

U.S. NRC: Rulemaking Highlights

Groundwater Protection at Uranium In Situ Recovery Facilities

What is the rule?

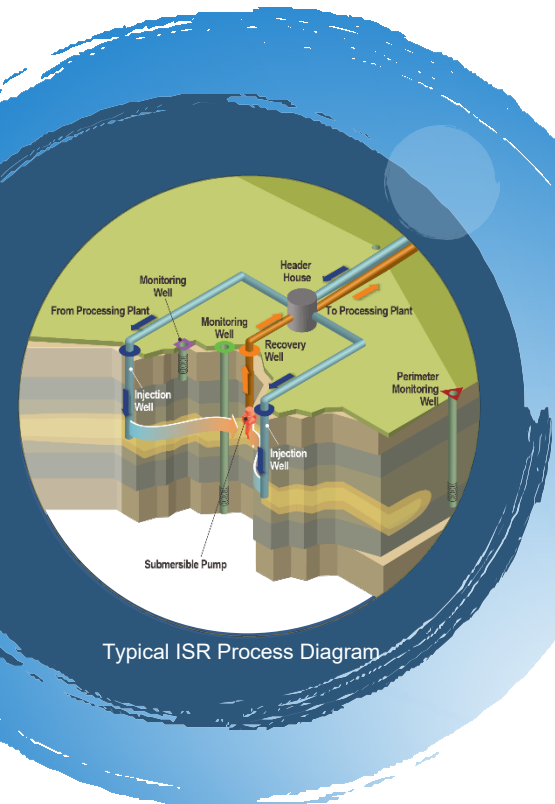
- The NRC proposes to amend its requirements in 10 CFR Part 40, Appendix A, for the operation of uranium mills to establish new regulations for groundwater protection at uranium in situ recovery (ISR) facilities.
- This rulemaking would make generically applicable those requirements for groundwater protection at ISR facilities that the NRC had previously imposed on existing licensees through license conditions.
- This rulemaking would apply to new ISR facility licensees and to current ISR facility licensees who choose to expand their existing facilities.

What is the impact?

The current application and licensing requirements in 10 CFR Part 40, Appendix A, were written for conventional uranium mills and, hence, do not include the necessary requirements for groundwater protection at ISR facilities. The NRC has been relying upon groundwater protection license conditions on a site-specific basis, which is an inefficient and burdensome approach for both the applicant and the NRC. This rulemaking would establish requirements for groundwater protection at ISR facilities by codifying the risk-informed and best management practices that are set forth in these site-specific license conditions, thus standardizing and streamlining the ISR facility licensing process as well as improving clarity, transparency, and regulatory stability.

What made this innovative?

- Because the Commission had placed this rulemaking on an expedited schedule, a senior manager acted as an active liaison with senior management throughout the NRC. Further, this senior manager provided oversight to the working group and was readily available to provide immediate direction at key decision points, which kept the working group focused and prevented delays to the schedule.
- The rulemaking working group included several experienced subject matter experts who supported the project as their highest priority. As a result, the working group drafted the rulemaking package documents within the expedited schedule.
- In addition to NRC members, the working group included Agreement State members who were involved early in the drafting of the proposed rule language. Their involvement ensured a high-quality proposed rule because the majority of licensed ISR facilities are regulated in Agreement States. The working group also afforded those Agreement States with the authority to regulate uranium milling an opportunity to review the draft proposed rule language early in the process, thereby gaining their feedback and insights.
- The NRC staff developed the draft proposed rule consistent with the July 2020 memorandum of understanding between NRC and EPA to ensure a level of comparability with requirements.



Typical ISR Process Diagram



[Review the Rulemaking Document](#)



[View Our Rulemaking Website](#)

Cameco Smith Ranch ISR facility near Douglas, WY



Innovative Rulemaking for Modern Technology

Issue: 2021-01