



State of New Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION
RADIATION PROTECTION AND RELEASE PREVENTION PROGRAMS
BUREAU OF ENVIRONMENTAL RADIATION

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CHRIS CHRISTIE
Governor

KIM GUADAGNO
Lt. Governor

BOB MARTIN
Commissioner

April 6, 2015

Mr. James L. Lynch
US Nuclear Regulatory Commission
Region III
2443 Warrenville Rd. Suite 210
Lisle, IL 60532-4352

Dear Mr. Lynch:

Paul Baldauf has asked me to respond to your letter of October 2, 2014 in which you requested responses to the "Integrated Materials Performance Evaluation Program Questionnaire." The responses and accompanying attachments have been provided to you electronically as requested.

If after reading the responses, you require further clarification or information, please call me at (609) 984-5498.

We look forward to your team visiting our office from April 20-24, 2015. As requested, we have scheduled a meeting with Senior Management on April 24, 2015.

Sincerely,

Jenny Goodman,
Acting Manager

INTEGRATED MATERIALS PERFORMANCE EVALUATION PROGRAM
QUESTIONNAIRE

New Jersey

Reporting Period: March 5, 2011 to April 24, 2015

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.

Status of Materials Inspection Program: The NRC found the New Jersey Department of Environmental Protection's (NJDEP) Inspection Program adequate but needs improvement. At the last IMPEP, NJDEP had overdue initial license inspections and overdue routine inspections. Since that time, NJDEP has implemented a new procedure for issuance of initial licenses to include adding a pending inspection, with a due date of less than one year. When the supervisors query the database, the pending inspections are captured. This ensures that all initial licensees will be inspected within one year of issuance of the initial license. Likewise, when amendments of new modalities are issued, the same procedure for adding a pending inspection is followed. NJDEP has no overdue initial license inspections for this review period.

Status of Materials Licensing Program: The NRC found the technical quality of licensing actions to be adequate but needs improvement. Since the last IMPEP, NJDEP reviewed and changed the licensing SOPs to include more checklists and provided training to technical staff through many Agreement State staff meetings regarding proper use of checklists. In addition, NJDEP has implemented a mandatory Bureau Manager review of all renewals, initial licenses, and terminations. A quality assurance (QA) Licensing Review Sheet is used to document the QA reviews to ensure that comments are adequately addressed. Supervisory review of all licensing actions is still in effect. However, a fully qualified license reviewer/inspector may also review the work of another qualified license reviewer/inspector as well as a supervisor's licensing actions. The NRC's pre-licensing checklist is used to determine if a pre-licensing inspection is required.

B. COMMON PERFORMANCE INDICATORS

I. Technical Staffing and Training

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;

Attachment 1 shows the organization of the Department of Environmental Protection from the Commissioner to the Radiation Control Program Director (highlighted in yellow). The Commissioner of the Department of Environmental Protection reports directly to the Governor.

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

See Attachments 2 and 3.

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

Not applicable.

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>	<u>Position</u>	<u>Area of Effort</u>	<u>FTE%</u>
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See Attachment 4

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.

Sarah Staab, B.S in Biology and B.S. in Environmental Science and Policy, Principal Environmental Specialist; Date Hired 12/13

Joseph Power, B.S. Biology, Principal Environmental Specialist; Date Hired 12/13

Nadia Akbar, B.S. Environmental Science and M.S. Public Policy, Environmental Specialist Trainee; Date Hired 12/14

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.

New Jersey's Agreement State program is currently separated into Medical and Industrial Sections. Staff members are considered fully qualified for either Medical, Industrial, or both. Attachment 5 lists all staff members, their Section affiliation, and their qualification status. Staff members who are fully qualified for Medical begin qualification in Industrial and vice versa, but new staff members working in those sections take precedence over this cross qualification. This means that section members in the Industrial Section would be assigned a higher priority than Medical Section members for Industrial NRC classes such as Safety Aspects of Well Logging, Safety Aspects of Industrial Radiography, and Irradiator Technology. The same would be true for Medical Section staff members. They would be assigned a higher priority for Medical NRC classes. Training journals will be available during IMPEP week which will provide more detailed information.

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

The licensees were grouped for qualification purposes as outlined in the example training journal (Attachment 6 Jack Tway Training Journal).

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

Patricia Gardner, Manager: April 18, 2014

Dennis Zannoni, Industrial QLR/I: April 1, 2013

William Csaszar, Supervisor Medical Section: June 30, 2014

Adria Wentzel, Industrial QLR/I: June 2011

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.

Manager 4 has been vacant since April 18, 2014. Management is in the process of filling this position.

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.

In N.J.S.A. 26:2D-9, NJDEP is defined as the department of state government designated throughout the Act as the empowered agency for radiation protection. N.J.S.A. 26:2D-3 creates a Commission on Radiation Protection ("Commission"), within the NJDEP, comprised of members with specified scientific training as well as representatives of the Commissioners of the Departments of Environmental Protection, Health and Senior Services and Labor and Workforce Development. This Commission is organized in accordance with N.J.S.A. 26:2D- 6. Its duties include: promulgating rules "to prohibit and prevent unnecessary radiation;" reviewing policies and programs of the NJDEP "as developed under the authority of this act;" making recommendations to the NJDEP on its policies and programs; and, providing technical advice and assistance to the DEP. N.J.S.A. 26:2D-8.

As a matter of practice, the Commissioner of NJDEP signs the regulations before they are sent for publication in the New Jersey Register. NJDEP staff, which is also staff to the Commission, has input into the content of regulations. New Jersey's statutory requirements to preclude conflicts of interest are found at N.J.S.A. 52:13D-12 et seq., the Conflicts of Interest law (COIL). The members of the Commission are all volunteers without payment, receiving only reimbursement for necessarily incurred expenses. N.J.S.A. 26:2D-5. Therefore, Commission members qualify as special state officers subject to COIL. The Commission members are also subject to the New Jersey Department of Environmental Protection's Ethics Code and the State Ethics Commission (SEC) regulations. Members of the Commission are screened and may not participate in any manner in developing, considering or voting on the matter for which he or she has been recused. The COIL, SEC regulations and the NJDEP code of ethics provide a strict system to eliminate conflicts of interest by Commission members as well as employees of the NJDEP.

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.

None

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.

	2011	2012	2013	2014	2015
Priority 1	3	5	7	9	1
Priority 2	28	27	32	25	8
Priority 3	36	30	28	32	7
Initial Inspections	18	15	15	14	2

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

No Priority 1,2, or 3 or initial inspections were overdue. Some initial inspections were flagged as overdue. See explanations in the table below.

PI	Name	Start Date	Earliest SCI date	Days Elapsed	Comments
542561	HACKENSACK UMC AT PASCACK VALLEY	11/17/2010	6/28/2012	589	Facility applied for and was issued a license in late 2010, but facility did not actually begin operations until Spring 2012. It was inspected one month after it began operations.
527488	IBA MOLECULAR NORTH AMERICA INC	7/6/2010	8/16/2011	406	Licensee awaiting IND approval of Redectane I-124 and were not operational even at time of inspection, but had received material for QA/QC
518330	DUFFIELD ASSOC INC	3/7/2010	3/9/2011	367	Pre-license inspection/delivery on 3/9/10 (365 days met with this date.) Gauges never stored in NJ, no work performed the first year.
511848	MED GRAPHIX INC	3/7/2010	3/8/2011	366	Pre-license inspection/delivery on 3/8/10 (365 days met with this date). No material stored here.
565385	CDL NUCLEAR TECHNOLOGIES INC @ OCEAN HEART	10/18/2011	9/7/2011	-41	Inspected as a reciprocity licensee and then requested a full specific license. Since the same materials/uses were inspected, did not go back to re-inspect the initial license.

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.

None

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.

Year	# Reciprocity Licensees	# Candidates for Inspection	# Candidate Inspections Completed	Percentage Completed
2011	23	22	10	45
2012	23	17	7	41
2013	22	14	9	64
2014	16	10	5	50
2015	12	7	1	14 (1 st qtr)

III. Technical Quality of Inspections

15. What, if any, changes were made to your written inspection procedures during the reporting period?

See response to question 21.

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

<u>Inspector</u>	<u>Supervisor</u>	<u>License Category</u>	<u>Date</u>
Attachment 7			

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?

A list of instrumentation is provided in Attachment 8. The NJ Department of Health and Senior Services Radiation Laboratory provides analytical services. In addition, we have the ability to contract out any unusual analytical needs to a contract laboratory. We maintain maintenance and calibration service agreements with the instrument manufacturers and calibration service providers. All instruments that are used during the course of office business are calibrated by licensed providers. There was an adequate supply of calibrated instruments available during the review period.

