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2006 SEP 19 PM 12: 56

September 15, 2006

LICENSING ASSISTANCE TEAM
DIVISION OF NUCLEAR MATERIALS SAFETY
ATTENTION: **BETSY ULRICH**
U.S. NUCLEAR REGULATORY COMMISSION, REGION I
475 ALLENDALE ROAD
KING OF PRUSSIA, PA 19406-1415

J-4
MS-16

Re: Docket # 030-37318
Control # 139-219
License # 37-31178-01

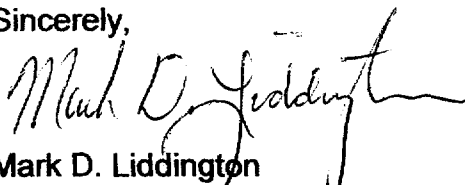
Dear Ms. Ulrich:

I'm writing in reference to your request for additional information regarding the above mentioned license number.

You asked for additional information regarding our request to name Mark D. Liddington as our Radiation Safety Officer. Please find copies of his training certificates and coursework and a letter from his preceptor RSO. Please note that the coursework completed at PennState Geisinger Health System was from 1986-1988.

Should you need additional information, contact me immediately at 1-800-446-7622 x 2. We are anxious to receive our radioactive materials license so we can move forward with installation of our gamma camera. Any effort you can make to expedite this process would be greatly appreciated.

Sincerely,



Mark D. Liddington
Walter L. Robinson & Associates
For: Advanced Breast Care Imaging



PennState Geisinger
Health System

August 16, 1999

Mark D. Liddington
4737 Janet Lane
Bethlehem, PA 18017

RE: Physics course work (Radiologic Education Program, School of Radiographic Technology)

Dear Mr. Liddington:

Per your request, I have reviewed the School of Radiographic Technology's curriculum and assigned equivalent semester hours (credits) to the class work in the program. Each semester hour equals 15 classroom lecture hours. Of the 60 credits you received for your course work at Penn State Geisinger Medical Center, the breakdown of physics credits is as follows:

Radiation Physics	4 credits
(Physical) Principles of Radiographic Exposure I	3 credits
(Physical) Principles of Radiographic Exposure II	3 credits
Basic Radiation Protection	1 credit
Principles of Radiation Protection	3 credits
Radiographic Processing Technique	3 credits
Radiation Biology	3 credits

I hope you find this information helpful. Should you need further clarification, please do not hesitate to contact me.

Sincerely,

Tim Phillips
Geisinger School of Radiographic Technology

rlk



Walter L. Robinson & Associates

Consultant Medical Radiation Health Physicists

2048 William Penn Way • Lancaster, PA 17601 • 717-291-9813 • 800-446-7622 Voice Mail

www.walterrobinson.com

Fax 717-295-7496

July 25, 2006

LICENSING ASSISTANCE TEAM
DIVISION OF NUCLEAR MATERIALS SAFETY
U.S. NUCLEAR REGULATORY COMMISSION, REGION I
475 ALLENDALE ROAD
KING OF PRUSSIA, PA 19406-1415

To whom it may concern:

Mark Liddington is recommended as an authorized RSO by virtue of the following:

- Mr. Liddington meets the requirements of 10 CFR 35.50 as he has completed a structured educational program consisting of 200 hours didactic training in the areas outlined in 35.50(b)(1)(I) A through E. Specifically, his training included the areas of radiation physics and instrumentation, radiation protection, mathematics pertaining to the use and measurement of radioactivity, radiation biology and radiation dosimetry.
- Mr. Liddington has more than one year of full-time radiation safety experience under the supervision of an individual identified as the Radiation Safety Officer on a Commission license that authorizes similar types and uses of byproduct material involving the areas outlined in 35.50 (b)(1)(II) A through G.
- Mr. Liddington has over 15 years of experience as a consultant medical radiation health physicist and has worked with many RSOs in the course of his duties. He has headed radiation safety committee meetings, communicated with authorized users and handled regulatory communications for several of my client jobsites.
- His contact time with multiple RSOs at various licensed client sites in PA far exceeds 1000 hours as his duties dedicated him to over 800 hours/year in regulatory compliance and radiation protection duties. His totals for 15 years would approach 12,000 hours.

The scope of his RSO oversight is recommended for programs licensed for 10 CFR 35.100, 200, 300 and 400 procedures.

I am currently the RSO at St. Luke's Health Network, Reading Hospital and Medical Center, Easton Hospital, and Reading Cardiac Imaging Center. As Mr. Liddington's preceptor Radiation Safety Officer, I certify that the above information accurately reflects Mark's training and experience and that he has satisfactorily completed the requirements in paragraph (b)(1) of 10 CFR 35.50.

Sincerely,

Walter L. Robinson, M.S., D.A.B.M.P., D.A.B.S.N.M., D.A.B.R.
Consultant Certified Medical Radiation Health and Diagnostic Imaging Physicist

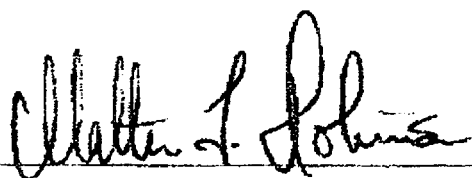
This certifies that

Mark D. Liddington

Has successfully completed:

**Walter L. Robinson & Associates Radiation Science and
Instrumentation, Radiation Protection and
Regulatory Training Program**

May 20, 1990 to November 30, 1990



Walter L. Robinson, MS, DABSNM, DABMP, DABR
Administrator

Walter L. Robinson & Associates
Consultant Medical Radiation Physicists
2624 Spring Valley Road, Lancaster, PA 17601

