



SRS Citizens Advisory Board

Consolidated Incineration Facility Focus Group

Meeting Summary

August 23, 2000
Hampton Inn
Aiken, SC

The Consolidated Incineration Facility (CIF) Focus Group met on Wednesday, August 23, 2000, 5:00 p.m., at the Hampton Inn, Aiken, SC. Attendance was as follows:

FG Members

Wade Waters
William Lawrence
Perry Holcomb
Bill Willoughby
Murray Riley
Ken Goad
Karen Patterson
Lane Parker
Jean Sulc

Stakeholders

Rick McLeod
Russ Messick
Lee Poe
Mike French
Bill Lawless
Bill McDonell

DOE/Contractors

Ray Hannah, DOE
George Mishra, DOE
Peter Hudson, BNFL
Steve Cook, WSRC
Sonny Goldston, WSRC
Helen Villazor, WSRC

Regulators

Shelly Sherritt, SCDHEC
Crystal Rippy, SCDHEC

Wade Waters opened the meeting at 5:00 p.m. Mr. Waters asked for introductions and thanked everyone for coming. Next, Mr. Waters noted that copies of the following documents were available:

- list of focus group members with e-mail addresses
- presentation made by Peter Hudson at the July 27, 2000 Focus Group meeting
- DOE response letter to CAB Recommendation 126
- Bill Lawless presentation to the Waste Management Committee, August 22, 2000

Bill Lawless, technical lead for the group, noted that he had presented a CIF Focus Group status update to the Waste Management Committee (WMC) at its August 22, 2000 meeting and highlighted DOE's response letter to CAB Recommendation 126, "Path Forward for the Consolidated Incineration Facility". Mr. Lawless then reviewed the evening's agenda, followed by a request for comments. There being none, Mr. Lawless asked Ray Hannah to begin his presentation.

Consolidated Incineration Facility Suspension, Maintenance, Startup Costs:

Ray Hannah brought the group up to date on DOE's current status of the suspension activities at CIF. These activities include layup and cleaning out the facility. Mr. Hannah said that a Request for Inquiry (RFI) for alternative technologies to incineration had appeared in the *Commerce Business Daily* from late July until August 22, 2000. To date, 14 responses have been received and the DOE Incineration Alternatives Study Team will review and screen the responses to determine those that are viable. Mr. Hannah said that an initial solidification/stabilization type demonstration with PUREX from one vendor has

already been conducted at the Savannah River Technology Center (SRTC). Mr. Hannah was requested to provide a review of the results of the RFIs at the next meeting.

Lee Poe asked Mr. Hannah to describe what happens in CIF between now and late September. Mr. Hannah responded by saying that first the facility has to be cleaned out to remove the waste material, the incinerator has to be shut down, and the tanks will have to be "blanked" down (installing physical isolation so that no materials can inadvertently enter the tank) to put the facility in a low surveillance mode. A site layup procedure that implements the South Carolina Department of Health and Environmental Control (SCDHEC)-approved suspension plan is also being used as a measuring stick to determine suspension permit requirements and how SRS is working to the layup plan. Mr. Poe asked that a presentation on the layup plan be provided to the focus group at an upcoming meeting.

Mr. Poe asked what the milestones mean. Mr. Hannah responded that SRS has drained the tank farm down, pressure washed it with water, took samples, and to date has met the Universal Treatment Standards (UTS) for certain hazardous constituents contained in the Resource Conservation and Recovery Act (RCRA) permit. For example, Mr. Hannah said that benzene is just one of the hazardous materials. Mr. Hannah reiterated that SRS is working to clean up the facility commensurate with a layup mode that is protective of human health and environment. Shelly Sherrit of SCDHEC clarified that the layup plan is a separate document from the permit.

