Radiological Control Coordinating Committee (RCCC) Meeting Minutes June 28, 2000 Denver, CO

The meeting began at 8:00 am, Denver time. Arrangements for a conference call were canceled when we could not get a dial tone in the meeting room.

Attendees:

Brenda Pangborn, RL
Theresa Aldridge, RL
Joel Rabovsky, EH/GTN
Charlotte Carter, NV
Carson Riland, NV
Barry Parks, SC/GTN
Mike Henderson, OR
Bruce Wallin, RF
Bob Bistline, RF
Edwin Njoku, OAK
Clyde Terrell, SRS
Bob Boston, ID
Pete Darnell, Fernald

Update on Special Tritium Compounds Working Group (Joel Rabovsky)

Maria Gavrilas-Guinn discussed the issue of metal tritides at Mound at last year's meeting. The issue was how to assess dose and exposure, following DNFSB interest in the matter. The Special Tritium Compounds Working Group (STCWG) has met mostly by phone, with one meeting in Albuquerque.

Urine Bioassay is not reliable, and fecal bioassay is under evaluation. Doses are probably not very high, but the issue is accountability. The dose factors (uncorrected for selfabsorption) for stable metal tritides are about ten times that of tritiated water. Tritiated dusts are also an issue at Mound. Each different tritide is like a separate radionuclide, dose-wise, because of differences in dissolution. The STCWG focus has been on air monitoring and bioassays. The STCWG is also supporting development of guidance documents relative to stable metal tritides.

On air monitoring, Joel noted that Los Alamos, LLNL and Canberra and other labs are now working on a beta-cam or a tritide-cam. Bremstrahlung may be used for detection because of the presence of metals. Mound is focused on air monitoring, and they assume the most conservative form for retention.

Joel gave a handout on the STCWG action items. The STCWG is also trying to come up with a DAC value for tritides. There has also been some funding for putting tritides into the RESRAD program, at Argonne National Laboratory.

Edwin Njoku asked about retrospective doses from historical work. Joel said that it is not being pursued at this time.

Application of 835 to Emergency Response (Charlotte Carter and Carson Riland)

Multiple agencies participating in emergency responses make it hard to have uniformity; for example, training requirements, dosimeters, forms, database of equipment. Semiresolved issues of uniformity include radioactive waste disposal, paramedics at events, Potassium Iodide (KI), SCBA use, and the incident command system. Unresolved issues of uniformity include public monitoring and hotline, regulatory guidance (EPA-400 and ANSI), 10CFR20 and 10CFR835, RPPs for Emergency Response, "Turn Back Levels" and administrative conflicts.

They request a National Standard for Health and Safety of Radiological Emergency Responders be developed, possibly by ANSI.

Mass Balance Study (Joel Rabovsky)

Joel spoke to the history of the mass balance study, which started with the recent EH investigation at Paducah. The study is an attempt to track the movements of feedstock material among the various DOE sites. The study may be done by the end of June but it is not certain.

Radworker Training for M&I Contractors (Mike Henderson)

The issue is that workers are getting multiple, repetitive training by each contractor and program; there are turf issues and the result is duplicative. ORO is working on 835 'core' training, with site-specific add-ons. Joel Rabovsky noted that the validity of the trainers is an issue.

Legal authority for Technical Position Papers (Mike Henderson)

Mike Henderson related that his boss at ORO feels that the Technical Position Papers (TPPs) are nice, but they are not legal. He suggested amending 10 CFR 820 subpart E section 61 to allow TPPs to be issued as interpretive documents by EH. Now, General Counsel (GC) does interpretation (subpart 20.51). Joel Rabovsky said that TPPs are guidance and not an interpretation. Mike noted this possible worst case scenario; a contractor may be cited by EH-10 for implementing a TPP from EH-52, making the point that EH needs to agree internally. Joel Rabovsky feels that the TPPs are equivalent to NRC Staff Positions, he also noted that the TPPs are given to EH-1- staff for review and comment. Theresa Aldridge (RL) said that the contractors at Hanford view TPPs as an interpretation from headquarters. Brenda Pangborn (RL) disagreed. Mike said the TPPs

were useful and they should continue to be issued, and asked if they could come out under the signature of EH-1. Joel said he thought that might be possible.

Technical Position Papers on Sealed Source Accountability (Edwin Njoku)

Edwin noted that at last year's RCCC meeting, we had a consensus to do a TPP on sealed sources, but it hasn't gone out yet. He said that SLAC was losing a lot of sources. Barry Parks asked if new guidance would stop the loss of sources, and noted that he would oppose making any guidance required.

Technical Position Papers on Posting and Labeling (Edwin Njoku)

There was discussion of the issue that NRC and DOE use different exposure scenarios and as a result, have different limits for labeling sealed sources. Note that the draft TPP on acceptable approaches for controlling and labeling radioactive materials is about to be issued by EH.

Respirator Selection, Use, Documentation (Clyde Terrell)

Clyde asked what other sites used for documentation of respirator selection. Fernald has mostly uranium and thorium as issues. Programs must be documented, but there are no requirements for how to document. Richland (RL) and Rocky Flats (RF) will send copies of their documentation to Clyde. RF requires full nasal and mouth swabs for respirator use unless a positive pressure device is used. If there is anything outside the respirator, fecal samples are taken.

