PHARMA-LOGIC
THE LOGICAL CHOICE

4 November 2010

Lizette Roldán-Otero, Ph.D.
Health Physicist
U.S. Nuclear Regulatory Commission, Region IV
Division of Nuclear Materials Safety
Licensing Assistant Section
Texas Health Resources Tower
612 E. Lamar Blvd, Suite 400
Arlington, TX 76011-4125

SUBJECT: Docket # 030-38007 / Control # 573479
NRC RAM License Amendment

Dear Dr. Roldán-Otero:

This correspondence is to provide additional information in support of our original amendment request, dated 22 September 2010, of US NRC RAM License # 49-27629-01MD. **(Docket # 030-38007 / Control # 573479)**

Items requiring additional documentation:

1. ***You have proposed to add Alan Marvin, RPh as the Authorized Nuclear Pharmacist (ANP); please provide a copy of Mr. Marvin's pharmacist license number and issuing entity.***

   a) ***For an individual qualifying under 10 CFR 32.72(b)(2)(ii):***
      i) ***Description of the training and experience specified in 10 CFR 35.55(b) demonstrating that the proposed ANP is qualified by training and experience, AND***
      ii) ***Written attestation, signed by a preceptor ANP, that training and experience required for certification have been satisfactorily completed and that a level of competency sufficient to function independently as an ANP has been achieved, AND***
      iii) ***If applicable, description of recent related continuing education and experience as required by 10 CFR 35.59.***

   I have attached the following information for Alan Marvin, RPh:

   - Wyoming Board of Pharmacy Pharmacist License # 3384TL
   - original Authorized User Certificate documents, issued February 9, 2001
   - original supervised training conducted at the Ohio State University Health Science Center, during the period January 8 to February 9, 2001
   - a completed NRC Form 313A to document an additional 510 hours of supervised training and experience conducted from August to November 2010.

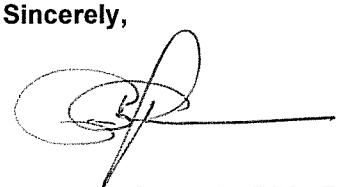
PharmaLogic WY Inc
3480 Trigood Drive ♦ Suite 2 ♦ Casper ♦ Wyoming 82609
307-261-7000 ♦ 307-261-9813 FAX

In addition, PharmaLogic has hired recently Cynthia Tindall, PharmD and requests that she be listed as an Authorized Nuclear Pharmacist (ANP). I have included her resume, Agreement State Radioactive Materials License numbers that list Cynthia Tindall as an ANP and documentation of Ms. Tindall's training and experience.

Tennessee RAM License # R-33166-D17
Ohio RAM License # 02500180092
Kentucky RAM License # 202-245-32
Kentucky RAM License # 202-249-32

Thank you for your time in the review of this amendment request. If there are any other questions, please contact William Chatoff, Senior Vice President (802-598-7209) (chatoff@rocketmail.com) as I will be on vacation from November 15th to December 2nd.

Sincerely,



Gerard A. Strugala, RPh, BCNP
Vice President, Operations
732-539-9395
strugala@optonline.net

The Ohio State University
College of Pharmacy
and
University Medical Center
Department of Pharmacy

OHIO STATE UNIVERSITY MEDICAL CENTER

By this certificate warrants that

Alan J. Marvin

has satisfactorily fulfilled all requirements
and completed the prescribed course

Nuclear Pharmacy Certificate Program

February 9, 2001

Director, Nuclear Pharmacy
Associate Professor of Pharmacy

Executive Director
Council of Ohio Colleges of Pharmacy

Dean, College of Pharmacy

Chair, Pharmacy Practice
and Administration

THE OHIO STATE UNIVERSITY
HEALTH SCIENCES CENTER

College of Pharmacy
Division of Pharmacy Practice and Administration
Phone 614-292-2775
FAX 614-292-1335

217 Lloyd M. Parks Hall
500 West 12th Avenue
Columbus, OH 43210-1291
Phone 614-292-2266
FAX 614-292-2588

February 10, 2001

Melanie Whitaker
Human Resources Department
Central Pharmacy Services, Inc.
1819 Peachtree Road, N.E.
Suite 609
Atlanta, GA 30309

Dear Melanie:

I am writing to report on the activities of Alan Marvin, a pharmacist employee of the Spokane Central Pharmacy, who participated in the Nuclear Pharmacy Certificate Program during January 8-February 9, 2001. As you know, Alan is a 1998 graduate of the University of Montana School of Pharmacy in Missoula, MT. He is a registered pharmacist who has been practicing as a staff pharmacist in Washington and Oregon since graduation. His decision to make a career in nuclear pharmacy has brought him to Columbus for the 33rd Nuclear Pharmacy Certificate Program.

Alan recently accepted the job at the Spokane nuclear pharmacy and, except for a couple of weeks working with Paul, his participation in the Nuclear Pharmacy Certificate Program was his first introduction to the practice of nuclear pharmacy. He was very quick to pick up on the laboratory activities and the didactic, classroom studies. He was one of the first of the group to go into a nuclear pharmacy setting to begin the preparation of kits and dispensing activities.

During Alan's stay in Columbus, he exemplified the qualities necessary to function in a nuclear pharmacy setting. He showed good attention to detail following directions in order to have good outcomes in any activity in which he was involved. Alan is well-organized, plans his activities in advance before starting a procedure that involves exposure to radiation. He is inquisitive-always expressing an interest in the topics for daily discussion sessions. He spent evenings working with nuclear medicine technologists who cover the late shift in the Division of Nuclear Medicine in order to have a better understanding of the use of radiopharmaceuticals in the clinical setting. This is very important for nuclear pharmacists who will be practicing in a centralized setting which may not allow time in a nuclear medicine setting for observation.

Alan is careful in his work environment. He took precautions to make certain his hands-on practice would not result in radiation contamination or unnecessary exposure to himself or co-workers. Alan interacted well with patients and always expressed a caring attitude in the clinical environment.

Alan immediately grasped the importance of learning as much as possible during his stay. He was very good about locating an activity in the Division of Nuclear Medicine that would provide a learning experience during "slow times" in the Nuclear Pharmacy Services. Alan spent extra hours with nuclear medicine technologists, nuclear medicine research staff and at film reading sessions with nuclear medicine physicians and nuclear cardiologists. In addition, he had the opportunity to visit and observe at two different stand-alone, outpatient clinics that provide nuclear medicine services. One of these facilities provides P.E.T. imaging services along with traditional nuclear medicine studies. He also completed an early-morning rotation at a cycloton facility to observe the preparation and dispensing of P.E.T. radiopharmaceuticals.

