From: Cynthia.Williams[redacted]
Sent: Wednesday, September 08, 2010 3:10 PM
To: Dimarzio, John A.
Cc: sachiko-w.mcalhany@nnsa.srs.gov; virginia.kay[redacted] l.ling[redacted] drew.grainger[redacted]
Subject: Fw: SPD SEIS Data Calls - Waste Management Questions

Attachments: SRS waste forecast.pdf; DWPF waste forecast.pdf; H-Canyon waste forecast.pdf; K-Area waste forecast.pdf; MOX waste forecast.pdf; Table 3-6.pdf; Table 3-4.pdf; Historical generation Rates for EIS Data Call.pdf

John,

Attached is the waste mgt. data you requested.

Cynthia Williams

[redacted]

----- Forwarded by Cynthia Williams[redacted] on 09/08/2010 03:09 PM -----

From: James Fudge[redacted]
To: Cynthia Williams[redacted]
Cc: Brent Blun[redacted] Clayton Shedrow[redacted] Eloy Saldivar[redacted] Keith Dye[redacted] Jeannette Hyat[redacted]
Date: 09/08/2010 01:17 PM
Subject: Re: Fw: SPD SEIS Data Calls - Waste Management Questions

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Cynthia,

Our records indicate that the files below were previously transmitted to SAIC. However, we are including them below as a matter of convenience and expedience for the project.

The Waste Forecasts folder is comprised of the following 5 files:

Here is the updated Table 3-6:

Information relative to Table 3-4:

Jim

James (Jim) R. Fudge, IV
RI&ES - NEPA
[redacted]

From: Cynthia Williams[redacted]
To: James Fudge[redacted]
Cc: Brent Blun[redacted] Clayton Shedrow[redacted] Eloy Saldiva[redacted] Keith Dye[redacted]
Date: 09/07/2010 04:46 PM
Subject: Re: Fw: SPD SEIS Data Calls - Waste Management Questions

---

Thanks.

Cynthia Williams

[redacted]

From: James Fudge[redacted]
To: Cynthia Williams[redacted]
Cc: Brent Blun[redacted] Clayton Shedrow[redacted], Eloy Saldiva[redacted] Keith Dye[redacted]
Date: 09/07/2010 04:45 PM
Subject: Re: Fw: SPD SEIS Data Calls - Waste Management Questions

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Cynthia,

I think we have all this. I will have this information to you tomorrow morning.

James (Jim) R. Fudge, IV
RI&ES - NEPA
[redacted]

From: Cynthia Williams[redacted]
To: James Fudge[redacted]
Cc: Eloy Saldiva[redacted] Clayton Shedrow[redacted] Brent Blun[redacted]
Date: 09/07/2010 04:40 PM
Subject: Fw: SPD SEIS Data Calls - Waste Management Questions

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Jim,

This looks like information from the Environmental data call request. Please check the database and see if we can provide the additional data. Please see if the data has been through an STI review.

Thanks,
Cynthia Williams

[redacted]

----- Forwarded by Cynthia Williams[redacted] on 09/07/2010 04:39 PM -----

From: "Dimarzio, John A."[redacted]
To: <Cynthia.Williams[redacted]
Cc: <sachiko-w.mcalhany@nnsa.srs.gov>, <virginia.kay[redacted] <drew.grainger[redacted]
Date: 09/07/2010 02:57 PM
Subject: SPD SEIS Data Calls - Waste Management Questions

See the below question on waste management information.

Should I address these questions to you or someone else?

From: Gorden, Milton E.
Sent: Tuesday, September 07, 2010 2:34 PM
To: Dimarzio, John A.; Eichner, John M.
Subject: RE: Data fpr 3 Data Calls

In the data call response SRS makes a statement that waste forecasts are provided in the attached Waste Forecasts folder, but there is no folder.

Also, SRS did not provide a markup of Table 3-6 (SRS waste storage facilities).

We need actual waste generation data for FY2008 and 2009 to update Table 3-4. Need actual volume for TRU waste, LLW, MLLW, Hazardous, sanitary, C&D.

Milton

Summary for Waste Category											
Profile Volumes in Cubic Meters											
Forecast as of Wed Aug 18 23:59:54 EDT 2010											
Category											
Stream	**FY011**	**FY012**	**FY013**	**FY014**	**FY015**	**FY016**	**FY017**	**FY018**	**FY019**	**FY020**	**10-yr Avg**
SANITARY WASTE	72,400	52,400	52,400	52,400	52,400	52,400	52,400	52,400	52,400	52,400	**54,400**
Land Clearing and Construction & Demolition Debris	70,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	**52,000**
Routine Sanitary Waste (1 mTon = 1 m3)	2,400	2,400	2,400	2,400	2,400	2,400	2,400	2,400	2,400	2,400	**2,400**
MIXED LOW LEVEL WASTE	592	304	19	15	14	16	13	13	16	13	**101**
LOW LEVEL WASTE	16,097	9,419	4,713	3,739	4,718	2,864	7,553	3,488	3,414	3,363	**5,937**
HAZARDOUS WASTE	1,304	128	49	48	51	53	53	65	65	50	**187**
TRANSURANIC WASTE	78	64	37	45	327	435	600	600	601	575	**336**
Report date Wed Aug 18 13:27:54 EDT 2010											
Note: Mixed LLW in FY11 & FY12 primarily results from the TRU waste remediation program											

