

APPENDIX A
NOTICE OF VIOLATION

Massachusetts Institute of Technology
Cambridge, Massachusetts

Docket Nos. 30-763
70-938

As a result of the inspection conducted on April 20-23, 1987, and in accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C (Enforcement Policy, 1986), the following violations were identified:

- A. 10 CFR 70.3 states that no person subject to the regulations in this part shall receive title to, own, acquire, deliver, receive, possess, use, or transfer special nuclear material except as authorized in a license issued by the Commission pursuant to these regulations.

Contrary to the above, on April 22, 1987, the inspector observed that the licensee possessed special nuclear material in the form of two milligrams of uranium-233 that was not authorized in a license issued by the Commission (D/N 70-938).

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

- B. 10 CFR 20.203(c)(1) states that each high radiation area shall be conspicuously posted with a sign or signs bearing the radiation caution symbol and the words "Caution - High Radiation Area".

10 CFR 20.203(f)(1),(2) and (3) state, in part, that each container of licensed material containing quantities greater than the applicable quantities listed in Appendix C, shall bear a durable, clearly visible label identifying the radioactive contents and the words "Caution, Radioactive Materials" or "Danger, Radioactive Materials". The label shall also supply sufficient information to permit individuals handling or using the containers or working in the vicinity to take precautions to avoid or minimize exposures.

Contrary to the above, on April 21-23, 1987, the inspector determined that:

- (1) The locked BTF fuel vault in Building NW-12 contained several 55-gallon drums of spent reactor water cleanup resin that exhibited surface radiation levels up to 2.5 Rem/hour on contact, which constitutes a high radiation area, and the entrance to the vault was not posted with "Caution - High Radiation Area" signs (D/N 70-938).

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- (2) Radioactive material storage containers in the Hot Machine Shop in Building NW-12, containing licensed materials in quantities greater than listed in Appendix C, were labelled "Caution, Radioactive Materials", but the label did not supply sufficient information to permit individuals handling or using the containers, or working in the vicinity, to take precautions to avoid or minimize exposures. (D/N 70-938 and 30-763).
- (3) A holder, containing a 10 curie strontium-90 source, a quantity of licensed material in excess of that listed in Appendix C, located at the Lincoln Laboratory in Lexington, Massachusetts, was not labeled with durable, clearly visible labels identifying the radioactive contents and the words "Caution - Radioactive Material" (D/N 30-763).
- (4) A cabinet located at the Lincoln Laboratory, in Lexington, Massachusetts, contained 450 microcuries of cobalt-60, a quantity in excess of that listed in Appendix C, and was not posted with a "Caution - Radioactive Material" sign. (D/N 30-763).

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

- C. 10 CFR 20.311(b) states, in part, that the total quantity of the radio-nuclides H-3, C-14, Tc-99, and I-129 in a shipment must be shown on a waste shipment burial site manifest.

Contrary to the above, the burial site waste shipment manifest for a May 22, 1986 waste shipment did not contain the total quantity of the radio-nuclides H-3, C-14, Tc-99 and I-129 in the shipment (D/N 30-763 and 70-938).

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

Pursuant to the provisions of 10 CFR 2.201, Massachusetts Institute of Technology is hereby required to submit to this office within thirty days of the date of the letter which transmitted this Notice, a written statement or explanation in reply, including: (1) the corrective steps which have been taken and the results achieved; (2) corrective steps which will be taken to avoid further violations; and (3) the date when full compliance will be achieved. Where good cause is shown, consideration will be given to extending this response time.