

MEETING SUMMARY
PART 40 JURISDICTIONAL WORKING GROUP
MARCH 6-7, 2002

Attendees

Torre Taylor, NRC/NMSS
Gary Comfort, NRC/NMSS
Loren Setlow, EPA
Ken Weaver, State of Colorado
 representing OAS and CRCPD¹
Chia Chen, OSHA
Brian Hearty, DOD/USACE (teleconference)
Maria Schwartz, NRC/OGC

Cathy Mattsen, NRC/NMSS
Dennis Sollenberger, NRC/OSTP
Hal Peterson, DOE/EH
Melanie Galloway, NRC/NMSS
Kristina Banovac, NRC/DWM
Adam Klinger, EPA
Jim Lieberman, NRC/OGC

This was a public meeting of the Part 40 Jurisdictional Working Group. Members of the public did attend the meeting. The following is a summary of the topics that were discussed.

NUREG-1717, "Systematic Radiological Assessment of Exemptions for Source and Byproduct Materials"

Dennis Sollenberger discussed his work on the analysis of NUREG-1717, "Systematic Radiological Assessment of Exemptions for Source and Byproduct Materials." Dr. Sollenberger has been analyzing the remaining information we received from the Office of Nuclear Regulatory Research, two references in the NUREG, and information NRC has received from industry representatives. Dr. Sollenberger discussed some of his preliminary findings, such as uncertainties regarding particle size, conservatism in calculations which are not realistic, error in original reference, etc. Generally, he does not believe there is a significant health and safety concern that warrants regulatory action. Dr. Sollenberger's goal is to identify where uncertainty exists and bound what is and is not good data in the references. He would also like to evaluate the results with newer ICRP dose methodology. He is talking with industry representatives, and stated that if anyone had additional information to provide, he would like to review it.

Discussion of Options with Focus on Outcomes

The working group discussed options and pros and cons for a better approach for regulating low-level source material. Other topics included a list of considerations, previous comments on SECY-99-259, and a draft proposal from Colorado on a tiered approach for regulating low-level source material. NRC staff noted that, if the Commission approves a recommended approach, NRC will need to formally contact other Federal agencies and the States for their comments.

The staff discussed a list of considerations to keep in mind during the discussion: (1) Impact on health and safety, (2) Consistency within NRC regulations, (3) Consistency with regulation of NORM, (4) NRC resources, (5) Resources to States and other Federal agencies, (6) Costs to licensees, (7) Costs to non-licensees, (8) Industry perception, and (9) Public confidence.

¹the Organization of Agreement States and the Conference of Radiation Control Program Directors

Ms. Taylor discussed the previous comments from the working group members on SECY-99-259, "Exemption in 10 CFR Part 40 for Materials less than 0.05 Percent Source Material - Options and Other Issues Concerning the Control of Source Material." Generally, many of the comments were specific to revising SECY-99-259. NRC staff pointed out that this document was a final document and would not be revised. Some of the more general comments are as follows: (1) NRC needs to make clear that EPA and the States may be unable to develop regulations and associated guidance in the time frame that NRC has identified for itself; (2) Legal and policy implications will need to be thoroughly addressed; and (3) If industries that are currently exempt from licensing will be required to dispose of materials in a licensed waste site, NRC will need to evaluate costs related to disposal.

The NRC also received comments from the Nuclear Energy Institute (letter dated October 6, 2000), which Ms. Taylor summarized as follows. NEI endorsed the NRC's program to risk-inform the licensing requirements that are applicable to Part 40 licensees and to implement, where needed, appropriate measures to protect public health and safety. It also supports the Commission's efforts to clarify the jurisdictional responsibility for regulation of source material containing less than 0.05% by weight of uranium and/or thorium among the NRC, other Federal agencies and the States. NEI questioned whether there is a true need for regulatory changes to 10 CFR Part 40 or legislative changes to the AEA at this time. It believes that regulations of other Federal agencies and the States adequately protect workers and the public. NEI believed the first task of the Jurisdictional Working Group should be a critical examination of whether a health and safety problem truly exists. NEI, in summary, believes that NRC regulatory oversight should primarily be limited to nuclear fuel cycle operations and not be extended to cover a majority of mineral processing operations.

