April 30, 2004

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

## Dear Senator Bingaman:

On March 17, 2004, I responded to your February 9, 2004 letter about the U.S. Nuclear Regulatory Commission's (NRC's) revised package certification requirements that would apply to the approval of a new transuranic waste transportation package, TRUPACT-III. Your letter also requested that any approval of TRUPACT-III be based on a mutually verifiable computational and full-scale testing program that is open to the public. My response indicated that the NRC would learn of the specific details of the TRUPACT-III design when the Department of Energy (DOE) submitted the appropriate application.

Since my previous letter to you, the NRC has received and docketed an application from Packaging Technology, Inc., on behalf of DOE, for approval of the TRUPACT-III transportation package design. The application requests approval of TRUPACT-III based on finite element computer modeling and a series of half-scale drop (impact) tests. Depending on the quality and completeness of the application, the NRC staff anticipates that its review of the TRUPACT-III design will take approximately 12 months. The application is publicly available under NRC docket number 71-9305. The results of the NRC's evaluation will also be made publicly available, and meetings with the applicant during the review process will be formally announced and open to the public.

I would also like to take this opportunity to clarify some information provided in my March 17, 2004 letter concerning the TRUPACT-II and TRUPACT-III package designs. The March 17, 2004 letter stated that the TRUPACT-II design was not a "double-walled" container, meaning that the TRUPACT-II design did not consist of a Type B approved package contained within another Type B approved package. I am providing a more complete description of the TRUPACT-II design as it relates to the double containment requirements. The double containment aspect of the TRUPACT-II design is achieved by the use of a thin-walled steel container placed within a thick-walled outer package, each sealed separately with a lid using a leak-tight "o" ring, that together form a single unit that must meet the safety standards for a Type B transportation package in 10 CFR Part 71. The significance of this design is that the inner container itself is not approved as a stand-alone transportation package. The proposed TRUPACT-III design would use a single thick-walled package sealed with one leak-tight "o" ring. The thick walls of the TRUPACT-III package consist of composite layers of steel, foam, and wood, and the overall wall thickness of the TRUPACT-III container design appears to be comparable to the total combined wall thicknesses of both the inner container and outer package of the TRUPACT-II design. Enclosed is a copy of the most recent NRC staff presentation on this topic, which provides more detailed information on the TRUPACT-II and TRUPACT-III designs.

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 the 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 me or have your staff contact Mr. Dennis Rathbun, NRC's Director of Congressional Affairs.

Sincerely,

## /**RA**/

Nils J. Diaz

Enclosure: As stated