



TEMPLE UNIVERSITY
A Commonwealth University

Radiation Safety Office

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October 12, 1990

Dr. Mohamed M. Shanbaky, Chief
Nuclear Materials Safety Section A
Division of Radiation Safety and Safeguards
U.S. Nuclear Regulatory Commission, Region I
475 Allendale Road
King of Prussia, PA 19406

re: Routine Inspection Nos. 030-02963/90-002 and 030-00458/90-001

Dear Dr. Shanbaky:

This letter is submitted in response to your letter dated September 18, 1990, concerning the routine safety inspection (conducted July 30, 31, and August 1, 1990) of Temple University's activities under USNRC License Nos. 37-00697-02 and 37-00697-31. In this letter I will provide explanation and information regarding the two items of non-compliance with USNRC requirements identified during the inspection and cited in the Notice of Violation attached to your letter as Appendix A. The explanation includes: 1) corrective steps which have been taken, and the results achieved; 2) corrective measures which will be taken to reduce the potential for a recurrence; and 3) the dates when full compliance was achieved.

Violation A - Failure to perform dose calibrator linearity tests on a quarterly basis.

Quarterly linearity tests of the dose calibrator were the responsibility of the Medical Physicist in the Nuclear Medicine Section. The Medical Physicist reported that these tests had been performed, both to me and to the Nuclear Medicine Section Chief. Since documentation for these tests cannot be found, it is not possible to confirm if the tests were actually performed.

1. Departmental radiation safety responsibilities, and in particular, the quarterly linearity tests, have been formally reassigned to the Administrative Chief Technologist. The linearity test for the current quarter was completed by August 20, 1990.
2. The Radiation Safety Office will perform spot audits in the Nuclear Medicine Section to verify that the dose calibrator linearity test is being performed (and adequately documented) as required.
3. Full compliance was achieved August 20, 1990.

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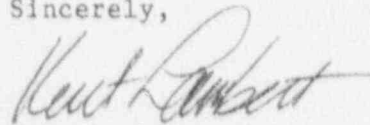
Violation B - Failure to determine the output of the teletherapy unit for the range of field sizes used.

The Medical Physicist in the Department of Radiation Oncology is responsible for the performance of the annual full calibration measurements on the teletherapy unit. In performing the annual full calibration, the Medical Physicist measured the output at a single field size, but did not follow the established procedures to perform the test for other field sizes used.

1. The procedures for measuring the output of the teletherapy unit have been rewritten to emphasize the requirement that the output be measured over the range of field sizes used. The output was measured to within 3% for the range of field sizes used on August 3, 1990.
2. Radiation Safety will perform spot audits in the Radiation Oncology Department to verify that the output of the teletherapy unit is measured over the range of field sizes used.
3. Full compliance was achieved on August 3, 1990.

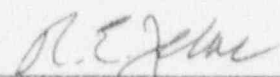
As always, our radiation safety program benefits from external evaluations such as provided by the NRC's inspection program.

Sincerely,



Kent Lambert, M.S.
Asst. Radiation Safety Officer

Reviewed and approved by:



Ronald E. Zelac, Ph.D., C.H.P.
Director, Radiological Health,
Biohazards Control, and Chemical
Right-to-Know

Associate Vice Provost for
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