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POLICY ISSUE
(Notation Vote)

February 18, 2003

SECY-03-0025

FOR: The Commissioners

FROM: William D. Travers
Executive Director for Operations

SUBJECT: UTAH ALTERNATIVE GROUNDWATER PROTECTION STANDARDS; PROCESS FOR IMPLEMENTATION OF THE ALTERNATIVE STANDARDS PROVISION IN SECTION 274o OF THE ATOMIC ENERGY ACT OF 1954, AS AMENDED

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PURPOSE:

To obtain Commission approval of the staff's interpretation of what is meant by an "alternative standard" in Section 274o of the Atomic Energy Act of 1954, as amended (AEA), the staff's proposal for processing the State of Utah's (Utah) request to use alternative standards, and the staff's initial determination that Utah's proposed alternative standards for groundwater protection standards are equivalent or more stringent than those in the NRC's regulations for the same purpose.

BACKGROUND:

The staff discussed the provisions in Section 274o in SECY-93-088, dated April 6, 1993, and the potential impediments to developing implementing procedures for these provisions. In the Staff Requirements Memorandum (SRM) for SECY-93-088, the Commission approved the development of the procedure for processing an alternative standard request from a mill Agreement State either after the D.C. Circuit Court of Appeals case involving the State of Illinois and Kerr-McGee was concluded, or a request to use alternative standards has been received from a mill Agreement State. Due to staff workload, the staff postponed the development of the procedure until a request from a mill Agreement State appeared imminent.

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Such a request has now been made. Utah has completed its application to amend its current Agreement to include authority for the regulation of 11e.(2) byproduct material and the activities that generate these materials and submitted it to the staff on January 8, 2003. In its regulations to implement a mill Agreement, Utah has identified that it intends to use groundwater protection standards to protect the waters of the State from uranium milling operations, which are based on the Environmental Protection Agency's (EPA) hazardous waste program. Utah's regulations differ in several respects from the groundwater protection provisions in Appendix A to 10 CFR Part 40. Therefore, staff evaluated whether the Utah groundwater regulations constitute an alternative standard[1] and developed a process to be followed to implement the provisions of Section 274o.

DISCUSSION:

I. Alternative Standard Determination and Section 274o Process

In 1983, the AEA was amended by adding the last paragraph of Section 274o which requires the Commission to consider the use of alternative standards by an Agreement State with authority for the regulation of 11e.(2) byproduct material if, after notice and the opportunity for hearing, the Commission determines that such alternatives will achieve a level of stabilization and containment of the sites concerned, and a level of protection for the public health, safety, and the environment from the radiological and non-radiological hazards associated with such sites, which is equivalent to, to the extent practicable, or more stringent than the level which would be achieved by the standards and requirements adopted and enforced by the Commission for the same purpose. Utah's proposed use of alternative standards has provided the impetus for staff to develop a specific procedure for the implementation of this requirement. However, such implementation raises the following issues: (1) what constitutes an alternative standard under Section 274o; (2) what criteria should be used to ensure that the determination required of the Commission in Section 274o is met; and (3) what hearing provisions should be used to conduct the proceeding specified in Section 274o?

Staff Understanding of Alternative Standards under Section 274o

Following the 1983 amendment of the AEA which added the last paragraph of Section 274o to address Agreement States, and Section 84c to address NRC licensees, the Commission amended its regulations to implement this requirement for its licensees. In the Introduction to 10 CFR Part 40, Appendix A, the Commission describes its understanding of what is meant by an "alternative standard," describing it as site specific alternative proposals to the requirements in Appendix A which may take into account local or regional conditions, including geology,

[1]The term "alternative standards" as used in this paper and SECY-93-088 includes the terms "alternative proposals" as used in Appendix A to 10 CFR Part 40, and "alternatives" and "alternatives to the requirements" as used in Section 274o.

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topography, hydrology, and meteorology. Thus, in practice, an alternative standard may be a different numerical value or a different approach for providing equivalent or more stringent protection of public health, safety, and the environment. Similar wording is used in Section 274o of the AEA, therefore, the staff believes that the same approach should be used for evaluating alternative standards when alternatives are proposed by Agreement State licensees (site-specific) or Agreement States (generic).

Criteria To Be Used To Ensure That the Determination Required of the Commission Under Section 274o Is Met

The Commission has a statutory obligation to make a determination that proposed alternatives meet the standard set out in Section 274o, i.e., the level of stabilization and containment of the site, as well as the level of protection of the public health and safety, and the environment, which is equivalent to, to the extent practicable, or more stringent than the level which would be achieved by the standards and requirements adopted and enforced by the Commission for the same purpose. In order to facilitate the Commission's determination, the staff will ensure that the State provides documentation that such alternatives meet the operational criteria and objectives in the Commission's regulations for the same purpose.

