

MASSACHUSETTS DEPARTMENT OF PUBLIC HEALTH (DPH)  
 MONITORING QUARTERLY CONFERENCE CALL  
 October 30, 2017

<b>NRC Participants</b>	<b>Massachusetts DPH Participants</b>
Farrah Gaskins, Acting RSAO, Region I	Jack Priest, Director, Radiation Control Program
Monica Ford, RSAO, Region I	Joshua Daehler, Materials Unit Supervisor, Radiation Control Program
James Trapp, Director, DNMS, Region I	
Lance Rakovan, Senior Health Physicist, Agreement States Program Branch, NMSS	
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**SUMMARY**

During the Integrated Materials Performance Evaluation Program (IMPEP) review of the Massachusetts Agreement State Program (Program) conducted on July 28 – August 1, 2014, the review team found the Commonwealth’s performance satisfactory for four performance indicators and satisfactory, but needs improvement, for three performance indicators: Technical Quality of Inspections, Technical Quality of Licensing Actions, and Technical Quality of Incident and Allegation Activities. The review team made one recommendation to strengthen the Commonwealth’s incident response program.

On October 28, 2014, the Management Review Board (MRB) found the Program adequate to protect public health and safety, but needs improvement, and compatible with the NRC’s program. The MRB directed the NRC staff to initiate a period of Monitoring, and requested that the Massachusetts DPH and the NRC staffs conduct quarterly conference calls. Additionally, the MRB directed that a periodic meeting be conducted in one year from the IMPEP review to assess the Commonwealth’s progress and efforts taken to address the identified performance issues, and that the next IMPEP review take place in approximately four years.

A periodic meeting was held with the Commonwealth on July 30, 2015. A special MRB meeting was held on February 22, 2016, to discuss the outcomes of that periodic meeting. Based on discussions held, the MRB directed that the Commonwealth continue on monitoring and agreed with the NRC’s staff recommendation to hold a second periodic meeting in 12 months, as well as to hold an IMPEP review as scheduled in July 2018.

The second periodic meeting was held on March 8, 2017. A special MRB meeting was held on July, 7, 2017, to discuss the outcome of that periodic meeting. The MRB directed that: the Commonwealth continue on Monitoring; quarterly calls continue between the DPH and the NRC staffs; and the next IMPEP review be conducted as scheduled in July 2018. This is the first quarterly monitoring call since the March 2017 periodic meeting.

## **DISCUSSION OF PROGRAM STATUS**

### Technical Staffing and Training (2014 IMPEP: Satisfactory)

There are currently no vacancies in the Program. The Program currently has eight technical staff, which includes the licensing and inspection supervisors, one Unit Supervisor, and one Program Director. The Program reported that 9.2 full-time equivalents (FTE) are dedicated to the program. Five technical staff members have been hired since the 2014 IMPEP review. One staff member was hired as recently as March 13, 2017. Three of the new staff are fully qualified in both licensing and inspection, one is qualified in only licensing, and one is still going through the qualification process.

### Status of Materials Inspection Program (2014 IMPEP: Satisfactory)

Since the 2014 IMEP review, the Program has conducted 125 Priority 1, 2, and 3 inspections. None of the inspections were performed overdue. The Program reported completing 42 initial inspections since the 2014 IMPEP and none were performed overdue. The Unit Supervisor reported that the Program currently has no overdue inspections.

The Program continues to focus on completing and documenting inspections within the required timeframe. The Program maintains a list of inspections that have exceeded their due dates by 10 percent and reviews the list every two weeks to ensure inspections do not exceed their due dates by greater than 25 percent. In calendar year 2015, the Program completed 5 of 13 reciprocity inspections and in calendar year 2016 the Program completed 6 of 13 reciprocity inspections of candidate licensees. At the time of the conference call, the program had completed 5 of 16 candidate licensees so far in 2017.

### Technical Quality of Inspections (2014 IMPEP: Satisfactory, but Needs Improvement)

The Program's goal is to perform a minimum of one supervisory accompaniment per inspector each calendar year. The Unit Supervisor conducts supervisory accompaniments and, at the time of the call, all but two inspection accompaniments had been completed for calendar year 2017. Senior inspectors continue to mentor less experienced inspectors as part of the Program's goal of having a sustained learning environment for inspectors. In addition, the Program continues to use the performance monitoring program and supervisory accompaniments to ensure high quality inspections which are focused on protecting public health and safety and security.