Alan also had the opportunity to work some early morning hours at another hospital-based nuclear pharmacy in Columbus. The Grant/Riverside Methodist Hospital is one of our training sites in which two Board Certified nuclear pharmacists, John L. Hatch and Janet Robertson, work alongside the Nuclear Pharmacy Certificate Program attendees on a daily basis. The Grant/Riverside Nuclear Pharmacy supplies two different hospitals in Columbus with unit dose radiopharmaceuticals and John or Janet begin their workday at 4:00am.

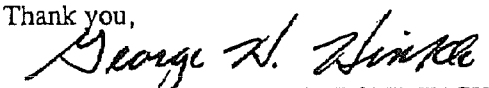
Alan devoted more hours than required for the completion of the Nuclear Pharmacy Certificate Program. As you know, a total of 214 hours is devoted to the didactic and laboratory sessions of the Program. Alan would consistently give 2-4 hours extra each day and spend time during the weekend working with nuclear pharmacists, nuclear medicine technologists or the research staff. The Division of Nuclear Medicine maintains regular weekend hours from 8:00am through 5:00pm both Saturday and Sunday. This provided more hands-on experience in the preparation and dispensing of radiopharmaceuticals as well as helping with the imaging procedures and working on research projects.

During the five weeks Alan was involved in the Nuclear Pharmacy Certificate Program, he completed a total of 152 additional hours of work with one of the following Board Certified Nuclear Pharmacists (George Hinkle, Steve Lefevre, John Hatch or Janet Robertson) learning the safe handling of radioactive materials involved with the preparation, dispensing and disposal of radioactive materials. Enclosed with this letter, you will find a daily summary of the activities in which Alan participated during his training.

In summary, Alan was a devoted Nuclear Pharmacy Certificate Program attendee. I appreciate the opportunity to be involved in the training of this nuclear pharmacist. I know Alan was looking forward to returning to Washington and joining the staff of the facility in Spokane. I hope he exceeds the expectations of the staff at the Spokane Central Pharmacy and the Atlanta offices of Central Pharmacy Services, Inc.

Please call if you have any questions concerning this information. I look forward to working with pharmacists from Central Pharmacy Services, Inc. throughout the coming year.

Thank you,



George H. Hinkle,RPh,MS,BCNP,FASHP,FAPhA
Pharmacy Practice & Administration Division
College of Pharmacy
The Ohio State University
Room 203D, Doan Hall
410 West Tenth Avenue
Columbus, OH 43210

office phone (614) 293-8751
FAX number (614) 293-2529
e-mail address: hinkle.5@osu.edu

Alan Marvin

THE OHIO STATE UNIVERSITY NUCLEAR PHARMACY CERTIFICATE PROGRAM
EXTRA HOURS SCHEDULE FOR THE PERIOD OF JANUARY 8, 2001 THROUGH FEBRUARY 9, 2001

MONDAY, January 8, 2001
Radiation contamination surveys. G-M survey meter calibration/check. Conducting area surveys. Recording results. Wipe smear sampling. Automatic well counter calibration and use. Conversion of cpm to dpm. Proper record maintenance. (2 hours)

Security of radioactive materials. N.R.C and institutional requirements and guidelines for safe use, storage and disposal of radioactive materials. (1 hour)

TUESDAY, January 9, 2001
Well counter calibration, Chi Square test and proper use for counting radioactive samples including wipe smear samples of radioactive material packages received in the Nuclear Pharmacy. Receipt of radioactive material packages, check-in procedures, surveys and record maintenance. (2 hours)

Radiation contamination surveys. G-M survey meter calibration/check. Conducting area surveys. Recording results. Wipe smear sampling. Automatic well counter calibration and use. Conversion of cpm to dpm. Proper record maintenance. (1 hour)

Security of radioactive materials. N.R.C and institutional requirements and guidelines for safe use, storage and disposal of radioactive materials. (1 hour)

WEDNESDAY, January 10, 2001
Shipping and receipt of radioactive material packages. Proper labeling, review of D.O.T. and N.R.C. regulations. Proper wipe smear testing of radioactive material packages. Placarding of transportation vehicles. Review of 10CFR Parts 19, 20 and 35. (2 hours)

Radiation contamination surveys. G-M survey meter calibration/check. Conducting area surveys. Recording results. Wipe smear sampling. Automatic well counter calibration and use. Conversion of cpm to dpm. Proper record maintenance. (2 hour)

THURSDAY, January 11, 2001
Elution of the Mo-99/Tc-99m radionuclide generator. Quality assessment of the generator eluate including Mo-99 levels, alumina content, pH and radioactive concentration. (2 hours)

Radiation contamination surveys. G-M survey meter calibration/check. Conducting area surveys. Recording results. Wipe smear sampling. Automatic well counter calibration and use. Conversion of cpm to dpm. Proper record maintenance. (2 hours)

FRIDAY, January 12, 2001
Elution of the Mo-99/Tc-99m radionuclide generator. Quality assessment of the generator eluate including Mo-99 levels, alumina content, pH and radioactive concentration. Record maintenance requirements. (1 hour)

Radiation contamination surveys. G-M survey meter calibration/check. Conducting area surveys. Recording results. Wipe smear sampling. Automatic well counter calibration and use. Conversion of cpm to dpm. Proper record maintenance. (2 hours)

SATURDAY, January 13, 2001
Proper handling of radioactive materials including liquids, solids and gases. Hands-on experience with syringes using proper lead protective shielding. (3 hours)

Nuclear Pharmacy computer software instruction. (3 hours)

Elution of the Mo-99/Tc-99m radionuclide generator. Quality assessment of the generator eluate including Mo-99 levels, alumina content, pH and radioactive concentration. Record maintenance requirements. (2 hours)

Radiation contamination surveys. G-M survey meter calibration/check. Conducting area surveys. Recording results. Wipe smear sampling. Automatic well counter calibration and use. Conversion of cpm to dpm. Proper record maintenance. (2 hours)

SUNDAY, January 14, 2001
Proper handling of radioactive materials including liquids, solids and gases. Hands-on experience with syringes using proper lead protective shielding. Nuclear Pharmacy computer software instruction. (6 hours)

Elution of the Mo-99/Tc-99m radionuclide generator. Quality assessment of the generator eluate including Mo-99 levels, alumina content, pH and radioactive concentration. Record maintenance requirements. (2 hours)

