



5/11/81 7DR
UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION III
799 ROOSEVELT ROAD
GLEN ELLYN, ILLINOIS 60137



Silver Cross Hospital
ATTN: Mr. Sam Wachtel
Assistant Administrator
1200 Maple Road
Joliet, Illinois 60432

License No. 12-01127-01
License No. 12-01127-02

Gentlemen:

This refers to the routine safety inspection conducted by Ms. E. Matson and Mr. J. R. Mullauer of this office on April 28, 1981, of activities at Silver Cross Hospital authorized by NRC Byproduct Material Licenses No. 12-01127-01 and No. 12-01127-02 and to the discussion of our findings with you, Mr. M. Fodor and Ms. B. Craig 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.

During this inspection, certain of your activities appeared to be in non-compliance with NRC requirements, as specified in 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 Laboratory. The source-to-chamber distance was 55 centimeters and the field size used was ten by ten centimeters. After applying standard correction factors for temperature, pressure, attenuation, inverse square, backscatter, timer error, and roentgen-to-rad conversion, our measurement of the output of your teletherapy equipment was 32.35 rads per minute at the point of maximum buildup in a phantom. The most recent monthly spot check of your teletherapy equipment, conducted on April 1, 1981, reported a measured output for the same exposure parameters of 33.04 rads per minute. Applying a correction factor to account for 27 days decay, the value calculated from the April 1, 1981, calibration becomes 32.72 rads per minute.

81061204/8

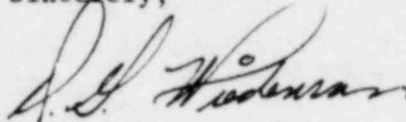
Silver Cross Hospital

- 2 -

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.

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:
Central Files
Reproduction Unit NRC 20b
PDR
NSIC