

UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

April 16, 2015

MEMORANDUM TO: Chairman Burns

Commissioner Svinicki Commissioner Ostendorff Commissioner Baran

FROM: Catherine Haney, Director /RA/ Scott Moore for

Office of Nuclear Material Safety

and Safeguards

SUBJECT: ANNUAL REPORT ON U.S. NUCLEAR REGULATORY

COMMISSION'S AND AGREEMENT STATES' RADIOACTIVE MATERIALS PROGRAMS FOR CALENDAR YEAR 2014

Enclosed is the annual report to inform the Commission of the status of the U.S. Nuclear

Regulatory Commission and Agreement State radioactive materials programs.

Enclosure:

Annual Report for U.S. Nuclear Regulatory Commission and Agreement State Radioactive Materials Program

cc: SECY

OGC

OCA

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

CALENDAR YEAR 2014

The U.S. Nuclear Regulatory Commission (NRC) uses the Integrated Materials Performance Evaluation Program (IMPEP) to periodically review the NRC and Agreement State 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. 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. IMPEP reviews are conducted by teams composed of the NRC and Agreement State staff members. IMPEP teams use the established criteria in MD 5.6, guidance documents maintained by the Office of Nuclear Material Safety and Safeguards (NMSS), and skills and knowledge acquired at a 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. Periodic meetings were created to help the NRC Headquarters, the NRC Regions, and the Agreement States remain knowledgeable of the status of each other's respective program.

Attachment 1 is the Summary of Agreement States' Adequacy and Compatibility Statuses as of publication of this report. Regarding the adequacy provision of Section 274b. of the Atomic Energy Act (the Act) of 1954, as amended, 31 of the 37 Agreement State programs currently have a program finding of "adequate to protect public health and safety." Georgia, Kentucky, Massachusetts, North Carolina, North Dakota, and Rhode Island have a program finding 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." California, Colorado, New Hampshire and New York have a program finding of "not compatible with the NRC's program." The NRC radioactive materials programs currently have a program finding of "adequate to protect public health and safety," as shown in Attachment 2 of this report.

In order to provide timely feedback to programs under review, the NRC has set a goal to issue a publicly available final report for each program reviewed within 104 days from the last day of the review. Attachment 3 presents the NRC's performance for IMPEP report issuance against the 104-day goal for the reviews that took place in the NRC Fiscal Year (FY) 2014. The NRC met the timeliness metric in only 3 of 13 IMPEP reports from FY 2014. Staff conducted a causal analysis, identified contributing factors, and drew several conclusions for the late reports. The analysis is provided in Attachment 3.

In conducting the causal analysis for the late reports in 2014, the NRC staff observed that 2014 results were an outlier. However, the NRC staff re-evaluated the 104-day metric and determined that a more appropriate timeliness metric would be one where NRC staff issues the final report within 30 days from the Management Review Board's (MRB) deliberations. To this end, the new metric is to issue the final report within 30 days from the MRB meeting. Staff still observes a division level metric of 104 days from the exit meeting of the onsite review to issue the final report. The 30-day metric provides flexibility when an IMPEP team may need additional dialogue with a program following the onsite review and/or when the MRB meeting is scheduled or rescheduled beyond a date that is restrictive of meeting the 104-day metric. In retrospect, the new 30-day metric would have been met in 8 of 13 IMPEPs from FY 2014. Five of the final reports exceeded the 30-day metric by 4 to 20 days. The delay with these reports is attributed to report concurrence in four of the five reports. For one of the five, substantive edits were made to the final report and required re-concurrence. To assure the new 30-day metric is met, staff has adjusted priorities following the MRB meeting.

