



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
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January 21, 2021

MEMORANDUM TO: Darrell J. Roberts  
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State, Tribal, Compliance, Administration,  
and Human Capital Programs  
Office of the Executive Director for Operations

John W. Lubinski, Director  
Office of Nuclear Material Safety  
and Safeguards

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Region I

FROM: Brian C. Anderson, Chief  
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Division of Materials Safety, Security, State,  
and Tribal Programs  
Office of Nuclear Material Safety  
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SUBJECT: INTEGRATED MATERIALS PERFORMANCE EVALUATION  
PROGRAM REVIEW OF KANSAS

This memorandum transmits to the Management Review Board (MRB) the proposed final report (Enclosure 1) documenting the Integrated Materials Performance Evaluation Program (IMPEP) review of the State of Kansas. The review was conducted remotely by a team of U.S. Nuclear Regulatory Commission (NRC) and Agreement State technical staff during the period of October 26, 2020, to November 2, 2020. The team's preliminary findings were discussed with representatives of the State of Kansas on the last day of the review. The team issued a draft report to Kansas on December 8, 2020, for factual comment (Agencywide Documents Access and Management System [ADAMS] Accession Number [ML20335A546](#)). Kansas responded to the draft report by email dated December 18, 2020, from Kim Steves, Director, Office of the Kansas Radiation Control Program, ADAMS (Accession Number [ML21007A386](#)).

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Overall, the team is recommending that Kansas's performance be found satisfactory for the following five performance indicators: Technical Staffing and Training, Status of Materials Inspection Program, Technical Quality of Inspections, Technical Quality of Licensing Actions, and Technical Quality of Incident and Allegation Activities. The team recommends that Kansas's performance be found satisfactory, but needs improvement, for the performance indicator Legislation, Regulations, and Other Program Elements. The finding for the Technical Quality of Inspections and Technical Quality of Licensing Actions performance indicators improved from satisfactory, but needs improvement, during the previous IMPEP review to satisfactory during this review. The finding for the Technical Quality of Incident and Allegation Activities performance indicator improved from unsatisfactory during the previous review to satisfactory during this review.

Accordingly, the team is recommending that Kansas be found adequate to protect public health and safety and compatible with the NRC's program. Following the 2018 review, Kansas was placed on Heightened Oversight. After the 2019 Periodic Meeting and subsequent MRB meeting, the MRB decided to remove the Kansas Agreement State Program from Heightened Oversight and initiate a period of Monitoring. Due to continued improved performance, the team is recommending that the period of Monitoring be discontinued. The team also recommends that the next IMPEP review take place in approximately 4 years with a periodic meeting in approximately 2 years.

The MRB meeting to consider Kansas's IMPEP report is scheduled for **Thursday, February 4, 2021, from 1:00 p.m. to 4:00 p.m. ET, via Microsoft Teams**. In accordance with Management Directive 5.6, the meeting is open to the public. The agenda for the meeting is enclosed (Enclosure 2).

Enclosures:

1. Kansas Proposed Final Report
2. Agenda for MRB Meeting

cc: Jay Hyland, Manager  
Maine Division of Environmental Health  
Radiation Control Program  
Organization of Agreement States  
Representative to the MRB

SUBJECT: INTEGRATED MATERIALS PERFORMANCE EVALUATION PROGRAM REVIEW  
OF THE KANSAS PROGRAM January 21, 2021

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

October 26, 2020 – November 2, 2020

**PROPOSED FINAL REPORT**

## EXECUTIVE SUMMARY

The results of the Integrated Materials Performance Evaluation Program (IMPEP) review of the Kansas Agreement State Program (the Program) are discussed in this report. The review was conducted remotely from October 26, 2020, to November 2, 2020, by a team composed of technical members from the U.S. Nuclear Regulatory Commission (NRC), the Commonwealth of Pennsylvania, and the State of Minnesota.

Based on the results of this review, Kansas's performance was found satisfactory for the following five performance indicators: Technical Staffing and Training, Status of Materials Inspection Program, Technical Quality of Inspections, Technical Quality of Licensing Actions, and Technical Quality of Incident and Allegation Activities. The team recommends that Kansas's performance be found satisfactory, but needs improvement, for the performance indicator Legislation, Regulations, and Other Program Elements. The finding for the Technical Quality of Inspections and Technical Quality of Licensing Actions performance indicator improved from satisfactory, but needs improvement, during the previous IMPEP review to satisfactory during this review. The finding for the Technical Quality of Incident and Allegation Activities performance indicator improved from unsatisfactory during the previous review to satisfactory during this review.

