



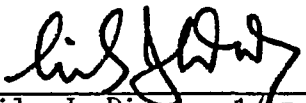
COMJSM-06-0001

COMMISSIONER

January 17, 2006

Approved.

MEMORANDUM TO: Chairman Diaz  
Commissioner McGaffigan  
Commissioner Jaczko  
Commissioner Lyons

  
Nils J. Diaz 1/31/2006

FROM: Jeffrey S. Merrifield 

SUBJECT: REGULATION OF GROUNDWATER PROTECTION AT *IN SITU*  
LEACH URANIUM EXTRACTION FACILITIES

Concerns regarding the dual regulation of groundwater protection programs at *in situ* leach (ISL) uranium recovery facilities have been debated at the Commission level since the late 1990's. The Commission's last significant direction to the staff on this issue was in response to SECY-03-0186, "Options and Recommendations for NRC Deferring Active Regulation of Ground-water Protection at *In Situ* Leach Uranium Extraction Facilities." In a Staff Requirements Memorandum dated November 19, 2003, the Commission directed the staff to pursue memoranda of understanding (MOU) that would allow the NRC to defer regulation of groundwater protection at ISLs to non-Agreement States<sup>1</sup> with appropriate groundwater protection programs as authorized by the U.S. Environmental Protection Agency (EPA). A recent series of memos from the staff indicate that such MOUs may be more difficult to achieve than originally anticipated.

It is my belief that the manner in which the NRC currently regulates this group of licensees is both complex and unmanageable. While the staff has done its best to regulate ISL licensees through the generally applicable requirements in Part 40 and imposition of license conditions, our failure to promulgate specific regulations for ISLs has resulted in an inconsistent and ineffective regulatory program. We have been attempting to force a square peg into a round hole for years, and I believe we should finally remedy this situation through notice and comment rulemaking. In developing a proposed rule, the staff should formulate a regulatory framework that is tailored specifically to this unique group of licensees. The staff should especially focus on eliminating dual regulation by the NRC and EPA of groundwater protection that is currently taking place. To achieve this, the NRC should retain its jurisdiction over the wellfield and groundwater under its Atomic Energy Act authority, but should defer active regulation of groundwater programs to the EPA or the EPA-authorized state through EPA's underground-injection-control permit program. During this rulemaking effort, the staff should actively engage interested stakeholders through public workshops and should request that EPA and EPA-

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UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555

REQUEST REPLY BY: 1/31

COMJSM-06-0001

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Commissioner Jaczko  
Commissioner Lyons

FROM: Jeffrey S. Merrifield

SUBJECT: REGULATION OF GROUNDWATER PROTECTION AT *IN SITU*  
LEACH URANIUM EXTRACTION FACILITIES

Approved enthusiastically.  
See attached comments.  
E. McGaffigan Jr.  
1/30/06

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**Commissioner McGaffigan's Comments on COMJSM-06-0001**

I appreciate and support Commissioner Merrifield's interest in improving NRC's regulation of in-situ leach (ISL) uranium recovery facilities. In 2003, we deferred a Part 41 rulemaking for in-situ leach (ISL) facilities in part because of a downturn in the market price of yellowcake. This downturn resulted in a corresponding reduction in the number of operating ISL facilities. However, the recent increasing trend in the market price for yellowcake toward \$40 per pound will spark a renewed industry interest in new ISL facilities. Therefore, we are now, more than ever, compelled to address a long-standing issue of overlapping EPA and NRC, or EPA-authorized state and NRC, regulations.

Under Commissioner Merrifield's approach, we would restart the Part 41 rulemakings for ISL facilities as the long-term solution to dual regulation at these facilities. Given the small number of current licensees, I support Commissioner Merrifield's suggestion to take this activity off of the fee base. Then, while the rulemaking proceeds, we would implement a two-pronged short-term solution involving: (1) the NRC's exercise of enforcement discretion for licensees who submit license amendment requests to change their groundwater restoration goals from a primary standard of baseline conditions to a primary standard which is consistent with EPA-Authorized State Underground Injection Control (UIC) rules, and (2) the pursuit of Memoranda of Understanding with Wyoming and Nebraska through which the States would agree to uphold NRC regulations and license conditions. I believe this approach is consistent with the EPA's intent that the UIC standards are the generally applicable standards that satisfy Atomic Energy Act Section 275 requirements for ISL facilities. I realize that this interpretation will require changes in NUREG-1569 and staff practice, even as the rulemaking proceeds, but I believe that this change is long overdue.

