January 8, 1991

MEMORANDUM FOR: James M. Taylor
Executive Director for Operations

William C. Parler
General Counsel

FROM: Samuel J. Chilk, Secretary /S/

SUBJECT: SECY-90-268 - PROPOSED FINAL ENVIRONMENTAL PROTECTION AGENCY (EPA) TITLE I GROUND-WATER PROTECTION STANDARDS

The Commission (with Chairman Carr and Commissioners Rogers and Curtiss agreeing) has disapproved the staff's plans to implement the proposed procedure for resolving the remaining issues with EPA on the ground-water protection standards. Commissioner Remick would have preferred to conditionally accept the staff's plan.

The Commission believes that EPA's direct involvement in site-specific implementation of the Title I remedial action program is unnecessary given NRC's mission of protecting the public health and safety and the environment, as well as logically inconsistent with the flexibilities EPA has incorporated into other provisions of 40 CFR Part 192, where NRC independently confirms the safety and environmental aspects of DOE's compliance with alternative standards (e.g., Supplemental Standards in Subpart C).

The Commission also believes EPA's requirement for site-specific concurrence with Alternate Concentration Limits (ACLs) (1) is improper given OGC's position that EPA has no legal right to insist on a concurrence role and that it deviates from the frame-work established by the Uranium Mill Tailings Radiation Control Act of 1978 (UMTRCA); (2) clouds ultimate responsibility for determining that the ACLs are protective of human health and the environment and are as low as reasonably achievable; (3) wastes limited Federal resources by requiring redundant reviews of the same information by both agencies, not to mention the effort spent

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SECY NOTE: THIS SRM, SECY-90-268, AND THE VOTE SHEETS OF COMMISSIONERS ROGERS AND CURTISS WILL BE MADE PUBLICLY AVAILABLE 10 WORKING DAYS FROM THE DATE OF THIS SRM

by DOE in proposing the ACLs; (4) could unnecessarily increase the level of NRC resources required for the Title I program for discussion and resolution of issues that may arise in either EPA's review of the ACLs proposed by DOE or in NRC's review of the ACLs approved by EPA; (5) could unnecessarily complicate NRC licensing actions at disposal sites following completion of remedial action if corrective actions are needed to restore performance of groundwater protection features or cleanup contaminated groundwater; (6) could lead to establishment of inconsistent ACLs among UMTRCA Title I sites and between Title I and II sites.

In addition, involvement of EPA in approving ACLs at mill tailings sites in the future after EPA promulgates the standards could result in decisions that are inconsistent with UMTRCA and the final standards themselves. This concern is underscored by comments from EPA staff that indicate an intent in the RCRA hazardous waste program to abandon the concept of ACLs altogether and to set groundwater concentration limits based only on the drinking water standards or informal surrogates. Such an approach would be inconsistent with EPA's standards being implemented by NRC at the Title II uranium mill tailings sites, which require consideration of a comprehensive set of site-specific factors in approving ACLs.

In addition to these general comments about ACLs, the staff should provide the following specific comment to EPA on the March 19, 1990 draft of the Statement of Consideration of the groundwater protection standards:

> On page 18, EPA should revise the statement that it is not appropriate "to apply detailed cost/benefit balancing judgments to the choice of level to which the ground water must be cleaned." The statement should say that, while detailed cost/benefit optimization is not appropriate, economic costs (i.e. cost/benefit rationalization) need to be considered in the choice of levels to which groundwater must be cleaned up. Economic cost consideration is essential in making the ALARA determination for ACLs required by EPA in the final standards at 40 CFR 192.02(a)(3)(iii)(B)(1), as well as in 40 CFR 192.32(a)(2)(iv) and in Criterion 5B(6) of 10 CFR Part 40, Appendix A, for uranium mill tailings under Title II of UMTRCA. In addition, Section 84(a)(1) of the Atomic Energy Act requires NRC to provide due consideration of economic costs in carrying out its program to ensure protection of the public health and safety and the environment from the hazards associated with 11e.(2) byproduct material.
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> (EDO) (SECY Suspense: 1/25/91)

