



OFFICE OF THE  
CHAIRMAN

UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555

November 20, 1979

The Honorable Charles McC. Mathias  
United States Senate  
Washington, D.C. 20510

Dear Senator Mathias:

This is in response to your letter of August 30, 1979 regarding the radioactive contamination at the National Bureau of Standards (NBS) Research Reactor at Gaithersburg, Maryland.

Following the discovery of surface contamination near the National Bureau of Standards reactor building on August 28, 1979 by an NRC inspector, NBS initiated a comprehensive program of area surveys, and sampling of soil and drainage areas to identify the extent and cause of the contamination, and to implement necessary cleanup activities. Analysis of the contamination indicates that a small amount of Cobalt-60 (about 2.3 millicuries) found at a number of locations is responsible for the contamination.

Enclosed is a report prepared by an ad hoc committee at NBS entitled, "Report on the Nature and Source of Radioactive Material Found at the NBS" which discusses NBS' actions regarding the Cobalt-60 contamination. Analysis of the Cobalt-60 contamination indicates that it is in the form of particles each less than 100 microns in size and could be from the stellite embedded in stainless steel. Stellite is a metallic material put on the surface of other metals for durability and hardness and was flame-sprayed on the wear rings of the primary system pump impellers of the NBS reactor. The NBS ad hoc committee believes that the most likely release of the radioactive particles resulted when a heat exchanger was removed from the NBS reactor. This heat exchanger has now been removed from the NBS reactor site and has been sent to a radioactive waste burial ground for disposal.

Sincerely,

Joseph M. Hendrie  
Chairman

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Enclosure:  
As Stated

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