Approved by OMB[1]
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INTEGRATED MATERIALS PERFORMANCE EVALUATION PROGRAM QUESTIONNAIRE

New York Agreement State Program
New York State Health Department
New York State Department of Environmental Conservation
New York City Department of Health and Mental Hygiene

Reporting Period: March 29, 2014 to March 23, 2018

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.

2014 Recommendation 1 (Technical Staffing and Training): The review team recommends that NYC should update its staffing and training qualification program to include approved documentation of staff's qualifications.

A qualification journal modeled on NRC qualification procedures has been developed and is in use. One staff member has been given responsibility to maintain the journal and records of employee trainings.

2014 Recommendation 3 (Technical Quality of Licensing): The review team recommends that NYC (1) provide additional training to technical staff members regarding technical review of licensing actions, including training to ensure that the staff acquires increased familiarity with the regulations under NYC's equivalent to 10 CFR Parts 30, 33, and 35, and applicable licensing guidance documents and license conditions, and (2) take measures to ensure that the NYC's review of licensing actions are complete and well-documented.

NYCDOHMH has increased staffing for license review, and now has two qualified license reviewers including a Certified Health Physicist, as well as a new license reviewer undergoing training. Training for license reviewers has included NRC agreement state training courses, 40-hour RSO training, and other in-house and on-the-job trainings. In addition, license review procedures have been revised and

new forms have been created to include better documentation of license actions, peer review, and communications with licensees.

2014 Recommendation 4 (Compatibility Requirements): The review team recommends that the Program make appropriate regulatory changes to resolve NRC-generated comments as noted in regulation review letters, and adopt NRC regulations in accordance with the current NRC policy on adequacy and compatibility.

NYCDOHMH is in the process of revising NYC Health Code Article 175 to adopt relevant NRC regulations by reference. Once adopted, this will be the primary method of maintaining compatibility with NRC regulations.

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;
(b) A chart showing positions of the radiation control program, including management; and
(c) Equivalent charts for sealed source and device evaluation, low-level radioactive waste and uranium recovery programs, if applicable.

(a)

1. Mayor (Bill deBlasio)
2. Commissioner of Health (Dr. Mary Bassett)
3. Deputy Commissioner for Environmental Health (Corinne Schiff)
4. Acting Assistant Commissioner for Environmental Sciences and Engineering (Lily Huang)
5. Radiation Control Program Director (Rejina Alam)

(b)

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:

Name Position Area of Effort FTE%

Name	Position	Area of Effort	FTE%
Rejina Alam	Director, Office of Radiological Health	Administration Materials Licensing & Compliance	95 5
(To be named)	Unit Chief, Radioactive Materials	Administration Materials Licensing & Compliance	75 25
Mark Horberg	Unit Chief, Radiation Producing Equipment	Administration	20
Jose Lorenzo[a]	Scientist III	Administration / Supervision Materials Licensing & Compliance	25 75
Olga Aminev[a]	Scientist II	Materials Licensing & Compliance	50
Mark Rayman[a]	Scientist II	Materials Licensing & Compliance	50
Kimloan Nguyen	Scientist II	Materials Licensing & Compliance	80
Hailu Tedla[b]	City Research Scientist II	Materials Licensing & Compliance Emergency response / special projects	70 10
Erik Finkelstein	City Research Scientist II	Materials Licensing & Compliance Emergency response/ special projects	65 10

a: Qualified Inspector
b: Qualified License reviewer
Note: FTE do not always add to 100% because some staff are dividing their effort between radioactive materials regulation and other areas.

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.

- Hailu Tedla, CHP – Health Physicist, City Research Scientist II, started August 2014
- Erik Finkelstein, PhD – City Research Scientist II, started August 2014
- Kimloan Nguyen MS– Scientist II, started 2016
- Rejina Alam, PhD – Chief of Radioactive Materials / Director, Office of Radiological Health, started 2016

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 the staff need and a tentative schedule for completion of these requirements.

Kimloan Nguyen, trainee (Inspections / License Reviewer) – recently completed NRC Licensing Procedures (G-109), training complete except for on the job training (license review, accompanied inspections), expect to be fully qualified for both inspection and licensing by July 2018.

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

Qualification journal for licensing and inspection training was developed and implemented.

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

Irene Santiago (March 2016)

Tobias Lickerman (December 2014)

Geoffrey Korir (March 2017)

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.

Scientist II-----filled immediately

Unit Chief Radioactive Materials working as Chief and acting Director simultaneously in 2017.

For Radioactive Materials Unit Chief position, a candidate has been selected and will be named in March, 2018.

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.

No.

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.

	2014 (3/29 – 12/31)	2015	2016	2017	2018 (as of 2/6/18)
Initial	12	50	24	20	1
Routine - Priority 1	20	20	22	18	0
Routine - Priority 2	60	167	102	126	12
Routine - Priority 3	14	6	20	17	0

(Initial inspections are not included in the number of routine inspections)

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.

