



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION**

REGION I  
2100 RENAISSANCE BLVD., SUITE 100  
KING OF PRUSSIA, PA 19406-2713

April 25, 2019

Karen Hays, Chief  
Air Protection Branch  
Environmental Protection Division  
Georgia Department of Natural Resources  
4244 International Parkway, Suite 120  
Atlanta, GA 30354

Dear Ms. Hays:

On February 19, 2019, the Management Review Board (MRB), which consisted of U.S. Nuclear Regulatory Commission (NRC) senior managers and an Organization of Agreement States Liaison to the MRB, met to consider the results of the Periodic Meeting held with the Georgia Agreement State Program (the Program) on December 10, 2018. The MRB agreed with the NRC staff's determination that your Program has demonstrated a period of sustained performance since the 2016 IMPEP review and agreed with the NRC staff's recommendations that the Program be removed from Monitoring, that the quarterly calls be discontinued, and that the next IMPEP review be held as scheduled in fiscal year 2020.

The final periodic meeting summary including the MRB's findings is enclosed. If you feel that the summary does not accurately reflect the outcome of the MRB meeting please contact me at (610) 337-5281 or Monica Ford at (610) 337-5214. I look forward to our agencies continuing to work together in support of the National Materials Program.

Sincerely,

*/RA/*

James M. Trapp  
Division Director  
Division of Nuclear Materials Safety  
U.S. NRC Region I

Enclosure:  
Final Periodic Meeting Summary for Georgia

cc w/encl.: David Matos, Program Manager  
Radiation Protection Programs  
Irene Bennett, Program Manager  
Radioactive Materials Program



INTEGRATED MATERIALS PERFORMANCE EVALUATION PROGRAM

PERIODIC MEETING WITH THE STATE OF GEORGIA

TYPE OF OVERSIGHT: MONITORING

December 10, 2018

**FINAL**

## PERIODIC MEETING PARTICIPANTS

### **NRC**

- Joseph Nick: Deputy Director, Division of Nuclear Materials Safety, NRC Region I
- Monica Ford: State Agreements Officer, NRC Region I

### **State of Georgia**

- Karen Hays: Chief, Air Protection Branch
- Dika Kuoh: Assistant Chief, Air Protection Branch
- David Matos: Manager, Radiation Protection Programs
- Irene Bennett: Manager, Radioactive Materials Program
- Barty Simonton: Team Leader, Environmental Radiation

## Georgia Final Periodic Meeting Summary

### 1.0 INTRODUCTION

This report presents the results of the periodic meeting held between the U.S. Nuclear Regulatory Commission (NRC) and the State of Georgia. The meeting was held on December 10, 2018. The meeting was conducted in accordance with NMSS Procedure SA-116 "Periodic Meetings between IMPEP Reviews," dated June 3, 2009.

The Georgia Agreement State Program is administered by the Radioactive Materials Program. The Radioactive Materials Program is located in the Air Protection Branch of the Environmental Protection Division of the Georgia Department of Natural Resources. At the time of the meeting, the Georgia Agreement State Program regulated approximately 405 specific licenses authorizing possession and use of radioactive materials. The meeting focused on the radioactive materials program as it is carried out under the Section 274b. (of the Atomic Energy Act of 1954, as amended) Agreement between the NRC and the State of Georgia.

The Georgia Agreement State Program has been subject to increased oversight by the NRC since December 2008. During a Management Review Board (MRB) held on December 4, 2008, to discuss the results of the September 2008 Integrated Materials Performance Evaluation Program (IMPEP) review, the MRB determined that the Georgia Agreement State Program should be placed on Monitoring and overall found adequate to protect public health and safety, but needs improvement and compatible with the NRC's Program. During the next IMPEP review held in October 2012, the Georgia Agreement State Program demonstrated continued decline in performance. The results of this review were discussed during an MRB held on January 17, 2013. The MRB determined that a recommendation should be made to place the Georgia Agreement State Program on Probation. In SECY-13-0051, "Management Review Board Recommendation for Probation of the Georgia Agreement State Program," dated May 9, 2013, the recommendation was made to the Commission that the Georgia Agreement State Program be placed on Probation as significant deficiencies were noted during the 2012 IMPEP review that had the potential to impact public health and safety, if left uncorrected. The Commission approved the recommendation in a staff requirements memorandum (SRM) dated July 9, 2013.

