

POLICY ISSUE NOTATION VOTE

October 29, 2003

SECY-03-0186

FOR: The Commissioners

FROM: William D. Travers
Executive Director for Operations

SUBJECT: OPTIONS AND RECOMMENDATIONS FOR NRC DEFERRING ACTIVE
REGULATION OF GROUND-WATER PROTECTION AT *IN SITU*
LEACH URANIUM EXTRACTION FACILITIES

PURPOSE:

To present three options and obtain Commission approval of the U.S. Nuclear Regulatory Commission (NRC) staff's recommendations for deferring active regulation of ground-water protection¹ at *in situ* leach (ISL) uranium recovery facilities.

SUMMARY:

Since 2000, the staff has held several public meetings with uranium recovery industry representatives and licensees, and several closed meetings (with publicly available meeting summaries) with regulators from non-Agreement States, Agreement States whose §274 Agreement do not include authority over 11e.(2) byproduct material, and the U.S. Environmental Protection Agency (EPA), to develop various approaches for reducing or eliminating dual regulation of ground-water protection at ISL uranium facilities licensed by the NRC. As a result, the staff has developed two options (in addition to the option of continuing the current staff program that does not reduce dual regulation) for reducing or eliminating duplicative NRC reviews of ground-water protection issues at NRC-licensed ISL facilities,

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¹In the context of this paper, ground-water protection applies to the ground water in the ore zones and adjacent ground water that could be affected by activities in the ore zones at *in situ* leach facilities. NRC has additional responsibility to protect near-surface ground water from the effects of surface operations and spills at such facilities (e.g., leakage from a surface pond). Protection of near-surface ground water from the effects of surface operations is not included in the options discussed in this paper.

including both operating sites and those in decommissioning status. One of these options can be implemented in either of two ways. The licensed sites currently affected by this proposal are in Wyoming and Nebraska. The Wyoming sites (four locations) are contained in two licenses and the Nebraska site is contained in one license. New Mexico is not currently affected. However, NRC has received an application for an ISL facility located in New Mexico. Wyoming is a non-Agreement State. Nebraska and New Mexico are Agreement States whose §274 Agreements do not include authority for 11e.(2) material. For the purpose of this document, the term non-Agreement will refer to 11e.(2) material authority only, and thus is applicable to Wyoming, Nebraska, and New Mexico.

BACKGROUND:

The Commission reaffirmed the NRC's authority to regulate all waste waters from ISL facilities as 11e.(2) byproduct material, in Staff Requirements Memorandum (SRM) SECY 99-013, dated July 26, 2000, but recognized that dual regulation of ground-water protection at these facilities would exist between the NRC and the EPA or the EPA-authorized States. SRM SECY 99-013 also approved staff continuing discussions with EPA and the appropriate EPA-authorized States, to determine the extent to which NRC could rely on the EPA Underground Injection Control (UIC) Program for ground-water protection reviews, minimizing the NRC involvement in that aspect of ISL facility regulation. In addition, the Commission directed the staff to include in those discussions appropriate methods for implementing any agreements, including Memoranda of Understanding (MOUs) or language, in a new 10 CFR Part 41.

The staff held two meetings with EPA at its Headquarters on October 10, and November 29, 2000. The summaries of these meetings are provided in Attachments A and B. EPA indicated in these meetings and in written comments submitted to the NRC that, at the Federal level, it viewed NRC's ISL licensing program and the EPA UIC programs as complementary and not duplicative. EPA did indicate that several States use the Federal UIC program as a minimum requirement and enforce additional standards, which may duplicate NRC's licensing requirements. The NRC agreed with EPA that in some instances duplication of ground-water protection activities existed between the NRC and the non-Agreement States, with EPA-approved UIC programs. Staff discontinued development of a new Part 41, in accordance with SRM SECY 01-0026, dated May 29, 2001.

The NRC staff held closed meetings with non-Agreement State regulators and other Federal regulators during the annual Uranium Recovery Workshops in 2001 and 2002, to discuss the issue of dual ground-water regulation at ISL facilities. The NRC presented a proposal at each of these meetings, for reducing or eliminating dual ground-water regulation. The meeting summaries of these two meetings are provided in Attachments C and D. The details of these proposals are provided in the following section.

DISCUSSION:

The staff proposed a framework for reducing duplication of ground-water protection reviews, to the non-Agreement States, at the Uranium Recovery Workshop in 2001. Attachment C provides a summary of that meeting. That framework generally provided that:

1. NRC would conduct its review after the State has completed its analysis and use the State's analysis as part of the basis for the licensing action.
2. NRC would still perform its National Environmental Policy Act (NEPA) review, but may use the State's detailed review to support the NEPA documentation.
3. NRC would use the ISL Standard Review Plan, NUREG-1569 as a guideline for examining the State's review.
4. NRC would accept the State's review as a basis for NRC's licensing action if the review adequately addressed the acceptance criteria outlined in NUREG-1569.

The concept of considering technical evaluations conducted by States and attempting to avoid duplicative reviews is discussed in Sections 6.1 and 6.1.3 of the ISL Standard Review Plan, NUREG-1569, which was issued for public comment by Notice in the Federal Register on February 5, 2002 and published in final form in June 2003. The NUREG was provided to the Commission as an attachment to SECY 02-0204, dated November 15, 2002. SECY 02-0204 provides the analysis of public comments received on NUREG-1569 and NRC's responses addressing those comments. No comments were received on the above-described concept.

Verbal feedback from the States of Wyoming, Nebraska and New Mexico, on the framework was not generally supportive. The States expressed concerns over conflicting technical and regulatory interpretations, State-specific issues such as water rights and water-quality standards, and the resource impacts associated with individual reviews if no formal agreement were in effect. The States also indicated that they would not be willing to provide the resources to defend a State's technical review, if NRC relied on the State's review for one of its licensing actions and that action were challenged in an NRC hearing.

At the Uranium Recovery Workshop in 2002, the staff proposed an approach to the non-Agreement States that would eliminate duplicative ground-water reviews. Attachment D provides a summary of that meeting. Staff proposed that:

1. NRC would retain its authority provided by the Atomic Energy Act of 1954, as amended, to regulate ground-water protection at ISLs.
2. NRC would defer active regulation of the ground-water protection aspects of ISL operations to a non-Agreement State authorized to administer the EPA's UIC program at ISL facilities, if the State entered into an MOU with the NRC.
3. ISL facilities in Agreement States, such as Texas, authorized to administer EPA's UIC Program, would not be impacted by this proposal. However, an Agreement State, such as Colorado, not authorized to administer EPA's UIC program, could choose to pursue an individual agreement with EPA for reducing or eliminating dual regulation of ground-water protection. At present, no ISL uranium facilities are licensed in an Agreement State that is not a UIC EPA-authorized State.

At the 2002 workshop, the States of Nebraska and Wyoming responded favorably to this proposal. The staff received letters from Nebraska, Wyoming, and the National Mining Association supporting the pursuit of this proposal (see Attachment E). The staff also met with EPA Headquarters staff on September 4, 2002, to brief them on the status of NRC's interactions with the EPA-authorized, non-Agreement States, and to request its continued consultation and guidance involvement, if the Commission pursues MOUs with the non-Agreement States. The staff views EPA's continued consultation and guidance role as crucial to assure that no regulatory gaps will occur in the Federal ground-water protection program for ISLs.

The State of New Mexico was not able to attend the 2002 meeting, and has not expressed an opinion on this proposal. The NRC does license the Hydro Resources, Inc. (HRI) ISL project in New Mexico. However, this facility has not been built yet, pending the outcome of the NRC hearing on the licensing of the HRI operation.

As a result of interactions with the non-Agreement States and EPA, the staff requests Commission consideration of three options. All these options assure protection of public health, safety, and the environment at ISL facilities. Two of these options would reduce or eliminate NRC duplicating regulatory reviews of ground-water protection for licensed operations.

Option 1 - Reduce or eliminate duplicate ground-water protection reviews by placing greater reliance on technical reviews performed by non-Agreement States, to support NRC licensing actions.

This option would follow the framework for conducting licensing reviews for ground-water protection, as now presented in NUREG-1569. NRC would not conduct its review until the State has completed the technical review. Staff would compare the State's review with the acceptance criteria in NUREG-1569, and if appropriate, rely on the findings from the State's review to support NRC's licensing action. Staff would continue to document the licensing basis and environmental review in Safety Evaluation Reports and Environmental Assessments or Environmental Impact Statements, as appropriate.

Advantages

Public health, safety, and environmental protection would be assured at licensed ISL facilities. A measure of increased efficiency and effectiveness would be achieved by conducting an acceptance-level review of the State's technical analysis. The current regulatory burden on the licensees of additional NRC reviews would be somewhat reduced.

Disadvantages

There would be no change to NRC's inspection role at these sites. The staff expects to be able to rely on the State's action for the licensing decisions, but resources probably would be needed to support the technical findings for a licensing action, if that action were challenged in an NRC hearing. Nebraska and Wyoming have verbally stated that these States would not provide resources to defend their technical reviews in an adjudication; therefore, NRC's use of a State's technical review should be based on the recognition of that potential limitation. In general, a State's permitting or approval

documentation is summary in nature, similar to the level of detail contained in NRC approval documentation. Although the staff would continue to document the licensing basis and environmental review, it would probably need additional detailed technical analysis to respond to public inquiries and challenges or to support a hearing. Reviewing the State's entire file for the review, prior to preparing NRC documentation of the licensing basis, would increase the NRC effort and thus reduce or eliminate potential savings.

Option 2 - Defer active regulation of ground-water protection at ISLs to EPA-authorized non-Agreement States through: (a) the development of MOUs with individual affected States; or (b) rulemaking.

