



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

August 31, 2015

Donald E. Williamson, MD  
State Health Officer  
Alabama Department of Public Health  
P.O. Box 303017  
Montgomery, AL 36130-3017

Dear Dr. Williamson:

On July 27, 2015, the Management Review Board (MRB) met to consider the proposed final Integrated Materials Performance Evaluation Program (IMPEP) report on the Alabama Agreement State Program. The MRB found the Alabama program adequate to protect public health and safety, and compatible with the U.S. Nuclear Regulatory Commission's program.

Section 5.0, page 14, of the enclosed final report contains a summary of the IMPEP team's findings. Five of six performance indicators reviewed were found satisfactory. The indicator, Technical Staffing and Training, was found satisfactory but needs improvement. The review team made one recommendation during this review in regard to program performance. Based on the results of the current IMPEP review, the next full review of the Alabama Agreement State Program will take place in approximately 4 years, with a periodic meeting tentatively scheduled for May 2017. The corrective actions taken to address the open recommendation will be reviewed during the periodic meeting and subsequently verified for closure at the next IMPEP. No additional response is required at this time to address the open recommendation.

I appreciate the courtesy and cooperation extended to the IMPEP team during the review. I also wish to acknowledge your continued support for the Agreement State program. I look forward to our agencies continuing to work cooperatively in the future.

Sincerely,

*/RA/*

Michael F. Weber  
Deputy Executive Director for Materials,  
Waste, Research, State, Tribal, and  
Compliance Programs  
Office of the Executive Director for Operations

Enclosure: Alabama Final IMPEP Report

cc:  
David Walter, Director  
Office of Radiation Control

B. J. Smith, Mississippi  
Organization of Agreement States  
Liaison to the MRB

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Letter to Dr. Williamson from M. Weber dated: August 31, 2015

SUBJECT: ALABAMA FY2015 FINAL INTEGRATED MATERIALS PERFORMANCE  
EVALUATION PROGRAM REPORT

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INTEGRATED MATERIALS PERFORMANCE EVALUATION PROGRAM  
REVIEW OF THE ALABAMA AGREEMENT STATE PROGRAM

MAY 4 – 8, 2015

**FINAL REPORT**

Enclosure

## **EXECUTIVE SUMMARY**

This report presents the results of the Integrated Materials Performance Evaluation Program (IMPEP) review of the Alabama Agreement State Program. The review was conducted during the period of May 4-8, 2015, by a review team composed of technical staff members from the U.S. Nuclear Regulatory Commission (NRC) and the State of Arizona.

Based on the results of this review, Alabama's performance was found satisfactory for five out of six indicators: Status of Materials Inspection Program, Technical Quality of Inspections, Technical Quality of Licensing, Technical Quality of Incident and Allegation Activities, and Compatibility Requirements. The indicator Technical Staffing and Training was found satisfactory, but needs improvement. The review team identified some performance issues under the indicators Technical Quality of Inspections and Technical Quality of Licensing Actions and attributed those issues to the lack of an updated training policy.

The review team made one recommendation (see Section 5.0). There were no recommendations from previous IMPEP reviews to evaluate.

Accordingly, the review team recommended, and the Management Review Board (MRB) agreed, that the Alabama Agreement State Program is adequate to protect public health and safety and is compatible with the NRC's program. The review team recommended, and the MRB agreed, that the next IMPEP review take place in approximately 4 years and that a periodic meeting be held in 1 year in order to review progress in Alabama's training program.

## 1.0 INTRODUCTION

This report presents the results of the review of the Alabama Agreement State Program radioactive materials safety program. The review was conducted during the period of May 4-8, 2015, by a review team composed of technical staff members from the U.S. Nuclear Regulatory Commission (NRC) and the State of Arizona. The review team members are identified in Appendix A. The review was conducted in accordance with the "Implementation of the Integrated Materials Performance Evaluation Program and Rescission of Final General Statement of Policy," published in the *Federal Register* on October 16, 1997, and NRC Management Directive 5.6 (MD 5.6), "Integrated Materials Performance Evaluation Program (IMPEP)," dated February 26, 2004. Preliminary results of the review, which covered the period of May 15, 2010, to May 8, 2015, were discussed with Alabama managers on the last day of the review.

