

**Radiological Control Coordinating Committee (RCCC)  
Meeting Minutes  
July 1, 1997  
San Antonio, Texas**

**CONVENE MEETING**

The meeting began at 8:00 am.

**AGENDA ADDITIONS**

The following items were added to the agenda:

- Al Alm's EM-1 memorandum on internal bioassays (Gene Runkle).
- The RCCC acting as the Rule Implementation Working Group for 10 CFR 835 (Bruce Wallin).
- Discussion of the RCCC in general (Mike Henderson).
- Protective clothing, and radiological control optimization (Kathy Hall).
- Regulation and guidance review (Brenda Pangborn).
- The question "when does an RPP have to be written?" (Richard Dickson).

**MEETING MINUTES**

The draft minutes for the January, 1997, meeting were distributed for comment.

**RCCC IN CYBERSPACE (Barry Parks)**

Barry Parks discussed the RCCC's web site, at:  
[www.er.doe.gov/production/esh/rccc/](http://www.er.doe.gov/production/esh/rccc/)

The site offers the ability to send E-mail to RCCC members, and gives information on upcoming meetings, including location and agenda. Transcripts for previous meetings are available for downloading, as well as documents relating to current issues. A comment form and links to related servers are also available.

The Chair asked if we were ready to advertise this page, and there was general agreement that we were. Kathy Hall suggested posting messages about the page to the RADSAFE listserv. Other places suggested to advertise the RCCC page were the Health Physics Society Newsletter and Operation Experience Weekly (contact: Keith Christopher). Also, we need a link to the DOE home page, and a link to Bruce Busby's Radiation Safety homepage. Mike Henderson suggested links to EM web sites.

## **UPDATE ON AMENDMENTS TO 10 CFR 835 (Joel Rabovsky)**

Joel Rabovsky reported that EH got over 1,000 comments on the proposed amendments, and that his office was gratified at the response. Comments should be resolved by July and they hope to publish the final action by the end of the year. He discussed the following issues:

**Radioactive Material Transportation:** Most comments supported the exclusion, but there was some confusion on how it applies. There is a need to clearly delineate how it applies to on-site transportation.

**Bioassay Accreditation:** Implementation guidance on DOELAP went out in February, and EH is now working on comment resolution.

**Surveys of Radioactive Material Packages that have been received:** This was taken from 10 CFR 20.1906, for Type A packages. Comments were supportive, but how soon after receipt a survey must be done was an issue.

**Posting Radioactive Material Areas:** There was support, but extra requirements (training, access control) were concerns. Also, control areas versus radioactive material areas was an issue.

**Labeling requirements:** were beefed up, supported, and if there is 8 hour surveillance by a knowledgeable individual, then posting is not needed.

**Eliminate requirements to record dose, if expected to get less than 100 millirem:** There was support and concern. This is consistent with 10 CFR 20. Concern about not recording dose included the need for data for epidemiology. There were no comments from lawyers. Richard Dickson made the point that there was the potential for people to get upset with this situation. Brenda Pangborn noted that since NRC is not an owner, maybe DOE shouldn't try to be consistent because DOE is subject to liability, while NRC is not. The point was made that if you go over 100 millirem, you still have to account for the dose.

**Contamination posting:** now only for removable contamination, not fixed. Strongly supported.

**Elimination of mandatory examinations for GERT training** was supported by the comments.

**Training:** Major changes were generally supported. Base requirements depends on nature of hazards.

**RadCon Control Tech:** There was concern that this is the only specific training by job title. Some concern about what an RCT is, exactly. Alternative four was most supported.

Design requirements are out, now.

Air monitoring: There was discussion on air monitoring for wearing respirators. Bruce Wallin discussed the many technical difficulties with monitoring outdoors. Mike Henderson emphasized that the people who write rules are completely different from those who enforce rules, and that a good example is the Constitution.

