



**UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION I**
2100 RENAISSANCE BOULEVARD, SUITE 100
KING OF PRUSSIA, PENNSYLVANIA 19406-2713

June 5, 2013

Patricia Gardner, Chief
Bureau of Environmental Radiation
Division of Environmental Safety & Health
Department of Environmental Protection
P.O. Box 420, Mail Code 25-01
Trenton, NJ 08625-0420

Dear Ms. Gardner:

A periodic meeting was held with you and your staff on March 27, 2013. The purpose of the meeting was to review and discuss the status of the New Jersey Department of Environmental Protection's Agreement State Program. The NRC was represented by Raymond Lorson, Michelle Beardsley, and me.

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 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
NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF ENVIRONMENTAL RADIATION

DATE OF MEETING: March 27, 2013

NRC Attendees	New Jersey Department of Environmental Protection (NJ DEP) Attendees
Raymond Lorson, Director, DNMS, Region I	Paul Orlando, Assistant Director, Radiation Protection and Release Prevention
Donna Janda, RSAO, Region I	Patricia Gardner, Chief, Bureau of Environmental Radiation (Bureau)
Michelle Beardsley, Health Physicist, FSME	William Csaszar, Supervisor, Medical Section
	Richard Peros, Medical Section
	Catherine Biel, Industrial and Decommissioning Section

DISCUSSION:

During the Integrated Materials Performance Evaluation Program (IMPEP) review of the New Jersey Agreement State Program (the Program), which was held on February 28 – March 4, 2011, the review team found the State's performance satisfactory for four performance indicators reviewed and satisfactory, but needs improvement, for the indicators, Status of Materials Inspection Program and Technical Quality of Licensing Actions. The review team made two recommendations. On May 9, 2011, the Management Review Board (MRB) met to consider the proposed final IMPEP report on the New Jersey Agreement State Program. The MRB found the Program adequate to protect public health and safety and compatible with NRC's program. Based on the results of the IMPEP review, the review team recommended, and the MRB agreed, that the next full IMPEP review take place in four years and that a periodic meeting be held in approximately two years from the date of the 2011 IMPEP.

The following is a status summary of the two recommendations that were identified in the 2011 New Jersey final IMPEP report:

1. The review team recommends that the Bureau consistently implement their licensing procedures and NRC's pre-licensing guidance, as well as other administrative licensing procedures found in the NUREG-1556 series.

Status: During the onsite IMPEP review and in the weeks following the review, the Bureau conducted additional training for technical staff and supervisors to review their commitment to follow the Bureau's licensing procedures and guidance documents. Licensing checklists were revised and made easier to follow. After the onsite IMPEP review and prior to the MRB, the Bureau staff reviewed 100 percent of the completed licensing actions to ensure all documentation was in the docket files. The Bureau Chief initially reviewed all licensing actions after the IMPEP review to ensure completeness of each action and consistency between reviewers. Currently the Bureau Chief reviews approximately 10 percent of the licensing actions for quality assurance purposes.

2. The review team recommends that the Bureau provide additional training to staff members and supervisors regarding technical review of licensing actions for uses and technologies that were transferred from the NRC to the Bureau's jurisdiction.

Status: After the IMPEP review the Bureau technical staff and supervisors were trained on the uses and technologies that were transferred from the NRC to the Bureau. The staff also conducted a site visit to a medical facility to observe the use of gamma knife technology. The Bureau also conducts more detailed, team-type reviews of specific technologies. In addition, the medical section uses training videos during staff meetings to enhance awareness of current technology.

OTHER TOPICS COVERED DURING THE MEETING INCLUDED:

Program Strengths

The Bureau Chief noted that the Bureau has a dedicated, experienced, and well-trained staff. There is an active in-house training program. The Bureau Chief also noted that the Bureau's strong investigative skills have been utilized in the last two years with two large incidents involving overexposures to radiation workers and members of the public. The Bureau has an active emergency response program which handles approximately 80-90 incidents each year. The Bureau Chief mentioned that another strength of its Program is its strong relationship with stakeholders. The New Jersey radioactive materials program is 100% user fee supported.

Program Weaknesses

The Bureau noted that some challenges the Program is facing include travel and purchase restrictions, refresher training needs, maintaining knowledge of new technical issues and the need to become more involved in working groups, IMPEP reviews and Organization of Agreement States activities. The Bureau also noted that having such an experienced staff could lead to a decrease in knowledge management if staff members begin to retire soon. Approximately 40 percent of the staff members are eligible for retirement.

Feedback on the NRC's Program

The Bureau commented that both the overall relationship and communications with the NRC are good. The Bureau appreciated the cooperation between the NRC and Bureau technical staff and the assistance provided by NRC during an event involving multiple personnel overexposures. The Bureau Chief expressed appreciation for the logistical assistance provided by FSME while dealing with the issue involving contaminated tissue box holders. The Bureau appreciates the use of webinars for training on current topics and would like to see more use of webinars in the future.

Agreement State Program Staffing and Training

The Bureau currently consists of 13 staff positions for the radioactive materials program, including Program management and administrative staff, totaling approximately 12.2 full-time equivalents. Since the 2011 IMPEP, one technical staff member transferred out of the Program, one technical staff member transferred into the program, and one technical staff member was scheduled to retire on April 1, 2013. The Bureau will post the vacancy internally.

Support for staff training exists in the Program. Bureau staff has attended the NRC and other training courses. As mentioned previously, the Bureau has an active in-house training program. Three staff members are fully qualified in all modalities. The remaining staff members are qualified in either the medical or industrial area. The Bureau has developed an interim qualification process which consists of formal training, site visits, and review of case studies.

