



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

July 18, 2024

Francis Steitz, Director  
Division of Air Quality & Radiation  
Protection  
New Jersey Department of Environmental  
Protection  
Mail Code 401-02, P.O. Box 420  
Trenton, NJ 08625-0420

SUBJECT: NEW JERSEY FY2024 FINAL IMPEP REPORT

Dear Francis Steitz:

On June 27, 2024, the Management Review Board (MRB) met, which consisted of the U.S. Nuclear Regulatory Commission (NRC) senior managers and an Organization of Agreement States Liaison to the MRB, to consider the proposed final Integrated Materials Performance Evaluation Program (IMPEP) report on the New Jersey Agreement State Program. The MRB Chair found the New Jersey program adequate to protect public health and safety, and compatible with the NRC program.

The enclosed final report documents the IMPEP team's findings and summarizes the results of the MRB meeting. Based on the results of the IMPEP review, the next periodic meeting will take place in approximately 2 years with the next IMPEP review taking place in approximately 4 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 agencies continuing to work cooperatively in the future.

Sincerely,

A handwritten signature in black ink, appearing to read "RLewis".

Signed by Lewis, Robert  
on 07/18/24

Robert Lewis, Deputy Director  
Office of Nuclear Material Safety  
and Safeguards

Enclosures:

1. 2024 New Jersey IMPEP Report
2. 2024 New Jersey MRB Meeting Participants

F. Steitz

-2-

cc: Patrick Mulligan, Assistant Director  
Radiation Protection Element

Jenny Goodman, Manager  
Bureau of Environmental Radiation



INTEGRATED MATERIALS PERFORMANCE EVALUATION PROGRAM  
REVIEW OF THE NEW JERSEY AGREEMENT STATE PROGRAM

March 18–21, 2024

**FINAL REPORT**

## EXECUTIVE SUMMARY

The results of the Integrated Materials Performance Evaluation Program (IMPEP) review of the New Jersey Agreement State Program (New Jersey) are discussed in this report. The review was conducted from March 18–21, 2024. Inspector accompaniments were conducted February 14–15, February 23, and March 5–7, 2024.

New Jersey's performance was found satisfactory for the following five performance indicators: Technical Staffing and Training; Technical Quality of Inspections; Technical Quality of Licensing Actions; Technical Quality of Incident and Allegation Activities; and Legislation, Regulations, and Other Program Elements. New Jersey's performance was found satisfactory but needs improvement for the performance indicator Status of Materials Inspection Program.

As a result of issues regarding the radiation safety officer being listed as an authorized user without supporting documentation identified in Section 3.4, *Technical Quality of Licensing Actions*, the team is making the following recommendation that New Jersey:

- Perform a review of all research and development licenses to ensure that radiation safety officers who are also designated as authorized users on the licenses are appropriately qualified for the authorized use and take corrective actions as needed.

Accordingly, the MRB Chair found New Jersey's radiation control program adequate to protect public health and safety and compatible with the NRC's program. Based on the results of the IMPEP review, the next periodic meeting will take place in approximately 2 years with the next IMPEP review taking place in approximately 4 years.

## 1.0 INTRODUCTION

The New Jersey Agreement State Program (New Jersey) Integrated Materials Performance Evaluation Program (IMPEP) review was conducted on March 18–21, 2024, by a team of technical staff members from the U.S. Nuclear Regulatory Commission (NRC) and the States of Alabama and Tennessee. Team members are identified in Appendix A. Inspector accompaniments were conducted on February 14, 15, and 23, and March 5–7, 2024. The inspector accompaniments are identified in Appendix B. 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 July 24, 2019. Preliminary results of the review, which covered the period of March 30, 2019, to March 21, 2024, were discussed with New Jersey 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 New Jersey on December 8, 2023. New Jersey provided its response to the questionnaire on February 22, 2024. A copy of the questionnaire response is available in the NRC’s Agencywide Documents Access and Management System Accession Number [ML24061A212](#).

The team issued a draft report to New Jersey on April 21, 2024, for factual comment available in [ML24107B020](#). New Jersey responded to the draft report by letter dated May 24, 2024, from Francis C. Steitz, Director, Division of Air Quality and Radiation Protection in the New Jersey Department of Environmental Protection available in [ML24150A083](#). New Jersey had three comments related to the Status of Materials Inspection Program performance indicator.