Radiation contamination surveys. G-M survey meter calibration/check. Conducting area surveys. Recording results. Wipe smear sampling. Automatic well counter calibration and use. Conversion of cpm to dpm. Proper record maintenance. (3 hours)

MONDAY, January 15, 2001
Elution of the Mo-99/Tc-99m radionuclide generator. Quality assessment of the generator eluate including Mo-99 levels, alumina content, pH and radioactive concentration. Record maintenance requirements. (2 hour)

Radiation contamination surveys. G-M survey meter calibration/check. Conducting area surveys. Recording results. Wipe smear sampling. Automatic well counter calibration and use. Conversion of cpm to dpm. Proper record maintenance. (2 hours)

TUESDAY, January 16, 2001
Elution of the Mo-99/Tc-99m radionuclide generator. Quality assessment of the generator eluate including Mo-99 levels, alumina content, pH and radioactive concentration. Record maintenance requirements. (1 hour)

Dose calibrator quality assessment (constancy, geometrical variation, accuracy and linearity). Record maintenance requirements. (2 hours)

WEDNESDAY, January 17, 2001
Elution of the Mo-99/Tc-99m radionuclide generator. Quality assessment of the generator eluate including Mo-99 levels, alumina content, pH and radioactive concentration. Record maintenance requirements. (1 hour)

Dose calibrator quality assessment (constancy, geometrical variation, accuracy and linearity). Record maintenance requirements. (2 hours)

THURSDAY, January 18, 2001
Elution of the Mo-99/Tc-99m radionuclide generator. Quality assessment of the generator eluate including Mo-99 levels, alumina content, pH and radioactive concentration. Assessment of daily radiopharmaceutical requirements. Review of drug orders (patient consults) for accuracy, history and proper procedure. Check for proper signature and ordering physician. (3 hours)

FRIDAY, January 19, 2001
Elution of the Mo-99/Tc-99m radionuclide generator. Quality assessment of the generator eluate including Mo-99 levels, alumina content, pH and radioactive concentration. Record maintenance requirements. Procedures for insuring correct dosage dispensed for patient. Review of procedures for preparation and dispensing of radiopharmaceuticals. Questioning of problematic nuclear medicine consults. (2 hours)

SATURDAY, January 20, 2001
Laboratory techniques/safety procedures review. Maintenance of the A.L.A.R.A. concept using time, distance, shielding and contamination control. Elution of the Mo-99/Tc-99m radionuclide generator. Quality assessment of the generator eluate including Mo-99 levels, alumina content, pH and radioactive concentration. Record maintenance requirements. (6 hours)

Radiation contamination surveys. G-M survey meter calibration/check. Conducting area surveys. Recording results. Wipe smear sampling. Automatic well counter calibration and use. Conversion of cpm to dpm. Proper record maintenance. (3 hours)

SUNDAY, January 21, 2001
Proper techniques for handling therapeutic radiopharmaceuticals. Procedures for dosing patients with iodine I-131 sodium iodide oral solution for therapy. Surveys of the patient for determination of exposure rate to general public. Review of N.R.C.and institutional requirements. (4 hours)

Elution of the Mo-99/Tc-99m radionuclide generator. Quality assessment of the generator eluate including Mo-99 levels, alumina content, pH and radioactive concentration. Record maintenance requirements. Radiation contamination surveys. G-M survey meter calibration/check. Conducting area surveys. Recording results. Wipe smear sampling. Automatic well counter calibration and use. Conversion of cpm to dpm. Proper record maintenance. (6 hours)

MONDAY, January 22, 2001
Elution of the Mo-99/Tc-99m radionuclide generator. Quality assessment of the generator eluate including Mo-99 levels, alumina content, pH and radioactive concentration. Record maintenance. Preparation and quality assessment of radiopharmaceuticals. Dispensing of unit dose radiopharmaceuticals. (3 hours)

TUESDAY, January 23, 2001
Elution of the Mo-99/Tc-99m radionuclide generator. Quality assessment of the generator eluate includingMo-99 levels, alumina content, pH and radioactive concentration. Record maintenance. Preparation and quality assessment of radiopharmaceuticals. Dispensing of unit dose radiopharmaceuticals. (3 hours)

WEDNESDAY, January 24, 2001
Elution of the Mo-99/Tc-99m radionuclide generator. Quality assessment of the generator eluate including Mo-99 levels, alumina content, pH and radioactive concentration. Record maintenance. Preparation and quality assessment of radiopharmaceuticals. Dispensing of unit dose radiopharmaceuticals. (3 hours)

THURSDAY, January 25, 2001
Elution of the Mo-99/Tc-99m radionuclide generator. Quality assessment of the generator eluate including Mo-99 levels, alumina content, pH and radioactive concentration. Preparation and quality assessment of radiopharmaceuticals. Dispensing of unit dose radiopharmaceuticals. (2 hours)

FRIDAY, January 26, 2001
Elution of the Mo-99/Tc-99m radionuclide generator. Quality assessment of the generator eluate including Mo-99 levels, alumina content, pH and radioactive concentration. Record maintenance. Preparation and quality assessment of radiopharmaceuticals. Dispensing of unit dose radiopharmaceuticals. (3 hours)

SATURDAY, January 27, 2001
Radiation decontamination of the laboratory. Proper techniques for isolation, clean-up and notification of contamination. N.R.C. and institutional requirements for major and minor spills. Elution of the Mo-99/Tc-99m radionuclide generator. Quality assessment of the generator eluate including Mo-99 levels, alumina content, pH and radioactive concentration. Record maintenance. (6 hours)

Radiation contamination surveys. G-M survey meter calibration/check. Wipe smear sampling. Automatic well counter calibration and use. Conversion of cpm to dpm. Proper record maintenance. (3 hours)

SUNDAY, January 28, 2001
Requirements for bioassay. Proper techniques for thyroid uptake bioassay and urine bioassay procedures. Conversion of cpm to dpm and determination of "action levels". Record maintenance requirements for N.R.C. and institution. (4 hours)

Elution of the Mo-99/Tc-99m radionuclide generator. Quality assessment of the generator eluate including Mo-99 levels, alumina content, pH and radioactive concentration. Record maintenance requirements. (3 hours)

Radiation contamination surveys. G-M survey meter calibration/check. Conducting area surveys. Recording results. Wipe smear sampling. Automatic well counter calibration and use. Conversion of cpm to dpm. Proper record maintenance. (3 hours)

