

tyco**Healthcare****Mallinckrodt**

Mallinckrodt Inc.
675 McDonnell Boulevard
P.O. Box 5840
St. Louis, MO 63134

Tele: 314 654-2000
www.mallinckrodt.com

November 20, 2006

Br. J

U.S. Nuclear Regulatory Commission
Region I
Nuclear Materials Safety Branch
475 Allendale Road
King of Prussia, PA 19406-1415

RE: Material License #24-04206-13MD

03032954

Please Expedite Licensing Action

Dear License Reviewer:

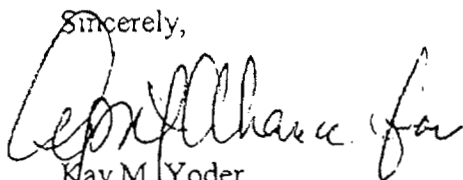
Please amend the above reference material license to reflect the following modification:

1. Amend to name **Eric Asare R.Ph.** as an Authorized Nuclear Pharmacist. Mr. Asare has completed the necessary didactic and practical experience training in accordance with 10 CFR 35.980 (refer to attached documentation). In addition, the Pennsylvania Board of Pharmacy recognizes Mr. Asare as a Registered Pharmacist.

An expedited review of this request would be appreciated due to extended staffing shortages in this pharmacy. All other items relating to our radioactive material license and established Radiation Safety Program remain unchanged at this time.

Please contact April Chance, Manager, Radiological Affairs at (314) 654-7960 for further information regarding this matter. Your prompt review and approval of this license modification is greatly appreciated.

Sincerely,



Kay M. Yoder

Director, Radiation, Environment, Safety & Health - Mallinckrodt Inc.

Attachment

cc: A. Gerner, Radiation Safety Officer (Folcroft, PA)
A. Chance, Manager, Radiological Affairs (Hazelwood, MO)

139712
NMSS/RGNI MATERIALS-002

ATTACHMENT
ERIC ASARE DOCUMENTATION

tyco**Healthcare****Mallinckrodt**

Mallinckrodt Inc.
19 Independence Court
Folsom, PA 19032

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Toll Free: 800 445-1319
www.mallinckrodt.com

November 21, 2006

Kay M. Yoder, Director, Radiation, Environment, Safety & Health
Regulatory Compliance Department
Mallinckrodt Inc.
675 McDonnell Boulevard
P.O. Box 5840
St. Louis, MO 63134

RE: Proposed Authorized Nuclear Pharmacist – (Eric Asare, R.Ph.)

Dear Kay:

Attached, please find documentation outlining the nuclear pharmacy training and experience received by **Eric Asare, R.Ph.** Mr. Asare received his “on the job” nuclear pharmacy training and practical experience under my supervision during the period of April 17, 2006 to November 16, 2006.

Based on Mr. Asare’s training and experience, as outlined in the attached documents, I confirm that he has achieved a level of competency sufficient to independently operate a nuclear pharmacy. I recommend elevating **Eric Asare, R.Ph.** to the status of Authorized Nuclear Pharmacist in accordance with 10 CFR 32.72.

Sincerely,



Michael Haigh, R.Ph.
Staff Pharmacist
License #RP031775L

Attachments

ATTACHMENT I
DIDACTIC TRAINING DOCUMENTATION

Revised 12/05

TRAINING RECEIVED IN BASIC RADIOISOTOPE HANDLING TECHNIQUES

Student: ERIC ASARE

				Breakdown of Course Content in Clock Hours								
Location of Training	Date(s) of Attendance	Course Title if Applicable	Total Clock Hours of Course	Radiation Physics & Instrumentation		Radiation Protection		Math Pertaining to Radioactivity		Radiation Biology		Radiopharmaceutical Chemistry
				A	B	A	B	A	B	A	B	
Purdue University	Fall Semester 2001 - 2002	NUPH 412 & 413: Diagnostic Imaging I and II	32	15		6				7		4
	Spring Semester 2001 - 2002	NUPH 414: Nuclear Pharmacy Laboratory	60	35		6		6		3		10
	Summer, 2002 Syncor (Cardinal)	NUPH 416: Practicum In Nuclear Pharmacy (Not For Credit)	45		15		22		8			
	Fall Semester 2002 - 2003	NUPH 530: Applied Nuclear Pharmacy	77	23		12		10		10		22
Column "A" refers to a Lecture / Laboratory Course.			214	73	15	24	22	16	8	20	0	36
Column "B" refers to a Supervised Laboratory Experience.			TOTAL HOURS	88		46		24		20		36

