

# SA-900 Termination of Uranium Mill Licenses

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**Stephen Poy, Program Manager  
Division of Materials Safety, Security, State, and Tribal Programs  
Office of Nuclear Material Safety and Safeguards**

**David Adams, Radiation Control Program Director  
Wyoming Department of Environmental Quality**

# Objectives

- Overview of the License Termination process
- Revising SA-900
- Milestones to License Termination
- Current Decommissioning Projects

# What is a CRR and an LTSP?

- Completion Review Reports (CRRs) provide the Agreement States' basis for 1) releasing a site for unrestricted use; or 2) to terminate the specific license so that the site can transfer to the Department of Energy (DOE) (as applicable for conventional mill and heap leach facilities) under a general license.
- The Long-Term Surveillance Plan (LTSP) is provided to NRC by the DOE. It details the actions the DOE will undertake as the long-term care custodian for the site.

# Types of Uranium Mills

- In-situ recovery (ISR) uranium recovery facilities inject lixiviant into a uranium-bearing aquifer and separate the dissolved uranium from the lixiviant to produce yellowcake (most common).
- Conventional mills crush and grind uranium-bearing ore and chemically separate the uranium.
- Heap leach facilities crush and grind ore to be placed on in a cell (heap). The ore is then leached with chemicals to produce leachate. The leachate is then processed for its uranium content.

# CRR Milestones

- For ISR facilities
  - No waste remains at the site and the site is released for unrestricted use. CRR is used to release mine units (wellfields) through partial site release.
  - Likely results in multiple CRRs for single facility
  - Demonstration of GW restoration
    - Meet Criterion 5B(5)
      - Background, MCL, ACL
  - Demonstration of Criterion 6(6) – radium benchmark dose approach

# CRR Milestones

- Conventional mills & heap leach facilities
  - Waste remains onsite in the form of a tailings pile, CRR demonstrates licensee having fulfilled 10 CFR 40 Appendix A criteria for decom. Site is ultimately transferred to DOE for LTS&M.
  - Cleanup of GW, as necessary
  - Radon cover, longevity of the cover
  - Criterion 6(6)
  - LTC Fee – 10 CFR Part 40 Appx A, Criterion 10 \$250,000 in 1978 dollars
    - Approximately \$1 million today

# SA-900 Termination of Uranium Mill Licenses in the Agreement States

- Review process for making the determination that all applicable standards and requirements have been met prior to Agreement State uranium milling license termination, as required by 10 CFR 150.15a(a) and Section 274c of the Atomic Energy Act of 1954.
- Establish the procedures to be followed by NRC staff for review of uranium milling license termination proposals submitted by Agreement States.
- Provide guidance for use by Agreement States on preparation and submittal of uranium milling license termination proposals for NRC staff review.

# SA-900 Termination of Uranium Mill Licenses in the Agreement States

- Guidance currently being revised.
- Engage NRC early.
- Complicated decommissioning requires early engagement – i.e., Novel approaches, irreversible licensing actions.
- NRC hosts an annual CRR Workshop.



# Current Decommissioning Projects

Colorado: Durita and Uravan

Texas: Panna Maria, Ray Point, and Conquista

Utah: Rio Algom Lisbon Valley

Washington: Dawn Mining Corp.

Wyoming: WNI Split Rock, Orano LuckyMc, ANC Gas Hills, Umetco Gas Hills East, ExxonMobil Highlands, Anadarko Bear Creek

New Mexico: *HMC Homestake Mill, Rio Algom Ambrosia Lake, UNC Churchrock*

Oklahoma: *Sequoyah Fuels*

# Questions?