MONDAY, January 29, 2001
Elution of the Mo-99/Tc-99m radionuclide generator. Quality assessment of the generator eluate including Mo-99 levels, alumina content, pH and radioactive concentration. Record maintenance. Preparation and quality assessment of radiopharmaceuticals. Dispensing of unit dose radiopharmaceuticals. (3 hours)

TUESDAY, January 30, 2001
Elution of the Mo-99/Tc-99m radionuclide generator. Quality assessment of the generator eluate including Mo-99 levels, alumina content, pH and radioactive concentration. Record maintenance. Preparation and quality assessment of radiopharmaceuticals. Dispensing of unit dose radiopharmaceuticals. (3 hours)

University Radiation Safety Committee attendance. (2 hours)

WEDNESDAY, January 31, 2001
Elution of the Mo-99/Tc-99m radionuclide generator. Quality assessment of the generator eluate including Mo-99 levels, alumina content, pH and radioactive concentration. Record maintenance. Preparation and quality assessment of radiopharmaceuticals. Dispensing of unit dose radiopharmaceuticals. (3 hours)

THURSDAY, February 1, 2001
Elution of the Mo-99/Tc-99m radionuclide generator. Quality assessment of the generator eluate including Mo-99 levels, alumina content, pH and radioactive concentration. Preparation and quality assessment of radiopharmaceuticals. Dispensing of unit dose radiopharmaceuticals. (3 hours)

FRIDAY, February 2, 2001
Elution of the Mo-99/Tc-99m radionuclide generator. Quality assessment of the generator eluate including Mo-99 levels, alumina content, pH and radioactive concentration. Record maintenance. Preparation and quality assessment of radiopharmaceuticals. Dispensing of unit dose radiopharmaceuticals. (2 hours)

SATURDAY, February 3, 2001
Preparation of radiopharmaceutical for lymphoscintigraphy and intraoperative lymphatic mapping (I.L.M.) procedures. Research involving training of surgeons in proper injection techniques and comparison of radioactive counts using the intraoperative gamma detecting probe with the vital blue dye procedure. (3 hours)

Elution of the Mo-99/Tc-99m radionuclide generator. Quality assessment of the generator eluate including Mo-99 levels, alumina content, pH and radioactive concentration. Record maintenance requirements. (2 hours)

Radiation contamination surveys. G-M survey meter calibration/check. Conducting area surveys. Recording results. Wipe smear sampling. Automatic well counter calibration and use. Conversion of cpm to dpm. Proper record maintenance. (2 hours)

SUNDAY, February 4, 2001
Preparation of radiopharmaceutical for gastric emptying studies, gastrointestinal reflux, solid and liquid meals. (4 hours)

Elution of the Mo-99/Tc-99m radionuclide generator. Quality assessment of the generator eluate including Mo-99 levels, alumina content, pH and radioactive concentration. Record maintenance requirements. (1 hour)

Radiation contamination surveys. G-M survey meter calibration/check. Conducting area surveys. Recording results. Wipe smear sampling. Automatic well counter calibration and use. Conversion of cpm to dpm. Proper record maintenance. (3 hours)

MONDAY, February 5, 2001
Elution of the Mo-99/Tc-99m radionuclide generator. Quality assessment of the generator eluate including Mo-99 levels, alumina content, pH and radioactive concentration. Record maintenance.Preparation and quality assessment of radiopharmaceuticals. Dispensing of unit dose radiopharmaceuticals. (2 hours)

Proper injection techniques and imaging procedures involving the research patient undergoing lymphoscintigraphy and I.L.M of melanoma. Attendance at surgery during I.L.M. procedure. (2 hours)

TUESDAY, February 6, 2001
Elution of the Mo-99/Tc-99m radionuclide generator. Quality assessment of the generator eluate including Mo-99 levels, alumina content, pH and radioactive concentration. Record maintenance. Preparation and quality assessment of radiopharmaceuticals. Dispensing of unit dose radiopharmaceuticals. (2 hours)

Practical Mo-99/Tc-99m generator kinetics. The importance of using "fresh" generator elutions for radiopharmceutical kit preparation. (2 hours)

WEDNESDAY, February 7, 2001
Elution of the Mo-99/Tc-99m radionuclide generator. Quality assessment of the generator eluate including Mo-99 levels, alumina content, pH and radioactive concentration. Record maintenance. Preparation and quality assessment of radiopharmaceuticals. Dispensing of unit dose radiopharmaceuticals. (3 hours)

THURSDAY, February 8, 2001
Elution of the Mo-99/Tc-99m radionuclide generator. Quality assessment of the generator eluate including Mo-99 levels, alumina content, pH and radioactive concentration. Preparation and quality assessment of radiopharmaceuticals. Dispensing of unit dose radiopharmaceuticals. (2 hours)

FRIDAY, February 9, 2001
Elution of the Mo-99/Tc-99m radionuclide generator. Quality assessment of the generator eluate including Mo-99 levels, alumina content, pH and radioactive concentration. Record maintenance. Preparation and quality assessment of radiopharmaceuticals. Dispensing of unit dose radiopharmaceuticals. (2 hours)

NRC FORM 313A (ANP)
(3-2009)

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED BY OMB: NO. 3150-0120
EXPIRES: 3/31/2012

AUTHORIZED NUCLEAR PHARMACIST TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION
[10 CFR 35.55]

Name of Proposed Authorized Nuclear Pharmacist	State or Territory Where Licensed
ALAN MARVIN	MONTANA, WYOMING, OREGON, WASHINGTON

PART I – TRAINING AND EXPERIENCE
(Select one of the two methods below)

* Training and Experience, including board certification, must have been obtained within the 7 years preceding the date of application or the individual must have obtained related continuing education and experience since the required training and experience was completed. Provide dates, duration, and description of continuing education and experience related to the nuclear pharmacy uses.

☐ **1. Board Certification**

a. Provide a copy of the board certification.

b. Skip to and complete Part II Preceptor Attestation.

☐ **2. Structured Educational Program for Proposed Authorized Nuclear Pharmacist**

a. Classroom and Laboratory Training.

Description of Training	Location of Training	Clock Hours	Dates of Training*
Radiation physics and instrumentation	OHIO STATE UNIVERSITY COLLEGE OF PHARMACY 317 LLOYD M PARKS HALL 500 WEST 12TH AVE COLUMBUS, OH 43210-1291	PLEASE SEE ATTACHED DOCUMENTS	2/10/01
Radiation protection			
Mathematics pertaining to the use and measurement of radioactivity			
Chemistry of byproduct material for medical use			
Radiation biology			
Total Hours of Training:			

NRC FORM 313A (ANP)
(3-2009)

U.S. NUCLEAR REGULATORY COMMISSION

AUTHORIZED NUCLEAR PHARMACIST TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)

2. Structured Educational Program for Proposed Authorized Nuclear Pharmacist (continued)

b. Supervised Practical Experience in a Nuclear Pharmacy.

