



SRS Citizens Advisory Board

Consolidated Incineration Facility Focus Group

Meeting Summary

May 2, 2002
Aiken Federal Building
Aiken, SC

The Consolidated Incineration Facility (CIF) Focus Group (FG) met on Thursday, May 2, 2002 at the Aiken Federal Building in Aiken, SC. The purpose of the meeting was to hear the schedule and plans for legacy PUREX disposition; plans for the Alternatives to Incineration Stakeholder Forum; and participate in a group discussion. Attendance was as follows:

FG Members

Jerry Devitt*
Jean Sulc*
Wade Waters*
Bill Willoughby*
Karen Patterson
Doug Leader
Ray Hannah
Peter Hudson
Sonny Goldston
Helen Villasor

Stakeholders

Jimmy Mackey*
Rick McLeod, CAB Tech. Adv.

DOE/Contractors

Virgil Sauls, DOE-SR
George Mishra, DOE-SR
Cliff thomas, WSRC

Regulators

None

***Denotes CAB members**

Bill Willoughby welcomed those in attendance, asked for introductions, and then requested public comments. Hearing no public comments, Mr. Willoughby said he wanted to share current information that the Department of Energy (DOE) Headquarters (HQ) is planning to release the Draft Scrap Metals Programmatic Environmental Impact Statement (PEIS) during the summer. Helen Villasor said that she has been tracking the PEIS on a weekly basis since the Waste Management Committee (WMC) has been involved with the issue and will ensure that as soon as the Draft PEIS information becomes available, the topic will be included in an upcoming meeting. Mrs. Villasor also noted that John Neave, DOE-HQ has been appointed as the new Scrap Metals Draft PEIS Manager.

Mr. Willoughby then discussed the CIF FG's charter, which had just been extended by the Citizens Advisory Board (CAB) until June 27, 2003. Explaining that the extension would provide the FG with an opportunity to follow the work on the legacy PUREX to ensure that the technology is an effective alternative treatment, Mr. Willoughby said the FG would now meet on a quarterly basis rather than monthly. The next meeting will be scheduled near the end of August.

PUREX Alternative Treatment Plans for PUREX Disposition

Before opening his presentation, Peter Hudson asked the attendees to notice the change of names on the cover slide from that of Ray Hannah to Howard Pope. Mr. Hudson explained that since DOE had made the decision to pursue an alternative and not restart CIF, the issue of dispositioning the waste stream as mixed low-level waste (MLLW) emerged, and Howard Pope is the DOE-SR MLLW Project Manager.

Mr. Hudson then opened his presentation by referring to a high level PUREX Waste Stabilization and CIF Closure bar chart. Mr. Hudson said the chart was divided into three major parts, the PUREX Waste Treatment Studies/CIF Closure; PUREX Aqueous Waste Treatment; and PUREX Organic Waste Treatment. Noting that the FG was already familiar with the first section since presentations on this portion of the chart had been made to the group over the past two years, Mr. Hudson said two important milestones that were basically on top of each other have been met. The first was the permit modification that allowed SRS to delay closure of CIF, and the second was SRS's formal notification to the South Carolina Department of Health and Environmental Control (SCDHEC) that the decision had been made to pursue an alternative treatment technology and not restart CIF.

Referring to the second portion of the bar chart dealing with the PUREX Aqueous Waste Treatment, Mr. Hudson said that the New Solvent Storage Tank and Tank 50 were being prepared for the transfer of waste. However, Mr. Hudson noted that the dates were flexible and said that Tank 50 was currently being emptied through the Saltstone Facility, with completion of the campaign expected around the end of May or early June. Mr. Hudson indicated that it was too late to add the legacy PUREX to the current campaign. Additionally, SRS did not want to complicate operations by adding another waste stream to the first batch of Low Curie Salt (LCS). Mr. Hudson emphasized that it would probably not be a good idea to blend the PUREX in the first campaign since it is important to ensure that the LCS process works to DOE's complete expectations. If LCS operations continue to run favorably, Mr. Hudson said there would be ample time to blend in the legacy PUREX.

