Tech/Ops

Radiation Products Division
40 North Avenue
Burlington, Massachusetts 01803
Telephone (617) 272-2000

26 April 1979

Director
Office of Inspection and Enforcement
U S Nuclear Regulatory Commission
Washington, DC 20555

Dear Sir:

This letter is written to provide additional information relating to the report filed on 23 March 1979. On that date we reported that a wipe test of an iridium-192 source in the possession of the TEREX Division of General Motors Corporation, Hudson, OH revealed the presence of 0.114 microcurie of removable contamination.

On 22 March, a Senior Radiological Technician from our facility went to the GM TEREX Division to package the equipment involved and to prepare this equipment for shipment to our facility. The equipment and contaminated source assembly had been used in two facilities of the GM TEREX Division, in Hudson, OH and in Cleveland, OH. Our technician went to both facilities and made a series of smear tests for contamination which were returned to our facility for analysis.

Analysis of twenty five smear test samples revealed two with detectable radioactivity. A smear test of a workbench in the Cleveland facility revealed the presence of 0.0006 microcurie of removable contamination. A smear test of a cart in the Cleveland facility revealed the presence of 0.0036 microcurie of removable contamination.

As a result of these tests, we contacted Applied Health Physics, Inc. of Bethel Park, PA to thoroughly survey these facilities and decontaminate them as necessary. On 24 March 1979, a representative of Applied Health Physics went to the Cleveland facility, surveyed the facility and decontaminated it. The cart upon which the radiographic exposure device had been stored revealed detectable levels of fixed contamination. GM TEREX Division shipped that cart to our facility for disposal.

On 27 March 1979, the representative of Applied Health Physics went to the Hudson, OH facility. His surveys revealed no detectable radioactive contamination.

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As a result of these findings, we recommended to GM TEREX Division that the people involved with this equipment be subjected to whole body counting. This was done on 2 April 1979. We have been informed that whole body counting revealed no detectable radioactivity above natural background.

The contaminated source assembly was received at our facility on 28 April 1979. A visual examination revealed two defects in the weld zone of the source capsule. One appeared as a fine line approximately two millimeters long. The other appeared as a small hole approximately one millimeter long and one-half millimeter wide.

As a result of the above occurrence, we expanded our field leak test program. We requested customers to perform leak tests of 530 sources which were fabricated between 1 October 1978 and 31 January 1979. To date, 287 sources (approximately 55%) have been tested. Other than the GM TEREX Division source, none of these tests revealed the presence of 0.005 microcurie or more of removable contamination.

If we can provide any additional information, please feel free to contact us.

Sincerely,

John J. Munro III
Technical Director

JJM/fb

xc: Director, OIE, Region I, USNRC
Mr. J. Glenn, OIE, Region I USNRC
Mr. R. Baker, GM TEREX
Tech/Ops Isotope Committee

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