Approved by OMB<sup>1</sup> Control No. 3150-0183 Expires 12/31/2016

# INTEGRATED MATERIALS PERFORMANCE EVALUATION PROGRAM QUESTIONNAIRE

New Hampshire Reporting Period: October 6, 2012 to November 1, 2016

Note: If there has been no change in the response to a specific question since the last IMPEP questionnaire, the State or Region may copy the previous answer, if appropriate.

# A. GENERAL

1. Please prepare a summary of the status of the State's or Region's actions taken in response to each of the open recommendations from previous IMPEP reviews.

2008 IMPEP Summary Recommendation 1 (left open): The review team recommends that the State develop and implement an action plan to adopt NRC regulations in accordance with the current NRC policy on adequacy and compatibility.

Response: All NRC regulations issued post January 1, 2013, have been or will be incorporated into the <u>New Hampshire Rules for the Control of Radiation</u>. As of September 30, 2016, the Administrator for the New Hampshire Radiological Health Section has been reviewing rules that are incompatible with the NRC regulations and making the necessary revisions to those rules and submitting them to the NRC for review. The final adopted rules will be submitted to the NRC for their final acceptance.

## B. COMMON PERFORMANCE INDICATORS

- I. <u>Technical Staffing and Training</u>
  - 2. Please provide the following organization charts, including names and positions:
    - (a) A chart showing positions from the Governor down to the Radiation Control Program Director;

#### See Attachment A.

<sup>&</sup>lt;sup>1</sup> Estimated burden per response to comply with this voluntary collection request: 53 hours. Forward comments regarding burden estimate to the Records Management Branch (T-5 F52), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, and to the Paperwork Reduction Project (3150-0183), Office of Management and Budget, Washington, DC 20503. If an information collection does not display a currently valid OMB control number, NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

(b) A chart showing positions of the radiation control program, including management; and

#### See Attachment B.

(c) Equivalent charts for sealed source and device evaluation, low-level radioactive waste and uranium recovery programs, if applicable.

For sealed source and device evaluation, see Attachments A and B. Not applicable for low-level radioactive waste or uranium recovery programs.

3. Please provide a staffing plan, or complete a listing using the suggested format below, of the professional (technical) full-time equivalents (FTE) applied to the radioactive materials program by individual. Include the name, position, and, for Agreement States, the fraction of time spent in the following areas: administration, materials licensing & compliance, emergency response, low-level radioactive waste, uranium recovery, other. If these regulatory responsibilities are divided between offices, the table should be consolidated to include all personnel contributing to the radioactive materials program.

If consultants were used to carry out the program's radioactive materials responsibilities, include their efforts. The table heading should be:

<u>Name</u>	Position	Area of Effort	<u>FTE%</u>
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#### See Attachment C.

4. Please provide a listing of all new professional personnel hired into your radioactive materials program since the last review, indicate the date of hire; the degree(s) they received, if applicable; additional training; and years of experience in health physics or other disciplines, as appropriate.

See Attachment D.

5. Please list all professional staff who have not yet met the qualification requirements for a radioactive materials license reviewer or inspector. For each, list the courses or equivalent training/experience they need and a tentative schedule for completion of these requirements.

Augustinus Ong, Administrator since May 18, 2012, has not met the qualification requirements for a radioactive materials license reviewer or inspector. Even though his position does not include these duties, Mr. Ong has taken the licensing and inspection procedure courses to increase his knowledge of these areas and better prepare him for administering the Section. He has not yet attended any specialized courses (i.e. Industrial Radiography) or done any on-the job training with the other Health Physicists.

David M. Scalise, who has been with the Agency since May 18, 2012, is a trained X-Ray Inspector in the Radiation Machines Program and has completed much of his training for the Radioactive Materials Program. He will next be taking Nuclear Medicine and Brachytherapy & Gamma Knife within the next two years as available.