Mr. Hudson discussed the radionuclide composition of the PUREX/LCS blend and said 13,000 gallons of the PUREX aqueous will be combined with a minimum of 300,000 gallons of LCS solution. Mr. Hudson also noted that the chemicals would not change; however, there will be a marginal difference in the radionuclides after the blend. At this point in the presentation, Bill Lawless asked Helen Villasor to check if a copy of CAB Recommendation 152, "PUREX Waste Alternative Treatment Evaluation" had been sent to SCDHEC since the CAB recommended blending the PUREX aqueous waste into the Saltstone feed as soon as practical after the Saltstone Processing Facility is restarted. A question was also raised whether SRS has held discussions with SCDHEC regarding the PUREX legacy waste being blended with LCS. In response, Sonny Goldston noted that SCDHEC has been well briefed on LCS; however, talks with the regulators will be scheduled soon to discuss the PUREX. As the permit now stands, Mr. Goldston said SRS is required only to notify the regulators of a waste stream change in feed.

Mr. Hudson continued with his presentation by saying that the legacy waste will be transported to Tank 50 by tanker trucks and will require at least four transfers for one campaign. However, Mr. Hudson said it should be noted that this action assumes LCS is successful. According to the bar chart, the PUREX aqueous waste is scheduled to be treated by September 30, 2003, which is a fixed date.

In the third section of the bar chart, which referred to PUREX Organic Waste Treatment, Mr. Hudson explained that current plans include performing stabilization R&D testing at full scale. However, Mr. Hudson emphasized that it was important to keep in mind that a repeat of a number of bench scales tests have to be completed first. Noting that there had been six stabilization media in the original R&D trials, Mr. Hudson said that SRS was now left with four stabilization options, NoChar, Imbiber Beads and two from Petroset.

Questions were raised concerning the peer review team's recommendations that were included in the study. In response, Mr. Hudson said that in terms of disposal, the team recognized the Nevada Test Site as the most viable disposal path. However, Virgil Sauls emphasized that DOE's optimum outcome is to have more than one disposal option. With regard to the iodine-129 detection limits, Mr. Hudson explained

that characterization of the iodine-129 partitioning coefficient (K_d) is still needed in order to complete a performance assessment for on-site disposal. As for the Draft Environmental Protection Agency (EPA) guidance, Mr. Hudson said that SRS still needs to determine how EPA regulations will affect the stabilization of the SRS PUREX and, if necessary, immediately initiate surrogate tests to determine how the final waste form will perform when subjected to aggressive extraction protocols.

In closing, Mr. Hudson referred to the bar chart and said that it depicts the regulatory commitment of completion of treatment for ten percent of the PUREX organic waste by April 2, 2007, and the projected date for completion of treatment for 100 percent of the PUREX organic waste by December 3, 2007. The regulatory commitment for starting closure of CIF is March 3, 2008, and completion of CIF closure by April 30, 2010. This should be compared with the revised Site Treatment Plan (STP) commitment for completing treatment of the legacy PUREX by December 2008. The projected date for starting closure of CIF is March 3, 2008, and completion of CIF closure by April 30, 2010. In response to a question on closing costs, Mr. Hudson said that since preliminary discussions with Facility Decommissioning Division (FDD) have begun, it's been determined that estimates for closure may actually be lower than the projected \$80M. SRS will also begin to include budgeting for closure in the outyear budgets, and since a regulatory commitment will be involved, the possibility of a higher priority in the DOE budget exists. Jimmy Mackey asked if CIF would still be operable in a given time frame of seven to ten years and would it be feasible to restart the facility? In response, Mr. Hudson explained that the optimization study looked at the possibility; however, the cost implications are factors worth considering since the facility would degrade over time, require modifications to the kiln liner, as well as major upgrades to enclose the offgas system. When asked if SRS was still seriously looking at other waste streams such as the disposition of the in-process Canyon PUREX solvents, Mr. Hudson responded that Nuclear Materials Division (NMD) is conducting a cost benefit analysis to dispose of its PUREX and is exploring costs for shipping it offsite for incineration. By that time, Mr. Hudson added, the SRS stabilization facility will be up and running. Bill Lawless asked if NMD had responded to CAB Recommendation 146, "Plutonium Uranium Extraction Process (PUREX) Recovery Alternatives" where the CAB asked for a presentation on the cost benefit analysis to be provided at the next CIF Focus group meeting. Dr. Lawless also asked Helen Villasor to check the dates in the recommendation to determine when NMD is to come back and present more information on the cost benefit analysis to the CIF Focus Group.