The outcome of this option would be to completely remove the duplication of ground-water protection reviews and inspections now being performed by both the NRC and non-Agreement States. Staff considers there are two viable approaches, by which the NRC could retain its authority in this area and exercise discretion to defer active regulation of ground-water protection at ISL facilities to EPA-authorized, non-Agreement States.

Approach 2(a) This approach for Option 2 proposes to enter into agreements (MOUs) with individual States to defer active regulation of both licensing and inspection activities for ground-water protection. Achieving a final MOU would begin with an initial official contact with the appropriate program director in each State, by the Director of the Office of Nuclear Material Safety and Safeguards (NMSS), requesting agreement to begin the MOU process. As a part of the agreement process, staff would work with each State to compare each State's ground-water protection program with that of the NRC. This comparison would examine the general review areas and staffing at the State, similar to an Integrated Material Performance Evaluation Program-type review performed for Agreement States.

Any areas determined not essentially equivalent to the NRC program would be identified in the MOU as areas where NRC would continue its direct regulatory oversight. Areas identified as essentially equivalent to the NRC program would be included in the MOU as programmatic areas where NRC would defer active regulatory oversight to the State. The NRC would enter into an MOU with that State, if the staff concluded that the State's ground-water protection program provides adequate protection of public health and safety, and the environment, equivalent to the NRC program. Staff proposes to use NUREG-1569, the ISL Standard Review Plan, as the basis for performing the programmatic comparison with the State.

Based on the staff's experience in working with Wyoming and Nebraska, we expect that the comparison would result in a finding of equivalence of those States' ground-water protection programs to NRC's.

The staff's preliminary conclusion is that the Wyoming program is essentially the same as NRC's. Irigary was the first commercial ISL license that both the NRC and Wyoming reviewed. As a result, staff in the former Uranium Recovery Field Office in Denver worked closely with staff from the Wyoming Department of Environmental Quality to assure that the NRC and State programs were essentially the same. The Branch Technical Positions (BTPs) that were developed by NRC staff and the Wyoming Guidelines on ISLs use much of the same language.

Those BTPs were used as the basis for NUREG-1569; thus, we expect to find the Wyoming program equivalent to NRC's. Additionally, in conducting groundwater inspections of Wyoming ISL facilities over the years, we have not found any gaps between requirements the State places on licensees and NRC's requirements. Finally, the practice of Wyoming ISL applicants and licensees is that when they submit an application to the NRC for a new license or a license renewal, the licensee provides its Wyoming UIC permit application, supplemented only with a chapter on radiation protection.

Nebraska essentially adopted the Wyoming program when it started looking at the Crow Butte ISL application in 1988. However, staff interactions with Nebraska indicate that one gap that may exist in the State's program compared to NRC's, relates to how it conducts reviews for groundwater restoration. Nevertheless, it is possible that during the MOU negotiation process, the State could make modifications to its program such that continued direct oversight by the NRC in groundwater protection would not be needed.

Once an agreement was in force, staff would amend the ISL licenses, at the request of each licensee within the State's jurisdiction, to remove, as appropriate, the specific conditions pertaining to ground-water protection. Thereafter, the staff would periodically document its review of UIC permits and State inspection reports, as well as State identified program changes, to determine that the State continues to conduct an acceptable program in accordance with the Regulatory Issues Summary (RIS) and MOU. NRC would continue to conduct licensing reviews and inspections for public and worker radiation safety at the affected ISL facilities. Only the production well field ground-water protection aspects of NRC's licensing and inspection programs would be deferred to the State.

If the Commission approves this approach to Option 2, the staff would issue a RIS for comment, outlining the MOU approach and the elements of an acceptable MOU, as a means of obtaining stakeholder and public input for deferring regulation to the States. The staff would complete the MOU process, absent any comments that would cause the staff to reconsider this approach. Upon successfully completing an MOU with a State, the NRC would then amend each of the affected ISL licenses in that State. Each amendment would be subject to an environmental review and a notice of opportunity for a hearing, in accordance with current NRC policy and practices. Attachment F provides a draft MOU, which would serve as an outline for the RIS, and would also serve as a starting point for discussions with any interested State.

Advantages

Public health, safety, and environmental protection with regard to ground-water would be assured at licensed ISL facilities, through the State's direct oversight. NRC will retain its authority to regulate ground-water protection at ISLs and could re-enter active regulation in this area, if a State's program was no longer adequate. Effectiveness and efficiency of NRC's ISL licensing program would be enhanced by making its active role clear to the licensee and other stakeholders. The current dual regulatory burden of NRC and State reviews on the licensees would be eliminated once the agreement is finalized. In time, the initial outlay of resources to develop the MOUs would be more than offset by the gains from reductions of reviews. The RIS publication will provide a mechanism for obtaining early public involvement in developing the details of deferring active NRC regulation.

Disadvantages

Implementing this option would require the expenditure of additional staff resources across several Offices to achieve the agreements, before any resource savings would be realized. Although a common agreement would be sought, each State would have to be approached separately, which might impact the potential for an economy of scale in developing multiple agreements. In addition, because there would be an opportunity for an adjudicatory hearing on each amendment, there could be time- and resource-consuming administrative hearings on some of the amendments to implement this approach, where litigants seek to essentially litigate the adequacy of ground-water protection for each particular facility. At this time, staff estimates this could encompass three licenses in two States.

Approach 2 (b) This approach would accomplish the same deferral of active regulation as previously described in Approach 2(a), except that it would be accomplished through a rulemaking process. Rulemaking would be used to promulgate NRC's general performance measures for ground-water protection; and subsequently, through additional rulemaking, list States where NRC would no longer directly oversee ground-water protection, based on a finding that a State's program would provide adequate protection of public health and safety, and the environment, equivalent to the NRC program. The NRC would then remove the ground-water protection conditions from each ISL license within that State, through an administrative amendment, after the State's program was found acceptable.

The rulemaking to establish the general performance measures would likely be a rule of medium complexity. Staff views the subsequent rulemakings to list the States where NRC would no longer directly oversee ground-water protection would be similar to the cask certification process in 10 CFR Part 72. An environmental review for this rulemaking would be conducted, in accordance with current NRC policy and practices. Any challenge to the factual finding of the adequacy of the State's program would be addressed during the notice and comment in the initial rulemaking process rather than in the adjudicatory hearings under Approach 2(a). A RIS would not be necessary, because the rulemaking process would provide for public involvement. However, an MOU or a similar agreement might be necessary with each State to establish the process for determining the adequacy of the State's program.

Advantages

The advantages of this approach are similar to those listed for Approach 2(a), with three additions. Rulemaking provides a more formalized process to obtain public comments and provides the underpinning of the deferral process. It may provide a less resource-intensive process to resolve disputes, in particular if there is litigation which challenges the amendments under Approach 2(a). Rulemaking could allow implementation with all EPA-authorized non-Agreement States that could potentially permit uranium ISL facilities. At this time, New Mexico is the only State that would be included in that category; however, other States could be affected if the economics of the uranium recovery industry improve.

Disadvantages

The outlay of staff resources to conclude several rulemakings, which would apply to essentially only three licensees, would be borne by other uranium recovery licensees,

who have repeatedly petitioned the Commission for fee relief because of poor economic prospects of the uranium recovery industry. The cost for this approach would be incrementally higher than Approach 2(a) by the cost of NRC's rulemaking effort, since both approaches would necessitate the development of some agreement with each State. The time involved for rulemaking would be longer than for Approach 2(a). Initiating rulemaking for only one uranium recovery policy issue while other such issues have been addressed by other means, in accordance with SRM SECY 01-0026, may appear piecemeal.

Option 3 - Continue with the current licensing review program of staff performing independent technical reviews of license amendment requests, separate from the reviews conducted by the UIC-permitting States.

This option maintains the current licensing review program. The staff would use the acceptance criteria contained in NUREG-1569 to evaluate the acceptability of license amendment requests. Routine inspections of ground-water compliance issues would continue at the current schedule of once every 2 years, unless a shorter frequency was warranted for a particular licensee.

Advantages

Public health, safety, and environmental protection would be assured at licensed ISL facilities.

Disadvantages

The current dual regulatory burden of additional NRC and State reviews on the licensees would remain unchanged, with no additional enhancements in the effectiveness and efficiency of regulatory reviews or inspections, and no perceived increases in public confidence. Unnecessary regulatory burden would not be reduced.

RESOURCES:

The following resource estimates are approximate, given the broad range of the options, and are provided for a comparison among the various options presented in this paper. The level of detail contained in these estimates is not sufficient to support planning and budgeting decisions. Additional detailed estimates must be performed for making those decisions. None of the resource estimates for these options has been incorporated in the current budget planning period.

Option 1 - Reduce or eliminate duplicate ground-water protection reviews by placing greater reliance on technical reviews performed by non-Agreement States to support NRC licensing actions.

Staff estimates this option would likely save approximately 0.1 full-time equivalent (FTE) per year in licensing resources, by using the framework described in NUREG-1569 for routine licensing actions. No resource savings are expected for inspections, since NRC would continue to inspect for ground-water protection, according to the current inspection schedules. The staff

recognizes that it might need to expend resources to defend the State’s technical review. However, the staff is not in a position to estimate that cost.

Option 2 - Defer active regulation of ground-water protection at ISLs to EPA-authorized non-Agreement States through: (a) the development of MOUs with individual affected States; or (b) rulemaking.

