EPA’S
NESHP Subpart W Activities
An Internet Webinar

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Ask Questions

- If you have a question during this presentation, please send it to:
  - SubpartW@epa.gov

- After the presentation, we’ll try to answer as many questions as possible, time permitting
Overview

- What is NESHAP?
- EPA regulatory requirements for operating uranium mill tailings (Subpart W)
- General requirements applicable to Subpart W
- Information on review of UMTRCA standards
- EPA’s rulemaking process
- Status update on Subpart W activities
- Communications
- Some conclusions
What is NESHAP?

- **National Emission Standards for Hazardous Air Pollutants**
- Mandated by the Clean Air Act
- Standards set by EPA for air pollutants to protect human health and the environment
- Radionuclides are in this category (Rad-NESHAP)
- Various sources regulated under Rad-NESHAP, including radon emissions from operation uranium mill tailings (NESHAP Subpart W)
EPA Regulatory Requirements for Operating Uranium Mill Tailings (Subpart W)
40 CFR 61 Subpart W requirements apply to facilities licensed to manage uranium byproduct materials during and following the processing of uranium ores:

- Preconstruction approval, 40 CFR 61.07
- Impoundment construction and operation requirements in 40 CFR 192 cross referenced in Subpart W
- Limit on number/size of impoundments
  - Phased Disposal – lined impoundments no more than 40 acres, no more than two in operation at any time
  - Continuous Disposal – tailings are dewatered and immediately disposed, no more than 10 acres uncovered at any time
Subpart W Requirements (continued)

- Radon emission standard of 20 pCi/m²/sec -- annual reporting requirements, notification in advance of testing
- The radon emission standard is for existing sources only (existing before 12/15/89)
- All operators must comply with 40 CFR 192.32(a)
  See http://www.epa.gov/radiation/neshaps/subpartw/rule making-activity.html for more information
General Requirements Applicable to Subpart W

- Subpart W facilities are subject to the general requirements of 40 CFR 61.01 - .19
  - Application for construction and modification
  - Notification of startup
  - Compliance with monitoring/maintenance requirements

- Subpart W facilities are subject to the design and ground-water requirements of 40 CFR 192.32(a)
  - Ground-water protection standards and impoundment design requirements similar to hazardous waste facilities
  - Permanent radon barrier at closure
EPA reviewing regulations implementing the Uranium Mill Tailings Radiation Control Act (UMTRCA)

Establishes health/environmental protection standards utilized by NRC and Agreement States, and DOE for their oversight of uranium extraction facility licensing, operations, sites, and wastes

Includes conventional uranium mills, ISL recovery facilities, heap leach facilities, but not conventional mines (open pit or underground)
- Internet site:
  - Members of the public interested in this issue should visit [http://www.epa.gov/radiation/tenorm/](http://www.epa.gov/radiation/tenorm/) and sign up to receive notification of changes to the page at the envelope icon: Get e-mail updates when this information changes.)
EPA’s Rulemaking Process

- **Tiering**
  - The lead office submits a request for a new action; the Regulatory Steering Committee (RSC) reviews it; the Regulatory Policy Officer (RPO) approves; the Office of Policy, Economics, and Innovation (OPEI) approves the tier
    - Tier 1: Top actions that demand the ongoing involvement of the Administrator – precedent setting and controversial
    - Tier 2: Include significant science, policy, economic and/or implementation issues – decision may be based on a risk assessment - Subpart W review is Tier 2
    - Tier 3: Generally involves use of well-known and accepted science principles
EPA’s Rulemaking Process

- **Analytic Blueprint and Early Guidance**
  - The workgroup creates a Preliminary Analytic Blueprint (ABP), management gives Early Guidance, and the workgroup creates a Detailed ABP

- **Analysis and Consultation**
  - The workgroup gathers scientific, economic, legal, stakeholder, enforcement, and compliance information. Also, the workgroup drafts regulatory options