In preparation for the review, a questionnaire addressing the common and applicable non-common performance indicators was sent to Alabama on February 3, 2015. Alabama provided its response to the questionnaire on March 5, 2015. A copy of the questionnaire response may be found in the NRC's Agencywide Documents Access and Management System (ADAMS) using the Accession Number ML15119A144.

A draft of this report was issued to Alabama on June 11, 2015, for factual comment. Alabama responded to the findings and conclusions of the review by letter dated July 1, 2015. A copy of Alabama's response can be found in ADAMS using the Accession Number ML15197A419. A copy of the review team's resolution of comments can be found using Accession Number ML15197A470. The Management Review Board (MRB) met on July 27, 2015, to consider the proposed final report. The MRB found the Alabama Agreement State Program adequate to protect public health and safety, and compatible with the NRC's program.

The Alabama Agreement State Program is administered by the Office of Radiation Control (the Office) which is located within the Department of Public Health (the Department). The Office Director reports to the State Health Officer, who serves as the Director of the Department. Organization charts for Alabama can be found in ADAMS using the Accession Number ML15138A266.

At the time of the review, the Alabama Agreement State Program regulated 414 specific licenses authorizing possession and use of radioactive materials. The review 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 Alabama.

The review team evaluated the information gathered against the established criteria for each common and the applicable non-common performance indicator and made a preliminary assessment of the Alabama Agreement State Program's performance.

## 2.0 PREVIOUS IMPEP REVIEW AND STATUS OF RECOMMENDATIONS

The previous IMPEP review concluded on May 14, 2010. The final report is available in ADAMS (Accession Number ML102090068). The results of the previous review and the status of recommendations are as follows:

Technical Staffing and Training: Satisfactory  
Recommendations: None

Status of Materials Inspection Program: Satisfactory  
Recommendations: None

Technical Quality of Inspections: Satisfactory  
Recommendations: None

Technical Quality of Licensing Actions: Satisfactory  
Recommendations: None

Technical Quality of Incident and Allegation Activities: Satisfactory  
Recommendations: None

Compatibility Requirements: Satisfactory  
Recommendations: None

Overall finding: Adequate and Compatible.

## 3.0 COMMON PERFORMANCE INDICATORS

Five common performance indicators are used to review the NRC regional and Agreement State radioactive materials programs. 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.

### 3.1 Technical Staffing and Training

The ability to conduct effective licensing and inspection programs is largely dependent on having a sufficient number of experienced, knowledgeable, well-trained technical personnel. Under certain conditions, staff turnover could have an adverse effect on the implementation of these programs, and thus could affect public health and safety. Apparent trends in staffing must be explored. Review of staffing also requires a consideration and evaluation of the levels of training and qualification. The evaluation standard measures the overall quality of training available to, and taken by, materials program personnel.

a. Scope

The review team used the guidance in State Agreements procedure SA-103, "Reviewing the Common Performance Indicator: Technical Staffing and Training," and evaluated the State's performance with respect to the following performance indicator objectives:

- A well-conceived and balanced staffing strategy has been implemented throughout the review period.
- Agreement State training and qualification program is equivalent to NRC Inspection Manual Chapter (IMC) 1248," Formal Qualifications Program for Federal and State Material and Environmental Management Programs."
- Qualification criteria for new technical staff are established and are being followed or that qualification criteria will be established if new staff members are hired.
- Any vacancies, especially senior-level positions, are filled in a timely manner.
- There is a balance in staffing of the licensing and inspection programs.
- Management is committed to training and staff qualification.
- Individuals performing materials licensing and inspection activities are adequately qualified and trained to perform their duties.
- License reviewers and inspectors are trained and qualified in a reasonable period of time.

b. Discussion

The Alabama Agreement State Program is composed of four technical staff members, two program supervisors, an assistant program director, and a program director which equals 4.5 full-time equivalents (FTE) for the radioactive materials program including any vacancies in the program. Currently, there are no vacancies. During the review period the program director left the program and two technical staff members were hired. The program director position was vacant for approximately 2 months, during which time there was an acting program director. Alabama does not have a training and qualification manual equivalent to the NRC's IMC 1248. The NRC issued a revised training manual (IMC 1248) in April 2013, which was due for adoption by the Agreement States in October 2013. The previous IMPEP team's review of Alabama's training procedure is not applicable to this current review, because the previous procedure was equivalent to IMC 1246 and not to IMC 1248, and the previous IMPEP review period does not overlap with this current review period. Alabama was required to adopt a compatible training manual to IMC 1248. As such, the review team evaluated Alabama's procedures against IMC 1248.