IV. Technical Quality of Licensing Actions

18. How many specific radioactive material licenses does your program regulate at this time? 581 (Does not include diffuse NARM)
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.

Hoffman LaRoche: Termination
Shieldalloy Metallurgical Corporation: Complex licensing and decommissioning
Hackensack Medical: Renewal
Branch Radiography: Renewal
Canberra: Termination
Capital Health Hopewell: Amendment
NJ Department of Transportation: Renewal

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

Covanta Essex Company
License #506859

A broken shutter was discovered on a BSI Instruments, Inc. (BSI) model LB 7440 L on December 15, 2014. A contractor, Applied Health Physics, LLC (AHP), Pennsylvania license number PA-0228A, had made this discovery during a semi-annual servicing of Covanta's generally licensed fixed gauges. On December 16, 2014 New Jersey Department of Environmental Protection (NJDEP) Bureau of Environmental Radiation (BER) staff received a letter of notification from Covanta's Environmental Specialist and Radiation Safety Officer (RSO) regarding an inoperable shutter actuator on a BSI model LB 7440 L, serial number 838-3-90, containing 50 mCi of Cs-137. The RSO explained that leak testing and radiation surveys performed by AHP had confirmed there was no damage to the source or misalignment of the gauge. Covanta requested continued operation of the device until repairs were made; this request was granted by NJDEP staff after it was confirmed by on-site inspection that no personnel exposures would be received from continued operation. NJ regulations at N.J.A.C. 7:28-52 (10 CFR 31 incorporated by reference) state that the licensee shall immediately suspend operation of the device if there is a failure of, or damage to, or any indication of a possible failure of or damage to, the shielding of the radioactive material or the on-off mechanism or indicator. The NJDEP issued a violation and allowed continued operation of the damaged gauge because there were no worker exposure issues. The gauge was repaired on February 10, 2015. This is considered a variance since no exemption was granted.

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

Attachment 9 lists changes to standard operating procedures since the last IMPEP
Policy Updates:

NJ issued an Information Notice 2011-11-28: Transportation of Waste
Approval of Sources/Devices outside of 10 CFR 32.210 (Sealed Source and Device Registrations)
Policy requiring a separate license for each storage location if physical locations are greater than 5 miles apart

Clarification on radiopharmaceutical and manufacturing and distribution program codes
Clarification on possession and licensing of portable gauges and NJDOT
Reciprocity policies for Service Providers

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.

NJ Department of Environmental Protection Bureau of Nuclear Engineering (BNE) renewal (507397-RAD11002) has been pending since 12/28/11. This is a NJDEP licensee that is in the process of terminating its license. Renewal was put on hold while a purchase order for disposal of

all sources commenced. This process took longer than expected and was met with several delays due to internal purchasing issues. Time on the clock is less than 90 days. BER was waiting for responses from the licensee. BNE is currently waiting for responses from decommissioning contractor to perform final status survey.

V. Technical Quality of Incident and Allegation Activities

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:

<u>Licensee Name</u>	<u>License #</u>	<u>Date of Incident/Report</u>	<u>Type of Incident</u>
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None

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

No major changes were made to our incident and allegation procedures other than contact information. A clarification was made regarding how different types of inspections are entered into NJEMS. A Brief Compliance Inspection (BCI) is used for pre-licensing inspections and follow-up inspections not involving an incident. An Incident Investigation (INV) is used for response to licensee incidents or allegations. A Standard Compliance Inspection (SCI) is used for routine periodic inspections. Only SCI's will be used to calculate due dates of the next inspection based on assigned priority.

C. **NON-COMMON PERFORMANCE INDICATORS**

I. Compatibility Requirements

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.

Currently effective legislation that affects the radiation control program:
Radiation Protection Act N.J.S.A. 26:2D
Atlantic Interstate Low-Level Radioactive Waste Compact Implementation Act

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

New Jersey's Radiation Protection Code N.J.A.C. 7:28 is subject to "Sunset" law. The Radiation Protection Code will sunset on May 9, 2020. A simple notice is filed for publication in the New Jersey Register if it will be readopted without changes at that time.

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.

SRS sheet is correct. RATS ID 2013-1, Physical Protection of Byproduct Material, and RATS ID 2013-2, Distribution of Source Material to Exempt Persons and to General Licenses and Revision

of General License and Exemptions, will be proposed in the New Jersey Register on July 20, 2015.

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.

All regulations have been adopted within 3 years.

II. Sealed Source and Device (SS&D) Evaluation Program – N/A

29. 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:

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

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:

New Jersey has incorporated all of 10 CFR Part 61 by reference into its regulations. Although New Jersey will be able to regulate siting and operation of a low-level radioactive waste disposal facility, this authority may never need to be implemented, as New Jersey is currently a member of the Atlantic Compact.

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

IV. Uranium Recovery Program – N/A

32. Please include information on the following questions in Section A, as they apply to the Uranium Recovery Program: Not Applicable

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

MATERIALS REQUESTED TO BE AVAILABLE FOR THE ON-SITE PORTION OF AN IMPEP REVIEW

Please have the following information available for use by the IMPEP review team when they arrive at your office:

- List of open license cases, with date of original request, and dates of follow-up actions.
- List of licenses terminated during review period.
- Copy of current log or other document used to track licensing actions.
- List of all licensing actions completed during the review period (sorted by license reviewer, if possible).
- Copy of current log or other document used to track inspections.
- List of all inspections completed during the review period (sorted by inspector, if possible).
- List of inspection frequencies by license type.
- List of all allegations occurring during the review period. Show whether the allegation is open or closed and whether it was referred by NRC.
- List of all licenses that your agency has imposed additional security requirements upon.

ALSO, PLEASE HAVE THE FOLLOWING DOCUMENTS AVAILABLE:

- All State regulations
- Statutes affecting the regulatory authority of the State program
- Standard license conditions
- Technical procedures for licensing, model licenses, review guides
- SS&D review procedures, guides, and standards
- Instrument calibration records
- Inspection procedures and guides
- Inspection report forms
- Documented training plan, if applicable
- Records of results of supervisory accompaniments of inspectors
- Emergency plan and communications list
- Procedures for investigating allegations
- Procedures for investigating incidents
- Enforcement procedures, including procedures for escalated enforcement, severity levels, civil penalties (as applicable)
- Job descriptions

Attachment 4

Staffing Plan (% FTE)

Name	Position	Administration*	Lic & Compliance**	Emerg Response
Jenny Goodman	Acting Manager 4***	60%	10%	10%
Richard Peros	Acting Supv Medical	20%	65%	15%
Catherine Biel	Acting Supv Industrial	20%	65%	15%
Nancy Stanley	QLR/I	5%	55%	40%
Ed Truskowski	QLR/I	5%	80%	15%
James McCullough	QLR/I***	10%	50%	15%
Jack Tway	QLR/I	10%	75%	15%
Karen Flanigan	QLR/I	10%	75%	15%
Sarah Staab	LR/I***	5%	70%	15%
Joseph Power	LR/I	5%	80%	15%
Nadia Akbar	LR/I	5%	93%	2%

*Administration includes rule writing, review and comment on NRC, CRCPD, and OAS documents or rules, and general management duties.

**Licensing & Compliance includes training.

*** Remaining percentage devoted to diffuse NARM and/or contaminated site cleanups.

Attachment 5

Staff Qualifications

Inspector Name	Section	Qualifications	Classes Needed	Tentative Completion
Karen Flanigan	Medical	Fully Qualified Medical	Irradiator Technology	application submitted
		Partially Qualified Industrial	Well Logging	accepted
			Intermediate Health Physics (H-123)	within 1 year
Debbie Wenke*	Medical	Partially Qualified Industrial	Transportation of Radioactive Materials	
		Partially Qualified Medical	Brachytherapy and Gamma Knife (H-313)	application submitted
		Fully Qualified diffuse NARM	Materials Control & Security Systems & Principles (S-201)	
Sarah Staab	Industrial	Partially Qualified Industrial	Fundamental Health Physics- Blended Learning (H-122)	application submitted
			Industrial Radiography (H-305)	application submitted
			Safety Aspects of Well Logging	application submitted
			Materials Control & Security Systems & Principles	application submitted
			Irradiator Technology	TBD
			Advanced Health Physics (H-201)	within 1 year
			Inspection Procedures Course (G-108)	application submitted
Joe Power	Industrial	Partially Qualified Industrial	Irradiator Technology	TBD
			Transportation of Radioactive Materials	accepted
			Safety Aspects of Well Logging	
			Fundamental Health Physics III (H-123)	within 1 year
			Fundamental Health Physics- Blended Learning (H-122)	apply this year

