



SRS Citizen's Advisory Board

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Waste Management Committee Meeting

Aiken Municipal Conference Center, Aiken, SC
September 12, 2006

The Savannah River Site (SRS) Citizens Advisory Board (CAB) Waste Management Committee (WMC) met on Tuesday, September 12, 2006, 5:00 PM, at the Aiken Municipal Conference Center, Aiken, SC. The purpose of this meeting was to discuss the Liquid Waste Disposition Processing Plan (DPP), the Radioactive Liquid Tank Waste Stabilization and Disposition (U) Risk Management Plan (RMP) Project Baseline Summary (PBS)-SR-0014 and to hear public comment. Attendance was as follows:

CAB Members

- Bob Meisenheimer
- Joe Ortaldo
- Manuel Bettencourt
- Bill Lawless
- Karen Patterson
- Alex Williams
- Jimmy Mackey
- Mary Drye
- Leon Chavous
- Wendell Lyons
- Cynthia Gilliard
- Judith Greene-McLeod
- Ranowul Jzar

Stakeholders

- Bill McDonell
- Jack Roberts
- Perry Holcomb
- Lee Poe
- Rick Ford
- Mike French
- Josh Gelinis
- Frank Boulineau
- *Rick McLeod

Regulators

- Dave Wilson, SCDHEC
- Shelly Sherritt, SCDHEC

DOE/Contractors

- Terry Spears, DOE
- Larry Ling, DOE
- Tony Polk, DOE
- Julie Petersen, DOE
- de'Lisa Bratcher, DOE
- Michelle Ewart, DOE
- Virginia Dickert, WSRC
- Steve Thomas, WSRC
- Frank England, WSRC
- Ron Campbell, WSRC
- Elmer Wilhite, WSRC
- Charlie Hansen, Parsons
- Michael Norton, Parsons
- Jim Moore, WSRC

- *WM committee members*

* *CAB technical advisor*

Welcome and Introduction:

Bob Meisenheimer, Chair, thanked everyone for being at the meeting and asked them to introduce themselves. Mr. Meisenheimer referenced the meeting ground rules and reviewed the agenda.

Mr. Meisenheimer explained that later in the meeting, Terry Spears, DOE, will comment on the newspaper articles concerning the cancellation of the National Regulatory Commission (NRC) meeting with Department of Energy (DOE) on the Tank Closure Waste Determination. In addition, Mr. Meisenheimer asked Mr. Spears to comment on the status of the draft Salt Process permit from the South Carolina Department of Health and Environmental Control (SCDHEC).

Liquid Waste Disposition Processing Plan (LWDPP):

Tony Polk, Acting Director of the DOE Waste Disposition Programs Division, told the WMC that Doug Hintze had accepted an opportunity to work with the Department of Labor in a leadership program and would be on a one-year leave of absence.

A discussion developed on the change in nomenclature from high-level waste to liquid waste. It was explained that the site no longer refers to the system as a high-level waste system since some of the waste in the system is low-level waste. The waste from this system that goes to Saltstone is low-level waste, thus the site refers to the system as liquid waste.

Mr. Polk explained that the LWDPP has three major elements. They are the salt waste treatment and disposal, the sludge batch preparation and processing, and tank closures. It also defines the near term LW disposition activities. The following major programmatic changes are incorporated in the document: 26 month delay in start of the Salt Waste Processing Facility (SWPF), delays in start of salt waste disposition, limited tank processing space and length of reviews and approvals of the waste determination documents. Priorities through fiscal year (FY) 2012 are identified.

The plan addresses the following basic criteria:

- Ensure safe operations of LW facilities
- Continue sludge feed to the Defense Waste Processing Facility (DWPF)
- Salt waste treatment and disposal near term via use of the Actinide Removal Process (ARP) and the Modular Caustic Extraction Unit (MCU)
- SWPF startup in FY2012 to process majority of salt waste
- Tank closures to meet the Federal Facility Agreement (FFA) commitments except for tanks 18 and 19
- Tank working space management

The following are the major changes since the Interim Processing Plan. They are:

- SWPF startup will be 9/30/11 vs 8/31/09
- Deliquification, Dissolution, and Adjustment (DDA) startup will be 7/30/06 vs 1/30/06
- 3116 process for tank closure documentation is 24 months vs 18 months
- Tank 50 used for high-level waste vs for Saltstone feed tank
- Tank 48 will be available in FY 2010 to support Tank Closure
- ARP/MCU startup will be July 2007 vs February 2008
- H Canyon operations will be through FY 2013 vs FY 2011
- DWPF canister rate is 186 vs 230 through FY 2014
- SWPF reaches full processing rate in one year vs four years
- SWPF full process rate is 5.9 million gallons vs 5.7 million gallons

Some of the key performance milestones for salt waste treatment and disposal are:

- Planned to initiate salt disposal via DDA processing 7/1/06. DDA will be complete by third quarter FY 2007.
- ARP and MCU construction will be completed by 10/1/07 and salt waste treatment and disposal will be initiated. Operations will be complete the third quarter FY 2011.
- SWPF construction will be complete and startup on 9/30/11.

- Tank 48 will be recovered via treatment of organics by 1/1/10.
- Tank 50 will be available for high-level waste by 1/1/10.
- Saltstone vaults will be constructed to meet disposal requirements. Vault 2 will be constructed 10/1/08, Vault 3 4/1/10 and Vault 5 10/1/11.
- Tank 25 will be converted to 2F Evaporator Drop Tank by 7/31/07.
- Tank 19 closure will be 10/31/07.
- Tank 18 closure will be 3/28/08.
- Tanks 5 and 6 closure will be 9/30/10.
- Tank 4 closure will be 9/30/11.
- Tank 12 and 16 closure will be 9/30/12.
- Tank 8 closure will be 9/30/13.
- Tank 14 and 11 closure will be 9/30/14.
- Tank 15 and 23 closure will be 9/30/15.

The Liquid Waste Risk Management Plan for Project Baseline Summary (PBS) - SR-0014C issued July 2006 incorporates the DPP risks. The near term DPP risks include:

- Failure to receive required permits to initiate salt disposal on schedule
- Legal impediments
- Degraded evaporator performance
- Delays in 3116 Determinations for tank closure
- Tank 48 treatment technology failure
- Integration of new facilities into existing infrastructure
- DWPF processing rate impacts from high aluminum and/or ARP/MCU feeds
- Inability to develop and deploy tank and annulus cleaning technologies

The current actions and issues include writing the permit language for Saltstone, Tank 48 material disposition by 1/1/10, ARP/MCU feed preparation, SWFP Critical Decision 2 to 3 preparation, path forward for Tank 18 and 19 and path forward for Section 3116 Determinations.

Liquid Waste Disposition Processing Plan, the Radioactive Liquid Tank Waste Stabilization and Disposition (U) Risk Management Plan Project Baseline Summary-SR-0014:

Tony Polk explained that risk is a measure of the potential inability to achieve overall project objectives with scope, cost, schedule and technical constraints. The risk components are 'likelihood' and 'consequences'. Project risk management is the process of risk identification, analysis, handling and monitoring.

In September 2004, a Risk Assessment Report was issued for the Liquid Waste program. The report summarized and presented results of a review of individual project risk and vulnerability assessments. The current Risk Management Plan incorporates the Salt Processing Program Risk Analysis. It updates and expands the scope of the assessment to include the entire PBS-SR-0014 scope through completion. It assesses potential opportunities and groups risk by category and near-term/short-term impacts. A Monte-Carlo simulation was used to obtain an 80 percent probability cost contingency. An action item list was generated from the risk database which identifies the organizations responsible for implementing risk handling strategies. A 'risk-o-meter' is a management status tool to provide a condensed 'snap shot'

of the project risk management status at any point in time.

The assessment process has four distinct steps: Identification, Grading, Handling and Impact Determination. To develop these steps, a risk assessment and opportunity team was established and comprised of both DOE and contractor personnel with diverse knowledge and expertise.

For Risk Identification, the following actions were taken:

- Identification and review of risk documents issued since the last update
- Review of Planning, Integration and Technology issues tracking database
- Review the Future Projects database
- Review of previous risks and deletion of risks no longer applicable
- Brainstorming of Waste Stabilization and Disposition Project (WSDP) categories
- Brainstorming of each Assessable Element

The risks and opportunities were graded according to likelihood and consequences using established criteria for the program. A total of 234 potential risks were identified. 169 were considered valid and were carried through to the evaluation process. The numbers were again reduced by removing duplications, combining risks where practical, and where feasible following through with detailed data collection to resolve (close) risks.