Description of Experience	Location of Experience/License or Permit Number of Facility	Clock Hours	Dates of Experience*
Shipping, receiving, and performing related radiation surveys		40	8/23/10 - 11/4/10
Using and performing checks for proper operation of instruments used to determine the activity of dosages, survey meters, and, if appropriate, instruments used to measure alpha- or beta-emitting radionuclides		30	8/23/10 - 11/4/10
Calculating, assaying, and safely preparing dosages for patients or human research subjects		300	8/23/10 - 11/4/10
Using administrative controls to avoid medical events in administration of byproduct material		40	8/23/10 - 11/4/10
Using procedures to prevent or minimize radioactive contamination and using proper decontamination procedures		100	8/23/10 - 11/4/10
	Total Hours of Experience:	510	

Supervising Individual

TAMIKO USHIO Tamiko K. Ushio

c. Go to and complete Part II Preceptor Attestation.

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NRC FORM 313A (ANP)
(3-2009)

U.S. NUCLEAR REGULATORY COMMISSION

AUTHORIZED NUCLEAR PHARMACIST TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)

PART II – PRECEPTOR ATTESTATION

Note: This part must be completed by the individual's preceptor. The preceptor does not have to be the supervising individual as long as the preceptor provides, directs, or verifies training and experience required. If more than one preceptor is necessary to document experience, obtain a separate preceptor statement from each.

First Section
Check one of the following:

Board Certification

| | I attest that _____ has satisfactorily completed the requirements in
Name of Proposed Authorized Nuclear Pharmacist

10 CFR 35.55(a)(1), (a)(2), and (a)(3) and has achieved a level of competency sufficient to function independently as an authorized nuclear pharmacist.

OR

Structured Educational Program

[X] I attest that ALAN MARVIN has satisfactorily completed a 700-hour structured
Name of Proposed Authorized Nuclear Pharmacist

educational program consisting of both 200 hours of classroom and laboratory training, and practical experience in nuclear pharmacy, as required by 10 CFR 35.55(b)(1) and has achieved a level of competency sufficient to function independently as an authorized nuclear pharmacist.

Second Section
Complete the following for preceptor attestation and signature:

I am an Authorized Nuclear Pharmacist for PHARMALOGIC WYOMING ,
Nuclear Pharmacy or Medical Facility

_____
License/Permit Number

Name of Preceptor	Signature	Telephone Number	Date
TAMIKO USHIO	Tamiko A. Ushio	307-261-7000	11/4/10

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Cynthia S. Tindall
Curriculum Vitae

595 Shenandoah Lane
Dayton, TN 37321
Phone: 423.285.7399
E-mail: Ctindall@pharmalogic.info
November 2010

CAREER EXPERIENCE:

LICENSED WITH THE BOARD OF PHARMACY IN THE FOLLOWING STATES:
Kentucky
Ohio
Tennessee
Georgia - inactive license

NUCLEAR/PET PHARMACIST

08/2004-12/2007
Scenic City Isotopes / Triad Isotopes,
2113 McCallie Avenue, Chattanooga, Tennessee 37404

Trained in the Atlanta, Georgia PET Pharmacy. This included learning the DOS based Pinestar software, cyclotron operation, QC procedures, coincidence box set-up, kit preparation for the coincidence boxes, and dose drawing with manipulator arms.
Composed, submitted, and corrected the Tennessee Radioactive Materials License for the PET pharmacy.
Composed, submitted, and corrected the Tennessee Certified Registration for the accelerator/cyclotron for the PET pharmacy.
Ensured the Board of Pharmacy license was submitted and was present for the Board of Pharmacy inspection and answered questions for the Board of Pharmacy inspector related to the PET pharmacy.
Listed as the Pharmacist in Charge on the Pharmacy license.

From January 2007 to August 5, 2007

All duties to ensure opening of the pharmacy on August 6, 2007.

This included working with the contractors for building set-up, decision making for changes to the building, assisting to keep the building construction on track, ordering equipment necessary for PET pharmacy operation, organization of paperwork, ad placement and hiring of drivers and pharmacy technician, training of newly hired personnel, training on the ROTEM area and stack monitoring system with Bioscan, availability to GE cyclotron installers, assisted with unloading and placement of minicells, hotcell, QC equipment, and cyclotron room equipment. Entering of information into the pharmacy software on customers, pricing, licenses, and authorized users.
Photograph documentation of the building construction and equipment delivery.
Ensured that all local inspections on the new building were completed by the Fire Department, sewer inspector, electrical inspector, building inspector, plumbing inspector, and all other inspections necessary for building occupancy.
Ensured initial IQ and OQ for all equipment.
Ensuring of adherence to FDA regulations, USP 797, cGMP associated with F18 FDG production.
Cyclotron operation for the production of radioactive FDG.

Preparation of chemicals, supplies, and production equipment for the production of radioactive FDG in a sterile environment.
Quality control tests after the production of FDG to ensure sterility, proper pH, and that FDG was produced and to ensure FDG dose was compliant for human IV dosing.
Complied with regulations for a sterile environment, lab, dose drawing hood, Production area, and QC lab separated from general areas. Ensuring that personnel donned sterile garments and kept any areas in relation to the patient doses as sterile as possible.
Monitored the facility environment for correct refrigerator temperature, freezer temperature, room temperature, and air quality.
Manipulated robotic arms in a sterile hood to draw the radioactive FDG doses into syringes for delivery to clients.
Pharmacy Manager with responsibilities that include, inventory control, ordering of supplies, financial reporting, hiring of new personnel, training new hires, filing new hire paperwork, and all administrative duties.
Radiation Safety Officer with the responsibility to oversee the radiation safety program and ensure compliance with the Tennessee Department of Health Radiation and Protection department.
Trained on the Biodose computer software for prescription entry, BOL printing, hot lab records, customer information, inventory entry, daily task records, and all aspects of the software.
Oversee delivery personnel which includes, coordinating deliveries, packaging of radioactive doses, adherence to radiation safety, and general maintenance of the lab.
Accept medication orders from physicians and nuclear technologists.
Assist Nuclear Technologists in locating CE credits, nuclear medicine procedures, and information on nuclear medicine products.
Visiting clients for customer relations and working with customers to ensure a smooth transition from Atlanta, Georgia supplying doses to the Chattanooga, Tennessee pharmacy supplying doses.
Tennessee Radioactive Material License number R-33166-D17
Tennessee Certified Registration License number A-3308-H7

NUCLEAR PHARMACIST

07/2004-08/2006

Mallinckrodt Inc.,
9800 Rockside Road, Suite 550, Valley View, Ohio 44125

Facility Manager October 25, 2004. Responsibilities include budgeting, inventory control, personnel performance reviews, hiring of new personnel, writing corrective action plans for the Dakota tracer, and initiate new procedures to improve pharmacy performance.

