

Savannah River Site Construction Worker Meeting

September 15, 2004

Attendees: Judson Kenoyer (ORAU Team), Melton Chew (ORAU Team), Buck Cameron (CPWR), John Dement (Duke), [REDACTED]

The meeting had been set up by the Center for the Protection of Workers Rights (CPWR) through the Local Union. Knut Ringen started the meeting, establishing the goal of gathering input from the representatives of the local trades with regard to special considerations that are related to their work. He turned the meeting over to Judson Kenoyer to facilitate. Judson asked the attendees go around the table and identify themselves and the trade or organization that they represented.

The following are a mix of comments and areas discussed during the meeting that lasted approximately 5 hours, including a working lunch:

- One of the attendees stated that the interviewers associated with the EEOICPA project “needed work.” In their experience, they were not listening.
- One worker stated that sometime during the time period of 1974-1975, he was involved in an incident (explosion) that involved uranium oxide.
- Another attendee brought up the question of the accuracy of the badges worn to measure dose.
- An attendee stated that the Radiation Protection staff would sometimes take his film badge, have him use pencil dosimeters, record his dose on a card when he came out of an area, and then the card would not be turned in. He also stated that recorded records may not be too far off the correct exposure. But, he did not see the 3” x 5” card turned in.
- Another attendee stated that there was one time when his film badge read about 100 mR and he knows he got 1.4R. (Nothing in minutes saying why he knew that.)

- One attendee stated that sometime in the 1960's or 1970's, during a normal shutdown, the Radiation Protection staff took his film badge and gave him a pencil dosimeter. He said that this was not an exception to what was done at other times.
- A painter stated that he received a copy of his dose history and it was not even close to what he knew he received. They did have an RWP for every job, wore film badges and pencil dosimeters. In some jobs, the pencils were pegged. When they went back to look for the records, they were not there.
- In some areas, the background levels were high enough to make re-zeroing the pencils a necessity in the morning. Another attendee stated that they tried to find the records in the HP Department; but, they could not find them.
- One attendee stated that he received dose records every month.
- One worker stated that when DuPont left the site, Bechtel and Westinghouse took over the operations. He stated that DuPont kept good records. There was discussion that when Bechtel and Westinghouse took over, there was "gross shredding" that went on.
- One attendee stated that he would leave his pencil at the gate when he left the area and then would pick it up the next morning. In one case, the badges that they had been using were removed during the night; when they came in to work in the morning, they were gone.
- Another attendee stated that sometimes they were told to take their badges off outside the area that they were going to be working in; he said that it was so that the reading would not exceed the legal limit.
- They knew that if they were a subcontractor and their exposure exceeded a certain level that they would be "sent home."
- Another attendee stated that there was one case that one of the monitors started alarming and someone called the HP. It was in the 221 Building. The HP stated "That machine has been giving us trouble; just go ahead." When the HP did come to the location, he found out that the worker did have contamination on him. The worker was trying to give the HP a bad time; the attendee stated that the worker was later laid off.
- Someone stated that log books were kept by Operations; work permits also were kept.
- Another person stated that he shredded records for months in approximately 1977. This happened when site operations went from DuPont to Westinghouse.

- One attendee stated that Construction Material Resources had records in microfilm.
- One worker stated that the 313 Building had asbestos throughout the building.
- A member of the Teamsters stated that when they transported items/things around the site, they were not issued dosimeters. They were not told if anything they transported might have been radioactive or contaminated.
- One of the painters stated that he was on the “Glazing crew.” During some jobs, they had to take off the shielding. A project could last for 30 days or so and workers could be there around the clock. Another job was with the Process Room shielding; it would be pulled out. The work involved Pu-238 and the workers wouldn’t know the exposure rates. There were daily work permits that were key; they were signed off by the Engineer and also by HP. These were used all over the site. They would also have to remove insulation. They used Special Work Permits (SWPs) and work packages. Smears would be taken and sometimes a 30-minute limit on their time was put into place. The 200 F Area was a “hot area.” He also did work in the Process Rooms for cleanup (floors, walls) and the area could include high levels of radiation. Contamination would be under the paint. Background could be high due to the presence of sources. The paint crews worked out of a Central Paint Shop; they went all over the place. At one time, there were about 140 painters. Most of the work is on the maintenance side. Work in the “gang-belt quarters” could be 3-4 weeks per project. Painters got into as much hot work as anyone. The only thing they did not do was clean the areas. The person made the statement that operators working with them took badges off so that they could get overtime. It was stated that the painters did not remove them. The work permit that they worked under would be correct; but, he did not know if the records were sent in. He estimated that if they double the recorded exposure, it might be OK; but, it may still be short.
- Another attendee stated that he thought the HPs were not doing their job and that there were problems in a number of areas.
- Someone else stated that workers were not monitored in what were considered to be non-rad areas. He stated that there were examples of office workers working in areas where they could get up to 150 mrem.
- A roofer stated that he did repair and maintenance work and was told that the areas that he worked in did not have Beryllium. It turned out that there was some. He stated “If they lie about one thing, they will lie about others. You mistrust people.”
- One person said that we should use coworker data.

