

**United States Nuclear Regulatory
Commission Licensing Workshop: Legal
and Regulatory Issues of Concern**

Presented by the National Mining Association:

Katie Sweeney, General Counsel
Anthony J. Thompson, Thompson & Pugsley, PLLC

INTRODUCTION

- **With the Submission of Numerous New License Applications for In Situ Leach Uranium Recovery (ISR) Projects, the Regulatory Environment Has Evolved:**
 - **Corrections and Updates to Regulatory Requirements Are Being Addressed;**
 - **Several Legal and Regulatory Issues of Concern Still Remain**

INTRODUCTION

- **NMA Believes That the Nuclear Regulatory Commission (NRC) Staff Should Consider and Re-Evaluate Several Potential Legal/Regulatory Issues of Concern:**
 - Risk-Informed, Performance-Based Regulations
 - Legal Relevance and Effectiveness of Commission Guidance and Administrative Litigation Decisions;
 - Revisions to NUREG-1569/Standard Review Plan for ISR Projects;
 - Pre-Licensing Site Construction and 10 CFR Part 40.32(e);
 - NRC's Position on EPA's Application of 40 CFR Part 61, Subpart W to Evaporation and Other Ponds at Uranium Recovery Facilities

ISSUE #1: RISK-INFORMED, PERFORMANCE BASED REGULATIONS

- **During the Course of Recent License, License Amendment, and Renewal Reviews, It Appears the Scope of NRC's Jurisdiction Under the AEA, as Amended, is Not Clear to NRC Staff;**
- **NRC Staff Should Re-Consider the Scope of Its Jurisdiction in Light of:**
 - **The AEA, as Amended by UMTRCA;**
 - **NEPA Jurisdiction;**
 - **Risk-Informed, Performance-Based Licensing;**
 - **The Scope of Commission Guidance and Regulatory Guides; and**
 - **Commission Decisions in Administrative Litigation**

ISSUE #1: RISK-INFORMED, PERFORMANCE BASED REGULATIONS

- **The Commission's Jurisdiction Over Uranium Recovery Originates with the AEA, as Amended by UMTRCA:**
 - **Statute of Limited Jurisdiction for Uranium Recovery: Limited to AEA Materials and Operations:**
 - Source Material (Uranium Above 500 PPM);
 - 11e.(2) Byproduct Material (Wastes Generated from Uranium Milling) (Includes Both Radiological and *Non-Radiological* Components);
 - Uranium Milling (Including ISR)

ISSUE #1: RISK-INFORMED, PERFORMANCE BASED REGULATIONS

- **AEA Jurisdiction is Intended to Address “Significant Risks to Public Health and Safety and the Environment:”**
 - **Supreme Court Has Established This Precedent Since 197 in the So-Called *Benzene* Decision (448 U.S. 607 (1980)):**
 - **“For we think it is clear that § 3(8) does apply to all permanent standards promulgated under the Act and that it requires the Secretary, before issuing any standard, to determine that it is reasonably necessary and appropriate to remedy a significant risk of material health impairment.”**
 - **The Use of the Term “Safety” Does Not Include Activities That Are Risk-Free**

ISSUE #1: RISK-INFORMED, PERFORMANCE BASED REGULATIONS

- **The *Benzene* Position is Later Endorsed by the So-Called *Vinyl Chloride* Case (*en banc*, 824 F.2d 1146 (D.C. Cir. 1987):**
 - Congress' use of the word “safety,” moreover, is significant evidence that it did not intend to require the Administrator to prohibit all emissions of non-threshold pollutants. As the Supreme Court has recently held, “safe” does not mean “risk-free.” [*Industrial Union Dep't, AFL-CIO v. American Petroleum Inst.*, 448 U.S. 607, 642, 100 S.Ct. 2844, 2864, 65 L.Ed.2d 1010 \(1980\)](#). Instead, something is “unsafe” only when it threatens humans with “a significant risk of harm.” *Id.*

ISSUE #1: RISK-INFORMED, **PERFORMANCE BASED REGULATIONS**

- **The Commission’s Policy on Risk-Informed, Performance-Based Licensing Espouses This Precedent:**
 - Performance-Based Licensing Has Been Translated to Uranium Recovery from 10 C.F.R. § 50.59 and Should Reflect Risk Levels at Uranium Recovery Facilities;
 - **SECY-98-144 Reflects the Generic Commission Policy:** “[W]here appropriate, a risk-informed regulatory approach can also be used to reduce unnecessary conservatism in deterministic approaches....”;
 - **2009 Safety Culture Statement Endorses This:**
 - “The staff believes that the current process of considering cross-cutting aspects of inspection findings is effective because it offers insights into a licensee's safety culture. In addition, it is consistent with the original tenets of the ROP. (i.e., It is transparent, objective, understandable, predictable, risk informed, and performance based.)

