

In Situ Recovery In Colorado: Recent Legislation and the Rulemaking Process

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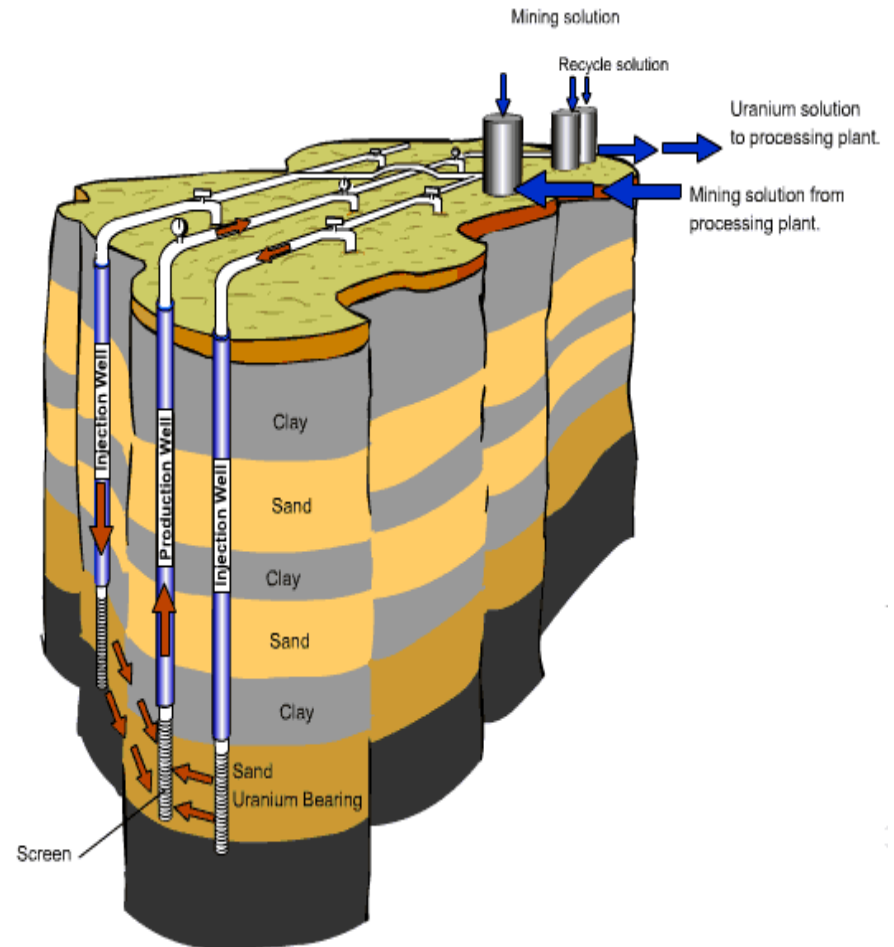
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Disclaimer

The views expressed in the paper and presentation are exclusively those of the author, and should not be attributed to any other entity or organization.

Introduction

- In situ recovery (ISR) mining is the modern alternative to traditional mineral extraction methods
- The process involves injecting a leach solution into an ore deposit and then extracting the mineral-rich solution via pumps for processing



Introduction (Cont.)

- In situ recovery has been described as:
 - The most advanced, cleanest and safest uranium mining technique
 - A controllable, safe and environmentally benign method of mining, which operates under strict operational and regulatory controls
 - The most cost effective and environmentally acceptable method of mining with little surface disturbance, no tailings or waste rock generated, and no emission of carbon dioxide
 - Yet the obvious facts were lost on the Colorado Legislature and proponents and sponsors of H.B. 1161

Chronology of Events Leading to Colorado Legislation

- 2006 – Mining Company announced plans for a uranium in situ leach mining operation in Colorado
- 2007 – Coloradoans Against Resource Destruction (CARD) formed, along with others
 - Grassroots movement to stop uranium mining in northern Colorado
 - Other groups were formed to oppose this and other Colorado projects through the Western Mining Action Project
- 2008 – Colorado House Bill 1161 drafted, deliberated, slightly amended and approved
 - From bill introduction to governor's signature, just a 5-month process
 - Few meaningful and substantive hearings were scheduled
 - Some bipartisan support was given to the bill
- H.B. 08-1161 is now law and part of Colorado's Mined Land Reclamation Act
- It is not a well-vetted or well-crafted piece of legislation

Intended Purpose of New Law (per HB 1161)

- **Explicit Purpose:**
 - To “increase...the regulatory authority of the Mined Land Reclamation Board over mining” (though neither MLRB nor DRMS ever requested more authority)
 - To “[ensure] the protection of ground water and public health” (though no real circumstance in which ground water was or is unprotected)
 - For the “immediate preservation of the public peace, health, and safety”
- **Implicit Purpose:**
 - To impose requirements to potentially forestall or frustrate ISR projects
 - Provide an opportunity for development of even stricter regulations to delay, deter or deny mining in Colorado

Summary of The New Law

- The law now defines “in situ mining” and “in situ leach mining” but oddly enough does not define “excursion”
- The law now requires
 - Reclamation of lands affected by in situ leach mining
 - Restoration of affected groundwater to pre-mining quality or better
 - Notification by operators to owners of record of lands within three (3) miles of affected land

Summary of the New Law (Cont.)