General Profile of the Walter L. Robinson & Associates Medical Radiation Health & Diagnostic Imaging Physics Training Program

I. Diagnostic Radiology

- A. The 12 annual evaluation measurements and checks of a radiographic X-ray tube
- B. The 10 annual evaluation measurements and checks of a fluoroscopic X-ray tube
- C. How to perform a radiographic and fluoroscopic radiation safety survey, including bone mineral analyzers, etc.
- D. Film-screen technology and quality assurance
- E. Computed and digital radiography and fluoroscopy Q.C.
- F. PACs, workstation monitor, medical informatics and tele-radiology Q.C.
- G. X-ray room radiation shielding requirements and measurements
- H. The state regulations pertaining to medical X-ray facilities
- I. ACR evaluations R&F (barium enema) of X-ray Systems
- J. Patient dose calculations of ESEs and mRAD (uGy) doses, including fetal dose

II. Nuclear Medicine

- A. The State and N.R.C. regulatory compliance pertaining to nuclear medicine and brachytherapy. Licensing services provided to clients. Introduction to all regulations that apply.
- B. How to become an NRC-approved RSO and/or Authorized Medical Physicist
- C. Planar and SPECT gamma camera acceptance-testing and annual evaluations and measurements
- D. PET, PET/CT, and SPECT/CT fusion /molecular imaging technology
- E. Shielding in nuclear medicine and PET
- F. Nuclear medicine radionuclides for diagnosis and therapy
Radiopharmaceuticals and their mechanisms of localization
- G. Measurements with Geiger-Mueller, ion chamber, and scintillation radiation survey meters and monitors. Appropriateness and selection for uses in medicine
- H. Measurements of dose calibrators and electrometers
- I. Measurements of well counters (for wipes) and uptake probes (clinical thyroid uptakes)
- J. Patient dose calculations for diagnostic and therapeutic radiopharmaceuticals, including the fetus
- K. Services in Radiation Safety Committees and communicating with management
- L. ACR SPECT and PET gamma camera accreditation programs

- M. Image protocol suggested improvements, and artifact recognition
- N. The RSO's role, the consultant as RSO
- O. Regulations pertaining to the diagnostic and therapeutic use of unsealed sources including, 10 CFR 2, 19, 20, 30, 31, 32, 35, 70, 170, Nureg 1556 Vol. 9 Final Version, NMSS newsletters, NRC information notices, NRC and State website resources, ADAMS, State regulatory differences, reporting requirements, licensing, amendments, and the inspection process
- P. Unsealed Source Therapies including: I-131 hyperthyroid and thyroid ablation, Sm-153, Sr-89, and P-32 radiopharmaceuticals; their contamination detection, assay, and clinical applications
- Q. Responsibilities of a Q.M.P., A.L.A.R.A. Program, RSO, and RSC

III. Mammography

- A. ACR/MQSA regulatory performance evaluations of the mammographic unit and technologist's Q.C. program
- B. Film/Screen versus Digital Mammography, and MQSA evaluations of various digital mammography units
- C. Stereotactic mammographic unit evaluations
- D. Image protocol improvement suggestions and artifact recognition

IV. Computed Tomography (C.T.)

- A. ACR Accreditation Program
- B. State regulatory compliance
- C. Special CT units and exemptions
- D. PET/CT and SPECT/CT hybrids
- E. Multi-slice, axial, and helical technologies
- F. Image protocol improvement suggestions and artifact recognition

V. M.R.I.

- A. ACR Accreditation Program
- B. ACR Phantom-testing protocol
- C. ACR Coil-testing
- D. Annual performance testing and technologist's Q.C. program review
- E. Image protocol improvement suggestions and artifact recognition

VI. Ultrasound

- A. ACR Accreditation Program
- B. Physics measurements of transducer probe operability
- C. Image protocol improvement suggestions and artifact recognition

VII. Miscellaneous

- A. Principles and Practices of W.L.R. & A
- B. Code of Ethical Conduct of a Consultant and HIPA
- C. NCRP Guidelines against which our measurements are qualified
- D. Teaching Duties, In-services, Seminars, etc.

- E. Education and other Policies of WLR & A
- F. Interaction with hospital and free-standing office staff
- G. Specific client services and their method of provision

VIII. LDR (Manual) Brachytherapy

- A. Sealed brachytherapy source leak-testing, including Cs-137, I-125 seeds, and Sr-90 sources
- B. Quarterly inventories of brachytherapy sources
- C. Radiation safety surveys of brachytherapy sources and their storage locations
- D. Remote handling, safe storage, shielding, and specific regulations pertaining to brachytherapy sources
- E. Packaging and return of brachytherapy sources, including DOT regulations
- F. Hazmat Training of personnel
- G. I-125 Seed and Cs-137 brachytherapy source inventory accounting and record-keeping
- H. Medical Events Reporting, Medical Directives, Amended Medical Directives
- I. Regulations pertaining to brachytherapy sources, including 10 CFR 35.400, 600, and 1000 requirements
- J. Security issues with orphan and brachytherapy sources, including locked storeroom doors, Medical Device Registry Numbers
- K. Safe inter-departmental transport, sterilization, and responsible parties
- L. Detection of lost seeds, and proper measuring equipment for detection
- M. Gamma vs. Beta source assay and leak-testing methods
- N. Leak-testing thresholds, measurement equipment efficiency, conversion of cpm to dpm to uCi
- O. Training necessary for licensure as an authorized user and authorized medical physicist