



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

December 14, 2018

Mr. Scott Thompson  
Executive Director  
Department of Environmental Quality  
P.O. Box 1677  
Oklahoma City, OK 73101-1677

Dear Mr. Thompson:

On November 20, 2018, 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 proposed final Integrated Materials Performance Evaluation Program (IMPEP) report on the Oklahoma Agreement State Program. The MRB found the Oklahoma Agreement State Program adequate to protect public health and safety and compatible with the NRC's program.

The enclosed final report contains a summary of the IMPEP team's findings (Section 5.0). The team made one recommendation regarding the performance of the Oklahoma Agreement State Program during this review. The team also concluded that the recommendation from the 2014 IMPEP review should be closed. The MRB agreed with the review team's recommendation and the conclusion that the recommendation from the 2014 IMPEP review be closed (see Section 2.0). Based on the results of the current IMPEP review, the next full IMPEP review will take place in approximately 5 years, with a periodic meeting in approximately 2.5 years.

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 respective organizations continuing to work cooperatively in the future.

Sincerely,

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Daniel H. Dorman  
Acting Deputy Executive Director for Materials,  
Waste, Research, State, Tribal, Compliance,  
Administration, and Human Capital Programs  
Office of the Executive Director for Operations

Enclosure:  
Oklahoma Final IMPEP Report

cc: Steve Harrison, VA  
Organization of Agreement States  
Liaison to the MRB



INTEGRATED MATERIALS PERFORMANCE EVALUATION PROGRAM

REVIEW OF THE OKLAHOMA PROGRAM

September 24–28, 2018

**FINAL REPORT**

Enclosure 1

## **EXECUTIVE SUMMARY**

This report presents the results of the Integrated Materials Performance Evaluation Program (IMPEP) review of the Oklahoma Agreement State Program. The review was conducted during the period of September 24–28, 2018, by a team comprised of technical staff members from the U.S. Nuclear Regulatory Commission (NRC) and the State of Minnesota.

Based on the results of this review, Oklahoma's performance was found to be satisfactory for all performance indicators reviewed.

The team made one recommendation (see Section 5.0) and concluded that the recommendation from the 2014 IMPEP review should be closed (see Section 2.0).

Accordingly, the team recommended, and the MRB agreed, that the Oklahoma Agreement State Program be found adequate to protect public health and safety and compatible with the NRC's program. The team recommended, and the MRB agreed, that the next IMPEP review take place in approximately 5 years with a periodic meeting in approximately 2.5 years.

## 1.0 INTRODUCTION

This report presents the results of the review of the Oklahoma Agreement State radioactive materials safety program. The review was conducted during the period of September 24–28, 2018, by a team comprised of technical staff members from the U.S. Nuclear Regulatory Commission (NRC) and the State of Minnesota. Team members are identified in Appendix A. The review was conducted in accordance with the “Agreement State Program Policy Statement,” published in the *Federal Register* on October 18, 2017 (82 FR 48535), and NRC Management Directive (MD) 5.6, “Integrated Materials Performance Evaluation Program (IMPEP),” dated February 26, 2004. Preliminary results of the review, which covered the period of August 9, 2014, to September 28, 2018, were discussed with Oklahoma managers on the last day of the review.

In preparation for the review, a questionnaire addressing the common performance indicators and applicable non-common performance indicators was sent to Oklahoma on June 21, 2018. Oklahoma provided its response to the questionnaire on August 29, 2018. A copy of the questionnaire response is available in the NRC’s Agencywide Documents Access and Management System (ADAMS) using the Accession Number ML18263A207.

A draft of this report was issued to Oklahoma on October 17, 2018, for factual comment (ADAMS Accession Number ML18289A800). Oklahoma responded to the draft report by letter dated October 23, 2018, from Mike Broderick, Environmental Programs Manager, Radiation Management Section, Oklahoma Department of Environmental Quality (Accession Number ML18304A176). The Management Review Board (MRB) convened on November 20, 2018, to discuss the team’s findings.

The Oklahoma Agreement State Program is administered by the Radiation Management Section (the Section) which is located within the Land Protection Division (the Division). The Division is part of the Department of Environmental Quality (the Department). Organization charts for Oklahoma are available in ADAMS (Accession Number ML18263A209).

At the time of the review, the Section regulated 236 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 Oklahoma.

The 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 Section’s performance.

