



MEDICAL IMAGING CORPORATION

781 River Street Haverhill Massachusetts 01830

617 / 374-4344

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RECEIVED

Applicant... 0809.....
 Check No. 0809 #40 (7B)
 Amount \$40 (7B)
 Type of fee Amendment
 Date Check rec. NOV 6 1979
 Received By Brown.....

November 6, 1979

NOV 10 AM 11 09

U. S. Nuclear Regulatory Commission
 Radioisotope Licensing Branch
 Division of Fuel Cycle and
 Material Safety
 Washington, D.C. 20555

Attn: Michael A. Lamastra

Gentlemen:

RECEIVED BY LFMB
 Date NOV 2 1979
 Log. Nov PG 15 Amend
 By... Brown...
 Orig. To.....
 Action Comp. 11/21/79

Please amend U.S. NRC Material License #20-18449-01 Condition 10 to include the Union Hospital of New Bedford and Youville Hospital of Cambridge, MA. Letters requesting this amendment from appropriate officials in each of these hospitals are enclosed. Also, please amend Condition 12 to add the name of Arthur D. Burke, M.D. to the list of physicians who will supervise the medical procedures under this program. Dr. Burke is on the staff of the Radiology Dept. at Union Hospital and will coordinate our efforts there. Enclosed is a summary of Dr. Burke's training and experience.

The Youville Hospital aspect of the program will be coordinated by Dr. Robert Hannon, who is a member of the Dept. of Radiology in that hospital, and associated with Medical Imaging Corporation in the Ultrasound Division. Nuclear Medicine procedures will be prescribed by and interpreted by Dr. Kirwan T. MacMillan of Medical Imaging Corporation.

A check for \$40 covering the amendment fee for the above request is enclosed. Please contact the undersigned at 617-245-6600 if further information is required.

Yours truly,

Frank Masse
 Frank Masse

XA Copy Has Been Sent to PDR

FXM/jg
Enclosure

79/2060407
 XA

COPIES SENT TO OFF. OF INSPECTION AND ENFORCEMENT

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UNION HOSPITAL OF NEW BEDFORD, INC.

LEONARD A. LANGLOIS
Executive Director

4499 ACUSHNET AVENUE, NEW BEDFORD, MASSACHUSETTS 02745

TELEPHONE: 617-995-4611

October 16, 1979

Director
Office of Nuclear Materials Safety
and Safeguards
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Gentlemen:

This is to request that our hospital be included in the list of facilities at which Medical Imaging Corporation of 781 River Street, Haverhill, Massachusetts, is licensed to perform Nuclear Medicine services. Ours is a general hospital facility with 116 beds. Adequate facilities are available for housing and operating the Medical Imaging Corporation equipment while it is in this hospital, and for performance of whatever procedures may be necessary by Medical Imaging Corporation personnel.

Nuclear Imaging procedures will be requested by any member of the medical staff, but will be coordinated through the Radiology Department under the general supervision of Dr. Arthur Burke, whose training and experience is described in the enclosure. Dr. Burke will work closely with Medical Imaging Corporation personnel throughout this program.

Sincerely,

Leonard A. Langlois
Executive Director

LAL/

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TRAINING AND EXPERIENCE OF EACH INDIVIDUAL NAMED IN ITEM 4 (Use supplemental sheets if necessary)

B. TYPE OF TRAINING	WHERE TRAINED	DURATION OF TRAINING	ON THE JOB (Circle answer)	FORMAL COURSE (Circle answer)
a. Principles and practices of radiation protection	NEW ENGLAND MED. CENTER	JUNE 71 SEPT 71	<input checked="" type="radio"/> Yes No	Yes No
b. Radioactivity measurement standardization and monitoring techniques and instruments	NEMCH	JUNE 71 SEPT 71	<input checked="" type="radio"/> Yes No	Yes No
c. Mathematics and calculations basic to the use and measurement of radioactivity	NEMCH + BCH	1973	Yes No	<input checked="" type="radio"/> Yes No
d. Biological effects of radiation			Yes No	Yes No

9. EXPERIENCE WITH RADIATION. (Actual use of radioisotopes or equivalent experience.)

ISOTOPE	MAXIMUM AMOUNT	WHERE EXPERIENCE WAS GAINED	DURATION OF EXPERIENCE	TYPE OF USE
¹²⁵ I	1 curie	NEW ENGLAND MED. CENTER	7/1/71 - 9/30/71	CLINICAL N. M. RADIATION SAFETY RADIO PHARMACY
¹³¹ I	200 mC			
²⁰³ Bi	25 mC			
^{99m} Tc	100 mC			

10. RADIATION DETECTION INSTRUMENTS. (Use supplemental sheets if necessary.)

TYPE OF INSTRUMENTS (include make and model number of each)	NUMBER AVAILABLE	RADIATION DETECTED	SENSITIVITY RANGE (mc/hr)	WINDOW THICKNESS (mg/cm ²)	USE (Monitoring, surveying, measuring)

11. METHOD, FREQUENCY, AND STANDARDS USED IN CALIBRATING INSTRUMENTS LISTED ABOVE.

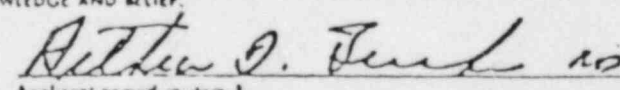
12. FLM BADGES, DOSIMETERS, AND BIOASSAY PROCEDURES USED. (For film badges, specify method of calibrating and processing, or name of supplier.)