The New Jersey Agreement State Program is administered by the Bureau of Environmental Radiation, which is in the Division of Climate, Clean Energy & Radiation Protection of the New Jersey Department of Environmental Protection. Organizational charts for New Jersey are available in [ML24061A166](#).

At the time of the review, New Jersey regulated 512 specific licenses authorizing possession and use of radioactive materials. The review focused on the radiation control program as it is carried out under Section 274b. (of the Atomic Energy Act of 1954, as amended) Agreement between the NRC and the State of New Jersey.

The team evaluated the information gathered against the established criteria for each common and applicable non-common performance indicators and made a preliminary assessment of New Jersey’s performance.

## 2.0 PREVIOUS IMPEP REVIEW AND STATUS OF RECOMMENDATIONS

The previous IMPEP review was conducted on March 25–29, 2019 available in [ML19176A361](#). The results of the review 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: None

Legislation, Regulations, and Other Program Elements: 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 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 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) [SA-103](#), "Reviewing the Common Performance Indicator: Technical Staffing and Training," and evaluated New Jersey'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) [IMC 1248](#), "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.

b. Discussion

The New Jersey radiation control program is comprised of 14 staff members consisting of 4 supervisory staff, 9 technical staff and 1 administrative position. This is equivalent to 10.1 full-time equivalents (FTE) for the radiation control program, when fully staffed. There were no vacancies at the time of the on-site review. During the review period, three of the staff members left the program and three staff members were hired. Staff positions were vacant up to 521 days. During the review period, New Jersey converted administrative positions into a technical staffing position to better support its Agreement State Program. As senior technical staff members exited the program, the positions were converted to entry level positions and subsequently filled.

Staff were very knowledgeable, well trained, and safety conscious. New Jersey ensured that all staff received the required core training courses, and that progress in obtaining interim and full qualification for licensing and inspection modalities was well documented with adequate justification provided. Staff who possessed advanced education degrees and pertinent experience prior to joining New Jersey were evaluated on a case-by-case basis and the rationale for granting equivalency was thoroughly indicated. The team noted that New Jersey's training and qualification program was compatible with the NRC's IMC 1248.

New Jersey deems staff fully qualified when an individual has obtained qualifications in two of the three focus areas, industrial section, medical section, and radiological and environmental section, that comprise the Agreement State Program. New Jersey staff can only perform inspections and licensing actions in focus areas for which they are qualified. New Jersey had six staff members who were fully qualified and seven individuals who are in the process of obtaining full qualification. Staff obtain refresher training across a broad range of health physics topics as well as specific licensing and inspection modalities. New Jersey ensured that staff received a minimum of 24-hours of retraining every 24-month cycle.

c. Evaluation

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

- d. The MRB Chair agreed with the team's recommendation and found New Jersey's performance with respect to this indicator satisfactory.

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

### **3.2 Status of Materials Inspection Program**

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 [SA-101](#), "Reviewing the Common Performance Indicator: Status of the Materials Inspection Program," and evaluated New Jersey'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 prescribed frequencies (<https://www.nrc.gov/materials/miau/mat-toolkits.html>).
- 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, "Materials Inspection Program," 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

New Jersey performed 425 Priority 1, 2, 3 inspections and 54 initial inspections during the review period. New Jersey conducted four Priority 1, 2, 3 inspections and seven initial inspections overdue, which equates to approximately two percent. Two overdue inspections were attributed to the licensees not performing work in the state, and in one instance the radiation safety officer was out of the country and unavailable for an initial inspection. The remaining overdue inspections were attributed to staff difficulties managing a heavy workload.

The team noted that Temporary Instruction (TI) [TI-003](#), "Evaluating the Impacts of the Coronavirus Disease 2019 Public Health Emergency as Part of the Integrated Materials Performance Evaluation Program," states, in part, that for inspections that exceed the scheduling window with overdue dates falling inside the defined time frame of the pandemic, the number of overdue inspections should be noted in the report but should not be counted, provided that the State continues to maintain health, safety, and security. Of the overdue inspections noted above, one inspection was performed overdue due to impacts related to the pandemic. During New Jersey's defined time frame of the pandemic, March 19, 2020, through March 4, 2022, New Jersey maintained health, safety, and security, therefore, the team did not include that inspection when performing the calculation.

