

NRC Region IV Inspection Activities of Interest

National Mining Association Meeting

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Agenda

- Overview of revised uranium recovery (UR) inspection programs
 - Operating facilities
 - Decommissioning facilities
- Management of monitor well purge water
- Current Region IV inspection program staffing

Operating UR inspection program

- Between April 2020-October 2021, NRC updated operating UR inspection program to:
 - Implement Commission policy on risk-informed, performance-based inspections
 - Include recently issued NRC regulations/guidance
 - Incorporate inspection experience as appropriate
 - Create new procedures where none previously existed (groundwater, preop inspections)

Operating inspection program, cont.

- Combined two Inspection Manual Chapters (IMCs) into one:
 - IMC 2641, In-Situ Leach Facilities Inspection Program
 - IMC 2801, Uranium Mill and 11e.(2) Byproduct Material Disposal Site and Facility Inspection Program
- Created 8 new Inspection Procedures (IPs) based on uniqueness of UR program
- Moved UR decommissioning to IMC 2602
 - IMC 2602 is currently in revision (revision expected to be issued in October 2022)

Risk-significant core IPs

- IP 89010, Disposal cell construction
- IP 89020, Groundwater & water management
- IP 89030, Radiation protection
- IP 89035, Radioactive waste & transportation
- IP 89045, Effluent control/env. protection
- IP 89050, Emergency preparedness/fire prot.

Discretionary IPs

- Predominately compliance-based IPs
 - IP 89005, Management organization & controls
 - IP 89015, UR construction/preop. inspections
- Generic IPs
 - IP 87102, Maintaining effluents ALARA
 - IP 87103, Inspection of licensees involved in incident or bankruptcy
 - IP 92701, Follow up
 - IP 92703, Follow up of CALs or COs

Change Notice 21-034

- Issued 10/8/21
- Includes revised IMC 2801, “ Uranium Recovery and 11e.(2) Byproduct Material Facility Inspection Program“
- Includes 8 new IPs
- ADAMS Accession No. ML21273A176

Changes to decommissioning program

- IMC 2602 being modernized to reflect changes in decommissioning (last updated in 2008)
- Combines all non-reactor decommissioning modalities into one IMC
- Incorporates risk-informed decision-making to support planning and implementation of inspection program
- Uses risk modules for consistency with IMC 2800 material inspections
- Existing instructions in IMC 2801 and 2641 remain in place until IMC 2602 is revised

UR Decommissioning

- Most of the new UR IPs for IMC 2801 are incorporated into the revised IMC 2602 program
- IP 87654 for UR decommissioning is being revised and will become a core IP under IMC 2602
- 2 core IPs in IMC 2602 for UR decommissioning
 - IP 87654, Decommissioning Inspection Procedure for Uranium Recovery (draft in use since Feb 2022)
 - IP 83890, Closeout Inspection and Survey
- 12 discretionary IPs

Well purge water

- Questions have come up regarding classification of purge water and how to dispose of this water
- Best classified as an effluent
- May be able to discharge purge water containing licensed material on site property
 - Must consider concept of ALARA
 - Most licenses require SOP to manage purge water
 - Radiologically restricted areas will be final status surveyed before release

Purge water, cont.

- Use caution for offsite purge water releases; can be complicated
 - Is the aquifer contaminated?
 - Does effluent contain licensed material?
 - What's the concentration of licensed material in the purge water? NRC's effluent concentration limits may apply
 - Do you plan to survey area prior to release?
 - Large or small purge volumes? Offsite releases?

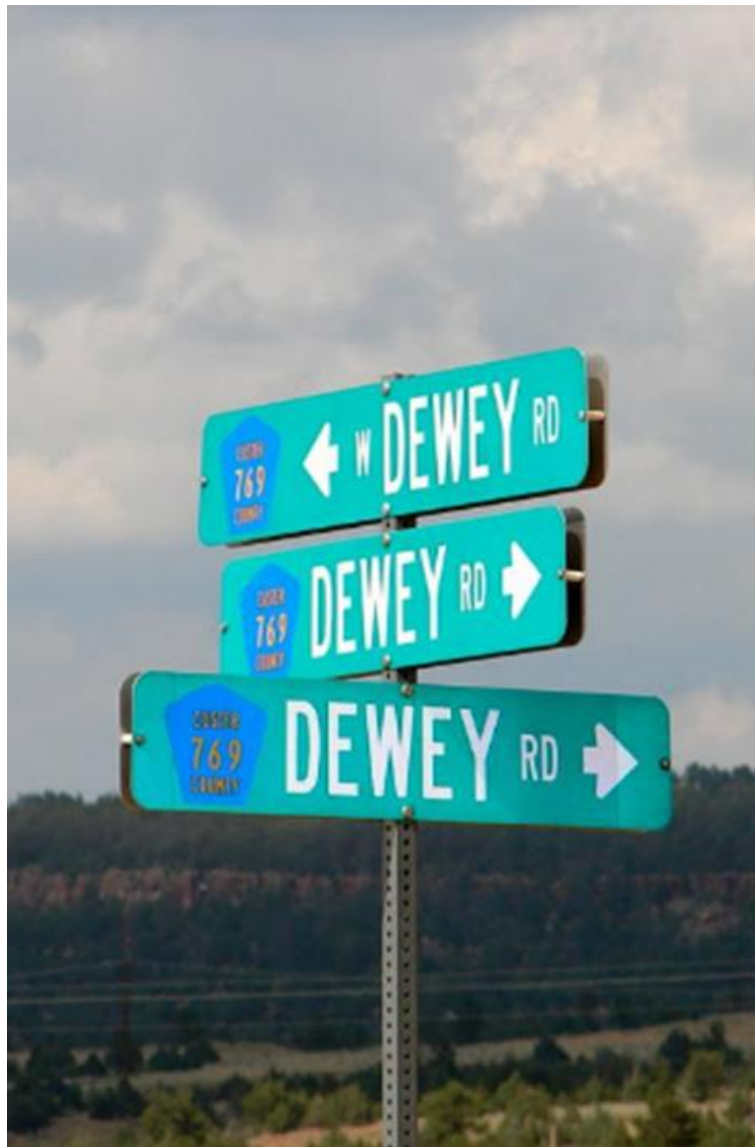
Inspection program

- UR inspection program currently resides in Region IV's Division of Radiological Safety & Security (DRSS), Decommissioning, ISFSI, and Operating Reactor (DIOR) Branch
 - Greg Warnick is the branch chief
- Inspection staff must be qualified to conduct operating UR inspections (IMC 2801) and decommissioning inspections (IMC 2602)

Inspection program, cont.

- IMC 2801 inspectors include Rob Evans & Linda Gersey, with backups Marti Poston & Bernadette Baca
- IMC 2602 inspectors include Rob, Linda, and Stephanie Anderson with Marti as backup
- Troy Johnson is new inspector in training; two more open decommissioning positions are in the process of being posted and filled

Questions? Comments?



Which way to the Dewey-Burdock uranium recovery site?
(Road sign encountered at intersection in South Dakota)