The timeframe for the next IMPEP review was shortened to one year and was held in January 2014. An MRB was held in April 2014 to discuss the results of the January 2014 IMPEP review. The MRB recommended requesting the Commission remove the Georgia Agreement State Program from Probation and place it on Heightened Oversight. This recommendation was communicated to the Commission in SECY-14-0074, "Discontinuance of the Probation Period for the Georgia Agreement State Program," dated July 22, 2014. The Commission approved removing the Georgia Agreement State Program from Probation and placing them on Heightened Oversight via an SRM issued on August 25, 2014. The next IMPEP review of the Georgia Agreement State Program was held in May 2016. Following the May 2016 IMPEP review, the MRB found five indicators satisfactory: Technical Staffing and Training, Status of Materials Inspection Program, Technical Quality of Inspections, Technical Quality of Incident and Allegation Activities, and Compatibility Requirements; and one indicator satisfactory but needs improvement: Technical Quality of Licensing Actions. Five recommendations were made and overall the MRB found the program adequate to protect public health and safety and compatible with the NRC's program. The MRB directed that the Georgia Agreement State Program be

## Georgia Final Periodic Meeting Summary

removed from Heightened Oversight and that a period of Monitoring be initiated. Additionally, the MRB directed that quarterly calls were to be conducted, two periodic meetings were to take place, with one periodic meeting to be held approximately one year from the 2016 IMPEP review and the second periodic meeting to be held approximately 18 months after the first periodic meeting, and the next IMPEP review was to be conducted in approximately four years. The MRB acknowledged the performance improvements made since the 2012 IMPEP review. As such, the MRB determined that the period of heightened oversight should be discontinued and a period of monitoring should be initiated until such time as the Georgia Agreement State Program had demonstrated a sustained period of satisfactory performance.

### 2.0 COMMON PERFORMANCE INDICATORS

Five common performance indicators are used to review the NRC Regional Office and Agreement State radioactive materials programs during an IMPEP review. These indicators are (1) Technical Staffing and Training, (2) Status of Materials Inspection Program, (3) Technical Quality of Inspections, (4) Technical Quality of Licensing Actions, and (5) Technical Quality of Incident and Allegation Activities.

#### 2.1 Technical Staffing and Training (2016 IMPEP: Satisfactory)

The Georgia Agreement State Program is made up of one Program Manager - 2 who oversees the Radiation Protection Programs which is comprised of 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 of which seven staff are located in the Radioactive Materials Section, two staff are located in the Environmental Radiation Team, and one staff splits his time evenly between the two. There are approximately 10 full time equivalents (FTE) dedicated to the Georgia Agreement State Program.

Since the 2016 IMPEP review, three staff have left. One individual that left, took a position at another Georgia State Government agency and the other two individuals left for employment opportunities outside State Government. As positions became available, the Georgia Agreement State Program was able to post and subsequently fill all positions. The positions were each filled within a year of the vacating employee's departure.

The Georgia Agreement State Program revised its training manual in June 2013 to incorporate changes that were made in the NRC's Inspection Manual Chapter (IMC) 1248. Additionally, the Georgia Agreement State Program updated its qualification journal in April 2017. The revised training manual and qualification journal are being used by all staff going through the qualification process. Staff are attending the NRC's training courses when available. Five technical staff are going through the license reviewer and inspector qualification process. The expectation is that each staff member going through the qualification process will qualify in at least two program areas, including but not limited to industrial radiography, portable gauge, fixed gauge, or nuclear pharmacy, each year. 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. Technical staff members track their own refresher training and management reviews it as part of the

## Georgia Final Periodic Meeting Summary

technical staff's annual performance review. The Georgia Agreement State Program uses staff developed monthly training, NRC courses, and conference attendance to meet the requirements.

### **Recommendation 1:**

The MRB recommends that the Georgia Agreement State Program management develop a strategy to address staff retention and implement corrective actions to mitigate the causes of the turnover to ensure satisfactory program performance is sustained.