- One attendee stated that he worked out of Central Shops and did non-rad work. But sometimes the tools that he worked with would come up contaminated. People were not aware that this was happening.
- Another worker said that depending on the type of job, the exposures had a wide distribution. It could be a 10-fold difference.
- It was stated that on the environmental data that there was a question on the geometric standard deviation.
- There were monthly reports for the records. The original records were kept in the 703-A Building.
- One of the painters stated that some of the labor had to do with cleanup. No records were kept. They (HPs) didn't see anything. That person has shown some Beryllium sensitivity with spots on the lung and cysts on the liver and spleen.
- An Ironworker stated that he worked in several areas including the 100 Area, K, L, P, C (Cleanup), and R Areas. He also did some work in the Hot Shop to dismantle equipment. He did rigging, lifting, used the crane and welding machines, upgraded and replaced equipment. It was stated that the personal protection was fairly uniform across the site.
- Another attendee stated that there was one time that a subcontractor was working outside the area digging a ditch using a backhoe. He was told that he didn't need a badge. An HP went over to take measurements and he had to stop him; there was too much radiation. There was some contamination. The worker was concerned. They never really checked him.
- Someone stated that the construction workers were always treated like "second-class citizens."
- Someone stated that he worked close to people that were dressed out and he wasn't.
- One of the workers stated that one time he went to pick up his badge and it wasn't there. The HP would pick up the badges when conditions change.
- A sheet metal worker stated that he did work at Tank Farms, the "Hot Tank," and would cut holes and work on the HVAC system. Jobs could last 8-9 months. In his jobs there were "dust" exposures and he "didn't trust anybody." Sometimes the laundry would come back contaminated.
- An example was stated that people would get tired of waiting to work, go home, come to work the next morning and set off the contamination alarms.

- A question was asked of all of the trade representatives: Are there any trades that would receive less exposure than others? Clerical was mentioned. Engineering also. Teamsters (drivers on site) was also brought up as a possible one. We discussed electricians, pipe fitters, sheet metal workers, maintenance, insulators, carpenters, millwrights, boilermakers, operators, operation engineers, roofers, crane operators. It was finally decided that over the long term period, with the variability in the jobs (and associated exposures) and the different crews that were needed for different jobs, that the exposures might just average out. It was agreed that the people performing the transportation onsite (on the average) might have a lower exposure.
- The SRS Incident Database was mentioned. Not many of the attendees knew about it.
- Someone stated that they believe the records are “out there.” But, they also said that if we found the real records, that they (the site) would be embarrassed.
- Knut Ringen stated that they (the rad workers) need a program to estimate the exposures like the Beryllium program does. They can get a clear fix on non-rad levels. Some parameters that are looked at include trades, facilities, time periods, type of construction performed. It is hard to come up with a manageable list.
- An example of a roofer that was supposedly working in a non-rad area was discussed. He had not been given dosimetry to wear; but, it turned out that he should have been wearing some. He was working above a source. But, he had no dose record for that time period. It was stated that sometimes it is very difficult to figure out if someone needs dosimetry or does not need it.
- A question came up with regard to the reliability of exposure data and how variable is it. It was stated by at least one person that they believed that construction workers’ exposure data would be more variable than other workers.
- One attendee stated that training on site was good.

Judson Kenoyer and Mel Chew discussed the efforts that the ORAU Team have had to date. This included the establishment of a task force with people on it that had construction experience and their interface with the Medical Surveillance Group and the CPWR. It also included discussions with the people working with the SRS Westinghouse Incident Database. The SOE Radiation Exposure Monitoring System (REMS) data available was discussed during the meeting and it showed some years that no exposure records were available (at least electronically). Some interesting trends for the years with data were discussed.

Judson Kenoyer wrapped up the discussion by thanking everyone that participated in the effort. He said that their input would be used in the planning of the Construction Worker Chapter for the SRS site that would be added to the site profile.