Adam Tirrell, who has only been on staff for a year and a half, has taken Fundamental Health Physics, Intermediate Health Physics, and Licensing Procedures as well as a 40 hour Radiation Safety Officer course and Troxler and Thermo Scientific gauge classes. He has started receiving in-house training on inspections and licensing and accompanying staff on license inspections and incidents. He is presently trained to complete many of the basic X-ray inspections. He has sent in applications for the Industrial Radiography course and the Inspection Procedures course for next year.

6. Identify any changes to your qualification and training procedure that occurred during the review period.

No significant changes since the last review. We will continue our in-house training procedure for the new health physicist and schedule inspections to allow as much hands-on training as possible.

7. Please identify the technical staff that left your radioactive materials program during the review period and indicate the date they left.

Ricardo D. D'Alarcao, Ph.D., Radiation Health Physicist III, left February 12, 2014

8. List any vacant positions in your radioactive materials program, the length of time each position has been vacant, and a brief summary of efforts to fill the vacancy.

There is one vacant position. It is a Health Physicist I-III which has been vacant six months and will have split responsibilities between the Radiation Machines Program and the Radioactive Materials Program. It is currently an outside posting, since September 27, 2016.

9. For Agreement States, does your program have an oversight board or committee which provides direction to the program and is composed of licensees and/or members of the public? If so, please describe the procedures used to avoid any potential conflict of interest.

Not applicable.

## II. Status of Materials Inspection Program

10. Please identify individual licensees or categories of licensees the State is inspecting less frequently than called for in NRC's Inspection Manual Chapter (IMC) 2800 and explain the reason for the difference. The list only needs to include the following information: license category or licensee name and license number, your inspection interval, and rationale for the difference.

Not applicable. The New Hampshire Radiological Health Section fully adopted the NRC inspection schedule in April 1997, and subsequent revisions.

11. Please provide the number of routine inspections of Priority 1, 2, and 3 licensees, as defined in IMC 2800 and the number of initial inspections that were completed during each year of the review period.

	Ending 10/01/13	Ending 10/01/14	Ending 10/01/15	Ending 11/01/16
Priority 1, 2, 3	4	12	6	10
Initials	4	3	2	6

12. Please submit a table, or a computer printout, that identifies inspections of Priority 1, 2, and 3 licensees and initial inspections that were conducted overdue.

At a minimum, the list should include the following information for each inspection that was conducted overdue during the review period:

- (1) Licensee Name
- (2) License Number
- (3) Priority (IMC 2800)
- (4) Last inspection date or license issuance date, if initial inspection
- (5) Date Due
- (6) Date Performed
- (7) Amount of Time Overdue
- (8) Date inspection findings issued

Licensee Name	Siemens Medical Solutions USA Inc.
License Number	482R
Priority (IMC 2800)	5 (initial)
License Issuance Date	January 15, 2014
Due Date	January 14, 2015
Date Performed	January 21, 2015
Amount of Time Overdue	7 days
Date Inspection Findings Issued	January 22, 2015
Reason for Delay	Records not at location specified

13. Please submit a table or computer printout that identifies any Priority 1, 2, and 3 licensees and initial inspections that are currently overdue, per IMC 2800. At a minimum, the list should include the same information for each overdue inspection provided for Question 12 plus your action plan for completing the inspection. Also include your plan for completing the overdue inspections.

Licensee Name	Mary Hitchcock Memorial Hospital
License Number	130R
Priority (IMC 2800)	2
Last Inspection Date	March 26, 2014
Due Date	March 25, 2016
Date Attempted / Performed	Sept 9, 2016 /
Amount of Time Overdue	< 25% / 1 month (on 10/24/16)
Date Inspection Findings Issued	
Reason for Delay	Federal Security Upgrade Delay

The only inspection overdue by more than 25% of the scheduled frequency as set forth in the NRC Inspection Manual Chapter 2800 is listed above. The inspection has been attempted on the day of the scheduled security upgrade but could not be performed because the upgrade was not finished. Currently waiting for date of the scheduled upgrade to be finished.

14. Please provide the number of reciprocity licensees that were candidates for inspection per year as described in IMC 1220 and indicate the number of reciprocity inspections of candidate licensees that were completed each year during the review period.