In addition, Commissioner Curtiss concluded that after reviewing the subject SECY paper and the staff's response to his memorandum

of September 11, 1990, there remain a number of matters in addition to the ACL issue that he would like to see clarified (see attached questions). He asks that the staff address these matters in further detail and respond to these questions. He also asks that staff consider the answers before taking a final position with the Office of Management and Budget on the EPA standards.
(EDO/OGC) (SECY Suspense: 2/22/91)

Attachment:
As stated

cc: Chairman Carr
Commissioner Rogers
Commissioner Curtiss
Commissioner Remick
GPA

Commissioner Curtiss' Questions on SECY-90-268

1) Applicability of the provisions in Subparts A, B, and C to the various options under UMTRCA, particularly for vicinity properties:

   a) EPA appears to have accepted NRC's view that routine coverage of vicinity properties is not appropriate, but that the option to apply the standards to vicinity properties should be retained. The preamble and revisions to the guidance in Subpart C (e.g., 192.20(a)(4) and (b)(4)) indicate agreement on this issue. It is not clear, however, how the applicability sections of Subpart A (192.00, which is not being changed) and Subpart B (192.10, which is also not being changed) relate to the stated findings in the preamble concerning vicinity properties on pages 11 and 12 of Enclosure 2 of the subject paper and amended guidance in Subpart C. Could staff please explain the relationship?

   b) If the applicability sections impose requirements, then wouldn't EPA's amended guidance in Subpart C reflect only that EPA would have no objection to use of supplemental standards in lieu of applicable Subpart A or B standards for vicinity properties? Why don't the threshold tests for using supplemental standards constitute an unnecessary burden?

   c) DOE can declare vicinity properties processing sites. Is this procedure necessary in order for Subparts A and B to apply to vicinity properties?

   d) How does the fact that vicinity properties are not covered in the plans for remedial action affect their status under 40 CFR Part 192?

   e) EPA indicates that residual radioactive materials left at vicinity properties after complying with the cleanup standards of Subpart B are not considered disposal sites under Subpart A (see page 12 of the preamble in Enclosure 2). Has EPA covered all situations (e.g., processing sites where surface materials have been removed and compliance with Subpart B has been achieved)? If not, doesn't the statement concerning whether a named situation is a disposal site have added significance for those not addressed? Shouldn't these findings be set forth in the definition or applicability sections of the standards to be legally binding?

f) The rule contains two definitions of processing sites (192.01(a)(1), which is new, and 192.10 which is unchanged). "Depository site", which is also used, has been changed to delete "disposal". The definition of "disposal site" in 192.01(d) remains unchanged. Could the staff please explain how these terms affect the applicability of the various provisions of Subparts A, B, and C? Do the complex set of possible combinations and permutations and the use of multiple terms affect when and what NRC is responsible for licensing under the general license in amended Part 40?

2) Grandfathering of completed sites from compliance with the design requirements of Subpart A:

Enclosure 2 to the EDO's Memorandum of October 9, 1990 indicates that no changes related to grandfathering are needed because staff, after further discussions with EPA, agrees with EPA's intent. EPA did not propose any changes in the standards. Instead, EPA indicated in the preamble that designs at completed sites should meet the standards, but acknowledged that this is a site specific matter (see page 39 of Enclosure 2 to SECY-90-268). EPA thus implies that backfitting to final standards is required. As I understand it, however, NRC is concurring in DOE's certification of compliance with the standards in effect at the time of concurrence, consistent with UMTRCA. Could staff clarify why it is not still necessary or desirable to grandfather completed sites? Will previous concurrences plus use of supplemental standards suffice without undue uncertainty or delay?

3) Accounting for, and justification of, differences between the Title I and the Title II standards:

Has EPA addressed staff's comments regarding the rationale for converting the Title II and RCRA performance standard into a design standard for Subpart A? If so, what is their response?

4) Clarification of the term "listed constituent":

EPA appears to have clarified the data collection requirements in 192.02(a)(3)(i), which are designed to determine the presence of constituents listed in the new Appendix I, but did not adopt the suggestion to use terms more consistent with RCRA or Title II, or to add an explicit definition. Does the term "listed constituent" refer to Appendix I, Appendix IX of Part 264, or the list specifically applicable at the site as determined under 192.02(a)(3)(i)?