Mr. Hannah began his presentation by saying that the CIF suspension costs and the scope of work covers placing CIF in a low surveillance mode that will be protective of human health and the environment. The cost to perform this activity will run \$9 million within the Fiscal Year (FY) 2000 operating budget. Surveillance and Maintenance costs will run \$1 million a year for five years (\$5 million total) with a scope of maintaining the facility in a low surveillance mode in a manner that is also protective of human health and the environment (FY-01-05). It was noted that this is an improved estimate since earlier cost information provided to the focus group indicated that Surveillance and Maintenance costs would run \$2 million/year.

In terms of startup costs, Mr. Hannah said that the scope of work covers attaining permits, inspecting, repairing, and restarting the facility as well as providing training. The costs are as follows:

- \$1.5 million for re-permitting
- \$8.5 million for inspection, repair, and training
- \$25.5 million for restart
- \$35.5 million total

Mr. Hannah said that the treatment options study, which is investigating and developing treatment options for PUREX, would continue at a cost of \$4 million. The total projected cost for the CIF suspension, maintenance and startup costs is \$53.5 million. This is also an improved estimate since earlier cost information indicated the total cost would run \$54 million.

There was significant discussion regarding Mr. Hannah's presentation. Lane Parker said that he disagrees with DOE's response to Recommendation 126 and asked who has determined that keeping CIF operating is not cost effective. Mr. Parker also noted that because there is no cost information available for an alternative form of treatment how can cost effectiveness be measured this early in the decision process. Mr. Hannah responded that quotes in the tens of thousands of dollars per cubic meters versus two orders of magnitude greater as is the case with CIF (i.e., \$1 million per cubic meter) have been seen and reviewed by DOE; therefore, in essence it is the government telling SRS that operating CIF is not cost effective. In terms of optimizing CIF, Bill Willoughby asked about an immediate possible savings if CIF were to be kept running. It was mentioned that optimization without major modifications could reduce current operational costs by ten percent. Bill Lawless asked Mr. Hannah and Mr. Hudson to investigate the estimate.

Ken Goad added that costs he has seen appear to be based on current dilution factors and asked if lowering the dilution factor could lower costs. Mr. Hannah responded that SRS is also looking at optimizing (lowering the dilution factor as a means of increasing the PUREX processing rate) CIF operations as an alternative. It should be noted here that there is a distinction between optimizing CIF as noted above, or accommodating PUREX much more efficiently than present and subsequent to the restart of the facility. Mr. Rick McLeod asked where the waste that was run through the CIF was stored. Mr. Hannah clarified that only some of the waste from the PUREX solvent storage tanks located adjacent to CIF had been incinerated. Murray Riley asked if the vendors who responded to the RFI made it known to SRS that they could manage PUREX. Mr. Hannah said that SRS had received responses on alternative technologies, but not specifically PUREX.

Concerned with safety issues during a shutdown of CIF, Lee Poe asked what measures have been developed for uncertainties such as accumulated rain water, the fire protection system, general and routine inspections of the area, and if the inspections would be conducted weekly or periodically. Mr. Hannah responded that inspections would be conducted weekly unless a significant storm occurred, then inspections would be increased. For the most part, Mr. Hannah said the inspections would not be manpower intensive and would require approximately three part time employees for a few Mondays per month. Mr. Poe asked why it would take \$1 million a year for this minimal type of activity? Mr. Hannah said that the cost also takes into account site overhead and taxes, not just manpower. Mr. Poe requested that SRS come back and tell the focus group in depth more about the safety issues surrounding CIF's suspension. Mr. Hannah reassured the group that SRS was not going to sacrifice safety for dollars.

When asked if there are any permits that will carry SRS through the Surveillance and Maintenance mode, Shelly Sherritt responded that as long as SRS stays with a temporary suspension mode, the current permit would remain in effect. In a discussion surrounding the Maximum Achievable Control Technologies (MACT) Rule compliance, Mr. Hannah said that MACT compliance is a \$1.5 million effort that would include administration efforts only. That is, as the facility sits now, it could pass MACT rules without any additional hardware or facility upgrade costs.