Not applicable.

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.

Not applicable.

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.

Number of Reciprocity Licenses	Number of Reciprocity Inspection Performed in 2014	Number of Reciprocity Inspection Performed in 2015	Number of Reciprocity Inspection Performed in 2016	Number of Reciprocity Inspection Performed in 2017
25	2	9	21	6

III. Technical Quality of Inspections

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

We have recently drafted and implemented an inspection procedures manual, modeled on NRC inspection procedures: Inspection Manual Chapter 2800. Inspection forms have been extensively revised including updated / corrected code citations and other improvements.

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

Inspector Supervisor License Category Date

INSPECTOR	SUPERVISOR	LICENSE CAT.	DATE
Mark Rayman	Jose Lorenzo	Priority 1	2.6.2014
Mark Rayman	Tobias Lickerman	Priority 1	2.14.2014
Olga Aminev	Jose Lorenzo	Priority 2	5.28.2014
Olga Aminev	Jose Lorenzo	Priority 2	3.10.2015
Mark Rayman	Jose Lorenzo	Priority 2	3.17.2015
Mark Rayman	Jose Lorenzo	Priority 1	4.30.2015
Olga Aminev	Jose Lorenzo	Priority 1	5.13.2015
Mark Rayman	Jose Lorenzo	Priority 2	11.12.2015
Mark Rayman	Jose Lorenzo	Priority 2	11.13.2015
Olga Aminev	Jose Lorenzo	Priority 2	12.21.2015
Olga Aminev	Jose Lorenzo	Priority 2	12.23.2015
Olga Aminev	Jose Lorenzo	Priority 2	12.24.2015
Olga Aminev	Jose Lorenzo	Priority 2	12.28.2015
Olga Aminev	Jose Lorenzo	Priority 2	11.3.2016
Mark Rayman	Jose Lorenzo	Priority 1	5.6.2016
Olga Aminev	Jose Lorenzo	Priority 2	1.5.2017
Mark Rayman	Jose Lorenzo	Priority 3	2.4.2017

17 accompanied inspections

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?

Inspectors currently carry Ludlum model 2241 survey meters with NaI gamma probe and G-M pancake probe, we have also recently used Thermo RadEye G electronic ratemeters. All instruments are sent out to qualified outside vendors for annual calibration, and all instruments currently in use by inspectors are current on calibration as of 2/5/18.There were sufficient calibrated instruments throughout the review period.

IV. Technical Quality of Licensing Actions

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

303 (as of February 5, 2018)

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.

New license issued, unusual:

- New York Proton Center, lic number 52-3687-01

Amendment requests, unusual:

- Hunter College, lic number 52-3120-02: request to add unsealed SNM (along with other radionuclides) for mainly actinide chemistry research purposes
- Columbia Presbyterian Medical Center, non-human use license, lic number 74-2878-03, request to license custom-build Cs-137 research irradiator for irradiating lab animals

Major licenses renewed in this period include:

- Columbia Presbyterian Medical Center, medical use, lic number 75-2878-01
- NYU Medical Center, medical use, lic number 75-2955-01
- New York Presbyterian – Weill Cornell Hospital, medical use, lic number 75-2960-04
- Memorial Sloan-Kettering Cancer Center, medical use, lic number 75-2968-01
- Long Island Jewish Medical Center, medical use lic number 75-2986-01
- New York University, non-human use, lic numbers 74-2955-02 and 74-2955-04
- Columbia University, non-human use, lic number 74-3030-01
- Columbia Presbyterian Medical Center, non-human use, lic number 74-2878-03
- NYU gamma knife, lic number 93-2955-05

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

One facility requested and received an exemption from public exposure limits in the case of caretakers for hospitalized young patients receiving I-131 MiBG therapy. We understand this exemption is consistent with NRC practice in similar cases.

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

No changes.

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.

None.

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:

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

All reportable incidents have been previously sent to NRC. The following is a list of allegations responded to:

Licensee	License #	Date	Type of Incident
Maimonides Medical Center	91-2844-01	March 4 2016	Allegation
NY Presbyterian Hospital	75-2960-04	March 9, 2016	Allegation
Dr. Daniel Shasha	91-3369-01	October 31, 2017	Allegation

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

NYCDOHMH has documented incident and allegation response procedures in the recently completed inspection manual.

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.

NYC Health Code Article 175.

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

No.

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.

NYCDOHMH is in the process of revising NYC Health Code Article 175 to adopt relevant NRC regulations by reference. The enclosed SRS sheet is based on the revised code, which is anticipated to be adopted in 2018. Until the new code is adopted, NYCDOHMH is implementing 10CFR Part 37 through license conditions in the relevant licenses.

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.

NYCDOHMH is in the process of revising NYC Health Code Article 175 to adopt relevant NRC regulations by reference. Once adopted, this will be the primary method of maintaining compatibility with NRC regulations.

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:

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

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 N/A

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

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:

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