- **Options Selection**
  - Senior management selects options or narrows the list to a select few that require further research
EPA’s Rulemaking Process

**Drafting**
- The workgroup creates a draft of the action

**Final Agency Review**
- This is the last point for EPA review. Senior management from participating offices concur or non-concur with the action as it is written

**Office of Management and Budget (OMB) Review**
- If the action is significant, OPEI submits it to OMB for review

**Signature**
- The EPA Administrator, an Assistant/Associate or Regional Administrator, or a delegate signs the action
EPA’s Rulemaking Process

**Docketing**
- The lead office ensures that the action and appropriate supporting documents are deposited in the official docket

**Federal Register Publishing**
- The action is published in the Federal Register

**Public Comments**
- The action is open for a formal comment period, during which the public may submit comments and request public hearings
EPA’s Rulemaking Process

**Final Action**

- After the proposed action's public comment period closes, the workgroup reviews all comments and usually starts preparing a final rule.
- The process begins again, usually with a new Analytic Blueprint.
- Final actions are often subject to the Congressional Review Act and Courtesy Copy Policy.
Status Update on Subpart W Activities
Status of Subpart W Review Activities

- Per Clean Air Act Amendments of 1990, EPA is obligated to review Subpart W
- A workgroup has been established
  - Members from across the Agency
  - Represent ORIA, OGC, ORD, OSWER, OECA, OPEI, OW, Regions 6, 7, 8 and 10
  - Workplan, Communications Plan, Analytic Blueprint have been completed, basically, how are we going to approach the task
Status of Subpart W Review Activities

- We have conducted historical research on the risk assessment work originally done in support of the 1989 standard.
- We have completed a survey of existing technologies.
- Office of Enforcement and Compliance Assurance sent information request letters to numerous uranium recovery facilities.
  - Answers better inform the workgroup of the universe of facilities, and the types of uranium recovery processes that exist.
- We have also requested that ISL facilities provide radon flux data from their evaporation ponds.
Status of Subpart W Review Activities

- We are researching if Method 115 continues to be current, or whether other methods could be employed for monitoring and analysis of radon flux.
- We are beginning the process of performing risk assessments at all existing facilities.
- Purpose is to update risk numbers used in 1989 rulemaking to reflect state of the science.
- Stylized scenarios will also be developed for representative future sites.
- Scenarios would include varied climate, heap leach.
Status of Subpart W Review Activities

• 1989 rule used AIRDOS to calculate dose and risk
• Determination which model is appropriate
• Candidate models include CAP88, GENII, RESRAD, MILDOS-AREA, MEPAS, GASPAR
• We welcome any other candidates you may know about
Status of Subpart W Review Activities

- Risk estimates will be developed for each Subpart W facility
- Estimates will be presented on a facility-by-facility basis, the same format used in the 1989 rulemaking
  - Source category, radionuclides released, existing controls
  - Bases for the risk estimate
  - Results of the dose and risk calculations
  - Description of supplementary emissions controls and cost effectiveness in reducing dose and risk
COMMUNICATIONS
Communications

- We have developed a website dedicated to Subpart W which provides internet access to background information already compiled by EPA
- Provides public access to all non-privileged records, especially technical documents, as well as useful links to sites relevant to Subpart W
• We are conducting quarterly conference calls to brief the public on the review of Subpart W

• Next Call is scheduled for Tuesday, July 6, 2010 at 11:00 AM EDT

• Phone-in number – 1-866-299-3188
• Conference Code 2023439563
Some Conclusions

- We are in the process of reviewing and possibly revising Subpart W, decision in winter 2011
- Owners/operators of ISL facilities that utilize evaporation ponds containing byproduct material produced by the extraction or concentration of uranium should assume you are subject to the requirements of Subpart W
- We appreciate the assistance of all stakeholders to inform and enable us to craft a protective and enforceable rule.
Questions?