### **Status:**

The Georgia Agreement State 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 Georgia Environmental Protection Division to discuss issues involving staff retention for the entire air branch since this issue was not unique to the radioactive materials staff. One outcome of these discussions was to create a path for upward mobility. This was accomplished in April 2017 by creating a Program Manager - 1 position and a team leader position within the Radiation Protection Programs Section. In September 2018, the Georgia Department of Natural Resources Office of Human Resources expanded the "Environmental Specialist 4 (ES - 4)" position to include Subject Matter Experts - individuals who add high value to the organization, show team leadership ability, have exceptionally high technical proficiency and display excellent judgement and decision making skills. Staff demonstrating these characteristics can be recommended by management to the Division for this promotion. Although the ES - 4 position is reserved for a select few high performing individuals, the expansion of this position to include Subject Matter Experts offers an opportunity for promotion along a non-managerial track to the staff. Technical staff now have promotion potential positions to work towards rather than looking for those opportunities elsewhere. The Branch Chief continues to meet with Human Resources representatives to discuss position reclassification for staff. A reclassification would result in a pay increase for staff. The process is ongoing and will take time to accomplish. This is not a current priority for human resources since both Radiation Protection Programs are fully staffed.

As part of a separate effort, the Air Protection Branch Chief met with all staff individually to obtain thoughts and ideas on how the work environment could be improved. Some of the feedback obtained included: 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. The subsequent initiative, which was led by a lean six sigma green belt, had the objective of "consolidating, revising, and adding adequate technical detail to existing procedures and developing licensing templates for the major licensing types." A presentation on this initiative was held for the Environmental Protection Division's Director on May 17, 2018. The work that was completed and the suggested path forward were approved. The Georgia Agreement State Program held training on June 26, 2018, for the staff to go over all of the revisions to the procedures and to discuss how to use the flowcharts that were created.

## Georgia Final Periodic Meeting Summary

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

The Georgia Agreement State Program's inspection frequencies are the same as the NRC's inspection frequencies that are listed in IMC 2800. A discussion was held regarding the changes made to the NRC's IMC 2800 with regards to inspection frequency timeliness. The Georgia Agreement State Program's goal is to stay within the +/- 25 % window which is more restrictive than the NRC's revised policy of +/- 50% for Priority 1 licensees and +/- 1 year for Priority 2 and 3 licensees. The Georgia Agreement State Program's policy however, will match the current requirements in IMC 2800. Since the last IMPEP review, the Georgia Department of Natural Resources information technology staff built a web-based database that is being used to track inspection and licensing actions. The database has been in use since in 2017.

The Georgia Agreement State Program completed 141 Priority 1, 2, and 3 inspections during the review period. At the time of the 2016 IMPEP review eight inspections were discovered to be overdue. These overdue inspections occurred as a result of database errors stemming from an outdated system in place at the time of the review. The eight missed inspections discovered during the 2016 IMPEP review were completed during this review period and no additional Priority 1, 2, or 3 inspections have been completed overdue during the review period. One of the 39 initial inspections was completed overdue during the review period. Using the calculation in State Agreements (SA) Procedure SA-101 "Reviewing the Common Performance Indicator, Status of Materials Inspection Program," as of December 10, 2018, the Georgia Agreement State Program has completed five percent of its Priority 1, 2, 3, and initial inspections overdue. This is less than ten percent completed overdue criteria for a satisfactory finding for this indicator. Additionally, inspection reports are typically issued within 30 days of the inspection exit meeting with the licensee and greater than 20 percent of candidate licensees for reciprocity have been inspected in each calendar year since the last IMPEP review.

#### **Recommendation 2:**

The MRB recommends that the Georgia Agreement State Program management implement corrective actions and make necessary adjustments to ensure satisfactory program performance is sustained with regard to reciprocity inspections.