Dates	<b>Candidates for Inspection</b>	Inspected
10/02/12 - 10/01/13	8	2
10/02/13 - 10/01/14	7	0
10/02/14 - 10/01/15	8	3
10/02/15 - 11/01/16	7	2

- III. Technical Quality of Inspections
  - 15. What, if any, changes were made to your written inspection procedures during the reporting period?

No significant changes since the last review. The Section modifies its program and procedures according to the NRC's Chapter 2800 Manual, as necessary.

16. Prepare a table showing the number and types of supervisory accompaniments made during the review period. Include:

Inspector	<u>Supervisor</u>	License Category	<u>Date</u>
Kenna, Twila	Laramee, Tina	Industrial Radiography	10/23/14
Kenna, Twila	Laramee, Tina	Medical Therapy (Sealed)	09/09/15
Kenna, Twila	Laramee, Tina	Manufacturing	08/02/16
D'Alarcao, Rick	Kenna, Twila	<b>Remote Controlled Brachytherapy</b>	12/13/13
Laramee, Tina	Kenna, Twila	Veterinary Therapeutic	11/14/13
Laramee, Tina	Kenna, Twila	Industrial Radiography	12/05/14
Laramee, Tina	Kenna, Twila	Medical Therapy (Sealed)	01/06/16
Laramee, Tina	Kenna, Twila	Medical Therapy (Unsealed)	02/18/16
Laramee, Tina	Janda, Donna	Industrial Radiography	09/22/16
Scalise, David	Kenna, Twila	Gauges (Portable)	08/25/15
Scalise, David	Janda, Donna	Medical Therapy (Unsealed)	09/23/16

17. Describe or provide an update on your instrumentation, methods of calibration, and laboratory capabilities. Are all instruments properly calibrated at the present time? Were there sufficient calibrated instruments available throughout the review period?

Equipment is calibrated as needed, and at least annually. All equipment currently in use has been appropriately calibrated. All survey instruments used during licensee inspections are calibrated at least at a frequency required for that specific category of licensee. Complete documentation of instrument calibration is available.

## IV. <u>Technical Quality of Licensing Actions</u>

18. How many specific radioactive material licenses does your program regulate at this time?

At present the Agency regulates 84 specific licenses.

19. Please identify any major, unusual, or complex licenses which were issued, received a major amendment, were terminated, decommissioned, submitted a bankruptcy notification or renewed in this period.

License No. 130R Amend. Nos. 135 & 136 License No. 381R Amend No. 48 License Nos. 442R (& 450R) Amend No. 15 License No. 276R Amend No. 66 License No. 382R Amend No. 39 License No. 491R Amend No. 00

20. Discuss any variances in licensing policies and procedures or exemptions from the regulations granted during the review period.

To our knowledge, there were no variances in licensing policies and procedures or substantive exemptions from the regulations granted during the review period.

21. What, if any, changes were made in your written licensing procedures (new procedures, updates, policy memoranda, etc.) during the reporting period?

None noted at this time, except modifications to comply with NRC updates.

22. Identify by licensee name and license number any renewal applications that have been pending for one year or more. Please indicate why these reviews have been delayed and describe your action plan to reduce the backlog.

At present the Agency does not have any renewal applications that have been pending for one year or more.

- V. <u>Technical Quality of Incident and Allegation Activities</u>
  - 23. For Agreement States, please provide a list of any reportable incidents not previously submitted to NRC (See Procedure SA-300, *Reporting Material Events*, for additional guidance, OMB clearance number 3150-0178). The list should be in the following format:

Licensee Name License # Date of Incident/Report Type of Incident

There were no radiological incidents that met regulatory reporting requirements for inclusion in NMED during this time period.

24. Identify any changes to your procedures for responding to incidents and allegations that occurred during the period of this review.

None noted at this time.

# C. NON-COMMON PERFORMANCE INDICATORS

#### I. <u>Compatibility Requirements</u>

25. Please list all currently effective legislation that affects the radiation control program. Denote any legislation that was enacted or amended during the review period.

