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MAR 23 1983

Trumbull Memorial Hospital
ATTN: Mr. J. D. Rexroad
Associate Executive Director
1350 East Market Street
Warren, OH 44482

License No. 34-02400-02
License No. 34-02400-03

Gentlemen:

This refers to the routine safety inspection conducted by Mr. W. J. Slawinski of this office on February 10 and 23, 1983, of activities authorized by NRC Byproduct Material Licenses No. 34-02400-02 and No. 34-02400-03 and to the discussion of our findings with you, Milton Toczczic and Deborah Kopko at the conclusion of the inspection on February 23, 1983.

The inspection was an examination of activities conducted under your license as they relate to radiation safety and to compliance with the Commission's rules and regulations and with the conditions of your license. The inspection consisted of a selective examination of procedures and representative records, observations, independent measurements, and interviews with personnel.

The reinspection on February 23, 1983 was performed to ascertain additional information on the patient room conditions that existed on September 21, 1982, at which time a patient received 103 millicuries of iodine-131. Such information included bed locations and occupancy in adjacent rooms, wall thickness/compositions between rooms and the performance of an NRC confirmatory survey of a reconstruction of these conditions.

Medical records and nurses logs indicated that patient occupancy factors were such that no individuals in unrestricted areas received a whole body dose in excess of 0.5 rem. However, certain 10 CFR Part 20 limits were exceeded, as outlined in the attached Appendix A, item No. 1 of License No. 34-02400-02.

This inspection also included a measurement of the output of your teletherapy equipment. Our measurement was made using a Victoreen Model 570 Condenser R-Meter with Model 621 chamber, calibrated by the National Bureau of Standards Laboratory. The source-to-chamber distance was 80.0 centimeters and the field size used was ten by ten centimeters. After applying standard correction factors for temperature, pressure, attenuation, inverse square, backscatter,

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timer error, and roentgen-to-rad conversion, our measurement of the output of your teletherapy equipment was 51.5 rads per minute. The most recent full calibration of your teletherapy equipment, conducted on January 15, 1983, reported a measured output for the same exposure parameters of 52.6 rads per minute. Applying a correction factor to account for 26 days decay, the value calculated from the January 15, 1983 calibration becomes 52.1 rads per minute.

Based on the close agreement in measured output values, we feel the actual output of your teletherapy equipment to be within established guidelines of ± 5 percent.

In addition to the above areas, the inspector examined actions described in your letters dated March 4, 11, and 25, 1977, regarding apparent items of noncompliance found during our February 14 and 15, 1977 inspection. We have no further questions regarding these matters.

During this inspection, certain of your activities appeared to be in non-compliance with NRC requirements, as specified in the enclosed Appendix A. A written response is required.

In addition to our concern for corrective action with respect to the specific items of noncompliance noted, we are concerned about your management control system that has permitted these items to occur. Consequently, in your reply to this letter, please describe those actions taken or planned to improve the effectiveness of your management control over your licensed activities so as to preclude the recurrence of these or similar items of noncompliance. Enclosed is Appendix B, "Management Control" to provide you with some guidance for your response.

During the inspection of your cobalt teletherapy unit, the inspector noted that the electrical interlocking switches for the source head and beam stopper are not as described in letter dated October 28, 1975. This letter is referenced in License Condition No. 25 of License No. 34-02400-03. Specifically, the radiation beam can be turned on without hitting the beam-stopper when the source head is positioned $100-110^\circ$ off vertical towards the west wall. If surrounding area surveys were performed at 100° rather than 110° , radiation levels in west side areas could be greater than those listed in your October 28, 1975 letter. Please clarify.

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The responses directed by this letter (and the accompanying Notice) are not subject to the clearance procedures of the Office of Management and Budget as required by the Paperwork Reduction Act of 1980, PL 96-511.

We will gladly discuss any questions you have concerning this inspection.

Sincerely,

J. R. Miller, Chief
Division of Radiological and Materials
Safety Program, Branch No. 2

Enclosures:

- 1. Appendix A, Notice of Violation
- 2. Appendix B, Management Control

cc w/encls:

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