

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

April 14, 2016

| MEMORANDUM TO: | Chairman Burns<br>Commissioner Svinicki<br>Commissioner Ostendorff<br>Commissioner Baran   |  |  |
|----------------|--|--|--|
| FROM:          | Scott W. Moore, Acting Director / <b>RA/JMunday for SMoore</b><br>Office of Nuclear Material Safety<br>and Safeguards            |  |  |
| SUBJECT:       | REPORT ON AGREEMENT STATES' AND U.S. NUCLEAR<br>REGULATORY COMMISSION'S RADIOACTIVE MATERIALS<br>PROGRAMS FOR CALENDAR YEAR 2015 |  |  |

Enclosed is the annual report to inform the Commission of the status of the Agreement State

and U.S. Nuclear Regulatory Commission (NRC) radioactive materials programs, as required by

the June 30, 1997, Staff Requirements Memorandum on SECY-97-054, "Final

Recommendations on Policy Statements and Implementing Procedures for: 'Statement of

Principles and Policy for the Agreement State Programs' and 'Policy Statement on Adequacy

and Compatibility of Agreement State Programs."

Enclosure: Report on Agreement States' and NRC's Radioactive Materials Programs

cc: SECY OGC OCA OPA CFO EDO

CONTACT: Lisa Dimmick, NMSS/MSTR (301) 415-0694 April 14, 2016

| MEMORANDUM TO: | Chairman Burns<br>Commissioner Svinicki<br>Commissioner Ostendorff<br>Commissioner Baran   |  |
|----------------|--|--|
| FROM:          | Scott W. Moore, Acting Director /RA/JMunday for SMoore   |  |
|                | Office of Nuclear Material Safety<br>and Safeguards  |  |
| SUBJECT:       | REPORT ON AGREEMENT STATES' AND U.S. NUCLEAR<br>REGULATORY COMMISSION'S RADIOACTIVE MATERIALS<br>PROGRAMS FOR CALENDAR YEAR 2014 |  |

Enclosed is the annual report to inform the Commission of the status of the

U.S. Nuclear Regulatory Commission (NRC) and Agreement State radioactive materials

programs, as required by the June 30, 1997, Staff Requirements Memorandum on

SECY-97-054, "Final Recommendations on Policy Statements and Implementing Procedures

for: 'Statement of Principles and Policy for the Agreement State Programs' and 'Policy

Statement on Adequacy and Compatibility of Agreement State Programs."

Enclosure:

Report on Agreement States' and NRC's Radioactive Materials Programs

cc: SECY

OGC OCA OPA CFO EDO

CONTACT: Lisa Dimmick, NMSS/MSTR (301) 415-0694

DISTRIBUTION: MSTR r/f RidsEdoMailCenter NMSS\_TicketCloseouts

| WITS 199500008/nmss201500269 | ML16077A283 |
|------------------------------|-------------|
|                              |             |

| OFFICE | NMSS/MSTR | NMSS/MSTR | NMSS/MSTR | TechEd | NMSS                  |
|--------|-----------|-----------|-----------|--------|-----------------------|
| NAME   | LDimmick  | PMichalak | DCollins  | WMoore | JMunday for<br>SMoore |
| DATE   | 3/21/16   | 3/29/16   | 4/7/16    | 4/7/16 | 4/14/16               |

