SAVANNAH RIVER REMEDIATION LLC We do the right thing.
Savannah River Site, Aiken, SC 29808

September 15, 2010 SRR-CWDA-2010-00137

TO: V. G. DICKERT, 705-1C

FROM: F. MALCOLM SMITH, 705-1C

JULY 28, 2010 U. S. NRC ONSITE OBSERVATION FOR SALT WASTE DISPOSAL AT THE SAVANNAH RIVER SITE ACTION ITEM RESPONSE

Attached, please find the Disposal Unit 2 Water Tightness Test Chronology from April 3, 2010 through July 29, 2010 and associated notes. Significant events related to water tightness testing of Disposal Unit 2 are contained in the Primavera schedule tool, while salient comments for selected activities are contained in the accompanying table. Please note that Disposal Unit 2 (cells 2A and 2B) are currently undergoing coating repairs and will be retested for water tightness. As such the chronology represents activities related to water tightness test activities conducted to date and does not represent the entire scope of water tightness testing.

If you have any questions please contact me at 557-9349.

FMS:fms

Att

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Closure and Waste Disposal Authority File

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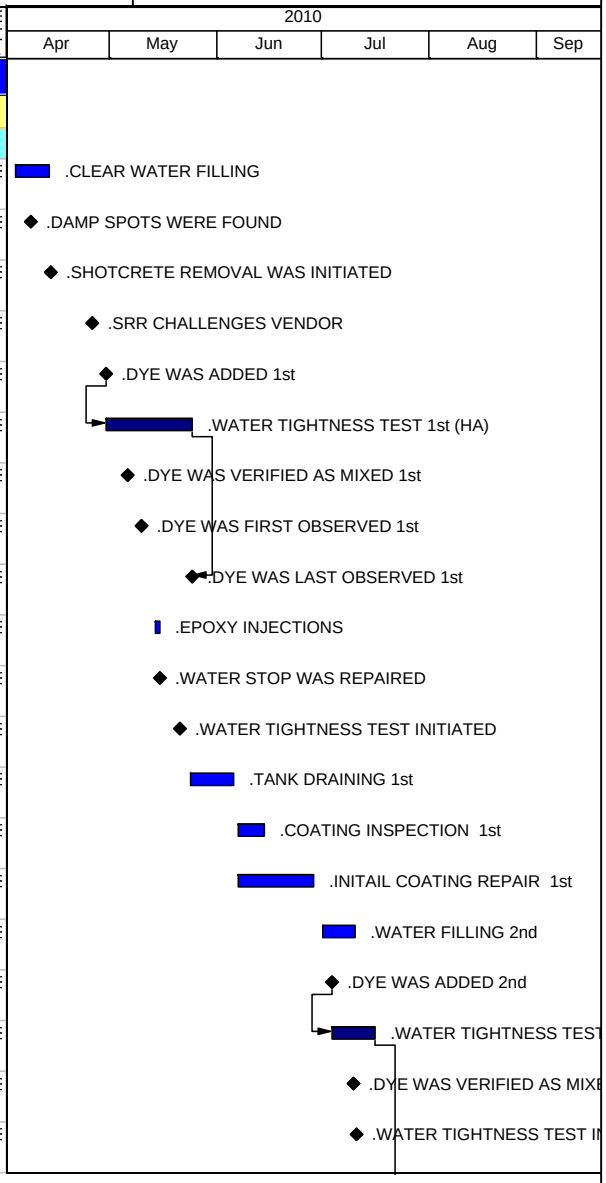
Saltstone Facility Schedule

