## SRS Citizens Advisory Board

Risk Management Working Group

## **Meeting Summary**

May 26, 1999 District Office of DHEC Aiken, SC

Team A - Risk Analysis - Risk Management Working Group met on Wednesday, May 26, 5:00 p.m., at the District Office of the Department of Health and Environmental Control (DHEC). The purpose of the meeting was to review the risk analysis performed by the Emergency Preparedness group and the path forward. Those in attendance were:

Stakeholders
Jennifer Hughes, Lead
Lee Poe
Jerry Devitt
Todd Crawford
Lynne McGrath

DOE/Contractor
Chris Baker, WSRC
Eric Shogren, WSMS
Wayne Davis, WSMS
Jim Moore, WSRC

Jennifer Hughes, Team A Lead, welcomed those in attendance and asked them to introduce themselves. Ms. Hughes reviewed the agenda and introduced those making the presentation.

Wayne Davis, WSMS, stated that he would review the process first and then if there was interest or questions, they could review the Emergency Preparedness Hazards Assessment (EPHA) for the Receiving Basin for Offsite Fuels. Mr. Davis reviewed the EPHA process. The EPHA is the technical basis for a facility's Emergency Management program. The EPHA considers time-urgent releases that are primarily airborne releases. Lee Poe asked if the Christmas release of tritium in 1991 would have come under the Emergency Preparedness notification? Mr. Davis stated that at the time it would not have been included, but since that time they have been developing data to include such a release. Chris Baker stated that there were several levels of notification, official and courtesy. A courtesy notification is considered if something happens at the site that would be considered newsworthy.

Mr. Davis listed the facilities at SRS that had completed EPHAs.

The documents include facility descriptions. Maximum radiological and toxicological substance inventories are identified within the facilities. Material is eliminated (screened) if there is not sufficient quantities to warrant considerations within the Emergency Plan. Chemical screening is based on lower of threshold quantities from 29 CFR 1910.119 or 40 CFR 68.130 as well as threshold planning quantities from 40 CFR 355. Radiological screening is based on 10 CFR 30.72 and the ratio is computed.

Primary barriers and secondary barriers are identified as well as mitigate features and administrative controls. The deterministic evaluation of the event takes into account "passive" sabotage, terrorism and malevolent act accidents. It was noted that while a Safety Analysis Report (SAR) does not consider such things as operator intervention, an EPHA does. A vulnerability analyses or sabotage analysis is used as the upper bound or severity of potential consequences.

Mr. Davis explained the definition used to determine the final source term. The consequence assessment for radiological events uses the HOTSPOT Gaussian dispersion model. The major uses of this model are for general plumes and tritium releases. The consequence assessment for chemicals uses the ALOHA code. The consequences are then evaluated against the Protective Action Criteria (PAC). The radiological limit is 1 rem. The toxicological evaluation is based on the Emergency Response Planning Guide (ERPG) -2. The Emergency Planning Zone (EPZ) is based on the analyses of the hazards associated with that facility. The EPZ is undefined if there is no potential for exposures exceeding a threshold for protective action outside the facility boundary.

Mr. Davis stated that the EPHAs are reviewed annually to see if they need updating. He also explained who reviewed and approved the EPHAs.

Some of the general questions and answers at the end of the presentation were:

- Question: Were the database tables updated regularly? Answer: Yes. WSMS is on the distribution list for all updates.
- Question: What does the EPHA tell us?
   Answer: This document explains the range of events that could occur at the facility and the worse case source term. It also defines the key protective actions. It also identifies the type of emergency or notification.
- Question: With all the facilities, how do you integrate?
   Answer: There are some things that can't be placed in a procedure. We continue to have drills with multi-facility events to train the personnel.
- Question: Have the counties ever moved people because of an emergency at SRS?
   Answer: No, not that we know of.

There was a question on the Emergency Classes and Emergency Action Levels, which was explained on the flip chart.

Ms. Hughes thanked the presenters. She reviewed the path forward. The next meeting will be a review meeting. There was discussion of the Transportation Analysis due in July. Mr. Davis was asked to attend. Jim Moore will talk to Mike Gutshell concerning a talk on the Transportation Analysis.

With no other questions, Ms. Hughes adjourned the meeting.

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