			Advanced Health Physics (H-201)	within 2 year
Ed Truskowski*	Medical	Fully Qualified Medical	Safety Aspects of Well Logging	apply within 1 year
		Partially Qualified Industrial	Irradiator Technology	apply within 2 years
Nancy Stanley*	Medical	Fully Qualified Medical	Irradiator Technology	apply within 2 years
Rich Peros*	Medical	Fully Qualified Medical	All NRC classes completed	
		Partially Qualified Industrial		
Catherine Biel	Industrial	Fully Qualified Industrial	All NRC classes completed	
		Partially Qualified Medical		
James McCullough	Industrial	Fully Qualified Medical and Industrial	All NRC classes completed	
Jack Tway	Industrial	Fully Qualified Medical and Industrial	All NRC classes completed	
Nadia Akbar	Medical	Trainee	Licensing Practices and Procedures (G-109)	application submitted
			Inspection Procedures Course (G-108)	application submitted
			Transportation of Radioactive Materials	accepted
			Fundamental Health Physics (H-122)	application 2015
			Brachytherapy and Gamma Knife (H-313)	
			Materials Control & Security Systems & Principles	application submitted
			Intermediate Health Physics (H-123)	within 1 year
			Advanced Health Physics (H-201)	within 2 years

* Master's Degree in Radiation Science

QUALIFICATION JOURNAL – NON-MEDICAL/ INDUSTRIAL

NAME: Jack Tway

POSITION : Radiation Physicist 3

License Reviewer/Inspector

FORMAL TRAINING

Copies of Formal Training Certifications should be appended to the back of this document.

BASIC TRAINING:

- A. **Inspection Procedures Course (G-108)**
Dates Attended: 4/27-5/1/2009
- B. **Licensing Practices and Procedures Course (G-109)**
Dates Attended: 3/9-13/2009
- C. **Transportation of Radioactive Materials (H-308)**
Dates Attended: 11/9/2007
- D. **Basic Health Physics (H-122)**
Dates Attended: 8/4-15/2008

SPECIALIZED TRAINING:

- A. **Diagnostic and Therapeutic Nuclear Medicine Course (H-304)**
Dates Attended: 3/23-27/2009
- B. **Brachytherapy and Gamma Knife Course (H-313)**
Dates Attended: 8/10-14/2009
- C. **Safety Aspects of Industrial Radiography (H-305)**
Dates Attended: 2/28-3/4/2011
- D. **Materials Control & Security Systems & Principles Course**
Dates Attended: 4/21-25/2008
- E. **Inspecting for Performance - Materials (G-304)**
Dates Attended: _____
- F. **Root Cause/Incident Investigation Training (G-205)**
Dates Attended: 5/19-23/2008
- G. **Nuclear Pharmacy Licensing & Inspection Course (H-401)**
Dates Attended: 9/28-10/1/2010

ADVANCED TRAINING

- A. **Health Physics Technology Course (H-201)**
Dates Attended: 10/27-11/7/2008
- B. **Radiological Surveys in Support of Decommissioning (H-120)**
Dates Attended: _____
- C. **Irradiator Technology Course (H-315)**
Dates Attended: 7/16-20/2012
- D. **Safety Aspects of Well Logging (H-314)**
Dates Attended: 9/24-28/2012

- E. Internal Dosimetry and Whole Body Counting (H-312)**
Dates Attended: _____
- F. Environmental Monitoring for Radioactivity (H-111)**
Dates Attended: 5/6-10/2013
- G. Air Sampling for Radioactive Material (H-119)**
Dates Attended: 6/1-5/2009
- H. Respiratory Protection (H-311)**
Dates Attended: _____
- I. Multi-Agency Radiation Survey and Sites Investigation Manual (MARSSIM)**
Dates Attended: _____
- H. Management of Allegations Training**
Dates Attended: _____
- I. Fundamental Health Physics III (H-123)**
Dates Attended: 6/24-28/2013

SELF STUDY

The trainee is responsible for completing the following activities:

1. Review of NJAC 7:28, Radiation Protection
2. Review of NJDEP BER Procedures
3. Review of NRC 10 CFR
4. Review of NUREG-1556, "Consolidated Guidance about Material Licenses".
5. Review of current and historical as needed, BER historical as needed, BER Reading File
6. Review of appropriate NRC Information Notices
7. Review of appropriate NJDEP BER Information Notices

Date: 9/30/09

Supervisor:

Note: Attach copies of Training Certification to the back of this document.

ON-THE-JOB TRAINING

BASIC TRAINING - INSPECTIONS

Inspector should have led all or part of at least two of the three documented activities

Academic

- 01100 Academic Broad- Type A
- 01110 Academic Broad- Type B
- 01120 Academic Broad- Type C

1. Licensee: **ROBERT WOOD JOHNSON MEDICAL SCHOOL 453604**
Date: **10/26/2007**
2. Licensee: **ROBERT WOOD JOHNSON MEDICAL SCHOOL 453604**
Date: **10/25/2011**
3. Licensee: **RUTGERS UNIVERSITY 460345**
Date: **2/15/2013 & 3/5/2013**

Measuring Systems

03122 Measuring Systems Analytical Instruments
03123 Measuring Systems Gas Chromatographs
03124 Measuring Systems Other
03120 Measuring Systems Fixed Gauges
03121 Measuring Systems Portable Gauges

1. Licensee: **ANS CONSULTANTS INC 506827**
Date: **1/20/2011**
2. Licensee: **AVA SHYPULA CONSULTING INC 507487**
Date: **2/10/2011**
3. Licensee: **MATERIALS TESTING INC 507512**
Date: **2/11/2011**
4. Licensee: **KEY-TECH 507394**
Date: **4/28/2011**
5. Licensee: **ENVIRONMENTAL TESTING CONSULTANTS LLC 425288**
Date: **4/10/2007**
6. Licensee: **CAMDEN CNTY DHHS 425299**
Date: **4/10/2007**
7. Licensee: **MANDELL LEAD INSPECTORS INC 297259**
Date: **9/15/2011**

Manufacturing and Distribution

03210 Radionuclide Production Using an Accelerator
03211 Manufacturing and Distribution Broad- Type A
03212 Manufacturing and Distribution Broad- Type B
03213 Manufacturing and Distribution Broad- Type C
03214 Manufacturing and Distribution Other

02500 Nuclear Pharmacies
02501 Cyclotron for Production of Radiopharmaceuticals
02511 Medical Product Distribution – 32.72 Prepared Radiopharmaceuticals
02513 Medical Product Distribution – 32.74 Sources and Devices

03240 General License Distribution – 32.51
03241 General License Distribution – 32.53
03242 General License Distribution – 32.57
03243 General License Distribution – 32.61
03244 General License Distribution – 32.71

1. Licensee: **CARDINAL HEALTH 440735**
Date: **7/15/2009**
2. Licensee: **MEDI-PHYSICS INC 456011**
Date: **5/06/2011**
3. Licensee **MEPROLIGHT INC C/O KLEIN AND HILL 509160**
Date: **9/29/2011**
4. Licensee: **PETNET SOLUTIONS INC 468534**
Date: **10/16/2012**
5. Licensee: **NUCLEAR DIAGNOSTIC PRODUCTS OF PHILA INC 455467**
Date: **4/20/2011**

6. Licensee: **PETNET SOLUTIONS INC. 459066**
Date: **10/17/2012**
7. Licensee: **TRIAD ISOTOPES, INC. 454680**
Date: **6/20/2013**

Industrial Radiographers

- 03310 Industrial Radiography Fixed Location
- 03320 Industrial Radiography Temporary Job Sites

1. Licensee: **VALLEY INSPECTION SERVICES INC 508394**
Date: **3/24/2011**
2. Licensee: **JANX INTEGRITY GROUP 507152**
Date: **7/21/2011**
3. Licensee: **QUALITY INSPECTION SERVICES INC 529904**
Date: **6/29/2011**
4. Licensee: **BRANCH RADIOGRAPHIC LABS INC. 507051**
Date: **5/15/2012**

Irradiators

- 03510 Irradiators Self-Shielded Less Than 10,000 Curies
- 03511 Irradiators Other Less Than 10,000 Curies
- 03520 Irradiators Self-Shielded Greater Than 10,000 Curies
- 03521 Irradiators Other Greater Than 10,000 Curies, including 10 CFR Part 36 panoramic pool irradiators

1. Licensee: **STERIGENICS US LLC 507153**
Date: **7/14/2011**
2. Licensee: **NEWARK BETH ISRAEL MED. CTR. 455336**
Date: **12/1/2010**
3. Licensee: **BERGEN COMMUNITY RGNL BLOOD CTR. 507491**
Date: **2/28/2013**
4. Licensee: **STERIGENICS US LLC 507156**
Date: **6/13/2013**