## 2.0 PREVIOUS IMPEP REVIEW AND STATUS OF RECOMMENDATIONS

The previous IMPEP review concluded on August 8, 2014. The final report is available in ADAMS (Accession Number ML14300A383). The results of the review and the status of the associated recommendation are as follows:

Technical Staffing and Training: Satisfactory  
Recommendation: None

Status of Materials Inspection Program: Satisfactory  
Recommendation: None

Technical Quality of Inspections: Satisfactory  
Recommendation: None

Technical Quality of Licensing Actions: Satisfactory  
Recommendation: None

Technical Quality of Incident and Allegation Activities: Satisfactory

Recommendation: "The team recommends that the Section provide additional training to the staff on the Section's revised standard operating procedure 'Environmental Complaints Program' and associated flowcharts to ensure consistent, timely, and accurate reporting and adequate follow-up of incidents." (Section 3.5 of the 2014 IMPEP Report)

Status: The Section responded by updating its procedures and providing additional training to the staff in the allegation (complaint) process on February 11, 2015, and April 2, 2015. The team determined that staff members were familiar with the process, and responses to incidents and allegations were appropriate, timely, and thorough throughout the review period.

This recommendation is closed.

Compatibility Requirements: Satisfactory  
Recommendation: None

Overall finding: Adequate to protect public health and safety and compatible with the NRC's program.

## 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 could affect public health and safety. Apparent trends in staffing must be explored. Review of staffing also requires 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 team used the guidance in State Agreements procedure SA-103, "Reviewing the Common Performance Indicator: Technical Staffing and Training," and evaluated Oklahoma'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 followed, or 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 team determined that the Section has sufficient staff to carry out the responsibilities of the Agreement State Program and a good balance between licensing and inspection staffing levels. The Section is comprised of 10 staff members, which equals approximately 6.0 full time equivalent for the radioactive materials program when fully staffed. Currently, there is one Section Manager, seven technical staff, one administrative staff, and one technical staff vacancy.

The Section Manager oversees both radioactive materials and radiation-producing machine regulation. Each staff member devotes roughly half of their time to the radioactive materials program, with the exception of one senior staff member who contributes approximately 75 percent to the radioactive materials program.

During the review period, four staff members left the program and three staff members were hired. The positions were vacant from 3 to 6 months, while the current vacancy

has been open for approximately 9 months. The State anticipates filling this vacancy in the coming year. The team did not note any impacts to the Section's IMPEP-related performance as a result of the vacancies.

The Section has a training and qualification program compatible with the NRC's IMC 1248. Training is tracked and managed by one of the senior staff who maintains well-organized training records for each staff member. Three staff are fully qualified in all areas and the other four are working towards full qualification in a timely manner. All staff receive training and experience to become qualified to perform both inspection and licensing activities. Staff spoke highly of the Section's commitment to training, especially support to attend NRC-sponsored training, the use of on-the-job training, and peer assistance while learning new duties.

c. Evaluation

The team determined that during the review period, Oklahoma met the performance indicator objectives listed in Section 3.1.a, and recommended that Oklahoma's performance with respect to the indicator, Technical Staffing and Training, be found satisfactory.

d. MRB Decision

The MRB agreed with the team's recommendation and found Oklahoma's performance with respect to this indicator to be satisfactory.

3.2 Status of 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 IMC 2800, "Materials Inspection Program," and 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 team used the guidance in State Agreements procedure SA-101, "Reviewing the Common Performance Indicator: Status of the Materials Inspection Program," and evaluated Oklahoma'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 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 *Code of Federal Regulations* (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 team inspection, as specified in IMC 0610, "Nuclear Material Safety and Safeguards Inspection Reports").

b. Discussion

Oklahoma's inspection frequencies are the same for similar license types found in the NRC's IMC 2800. The Section performed 307 Priority 1, 2, 3, and initial inspections over the review period, all of which were conducted on time by the Section's and NRC standards. Initial inspections of all new licenses were performed within 12 months of license issuance. The Section performed 20 percent of candidate reciprocity inspections in 2014, 21 percent in 2015, 23 percent in 2016, and 23 percent in 2017.

The Section provided the IMPEP team a database spreadsheet summary of its completed inspections during the IMPEP period. The spreadsheet indicated that inspection documentation was not consistently issued within 30 days. Twenty percent of the inspection documentation, 61 cases, were issued beyond 30 days; 23 inspection reports were issued between 30 and 45 days, 17 reports were issued between 45 and 60 days, 13 reports were issued between 60 and 90 days, and eight were issued beyond 90 days, with two cases taking 252 and 266 days to complete. Thirty-five of the 61 instances of late inspection correspondence involved either a Notice of Violation (NOV) or a documented non-cited violation.

