Analysis of Jurisdictional Boundaries for Uranium Recovery Project Stages

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Introduction

- With The Resurgence of the Domestic Uranium Recovery Industry, New Uranium Recovery Projects Are Being Developed:
- New Uranium Recovery Projects Take on Several Forms:
 - New Conventional Mill Sites;
 - New In Situ Uranium Recovery (ISR) Projects;
 - Existing Project Restarts (Conventional & ISR);
 - New Project Facilities at Already-Licensed Sites (Conventional & ISR)

Introduction

- It is Crucial to the Licensing/Permitting of New Uranium Recovery Projects That a Critical Path Be Established With Relevant Milestones:
 - In Order to Establish an Accurate Critical Path, License/Permit Applicants Must Understand:
 - Which Regulatory Agencies are Empowered to Issue Necessary License/Permits;
 - What Each Regulatory Agency's Licensing/Permitting Requirements Are
- For New Uranium Recovery Projects Located on Federal Lands Administered by the United States Department of the Interior Bureau of Land Management (BLM), the Lines of Jurisdiction Between BLM & NRC are Critical to Understanding What Regulatory Requirements Must Be Satisfied

Introduction

- As a Result, There Are Many Questions That Must Be Answered for Uranium Recovery Companies to Establish a Critical Path For Licensing/Permitting:
 - Which Regulatory Agencies Have Jurisdictional Authority Over the Various Stages of Uranium Recovery Projects?;
 - What Regulatory Requirements Must Be Satisfied to Obtain Necessary Licenses/Permits?;
 - Will "Tiering" From the NRC ISR GEIS Be Possible for Projects Where BLM Regulations are Implicated?

Why is This Issue Important? NRC Authority

- Statement of Commissioner Pete Lyons at 2008 National Congress of American Indians Meeting:
 - NRC Regulates Uranium <u>Milling</u> Facilities & Does Not Regulate Uranium <u>Mining</u> or Abandoned Mine Sites;
 - Mining Involves the Actual Digging and Excavating of Uranium Ore From the Earth, Whereas, Uranium Recovery Involves the Processing and Concentration of Uranium Into "Yellowcake" (Following Its Removal from Its Original Place in Nature Through Mining Operations
- The Atomic Energy Act of 1954 (AEA), As Amended, (Section 62) Requires an NRC License to Transfer or Receive in Interstate Commerce Any Source Material (Such as Uranium Ore) Only "After Removal From Its Place of Deposit in Nature"

Why is This Issue Important? BLM & Other Agency Authority

- For Example, BLM Regulates (Surface Land Use) for Mining Activities on Federal Lands That Are Conducted Pursuant to the General Mining Law of 1872;
- The Federal Land Policy & Management Act Authorizes BLM to Prevent Undue or Unnecessary Degradation to Federal Lands:
 - BLM Regulations at 43 CFR § 3809 Regulations Govern Hardrock Mining on Federal Lands

Jurisdictional Issues

Factors That May Have Implications for Agency Jurisdictional Issues:

- 2000 Commission Decision on ISR Projects;
- Large Number of Claims Filed With BLM for Uranium Exploration;
- Large Number of Uranium Recovery License Applications Leading to Preparation of NRC Generic Environmental Impact Statement (GEIS) on ISR Projects

Jurisdictional Issues: NRC Decision on "Milling Underground"

- In 2000, the Commission Determined That Restoration Fluid from ISR Operations Constitutes 11e.(2) Byproduct Material:
 - By Implication, This Decision Renders the Underground Processes at an ISR Project "Milling Underground:"
 - Operations
 - Restoration
- NRC Staff Interprets This Decision to Mean That An Environmental Impact Statement (EIS) is Required for ALL Uranium Recovery Projects, Including:
 - Conventional Mills;
 - ISR Projects

Jurisdictional Issues: Claims on Federal Agency Lands

- During the Recent Nuclear Renaissance, New Uranium Claims Have Been Filed:
 - Private Lands:
 - State Lands;
 - Federal Lands (Administered by BLM or United States Forest Service (USFS))
- Fifty (50) Percent of New BLM Locatable Mineral Claims in 2007 Were for Uranium;
- Thus, BLM Regulations Regarding Uranium Recovery Projects Will Be Relevant to the Critical Path for Project Development