Research and Development and Licenses of Limited Scope

- 02400 Veterinary Non-Human
- 02410 *In Vitro* Testing Laboratories
- 03610 Research and Development Broad- Type A
- 03611 Research and Development Broad- Type B
- 03612 Research and Development Broad- Type C
- 03620 Research and Development Other
- 03710 Civil Defense

1. Licensee: **BRISTOL MYERS SQUIBB COMPANY 507395**
Date: **3/3/2008**
2. Licensee: **JOHNSON & JOHNSON PHARMACEUTICAL R&D 507685**
Date: **10/21/2010**
3. Licensee: **NOVARTIS PHARMACEUTICALS CORP 507408**
Date: **6/7/2012**
4. Licensee: **UNIGENE LABORATORIES INC 507121**

- Date: *7/12/2012*
5. Licensee: *PURDUE PHARMA LP 506992*
Date: *4/12/2011*
 6. Licensee: *METROPOLITAN ANIMAL EMERGENCY GROUP PA 507124*
Date: *4/14/2011*
 7. Licensee: *GARDEN STATE VETERINARY SPECIALISTS 506812*
Date: *6/29/11*
 8. Licensee: *NORTHSTAR VETS 506809*
Date: *8/10/11*

Source Material

- 11200 Source Material Other Less Than 150 Kilograms
- 11210 Source Material Shielding
- 11300 Source Material Other Greater Than 150 Kilograms
- 11800 Source Material Standby – No Operations

1. Licensee: *QUALITY INSPECTION 529904*
Date: *6/29/2011*
2. Licensee: *H & H X-RAY SRVS INC DBA WAGGONER & ASSOC INC 584263*
Date: *9/21/2012*
3. Licensee: *SHIELDALLOY METALLURGICAL CORPORATION 517488*
Date: *2/12/2013*

Special Nuclear Material

- 22110 Special Nuclear Material Plutonium – Unsealed Less Than a Critical Mass
- 22111 Special Nuclear Material U-235 and/or U-233 – Unsealed Less Than a Critical Mass
- 22120 Special Nuclear Material Neutron Sources Less than 200 grams
- 22150 Special Nuclear Material Plutonium –Sealed Sources Less Than a Critical Mass
- 22151 Special Nuclear Material U-235 and/or U-233 – Sealed Sources Less Than a Critical Mass
- 22160 Pacemaker – Byproduct and/or Special Nuclear Material – Medical Institution
- 22161 Pacemaker – Byproduct and/or Special Nuclear Material – Individual
- 22162 Pacemaker – Byproduct and/or Special Nuclear Material – Manufacturing and Distribution
- 22170 Special Nuclear Material, General License Distribution (70.39)
- 22200 Special Nuclear Material Facilities – Less Than a Critical Mass

1. Licensee: *NEWARK BETH ISRAEL MEDICAL CENTER 508028*
Date: *12/1/2010*
2. Licensee: *NJDOH PHEL 435765*
Date: *5/3/2007*

Service Providers

- 03219 Decontamination Services
- 03220 Leak Test Services
- 03221 Instrument Calibration Service Only, Source Less Than 100 Curies
- 03222 Instrument Calibration Service Only, Source Greater Than 100 Curies
- 03225 Other Services
- 03226 Other Services – Source Greater than 100 Ci
- 03232 Waste Disposal Service Prepackaged Only
- 03234 Waste Disposal Service Processing and/or Repackaging

1. Licensee: *MICHAEL W LAIRMORE ASSOC 454533*
Date: *8/12/2011*

2. Licensee: **BIO-MED ASSOC INC 506967**
Date: **7/13/2011**
3. Licensee: **INTEGRATED SERVICES GRP LLC 578817**
Date: **4/16/2013**

Medical Diagnostic

02121 Medical Institution -WD Not Required
 02201 Medical Private Practice- WD Not Required
 02220 Mobile Med Service –WD Not Required

1. Licensee: **COASTAL CARDIOVASCULAR CONSULTANTS 434687**
Date: **8/17/2007**
2. Licensee: **MIDDLESEX CARDIAC DIAGNOSTIC CENTER 425358**
Date: **9/7/2007**
3. Licensee: **UNIVERSITY RADIOLOGY GROUP PC 438484**
Date: **9/14/2010**
4. Licensee: **OCEAN HEART IMAGING 424883**
Date: **4/2/2007**
5. Licensee: **PREMIER PET IMAGING**
Date: **5/16/07**
6. Licensee: **NEO-PET LLC 452473**
Date: **4/8/09**
7. Licensee: **SHARED IMAGING LLC 459062**
Date: **4/14/2009**

Medical Therapy (general)

02120 Medical Institution –WD Required
 02200 Medical Private Practice- WD Required
 02231 Mobile Med Service –WD Required

1. Licensee: **MOUNTAINSIDE HOSPITAL 332177**
Date: **3/26/2007**
2. Licensee: **SOUTHERN OCEAN MEDICAL CENTER 443216**
Date: **7/31/2007**
3. Licensee: **VIRTUA MEMORIAL HOSPITAL OF BURLINGTON CNTY 425372**
Date: **6/25/2010**
4. Licensee: **KENNEDY HEALTH SYSTEM 454375**
Date: **2/18/2011**
5. Licensee: **COMMUNITY MEDICAL CENTER 448052**
Date: **5/20/2011**
6. Licensee: **UNIVERSITY RADIOLOGY GROUP PC 438484**
Date: **4/14/2010**

Broad Scope Medical Institution

02110 Medical Institution Broad

1. Licensee: **COOPER HEALTH SYSTEM @ CAMDEN 438814**
Date: **6/1/2007**
2. Licensee: **GARDEN STATE CANCER CENTER 450279**

- Date: **2/17/2009**
- Licensee: **COOPER HEALTH SYSTEM @ CAMDEN 438814**
Date: **8/1/2013**

HDR

02230 High-Dose Rate Afterloader

- Licensee: **JFK MEDICAL CENTER 441325**
Dates: **2/17-18/2010**
- Licensee: **VIRTUA MEMORIAL OF BURLINGTON CNTY. 425372**
Date: **6/25/10**
- Licensee: **KENNEDY MEMORIAL 454375**
Date: **2/18/2011**
- Licensee: **OCEAN MEDICAL CTR. 457842**
Date: **10/14/10**
- Licensee: **COMMUNITY MEDICAL CTR. 448052**
Date: **5/20/2011**
- Licensee: **NEWARK BETH ISRAEL MED. CTR. 455336**

Gamma Knife Therapy

02310 Gamma Stereotactic Radiosurgery

- Licensee: **JFK MEDICAL CENTER 441325**
Dates: **2/17-18/2010**
- Licensee: **COOPER HEALTH SYSTEM @ CAMDEN 438814**
Dates: **8/1/2013**
- Licensee: **JFK MEDICAL CENTER 441325**
Date: **2/12/2014**

Limited Use

02240 Medical Therapy-Emerging Technologies (liquid sources, microspheres, intravascular brachytherapy sources)

02300 Teletherapy

02210 Eye Applicators Strontium-90

- Licensee: **CAPITAL HEALTH MED. CTR –HOPEWELL 440570**
Date: **6/26/2009**
- Licensee: **RIVERVIEW MEDICAL CTR. 297846**
Date: **10/6/2010**
- Licensee: **NEWARK BETH ISRAEL MED. CTR 455336**
Date: **12/1/2010**

CORE TRAINING - LICENSE REVIEWER

At least one of the three documented activities should be a new, renewal, merge or case study.

