THE CLEVELAND CLINIC FOUNDATION
9500 Euclid Avenue Cleveland, Ohio 44106 U.S.A.

Steven J. Aron, Jr., Ph.D. Radiation Safety 216/444-6645

Darrel Wiedeman U.S. Nuclear Regulatory Commission, Region III Nuclear Materials Safety Section No. 1 799 Roosevelt Road Glen Ellyn, Illinois 60137

February 12, 1987

Dear Mr. Wiedeman:

As required by 10 CFR 20.403 (a) (2), the release of radioactive ashes from an incinerator room at the Cleveland Clinic Foundation was reported and discussed with you as notification of incident on February 6, 1987. Relative to 10 CFR 20.402, our investigation shows that the loss of this licensed material does not appear to be a substantial hazard to persons in unrestricted areas.

The attached Radiation Safety Incident Report is sent in compliance with 10 CFR 20.403 (d)(2). Also, copies of this report are being sent to all Radioisotope Committee members as indicated and other responsible Foundation personnel.

Should you require any additional information, please don't hesitate to call me at (216) 444-6645.

Sincerely,

Steven J. Aron, Jr., Ph.D. Radiation Safety Officer

Attachment: Radiation Safety Incident Report

cc: Raymundo T. Go, M.D. Gerald Hoeltge, M.D.

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TO: All Isotope Committee Members

FROM: Steven J. Aron, Jr., Ph.D.

Radiation Safety Officer

DATE: February 12, 1987

SUBJECT: Radiation Safety Incident Report

Late on February 4, 1987, the Building Services employee responsible for handling radioactive ashes in the West Clinic incinerator admitted to the Radiation Safety Officer that he has been throwing out radioactive ashes as normal trash since November of 1986 because he did not have any empty drums.

This same employee had received instructions on October 28, 1986, telling him that this was expressly forbidden. Moreover, Radiation Safety had made empty drums available for this use.

Testing of radioactive ashes from drums which have been saved for decay showed the presence of Cr-51 to be less than 500 times the Maximum Permissible Concentration for an unrestricted area. However, tests for I-125 show that the release of this radioisotope to be in a range of approximately 2,600 - 13,400 times the Maximum Permissible Concentration for an unrestricted area.

As soon as this information was learned, a phone call was immediately made to the U.S. Nuclear Regulatory Commission as required by the Code of Federal Regulations, 10 CFR 20.403 (a) (2). Also, personnel were dispatched to the dump site to survey the area and retrieve as much as possible of the radioactive ashes.

On arrival at the dump site, surveys were performed using Geiger Mueller meters with thin window pancake detectors and speakers. All radiation levels were found to be less than twice background.

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The person in charge at the dump site told CCF personnel that 2 feet of earth are placed on top of all materials which are dumped each day. Instrument readings verify that all radiation exposures are at background levels.

At 1 drum per month, it is estimated that at maximum concentration of I-125, approximately 1,680 microcuries of this material were released to the dump site and were subsequently buried. This radioactive material will remain buried for at least 10 half lives and more, after which it will return to a stable state and no longer be considered radioactive. The exposures of workers at the site is not expected to be more than that associated with natural background radiation levels.

To prevent this incident from happening again, the Building Services supervisor has reviewed the entire affair with the person responsible for the release of the ashes and a reprimand has been given.