



# ***EPA'S NESHAP Subpart W Activities***

**Reid J. Rosnick  
Environmental Protection Agency  
Radiation Protection Division (6608J)  
Washington, DC 20460  
202-343-9563, [rosnick.reid@epa.gov](mailto:rosnick.reid@epa.gov)  
June 30, 2009**

# Overview

- General requirements applicable to Subpart W
- EPA regulatory requirements for operating uranium mill tailings (Subpart W)
- EPA's Rulemaking Process
- Status update on Subpart W activities
- Some Conclusions



# 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 Regulatory Requirements for Operating Uranium Mill Tailings (Subpart W)**



## EPA Regulatory Requirements for Operating Uranium Mill Tailings (Clean Air Act)

- 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



# EPA Regulatory Requirements for Uranium Operations (Clean Air Act)

## Subpart W Requirements (continued)

- Radon emission standard of 20 pCi/m<sup>2</sup>/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/index.html> for more information



# 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 are conducting historical research on the risk assessment work originally done in support of the 1989 standard
- We have begun a survey of existing technologies
- Office of Enforcement and Compliance Assurance has 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 planning to work with all stakeholders in reviewing/revising the standards
- The Agency continues to believe that conventional tailings piles, certain evaporation ponds from ISL operations, and heap leach piles, are subject to the requirements of Subpart W
- We base our decision on a review of existing regulatory language



# Applicability of Subpart W (Clean Air Act)

- 40 CFR 61.250 –

“The provisions of this subpart apply to owners and operators of facilities licensed to manage uranium byproduct materials during and following the processing of uranium ores, commonly referred to as uranium mills and their associated tailings. This subpart does not apply to the disposal of tailings.”





## Subpart W Definition of Uranium Byproduct Material

- 40 CFR 61.251 (g) –

*“Uranium byproduct material or tailings means the waste produced by the extraction or concentration of uranium from any ore processed primarily for its source material content. Ore bodies depleted by uranium solution extraction and which remain underground do not constitute byproduct material for the purposes of this subpart.”*



# EPA Regulatory Requirements for Uranium Operations (Clean Air Act)

- What is an impoundment (per 40 CFR 192.32, which cross references 40 CFR 260.10)?
  - “...a facility or part of a facility which is a natural topographic depression, man-made excavation or diked area formed primarily of earthen materials (although it may be lined with man-made materials) which is designed to hold an accumulation of liquid wastes, or wastes containing free liquids, and which is not an injection well. Examples of impoundments are holding, storage, settling, and aeration pits, ponds and lagoons.”



# Some Conclusions

- We are in the process of reviewing and possibly revising Subpart W, decision in late 2010
- 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?