## ANNUAL REPORT FOR U.S. NUCLEAR REGULATORY COMMISSION AND AGREEMENT STATE RADIOACTIVE MATERIALS PROGRAMS

## CALENDAR YEAR 2015

The U.S. Nuclear Regulatory Commission (NRC) uses the Integrated Materials Performance Evaluation Program (IMPEP) to periodically review the Agreement State and the NRC radioactive materials programs to ensure that public health and safety are adequately protected from the potential hazards associated with the use of radioactive materials and to ensure that Agreement State programs are compatible with the NRC's program. Through IMPEP reviews and Management Review Board (MRB) meetings, a radiation control program (i.e., Agreement State program or the NRC regional program) is determined to be adequate to protect public health and safety if administration of the program provides reasonable assurance of protection of public health and safety in regulating the use of radioactive material. IMPEP review adequacy findings result in one of three conclusions: Adequate to Protect Public Health and Safety, Adequate but Needs Improvement, or Inadequate to Protect Public Health and Safety. An Agreement State radiation control program is determined to be compatible with the Commission's regulatory program when the State's program does not create conflicts, duplications, gaps, or other conditions that jeopardize an orderly pattern in the regulation of agreement material (source, byproduct, and small quantities of special nuclear material as identified by Section 274b. of the Atomic Energy Act, as amended) on a nationwide basis. Compatibility focuses primarily on the potential effects of State action or inaction either on the regulation of agreement material on a nationwide basis or on other jurisdictions. The IMPEP review compatibility findings for Agreement State Programs are either Compatible or Not Compatible.

The frequency of IMPEP reviews for a particular program range from 1-5 years, based on the program's performance. All reviews are conducted in accordance with the NRC Management Directive (MD) 5.6, "Integrated Materials Performance Evaluation Program (IMPEP)," dated February 26, 2004, and are conducted by teams of NRC and Agreement State staff members. The IMPEP teams use the established criteria in MD 5.6, guidance documents maintained by the Office of Nuclear Material Safety and Safeguards, and skills and knowledge acquired at a 2 1/2-day training program for IMPEP team members to effectively assess each program's adequacy to protect public health and safety and each Agreement State program's compatibility with the NRC's program. The NRC staff also conducts periodic meetings between IMPEP reviews, in order for the NRC and the Agreement States to remain knowledgeable of the status of each other's program.

Attachment 1 is the Summary of Agreement States' Adequacy and Compatibility Statuses as of February 10, 2016. Regarding the adequacy provision of Section 274b. of the Atomic Energy Act (the Act) of 1954, as amended, 32 of the 37 Agreement State programs currently have a program finding of "adequate to protect public health and safety." The remaining five states, Georgia, Kentucky, Massachusetts, North Carolina, and Rhode Island have program findings of "adequate to protect public health and safety, but needs improvement." Regarding the compatibility provision of Section 274b. of the Act, 33 of the 37 Agreement State programs have a program finding of "compatible with the NRC's program." The remaining four states, Colorado, New Hampshire, New York, and Utah have program findings of "not compatible with

Enclosure

NRC's program." All NRC radioactive materials programs currently have program findings of "adequate to protect public health and safety," as shown in Attachment 2 of this report.

In accordance with MD 5.6, the NRC takes a graded approach to addressing programmatic weaknesses in Agreement State Programs. Under these processes (e.g., monitoring, heightened oversight), the NRC staff works collaboratively with the Agreement States to ensure that they have a full understanding of the issues that need to be addressed and implement appropriate measures to progress toward re-establishing a fully satisfactory program. In the least severe, and most frequent cases, Agreement State Programs are placed on monitoring. For monitoring, a State's managers and staff must participate in quarterly calls with the NRC staff to discuss program status. Under heightened oversight, a State is required to develop a Program Improvement Plan (Plan) to address IMPEP findings and recommendations. The Plan is submitted to NRC for approval prior to implementation. A State on heightened oversight must also submit status reports prior to bimonthly conference calls conducted by the NRC staff with State program managers and staff to discuss program status. The decision to put an Agreement State program on either monitoring or heightened oversight is done at the direction of the MRB. An Agreement State program can be placed on monitoring or heightened oversight as a result of an IMPEP review or periodic meeting.