Jurisdictional Issues: Claims on Federal Agency Lands

- Pursuant to Applicable Regulations, Uranium Claims on Federal Agency Lands Are Subject to Applicable Agency Requirements:
 - For Example, BLM Land Management Regulations Apply to Claims on BLM Lands (43 CFR § 3830 et seq.);
 - National Environmental Policy Act (NEPA):
 - Lead Agency for Environmental Impact Statement (EIS)/Environmental Assessment (EA) Preparation;
 - Cooperating/Consulting Agency on EIS/EA Preparation

Jurisdictional Issues: ISR GEIS

- Due to the Increase in The Number of ISR Applications, NRC Determined That Creation of an ISR GEIS is Warranted to:
 - Address Common Elements of Technical and Environmental Reviews for ISR Projects;
 - Focus Agency Resources on Site-Specific Technical & Environmental Issues;
 - Provide AEA Agreement States, Other Federal/State Agencies, and Interested Stakeholders With A Comprehensive Information Resource for Issues and Regulatory Decisions Associated With ISR Projects

Jurisdictional Issues: ISR GEIS

- As Part of the ISR GEIS Process, NRC Has Determined That An ISR GEIS Will Permit the Agency to:
 - Utilize the Concept of "Tiering" As Recognized By the Council on Environmental Quality (CEQ) Regulations (40 CFR § 1502.20), NRC, and Other Federal Agencies:
 - Perform Site-Specific Environmental Assessments (EAs) for New Proposed ISR Project Sites;
 - Perform Site-Specific Supplemental EISs Where Warranted
- BLM and Other Federal Agency Regulations May Require the NEPA Process for Certain Activities at New Project Sites;
- Thus, The Initial Questions is---Will These Agencies' Regulations Allow for "Tiering" of Site-Specific Environmental Evaluations in a Manner Similar to That of NRC in Light of the ISR GEIS?

Jurisdictional Questions Remaining

- Given the Recent Surge of Uranium Claims on BLM Lands, Some Jurisdictional Questions Remain:
 - Which Agency (NRC or BLM/Other or Both) Has Jurisdiction Over the Various Stages of Uranium Production?:
 - Exploration;
 - File for Claims;
 - Site Characterization;
 - Licensing & NEPA Process
 - Site Construction;
 - Operations;
 - Site Reclamation (Conventional & ISR) & Restoration (ISR)

Where Should the Jurisdictional Line Be Drawn?

- To Try to Understand Where to Draw the Jurisdictional Line Between Agency Regulatory Authority, Ask the Following Question:
 - WHERE DOES THE PROCESS OF URANIUM RECOVERY CEASE TO BE "MINING" AND BECOME "MILLING?";
 - WHAT REGULATORY PRECEDENT IS AVAILABLE TO SUPPORT THE POSITION?

Mining v. Milling: Is This The Proper Place to Delineate Jurisdictional Lines?

- Why Should Jurisdiction Over Uranium Recovery Projects Be Defined by Mining v. Milling?:
 - The Atomic Energy Act of 1954, As Amended by the Uranium Mill Tailings Radiation Control Act of 1978 (UMTRCA), (Hereinafter the "AEA") Grants NRC and Its Agreement States Preemptive Regulatory Authority Over Health and Safety Regulation Associated With AEA Materials (i.e., Source Material Recovery/Milling):
 - Supremacy Clause;
 - Field Preemption;
 - Pervasive Federal Statutory Regime;
 - Supported by Federal Case Law

Mining v. Milling: Is This The Proper Place to Delineate Jurisdictional Lines?