ISSUE #1: RISK-INFORMED, PERFORMANCE BASED REGULATIONS

- **What Does This Mean for Uranium Recovery Licensing?:**
 - **Minor/Insignificant Risks Deserve to Be Treated As Such---Deal With These Items as Administrative/Procedural Items;**
 - **NRC Staff Should Be Specific in Guidance On Which Items Fall Under a Significant Potential Issue Category Versus Those That Fall Under This “Minor/Insignificant” Issue Category With Appropriate Justification(s)**

ISSUE #1: RISK-INFORMED, **PERFORMANCE BASED REGULATIONS**

- **What Does This Mean for Uranium Recovery Licensing?:**
 - **NRC Staff's Proposed Revisions to ISR Guidance (e.g., NUREG-1569) Should Delineate Issues Based on Significance of Risk :**
 - » **Non-Licensee Occupational Radiological Exposure Risk:**
 - **Simple Formula with Few Conservative Assumptions Such as Gamma Exposure On-Site, "Radon Daughter" Exposure On-Site, Radioactive Particulate (Yellowcake) On-Site That Will Show Virtually Zero Theoretical Risk;**
 - **MUST DELINEATE ISSUES WHERE DETAILED DATA/ANALYSES ARE WARRANTED BASED ON RISK LEVEL**

ISSUE #2: RELEVANCE AND EFFECTIVENESS OF COMMISSION GUIDANCE AND DECISIONS

- **NRC Staff Must Marry The Concept of “Significant Risk” With Updating Regulatory Requirements According to Commission Decisions in Administrative Litigation (e.g., HRI CUP Litigation):**
 - Legal Issues;
 - Critical Factual Issues Relevant Beyond the HRI Case;
 - NRC Staff Cannot Modify the Commission’s Decisions in Administrative Litigation;
 - **Thus, NRC Staff Must Understand the Scope and Relevance of Any Such Decisions**

ISSUE #2: RELEVANCE AND EFFECTIVENESS OF COMMISSION GUIDANCE AND DECISIONS

- **The Use and Application of Commission Guidance by NRC Staff Has Become An Issue:**
 - **It is Widely Understood and Accepted That Commission Guidance is Not the Same as a Statutory or Regulatory Requirement;**
 - **HOWEVER, Guidance Approved by the Commission (Such as NUREG-1569) is Still an Official Commission Document Issued After Notice and Public Comment:**
 - **Modifications Require the Same Notice and Public Comment;**
 - **NRC Staff Members Cannot Unilaterally Modify the Guidance As It Directly Contradicts the Commission's Position on Implementation of Its Regulations;**
 - **NRC Staff Must Seek to Obtain Some Form of Temporary Interim Guidance from the Commission on Items That are Deemed Outdated or Contradicted by Best Available Data Pending Formal Revision of Such Guidance Documents**

ISSUE #2: RELEVANCE AND EFFECTIVENESS OF COMMISSION GUIDANCE AND DECISIONS

- **Commission Decisions/NRC Staff Agency Actions in Administrative Litigation (Such as Hydro Resources, Inc.) Are Controlling on NRC Staff:**
 - **Previously Approved License Conditions or Requirements;**
 - **Restoration Action Plan (RAP) Requirements & Associated Line Items;**
 - **Definition of “Background Radiation;”**
 - **Financial Assurance Under Criterion 9;**
 - **Environmental Justice**

ISSUE #2: RELEVANCE AND EFFECTIVENESS OF COMMISSION GUIDANCE AND DECISIONS

- **What Does This Mean for Uranium Recovery Licensing?:**
 - **NRC Staff Should Familiarize Themselves With These Commission Decisions/Past Agency Actions and Implement Their Provisions;**
 - **NRC Staff Cannot Unilaterally Modify or Overrule Such Decisions/Past Agency Actions Without Demonstration of an Imminent, Significant Hazard;**
 - **The Criteria Embodied in These Decisions Must Be Accepted and Enforced in License Reviews and Inspections**

ISSUE #3: RECOMMENDATIONS ON NUREG-1569 REVISIONS

- **NMA is Aware That NRC Staff is Planning to Issue a Revised NUREG-1569 in the Coming Months;**
- **NMA Plans to Provide Detailed Comments on the Proposed Revisions;**
- **NMA Has Two Sets of Recommendations for NRC Staff Prior to Its Issuance:**
 - **Procedural;**
 - **Substantive**

ISSUE #3: RECOMMENDATIONS ON **NUREG-1569 REVISIONS**

- **NMA's Procedural Recommendations for**
NUREG-1569 Revisions:
 - **Establish a Mailing List for Hard Copies of the Revised Document;**
 - **Establish E-Mail Notification List for Availability of the Revised Document;**
 - **Minimum Ninety (90) Day Comment Period**

