

GEORGIA DEPARTMENT OF NATURAL RESOURCES (DNR)  
QUARTERLY CONFERENCE CALL  
June 13, 2018

<b>U.S. Nuclear Regulatory Commission (NRC) Attendees</b>	<b>Georgia Environmental Protection Division (EPD) Attendees</b>
Monica Ford, Region I	Karen Hays, Chief, Air Protection Branch
Lance Rakovan, NMSS	David Matos, Manager, Radiation Protection Programs
Lizette Roldan-Otero, NMSS	Irene Bennett, Manager, Radioactive Materials Program

**DISCUSSION:**

During the May 2016 Integrated Materials Performance Evaluation Program (IMPEP) review of the Georgia Agreement State Program (the Program), the team evaluated the State's performance with respect to five common performance indicators and one non-common performance indicator. On August 4, 2016, the Management Review Board (MRB) met to consider the team's proposed final IMPEP report. The MRB found the State's performance satisfactory for five performance indicators and satisfactory, but needs improvement, for one performance indicator. Overall the MRB found the State adequate to protect public health and safety and compatible with the U.S. Nuclear Regulatory Commission's (NRC) program. Upon its deliberations, the MRB issued five recommendations. The MRB directed that the State be removed from Heightened Oversight and that a period of Monitoring be initiated. Additionally, the MRB directed that calls between the staffs of Georgia and the NRC be conducted quarterly and that two periodic meetings should take place. One periodic meeting was to be held approximately one year from the 2016 IMPEP review and a second periodic meeting was to be held approximately 18 months after the first periodic meeting. A periodic meeting was held on May 22, 2017, and discussed at a special MRB meeting held on August 29, 2017. The MRB directed that the Program remain on monitoring, that quarterly calls continue with the Program, that a second periodic meeting be held in approximately 18 months, and that the IMPEP review be held as scheduled in 2020.

This is the third quarterly call since the August 29, 2017 MRB. This summary is a reflection of that call.

**DISCUSSION OF PROGRAM STATUS**

Technical Staffing and Training (2016 IMPEP: Satisfactory)

The Program is made up of one Program Manager - 2 who oversees both the Radioactive Materials Section and the Environmental Radiation Team, one Program Manager-1 who oversees the Radioactive Materials Section, one Team Leader who oversees the Environmental Radiation team, and 10 technical staff positions. There are 11.5 full time equivalents (FTE) dedicated to the Program with 2.5 managerial FTE and 9 technical FTE. Since the 2016 IMPEP review, three people have left the Program. One position was filled in October 2016 (Program Manager 2) and the other two staff level positions were filled in November 2017. The positions were all filled within a year of the vacating staffer's departure.

The Program revised its training manual in June 2013 to incorporate changes that were made in the NRC's Inspection Manual Chapter 1248. This revised training manual is being used by new staff starting with the Program and staff going through the qualification process. Program staff is attending NRC training courses when available. Six technical staff are going through the license reviewer and inspector qualification process. Fully qualified inspection and licensing staff are aware of the requirement to complete 24 hours of refresher training every two years and are working to meet this requirement. The Program has each technical staff member track their own refresher training and management reviews it as part of the technical staff's annual performance review. The Program uses staff developed monthly trainings, NRC courses, and conference attendance to meet the requirements.

**Recommendation 1:** The MRB recommends that the Program management develop a strategy to address staff retention and implement corrective actions to mitigate the causes of the Program's turnover to ensure satisfactory program performance is sustained.

**Status:** The Program analyzed the reasons staff gave as to why they left the program. Although an explicit reason was not identified, as reasons for departure varied widely, salaries and lack of promotion potential were common contributing factors. The Air Protection Branch Chief met with the Human Resources Director and with the director of the GA Environmental Protection Division to discuss issues involving staff retention not only for the radioactive materials program, but for the entire air branch since this issue is not unique to the radioactive materials staff. One corrective action the Program took was to create a path for upward mobility within the Program. They accomplished this in April 2017 by creating a Program Manager-1 position and a team leader position within the Radiation Protection Programs Section. Now technical staff have promotion potential positions to work towards within the Program rather than looking for those opportunities elsewhere. The Branch Chief continues to meet with human resources representatives to discuss position reclassification for staff. The process is still ongoing and will take some time to accomplish. This is not a current priority for human resources since the Program is fully staffed. The reclassification will most likely happen the next time a vacancy occurs and the position is advertised.

