

# UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

August 18, 2021

Ms. Michele Roberge, MBA
Bureau Chief
Public Health Protection
Division of Public Health Services
Department of Health and Human Services
29 Hazen Drive
Concord, NH 03301-6504

Dear Ms. Roberge:

On July 20, 2021, the Management Review Board (MRB), which consisted of U.S. Nuclear Regulatory Commission (NRC) senior managers and an Organization of Agreement States MRB member, met to consider the results of the Integrated Materials Performance Evaluation Program (IMPEP) review of the New Hampshire Agreement State Program. The MRB Chair in consultation with the MRB, found the New Hampshire Agreement State Program adequate to protect public health and safety and compatible with the NRC's 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 current IMPEP review, the next full review of the New Hampshire Agreement State Program will take place in approximately 5 years, with a periodic meeting in approximately 2.5 years.

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

Sincerely,

Signed by Roberts, Darrell on 08/18/21

Darrell J. Roberts
Deputy Executive Director for Materials, Waste,
Research, State, Tribal, Compliance,
Administration, and Human Capital Programs
Office of the Executive Director for Operations

Enclosure:

New Hampshire Final IMPEP Report

CC:

Augustine Ong, Administrator (w/enclosure) Radiological Health Section

David Scalise, Manager (w/enclosure) Radioactive Materials Program SUBJECT: FINAL NEW HAMPSHIRE AGREEMENT STATE PROGRAM INTEGRATED MATERIALS PERFORMANCE EVALUATION PROGRAM REPORT

DATE August 18, 2021

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

April 5-9, 2021

**FINAL REPORT** 

#### **EXECUTIVE SUMMARY**

The results of the Integrated Materials Performance Evaluation Program (IMPEP) review of the New Hampshire Agreement State Program (the Program) are discussed in this report. The review was conducted from April 5-9, 2021, by a team of technical staff members assembled from the U.S. Nuclear Regulatory Commission (NRC) and the State of New Jersey. This review was conducted remotely due to travel restrictions associated with the COVID-19 Public Health Emergency. Three in-person inspector accompaniments were conducted on March 29-31, 2021.

The team found the New Hampshire's performance to be satisfactory for all indicators reviewed. These indicators are:

- Technical Staffing and Training;
- Status of Materials Inspection Program;
- Technical Quality of Inspections;
- Technical Quality of Licensing Actions;
- Technical Quality of Incident and Allegation Activities;
- Legislation, Regulations, and Other Program Elements; and
- Sealed Source, and Device Evaluation Program.

The team did not make new recommendations for the Program during the review. The team found that two recommendations issued by the Management Review Board (MRB) on February 14, 2017, be closed based on the Program's performance, and enhancements to its processes, and procedures. The recommendations involved (1) the Program's inspection frequency of licensees authorized for High Dose Rate Remote Afterloaders, and (2) the review of amendments that added Radiation Safety Officers to medical licenses whose qualifications did not meet the Program's regulatory requirements at the time of issuance.

Accordingly, the team recommended, and the MRB Chair agreed, that the New Hampshire Agreement State Program be found adequate to protect public health and safety, and compatible with the NRC's program. Since this is the second consecutive IMPEP review with all performance indicators being found satisfactory, the team recommended, and the MRB Chair agreed, that the next IMPEP review take place in approximately 5 years with a periodic meeting in approximately 2.5 years.

#### 1.0 INTRODUCTION

The New Hampshire Agreement State Program (the Program) review was conducted remotely from April 5-9, 2021, by a team of technical staff members assembled from the U.S. Nuclear Regulatory Commission (NRC) and the State of New Jersey. Team members are identified in Appendix A. This review was conducted remotely due to travel restrictions imposed by the COVID-19 Public Health Emergency (PHE). Inspector accompaniments were conducted in-person prior to the review. 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 November 19, 2016 to April 9, 2021, were discussed with New Hampshire managers on the last day of the review.

In preparation for the review, the team sent New Hampshire a questionnaire addressing the common and non-common performance indicators was initially sent informally via electronic mail on January 14, 2021, and later formally by the Program Office via electronic mail on February 26, 2021. New Hampshire provided its response to the questionnaire on March 19, 2021. A copy of the questionnaire response is available in the NRC's Agencywide Documents Access and Management System (ADAMS) using the Accession Number ML21089A238.

