

30-0301  
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70-2174

JUL 6 1982

Southeast Missouri Hospital  
ATTN: Mr. O. David Niswonger  
    Admistrator  
1701 Lacey Street  
Cape Girardeau, MO 63701

License No. 24-00128-03  
License No. 24-00128-05  
License No. SNM-1595

Gentlemen:

This refers to the routine safety inspection conducted by Messrs. D. R. Gibbons and J. R. Madera of this office on June 15, 1982, of activities authorized by NRC Byproduct Material Licenses No. 24-00128-03, No. 24-00128-05 and Special Nuclear Material License No. SNM-1595 and to the discussion of our findings with Mr. Richard Meyer and Dr. Herbert W. Mower 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 80 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, chamber factor, roentgen-to-rad conversion, our measurement of the output of your teletherapy equipment was 134.78 rads per minute at the point of maximum buildup in a muscle miniphantom. The most recent full calibration of your teletherapy equipment, conducted on June 13, 1982, reported a measured output for the same exposure parameters of 139.5 rads per minute. Applying a correction factor to account for 2 days decay, the value calculated from the June 13, 1982 calibration becomes 139.34 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.

During this inspection, no items of noncompliance were identified for Licenses No. 24-00128-05 and No. SNM-1519, however, for License No. 24-00128-03, certain of your activities appeared to be in noncompliance with NRC requirements, as described in the enclosed Appendix. A written response is required.

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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,

Original Signed by J. R. Miller

J. R. Miller, Chief  
Technical Inspection Branch

Enclosure: Appendix,  
Notice of Violation

cc w/encl:  
Herbert W. Mower, ScD.  
Radiation Safety Officer  
DMB/Document Control Desk (RIDS)

R111  
Gibbons/dm  
6/25/82

R111  
Madera

R111  
Wiedeman  
7/2/82

R111  
Miller  
7/3/82