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Docket No. 03037620

License No. 45-31299-01

James P. Dwyer, Chief
Commercial and R&D Branch
Division of Nuclear Materials Safety
United States Nuclear Regulatory Commission

**SUBJECT: REQUEST FOR INFORMATION REGARDING POSSIBLE CONTAMINATION
 FOUND IN A GAMMACELL 40 SELF-SHIELDED IRRADIATOR**

Dear Mr. Dwyer,

Best Theratronics has done a preliminary investigation into the contamination incident reported by the New York State Department of Health (NRC Event Report No. 45480).

The reported incident occurred when the unit was being dismantled for a hardening upgrade. Under normal operating conditions including preventive maintenance this part of the device would not be accessible. There are no reports of this problem detected by users through routine wipe tests of their units.

These sources were manufactured by Oak Ridge National Laboratory (ORNL) until approximately 1989 and are installed exclusively in the Gammacell 40 with serial numbers 1 to 121 inclusive. Two of these units were refurbished with new sources (# 57 and 120). The C-161 Type 8 source was not used in any other model.

After the discovery of the problem in New York, Best Theratronics subsequently dismantled four other units within this serial range during routine preventive maintenance and they were found to be well within acceptable limits. Further to this, in December 2009 the Department of Energy modified the design of the hardening upgrade so that the area where the contamination was discovered would no longer be accessible to the installers and the hardening upgrade could proceed for all serial numbers.

On December 2, 2009 Best Theratronics sent out a safety bulletin to all customers worldwide to advise them to exercise caution when dismantling. It is our belief that there is no potential hazard to the user and/or general public and that their units can continue to be used safely with standard radiation safety procedures (i.e. wipe tests).

As per the asset purchase agreement between Best and MDS Nordion, Best did not take liability for units installed prior to the asset purchase agreement date but does still provide service on these units. Any further investigation of this source would need to be performed by MDS Nordion. Best Theratronics is available and willing to assist in any further evaluation.

Please feel free to contact me if you have any other questions or concerns.

Sincerely,

A handwritten signature in black ink, appearing to read 'Mike de van der Schueren', written in a cursive style.

Mike de van der Schueren
Director, Compliance
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cc:

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