

APPENDIX A

NOTICE OF VIOLATION

Lawrence Memorial Hospital  
Lawrence, Massachusetts 01842

Docket No. 30-01874  
License No. 20-05655-01

As a result of the inspection conducted on July 23, 1982, and in accordance with the NRC Enforcement Policy (10 CFR 2, Appendix C), the following violations were identified:

- A. 10 CFR 20.201(b) requires that each licensee make such surveys as may be necessary to comply with all sections of Part 20. As defined in 10 CFR 20.201(a), "survey" means an evaluation of the radiation hazards incident to the production, use, release, disposal, or presence of radioactive materials or other sources of radiation under a specific set of conditions.

Contrary to the above, as of July 23, 1981, surveys were not made to determine that individuals who handled significant quantities of iodine-131 were not exposed to airborne concentrations exceeding the limits specified in 10 CFR 20.103. Specifically, no surveys (evaluations, including air monitoring and thyroid monitoring where applicable) have been made during the preparation and administration of 6-10 millicuries of liquid iodine-131 for treatment of hyperthyroidism.

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

- B. Condition 16 of License No. 20-0565501 requires that licensed material be possessed and used in accordance with statements, representations and procedures contained in an application dated September 27, 1977, and in a letter dated March 10, 1978.

1. Item 14.1 of this letter requires that the elution and preparation area be surveyed daily.

Contrary to the above, as of July 23, 1982, daily surveys of the elution and preparation areas were not performed from May 4-20, 1982, May 26 - June 14, 1982 and from June 22 - July 23, 1982.

2. Item 14.3 of this letter requires that the entire Nuclear Medicine department be surveyed and wipe tested weekly.

Contrary to the above, no weekly surveys or wipe tests have been performed since June 30, 1982. In addition, the required weekly survey and wipes were performed on a sporadic basis prior to this date.

3. Item II of this letter requires that dose calibrators be calibrated in accordance with procedures contained in Appendix D, Section 2, of Regulatory Guide 10.8.

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- a. Item C of Appendix D, Section 2, requires that dose calibrators be checked for constancy daily at all appropriate instrument settings with a cobalt-57 source and a cesium-137 source.

Contrary to the above, as of July 23, 1982, the required daily constancy checks had not performed since July 6, 1982.

- b. Item A.1 of Appendix D, Section 2, requires that the dose calibrator linearity be determined at installation and quarterly thereafter.

Contrary to the above, as of July 23, 1982, the dose calibrator linearity had not been determined.

4. Item 10.5 of this letter requires that personnel using unsealed radioactive material monitor their hands and clothing for contamination before leaving areas where these materials are used.

Contrary to the above, on July 23, 1982, personnel preparing and administering radiopharmaceuticals routinely failed to monitor their hands and clothing for contamination prior to leaving the preparation areas.

5. Item 11 of this letter requires that patient doses containing radioactive material be prepared and administered using lead syringe shields.

Contrary to the above, on July 23, 1982, personnel failed to use syringe shields in the preparation of radiopharmaceuticals from reagent kits and the preparation of patient doses.

6. Item 10 of this application requires that a Healthkit Radiation counter survey meter be available for measuring radioactive contamination and radiation levels.

Contrary to the above, on July 23, 1982, the required survey meter was inoperable, and no equivalent was low-level survey meter available.

These are Severity Level IV violations. (Supplement VI).

Pursuant to the provisions of 10 CFR 2.201, Lawrence Memorial Hospital is hereby required to submit to this office within thirty days of the date of 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.

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