Academic

01100 Academic Broad- Type A
01110 Academic Broad- Type B
01120 Academic Broad- Type C

1. License: ***Rutgers The State University of New Jersey 460345***
Date: ***10/11/2012***
Amendment Type: ***Added temporary job sites***
2. License: ***Rutgers Newark Campus 619906***
Date: ***10/23/2013***
Amendment Type: ***Break up of existing Broad scope license into 3 Broad scope licenses***
3. License: ***Rutgers Camden Campus 620182***
Date: ***10/23/2013***
Amendment Type: ***Break up of existing Broad scope license into 3 Broad scope licenses***

Measuring Systems

03122 Measuring Systems Analytical Instruments
03123 Measuring Systems Gas Chromatographs
03124 Measuring Systems Other
03120 Measuring Systems Fixed Gauges
03121 Measuring Systems Portable Gauges

1. License: ***KEY-TECH 507394-RAD 100001***
Date: ***3/18/2010***
Amendment Type: ***Added gauges***
2. License: ***URS CORPORATION 507141-RAD 110001***
Date: ***1/21/2011***
Amendment Type: ***License Renewal***
3. License: ***FERREIRA CONSTRUCTION CO INC 507733-RAD 110001***
Date: ***5/2/2011***
Amendment Type: ***License Renewal***
4. License: ***ENVIRONMENTAL TESTING CONSULTANTS LLC 425288-RAD 100001***
Date: ***10/15/2010***
Amendment Type: ***Add new devices***
5. License: ***COLGATE PALMOLIVE TECH. CTR 454218-RAD100001***

Date: **2/11/2011**

Amendment Type: **Converted NRC to NJ AS license**

6. License: **SOMERSET CO DEPT OF HEALTH 542036-RAD 100001**
Date: **11/14/2010**
Amendment Type: **License Application**

Manufacturing and Distribution

03210 Radionuclide Production Using an Accelerator
03211 Manufacturing and Distribution Broad- Type A
03212 Manufacturing and Distribution Broad- Type B
03213 Manufacturing and Distribution Broad- Type C
03214 Manufacturing and Distribution Other

02500 Nuclear Pharmacies
02501 Cyclotron for Production of Radiopharmaceuticals
02511 Medical Product Distribution – 32.72 Prepared Radiopharmaceuticals
02513 Medical Product Distribution – 32.74 Sources and Devices

03240 General License Distribution – 32.51
03241 General License Distribution – 32.53
03242 General License Distribution – 32.57
03243 General License Distribution – 32.61
03244 General License Distribution – 32.71

- 1 License: **CANBERRA DOVER INC 440566-RAD110001**
Date: **7/7/2011**
Amendment Type: **Review of Renewal Application**
2. License: **IBA Molecular RAD110002-439619**
Date: **10/27/2011**
Amendment Type: **Add/Remove AUs, decrease possession limit for I-131**
3. License: **GE Health Care/MediPhysics Inc. 456011**
Date: **11/23/2012**
Amendment Type: **Full Renewal**
4. License: **Cardinal Health 440735-RAD100001**
Date: **12/29/2010**
Amendment Type: **Merge & Technical Review**

Industrial Radiography- 03310, 03320

1. License: **MISTRAS SERVICES 507182-RAD 100001**
Date: **5/31/2011**
Amendment Type: **Added new RSO**
2. License: **VALLEY INSPECTION SERVICES INC 508394-RAD 110001**
Date: **10/06/2011**

Amendment Type: *New License Application*

3. License: **CERTIFIED TESTING LABS**
Date: 11/18/2011
Amendment Type: *Full Renewal*

Irradiators- 03510,03511,03520,03521

1. License: **STERIGENICS ROCKAWAY 507156-RAD110003**
Date: *2/16/12*
Amendment Type: *Full Renewal*
2. License: **STERIGENICS ROCKAWAY 507156-RAD130001**
Date: *6/10/2013*
Amendment Type: *Procedural*
3. License: **COMMUNITY BLOOD SERVICES 507491-RAD130001**
Date: *3/13/2013*
Amendment Type: *Added new location for move irradiator*

Research & Development- 03610, 03611, 03612

1. License: **BRISTOL MEYERS SQUIBB INC. 425341-RAD110004**
Date: *08/16/2011*
Amendment Type: *Changed Administrator*
2. License: **SANOFI-AVENTIS US INC. 507167-RAD110001**
Date: *7/11/2011*
Amendment Type: *Converted NRC to NJ AS license*
3. License: **MERCK SHARP & DOHME CORP 456557-RAD110001**
Date: *6/20/2011*
Amendment Type: *License Renewal*
4. License: **BRISTOL MEYERS SQUIBB INC. 425341-RAD130001**
Date: *7/3/2013*
Amendment Type: *Added device*

Source Material- 11210

1. License: **CARDINAL HEALTH 414 LLC NPS 440735-RAD 120001**
Date: *5/30/2012*
Amendment Type: *Amended License*
2. License: **MEDI PHYSICS INC dba GE HEALTHCARE 456318-RAD 120001**
Date: *6/28/2012*

Amendment Type: *License Renewal*

- License: **TRIAD ISOTOPES INC 454680-RAD 130001**
Date: **5/10/2013**
Amendment Type: *License Renewal*

Special Nuclear Material- 22160, 22111

License: **RUTGERS THE STATE UNIVERSITY OF NJ**
Date: **10/9/ 2012**
Amendment Type: *Amended License*

Service Providers-03220, 03221, 03225

License: **BIO-MED ASSOC INC 506967-RAD 100001**
Date: **2/8/2011**
Amendment Type: *Amended License*

License: **INTEGRATED SERVICES GROUP LLC 578817-RAD 120001**
Date: **6/5/2012**
Amendment Type: *New License*

Additional Program Codes as Needed

Medical Practice- 02200, 02201, 02120, 02121

- License: **ST. CLARES HOSPITAL DOVER CAMPUS 450604**
Date: **9/2/2008**
Amendment Type: *Added Material Authorization*
- License: **MEMORIAL HOSPITAL OF SALEM CNTY 456000**
Date: **9/15/2008**
Amendment Type: *Added/Deleted AU*
- License: **CAPITAL HEALTH SYSTEMS @ HAMILTON 508479-RAD090001**
Date: **5/6/2010**
Amendment Type: *New License Application*
- License: **ATLANTICARE RGNL MEDICAL CTR 425172-RAD100001**
Date: **1/19/2010**
Amendment Type: *Merge of NRC & NJ licenses*
- License: **TEANECK RADIOLOGY CTR LLC 450426-RAD090001**
Date: **10/29/2009**
Amendment Type: *Amendment / NRC & NJ Merge*
- License: **SHORE HEART GROUP 450657-RAD090001**
Date: **11/12/2009**

Amendment Type: *Full Renewal*

Medical Institution Broad- 02110

1. License: *GARDEN STATE CANCER CTR 450279-RAD090003*
Date: *12/30/2009*
Amendment Type: *Merge of NRC & NJ licenses*
2. License: *Rutgers The State University of New Jersey 450669*
Date: *12/16/2013*
Amendment Type: *Irradiator license condition*
2. License: *Cooper Health System PI 438814*
Date: *2/27/2014*
Amendment Type: *File Review*

HDR or Teletherapy- 02230/02300

1. License: *SOUTH JERSEY HEALTHCARE RGNL MED CTR 450632-RAD100004*
Date: *11/23/2010*
Amendment Type: *Add new HDR*
2. License: *ST. CLARES DENVILLE CAMPUS 450607-RAD100001*
Date: *4/27/2010*
Amendment Type: *Amendment/ Merge of NRC & NJ licenses*
3. License: *ST JOSEPHS RGNL MEDICAL CENTER 450610-RAD100001*
Date: *5/10/2010*
Amendment Type: *Amendment to add HDR/ Merge of NRC & NJ licenses*

Gamma Knife Therapy- 02310

1. Licensee: *JFK MEDICAL CENTER 441325 -RAD090002*
Date: *1/04/2010*
Amendment Type: *Amendment/ Merge of NRC & NJ licenses*
2. Licensee: *Valley Hospital Luckow Pavilion*
Date: *11/26/2013*
Amendment Type: *File Review*
3. License: *Cooper Health System PI 438814*
Date: *2/27/2014*
Amendment Type: *File Review*

Supervisor Signature _____

Qualification

Continuing Education and Training

NRC & State Accompaniments	_____ (see Attached)
Emergency Response Training	_____
Member of IMPEP Team	_____
Other Health Physics Courses	_____
Other Courses	_____