Currently, four States are on monitoring and one State is on heightened oversight. Discussions of each of the States on monitoring and heightened oversight are provided in the corresponding sections below. A summary of recent activities related to States on monitoring or heightened oversight is presented in Attachment 3. Also provided below are discussions for the States of California and North Dakota as these states were removed from monitoring following their respective 2015 IMPEP reviews. In addition, discussions on Colorado, Kentucky, North Carolina, and Utah are included because these States are not subject to monitoring or heightened oversight but have findings of either "not compatible" or "adequate to protect public health and safety, but needs improvement."

#### STATES ON MONITORING

#### Massachusetts:

The Massachusetts Agreement State Program was placed on monitoring following its July 2014 IMPEP review. Massachusetts's performance was found adequate to protect public health and safety, but needs improvement and compatible with the NRC's program. The review team observed weaknesses in the technical quality of the Commonwealth's licensing and inspection activities. Staff has conducted quarterly monitoring calls and held a periodic meeting in July 2015. The Commonwealth is making progress in addressing the observed weaknesses. Following the July 2015 periodic meeting, the MRB directed the NRC staff to continue with monitoring and schedule the next periodic meeting and IMPEP review meetings as planned, in January 2017 and July 2018, respectively.

#### New Hampshire:

The New Hampshire Agreement State Program was placed on monitoring following its October 2012 IMPEP review. New Hampshire's performance was found adequate to protect public health and safety, but not compatible with the NRC's program due to the large number of overdue regulation amendments. The MRB determined that monitoring would be a useful tool

in assessing the State's progress toward completion of overdue regulations. New Hampshire had a periodic meeting in November 2014, at which time progress was shown in addressing overdue regulations. New Hampshire's next IMPEP review is planned for October 2016.

#### New York:

The New York Agreement State Program was removed from heightened oversight and placed on monitoring following its March 2014 IMPEP review as the State had corrected a number of performance weaknesses. The IMPEP team found that while the State made progress in addressing some overdue regulations, overdue regulations remained an issue. The New York program was found adequate to protect public health and safety, but not compatible with the NRC's program. The MRB directed the NRC staff to continue with monitoring calls to discuss regulation status and open recommendations. The next periodic meeting with New York will be conducted in May 2016, and the next IMPEP in March 2018.

#### Rhode Island:

The Rhode Island Agreement State Program was placed on monitoring following its October 2011 IMPEP review. The Rhode Island program was found adequate to protect public health and safety, but needs improvement and compatible with the NRC's program. The review team observed performance weaknesses in technical staffing levels, overdue inspections, and overdue regulations. Rhode Island had periodic meetings in December 2012 and May 2014 along with quarterly monitoring calls. Since 2011 IMPEP review, Rhode Island has been addressing its performance weaknesses. In November 2015, the Rhode Island program requested the NRC send a letter of support for resources to the Rhode Island Governor. The NRC sent the letter on January 14, 2016. Subsequently, the Rhode Island program posted a vacancy announcement in March 2016. The Rhode Island program had an IMPEP review in March 2016 and the MRB meeting to finalize the IMPEP findings is scheduled for June 2016.

#### STATES ON HEIGHTENED OVERSIGHT

#### Georgia:

The Georgia Agreement State Program was removed from probation and placed on heightened oversight following its January 2014 IMPEP review due to the significant progress Georgia made in addressing the performance issues identified in the 2012 IMPEP review. Under heightened oversight, the Georgia program maintains a "Program Improvement Plan" and participates in bimonthly calls with the NRC. Georgia's next IMPEP review will be held in May 2016.

#### STATES REMOVED FROM MONITORING

#### California:

The California Agreement State Program was removed from heightened oversight and placed on monitoring following its 2008 IMPEP review as the State had corrected a number of performance weaknesses. However, timely adoption of regulations remained an issue. This situation was unchanged during the State's IMPEP conducted in October 2011. California was found adequate to protect public health and safety, but not compatible with the NRC's program. The State committed to apply an additional resource to the area of regulation development and to update its plan for completing overdue regulatory packages to include details and milestones

necessary to demonstrate sustained performance with regard to compatibility requirements. California's last IMPEP review was conducted in October 2015. In that review, California was found adequate to protect public health and safety, and compatible with the NRC's program. The California program showed sustained and substantial improvement in its rule development program. As a result, the MRB agreed to discontinue the period of monitoring.