There was also discussion about monitoring DAC hours versus doing an actual bioassay, for thorium, which does not show up on a bioassay. It was noted that in Nevada, the results from BZA and fecal samples are not corresponding well. Gene Runkle stated that he could see DAC hours triggering monitoring but not using for actual dosimetry. There was no consensus or conclusion.

### **SUBCOMMITTEE FOR SURFACE RADIOACTIVITY VALUES**

The Subcommittee has done nothing since the last RCCC meeting, when the RCCC decided to keep the subcommittee in existence to look at the Occupational concerns of Appendix D numbers. Subsequent to that meeting, comments to 835 were being sent to EH. A number of people who were previously contacted and indicated that they had comments to make, stated that they were sending their comments to EH on the 835 amendments. That being the case, there didn't appear to be any necessity of collecting data or information until the final ruling is published on the amendments to 10 CFR 835. It was reported that Bruce Eichorst suggested disbanding the group.

On a related issue, the members agreed that ANSI N13.12, Surface and Volume Radioactivity Standards for Unconditional Clearance, should be made available on the RCCC web site. Kathy Hall will supply a link to this document to Barry Parks, the RCCC webmaster.

Gene Runkle said that he doesn't want to disband the subcommittee. If and when 834 ever goes again it can go to work. There may be other items it can do, Mike Henderson has some issues.

Brenda Pangborn discussed the issue of dose from Strontium-90 versus Yttrium-90, which is important in Yttrium milking.

**BREAK: approximately 9:45 to 10:15**

### **INAPPROPRIATENESS OF USING CEDE FOR ORGAN DOSES AS A REGULATORY ISSUE (Mike Henderson)**

There were four handouts on this topic. Mike made the point that going from AEDE to CEDE can raise doses up to 50 times for long-lived radionuclides. This impacts Administrative Control Limits. Gene Runkle agreed with Mike on this issue. A 5 Rem Dose Commitment is now triggering accident investigations, which previously were triggered by 5 Rem in a single year. There was much discussion on this topic.

Mike felt that it is okay to keep doses on records but it should be taken out of regulatory space, with the associated enforcement actions, which are expensive and time consuming. Investigations do find unauthorized work, however. But penalties and mistrust are a downside.

Other points made were that fractionating dose does reduce risk, which contradicts the Linear, No Threshold (LNT) model for radiation risk. Mike noted that lowering allowable doses will put us out of business, and that there are two issues; health risk and regulatory.

Gene stated that it is a dose rate issue. There was no real closure on this, with lots of issues around the table. Gene will try to get Charlie Mienhold to give the RCCC the ICRP perspective on this issue.

The chair summed up the various issues as follows, to be posted by the webmaster on the RCCC page for comment:

#### ISSUES:

- 1) Record (the dose)
  - TEDE = EXT + CEDE
  - ORGAN VALUES (C DE)
- 2) Regulatory Issues
  - CEDE
  - Organ Doses
- 3) Investigative Issues/ORPS (NTS)
  - >10 Rem Type B
  - >25 Rem Type A
  - >250 Rem Organ
- 4) Risk Perspectives
  - CEDE Now vs. Future work impacts
  - AEDE
- 5) Public Relations and Employee Interactions

Resolution: The RCCC members will go back and work the issues locally, and get back together via conference call on August 27, to discuss the status and decide where to go next.

#### **REGULATORY CRITERIA FOR SOIL CONTAMINATION (Michael Tester)**

The webmaster will post the following issues on the RCCC web site for comment:

Current DOE guidance on the posting, control and management of soil contamination areas is vague, at best. Can the RCCC provide guidance or direction for the following?

1. What is the best definition for radioactive contamination that is in a soil matrix?

2. What is the criterion for posting soil contamination?
3. When does Appendix D of 10 CFR 835 apply to radioactive contamination that is in a soil matrix?
4. What is the criterion for upgrading of posting from Soil Contamination Areas and onto High Contamination Areas (i.e., how should each site define and/or measure transferability)?
5. Is there published criteria (i.e., radiological controls) for soil excavation work?

