



SRS Citizens Advisory Board

Environmental Remediation and Waste Management Subcommittee

Meeting Record
September 10, 1996
Beech Island, S.C.

The SRS CAB's Environmental Remediation and Waste Management (ER&WM) Subcommittee met on September 10, 1996, at 6:00 P.M. at the First Citizen's Bank in Beech Island, South Carolina. Bill Lawless and Kathryn May, Co-chairs of the Subcommittee, opened the meeting with introductions. CAB representatives present included Mr. Lawless, Ms. May, Deborah Simone, and Anne Brown. Representatives from the South Carolina Department of Health and Environmental Control (SCDHEC) included Keith Collinworth, Shelly Phipps, Penny Cornett, and Myra Reese. Representatives from the Department of Energy (DOE-SR) included Charlie Anderson, John Reynolds, Bill Brasel, Wade Whitaker, Karen Poore, and Virginia Gardner. Virginia Gardner was the Associate Designated Deputy Federal Official. Kelly Way, Mary Flora, Tom Hinton, and Anne Roe attended from Westinghouse Savannah River Company. Public attendees were as follows: Gerry Stejskal, Lee Poe, and David Towles.

Mr. Lawless announced the meeting agenda for the night and thanked local Beech Island resident, David Towles for attending. Mr. Towles expressed his concern over what he termed "green smoke" which he believed was coming from industries on the Georgia side of the Savannah River. Mr. Towles said he has been unable to get response/resolution from officials in Georgia. Myra Reese of the SCDHEC noted that SCDHEC works closely with Georgia Environmental Officials and said he could contact her with his concerns and she would relay these concerns to the appropriate Georgia officials.

Mr. Lawless then turned the program over to John Reynolds for an update on the Consolidated Incineration Facility (CIF). Mr. Reynolds showed a short video on the CIF.

He explained the basic incineration process is utilized with a rotary kiln, and secondary combustion chamber for combustion of the waste. Off gas from the process is treated by wet quenching and scrubbing systems and high efficiency particulate air (HEPA) filters before being exhausted to the stack where it is monitored for opacity, radiation, and carbon monoxide. The principal products emitted from the stack are carbon dioxide and water. Solid waste from the process (ash) will be solidified with concrete and stored or disposed depending on its composition.

Solidified ash from waste streams containing RCRA listed hazardous materials will be

managed in accordance with regulations, whereas ash from low level radioactive waste will be disposed of as radioactive waste. Waste to be incinerated is initially sampled and characterized at the generator before being sent to CIF. Waste containing RCRA listed hazardous materials will be incinerated separately from other wastes due to their more costly ash handling requirements. When asked about listed and non-listed wastes, Mr. Collinsworth clarified that RCRA hazardous wastes fall under two categories: listed and non-listed. If you incinerate one that is not listed then the residues do not have to be handled as listed. Listed waste contains a RCRA listed hazardous component. RCRA listed waste is much more expensive to handle. A listed waste will be handled by itself.

Mr. Reynolds continued. CIF is presently in the startup phase. September is a training and familiarization period called the quiet time, during which all the facility systems, programs, procedures, and personnel will be evaluated and tested to ensure everything is prepared for operations. A pretrial burn will take place in October to verify the facility is capable of meeting the permitted operating limits at maximum waste feed rates.

While the data from the pretrial burn is being analyzed, readiness assessments by WSRC and DOE HQ will take place. These reviews and assessments will be conducted to certify the facility, programs, and personnel are ready for radioactive operations. Following the readiness assessments, a short maintenance outage will take place to replace the High Efficiency Particulate Air (HEPA) filter housing. Then the official trial burn will be conducted with on-site participation and monitoring by SCDHEC. Only after completion of all these steps to ensure safe operation, will radioactive start up occur.

During the first three months of operation, radioactive hazardous waste on filter paper rolls will be burned. Following this campaign, a shut down will occur for system operation evaluations.

Mr. Poe questioned the significance and meaning of pretrials and asked if this meant that SR could operate the facility with no permit. Basically the permit allows 1440 hours of start-up operation to conduct training, familiarization, and trial burns. The pretrial is the same as the trial burn, but without on-site regulator observation. Also, the pretrial proves that the levels requested in the permit can (or cannot) be met. The trial burn is non-radioactive and will be observed by DHEC.

Mr. Poe questioned if SR had studied other facilities that perform this same kind of work. This technology is not new. The rotary kiln that the incinerator uses is a well established design. When CIF was designed in 1986, SR studied similar facilities in Idaho, Oak Ridge, Louisiana, and Texas. The technology is very mature. Non-rotary facilities were studied as well.

Mr. Poe asked about corrosion and the design life of the facility. The facility is designed for a 30-year life. However, even though precautions have been taken to protect against corrosion, such as coated duct work and fiberglass components, some parts are going to have to be replaced sooner than the facility design life. One example, the refractory (the brick inside the

kiln), will have to be replaced more frequently than 30 years.

Mr. Lawless questioned the plant's location in relation to Jackson and the chances of an emission. The CIF is located between Defense Waste Processing Facility (DWPF) and H-Canyon, about 20 miles from Jackson and approximately 10 miles from the site's boundary. Mr. Reynolds assured the group there are controls in place to prevent any offsite risks or health effects. Studies have been done to determine the effects of an emission. Effects on an individual who lived off the land and water and breathed the air were found to be negligible.

Mr. Lawless suggested an Open House or similar public involvement effort, be held when the CIF begins operations, and that members of the public from Barnwell, Jackson, and Beech Island be invited to attend.

When asked if offsite waste and benzene would be burned in CIF, Mr. Anderson said there are no plans at this time to burn off-site waste at the CIF. Mr. Collinsworth replied that the permit doesn't include off-site waste streams. This would be a large issue with state involvement and transportation issues to resolve. Benzene is not an issue yet since it will not come on line until ITP starts up.

Mr. Lawless asked if there were any questions and then closed the CIF portion of the meeting.

Mr. Collinsworth of SCDHEC then gave an update/overview of the Fish Consumption Advisory which DHEC had reissued and upgraded in May 1996 to include the two radioactive isotopes: Cesium-137 and Strontium-90. This expanded advisory applies only to a portion of the river from Beech Island in Aiken County downstream to the Webb Wildlife Center in Hampton County. Mr. Collinsworth detailed the changes in the recommended consumption rates for various types of fish. Mr. Collinsworth explained that the first fish consumption advisory was primarily due to mercury; and that South Carolina was not unique in issuing these fish advisories as thirty seven (37) other states have also issued fish advisories. SCDHEC continues to sample the fish of the affected rivers and streams and plans additional research in conjunction with state colleges. Questions and discussions centered around if other types of fish would be sampled, how limits were established(EPA), and the public's right to know the information so that they may make informed decisions.

Dr. Tom Hinton of the Savannah River Ecology Laboratory, SREL, gave a presentation on relative risk, discussing sources of exposure and the resulting dose. Questions and discussion covered voluntary and involuntary risks, long term vs. short term effects, and ongoing studies and research.

Mr. Lawless closed the meeting at 8:30p.m.

Meeting handouts may be obtained by calling the SRS CAB toll free number at 1-800-249-8155