The Program uses inspection procedures that are consistent with the inspection guidance in the NRC's Inspection Manual Chapter 2800. A supervisor signs off on all inspection reports to ensure the required information is documented in the report. Inspection findings are routinely sent to the licensees within 30 days of completing an inspection.

### Technical Quality of Licensing Actions (2014 IMPEP: Satisfactory, but Needs Improvement)

Massachusetts maintains approximately 412 specific radioactive materials licenses. The Program currently has a backlog of approximately 15 licensing actions, some of which are greater than one year. The Program performs pre-licensing site visits for all applicants whether or not the applicant is a known entity. The Program does not hand deliver licenses.

The Program stated that they have addressed the issues identified during the 2014 IMPEP review (e.g., changing the Increased Control (IC) license condition back to the NRC approved version; marking sensitive, security-related information; and reviewing applicable licenses for maximum possession limits). The Program has implemented a 10-year license renewal period (increased from a 5-year period) and has a process to determine which licenses will receive a 10-year license renewal term. The license renewal period will change at the time of renewal.

Technical Quality of Incident and Allegation Activities (2014 IMPEP: Satisfactory, but Needs Improvement)

The Program reported receiving 34 reportable and non-reportable events since the 2014 IMPEP review. The Program has implemented and continues the use of a challenge board as part of the Program's evaluation of event follow up. Events are assigned to an inspector and tracked through completion. The program reported that all events received were subsequently inspected.

The Program received and responded to approximately 13 allegations since the 2014 IMPEP review. The Program uses procedures equivalent to the NRC's procedures for processing allegations. The following is a status of the Program's actions to address a recommendation made during the 2014 IMPEP review:

**Recommendation:** The review team recommends that the Commonwealth strengthen its incident response program and take measures to ensure that the Program's evaluation of events is thorough, complete, properly documented to facilitate future follow-up, and undergoes appropriate management review prior to closeout.

**Status:** The Program implemented the use of a challenge board for their evaluation of event follow up actions. After implementation, the first few events were discussed during a team review with the Program Director as chair. Currently, the inspector assigned to an event will work with the inspection supervisor and Unit Supervisor to ensure follow up actions are complete, thorough, and properly documented. Challenge boards are used when appropriate. The Program Director reviews the event documentation and event closeout quality checklist for each event to ensure completeness.

Compatibility Requirements (2014 IMPEP: Satisfactory)

At the time of this call, the Program stated that there were no legislative changes that effected the Program. According to the State's Regulation Status Sheet, the Program has two regulation amendments overdue for adoption (2012-4 and 2013-2). The Program stated that the proposed regulations had been reviewed by legal counsel and that the next step is to send them to the Commonwealth's Public Health Council (PHC). However there may be a challenge to get on the docket. After PHC approval, the regulations are submitted to the Secretary of the Commonwealth, who establishes an effective date for the regulations. The Program is hopeful that the regulations will be adopted in final before the June 2018 IMPEP review.

Sealed Source and Device (SS&D) Evaluation Program (2014 IMPEP: Satisfactory)

The Program has a total of four qualified SS&D reviewers. This is one less reviewer than the Program had at the time of the periodic meeting. The Program does not plan to qualify any new SS&D reviewers at this time. The Program has 11 active vendors with 55 active SS&D

registrations. There are three new registrations pending approval. The Program reported that it does not have a backlog in SS&D actions.

#### Other Items of Interest

Region I informed the Commonwealth of Massachusetts that a new Regional State Agreements Officer (RSAO) was selected and would be starting the position on November 13, 2017.

The Program noted that they continue to work on Non-Military Radium. The Program has completed their review of the list of sites in Massachusetts and have inspected all of the sites. The Program reported that they have found a small concentration of radium at one site in a very small area. The Program noted that approximately nine of the sites are current licensees of the Commonwealth, but most of the former sites have been developed.

#### Conclusion

Massachusetts continues to make progress in addressing the recommendation on incident response and other items identified during the 2014 IMPEP review. The Program has no vacancies in the radioactive materials program. The Program has no overdue inspections and continues to address the backlog in licensing renewal actions.

The next quarterly monitoring call will be scheduled for the first quarter 2018.