The team did not make any recommendations on the indicators reviewed, and there were no recommendations to be closed out from previous IMPEP reviews.

Following the 2018 review, Kansas was placed on Heightened Oversight. After the 2019 Periodic Meeting and subsequent MRB meeting, the MRB decided to remove the Program from Heightened Oversight and initiate a period of Monitoring. Due to continued improved performance, the team is recommending that the period of Monitoring be discontinued. In making this recommendation, the team considered that the Program had improved ratings in three out of the four performance indicators found less than satisfactory during the 2018 IMPEP review.

Accordingly, the team recommends that the Kansas Agreement State Program be found adequate to protect public health and safety and compatible with the NRC's program. The team also recommends that the next IMPEP review take place in approximately 4 years with a periodic meeting in approximately 2 years.

## 1.0 INTRODUCTION

The Kansas Agreement State Program review was conducted remotely from October 26, to November 2, 2020, by a team of technical staff members from the U.S. Nuclear Regulatory Commission (NRC), the Commonwealth of Pennsylvania, and the State of Minnesota. This review was conducted remotely due to travel restrictions imposed by the COVID-19 public health emergency (PHE). It should be noted that prior to the review, the inspector accompaniments were conducted in person. 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* (FR) on October 18, 2017 (82 FR 48535), and NRC Management Directive (MD) 5.6, "Integrated Materials Performance Evaluation Program (IMPEP)," dated July 24, 2019. Preliminary results of the review, which covered the period of June 8, 2018, to November 2, 2020, were discussed with Kansas 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 indicator was sent to Kansas on June 2, 2020. Kansas provided its response to the questionnaire on October 6, 2020. A copy of the questionnaire response is available in the NRC's Agencywide Documents Access and Management System (ADAMS) using the Accession Number [ML20289A547](#).

The Kansas Agreement State Program is administered by the Radiation Control Program (the Program) which is located within the Bureau of Community Health Services (the Bureau). The Bureau is part of the Department of Health and Environment (the Department). The Program is comprised of three sections: The Radioactive Materials Unit (the Unit), the X-Ray Compliance Unit, and the Environmental Radiation, Emergency Preparedness, Right-to-Know Unit. The Unit implements the Agreement State Program. Organization charts for Kansas are available in ADAMS (Accession Number [ML20289A596](#)).

At the time of the review, Kansas regulated 258 specific licenses authorizing possession and use of radioactive materials. The review focused on the radiation control 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 Kansas.

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 Kansas Agreement State Program's performance.

## 2.0 PREVIOUS IMPEP REVIEW AND STATUS OF RECOMMENDATIONS

The previous IMPEP review concluded on June 29, 2018. The final report is available in ADAMS (Accession Number [ML18267A223](#)). The results of the review and the status of the associated recommendations are as follows:

Technical Staffing and Training: Satisfactory  
Recommendation: None

Status of Materials Inspection Program: Satisfactory  
Recommendation: None

Technical Quality of Inspections: Satisfactory, But Needs Improvement  
Recommendation: None

Technical Quality of Licensing Actions: Satisfactory, But Needs Improvement  
Recommendation: None

Technical Quality of Incident and Allegation Activities: Unsatisfactory  
Recommendation: None

Legislation, Regulations and Other Program Elements: Satisfactory, But Needs Improvement  
Recommendation: None

Sealed Source and Device Evaluation Program: Not reviewed

Low-level Radioactive Waste Program: Not reviewed

Overall finding: Adequate to protect public health and safety but needs improvement and compatible with the NRC's program. Based on the results of the 2018 Kansas IMPEP review, the team recommended, and the MRB agreed, that NRC initiate a period of Heightened Oversight for Kansas. The team further recommended, and the MRB agreed, that a Periodic Meeting be held within 1 year and that a follow-up IMPEP review take place approximately 1 year following the Periodic Meeting. After the 2019 Periodic Meeting and subsequent MRB meeting, the MRB removed the Program from Heightened Oversight and initiated a period of Monitoring.