Rick McLeod asked what would happen if optimization does not become a viable option. Mr. Hannah replied that changing a facility classification is expensive, new safety documentation would be required, hazardous analyses performed, and would be part of the \$35 million he mentioned earlier. Mr. Hannah added that while CIF was designed to a Category 3 classification, it never operated at that level, nor was it designed to treat undiluted PUREX. When asked if DOE could provide an estimate on changing the dilution factor, Mr. Hannah responded that under the current study, optimization of the facility includes analyzing non-dilution. In addition, Helen Belencan, DOE-HQ and other complex resources are conducting a parallel study on alternative technologies.

Several questions about final closure of CIF were raised. For example, what would happen to the current permit if an alternative is found; what would final closure cost; and why bother with alternatives if final closure is evident? Bill Lawless noted that for the first time, the focus group was hearing that once an alternative process was selected, there would be no need for restart, forcing SRS into an immediate final closure by SCDHEC that could cost millions of dollars. Closure estimates were crudely estimated to range from a few to as much as \$50 million.

Karen Patterson said it was her belief that it is too early to focus on cost when more attention should be paid on the disposal of SRS's legacy PUREX waste. However, Mr. Lawless explained that if there was startup in 2007, at the present feed rate, SRS could meet the Site Treatment Plan (STP) commitments in addition to incinerating 15,000 more gallons through 2009. Perry Holcomb mentioned that since no treatment alternative is available, he believes the facility should run to 2006 to dispose of the spent solvent. Mr. Holcomb also asked the question about how DOE intends to dispose of the active solvent, i.e., transitioning from backlog (legacy) to the disposal of active solvent.

Regulator Review:

At the request of the Focus Group for a presentation on issues such as licensing mobile incinerators,

privatization and commercialization, and regulatory consideration of a permit extension, Shelly Sherritt provided a regulatory review at this time. In her presentation, Ms. Sherritt said that SCDHEC would consider an extension of the current CIF permit if the request was reflective of operating intent. However, Ms. Sherritt said at present, this is a moot point since the agency has not received a request from SRS for an extension.

In response to a Focus Group question, i.e., permitting of a mobile or vendor unit (similar to the Duratek melter) at SRS, Mr. Sherritt said that the same typical regulatory requirements as permitting for CIF are applicable. However, the type of permit required would first have to be assessed. If a mobile or a vendor unit process was an option SRS intended to use, the normal permitting process would begin since there are no shortcuts for mobile or vendor units. When asked who would hold the permit, Ms. Sherritt responded that both SRS and the operator of the mobile or vendor unit would be responsible. Lee Poe also raised the question that if a mobile unit was brought to SRS, wouldn't it already have a permit. Ms. Sherritt said that the workload at SCDHEC would still be the same and neither a mobile or vendor unit would be able to operate until permitted. Steve Crook noted that the length of time typically required to obtain a hazardous waste permit is two years. However, it took CIF three and a half years to obtain a permit to operate.

With relation to the Focus Group's concern about privatization or commercialization of an incinerator, Ms. Sherritt said that either option would require a permit modification. In addition, fee regulations for hazardous waste permits allow 990 days to process a commercial facility application. However, DOE complex-wide use addressed (for mixed waste) is conducted through the STP.

In closing, Ms. Sherritt provided the probable permit schedule, which includes:

- Complete temporary shutdown - September 30, 2000
- Enter suspension phase - October 1, 2000
- Decision to operate or close
- After decision, proceed to closure or repermitting
- Public review period of 45 days

In response to Ms. Sherritt's presentation, there was considerable discussion regarding the regulatory issues surrounding CIF. For example, Ms. Sherritt was asked if SCDHEC has ever permitted a mobile unit in South Carolina. In response, Ms. Sherritt said that to date South Carolina has not received any such requests. Ms. Sherritt was also asked if the state would favor privatization or commercialization. Ms. Sherritt said that the state would be more accepting of privatization than it would of commercialization. This discussion brought up the need for clarification between both. Ms. Sherritt explained that if a company were to come to SRS and operate CIF it would be privatization. If offsite waste were brought to SRS, then it would be commercialization. Ms. Sherritt was thanked for explaining both; especially since equity issues regarding DOE complex-wide waste streams is an ongoing CAB concern.