Inservices

Nuclear Diagnostic Products

Attachment 7

Inspector	Supervisor	License Category	Date
Catherine Biel	Bill Csaszar	Broad Scope A/Irradiator	4/26-27/11
	Bill Csaszar	Nuclear Pharmacy	9/19/12
	Bill Csaszar	Industrial Radiography	6/12/13, 6/26/13
	Jenny Goodman	Blood Irradiator	12/3/14
Karen Flanigan	Rich Peros	Mobile Medical Service	10/6/11, 9/13/11
	Nancy Stanley	Med Institution WD Req'd	6/14/12
	Bill Csaszar	Med Institution WD Req'd	9/16/13
	Rich Peros	Med Private Practice WD	11/6/14
James McCullough	Bill Csaszar	Gamma Knife	12/19/11
	Rich Peros	Med Private Practice-No WD	11/8/12
	Cathy Biel	Research & Development	4/17/13
	Cathy Biel	Portable Gauge	12/1/14
Richard Peros	Bill Csaszar	Med Institution WD Req'd	5/24/11
	Bill Csaszar	Med Inst, Emerg Tech, HDR	8/7/12
	Bill Csaszar	Med Institution WD Req'd	5/7/13
	Jenny Goodman	Med Private Practice WD	11/26/14
Joseph Power	Jack Tway	Portable Gauge	4/10/14
Sarah Staab	Jack Tway	Portable Gauge	7/2/14
	Jack Tway	Fixed Gauge	7/29/14
Nancy Stanley	Rich Peros	Med Private Practice WD, HDR	5/31/11
	Bill Csaszar	Gamma Knife	6/27/12
	Bill Csaszar	Med Institution WD req'd	5/29-30/13
	Rich Peros	Med Inst WD, HDR, Eye App, Emerg Tech, Irradiator	10/1/14
Ed Truskowski	Rich Peros	Med Private Practice WD, HDR	6/23/11
	Rich Peros	Med Inst WD, HDR, Eye App, Emerg Tech	10/25-26/12
	Rich Peros	Med Institution Broad, Eye App, HDR, Emerg Tech, Irradiator, Source Material Shielding	3/12/13
	Rich Peros	Med Institution WD, HDR, Emerg Tech	8/12/14
Debbie Wenke*	Karen Flanigan	Water treatment (TENORM)	12/10/12
	Jenny Goodman	Water treatment (TENORM)	2/19/13
	Rich Peros	Mobile med service	12/5/14
Jack Tway	Cathy Biel	Panoramic Irradiator	7/14/11
	Cathy Biel	Industrial Radiography	9/28/11
	Jenny Goodman	Portable Gauge	7/24/12
	Cathy Biel	Radiopharmacy	4/11/13
	Cathy Biel	Radiopharmacy	11/18/14

*started some agreement state work in 9/2012.

Attachment 8
Inventory of Instruments that are Calibrated and their probes

Make	Model	Count	Description	Notes
Ludlum	19	15	uR	2 calibrated to Ra
Ludlum	17	6	ion chamber	
Ludlum	9-3	6	ion chamber	
Ludlum	3	12	survey meter	
Ludlum	PR 44-9	12	pancake GM	
Ludlum	PR 44-38	12	side window GM	
Ludlum	77-6	1	telescoping	
Ludlum	44-10	1	large NaI detector	
Ortec	905790	2	Detective-EX HPGe Detectors	
Thermo	FH 40 GL	16	Digital Meter	
Thermo	FHT-752SH	12	He-3 Neutron Probe	
Thermo	FHZ-732GM	12	Pancake Detector	
Thermo	FHZ512A	12	NaI Micro-R Detector	
Thermo		12	Teleprobe 13' Extension	
Thermo	FHZ-612	12	Hi-range Gamma Detector	
Thermo	FHZ-672	8	Scintillation Probe (blue sausage)	
Thermo	FHZ-380 AB	8	Alpha Scint Probe	
Thermo	HS-025-I	8	identiFINDER Ultra	
Thermo	N/9V	3	identiFINDER	
Victoreen	450P	1	pressurized ion chamber	
NDS Products	ND2000	4	radiography survey meter	

Attachment 9

4.3.1 Licensing Program

BER 3.01 Review of Application for a New License or Transfer of Ownership or Control

- Was titled “Review of Application for License or Amendment Request”
- Section 1.4. Added reference to checklists
- Section 2.1. Changed the details of what the administrative assistant gives the licensee.
- Section 2.3. “Senior Qualified License Reviewer/Inspector” has been eliminated. Added “or designee” in the sentence regarding review and approval.
- Section 2.4. “Supervising Qualified License Reviewed/Inspector” is now “Radioactive Material Section Supervisor” in new Sec 2.3. Should be changed to “Industrial or Medical Supervisor”
- Section 3.1.4. The administrative assistant not the QLR/I checks that the fee is correct.
- Section 3.2.1. Six checklists are referenced, originally only attachment 1 was referenced.
- Section 3.2.2. Change in details of how to use checklists; addition of discussion on license “tiedowns”, and use of 10 year term limit for licenses.
- Section 3.2.9. Changed to schedule new license inspection within 12 months, which is criteria in BER 2800 #5.03: “Initial inspections of a new license or an existing license which obtained an amendment for any significant licensing action including Medical Therapy – Other Emerging Technologies shall be assigned and completed within 12 months of the date of the new license or amendment.”
- Section 3.3 was “Processing a Request for License Amendment or Renewal” – now can be found in BER 3.02 and BER 3.03.
- Section 3.4 Processing of Exemptions for Material Licenses is now Sec 3.3
- Section 3.5 Processing Reciprocity Applications can be found in BER 3.09.
- Section 3.6 Emerging Medical Technologies is now Sec 3.4.

BER 3.02 Review of Application or Request for an Amendment

- Was “Review of Application for Renewal of a Specific License – which is now BER 3.03
- This procedure was included in the original BER 3.01 sec 3.3.
- This is a complete rewrite with specifics on the use of checklists.

BER 3.03 Review of Application for Renewal of a Specific License

- This was formerly BER 3.02

- Originally BER 3.03 was “Review of a Request for License Termination”, which is now BER 3.04
- Section 1.5.2. “Expedited review” has been deleted.
- Section 2.3. “Senior QLR/I” has been deleted.
- Section 3.1.4. Currently “manager of BER must approve operation of any license for which the renewal application was submitted after the license’s expiration date.” Originally the Supervisor could approve.
- Section 3.2. Checklists are now referenced.

BER 3.04 Review of a Request for License Termination

- Originally was BER 3.03
- Section 1.3.1. Reference to checklists is now included.
- Section 2.3 diffuse NARM, Source Material, General Licensing and Decommissioning supervisor now has responsibilities of RAS and Medical Section supervisors in original procedure.
- Section 3.2.2. Reference to checklists is now included.
- Section 3.3.2 and Section 3.4.2. Status of assessments is now included.
- Section 3.3.5 and Section 3.4.8. Reference to checklists is now included.

BER 3.05 Prioritization of Licensing and General License Registration Actions.

- Was BER 3.04
- Section 1.5.6. “Expedited review” has been eliminated.
- Section 2.1.1, changed “Receiving, logging and acknowledging the receipt of a renewal, amendment, or termination request, a new application, or an annual general license registration,” to “Receiving and logging the receipt of a renewal, amendment, or termination request, a new application, or an annual general license registration,”
- Section 2.1.4 has been deleted: “Setting initial priority.”
- Section 2.3.1.1 has been deleted: “Assigning a priority to a licensing action when administrative assistant has questions.”
- Section 2.3.2. A task is not assigned through a Senior QLR/I, but now directly to a QLR/I.
- Section 3.1, added: “or as soon thereafter as possible.”
- Section 4.1.1, deleted: “Requests for applications are maintained in a file.”

BER 3.06 Review of Annual Registration of Generally Licensed Devices

- Was BER 3.05
- This is a completely new procedure that is in greater detail.
- New 3.06 prepared by J. Power Dec 2014.

4.3.5 Licensing Quality Assurance

BER 3.07 Licensing Quality Assurance

- Was BER 3.06
- Introduction, second paragraph, deleted “once in place (projected date early 2009)”; “will be” changed to “is.”
- Introduction, third paragraph: “The NJEMS’s ability to provide review of license and permit applications, as well as emission statements, testing documents, monitoring reports and enforcement actions” changed to “The NJEMS’s ability to provide review of license applications, as well as enforcement actions.”
- Section 2.0. Administrative Assistant now notifies licensee that license will expire in 90 days. Notification was for 180 days.
- Section 2.0 and Section 3.0. Senior QLR/I duties are now performed by Supervising QLR/I.
- Section 2.0, changed: “The Administrative Assistant is responsible for receiving, logging, and acknowledging the receipt of an application for license renewal and ensuring the applicant is informed that the application is considered to be timely.” To “The Administrative Assistant is responsible for logging the receipt of an application for license renewal, initial application, amendment and termination.” First paragraph, added” and provides both to the Supervising QLR/I.”
- Section 2.0, Supervising QLR/I, added “The Supervising QLR/I is responsible for assigning initial, renewals, amendments and terminations to a QLR/I”.
- Section 2.0, added: “Manager, BER: the Manager is responsible for a QA review of all renewal, initial, and terminations. The QA Licensing Review Sheet (Att. 1) shall be used to document this review.”
- Section 3.0(b)(1): deleted “nomenclature in distribution licenses.”
- Section 3.0(b)(7) added: “A pending inspection is entered for initial licenses no more than one year from the license issue date.”
- Section 3.0(b): deleted: “Implementation of licensing initiatives. In particular, the reviewer should identify these initiatives for a performance-based review (i.e., radiography certification, general licensing programs, etc.). “
- Changed Section 2.0 to remove sentence regarding adding attachment #1 to personnel file.