The estimated costs for both approaches are provided in the following table:

Option 2 Resource Estimates			
Approach 2(a)-RIS/MOUs		Approach 2(b)-Rulemaking	
Tasks	FTE	Tasks	FTE
Regulatory Issues Summary Draft RIS Publish for Comment Address Comments & Finalize	0.2	Rulemaking - NRC Performance Measures Prepare Rulemaking Plan Draft Rule Publish for Comment Address Comments & Finalize	3.0
State Program Adequacy (2 States) Negotiate MOU Conduct Adequacy Review Document Findings	0.4	State Program Adequacy (2 States) Negotiate Agreement Conduct Adequacy Review Document Findings	0.4
Amend Licenses (3 total)* Federal Register Notice/ Opportunity for Hearing Environmental Review Federal Register Notice/ FONSI	0.1	Rulemaking - State Program Acceptance (2 States) Direct Final Rule	1.0
		Amend Licenses (3 total) Administrative Amendment	Nil
TOTAL	0.7	TOTAL	4.4
* Litigation cost was not factored into this resource estimate, since it is speculative whether a hearing would be requested.			

Staff estimates that approximately 0.2 FTE of inspection and licensing resources will be saved under Option 2 for each year after regulatory deferrals to Wyoming and Nebraska are completed. (For comparison, 3.8 FTE are budgeted for all uranium recovery licensing and inspection activities in FY04. This includes licensing reviews and inspections at ISLs and conventional mills, but does not include reviews of reclamation plans and alternate concentration limit requests.) Future deferrals could be implemented as needed (e.g., when the HRI facility completes its UIC permitting process with New Mexico), or if new applications were received in other non-Agreement States. Some resources would be needed to periodically review a State’s activity, but these are not expected to be significant.

NMSS will support the resource needs for Option 2, using either approach, through the Planning, Budgeting and Performance Management process.

Option 3 - Continue with the current licensing review program of staff performing independent technical reviews of license amendment requests, separate from the reviews conducted by the UIC-permitting States.

Staff estimates this option would require no additional resources above those estimated in the current budget planning period. Likewise, there would be no savings of staff resources for this option.

The table below summarizes the effects of the options discussed on the staff, licensees, and States.

Summary of the Effects of the Options

	Option 1	Option 2a	Option 2b	Option 3
NRC review & inspection savings (FTE/yr)	0.1	0.2	0.2	-
NRC cost to put into place (FTE)	-	0.7	4.4	-
Licensee cost savings (\$/yr) ²	\$56K	\$112K		-
Ground water regulatory burden on licensees	less NRC regulatory burden	minimal NRC regulatory burden		dual State and NRC regulatory burden
State reaction	negative	positive		neutral

COORDINATION:

The Office of the General Counsel has reviewed this paper and has no legal objection. The Office of the Chief Financial Officer has reviewed this paper for resource implications and has no objection.

RECOMMENDATION:

That the Commission adopt Option 2, Approach 2(a): “Defer regulation of ground-water protection at ISLs to EPA-authorized non-Agreement States through development of MOUs,” because of the potential to achieve the outcome with fewer resource and time needs. The cost

² Licensee savings are the sum of NRC fees and licensee internal costs saved for document preparation and interaction with NRC. Licensee internal costs saved are assumed to be equal to NRC fees saved. Costs are based on \$280,876 per FTE.

of this option appears reasonable. If the Commission approves Approach 2(a) - Option 2 , the staff will develop and publish a RIS, then proceed to develop MOUs, consistent with Attachment F.

This paper does not contain sensitive information. The staff requests that this paper be made publicly available at the Commission's earliest convenience.

/RA/

William D. Travers
Executive Director
for Operations

Attachments:

- A. EPA/NRC Meeting Summary, October 10, 2000
- B. EPA/NRC Meeting Summary, November 29, 2000
- C. NRC/EPA/States Meeting Summary, June 12, 2001
- D. NRC/EPA/States Meeting Summary, June 11, 2002
- E. Letters of Endorsement from Nebraska, Wyoming, and NMA
- F. Proposed Preliminary MOU with non-Agreement States

November 24, 2000

MEMORANDUM TO: Philip Ting, Chief
Fuel Cycle Licensing Branch
Division of Fuel Cycle Safety and Safeguards
Office of Nuclear Material Safety
And Safeguards

FROM: Michael Layton, Hydrogeologist
Fuel Cycle Licensing Branch
Division of Fuel Cycle Safety and Safeguards
Office of Nuclear Material Safety
And Safeguards

SUBJECT: MEETING SUMMARY, EPA AND NRC MEETING OF OCTOBER 10,
2000

Attached is the summary of the October 10, 2000 meeting between the Environmental Protection Agency (EPA) and the Nuclear Regulatory Commission regarding NRC's reliance on the EPA's Underground Injection Control (UIC) Program for the protection of ground-water at NRC-licensed *In Situ* Leach Uranium Extraction Facilities. This meeting summary was reviewed by the participants. The meeting was conducted to partially fulfill the requirements of the Commission's Staff Requirements Memorandum SECY-99-013, issued on July 26, 2000.

Attachment 1: Meeting Summary
Attachment 2: Meeting Agenda
Attachment 3: Attendance List

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(301) 415-6676

cc: Joan Harrigan Farrelly, Office of Ground Water
and Drinking Water, EPA
Mario Salazar, Office of Ground Water
and Drinking Water, EPA

Meeting Summary

Topic: EPA and NRC Discussions: NRC's Reliance on UIC Ground-Water Protection Program at *In Situ* Leach Uranium Extraction Facilities

Date/Time: October 10, 2000; 1:00 pm to 2:00 pm

Location: 12th Floor Conference Room, EPA Offices, East Tower, Waterside Mall

Meeting Agenda: (see Attachment 1)

Attendees: (see sign up sheet, Attachment 2)

Joan Harrigan Farrelly - EPA	Philip Ting - NRC
Dan Gillen - NRC	Bruce Kobelski - EPA
Jim Curtin - EPA	Don Olson - EPA
Roy Simon - EPA	Maria Schwartz - NRC
Mario Salazar - EPA	Michael Layton - NRC
Bill von Till - NRC	

Telephone

Participants: Laura Bose - EPA Region 9	Jim Walker - EPA Region 9
Theodore Fritz - EPA Region 7	Ray Leissner - EPA Region 6

Discussions: The NRC requested this meeting with EPA's management and technical staff to present NRC's regulatory and licensing program at *In Situ* Leach Uranium Extraction (ISL) facilities, and possible ways the NRC could rely on EPA's Underground Injection Control (UIC) Program for the active regulatory oversight of ground-water protection at ISL facilities. The NRC representatives began the discussions with a brief background of the ISL Commission Paper (SECY-99-013) and the Commission's decisions on that paper (SRM-99-013), including a directive that the staff continue discussions with EPA and the appropriate States to determine to what extent the NRC can rely on EPA's UIC program for ground-water protection at ISL facilities.

The NRC representatives described the NRC's statutory authority, as granted by the Atomic Energy Act of 1954, as amended (AEA), which gives the NRC jurisdiction over all aspects of operations at ISL facilities. Additionally, the NRC also understood that the EPA, and the EPA-authorized States, also have jurisdiction over the ground-water protection aspects of ISL operations, in what regards to threats by underground injection, under the UIC Program authorized by Part C of the Safe Drinking Water Act. The overlapping authorities granted by these two federal laws potentially creates duplicative regulatory programs.

The EPA emphasized that all States have either adopted the federal UIC program in its entirety, or use the federal program, as a minimum, and impose additional requirements that are more stringent than the federal program. An example of more stringent requirements is the criterion for ground-water restoration within the exempted aquifer area that some states or Indian Lands may have. EPA approves the aquifer exemption that takes the affected portion of the aquifer off the definition of underground source of drinking water. Individual States can impose ground-water restoration limits within the exempted area. EPA would not require wellfield

restoration, because that area has been exempted as an underground source of drinking water, but EPA would require corrective action (cleanup) measure only if there was an indication that the exempted area might impact the water quality in the aquifer adjacent to the exempted area.

EPA representatives indicated that the federal UIC program does not have the broad authority, and is not as comprehensive at ISLs as the NRC's program. The federal UIC program relies on some aspects of the NRC's regulatory program, primarily the environmental impact reviews, which make the two federal programs complimentary in many regards rather than duplicative. The EPA does not have the resources to address the more comprehensive issues that NRC addresses in its environmental review process, or the authority to require fees for permit review and issuance. Duplicative aspects of regulation at these facilities may rests between NRC and the States with delegated EPA authority.

The NRC representatives described two currently-recognized potential impacts that resulted from the Commission's decisions in SECY-99-013. One impact involves the status of existing NPDES permits at ISL facilities that were granted by the States under the definition that wellfield restoration waters are mine waste water (40 CFR 440). The Commission has determined that all wastes from ISL facilities are classified as AEA 11e.(2) byproduct material. This difference in the definition of the same material may cause some concern with the States, and they may revisit their decisions on the existing NPDES permits at these facilities. The NRC representatives indicated that this topic would need to be explored in more detail with the affected States and potentially the EPA Office that oversees NPDES permits. The second impact involved the requirement of ground-water restoration in the wellfields. NRC licenses require wellfield restoration to the pre-extraction water quality, or to the pre-extraction water use classification determined by the State. It became apparent that at least one State relies on EPA as the regulatory authority responsible for protecting future ground-water users in the exempted aquifer area after restoration. The EPA representatives clarified this by stating that once the aquifer exemption is granted, EPA extends no protection to the exempted portion of the aquifer. EPA's focus is ground-water protection in the aquifer adjacent to the exempted area. The NRC and EPA representatives indicated that this issue would need to be examined in more detail, potentially with the affected States.