c. Evaluation

The review team determined that during the review period Alabama did not fully meet performance indicator objective listed 3.1.a concerning the State's qualification program. Alabama hired two technical staff as inspectors during the review period and transitioned an existing technical staff member into a license reviewer role. Alabama had not hired or trained technical staff for approximately 7 years. Consequently, there was no focus



on updating Alabama Policy No. 417 “Summary of Basic and Specialized Training Requirements for Staff Working in the Agreement States Program in the Division of Radiation Control” which was put into place on October 20, 1997. This policy is not equivalent to IMC 1248, does not require the training qualification to be documented for both license reviewers and inspectors, and does not require the 24 hour refresher training criteria for existing qualified staff. The review team attributed several performance issues discussed under the indicators Technical Quality of Inspections and Technical Quality of Licensing Actions to the absence of a documented training program for license review and inspector qualification. The review team recommends that the State (1) create a formal training qualification program equivalent to IMC 1248 and apply it to staff going through the qualification process; (2) require 24 hours of refresher training every 2 years for currently qualified staff; and (3) re-evaluate the qualifications of the two newest inspection staff to determine if additional training is needed.

d. Results

The review team considered the impact of the issues identified under the indicators Technical Quality of Inspections and Technical Quality of Licensing Actions when recommending a finding for this indicator. The review team observed that license reviewers and inspectors were not specifically trained in certain technical areas. Consequently, the review team determined that the absence of documented training for qualification resulting from the Program’s current procedure not being equivalent to IMC 1248, a lack of knowledge of the current training procedure by the new staff, and a lack of understanding on the expectation of how to become fully qualified led to the issues seen in those two indicators. The performance issues observed under inspection and licensing led the review team to recommend a downgraded finding for this indicator.

Based on the IMPEP evaluation criteria in MD 5.6, the review team recommended, and the MRB agreed, that Alabama’s performance with respect to the indicator, Technical Staffing and Training, be found satisfactory, but needs improvement.

3.2 Status of the Materials Inspection Program

Periodic inspections of licensed operations are essential to ensure that activities are being conducted in compliance with regulatory requirements and consistent with good safety practices. The frequency of inspections is specified in the NRC’s IMC 2800, “Materials Inspection Program.” The frequency is dependent on the amount and kind of material, the type of operation licensed, and the results of previous inspections. There must be a capability for maintaining and retrieving statistical data on the status of the inspection program.

a. Scope

The review team used the guidance in State Agreements procedure SA-101, “Reviewing the Common Performance Indicator: Status of the Materials Inspection Program,” and evaluated the State’s performance with respect to the following performance indicator objectives:

- Initial inspections and inspections of Priority 1, 2, and 3, licensees are performed at the frequency prescribed in NRC IMC 2800.
- Candidate licensees working under reciprocity are inspected in accordance with the criteria prescribed in IMC 1220, "Processing of NRC Form 241, Report of Proposed Activities in Non-Agreement States, Areas of Exclusive Federal Jurisdiction, and Offshore Waters, and Inspection of Agreement State Licensees Operating Under 10 CFR 150.20."
- Deviations from inspection schedules are normally coordinated between technical staff and management.
- There is a plan to perform any overdue inspections and reschedule any missed or deferred inspections; or a basis has been established for not performing any overdue inspections or rescheduling any missed or deferred inspections.
- Inspection findings are communicated to licensees in a timely manner (30 calendar days, or 45 days for a review team inspection, as specified in IMC 0610, "Nuclear Material Safety and Safeguards Inspection Reports").

b. Discussion

Alabama's inspection frequency is as or more frequent than similar license types found in IMC 2800, except for SIR-Spheres, TheraSpheres, and the Gliasite Radiation Therapy System. In IMC 2800, these modalities are assigned a program code of 2240 (Medical Therapy - Other Emerging Technology) which requires a 2-year inspection frequency. However, Alabama chose to assign a program code of 2120 (Medical Institution - Written Directive Required) for these modalities and apply the 3-year inspection frequency. Alabama provided written justification for the less frequent assignments based on its determination that these modalities are brachytherapy in nature and do not warrant a 2-year frequency. Alabama determined there was no effect on health and safety with these assignments. The review team considered Alabama's rationale for the 3-year inspection interval and found it acceptable.

