RECORD OF CONVERSATION

Conversation took place on: October 27, 2005 3:00pm EST

Type of Conversation (specify): Phone

Conversation was initiated by: Kirk Owens and Jennifer Smith

Conversation Involved: Kirk Owens—SAIC
Jennifer Smith—SAIC
Chris Del Signore--LANL

Issues Discussed: Volumes of waste to be processed at the RLWTF under each alternative.

Resolution:
The following table outlines the resolutions of the discussion

Activity	Units	Reduced 2006	No Action 2006	Expanded 2006
Pre-treat at TA-21	10^3 lpy	b	b	b
Pre-treat in Room 60	10^3 lpy	120	120	170
Solidify sludge from Room 60	m^3/yr	12	12	17
Treat LLW-RLW at MTP at TA-50	10^6 lpy	15	15	18
Treat LLW-RLW at TA-53	10^3 lpy	19	519	519
Package LLW sludge	m^3/yr	50	50	60
Secondary RLW thru Interim evaporator	10^3 lpy	1,000	1,000	1,200
Transport evaporator bottoms to Tennessee	10^3 lpy	250	250	300
Receive solidified bottoms from Tennessee	m^3/yr	20	20	24

Action Items:

1. Jennifer will type up conversation and revised table for approval. Document will be entered as a reference in the Administrative Record for the Project and cited in the new SWEIS.
2. Kirk and Jennifer will ensure that the evaporator bottoms that are transported to and from TN are accounted for—perhaps with solid waste.
3. Jennifer will follow up with MJ Davis on which tables these numbers (evaporator bottoms) should go in.
4. Jennifer will follow up with Chapter authors (specifically Chapters 3 and 5) to ensure that the numbers in the above table are reflected and consistent throughout the document.
5. Chris will send a diagram showing RLW generators (LLW) to Kirk
6. Chris will request a profile of the LLW shipped to and from TN so that it can be used in the transportation accident analysis.

RoC prepared by: Jennifer Smith. Notes of conversation attached.

Notes from call:

1) Chris expressed concern that the transportation of evaporator bottoms to and from TN was not addressed in these tables. It was noted that this waste is LLW both going to and coming from TN. Kirk and Jennifer noted that this will be addressed, but perhaps in the tables for solid waste in Chapter 5.
2) SLUDGES. The need to process secondary wastes has arisen since the 1999 SWEIS as a result of the installation of the UF/RO processes.
3) TA-21 pre-treatment. Chris confirmed that this is shipped to TA-50 if the tritium content is low, and to TA-53 for evaporation if the Tritium content is high. Although the TA-21 facility hasn't operated in 04 or 05, there is residual liquid in the equipment. This will be treated to get the facility ready fro decommissioning. It was agreed to deal with this in a footnote, but to be cautious, say "by 07" rather than "by 06."
4) Pretreatment in room 60—these numbers are based on projections from TA-55. for the next three years, they said 100 as a "best guess" of actual performance. In order to give them some cushion, it was decided to use 120 for the Reduced and No Action Alternatives, and to use 170 for the Expanded Operation Alternative.
5) Solidified Sludge—this is roughly the number of liters processed divided by 10. Thus 12 for the Reduced and No Action Alternatives and 17 for the Expanded Operations Alternative.
6) Main treatment process: although Chris had previously estimated 10 million liters for the volume of waste t ogo through the main treatment process, he thought that number should be increased, since they have actually received/treated around 12 million liters for several years now. To provide some rooms for error/expansion, we will now use 15 million for the No action and reduced operations alternatives.
7) There are three waste streams from TA-55: caustic and acidic TRU and "industrial RLW (LLW). Although we have already noted that TRU liquid waste will increase with increased pit production, we should also account for the increases in the LLW stream from TA-55 under the Expanded operation alternative. We will use 18 million liters.
8) The largest produces of RLW are:
    a. CMR
    b. TA-55
    c. TA-59 (various labs)
    d. TA-48 Radiochemistry operations
    e. Beryllium facility
    f. Machine shops (bldg 3-102)
    g. MSL and TFF in TA-55
9) The numbers previously listed for TA-53 operatiosn are OK
10) Secondary Waste Volumes—sludge packaged: 60m3 per year is equal to 300 drums, which would cover up to 20 million liters going through the main treatment process. We will use 60 for expanded operations and 50 for reduced and no action.
11) Secondary waste through the evaporator: 1 million should be ok for 15 million liters through the main treatment process. Take up proportionally for expander operations—1.2 million
12) Bottoms—there is a 4 to one ratio. Previous numbers ok for no action and reduced. Use 300 and 25 for expanded (to TN and from TN respectively.)