The New Hampshire Agreement State Program is administered by the Radiological Health Section which is located within the Bureau of Public Health Protection, Division of Public Health Services. The Division is part of the Department of Health and Human Services. Organization charts for New Hampshire are available in ADAMS using the Accession Number ML21089A230.

A draft of this report was issued to New Hampshire on May 20, 2021, for factual review and an opportunity to comment (ADAMS Accession Number ML21126A185). New Hampshire responded to the draft report with minor comments via letter dated June 15, 2021, from Michele Roberge, the Chief of the Bureau of Public Health Protection (ADAMS Accession Number ML21168A091). The Management Review Board (MRB) was convened on May 6, 2021, to discuss the team's findings and recommendations. This meeting was conducted remotely given travel restrictions imposed by the COVID-19 PHE.

At the time of the review, New Hampshire regulated 71 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 Hampshire.

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 New Hampshire Agreement State Program's performance.

## 2.0 PREVIOUS IMPEP REVIEW AND STATUS OF RECOMMENDATIONS

The previous IMPEP review concluded on November 14-18, 2016. The final report is available in ADAMS using the Accession Number ML17052A322. The results of the review are as follows:

Technical Staffing and Training: Satisfactory

Recommendation: None

Status of Materials Inspection Program: Satisfactory

Recommendation: Following the 2016 IMPEP review, the MRB recommended that Program management implement a mechanism to ensure that licenses with more than one program code authorized by the license are inspected at the required frequency assigned to each program code.

Status: During the MRB meeting for the 2016 IMPEP review, the MRB noted that on three occasions, the Program had not inspected High Dose Rate (HDR) remote afterloader brachytherapy devices at the required two-year inspection frequency as identified in Inspection Manual Chapter (IMC) 2800. These instances occurred when an HDR was authorized on the license of a medical facility having multiple inspection frequencies, with at least one being greater than the HDR two-year inspection interval. The inspections exceeded the shorter inspection interval and occurred at the longer inspection interval. To correct this misunderstanding, the Program identified all the medical licenses where an HDR had been authorized and corrected the associated inspection frequency.

During the 2021 IMPEP review, the team confirmed that the Program tracks and inspects HDR licenses at a two-year inspection interval. The Program updated its license reviewer guidance to clarify that if the addition of a modality to a medical license could impact the priority of an inspection, then the inspection tracking system must be adjusted to the more frequent inspection interval. Peer reviews performed on licensing actions also consider the impact an amendment may have on the license inspection priority. Based on these changes, the team believes that the Program has implemented a mechanism to ensure that licensees with more than one program code authorized by the license are inspected at the required frequency assigned to each program code.

The team concluded that this recommendation should be closed.

Technical Quality of Inspections: Satisfactory

Recommendation: None

Technical Quality of Licensing Actions: Satisfactory

Recommendation: Following the 2016 IMPEP review, the MRB recommended that Program management review the qualifications of three medical Radiation Safety Officers (RSOs) who did not meet the current medical regulations in New Hampshire and implement a mechanism to ensure that the named RSOs on all medical licenses meet New Hampshire's regulatory requirements.

Status: During the 2021 IMPEP review, the team confirmed that the Program had revised its procedures and provided staff training on the approval of medical RSOs. The Program revised their existing medical Authorized User review checklist to include RSOs and Authorized Medical Physicists. In addition, a peer review section was added to the license action tracking form used for all licensing actions. This is in addition to the management review of documentation. The team evaluated case files for amendments

and renewals that authorized medical RSOs and found that Program staff verified that the qualifications of each RSO met New Hampshire's regulatory requirements.

The team concluded that this recommendation should be closed.

Technical Quality of Incident and Allegation Activities: Satisfactory

Recommendation: None

Legislation, Regulations and Other Program Elements: Satisfactory

Recommendation: None

Sealed Source and Device Program: 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 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 New Hampshire'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. <u>Discussion</u>

The Program is composed of five staff members, which equals four full-time equivalents (FTE) for the radiation control program. At the time of the review, there were no vacancies. During the review period, the Program Manager left the Program, a staff member was internally promoted to that Program Manager position, and one new staff member was externally hired to fill the resulting vacancy. The external hiring action was completed within 6 months.

The Program has a training and qualification program compatible with the NRC's IMC 1248. The Program's qualification process uses a combination of on-the-job training and NRC sponsored courses. The team noted that qualified staff received the 24-hour refresher training as detailed in the NRC IMC 1248.

