

July 13, 2000

Dr. Frank M. Lenz
Chartwell Manor
HC-01, Box 207-Z
Marquette, MI 49855-9706

Dear Dr. Lenz:

I am responding to your letter, dated June 7, 2000, to John Greeves, Director, Division of Waste Management, U.S. Nuclear Regulatory Commission (NRC). Thank you for sending us a copy of your research report. Your letter and report were reviewed and discussed among NRC staff. Mr. Greeves asked me to respond to your proposed plan to dispose of nuclear waste by emplacement in the Aleutian or other deep trenches.

In the 1970's and into the 1980's, the U.S. Department of Energy (DOE) began an investigation of alternative means of disposal of radioactive waste from commercial activities, such as electricity production by nuclear-fueled generators. One of the alternatives considered was deep oceanic disposal in tectonic trenches. This approach, as well as other off-land (and even, off-planet) disposal systems, was evaluated and presented for public review and comment (U.S. Department of Energy, "Draft Environmental Impact Statement, Management of Commercially Generated Radioactive Waste," DOE/EIS-0040D, April, 1979). I note that in response to public comments, in October 1980 DOE stated on page 360 of the Final Environmental Impact Statement (see Attachment) that "...the most unpredictable regimes in the oceans are the trenches, and for that reason have been removed from consideration..."

In addition, in 1982 the U.S. Congress acted on the national need for disposal of high-level radioactive waste, such as the spent fuel from nuclear power plants, and chose deep geologic disposal as the preferred method. In the Nuclear Waste Policy Act, Congress gave the NRC the responsibility for evaluating the DOE's license application for geologic (land-based) disposal of high-level radioactive waste. DOE is considering a site at Yucca Mountain, Nevada for disposal of high-level waste (for example, "Viability Assessment of a Repository at Yucca Mountain," 4 Volumes, DOE/RW-0508, December 1998).

Finally, the DOE is the primary source of information on alternative methods of disposal, such as the sub-seabed trench option that you described in your letter. Naomi Lewis in the DOE has been identified as a source of such information. She may be reached by mail at DOE, Yucca Mountain Site Characterization Office, P.O. Box 30307, North Las Vegas, NV 89036, by phone at 1-800-225-6972, or on the Internet at <http://www.ym.gov>.

Dr. F. M. Lenz

2

Your thoughtful interest in nuclear waste disposal is greatly appreciated. I trust that this response is helpful. If you have any questions that you believe the NRC staff might help you with, please contact me at the above address, by e-mail (DJB@nrc.gov), or by phone at 301-415-7284.

Sincerely,

/ra/

David Brooks, Chief
Repository Site Section
High-Level Waste Branch
Division of Waste Management
Office of Nuclear Material Safety and Safeguards

Attachment: Final Environmental Impact Statement,
Management of Commercially
Generated Radioactive Waste

cc: John Greeves

Dr. F. M. Lenz

2

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