Michael Tester raised these issues, which result from digging operations at Fernald. He believes Appendix D doesn't apply to contamination in a soil matrix. Ed Bradley suggested that this be put to local "EH Residents", and make it part of the "issue process" to get the issues resolved. On timeliness, he noted that this process has been working with the LANL "open glove box" issue since 1995. This may also be an issue for the subcommittee surface radioactivity values.

Bruce Wallin will send to Barry Parks, RCCC webmaster, a Rocky Flats document on soil contamination, to post on the Web for comments.

#### **LUNCH BREAK; Reconvened at 2:30**

#### **PROTECTIVE CLOTHING (Doug Minnema)**

Back in December, Defense Programs began a study of problems with Anti-C's, including sweat induced contamination migration and inappropriate use of Tyvek (when users mistakenly thought it was waterproof). The project collected information on such occurrences, it is still ongoing, and may be done by October. The K-25 incident where a welder died from burns was included. The project includes people with a variety of expertise, not just health physicists. The emerging theme is "less is more"; multiple layers of protective clothing is often not justified. Doug noted that there is a web page with a posted video clip of a fire test of protective clothing.

#### **RADIOLOGICAL CONTROL OPTIMIZATION (Michael Tester)**

The RCCC webmaster will establish a link on the web to this document:

"Radiological Control Optimization", Project Team Report February 1997, Fluor Daniel Fernald.

Michael discussed this paper, and noted that the "process was just as important as the results". Savings of approximately \$116 million could result if the changes are implemented at the Fernald project. But, there will be resistance to changing, such as not using double Anti-C's, taped interfaces, since people are used to those procedures. An implementation strategy is being worked on now. Agendas are cropping up. Worker

efficiency reductions from personal protective equipment is greater than has been estimated; they are finding that the loss estimates were pretty much pulled from nowhere.

### **AL ALM REQUEST ON BIOASSAY (JUNE 9, 1997)**

The request is due July 31. EM actions in response to the results of the Bioassay Program Review at Mound, there are three issues. Question: How do workers get on bioassay? Gene Runkle reported that Maria Garvilas-Guinn had told him that by July 31 there should be a rollout process for looking at your facilities, which is not what the letter says.

The group discussed the work going on at the various area offices on assessment of bioassay programs for the Al Alm memorandum. Ohio is even doing NRC licensed sites, and has eight (8) criteria for their assessment. There was discussion about Minimum Detectable Activity (MDA) and Decision Levels (DL).

### **835 ISSUES**

Doug Minnema said that DP has not resolved delegation of RPP approvals for 835 amendments, but will probably delegate as long as the program is tied into the approval process.

Gene Runkle said that on RPP Reviews, the way we did it last time is still the way to go. Mike Henderson asked if we are still the RIWG. Gene Runkle noted that the RCCC hasn't given it up. Joel Rabovsky noted that the changes to 835 should be final in December.

There was discussion about the situation at K-25, Oak Ridge, where competitors to Lockheed Martin are using the facility, and should have to write new RPPs. RPPs are needed when DOE activity starts. You can duplicate an RPP and let a competitor use it, they are public information.

Mike Henderson asked that this question be put on the agenda for next time; "When is an RPP needed?"

### **RCCC, IN GENERAL (Mike Henderson)**

We agreed that we need to use email and the web more to exchange information and work issues.

We will keep meeting along with the Health Physics Society. Gene Runkle stated that we need an invitation to be part of EFCOG meetings.

### **REGULATION AND GUIDANCE REVIEWS (Brenda Pangborn)**

There is an issue with the line having adequate time to review regulations and guidance. Brenda also raised the issue of policy on exposure to minors. On Family Days and Show

and Tell Days, minors are allowed in controlled areas. She asked if the group had any input or if this was done anywhere else.

### **FOLLOW UP**

There will be an August 27 conference call on the CEDE issues. We will meet in December or January next time. Edwin Njoku raised the issues of open book radworker exams and unreturned badges.