The Chippewa County

A.C. 906 635-4460

War Memorial Hospital

500 Osborn Boulevard
Sault Ste. Marie, Michigan
49783

October 28, 1987

U. S. Nuclear Regulatory Commission
Region III
Materials Licensing Branch
799 Roosevelt Road
Glen Ellyn, IL 60137

Gentlemen:

This letter is to request renewal of our byproduct materials license **#21-20318-01.** Enclosed, please find the supplemental information describing the changes in our Radiation Safety Program (in duplicate) and the renewal fee of $580.00.

If you have any questions concerning this request, please contact myself or our consultant, James Tomlinson (313-662-3197).

Sincerely,

Louis A. Herrero
Administrator

LAH/bjd

Enclosures

Log Nov 6th
Remitter
Check No. 002065
Amount $380
Fee Category
Type of Fee Renewal
Date Check Rec'd.
Date Completed 11/10/87
By:

RECEIVED
OCT 30 1987
REGION III

8904040489 880407
REG3 LIC30
21-20318-01 PNU

CONTROL NO. 84376

WAR MEMORIAL HOSPITAL

NRC LICENSE RENEWAL -- RADIATION SAFETY PROGRAM CHANGES

27 October 1987

The revised (16 October 1986) 10 CFR 35 regulations will be adhered to with the following modifications:

1. Dose Calibrator Testing:

CONSTANCY testing will be performed daily by assaying an NBS-traceable Cs-137 radionuclide source of activity greater than 50 microcuries on the Cs-137 and Tc-99m settings. The reading will be compared to a daily activity chart (sample enclosed) to ensure that the assayed activity is within +/- 10 percent of the actual activity (or the reading for Tc-99m determined at the time of an Accuracy test).

LINEARITY testing will be performed quarterly with a Tc-99m source having activity equal to the maximum activity administered to a patient. Readings will be taken at 0, 6, 24, 30, and 48 hours. The tolerance level will be +/- 10 percent.

ACCURACY testing will be performed annually with both Co-57 and Cs-137 sources having activity greater than 50 microcuries. The tolerance level will be +/- 10 percent.

GEOMETRICAL DEPENDENCE testing will be performed at installation and after repairs that affect geometry with a 2 millicurie Tc-99m source over the volume range of 1-20 milliliters. The tolerance level will be +/- 10 percent.

2. Calibration of Survey Instruments:

Survey instruments will be calibrated by Medical Physics Consultants, Inc. (procedures on file with NRC) or other individuals authorized to perform such services.

3. Possession of Survey Instruments:

GM meters -- Eberline E-120 (range 0.1 - 50 mR/h)
Eberline E-520 (range 0.02 - 2000 mR/h)

(No ion chambers)

4. Radiation Surveys:

Trigger levels have been established at 2 mR/h for area surveys (threshold for unrestricted->restricted area) and 2000 dpm/100 square centimeters. The Radiation Safety Officer will be notified when these levels are exceeded.

