ALBERT EINSTEIN MEDICAL CENTER

Northern Division
York and Tabor Roads
Philadelphia, Pennsylvania 19141

Martin H. Goldsmith
Senior Vice President, A.E.M.C.
General Director, Northern Division
456-6010

August 19, 1982

Mr. Thomas T. Martin, Director
Division of Engineering and Technical Programs
U.S. Nuclear Regulatory Commission
Region I
631 Park Avenue
King of Prussia, Pa. 19406

Dear Mr. Martin:

In response to your letter dated August 3, 1982, enclosed please find Plans of Correction with anticipated dates of completion for the four violations cited as a result of the Nuclear Regulatory Commission inspection held January 28th and 29, 1982.

If you have any questions regarding our action plans, please contact Mr. Alan Baker, M.S. at 456-6291 or Mr. Michael Nunno, M.S. at 456-6292.

Thank you.

Sincerely,

Martin Goldsmith
Senior Vice President and
General Director

MG:jbm
cc: Bernard Shapiro, M.D.
Alan Baker, M.S.
Michael Nunno, M.S.
Kate Flynn
attachment

ALBERT EINSTEIN MEDICAL CENTER
NORTHERN DIVISION

PLAN OF CORRECTION

A. 10 CFR 20.101 limits the exposure to the extremities of an individual to 18.75 rem per calendar quarter.

Contrary to the above, an individual working in the restricted area received an extremity dose of 25.87 rem during the fourth calendar quarter of 1981. A major portion of this exposure was received during the painting of brachytherapy sources on October 27, 1981.

Plan of Correction

Exposure to the extremities of an individual will be limited to 18.75 rem per calendar quarter.

The Radiation Safety Staff will closely monitor the exposure per individual by reviewing exposure reports monthly on receipt.

The specific reason for this violation has been stated as a separate violation. See violation B and plan of correction.

Date of Compliance March 24, 1982

B. 10 CFR 20.201(b) requires that each licensee make such surveys as may be necessary to comply with all sections of Part 20. As defined in 10 CFR 20.201(a), "survey" means an evaluation of the radiation hazards incident to the production, use, release, disposal, or presence of radioactive materials or other sources of radiation under a specific set of conditions.

Contrary to the above, on October 27, 1981, an individual was allowed to handle 34 sources containing a total activity of 879 millicuries of cesium-137 without adequate prior evaluation to assure that the limits in 10 CFR 20.101(a) would not be exceeded.

In addition, the evaluation of the radiation dose to the hands and fingers of a Nuclear Medicine technologist, who routinely prepares and injects patient doses, was inadequate in that the TLD ring dosimeter was worn on the fifth finger of the left hand and radioactive materials were handled and injected with the right hand.

B. Plan of Correction

On April 20, 1982, the Radiation Safety Committee discussed and determined that the Radiation Safety Office will submit all new procedures which could potentially deliver a high personnel dose to the Committee for evaluation. A copy of the pertinent section of the meeting's minutes is enclosed for your review.

The procedure on the appropriate wearing of extremity dosimeters has been reinforced to all members of the department. Technologists will monitor to insure that the ring badge is worn on the index finger facing in toward the thumb of the hand that prepares and injects patient doses.

Date of Compliance January 29, 1982

C. 10 CFR 20.405(a) requires that, within 30 days, a written report be made to the Commission concerning each exposure to radiation in excess of any applicable limit in Part 20 or in a license.

Contrary to these requirements, as of January 28, 1982, a report was not made to the Commission concerning the exposure described in Item A which was identified December 10, 1981.

Plan of Correction

In the event that there is an exposure to radiation in excess of any applicable limit, a verbal report will be made to the Commission by the Radiation Safety Staff, within 30 days to be followed by a written report, if required.

Date of Compliance March 24, 1982

D. Condition 24 of License No. 37-00448-19 requires that licensed material be possessed and used in accordance with statements, representatives, and procedures contained in an application received August 3, 1976, application dated March 23, 1979, and letter dated November 29, 1979.

1. Page 9 of the application received August 3, 1976 requires weekly wipe tests when radioisotopes are being used.

   Contrary to the above, as of January 29, 1982, weekly wipe tests had not been performed in the Nuclear Medicine Laboratory at the Philadelphia Geriatric Center since August 14, 1981.

D. Cont'd

2. The application received August 3, 1976 requires that procedures described in the Nuclear Regulatory Commission's Guide entitled, "Methods for Calibration of Dose Calibrator," be followed.

   This guide requires daily constancy checks and quarterly linearity tests of each dose calibrator.

   Contrary to the above, as of January 29, 1982, daily constancy checks and quarterly linearity tests of the dose calibrator were not performed at the Philadelphia Geriatric Center.

Plan of Correction

1. The program outlining that weekly wipe tests shall be performed when radioisotopes are being used has been implemented at the Philadelphia Geriatric Center is ongoing there as has been in other areas of our center. (This program was discussed with the Commission at the Enforcement Conference held March 24, 1982.

   A written record of the weekly wipe tests is maintained by the Philadelphia Geriatric Center technologist.

2. The Philadelphia Geriatric Center technologist now has two standard sources for performing the daily constancy tests. A written procedure has been implemented to insure quarterly linearity tests of each dose calibrator.

   The Radiation Safety Staff Monitors this activity thru routine and periodic checks.

Date of Compliance March 24, 1982

ASB:jbm