## NOTICE OF VIOLATION

Washington University St. Louis, MO 63110 License No. 24-00167-11 Docket No. 030-02271 License No. 24-00063-11 Docket No. 030-15101

During an NRC inspection conducted from November 15, 1993 to November 18, 1993, violations of NRC requirements were identified. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C, the violations are listed below:

 10 CFR 35.70(a) requires a survey with a radiation detection survey instrument at the end of each day of use all areas where radiopharmaceuticals are routinely prepared for use or administered.

Contrary to the above, as of November 18, 1993, the licensee failed to conduct a survey with a radiation survey instrument at the end of each day of use, in the cesium room at Barnes Hospital, where iodine-131, phosphorus-32, and strontium-89 are routinely prepared for use.

This is a Severity Level IV violation (Supplement VI).

2. 10 CFR 35.70(b) requires that the licensee survey with a radiation detection survey instrument at least once each week all areas where radiopharmaceuticals or radiopharmaceutical waste is stored. 10 CFR 35.70(e) requires that a licensee survey for removable contamination once each week all areas where radiopharmaceuticals are routinely prepared for use, administered, or stored.

Contrary to the above, as of November 18, 1993 the 9th floor Pavilion of Barnes Hospital Radiopharmaceutical waste storage room and the cesium room at Barnes Hospital have not been surveyed weekly with a survey instrument as required by 35.70(b) nor have they been surveyed for removable contamination once each week as required by 35.70(e).

This is a Severity Level IV violation (Supplement VI).

 Condition 19. of License No. 24-00167-11 prohibits the opening of sealed sources containing licensed material.

Contrary to the above, on May 5, 1993, a sealed source containing 2.8 millicuries of ytterbium-169 was inadvertently opened while attempting to straighten the source.

This is a Severity Level IV violation (Supplement VI).

4. Condition 25. of the License No. 24-00167-11 requires that licensed material be possessed and used in accordance with statements, representations, and procedures contained in an application dated April 27, 1988, and letters (among others) dated September 9, 1987, and July 18, 1991. A. Item V.C. of the letter dated September 9, 1987, entitled, "Amendment to the NRC Regarding Remote Afterloading Devices," states; "Patient viewing is available via video camera and monitoring systems. If patient viewing is not available, then treatment will be halted."

Contrary to the above, on June 27, 1993, between 01:36 am and 05:21 am, no persons were assigned to the nursing station where the video monitors were located and therefore patient viewing was not available and treatment was not halted.

This is a Severity Level IV violation (Supplement VI).

B. The letter dated July 18, 1991, states, in Item V.C.3., that only visitors and hospital workers authorized by trained nursing staff are allowed to enter the brachytherapy treatment area.

Contrary to the above, on July 24, 1992, visitors not authorized by the trained nursing staff, were allowed to enter the brachytherapy treatment area.

This is a Severity Level IV violation (Supplement VI).

5. 10 CFR 35.634(d)(6) requires that a licensee authorized to use a teletherapy unit for medical use perform safety spot-checks once in each calendar month that assure proper operation of electrically assisted treatment room doors with the teletherapy unit electrical power turned off.

Contrary to the above, as of November 18, 1993, the licensee had failed to include in the monthly safety spot-checks, tests that assure the proper operation of electrically assisted treatment room doors with the teletherapy unit electrical power turned off.

This is a Severity Level IV violation (Supplement VI).

Pursuant to the provisions of 10 CFR 2.201, Washington University is hereby required to submit a written statement of explanation to the U.S. Nuclear Regulatory Commission, Region III, 801 Warrenville Road, Lisle, Illinois, 60532-4351, within 30 days of the date of the letter transmitting this Notice of Violation (Notice). This reply should be clearly marked as a "Reply to a Notice of Violation" and should include for each violation: (1) the reason for the violation, or, if contested, the basis for disputing the violation, (2) the corrective steps that have been taken and the results achieved,

(3) the corrective steps that will be taken to avoid further violations, and (4) the date when full compliance will be achieved. If an adequate reply is

not received within the time specified in this Notice, an order may be issued to show cause why the license should not be modified, suspended, or revoked, or why such other action as may be proper should not be taken. Where good cause is shown, consideration will be given to extending the response time.

JAN 1 2 1994

Dated

Roy & Caniano, Chief

Nuclear Materials Safety Branch