Alabama performed a total of 512 Priority 1, 2, 3 and initial inspections over the review period. Alabama conducted 1.5 percent of those inspections overdue. A sampling of 25 inspection reports indicated that all of the inspection findings were communicated to the licensees within Alabama's goal of 30 days following the inspection exit.

Alabama met the NRC's criteria of inspecting 20 percent of candidate licensees operating under reciprocity in one of the 5 years covered by the review period (2010—7 percent, 2011—9 percent, 2012—4 percent, 2013—23 percent, 2014—19 percent). The review team observed that Alabama regulations allow for 30 days of use of radioactive materials in the State under reciprocity compared to the NRC's allowance of 180 days under reciprocity in NRC jurisdiction. Alabama expressed that the shortened period of reciprocity (i.e., 30 days) limits the State's opportunities to inspect licensees under reciprocity. After 30 days, licensees entering Alabama are issued an out-of-state Alabama radioactive materials license and are inspected based on inspection frequencies prescribed in IMC 2800. Alabama expressed that the out-of-state licensees, whether working under reciprocity or under a specific license, are more difficult to

inspect because they do not have in-state storage locations and they work in remote areas of the State.

c. Evaluation

Despite some challenges with reciprocity, the review team determined that during the review period Alabama met the performance indicator objectives listed in Section 3.2.a.

d. Results

Based on the IMPEP evaluation criteria in MD 5.6, the review team recommended, and the MRB agreed, that Alabama's performance with respect to the indicator, Status of Materials Inspection Program, be found satisfactory.

3.3 Technical Quality of Inspections

Inspections, both routine and reactive, provide assurance that licensee activities are carried out in a safe and secure manner. Accompaniments of inspectors performing inspections, and the critical evaluation of inspection records are used to assess the technical quality of a program's inspection capability.

a. Scope

The review team used the guidance in State Agreements procedure SA-102, "Reviewing the Common Performance Indicator: Technical Quality of Inspections," and evaluated the State's performance with respect to the following performance indicator objectives:

- Inspections of licensed activities focus on health, safety, and security.
- Inspection findings are well-founded and properly documented in reports.
- Management promptly reviews inspection results.
- Procedures are in place and used to help identify root causes and poor licensee performance.
- Inspections address previously identified open items and violations.
- Inspection findings lead to appropriate and prompt regulatory action.
- Supervisors conduct annual accompaniments of each inspector to assess performance and assure consistent application of inspection policies.
- For programs with separate licensing and inspection staffs, to verify that procedures are established and followed to provide feedback information to license reviewers.
- For Agreement States, to determine if inspection guides are consistent with NRC guidance.
- An adequate supply of calibrated survey instruments is available to support the inspection program.

b. Discussion

The review team evaluated the inspection reports, enforcement documentation, and interviewed inspectors for 25 materials inspections conducted during the review period. The casework reviewed included inspections conducted by four of Alabama's inspectors and covered medical, industrial, commercial, academic, research, and service licenses.

A review team member accompanied three program inspectors on April 7-9, 2015. The inspector accompaniments are identified in Appendix B.

The review team noted that the State has a policy of performing annual supervisory accompaniments for each of the materials inspectors. The review team found that over the review period, a total of 14 inspector accompaniments had been performed. The Radioactive Materials Inspection Branch Director, who did most of the accompaniments during the review period, was the only inspector who was not accompanied during the review period. The Radioactive Materials Inspection Branch Director performed 156 inspections during the review period in order to prevent a backlog of inspections. Alabama indicated that the inspector would be accompanied at appropriate intervals by a supervisor in the future.

c. Evaluation

During one of the accompaniments, the inspector did not demonstrate appropriate knowledge of the Increased Controls (IC), specifically on how a licensee approves unescorted access to quantities of concern and how the process should be inspected. In addition, during on-site interviews with the two newest inspectors, it became apparent the inspectors lack a full understanding of several key areas for materials they are already inspecting independently. One example included a lack of understanding of what constituted a medical event with regards to an iodine 131 therapy. A second example included a misunderstanding with regards to leak testing requirements. The new inspectors were under the impression that calibration and reference sealed sources did not need to be leak tested. In addition, when asked about instrument calibrations, therapy spot checks, and certain quality assurance tests, the inspectors indicated that they inspect for completion.