As part of a separate effort, the Air Protection Branch Chief met with all staff individually to obtain thoughts and ideas on how the program could be improved. Some of the feedback obtained involved: having staff do only licensing or inspection (not both), creating more templates for licensing to ensure accuracy, and improving the training process to make it more efficient. After collecting all of the feedback, the Branch Chief decided that the most critical need was to ensure licensing accuracy. A charter was put in place for an initiative, which is being led by a lean six sigma green belt, with the objective of "consolidating, revising, and adding adequate technical detail to existing procedures and developing licensing templates for the major licensing types." The Director's presentation for this effort occurred on May 17, 2018 and the work that was completed and the suggested path forward were approved. The Program plans to hold training for the staff to go over all of the revisions to the procedures and the flowcharts that were created. This training is scheduled to take place on June 26, 2018.

#### Status of the Materials Inspection Program (2016 IMPEP: Satisfactory)

The Program's inspection frequencies are the same as the NRC's inspection frequencies that are listed in Inspection Manual Chapter 2800. However, the Program is still using the +/- 25 % window which is more restrictive than the NRC's policy of +/- 50% for Priority 1 licensees and +/- 1 year for Priority 2 and 3 licensees. Since the last IMPEP review, the Program has implemented a new database. The State's in house information technology (IT) staff built a

web-based database for the Program. The Program has a policy of issuing inspection reports within 30 days of the close of the inspection.

Four Priority 1, 2, and 3 inspections have been completed overdue since the last IMPEP review. All of the inspections completed overdue occurred as a result of incorrect Priority codes listed in the database. All four inspections were mistakenly listed as a Priority 5 in the database. However, one inspection should have been listed as a Priority 2 and three inspections should have been listed as a Priority 3. The errors were not discovered until the Program started to prepare for each inspection at the Priority 5 interval, making them late. At the time of this call, no Priority 1, 2, or 3 inspections were overdue. Three initial inspections were completed overdue since the last IMPEP review. Two initial inspections were completed overdue because of database errors and one initial inspection was the 2<sup>nd</sup> initial inspection being performed for a new licensee. At the time of the first inspection, the licensee did not possess material and was not performing licensed operations. Per the NRC's Inspection Manual Chapter 2800, another inspection should have been completed within 12 months. The Program was not aware that the grace period did not apply to the second inspection. Therefore, this initial inspection was performed overdue by 51 days.

**Recommendation 2:** The MRB recommends that Program management implement corrective actions and make necessary adjustments to ensure satisfactory program performance is sustained with regard to reciprocity inspections.

**Status:** The Program is mindful of reciprocity inspections and is working to meet the goal of inspecting 20 percent of candidate licensees each calendar year. The Program's management implemented a policy that each staff person must perform at least one reciprocity inspection every year. Program management believes that this should ensure that the Program meets the requirement of inspecting 20 percent of candidate licensees every calendar year. Program management recognizes that, for this to be accomplished, all staff need to be qualified to inspect those types of licensees that typically come in under reciprocity. The Program is working on ensuring that all staff are qualified to perform these types of inspections. Until that occurs, program staff that are qualified will be performing additional inspections to ensure the requirement is met.

The program manager of the radioactive materials program has been given the responsibility to track reciprocity inspections to ensure that the Program meets the goal of inspecting 20 percent of candidate licensees. For calendar year 2016 the Program stated that they performed eight inspections out of 38 reciprocity candidates (21 percent). For calendar year 2017, 37 reciprocity candidate licensees have performed work in Georgia. The Program has inspected nine of those licensees for a total of 24 percent. The Program stated that for CY 2018 they are a bit behind in the completion of reciprocity inspections. To date the Program has completed 2 inspections on 22 candidate licensees (9 percent). The Program believes they are behind due to the large number of industrial radiography licensees performing reciprocity in GA and not having enough staffed qualified to perform industrial radiography inspections. Typically the Program allows qualified inspectors to pick the reciprocity inspection they wish to perform, however the Program stated that if they are falling short half way through the year they will start assigning inspections to staff to ensure the 20% inspection criteria is met.

#### Technical Quality of Inspections (2016 IMPEP: Satisfactory)

Inspection guidance used by the Program is equivalent to the NRC's Inspection Manual Chapters and Inspection Procedures. The Program does not issue inspection findings in the

field. Inspection findings are routinely sent to licensees within 30 days of the completion of an inspection. The Program completed all supervisory accompaniments in calendar years 2016 and 2017. The Program has completed five of seven supervisory accompaniments in 2018.