- The Law requires the Mined Land Reclamation Board (MLRB), to impose the following conditions on an ISR permit applicant
 - Require operator to undertake initial baseline site characterization plan and ongoing monitoring of affected land and affected surface and ground water
 - Require operator to pay for third party expert to review the plan for DRMS
 - Deny permit if operator fails to demonstrate that extremely stringent reclamation can and will be achieved - which must be shown by “substantial evidence” before the grant of a permit
 - Deny permit if operator fails to show evidence of at least five (5) past ISR sites which did not result in groundwater contamination through leakage, migration or excursion

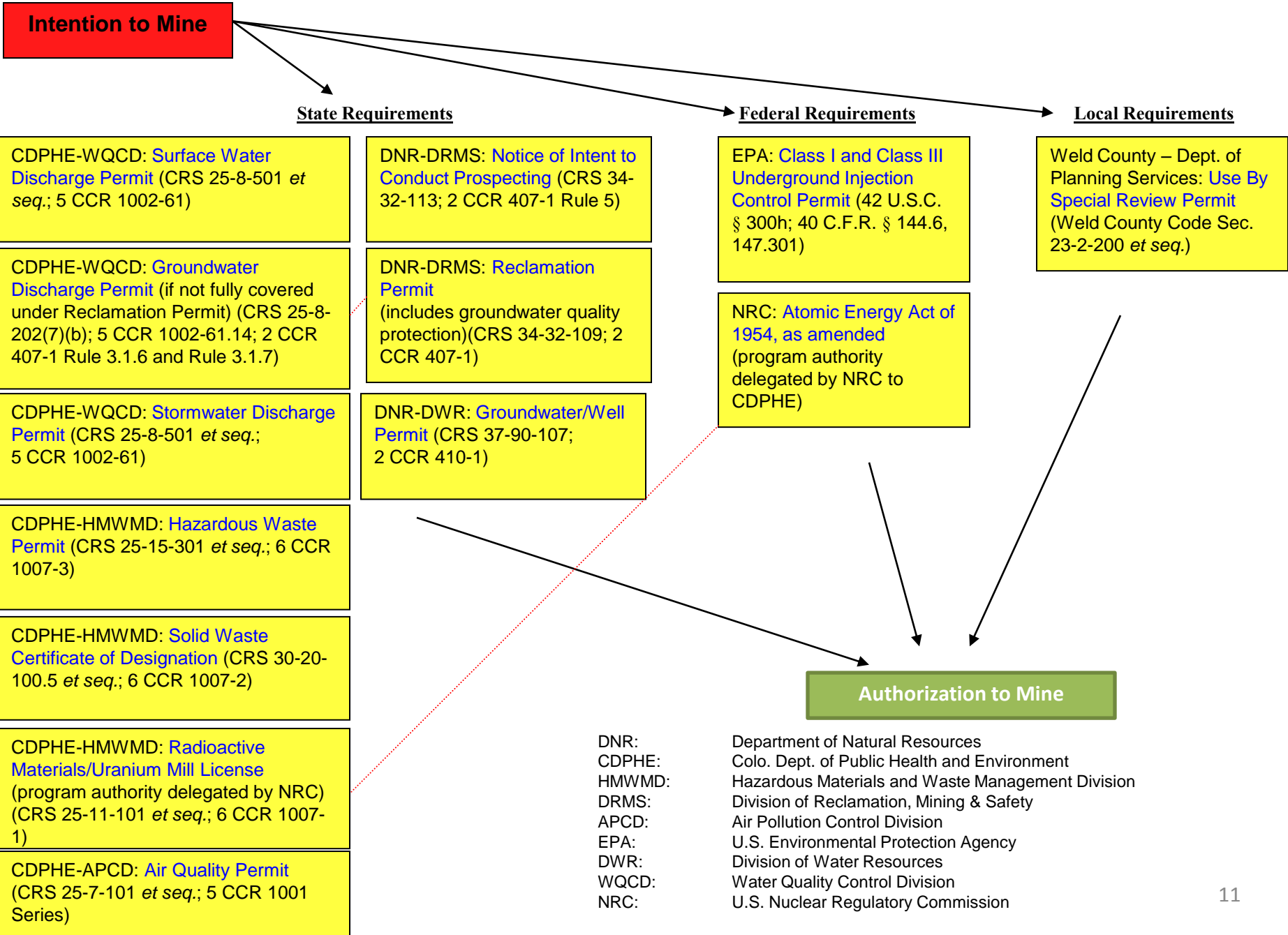
Summary of the New Law (Cont.)