RSA 125-F:1-25	Radiological Health Program
RSA 125-B	New England Compact on Radiological Health Protection
RSA 125:77-b	Radioactive Waste Prohibition
RSA 107-B	Nuclear Planning and Response Program

2015 New Hampshire Legislative Session, HB 2-FN-A

26. Are your regulations subject to a "Sunset" or equivalent law? If so, explain and include the next expiration date for your regulations.

New Hampshire regulations are subject to a "Sunset" law. Regulations whose initial filing dates occurred prior to September 11, 2011, expire 8 years after the rule's effective date. Regulations with rulemaking notices filed after September 11, 2011, expire 10 years after the rule's effective date. The next expiration date for parts of our regulations is 2017.

27. Please review and verify that the information in the enclosed State Regulation Status (SRS) sheet is correct. For those regulations that have not been adopted by the State, explain why they were not adopted, and discuss actions being taken to adopt them. If legally binding requirements were used in lieu of regulations and they have not been reviewed by NRC for compatibility, please describe their use.

The SRS information appears to be correct. According the SRS, there remain 0 regulation amendments overdue for adoption by the State of New Hampshire:

"Requirements for Certain Generally Licensed Industrial Devices containing Byproduct Material," Parts 30, 31, 32 (65 FR 79162)—Adopted and in the final stages of editorial correction before submission to NRC for acceptance.

"Medical Use of Byproduct Material," Parts 20, 32, 35 (67 FR 20249)—Adopted and in the final stages of editorial correction before submission to NRC for acceptance.

"Medical Use of Byproduct Material—Recognition of Specialty Boards," Part 35 (70 FR 16336, 71 FR 1926)—Adopted and in the final stages of editorial correction before submission to NRC for acceptance.

"Minor Amendments," Parts 20, 30, 32, 35, 40 and 70 (71 FR 15005)—Adopted and in the final stages of editorial correction before submission to NRC for acceptance.

"National Source Tracking System—Serialization Requirements," Part 32 with reference to Part 20 Appendix E (71 FR 65785)—Adopted and in the final stages of editorial correction before submission to NRC for acceptance.

"National Source Tracking System," Part 20 (71 FR 65687, 72 FR 59162)—Adopted and in the final stages of editorial correction before submission to NRC for acceptance.

"Medical Use of Byproduct Material—Minor Corrections and Clarifications, "Parts 32 and 35 (72 FR 45147, 54207)—Adopted and in the final stages of editorial correction before submission to NRC for acceptance.

"Exemptions From Licensing, General Licenses, and Distribution of Byproduct Material: Licensing and Reporting Requirements," Parts 30, 31, 32, 150 (72 FR 58473)—Adopted and in the final stages of editorial correction before submission to NRC for acceptance.

"Requirements for Expanded Definition of Byproduct Material," Parts 20, 30, 31, 32, 33, 35, 61, 150 (72 FR 55864)—Adopted and in the final stages of editorial correction before submission to NRC for acceptance.

"Occupational Dose Records, Labeling Containers, and Total Effective Dose Equivalent," Parts 19, 20 (72 FR 68043)—Adopted and in the final stages of editorial correction before submission to NRC for acceptance.

"Medical Use of Byproduct Material—Authorized User Clarification," Part 35 (74 FR 33901)—Adopted and in the final stages of editorial correction before submission to NRC for acceptance.

"Decommissioning Planning," Parts 20, 30, 40, 70 (76FR 35512)—Adopted and in the final stages of editorial correction before submission to NRC for acceptance.

"Licenses, Certifications, and Approvals for Materials Licenses," Parts 30, 36, 39, 40, 70 and 150 (76 FR 56951)—Adopted and in the final stages of editorial correction before submission to NRC for acceptance.

"Change of Compatibility of 10 CFR 31.5 and 31.6" (77 FR 3640)—Adopted and in the final stages of editorial correction before submission to NRC for acceptance.