ISSUE #3: RECOMMENDATIONS ON NUREG-1569 REVISIONS

- **NMA's Substantive Recommendations for
NUREG-1569 Revisions:**
 - **Pre and Post-License Issuance Guidelines for Data Collection Per 10 CFR § 40.32(e);**
 - **RAP on Decommissioning & Decontamination (D&D) Model Per HRI Decision and Strata License Application;**
 - **Performance-Based Licensing Per Moore Ranch License;**
 - **Embrace and Discuss Appendix A "Flexibility (Including Potential Alternatives)"**

ISSUE #3: RECOMMENDATIONS ON NUREG-1569 REVISIONS

- **NMA's Substantive Recommendations for
NUREG-1569 Revisions:**
 - **Pre-Licensing Site Construction:**
 - Proposed Rule States that 10 CFR § 40.32(e) “Prohibits” Such Activities Beyond Site Exploration Activities;
 - Definition of Construction Proposed Fails to Account for Different Parts of the Fuel Cycle and Risk Levels

ISSUE #3: RECOMMENDATIONS ON **NUREG-1569 REVISIONS**

- **NMA/NEI Comments on the Proposed Rule Demonstrate That NRC Staff Ignored or Overlooked a Key Commission Decision:**
 - **Nuclear Fuel Services Case:**
 - Three Buildings to House Special Nuclear Material Operations Not Prohibited By NRC Regulations But “Discouraged;”
 - 10 CFR § 70. __ Does Not Prohibit The Activities;
 - NRC Has No Jurisdiction Over Construction of the Three Buildings Under the AEA or UMTRCA;
 - **Special Nuclear Material Carries Much Larger Risk Than Source Material; Source Material Facilities Need to Be Addressed Separately:**
 - Wellfields;
 - Deep Disposal Wells;
 - Central Processing Plants;

ISSUE #4: EPA SUBPART W **APPLICATIONS**

- **Recently, Controversy Has Arisen With Respect to EPA's Application of 40 CFR Part 61, Subpart W Regulations to NRC-Licensed ISR Facilities:**
 - **NMA Research Shows That Subpart W Was Not Intended to Apply to Evaporation Ponds;**
 - **EPA Interpretation Represents an "Post-Hoc" Rationalization: DC Circuit Case;**
 - **EPA Interpretation Not Anywhere Mentioned in the Rulemaking Record So It Cannot Be Re-Made Twenty Years Later Without Rulemaking;**
 - **NRC Had an Opportunity in Moore Ranch SEIS Response to Comments to Address the Issue and Did Not**

ISSUE #4: EPA SUBPART W **APPLICATIONS**

- **NRC Staff's Failure to Address This Issue in the Moore Ranch SEIS is Confusing:**
 - **40 CFR Part 61, Subparts I & T Were Eliminated By EPA After NRC Concessions But With Vigorous NRC Support to Eliminate "Dual Regulation;"**
 - **NRC's Concessions Involve Criterion 6 And The 10 Mrem "Constraint Limit";**
 - **NRC Vigorously Opposed EPA Overlapping Regulation Before and During the Negotiations Between the Agencies---WHY NOT NOW?**

ISSUE #4: EPA SUBPART W **APPLICATIONS**

- **What Does This Mean For Uranium Recovery Licensing?:**
 - **NRC Staff Needs to Take a Firm Stance on The Potential Negative Impacts on Regulatory Efficiency That Will Be Caused by EPA's Unnecessary Involvement;**
 - **NRC's Failure to Do So Will Result in Unnecessary Costs Associated with Licensing and Will Permit EPA to Engage in Dual Regulation of Yet Another Part of Uranium Recovery That Present No Significant Risks:**
 - **Rescission of Subparts I & T Were Intended to Avoid Dual Regulation**

ISSUE #5: GROUNDWATER RESTORATION STANDARDS

- **There Has Been Controversy Over The Application of 10 CFR Part 40, Appendix A, Criterion 5(B)(5) to ISR Facilities:**
 - **Should It Be Applied Per Commission Policy or “As a Matter of Law;”**
 - **NRC Staff’s Position Apparently Has Been That It Is Applicable “As a Matter of Law;”**
 - **Industry Disagrees With This and Believes It Can Only Be Applied Per Commission Policy**

ISSUE #5: GROUNDWATER RESTORATION STANDARDS

- **If Criterion 5(B)(5) is Applied “As a Matter of Law,” Then...:**
 - Why is a Rulemaking for ISR Necessary?;
 - Where is Reference to This in NUREG-0706, NUREG-1569 or EPA’s FEIS for Uranium and Thorium Processing?;
 - The Point of Compliance (POC) and Point of Exposure (POE) Language is Impractical for ISR
- **If Criterion 5(B)(5) is Applied Per Commission Policy:**
 - Rulemaking Needs to Be Attentive to the ISR-Specific Items So That Appendix A Can be Harmonized with ISR Activities;
 - NRC Staff Can Develop Policies for POC/POE Items and Others Pending a Rulemaking