At the conclusion of the meeting, the EPA management thanked the NRC representatives for providing information on NRC's regulatory program at ISL facilities and their perspectives of potential issues with relying totally or partially on the UIC programs. EPA representatives emphasized that EPA headquarters and regional offices largely provide programmatic support and guidance to the States, and that the active regulation for much of the UIC programs lies with the States. The EPA Regions are the main active regulators for EPA directly implemented programs. The NRC representatives asked if it would be appropriate, at this time, to plan future meetings and include other EPA offices, regions, and affected States. EPA management indicated that the EPA participants would like to have some time to digest the information from this meeting and meet internally before deciding any additional steps. This would occur over the next couple of weeks and EPA would get in touch with the NRC representatives. In the mean time, any discussions among the respective staffs to discuss technical issues should continue, if needed.

No binding agreements or programmatic decisions were made by either the NRC or the EPA during this meeting.

Agenda

Discussion Topics Between EPA and NRC
October 10, 2000 1 pm to 2 pm
11th Floor Conference Room
East Tower, Waterside Mall

Reliance on UIC Ground-Water Protection Program
at Uranium *In Situ* Leach Extraction Facilities

Introductions

Background

- The Commission's recent policy decision in SRM 99-013 for staff to continue discussions with EPA to determine the extent NRC can rely on EPA's UIC program for ground-water protection at ISL facilities.
- NRC's current regulatory process for licensing reviews at ISL facilities and incorporation of UIC permit standards in NRC's licenses.
- Past coordination with non-Agreement States and EPA on ISL technical issues.

Current Topics

- NRC's authority under the Atomic Energy Act and EPA's authority under the Safe Drinking Water Act.
- Potential impact of NRC's decision to classify all ISL wastes as 11e.(2) byproduct material (solid material disposal, liquid effluent disposal).
- Ground-water restoration of wellfields, aquifer exemption, and potential impacts on future water use.

Next Steps

- Additional focused meeting between NRC and EPA technical staff
- Meeting with affected EPA regions and non-Agreement States

MEETING ATTENDANCE

EPA / NRC meeting - 10/10/2002

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Jim Curtin	EPA/OGC	Curtin.James@epa.gov	202 564-5482
Doc Olson	EPA/OECA/ORE	Olson.doc@epa.gov	202 564-5558
Roy Simon	EPA/OGWOW	Simon.Roy@epa.gov	202-260-7777
Dan Gillett	NRC	DMG2@NRC.GOV	301-415-7295
MARIA SCHWARTZ	NRC/OGC	MES@NRC.GOV	301-415-1888
Mario Salazar	EPA, OGAJW	SALAZAR.MARIO@EPA.GOV	202 260-2363
Bill von Tim	NRC	rwv@nrc.gov	301-415-6251
Philip Ting	NRC	Chief Licensing	301-415-7156

By Telephone:

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Jim Walker	EPA UIC Staff Region 9	walker.jim@epa.gov	415-744-1833
Theodore Fritz	EPA UIC Staff Region 7	fritz.theodore@epa.gov	913-551-7412
Ray Leissner	EPA UIC Staff Region 6	leissner.ray@epa.gov	214-665-7183

December 21, 2000

MEMORANDUM TO: Philip Ting, Chief
Fuel Cycle Licensing Branch
Division of Fuel Cycle Safety and Safeguards
Office of Nuclear Material Safety and Safeguards

FROM: Michael Layton, Hydrogeologist
Fuel Cycle Licensing Branch
Division of Fuel Cycle Safety and Safeguards
Office of Nuclear Material Safety and Safeguards

SUBJECT: MEETING SUMMARY, EPA AND NRC MEETING OF
NOVEMBER 29, 2000

Attached is the summary of the November 29, 2000 meeting between the Environmental Protection Agency (EPA) and the Nuclear Regulatory Commission regarding NRC's reliance on the EPA's Underground Injection Control (UIC) Program for the protection of ground-water at NRC-licensed *In Situ* Leach Uranium Extraction Facilities. This meeting summary was reviewed by the participants. The meeting was conducted to partially fulfill the requirements of the Commission's Staff Requirements Memorandum SECY-99-013, issued on July 26, 2000.

Attachment 1: Meeting Summary
Attachment 2: Meeting Agenda
Attachment 3: Attendance List

CONTACT: Michael Layton, NMSS/FCSS
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cc: Joan Harrigan Farrelly, Office of Ground Water
and Drinking Water, EPA
Mario Salazar, Office of Ground Water
and Drinking Water, EPA

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Accession Number: ML00

OFC	FCLB	FCLB	FCLB
NAME	MLayton	D Gillen	P Ting
DATE	12/20/00	12/20/00	12/21/00

OFFICIAL RECORD COPY

Meeting Summary

Topic: EPA and NRC Discussions: NRC's Reliance on UIC Ground-Water Protection Program at *In Situ* Leach Uranium Extraction Facilities

Date/Time: November 29, 2000; 1:00 pm to 2:30 pm

Location: 11th Floor Conference Room, EPA Offices, East Tower, Waterside Mall

Meeting Agenda: (see Attachment 2)

Attendees: (see attendance sheet, Attachment 3)

Joan Harrigan Farrelly - EPA	Philip Ting - NRC
Dan Gillen - NRC	Bruce Kobelski - EPA
Mario Salazar - EPA	Michael Layton - NRC
Bill von Till - NRC	Maria Schwartz - NRC
Jim Curtin - EPA	

Telephone

Participants: Laura Bose - EPA Region 9	Jim Walker - EPA Region 9
Theodore Fritz - EPA Region 7	Ray Leissner - EPA Region 6
Paul Osborne - EPA Region 8	Loren Setlow - EPA /OAR

Discussions:

The EPA scheduled this meeting to continue discussions on NRC's efforts to identify possible ways the NRC could rely on EPA's Underground Injection Control (UIC) program for the active regulatory oversight of ground-water protection at *in situ* leach (ISL) uranium extraction facilities. This meeting was a follow-up to the October 10, 2000 meeting between EPA and NRC on the same subject. The EPA representatives provided an agenda which served as discussion topics for the meeting (Attachment 2).

The EPA affirmed their understanding that NRC was looking at ways to reduce duplicative regulatory oversight at ISL facilities by relying on the EPA's UIC program for the active regulation of ground-water protection at these facilities. The EPA asked what specific areas the NRC viewed as being duplicative and what would be involved with NRC deferring active regulation. EPA's view is, that at the federal level, the UIC program and NRC's licensing were more complementary than duplicative, since the federal EPA program does not require ground-water restoration in the exempted aquifer area, and does not regulate extraction wells. In addition, the EPA relies on the environmental analysis performed by the NRC to support the NEPA requirements to make permitting and aquifer exemption decisions.

The NRC representatives agreed that much of the duplicative regulation at these facilities likely rests with the individual States implementing the UIC program, since those agencies actively regulated the ground-water aspects in the wellfields. The NRC envisions that staff would conduct its review after the state's analysis and use that review as part of the basis for the licensing action. NRC would still perform its NEPA reviews, but may use the State's detailed technical reviews to support the NEPA documentation. The NRC would use the Standard

Review Plan for ISL applications and license amendments as a guideline for examining the State's technical reviews. The NRC views itself as working closely with the State, in the event there are differences between the State's reviews and NRC's examination. The NRC does not see itself in the role of an oversight authority for the non-Agreement State programs. The details of how NRC would interact with the State's and how NRC's licensing program may change have yet to be determined.

The EPA encouraged NRC to make the initial contacts with the individual State programs and begin discussing how reliance on the State's programs might progress. The EPA requested that the NRC keep the EPA headquarters program informed of developments and work through the appropriate EPA Regional coordinators when working with the individual States. The EPA representatives offered to assist in coordinating discussions with the individual States, but would only have a limited role in NRC's interactions with the States, because the UIC programs had been delegated to the States and they have the control over the programs. The EPA offered to provide the NRC with contact information for the State UIC program coordinators and the EPA Regional UIC program coordinators.

At the conclusion of the meeting, the NRC representatives thanked the EPA representatives for continuing discussions on this issue and for their offer of assistance in coordinating and contacting the State program coordinators. The NRC will begin contacting the State and EPA Regional coordinators to begin discussions.

No binding agreements or programmatic decisions were made by either the NRC or the EPA during this meeting.

Ray Jessman, Jim Walker, James Rose,
Paul Osborne, Ted Fritz

DRAFT 11/22/00

NRC/EPA Meeting on ISL Uranium Mining Facilities
November 29, 2000
1:00 pm - 2:30 pm (EST)

AGENDA

Introductions

Review of Agenda

Review/Affirm NRC's Objectives (NRC)

- To reduce duplication and regulatory effort in oversight of ISL Uranium Mining facilities.
- To divest and defer to UIC programs where there is duplication.

Restatement of EPA's position (EPA)

- EPA supports any effort to reduce duplication of effort.

Message to be sent/Points to be made and emphasized:

1. EPA restates that the scope as well as the legal and regulatory authority of the UIC program is limited. Little overlap exists between the NRC licensing process and the federal UIC permitting program (specific discussion to follow, see NEPA below).
2. Delegated State UIC programs may be broader than the federal UIC program so additional points of overlap may exist.
3. EPA does not object to NRC's interest in pursuing MOU's to achieve their objective. If NRC would like to pursue MOU with delegated States we would be happy to provide the name of state UIC program managers that would need to be consulted.
4. With regards to the non-delegated states, the negotiations would occur with the individual regions. EPA Regional UIC contact can be provided.

NRC proposal to divest

- Identify specific regulatory activities that are proposed for divestiture.
- What would be the expectations of NRC in making this deferral to EPA or the state Agency?

Evaluation of a proposed specific element

To make this discussion "real", let's look at one specific activity that the NRC believes may have overlap, compliance with NEPA and the preparation of the EA/EIS.