The review team noted some performance issues with quality of the inspections and casework for the newer inspectors. However, the review team found that Alabama inspections of licensed activities adequately focused on health and safety. The review team determined the issues observed are attributed to Alabama's qualification process. The review team found that the new inspectors brief management after they have performed an inspection. This briefing includes a discussion that covers the inspections, start to finish. Based on interviews with management and staff, and reviews of case work, the review team resolved its performance concerns observed during the accompaniments and determined that during the review period, Alabama met the performance indicator objectives listed in Section 3.3.a.

d. Results

The review team considered if the finding for the indicator was satisfactory but needs improvement. The review team determined the performance concerns noted during the accompaniments were attributed to inexperience and the qualification process. Further, Alabama implemented a process to review inspection findings with the new staff to ensure public health and safety are protected.

Based on the IMPEP evaluation criteria in MD 5.6, the review team recommended, and the MRB agreed, that Alabama's performance with respect to the indicator, Technical Quality of Inspections, be found satisfactory.

3.4 Technical Quality of Licensing Actions

The quality, thoroughness, and timeliness of licensing actions can have a direct bearing on public health and safety, and security. An assessment of licensing procedures, actual implementation of these procedures, and documentation of communications and associated actions between the State licensing staff and the regulated community will be a significant indicator of the overall quality of the program.

a. Scope

The review team used the guidance in State Agreements procedure SA-104, "Reviewing the Common Performance Indicator: Technical Quality of Licensing Actions," and evaluated Alabama's performance with respect to the following performance indicator objectives:

- Licensing action reviews are thorough, complete, consistent, and of acceptable technical quality with health, safety, and security issues properly addressed.
- Essential elements of license applications have been submitted and elements meet current regulatory guidance (e.g. financial assurance, ICs, pre-licensing guidance).
- License reviewers, if applicable, have the proper signature authority for the cases they review independently.
- License conditions are stated clearly and are inspectable.
- Deficiency letters clearly state regulatory positions and are used at the proper time.
- Reviews of renewal applications demonstrate a thorough analysis of a licensee's inspection and enforcement history.
- Applicable guidance documents are available to reviewers and are followed (e.g., NUREG-1556 series, pre-licensing guidance, regulatory guides, etc.).
- Licensing practices for risk significant radioactive materials are appropriately implemented including ICs and fingerprinting orders (Part 37 equivalent).
- Documents containing sensitive security information are properly marked, handled, controlled and secured.

b. Discussion

During the review period, Alabama performed 1,750 licensing actions. The review team evaluated 26 of these licensing actions which included casework for two current and former license reviewers. The casework reviewed included new applications, amendments, renewals and terminations. The review team evaluated casework for the following license types and actions: broad scope, medical diagnostic and therapy, veterinary, research and development, academic, gauges, self-shielded irradiators, service providers, waste brokers, decommissioning actions, and financial assurance.

The review team identified that four medical limited scope licenses, issued by the state did not include authorized users for a few authorized line items. Specifically, one of the licenses was authorized for a high dose-rate remote afterloader without an authorized user; another license was authorized to use palladium-103 and yttrium-90 without an authorized user.

Additionally, the review team identified that financial assurance was not requested from pharmaceutical licensees in accordance with Alabama regulation 420-3-26-.02(26) "Financial Assurance and Recordkeeping for Decommissioning."

The review team identified that email was accepted as initial requests for license amendment, which is contrary to Alabama regulation under 420-3-26-.02(8) "Filing of Application for Specific Licenses."

The review team identified two instances involving authorized nuclear pharmacists, one of which did not have complete training documentation, in accordance with 420-3-26-.07(28) "Training for an Authorized Nuclear Pharmacist," and another which was not fully documented to show how the review had verified that the individual's training was complete.

c. Evaluation

The review team interviewed the licensing staff and although the primary reviewer was an experienced inspector, the training of the individual as a license reviewer did not meet the qualification process of IMC 1248, as discussed earlier. The review team attributed the licensing issues noted above to incomplete training and experience. Alabama is in the process of correcting the licensing issues. Despite these issues, the review team determined that during the review period Alabama met the performance indicator objectives listed in Section 3.4.a.

d. Results

The review team considered if the finding for the indicator was satisfactory but needs improvement, but concluded that the licensing issues observed did not represent a health and safety concern and were attributed to Alabama staff not being systematically trained in each area of licensing.