Although a number of the inspections reports were issued beyond the 30 day goal, during inspector accompaniments the team observed that the four inspectors accompanied clearly communicated the results of the inspection to licensees. On one of the inspections, an apparent violation was communicated at the site debrief. Through discussions with Section staff, inspectors confirmed that they consistently communicate the results of the inspection to the licensee prior to leaving the site.

The team identified the following contributing factors for issuing inspection correspondence beyond 30 days:

1. Lack of effective management oversight over this performance metric.
2. No tracking system. A routing slip accompanies the inspection documentation, but there is no way to track the progress in real time.
3. A multi-layered approval process to issue a NOV. A Department lawyer must review all NOVs and senior management two levels above the Radiation Control Program Director must sign all NOVs.
4. Conservatively assessing the completion of the inspection. The program consistently measured the start of the 30 day window when inspectors left the site. However, in some cases additional information was requested from the

licensee and the report issuance clock was not reset when the inspectors received and reviewed the additional information.

Consequently, the team recommended that the Section develop a strategy to address the contributing factors for issuing delinquent inspection documentation and assure that inspection documentation is issued within 30 days.

c. Evaluation

The team determined that, except as noted below, during the review period Oklahoma met the performance indicator objectives listed in Section 3.2.a.

- Inspection findings were not communicated to licensees in a timely manner (30 calendar days as specified in IMC 0610, “Nuclear Material Safety and Safeguards Inspection Reports”).

An evaluation of the Section’s database spreadsheet indicated that 61 cases, or 20 percent of the inspection findings were communicated past the 30 day goal. The team identified several reasons for the delay in issuing inspection reports and recommended that the Section develop a strategy to address the contributing factors for issuing delinquent inspection documentation and assure that inspection documentation is issued within 30 days.

Based on the IMPEP evaluation criteria in MD 5.6, the team recommended that Oklahoma’s performance with respect to the indicator, Status of Materials Inspection Program, be found satisfactory.

d. MRB Decision

The MRB agreed with the team’s recommendation and found Oklahoma’s performance with respect to this indicator to be 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 an Agreement State’s inspection program.

a. Scope

The team used the guidance in State Agreements procedure SA-102, “Reviewing the Common Performance Indicator: Technical Quality of Inspections,” and evaluated Oklahoma’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, or senior staff as appropriate, conduct annual accompaniments of each inspector to assess performance and assure consistent application of inspection policies.
- For programs with separate licensing and inspection staffs, procedures are established and followed to provide feedback information to license reviewers.
- Inspection guides are consistent with NRC guidance.
- An adequate supply of calibrated survey instruments is available to support the inspection program.

b. Discussion

The team evaluated the inspection reports and enforcement documentation, and interviewed inspectors involved in materials inspections conducted during the review period. The casework reviewed included 20 inspections conducted by nine current and former Section inspectors and covered medical, industrial, commercial, academic, and research licenses.

The team found that inspection documents were thorough, complete, consistent, and of acceptable technical quality with health, safety, and security issues properly addressed. Inspection findings were clearly communicated to the licensee and violations were written with a direct link to a regulation or license condition. In the casework reviewed, every inspection addressed previously identified open items and violations.

A team member accompanied four Section inspectors during the week of July 30–August 3, 2018. No performance issues were noted during the inspector accompaniments. The inspectors were well-prepared and thorough, and assessed the impact of licensed activities on health, safety, and security. Inspector accompaniments are identified in Appendix B.

Supervisory accompaniments were performed each year of the review period by the Section Manager. In 2014 and 2017, all active Section inspectors were accompanied. In 2015 and 2016, one inspector was not accompanied due to an extended absence and subsequent retirement.