**Recommendation 3:** The review team recommends that the Program develop and implement training for inspections on the examination of the written directives and NRC inspection procedure 87132, Brachytherapy Programs.

**Status:** After the 2016 IMPEP, the Program expressed concern to the NRC that in-house expertise did not exist in a manner to allow for the development of training. The NRC suggested that, as a start, the Program use training located on the NRC's Agreement State Webpage (Update on Inspection Procedure 87132, Brachytherapy Programs) to address part of this recommendation. Additionally, the NRC developed a training that was offered to all Agreement States as a webinar on April 4, 2017, entitled "Medical Webinar Training Series: Brachytherapy Medical Events/Reporting – Y-90 Microsphere and High Dose Rate Brachytherapy." The Program management and nine technical staff viewed this training and felt that it increased staff knowledge of written directives used in brachytherapy procedures. The Program manager stated that staff have not raised any additional concerns to date in regards to these types of inspections. Additionally, the Program stated that the biggest hurdle they are facing is that authorized licensees are either not performing this type of treatment or perform one or two over the entire inspection period. In most cases the inspection encompasses a records review only of the licensees program.

#### Technical Quality of Licensing Actions (2016 IMPEP: Satisfactory but needs improvement)

The Program has approximately 404 specific licensees. The Program does not have a backlog of licensing actions. All licensing actions with the Program have been in-house for less than one year.

**Recommendation 4:** The review team recommends that the Program verify that all previously approved radiation safety officers (RSO) for medical licenses have an attestation by a preceptor RSO, including that the individual has completed training in the radiation safety, regulatory issues, and emergency response procedures for the appropriate license type.

**Status:** The Program has reviewed all documentation for medical RSOs that are currently on a specific license. The Program started with a pool of over 200 RSOs that needed additional documentation. As of this call, all work on this recommendation has been completed. The Program stated that the revised procedures direct staff to review this information when doing a licensing action, and is regularly being followed. The Program is working to ensure that these items are not missed in future actions.

**Recommendation 5:** The review team recommends that the Program management develop and implement training and guidance that provides the staff with the tools necessary to accurately complete the Program's pre-licensing requirements for each new license.

**Status:** The Program redesigned its pre-licensing guidance and the forms associated with the guidance and provided training to the staff before the MRB meeting in August 2016. As the Program receives new license applications, it will use the revised guidance and will periodically evaluate the actions completed against the revisions to see if additional revisions are required. The actions that have been evaluated since putting the new guidance in place have not resulted in any revisions. The Program was informed that the Risk Significant Radioactive Materials

checklist was revised in June 2017 with required adoption for Agreement States by January 2018. These changes along with other changes to licensing procedures were incorporated in the lean six sigma initiative. Additionally, the NRC mentioned that the pre-licensing guidance is in the final stages of being revised and is expected to be issued later this year. The Agreement States will have 6 months from issuance to adopt the equivalent changes. A webinar explaining the changes to the guidance will be held as well.

#### Technical Quality of Incident and Allegation Activities (2016 IMPEP: Satisfactory)

The Program has processes in place to maintain effective responses to incidents and allegations. The Program has reported 17 events since the last IMPEP review. For events requiring reporting to the HOO, additional follow-up information is updated in the NRC's Nuclear Materials Events Database system.

The Program has received six allegations since the 2016 IMPEP review, two of which were referred from the NRC. The Program evaluated each allegation as it was received and performed onsite follow-up, when appropriate. Closure letters to the concerned individuals were issued in a timely manner. Due to Georgia's open records act, the Program is unable to guarantee protection of an alleege's identity.

#### Compatibility Requirements (2016 IMPEP: Satisfactory)

No legislative changes affecting the Program have occurred since the last IMPEP review. The Program has incorporated the required regulation changes from the one Regulation Amendment Tracking Sheet that was overdue for adoption. These were presented to the Department of Natural Resources Board (Board) in December 2017. The rule changes were approved and became effective 20 days after they are filed with the Secretary of State. No other regulation changes are overdue and the program is up to date. There are a few outstanding comments associated with compatible regulations that the Program is addressing through their annual administrative clean-up. The hope is to have the changes to the NRC this summer and to the Board for approval in October. The Program's regulation review process can take approximately one year to complete. The Program's rules are not subject to sunset requirements.

#### CONCLUSIONS:

The Program believes they have met the goals of the five recommendations made as a result of the 2016 IMPEP review and plans to continue improvements to ensure compliance with IMPEP requirements. No other concerns are noted at this time.

Next Quarterly Call: September 2018