Radiation Safety Officer Position held through April 2005.
Training and overseeing the new Radiation Safety Officer chosen to fill the position.
Oversee the radiation safety program. Ensure compliance with Mallinckrodt and the Ohio Department of Health Radiation and Protection Program.
Initial entry of customers radioactive licenses into TRON and maintenance of the radioactive licenses in TRON.
Compound and dispense radiopharmaceuticals for patient use following cGMP. Compounding included calculating the correct amounts of radioactive material, medication, buffer, and solution for compliant patient dosing. Sterility procedures were followed.
Labeling patient blood with In-111 Oxine or Tc99m Ceretec in a sterile environment. Ensuring that each dose syringe was properly labeled and returned to the proper hospital for patient IV administration.
Perform quality control on compounded radiopharmaceuticals in a sterile environment.

Oversee delivery personnel which includes, coordinating deliveries, packaging of radioactive doses, adherence to radiation safety, and general maintenance of the lab.
Order supplies, medication kits for compounding, and radioactive pharmaceuticals.
Accept medication orders from physicians and nuclear technologists.
Assist Nuclear Technologists in locating CE credits, nuclear medicine procedures, and information on nuclear medicine products.
During product shortages, obtaining product from other sources, or coordinating the distribution to our pharmacy customers.
Visiting clients for customer relations which included Neutrospec informational meetings, and safety syringe issues.
Participation in a Nuclear Medicine Product Development meeting.
Interim manager for four months prior to the promotion of Facility Manager.
Review of the delivery routes and updating of the routes delivery times to decrease costs.
Coordinate courier driver training. Including developing a procedural manual.
Initiated the nuclear pharmacy technician morning rotation schedule to ensure that all the morning technicians were proficient on drawing doses and working on the floor to coordinate deliveries.
Assured that all pharmacists were trained in Bexxar and Neutrospec compounding. Doses were compounded in a sterile environment for patient IV dosing.
Preceptor for the Summer Pharmacy Interns.
Training of Nuclear Medicine Students that rotate through the pharmacy.
Training of new pharmacy personnel, including new pharmacists.
Fill in pharmacist at the Toledo Mallinckrodt Nuclear Pharmacy.
Ohio Radioactive Material License number 02500180092

NUCLEAR PHARMACIST

05/2001-06/2002
Louisville Central Nuclear Pharmacy,
4044 Dutchmans Lane, Louisville, Kentucky 40207

Five weeks of Nuclear Pharmacy training at Premier Pharmacy Services in Indianapolis, Indiana under the direction of Steve Piepenbrink.
Labeling patient blood with In-111 Oxine or Tc99m Ceretec.
Compound and dispense radiopharmaceuticals for patient use.
Compound I-131 diagnostic and therapy capsules.
Perform quality control on compounded radiopharmaceuticals.
Oversee delivery personnel which included coordinating deliveries, packaging of radioactive doses, adherence to radiation safety, conducting laboratory meetings, and general maintenance of the lab.
Order supplies, medication kits for compounding, and radioactive pharmaceuticals.
Accept medication orders from physicians and nuclear technologist.
Responsible for ordering bulk sincalide, weighing, repackaging, and compounding for patient specific use.
Answer questions from technologists and physicians pertaining to radiopharmaceuticals.
Training the new office administrator and delivery drivers.
Instruct pharmacy technicians in the proper technique of drawing radioactive doses.
Visit clients for customer relations.

LAB ASSISTANT

03/1999-05/2001
Positron Emission Tomography Clinic,
University of Iowa Hospitals and Clinics, Iowa City, Iowa 52242

Bioburden studies. Testing filter integrity and bacterial load.
Organization and maintenance of the hot and cold chemistry laboratory.

Maintenance of the nanopure water purification system.
Assisting the Nuclear Technologist and Chemist with endotoxin and sterility testing, record keeping, and pre-setup for F18 FDG and 15O H2O studies.
Administrative duties consisting of filing paperwork, acquisition of research articles, faxing, copying, and requisitioning of laboratory supplies.

EDUCATION:

06/2001-07/2001 NUCLEAR PHARMACY TRAINING
Ohio State University, Columbus, Ohio with George Hinkle

08/1995-05/2001 DOCTOR OF PHARMACY
University of Iowa College of Pharmacy, Iowa City, Iowa 52242
Degree: May 10, 2001

08/1993-05/1995 ASSOCIATE OF ARTS
Iowa Central Community College, Webster City, Iowa 50595
Degree: May 15, 1995

PHARMACY SCHOOL ROTATIONS May 2000-May 2001

PHARMACEUTICAL CARE
Osco Pharmacy, Coralville, Iowa

Major focus on counseling patients with prescription and over the counter medications, which included assisting patients with over the counter medication selection.
Pharmacy reference manuals and Internet searches on medications and therapy for patients.
Blood pressure monitoring of patients.
Review of blood glucose meters with clients.
Free Medical Clinic Pharmacy assistant. Filling prescriptions and counseling patients.
Emergency Housing Project resident interviews. Assisted residents with medication information, medical appointments, optometrist appointments, medication acquisition, and blood pressure checks.

PHYCHIATRY INPATIENT UNIT
University of Iowa Hospitals and Clinics, Iowa City, Iowa

Counseled patients on prescription medications with an emphasis on psychiatric medications.
Participated in daily inpatient rounds with the health care team.
Reviewed patient medications and necessary monitoring including drug levels and blood tests, making recommendations to the health care team.
Pharmacy reference manuals and Internet searches for information on medications and therapy for the medical team.
Interviewed psychiatric inpatients about their disease state.

SURGICAL INTENSIVE CARE UNIT
University of Iowa Hospitals and Clinics, Iowa City, Iowa

Participated in daily inpatient rounds with the health care team.
Performed pharmacy reference manuals and Internet searches for information on medications and therapy for the medical team.
Reviewed patient medications and appropriate monitoring of drug levels, electrolytes, and blood tests.
Updated the satellite pharmacist with the medical teams intentions for therapy for the patients in the unit.
Oral reports of recently approved medications appropriate for use in the clinic to staff pharmacist and pharmacy students.

