APPENDIX A

NOTICE OF VIOLATION

Clark University Worcester, Massachusetts 01610 Docket No. 030-08144 License No. 20-02245-04

During an NRC inspection conducted on April 12 and 13, 1994, 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:

- A. Condition 25 of License No. 20-02245-04 requires that licensed material be possessed and used in accordance with the statements, representations, and procedures contained in an application dated July 21, 1993, and a letter dated September 20, 1993
 - Step 2. of the attachment, referenced in Item 10 of the application "How to Handle Radioisotope Shipments," requires that, upon receipt, the outside of packages containing radioactive material is to be wipe tested for removable activity.

Contrary to the above, as of April 12, 1994, packages received in Room N-303 of the Chemistry Department were not wipe tested. Receipt records showed that packages were only surveyed for radiation levels using a radiation survey instrument.

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

2. Item 9, of the application requires that survey instruments will be calibrated by a commercial company at annual intervals.

Contrary to the above, between July 29, 1989 and February 14, 1991, no survey instruments were calibrated. During this period, the survey instruments were used in research programs and in student laboratory classes.

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

3. Item 5.(b) of the enclosure referenced in the letter dated September 20, 1993, requires that the maximum volume of waste stored in the radioactive waste storage area will not exceed 30 cubic feet (four, 55 gallon drums).

Contrary to the above, as of April 12, 1994, the volume of waste stored in the radioactive waste storage area was in excess of 30 cubic feet. The area contained four, 55 gallon drums of waste; one large drum (appeared to be a

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55 gallon over-pack type drum) also containing radioactive waste; and one five gallon plastic bag of radioactive waste, a total volume in excess of 30 cubic feet.

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

4. Item 5.(e)v. of the enclosure to the letter dated September 20, 1993 requires that radioactive waste will be packaged in plastic bags stored in 55 gallon steel drums in the radioactive waste storage area. Bags will be labeled with respect to isotope amount, identity and date of placement in storage then surveyed quarterly for maintenance of package integrity.

Contrary to the above, as of April 12, 1994, radioactive waste packaged in plastic bags stored in 55 gallon steel drums in the radioactive waste storage area were not surveyed quarterly for maintenance of package integrity.

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

 Item 8 of the application dated July 21, 1993, requires that film badges will be changed monthly and processed by the ICN Dosimetry Service of Irvine, California.

Contrary to the above, as of April 12, 1994, film badges were not processed by ICN Dosimetry Service of Irvine California. Specifically, about fifty percent of the badges were processed by another dosimetry service.

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

B. License Condition 16 requires that the licensee shall conduct a physical inventory every six months to account for all sealed sources and devices containing licensed material received and possessed under the license.

Contrary to the above, as of April 12, 1994, physical inventories to account for all sealed sources and devices containing licensed material received and possessed under the license were not conducted since 1990. The last entry in the Physics Department sealed source log book was made during 1990.

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

C. 10 CFR 20.1904(a) requires that the licensee shall ensure that each container of licensed material bears a durable, clearly visible label bearing the radiation symbol and the words "CAUTION (or DANGER), RADIOACTIVE MATERIAL." The label must provide sufficient information [such as the radionuclide(s) present, an estimate of the quantity of radioactivity, the date for which the activity is estimated, radiation levels, kinds of materials, and mass enrichment] to permit individuals handling or using the containers, or working in the vicinity of the containers, to take precautions to avoid or minimize exposures.

Contrary to the above, as of April 12, 1994, labels on the drums containing radioactive waste and stored in the radioactive waste storage area did not provide sufficient information identifying the radionuclide(s) present, an estimate of the quantity of radioactivity, the date for which the activity is estimated, radiation levels, and mass enrichment to permit individuals handling or using the containers, or working in the vicinity of the containers, to take precautions to avoid or minimize exposures.

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

Pursuant to the provisions of 10 CFR 2.201, Clark University 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 I, 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 or a Demand for Information 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.