Waste Category Summary for DWPF

Profile Volumes in Cubic Meters

Forecast as of Thu Aug 19 23:59:55 EDT 2010

Category	FY011	FY012	FY013	FY014	FY015	FY016	FY017	FY018	FY019	FY020
LIQUID LOW LEVEL WASTE	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21
LOW LEVEL WASTE	262.5	262.5	262.5	262.5	262.5	262.5	262.5	262.5	262.5	262.5
MIXED LOW LEVEL WASTE	1.69	1.69	4.24	1.69	1.69	4.24	1.69	1.69	4.24	1.69
TRANSURANIC WASTE	0	0	0	0	0	0	0	0	0	0
HAZARDOUS WASTE	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11

Report date Thu Aug 19 13:57:55 EDT 2010

Note: Table compiled from data in the SRS Solid Waste integrated Forecasting Tool (SWIFT).

Waste Category Summary for H-Canyon

Profile Volumes in Cubic Meters

Forecast as of Thu Aug 19 23:59:18 EDT 2010

Category	FY011	FY012	FY013	FY014	FY015	FY016	FY017	FY018	FY019	FY020
MIXED LOW LEVEL WASTE	0.4	0.4	1	0.2	0.2	1	0.2	0.2	1	0.2
LOW LEVEL WASTE	506.57	506.57	506.57	506.57	506.57	506.57	506.57	506.57	506.57	506.57
TRANSURANIC WASTE	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2

Report date Thu Aug 19 14:33:18 EDT 2010

Note: Table compiled from data in the SRS Solid Waste integrated Forecasting Tool (SWIFT).

Waste Category Summary for K-Area Facilities

Profile Volumes in Cubic Meters

Forecast as of Thu Aug 19 23:59:18 EDT 2010

Category	FY011	FY012	FY013	FY014	FY015	FY016	FY017	FY018	FY019	FY020
OTHER WASTEOTHER WASTE	0	0	0	0	0	0	0	0	0	0
LOW LEVEL WASTE	56.47	50.47	69.97	77.47	76.47	71.47	71.47	70.2	70.2	5
PCB NON-RAD / RCRA	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0
MIXED LOW LEVEL WASTE	0	0.3	0.3	0.3	0	0	0	0	0	0
HAZARDOUS WASTE	0.5	0.5	0.5	0.5	2	2	2	2	2	0
LIQUID LOW LEVEL WASTE	0	0	0	0	0	0	0	0	0	0
TRANSURANIC WASTE	0.42	0.21	0.21	15	15	15	15	15	15	0

Report date Thu Aug 19 15:06:18 EDT 2010

Note: Table compiled from data in the SRS Solid Waste integrated Forecasting Tool (SWIFT).

Waste Category Summary for MOX Fuel Facility

Profile Volumes in Cubic Meters

Forecast as of Thu Aug 19 23:59:11 EDT 2010

Category	FY011	FY012	FY013	FY014	FY015	FY016	FY017	FY018	FY019	FY020
LOW LEVEL WASTE	0	0	0	0	0	75	103	103	103	103
TRANSURANIC WASTE	0	0	0	0	0	101	138	138	138	138

Report date Thu Aug 19 14:17:11 EDT 2010

Note: Table compiled from data in the SRS Solid Waste integrated Forecasting Tool (SWIFT).

Table 3-6 Waste Management Storage Capabilities at the Savannah River Site

Facility Name	*Capacity*	*Status*	*Waste Type*					
			High-level Radioactive	*Transuranic*	*Mixed Transuranic*	*Low-level Radioactive*	*Mixed Low-level Radioactive*	*Hazardous*
Storage Facility								
High-Level Liquid Radioactive Waste Tank Farms	6.1 million liters [a] (no change per Brent Blunt)	Operating	X					
Glass Waste Storage Buildings (no change per Keith Dyer)	4,400 canisters in existing two buildings	2 buildings operating, a third building planned	X					
Failed Equipment Storage Vaults (Defense Waste Processing Facility) (no change per Keith Liner)	2 exist, space allocated for 12 more vaults	Operating	X					
Transuranic Waste Storage Pads	13,200 cubic meters	Operating		X	X			
Defense Waste Processing Facility Organic Waste Storage Tank	568 cubic meters (no change per Keith Liner)	De-inventoried and decommissioned					X	
Hazardous Waste/Mixed Waste Storage Facilities	~~8,794 cubic meters~~ Please see note below	~~Operating~~					~~X~~	~~X~~
~~Savannah River Technology Center Mixed Waste Storage Tanks~~	~~198 cubic meters~~	~~Operating~~					~~X~~	
Solid Waste Storage Pads	~~2,657 cubic meters~~ Please see note below	~~Operating~~					~~X~~	~~X~~
Solvent Storage Tanks at CIF, S33-S36 (no change per Brent Blunt and Bill Maloney)	105,000 liters per tank [b]	Operating				X	X	

[a] Working capacity of the F and H Tank Farms.