The impacts of the cost and schedule on the scope were determined and risk-handling strategies were developed to eliminate or reduce the likelihood or consequences of the risk. The impacts of implementing the risk-handling strategies were determined. The residual risk after implementation of the risk-handling strategies was determined and captured in the contingency analysis. The risk-handling strategies were then incorporated into the project baseline.

Twelve categories of risks with 42 High, 22 Moderate, and 21 Low risks and resolution of 13 risks were identified. Four opportunities were identified, validated and graded. The contingency analysis was based on 80 percent confidence in project completion and resulted in \$209 million of cost contingency through 2012. Overall contingency analysis resulted in approximately \$13 billion for the project life cycle from 2006 to 2031. Mr. Polk reviewed the various WSDP high risk categories giving the probability and worst consequence.

In summary, Mr. Polk explained that DOE intends to actively manage the risks and monitor implementation of risk handling strategies monthly. A database will be maintained to track issues to be evaluated and incorporated into the next Risk Management Plan revision.

Other:

Terry Spears, DOE, and David Wilson, SCDHEC, explained that the articles in the newspapers in relation to the canceled DOE/NRC meeting really didn't give the whole story. In actuality, there was only one meeting involved. It was related to a letter the DOE General Council sent to the NRC explaining the DOE concept of consultation. The high level management of DOE wanted to meet with the NRC commissioners to address DOE's position stated in the letter. It had nothing to do with the 3116 process. It was also stated that the past waste determination

process for salt waste disposal had been conducted very openly, and that the ongoing Tank 19/18 waste determination process and future processes would certainly also be done in the public eye. There was discussion between the WMC members on a possible letter or recommendation expressing the importance of having open meetings with the public and impressing upon both DOE and the NRC to speed up the Waste Disposition process.

Mr. Spears explained that DOE and SCDHEC were continuing to work on draft language expressing appropriate commitment for the Saltstone disposal permit. He remained optimistic that this process was proceeding to closure and that DOE and SCDHEC could soon come to agreement on language that would support initiation of the public review process for the permit in the near future. DOE is reviewing the draft permit language at present. Ms. Sherritt confirmed the status.

Mr. Spears introduced Larry Ling as the new DOE-SR Director of Salt Process Division.

Public Comment:

Lee Poe had two comments. 1. Mr. Poe recommended to the WMC and the CAB that the CAB take a position on the priority of the types of tanks to be used for reuse or when the type IV tanks get filled. He felt that the CAB should not agree to use the single walled tanks. These are the last tanks that should be used because they form the most potential hazard to the workers, public and the environment. 2. Mr. Poe felt that there needs to be more public involvement on the 3116 program. Since hazardous material will be left in the State of South Carolina, there should be broad public participation. Mr. Poe feels that the CAB should cultivate public interest and that there is not enough public outreach. There was discussion related to a public workshop.

Adjourn:

Mr. Meisenheimer adjourned the meeting

Follow-Up Actions:

The following are the actions items:

- Bob Meisenheimer and Rick McLeod requested that DOE come back to the WMC and discuss the Disposition Processing Plans in more detail. In particular they were requesting a more in depth discussion of the Salt Process as well as a chart or discussion on the key factors and the critical path for the Salt Process. - Terry Spears/Gerri Flemming
- From comment on the Hanford trip on technology development for waste tank cleanup, a request was made by Bob Meisenheimer for DOE to come back soon to update the committee on technology development status. - Terry Spears/Gerri Flemming
- Karen Patterson requested a copy of the letter from the DOE General Council to the NRC on the issue of consultation. - Terry Spears/Jim Moore
- Joe Ortaldo requested that CAB Recommendations 230 and 237 be moved from Pending to Open. - Dawn Haygood/Jim Moore
- The site will consider developing a fact sheet that explains the change from high-level waste system to the liquid waste system to help educate the public. - Ginger Dickert/Gerri Flemming