PEARSONS COMMUNITY PHARMACY
Iowa City, Iowa

Counseled patients on prescription and over the counter medications.
Processed medication prescriptions for patients.
Contacted physicians for patient refills and accepted refill authorizations from physicians offices.
Compounded special order prescriptions for patients.
Ordered prescription medications online for pharmacy stock.
Experience with the Condor computer system.

HEMATOLOGY AND ONCOLOGY INPATIENT UNIT
University of Iowa Hospitals and Clinics, Iowa City, Iowa

Counseled patients on prescription medications including in-depth warfarin counseling.
Participated in daily inpatient rounds with the health care team.
Reviewed patient medications and necessary monitoring including drug levels and required blood tests.
Assisted with the patient moral support group.
Performed pharmacy reference and Internet searches for information on medications and therapy of cancer patients for the medical team.
Reviewed chemotherapy orders and medication doses.

INTERNAL MEDICINE INPATIENT UNIT
University of Iowa Hospitals and Clinics, Iowa City, Iowa

Counseled patients on discharge prescriptions and over the counter medications including warfarin counseling.
Participated in daily inpatient rounds with the health care team.
Reviewed patient medications and necessary monitoring including drug levels and blood tests.
Performed pharmacy reference manuals and Internet searches for information on medications and therapy for the medical team.

FAMILY PRACTICE CLINIC
University of Iowa Hospitals and Clinics, Iowa City, Iowa

Dispensed medications and counseled patients at the free medical clinic.
Assisted with blood pressure checks, INR, and PT testing at the anticoagulation clinic.
Reviewed patient medications and necessary monitoring including drug levels and blood tests.
Answered the phone for medication refill authorizations and authorized refills.
Medication information presentations to the health care team and assisted the health care team with drug information questions.
Instructed patients on the proper technique of inhalers.

PHARMACEUTICAL CARE
Northwest Medical Center, Cedar Rapids, Iowa

Counseled patients with new prescriptions and answered patient question on prescription, herbal, and over the counter medications.
Educated patients on glucose meter functioning and use. Assisted patients in glucose meter purchases.
Updated the Diabetes Education Manual.
Assessed patients use of herbal medications.

Conducted diabetes training for diabetic patients and their families. Follow-up with diabetic patients and their families through phone interviews.

HOSPITAL EXTERNSHIP
Mercy Medical Center, Cedar Rapids, Iowa

Filled prescriptions for the inpatient pharmacy and outpatient pharmacy.
Counseled outpatients with new prescriptions.
Packaged medications for the robotic drug dispenser and restocked the robotic drug dispenser.
Attended patient assessment meetings for hospice and long term care patients.
Researched drug information questions.
Conducted inventory of prescription medications and controlled substances.
Visited hospice patients with the hospice nurse.
Assisted nurses with dialysis patients in the dialysis treatment room.

COMPUTER SKILLS:Windows 95, 98, XP OS, Mac OS, WordPerfect, Paradox, Microsoft Word, Quicken, Reference Manager, Windows 7, Power Point, Lotus, Palm OS, Microsoft Outlook, Eudora, NexGen, and Microsoft Excel.

ACTIVITIES:Volunteer for Portage County Emergency Preparedness Group, Pharmacy Class of 2001 Treasurer 1998-2001, Pharmacy School Student Council Member, Academy of Students of Pharmacy, Health Science Ambassador Network, Parent Teacher Association, Phi Lambda Sigma Leadership Organization, Professional Compounding Centers of America Compounding Training Seminar in Houston, Texas, Deans list, Wahl-Teeters Scholarship, Frances T. and Charles Holub Award, Coordinator for Girl Scout troop cookie sales 1998, 1999, 2000, and 2001. Girl Scout volunteer, Free Medical Clinic pharmacy volunteer, Weber Elementary school parent volunteer, Parent School Chaperone, Sunday school teacher, Bible school teacher, Church service assistant, American Pharmacists Association Member, Kentucky Pharmacists Association Member, Ohio Pharmacists Association Member, Society of Nuclear Medicine Member, taught Nuclear Cardiologists aspects of Nuclear Pharmacy, fill in Pharmacist at the Cyclotech PET center.

CENTRAL PHARMACY SERVICES, INC.
Serving the Nuclear Pharmacy Needs of Health Institutions

Operations and
Regulatory Support
Department

September 18, 2001

Ms. Jan Jasper,
KY Cab. for Health Svces.,Radiation Control
Mail Stop H-S2 ED
275 East Main St.
Frankfort, KY 40621

Re: Amendment to License # 202-245-32 (Louisville Central Pharmacy)

Dear Ms. Jasper:

We wish to amend our license to include Cynthia S. Tindall, Pharm D., as an authorized nuclear pharmacist. I have enclosed evidence of her training and experience, which includes the following:

Type of Training	Training Site
214 hours of didactic training	Ohio State University
152 hours additional practical experience	Ohio State University
160 hours practical experience	Premier Pharmacy Services Indianapolis, IN
180 hours practical experience	Louisville Central Pharmacy Louisville, KY

Total of 706 hours of didactic training and practical experience under the supervision of an authorized nuclear pharmacist.

Other Credentials:

Dr. Tindall was trained at Premier Pharmacy Services, Indianapolis, IN, in I-131 capsule preparation. A copy of her documentation is attached, along with a copy of her Kentucky Pharmacist registration.

Thank you for your attention in this matter.

Sincerely,

Tony R. Walters, P.D., V.P.

Enclosures

cc: Jason Guy, Mgr.

2116 Forsythe Avenue, Suite A • Monroe, LA 71201 • Tel: (318) 387-7701 • Fax: (318) 387-3133

TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION
DIVISION OF RADIOLOGICAL HEALTH

CERTIFIED REGISTRATION

Pursuant to Tennessee Department of Environment and Conservation Regulations, and in reliance on statements and representations heretofore made by the registrant, a *Certified Registration* is hereby issued authorizing the registrant to use accelerator listed below for the purpose(s) and at the place(s) designated below. This *Certified Registration* is subject to all applicable rules and regulations of the Tennessee Department of Environment and Conservation and orders of the Division of Radiological Health, now or hereafter in effect and to any conditions specified below.