E. McGaffigan, Jr.  
11/30/06



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555

REQUEST REPLY BY: 1/31


COMJSM-06-0001

COMMISSIONER

January 17, 2006

Approve/Disapprove. See attached  
comments.

MEMORANDUM TO: Chairman Diaz  
Commissioner McGaffigan  
Commissioner Jaczko  
Commissioner Lyons

  
Gregory B. Jaczko  
2/20/06  
Date

FROM: Jeffrey S. Merrifield 

SUBJECT: REGULATION OF GROUNDWATER PROTECTION AT *IN SITU*  
LEACH URANIUM EXTRACTION FACILITIES

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**Commissioner Jaczko's Comments on COMJSM-06-0001  
Regulation of Groundwater At In-Situ Leach Uranium Extraction Facilities**

I approve in part and disapprove in part COMJSM-06-0001. I approve of Commissioner Merrifield's suggestion to initiate a rulemaking to develop specific regulations to govern the regulation of in-situ leach uranium extraction facilities. I disapprove, however, his suggestions to modify our regulatory treatment of these facilities prior to the completion of a rulemaking effort.

A series of recent staff memos indicated the regulatory framework for regulating these facilities is complex, resulting in part from a statutory framework that did not specifically envision mining of uranium using in-situ leach technology. As Commissioner Merrifield indicates, resolving these issues at this time is important, because the mining of uranium may increase substantially in the near term.

As Commissioner Merrifield and I discussed, this rulemaking effort should proceed off the fee basis. A rulemaking effort is primarily necessary to ensure a more transparent regulatory framework for the potential increase in the number of in-situ uranium mining facility licensees. The limited number of current licensees should not be responsible for funding, through license fees, a rulemaking which is necessary primarily because of an expected increase in licensees, who will benefit from a more transparent regulatory framework.

I disagree, however, with the need to modify the current regulatory approach for in-situ leach uranium facilities by essentially transferring authority to the states. A staff review of the states programs has found them incompatible with the Nuclear Regulatory Commission's decommissioning standards. Until this issue is resolved through a public rulemaking process, the Commission should continue to follow the current regulatory process.

  
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Gregory B. Jaczko                      2/6/10  
Date



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555

REQUEST REPLY BY: 1/31

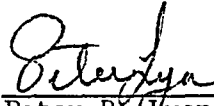
COMJSM-06-0001

COMMISSIONER

January 17, 2006

Approve.

MEMORANDUM TO: Chairman Diaz  
Commissioner McGaffigan  
Commissioner Jaczko  
Commissioner Lyons

  
Peter B. Lyons 2/10/06  
Date

FROM: Jeffrey S. Merrifield 

SUBJECT: REGULATION OF GROUNDWATER PROTECTION AT *IN SITU*  
LEACH URANIUM EXTRACTION FACILITIES

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authorized states work closely with the staff to ensure an acceptable outcome for all affected parties.

With this in mind, the staff should meet with licensees and other interested stakeholders to discuss the implementation of the following short term solution:

- 1) Pursue MOUs with Wyoming and Nebraska through which the states would agree to uphold current NRC regulations and license conditions, and
- 2) Exercise enforcement discretion to allow current licensees to meet state groundwater requirements in lieu of alternative conditions that may exist in their licenses. This will allow them sufficient time to prepare license amendment requests to revise or eliminate such conditions and provide an effective regulatory framework for states to assume oversight of ground-water protection programs.

I would expect the staff to keep the Commission informed regarding their progress on achieving this interim solution, as well as provide the Commission with a time line and resource estimates for completion of the suggested rulemaking. In addition, the staff should consider taking this rulemaking activity off of the fee base. While the cost of the rule would be passed onto a small group of our current licensees, the recent rapid rise in uranium prices and mining claims would indicate a significant future potential for new ISL facilities. I do not think it would be appropriate to require current licensees to subsidize an effort that may have substantially greater benefit for future licensees.