JAN 2 8 1986

License No. 06-06697-01
Docket No. 030-00116
Control No. 104334

Stamford Hospital
ATTN: Maura Carley
Vice President, Administration
Shelburne Road and West Broad
P.O. Box 9317
Stamford, Connecticut 06904

Gentlemen:

Please find enclosed an amendment to your NRC Material License.

Please review the enclosed document carefully and be sure that you understand all conditions. If there are any errors or questions, please notify the Region I Material Licensing Section, (215) 337-5239, so that we can provide appropriate corrections and answers.

Please be advised that you must conduct your program involving licensed radioactive materials in accordance with the conditions of your NRC license, representations made in your license application, and NRC regulations. In particular, please note the items in the enclosed, "Requirements for Materials Licensees."

Since serious consequences to employees and the public can result from failure to comply with NRC requirements, the NRC expects licensees to pay meticulous attention to detail and to achieve the high standard of compliance which the NRC expects of its licensees.

You will be periodically inspected by NRC. A fee may be charged for inspections in accordance with 10 CFR Part 170. Failure to conduct your program safely and in accordance with NRC regulations, license conditions, and representations made in your license application and supplemental correspondence with NRC will result in prompt and vigorous enforcement action against you. This could include issuance of a notice of violation, or in case of serious violations, an imposition of a civil penalty or an order suspending, modifying or revoking your license as specified in the General Policy and Procedures for NRC Enforcement Actions, 10 CFR Part 2, Appendix C.

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01/22/86

ML10

We wish you success in operating a safe and effective licensed program.

Sincerely,

Original Signed By:
Jenny M. Johansen

Jenny M. Johansen, M.S.
Nuclear Materials Safety Section B
Division of Radiation Safety
and Safeguards

Enclosures:
1. Amendment No. 14
2. Requirements for Materials Licensees
3. Notice to All Teletherapy Licensees
4. Draft Teletherapy Guide

RI:DRSS
Johansen/mmb
01/27/86

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01/22/86

NRC Form 272
(8-83)

U. S. NUCLEAR REGULATORY COMMISSION
MEDICAL ADVISORY COMMITTEE
APPRAISAL

P5

1. Applicant: Stamford Hospital

Address: P. O. Box 9317
Shelburne Road

City: Stamford State: CT 06904

2. Control No. (Region I)
104?74 (License No. 06-06697-01)

3. Department

4. Name and title of trained individual

Alfred G. Agostinelli

5. Type Program:

☐ Private practice

☐ Private practice in hospital

XXXX Institutional

6. Review:

☐ First XXXX Second

7. Previous application control No.(s)

117132

8. Remark on checked items:

☐ A. All radioisotopes and uses stated in application

☐ B. Use of _____ for _____

XXXX Training and experience of user "Qualified Expert"

☐ D. Dosage(s) indicated

☐ E. Clinical techniques and procedures outlined

☐ F. Type patient used (i.e., terminal, infants, normal)

☐ G. Other

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9. Action of Subcommittee on Human Applications:

☒ Approve ☐ Disapprove

Remarks: Mr. Agostinelli has submitted adequate supporting data for this full calibration and provides a good example of his "spot check" techniques.

[There are 2 faults I can find: on page 2 of the spot-check protocol there is an unfortunate error — on July 5 1983 the spot check deviation was 3% not 0.3% (factor of 10); ! the recommendation of R. J. Schulz has a slight conflict of interest, since AGA works in the RTS consultant group.]

1/15/86
(Date of appraisal)

Signature _____
(Member of subcommittee)

JAN 21 1986

A. G. AGOSTINELLI, B.S.
LAURENCE GRAY, M.S.
CHARLES E. GIGNAC, M.S.
R. J. HOFFMAN, M.S.
ROBERT C. LANGE, Ph.D.
S. C. ORPHANOUDAKIS, Ph.D.
R. J. SCHULZ, Ph.D.