[b] Operating capacity.

Note: There are no dedicated low-level radioactive waste or nonhazardous waste storage facilities.

To convert cubic meters to cubic feet, multiply by 35.315; to convert liters to gallons, multiply by 0.26417.

Sources: DOE 1999b, 2002d; WSRC 2007a, 2007l, 2008a.

Note: Please refer to accompanying email from Larry Eldridge, the Clean Water Act Environmental Compliance Authority for the Savannah River National Laboratory, regarding removal from this table of Savannah River Technology Center Mixed Waste Storage tanks.

Note: The decrease in storage capacity for the Transuranic Waste Storage pads (previously 34,400m^3, now 13,200m^3) reflects the closure of pads 7-13 (Source: Joe Price).

Note: The existing Hazardous Waste/Mixed Waste Storage Facility, as well as the Solid Waste Storage Pads, in N-Area are in the closure process, which is anticipated to be complete in 2011. After closure is complete, the facility will only accept non-rad./non-haz. waste. TRU Pad 26-E has been permitted to accept haz./mixed waste, and will have a maximum capacity of 296m^3 (Source: Lynn Martin).

Table 3-4 Solid Waste Generation Rates at the Savannah River Site (cubic meters)

Waste Type	*Savannah River Site - Total*		*K-Area*		*H-Canyon*		*HB-Line*		*DWPF*		*Inventory - FY 2007* [b]
	5-Year Average	*FY 2007*	*5-Year Average*	*FY 2007*	*5-Year Average*	*FY 2007*	*5-Year Average*	*FY 2007*	*5-Year Average*	*FY 2007*	
Transuranic Waste [a]	140	130	NA	NA	7.9	7.6	36	49	0.1	0.0	NA
Low-level Radioactive Waste	20,000	13,000	270	20	790	630	140	66	280	270	190
Mixed Low-level Radioactive Waste	270	55	0.8	0.0	1.8	1.3	0.7	0.0	1.1	5.4	NA
Hazardous	180	34	0.7	0.3	NA	NA	0.0	0.2	0.1	0.0	NA
Sanitary [c]	76,000	42,000	NA	NA	NA	NA	NA	NA	NA	NA	NA
Construction and Demolition Debris [d]	45,000	52,000	NA	NA	NA	NA	NA	NA	NA	NA	NA

FY = fiscal year, NA = not applicable, DWPF = Defense Waste Processing Facility.
Note: To convert cubic meters to cubic feet, multiply by 35.315.
[a] Includes mixed transuranic wastes.
[b] Generally, solid wastes are not held in long-term storage greater than 180 days, with the exception of some legacy low-level radioactive waste. The inventory reflected in this table is for long-term storage (greater than 180 days).
[c] Includes sanitary waste and debris sent to the Three Rivers Landfill and assumes 0.1186 metric tons per cubic meter (200 pounds per cubic yard) on an as-generated basis.
[d] Includes construction and demolition debris sent to the SRS Construction and Demolition Landfill and assumes 1 metric ton per cubic meter (0.84 tons per cubic yard).
Source: WSRC 2008a.

Please refer to folder: <u>Historical Waste Generation (for Table 3-4)</u> for an Excel spreadsheet compiled by John Harley that contains replacement data for this table.

Historical Waste Generation Volume (m3)

	Haz W	LLW	MLLW	TRU W	Sanitary Routine*	Sanitary C&D*
Site						
2009	56.7	5,517.1	26.3	63.0	2,333.0	74,072.5
2008	218.8	9,527.8	127.1	58.1	2,304.9	59,592.8
2007	34.1	13,339.4	55.2	134.7	2,386.9	51,995.5
2006	96.7	28,442.2	193.7	262.9	2,371.3	113,088.4
2005	54.2	20,477.0	99.9	80.7	1,863.8	59,641.2
Avg	92.1	15,460.7	100.4	119.9	2,252.0	71,678.1
K-Area						
2009	-	84.5	3.2	0.2		
2008	1.6	50.8	-	-		
2007	0.3	20.4	-	-		
2006	0.4	212.3	0.4	-		
2005	-	221.5	3.8	-		
Avg	0.5	117.9	1.5	0.0		
H-Canyon						
2009	-	546.2	-	-		
2008	-	697.8	-	-		
2007	-	633.7	1.3	7.6		
2006	-	547.7	-	-		
2005	-	1,000.7	6.4	7.9		
Avg	-	685.2	1.5	3.1		
HB-Line						
2009	-	38.5	0.6	10.9		
2008	-	68.8	0.2	17.7		
2007	0.2	66.4	-	49.3		
2006	-	177.5	-	36.0		
2005	-	135.9	2.6	19.4		
Avg	0.0	97.4	0.7	26.7		
DWPF						
2009	-	285.6	0.0	-		
2008	-	205.3	0.6	-		
2007	-	270.5	5.4	-		
2006	-	292.1	0.2	0.3		
2005	-	293.8	-	-		
Avg	-	269.5	1.2	0.1		

*** Sanitary Waste is measured for Site only (no breakdown by area) and based on 1 metric ton = 1 m3 for this report.**