Based on the IMPEP evaluation criteria in MD 5.6, the review team recommended, and the MRB agreed, that Alabama's performance with respect to the indicator, Technical Quality of Licensing Actions, be found satisfactory.

3.5 Technical Quality of Incident and Allegation Activities

The quality, thoroughness, and timeliness of response to incidents and allegations of safety concerns can have a direct bearing on public health and safety. An assessment of incident response and allegation investigation procedures, actual implementation of these procedures, internal and external coordination, and investigative and follow-up procedures and actions will be a significant indicator of the overall quality of the program.

a. Scope

The review team used the guidance in State Agreements procedure SA-105, "Reviewing the Common Performance Indicator: Technical Quality of Incident and Allegation Activities," and evaluated the State's performance with respect to the following performance indicator objectives:

- Incident response, investigation, and allegation procedures are in place and followed.
- Response actions are appropriate, well-coordinated, and timely.
- On-site responses are performed when incidents have potential health, safety or security significance.
- Appropriate follow-up actions are taken to ensure prompt compliance by licensees.
- Follow-up inspections are scheduled and completed, as necessary.
- Notifications are made to the NRC Headquarters Operations Center for incidents requiring a 24-hour or immediate notification to the Agreement State or NRC.
- Incidents are reported to the Nuclear Material Events Database.
- Allegations are investigated in a prompt, appropriate manner.
- Concerned individuals are notified of investigation conclusions.
- Concerned individuals' identities are protected, as allowed by law.

b. Discussion

During the review period, 134 incidents were reported to Alabama. The review team evaluated 12 of the 54 radioactive materials incidents that were reportable to the NRC, including two lost/stolen radioactive materials, three potential overexposures, three

damaged equipment, and one nuclear laundry leak. Alabama dispatched inspectors for onsite follow-up for the cases reviewed as appropriate.

During the review period, nine allegations were received by State. The review team evaluated four allegations, including one allegation that the NRC referred to the State, during the review period.

c. Evaluation

The review team determined that during the review period Alabama met the performance indicator objectives listed in Section 3.5.a.

d. Results

Based on the IMPEP evaluation criteria in MD 5.6, the review team recommended, and the MRB agreed, that Alabama's performance with respect to the indicator, Technical Quality of Incident and Allegation Activities, be found satisfactory.

#### 4.0 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 (LLRW) Disposal Program, and (4) Uranium Recovery Program. The NRC's Agreement with Alabama does not relinquish regulatory authority for a uranium recovery program. In addition, with regard to the non-common performance indicators for SS&D and LLRW, although Alabama has authority to conduct SS&D evaluations and regulate LLRW disposal, the State did not perform any activities related to these indicators during the review period. Therefore, only the first non-common performance indicator, Compatibility Requirements, applied to this review.

#### 4.1 Compatibility Requirements

State statutes should authorize the State to establish a program for the regulation of agreement material and provide authority for the assumption of regulatory responsibility under the agreement. The statutes must authorize the State to promulgate regulatory requirements necessary to provide reasonable assurance of protection of public health, safety, and security. The State must be authorized through its legal authority to license, inspect, and enforce legally binding requirements, such as regulations and licenses. NRC regulations that should be adopted by an Agreement State for purposes of compatibility or health and safety should be adopted in a time frame so that the effective date of the State requirement is not later than 3 years after the effective date of NRC's final rule. Other program elements, as defined in Appendix A of State Agreements procedure SA-200, "Compatibility Categories and Health and Safety Identification for NRC Regulations and Other Program Elements," that have been designated as necessary for maintenance of an adequate and compatible program should be adopted and implemented by an Agreement State within 6 months following NRC designation.



a. Scope

The review team used the guidance in State Agreements procedure SA-107, "Reviewing the Non-Common Performance Indicator: Compatibility Requirements," and evaluated Alabama's performance with respect to the following performance indicator objectives. A complete list of regulation amendments can be found on the NRC website at the following address: [https://scp.nrc.gov/rss\\_regamendments.html](https://scp.nrc.gov/rss_regamendments.html).

