

## **JURISDICTIONAL WORKING GROUP CHARTER**

The Working Group will identify regulatory options to assure protection of public health and safety from risk associated with materials containing low concentration of uranium and/or thorium and their decay products.

### **Purpose**

To explore the best approach to delineating the responsibilities of the NRC and other Federal agencies and States with regard to low concentrations of uranium and/or thorium and their decay products.

### **Working Group**

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### **Alternates**

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### **Background**

Section 40.13(a) of 10 CFR Part 40 exempts any person who receives, possesses, uses, transfers, or delivers source material in any chemical mixture, compound, solution, or alloy in which the source material is by weight less than 0.05 percent of the mixture, compound, solution or alloy from the regulations in 10 CFR Part 40 and from the requirements for a license set forth in section 62 of the Atomic Energy Act of 1954 (AEA). This exemption involves complex issues related to the history of Part 40. The origin of the definition of source material in the AEA relates to its significance as a source of uranium or thorium for the production of special nuclear material. The original definition of source material in Part 40 (1947) excluded all forms of uranium and thorium below this concentration limit, i.e., 0.05% by weight. In 1961, the definition was revised to its present form to be consistent with the definition in the 1954 Act. Since that time, only ore below the 0.05 percent concentration limit has been excluded from the definition of source material. The exemption was added at that time and is a remnant of this

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history. The 0.05% concentration appears to have been chosen on the basis of the concentrations of source material necessary to be a useful source of fissionable material. The Commission has since determined that wastes containing unimportant quantities of source material derived from licensed operations should be transferred (including for disposal) only with NRC staff pre-approval.

Estimates of possible doses from uranium and thorium suggest that the concentration limit of 0.05 % (500 ppm) may not be adequately protective of public health and safety and the environment. However, lowering the concentration limit below this level could lead NRC to regulate many activities (including almost all mineral processing and product manufacturing) unrelated to the nuclear fuel cycle. This was not intended in the 1946 and 1954 Acts.

Additionally, many naturally-occurring materials containing uranium and thorium also contain radium at elevated concentrations that could pose health and safety impacts that may be more significant than the uranium and thorium that are present in the materials. The Jurisdictional Working Group will review and evaluate potentially relevant and applicable regulations and explore ways to regulate those materials containing uranium and/or thorium which could pose a risk to humans and the environment. The Jurisdictional Working Group will also consider possible regulatory approaches, including shared roles among Federal and State agencies, to address such concerns and minimize the associated risks.

### **Function**

- Bring together Federal and State agencies to explore the best approach for delineating their responsibilities with regard to materials containing low concentrations of uranium and/or thorium.
- To ensure no undue risks, and adequate protection of public and occupational health and safety and the environment, from materials containing low concentrations of uranium and thorium and their decay products, the Federal agencies and the States will evaluate existing and proposed regulations for such materials. This process will include assessing the willingness and ability of Federal and/or State agencies to assume responsibilities for certain levels of source material and related radioactive materials, i.e., decay products of the uranium and thorium series.
- Identify issues that the rulemaking working group should consider in the development of the rulemaking plan described in SECY-99-259.

### **Desired Products**

- Document the activities of the Jurisdictional Working Group.
- Identify and prioritize options for regulating materials containing low concentrations of uranium and/or thorium.
- Submit a status report to the Commission by March 9, 2001, of its activities.

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- Ultimately, the Jurisdictional Working Group will recommend preferred regulatory approach(s) to address risks from currently exempt material under 10 CFR 40.13(a).