New Jersey's inspection frequencies were consistent with the NRC's program except for fixed and portable gauges license types, which New Jersey inspects more frequently than the NRC. New Jersey also treats multi-site licensees as separate entities, each with their own license and each inspected at the required frequency, resulting in more frequent inspections than the NRC.



During the review period, New Jersey communicated inspection findings to the licensees beyond 30 days after the inspection exit, or 45 days after the team inspection exit, at a rate of 14.6 percent. New Jersey had been operating under an internal policy of communicating findings to the licensees within 90 days. This policy had not been identified as compatible with NRC inspection procedures program element. While New Jersey has been implementing this policy since the inception of its Agreement, it has not previously impacted New Jersey meeting the 30-day requirement. New Jersey notified the IMPEP team that they will implement the 30-day requirement and will incorporate it, along with other required changes, into their upcoming revision of IMC 2800 before the due date in June 2024.

New Jersey conducts reciprocity inspections using a procedure compatible with IMC 2800. Candidates are identified using a risk-informed approach and offered to inspectors for inspection. Based on their procedure, New Jersey was expected to annually inspect 15 percent of identified candidates. During the review period, New Jersey completed the following percentages of reciprocity candidates: 41 percent in 2019, 0 percent in 2020, 10 percent in 2021, 38 percent in 2022, and 11 percent in 2023, and 20 percent to date in 2024. Based on interviews with New Jersey staff and review of the IMPEP questionnaire, the IMPEP team determined that reciprocity inspections were not impacted by the Public Health Emergency, therefore, the review team did not apply TI-003 when evaluating this aspect of the performance indicator. New Jersey did not meet the criteria for three years during the review period. New Jersey indicated that they will be implementing corrective actions to ensure they are meeting their criteria to include closer monitoring of the reciprocity inspection program and assigning inspections to individual inspectors, as necessary.

#### c. Evaluation

The team determined that, during the review period, New Jersey met the performance indicator objectives listed in Section 3.2.a, except for:

- Inspection findings were not communicated to licensees in a timely manner (30 calendar days, or 45 days for a team inspection).
- Candidate licensees working under reciprocity were not inspected in accordance with the criteria prescribed in IMC 2800 and other applicable guidance or compatible Agreement State Procedure.

The team found that New Jersey did not issue inspection findings to licensees in a timely manner in more than a few, but less than most, cases. Because New Jersey inspectors routinely verbally communicate inspection findings and necessary items in need of corrective actions during the exit briefing, the overall impact on health and safety was small. During the review, New Jersey described their plan to include the 30-day inspection finding timeliness requirement in their upcoming revision of IMC 2800, which is due to be completed by June 2024. During the MRB meeting, New Jersey indicated that they will either implement the current report timeliness standard (30 calendar days or 45 days for team inspections), or submit a revised New Jersey IMC 2800 to the NRC for a compatibility review.

New Jersey did not meet the reciprocity inspection criteria defined in its procedure for three of five years during the review period. During the MRB meeting New Jersey indicated that they had implemented corrective actions to ensure the program meets its reciprocity inspection goals.

Based on the IMPEP evaluation criteria in MD 5.6, the team recommends that New Jersey's performance with respect to the indicator, Status of Materials Inspection Program, be found satisfactory, but needs improvement.

d. Management Review Board (MRB) Discussion and Chair's Determination

The MRB Chair agreed with the team's recommendation and found New Jersey's performance with respect to this indicator satisfactory but needs improvement.

### 3.3 Technical Quality of Inspections

Inspections, both routine and reactive, provide reasonable 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 inspection program.

a. Scope

The team used the guidance in [SA-102](#), "Reviewing the Common Performance Indicator: Technical Quality of Inspections," and evaluated New Jersey'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 compatible with NRC guidance.
- An adequate supply of calibrated survey instruments is available to support the inspection program.

b. Discussion

The team evaluated 21 inspection reports, including any associated enforcement documentation, and interviewed inspectors involved in materials inspections conducted during the review period. The team reviewed casework for inspections conducted by 14 of New Jersey's past and present inspectors during the review period which covered medical, industrial, commercial, academic, research, and service license types.