#### **Status:**

The Georgia Agreement State Program is mindful of reciprocity inspections and is ensuring it meets the goal of inspecting 20 percent of candidate licensees each calendar year. Management implemented a policy that each staff person must perform at least one reciprocity inspection every year. This should ensure that the requirement of inspecting 20 percent of candidate licensees every calendar year is met. 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 Georgia Agreement State Program is working on ensuring that all staff are qualified to perform these types of inspections. Until that occurs, staff that are qualified will be performing additional inspections to ensure the requirement is met. Qualified inspectors have the ability to pick the reciprocity inspection they wish to perform, however management stated that if the 20% inspection criteria is not being met and sustained by half way through the calendar year, reciprocity inspections will be assigned to staff to ensure the 20% inspection criteria is met each calendar year.

## Georgia Final Periodic Meeting Summary

The Program Manager - 1 has been given the responsibility to track reciprocity inspections to ensure that the goal of inspecting 20 percent of candidate licensees is met. For calendar year 2016, eight inspections out of 38 reciprocity candidates (21 percent) were performed. For calendar year 2017, 10 inspections out of 39 reciprocity candidate licensees (26 percent) were performed. For calendar year 2018, seven inspections out of 28 candidate licensees (25 percent) were performed.

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

Inspection guidance used by the Georgia Agreement State Program is equivalent to the NRC's IMCs and Inspection Procedures. The Georgia Agreement State Program issues all inspection findings, regardless of whether or not there is a violation, by written correspondence from the office. Inspection findings are routinely sent to the licensee within 30 days of the completion of an inspection. All supervisory accompaniments in calendar years 2016, 2017, and 2018 were completed.

#### **Recommendation 3:**

The review team recommends that the Georgia Agreement State Program develop and implement training for inspections on the examination of written directives and NRC Inspection Procedure 87132, Brachytherapy Programs.

#### **Status:**

After the 2016 IMPEP review, the Georgia Agreement State 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 the training located on the NRC's Agreement State Webpage (Update on Inspection Procedure 87132, Brachytherapy Programs) could be used to partially address this recommendation. Additionally, the NRC developed 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." Management and nine technical staff viewed this training and felt that it increased staff knowledge of written directives used in brachytherapy procedures. Management stated that staff has not raised any additional concerns to date in regards to these types of inspections. Furthermore, Georgia Agreement State program management stated that authorized licensees are either not performing this type of treatment or perform one or two over the entire inspection period giving inspectors little opportunity to apply the knowledge gained during training. In most cases, the inspection encompasses a records review only of the licensee's program.

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

The Georgia Agreement State Program has approximately 405 specific licensees. All licensing actions have been in-house for less than one year and no backlog exists. When licensing actions come in a Program Manager will assign the action to a staff person based on their qualifications. This will be changing once the administrative assistant position is filled. It will be the administrative assistant's role to assign actions to staff based on each individuals' qualifications. After the action is assigned, the reviewer completes the review. Once complete, a peer reviewer is assigned to review the action.

## Georgia Final Periodic Meeting Summary

Once all, if any, items identified by the peer reviewer are addressed the license is signed and issued to the licensee.

### **Recommendation 4:**

The review team recommends that the Georgia Agreement State Program verify that all previously approved radiation safety officers (RSOs) 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:**

All documentation for medical RSOs that are currently on a specific license has been reviewed. Over 200 RSOs needed additional documentation. As of June 2018, all work on this recommendation has been completed. Additionally, the Georgia Agreement State Program management stated that the licensing procedures have been revised and now direct staff to review this information when doing a licensing action.

### **Recommendation 5:**

The review team recommends that the Georgia Agreement State Program management develop and implement training and guidance that provides the staff with the tools necessary to accurately complete the pre-licensing requirements for each new license.

### **Status:**

The Georgia Agreement State Program redesigned its pre-licensing guidance and the forms associated with the guidance and provided training to the staff before the 2016 IMPEP MRB meeting that was held in August 2016. When new license applications are received, the revised guidance is used and is periodically evaluated by management along with the actions completed 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 Risk Significant Radioactive Materials checklist was revised in June 2017 with Agreement States required to adopt equivalent guidance by January 2018. The changes to this checklist along with other changes to licensing procedures were incorporated in the lean six sigma initiative. Additionally, since the last IMPEP review, the NRC revised its Pre-Licensing Guidance and issued the revisions to the Agreement States via a Radiation Control Program Director letter on August 9, 2018. This revised guidance will be required to be implemented by the Agreement States by February 9, 2019. Two webinars explaining the changes to the guidance were held. These webinars have been uploaded to the Materials Security Toolbox, a secure portion of the NRC's Agreement State website, for future viewing. The Georgia Agreement State Program is working on implementing the new guidance and plans to have it in place by February 9, 2019.

