University of Cincinnati Medical Center University Hospital

Eugene L. Saenger Radioisotope Laboratory Mail Location #577 TELEPHONE (513) 872-4282



234 Goodman Street Cincinnati, Ohio 45267-0577

January 10, 1982

W. L. Axelson, Chief
Nuclear Materials, Safety
and Safeguards Branch
Nuclear Regulatory Commission
Region III
799 Roosevelt Road
Glen Ellyn, Illinois 60137

Dear Mr. Axelson:

In response to your letter of December 18, 1984 concerning the Severity which includes a Notice of Violation for the University of Cincinnati, License #34-6903-05, we are submitting the required written statement for each item of non-compliance.

1. The sealed source was opened by a radiation safety technologist under conditions of poor visibility. This accident could have happened at any installation in the country where the seeds would have been placed in plastic tubing which becomes discolored from use and an attempt made to retrieve the seeds and reutilize them because of their cost. These concerns have been shared with the manufacturer of the seeds who has agreed that it could be unwise for any of the high activity iodine-125 (40 mCi) seeds to be reutilized within a hospital since this problem could occur again anywhere.

In addition, the Radiation Safety Committee has suspended use of high activity iodine-125 seeds for brachytherapy until certain health physics aspects of these seeds are further clarified. Furthermore a new brachytherapy storage room has been constructed to provide greater isolation between the iodine-125 source and preparation area and the storage and preparation of other sources. A fume hood has also been installed in the new iodine-125 room to provide greater safety for workers in preparing brachytherapy iodine-125 sources. Formal instruction will continue to be provided to all radiation therapy technologists on the handling of iodine-125 seeds of any activity, including practice sessions loading dummy iodine-125 seeds.

2. 10 CFR 20.201(b) requires each licensee to make such surveys as may be necessary and reasonable under the circumstances to evaluate the extent of radiation hazards that may be present. As corrective action a new brachytherapy room has been designed, built, and now occupied, which includes a special area and hood for iodine-125 and provides a low level

8502120291 850206 NMS LIC30 34-06903-05 PDR W. L. Axelson January 10, 1985 Page 2 background. In addition, the instrument for surveying this room is appropriate for detecting low levels of iodine-125 contamination in the new iodine-125 brachytherapy source preparation room. Full compliance with license condition 15 and 10 CFR 20.201(b) is now in effect. Sincerely, Robert S. Daniels, M.D. Senior Vice President, Medical Center Dean, College of Medicine RSD:snm (2)