

## UNITED STATES NUCLEAR REGULATORY COMMISSION

REGION III 799 ROOSEVELT ROAD GLEN ELLYN, ILLINOIS 60137

MAY 1 4 1981

Augustana Hospital
ATTN: John Reising
Vice President of
Medical Affairs
411 West Dickens Avenue
Chicago, IL 60614

License No. 12-00710-02 License No. 12-00710-03

## Gentlemen:

This refers to the routine safety inspection conducted by Ms. E. Matson and Mr. J. R. Mullauer of this office on April 29, 1981, of activities authorized by NRC Byproduct Material Licenses No. 12-00710-02 and No. 12-00710-03 and to the discussion of our findings with Messrs. Ken Roman, Thakor Patel, and Ms. Gina Pugliese at the conclusion of the inspection.

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.

In addition to the above areas, the inspectors examined actions described in letter dated November 22, 1977. signed by John Sward, regarding corrective action taken on apparent items of noncompliance found during our August 31, 1977, inspection of License No. 12-00710-02. We have no further questions regarding these matters.

During this inspection, no items of noncompliance were identified for License No. 12-00710-03; however, for License No. 12-00710-02 certain of your activities appeared to be in noncompliance with NRC requirements, as described in the enclosed Appendix A. A written response submitted under oath or affirmation, is required.

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



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Laboratory. The source-to chamber distance was 80 centimeters and the field size used was 10 by 10 centimeters. After applying standard correction factors for temperature, pressure, attenuation, decay factor, timer error, and roentgen-to-rad conversion, our measurement of the output of your teletherapy equipment was 122.7 rads per minute at the center of the source-axis-distance in a mini phantom. The most recent full calibration of your teletherapy equipment, conducted on August 29, 1980, reported a measured output for the same exposure parameters of 122.4 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  $\pm$  5 percent.

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

Sincerely

D. G. Wiedeman, Acting Chief Materials Radiation Protection

Section 1

Enclosure: Appendix A, Notice of Violation

cc w/encl:
Gina Pugliese, Acting
Assistant Administrator
Ken Roman, Assistant
Administrator
Central Files
Reproduction Unit NRC 20b
PDR
NSIC