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Department of Energy
Washington, DC 20585

JAN 11 1991

Mr. Charles E. MacDonald
Chief, Transportation Branch
Division of Safeguards and Transportation, NMSS
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Dear Mr. MacDonald:

In response to your request dated December 20, 1990, for additional information on the maintenance and quality assurance procedures for the LP-50 package, the following information is provided:

The ten product containers in question have already been loaded with the tritium gas payload, and the shipper in the UK does not have the pumping or storage facilities necessary to unload the tritium to perform the pressure and leak tests specified in the SARP. These tests, therefore, cannot be performed prior to the proposed shipment. However, there are several factors associated with these particular containers that provide indirect indication of their structural soundness. The leaktightness of the containers will be proven prior to shipment by means of item 5 below.

1. All of the product containers were successfully pressure and leak tested just prior to their current loading, which took place between May 26 and August 16, 1989 (see the November 8, 1990 supplement to our application). Therefore, on the proposed latest shipment date of February 28, 1991, the containers will have been last tested between 18 and 21 months prior to shipment.

2. Since loading, the containers have been stored indoors and have not experienced temperature extremes or been subjected to any unnecessary or rough handling.

3. The product containers have been stored inside their aluminum liners, thus precluding any possibility of exposure to corrosion-inducing chlorides.

4. On the proposed latest shipment date of February 28, 1991, the maximum calculated pressure in the containers will be 719 Torr, significantly less than the maximum permitted fill pressure of 1200 Torr or the maximum normal operating pressure of 1507 Torr specified in Section 2.4.4 of the SARP. The maximum calculated pressure is judged to be sufficiently low to justify extending the testing interval by six to nine months.

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b. In preparation for shipment, prior to enclosure in the container overpack, the space between the product container and the aluminum liner will be evacuated and checked for contamination. Detection of contamination in this test will exclude the package from shipment.

If you need any further information, please do not hesitate to contact Steve Primeau of my staff at 353-4210.

Sincerely,

Jacques Read
Acting Director
Division of Quality Verification
and Transportation Safety

cc:
B. Wilson, SR
R. L. Chandler, SR
R. C. Yates, DP-143