### 3.0 COMMON PERFORMANCE INDICATORS

Five common performance indicators are used to review the NRC and Agreement State radiation control 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 assessed. 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 Kansas's performance with respect to the following performance indicator objectives:

- A well-conceived and balanced staffing strategy has been implemented throughout the review period.
- 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.
- 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.
- 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 Program is comprised of 12 staff members (e.g., one director, one supervisor, and ten staff members) which equals 8.8 full-time equivalent (FTE) when fully staffed. The 8.8 FTE is comprised of 7.4 technical FTE and 1.4 administrative FTE. During the review period, two staff members left the program including the Team Leader for Radioactive Materials Licensing and Inspections. A senior staff member was promoted to fill the Team Leader vacancy. Two staff members were hired to fill the other vacancies. The Program had no vacancies at the time of the review. All employees hired during this review period have a minimum of a Bachelor of Science degree.

In June 2020, the current Supervisor for Radioactive Materials Licensing and Inspections temporarily left the Program for military deployment and is scheduled to return in June 2021. At the time of the review, the supervisory duties of the Program were divided between the Program Director and the newly promoted Team Leader for Radioactive Materials Licensing and Inspections.

Kansas has a training and qualification program compatible with the NRC's IMC 1248. The Program uses a combination of on-the-job training along with the NRC sponsored courses as part of its qualification process. Staff is fully qualified in a modality before they can perform licensing and inspection tasks independently. Staff is considered fully qualified when they are qualified in all modalities. At the time of the review, three staff members were undergoing the qualification process.

Program management is very supportive of the training program and the staff is encouraged to attend NRC training courses. Continuing education and professional development are encouraged and tracked by the Program Supervisor. The training qualification records are used to track qualification milestones. A mentoring program has been implemented where the Program Supervisor and senior inspectors and license reviewers provide on-the-job training for the staff undergoing qualification. This mentoring program is consistent with the activities identified in the Performance Improvement Plan. Experienced staff are also expected to take refresher training that is compatible and consistent with refresher training as detailed in the NRC's IMC 1248.



The team noted that Temporary Instruction (TI) 003, "Evaluating the Impacts of the COVID-19 Public Health Emergency as part of the Integrated Materials Performance Evaluation Program," states, in part, that license reviewers and inspectors may take longer to become qualified due to the inability to travel to attend training classes needed to complete qualification and inspections being delayed due to social distancing or other factors related to the COVID-19 PHE, provided the Program continued to maintain health, safety, and security. The review team noted that although the COVID-19 PHE has impacted training of the Program staff, the Program continues to get its staff into NRC training classes, when available to get staff undergoing qualification trained. The Program has taken advantage of NRC on-line training classes, which the Organization of Agreement States worked with NRC to provide.

c. Evaluation

The team determined that, during the review period, Kansas met the performance indicator objectives listed in Section 3.1.a. Based on the criteria in MD 5.6, the team recommends that Kansas's performance with respect to the indicator, Technical Staffing and Training, be found satisfactory.

d. MRB Chair's Determination

The final report will present the MRB Chair's determination regarding this indicator.

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 and security practices. The frequency of inspections is specified in IMC 2800, "Materials Inspection Program," and is dependent on the amount and type of radioactive 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 Kansas'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.
- 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.
- Candidate licensees working under reciprocity are inspected in accordance with the criteria prescribed in IMC 2800, and other applicable guidance or compatible Agreement State Procedure.

- 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

The Program performed 119 Priority 1, 2, 3, and initial inspections during the review period. Less than one percent (1 of 119) of Priority 1, 2, 3, and initial inspections were conducted overdue during the review period. The sole inspection performed overdue was because of a database entry error that was identified during an internal audit. Also, the team identified one inspection that was performed overdue as a result of delays caused by the COVID-19 PHE. The team noted that Temporary Instruction (TI) 003, “Evaluating the Impacts of the COVID-19 Public Health Emergency as part of the Integrated Materials Performance Evaluation Program,” states, in part, that for inspections that exceed the scheduling window as described in IMC 2800 with overdue dates falling inside the defined timeframe of the COVID-19 PHE, the number of overdue inspections should be noted in the report but should not be counted in the calculation of overdue inspections described in State Agreements procedure (SA)-101, “Reviewing the Common Performance Indicator: Status of Materials Inspection Program,” Appendix A, provided that the Program continues to maintain health, safety, and security. Of the overdue inspections noted above, since one inspection was performed overdue due to impacts related to the COVID-19 PHE, the team did not include this inspection when performing the calculation. No Priority 1, 2, 3 or initial inspections were overdue at the time of the review.