Team members performed six inspector accompaniments on February 14–15, 23, and March 5–7, 2024. The inspector accompaniments are identified in Appendix B. The team determined that the inspectors' performances observed during the inspector accompaniments indicated that the inspectors were knowledgeable of the requirements for

each license type, applied performance-based techniques, and were able to identify potential health, safety, and security concerns.

During the review period, supervisory accompaniments were performed annually for each inspector. The accompaniments were well documented and provided detailed feedback for the inspector's review.

Due to the pandemic, New Jersey established virtual inspection procedures which were implemented between March 19, 2020–March 4, 2022. The team noted that the start of the inspection would include a document review performed virtually by the inspectors. This document review was followed by an on-site visit scheduled within 90 days after the start of the inspection.

The team noted that New Jersey maintains a wide variety of appropriately calibrated radiation detection equipment for their inspection program. Detection instruments were available for gamma, beta, and alpha contamination, as well as dose rates.

c. Evaluation

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

d. MRB Discussion and Chair's Determination

The MRB Chair agreed with the team's recommendation and found New Jersey's performance with respect to this indicator 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, implementation of those procedures, and documentation of communications and associated actions between the New Jersey 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 [SA-104](#), "Reviewing the Common Performance Indicator: Technical Quality of Licensing Actions," and evaluated New Jersey'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, Title 10 of the *Code of Federal Regulations* (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 (RSRM) are appropriately implemented including the physical protection of Category 1 and Category 2 quantities of radioactive material (10 CFR Part 37 equivalent).
- Documents containing sensitive security information are properly marked, handled, controlled, and secured.

b. Discussion

During the review period, New Jersey performed 1615 radioactive materials licensing actions. The team evaluated 30 of those licensing actions. The licensing actions selected for review included 2 new applications, 11 amendments, 5 renewals, 3 decommissioning, 3 change of ownership notifications, 2 financial assurances, and 4 terminations. The team evaluated casework represented by eight license reviewers which included the following license types: broad scope, medical diagnostic and therapeutic, production of radioactive material using accelerator, commercial manufacturing and distribution, industrial radiography, research and development, academic, nuclear pharmacy, gauges, self-shielded irradiators, and service providers.

Licensing actions were well documented and addressed health, safety, and security issues. New Jersey developed and used a master checklist for every licensing action. The master checklist assisted the license reviewers in screening the license application and directed the license reviewers to complete other checklists, as required. Licensing actions were assigned to the license reviewers and tracked in the computer database system called New Jersey Environmental Management System. Completed licensing action were reviewed by a second qualified license reviewer.

All necessary statements and commitments from the licensee were obtained and appropriately tied down. License conditions were appropriate for each license and enforceable. All documentation related to the licenses were well maintained in the licensing files and accessible only by authorized persons. Licenses and licensing documents were not publicly available.

During the review of the financial assurance licensing actions, the team found that financial assurances for applicable licenses were requested, appropriately reviewed, and properly secured. The team interviewed an individual who has reviewed the decommissioning financial assurances and determined that the individual is knowledgeable.

The team found that New Jersey adapted and used the NRC standard license conditions and licensing guidance (such as NUREG-1556 Series, NUREG-1757 Series, Pre-licensing Guidance, RSRM checklist, and all licensing guidance for medical and animal use). New Jersey conducted pre-licensing site visits for all new licenses. New Jersey also utilized the Pre-licensing Guidance for reviewing the change of ownership notifications.

The team identified two instances on research and development licenses where the radiation safety officer was also listed on the license as an authorized user for all licensed material and use without supporting documentation. Based on the information documented in the licensing files, it appeared the licensees did not request authorization for those radiation safety officers to be listed as authorized users and did not provide training and experience documentation requirements to support the qualification for such authorized use. While the team did not identify similar instances when they reviewed additional license types, the team recommends New Jersey review all research and development licenses to ensure proper authorization is allowed.