4.3.6 Administrative Licensing Procedures

BER 3.08 Licensing Administrative Procedures

- Was BER 3.07

- Section 1.0, third paragraph, changed to state that the NJEMS system is now in place.
- Section 3.0A, deleted “However, this number will not be referenced in communications with the licensee until the license has been finalized. (The computer system permits licensee identification using many different queries including a facility name as well as a license number.)”
- Section 3.0A “and/or the Senior QLP/I” was deleted.
- Section 3.0B “or Senior QLR/I” was deleted.
- Section 3.0C&D. “the objective is to complete all licensing action within 45 days of receipt.” BER 3.05 states 90 days. Changed to 90 days. Deficiency correspondence is at 45 days.
- Section 3.0G “or Senior QLR/I” was deleted.
- Section 3.0I, deleted “are stored in a secured entry resource room.”

BER 3.09 Reciprocity Licenses

- This procedure was extracted from MC1200 Reciprocity and edited for New Jersey.

4.4 Inspection Program

NJDEP Inspection Manual – Manual Chapter 1220 Reciprocity

- This is a new procedure

NJDEP Inspection Manual – Manual Chapter 2602 Decommissioning

- Section 02.06 added: “Note the NJDEP does not accept some parts of NUREG-1757 such as the long term control license.”
- Section 05.01, added: “Reviews all final license terminations before termination letter is sent.”
- Section 06.04, changed NORM to TENORM.
- Section 06.04(d) deleted Site Remediation Program issuing a No further Action letter.

NJDEP Inspection Manual – Manual Chapter 2800 Materials Inspection Program

- Section 05.01(a): changed: “for the travel itinerary.” to “discuss the travel itinerary with the supervisor if questions arise.”
- Section 6.03 changed from “Inspections after Escalated Enforcement. If escalated enforcement action has taken place for a particular licensee, a follow-up inspection to focus on the Severity Level III or above violation(s) shall be scheduled and conducted within 6 months of the last inspection or sooner, in accordance with this guidance regarding reduction of inspection interval, after completion of the escalated enforcement action, to assess the licensee's follow-up actions in response to the

previous violations.” To “Inspections after Escalated Enforcement. If escalated enforcement action has taken place, a follow-up inspection to focus on the Severity Level III or above violation(s) may be requested by the section supervisor at a reduced inspection interval to assess the licensee's follow-up actions in response to the previous violations.”

- Section 8.03 deleted: “Methods of Documenting Inspection Results. Inspections shall be initially documented by completing inspection records.
 - a. The inspection records do not have to be typed, but should be legible and should

contain:

1. the procedure(s) used;
2. the focus areas examined;
3. the status of follow-up items involving prior enforcement or reported licensee events;
4. sufficient information to support cited violations, non-cited violations, and closed violations identified during a previous inspection;
5. description of completed and anticipated corrective actions to any identified violations; and
6. a succinct description of the scope of the licensee’s program

A different inspector should be able to use the inspection records in preparing for a subsequent inspection, and to determine whether corrective actions have been taken.

- Section 08.04(3), deleted: “In order to capture each site visit in NJEMS, the inspector must add the task “**Site visit**” to **Activity Tracking** for each individual site visit.”
- Section 08.04(5) was deleted: “The **multimedia checkbox** will be checked whenever a subject item/requirement set from more than one program is included in the inspection checklist. This includes screening checklists.”
- Section 08.04(6), added: “It is also acceptable to create a RAD word document under this activity to record inspection findings.”
- Section 08.04(8), deleted: “For subject item/requirement sets which are automatically given the Compliance Status of **H** for Heading, no information is required. This is general information that relates to the Subject Item or group of checklist items as whole and not individual requirements.”
- Section 08.04(13), deleted: “The **non-Checklist** tab is used for permit violations where the permit requirements have not been entered into NJEMS (i.e., multiple APEDS converted permit violations). Violations which need to be addressed after the inspector has completed his checklist data entry will also be documented on the **Non-Checklist** (i.e., supervisor discovers a requirement not included in the **Checklist** which should have been and was determined out of compliance).”
- Enclosure 7 and 8, changed NRC contact information.

- Section 02.05(a) was changed from: “Posting and Labeling. Determine if licensee’s performance is in accordance with N.J.A.C. 7:28-6.1 (see 10 CFR 20.1902, 20.1903, 20.1904, 20.1905, 20.1501, and 20.1502) and other posting and labeling requirements specified in the license or licensee procedures.” to: “Posting and Labeling. Determine if licensee’s performance is in accordance with N.J.A.C. 7:28-6.1 (see 10 CFR 20.1902, 20.1903, 20.1904 and 20.1905) and other posting and labeling requirements specified in the license or licensee procedures.”
- Section 02.08(f), added “When applicable.”
- Section 03.04(a)(1), changed “or leak test procedure” to “if deemed necessary by the inspector.”
- Section 03.06(a), added to the first sentence: “as applicable.”

NJDEP Inspection Manual – Inspection Procedure 83890 Closeout Inspection and Survey

- Section 01.01, added: “Status.”
- Section 02.02, added “c. Confirm, by examining waste manifests, that waste broker and/or waste collector have applied for and received reciprocity for the dates indicated on the manifests if applicable (See INFORMATION NOTICE 2011-11-28, Transportation of Waste).
- Appendix A, Section IV, deleted: “NOTE: If licensees are decommissioning under the NRC’s NUREG/CR-5849, NUREG 1575 Rev.1 should not be applied to them.”

NJDEP Inspection Manual – Inspection Procedure 84850 Radioactive Waste Management

- Section 02.01, added: “d. That there is an unambiguous procedure or process by which the licensee as a licensed processor or user of radioactive material becomes a “waste generator” in accordance with Appendix G of 10 CFR Part 20.
- Section 03.01(b), added: “Inspectors should also observe the records to verify they are legible, accurate, and complete throughout the specified retention period.”
- Section 03.01(e)(1),, changed details of solidification media to: “Solidification media currently being used must be consistent with disposal site license conditions.”

NJDEP Inspection Manual – Inspection Procedure 84900 Low Level Radioactive Waste Storage

- No changes

NJDEP Inspection Manual – Inspection Procedure 86740 Transportation Activities

- No changes

NJDEP Inspection Manual – Inspection Procedure 87102 Maintaining Effluents ALARA

- Section 02.07, deleted: “The US Nuclear Regulatory Commission (NRC) Referral Form to the U.S. Environmental Protection Agency (EPA) is provided in Enclosure 1 of this procedure. The form is intended to inform the EPA through the NRC of the inspection and to provide the EPA and the NRC with data on the magnitude of air emissions from the licensee’s facilities. Fill out the form at the end of the inspection and ensure that all

the data required in the form are entered. The form is mostly self-explanatory, but the following are some items to note when entering the information. The "Contact" entry in the top box of the form refers to a licensee representative who would be able to answer questions related to the licensee emission information if the NRC or EPA were to contact the licensee for additional information or clarification. In the second box," and the referenced Enclosure 1.

NJDEP Inspection Manual – Inspection Procedure 87103 Incident of Bankruptcy Filing

- Section 05.02(c), deleted: "Word processing software may be helpful if you can type at a reasonable rapid pace."
- Section 05.02(d), added: "Be familiar with required input parameters so that this information is obtained. Calculations could be done after leaving the facility depending on the situation."
- Section 05.08, deleted: "The inspector can refer to NUREG-1303, "Incident Investigation Manual," as a guide on how to collect data. Although primarily used for an Incident Investigation Team, NUREG-1303 is the reference document based on inspection experience that provides good follow-up information on how to conduct an investigation and interview, collect information, write a preliminary notification, and prepare a report."
- Section 05.10, added "or conference call."
- Section 05.12, changed "NMSS/IMNS" to "NRC".
- Section 05.13, added: "or after the investigation has been concluded." and "If the exit meeting is on site, leave"
- Section 87103-06, changed "ICRP 30" to "ICRP 103." Changed "Health Effects of Exposure to Low Levels of Ionizing Radiation, Committee on the Biological Effects of Ionizing Radiations, BEIR V, National Academic Press, 1990." To "Health Risks from Exposure to Low Levels of ionizing Radiation, Committee on the Biological Effects of Ionizing Radiation, BEIR VII, National Academic Press, 2006."

NJDEP Inspection Manual – Inspection Procedure 87104 Decommissioning for Material Licenses

- Section 02.02(b), deleted: "on site disposal of waste if authorized under N.J.A.C. 7.28-6.1 (see 10CFR20.2002)."
- Section 03, deleted: "The planning and field conduct of an inspection should be coordinated with the NJDEP Licensing Supervisor in coordination with the Radiological Assessment Section."
- Section 02.01(a), added: "and the extent and quantity of contamination."
- Section 03.02(a)(8), added: "Inspector should contact the DEP's Solid and Hazardous Waste program for assistance."
- Section 03.02(c)(4), added: "Verify that the licensee has met all applicable conditions for release of the site for restricted use as per N.J.A.C. 7:28-12."