- Why Should Jurisdiction Over Uranium Recovery Projects Be Defined by Mining v. Milling?:
 - The Commission Has Definitively Stated That NRC Has No Jurisdiction Over "Mining:"
 - Section 62 of the AEA: (Commission's Source Material Authority Invoked After "Removal From Its Place of Deposit in Nature");
 - NRC 1980 GEIS: ("NRC Has No Direct Authority Over Uranium Mining or Mine Wastes." (Page A-94))
 - Hydro Resources, Inc. (HRI) Administrative Litigation: ("This Agency Has Traditionally Viewed This Provision As Precluding Jurisdiction Over Uranium Mining." 63 N.R.C. 510, 512 (May 16, 2006))

- The First Stage of Uranium Recovery is Exploration:
 - Entities Seeking to Explore Land Parcels for Uranium Resources Must Obtain Necessary State Permits to Drill and Delineate Ore Bodies:
 - Agency (BLM/USFS/etc.) Concurrence Required
 - Bonding for Wells to Be Reclaimed
 - NOTE: NRC Does Not Have Regulations Pertaining to This Stage of Uranium Recovery

- The Second Stage of Uranium Recovery is Filing for a Claim or Purchasing a Previously Claimed Resource:
- For BLM Public Lands, BLM Regulations Directly Apply:
 - Claims Must Be Submitted to BLM in Accordance With BLM Procedures (43 CFR § 3800 & 3833);
 - "Anyone intending to develop mineral resources on the public lands must prevent unnecessary or undue degradation of the land and reclaim disturbed areas." (43 CFR § 3809.1(a))
- NOTE: NRC Does Not Have Any Regulations Dictating Policies or Procedures Regarding This Stage of Uranium Recovery

- The Third Stage of Uranium Recovery is Site Characterization:
 - "Site Characterization" is Considered to Include:
 - Gathering of Site-Specific Data for Application Submission:
 - Surface Soils;
 - Other Surface Characteristics Such As Roads, Property Boundaries for Further Delineation of the Ore Body;
 - Surface and Groundwater Characteristics and Active/Inactive Wells;
 - Flora & Fauna
 - "Site Characterization" is Addressed as the First of the Two Stages of ISR Site Development in NUREG-1569 (Chapter 2, ISR Standard Review Plan);

- The Fourth Stage of Uranium Recovery is Licensing & NEPA Process:
 - Unless Expressly Granted to an Agreement State Pursuant to Section 274 of the AEA, NRC Retains Regulatory Authority Over Source Material Milling & Management of 11e.(2) Byproduct Material;
 - Given That Underground Processing at ISR Facilities is "Milling," NRC Retains Authority Over Such Processes
- AEA Expressly Grants NRC Preemptive Authority Over Licensing & Regulation of Source Material Milling Facilities:
 - Chapter 7 of the AEA (Section 62);
 - 10 CFR Part 40, Appendix A Criteria;
 - 10 CFR Part 51 (NEPA);
 - ISR SRP (NUREG-1569) & NUREG-1757, Volume 3 Financial Assurance Guidance;
 - Other Applicable Guidance

- The Commission Has Voluntarily Adopted CEQ NEPA Requirements, With Certain Exceptions (Cite):
 - 49 Fed. Reg. 9352 (March 12, 1984): "This Rule Reflects the Commission's Policy to Develop Regulations to Take Account of the Regulations of the Council on Environmental Quality (CEQ) Implementing the Procedural Provisions of NEPA Voluntarily, Subject to Certain Conditions."
 - 10 CFR Part 51 Requirements Embody the Commission's Adoption of Such Requirements
- Premature Commencement of Activities That Can Be Deemed Related to Operations Are Grounds for Denial of a License (10 CFR § 40.32(e))

- NRC Also Includes Sister Agencies in the NEPA Process:
 - Cooperating Agencies;
 - Consulting Agencies
- Thus, While Other Agencies May Be a Part of the NEPA Process, NRC is the Lead Agency for Source Material Milling Facilities

The Fifth Stage of Uranium Production is Site Construction & Recovery Operations:

- Construction & Operation of an ISR Facility Are Expressly Covered by a Company's NRC-Related Materials:
 - License Application;
 - License Conditions;
 - Operations Plans (If Applicable);
 - EIS/EA Findings