What other specific regulatory activities does NRC propose to defer?

We suggest NRC developing a list of the proposed activities. Then using a crosswalk, or tabular approach, EPA could then compare the desired elements with UIC program authority. Counsels from both agencies could add their opinions on the appropriateness of the match ups and add any other advice. This product would clearly identify where we overlap and where we don't. It can also be used by NRC to pursue discussions with the delegated state programs.

MEETING ATTENDANCE

EPA/NRC MEETING OF 11/25/00

Bill van Tilt	NRC	301-415-6251
Philip Ting	NRC	301-415-6045
Joan Harrigan Farrelly	NRC	202-260-6672
Bruce Kobelski	EPA/OGWDD/DWRD	202-260-7275
MARIO SALAZAR	EPA/OGWDD/DWRD	202 260-2363
Dan Gillen	NRC	301-415-7295 DMG28NEC60
MARIA SCHWARTZ	NRC/OGC	301-415-1888 mss@nrc.gov
Michael Layton	NRC/HMSS	301.415.6676 mcl@nrc.gov
Jim CURTIN	EPA/OGC	202-564-5482

On the phone:

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Ted Fritz	EPA-UIC Region 7	913 551-7412
Paul Osborne	EPA-UIC Region 8	303 312-6125
Jim Walker	EPA-UIC Region 9	505 599-6317
Tara Rose	EPA-UIC Region 9	415 744-1835
Toren fellow	EPA OAR	202 564 9845

August 2, 2001

MEMORANDUM TO: Melvyn Leach, Acting Chief
Fuel Cycle Licensing Branch
Division of Fuel Cycle Safety and Safeguards
Office of Nuclear Material Safety
And Safeguards

FROM: Michael Layton, Hydrogeologist /RA/
Fuel Cycle Licensing Branch
Division of Fuel Cycle Safety and Safeguards
Office of Nuclear Material Safety
And Safeguards

SUBJECT: MEETING SUMMARY, *IN SITU* LEACH PERMITTING STATES AND
NRC MEETING OF JUNE 12, 2001

Attached is the summary of the June 12, 2001, meeting among representatives from the States of Nebraska, New Mexico and Wyoming; and the Nuclear Regulatory Commission regarding NRC's reliance on individual State's Underground Injection Control (UIC) Program for the protection of ground-water at NRC-licensed *In Situ* Leach Uranium Extraction Facilities. This meeting summary was reviewed by the participants. The meeting was conducted to partially fulfill the requirements of the Commission's Staff Requirements Memorandum SECY-99-013, issued on July 26, 2000 and SECY-01-00026 issued on May 30, 2001.

Attachment 1: Meeting Summary
Attachment 2: Meeting Talking Points
Attachment 3: Attendance List

CONTACT: Michael Layton, NMSS/FCSS
(301) 415-6676

cc: Mario Salazar, Office of Ground Water
and Drinking Water, EPA
David Miesbach - Nebraska DEQ
Kevin Myers - New Mexico Env. Dep.
Roberta Hoy - Wyoming LQD

Meeting Summary

Topic: States and NRC Discussions: NRC's reliance on ground-water protection reviews performed by non-Agreement States for licensing actions at *In Situ* Leach Uranium Extraction Facilities

Date/Time: June 12, 2001; 3:00 pm to 5:00 pm

Location: Beethoven Meeting Room, Executive Tower Hotel Conference Center, Denver, Colorado

Meeting Agenda: (see Attachment 2)

Attendees: (see attendance sheet, Attachment 3)

Dave Carlson - Nebraska DEQ	Melvyn Leach - NRC
David Miesbach - Nebraska DEQ	Michael Weber - NRC
Steve Ingle - Wyoming LQD	Dan Gillen - NRC
Roberta Hoy - Wyoming LQD	Maria Schwartz - NRC
Kevin Myers - New Mexico Env. Dep.	Michael Layton -NRC
Gary Janosko - NRC	

Discussions: The NRC requested this meeting with representatives from the States of Nebraska, New Mexico, and Wyoming to determine the level of interest for beginning discussions on the extent to which NRC could rely on ground-water protection reviews at *in situ* leach (ISL) uranium extraction facilities performed by the three non-Agreement States. This meeting was scheduled to coincide with the annual NMA/NRC Uranium Recovery Workshop, and serve as a kick-off meeting for future discussions.

After introductions, NRC participants gave a narration of the background behind NRC seeking ways to reduce duplicative efforts, since both the NRC and EPA-authorized States share regulatory oversight at ISL facilities. The NRC also described the two meetings that were held with EPA headquarters staff and management in late 2000, and provided copies of the meeting summaries to the participants. The NRC explained that this effort is being undertaken in accordance with specific directions from the Commission, as described in two Staff Requirements Memoranda (SRMs)

The NRC also described that one outcome from the NRC/EPA meetings was EPA's view that the federal Underground Injection Control (UIC) program was more complementary to NRC's licensing program at ISL facilities, and not duplicative. EPA also viewed that any potential duplication would occur between the State-administered programs and NRC's licensing, because the States implement the specific permit requirements and often impose requirements in addition to the federal UIC program. An example of this is ground-water restoration in the exempted aquifer area. Other technical areas that NRC considers have a potential for duplication between the State and NRC programs are listed in the talking points.

Through the course of discussions, several questions and comments were posed by the State participants. One comment was that endpoint of the process and future interactions needed to be identified - were we looking for a formal agreement? WDEQ does not consider it

appropriate for the NRC to rely on the State reviews [without a formal agreement] for several reasons, including: addressing public and industry comments; conflicting technical and/or regulatory interpretations; and state-specific issues, such as water rights and water quality standards. The NRC participants indicated that at this stage it was too early to determine whether a formal agreement, like a memorandum of understanding, was achievable or not. The NRC's goal at this early stage was to begin discussion with the States, identify areas where overlapping reviews were obvious and then see if there was a way to reduce or eliminate the duplication. The NRC staff would need to inform the Commission of the results of these early discussions and ask for guidance before committing the resources to enter into formal agreements.

A second question was raised concerning the level of NRC oversight of States in technical review areas. NRC participants pointed out that the States are currently implementing their permitting programs through authority from the EPA, not the NRC. Consequently, NRC would have no oversight authority over the State's program. That oversight would rest with the EPA. NRC outlined its vision of how the State/ NRC interactions could work for those technical areas that are duplicative:

1. Licensee's would submit applications or permit/license revision requests to the State and NRC for review, as is currently done. The NRC would not begin its review until the State's review was completed or nearly completed.
2. The State would complete its technical review in accordance with current practices.
3. NRC would receive the State's review and perform a limited review of the State's review, comparing it to NRC's Standard Review Plan (NUREG-1569).
4. NRC would accept the State's review as basis for NRC's licensing action if the review adequately addressed the acceptance criteria outlined in the Standard Review Plan. In the event of technical disagreements, the NRC would work cooperatively with the State to resolve the disagreement.

The question of resource impacts associated with participating in this effort was raised. Some State participants needed to meet with their respective management and determine whether they wanted to continue participating, given the limited resources in the State's program. NRC indicated that the amount of resource impact on the State participants would likely be minimal during these early stages.

The question of jurisdiction for 11e.(2) byproduct material was also raised. One State participant pointed out that the oversight of evaporation ponds should be added to the list. One state raised the concern over water pumped from an ISL facility to a plant, and the evaporation ponds used for wastewater. NRC considers evaporation ponds as 11(e).2 byproduct material, and views that it has sole jurisdiction over 11e.(2) byproduct material and source material; however, the Safe Drinking Water Act and the Atomic Energy Act each provide authority for ground-water protection at ISL facilities, resulting in shared jurisdiction in the ISL wellfields. Reducing the unnecessary burden caused by this circumstance is the incentive for finding ways to reduce or eliminate duplication between State and NRC regulatory programs.

Several questions on the details of documentation and communication with the States were raised. Currently, not all communications from the NRC get to the appropriate staff in the States. Also, paper versus electronic submittals was raised- NRC is going to electronic submittals, but States will require paper submittals for some time to come. NRC admitted that it

could do a better job of providing documentation and communicating with the technical staff at the States. The details of improving communication will need to be worked out.

NRC provided copies of its guidance documents to the State participants (NUREG-1569 , Reg. Guide 3.46, and electronic copies of the Uranium Recovery Commission Papers and SRMs). NRC asked for each State to provide copies of any available guidance documents or regulations to the NRC, that NRC does not already have, at some point in the near future.

It was suggested that a cross-walk table showing the applicable State regulations and NRC guidance would be helpful for future discussions to determine where State and NRC reviews would be the same and where they would be different. NRC agreed to begin drafting such a cross walk.

At the conclusion of the meeting, the participants agreed to continue discussions by telephone and e-mail and work toward scheduling future meetings through conference calls, if continued participation is approved by the respective State managers. NRC is working toward a goal of making an information report to the Commission in by October of this year regarding the progress of discussions with the States, and the potential for reducing or eliminating duplicative technical reviews.

No binding agreements or programmatic decisions were made by either the NRC or the State participants during this meeting.

Talking Points
NRC and EPA-authorized States

Topic: NRC reliance on ground-water protection reviews performed by non-Agreement States for licensing actions at *in situ* leach facilities

Date: Tuesday June 12, 2001

Time: 3:00 pm to 5:00 pm

Place: Beethoven Meeting Room, Executive Tower Hotel Conference Center

1. Introductions and Background
2. Overlapping Technical Review Areas
 - Wellfield Characterization, Monitoring, Approvals
 - Well Design, Mechanical Integrity Testing
 - Excursion Determination & Corrective Action
 - Deep Well Disposal
 - Wellfield Restoration
 - Surety Reviews
 - Others?
3. Guidance Documents
 - NRC's Regulatory Guide 3.46 and NUREG-1569
 - Available State Guidance Documents
4. NRC and State Interactions
 - How would this work?
5. Future Communications and Meetings

MEETING ATTENDANCE

Meeting Attendance
 NRC/State Discussions:
 Ground Water Reviews at ISLs.