The team verified that the Section maintains a wide variety of appropriately calibrated survey instruments to support the inspection program, and to respond to radioactive materials incidents and emergency situations. Calibration records for the instruments are maintained on file. Detection instruments are available for gamma, beta, and alpha contamination, as well as dose rates. The Section had a portable multi-channel analyzer for assessing and identifying unknown sources.

c. Evaluation

The team determined that, during the review period, Oklahoma met the performance indicator objectives listed in Section 3.3.a, and recommended that Oklahoma's performance with respect to the indicator, Technical Quality of Inspections, be found satisfactory.

d. MRB Decision

The MRB agreed with the team's recommendation and found Oklahoma's performance with respect to this indicator to be 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, as well as security. An assessment of licensing procedures, actual implementation of those procedures, and documentation of communications and associated actions between the Oklahoma licensing staff and regulated community is a significant indicator of the overall quality of the licensing program.

a. Scope

The team used the guidance in State Agreements procedure SA-104, "Reviewing the Common Performance Indicator: Technical Quality of Licensing Actions," and evaluated Oklahoma'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 are consistent with current regulatory guidance (e.g., financial assurance, increased controls, pre-licensing guidance).
- License reviewers, if applicable, have the proper signature authority for the cases they review independently.
- License conditions are stated clearly and can be inspected.
- 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 increased controls and fingerprinting orders (Part 37 equivalent).
- Documents containing sensitive security information are properly marked, handled, controlled, and secured.

b. Discussion

During the review period, the Section performed 746 radioactive materials licensing actions. The team evaluated 20 of those actions. The licensing actions selected for review included five new applications, nine amendments, three renewals, and three terminations. The team evaluated casework which included the following license types: medical diagnostic and therapy, nuclear pharmacy, industrial radiography, portable and fixed gauges, well logging, veterinary, and waste receipt, transport, storage, and packaging. The casework sample represented work from 10 license reviewers including current and former license reviewers.

The team found licensing actions were thorough, complete, consistent, and of acceptable quality of health, safety and security. The licensing staff uses formal correspondence to licensees for notification of technical deficiencies. All licensing actions are reviewed by a peer license reviewer prior to having final approval and signature by the Section Manager.

The Section assigns priority levels one, two, or three to licensing actions depending on the type of licensing action (new, amendments, renewals, or terminations) in addition to the complexity of the action. The metric for completion of applications assigned priority one, two, or three is 30 days, 60 days, and 180 days, respectively. New applications and amendment actions are usually given priority one or two, depending on the complexity. The metric for renewals or terminations are normally assigned a priority three. The team assessed that there was no backlog of licensing actions at the time of the review.

Based on its review, the team found that actions terminating a license were well documented, included the appropriate survey records, and contained documentation of proper disposal or transfer of radioactive material, as appropriate.

During the review period, the team evaluated the Section's handling and storing of sensitive documents. The team determined that radioactive materials licenses were marked appropriately. The radioactive materials license files were maintained in a secured location accessible by the central records administration staff. In addition, the files are adequately stored or secured while signed out to an individual for use during an inspection or licensing action.

The team assessed the Section's implementation of the pre-licensing guidance. The Section has implemented the essential elements of the NRC's pre-licensing guidance revised August 9, 2018, and transmitted to the Agreements States via Radiation Control Program Director (RCPD) Letter RCPD-18-005, "Request to Implement the Revised Pre-Licensing Guidance, Notification of Upcoming Webinar Training, and Discontinuance of a Licensing Practice." Based on the files reviewed, the team determined that the assigned license reviewer used the pre-licensing guidance appropriately prior to the issuance of the license. In addition, the Section is also appropriately implementing the checklist for Risk-Significant Radioactive Materials, which was revised June 30, 2017.

The team noted that the Section issued renewal licenses for 10 years. Through interviews with staff, the team determined that although the license reviewer considered the licensee's inspection and enforcement history during reviews of renewal applications, it was not documented. The Section indicated that it is considering updating its peer review sheet to include the documentation of the inspection and enforcement history.

During the review period, the team noted that the Section informed its licensees implementing increased controls that the increased controls would be superseded by 10 CFR Part 37 by administratively amending its licenses accordingly with a specific license condition. Subsequently, the Section submitted and implemented regulations equivalent to 10 CFR Part 37 and removed the license condition from all licenses.

c. Evaluation

The team determined that during the review period, Oklahoma met the performance indicator objectives listed in Section 3.4.a, and recommended that Oklahoma's performance with respect to the indicator, Technical Quality of Licensing Actions, be found satisfactory.

d. MRB Decision

The MRB agreed with the team's recommendation and found Oklahoma's performance with respect to this indicator to be 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 followup actions, are a significant indicator of the overall quality of the incident response and allegation programs.

a. Scope

The team used the guidance in State Agreements procedure SA-105, "Reviewing the Common Performance Indicator: Technical Quality of Incident and Allegation Activities," and evaluated Oklahoma'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 followup actions are taken to ensure prompt compliance by licensees.