#### North Dakota:

The North Dakota Agreement State Program was placed on heightened oversight following its April 2011 IMPEP review for performance weaknesses in licensing and inspection. Subsequently, a follow-up IMPEP review was performed in 2013, and the North Dakota program was removed from heightened oversight and placed on monitoring as the State had made significant improvements in performance. North Dakota's last IMPEP was conducted in April 2015. In that review, North Dakota was found adequate to protect public health and safety, and compatible with the NRC's program. The North Dakota program showed a sustained and substantial improvement in its licensing and inspection programs. As a result, the MRB agreed to discontinue the period of monitoring.

#### STATES NOT SUBJECT TO MONITORING OR HEIGHTENED OVERSIGHT

The Colorado, Kentucky, North Carolina, and Utah Agreement State Programs have overall program findings of either "not compatible" or "adequate to protect public health and safety, but needs improvement;" however, these programs are not subject to monitoring or heightened oversight.

#### Colorado:

The Colorado Agreement State Program was found "not compatible" due to a number of modifications to Colorado statutes which are not compatible with the NRC requirements following its April 2014 IMPEP review. The modifications were made by the State Legislature without concurrence by the Colorado Radiation Control Program. To resolve the issue, Colorado management obtained permission from the Governor's Office to conduct a stakeholder process in the summer of 2014 to address incompatible sections of the Radiation Control Act. Further, Colorado management indicated that this process would lead to the submission of statutory language changes in the legislative session starting in January 2015 that would bring the statute into compatibility with the NRC requirements. The MRB concluded that Colorado's path forward to resolve the statutory compatibility issues was reasonable and therefore, did not warrant monitoring or heightened oversight. The next periodic meeting with Colorado will be conducted in May 2016, and the IMPEP in 2018.

#### Kentucky:

The Kentucky Agreement State Program was found "adequate to protect public health and safety, but needs improvement," following its June 2012 IMPEP review due to performance weaknesses with overdue inspections and regulations. At that time, the MRB directed the Kentucky program remain on monitoring. A periodic meeting was conducted in June 2014, and the MRB determined the Kentucky Agreement State Program could be taken off monitoring. At the time of the periodic meeting, Kentucky had shown sustained improvement with overdue inspections, staffing levels, and regulations. The next IMPEP review of the Kentucky Agreement State Program is scheduled for June 2016.

#### North Carolina:

The North Carolina Agreement State Program was found "adequate to protect public health and safety, but needs improvement" due to performance issues including technical staffing and training, overdue inspections, and sealed source and device evaluations following its March 2014 IMPEP review. Following the IMPEP review but prior to the MRB, the North Carolina program was able to resolve many of the performance issues and had a plan in place to resolve the remaining issues. As a result, the MRB concluded that North Carolina's path forward was reasonable and determined that the performance issues did not warrant either monitoring or heightened oversight. North Carolina had a periodic meeting in April 2015 and will have its next IMPEP in April 2018.

#### Utah:

The Utah Agreement State Program was found adequate to protect public health and safety, but in consideration of the recent revisions to the statutes addressing financial surety, not compatible with the NRC's program following its October 2015 IMPEP review. Utah acknowledged the NRC's concerns over the legislative changes and committed to work with the NRC to resolve the matter. The MRB determined that the statutory compatibility issues did not warrant either monitoring or heightened oversight at that time, and directed the next meeting with Utah will be a periodic meeting in October 2016 and follow-up IMPEP in October 2017.

