

AUG 02 1985

Unity Hospital
ATTN: Mr. Able Whittemore
Administrator
1301 Main Street
Buchanan, MI 49107

License No. 21-18556-01

Gentlemen:

This refers to the routine safety inspection conducted by Mr. W. P. Reichhold of this office on July 1 and 3, 1985, of activities authorized by NRC Byproduct Material License No. 21-18556-01, and to the discussion of our findings with you and Mr. Cliff Lind 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 inspector examined actions described in your letter dated January 17, 1982, regarding apparent items of noncompliance found during our November 23, 1981 inspection. We have no further questions regarding these matters.

During the inspection, it was noted that correction factors were used to adjust the dose calibrator measured value to within $\pm 5\%$ of the actual value of standards used for accuracy checks. The measured value varied by 6% for the cesium-137 standard on April 9, 1985, and a correction factor of 1.06 was established to correct the measured value to within $\pm 5\%$ of the actual value of the source. (Previous checks showed the % error for the cesium-137 measurement increased from 3% on July 10, 1984 to 5% January 9, 1985.) Variation between the measured value and the actual value was from 6% to 11% for a barium-133 standard between July 10, 1984, and April 9, 1985, and accordingly the corrective factor varied from 1.06 to 1.11. Variation between the measured value and the actual value was from 6% to 9% for a cobalt-57 standard between October 4, 1984, and April 9, 1985, and accordingly the corrective factor varied from 1.06 to 1.09.

Your dose calibrator shows a steady degradation in the measured value of the standard, and a steady variation in correction factors. Because of the slow but constant drift of the dose calibrator the use of a correction factor to correct the measured values is not adequate. The correct factor established one day may not apply the next day.

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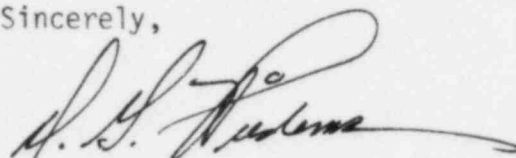
This matter was reviewed with our Enforcement Coordinator and it does not appear that there is a violation, however, your corrective actions were not adequate to correct the problem.

Describe your corrective actions to repair your dose calibrator so the measured value is within $\pm 5\%$ of the actual value of the standard source, or obtain a replacement that can measure to within $\pm 5\%$ of the actual value of a standard source.

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,



D. J. Sreniawski, Chief
Nuclear Materials Radiation Protection
Section 2

cc: DMB/Document Control Desk (RIDS)

RIII
RPE 8/1/85
Reichhold/bl
07/19/85

RIII
Sreniawski
8/2/85