Wade Waters extended his appreciation to Mr. Hudson and all of the people who have been involved with CIF and came forward to help the CAB understand the implications of shutting down the facility. Mr. Waters also thanked members of the Focus Group for their diligence and attendance at all of the CIF Focus Group meetings that have transpired over the past two years. Mr. Waters mentioned that he heard SCDHEC speak highly of the support given by SRS and the seven recommendations concerning CIF that were received, which helped the regulators to make the decision to keep CIF as a viable option. Mr. Waters said that the cooperation of DOE, WSRC, SCDHEC and the CIF Focus Group was a magnificent job of teamwork and he congratulated everyone for the highly positive outcome.

Alternative Technology to Incineration (ATI) Stakeholder Forum Plans

Karen Patterson, substituting for Perry Holcomb provided a brief background on the "Keep Yellowstone Nuclear Free" litigation and the emerging Blue Ribbon Panel (BRP) that was formed in response to the legal action. Ms. Patterson said that in its report, the BRP recommended additional stakeholder participation; therefore the Energy Management Advisory Board (EMAB) formed the ATI Committee (ATIC), which then led to the development of the ATI Stakeholder Forum.

Perry Holcomb and Bill Willoughby have been designated by SRS CAB Chair Wade Waters to attend the Forum, which will be held in Denver, CO, June 7-8, 2002. The forum objectives include facilitating information exchange among technical experts, regulators, and concerned stakeholders; and identifying stakeholder values and concerns. Ms. Patterson indicated that a primer describing details of the ATI will soon be available at its website at <http://tmfa.inel.gov.ati> in order to assist stakeholders who are interested in participating in the conference.

Ms. Patterson noted that initially, DOE was planning a "talking heads" format for the forum; however, after hearing the concerns of Lee Poe, Perry Holcomb, and Ms. Patterson (all members of the ATIC) at a recent Washington, DC meeting, a different approach had been developed. Following are the topics to be included on the Forum's agenda:

- DOE plans for developing ATI
- Current state of technology development
- Acceptability of new technologies
- Stakeholder views (benefits and drawbacks)
- Stakeholder opportunities in the process
- Federal and state regulatory processes, including permitting

In closing, Ms. Patterson provided details on how meeting and registration information can be obtained. For meeting information, the Internet address is <http://tmfa.inel.gov.ati> and registration information is available at www.getf.org.ati. Bill Lawless suggested that when Messrs. Holcomb and Willoughby return with comments from the Forum, a letter or recommendation should be drafted to include suggestions and recommendations from the SRS CAB and to ensure that incineration is not eliminated from the list of technologies.

CIF Focus Group Discussion

It was suggested that the next meeting of the CIF Focus Group be scheduled for late August with the following topics to be included on the agenda:

- Regulatory discussion (by the regulators)
- Disposition of the in-process Canyon PUREX solvents
- CIF Closure
- Update from Helen Belencan, DOE-HQ

Noting seven successful CAB recommendations related to CIF and PUREX legacy waste, Bill Lawless, CIF Focus Group Technical Lead presented letters of appreciation to the following for their hard work, diligence, and professionalism in seeing that a positive outcome was achieved for CIF:

- Sonny Goldston
- Ray Hannah
- Perry Holcomb
- Peter Hudson
- Marshall Looper
- Rick McLeod
- Lee Poe
- Shelly Sherritt
- Cliff Thomas
- Helen Villasor
- Wade Waters
- Bill Willoughby

Public Comment

With there being no public comment, Mr. Willoughby adjourned the meeting at 6:30 p.m.

Meeting handouts may be obtained by calling 1-800-249-8155.