

Enclosure 1 – DOE and NRC Saltstone Disposal Facility Activities

Reference #	Correspondence / Other Interaction	Date	Description of Activity
1	NRC Letter, Satorius to Gilbertson	April 30, 2012	Letter of Concern (Type IV) Regarding US Department of Energy Disposal Activities at the Savannah River Site Saltstone Disposal Facility
2	NRC Letter, Camper to Gilbertson	April 30, 2012	Technical Evaluation Report for the 2009 Performance Assessment for the Saltstone Facility at the Savannah River Site; provided document 2a
2a		April 30, 2012	Technical Evaluation Report for the Revised Performance Assessment for the Saltstone Disposal Facility at the Savannah River Site, South Carolina
3	Public Meeting in Rockville, MD	May 7, 2012	NRC Presentation, NRC Evaluation of the DOE Updated Performance Assessment for Salt Waste Disposal at the Savannah River Site
4	Public Meeting in Rockville, MD	May 29, 2012	DOE Presentation, Savannah River Site Saltstone Disposal Facility Performance Assessment
5	DOE Letter, Spears to Camper	June 13, 2012	Transmittal of Updated Saltstone Disposal Facility Information Developed Since August 2011; provided documents 5a-5g
5a		January 2012	Saltstone Disposal Facility Stochastic Fate and Transport Model
5b		January 2012	Uncertainty and Sensitivity Analyses for Saltstone Disposal Facility Performance Assessment Case A and Alternative Sensitivity Case K
5c		January 2012	Revised Methodology for Determination of Inventories in SDF Vaults 1 and 4 through 9/30/11
5d		March 2012	Savannah River Site Liquid Waste Facilities Performance Assessment Maintenance Program, FY 2012 Implementation Plan
5e		January 2012	Technetium Sorption by Cementitious Materials Under Reducing Conditions
5f		December 2011	Full Scale Testing of the Formed-Core Sampler for Saltstone Facility Vaults
5g			GoldSim probabilistic modeling files
6	Conference call	June 21, 2012	Saltstone Monitoring Document List Discussion

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7	DOE Letter, Spears to Satorius	July 12, 2012	Letter of Concern (Type IV) Regarding US Department of Energy Disposal Activities at the Savannah River Site Saltstone Disposal Facility; provided documents 7a and 7b
7a		July 2012	Projected Technetium-99 Inventory in Saltstone Disposal Facility Units 2, 3, and 5
7b		July 2012	Sensitivity Analysis for Disposal Operations into Saltstone Disposal Facility Vault 1, Vault 4 and SDUs 2, 3, and 5
8	Email, Ross to Devaser	July 20, 2012	Provided documents 8a and 8b
8a		July 2012	Z-Area Saltstone Disposal Facility Groundwater Monitoring Midyear Report for 2012
8b		January 2012	Z-Area Saltstone Disposal Facility Groundwater Monitoring Report for 2011
9	DOE Letter, Spears to Camper	July 26, 2012	Additional Response to Technical Evaluation Report for Revised Performance Assessment for the Saltstone Disposal Facility at the Savannah River Site South Carolina and Letter of Concern; provided document 9a
9a		July 2012	Assessment of Key Monitoring Factors in the Nuclear Regulatory Commission Technical Evaluation Report for the Revised Performance Assessment for the Saltstone Disposal Facility
10	Public Meeting in Aiken, SC	August 6, 2012	<ul style="list-style-type: none"> <li>• NRC Presentation, Overview of NRC Monitoring Activities at the Saltstone Disposal Facility at the Savannah River Site</li> <li>• DOE Presentation, Savannah River Site Saltstone Disposal Facility Performance Assessment</li> <li>• SRR Presentation, Path Forward to Resolve NRC Concerns</li> </ul> <p>Discussion of References 5a-5g and 7a-7b</p>
11	Onsite NRC Monitoring Visit	August 7-8, 2012	<ul style="list-style-type: none"> <li>• Salt Processing Update</li> <li>• Saltstone Disposal Unit Status</li> <li>• Saltstone Facility Tours</li> <li>• Lysimeter Tour</li> <li>• Quality Assurance Overview</li> <li>• Inventory Methodologies</li> <li>• Performance Assessment Maintenance Overview</li> </ul>