Notice and Hearing Provisions To Be Used To Conduct the Proceeding Specified in Section 274o

Because neither the language in the amendment nor the legislative history of the amendment address the type of hearing that should be afforded, and because the term "hearing" can encompass a spectrum of proceedings, the staff has considered three options for meeting the notice and hearing provisions in Section 274o:

(1) Notice and comment hearing similar to the provisions of 10 CFR Part 2, Subpart H- "Rulemaking." This approach would afford interested persons an opportunity to participate through the submission of statements, information, opinions, and arguments in the manner stated in the notice. Additionally, as provided in 10 CFR 2.805(b), the Commission could hold informal hearings at which interested persons may be heard, adopting procedures which in the Commission's judgement will best serve the purpose of the hearing. This option appears to be most appropriate because when the Commission initially issued, and later modified, the requirements applicable to the management of uranium and thorium in Appendix A to 10 CFR Part 40, this was accomplished through the rulemaking process.

(2) Informal hearing similar to the provisions of 10 CFR Part 2, Subpart L- "Informal Hearing Procedures for Adjudicating in Materials and Operating Licensing Proceedings." While Subpart L is a post-licensing hearing process triggered by a request for a hearing to evaluate the basis for a licensing decision, its informal procedures could be used prior to

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a determination on a State's proposal. The participants in such, a hearing would be the State, the staff, and the party with standing.

(3) Formal hearing similar to the provisions of 10 CFR Part 2, Subpart G- "Rules of General Applicability," which provides the opportunity for a formal hearing including discovery and cross examination. While this option provides for a hearing, like Option 2 and in contrast to Option 1, parties must establish standing. In addition, this option would require such parties to rely on legal intermediaries and concern themselves with the formal procedures found in Subpart G.

Because the original standards in the Commission's regulations, based on standards set by EPA, were promulgated through the rulemaking process, the staff believes that Option 1 is most appropriate for the determination required by the Commission. A mill Agreement State's use of alternatives standards suited to regional or site-specific conditions, is reviewed by the State which then provides documentation of that review and the State's findings to the staff, before the proposal is provided to the Commission. The staff believes this process is akin to a rulemaking in that the State is proposing alternatives to address mill tailings containment and stabilization which may vary from the engineering or technical specifications contained in the Commission's regulations addressing the same subject matter. The first option would provide a procedure that parallels the initial rulemaking process, allowing interested persons to provide comments before the Commission reaches a determination, without the need for relying on legal intermediaries or concerning themselves with the more formal procedures that Options 2 and 3 call for. The Sierra Club has already requested a hearing which would include oral arguments to be held in the vicinity of the Utah facilities (Attachment 1). Under the staff's proposed approach, the Sierra Club's participation in this process would provide for written comments, opinions, etc.; however, informal hearing(s) as provided in 10 CFR 2.805(b) would be held only if the Commission determined, in the Commission's discretion, to hold such hearing(s).

NRC and Agreement State Obligations

When an Agreement State proposes the use of an alternative standard (including a site-specific standard), the Agreement State is responsible for documenting the difference between the proposed alternative standard and the NRC/EPA standard or requirement. The State documentation should include a State determination that the proposed alternative standard is equivalent to or more stringent than the NRC/EPA standard.

Upon submittal of the State's documentation in support of an alternative standard, the staff will review the documentation to see if the State has provided sufficient information to make the determination required in Section 274o. The staff will document its review and prepare the **Federal Register** Notice. The NRC documentation, **Federal Register** Notice, and State documentation will be sent to the Commission with a preliminary finding that the alternative standard is equivalent to or more stringent than the NRC/EPA standard.

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Upon Commission approval, the Federal Register Notice would be published with a minimum of 30 days for comment. The NRC staff would evaluate the comments received and provide a final recommendation to the Commission. The Commission will make the final determination of whether the alternative standard is equivalent to or more stringent than the NRC/EPA standard. If the standard is equivalent to or more stringent than the NRC/EPA standard for the same purpose, the alternative standard would be approved.