Table of metric to English conversions and Rounded numbers to be used in document

if original number is in cubic meters:				
type of waste	**cubic meters**	**cubic yards**	**Rounded for Sig.Figs:**	
	original	(m3 * 1.3079)	meters	yards
Rm 60 sludge	12	15.7	12	16
exp ops	17	22.2	17	22
LLW sludge	50	65.4	50	70
exp ops	60	78.5	60	80
solidified bottoms	20	26.2	20	25
exp ops	24	31.4	25	30

if original number is in liters:				
type of waste	**Liters**	**gallons**	**Rounded for Sig.Figs:**	
	original	(l * 0.26418)		
pre-treat in Rm60	120	31.7	120	30
exp ops	170	44.9	170	50
LLW--MTP	15	4.0	15	4
exp ops	18	4.8	20	5
LLW at TA-53	19	5.0	20	5
exp ops	519	137.1	520	140
secondary thru evap.	1,000,000	264,180	1 mil	260,000
exp ops	1,200,000	317,016	1.2 mil	320,000
bottoms to TN	250,000	66,045	250,000	66,000
exp ops	300,000	79,254	300,000	80,000

Table 5-30 Radioactive Liquid Waste Treated at LANL—No Action Alternative

Waste Treatment Activity	*Projection*[a]
Pretreatment of radioactive liquid waste at TA-21	--[b]
Pretreatment of transuranic liquid waste from TA-55 in Room 60	30,000 gallons (120,000 liters)/yr
Solidification of transuranic (TRU) sludge at TA-50	16 yards^3 (12 meters^3)/yr
Radioactive liquid waste treated at TA-50	4,000,000 gallons (15,000,000 liters)/yr
Secondary treatment of radioactive liquid waste at TA-50	260,000 gallons (1,000,000 liters)/yr
De-water low-level radioactive waste (LLW) sludge at TA-50	70 yards^3 (50 meters^3)/yr
Radioactive liquid waste treated at TA-53	140,000 gallons (520,000 liters)/yr[c]
Transport evaporator bottoms to Tennessee	66,000 gallons (250,000 liters)/yr
Receive solidified evaporator bottoms from Tennessee[d]	25 yards^3 (20 meters^3)/yr

[a] All information from Del Signore 2005
[b] No new radioactive liquid waste is being generated at TA-21, and all inventory that exists in tanks and equipment is expected to be processed by 2006.
[c] Radioactive liquid waste treated at TA-53 includes waste volumes from LANSCE plus approximately 5,000 gallons (20,000 liters) per year from TA-50.
[d] This is solid low level radioactive waste that is disposed of at TA-54

Table 5-33 Radioactive Liquid Waste Treated at LANL—Reduced Operations Alternative

Waste Treatment Activity	*Projection*[a]
Pretreatment of radioactive liquid waste at TA-21	--[b]
Pretreatment of transuranic liquid waste from TA-55 in Room 60	30,000 gallons (120,000 liters)/yr
Solidification of transuranic (TRU) sludge at TA-50	16 yards^3 (12 meters^3)/yr
Radioactive liquid waste treated at TA-50	4,000,000 gallons (15,000,000 liters)/yr
Secondary treatment of radioactive liquid waste at TA-50	260,000 gallons (1,000,000 liters)/yr
De-water low-level radioactive waste (LLW) sludge at TA-50	70 yards^3 (50 meters^3)/yr
Radioactive liquid waste treated at TA-53	5,000 gallons (20,000 liters)/yr[c]
Transport evaporator bottoms to Tennessee	66,000 gallons (250,000 liters)/yr
Receive solidified evaporator bottoms from Tennessee[d]	25 yards^3 (20 meters^3)/yr

[a] All information from Del Signore 2005
[b] No new radioactive liquid waste is being generated at TA-21, and all inventory that exists in tanks and equipment is expected to be processed by 2006.
[c] Under the Reduced Operations Alternative, operations at the LANSCE facility will cease. Approximately 5,000 gallons (20,000 liters) of radioactive liquid waste per year from TA-50 will continue to be treated at TA-53.
[d] This is solid low level radioactive waste that is disposed of at TA-54

Table 5-37 Radioactive Liquid Waste Treated at LANL—Expanded Operations Alternative

Waste Treatment Activity	*Projection*[a]
Pretreatment of radioactive liquid waste at TA-21	--[b]
Pretreatment of transuranic liquid waste from TA-55 in Room 60	50,000 gallons (170,000 liters)/yr
Solidification of transuranic (TRU) sludge at TA-50	22 yards^3 (17 meters^3)/yr
Radioactive liquid waste treated at TA-50	5,000,000 gallons (20,000,000 liters)/yr
Secondary treatment of radioactive liquid waste at TA-50	320,000 gallons (1,200,000 liters)/yr
De-water low-level radioactive waste (LLW) sludge at TA-50	80 yards^3 (60 meters^3)/yr
Radioactive liquid waste treated at TA-53	140,000 gallons (520,000 liters)/yr[c]
Transport evaporator bottoms to Tennessee	80,000 gallons (300,000 liters)/yr
Receive solidified evaporator bottoms from Tennessee[d]	30 yards^3 (25 meters^3)/yr

[a] All information from Del Signore 2005
[b] No new radioactive liquid waste is being generated at TA-21, and all inventory that exists in tanks and equipment is expected to be processed by 2006.
[c] Radioactive liquid waste treated at TA-53 includes waste volumes from LANSCE plus approximately 5,000 gallons (20,000 liters) per year from TA-50.
[d] This is solid low level radioactive waste that is disposed of at TA-54