INFORMATION TO BE SUBMITTED ON ADDITIONAL SHEETS IN DUPLICATE

- 13. FACILITIES AND EQUIPMENT. Describe laboratory facilities and remote handling equipment, storage containers, shielding, fume hoods, etc. Explanatory sketch of facility is attached. (Circle answer) Yes No
- 14. RADIATION PROTECTION PROGRAM. Describe the radiation protection program including control measures. If application covers sealed sources, submit leak testing procedures where applicable, name, training, and experience of person to perform leak tests, and arrangements for performing initial radiation survey, servicing, maintenance and repair of the source.
- 15. WASTE DISPOSAL. If a commercial waste disposal service is employed, specify name of company. Otherwise, submit detailed description of methods which will be used for disposing of radioactive wastes and estimates of the type and amount of activity involved.

CERTIFICATE (This item must be completed by applicant)

16. THE APPLICANT AND ANY OFFICIAL EXECUTING THIS CERTIFICATE ON BEHALF OF THE APPLICANT NAMED IN ITEM 1, CERTIFY THAT THIS APPLICATION IS PREPARED IN CONFORMITY WITH TITLE 10, CODE OF FEDERAL REGULATIONS, PART 30, AND THAT ALL INFORMATION CONTAINED HEREIN, INCLUDING ANY SUPPLEMENTS ATTACHED HERETO, IS TRUE AND CORRECT TO THE BEST OF OUR KNOWLEDGE AND BELIEF.


 Applicant named in item 1

Date 6/17/78 By _____

Title of certifying official

WARNING.—18 U. S. C., Section 1001, Act of June 25, 1948, 62 Stat. 749, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

UNITED STATES ATOMIC ENERGY COMMISSION
APPLICATION FOR BYPRODUCT MATERIAL LICENSE—MEDICAL
SUPPLEMENT A—PRECEPTOR STATEMENT

This page is to be completed by the applicant physician's preceptor. If more than one preceptor is necessary to document experience, obtain a separate statement from each. Page 2 may be used for comments and additional information.

10. NAME AND ADDRESS OF APPLICANT PHYSICIAN (Include ZIP Code) ARTHUR J. BURKE MD

11. CLINICAL TRAINING AND EXPERIENCE OF PHYSICIAN NAMED IN ITEM 10 ABOVE

(A) ISOTOPE	(B) CONDITIONS DIAGNOSED OR TREATED	(C) No. Cases Observed (See 1 in key below)	(D) No. Cases Involving Personal Participation (See 2 in key below)
I-131 or I-125	Diagnosis of thyroid function*	50	25
	Determination of blood and blood plasma volume		
	Liver function studies		
	Fat absorption studies		
	Kidney function studies	6	3
	In vitro studies	23	12
Cr-51	Gastrointestinal protein loss studies		
	Determination of red blood cell volume and studies of red blood cell survival		
Fe-59	Iron turn over studies		
Co-58 or Co-60	Intestinal absorption studies		
K-42	Potassium space determinations		
I-131	Thyroid imaging		
	Brain tumor localization and cardiac imaging		
	Cisternography	7	5
	Lung imaging		
	Liver imaging		
	Kidney imaging		
	Placenta localization		
Cr-51	Placenta localization		
	Spleen imaging		
Au-198	Liver imaging		
Hg-197	Brain imaging		
	Kidney imaging		
Hg-203	Brain imaging		
Sr-85	Bone imaging		
Tc-99m	Brain Imaging	216	108
	Thyroid Imaging	35	18
	Salivary gland imaging	1	1
	Blood pool imaging		

**APPLICATION FOR BYPRODUCT MATERIAL LICENSE—MEDICAL
SUPPLEMENT A—HUMAN USE**

(A) ISOTOPE	(B) CONDITIONS DIAGNOSED OR TREATED	(C) No. Cases Observed (See 1 in key below)	(D) No. Cases Involving Personal Participation (See 2 in key below)
Tc-99m	Placenta localization		
	Liver and spleen imaging	134	75
	Lung imaging	71	60
	Bone imaging	3	3
Xe-133	Blood flow studies and pulmonary function studies		
Ce-75	Pancreas imaging	12	12
P-32	Treatment of polycythemia, leukemia, and Bone metastases		
	Intracavitary treatment		
I-131	Treatment of thyroid carcinoma		
	Treatment of hyperthyroidism and cardiac condition		
Au-198	Intracavitary treatment		
Co-60 or CO-137	Interstitial treatment		
	Intracavitary treatment		
Ir-192	Interstitial treatment		
Co-60 CO-137	Teletherapy treatment		
Sr-90	Treatment of eye disease		

Key to Column (C) and (D) above

1. Observation should consist of observing radioisotope administration techniques and discussion with preceptor the case histories to establish most appropriate diagnostic and/or therapeutic procedure, limitation, contraindications, etc.
2. Personal participation should consist of (a) supervised examination of patients to determine the suitability for radioisotope diagnosis and/or treatment and recommendation on dosage to be prescribed, (b) collaboration in calibration of the dose and the actual administration of the dose to the patient, including calculation of the radiation dose, related measurements, and plotting of data, and (c) adequate period of training to enable the physician to manage radioactive patients and to follow patients through diagnosis and/or the course of treatment.

12. DATES AND TOTAL NUMBER OF HOURS OF CLINICAL RADIOISOTOPE TRAINING July 1, 1971 - September 30, 1971, 500 hrs.

13. THE TRAINING AND EXPERIENCE INDICATED ABOVE WAS OBTAINED UNDER THE SUPERVISION OF Dr. Paul C. Kahn

New England Medical Center 20-003857-06
 AT 171 Harrison Avenue
 Boston, MA 02111

(Byproduct Material License Number)

Paul C. Kahn
 (Signature of Preceptor)

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