Ken Weaver discussed a draft proposal for regulating waste water treatment facilities. This proposal is an example of a tiered approach for regulating low-level source material. The levels are set at different dose levels. These levels determine whether a specific license is needed or whether a general license is granted, or whether the material can be used under an exemption. This is an additional option, beyond what the NRC staff proposed, that Mr. Weaver presented to the working group. There are many things to evaluate with this proposal, such as the different dose limits and how to arrive at the limit, but it ties in with several options in SECY-99-259 regarding specifying which activities can and cannot be conducted under an exemption.

The staff raised several issues with the working group as a result of their evaluation of options. Generally, the staff does not believe that there is a significant health and safety problem warranting urgent regulatory action. However, the staff cannot conclude that the exemption in Section 40.13(a) provides an adequate level of protection. Keeping a concentration level for the exemption is still problematic because it is difficult to determine when one is at that level. In addition, there are inconsistencies between Section 40.13(a) and other areas of NRC's regulations. There can be situations where two different facilities have the same radionuclides at the same concentration and risk, but have to dispose of the material differently because, in one case, the material was initially licensed since the material, at some time, exceeded 0.05% by weight concentration. In the other case, the facility is allowed an exemption since the material never reached or exceeded 0.05% by weight concentration. If the staff recommended "no change," there would still be a problem with the concentration level, inconsistencies, and the limited ability for the States and EPA to regulate such material within their existing authorities.

The staff presented a discussion of the options and pros and cons. The three basic options are (1) no change, (2) increase NRC regulation, and (3) decrease NRC responsibility. There are several ways of accomplishing option (2), such as eliminating the exemption, lowering the concentration level, keeping the exemption but specifying activities that can or cannot be conducted under the exemption, or a combination of revising the concentration level and specifying which activities can or cannot be conducted under the exemption. For option (3), NRC could regulate uranium or thorium that is extracted for the use of the uranium or thorium, regulate uranium or thorium that is extracted for the use of the uranium or thorium and rare earth processing, or establish a concentration level below which NRC would not have jurisdiction.

The attachment includes tables of the options with pros and cons as presented. There was a general discussion of these items and several points were made. It was mentioned that we will need to look at the impact of any changes on the FUSRAP materials. If the concentration level is lowered, NRC will have responsibility in areas where it did not have responsibility before. NRC will need to evaluate the impact on international treaties if the concentration level is lowered, or if it is eliminated. Decreasing NRC responsibility could improve consistency within NRC regulations as well as consistency with how NORM/TENORM is regulated by the States and EPA. If a revision is made such that material that had previously been exempt is now regulated, there will be an impact on the waste disposal sites regarding space and a cost burden for individuals. There is also concern about expanding NRC regulation to areas that Congress did not intend NRC to regulate. There are many situations in which the material covered under the exemption in Section 40.13(a) is regulated by the States and the EPA due to other components such as radium. In some situations, regulations or guidance is under development.

Another option was presented to the group from a member of the public. NRC should not make any changes, and OSHA should add a requirement to its regulations that training is required for those individuals who might receive a dose of 100 mrem/year or more. This training would be similar to NRC's requirement in 10 CFR Part 19.

NRC staff discussed the following option in more detail: Decrease NRC Responsibility, such that NRC regulates only uranium and thorium extracted for the purposeful use of uranium and thorium. All other uranium and thorium would be considered naturally occurring radioactive material, and could be regulated by the States and the EPA under their current authorities. The exemption in Section 40.13(a) would be eliminated with this option. This will minimize inconsistencies within NRC regulation. It will also remove impediments so the States and EPA can regulate uranium and thorium within their regulations or standards for naturally occurring radioactive material or general radiation protection standards. The staff is evaluating whether this option would require a legislative change or whether it could be implemented by a reinterpretation of the Atomic Energy Act that could be included in 10 CFR Part 8. Implementation will need to be further evaluated with NRC's Office of the General Counsel.

The representatives from EPA and OSHA thought this option was a reasonable approach. The representative from EPA thought EPA could easily incorporate this into their current programs with minimal impact. A member of the public commented that NRC would have to look at the cost to small businesses.

As part of the next steps, the staff is sending a paper to the Commission in early summer. Depending on Commission direction and the approved option, the staff will contact the other agencies and States at a formal level to address the option if it impacts other agencies and the States.

ATTACHMENT

LIST OF OPTIONS WITH PROS AND CONS