

March 17, 2004

The Honorable Jeff Bingaman
United States Senate
Washington, D.C. 20510-3102

Dear Senator Bingaman:

On behalf of the U.S. Nuclear Regulatory Commission (NRC), I am responding to your letter dated February 9, 2004, in which you expressed concerns about NRC's package certification requirements that would be applicable to a new transuranic waste transportation package, TRUPACT-III. The Commission recently revised its regulations for transportation in 10 CFR Part 71 (published in the *Federal Register* as 69 FR 3698; January 26, 2004) to no longer require double containment for transportation packages, like TRUPACT-III, designed to ship plutonium in excess of 20 curies. In your letter, you request that any approval of TRUPACT-III be based on a mutually verifiable computational and full-scale testing program whose results are available to the public.

NRC's regulations (10 CFR 71.41) permit transportation packages to be approved based on either full- or scale-model testing, or other methods of demonstration (e.g., computer modeling) found acceptable to the Commission. The methods used to demonstrate compliance with the transportation package approval requirements are proposed by an applicant as part of the application for NRC certification. The NRC technical staff, as part of its safety review, determines if the method(s) chosen by an applicant are adequate to demonstrate compliance with 10 CFR Part 71. All documents involved with the certification process are available for public review. The U.S. Department of Energy (DOE) has not yet submitted an application for approval of the TRUPACT-III, so the NRC staff has not determined if the demonstration methods DOE will suggest (which may or may not include full-scale testing) are adequate to demonstrate compliance with 10 CFR Part 71. We have, however, shared your letter and views on full-scale testing with the DOE staff that will be responsible for preparing and submitting an application for TRUPACT-III.

In your letter you referred to the TRUPACT II design as a "double-walled container." The previous NRC requirement for double containment, however, is not a requirement for the container to have double walls. The double containment aspect of the TRUPACT II design is accomplished by the use of two "o" rings on the lid of a single-walled container. Depending on the final TRUPACT III design submitted, one difference in the design could incorporate one "o" ring rather than two. Like the TRUPACT II design, the TRUPACT III design may likely incorporate a single wall, not double walls, to meet NRC safety requirements, which were recently revised to allow wider use of U.S.-designed transportation casks. Even though the revised NRC regulations eliminate the requirement for double containment, TRUPACT-III would still be required to meet the safety standards for a Type B transportation package. These requirements have been shown to provide protection against very severe accidents and are the same requirements used to certify spent fuel casks and high-level-waste transportation packages. The NRC will learn of the specific details of the TRUPACT III design when DOE submits the appropriate application.

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Finally, I want to assure you that the Commission shares your long-standing interest in the safety of transuranic waste shipments to the Waste Isolation Pilot Plant (WIPP). NRC has been actively involved in the approval of transportation packages used to ship transuranic waste to WIPP, such as TRUPACT-II, since 1988, and stands fully prepared to meet its future commitments under the WIPP Land Withdrawal Act (Public Law 102-579), regarding the approval of transportation packages for WIPP shipments.

If you have any questions, please contact Mr. Dennis Rathbun of my staff. Mr. Rathbun may be reached on 301-415-1776.

Sincerely,

/RA/

Nils J. Diaz

cc: Alice Williams, DOE