Kansas’s inspection frequencies are equal to, or more frequent than, the inspection frequencies for similar license types identified in IMC 2800.

The team reviewed the timeliness of inspection reports and noted that only 3 inspection findings or 2.5 percent were communicated to the licensees greater than 30 days after the inspection exit, ranging from 35 to 49 days after the inspection. Two of the late inspection findings took additional time to issue because they were related to training efforts. The third inspection finding was late due to communication challenges with a licensee.

During the 2018 IMPEP review, inability to consistently conduct reciprocity inspections was noted as an issue, along with the Program’s plans to correct that issue. The team noted that a staff member has been assigned to prioritize reciprocity inspections. This action appears to have corrected the issue. The Program conducted 27 percent (6 of 22) of candidate reciprocity inspections in 2018 and 23 percent (4 of 17) in 2019. At the time of the review, the Program had conducted 13 percent (2 of 15) of candidate reciprocity inspections in 2020.

c. Evaluation

The team determined that, during the review period, Kansas met the performance indicator objectives listed in Section 3.2.a. Based on the criteria in MD 5.6, the team recommends that Kansas’s performance with respect to the indicator, Status of Materials Inspection Program, be found satisfactory.

d. MRB Chair's Determination

The final report will present the MRB Chair's determination regarding this indicator.

3.3 Technical Quality of Inspections

Inspections, both routine and reactive, provide assurance that the licensee activities are carried out in a safe and secure manner. Accompaniments of inspectors performing inspections, and 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 Kansas'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 32 materials inspections conducted during the review period. The casework reviewed included inspections conducted by seven current and former inspectors, and covered medical, industrial, commercial, and academic licenses for routine and special inspections. The casework review also included security, reactive, temporary jobsite and reciprocity inspections.

Two team members accompanied three inspectors from October 6-8, 2020. The inspector accompaniments are identified in Appendix B. No performance issues were noted during the inspector accompaniments. The inspectors were well-prepared, thorough, and assessed the impacts of licensed activities on health, safety, and security. The inspectors clearly communicated the inspection findings to the licensees at the exit meetings.

Normally, the Program conducts unannounced performance-based inspections. Due to the impacts of the COVID-19 PHE, the inspectors performed announced inspections and were required to contact the licensees to inquire about the health of the licensee's staff prior to the inspection. If the licensee had any employees that displayed symptoms of COVID-19, the inspector postponed the inspection to a later date. The Program has conducted limited inspections of medical facilities since the start of the PHE.

The team determined that the Program has an ample supply of radiation survey instruments such as Geiger-Muller meters, scintillations detectors, ion chambers and micro-R meters to support the inspection program. Each inspector is assigned instruments commensurate with the type of inspections they perform. The survey instruments used during the inspector accompaniments were operational and calibrated.

During the 2018 Kansas IMPEP review, the team determined that the Program inspection findings were neither consistently well-founded nor properly documented in reports, procedures did not help identify root causes and poor license performance, inspections did not consistently address previously identified open items and violations, inspections findings did not, in all cases, lead to appropriate and prompt regulatory action, and inspections guides were not consistent with NRC guidelines.

The team identified that the Program's inspection results were well documented with respect to health, safety, and security. The team also identified that the Program's inspection findings were well documented, cited violations were supported by the State of Kansas regulations and inspection findings led to appropriate and prompt regulatory actions. Licensees with poor inspection performance had their inspection frequencies increased to allow closer oversight of these licensees. The inspection reports are improved with closing previous violations and documenting open items.

The Program has updated all its inspection procedures since its last IMPEP, including its procedure for documenting violations and non-compliance. The procedures are in alignment with NRC guidance. Procedures now include guidance that will help to identify root causes and poor license performance. Inspection reports are reviewed by the Program supervisor.

c. Evaluation

The team determined that, during the review, Kansas met the performance indicator objectives listed in Section 3.3.a. Based on the IMPEP evaluation criteria in MD 5.6, the team recommends that Kansas's performance with the respect to the indicator, Technical Quality of Inspections, be found satisfactory.

d. MRB Chair's Determination

The final report will present the MRB Chair's determination regarding this indicator.

