# Radiological Control Coordinating Committee (RCCC) Meeting Minutes June 13, 2001 Cleveland, OH

#### **Attendees:**

Theresa Aldridge, PNNL
Maria Gavrilas-Guinn, EM
Michael Henderson, ORO
Margaret Lachman, OH
Larry McKay, ORP
Doug Minnema, DP
Barry Parks, SC
Ed Parsons, RL
Joel Rabovsky, EH
Bruce Wallin, RFFO

#### **Guests:**

Pete Darnell, Fernald Steve Bump, RL William Kennedy, RL

The minutes of the last teleconference (May 8, 2001) were accepted.

#### Adoption of ICRP-68 Methodology (Mike Henderson)

The fundamental issue is the need to request an exemption in order to use ICRP-60 tissue weighting factors for dose calculations. DOE permits and encourages the use of newer internal dosimetry methodologies in determining individual dose from intakes of radioactive material. And, the DOE Internal Dosimetry Program Guide says dose from intakes should be based on recommendations given in ICRP publications, NCRP reports and ANSI standards that embody improvements and updates of the science of internal dosimetry. Finally, 10 CFR 835 permits corrections for particle size and the use of currently available internal dose models.

Joel Rabovsky noted that an exemption is required by the regulation. Mike Henderson suggested that a technical position paper be written to clarify the issue. Doug Minnema said that at Y-12, there was a large discrepancy between the results of urine and fecal analysis, and that using the newer method made the results more consistent, which was the basis for the exemption request that they made. Maria Gavrilas-Guinn stated that EM supports using better methods. Bruce Wallin pointed out that this will have a big effect on dose reconstruction and worker compensation issues. There was discussion of having the RCCC form a working group to study the impact of these methods.

EH is considering amending 835 to take out specific tissue weighting factors to allow flexibility. Bob Loesch is working on a new "IMBA" code for occupational internal

dosimetry. The EH Environmental Group (Andy Wallo) is not so keen on new weighting factors because they include non-fatal effects; however, EPA is open to the idea. NRC has a big administrative issue to making a change. Mike Henderson made the point that the exemption requirement is a paperwork disincentive to assigning the correct dose. The RCCC unanimously agreed to form a working group to study the issue. Bruce and Maria will work to set up the first meeting. Doug Minnema will be the NNSA representative.

### Footnote 7 of 10 CFR 835 Appendix D (Mike Henderson)

According to this footnote, a beta survey is not required for uranium. Joel Rabovsky opined that this is because the alpha dominates the health effect. Mike noted that the OR contractor scans for beta anyway. The beta to alpha ratio for Uranium-238 is 3 to 1.

#### **Security Cabinet X-Ray Machines and 10 CFR 835 (Mike Henderson)**

ORO has submitted a request to SC to exempt these machines from being incorporated in an RPP. Joel Rabovsky advocated putting security cabinet X-ray machines in an RPP. At Rocky Flats, security guards are RadWorker 2 trained if they use the X-ray machines. In Tennessee, DOE had funded the FDA to do calibrations, but that funding has been cut off. Doug Minnema and Maria Gavrilas-Guinn felt that the exemption route was the way to go. These machines are installed in Forrestal and Germantown.

#### **Personal Protective Equipment Use in DOE Programs**

Doug Minnema distributed a handout on DOE PPE use.

### **Reciprocity (Ed Parsons)**

Ed distributed a handout on the Hanford ALARA Website Design Plan. He asked for contributions of documents that should be made available at that site. The site is at this URL:

http://www.hanford.gov/esh/ALARA/

There is an RCT shortage at Hanford. They are hiring mostly from other DOE sites so there is no net gain of RCT talent to DOE. Entry-level training programs and feeder programs are mostly defunct now, and the aging work force is an issue. The upcoming Vitrification Plant contract at Hanford will make the need for RCTs more acute.

Hanford is prototyping an entry-level RCT training program, using classes with On The Job Training. The unions are on board with it, and it costs about 15K per person, with a one year work commitment by the student. Graduates start at slightly above the minimum on site. Ed's message was that this process could work elsewhere. It would be good for worker transition and displaced worker issues.

On the issue of reciprocity for radworker training between sites, Ed noted that going from the RadCon Manual to the RadCon Standard removed consistency between sites. This results in higher training costs and frustration for DOE Complex transients. About 50 percent of DOE sites accept training, but in general re-testing is required. Mike Henderson noted that at ORO, there is site-specific training but normally no requirement for re-testing. Joel Rabovsky said a fundamental issue is who is doing the training.

Ed suggested the following for consideration:

Accept site to site core general employee radiological training (DOE-HDBK-1131-98) Accept site to site core radworker I/II training (DOE-HDBK-1130-98) Accept site to site core RCT/HPT training (DOE-HDBK-1122-99)

The cons for this approach is that workers still won't be 'walk-in ready'; it will be tough for narrow-focus sites, and contractor acceptance will remain an issue.