#### c. Evaluation

The team determined that, during the review period, New Jersey met the performance indicator objectives listed in Section 3.4.a. Based on the criteria in MD 5.6, the team recommends that New Jersey's performance with respect to the indicator, Technical Quality of Licensing Actions, be found satisfactory.

Due to the issue regarding the radiation safety officer being listed as an authorized user without supporting documentation on research and development licenses, the team is making the following recommendation:

- Perform a review of all research and development licenses to ensure that radiation safety officers who are also designated as authorized users on the licenses are appropriately qualified for the authorized use and take corrective actions as needed.

#### d. MRB Discussion and Chair's Determination

The MRB Chair agreed with the team's recommendation and found New Jersey's performance with respect to this indicator 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, 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 [SA-105](#), "Reviewing the Common Performance Indicator: Technical Quality of Incident and Allegation Activities," and evaluated New Jersey'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 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, 38 incidents were reported to New Jersey. The team evaluated 19 radioactive materials incidents which included 5 lost or stolen radioactive materials, 2 potential overexposures, 4 medical events, 5 damaged equipment, and 3 leaking sources. New Jersey dispatched inspectors for on-site follow-up for 14 of the cases reviewed.

When notified of an incident, management and staff met to discuss the incident and determine the appropriate level of response which ranged from an immediate on-site response to reviewing the incident during the next routine scheduled inspection. Those determinations were made based on both the circumstances and the health and safety significance of the incident. The team found that New Jersey's evaluation of incident notifications and its response to those incidents was thorough, well balanced, complete, and comprehensive.

The team also evaluated New Jersey's reporting of incidents to the NRC's Headquarters Operations Officer (HOO). The team noted that in each case requiring HOO notification, New Jersey reported the incidents within the required time frame. The team also evaluated whether New Jersey had not reported any required incidents to the HOO. The team did not identify any missed reporting requirements.

During the review period, nine allegations were received by New Jersey. The team evaluated all nine allegations including four allegations that the NRC referred to the State.

The team found that inspectors properly evaluated each event, interviewed involved individuals, and thoroughly documented their findings. Although the enforcement program is not evaluated as part of the IMPEP process, the team noted that enforcement actions were taken where appropriate to address violations identified during follow-up inspections.

c. Evaluation

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

- d. The MRB Chair agreed with the team's recommendation and found New Jersey's performance with respect to this indicator satisfactory.

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 (LLRW) Disposal Program; and (4) Uranium Recovery (UR) Program. The NRC retains regulatory authority for SS&D Evaluation, LLRW Disposal, and UR Programs; therefore, only the first non-common performance indicator, Legislation, Regulations, and Other Program Elements, 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 NRC web site at the following address: <https://www.nrc.gov/materials/toolboxes/regulation.html>.

#### a. Scope

The team used the guidance in [SA-107](#), "Reviewing the Non-Common Performance Indicator: Legislation, Regulations, and Other Program Elements," and evaluated New Jersey'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://www.nrc.gov/materials/toolboxes/regulation.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 of 1954, 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

New Jersey's current effective statutory authority is contained in the Radiation Protection Act (N.J.S.A. 26:2D-1) and the Atlantic Interstate LLRW Compact Implementation Act. The Department of Environmental Protection is designated as the State's radiation control agency. No legislative amendments affecting the radiation control program were passed during the review period.

New Jersey incorporates NRC requirements by reference except for Title 10 of the *Code of Federal Regulations* (10 CFR) 20.1401 - 20.1405. The State has requirements compatible with 10 CFR 20.1401 - 20.1405. For NRC rules that New Jersey incorporates by reference, amendments to the requirements are automatically adopted by New Jersey without further rulemaking activities.

In instances where New Jersey needs to amend its rules, the administrative rulemaking process takes approximately 18 months from drafting to finalizing a rule. The public, NRC, other agencies, and potentially impacted licensees and registrants are offered an opportunity to comment during the process. The team noted that the State's rules and regulations were subject to "sunset" laws. New Jersey Radiation Protection Programs rules (N.J.S.A. 7:28) are set to expire February 19, 2027. To readopt the rules, a notice is filed for publication in the *New Jersey Register*.

