

UNITED STATES NUCLEAR REGULATORY COMMISSION

REGION !!! 799 ROOSEVELT ROAD GLEN ELLYN, ILLINOIS 60137

JUN 2 5 1981

St. Anthony's Medical Center ATTN: Mr. Robert L. Morris President 10010 Kennerly Road St. Louis, MO 63128 License No. 24-01041-03 License No. 24-01041-04

Gentlemen:

This refers to the routine safety inspection conducted by Dr. W. J. Adam of this office on June 10, 1981, of activities at St. Anthony's Medical Center authorized by NRC Byproduct Material Licenses No. 24-01041-03 and No. 24-01041-04 and to the discussion of our findings with you and J. L. Bircher, M.D. 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.

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 60 centimeters and the field size used was 10 by 10 centimeters. After applying standard correction factors for temperature, pressure, attenuation, inverse square, backscatter, timer error, and roentgen-to-rad coversion, our measurement of the output of your teletherapy equipment was 50.76 rads per minute at the point of maximum buildup in an extended tissue phantom. The most recent monthly spot check of your teletherapy equipment conducted on May 17, 1981, reported a measured output for the same exposure parameters of 52.41 rads per minute. Applying a correction factor to account for 24 days decay, the value calculated from the May 17, 1981 spot check becomes 51.96 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.

IEO7

During this inspecti , certain of your activities conducted under License No. 24-0104' J4 appeared to be in noncompliance with NRC requirements, as specified in enclosed Appendix A. A written response, submitted under oath or affirmation, is required.

No apparent items of noncompliance were identified under License No. 24-01041-03.

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: DMB/Document Control Desk (RIDS)

Adam/db