



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION I**  
475 ALLENDALE ROAD  
KING OF PRUSSIA, PENNSYLVANIA 19406-1415

September 21, 2011

Robert L. Gallagher, Acting Director  
Radiation Control Program  
Massachusetts Department of Public Health  
Schrafft Center, Suite 1M2A  
529 Main Street  
Charlestown, MA 02129

Dear Mr. Gallagher:

A periodic meeting was held with you on August 1, 2011. The purpose of the meeting was to review and discuss the status of the Commonwealth of Massachusetts Department of Public Health's Radioactive Materials Program. The NRC was represented by Michelle Beardsley, Michelle Killian, and me. Topics and issues of importance discussed at the meeting included a detailed discussion of recommendations from the 2010 IMPEP review.

I have completed and enclosed a general meeting summary, including any specific actions that will be taken as a result of this meeting. If you feel that our conclusions do not accurately summarize the meeting discussion, or have any additional remarks about the meeting in general, please contact me at (610) 337-5371, or email to [Donna.Janda@nrc.gov](mailto:Donna.Janda@nrc.gov) to discuss your comments.

Sincerely,

*/RA/*

Donna M. Janda  
Regional State Agreements Officer  
Division of Nuclear Materials Safety

Enclosure: As stated

AGREEMENT STATE PERIODIC MEETING SUMMARY FOR MASSACHUSETTS  
DEPARTMENT OF PUBLIC HEALTH (DPH)

DATE OF MEETING: August 1, 2011

<b>NRC Attendees</b>	<b>Massachusetts DPH</b>
Donna Janda, Region I RSAO	Robert Gallagher, Acting Director, Radiation Control Program (RCP)
Michelle Beardsley, FSME	Beverly Anderson, Supervisor, RCP
Michelle Killian, FSME	Michael Whalen, RCP
	Kenath Traegde, RCP

**DISCUSSION:**

During the 2010 Integrated Materials Performance Evaluation Program (IMPEP) review of the Massachusetts Agreement State Program (the Program), the review team found the Commonwealth's performance satisfactory for four performance indicators: Technical Quality of Inspections, Technical Quality of Licensing Actions, Technical Quality of Incidents and Allegations, and Sealed Source and Device Evaluation Program; and satisfactory, but needs improvement, for three performance indicators: Technical Staffing and Training, Status of Materials Inspection Program, and Compatibility Requirements. Three recommendations were made by the IMPEP review team, and five recommendations were carried over from the 2002 and 2006 IMPEP reviews. On September 20, 2010, the Management Review Board (MRB) met to consider the proposed final IMPEP report on the Massachusetts Agreement State Program. The MRB found the Program adequate to protect public health and safety, but needs improvement, and compatible with NRC's program. The MRB directed NRC staff to initiate a period of monitoring, requested that calls between the Massachusetts DPH and NRC staffs be conducted quarterly, and directed that a periodic meeting take place approximately one year from the 2010 IMPEP review.

The following is a status summary of the eight recommendations that were identified in the 2010 Massachusetts final IMPEP report:

1. The review team recommended that the Commonwealth pursue adequate funding to support and implement the staffing plan which is needed to meet current program demands as well as the projected increase in workload. (Carryover from the 2006 IMPEP review)

Status: During Fiscal Year (FY) 2012, the Radiation Control Program (RCP) received slightly more funding (approximately \$13,000 in additional funds) than FY 2011. Since the 2010 IMPEP review, one new technical staff member, one senior supervisor, and one clerical staff member joined the Program. One senior supervisor recently retired from the Program and the clerical staff member left the Program. According to the Acting Director, the staffing plan includes filling the Director's post as a permanent position and hiring one additional technical staff member and a replacement for the clerical position (which has been approved for posting the vacancy.)

Enclosure

2. The review team recommended that the Commonwealth monitor and maintain accurate information in its database so it can be used by Program management and staff as a reliable planning and tracking tool to ensure that inspections are completed within the required timeframe.

Status: The Program has completed modifications to its database to more effectively monitor and track inspections as well as licensing actions. In addition, the Program modified the database to track assigned and unassigned inspections, flag inspections approaching their due dates, and identify potential data entry errors. Tickler reports of outstanding actions are sent to managers. Individual inspectors and license reviewers receive weekly tickler reports listing their respective outstanding actions.

