

MEETING SUMMARY  
PART 40 JURISDICTIONAL WORKING GROUP  
AUGUST 2, 2001

Attendees

Gary Comfort, NRC/NMSS  
Brian Hearty, DOD/USACE  
Maria Schwartz, NRC/OGC  
Dennis Sollenberger, NRC/STP  
Loren Setlow, EPA

Betsy Forinash, EPA  
Torre Taylor, NRC/NMSS  
Ken Weaver, representing OAS and CRCPD  
Chia Chen, PhD, OSHA  
Melanie Galloway, NRC/NMSS

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.

Introductions and Updates

The staff is still working with OGC regarding the issue as to whether Pre-UMTRCA mill tailings with greater than 0.05% U and Th will be considered source material subject to NRC regulation.

SECY-01-0112, "National Materials Program: Transmittal of the Final Working Group Report Presenting Options for a National Materials Program," June 22, 2001, is now available on the web. The National Materials Program Working Group is recommending that the Commission adopt a cooperative, consensus option for a national program. The working group believes that it has the best potential for achieving NRC's current strategic goals, as well as the goals and objectives of a future National Materials Program. The option is called the Alliance option.

List of Terms, Definitions, and Acronyms

Per the request of the working group members during the last meeting (April 2001), a list of commonly used terms and acronyms, along with different meanings for the terms, was developed. Some of these terms are background radiation, byproduct material, FUSRAP, UMTRCA, licensed material, NARM, NORM, TENORM, and source material.

The list was developed to assist the working group members in their discussions and to have as a reference. The list is still in draft form and will be further developed incorporating comments from today's meeting. The working group noted that there are various definitions for the same term and that NRC should note the source(s) of the definition(s), i.e., regulation, statute, other reference. Members of the working group provided additional definitions for some of the terms. The group asked that we include information regarding alternate feed materials and solid waste. The group also discussed the need for the term NARM, given that many organizations are starting to separate out naturally occurring material versus accelerator produced material. The acronym ARM (accelerator produced material) is often used.

National Academy of Sciences Report on TENORM Guidelines

Loren Setlow, Environmental Protection Agency (EPA), provided a summary of the National Academy of Sciences (NAS) Report, "Evaluation of Guidelines for Exposures to Technologically Enhanced Naturally Occurring Radioactive Materials," which was completed in 1999, as well as a summary of the EPA's response to Congress (June 2000). The NAS was tasked with determining whether the differences in the guidelines for TENORM developed by the EPA and other organizations are based upon scientific and technical information or on policy decisions related to risk management. If the guidelines developed by the EPA and other organizations

differ in their scientific and technical bases, the NAS was to look at what the relative merits of these assumptions are. Additionally, the NAS was to determine whether there is relevant and appropriate scientific information that has not been used in the development of TENORM guidelines.

The NAS determined that the differences are based essentially on differences in policy judgments for risk management, and that the differences are not based on technical issues. All current scientific information on TENORM is reflected in current guidelines.

The NAS made several recommendations for EPA's consideration. The EPA has several activities related to TENORM. It is studying individual TENORM sources and looking at existing sites. Based on these studies, EPA may develop education and guidance for safe and economical handling, clean-up and disposal of TENORM. The EPA is also working with other organizations in developing TENORM solutions, such as the ISCORS-NORM Subcommittee, and the Sewage Sludge and Ash Subcommittee.

#### Discussion of Materials and Jurisdiction

There was a general discussion of NUREG-1717, "Systematic Radiological Assessment of Exemptions for Source and Byproduct Materials," as it applies to this group's task. The purpose of the discussion was to evaluate the results of the assessment in those areas where the doses approached or exceeded 100 mrem/year and to start assessing jurisdictional authorities and issues for the various materials for potential health and safety problems. The sections from the NUREG that resulted in particular concern are Section 3.2, "Chemical Mixture, Compound, Solution, Alloy Containing <0.05 Percent by Weight of Source Material"; Section 3.3, "Unrefined and Unprocessed Ore Containing Source Material"; and Section 3.9, "Rare Earth Products Containing Less than 0.25% by Weight of Source Material."

The group discussed various issues related to NUREG-1717 and the material involved. The dosimetry models used in the NUREG were ICRP 26 and 30. The working group noted that newer dose methodologies may demonstrate lower doses. Also, the group decided that the main focus of its work should be on materials described in Section 3.2 and Section 3.3 of the NUREG. While the rare earths discussed in Section 3.9 may be of some concern, the group indicated that there are very few remaining facilities and that most of the materials are imported. The group will evaluate this as it moves forward.

The working group was asked to look at the various materials discussed in Sections 3.2 and 3.3 of the NUREG and determine what materials their respective agencies regulate and why, i.e., what are the radionuclide(s) or other materials involved and why are they of concern. This will be discussed at the next meeting. Additionally, the State representative will poll other States regarding any information they might have on doses related to the materials discussed in Sections 3.2 and 3.3 of the NUREG.

#### Action Items

NRC will: (1) continue work on the list of terms, incorporating comments from the meeting; (2) evaluate the assumptions and criteria used in the assessments in Sections 3.2 and 3.3 of NUREG-1717, to better understand the basis behind the estimates and calculations; and

(3) review the results in Sections 3.2 and 3.3 of NUREG-1717 to evaluate the dose contribution, such as an external versus an internal dose and what radionuclides are contributing to the dose.

The working group members will evaluate NUREG-1717 in light of their agency's regulatory authority, as discussed above, for discussion at the next meeting. This information will be provided to the NRC staff for evaluation before the next meeting (date to provide information to be determined).

The State representative will begin polling other States for information on doses related to the materials discussed in Sections 3.2 and 3.3 of NUREG-1717.

The next working group meeting is scheduled for late September, tentatively on September 26, 2001.