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, implementation of those procedures, and documentation of communications and

associated actions between the Kansas 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 Kansas'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., pre-licensing guidance, 10 CFR Part 37, financial assurance, etc.).
- 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 the physical protection of Category 1 and Category 2 quantities of radioactive material (Part 37 equivalent).
- Documents containing sensitive security information are properly marked, handled, controlled, and secured.

b. Discussion

During the review period, Kansas performed 430 radioactive materials licensing actions. The team evaluated 22 of those licensing actions. The licensing actions selected for review included 2 new applications, 10 amendments, 4 renewals, 4 terminations, 1 denial, and 1 abandonment. The team evaluated casework which included the following license types and actions: broad scope, medical diagnostic and therapy, medical manufacturing and distribution, industrial radiography, research and development, academic, nuclear pharmacy, portable and fixed gauges, self-shielded irradiators, well-logging, and financial assurance. The casework sample represented work from eight current and former license reviewers.

In each of the licensing actions reviewed, the team found the casework to have been done in accordance with current guidance and followed sound health physics principles. The team confirmed that the pre-licensing guidance and risk significant radioactive material checklist were implemented correctly and was current.

The team noted that licensee's compliance history was not evaluated or documented for renewals. However, the licensing staff documented compliance history for licensing amendment actions (e.g., the last two inspection cycles). The Program stated that it will begin evaluating and documenting the licensee's compliance history during renewals.

c. Evaluation

The team determined that during the review period Kansas met the performance indicator objectives listed in Section 3.4.a, except for:

- Reviews of renewal applications did not demonstrate a thorough analysis of a licensee's inspection and enforcement history.

The licensee's compliance history was not evaluated or documented for renewals. The Program will be updating its checklists to include the evaluation and documentation of the licensee's compliance history during renewals.

Based on the IMPEP evaluation criteria in MD 5.6, the team recommends that Kansas's performance with respect to the indicator, Technical Quality of Licensing Actions, be found satisfactory.

d. MRB Chair's Determination

The final report will present the MRB Chair's determination regarding this indicator.

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, safety, and security. An assessment of incident response and allegation investigation procedures, actual implementation of these procedures, internal and external coordination, timely incident reporting, and investigative and follow-up 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 Kansas's performance with respect to the following performance indicator objectives:

- Incident response, 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 (NMED) and closed when all required information has been obtained.
- Allegations are investigated in a prompt, appropriate manner.
- Concerned individuals are notified within 30 days, of investigation conclusions.
- Concerned individuals' identities are protected, as allowed by law.

b. Discussion

During the review period, Kansas reported six incidents to the NRC for inclusion in NMED. Of the six incidents reported, four were classified in NMED as reportable. The team evaluated all six of the incidents reported to NMED, which included three lost or stolen radioactive materials events, one medical event, and two damaged portable gauges. The Program dispatched inspectors for onsite follow-up for five of the cases reviewed. In addition to the six incidents reported to NMED, the Program identified eight other incidents that they determined were not reportable. The team reviewed five of these incidents. The Program appropriately handled these cases, and the team confirmed that these incidents did not require reporting based on the criteria in SA-300, "Reporting Material Events."

The team found that the program properly evaluated each incident, interviewed involved individuals, and documented its findings. When incidents were reported to the Program, management determined the appropriate response taking into consideration its health and safety significance. Three of the four reportable incidents had an onsite investigation conducted within 5 days. The other event was investigated 11 days after the event notification, which was delayed due to weather closing State offices and having to reschedule with the authorized user involved in the event. In all cases, the Program's response and licensee's corrective actions were appropriate.

The team determined that incidents were reported timely to the NRC, and follow-up information was updated in NMED. Reportable events were closed in NMED from a couple of weeks to 4 months after the Program completed the response. In addition, at the time of the review, two incidents (one classified as reportable and one classified as uncertain in NMED) were not closed in NMED due to a local database issue when transitioning to remote work. The reportable event was considered complete. The incident classified as uncertain was considered as unreportable by the Program, and the review team agreed with this assessment. There were no health and safety concerns with these issues.

During the review period, six allegations were received by Kansas. The team evaluated all six allegations, including two allegations that the NRC referred to the State. The team found that the Program took prompt and appropriate action in response to the concerns raised. All the allegations reviewed were appropriately closed, concerned individuals were notified of the actions taken, and allegeders' identities were protected whenever possible in accordance with State law.

