

APPENDIX A  
NOTICE OF VIOLATION

Massachusetts General Hospital  
Boston, Massachusetts 02114

Docket No. 030-01867  
License No. 20-03814-80

As a result of the inspection conducted on August 13, 14 and 15, 1990, and in accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C (Enforcement Policy) (1988), the following violations were identified:

A. Condition No. 26 of Radioactive Materials License No. 20-03814-80 requires that licensed radioactive materials be possessed and used in accordance with the statements, representations, and procedures described in the radioactive materials license application dated June 29, 1983.

1. Item 17 of the application dated June 29, 1983 states that nuclear medicine area surveys will be performed in accordance with the procedures described in Appendix I of Regulatory Guide 10.8 (Revision 1, October, 1980). Section 3 of Appendix I of Regulatory Guide 10.8 states that waste storage areas and other laboratory areas will be surveyed weekly. Section 4 of Appendix I states, in part, that weekly surveys will consist of a series of wipe tests to measure contamination levels.

Contrary to the above, as of August 15, 1990, weekly surveys consisting of wipe tests to measure contamination levels in waste storage areas and other laboratory areas were not performed. Specifically, the required weekly surveys were not performed in the clinical thyroid laboratory used to prepare radioactive materials for administration to patients and store radioactive waste.

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

2. Item 23 of application dated June 29, 1983 states that bioassays will include counting of thyroids of those individuals handling radioiodine or handling patients containing therapeutic quantities of iodine-131 and that thyroid bioassays for iodine-131 must be performed within three days of the initial exposure.

Contrary to the above, from January 17, 1990 through July 25, 1990, thyroid bioassays (i.e., counting of thyroids) of those individuals handling radioiodine or handling patients containing therapeutic quantities of iodine-131 were not performed within three days of the initial exposure.

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

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- B. 10 CFR 20.103(b)(1) states the licensee shall, as a precautionary procedure, use process or other engineering controls, to the extent practicable, to limit concentrations of radioactive materials in air to levels below those which delimit an airborne radioactivity area, as defined in section 20.203(d)(1)(ii).

Contrary to the above, on August 7, 1990, the licensee did not, as a precautionary procedure, use process or other engineering controls, to the extent practicable, to limit concentrations of radioactive materials in air to levels below those which delimit an airborne radioactivity area as defined in section 20.203(d)(1)(ii). Specifically, the engineering controls used by the licensee (a chemical fume hood) were inadequate to limit concentrations of radioactive materials in air to levels below those which delimit an airborne radioactivity area as defined in section 20.203(d)(1)(ii), (defined as an area not to exceed 25% of the average weekly concentration; i.e., 10 MPC-hours per week). Consequently, two individuals sustained intakes of iodine-125 of 64 MPC-hours and 19 MPC-hours, respectively.

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

Pursuant to the provisions of 10 CFR 2.201, Massachusetts General Hospital 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.