The team noted that, although the COVID-19 PHE has reduced the number of in-person training opportunities, there have been no adverse impacts to the qualification process. The Program's staff continues to enroll in NRC virtual classes, when available. The Program has also 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, New Hampshire met the performance indicator objectives listed in Section 3.1.a. Based on the criteria in MD 5.6, the team recommended that New Hampshire's performance with respect to the indicator, Technical Staffing and Training, be found satisfactory.

#### d. MRB Chair's Determination

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

## 3.2 Status of Materials Inspection Program

Periodic inspections of licensed operations are essential to ensure that activities are being conducted in compliance with regulatory requirements and consistent with good safety 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 New Hampshire'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

New Hampshire performed 52 Priority 1, 2, 3, and initial inspections during the review period. The team found that only one Priority 2 inspection had been performed overdue during the review period and was identified as part of an issue noted during the 2016 IMPEP review. This resulted in an overall overdue inspection rate of 1.9 percent for the review period.

The 2016 IMPEP review team found that the correct inspection frequency was not used on three occasions because of a misunderstanding of the requirements for inspecting facilities having multiple inspection codes. At the 2017 MRB meeting, MRB members recommended that the Program implement a mechanism to ensure that licenses with more than one program code authorized by the license, are inspected at the required frequency assigned to each program code. The IMPEP team reviewed the casework to confirm that changes had been implemented and verified that this issue has been corrected.

The team determined that the Program's inspection frequencies are the same for similar license types found in IMC 2800. Additionally, the team determined that in each year of the review period, the Program performed 20 percent of candidate reciprocity inspections as identified in their procedure.

The team reviewed the 52 inspection reports for the Priority 1, 2, and 3 inspections performed during the review period, and found that 100 percent of the inspection findings were communicated to the licensees at the NRC goal of 30 days. New Hampshire's objective is to issue inspection findings within 10 working days after completing the inspection. The team noted that nearly all of the inspection reports were issued within the 10 working day period established in New Hampshire's goal, and all were within NRC's 30 day goal.

#### c. Evaluation

The team determined that, during the review period, New Hampshire met the performance indicator objectives listed in Section 3.2.a. Based on the criteria in MD 5.6,

the team recommended that New Hampshire's performance with respect to the indicator, Status of Materials Inspection Program, be found satisfactory.

#### d. MRB Chair's Determination

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

## 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 State Agreements procedure SA-102, "Reviewing the Common Performance Indicator: Technical Quality of Inspections," and evaluated New Hampshire'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 20 inspection reports and associated enforcement documentation. The team reviewed casework for inspections conducted by all the Program's current and former inspectors, and covered various medical, industrial, commercial, academic, research, service provider, veterinary, fixed and portable gauges, and reciprocity licenses.

Based on its review of inspection documentation, the team found that inspections were conducted with enough detail and depth to evaluate licensee performance in meeting regulatory requirements and license commitments. Inspection procedures are compatible with NRC guidance. Citations issued to licensees due to violations of New Hampshire's radioactive materials regulations, or for failure to perform activities as specified by license conditions, were well supported in the inspection reports. Inspection documentation was complete and, when required, was marked to prevent inadvertent

public disclosure. In all cases, enforcement documentation was complete and indicated that the Program sufficiently evaluates licensee corrective actions.

The 2016 IMPEP review team found that New Hampshire approved three medical Radiation Safety Officers (RSOs) who did not meet current medical requirements. At the 2017 MRB meeting, MRB members recommended New Hampshire review these individuals' qualifications and implement a mechanism to ensure that the named RSOs on all medical licenses meet New Hampshire's regulatory requirements. The IMPEP team reviewed the casework to confirm that changes had been implemented and verified that this issue had been corrected.

A team member conducted three in-person inspector accompaniments on March 29-31, 2021. No performance issues were noted during the accompaniments. The team found that inspectors were well-prepared and thorough, and assessed the impact of licensed activities on health, safety, and security. Inspectors observed the use of radioactive materials, whenever possible. During interviews of licensee staff, inspectors used open ended questions, and were able to develop a basis of confidence that radioactive materials were being used safely and securely. Any findings observed were brought to the user's attention at the time of the inspection and again to the licensee's management during the inspection closeout. The inspector accompaniments are identified in Appendix B.