#### TRENDING ANALYSIS

The NRC staff evaluates IMPEP data for trends using current and past IMPEP data, specifically in the area of performance indicator results, recommendations issued to address program weaknesses, as well as discussions between the IMPEP team, the State program, and MRB. The outcome of the trending analysis serves to enhance the IMPEP program and improve communication within the National Materials Program (NMP). The NRC presents its analysis of the IMPEP program to the Organization of Agreement States (OAS) at the annual OAS meeting.

In Calendar Year (CY) 2015, there were nine IMPEP reviews. The CY 2015 data shows a very strong performance by the NMP, which is consistent with the IMPEP benchmark data (1997–2012). Collectively, only 3 of 59 performance indicators reviewed were found less than satisfactory. The evaluation showed that only five recommendations were issued. Two programs were issued recommendations to implement compatible changes to their staff training and qualification manuals. The other recommendations concerned quality assurance programs for licensing, and sealed source and device. IMPEP results indicate that 36 regulatory programs are adequate to protect public health and safety, and 5 are adequate, but need improvement. This is a slight improvement over 2014 and 2013 where six programs needed improvement.

Staffing and budget data are not specifically collected under IMPEP. However, information describing a program's staffing level, the program's ability to retain and hire, and how a program may be funded, is part of staffing description under the performance indicator, Technical Staffing and Training. The trending review indicates that a number of Agreement States still experience staffing and budget difficulties. How each program addresses staffing and budgets

and the impact on program performance differs state by state. Under IMPEP, performance recommendations are frequently offered when staffing vacancies persist. Sustaining a high level of performance when there is significant program staff turnover is a challenge for materials programs. While these challenges persist for some states, IMPEP reviews have confirmed that the NMP continues to protect the public health and safety.

### CONCLUSION

The IMPEP reviews are a useful tool to ensure that public health and safety are adequately protected from the potential hazards associated with the use of radioactive materials and that Agreement State programs are compatible with the NRC's program. Inclusion of the Agreement States in the IMPEP review process enables a productive exchange of information. The NRC and the Agreement States both benefit from IMPEP's blending of State and Federal resources. The Agreement States have provided significant input, and will continue to play an instrumental role, to the NRC's actions in ensuring consistent, nationwide implementation of a program to protect the public health and safety and to prevent the malevolent use of radioactive materials while allowing the beneficial uses to continue.

#### Attachments:

- 1. Summary of Agreement States' Adequacy and Compatibility Statuses
- 2. Summary of NRC Radioactive Materials Programs Adequacy Statuses
- 3. Heightened Oversight and Monitoring Status Chart

| STATE          | FISCAL YEAR<br>OF REVIEW | ADEQUACY<br>FINDING             | COMPATIBILITY<br>FINDING |
|----------------|--------------------------|---------------------------------|--------------------------|
| Alabama        | 2015                     | adequate                        | compatible               |
| Arizona        | 2012                     | adequate                        | compatible               |
| Arkansas       | 2014                     | adequate                        | compatible               |
| California     | 2016                     | adequate                        | compatible               |
| Colorado       | 2014                     | adequate                        | not compatible           |
| Florida        | 2015                     | adequate                        | compatible               |
| Georgia        | 2014                     | adequate, but needs improvement | compatible               |
| Illinois       | 2013                     | adequate                        | compatible               |
| Iowa           | 2012                     | adequate                        | compatible               |
| Kansas         | 2014                     | adequate                        | compatible               |
| Kentucky       | 2012                     | adequate, but needs improvement | compatible               |
| Louisiana      | 2012                     | adequate                        | compatible               |
| Maine          | 2015                     | adequate                        | compatible               |
| Maryland       | 2016                     | adequate                        | compatible               |
| Massachusetts  | 2014                     | adequate, but needs improvement | compatible               |
| Minnesota      | 2012                     | adequate                        | compatible               |
| Mississippi    | 2013                     | adequate                        | compatible               |
| Nebraska       | 2011                     | adequate                        | compatible               |
| Nevada         | 2013                     | adequate                        | compatible               |
| New Hampshire  | 2013                     | adequate                        | not compatible           |
| New Jersey     | 2015                     | adequate                        | compatible               |
| New Mexico     | 2013                     | adequate                        | compatible               |
| New York       | 2014                     | adequate                        | not compatible           |
| North Carolina | 2014                     | adequate, but needs improvement | compatible               |
| North Dakota   | 2015                     | adequate                        | compatible               |
| Ohio           | 2014                     | adequate                        | compatible               |
| Oklahoma       | 2014                     | adequate                        | compatible               |