During the review period, New Jersey submitted 12 final regulation amendments to the NRC for a compatibility review. None of the amendments were overdue for State adoption at the time of submission. Other program elements that have been designated as necessary for maintenance of an adequate and compatible program were adopted within six months or other time frame specified in the State and Tribal Communication Letter.

As discussed under the Status of the Materials Inspection Program indicator, New Jersey has a 90-day timeliness requirement for issuance of inspection reports. However, the NRC's inspection program has a 30-day timeliness requirement for inspection report issuance. While this is a compatibility issue, it does not impact the performance of this indicator.

c. Evaluation

The team determined that, during the review period, New Jersey met the performance indicator objectives listed in Section 4.1.a. Based on the criteria in MD 5.6, the team recommends that New Jersey's performance with respect to the indicator, Legislation, Regulations, and Other Program Elements, be found satisfactory.

d. MRB Discussion and Chair's Determination

The MRB Chair agreed with the team's recommendation and found New Jersey's performance with respect to this indicator satisfactory.



## 4.2 LLRW Disposal Program

Although New Jersey has authority to regulate a LLRW disposal facility, the NRC has not required States to have a program for licensing a disposal facility unit until such time as the State has been designated as a host State for a LLRW disposal facility. When an Agreement State has been notified or becomes aware of the need to regulate a LLRW disposal facility, it is expected to put in place a regulatory program that will meet the criteria for an adequate and compatible LLRW disposal program. There are no plans for a commercial LLRW disposal facility in New Jersey. Accordingly, the team did not review this indicator.

## 5.0 SUMMARY

New Jersey's performance was found satisfactory for the following five performance indicators: Technical Staffing and Training; Technical Quality of Inspections; Technical Quality of Licensing Actions; Technical Quality of Incident and Allegation Activities; and Legislation, Regulations, and Other Program Elements. New Jersey's performance was also found satisfactory but needs improvement for the performance indicator Status of Materials Inspection Program.

The team made one new recommendation that New Jersey:

- Perform a review of all research and development licenses to ensure that radiation safety officers who are also designated as authorized users on the license are appropriately qualified for the authorized use and take appropriate corrective action, if needed.

Accordingly, the MRB Chair found the New Jersey radiation control program adequate to protect public health and safety and compatible with the NRC's program. Based on the results of the IMPEP review, the next periodic meeting will take place in approximately 2 years with the next IMPEP review taking place in approximately 4 years.

## LIST OF APPENDICES

Appendix A	IMPEP Review Team Members
Appendix B	Inspector Accompaniments

## APPENDIX A

### IMPEP REVIEW TEAM MEMBERS

<b>Name</b>	<b>Areas of Responsibility</b>
Sherrie Flaherty, NMSS	Team Leader Status of Materials Inspection Program Inspector Accompaniments
Allyce Bolger, NMSS	Team Leader in Training Legislation, Regulations, and Other Program Elements Inspector Accompaniments
Lisa Forney, Region I	Technical Staffing and Training
Frank Tran, Region III	Technical Quality of Licensing Actions
Cortney Dillard, State of Alabama	Technical Quality of Inspections
Stuart Belva, State of Tennessee	Technical Quality of Incident and Allegation Activities

## APPENDIX B

### INSPECTOR ACCOMPANIMENTS

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

Accompaniment No.: 1	License No.: 506963
License Type: <i>Industrial Radiography</i>	Priority: 1
Inspection Date: 2/14/2024	Inspector's initials: CG

Accompaniment No.: 2	License No.: 535776
License Type: <i>Research and Development and special nuclear material plutonium unsealed, less than critical mass</i>	Priority: 3
Inspection Date: 2/15/2024	Inspector's initials: JT

Accompaniment No.: 3	License No.: 507164
License Type: <i>Portable Gauge</i>	Priority: 5
Inspection Date: 2/23/2024	Inspector's initials: DT

Accompaniment No.: 4	License No.: 450695
License Type: <i>Gamma Knife</i>	Priority: 2
Inspection Date: 03/05/2024	Inspector's initials: RP

Accompaniment No.: 5	License No.: 332593
License Type: <i>HDR</i>	Priority: 2
Inspection Date: 03/06/2024	Inspector's initials: CD

