

APPENDIX B

NOTICE OF VIOLATION

The University of Oklahoma  
Health Sciences Center  
Oklahoma City, Oklahoma

Docket No. 30-02885/90-01  
License No. 35-03176-01

During an NRC inspection conducted on July 30 through August 3, 1990, 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 (1990), the violations are listed below:

A. License Condition 14, in part, specifies that the license is based on the statements and representations contained in the application dated January 27, 1988; and letter dated March 23, 1989.

1. Item 11 of the application dated January 27, 1988, specifies that all radioactive waste generated under the license will be managed by the UOHSC radiation safety office which is licensed for storage for decay, processing, incineration, and shipping of radioactive material to approved waste sites.

The section titled "Minilicense Holder" of the radiation safety manual submitted with the letter dated March 23, 1989, describes the responsibilities of individuals so authorized under the license. Item 4 of this section specifies that each minilicense holder shall maintain records of waste disposal.

Contrary to the above, during the period from May 1989 through July 1990, two minilicense holders had failed to maintain records of all (radioactive) waste disposals and had disposed of such wastes through the nuclear pharmacy rather than the UOHSC radiation safety office as required. (These materials consisted of small quantities of technetium-99m and iodine-125 which had been disposed of by decay-in-storage by the nuclear pharmacy.)

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

2. Item A.5 of the radiation safety manual submitted with the letter dated March 23, 1989, specifies, in part, that all contracts and requisitions for purchase of radioactive material shall be routed to the RSO before being processed for purchase and that no purchase order will be issued without the concurrence of the RSO, even when the order is placed by telephone.

Contrary to the above, several researchers had routinely purchased technetium-99m products from the UOHSC nuclear pharmacy without prior approval or concurrence from the RSO, and purchase orders for iodine-131 products from an independent source had been issued

without prior approval from the RSO. (Each researcher involved had received prior approval by the radiation safety committee for use of these materials.)

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

3. Item 4 of the section entitled "Radiation Worker," of the radiation safety manual submitted with the letter dated March 23, 1989, describes protective measures to be observed by individual workers including prohibiting eating and drinking in areas in which radioactive material is either used or stored.

Contrary to the above, on August 1-2, 1990, workers had consumed food and beverage within the radioimmunoassay lab, an area where radioactive materials were routinely used and stored.

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

4. Item A.20 of the radiation safety manual submitted with the letter dated March 23, 1989, describes procedures for conducting and documenting radiation and removable contamination surveys including: (1) an established action level of 200 disintegrations per minute (dpm) per 100 square centimeters for removable contamination, and (2) requirements to maintain records of surveys which include appropriate notations on (method and instrument) sensitivity and locations surveyed.

Contrary to the above, during the period May 1989 through July 1990, the licensee had failed to (1) determine the sensitivity of the methods used to conduct removable contamination surveys (necessary to ensure that established action levels had been observed) in some cases, and (2) include appropriate notations on (method and instrument) sensitivity and locations surveyed on all records of surveys conducted during this period.

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

- B. 10 CFR 20.207(b) requires that licensed material in an unrestricted area and not in storage shall be tended under the constant surveillance and immediate control of the licensee.

Contrary to the above, on August 1, 1990, licensed materials on an open workbench located in a room which was not restricted at the time, was not tended under the constant surveillance and immediate control of the licensee. These materials consisted of a test tube and syringe containing possible millicurie quantities of iodine-131.

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

Pursuant to the provisions of 10 CFR 2.201, the University of Oklahoma is hereby required to submit a written statement or explanation to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, D.C. 20555 with a copy to the Regional Administrator, Region IV, and if applicable, a copy to the NRC Resident Inspector, 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. Under the authority of Section 182 of the Act, 42 U.S.C. 2232, this response shall be submitted under oath or affirmation.

Dated at Arlington, Texas  
this 8<sup>th</sup> day of November 1990