Signature: *Eric Asare*
Purdue University Division of Nuclear Pharmacy

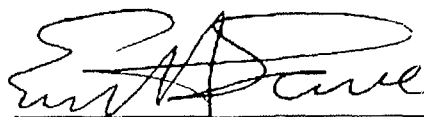
Assistant Professor of Nuclear Pharmacy

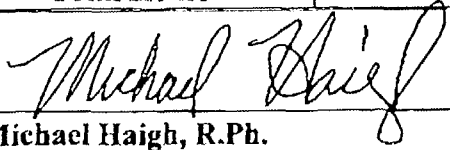
ATTACHMENT II
PRACTICAL TRAINING DOCUMENTATION

Hours of Radioactive Material Experience

Proposed Authorized Nuclear Pharmacist: **Eric Asare, R.Ph.**

Dates of Use	Location	Isotope(s) Used	Max activity used at any one time	Purpose(s) of Use ^a	Total Hours Worked
04/17/06 – 11/16/06	Mallinckrodt Inc. 19 Independence Ct. Folcroft, PA 19032	Mo-99	19 Ci	1,2,3,4,5,6	Total hours worked from 4/17/06 to 11/16/06 = 1096
		Tc-99m	16 Ci	1,2,3,4,5,6	
		I-131	210 mCi	3,4,5,6	
		Xe-133	3.4 Ci	1,3,4,5	
		I-123	4 mCi	1,3,4,5	
		Ga-67	10 mCi	1,3,4,5	
		Tl-201	220 mCi	1,3,4,5	
		In-111	3 mCi	1,3,4,5	
		P-32	15 mCi	1,2,3,4,5	
		Sr-89	4 mCi	1,2,3,4,5	
		Sm-153	80 mCi	1,2,3,4,5	
		Co-57	0.997 uCi	2	
		Cs-137	162 uCi	2	
		Ba-133		2	
				Total Hours	1096


Eric Asare, R.Ph.


Michael Haigh, R.Ph.
Staff Pharmacist
License #RP031775L

^a "Purpose of Use" should be designated as one or more of the following:

1. Ordering, shipping, and receiving radioactive materials and performing related radiation surveys
2. Calibrating, using, and performing checks for proper operation of dose calibrators, scintillation detectors, survey meters, and, if applicable, instruments used to measure alpha- or beta-emitting radionuclides
3. Calculating, assaying, and safely preparing dosages for patients or human research subjects
4. Use of administrative controls to avoid mistakes in the administration of byproduct material
5. Use of procedures to prevent or minimize contamination and/or use of proper decontamination procedures.
6. Eluting Tc-99m from generator systems, assaying eluate for Tc-99m and Mo-99 and processing the eluate with reagent kits to prepare radioactive drugs

**ATTACHMENT III
NUCLEAR PHARMACIST LICENSE**

*Pennsylvania Department of State
Bureau of Professional and Occupational
Affairs*



License Verification

Person Information

Name: ERIC BAFFOUR ASARE

Address(city,state zipcode):

Employer Information

No Information Found

License Information

Type: Pharmacist

Secondary Type: N/A

Number: RP441484

Profession: Pharmacy

Status: Active

Obtained By: Reciprocity

Issue Date: 11/8/2006

Expires: 9/30/2008

Last Renewed: N/A

Standing: This license is in good standing.

Disciplinary action history: No disciplinary actions were found for this license.

[Return to Licensee Search](#) | [Back to Results](#)

**PERSONAL INFORMATION WAS REMOVED
BY NRC. NO COPY OF THIS INFORMATION
WAS RETAINED BY THE NRC.**

This is to acknowledge the receipt of your letter/application dated

11/20/2006, and to inform you that the initial processing which includes an administrative review has been performed.

☒ Amendment 24-04206-13MD
There were no administrative omissions. Your application was assigned to a technical reviewer. Please note that the technical review may identify additional omissions or require additional information.

☐ Please provide to this office within 30 days of your receipt of this card

A copy of your action has been forwarded to our License Fee & Accounts Receivable Branch, who will contact you separately if there is a fee issue involved.

Your action has been assigned Mail Control Number 139712.
When calling to inquire about this action, please refer to this control number.
You may call us on (610) 337-5398, or 337-5260.