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MEMORANDUM FOR: John H. Austin, Chief
Decommissioning and Regulatory Issues Branch
Division of Low-Level Waste Management
and Decommissioning, NMSS

FROM: Margaret V. Federline, Chief
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SUBJECT: STATUS OF EPA'S HLW STANDARDS

Enclosed is a description of the status of EPA's development of its HLW standards, as requested in preparation for the Chairman's upcoming meeting with EPA Administrator Riley.

/S/

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Enclosure:
As stated

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STATUS OF EPA'S HLW STANDARDS

Background

-In July, 1987, a Federal Court remanded EPA's HLW standards for further consideration. The bases for the remand were:

-Inadequate explanation for different time periods for different parts of the standards (1,000 vs 10,000 years).

-Inadequate explanation for different protection levels in groundwater and individual protection standards (4 vs 25 mrem/yr).

-Inadequate opportunity for public comment on groundwater protection standards.

-EPA has decided to consider additional revisions when the standards are reissued.

-EPA has released four "working drafts" of its standards. The NRC staff has formally commented on Drafts 2 and 3. Informal comments were provided on the other two.

-NRC has repeatedly raised concerns about the fundamental technical basis underlying the containment requirements of the standards and urged a comparison with risk levels used as a basis for other safety standards. An objection to EPA's "assurance requirements" has also been raised based on jurisdiction.

-EPRI has hosted several workshops for discussion of EPA's working drafts.

-NRC staff has met four times with EPA to discuss specific issues of concern to the NRC and potential regulatory language to address those issues.

-EPA has promised to provide EPA's revised technical support documents to the NRC for review before seeking approval of the Office of Management and Budget for publication of proposed standards.

Status

-EPA has completed specific regulatory language for the standards which responds to previous NRC staff comments regarding the clarity of EPA's standards. The NRC staff is satisfied that EPA's language adequately addresses the NRC staff's concerns. (NRC staff concerns about the technical basis underlying EPA's standards have not yet been addressed.)

-EPA has offered the NRC staff an opportunity for an early review of portions of the technical support for the standards. The NRC staff intends to provide comments to EPA by Sept. 4. (The most substantive portions of EPA's technical support have not yet been received for review. The staff plans to prepare recommendations for the Commission on the acceptability of the revised standards and the technical basis when this review is complete.)

-EPA has asked its Science Advisory Board to review the status of scientific

information about the potential for gaseous radionuclide releases, including Carbon-14, from an unsaturated zone repository. The SAB met in June and in August, and will meet again in September to discuss a draft report on this subject.

-DOE commissioned seven items of technical work to be done to support development of EPA's HLW standards. Early drafts of the reports from those seven projects were provided to NRC and EPA for review. Because of the preliminary nature of these analyses, only informal NRC staff comments have been provided to EPA. Although NRC did not always agree with DOE's rationale, staff did not object to the general concepts proposed by DOE in most cases. The final reports of DOE's projects have now been completed, and the staff will observe a review by the National Academy of Sciences to be conducted Sept 23-24.

-In an August 12, 1992, letter to EPA, DOE reiterated its position that the HLW standards are unnecessarily conservative and reflect an unusually low level of risk when compared to other risks accepted by society. The staff has recently addressed this issue of stringency in an August 10, 1992, response to Commissioner Curtiss which indicates that annual individual risks, although strongly dependent on site-specific factors, are generally consistent with other EPA and NRC standards, including the NRC's safety goals for power plants.

Evaluation

-EPA staff has generally been very willing to consider NRC staff comments and recommendations. EPA is expected to adopt several improvements to the wording of its standards. NRC staff concerns about jurisdictional matters have not been addressed, as discussed below.

-EPA does not believe its standards are overly stringent. As noted, EPA intends to provide comparisons with the level of stringency imposed by other standards, but will not generally revise the release limits of the 1985 standards. NRC should continue to urge EPA to provide such risk comparisons to gain acceptance by the public and the technical community.

-It is unclear what EPA will do about the release limit for gaseous carbon-14. Some EPA staff members are searching for technical arguments that could be used to support retention of the 1985 release limit.

-To date, EPA has not been prepared to discuss jurisdictional issues. Several new features of EPA's working drafts deal with implementation or enforcement of EPA's standards, and the NRC has previously objected to such requirements or guidance on jurisdictional grounds.