- Followup 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, 39 incidents were reported to the Oklahoma Agreement State Program with 27 of the incidents being reportable to the NRC. The team evaluated 11 radioactive materials incidents, which included four incidents involving lost or stolen material, one abandonment of a well logging tool, one potential overexposure, one medical event, three reports of damaged equipment, one leaking source, and three transportation incidents. Some incidents fell into more than one category. The Section dispatched inspectors for onsite followup for nine of the cases reviewed.

Incidents were reported in a timely manner to the NRC with a few exceptions. Of the 27 reportable incidents, all but four were reported to the Headquarters Operations Officer in the required time frame. The late reporting was due to staff oversight. Once identified, the Section made the reports to the NRC within a few days to 2 weeks of notification to the State.

During the review period, 14 allegations concerning radioactive materials licensees were received by the Section. The team evaluated 10 allegations, including one allegation that the NRC referred to the Section during the review period. Concerned individuals' identities are kept confidential and concerned individuals are sent a letter of the results of the investigation unless they are anonymous.

The team found that responses to incidents and allegations were appropriate, thorough, and timely, commensurate with the potential health and safety significance of the incident or allegation. The Section promptly conducted onsite inspections for most cases, and the cases without an onsite inspection were handled appropriately. Incidents and allegations were adequately investigated to determine cause, validity of complaints, and appropriate corrective actions.

c. Evaluation

The team determined that, except as noted below, during the review period, Oklahoma met the performance indicator objectives listed in Section 3.5.a.

- Notifications were not consistently made to the NRC Headquarters Operations Center for incidents requiring a 24-hour or immediate notification to the Agreement State or NRC.

The team identified four instances where NRC-reportable events were not reported to the Headquarters Operations Officer in a timely fashion. The late reporting was due to staff oversight. Once identified, the Section made the reports to the NRC within a few days to 2 weeks of notification to the State.

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

d. MRB Decision

The MRB agreed with the team's recommendation and found Oklahoma's performance with respect to this indicator to be 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 Disposal (LLRW) Program; and (4) Uranium Recovery Program. The NRC's Agreement with Oklahoma retains regulatory authority for sealed source and device evaluations, low-level radioactive waste disposal, and uranium recovery. Therefore, only the first non-common performance indicator 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 the 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 team used the guidance in State Agreements procedure SA-107, "Reviewing the Non-Common Performance Indicator: Compatibility Requirements," and evaluated Oklahoma'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/regtoolbox.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.
- Sunset requirements, if any, do not negatively impact the effectiveness of the State's regulations.

b. Discussion

Oklahoma became an Agreement State on September 29, 2000. The Oklahoma Agreement State Program's current effective statutory authority is contained in the Radiation Management Act Chapter 27A, of the Oklahoma Statutes, section 2-9-101 et seq. The Department is designated as the State's radiation control agency. No legislation affecting the radiation control program was passed during the review period.

Oklahoma's administrative rulemaking process takes approximately 18 to 24 months from drafting to finalizing a rule. The public, the 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 governor. The team noted that the Oklahoma's rules and regulations are not subject to "sunset" laws.

During the review period, the Section submitted seven proposed regulation amendments (Regulation Amendment Tracking System Identification Numbers (RATS IDs) 2013-1, 2013-2, 2015-1, 2015-2, 2015-3, 2015-4, and 2015-5), six final regulation amendments (RATS IDs 2011-1, 2011-2, 2012-1, 2012-2, 2012-3, and 2012-4), and one legally binding license condition (10 CFR Part 37) to the NRC for a compatibility review. None of the amendments were overdue for State adoption at the time of submission.

Oklahoma incorporates Federal regulations by reference. At the time of the review, the Section had not submitted the final regulations for the seven proposed regulation amendments stated above to the NRC for review. In the proposed regulations, the NRC had comments for RATS IDs 2013-1, 2013-2, 2015-1, 2015-2, and 2015-5. The team was able to confirm that the Section incorporated the NRC comments to its proposed regulations for RATS IDs 2013-1, 2015-1, 2015-2, and 2015-5 and had adopted the regulations as final on time. At the time of the review, the Section was in the process of preparing the final regulation packages for submission to the NRC for review. However, for RATS ID 2013-2, the sections for Parts 30 and 70 were adopted approximately 2 weeks late. In addition, the Section did not incorporate all of the relevant sections required by RATS ID 2013-2 in 10 CFR Part 40. Therefore, at the time of this review, the following amendment was overdue for adoption:

- RATS ID 2013-2: "Distribution of Source Material to Exempt Persons and to General Licensees and Revision of General License and Exemptions," 10 CFR Parts 30, 40, and 70 (78 FR 32310), that was due for Agreement State adoption by August 27, 2016.