During the 2018 Kansas IMPEP review, the team concluded that the Program's response to risk significant incidents were in many cases incomplete, inappropriate, poorly coordinated, and/or not timely, notifications to the NRC were not always timely, and that health and safety concerns from the previous IMPEP persisted. In addition, management did not provide sufficient oversight of reactive and follow-up inspections to ensure a prompt response to incidents. The current review team no longer found these issues were present. The Program updated its incident response procedures and provided training on the updated incident response procedures to staff. As discussed above, the team found the incidents and allegations reviewed were complete, appropriate, well-coordinated, and timely.

c. Evaluation

The team determined that, during the review period, Kansas met the performance indicator objectives listed in Section 3.5.a. Based on the criteria in MD 5.6, the team recommends that Kansas's performance with respect to the indicator, Technical Quality of Incident and Allegation Activities, be found satisfactory.

d. MRB Chair's Determination

The final report will present the MRB Chair's determination regarding this indicator.

#### 4.0 NON-COMMON PERFORMANCE INDICATORS

Four non-common performance indicators are used to review Agreement State programs: (1) Legislation, Regulations, and Other Program Elements; (2) Sealed Source and Device (SS&D) Evaluation Program; (3) Low-Level Radioactive Waste Disposal (LLRW) Program; and (4) Uranium Recovery Program. The NRC retains regulatory authority for the Uranium Recovery Program; therefore, only the first three non-common performance indicators applied to this review.

#### 4.1 Legislation, Regulations, and Other Program Elements

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 State's agreement with the NRC. The statutes must authorize the State to promulgate regulatory requirements necessary to provide reasonable assurance of adequate 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. The 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 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 Program Element Table indicating the Compatibility Categories for those program elements other than regulations can be found on the NMSS website/Regulation Toolbox at <https://scp.nrc.gov/regtoolbox.html>.

a. Scope

The team used the guidance in State Agreements procedure SA-107, "Reviewing the Non-Common Performance Indicator: Legislation, Regulations, and Other Program Elements," and evaluated Kansas'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

Kansas became an Agreement State on January 1, 1965. The Kansas regulations governing radiation protection requirements are found in Kansas Administrative Regulations (K.A.R.) 28-35-133 through 28-35-505, and apply to all ionizing radiation, whether emitted from radionuclides or produced by machines. The Program is designated as the State's radiation control agency. During the review period, only K.A.R. 28-35-146a and 28-35-147a were updated to make a change to the schedule of fees. No other legislative changes were made.

Kansas's administrative rulemaking process takes approximately 3 to 4 years from drafting to finalizing a rule. A new step in the regulation adoption process went into effect after the 2018 Kansas IMPEP review due to revisions made in late 2018. Regulations are now sent to the Kansas Division of Budget with an Economic Impact Statement. This new step in the process may take multiple months. The public, NRC, other agencies, and potentially impacted licensees and registrants are still offered an opportunity to comment during the process. Comments are considered and incorporated, as appropriate, before the regulations are finalized and approved by the Kansas Attorney General. The Program noted that the legislative review process is outside of its control. The team noted that the State's rules and regulations are not subject to "sunset" laws.

Kansas was found satisfactory, but needs improvement, for this indicator during the 2018 Kansas IMPEP review. The team and MRB concluded that this finding was appropriate because: (1) although amendments were submitted late to the NRC for compatibility review, Kansas had final regulations adopted and effective and had a rulemaking package to address all outstanding NRC comments in process; (2) the legislative process was outside the control of the Program; and (3) new Program management was committed to ensuring that all efforts will be made to promulgate regulations on time, and, if not, will issue legally binding requirements. During the first bi-monthly conference call with the Program following the 2018 Kansas IMPEP review, the Program made a commitment to assign a radiation staff member to be responsible for monitoring the status of NRC regulation revisions which impact compatibility and drafting corresponding revisions to Kansas regulations. They have executed this commitment and it is ongoing.

During the review period, Kansas submitted seven proposed, five final, and nine revised final regulation amendments to the NRC for a compatibility review. Seventeen of these amendments were overdue for State adoption at the time of submission, with the initial submittal anywhere between approximately 2 months to 2 years late. On-time were two revised final submissions involving RATS ID 2013-1 and one proposed final submission each for RATS IDs 2018-1 and 2018-2.