"Advance Notification to Native American Tribes of Transportation of Certain Types of Nuclear Waste," Part 71 (77 FR 34194)—Corrected and awaiting submission to NRC for acceptance.

"Technical Corrections," Part 30, 34, 40 and 71 (77 FR 39899)—Adopted and in the final stages of editorial correction before submission to NRC for acceptance.

"Requirements for Distribution of Byproduct Material," Parts 30, 31, 32, 40 and 70 (77 FR 43666)—Adopted and in the final stages of editorial correction before submission to NRC for acceptance.)

"Physical Protections of Byproduct Material," 10 CFR Part 20, 30, 32, 33, 34, 35, 36, 37, 39, and 71 (78 FR 16922)—Adopted and in the final stages of editorial correction before submission to NRC for acceptance.

"Distribution of Source Material to Exempt Persons and to General Licensees and Revision of General License and Exemptions," Parts 30, 40, and 70 (78 FR 32310)—Adopted and in the final stages of editorial correction before submission to NRC for acceptance.

28. If you have not adopted all amendments within three years from the date of NRC rule promulgation, briefly describe your State's procedures for amending regulations in order

to maintain compatibility with the NRC, showing the normal length of time anticipated to complete each step.

The New Hampshire process for amending regulations includes the following steps:

Drafting the regulation(s) to meet NRC compatibility requirements	3.0 months
NRC review of proposed regulation	2.0 months
Review of New Hampshire Administrative Rules Unit	0.5 month
File with Joint Legislative Committee on Administrative Rules (JLCAR)	1.0 month
Regulation published by JLCAR	0.5 month
Prepare for public hearing	0.5 month
Public hearing period	0.5 month
JLCAR final review of revisions	0.5 month
Finalization of New Hampshire regulation	1.5 months
NRC review of final regulation	2.0 months
Total	12 months

# II. Sealed Source and Device (SS&D) Evaluation Program

 Prepare a table listing new and amended (including transfers to inactive status) SS&D registrations of sources and devices issued during the review period. The table heading should be:

SS&D	Manufacturer,			
Registry	Distributor or	Product Type	Date	Type of
<u>Number</u>	<u>Custom User</u>	<u>or Use</u>	<u>lssued</u>	<u>Action</u>

The SS&Ds listed below were performed for the state of Maine by Agency staff.

SS&D	Manufacturer, Distributor,	Product Type	Date Sent to Maine	Type of
<b>Registration No.</b>	or Custom User	or Use	for Issuance	Action
ME-1413-S-101-S	Diligistics, LLC	<b>Neutron Source</b>	10/22/15	New
ME-1374-D-102-S	Die-Matic, LLC	Level Gauge	12/22/15	New

30. Please include information on the following questions in Section A, as they apply to the SS&D Program:

Technical Staffing and Training - Questions 2-9 Technical Quality of Licensing Actions - Questions 18-22 Technical Quality of Incident and Allegation Activities - Questions 23-24

- **#2.** Currently the SS&D staff consists of Twila M. Kenna, Ph.D. and Asish K. Banerjee. See Attachments A and B.
- **#3.** SS&D Staff consists of Twila M. Kenna, Ph.D. and Asish K. Banerjee. See Attachment E.
- #4. No new hires since the last review in the SS&D Program.
- #5. Only two current staff members are trained for SS&D work. Due to the limited

activity in this program it has not been considered necessary to increase the number of trained staff.

- **#6.** No changes since the last review.
- **#7.** No technical staff have left the program during the review period.
- **#8.** Not applicable.
- **#9.** Not applicable.
- **#18.** At present the SS&D Program regulates 2 specific licenses.
- #19. New Hampshire was requested and performed two SS&D reviews for the state of Maine, due to their lack of SS&D trained staff members.
- #20. To our knowledge, there were no variances in SS&D policies or procedures or substantive exemptions from the regulations granted during the review period.
- **#21.** None noted at this time.
- **#22.** Not applicable.
- #23. There were no radiological incidents that met regulatory reporting requirements for inclusion in NMED during this review period.
- **#24.** None noted at this time.