June 12, 2001

3:00p - 5:00p

Executive Tower Hotel, Denver, CO.

<u>Name</u>	<u>Affiliation</u>	<u>Telephone & E-mail</u>
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Steve Ingle	WDER	307.777-7064 single@state.wy.gov
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July 16, 2002

MEMORANDUM TO: Daniel M. Gillen, Chief
Fuel Cycle Facilities Branch
Division of Fuel Cycle Safety and Safeguards
Office of Nuclear Material Safety
And Safeguards

FROM: Michael Layton, Hydrogeologist **/RA/**
Fuel Cycle Facilities Branch
Division of Fuel Cycle Safety and Safeguards
Office of Nuclear Material Safety
And Safeguards

SUBJECT: MEETING SUMMARY, *IN SITU* LEACH PERMITTING STATES, EPA
AND NRC MEETING OF JUNE 11, 2002

Attached is the summary of the June 11, 2002, meeting among representatives from the States of Colorado, Nebraska and Wyoming; the US Environmental Protection Agency; and the US Nuclear Regulatory Commission (NRC) regarding NRC's reliance on individual State's Underground Injection Control Program for the protection of ground-water at NRC-licensed *In Situ* Leach Uranium Extraction Facilities. This meeting summary was reviewed by the participants. The meeting was conducted to partially fulfill the requirements of the Commission's Staff Requirements Memorandum SECY-99-013, issued on July 26, 2000 and SRM SECY-01-00026 issued on May 30, 2001.

Attachment 1: Meeting Summary
Attachment 2: Meeting Talking Points
Attachment 3: Attendance List

CONTACT: Michael Layton, NMSS/FCSS
(301) 415-6676

cc: Distribution Sheet

DISTRIBUTION SHEET

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Cheyenne, Wyoming 82003

Meeting Summary

Topic: States, EPA, and NRC Discussions: NRC's reliance on ground-water protection reviews performed by non-Agreement States for licensing actions at *In Situ* Leach (ISL) Uranium Extraction Facilities

Date/Time: June 11, 2002; 6:30 pm to 7:30 pm

Location: Curtis Meeting Room, Executive Tower Hotel Conference Center, Denver, Colorado

Meeting Agenda: (see Attachment 2)

Attendees: (see attendance sheet, Attachment 3)

Dave Carlson - Nebraska DEQ
David Miesbach - Nebraska DEQ
Rick Chancellor - Wyoming LQD
Steve Ingle - Wyoming LQD
Roberta Hoy - Wyoming LQD
Phil Egidi - Colorado DOH
Mario Salazar - EPA HQ
Loren Setlow - EPA HQ
Paul Osborne - EPA Reg. 8

Dan Gillen - NRC
Gary Janosko - NRC
Michael Layton - NRC
James Lieberman - NRC
Maria Schwartz - NRC
William vonTill - NRC (not signed in)
John Lusher - NRC (not signed in)
Diana Diaz-Toro - NRC

Discussions:

Mr. Layton opened the meeting with introductions, and passed the sign-in sheet to the attendees. He continued by stating that this was a closed meeting of State and federal regulators to discuss the topic of dual regulation at *in situ* leach (ISL) uranium extraction facilities, which are licensed by the NRC under authority of the Atomic Energy Act (AEA) and permitted by EPA-authorized States, under the Safe Drinking Water Act (SDWA) Underground Injection Control (UIC) Program. Although this was a closed meeting Mr. Layton asked whether all attendees would be agreeable to having a meeting summary drafted, reviewed by the attendees, and placed in the public record. All attendees agreed.

The purpose of the meeting was to update the attendees on the status of NRC's efforts to finalize the Standard Review Plan (SRP) for ISLs (NUREG-1569), discuss additional options for reducing or eliminating dual regulation at ISLs, inform State attendees of EPA's view of challenges regarding approval of alternate feed requests for uranium milling at conventional mills, and receive feedback from the attendees on the items presented.

NUREG-1569, ISL Standard Review Plan

The NRC staff received public and stakeholder comments on NUREG-1569 in April 2002, and is now in the process of compiling, reviewing and addressing the comments. The schedule is to provide the Commission with an information paper in October 2002; which will transmit NUREG-1569 and NUREG-1620, (SRP for conventional mills) along with the comments received, and staff's analysis of the comments. The paper will request Commission approval to issue the SRPs as final documents and use them as the regulatory framework *in lieu* of a Part 41 rulemaking.

The draft NUREG-1569, includes a proposed framework for reducing dual regulation at ISLs by using the State's technical review as a basis to support NRC's licensing action. NRC would not do a separate technical review, but would examine the State's review against the SRP and determine whether the State's review addressed all the acceptance criteria the NRC would need to support the licensing action. This would not be an oversight review of the State's analysis, but would be similar to the current "Acceptance Review" or a completeness review that initially NRC performs on incoming licensee's amendment requests before the detailed technical review commences. NRC would still be responsible for NEPA review and would use the State's review to support the environmental review if the State's review was acceptable for this use.

Dual Regulation at ISLs

In past meetings with the States and EPA, several questions and concerns to this approach had been expressed:

- 1) What would be NRC's oversight role in non-Agreement States ?
- 2) What would happen if an NRC licensing action, which was based on a State's review, went to hearing?
- 3) There are limited State resources for entering into a protracted negotiation for a formalized agreement for this approach, given the potential obstacles.

The NRC clarified that it would have no programmatic oversight of the non-Agreement State, since the authority to regulate ISLs for those States came from the EPA under the SDWA, and not the NRC under the AEA. Any oversight would be performed under EPA's current program.

In the past, the States indicated that a State would not expend resources to defend its technical review, if NRC relied on a State's review for a licensing action and that action was challenged in an adjudicatory hearing. NRC reliance on a State's review would be purely, "let the buyer beware." NRC indicated in this meeting that it understood the States' position and would likely have to expend its resources to do some analyses to support a licensing decision, if it were brought to a hearing.

The States indicated they were not supportive of entering into a formal agreement, such as a Memorandum of Understanding (MOU), with the NRC at this time, given the shortcomings of the framework to reduce dual regulation proposed in the SRP, and the resources needed to support that effort.

The NRC then asked Nebraska and Wyoming if they would be supportive of a proposal that NRC retain its authority to regulate ground-water protection at ISLs, but defer active regulation of ground-water protection to the States; given their delegated authority from the EPA's UIC program. Part of the basis for this proposal is a draft legal opinion from NRC's Office of General Counsel (OGC), which concluded that NRC could defer active regulation of ground-water protection at ISLs to another federal program. This proposal is a logical extension of the OGC conclusion, given the federal program has been delegated to the State from the EPA. The NRC could implement this deferral by negotiating an individual MOU with each State. The NRC did not see the need to develop a MOU with EPA, at this time, since Nebraska and Wyoming have full authority to implement the federal UIC program from EPA. In response to a request from EPA to be kept informed on the progress of any negotiations with the states, Mr.

Layton responded that NRC would appreciate and encourage EPA to participate in the MOU negotiations with the States in a coordinating or consultation role, if it desired to do so.

EPA indicated two concerns with NRC deferring all active ground-water regulation. One item was that EPA relies on NRC's detailed National Environmental Policy Act environmental review, in addition to information submitted by the State, as a basis for granting the aquifer exemption and other technical aspects for the UIC permit. Currently, the federal EPA program does not have the resources to conduct the detailed environmental reviews needed for the ISL aquifer exemptions in programs directly implemented by EPA. Secondly, the SDWA does not provide the EPA with the authority to address impacts to the surface, like spills. The NRC indicated that these are issues that would have to be worked out in the MOU with each State. As far as surface impact, NRC would retain its authority over the surface features and directly regulate those activities, including spills and discharges of licensed material. The State would continue its oversight of surface activities such as topsoil protection, re-vegetation success, and other activities which NRC does not directly regulate.

The EPA also clarified that when it delegates a program to a State, the EPA doesn't necessarily do inspections, but does have oversight responsibility to ensure licensees are doing an adequate job. The NRC indicated that this seemed similar to how the NRC relinquishes authority to Agreement States and conducts oversight of the Agreement State program without doing specific inspections of facilities. The one difference between the EPA and NRC delegation is that if NRC is dissatisfied with the Agreement State program, that entire program is pulled back for federal implementation. If EPA is dissatisfied, it can take direct enforcement action with or without the State participation or can withdraw the portion of the UIC program delegated under Section 1422 of the Safe Drinking Water Act from the State.

The NRC indicated that once a MOU was signed with a State under the full deferral option, the NRC would amend the existing license(s) in that State to require the licensee to comply with the ground-water protection provisions in the UIC permit. Inspection of ground-water protection would reside with the State, and NRC would continue to inspect the licensed surface activities.

The NRC clarified that this proposal to defer active ground-water regulation to the States through a MOU has not yet been raised to the Commission. If the States are agreeable with the proposed MOU framework, the staff could send some information to the Commission describing the position of the non-Agreement States, and potentially provide the proposal for Commission consideration along with the SECY Paper transmitting the final SRPs to the Commission for approval.

Nebraska and Wyoming indicated an initial positive response to the proposal; however, Wyoming was concerned about the potential for taking on additional responsibility without the accompanying resources. The NRC indicated that it would follow up with the States within the next few weeks, after the State representatives had an opportunity to confer with their respective department managers.