The Section had the opinion that the amendment was not applicable due to the limited authority for source material assumed by the State in the Section 274b. Agreement with the NRC. However, after discussions with the team during the review, the Section agreed with the comments provided by the NRC with regard to the amendment and immediately started the process to revise its regulations to make the appropriate changes. Additionally, the team determined that the amendment is of low safety and health significance because the Section does not have any licensees affected by this amendment.

The team also reviewed other program elements, such as recently updated guidance documents that are necessary for maintenance of an adequate and compatible program. The team determined that all guidance documents have been adopted and implemented within 6 months of NRC designation. Specifically, the recent versions of the NUREG-1556 series, the Risk Significant Radioactive Materials Checklist, and the Pre-Licensing Guidance have all been adopted and implemented into the license review process.

c. Evaluation

The team determined that, except as noted below, during the review period Oklahoma met the performance indicator objectives listed in Section 4.1.a.

- Regulations adopted by the Agreement State for purposes of compatibility or health and safety were adopted greater than 3 years after the effective date of the NRC regulation.

Although the Section had received comments with respect to RATS ID 2013-2 with regard to incorporating specific regulations in 10 CFR Part 40, the Section had the understanding that the regulation was not applicable due to the limited authority for source material assumed by the State in the Section 274b. Agreement with the NRC.

However, after discussing the scope of the State's regulatory authority for source material with the team, the Section agreed with the comments provided by the NRC with regard to the amendment and immediately started the process to revise its regulations to make the appropriate changes. Additionally, the team determined that the amendment is of low safety and health significance because Oklahoma does not have any licensees impacted by this amendment.

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

d. MRB Decision

The MRB agreed with the team's recommendation and found Oklahoma's performance with respect to this indicator to be satisfactory.

## 5.0 SUMMARY

As noted in Sections 3.0 and 4.0 above, the Oklahoma Agreement State Program's performance was found to be satisfactory for all of the performance indicators reviewed. The team made one recommendation regarding the Section's performance and concluded that the recommendation from the 2014 IMPEP review should be closed.

Accordingly, the team recommended, and the MRB agreed, that the Oklahoma 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, which was the second consecutive IMPEP review with all performance indicators found satisfactory, the team recommended, and the MRB agreed, that the next full IMPEP review take place in approximately 5 years, with a periodic meeting in approximately 2.5 years.

Below is the team's recommendation, as mentioned in the report, for evaluation and implementation by Oklahoma:

Oklahoma should develop a strategy to address the contributing factors for issuing delinquent inspection documentation and assure that inspection documentation is issued within 30 days. (Section 3.2).

## LIST OF APPENDICES

Appendix A           IMPEP Review Team Members

Appendix B           Inspection Accompaniments

APPENDIX A

IMPEP REVIEW TEAM MEMBERS

<b>Name</b>	<b>Areas of Responsibility</b>
Bryan Parker, Region III	Team Leader Technical Staffing and Training
John Miller, Region I	Team Leader-in-Training Technical Quality of Inspections Status of Materials Inspection Program
Jackie Cook, Region IV	Technical Quality of Licensing Actions
Brandon Juran, Minnesota	Technical Quality of Incident and Allegation Activities
Lizette Roldán-Otero, NMSS	Compatibility Requirements

APPENDIX B

INSPECTION ACCOMPANIMENTS

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

Accompaniment No.: 1	License No.: OK-21144-02
License Type: Industrial Radiography	Priority: 1
Inspection Date: 07/30/18	Inspector: M.R.

Accompaniment No.: 2	License No.: OK-14145-01
License Type: Medical Institution – Written Directive Required	Priority: 3
Inspection Date: 07/31/18	Inspector: L.M.

Accompaniment No.: 3	License No.: OK-23359-02MD
License Type: Nuclear Pharmacy	Priority: 2
Inspection Date: 08/01/18	Inspector: K.S.

Accompaniment No.: 4	License No.: OK-31028-01
License Type: Portable Gauge	Priority: 5
Inspection Date: 08/02/18	Inspector: J.C.