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12	Email, Devaser to Ross	August 24, 2012	Provided document 12a
12a		August 2012	NRC Prioritization of Factors for the Saltstone Disposal Facility
13	NRC Letter, Satorius to Spears	August 31, 2012	Acknowledgement of US Department of Energy's Letter dated July 12, 2012, Regarding US Nuclear Regulatory Commission's Letter of Concern (Type IV) Regarding Disposal Activities at the Savannah River Site Saltstone Disposal Facility; Preliminary assessment and conclusion that a Type II letter to Congress is not needed at this time.
14	SC GNAC Public Meeting in Columbia, SC	September 6, 2012	<ul style="list-style-type: none"> <li>• NRC Presentation: US Nuclear Regulatory Commission Recent Monitoring Activities at the Savannah River Site Saltstone Disposal Facility</li> <li>• DOE Presentation: Savannah River Site Saltstone Disposal Facility Performance Assessment, NRC's Saltstone Monitoring and Technical Evaluation Report</li> </ul>
15	Email, Ross to Devaser	November 8, 2012	Provided References 15a and 15b
15a		May 2012	Determination of Inventory in SDF Vault 4 through 3/31/2012
15b		August 2012	Impact on Saltstone Disposal Facility Performance Assessment Due to Revised Projected Inventories in Vaults 1 and 4
16	NRC Letter, Mohseni to Folk	November 19, 2012	US Nuclear Regulatory Commission August 7-8, 2012, Onsite Observation Visit Report for the Savannah River Site Saltstone Disposal Facility (Docket No. PROJ0734)
17	Email, Ross to Devaser	November 29, 2012	Provided References 17a – 17h
17a		August 2012	Method Evaluation and Field Sample Measurements for the Rate of Movement of the Oxidation Front in Saltstone
17b		August 2012	SIMCO Technologies Inc., Final Report, Comparison of Wasteform Mixtures
17c		September 2012	Formed Core Sampler Hydraulic Conductivity Testing

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17d		August 2012	Review of Concrete Biodeterioration in Relation to Buried Nuclear Waste
17e		April 2012	Transport Through Cracked Concrete: Literature Review
17f		September 2012	Process Formulations and Curing Conditions that Affect Saltstone Properties
17g		September 2012	Technetium Sorption by Cementitious Materials Under Reducing Conditions
17h		September 2012	Equilibrium Solubility Model for Technetium Release from Saltstone Based on Anoxic Single-Pass Flow through Experiments
18	NRC Onsite Monitoring Visit	December 6, 2012	<ul style="list-style-type: none"> <li>• Action Item Status Review</li> <li>• Facility Status Update</li> <li>• FY12 Research and Development Review (References 17a – 17h)</li> </ul>
19	DOE Letter, Guay to Mohseni	December 14, 2012	Modeling Activities for the Saltstone Disposal Facility at the Savannah River Site; provided Reference 19a
19a			Summary of FY13 Saltstone Disposal Facility Special Analysis (SA) Attributes Compared to Previous Cases
20	Email, Ross to Devaser	January 3, 2013	<ul style="list-style-type: none"> <li>• Re: Modeling Parameters Meeting Reference; Provided Reference 20a</li> </ul>
20a		December 2011	Moisture Retention Properties of High Temperature Curie ARP/MCU Saltstone Grout
21	Email, Ross to Devaser	January 14, 2013	Support Materials for Thursday's public meeting; provided References 21a through 21c
21a		January 17, 2013	SRR Presentation: Discussion of Modeling Attributes for Saltstone Disposal Facility FY2013 Special Analysis
21b		December 2012	Sample Results from the Interim Salt Disposition Program Macrobatch 6 Tank 21H Qualification Samples
21c		October 10, 2012	Analysis of Saltstone Water-to-Premix Ratio During Pre-ELAWD Operation
22	Public Meeting in Rockville, MD	January 17, 2013	DOE and NRC Discussion of Modeling Attributes for Saltstone Disposal Facility FY2013 Special Analysis
23	Email, Ross to Devaser	January 29, 2013	SDU Thermocouple Data; provided References 23a and 23b

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23a		January 2013	Saltstone Disposal Facility Saltstone Disposal Unit (SDU) 4 and SDU Cell 2B Thermocouple Data
23b		January 2013	Thermocouple data Excel File
24	NRC Letter, Mohseni to Blanco	February 15, 2013	The U.S. Nuclear Regulatory Commission Response to the U.S. Department of Energy Letter Dated December 14, 2013, RE: Modeling Activities for the Saltstone Disposal Facility at the Savannah River Site; Provided Reference 24a
24a			Comments or Questions From Technical Discussions at January 17, 2013, Public Meeting on Upcoming DOE PORFLOW Model
25	NRC Letter, Mohseni to Blanco	February 15, 2013	US Nuclear Regulatory Commission December 6, 2012, Onsite Observation Visit Report for the Savannah River Site Saltstone Disposal Facility (Docket No. PROJ0734); Provided Reference 25a
25a			U.S. Nuclear Regulatory Commission December 6, 2012, Onsite Observation Visit Report For the Savannah River Site Saltstone Disposal Facility
26	Email, Ross to Devaser	March 8, 2013	Solubility of Technetium, provided Reference 26a
26a		February 1, 2013	Solubility of Technetium Dioxides ( $TcO_2-c$ , $TcO_2 \cdot 1.6H_2O$ and $TcO_2 \cdot 2H_2O$ ) in Reducing Cementitious Material Leachates: A Thermodynamic Calculation