3. The review team recommended that the Commonwealth routinely perform accompaniments of each inspector, at least annually, to ensure quality and consistency in the inspection program.

Status: The Program now uses their database as a tool to schedule and track inspections and supervisory accompaniments. These accompaniments are documented on a supervisor accompaniment form which is monitored quarterly. The Program has performed two supervisor accompaniments in calendar year 2011 and is on track to complete the remaining six accompaniments by the end of the calendar year.

4. The review team recommended that the Commonwealth take necessary steps to ensure that all reportable events are submitted and updated to NRC in accordance with FSME Procedure SA-300. (Carryover recommendation from the 2002 IMPEP review.)

Status: The 2010 IMPEP review team determined that five out of 51 events were not reported to NRC in a timely manner and timely follow up information was not provided for nine events which were still open in the Nuclear Material Events Database (NMED). Since the IMPEP review, the Program has addressed the open events in NMED and has reported seven new events, six of which were reported in a timely manner. The event which was reported to NRC late occurred during the timeframe that the Program staff was preparing for the 2010 IMPEP and the reporting requirement was inadvertently overlooked.

5. The review team recommended that the Commonwealth adopt regulations necessary for compatibility within the required 3-year period. (Carryover from the 2006 IMPEP review; modified in the 2010 IMPEP review.)

Status: The Program has developed and now uses a written procedure for the regulation adoption process. According to the Acting Director, a comprehensive rulemaking package was presented to the Commonwealth's Public Health Council (PHC) on July 13, 2011. The PHC gave its approval for the regulatory changes to be published for public comment. This rulemaking package included all of the amendments identified in the 2010 IMPEP report.

6. The review team recommended that the Commonwealth reissue the certificate MA-0555-S-102-S to contain a table indicating radiation levels under maximum loading conditions.

Status: Registration certificate MA-0555-S-102-S has been revised to include a table of radiation levels under maximum loading conditions. The revised certificate has been posted in the SS&D Registry.

7. The review team recommended that the Commonwealth make corrections to registration certificate MA-0166-D-102-B. (Carryover recommendation from the 2002 and 2006 IMPEP reviews.)

Status: The new registration certificate with the proper model number (HUB-77A) was completed on July 23, 2010. This certificate was posted in the SS&D Registry with the new registration number MA-1287-D-103-B and subsequently inactivated on September 2, 2010 and posted as MA-1287-D-801-B.

8. The review team recommended that the Commonwealth reissue registration certificate MA-8154-D-803-B with the complete text or equivalent form. (Carryover recommendation from the 2006 IMPEP review; modified in the 2010 IMPEP review.)

Status: The Commonwealth provided a copy of the cover page of the registration certificate NR-143-D-103-B and the inactivated certificate MA-8154-D-803-B for posting in the SS&D Registry. As of July 31, 2011, this change had not yet been posted. RCP has contacted the SS&D staff at NRC to resolve the issue.

#### OTHER TOPICS COVERED DURING THE MEETING INCLUDED:

##### Program Strengths

The Program has an experienced and well-trained staff. Both senior management and Program management support staff training. The Program has been responsive to the recommendations from the 2010 IMPEP review.

##### Program Weaknesses

The Commonwealth's fiscal constraints continue to be a challenge for the Program, although the Program did receive a slight increase in funding this fiscal year.

##### Feedback on the NRC's Program

The Program commented that both the overall relationship and communications with the NRC are good. The Program expressed appreciation for the NRC funding of training. The Acting Director noted that, because it can take approximately six weeks to receive State approval for travel, it can be challenging to support NRC's requests to participate on short notice on an IMPEP team or working groups. The Acting Director suggested that NRC consider conducting working group meetings in conjunction with regional or national meetings, such as OAS or CRCPD annual meetings, to gain more Agreement State participation/support.

Enclosure

The Program also suggested that it would be beneficial to have a unified licensing approach between NRC and the Agreement States for licensees with facilities throughout the United States.

#### Agreement State Program Staffing and Training

The Program staff currently consists of eight technical staff members and two managers, including the Acting Director. There are two staff vacancies, one technical position and one administrative position. No technical staff members have left the Program since the 2010 IMPEP. The materials supervisor position has been permanently removed from the Program after the individual retired in May 2011. However, the senior supervisor who initially transferred to the Program on a temporary basis after the 2010 IMPEP is now permanently assigned to the Program.