Organization

The New Jersey Agreement State Program is administered by the Bureau of Environmental Radiation which is located in the Division of Environmental Safety and Health within the Department of Environmental Protection.

Program Budget/Funding

The Program is 100 percent fee funded. All funds are placed into a dedicated account for the Radioactive Materials Program. The Bureau has not had a fee increase in the past two years.

Inspection and Licensing Programs

The Bureau's inspection priorities are the same as those found in NRC's Inspection Manual Chapter 2800, "Materials Inspection Program." Since the 2011 IMPEP review, the Bureau has performed 449 routine inspections (all priorities.) At the time of the periodic meeting, the Bureau reported that it had no overdue inspections and, since the 2011 IMPEP review, no routine or initial inspections were completed while overdue. Since the 2011 IMPEP review, the Bureau has added an inspection scheduling module to their computer tracking system called the New Jersey Environmental Management System (NJEMS), a database used by all programs in the NJDEP to centrally locate information regarding licenses, inspections, enforcement actions and incidents. Inspection lists are generated from NJEMS and supervisors assign inspections. The Bureau does not use the 25 percent inspection window unless absolutely necessary. Initial inspection dates are set at 10 months to ensure completion of the inspection by the 12 month requirement. The Bureau noted that annual supervisory inspection accompaniments are being performed and documented.

The Program currently has approximately 638 specific licenses. Between April 2011 and February 2013, the Program completed approximately 620 licensing actions. There is no backlog in licensing actions. All licensing actions receive a supervisory review and a percentage of actions are reviewed by the Bureau Chief. Since the 2011 IMPEP review, the Bureau Chief and/or supervisors completed 135 quality assurance reviews on licensing actions. Licenses are issued for a ten-year period under a timely renewal system.

Regulations and Legislative Changes

New Jersey adopts all NRC regulations by reference with the exception of Subpart E to 10 CFR Part 20 and certain provisions of 10 CFR Part 35 related to dose calibrator requirements. The Bureau Chief noted that New Jersey must create a new regulation section to address the new 10 CFR Part 37 regulations.

According to the Bureau Chief, a change in New Jersey's sunset rulemaking process allows for "rule without change" to be published in the State Register without a public comment

requirement. In addition, sunset requirements have changed from every 5 years to every 7 years.

The Bureau is currently working on addressing outstanding comments on final regulations submitted to NRC prior to New Jersey becoming an Agreement State. The Bureau Chief noted that a rule proposal addressing these comments should be published in the State Register in April 2013.

Event Reporting

Since the 2011 IMPEP review, the Program reported 23 events to the Nuclear Material Events Database (NMED). Follow-up information for all events reported by the Program is included in the State's NMED entries.

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. Since the 2011 IMPEP review, NRC has not referred any allegations to the Program. The Bureau received three allegations since the 2011 IMPEP and followed up on the allegations in accordance with their procedures.

The Bureau has had two significant events since the 2011 IMPEP review. One event involved the overexposure of several radiation workers during a source exchange at a self-shielded irradiator facility. This event involved multiple licensees and multiple regulatory authorities, including NRC. The Bureau worked closely with NRC and the other Agreement States to follow up on this event. The second event involved the overexposure of several workers who were exposed to radiation when a shutter on a fixed gauge was determined to be stuck in the open position. These workers were not radiation workers and were considered to be members of the public. Both of these events met the International Atomic Energy Agency (IAEA) reporting requirements for Level 2 rating on the International Nuclear and Radiological Event Scale and were reported to NRC and the IAEA.

Current State Initiatives

According to the Bureau Chief, the Bureau has fully embraced the safety culture policy shared by the NRC with the Agreement States. The Bureau has conducted training for its staff and reviewed safety culture information with its licensees during inspections.

New Jersey has formed a Radiation Advisory Committee (RAC), which consists of a cross section of the regulated community. The first meeting of the RAC is scheduled for April 2013.

The Bureau has a procedure in place to contact licensees in advance of events such as major storms. In addition, the Bureau follows up with all of their licensees after the event has passed to ensure the licensees' facilities are secure. For example, during Hurricane Sandy, the Bureau used the services of the local hazardous materials first responders to check on licensees in the affected areas. Bureau staff members have remote work capability.

Emerging Technologies

The Program is receiving an increased number of requests for use of yttrium-90 microspheres but is not yet seeing an increase in actual usage of this type of treatment. Also, the Program is receiving new requests for use of radium-223 dichloride and will license this activity under 35.300 authorizations.

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

The Bureau Chief noted that the Program is addressing an upcoming merger between a large State University and a medical school/hospital. The Bureau is working closely with both entities to ensure the resulting license amendments accurately reflect the merger between the two parties.

State's Mechanisms to Evaluate Performance

All licensing actions and inspection reports are reviewed by senior staff or supervisors. The Bureau Chief reviews various actions/reports (e.g., new licenses, amendments, qualification training records, financial assurance documents) on a quarterly basis. Section meetings are held periodically and Program staff members meet quarterly.

CONCLUSIONS:

The Bureau has been responsive to the recommendations that were made during the 2011 IMPEP review. The New Jersey Radioactive Materials Program continues to be an effective, well maintained Agreement State program with an experienced and well-trained staff. There were no vacancies in the Program at the time of the periodic meeting.

NRC staff recommends that the next IMPEP review should be conducted as scheduled in fiscal year 2015.