- The Sixth & Final Stage of Uranium Recovery is Site Reclamation (Conventional & ISR) &, If Necessary, Groundwater Remediation (Conventional) & Restoration (ISR):
 - NRC Regulations Require Site Reclamation and, If Applicable, Groundwater Remediation (Conventional) Restoration (ISR) for License Termination;
 - EPA/Delegated State Provides Additional Regulatory
 Oversight of Groundwater at Licensed ISR Sites Under the
 Underground Injection Control (UIC) Program and Its
 Mandatory Aquifer Exemptions

The Line Between BLM & NRC Jurisdiction is Most Appropriately Drawn Where the Proposed Action Transforms from Mining to Milling:

- Acceptable as a Matter of Law Based on Clear NRC Authority Over "Milling" But Not "Mining;"
- Acceptable as a Matter of Policy Based on the Stages of Uranium Production

- Stage 1: Exploration: Properly Classified as Part of "Mining" & Covered by BLM Regulations:
 - BLM/USFS/Other Agency Requirements: Apply to State for Exploration Permit & Obtain Agency Concurrence;
 - State Statutes Govern Application Process;
 - Some Exemptions Apply;
 - Annual Reporting Requirements;
 - Some, If Not All, Jurisdictions Require Some Form of Bonding

 Stage 2: Obtaining a Claim: Properly Classified as Part "Mining" & Covered by BLM Regulations

- BLM Regulations Provide Explicit Procedures for Obtaining and Maintaining a Claim;
- NRC's AEA Authority Does Not Extend to Source Material That Has Not Been Removed from Its Place in Nature (Section 62 of the AEA)

Stage 3: Site Characterization: Properly Classified as Part of "Mining" & Covered by BLM Regulations:

- NRC Requires Site-Specific Characterization Data for New Project Sites But Does Not Regulate Characterization Processes;
- State Mining Permits With Agency Concurrence Required:
 - Bonding Requirements (e.g., Wells)

- Stage 4: Licensing & NEPA Process for Uranium Recovery: Properly Classified as Part of "Milling" & Covered by NRC Regulations:
 - **10 CFR Part 40: Contents of License Application;**
 - 10 CFR Part 51: NEPA Process;
 - NUREG-1569: ISR SRP
 - NUREG-1620: Conventional Mill Reclamation Plan Guidance ("Conventional Mill SRP");
 - NUREG-1757, Volume 3: Financial Assurance Guidance

 Stage 5: Site Construction & Operations: Properly Classified as "Milling" & Covered By NRC Regulations

- 10 CFR Part 20: Radiation Dose;
- <u>10 CFR Part 40 & Appendix A</u>: Site Operations & Closure;
- NRC/Agreement State License Conditions

- Stage 6: Site Reclamation & Groundwater Remediation/Restoration: Properly Classified as "Milling" & Covered By NRC Regulations and EPA/Delegated State UIC Program Requirements:
 - 10 CFR Part 40, Appendix A;
 - Approved Site Reclamation Plan and/or Restoration Action Plan (RAP);
 - Additional UIC Restoration & Well Requirements

Path Forward

- Environmental Review Process is a Key Aspect of Licensing/Permitting New Project Sites:
 - If Jurisdictional Lines Are Blurred, Memoranda of Understanding (MOUs) May Be Helpful;
 - Repetitive to Conduct Multiple Environmental Reviews of the Same Project Site:
 - Some BLM Guidance Allows for Determination of NEPA Adequacy (DNA) to Address This
 - Interagency Discussion & Cooperation is Essential With An Eye Towards Minimizing the Expenditure of Valuable Agency Resources While Maximizing the Effectiveness of Site Reviews

Conclusions

- New Uranium Recovery Project Sites Require a Full Understanding of Which Regulatory Authorities Have Jurisdiction Over Proposed Activities;
- Licensees and License Applicants Must Have a Thorough Understanding of the Land Ownership Status of Their Properties;
- To Assist These Entities, Agencies Should Be Prepared to Work Together to Make the Lines of Jurisdictional Authority Transparent