Accompaniment No.: 6	License No.: 440570
License Type: <i>HDR and therapy, written directive required</i>	Priority: 2
Inspection Date: 03/07/2024	Inspector's initials: KF

**NEW JERSEY MANAGEMENT REVIEW BOARD ATTENDANCE**  
**June 27, 2024, 1:00 p.m. – 3:33 p.m. EST, via Microsoft Teams**

**Management Review Board:**

- Rob Lewis, Deputy Director, Office of Nuclear Material Safety and Safeguards (NMSS), Acting MRB Chair;
- Jessica Bielecki, Deputy Assistant General Counsel for Rulemaking, Agreement States and Fee Policy;
- Kevin Williams, NMSS;
- Mohammed Shuaibi, Deputy Regional Administrator, NRC Region III;
- Lisa Bruedigan, Organization of Agreement States representative to the MRB, from the State of Texas.

**New Jersey (via Teams):**

- Patric Mulligan, Assistant Director, Radiation Protection Element;
- Jenny Goodman, Manager, Bureau of Environmental Radiation;
- Nancy Stanley, Radiological Assessment Team Coordinator;
- Jack Tway, Supervisor, Industrial Section;
- Deborah Wenke, Supervisor, Medical Section;
- James McCullough, Supervisor, Radiological & Environmental Assessment Section;
- Chris Giaquinto, Industrial Section;
- Sarah Sanderlin, Industrial Section;
- Daniel Tabor, Industrial Section;
- Claire Drozd, Medical Section;
- Karen Flanigan, Medical Section;
- Richard Perso, Medical Section;
- Kelly Karausky, Radiological & Environmental Assessment Section;
- Joseph Power, Radiological & Environmental Assessment Section; and
- Kaitlin Rainey, Radiological & Environmental Assessment Section.

**IMPEP Team:**

- Sherrie Flaherty, Team Leader, NMSS;
- Allyce Bolger, Team Leader in Training, NMSS;
- Frank Tran, NRC Region III;
- Courtney Dillard, State of Alabama; and
- Stuart Belva, State of Tennessee.

**NRC and OTHER MEMBERS OF THE PUBLIC:**

- Kevin Williams, NMSS;
- Adelaide Giantelli, NMSS;
- Robert Johnson, NMSS
- Duncan White, NMSS;
- Jeff Lynch, NMSS;
- Shawn Seeley, NRC Region I;
- Keisha Cornelius, State of Oklahoma;
- Travis Cartoski, State of North Carolina;
- Morgan Tawney, State of North Carolina.

NEW JERSEY FY2024 FINAL IMPEP REPORT DATE July 18, 2024

## DISTRIBUTION:

KWilliams, NMSS/MSST

PKrohn, R-I/DRS

JZimmerman, NMSS/DFM

SFlaherty, NMSS/MSST/SLPB

AGiantelli, NMSS/MSST/SMPB

ABolger, R-IV/DNMS/MIB

LForney, R-I/DRSS/CIRDA

FTran, R-III/DNMS/MLB

AWhite, NMSS/MSST/SLPB

RJohnson, NMSS/MSST/SLPB

LGillispie, NRR/DRMA

RidsEdoMailCenterResource, OEDO

RidsRgn1MailCenterResource, RGN I

RidsOgcMailCenterResource, OGC

RidsNmssOdResource, NMSS

IMPEP.Resource@nrc.gov

Astrainingandtravel.Resource@nrc.gov

**ADAMS Accession No.: ML24184B392**

OFFICE	R-IV/DNMS/MIB	NMSS/MSST/SLPB	NMSS/MSST/SLPB	NMSS/MSST/SMPB
NAME	ABolger <i>AB</i>	RJohnson <i>RJ</i>	SFlaherty <i>SF</i>	AGiantelli <i>AG</i>
DATE	Jul 2, 2024	Jul 2, 2024	Jul 2, 2024	Jul 9, 2024
OFFICE	NMSS/MSST	NMSS		
NAME	KWilliams <i>KW</i>	RLewis <i>RL</i>		
DATE	Jul 16, 2024	Jul 18, 2024		

**OFFICIAL RECORD COPY**