NEUTRON PRODUCTS inc

22301 Mt. Ephraim Road, P.O. Box 68
Dickerson, Maryland 20842 USA
301/349-5001 TWX: 710-828-0542

March 7, 1983

Mr. John Kenneman, Chief
Materials Radiological Protection
Section
Fuel Facility and Materials Safety
Branch
U.S. Nuclear Regulatory Commission
631 Park Avenue
King of Prussia, PA 19406

Dear Mr. Kenneman:

This is to confirm my conversation with Ms. Ann Tiskus, of this date, that the date of installation at Ellis Fischel State Cancer Hospital, Columbia, Missouri, has been changed from March 12, 1983 to March 13, 1983.

If you have any questions, please do not hesitate to call me.

Sincerely,

NEUTRON PRODUCTS, INC.

Cathy I. Collins

Cathy I. Collins
Teletherapy Records

/cc

Region I

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neutron products inc

22301 Mt. Ephraim Road, P.O. Box 68
Dickerson, Maryland 20842 USA
301/349-5001 TWX 710-828-0542

June 3, 1983

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NMSS
MAIL SECTION
DOCKET CLERK

Mr. Charles E. MacDonald, Chief
Transportation Certification Branch
Division of Fuel Cycle and Material
Safety, NMSS
U.S. Nuclear Regulatory Commission
Washington D. C. 20555

Dear Mr. MacDonald:

It is the purpose of this letter to inform you of an inadvertent overloading of our shipping cask, Certificate of Compliance Number 5364.

On February 22, 1983, Neutron Products shipped approximately 407,300 curies in the Mode II shipping container which is licensed for a maximum of 400,000 curies. The error was the result of miscalculations of the generation rate of the first cobalt-60 targets irradiated in the Department of Energy's Advanced Test Reactor (ATR) in Idaho Falls, Idaho.

There are no health or safety implications associated with this "overloading". The maximum dose rate readings on the shipping trailer was 11 mR/hr and six feet from the trailer was 2 mR/hr.

The first indication of the error was discovered on June 1, 1983 when a corrected estimate of our radioactive material inventory was being prepared based on our calibration of the returned targets. The validity of the error was checked on June 2 and 3, 1983. Generally our calibrations are accurate to within ± 5%: hence, there was somewhere between 387,000 and 427,000 curies in the returning targets. At the time of shipment it was believed that the actual content of the shipment was somewhere between 350,000 and 400,000 curies, but not in excess of 400,000 curies. Accordingly, the Department of Energy used 398,000 curies on the Radioactive Shipment Record.

In view of the data generated from these shipments, we believe that it is very unlikely that this problem will occur in future shipments from the ATR. In order to protect against a recurrence, we will henceforth allow a minimum margin of 5% on future shipments where calculated rather than calibrated values must be used.

Sincerely,

NEUTRON PRODUCTS, INC.

Carmine Smedira

Carmine Smedira
Vice President

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