During the week of the review, the Program noted that a regulation package to revise certain regulations that had gone into effect on May 4, 2018, had been stamped and approved by the Kansas Division of Budget and sent back to the Program by the Kansas Department of Administration with minor edits that pertain to the Kansas Regulatory Style/grammar. This package will resolve minor outstanding compatibility issues involving five previously adopted regulation amendments:

- RATS ID 2012-2: Advance Notification to Native American Tribes of Transportation of Certain Types of Nuclear Waste Part 71 (77 FR 34194) that was due for State adoption on August 10, 2015.
- RATS ID 2012-3: Technical Corrections Parts 30, 34, 40 and 71 (77 FR 39899) that was due for State adoption on August 6, 2015.
- RATS ID 2012-4: Requirements for Distribution of Byproduct Material Parts 30, 31, 32, 40 and 70 (77 FR 43666) that was due for State adoption on October 23, 2015.
- RATS ID 2013-1: Parts 20, 30, 32, 33, 34, 35, 36, 37, 39 and 71 (78 FR 16922) that was due for State adoption on March 19, 2016.
- RATS ID 2013-2: Distribution of Source Material to Exempt Persons and to General Licensees and Revision of General License and Exemptions Parts 30, 40 and 70 (78 FR 32310) that was due for State adoption on August 27, 2016.

As of the week of the review, Kansas had submitted all regulation amendments necessary for adoption by January 2022 to the NRC for compatibility review, including the following five regulations overdue for adoption by Kansas:

- RATS ID 2015-1: Domestic Licensing of Special Nuclear Material – Written Reports and Clarifying Amendments Part 70 (79 FR 57721, 80 FR 143) that was due for State adoption on January 26, 2018.
- RATS ID 2015-2: Safeguards Information - Modified Handling Categorization, Change for Materials Facilities Parts 30, 37, 73 and 150 (79 FR 58664, 80 FR 3865) that was due for State adoption on January 28, 2018.
- RATS ID 2015-3: Revisions to Transportation Safety Requirements and Harmonization with International Atomic Energy Agency Transportation Requirements Part 71 (80 FR 33987) that was due for State adoption on August 15, 2020.
- RATS ID 2015-4: Miscellaneous Corrections Parts 37 and 40 (80 FR 45841) that was due for State adoption on September 2, 2018.
- RATS ID 2015-5: Miscellaneous Corrections Parts 19, 20, 30, 32, 37, 40, 61, 70, 71 and 150 (80 FR 74974) that was due for State adoption on December 31, 2018.

The staff member in charge of regulation adoption noted that the Program is waiting for the regulation package that was submitted in June 2018 to be approved before it submits another package that will include the above overdue regulations as well as additional regulations due for adoption. The regulation changes in the current package

are, in some cases, needed before the additional changes can be made. The staff member also noted that he had created a new handbook for regulations that addresses the process for regulation drafting and adoption.

The review team discussed potential compatibility issues with the staff member in charge of regulation adoption and Program management. The team determined that any incompatibilities presented by the amendments currently in Kansas's regulation adoption process as well as the amendments overdue for adoption did 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. Accordingly, the Program did not address any potential incompatibilities through legally binding requirements.

c. Evaluation

The team determined that during the review period Kansas met the performance indicator objectives listed in Section 4.1.a, except for:

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

The Program has made considerable progress towards regulation adoption since the 2018 Kansas IMPEP review, however, that progress has been hindered by the amount of time it takes for amendments to get through Kansas's regulation adoption process. This process is out of control of the Program and takes additional time since the 2018 review due to a new step being added. Additionally, the team believes the minor compatibilities caused by the regulation package in the adoption process, as well as the five amendments overdue for adoption, at the time of the review did 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.

Based on the IMPEP evaluation criteria in MD 5.6, the team recommends that Kansas's performance with respect to the indicator, Legislation, Regulations, and Other Program Elements, be found satisfactory, but needs improvement.

d. MRB Chair's Determination

The final report will present the MRB Chair's determination regarding this indicator.