The EPA emphasized that the EPA and NRC programs were viewed as complimentary, not duplicative. The NRC agreed that at the federal level the programs were complimentary, but the NRC program is very duplicative in several areas with the ground-water protection programs implemented by the States. EPA mentioned that it did not want to have any regulatory gaps result from NRC deferring active ground-water regulation, and the specific responsibilities would need to be explicit in the MOUs. The EPA also asked how financial assurance would be addressed under this proposal. NRC replied that there likely would be no change from the

current practice. The current surety review practice for ISLs is to have both NRC and the State review the financial assurance submittals annually, and have the licensee provide one financial instrument with one agreed-upon dollar amount, with the instrument defaulting to the State. This eliminates the burden of requiring the licensee to fund two instruments with different dollar amounts.

A question arose about how this MOU proposal would work for an NRC Agreement State. The NRC responded that the Agreement State already has the program authority from the NRC, so there would be no need for NRC to negotiate a MOU with an Agreement State. If the State did not have full UIC authority from the EPA, it would be a matter between the State and EPA. NRC would not be involved.

The NRC asked the attendees if there were any concerns with Mr. Layton sharing some of the details of the MOU proposal and the States' feedback at tomorrow's Workshop presentation. The attendees indicated that sharing the details of this meeting with the Workshop would be fine.

Wyoming asked about the status of the legislation appropriating \$10 million for DOE to conduct energy research (Nuclear Energy Electricity Supply Assurance Act of 2001 [S 472], sec. 127. Cooperative Research and Development and Special Demonstration Projects for the Uranium Mining Industry) including research for ground-water restoration at ISLs. Some attendees replied that the legislation passed the House, but is being deliberated in the Senate.

Alternate Feed Issues

Mr. Setlow led a discussion of the potential concerns that States should be aware of when reviewing alternate feed requests for conventional uranium mills. Some attendees noted that only one NRC-licensed mill, located in Utah, is accepting alternate feed material. Colorado added that the Cotter mill can also receive alternate feed. Mr. Setlow clarified that the alternate feed issue also impacts States where the material originates, because of challenges with classifying and permitting removal and transportation of the material under the Resource Conservation and Recovery Act (RCRA). The material is not classified as AEA material until it enters the mill for processing, making the coordination for transportation classification among parties potentially difficult. Mr. Setlow emphasized that EPA would continue to provide assistance in working through this issue with States.

Adjournment

The meeting was adjourned at 7:30 pm. No programmatic agreements or commitments were made by any of the parties in attendance.

Proposed Discussion Topics
Regulators Meeting
June 11, 2002; 6:30 pm - 7:30 pm

NRC reliance on State Technical Reviews for NRC licensing actions. (States' feedback on NRC's view)

NRC recognizes that much of the duplicative regulation at ISLs resides between NRC and States.

- 1) Monitoring well placement, completion, and sampling;
- 2) Injection/production well integrity testing;
- 3) Setting upper control limits & excursion control;
- 4) Impoundment leak and spill reporting;
- 5) Financial assurance; and
- 6) Wellfield ground-water restoration.

NRC would conduct its review after the State has completed its analysis and use the State's analysis as part of the basis for the licensing action.

NRC would still perform its NEPA review, but may use the State's detailed review to support the NEPA documentation.

NRC would use the Standard Review Plan (NUREG-1569) as a guideline for examining the State's review.

NRC would accept the State's review as a basis for NRC's licensing action if the review adequately addressed the acceptance criteria outlined in the Standard Review Plan (NUREG 1569).

NRC does not see itself in the role of an oversight authority for the non-Agreement State programs, EPA fills that role.

Current licensing/permitting challenges and impacts to fellow regulators (States & NRC).

Wellfield restoration approval under the above framework.

Operator's analysis and demonstration that restoration is not needed.

Need for formal agreement between NRC and Non-Agreement States.

Alternate Feed at Uranium Mills (EPA).

Regulators
Meeting
June 11, 2002
6:30 - 7:30pm
Curtis Room

Michael Layton	USNRC	301. 415. 6676	mcl@nrc.gov
Rick Chancellor	WY DER	307. 777. 7046	Rehenc@state.wy.us
Gary Sosko	USNRC	301-415-7244	GSS@NRC.GOV
Dave Carlson	NDER	308-432-6110	
David Miesbach	NDER	402 471 4992	David.miesbach@state.wy.us
DIANA DIAZ-TORO	USNRC	301-415-6640	ddt1@nrc.gov
MARCO SALAZAR	USEPA	202 564-3894	SALAZAR.MARCO@EPA.GOV
MARIA SCHWARTZ	USNRC	(301) 415-1888	mes@nrc.gov
Daniel M. Gillen	USNRC	301-415-7295	DMG2@NRC.GOV
JIM LIEBERMAN	USNRC	301 415 2746	JXL@NRC.GOV
Steve Ingle	WY DER/LAD	307 797-7064	Single@state.wy.us
ROBERTA HOY	WDER/LAD	(307) 777-5922	RHOY@state.wy.us
Loren Setlow	USEPA/BRIA	202 564-9445	setlow.loren@epa.gov
Phil Egidi	colo. Dept Public Aff	303-692-3083	phil.egidi@state.co.us
Paul S. Osborne	USEPA Region VIII	303-312-6125	Osborne.Paul@EPA.GOV

STATE OF NEBRASKA



Mike Johanns
Governor

Mr. Martin J. Virgilio
Director
Office of Nuclear Material Safety and Safeguards
c/o Document Control Desk
U.S. Nuclear Regulatory Commission
Washington, DC 20555

DEPARTMENT OF ENVIRONMENTAL QUALITY

Michael J. Linder

Director

Suite 400, The Atrium

1200 'N' Street

P.O. Box 98922

Lincoln, Nebraska 68509-8922

Phone (402) 471-2186

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JUL 24 2002

40-8943

Dear Mr. Virgilio:

The Nebraska Department of Environmental Quality (NDEQ) has reviewed the meeting summary of the discussions that took place between several non-Agreement States, the EPA and the NRC on June 11, 2002 in Denver, Colorado. The Department promulgated rules and regulations specifically for In Situ Uranium (ISL) recovery in 1982 and was granted primacy of the Underground Injection Control (UIC) Program by the EPA in 1984. During the initial stages of the ISL industry operating in our state, the Department worked closely with both the EPA and the NRC to ensure the safety of the public and the water quality of our State. The Department feels that over the last 20 years we have developed a very strong UIC Program for regulating the ISL industry as far as ground water protection and well construction/maintenance issues are concerned.

Throughout the lifetime of Nebraska's only permitted ISL facility (Crow Butte Resources, Inc. (CBR)) the Department was well aware of the dual regulation that was placed on CBR by the NRC and the NDEQ. However, it was not until November 1999 when the NDEQ approved the restoration of Mine Unit #1 at CBR that this dual regulation was readily apparent.

During the June 11th meeting, it was proposed by the NRC to retain its authority to regulate ground water protection of ISL facilities but to defer active regulation of ground water protection to the State of Nebraska's UIC Program. This deferral would have to be implemented through a Memoranda of Understanding (MOU) with the State of Nebraska.

The Department would like to take this opportunity to endorse the MOU approach as a viable solution to the dual regulation dilemma. Please let us know what the next steps are in this process so that we can assist in the development of the MOU.

If you have any questions or comments concerning this letter or the NDEQ's rules and regulations pertaining to ISL facility, please contact David Miesbach of my staff at (402) 471-4982. Thank you in advance for your consideration.

Sincerely

Michael J. Linder
Director

NMSSal Public

Add: STP mail Center



The State
of Wyoming



Department of Environmental Quality

Jim Genniger, Governor

Herschler Building • 122 West 25th Street • Cheyenne, Wyoming 82002

ADMIN/OUTREACH (307) 777-7758 FAX 777-3610	ABANDONED MINES (307) 777-6145 FAX 777-6462	AIR QUALITY (307) 777-7391 FAX 777-5516	INDUSTRIAL SITING (307) 777-7368 FAX 777-6937	LAND QUALITY (307) 777-7756 FAX 777-5864	SOLID & HAZ. WASTE (307) 777-7752 FAX 777-5973	WATER QUALITY (307) 777-7781 FAX 777-5973
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August 9, 2002

Michael Layton
Nuclear Regulatory Commission
OWFN
11555 Rockville Pike
Rockville, MD 20852

RE: Memorandum of Understanding Concerning Uranium In Situ Leach Operations

Dear Mr. Layton:

This letter confirms our earlier telephone conversation concerning Wyoming's desire to pursue a Memorandum of Understanding (MOU) with the Nuclear Regulatory Commission (NRC). The purpose of the MOU is to minimize duplication of effort concerning the regulation of ground water in situ leach operations. With the MOU, the NRC would compare the state's technical review with the NRC Standard Review Plan and rely upon the state's analysis for NRC licensing actions.

We support this concept and look forward working with you in this endeavor.

Sincerely,


Richard A. Chancellor
Administrator
Land Quality Division

xc: Roberta Hoy



October 18, 2002

Mr. Michael Layton
U.S. Nuclear Regulatory Commission
11555 Rockville Pike
Rockville, MD 20852

RE: Memoranda of Understanding on In Situ Leach Facilities

Dear Mike:

This purpose of this letter is to express the National Mining Association's (NMA) support for the development of memoranda of understanding (MOU) between the Nuclear Regulatory Commission (NRC) and individual states to reduce dual jurisdiction over in situ leach (ISL) facilities. NMA reviewed the meeting summary of discussions held between NRC, several non-Agreement States and the Environmental Protection Agency (EPA) in June and agrees that the MOU approach with individual states such as Wyoming and Nebraska is appropriate. This dual jurisdiction over wellfields significantly increases the costs for uranium producers and is truly a waste of licensee, NRC and state resources.

