



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

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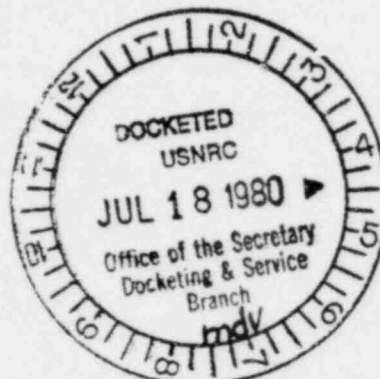
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(45 FR 31393)

Secretary of the Commission
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Attention: Docketing and Service Branch

Dear Mr. Secretary:



OFFICE OF THE ADMINISTRATOR

The U.S. Environmental Protection Agency (EPA) has reviewed the advance notice of proposed rulemaking, 10 CFR Part 60, "Technical Criteria for Regulating Geologic Disposal of High-Level Radioactive Waste", which were published in the Federal Register, Vol. 45, pages 31393-31408. EPA views these draft Technical Criteria as providing the regulatory means to implement the requirements of the generally applicable environmental standards to be proposed by EPA in the near future. The proposed draft Technical Criteria provide a satisfactory means to assure compliance with the standards to be promulgated by EPA. Adequate discussion is given the technical issues necessary for the licensing of a high-level radioactive waste (HLW) repository. We provide our comments below on specific issues and also address the questions posed by the Commission.

1. On page 31396 in the section on "Considerations", it is stated that engineering can be used to narrow the extent to which geological processes must be considered. This could be interpreted to mean that the NRC will allow substituting engineered barriers for poor geological characteristics. We feel that (1) a site with acceptable geologic characteristics should be selected and (2) engineering should be used to supplement the geology and enhance confidence that the waste will be retained in the repository. Thus, assurance will be given that engineering will add to the total effectiveness of a repository rather than substituting for a poor geological barrier. We believe NRC should give more emphasis to these points.

2. In the same section in (5) "Codification of Models in the Licensing Processes", NRC concludes that, because of the great uncertainties involved, the state of knowledge to determine the adequacy of a site is more qualitative than quantitative. Therefore, NRC proposes to rely primarily on judgements by experts in the applicable fields to arrive at a decision, rather than on numerical assessment methods (models). EPA agrees with NRC that, at the present stage of development, it is premature to codify specific models for use in the analyses. However, EPA plans to include both qualitative and quantitative requirements in its proposed standards. Therefore, EPA recommends that NRC expand the discussion to state that quantitative assessments must be performed, at least to the extent necessary to assure compliance with EPA numerical performance requirements.

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3. The proposed regulation does not adequately address the subject of groundwater resources. In several places, consideration is given only to present uses of groundwater. This view is not in concert with the recognition in Section 60.121(c) that institutional controls may not persist for a long time. "Accessible environment", as defined in Section 60.2(a), would only protect "presently used" aquifers as designated under 40 CFR 146. However, the legislative history of the Safe Drinking Water Act makes it clear that both currently-used and potential drinking water sources should be protected.

4. Sections 60.122(a) (8) and 60.122(b) (1) (iii) indicate the need to avoid sites with significant resource potential. However, these provisions specify resources which "are economically exploitable using existing technology under present market conditions" (emphasis added). Interpreted strictly, this could mean that a resource like oil shale need not be considered if a repository were to be licensed today. We believe that this provision should be broadened to include "reasonably foreseeable" technology and market conditions; this would be consistent with the approach used for other site characteristics.

5. In response to the specific questions asked by the Commission on page 31398, we wish to present the following replies to questions 1 through 4:

(1) The list of considerations adequately defines and identifies the relevant issues involved in disposal of HLW.

(2) The referenced draft rule will address the issues in an appropriate manner.

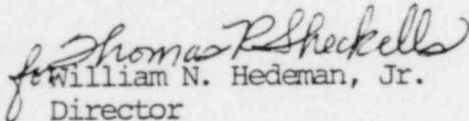
(3) The draft Environmental Impact Statement now in preparation by EPA in support of the draft environmental standards (40 CFR 191) will be less detailed than is required for an EIS supporting licensing of a HLW repository, and will be limited to a discussion of the health risks and the costs for disposal of HLW in specified model repositories. In order to avoid unnecessary duplication, we believe that the environmental impact statement to be prepared by NRC should deal with the specifics of implementation of the draft Technical Criteria. It should therefore examine implications of specific geologic and engineered alternatives which NRC believes would satisfy the Technical Criteria. The EIS should specifically address those areas where NRC judgments are operative in narrowing the choices available in the EPA standards, or where NRC interpretations are needed to define the range of available alternatives.

(4) NRC will need to review applicable sections of the proposed draft Technical Criteria to reflect comments which EPA expects to receive on its forthcoming generally applicable standards (40 CFR 191), especially those comments which may lead to changes in the final standards.

6. We anticipate that the proposed EPA standards will include a requirement that provision be made for recoverability of wastes. If this requirement is promulgated, the NRC draft Technical Criteria must provide for implementation.
7. Section 60.111 (a) (1) "Radiation exposure or releases during operation" should add the following: "... or such other standards as may be established by EPA".
8. Section 60.122 (b) (2), Potentially adverse natural conditions - geologic and tectonic, should include an additional item which reads as follows: "(viii) there is a uniqueness about the site that may substantially increase future exploration for purposes other than resources".
9. NRC and EPA should assure that the definition of "high-level waste" be identical in Section 60.2 and in the forthcoming EPA standards.
10. The numbering system used does not allow for easy reading of grouped and sequential ideas. Perhaps a number of additional subheadings would provide greater clarity.

We appreciate the opportunity to comment on the advance notice of proposed rulemaking and look forward to a continued, coordinated effort on this urgent national problem. Should you have questions concerning EPA's comments, please contact Ms. Betty Jankus of my staff (202) 755-0770.

Sincerely yours,


William N. Hedeman, Jr.
Director

Office of Environmental Review (A-104)