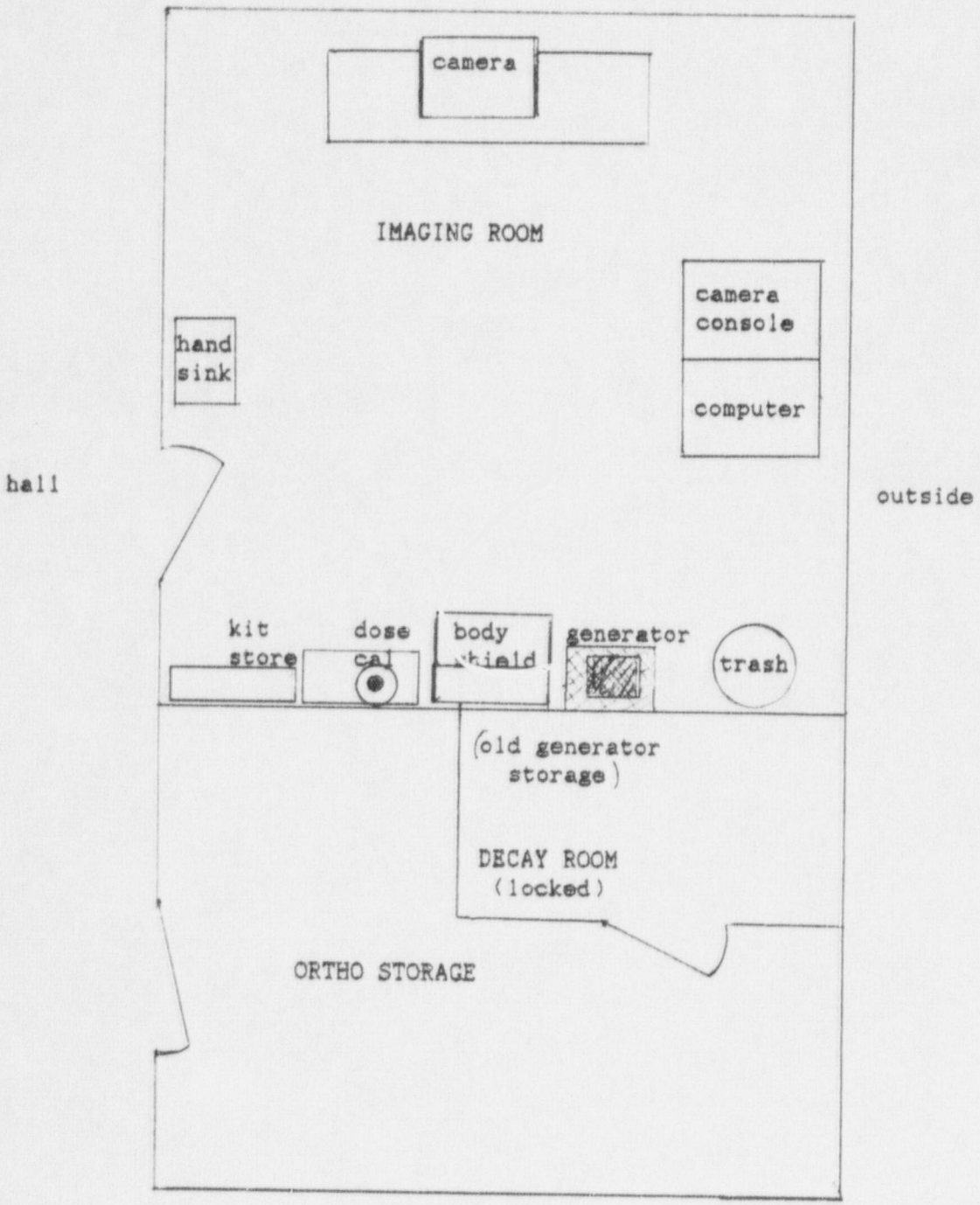
5. Testing Review by Radiation Safety Officer:

The surveys, tests, and other safety procedures that are required to be reviewed and signed by the RSO will be reviewed by the RSO and/or the consulting physicist. If reviewed/signed by the physicist, any deficiencies and a summary will be reported to the RSO and the Radiation Safety Committee.

6. Facility Diagram:

A revised facility diagram is enclosed.

FACILITY DIAGRAM



WAR MEMORIAL HOSPITAL - - (sample)

DOSE CALIBRATOR CONSTANCY

DECEMBER 1987

	Cs-137		Cs137@Tc99	
day	-10%	+10%	-10%	+10%
1	78.48	95.92	148.8	181.9
2	78.48	95.92	148.8	181.9
3	78.47	95.91	148.8	181.9
4	78.47	95.90	148.8	181.9
5	78.46	95.90	148.8	181.9
6	78.46	95.89	148.8	181.8
7	78.45	95.89	148.8	181.8
8	78.45	95.88	148.8	181.8
9	78.44	95.87	148.7	181.8
10	78.44	95.87	148.7	181.8
11	78.43	95.86	148.7	181.8
12	78.43	95.86	148.7	181.8
13	78.42	95.85	148.7	181.8
14	78.42	95.84	148.7	181.7
15	78.41	95.84	148.7	181.7
16	78.41	95.83	148.7	181.7
17	78.40	95.83	148.7	181.7
18	78.40	95.82	148.7	181.7
19	78.39	95.81	148.7	181.7
20	78.39	95.81	148.6	181.7
21	78.38	95.80	148.6	181.7
22	78.38	95.80	148.6	181.7
23	78.37	95.79	148.6	181.6
24	78.37	95.78	148.6	181.6
25	78.36	95.78	148.6	181.6
26	78.36	95.77	148.6	181.6
27	78.35	95.77	148.6	181.6
28	78.35	95.76	148.6	181.6
29	78.34	95.75	148.6	181.6
30	78.34	95.75	148.6	181.6
31	78.33	95.74	148.5	181.6