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November 25, 1997

U.S. Nuclear Regulatory Commission Attn: Document Control Desk Washington, D.C. 20555

Reference: OMB No. 3150-0012 NRCB: 97-02

Subject: 10 CFR 71.73(c)(3) Puncture test FOR COC 5984 and COC 6280 Type B Shipping Containers for Radioactive Materials

We will address this response in accordance with the titles as listed in the reference document. This response is under affirmation under provisions of Section 182a. Atomic Energy Act of 1954 as amended and a copy is being submitted to the Director of the Spent Fuel project Office.

Discussion

All engineering calculations (copy enclosed) were based on a 1 meter (40") free drop on a 6" diameter unyielding surface with the long axis in a vertical configuration and sufficient height that all deflection of the packages would be on this 6" diameter unyielding surface, not on the surrounding support structure. This meets the criteria of 10CFR 71.73 (c)(3) Puncture Test.

Requested Actions

Both COC 5984 and 6280 packages were evaluated to be in compliance with 10 CFR 71.73 (c)(3) by engineering analysis.

The analysis the 6280 package addresses 3 possible conditions:

- a. 40" free drop on side wall of container
- b. 40" free drop on ends of container outside of the 4" diameter central steel tube ends.

c. 40" free drop on ends of container in area of central 4" diameter steel tube ends.

The analysis of the 5984 package for 40" free drop on end shows only 0.73" deflection. Side drop will be virtually identical. Please note that the 5984 package analysis did not include calculations for the deflection of the 12 gage steel outer cover which will further reduce the calculated deflection.

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Based on the above referenced engineering calculations both the COC 6280 and COC 5984 meet the requirements of 10 CFR 71.73(c)(3) and the certificates for these packages should remain valid in their present form.

If I may forward additional information, please advise. I apologize for the delay in forwarding this information which was caused by inexcusability to our computer system which was being upgraded with replacement of both hardware and software.

Sincerely,

J. L. Shepherd

J. L. Shepher President

cc: Charles J. Haughney Director Spent Fuel Project Office Office of Nuclear Material Safety and Safeguards Washington, D.C. 20555