Typically, the Program conducts unannounced, performance-based inspections unless situations exist that necessitate announcing them. Throughout the COVID-19 PHE, the Program continued to perform onsite inspections unless the licensees were not allowing outside individuals into their facilities. On the rare occasions when this occurred, the Program conducted a remote inspection.

The team found that all supervisory accompaniments were performed annually for all qualified inspectors who performed inspections during each year of the review period. The Program Manager also performs several inspections each year and is accompanied by the Program Administrator annually.

The team determined that the Program has an adequate supply of properly calibrated radiation detection equipment to support the inspection program. Calibrations are performed annually. In all inspection records reviewed, the team found that surveys had been performed with properly calibrated survey equipment. The Program also has laboratory services available for sample analysis when needed.

## c. Evaluation

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

#### d. MRB Chair's Determination

The MRB Chair agreed with the team's recommendation and found New Hampshire'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 Hampshire 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 New Hampshire'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, New Hampshire performed 419 radioactive materials licensing actions. The team evaluated 17 of those licensing actions: 3 new applications, 9 amendments, 3 renewals, and 2 terminations. The team evaluated casework which included the following license types and actions: broad scope, medical diagnostic and therapeutic, commercial manufacturing and distribution, industrial radiography, academic broad scope, gauges, self-shielded irradiator, civil defense, mobile medical service, and financial assurance. The casework sample represented work from 5 license reviewers.

The team reviewed New Hampshire's procedures, checklists, and license guides, which are equivalent to the NRC NUREG-1556 series. New Hampshire's licensing guides provide clear guidance for various licensing action types including new, renewals, terminations, and change of control actions. Licensing actions are reviewed by a manager and by a secondary reviewer who is qualified to perform that type of review. Timeliness goals are established to ensure responsiveness to licensees or applicants, but also provide licensees or applicants sufficient time to respond to requests for information, particularly when the requests are complex.

The team found that licensing actions were well documented and properly addressed health, safety, and security issues. The team also found that deficiency letters were clear and used at appropriate times. License reviewers complete a summary sheet for each licensing action describing the review and the changes made to the license. Reviews of renewals included an analysis of the licensee's inspection and enforcement history.

The team evaluated the implementation of the Pre-Licensing Guidance (PLG) and Risk Signification Radioactive Materials (RSRM) checklists. New Hampshire conducted pre-licensing visits for unknown entities in accordance with the checklist, and properly implemented the PLG. For applications with RSRM, New Hampshire completed the RSRM checklist and performed onsite security reviews, as necessary. In addition, the team determined that documents containing sensitive security information were marked, handled, and secured appropriately.

#### c. Evaluation

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

## d. MRB Chair's Determination

The MRB Chair agreed with the team's recommendation and found New Hampshire'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 State Agreements procedure SA-105, "Reviewing the Common Performance Indicator: Technical Quality of Incident and Allegation Activities," and evaluated New Hampshire'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
- Onsite 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, 43 incidents were reported to the Program. The team evaluated 13 radioactive materials incidents: two responses to contaminated waste, two misadministration's which were not medical events, two medical events, two damaged equipment, one call from concerned citizens to retrieve radioactive materials, one possession for unauthorized radioactive materials, one traffic accident, one report of possible contamination at a licensee facility, and one leaking source. New Hampshire dispatched inspectors for onsite follow-up for five of the cases reviewed.

The team found that inspectors properly evaluated each event, interviewed involved individuals, and thoroughly documented their findings. Enforcement actions were taken where appropriate. When an event is reported to the Program, the Program Manager and staff evaluates the event to determine its health and safety significance and then decides on the appropriate response. That response can range anywhere from responding immediately to reviewing the event during the next inspection. For each incident that was determined to have potential health and safety significance, the Program responded immediately. The team also found that the Program responded to events in accordance with its established procedure.

The team noted three incidents that were not reported to the Headquarters Operations Officer (HOO), as required. The events involved one missing static eliminator and two instances of damaged equipment, specifically stuck shutters on two fixed gauges. None of the events resulted in exposure to the public. However, the team noted that New Hampshire reported the events to Nuclear Materials Event Database (NMED). The Program reported these events to the HOO during the review. Although these incidents were not reported as required, the team noted that New Hampshire followed their response procedures to investigate and fully documented these events.