Monthly Spot Check Procedures

R. J. SCHULZ ASSOCIATES
P.O. BOX 3183, STONY CREEK STATION
BRANFORD, CONNECTICUT 06405

The Stamford Hospital

Cobalt-60

Safety, Alignment and Output Check

A. Beam on/off indicators.

1) Check "beam off" light indicators: in room on wall; over door to room; "operation indicator" on Primalert room monitor; and green light on console.

2) Turn beam on and check all flashing "beam on" indicators; on machine; on wall in room; above door to room; on the console; and on the Primalert.

B. Door Interlocks.

1) With the beam on, open the door slightly to check if the door interlock shuts off the beam.

2) With the beam off, time set on the timer and the door ajar, try to turn the beam on to check that the beam will not go on.

3) Close the door and check that the beam may only go on after resetting at console.

C. Timer Check.

1) Let the beam turn off normally to check that the timer shuts the beam off when zero time is reached.

2) With zero time set, attempt to turn the beam on to check that it will not come on.

D. Emergency off switches.

1) With the beam on, see that the emergency off bar on the console shuts off the beam.

E. Alignment of distance measuring device.

-- Set a 10 x 10 cm field at 80 cm.
-- Raise the table until it stops automatically.
-- Place the spacer on the table with mattress removed.
-- Place the alignment jig on the spacer.
-- Center the 10 x 10 cm field.
-- Set the Optical Distance indicator to 80 cm.
-- The arrow should intersect the cross hairs (within 2mm).

F. Light vs. Radiation Field - Congruence.

1. Place a ready pack of RP/V film between the alignment jig and the spacer; align the 10 x 10 cm light field on the 10 x 10 wires on the jig.

2. Irradiate to approximately 80 rads.

3. When developed, the radiation beam should be within 3mm of the light beam (i.e., the wires).

G. Output Check.

1. Set a 10 x 10 cm field at 80 cm.

2. Place the output jig in the center of the field on the spacer (with the couch fully raised).

3. Place the blue diode in the center of the field. Read the diode on the Nuclear Associates Diode Dosemeter.

4. Irradiate for 1 minute.

5. The reading multiplied by ~~0.75~~ 0.72 should be within 5% of the posted output for the month, for a 10 x 10 cm field.

   To calculate this value:

$$\frac{100\ [\ (\text{Reading})\ (\overset{0.72}{\cancel{0.75}}) - \text{Posted}\ ]}{\text{Posted}} = \pm \_\_\_\_\_ \%\ \text{deviation}$$

   For example, on July 5, 1983, the reading was 111, and the posted output was 83.5. Therefore:

$$\frac{100\ [\ (111)\ (\overset{0.73}{\cancel{0.75}}) - 83.5\ ]}{83.5} = -\cancel{0.3\%}\ \text{deviation}$$

-2.76%

H. Timer Accuracy.

1. Irradiate the diode as in the output check. This is Reading A (Rd_a).

2. Repeat the irradiation, turning the beam off 4 times during the 1 minute irradiation. When the beam shuts off it will have had 5 on-off cycles. This is Reading B (Rd_b).

Timer Accuracy (TA) is determined by the following:

$$TA = \frac{Rd_b - Rd_a}{5\,Rd_a - Rd_b}$$

For example:

A 1-minute irradiation with one on-off cycle readings 153 (Rd_a).

A 1-minute irradiation with 5 on-off cycles reads 159 (Rd_b).

$$TA = \frac{159 - 153}{5\,(153) - 159} = \frac{0.01\ min}{0.01\ min \times 60\ \frac{sec}{min}} = 0.59\ sec$$

$\frac{6}{765-159} = \frac{6}{606} = .01$

A. G. Agostinelli

Alfred G. Agostinelli
Radiological Physicist
R. J. Schulz Associates

NRC Form 272
(10-83)

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9. Action of Subcommittee on Human Applications:

☒ Approve ☐ Disapprove

Remarks:

ML10
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12/5/85
(Date of appraisal)

Signature Peter Rutland
(Member of subcommittee)