NJDEP Inspection Manual – Inspection Procedure 87121 Industrial Radiography

- Under Facilities, added: “if possible with material that is present.”
- Under Physical Inventory, changed “semi-annual” to “Quarterly” and added to the last sentence: “and reconcile it with the NSTS inventory.”
- Under Area Surveys, deleted: “The inspector should use a survey instrument that has been calibrated within the last 6 months. This will enhance the credibility of the inspector’s survey results if there is any disagreement between the reading obtained from the licensee’s instruments and the inspector’s (NJDEP).”
- Under Waste Storage and Disposal, deleted: “Also review the licensee's procedures and records to verify that each package intended for shipment to a licensed land disposal facility is labeled, as appropriate, to identify it as Class A, B, or C waste in accordance with the classification criteria of N.J.A.C. 7:28-59.1 (see 10 CFR 61.55 [subsection III.A.2. of Appendix G to Part 20].”
- Under Routine and Non-Routine Maintenance, changed language in first two sentences. No substantive changes were made.

NJDEP Inspection Manual – Inspection Procedure 87122 Irradiator

- Punctuation changes.

NJDEP Inspection Manual – Inspection Procedure 87123 Well Logging

- Section 3.03, Transportation, sixth paragraph, deleted: “Also review the licensee's procedures and records to verify that each package intended for shipment to a licensed land disposal facility is labeled, as appropriate, to identify it as Class A, B, or C waste in accordance with the classification criteria of N.J.A.C. 7:28-59.1 (10 CFR 61.55 [Subsection III.A.2 of Appendix G to Part 20]. Verify that records are maintained that demonstrate compliance with the requirements for the disposal of licensed materials.”

NJDEP Inspection Manual – Inspection Procedure 87124 Fixed and Portable Gauge

- Section 02.04 FE-4, added: “or maintain documentation demonstrating that unmonitored individuals are not likely to receive, in one year, a radiation dose in excess of 10 percent of the allowable limits in NJAC 7:28-6.1 (10 CFR Part 20).”
- Section 02.05 FE-5 changed:” The licensee should provide radiation instrumentation in sufficient number, condition, and location to accurately monitor radiation levels in areas where licensed material is used and stored.” to “The licensee should provide, or have access to, radiation instrumentation in sufficient number and condition to accurately monitor radiation levels in the event of an incident to determine whether the shielding and source are intact.”
- Section 03.01 FE-1 fifth paragraph, added “Verify compliance with 10CFR30.34(i).”
- In “Storage and Disposal of Gauges Removed from Service”, deleted: “Also assess the licensee's procedures and records to verify that each package intended for shipment to a licensed land disposal facility is labeled, as appropriate, to identify it as Class A, B, or C

waste in accordance with the classification criteria of N.J.A.C. 7:28-59.1 (see 10 CFR 61.55 [Subsection III.A.2 of Appendix G to Part 20].”

- Section 03.05 FE-5, added: “if they do not possess their own equipment.”

NJDEP Inspection Manual – Inspection Procedure 87125 Materials Processor/Manufacturer

- Punctuation changes.

NJDEP Inspection Manual – Inspection Procedure 87126 Industrial/Academic/Research

- Section 02.04: added “and as required in N.J.A.C. 7:26-6 (10CFR20.1502)”.
- Section 03.02(b)(4), changed “SSD registry” to “Sealed Source and Device Registry (SSDR). Changed “registry sheet” to “SSDR and”.
- Section 03.04, second paragraph, deleted: “the measurement of quantities of licensed materials present.”
- Section 3.04(b): added “used for personnel exposure records” after “For pocket dosimeters or pocket chambers” and after “For electronic dosimeters.” In second paragraph, added “if deemed necessary during the inspection.”
- Section 03-04(c): added after “intake measurements to dose: “, when required to add internal and external exposures per N.J.A.C. 7:28-6 (10CFR20.1202),”.
- Section 3.04(g): changed “Should provide” to “Licensee should provide”.
- Section 03.06(c): changed “will be found” to “may be found”.

NJDEP Inspection Manual – Inspection Procedure 87127 Radiopharmacy

- Primarily formatting changes

NJDEP Inspection Manual – Inspection Procedure 87130 Nuclear Medicine, no WD

- General Guidance, fifth paragraph, deleted: “Especially ensure that the licensee understands that the retained record will become publicly available, and give the licensee the opportunity to request withholding the information.”
- Section 3.01(d), 3.01(g), 3.01(h), 3.02(a), 3.05(b), made grammar changes.

NJDEP Inspection Manual – Inspection Procedure 87131 Nuclear Medicine with WD

- Footnote, formatting changes
- Section 2.01, general guidance fourth paragraph, 3.01(d), 3.06(d), made grammar changes.
- General guidance fifth paragraph, deleted: “Especially ensure that the licensee understands that the retained record will become publicly available, and give the licensee the opportunity to request withholding the information.”

NJDEP Inspection Manual – Inspection Procedure 87132 Brachytherapy

- Updated to reflect latest version of NRC IP 87132 (2/26/15) and to change language from “NRC” to “NJDEP”.

NJDEP Inspection Manual – Inspection Procedure 87133 Medical Gamma Sterotactic Radiosurgery and Teletherapy

- No changes

NJDEP Inspection Manual – Inspection Procedure 87134 Medical Broad Scope

- “if necessary” changed to “when deemed necessary” in many sections.
- “Radioactive Material Section” changed to “Radioactive Materials Program” in many sections.
- Section 3.01, under “Written Directives”, deleted “If necessary” in the beginning of the last sentence.
- Section 3.01 under “Effluents”, changed “If the inspector determines that a review of selected records is necessary” to “During a review of these selected records.” Deleted “If a review of selected records is necessary” in the next sentence.
- Section 3.02, under “Shielding of Transferred Materials”, changed “NJDEP” to “agency.”
- Section 3.04, under “Internal Dosimetry”, changed “10CFR20.1501” to “10CFR20.1502”.
- Section 3.05, under Equipment and Instrumentation”, changed “10CFR30.61” to “10CFR35.61.”

NJDEP Inspection Manual – Inspection Procedure 92702 Follow-up on Enforcement Actions

- No substantive changes.

4.5 Routine Enforcement Procedures

BER 5.01 NJEMS Overview for Compliance and Evaluation

- Section 3.0: deleted reference to NJEMS training and users-manual

BER 5.02 Compliance Evaluation

- Deleted references to hours to complete a task.

BER 5.03 Routine Enforcement Actions

- Deleted references to “issuance of a field notice.”
- Deleted references to “return receipt card.”

BER 5.04 Documenting Hours to Complete Tasks

- Deleted procedure.

BER 5.05 Enforcement Escalation Procedure

- No changes

BER 5.06 NJEMS Case Management

- Deleted references to hours to complete a task.

4.7.1 Procedures for Responding to Events and Allegations

SOP RR-101 Notification, Initial Response, and Mobilization

- Formatting changes

Attachment RR101 -1 RAMRAT Team Listing

- Formatting changes

Attachment RR101-2 RAMRAT Initial Contact Message Form

- Formatting changes

Attachment RR101-3 Communication Log

- Formatting changes

Attachment RR101-4 NJDEP Management Chain of Command & Contact Numbers

- Updated names to reflect staffing changes

Attachment RR101-5 Building Entry Procedure

- Formatting changes

Attachment RR101-6 RAMRAT Emergency Equipment Checklist

- Formatting changes

Attachment RR101-7 RAMRAT Instrumentation Checklist

- Update instrument list
- Formatting changes

Attachment RR101-8 Pre-Operational Instrument Check

- Formatting changes

SOP RR-102 On-Scene Radiological Response

- Formatting changes

SOP RR-103 Radiological Assessment and Protective Action Guidance

- Formatting changes

4.7.2 Procedures for Identifying Significant Events and Allegations and for Entering Same into the Nuclear Materials Events Database (NMED)

BER 7.01 Procedure for Issuance of USDOT Special Permits

- Updated to reflect change in terminology from “exemption” to “Special Permit”.
- Attachment 1 updated to most current version of DOT Special Permit 10656
- Attachment 2 updated to most current version of DOT Special Permit 11406

BER 7.02 Management of Allegations

- No substantive changes

BER 7.03 Instrument Calibration and QA Program

- Updated to include instrument shipping procedure

BER 7.04 Entering Incidents in NJEMS

- No substantive changes

BER 7.05 Nuclear Materials Events Database

- Section 4 rewritten to reflect that BER no longer uses the local database, instead submitting reports via email
- Addition of References
- Minor formatting changes