

December 22, 1987

U.S. Nuclear Regulatory Commission
Region 1
613 Park Avenue
King of Prussia, Pa. 19406

Reference: License 37-02-006-05

Dear Sir/Madam:

During routine leak testing on 12/21/87, as set of 3M Brand Nuclear Static Eliminators (Model 205, SN A38309 and Model 504, SN A25974) containing 5 and 10 mCi of Polonium-210 were discovered to be leaking.

A thorough wiping of the 10 mCi source revealed the presence of about 57 dpm of removable polonium-210 and the 5 mCi source showed about 1292 dpm. Both of these levels calculate out to an activity below the 0.005 uCi indicated in item 13, D&E of our byproduct license (37-02006-05) which requires reporting to NRC. However, further testing conducted on 12/22/87 indicated that there was 24,142 dpm (approx. 0.01 uCi) of removable contamination on the shelf where these sources had been stored. I believe that this situation is in a grey area in terms of whether or not reporting of this leak is required, but we decided to report it to be on the safe side.

Both sources have been double sealed in plastic bags and are being prepared for return to 3M for disposal. There are no other sources of this type in our position at this time.

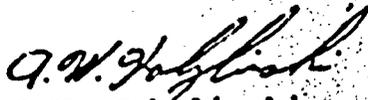
The cause of the leak is under investigation. Unlike a previous, similar situation in which a source may have been exposed to temperature conditions greater than those recommended by the source manufacturer, these sources were reportedly not exposed to any unusual environmental conditions. Members of our engineering staff are in touch with representatives from 3M to try and determine a possible cause of the failure of the source sealing material. 3M has indicated that the polonium-210 itself is permanently encapsulated in microspheres that are biologically inert, thus minimizing the hazard associated with possible material contact by our personnel.

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Questions or comments regarding this report should be directed to the undersigned at (215) 354-1085.

Sincerely,



A.W. Kobylinski
Senior Industrial Hygienist
Radiation Safety Officer

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