Of course, the issue of dual jurisdiction would be moot if NRC would accept NMA's position that NRC should have no jurisdiction over ISL mining until the ore reaches the ion exchange column or perhaps later. Given NRC's continued reluctance to accept that position, other ways to minimize overlapping jurisdiction should be to be examined. The concept of a MOU to achieve the goal of minimizing overlapping jurisdiction was first raised at a NRC staff/industry meeting held in Riverton, Wyoming in 1997. At that time, NRC staff were looking at developing a chapter in NRC inspection manual and attempting to determine whether the states were already addressing the necessary components; staff indicated that if the state covered all the issues NRC had to cover, then NRC could rely on the state. In the intervening years, both industry and the Commission itself have asked staff to determine a way to proceed with the MOU concept. NMA is pleased the idea is finally coming to fruition.

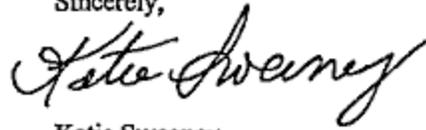
It is a logical step for NRC to develop MOUs that would allow NRC to defer active regulation of groundwater protection to the states. ISL wellfields are already adequately regulated; regulation of ISL wellfields extends far beyond the requirements of the EPA's UIC program - there are separate state regulations specific to ISL mining, control of wellfield operations and groundwater restoration. NMA urges NRC to develop the MOUs with Wyoming and Nebraska in an expedient manner to prevent further squandering of licensee, NRC, and state resources.

National Mining Association | 401 Constitution Avenue, NW | Suite 500 East | Washington, DC 20001 | ph 202.463.2625 | fx 202.463.2614

DMSS 22
Add: Judy Muszkewicz

If you have any questions, please contact me at 202/463-2627.

Sincerely,

A handwritten signature in cursive script that reads "Katie Sweeney". The signature is written in black ink and is positioned to the right of the word "Sincerely,".

Katie Sweeney
Associate General Counsel

-EXAMPLE-

**MEMORANDUM OF UNDERSTANDING
STATE OF _____ AND THE
U.S. NUCLEAR REGULATORY COMMISSION**

1. Purpose

This Memorandum of Understanding (MOU) between the State of _____ (hereafter the "State") and the U.S. Nuclear Regulatory Commission (hereafter the "NRC") expresses the desire of the parties to cooperate in reducing or eliminating duplicative active regulation and oversight of ground-water protection at *in situ* leach uranium extraction facilities (hereafter "ISL facilities"). ISL facilities are both licensed by the NRC under authority of the Atomic Energy Act of 1954, as amended, and permitted for Underground Injection Control (hereafter "UIC") by the State under the authority of the Safe Drinking Water Act, as amended, as delegated by the U.S. Environmental Protection Agency (hereafter the "EPA"). This MOU is intended to provide the basis by which the NRC will defer active regulation and oversight of ground-water protection to the State at those licensed ISL facilities which the State exercises regulation and oversight through its UIC permitting authority.

2. Background

Under sections 84,161, and 183 of the Atomic Energy Act of 1954, as amended, the NRC is responsible for protecting public health, safety and the environment for the extraction, concentration, processing, and possession of uranium and thorium as source material and the management and disposal of wastes resulting from the extraction of uranium and thorium for its source material content. The NRC implements its authority at ISL facilities by applicable regulations in Title 10 Code of Federal Regulations (hereafter "10 CFR") Part 40, including applicable portions of Appendix A to 10 CFR Part 40; and applicable portions of 10 CFR Part 20. The NRC implements specific requirements, not contained in the regulations, by specific license conditions as a means of fulfilling its responsibilities under the Atomic Energy Act of 1954, as amended. The NRC provides guidance for achieving compliance with requirements through various Regulatory Guides and NUREG-1569, Standard Review Plan for In Situ Leach Uranium Extraction License Applications (hereafter "NUREG-1569").

Ground-water protection at ISL facilities is one such area that the NRC regulates by specific license conditions. These license conditions include: 1) prescribing the sampling and analysis of specific radiological and non-radiological constituents in the groundwater; 2) setting numerical standards of those constituents for protecting ground-water quality; 3) prescribing specific placement, construction, and sampling frequency of monitoring wells; 4) prescribing

specific corrective action measures if exceedances are determined; and 5) requiring restoration of ground-water quality of economically depleted portions of the uranium ore zones to specific ground-water quality standards. The NRC conducts routine periodic inspection of the ISL facilities to assure compliance with regulatory and license requirements.

The State is responsible for ground-water protection at ISL facilities under authority of sections _____ [State Legislative Citation]. The State issues permits for underground injection control at ISL facilities under authority delegated by the EPA pursuant to sections 1421 et seq. of the Safe Drinking Water Act , as amended. The State UIC permits include: 1) prescribing the sampling and analysis of specific radiological and non-radiological constituents in the groundwater; 2) setting numerical standards of those constituents for protecting ground-water quality; 3) prescribing specific placement, construction, and sampling frequency of monitoring wells; 4) prescribing specific corrective action measures if exceedances are determined; and 5) requiring restoration of ground-water quality of economically depleted portions of the uranium ore zones to specific ground-water quality standards. The State conducts routine periodic inspection of the ISL facilities to assure compliance with regulatory and permit requirements. The State provides guidance for achieving compliance through various documents such as: [list State Guidance Documents].

The EPA performs a policy guidance and oversight role to the EPA-authorized State. The EPA provides consultation and coordination with the NRC on matters of ground-water protection at ISL facilities.

3. Principles of Cooperation

- A. The NRC concludes that the State program for ground-water protection at ISL facilities provides adequate protection of public health, safety, and the environment equivalent to the NRC program. Accordingly, in light of the State's authority and State actions and in the interest of minimizing duplication of government efforts and reducing regulatory burden on the licensed/permitted entities, the NRC is exercising its regulatory discretion and deferring active regulation of ground-water protection at ISL facilities within the State of _____, as long as the State is able to provide at least an equivalent level of protection for public health, safety and the environment as the ground-water protection program established by the NRC.
- B. However, the NRC will retain active regulation and oversight for the following ground-water areas where the State program does not provide at least the same level protection as the NRC program: [List Programmatic Areas]

- C. In addition, the NRC will retain active regulation and oversight for the uranium processing facilities, control of source material, and management and disposal of discrete surface wastes classified as 11e.(2) byproduct material, which include wastes generated from the restoration of ground-water.
- D. The NRC and the State will continue to work cooperatively for the issuance of a single financial assurance instrument to meet NRC's responsibilities under section 161x. of the Atomic Energy Act of 1954, as amended.
- E. Notwithstanding the above deferral, nothing in this MOU is intended to restrict or extend the constitutional or statutory authority of either the NRC or the State or to affect or vary the terms of future agreement between the State and the NRC under section 274b. of the Atomic Energy Act of 1954, as amended.

4. Implementation

- A. Subject to condition 3. B. above, upon execution of this MOU, the NRC will amend the existing ISL licenses for facilities in the State and will not impose specific license conditions for ground-water protection and the NRC will not impose specific license conditions for ground-water protection upon issuing licenses for new ISL facilities or renewing existing ISL licenses.
- B. The NRC will defer enforcement of ground-water protection requirements to the State except as noted in condition 3.B above.
- C. The State shall provide NRC with copies of all permits and inspection reports involving ground-water protection at ISL facilities.
- D. The State shall notify NRC of any significant change to its ground-water protection program.
- E. The State shall allow the NRC full access to State files and records involving ground-water protection at ISL facilities and make appropriate State staff available to NRC staff for the purpose of reviewing applications for termination of NRC licenses, and for the purpose of determining whether this agreement should be continued, amended, or terminated. In that regard, the State agrees that the NRC may review its ground-water protection program as necessary, including periodic reviews and in response to petitions submitted under 10 CFR 2.206 of the Commission's regulations, to determine whether the program and its implementation remains equivalent to the NRC's program.

- F. The NRC shall re-instate active regulation of ground-water protection at ISL facilities within the State if: 1) the State's EPA authorization for UIC permitting is rescinded; 2) the State is not providing an equivalent level of protection for public health, safety, and environment and the State has not taken remedial action to remedy the matter within a reasonable time; 3) at the request of an ISL licensee; or 4) if this agreement is terminated.

- G. The State shall notify the NRC if EPA has notified the State that its EPA authorization for UIC permitting is in jeopardy of rescission. The State will also provide copies of any EPA evaluation of its UIC permitting program and the associated State responses. The NRC shall notify the State upon receiving any petitions submitted under 10 CFR 2.206 that could affect this MOU, or any licensee request to re-instate active regulation of ground-water protection.

- H. Allegations concerning ground water issues under this MOU will be referred to the State.

3. Points of Contact

The NRC principal contact under this MOU shall be the Director of the Office of Nuclear Material Safety and Safeguards or his or her designee. The principal State contact shall be the Director of the _____ or his or her designee.

4. Amendment and Termination

This MOU may be amended or modified upon written agreement by both parties to the MOU, and may be terminated by either party upon 60 days of written notice.

5. Effective Date

This MOU shall take effect upon signing by the Governor of the State of _____ and the Chairman of the U.S. Nuclear Regulatory Commission.

For the State of _____.

Date at _____, __ this ____ Day of _____, 20__ .

Governor.

For the United States Nuclear Regulatory Commission.

Date at _____, __ this ____ Day of _____, 20__ .

Chairman.