



## The Children's Hospital • Boston

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Office of Research Administration

March 21, 1988

Mr. John D. Kinneman, Chief  
Nuclear Materials Safety Section A  
Division of Radiation Safety and Safeguards  
Nuclear Regulatory Commission  
Region 1  
475 Allendale Road  
King of Prussia, PA 19406

REF: Docket Nos. 030-08021  
030-11864  
License Nos. 20-09568-17  
20-09568-18

Dear Mr. Kinneman:

I am responding to your letter of February 23, 1988 regarding Routine Inspection No. 87-001 conducted on August 5 and 6, 1987. As a result of that inspection four severity level IV violations were identified which require a response as to the corrective action taken regarding the violation.

The first violation concerned investigators who performed iodinations using more than 1000 microcuries of iodine-125 and did not have thyroid bioassays within thirty days of the iodination. In response to this violation those researchers who were in violation at the time of the inspection were individually notified by the Radiation Safety Officer that they were in violation of NRC regulations and to report for thyroid scans immediately or face suspension from further iodination work until the required scan is done. Those individuals reported for thyroid scans.

To prevent further violations of this nature, a general notice was sent to all researchers who perform iodinations reminding them of the thyroid scan requirement. Also, notices have been posted on the iodination hood as a further reminder. In addition, notices are sent to individuals two weeks after they have performed an iodination reminding them to report for a scan by a certain date which would ensure compliance with this

requirement. Since implementing this procedure, no researcher has missed having the required scan. In the event that a scan is missed by a researcher, the permit holder that he/she works for will be sent a notice with a copy to the Director of Research Administration stressing the importance of maintaining compliance with NRC regulations and the suspension of iodination work until the scan has been made. We are now in compliance.

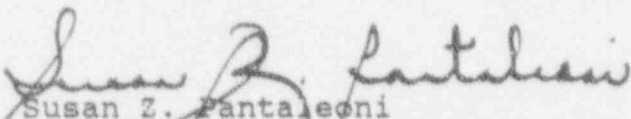
The second violation concerned a survey meter in the Nuclear Medicine Department that had not been calibrated since January 1986, an interval of greater than one year. The meter has been calibrated. Further, the meters in Nuclear Medicine are checked during each weekly survey by radiation safety technicians to ensure they are calibrated within one year of the date last calibrated. We are now in compliance.

The third violation concerned personnel in the Nuclear Medicine Department as well as personnel in a research laboratory failed to wear a laboratory coat while handling radioactive materials. The individuals involved have been trained on the required use of laboratory coats when handling radioactive materials. To prevent further violations of this type, all lab personnel have been reminded of the lab coat requirement. Also, new employee training includes instruction concerning wearing lab coats.

The fourth violation concerned the purchase of radioactive material by a permit holder in excess of the permit possession limit. The permit involved has been amended to accommodate the additional phosphorous 32 needed to carry out research projects. To prevent further violations of this type, careful attention is paid to all purchase orders involving radioactive materials. Each order is checked against the permit possession limit and previous purchases to ensure limits are not exceeded. We are now in compliance.

In light of the corrective actions already taken by The Children's Hospital regarding violations identified during the inspection of August 5 and 6, 1987, I can now assure you that we are in full compliance.

Sincerely,



Susan Z. Pantaleoni  
Director of Research Administration

cc: S.T. Preves, M.D., Chairman, Radiation Safety Committee  
Ronald Amoling, Radiation Safety Officer