Support for staff training exists in the Program. Two technical staff members are progressing through the Program's qualification process. Program staff has attended NRC and other training courses, including the NRC's Security Systems and Principles Course. The Acting Director noted that other activities that are not specifically training, such as attendance at meetings, also provide valuable opportunities for knowledge sharing.

#### Organization

The Massachusetts Agreement State Program is administered by the Radiation Control Program which is located in the Department of Public Health. No senior management changes have occurred since the most recent IMPEP review.

#### Program Budget/Funding

The Program received a slight increase in funding in the current fiscal year and is adequately funded by licensing and registration fees. The funds are placed into a retained revenue account and the Program is allowed to retain a certain percentage of the revenue from its annual fees and is capped at that point. The remainder of the revenue is placed into the Commonwealth's General Fund. Despite fiscal constraints, the Program has hired additional staff since the 2010 IMPEP and has received approval to hire an administrative staff member and permanently fill the Director's position.

#### Inspection and Licensing Programs

The Program's inspection frequencies are at least as frequent as NRC's. Since the 2010 IMPEP, five of 44 Priority 1, 2, and 3 (high priority) inspections were conducted overdue by more than 25 percent of the inspection frequency prescribed by Inspection Manual Chapter 2800. Two of these inspections were completed overdue because the inspection priority for each of these licensees was not changed to a higher frequency in conjunction with a program code change based on new licensed activities. The Program identified and corrected this error. No high priority inspections were overdue at the time of the periodic meeting. Since the 2010 IMPEP, one initial inspection was conducted overdue (greater than 12 months of license issuance) and no initial inspections were overdue at the time of the periodic meeting.

The Program currently has approximately 500 specific licenses. Massachusetts licensees are subject to a five-year license renewal term. The Acting Director continues to conduct secondary technical reviews of licensing actions and provides feedback to the license reviewers.

#### Regulations and Legislative Changes

There have not been any legislative changes or proposals that have affected the Program. Since the 2010 IMPEP, the Program submitted a comprehensive rulemaking package to the Commonwealth's Public Health Council (PHC) on July 13, 2011. The PHC gave its approval for the regulatory changes to be published for public comment. This rulemaking package included all of the amendments identified in the 2010 IMPEP report as overdue for adoption or as upcoming rulemaking through September 2012.

#### Event Reporting

This topic is discussed in Recommendation 4 above.

#### Response to Incidents and Allegations

The Program continues to be sensitive to notifications of incidents and allegations. Incidents are quickly reviewed for their effect on public health and safety. Staff is dispatched to perform onsite investigations when necessary. The Program is aware of the need to maintain an effective response to incidents and allegations.

Program staff responded in a prompt and effective manner to reports of the possible presence of depleted uranium contamination at multiple locations at the site of the former Springfield Armory. This large-scale investigation received high media interest and support from other Commonwealth offices.

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

Since the 2010 IMPEP review the Program has addressed the three recommendations associated with this indicator. This topic is discussed in Recommendations 6, 7, and 8 above.

#### Large, Complicated, or Unusual Authorizations for Use of Radioactive Material

The Program received a request for a new cyclotron from a medical broad scope licensee.

#### Commonwealth's Mechanisms to Evaluate Performance

Inspection reports and licensing actions receive secondary technical reviews. Staff members are provided with weekly tickler reports of due dates for inspections and licensing actions. Managers conduct periodic audits of licensing actions and inspection due dates and perform supervisory accompaniments of inspectors on an annual basis. After the 2010 IMPEP, the Program conducted a thorough review of their database to correct any issues which were identified. The Program also holds monthly staff meetings.

**CONCLUSIONS:**

Massachusetts has been responsive to the recommendations that were made during the 2010 IMPEP review and to the open recommendations from previous IMPEP reviews. The Program has received additional funds and has made significant progress to address staffing vacancies, correct database errors which led to overdue inspections, and improve management oversight and direction for the licensing and inspection staff.

Based on the significant progress the Commonwealth has made in addressing the IMPEP recommendations and the information reviewed during this periodic meeting, NRC staff recommends that the period of monitoring be discontinued. In addition, NRC staff recommends that a periodic meeting should be conducted approximately 18 months from the date of this meeting and that the next IMPEP review should be conducted as scheduled in FY 2014 (tentatively July 2014).