4.2 SS&D Evaluation Program

The Kansas Agreement State Program has authority to conduct SS&D evaluations for byproduct, source, and certain special nuclear materials; however, Kansas did not conduct any SS&D evaluations during the review period. Accordingly, the team did not review this indicator. There are currently no SS&D manufacturers in Kansas. If Kansas were to receive an application for a SS&D action, it has a procedure in place to ensure the technical evaluation is completed by qualified SS&D reviewers. This practice is consistent with acceptable approaches used by other Agreement States.

#### 4.3 LLRW Disposal Program

In 1981, the NRC amended its Policy Statement, “Criteria for Guidance of States and NRC in Discontinuance of NRC 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. Those States with existing Agreements prior to 1981 were determined to have continued LLRW disposal authority without the need for an amendment. Although Kansas has such authority to regulate a LLRW disposal facility, the NRC has not required States to have a program for licensing a disposal facility until such time as the State has been designated as a host State for LLRW disposal. When an Agreement State has been notified or becomes aware of the need to regulate a LLRW disposal facility, it is expected to put in place a regulatory program that will meet the criteria for an adequate and compatible LLRW program. There are no plans for a commercial LLRW disposal facility in Kansas. Accordingly, the team did not review this indicator.

#### 5.0 SUMMARY

As noted in Sections 3.0 and 4.0 above, Kansas’s performance was found to be satisfactory for five out of six performance indicators reviewed and satisfactory, but needs improvement, for the indicator Legislation, Regulations, and Other Program Elements. The team did not make any recommendations.

The team acknowledges the performance improvements Kansas has made since 2018. As such, the team recommends that the period of Monitoring be discontinued as the Kansas Agreement State Program has demonstrated a sustained period of satisfactory performance.

Accordingly, the team recommends that Kansas 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 team recommends that the next full IMPEP review take place in approximately 4 years, with a periodic meeting in approximately 2 years.

## 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>
Lance Rakovan, NMSS	Team Leader Status of Materials Inspection Program Legislations, Regulations, and Other Program Elements
Stephen Poy, NMSS	Team Leader in Training Technical Staffing and Training Inspector Accompaniments
Jackie Cook, Region IV	Technical Quality of Licensing Actions
Leonardo Wardrobe, Region I	Technical Quality of Inspections Inspector Accompaniments
Lisa Forney, Pennsylvania	Technical Quality of Inspections Technical Quality of Licensing Actions
Brandon Juran, Minnesota	Technical Quality of Incident and Allegation Activities

## APPENDIX B

### INSPECTION ACCOMPANIMENTS

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

Accompaniment No.: 1	
Licensee: Bradken-Atchison / St. Joseph, Inc.	License No: 21-B092-01
License Type: Radiography	Priority: 1
Inspection Date: 10/6/2020	Inspector: JJ

Accompaniment No.: 2	
Licensee: Blue Pearl Operations, LLC	License No: 19-B820
Inspection Type: Veterinarian, Therapeutic	Priority: 3
Inspection Date: 10/7/2020	Inspector: JH

Accompaniment No.: 3	
Licensee: Futamura USA, Inc.	License No: 22-B1009
Inspection Type: Fixed Gauge	Priority: 5
Inspection Date: 10/8/2020	Inspector: CN

**Agenda for the Kansas Management Review Board Meeting  
February 4, 2021, 1:00 p.m. – 3:00 p.m. (ET), via Microsoft Teams**

1. Meeting Convened.
  - a. Announcement of public meeting.
  - b. Introduction of MRB members, review team members, State representatives, and other participants.
  - c. Request for members of the public to indicate they are participating and their affiliation.
2. MRB Chair Convenes the Business Portion of the Meeting.
  - a. Consideration of the Kansas Agreement State's IMPEP Report.
  - b. Presentation of Findings Regarding Kansas's Program and Discussion.
    - i. Technical Staffing and Training
    - ii. Status of Materials Inspection Program
    - iii. Technical Quality of Inspections
    - iv. Technical Quality of Licensing Actions
    - v. Technical Quality of Incident and Allegation Activities
    - vi. Legislation, Regulations, and Other Program Elements
  - c. IMPEP Team Recommendations.
  - d. MRB Consultation/Comments on Issuance of Report.
  - e. Request for comments from Kansas representatives, OAS Liaison, and State IMPEP team members.
  - f. Overall MRB Chair Determination.
3. MRB Chair Closes the Business Portion of the Meeting.
4. Questions or comments from members of the public.
5. Meeting adjournment.