5) Relationship between Subpart B cleanup actions in meeting the Subpart A ground-water design standards:

Explain how DOE will deal with two concentration limits for a given constituent at a site, and how restoration activities should be taken into account in meeting the design standards of Subpart A? How can final design concentration limits be established for processing sites where the materials are being stabilized in place, until the effectiveness of active and natural flushing restoration is known? Is it sufficient to estimate the effectiveness of restoration and design disposal features to maintain the end point expected to be reached?

6) Definition of "point of compliance":

a) The final rule has two definitions for "point of compliance: one in 192.02(a)(3)(iv) for Subpart A and one in 192.12(c)(3) for Subpart B. Does either definition address protection of stabilization features as well as the cover, consistent with staff's recommendation?

b) "Point of compliance" is defined under Subpart B as "those locations not beneath a disposal site and its cover where ground water contains listed constituents from residual radioactive material." What limits are there to the Subpart B definition? Does the rule provide any threshold or qualification for the implementation of this definition? If read narrowly, such that points of compliance are associated only with disposal sites, would this definition address cleanup of processing sites where residual materials have been removed? How does the staff anticipate DOE will implement this definition?

7) Standards versus implementation guidance:

Staff recommended that EPA either delete the monitoring and corrective action requirements from the disposal standards in Subpart A or move them to a consolidated guidance section, with a preference for the former. EPA clarified that the monitoring requirements are not design standards, but rejected staff's suggestion that the monitoring and corrective action requirements be deleted or relocated.

a) What is the basis for EPA's rejection of the staff's recommendation?

b) Does the present EPA formulation continue to raise implementation uncertainties? For example, is it a correct reading that 192.02(b) and (c) would fall under

NRC's general license if ground water at the stabilized site meets the established concentration limits, but would fall under the remedial action program if the concentrations in the ground water do not meet the established standards and active or natural flushing, as provided under Subpart B, is required?

c) On page 26 of the.preamble in Enclosure 2 to the subject paper, EPA notes that "installation and commencement of the monitoring required under Section 192.02(b) will satisfy this standard, for the purpose of licensing of the site by NRC." This position is not reflected in the standard itself. Does this raise implementation uncertainties? In 192.12(c)(2)(ii), EPA states that Subpart B remedial actions may occur before or after the transfer and licensing requirements of section 104(f)(2) of UMTRCA are initiated. Is staff comfortable that all issues associated with potential delay in licensing have been addressed?

8) Need for site-specific flexibility in determining the need for, and duration and scope of, monitoring:

EPA's response to staff's comments suggests that not all Appendix I constituents need be monitored. Does staff see a need for additional flexibility or will the option for supplemental standards suffice?

9) Concentration limit design standard in 192.02(a)(3):

Although EPA clarified the reference to 192.02(a) in paragraph (c), the role of (a)(4) was not addressed in the response to comments in the preamble. Are there any remaining uncertainties about how to integrate (a)(4)?

10) Use of supplemental standards:

EPA rejected staff's recommendation that 192.22(d) be deleted, but with no discussion of their reasoning in the preamble. What is EPA's reason?

11) Use of ACLs in setting priorities:

In 192.20(a)(2) of Subpart C, EPA indicates that priority should be given to concentration levels in the order listed: background, drinking water, and ACLs. What is the justification for adding this priority preference to the rule when it is not in the RCRA regulations or Title II standards? Did staff raise this issue with EPA in the negotiations?

12) The monitoring scheme established by EPA in Appendix IX of 40 CFR Part 264, which requires routine monitoring of

ground water for an extensive set of constituents (see 192.20(a)(2)), appears to be not only excessive, but inconsistent with the RCRA scheme adopted for Title II sites. Why didn't EPA adopt an approach along the lines of that established for the Title II sites? Has DOE raised the issue of the cost of monitoring for dozens of constituents, when two or three may be adequate?

13) EPA deleted the option to delist constituents. In view of the fact that the option to delist is recognized in both the RCRA regulations and Title II standards, what is EPA's basis for deleting this option, aside from the fact that DOE has not exercised this option?

14) On page 12 of the preamble, EPA references a RCRA guidance document for determining when vicinity properties may pose a significant potential for ground-water contamination. Has staff seen or reviewed this document?