During the review period, three allegations were received directly by the Program. One allegation was referred by NRC during the review period. 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 when known, and allegers' identities were protected whenever possible in accordance with State law.

#### c. Evaluation

The team determined that during the review period New Hampshire met the performance indicator objectives listed in Section 3.5.a, except for:

• Notifications are made to the NRC Headquarters Operations Center for incidents requiring a 24-hour or immediate notification to the Agreement State

The team found that it was the Program's understanding that incidents reported to NMED would automatically be picked up by the HOO, entered into the system, and then meet HOO timeliness reporting requirements. The review team clarified the process with the Program explaining that events that meet HOO reporting criteria must be reported directly to the HOO and, after 5 days, those reports become public and are then

picked up by the NMED contractor who automatically opens up an entry into NMED for the Program. Once that process was clarified, the Program then immediately reported the three events to the HOO during the IMPEP review. While these three incidents did not meet this performance indicator objective, the team considered the low health and safety significance of these events, the lack of personnel or public exposure, and the Program's immediate corrective actions, and determined that this minor misunderstanding was not sufficient, by itself, to downgrade this performance indicator.

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

## d. MRB Chair's Determination

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

#### 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 a 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 NRC Web site at the following address: <a href="https://scp.nrc.gov/regtoolbox.html">https://scp.nrc.gov/regtoolbox.html</a>.

#### 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 New Hampshire's performance with respect to the following performance indicator objectives. A complete list of regulation amendments can be found on the NRC Web site 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

New Hampshire became an Agreement State on May 16, 1966. The New Hampshire Agreement State Program's current effective statutory authority is contained in the New Hampshire Revised Statutes Annotated, 1990, Title 125. The Section is designated as the State's radiation control agency. No legislation affecting the radiation control program was passed during the review period.

New Hampshire's administrative rulemaking process takes approximately 20 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. Comments are considered and incorporated, as appropriate, before the regulations are finalized, and approved by the New Hampshire Rulemaking Committee. The team noted that New Hampshire's rules and regulations are subject to "sunset" laws. Regulations whose initial filing dates occurred prior to September 11, 2011, expire 10 years after the rule's effective date. New Hampshire has a system in place to track rules that are subject to expiration to begin the renewal process.

During the review period, New Hampshire submitted a total of five proposed and final regulation amendments to the NRC for a compatibility review. No legally binding conditions were sent to the NRC for a compatibility review during the review period, and none of the amendments submitted were overdue for State adoption at the time of submission. Additionally, two amendments due in the future have also been adopted ahead of schedule and three other future amendments are currently in the process for adoption.

The team also reviewed guidance documents that New Hampshire uses to meet the requirements of other program elements (e.g., Pre-Licensing Guidance, Inspection Procedures, etc.) that the NRC has designated as necessary for the maintenance of an adequate and compatible program. These are living documents and changes are made as needed. The team found that all documents reviewed were compatible with NRC requirements.

## c. Evaluation

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

#### d. MRB Chair's Determination

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

## 4.2 SS&D Evaluation Program

Adequate technical evaluations of SS&D designs are essential to ensure that SS&Ds will maintain their integrity and that the design is adequate to protect public health and safety. NUREG-1556, Volume 3, "Consolidated Guidance about Materials Licenses: Applications for Sealed Source and Device Evaluation and Registration," provides information on conducting SS&D reviews and establishes useful guidance for teams. Three sub elements: technical staffing and training, technical quality of the product evaluation program, and evaluation of defects and incidents regarding SS&D's, are evaluated to determine if the SS&D program is satisfactory. Agreement States with authority for SS&D evaluation programs who are not performing SS&D reviews are required to commit in writing to having an SS&D evaluation program in place before performing evaluations.