L_SS_SDU2 TEST REPAIR CHRONOLOGY

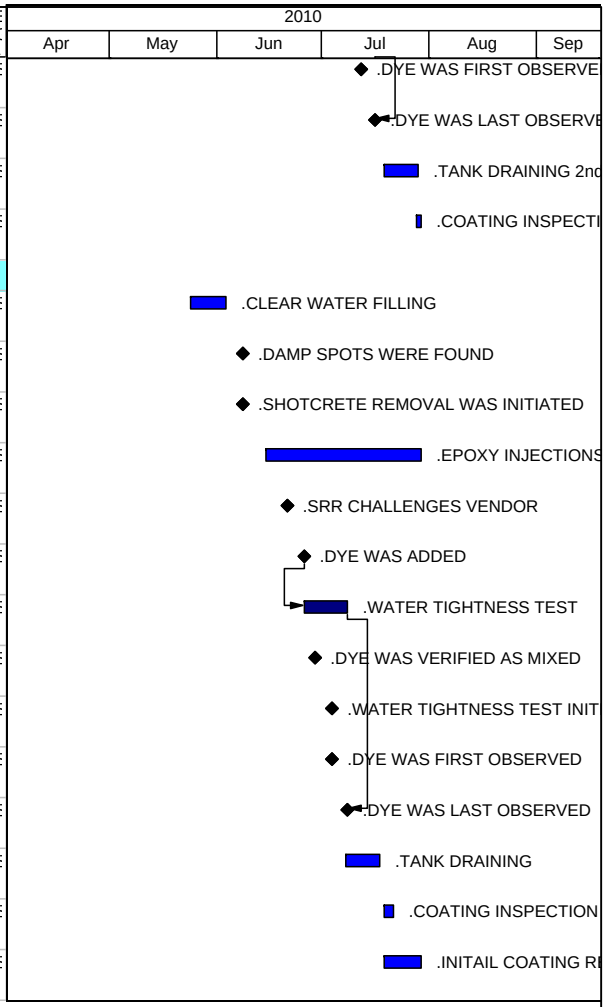
WATER TIGHTNESS TEST CHRONOLOGY

SDU # 2

LINE : Lin	Activity ID	Activity Name	Start	Finish	Org	PO PO F	RD	TF	SEQT: Sequ...	EPS: Srt 1 - LWO	GRP1: Major Task	E C -
SDU #2												
Water Tightness												
Saltstone Disposal Cell 2B												
01	ZV2HT2B-115	.CLEAR WATER FILLING	04-Apr-10 07:00 A	13-Apr-10 17:00 A		U	0d		000		Q17	S
02	ZV2HT2B-130	.DAMP SPOTS WERE FOUND	08-Apr-10 07:00 A			U	0d		000		Q17	S
03	ZV2HT2B-140	.SHOTCRETE REMOVAL WAS INITIATED	14-Apr-10 07:00 A			U	0d		000		Q17	S
04	ZV2HT2B-180	.SRR CHALLENGES VENDOR	26-Apr-10 07:00 A			U	0d		000		Q17	S
05	ZV2HT2B-190	.DYE WAS ADDED 1st	30-Apr-10 07:00 A			U	0d		000		Q17	S
06	ZV2HT2B-460	.WATER TIGHTNESS TEST 1st (HA)	30-Apr-10 07:00 A	24-May-10 17:00 A		U	0d		000		Q17	S
07	ZV2HT2B-210	.DYE WAS VERIFIED AS MIXED 1st	06-May-10 07:00 A			U	0d		001		Q17	S
08	ZV2HT2B-250	.DYE WAS FIRST OBSERVED 1st	10-May-10 07:00 A			U	0d		001		Q17	S
09	ZV2HT2B-270	.DYE WAS LAST OBSERVED 1st		24-May-10 17:00 A		U	0d		001		Q17	S
10	ZV2HT2B-155	.EPOXY INJECTIONS	14-May-10 07:00 A	15-May-10 17:00 A		U	0d		002		Q17	S
11	ZV2HT2B-170	.WATER STOP WAS REPAIRED		15-May-10 17:00 A		U	0d		002		Q17	S
12	ZV2HT2B-120	.WATER TIGHTNESS TEST INITIATED	21-May-10 07:00 A			U	0d		002		Q17	S
13	ZV2HT2B-380	.TANK DRAINING 1st	24-May-10 07:00 A	05-Jun-10 17:00 A		U	0d		003		Q17	S
14	ZV2HT2B-450	.COATING INSPECTION 1st	07-Jun-10 07:00 A	14-Jun-10 17:00 A		U	0d		003		Q17	S
15	ZV2HT2B-375	.INITAIL COATING REPAIR 1st	07-Jun-10 07:00 A	28-Jun-10 17:00 A		U	0d		004		Q17	S
16	ZV2HT2B-440	.WATER FILLING 2nd	01-Jul-10 07:00 A	10-Jul-10 17:00 A		U	0d		004		Q17	S
17	ZV2HT2B-200	.DYE WAS ADDED 2nd	04-Jul-10 07:00 A			U	0d		004		Q17	S
18	ZV2HT2B-470	.WATER TIGHTNESS TEST 2nd (HA)	04-Jul-10 07:00 A	16-Jul-10 17:00 A		U	0d		004		Q17	S
19	ZV2HT2B-220	.DYE WAS VERIFIED AS MIXED 2nd	10-Jul-10 07:00 A			U	0d		005		Q17	S
20	ZV2HT2B-420	.WATER TIGHTNESS TEST INITIATED	11-Jul-10 07:00 A			U	0d		005		Q17	S