- The Agreement State program does not create conflicts, duplications, gaps, or other conditions that jeopardize an orderly pattern in the regulation of radioactive materials under the Atomic Energy Act, as amended.
- Regulations adopted by the Agreement State for purposes of compatibility or health and safety were adopted no later than 3 years after the effective date of the NRC regulation.
- Other program elements, as defined in SA-200 that have been designated as necessary for maintenance of an adequate and compatible program have been adopted and implemented within 6 months of NRC designation.
- The State statutes authorize the State to establish a program for the regulation of agreement material and provide authority for the assumption of regulatory responsibility under the agreement.
- The State is authorized through its legal authority to license, inspect, and enforce legally binding requirements such as regulations and licenses.
- Impact of sunset requirements, if any, on the State's regulations.

b. Discussion

Alabama became an Agreement State on October 1, 1966. The Alabama Agreement State Program's current effective statutory authority is contained in the Acts of 1963, No. 582 of the Alabama Statutes. The Department is designated as the State's radiation control agency. A legislative amendment affecting the radiation control program was passed during the review period. Previously Alabama Radiation Control regulations were subject to sunset requirements. In 2013, the legislature determined that the Radiation Control Agency is no longer an enumerated agency subject to review by the Alabama Sunset Committee, therefore regulations adopted by the State are no longer subject to sunset requirements.

Alabama's administrative rulemaking process takes approximately 6 months to 1 year from drafting to finalizing a rule. The public, NRC, other agencies, and potentially impacted licensees and registrants are offered an opportunity to comment during the process. Comments are considered and incorporated, as appropriate, before the regulations are finalized and approved by the State Committee of Public Health. The review team noted that the State's rules and regulations are not subject to "sunset" laws.

During the review period, Alabama submitted 15 final regulation amendments, to the NRC for a compatibility review. At the time of this review, no amendments were overdue for adoption.

c. Evaluation

The review team determined that during the review period Alabama met the performance indicator objectives listed in Section 3.4.1.a.

d. Results

Based on the IMPEP evaluation criteria in MD 5.6, the review team recommended, and the MRB agreed, that Alabama's performance with respect to the indicator, Compatibility Requirements, be found satisfactory.

## 5.0 SUMMARY

As noted in Sections 3.0 and 4.0 above, Alabama's performance was found satisfactory for five out of six performance indicators reviewed, and satisfactory, but needs improvement, for the indicator Technical Staffing and Training. The review team made one recommendation regarding program performance by the State.

Accordingly, the review team recommended, and the MRB agreed, that the Alabama Agreement State Program be found adequate to protect public health and safety and compatible with the NRC's program. Based on the results of the current IMPEP review, the review team recommended, and the MRB agreed, that the next full IMPEP review take place in approximately 4 years, and that a periodic meeting be held in 1 year in order to review progress in Alabama's training program.

Below is the review team's recommendation, as mentioned in the report section 3.1.c., for evaluation and implementation by State.

The review team recommended, and the MRB agreed, that Alabama:

- 1) Create a formal training qualification program equivalent to Inspection Manual Chapter 1248 and apply it to staff going through the qualification process;
- 2) Require 24 hours of refresher training every 2 years for currently qualified staff; and
- 3) Re-evaluate the qualifications of the two newest inspection staff to determine if additional training is needed.

## LIST OF APPENDICES

Appendix A	IMPEP Review Team Members
Appendix B	Inspection Accompaniments

## APPENDIX A

### IMPEP REVIEW TEAM MEMBERS

<b>Name</b>	<b>Area of Responsibility</b>
Bryan A. Parker, Region III	Review Team Leader Technical Quality of Incident and Allegation Activities
Monica Ford, Region I	Technical Staffing and Training Compatibility Requirements
Shirley Xu, NMSS	Technical Quality of Licensing
Brian Goretzki, Arizona	Status of Materials Inspection Technical Quality of Inspections Inspector Accompaniments

## APPENDIX B

### INSPECTION ACCOMPANIMENTS

The following inspection accompaniments were performed prior to the on-site IMPEP review:

Accompaniment No.: 1	License No.: 1183
License Type: Industrial Radiography	Priority: 1
Inspection Date: 04/07/2015	Inspector: MR

Accompaniment No.: 2	License No.: 0498
License Type: Medical Institution, Written Directive Required	Priority: 3
Inspection Date: 04/08/2015	Inspector: KT

Accompaniment No.: 3	License No.: 1179
License Type: Stereotactic Radiosurgery	Priority: 2
Inspection Date: 04/09/2015	Inspector: RC