

FEB 24 1993

89001794

Dade W. Moeller, Chairman
Advisory Committee on Nuclear Waste
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Dear Dr. Moeller:

Thank you for your letter to Chairman Selin dated February 5, 1993. Your letter provided the views of the Advisory Committee on Nuclear Waste (ACNW) regarding issues to be considered by the NRC in preparing for the National Academy of Sciences' review of environmental standards for the Yucca Mountain high-level waste site.

In general, I found your recommendations clear and helpful. In a few cases, however, my staff has had to interpret your recommendations in light of the discussions of the ACNW during its January 27 and 28 meeting. Therefore, the enclosure to this letter clarifies our understanding of the ACNW's views in an attempt to prevent any misunderstandings. Please advise me if our understandings are incorrect.

Again, thank you for the advice of the ACNW in this important area.

Sincerely,

B.J. Youngblood, Director
Division of High-Level Waste Management
Office of Nuclear Material Safety
and Safeguards

Enclosure:
Discussion of ACNW letter
of February 5, 1993

DISTRIBUTION (EDO-0008569)

Central File	BJYoungblood, HLWM	JJLinehan, HLWM	HLHP r/f
MVFederline, HLHP	RLBallard, HLGE	JHolonich, HLPD	NMSS r/f
CNwRA	LSS	LPDR & PDR	ACNW
BLynn, HLWM	CPoland, PMDA	HThompson, EDO	EDO r/f
DMorris, EDO	EBeckjord, RES	TMurley, NRR	EJordan, AEOD
JScinto, OGC			

010026

*SEE PREVIOUS CONCURRENCE

OFC	HLHP*		HLHP*		HLHP*		HLWM*	
NAME	DFehringer/cj		NEisenberg		MVFederline		JJLinehan	
DATE	02/23/93		02/23/93		02/23/93		02/23/93	
OFC	HLWM	E						
NAME	BJYoungblood							
DATE	02/24/93							

C = COVER

E = COVER & ENCLOSURE

N = NO COPY

G:ACNW.DJF

409.65
WM-1

NH18/11

9303010316 930224 PDR
PDR WASTE
WM-1

Dade W. Moeller, Chairman
 Advisory Committee on Nuclear Waste
 U.S. Nuclear Regulatory Commission
 Washington, D.C. 20555

Dear Dr. Moeller:

Thank you for your letter to Chairman Selin dated February 5, 1993. Your letter provided the views of the Advisory Committee on Nuclear Waste (ACNW) regarding issues to be considered by the NRC in preparing for the National Academy of Sciences' review of environmental standards for the Yucca Mountain high-level waste site.

In general, I found your recommendations clear and helpful. In a few cases, however, my staff has had to interpret your recommendations in light of the discussions of the ACNW during its January 27 and 28 meeting. Therefore, the enclosure to this letter clarifies our understanding of the ACNW's views in an attempt to prevent any misunderstandings. Please advise me if our understandings are correct.

Again, thank you for the advice of the ACNW in this important area.

Sincerely,

B.J. Youngblood, Director
 Division of High-Level Waste Management
 Office of Nuclear Material Safety
 and Safeguards

Enclosure:
 Discussion of ACNW letter
 of February 5, 1993

DISTRIBUTION EDO-0008569

Central File
 MVFederline, HLHP
 CNWRA

BJYoungblood, HLWM
 RLBallard, HLEN
 LSS

JJLinehan, HLWM
 JHolonich, HLPD
 LPDR & PDR

HLHP r/f
 NMSS r/f
 ACNW

BLynn, HLWM
 CPoland, PMDA
 HThompson, EDO
 DMorris, EDO
 EDO r/f
 EBeckjord, RES
 TMurley, NRR
 EJordan, AEOD
 JScinto, OGC

OFC	HLHP <i>[initials]</i>	<i>E</i>	HLHP	<i>E</i>	HLHP	<i>E</i>	HLWM	<i>E</i>
NAME	DFehringer/cj		NEisenberg <i>[initials]</i>		MVFederline		JJLinehan	
DATE	02/23/93		02/23/93		02/23/93		02/23/93	
OFC	HLWM							
NAME	BJYoungblood							
DATE	02/ /93							

C = COVER

E = COVER & ENCLOSURE

N = NO COPY

G:ACNW.DJF

Discussion of ACNW Letter of February 5, 1993

1. Paragraph a of page 1 interprets the Energy Policy Act of 1992 as providing the flexibility for EPA to set generally applicable standards which would apply to the Yucca Mountain site. It recommends that EPA's standards, as well as the NRC's repository regulation, 10 CFR Part 60, should not be made site-specific. We understand this recommendation to mean that EPA and NRC should develop generic regulations, even though the intended application will be for the Yucca Mountain site.

2. Paragraph b at the top of page 2 recommends different standards (or at least different bases for standards) for different times after waste disposal. In particular, this paragraph recommends reliance on institutional controls for an initial period. We interpret this recommendation as a general endorsement of the recommendations of the British National Radiological Protection Board, but not as a contradiction of the ACNW's views (pages 3 and 4) regarding post-closure oversight of a HLW repository. Specifically, we understand this recommendation to mean that short-term reliance on institutional controls might be appropriate for some types of waste disposal, but long-term reliance on such controls is not appropriate for disposal of HLW. Additionally, this comment is not a recommendation for development of numerical performance standards for the third (very long-term) period of time after disposal.

3. Paragraph b at the bottom of page 2 argues that a health-based standard based upon doses to individuals "would place an annual, versus cumulative, limit on permissible doses to members of the public." Here, we understand "cumulative" to refer to the 10,000-year projections of impacts used by EPA to derive the 1985 standards. The ACNW's reference to an "annual, versus cumulative limit" would not preclude a regulatory restriction on the lifetime dose or risk to which an individual member of the public might be exposed.

4. Paragraph c on page 3 notes that determining compliance with a release limit standard through environmental monitoring would be very difficult. We understand the difficulty to be the long time period of concern for HLW disposal. Since determining compliance by monitoring would be equally difficult for a dose- or risk-based standard, this comment is not a suggestion that monitoring is an acceptable way to demonstrate compliance for such a standard.

5. Paragraph c at the bottom of page 4 says that risk-based standards for individual members of the public "should not apply to public exposures that occur as a result of actions by intruders who bypass all the repository barriers." We understand this to mean that the dose limits should not apply to exposures of the intruder(s), but that potential exposures of other members of the public would still be required to meet the established dose (or risk) limits. Additionally, we understand this recommendation to mean that, when estimating potential exposures to other members of the public, it should be assumed that intruders will recognize that an intrusion has occurred and will take appropriate remedial actions.

6. Paragraph d on page 5 recommends that potential intrusions be considered outside the normal evaluation of repository safety in a manner similar to consideration of sabotage at a nuclear power plant. We do not understand this to be a recommendation opposing numerical limits on the consequences of potential intrusions. Rather, it is a recommendation for standards and compliance evaluations completely separate from the standards and evaluations for potential natural disruptions.