



UMTRCA Rulemaking- 40 CFR 192

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**Navajo Uranium Contamination Stakeholder Workshop
Gallup, New Mexico
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Overview

- **Uranium Mill Tailings Radiation Control Act (UMTRCA) of 1978, as amended, Section 206**
- **Existing regulations 40 CFR 192**
- **Reason for review and potential update**
- **Issues for review**
- **Coordination and stakeholder input**



Uranium Mill Tailings Radiation Control Act (UMTRCA) of 1978, as amended, Section 206

- **Title I inactive mill sites administered by DOE**
 - EPA to develop health and environmental standards for
 - “radiological and
 - nonradiological hazards associated with residual radioactive materials located at inactive uranium mill tailings sites

- **Title II and future active processing sites):**
 - Required EPA to develop standards “...for the protection of the public health, safety, and the environment from
 - radiological and nonradiological hazards associated with the processing, possession, transfer, and disposal of byproduct material...
 - at sites at which ores are processed primarily for their source material content or which are used for the disposal of such byproduct material”



Uranium Mill Tailings Radiation Control Act Requirements for EPA

- **“The Administrator may periodically revise any standard...”**
- **Before the promulgation of any rule pursuant to this section, the Administrator shall:**
 - **“publish, the proposed rule in the Federal Register, together with a statement of the research, analysis, and other available information in support of such proposed rule...”**
 - **Provide a period of public comment of at least thirty days for written comments with a hearing thereafter**
 - **“The Administrator shall consult with the Commission and the Secretary of Energy before promulgation of any such rule”**



Existing Regulations 40 CFR 192

Health and Environmental Protection Standards for Uranium and Thorium Mill Tailings

- **Subpart A. Standards for the control of residual radioactive materials from inactive uranium processing sites**
- **Subpart B. Standards for cleanup of land and buildings contaminated with residual radioactive materials from inactive uranium processing sites**
- **Subpart C. Implementation**



Existing Regulations 40 CFR 192

- **Subpart D. Standards for management of uranium byproduct materials pursuant to Section 84 of the Atomic Energy Act as Amended**
- **Subpart E. Standards for management of thorium byproduct materials pursuant to Section 84 of the Atomic Energy Act of 1954, as Amended**



Existing Regulations 40 CFR 192

Regulations provide standards for mills for:

- **Radiation protection of the public and occupational workers**
- **Radon emissions**
- **Surface and groundwater protection including monitoring and restoration**
- **Reclamation standards for radiologically contaminated soil and buildings**
- **Tailings impoundment construction requirements**



Reason for Review and Potential Update

- **Over 25 years since originally finalized, ~15 years since last update for groundwater protection**
- **Lacks explicit provisions for In Situ Leach/Recovery (ISL/ISR), now principal means of uranium recovery in U.S., and for heap leach facilities**
- **Changes in EPA protective standards for hazardous substances in groundwater and drinking water**
- **Changes in economics of extraction & site remediation**



Reason for Review and Potential Update

- **Changes in dose factors for radiation/radon, principal scenarios for exposure, free release of sites (ISL/ISR's) after decommissioning**
- **Potential for uranium extraction in different geographic locations than those considered in risk assessments in previous standards**
- **Court case negating provision of regulations—EPA concurrence in NRC ACL determinations**



Issues for Review

- **Are provisions for Title I and other closed sites still protective, and should those sites be grandfathered?**
- **How should radiation, radon release, groundwater and surface water protection standards be revised due to
 - new EPA standards,
 - updated exposure scenarios and dose factors,
 - historical production and economic data?**
- **How should existing regulatory framework of 40 CFR 192 be applied to ISL/ISR operations?**



Issues for Review

- **What protective standard should be selected for lead in groundwater?**
- **How to reconcile NRC proposed ISL/ISR groundwater protection standards (10 CFR 40, Appendix A) with revised 40 CFR 192?**



Issues for Review

- **How to balance environmental compliance costs and benefits?**
- **How to ensure that environmental justice, children's health and Tribal concerns are fully taken into account?**



Coordination and Stakeholder Input

- **Development of Communications Plan**

OBJECTIVES:

- Ensure an open and transparent process for reviewing and potentially revising the standards.
- Increase awareness of the issues surrounding the potential revisions among targeted audiences.
- Provide stakeholders the opportunity to provide informal and formal input on the revisions

- **Federal Agency Coordination**

- **NRC and DOE**
- **ISCORS**

- **EPA Intra-agency Workgroup**

- **Regions – 6-10 with observers from 3 and 5**
- **HQ – OW, ORD, OSWER, OGC, OPEI**



Coordination and Stakeholder Input

- **Tribes and Tribal organizations**
- **States**
- **Industry**
- **Environmental and other NGO's**
- **Internet site for Public**



Questions?