#### III. Low-level Radioactive Waste Disposal Program

31. Please include information on the following questions in Section A, as they apply to the Low-Level Radioactive Waste Disposal Program:

Technical Staffing and Training - Questions 2-9 Status of Materials Inspection Program - Questions 10-14 Technical Quality of Inspections - Questions 15-17 Technical Quality of Licensing Actions - Questions 18-22 Technical Quality of Incident and Allegation Activities - Questions 23-24

#### Not applicable.

#### IV. Uranium Recovery Program

32. Please include information on the following questions in Section A, as they apply to the Uranium Recovery Program:

Technical Staffing and Training - Questions 2-9 Status of Materials Inspection Program - Questions 10-14 Technical Quality of Inspections - Questions 15-17 Technical Quality of Licensing Actions - Questions 18-22 Technical Quality of Incident and Allegation Activities - Questions 23-24

#### Not applicable.

I. Technical Staffing and Training Item 3 (10/01/12 to present)

	Destile	Radioactive Materials Program	Radiation Machines Program	Radiological Emergency Response	Administration/ Section Management/ Supervision
Name	Position	(est. FIE%)	(est. FIE%)	Program (est. FIE%)	(est. FIE%)
Ong, Augustinus	Administrator	10	30	30	30
	(Health Physicist V)				
Kenna, Twila M., Ph.D.	Manager	90	0	5	5
	Radioactive Materials				
	Program				
	(Health Physicist IV)				
Banerjee, Asish K.	Manager	0	90	5	5
	Radiation Machine				
	Program				
	(Health Physicist IV)				
D'Alarcao, Rick D., Ph.D.	Health Physicist III	85	5	10	
(left 02/12/14)					
Laramee, Tina M.	Health Physicist III				
(before 02/14/14)		45	45	10	
(after 02/14/14)		75	15	10	
Scalise, David M.	Health Physicist III	45	45	10	
Tirrell, Adam J.	Health Physicist III	45	45	10	
(started 03/20/15)					

Comment: Please note that Radiological Health employees work a 37.5-hour workweek.

# New Hampshire IMPEP Questionnaire 2016

I. Technical Staffing and Training Item 4

NAME OF INDIVIDUAL	HIRING DATE	DEGREES	ADDITIONAL TRAINING	YEARS OF EXPERIENCE
INDIVIDUAL AND POSITION Tirrell, Adam J. Radiation Health Physicist III	DATE 03/20/15	B.S. – Environmental Engineering University of New Hampshire	Fundamental Health Physics (H-122)Intermediate Health Physics (H123)Licensing Procedures (G-109)Radiation Safety Officer Course, RSCS 40 hrsNational Incident Command System (IS-100b FEMA)National Incident Command System (IS-700a FEMA)	1 1/2 years in NH Radiation Control Program 1 year as Laboratory Helper (part-time) NH Public Health Water Analysis Lab 6 years US Navy Engineering Laboratory
			National Response Framework (IS-800 FEMA) Troxler Nuclear Gauge Training Thermo Scientific XRF Training	Technician & Hazmat Supervisor

# New Hampshire IMPEP Questionnaire 2016

# II. SS&D Program. Technical Staffing and Training (10/01/12 to present)

Item 30

Name	Position	Radioactive Materials Program (est. FTE%)	Radiation Machines Program (est. FTE%)	Radiological Emergency Response Program (est. FTE%)	Administration/ Section Management/ Supervision (est. FTE%)
Kenna, Twila, Ph.D.	Manager	90	0	5	5
	Radioactive Materials				
	Program				
	(Health Physicist IV)				
Banerjee, Asish	Manager		90	5	5
	Radiation Machine				
	Program				
	(Health Physicist IV)				

Comment: Twila M. Kenna, Ph.D. attended the NRC Sealed Sources and Devices Workshop in 2006. Asish K. Banerjee received training from the Massachusetts Radiation Control Program SS&D staff in 2005.