### **HPT/RCT Ergonomics Injury Study (Ed Parsons and Steve Bump)**

Two years ago, HPTs had the highest injury rate (20 percent per year) at Hanford. Injuries were not really age or gender specific. The fundamental issue is that HP instruments are basically the same design as from 50 years ago, and are not ergonomically built. Awkward positions are a major cause of injuries, as well the large number of 'tight' areas on site. A survey showed that 70 percent of HPTs had job discomfort. HPTs often carry multiple instruments at a total weight of about 40 pounds. The study committee recommended better instrumentation.

#### **HEPA Filter Testing (Barry Parks)**

Barry discussed the latest memorandum to the Field Management Council and will distribute it electronically to the RCCC. The only change since the last meeting is the EM agreed to fund the Filter Test Facility until it is moved in two years.

# **Dose Records for Former Workers When Additional Information Is Found (Bruce Wallin)**

There can be a disconnect between records that are updated on-site, when new information is found, and getting the records updated at other sites if the worker has relocated, especially if that is unknown. There was much discussion about different procedures for requesting dose records. While existing procedures might address the issue if followed perfectly, there is an issue that not all contractors have the resources to do all of the back checking required. This may be in issue in the upcoming worker compensation and dose reconstruction effort by DOE, DOL and NIOSH.

#### D&D and 10 CFR 835, specific case issues (Bruce Wallin)

Bruce discussed an approximate 60 millirem uptake in B771 in November 2000 at Rocky Flats. The lesson learned is that 835 is not a minimal protective basis; you can get this kind of dose and never detect it, absent other information. For example, Continuous Air Monitors (CAMs) are not sensitive enough to catch the spike at B771. There are always surprises in D&D work and there is always an issue of how big to make the safety envelope.

#### **Update on Special Tritium Compounds Working Group (Joel Rabovsky)**

Drafts on radiological controls for STCs are now out for comment. The draft internal dosimetry guide may reference ANSI N13.39, and a DAC value for tritides may be put in 835. A final copy of the working group will be distributed to the RCCC.

## Discussion: Update on Moratorium/Suspension on Surface/Volumetrically Contaminated Metals

Joel Rabovsky distributed a handout summarizing the issue. There was some discussion regarding the recent meeting in Las Vegas and the scope of the EIS, which has not been determined.

#### EH-52 regulatory planning (Joel Rabovsky)

Joel Rabovsky distributed handouts on proposed amendments to 10 CFR 835. Footnote 7 (Uranium and beta surveys) and tissue weighting factors are on the list. Also, 835 is inconsistent with some parts of the NNSA Act, and GC has proposed some changes to 835 to resolve the issue.

# DOE Involvement in the Energy Occupational Illness Compensation Program Act (Joel Rabovsky)

The Energy Employee Occupational Illness Compensation Program (EEOICPA) provides DOE employees, contractors and subcontractors with a lump sum payment of \$150,000 for disability and future medical benefits for cancer caused by radiation, beryllium exposure or chronic silicosis. The DOE will be involved in two stages of the process required by EEOICPA; in the first stage, the Department of Labor will request that DOE verify employment for all types of exposures covered by the EEOICPA. In the second stage, DOE is required to provide dosimetry records to NIOSH, for their use in dose reconstruction.

More information about the EEOICPA can be found on the web at this URL: http://tis.eh.doe.gov/advocacy/index.html

Employees may file claims under EEOICPA beginning on July 31, 2001; however, the DOE Office of Worker Advocacy Hotline reports that it has already taken over 12,000

calls to date. Many members of the DOE Radiological Control Coordinating Committee (RCCC) have become the focus for radiological aspects of DOE involvement in the compensation program. The RCCC may assist the Office of Worker Advocacy by acting as the radiological point of contact for compensation issues - particularly retrieval of radiological records. Joel Rabovsky will draft an approach for working with the Office of Worker Advocacy, and will distribute it to the RCCC for comment. Resources will be a major issue for retrieving requested records.

## Adoption of ANSI N13.12 (Theresa Aldridge, William Kennedy)

The draft ANSI Standard N13.12, entitled "Surface and Volume Radioactivity Standards for Clearance", uses a dose of 1 millirem per year to any member of the public as the criterion for establishing surface and volumetric contamination standards for free release of materials. The new standard, if adopted by the Department of Energy, would help rationalize the release of materials from radiological areas, and it would also have the benefit of being a nationally recognized standard. The ANSI workgroup is now working with the EPA, DOE, NRC and the States to finalize the standard.

#### **Next Meeting**

The consensus was to meet on Thursday afternoon and Friday morning following the next HPS annual meeting. The RCCC will also poll the membership to determine the location of the next meeting (before the next HPS meeting). The meeting adjourned at 2:30.

An email poll of the RCCC on June 21 was done to determine date and location of the next meeting. As a result of this poll, the next meeting is tentatively scheduled to be in conjunction with the next ISM meeting, December 13-14 at the DOE Nevada Operations Office in North Las Vegas, NV. A room has been reserved by David Wheeler.