More questions regarding the extension of the permit for six more months arose and it was suggested that SCDHEC consider that option now while DOE is reviewing the RFIs that have been received. Ms. Sherritt said that if there is a request from DOE, then SCDHEC would be open to considering it. Bill Lawless said that the CAB might be open to developing a draft motion requesting that DOE ask for a permit extension until April 2001. Mr. Lawless explained that the only advantage of a shut down that he sees is to prepare for the next administration that will come into office in January 2001. Jean Sulc asked how much more money would be needed to extend the permit. Mr. Hannah was hesitant to answer this question since there was insufficient time to evaluate it; however, Mr. Hannah said that it would take approximately \$5 million to maintain permit requirements.

Lee Poe said it is his belief that DOE should make a decision to continue operations, i.e., until a decision is forced by the regulators, but that DOE should make it as long as possible. Mr. Poe added that if there is a suspension, all safety concerns must be verified, and that CIF meet all regulatory commitments without

forcing an early decision. Ms. Sherritt clarified that it is not a good practice to have a permitted facility not operating.

Ms. Sherritt reminded the group that if a change is made to the permit, a 45-day public comment period would be required. However, a decision on a permit change may not be made until January 2001. Bill Lawless asked if there is a need to develop a draft motion to slow the process down and keep the window of opportunity open or would just asking SCDHEC to consider the request take care of it. Ms. Sherritt said a draft motion would not effect any change. Crystal Rippy noted that a temporary authorization could be necessary to carry CIF in a suspension mode from October 1, 2000 until the permit modification is approved so that the current surveillance program could be suspended. Rick McLeod asked the question if DOE had considered any lawsuit that could result from a statute standpoint. A suggestion was made to extend the permit for 18 months, using both PUREX and non-PUREX waste streams for incineration. Noting that "RCRA realizes that most facilities do not just sit around without operating", Ms. Sherritt said, "SRS would be directed into a final closure if CIF was not going to be operated for a period of 18 months".

It was mentioned that 18 months is also too short a timeframe to evaluate alternative technologies, especially since no technology exists that even looks promising. Ken Goad suggested that SRS "keep what works" and let CIF continue to operate. Bill Lawless said it is his opinion that a lawsuit could result if DOE restarts CIF since it is his belief the suspension may be a political issue conceived to appease environmental activists.

In noting that as long as the waste is present at SRS, Perry Holcomb said there are uncertainties. As a chemist and the Focus Group's technical lead on PUREX, Mr. Holcomb asked for detailed information regarding the following:

- Volume of waste
- Where it is stored
- Radiological content of the waste
- How much waste is in the canyons
- Forecasted operating data – how much will result from canyon operations
- Useful data – curie content of pu-238, Pu-239, strontium, cesium, etc.

Issues: There is a strong feeling among the focus group that the permit should be kept active, confirm if the permit can be extended to April 2001, reevaluate permit issues, and investigate alternative waste streams for incineration.

Actions: Request explanation from DOE on what happens if an alternative is selected, there is no need to restart CIF and SRS is immediately forced into final closure by SCDHEC. Where will funding for both activities come from? Consider developing draft motions on:

- Extending the permit until April 2001
- Slow the process down and keep the window of opportunity open
- Provide requested PUREX technical information to the focus group PUREX technical lead
- Provide results of the RFIs at the next meeting
- Provide a presentation on the layup plan at a future meeting

The group tentatively suggested the following meeting agenda items:

September

Helen Belencan presentation on alternative technologies team study

RFI review

Thermal destruction

October

CIF Safety issues and a review of safety documentation

Perry Holcomb presentation on PUREX issues

Explanation of RCRA Permit regarding CIF

Non-thermal destruction

Optimization

Solidify solvent for disposal

September 27, 2000, was set as the next meeting date at the Aiken Federal Building, 5:00 p.m. Wade Waters adjourned the meeting at 7:30 p.m.

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