Workgroup for Moratorium on Surface/Volumetrically Contaminated Materials (Clyde Terrell)

There was discussion about the workgroup activities and the moratorium. The steel industry is driving the issue.

EH-52 regulatory planning (Joel Rabovsky)

Joel distributed a handout on proposed improvements to 835 (copy below).

Proposed Topics for Improving 10 CFR 835

Topic Reason

Торіс	T
Revise Radioactive Material Transportation exclusion	The language of the definition of radioactive material transportation is unclear in regard to monitoring.
Add exclusion for released areas outside controlled areas	Clarify occupational (835)/environmental (5400.5) interface - areas can be authorized for unrestricted released under DOE O 5400.5 which still need to be posted/labeled in accordance with 10 CFR 835.
General Employee Defintion	Revise definition to remove phrase "or utilize DOE facilities" in order to remove ambiguity from defintion of General Employee
Tissue Weighting Factors	Tissue weighting factors from ICRP 60 cannot be used to calculate internal dose for purposed of demonstrating compliance with 10 CFR 835 dose limits.
Add NRC to prohibition from violating rule	The current language in 835.3(b) does not exclude NRC from violating the rule
Dose limit for member of the public in a controlled area	To establish consistency with the 5400.5 limit by stating that the dose limit for the public includes dose from all DOE sources
Labeling values	Decrease the values above which radioactive material needs to be labelled.
Threshold for recording very low doses	To establish a dose level below which doses from monitoring do not have to be recorded.
Release of materials	Add a statement that pointing out that equipment and materials cannot be released for unrestricted use without a DOE authorized limit. This change will clarify the language on release of materials from radiological to controlled areas.
Resumption of work after an accident	Clarify applicability of requirement to resumption of work which had been suspended after an accidental exposure
Appendices A & C	Not all radionuclides are listed. Add wording for radionuclides not listed in table, include SMTs for Appendix A
Update values in Appendix D	ANSI has published new values for clearance on items containing residual radioactivity. Tritides have not been explicitly addressed
Editorial	Reword sentence structure in 835.209(b)(3) Change "engineering and process" to "design features and administrative" in 835.401(a)(5)for consistency with 835.1001 - 1003 Clarify wording that requires training before (1) or (2) in 835.901(a)&(b) Delete phrase "from the whole body" (redundant) in 835.402(a)(1)(i) Appendix C title is misleading.

Mike Henderson said that on the issue of leasing, a memo came out about six weeks ago saying that worker would be treated as members of the public, not as general employees.

This is an issue in determining compliance with the EPA NESHAPS standards (10 CFR 40 Part 61, Subpart H).

Brenda Pangborn and Theresa Aldridge, RL, had comments on not mixing models (ICRP 60, 29) and tissue weighting factors (which Oak Ridge does).

Theresa Aldridge said that there is a committee of DOE, NRC and NIST to 'standardize requirements'.

Program Offices report on Exemptions that Have Been Requested

Bechtel RL has withdrawn Pu-241 from their exemption request on surface contamination values in 10 CFR 835, Appendix D.

HEPA Filters (Barry Parks, Brenda Pangborn)

Barry reported on the headquarters working group, which is developing recommendations on one-hundred percent re-testing of HEPA filters after they are first delivered from the manufacturers. The testing would be at the Filter Test Facility in Oak Ridge, TN. The working group has been very contentious with little agreement on the benefits of filter re-testing, or the recommendations for a path forward. Barry is promoting an exemption for accelerators and radiological facilities; EH and DP are promoting a uniform recommendation for testing regardless of the facility risk. Both SRS and RL feel that the re-testing at the FTF does not add value; EH at HQ sharply disagrees. Clyde Terrell, SRS, said that he could not find a technical basis document, analyzing costs and benefits, for the 1997 DOE standard on HEPA filter testing (DOE-STD-3020-97).

No one at the meeting felt that re-testing should be required for accelerators or radiological facilities; however, a subsequent conversation with Doug Minnema, DP, indicated that he was against a 'blanket' exemption for whole classes of facilities. Doug believes that DOE should establish a clear set of criterion against which an exemption request can be weighed, and then it can be granted as appropriate. The facilities should have a good technical basis upon which they operate, and against which such decisions as this should be made. While the Department's processes have attempted to seperate facilities by levels of risk, there is enough vagueness in the processes, and enough inconsistency in the applications over the years to warrant continued care in applying (or exempting) requirements to these facilities. Each application of an exemption should be justified and documented appropriately and completely.

Revised Charter (Joel Rabovsky)

The revised charter was distributed and discussed. It has been authored, variously, over the past year by Doug Minnema, Mike Henderson, Ken Whitham and Joel Rabovsky. The RCCC will forward comments back to Joel.

Future of the RCCC

No notes taken.

The next conference call for the RCCC will be Tuesday, August 22, 2000, at $1:00~\rm pm$ eastern time. The phone number will be (301) 903-6167.