#### a. Scope

The team used the guidance in State Agreements procedure SA-108, "Reviewing the Non-Common Performance Indicator: Sealed Source and Device Evaluation Program," and evaluated New Hampshire's performance with respect to the following performance indicator objectives:

## **Technical Staffing and Training**

- A well-conceived and balanced staffing strategy has been implemented throughout the review period
- Qualification criteria for new technical staff are established and are being followed or qualification criteria will be established if new staff members are hired
- Any vacancies, especially senior-level positions, are filled in a timely manner
- Management is committed to training and staff qualification
- Individuals performing SS&D evaluation activities are adequately qualified and trained to perform their duties
- SS&D reviewers are trained and qualified in a reasonable period of time

## Technical Quality of the Product Evaluation Program

• SS&D evaluations are adequate, accurate, complete, clear, specific, and consistent with the guidance in NUREG-1556, Volume 3

## **Evaluation of Defects and Incidents**

- SS&D incidents are reviewed to identify possible manufacturing defects and the root causes of these incidents
- Incidents are evaluated to determine if other products may be affected by similar problems. Appropriate action and notifications to the NRC, Agreement States, and others, as appropriate, occur in a timely manner

#### b. Discussion

#### **Technical Staffing and Training**

New Hampshire has two staff qualified to perform SS&D reviews. The Program has another staff member in the process of qualification. New Hampshire has a training and qualification program equivalent to NRC training requirements listed in IMC 1248, Appendix D. The team determined that the Program is appropriately staffed and trained to carry out the SS&D program.

## <u>Technical Quality of the Product Evaluation</u>

New Hampshire has one active SS&D licensee. The team evaluated the 3 SSD actions processed during the review period. These actions included one new application and two inactivations. Based on the information reviewed, the team determined that the technical evaluation of the applications was adequate, accurate, complete, clear, specific, and consistent with the guidance in NUREG-1556, Volume 3, Revision 2.

The Program provided SS&D registry review support to the Maine and North Carolina Agreement State programs during the review period. New Hampshire processed two new SS&D registrations during the review period for the Maine Program and two inactivations for the North Carolina Program. At the conclusion of the process, the Maine certificates were provided to their Program and entered into the SS&D registry as Maine certificates.

#### Evaluation of Defects and Incidents Regarding SS&Ds

No incidents involving SS&D registered products occurred during the review period. Incident procedures are in place should a SS&D-related incident occur. The team found that the Program is aware of the need to review SS&D-related incidents including those related to SS&D defects as potentially generic in nature with possible wide-ranging effects.

## c. Evaluation

The team determined that during the review period New Hampshire met the performance indicator objectives listed in Section 4.2.a. Based on the IMPEP evaluation criteria in MD 5.6, the team recommended that New Hampshire's performance with respect to the indicator, SS&D Evaluation Program, be found satisfactory.

#### d. MRB Decision

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

## 4.3 <u>LLRW Disposal Program</u>

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

## 5.0 SUMMARY

As noted in Sections 3.0 and 4.0 above, New Hampshire's performance was found to be satisfactory for all performance indicators reviewed. The team did not make any new recommendations and determined that the two recommendations noted during the 2016 IMPEP review should be closed.

Accordingly, the team recommended, and the MRB Chair agreed, that New Hampshire be found adequate to protect public health and safety, and compatible with the NRC's program. The MRB Chair also agreed with the team's finding that the two recommendations issued by the 2017 MRB be closed. Since this is the second consecutive IMPEP review with all performance indicators being found satisfactory, the team recommended, and the MRB Chair agreed, that the next IMPEP review take place in approximately 5 years with a periodic meeting in approximately 2.5 years.

# LIST OF APPENDICES

Appendix A IMPEP Review Team Members

Appendix B Inspector Accompaniments

# APPENDIX A

# IMPEP REVIEW TEAM MEMBERS

Name	Areas of Responsibility
Randy Erickson, Region IV	Team Leader Technical Quality of Inspections Legislation, Regulations, and Other Program Elements
Farrah Gaskins, Region I	Technical Staffing and Training Technical Quality of Incidents and Allegations
Lymari Sepulveda, NMSS	Status of Materials Inspection Program Sealed Source and Device Evaluation Program
Karen Flanigan, State of New Jersey	Technical Quality of Licensing Actions
Monica Ford, Region I	Inspector Accompaniments

# APPENDIX B

# INSPECTOR ACCOMPANIMENTS

The following inspector accompaniments were performed prior to the remote IMPEP review:

Accompaniment No.: 1	License No.: 465R
License Type: Industrial Radiography	Priority: 2
Inspection Date: 03/29/21	Inspector: AT
Accompaniment No.: 2	License No.: 345R
License Type: Portable Gauge	Priority: 5
Inspection Date: 03/30/21	Inspectors: AB
Accompaniment No.: 3	License No.: 381R
License Type: Service Provider (Part 37)	Priority: 5
Inspection Date: 03/31/21	Inspectors: TL