- The Law Authorizes the MLRB to deny a permit
 - Based on “uncertainty about the feasibility of reclamation”
 - If existing or reasonably foreseeable future uses of groundwater include domestic or agricultural uses
 - If applicant or related entity or person has previously violated reclamation laws and any violation remains unabated
 - If applicant or related entity or person has demonstrated pattern of willful violations of environmental protection requirements in Colorado or other states or U.S. laws
 - If applicant cannot show it will restore ground water for “all baseline parameters” or better

Reasonable Reaction to New Law

- New law was unnecessary because
 - Existing State laws and regulations were sufficient to protect groundwater
 - The extent to which the new law overlaps with existing state and federal laws and regulations renders it redundant and potentially contradictory – may lead to preemption or other legal challenges
- New Law contains numerous vague, unrealistic and overreaching requirements
 - The practical implications are that good clean operations may have difficulty being permitted
 - The legal implication is that ambiguity in the statute may result in arbitrary decisions requiring legal challenge - or an inability to defend a permit

Permitting Process for In Situ Uranium Recovery in Colorado Under Existing Laws and Regulations



Existing Laws and Regulations Were/Are More Than Sufficient

- Colorado Department of Public Health and Environment (CDPHE)
 - Water Quality Control Division (WQCD)
 - Hazardous Materials Waste Management Division (HMWMD)
 - Air Pollution Control Division (APCD)

Existing Laws and Regulations (Cont.)

- Colorado Department of Natural Resources
 - Division of Reclamation, Mining and Safety (DRMS)
 - Colorado Division of Water Resources (DWR)
- U.S. Environmental Protection Agency (EPA)
- Nuclear Regulatory Commission (NRC)
- Local Regulations
- Public Process

Unusual/Overreaching Requirements of New Law

- Ground Water Quality (C.R.S. 34-32-115(5)(b), 34-32-116(8))
 - Requires applicant to show by “substantial evidence” that ground water will be restored to baseline parameters or better – before a permit is granted
 - Seems to arguably require matching water chemistry on a constituent-by-constituent or ion by ion basis
- Potential Agricultural Use of Ground Water (C.R.S. 34-32-115(5)(c))
 - MLRB may deny permit if “existing or reasonably foreseeable potential future use for any potentially affected groundwater” includes domestic or agricultural uses
 - Overbroad because potentially all ground water in Colorado meets this use standard
 - Conflicts with the UIC permit requirement under SDWA that an applicant must obtain an aquifer exemption (indicating water is not a source of drinking water)

Unusual/Overreaching Requirements (Cont.)

- Uncertainty About the “Feasibility of Reclamation” (C.R.S. 34-32-115(5)(a))
 - MLRB may deny permit based on “uncertainty” about the feasibility of reclamation
 - So open-ended that any permit could be denied based on this language alone
- “Blackball” Provisions (C.R.S. 34-32-115(5)(d)(1)&(2))
 - MLRB may deny permit if applicant or any affiliate, officer or director of the applicant, the operator or the claimholder has violated the Mined Land Reclamation Act or rules, a permit issued under the Act, or an “analogous” law, rule, or permit issued by any other state or the U.S. (The draft Bill also identified violations in “foreign countries.”)
 - Serious potential implications given that acquisitions of one mining company by another is common practice in the industry, and a good operator may be replacing one with a questionable record.
- Evidence of 5 Sites to Accompany Permit Applications (C.R.S. 34-32-112(2)(i))
 - Application must identify 5 ISR perational sites that have not resulted in leaking or migration of leaching solutions and ground water containing chemicals/constituents
 - This seems to require irrelevant and meaningless information from other unrelated sites with no probative value

ADDITIONAL LEGISLATIVE ACTS ADDRESSED IN RULEMAKING

- S.B. 08-22B—Legislature made most information in prospecting NOIs available to the public
 - Removing traditional confidentiality for most information
- S.B. 08-169—Legislature enacted law to enable DRMS to pass costs of review and processing of ISR Permit to permit applicants

Additional Recent Legislation

- H.B. 1348 was recently enacted by the legislature to address convention uranium mills and the definition of “processing” therein is broad enough to encourage ISR operations.