LINE : Lin	Activity ID	Activity Name	Start	Finish	Org	PO PO F	RD	TF	SEQT: Sequ...	EPS: Srt 1 - LWO	GRP1: Major Task	E C -
21	ZV2HT2B-260	.DYE WAS FIRST OBSERVED 2nd	12-Jul-10 07:00 A			U	0d		005		Q17	S
22	ZV2HT2B-280	.DYE WAS LAST OBSERVED 2nd		16-Jul-10 17:00 A		U	0d		005		Q17	S
23	ZV2HT2B-305	.TANK DRAINING 2nd	19-Jul-10 07:00 A	28-Jul-10 17:00 A		U	0d		008		Q17	S
24	ZV2HT2B-345	.COATING INSPECTION 2nd	28-Jul-10 07:00 A	29-Jul-10 17:00 A		U	0d		009		Q17	S
	Saltstone Disposal Cell 2A											
25	ZV2HT2A-105	.CLEAR WATER FILLING	24-May-10 07:00 A	03-Jun-10 17:00 A		U	0d		000		Q17	S
26	ZV2HT2A-130	.DAMP SPOTS WERE FOUND	08-Jun-10 07:00 A			U	0d		001		Q17	S
27	ZV2HT2A-140	.SHOTCRETE REMOVAL WAS INITIATED	08-Jun-10 07:00 A			U	0d		001		Q17	S
28	ZV2HT2A-155	.EPOXY INJECTIONS	15-Jun-10 07:00 A	29-Jul-10 17:00 A		U	0d		002		Q17	S
29	ZV2HT2A-180	.SRR CHALLENGES VENDOR	21-Jun-10 07:00 A			U	0d		002		Q17	S
30	ZV2HT2A-190	.DYE WAS ADDED	26-Jun-10 07:00 A			U	0d		003		Q17	S
31	ZV2HT2A-165	.WATER TIGHTNESS TEST	26-Jun-10 07:00 A	08-Jul-10 17:00 A		U	0d		003		Q17	S
32	ZV2HT2A-120	.DYE WAS VERIFIED AS MIXED	29-Jun-10 07:00 A			U	0d		003		Q17	S
33	ZV2HT2A-200	.WATER TIGHTNESS TEST INITIATED	04-Jul-10 07:00 A			U	0d		003		Q17	S
34	ZV2HT2A-210	.DYE WAS FIRST OBSERVED	04-Jul-10 07:00 A			U	0d		003		Q17	S
35	ZV2HT2A-220	.DYE WAS LAST OBSERVED		08-Jul-10 17:00 A		U	0d		003		Q17	S
36	ZV2HT2A-290	.TANK DRAINING	08-Jul-10 07:00 A	17-Jul-10 17:00 A		U	0d		004		Q17	S
37	ZV2HT2A-310	.COATING INSPECTION	19-Jul-10 07:00 A	21-Jul-10 17:00 A		U	0d		005		Q17	S
38	ZV2HT2A-300	.INITAIL COATING REPAIR	19-Jul-10 07:00 A	29-Jul-10 17:00 A		U	0d		006		Q17	S



WATER TIGHTNESS TEST & REPAIR TIMELINE – SDU 2 (Cells A & B)

ACTIVITY ID(s)	ACTIVITY	SDU 2A COMMENTS	SDU 2B COMMENTS
01, 25	Clear Water Filling	Clear water testing was directed by SRR as per contract with vendor. *Water Tightness Test Procedure* WB00001K-041-B-MDM.	Clear water testing was initiated in accordance with standard industry practice and specification requirements. *Water Tightness Test Procedure* WB00001K-041-B-MDM.
03, 27	Shotcrete Removal	Shotcrete was removed at various locations to accommodate inspections and find the source of the dampness.	Shotcrete was removed at various locations to accommodate inspections and find the source of the dampness.
10, 28	Epoxy Injections	Additional injections performed after tank was emptied; various dates.	Additional injections performed after tank was emptied; various dates.
11	Water Stop Was Repaired	This was only performed on 2B.	This was only performed on 2B.
04, 30	SRR Challenges Vendor	Vendor formally challenged to provide positive means to discriminate interior and construction / environmental water.	Vendor formally challenged to provide positive means to discriminate interior and construction / environmental water.

ACTIVITY ID(s)	ACTIVITY	SDU 2A COMMENTS	SDU 2B COMMENTS
07, 19, 32	Dye Was Verified as Mixed	Samples collected from various locations and various depths. Color consistency between samples confirmed thorough mixing. IAW dye test procedure WB00001K-046-C-MDM.	Samples collected from various locations and various depths. Color consistency between samples confirmed thorough mixing. IAW dye test procedure WB00001K-046-C-MDM.
12, 20, 33	Water Tightness Test Initiated	IAW dye test procedure WB00001K-046-C-MDM. The test entry conditions could not be met. In order to declare a failure the test entry was forced so that failure could be declared.	IAW dye test procedure WB00001K-046-C-MDM. The test entry conditions could not be met. In order to declare a failure the test entry was forced so that failure could be declared.
09. 22, 35	Dye Was Last Observed	N/A	2nd Test– Dye was observed only on the floor to upper mud mat interface.
14, 24, 37	Coating Inspection	Soundings and visual inspection on the floor used to detect anomalies in the coating. Improperly saturated chopped strand mat was the failure mode.	Soundings and visual inspection on the floor used to detect anomalies in the coating.
16	2nd Water Filling	Cell 2A did not undergo a second fill / test cycle.	N/A