gallons)
 - Designed, fabricated, tested, and installed a footer to facilitate lowering suction head toward waste
 - Re-initiated waste removal on 2/27/09



Tank 18 on 1/30/08



Tank 18 on 2/17/09



Mock-up of Footer Placement on Crawler in Tank 18



Tank 19 Tilt Arm Modification



F Tank Farm Performance Assessment Comments

- Comments received from
 - South Carolina Department of Health and Environmental Control
 - Environmental Protection Agency
 - Nuclear Regulatory Commission
 - Citizen's Advisory Board Waste Management Committee
- Excellent comments that will improve overall readability and quality of the document
 - No new modeling anticipated at this time
- Path Forward – revise the F Tank Farm performance Assessment to incorporate comments



Path Forward

- Complete mechanical and chemical cleaning of Tanks 19, 18, 5 & 6 by Fall 2009
- Issue Draft F Tank Farm Closure Plan to SCDHEC and EPA by Fall 2009
- Draft FTF WD Basis issued Summer 2010
- On schedule to close Tanks 18 and 19 by Federal Facility Agreement commitment of December 2012