REGISTRANT

1. Name Triad Isotopes
   dba Scenic City Isotopes
2. Address 2113 McCallie Avenue
   Chattanooga, TN 37404

3. *Certified Registration* No.
   A-3308-H7
4. Expiration date
   August 31, 2017
5. File No.
   A-3308

6. A. TYPE OF EQUIPMENT AND MANUFACTURER	B. PEAK KILOVOLTAGE	C. YEAR AND MODEL	D. TYPES OF RADIATION PRODUCED	E. MAXIMUM INTENSITY PRODUCED
i. General Electric PETtrace Dual-particle Cyclotron	**i. 16,500**	**i. 2006 PETtrace Cyclotron**	**i. 16.5 MeV Protons,**	**i. 100 micro-Amperes**

10. Authorized Use

SEE SUPPLEMENTARY SHEETS

CONDITIONS

11. Unless otherwise specified, the authorized place of use is the registrant's address stated in item 2, above.

SEE SUPPLEMENTARY SHEETS

Date of Issuance August 1, 2007

For the Commissioner
Tennessee Department of Environment and Conservation

ORIGINAL SIGNED BY
ROBERT N. YOUNG, HPS-II

By: _____
Robert N. Young, X-ray Registration Manager

CN-0944
Form RHS 8-9

Form RHS 8-9A
(9-92)

TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION
DIVISION OF RADIOLOGICAL HEALTH

CERTIFIED REGISTRATION

Certified Registration Number A-3308-H7

Item 10.i. Radioisotope production in accordance with statements, representations, and procedures contained in correspondence referenced in Condition 22 of this Tennessee Certified Registration and where applicable, documents referenced in Tennessee Radioactive Material License File Number R-33166, as amended.

Conditions (continued)

12. The registrant shall comply with all applicable provisions of 1200-2-4, 1200-2-5, 1200-2-9, and 1200-2-10 of "State Regulations for Protection Against Radiation" (SRPAR).

13. The accelerator authorized in Item 6i., of this Certified Registration, shall only be used at 2113 McCallie Avenue, Chattanooga, TN 37404.

14. The use of the accelerator for purposes authorized in Items 10. i. shall be under the supervision of Cynthia Tindall, Chris Paulus, Brian Sipe, or Roy Coble. No one other than individuals who meet the requirements of "State Regulations for Protection Against Radiation" 1200-2-9-.18 shall operate the cyclotron for the purpose of radioisotope production. The accelerator shall be operated by other qualified persons only for the purpose of testing or repairing the system or associated equipment or for making surveys.

15. Access to the radiation areas and high radiation areas during operation of the accelerator shall be controlled in accordance with statements, representations, and procedures contained in correspondence referenced in Condition 22. Interlocked shielding shall be maintained in such a manner as to preclude the existence of high radiation areas in the noted "cyclotron room".

16. Statements, representations, and procedures contained in correspondence referenced in Condition 22. shall constitute the basis for compliance with the requirements of "State Regulations for Protection Against Radiation" 1200-2-9-.17, except where such requirements have been exempted or are in conflict with 1200-2-9-.17. In case of a conflict, the requirements of 1200-2-9-.17 shall prevail.

Form RHS 8-9A
(9-92)

TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION
DIVISION OF RADIOLOGICAL HEALTH

CERTIFIED REGISTRATION

Certified Registration Number A-3308-H7

17. Written instructions outlined in statements, representations, and procedures contained in correspondence referenced in Condition 22. including revisions, shall be followed except where they may conflict with "State Regulations for Protection Against Radiation", or specific conditions of this Tennessee Certified Registration. A copy of these operating and emergency procedures shall be supplied to each operator involved with the use of the accelerator.

18. Prior to initiation of a radioisotope production program, and subsequent to any change in descriptions and parameters described in the correspondence specifically referenced in Condition 22., radiation surveys and tests shall be performed in accordance with the following:

    A. A radiation survey shall be made with the accelerator set at the maximum operating parameters to be used. The survey shall clearly establish:

        (i) That radiation levels in restricted areas are not likely to cause personnel exposures in excess of the limits specified in 1200-2-5-.50 of "State Regulations for Protection Against Radiation", and,

        (ii) That quantities of radiation in unrestricted areas do not exceed the limits specified in Section 1200-2-5-.60 of "State Regulations for Protection Against Radiation".

        (iii) The intensity of the primary beam of radiation at a specified distance form the target of the accelerator.

    B. Tests shall include the determination of the proper operation of:

        (i). Electrical interlocks on entrance door to the accelerator room.

        (ii). Emergency cut-off switches.

        (iii). The accelerator timing devices and other computer operated devices.

    C. A report of the results of the above surveys and tests shall be sent to the Division of Radiological Health, Tennessee Department of Environment and Conservation, 3rd Floor L & C Annex, 401 Church Street, Nashville, TN 37243-1532, not later than thirty (30) days following the event that precipitated this action.

Form RHS 8-9A
(9-92)

TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION
DIVISION OF RADIOLOGICAL HEALTH

CERTIFIED REGISTRATION

 Certified Registration Number A-3308-H7

19. Notwithstanding the requirements of any other condition of this Certified Registration for the performance of radiation surveys, the registrant shall conduct a comprehensive survey of areas adjacent to the accelerator and the "cyclotron room" and shall determine the radiation dose to operators and technologists associated with isotope production and handling. A report of this survey and determination shall be forwarded to the Department at thirty (30) day intervals for one (1) year from the date of issuance of this Certified Registration.

20. Survey instrument calibration shall be performed by persons specifically licensed to perform instrument calibration activities by the Department, an Agreement State, the U.S. Nuclear Regulatory Commission, or a Licensing State.

21. An exemption is granted to the requirements of 1200-2-9-.17(4)(k) of "State Regulations for Protection Against Radiation" in accordance with application dated March 7, 2007, with attachments (received March 19, 2007), and other correspondence referenced in Condition 22, to allow calibration of survey instruments at intervals not to exceed (12) twelve months and after each instrument's servicing and repair.

    This exemption may be withdrawn or modified by the Department at any time it is determined necessary in order to protect the public health and safety or if it is found that the conditions upon which this exemption is based have been violated.

22. Except as specifically provided otherwise by this Tennessee Certified Registration, the registrant shall possess and use the accelerator described in Item 6, in accordance with statements, representations, and procedures contained in applications dated March 7, 2007, with attachments (received March 19, 2007) and undated letter received March 19, 2007, and letters dated July 2, 2007, with attachments, July 19, 2007 with attachments, and July 24, 2007, with attachments.