## SUMMARY OF AGREEMENT STATES' ADEQUACY AND COMPATIBILITY STATUSES (As of February 10, 2016)

| STATE          | FISCAL YEAR<br>OF REVIEW | ADEQUACY<br>FINDING             | COMPATIBILITY<br>FINDING |  |
|----------------|--------------------------|---------------------------------|--------------------------|--|
| Oregon         | 2013                     | adequate                        | compatible               |  |
| Pennsylvania   | 2014                     | adequate                        | compatible               |  |
| Rhode Island   | 2012                     | adequate, but needs improvement | compatible               |  |
| South Carolina | 2012                     | adequate                        | compatible               |  |
| Tennessee      | 2012                     | adequate                        | compatible               |  |
| Texas          | 2014                     | adequate                        | compatible               |  |
| Utah           | 2015                     | adequate                        | not compatible           |  |
| Virginia       | 2015                     | adequate                        | compatible               |  |
| Washington     | 2013                     | adequate                        | compatible               |  |
| Wisconsin      | 2014                     | adequate                        | compatible               |  |

## SUMMARY OF NRC RADIOACTIVE MATERIALS PROGRAMS' ADEQUACY STATUSES (As of February 10, 2016)

| REGION     | REVIEW YEAR (FY) | ADEQUACY FINDING |
|------------|------------------|------------------|
| HQ SS&D    | 2015             | adequate         |
| Region I   | 2015             | adequate         |
| Region III | 2012             | adequate         |
| Region IV  | 2014             | adequate         |

# HEIGHTENED OVERSIGHT AND MONITORING CHART

(As of April 4, 2016)

| State         | Last IMPEP<br>Review | Last Contact   | Next Contact                      | Action(s) Due  |  |
|---------------|----------------------|--|-----------------------------------|--|--|
| HEIGHTENED O  | VERSIGHT             |  |                                   |  |  |
| Georgia       | 1/27–1/31/2014       | bimonthly call<br>3/31/2016                              | IMPEP review<br>5/9–13/2016       | <ol> <li>Bimonthly calls</li> <li>Program Improvement<br/>Plan updates prior to each<br/>bimonthly call</li> </ol> |  |
| MONITORING    | MONITORING           |  |                                   |  |  |
| Massachusetts | 7/28–8/1/2014        | Management<br>Review Board<br>(MRB) meeting<br>2/22/2016 | quarterly call<br>5/2016          | 1. Quarterly calls<br>2. Next IMPEP planned for<br>July 2018   |  |
| New Hampshire | 10/2–10/5/2012       | semi-annual<br>call 11/23/2015                           | semi-annual<br>call 5/2016        | 1. Semi-annual calls<br>2. Next IMPEP planned for<br>October 2016  |  |
| New York      | 3/17–3/28/2014       | quarterly call<br>1/20/2016                              | periodic<br>meeting<br>5/3–5/2016 | 1. Quarterly calls<br>2. Next IMPEP planned for<br>March 2018  |  |
| Rhode Island  | 10/24–<br>10/28/2011 | IMPEP review<br>3/7–11/2016                              | MRB Meeting<br>6/2/2016           | 1. Quarterly calls<br>2. Next IMPEP to be<br>determined by the MRB   |  |

Note: (1) Monitoring was discontinued for North Dakota following its MRB meeting in September 2015. (2) Monitoring was discontinued for California following its MRB meeting in January 2016.