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

The Georgia Agreement State Program has processes in place to maintain effective responses to incidents and allegations. Nineteen events have been reported to the NRC since the last IMPEP review. When an event requires reporting to the NRC's Headquarters' Operations Officer, the Georgia Agreement State Program provides additional follow-up information as appropriate and ensures that the NRC's Nuclear

## Georgia Final Periodic Meeting Summary

Materials Events Database system is updated and that events in the system are completed and closed.

Nine allegations have been received since the 2016 IMPEP review, three of which were referred by the NRC. Each allegation is evaluated when it is received and onsite follow-up is performed, when appropriate. Closure letters to the concerned individuals are issued in a timely manner. Due to Georgia's open records act, the Georgia Agreement State Program is unable to guarantee protection of an allegor's identity.

### 3.0 NON-COMMON PERFORMANCE INDICATORS

Four non-common performance indicators are used to review Agreement State programs: (1) Compatibility Requirements, (2) Sealed Source and Device (SS&D) Evaluation Program, (3) Low-Level Radioactive Waste Disposal (LLRW) Program, and (4) Uranium Recovery (UR) Program. The NRC's Agreement with Georgia does not relinquish regulatory authority for either SS&D or UR; therefore, only the non-common performance indicators Compatibility Requirements and LLRW apply.

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

No legislative changes affecting the Program have occurred since the last IMPEP review. At the time of the periodic meeting there were no regulation amendments overdue for adoption. There are a few outstanding comments associated with compatible regulations that are being addressed through the annual administrative rule clean-up. The rule changes will be presented to the Department of Natural Resources Board and are on track for final adoption in January 2019. The regulation review process takes approximately one year to complete. Regulations applicable to the Georgia Agreement State Program are not subject to sunset requirements.

#### 3.2 Low-Level Radioactive Waste (LLRW) Disposal Program (2016 IMPEP: Not reviewed)

In 1981, the NRC amended its Policy Statement, "Criteria for Guidance of States and NRC in Discontinuance of NRC Regulatory Authority and Assumption Thereof by States Through Agreement," to allow a State to seek an amendment for the regulation of LLRW as a separate category. Although the Georgia Agreement State Program has LLRW disposal authority, the NRC has not required States to have a program for licensing a LLRW disposal facility until such time as the State has been designated as a host State for a LLRW disposal facility. When an Agreement State has been notified or becomes aware of the need to regulate a LLRW disposal facility, they are expected to put in place a regulatory program which will meet the criteria for an adequate and compatible LLRW disposal program. There are currently no plans for a LLRW disposal facility in Georgia.

### 4.0 SUMMARY

The Georgia Agreement State Program has addressed the five recommendations made as a result of the 2016 IMPEP review and continues to make improvements to ensure compliance with IMPEP criteria. No programmatic concerns are noted at this time. The Georgia Agreement State Program is fully staffed and since the 2016 IMPEP review, has

## Georgia Final Periodic Meeting Summary

shown a period of sustained performance. The 2016 MRB recommended that the Georgia Agreement State Program stay on Monitoring until such time as the Program demonstrated a period of sustained performance. Based on the results of this periodic meeting, the NRC staff determined that a period of sustained performance has been demonstrated and as a result, is recommending that the Georgia Agreement State Program be removed from Monitoring.

### 5.0 MRB Meeting

An MRB meeting was held on February 19, 2019 to discuss the status of the Georgia Agreement State Program. The MRB agreed with the NRC staff's finding that the Georgia Agreement State Program has demonstrated a period of sustained performance since the 2016 IMPEP review. Additionally, the NRC staff recommended, and the MRB agreed, that the Georgia Agreement State Program be removed from Monitoring, that the quarterly calls be discontinued, and that the next IMPEP review be held in fiscal year 2020.