II. Evaluation and Staff Conclusion on Utah's Proposal

Utah has proposed to use its existing groundwater regulations in lieu of the groundwater protection requirements in Appendix A to 10 CFR Part 40 (Attachment 2). The specific sections of Appendix A to 10 CFR Part 40 and the corresponding Utah requirements are presented in Attachment 2. Utah's groundwater regulations are not organized in the same manner as the NRC regulations; therefore, it is not possible to make a one-to-one correlation between specific sections. However, in its submittal, Utah has documented the differences between the proposed alternative standard and the NRC/EPA standard (as implemented in the Commission's regulations) and has included in this information its determination that the proposed alternative standard is equivalent to or more stringent than the NRC/EPA standard for the same purpose.

Based on its review of the information that Utah provided, NRC staff's evaluation concludes that Utah has provided sufficient information for the staff to make an initial finding that the alternative standards that Utah is proposing as a basis for its groundwater regulations do provide for the equivalent (or more stringent) protection of the groundwater in Utah as would be provided by the NRC regulations in Appendix A to 10 CFR Part 40. Additionally, these standards provide equivalent flexibility for the licensee to demonstrate compliance with the alternative standard. The staff's initial evaluation is presented in Attachment 3. The staff identified that several of the numerical values in Utah's regulations for the concentration limits were greater (less stringent) and several were less (more stringent) than the values in the NRC regulations. These differences are the result of EPA revisions to the drinking water maximum contaminant limits (MCLs) in 40 CFR 141, which have not been adopted by NRC. The Atomic Energy Act of 1954, as amended by the Uranium Mill Tailings Radiation Control Act of 1978 (UMTRCA), directed the EPA to set generally applicable standards for the licensing and reclamation of uranium milling facilities. EPA accomplished this in 1983 by promulgating those requirements in 40 CFR 192, Subparts D&E, and referencing the numerical groundwater limits from other chapters of Title 40 CFR, as they were in effect in 1983. UMTRCA also required the NRC to conform its regulations to the generically applicable EPA standards, which are 40 CFR 192, Subparts D&E. NRC accomplished this in 1987 with rule revisions to 10 CFR 40, Appendix A , which codified Table 5C.

Although EPA revised the MCLs for various non-radiological groundwater constituents in 40 CFR 141, EPA has not incorporated those revisions into 40 CFR 192. As a consequence, NRC has not revised Table 5C, because the benchmark EPA limits in 40 CFR 192 have not been revised. Utah, which is also an EPA-authorized State, revised its Groundwater Quality Standards (GWQS) to comply with the revised Federal limits in 40 CFR 141.

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Staff has previously used the newer EPA MCLs to approve groundwater alternate concentrations limits at its licensed facilities, in keeping with the spirit of maintaining conformity with the generically applicable EPA standards. Although four of Utah's GWQSs are higher than those published in Criterion 5C, the staff considers Utah's standards to be consistent with the intent of NRC conformity with EPA's generically applicable standards. The staff has concluded that, since Utah's regulations are based on more recent scientific information than NRC's regulations and the higher values are considered by EPA as protective of public health and safety, this part of Utah's standards are equivalent to or more stringent than NRC standards. The staff's initial finding is subject to the Commission's review and the outcome of the hearing process.

RESOURCES:

The resources to conduct these activities are included in the FY 2003 budgeted resources to process the amended Agreement for Utah.

COORDINATION:

The Office of General Counsel (OGC) 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 objections.

RECOMMENDATIONS:

The staff recommends that the Commission approve:

1. The staff's interpretation of what constitutes an alternative standard under Section 274o of the AEA.

2. A notice and comment hearing based on the provisions in 10 CFR Part 2, Subpart H which could include an informal hearing as provided in 10 CFR 2.805(b) to fulfill the hearing requirement in Section 274o of the AEA.

3. The staff's initial determination that Utah's proposed alternative standards for groundwater protection standards are equivalent or more stringent than those in the NRC's regulations for the same purpose.

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Note that:

1. Upon approval by the Commission, the staff will prepare a Federal Register Notice in coordination with OGC to implement Option 1.

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Executive Director
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Attachments:
1. Letters from Sierra Club and Interim Response (ML023400170, ML023450576, ML023540436)
2. Utah Groundwater Regulation Analysis (ML022980335)
3. NRC Staff Analysis of Utah Proposal

Commissioners' completed vote sheets/comments should be provided directly to SECY by c.o.b. Thursday, March 6, 2003.

Commission staff office comments, if any, should be submitted to the Commissioners NLT February 27, 2003, with an information copy to SECY. If the paper is of such a nature that it requires additional review and comment, the Commissioners and the Secretariat should be apprised of when comments may be expected.

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