Rulemaking Related to HB 1161

- DRMS is conducting a rulemaking process to implement the new law
 - Series of informal stakeholder meetings were held May-December 2009 on the draft rulemaking
 - Formal rulemaking process began Feb. 2, 2010
 - With publication in Colorado Register;
 - Four public hearings held or to be held April-June;
 - Prehearing conference for formal parties held April 6; and
 - Hearing for parties achieving party status to be held on July 13-15.

RULEMAKING PROCESS AND TIMELINE



FEBRUARY 2010

February 10 Notice of Public Rulemaking in Colorado Register
February 23 Requests for Party Status

MARCH 2010

March 1 Written public comments by non-parties
March 12 Parties submit Prehearing Statements, Prehearing Motions and Alternate Proposed Rules
March 23 Parties submit Rebuttal Statements and Responses to Prehearing Motions

APRIL 2010

April 6 Prehearing Conference
April 15 MLRB hearing for public comment by non-parties (Loveland)

MAY 2010

May 13 MLRB hearing for public comment by non-parties (Grand Junction)
May 26 MLRB hearing for public comment by non-parties (Salida)

JUNE 2010

June 10 MLRB hearing for public comment by non-parties (Denver)

JULY 2010

July 13, 14, 15 MLRB hearing for testimony from parties and DRMS (Denver)

AUGUST 2010

MLRB deliberates at monthly meeting

What Will the Rules Accomplish?

- The hope is that rules ultimately resulting from the process will serve to clarify the new law
- Unfortunately, at this stage draft rules
 - Carry over much of the redundancy and ambiguity of the legislation
 - Add unnecessary, delay-oriented public comment and appeal opportunities at many points in the prospecting and mining processes
 - Result will be a more unpredictable and burdensome permitting process and enormous increased costs to state, industry and taxpayers

Key Problems with Proposed Rules

- Conflict with purposes of the Mined Land Reclamation Act to:
 - “[F]oster and encourage the development of an economically sound and stable mining and minerals industry...” (C.R.S. 34-32-102(1))
 - “[A] mined land reclamation regulatory program in which the economic costs of reclamation measures utilized bear a reasonable relationship to the environmental benefits derived from such measures”
 - Give "consideration ... to the economic reasonableness of the action of the mined land reclamation board or the office" (C.R.S. 34-32-102 (1)-(2))

Key Problems with Proposed Rules (Continued)

- Exceed the MLRB's statutory authority by including requirements outside the scope of the initial legislation
 - The rulemaking now allows any affected party to appeal the transfer of ISR permit
 - Additional notice and comment opportunities are unnecessary, outside the scope of the MLRA, will delay the process and could result in a regulatory taking – e.g. public comments are allowed now on Notices of Intent and baseline characterizations
 - Vagueness with respect to the relationship between prospecting activities and the baseline site characterization and monitoring plan
 - Confusion of prospecting activities with mining activities
 - Unreasonableness of requesting the baseline site characterization at prospecting stage
 - Failure to expressly provide for sequential well field baselines
 - Failure to expressly provide for amendments and technical revisions to the BSC/MP to reflect additional information gained from initial BSC/MP activities, or activities undertaken later at the site

Key Problems with Proposed Rules (Continued)

- Ground Water Quality Issues Not Clarified
 - Contain numerous unrealistic and potentially conflicting water quality standards
 - Baseline/better than baseline, potential agricultural use standard, Colorado water drinking water quality standards
 - Point of compliance -- the proposed rules seek to impose water quality standards within the mine site area

Key Problems with Proposed Rules (Continued)

- Other Issues Regarding the New Law Not Clarified
 - “Blackball” Provisions
 - Uncertainty About the “Feasibility of Reclamation”
 - Evidence of 5 Sites to Accompany Permit Applications
 - Failure to track NRC, other programs results in redundant regulation and could give rise to preemption
 - Failure to adequately consider or accurately assess the cost of the proposed rules

Conclusion

- The new regulations should clarify the legislation, not perpetuate and increase the confusion
- The many additional public comment and appeal provisions should be deleted from the proposed rules – not authorized by the New Law
- Colorado state government should carefully and realistically weigh the enormous costs of the proposed rules, and reject them
- Though the regulatory framework has become more burdensome and expensive via the legislation and rulemaking we remain optimistic that ISR operations can and will be permitted
- But it is inevitable that litigation will likely be necessary to resolve ultimately some of the uncertain issues in the rulemaking – e.g., constitutional, preemption and regulatory issues and vague and ambiguous portions of the rulemaking

Remember above all,
“a mine is a terrible thing to
waste!”

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