When programmatic weaknesses exist in an Agreement State program, the NRC primarily uses two processes, heightened oversight and monitoring, to ensure that an Agreement State program needing improvement is progressing toward re-establishing a fully satisfactory program. 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 the 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. For monitoring, a State's managers and staff must participate in quarterly calls with NRC 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. The results of all IMPEP reviews and periodic meetings are presented to the MRB for its deliberation of the findings. An Agreement State program can be placed on heightened oversight or monitoring as a result of an IMPEP review or periodic meeting. Currently, one State is on heightened oversight and six States are on monitoring. Discussions of each of the States on heightened oversight and monitoring are provided in the corresponding sections below. A summary of recent activities related to States on heightened oversight or monitoring is presented in Attachment 4. Also provided is a discussion for the Commonwealth of Kentucky and State of Maine as these programs were taken off monitoring following their respective periodic meetings. In addition, a discussion on Colorado and North Carolina is included because these States are not subject to heightened oversight or monitoring but have a finding of either "not compatible" or a "adequate, but needs improvement."

STATES ON HEIGHTENED OVERSIGHT

Georgia: On April 14, 2014, the MRB met to consider the findings of the Georgia Agreement State IMPEP review that was conducted in January 2014. Due to the State's significant progress in addressing previous recommendations, the noted improvement in staff and

management communications, and the strong commitment from Program management to continue to improve performance, the MRB determined that the Program should be removed from probation and placed on heightened oversight. In the Staff Requirements Memorandum to SECY-14-0074, "Discontinuance of the Probation Period for the Georgia Agreement State Program" dated August 25, 2014, the Commission approved staff's recommendation to discontinue probation. Under heightened oversight, the Georgia program maintains a "Program Improvement Plan" and bimonthly calls with the NRC. Georgia's next IMPEP will be held in January 2016.

STATES ON MONITORING

California:

California's last IMPEP was conducted in October 2011. California was found adequate to protect public health and safety, and not compatible with the NRC's program due to the extensive number of overdue regulation amendments. California committed to apply an additional resource to regulation development. The MRB determined that California should remain on monitoring. California had a periodic meeting in January 2013 at which time California showed progress in addressing overdue regulations. California will continue with monitoring calls to discuss regulation status until otherwise directed by an MRB. California's next IMPEP is planned for October 2015.

Massachusetts:

The Massachusetts Agreement State Program was placed on monitoring following the October 28, 2014, MRB meeting which discussed the results of the IMPEP review conducted in July 2014. The Commonwealth 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, inspection, and incident response activities. The first monitoring call was held with Massachusetts's management on December 2014. A periodic meeting is planned for July 2015.

New Hampshire:

Following the October 2012 IMPEP review, the New Hampshire Agreement State Program was found adequate to protect public health and safety, and not compatible with the NRC's program due to the extensive number of overdue regulation amendments. New Hampshire was placed on monitoring by the MRB. New Hampshire had a periodic meeting in November 2014 at which time New Hampshire showed progress in addressing overdue regulations. New Hampshire will continue with monitoring calls to discuss regulation status until otherwise directed by an MRB. New Hampshire's next IMPEP is planned for October 2016.

New York:

On August 4, 2014, the MRB met to consider the findings of the New York Agreement State IMPEP review that was conducted in March 2014. New York was found adequate to protect public health and safety, and not compatible with the NRC's program due to the extensive number of overdue regulation amendments. Considering the progress New York made under the indicator Technical Quality of Incident and Allegations (i.e., performance was improved from unsatisfactory to satisfactory during the review period) and the progress made in adopting some overdue regulations, the MRB determined that the period of heightened oversight be

discontinued and a period of monitoring be initiated. New York will continue with monitoring calls to discuss regulation status and the open recommendations until otherwise directed by an MRB. The next meeting with New York will be a periodic meeting in March 2016.

North Dakota:

A follow-up IMPEP was conducted in April 2013 to review the performance weaknesses identified in the 2011 IMPEP. The program was found adequate to protect public health and safety, but needs improvement, and compatible with the NRC's program. The MRB found that the North Dakota program made significant improvements in performance and addressed the 2011 recommendations. The MRB directed that heightened oversight be discontinued and monitoring be implemented. A periodic meeting was held in June 2014 at which time the program continued to demonstrate sustained performance. The next full IMPEP review of the North Dakota Agreement State Program is scheduled for June 2015.

Rhode Island:

Following the October 2011 IMPEP, the Rhode Island Agreement State Program was placed on monitoring by the MRB for performance weaknesses in technical staffing levels, overdue inspections, and overdue regulations. The MRB found the program adequate to protect public health and safety, but needs improvement, and compatible with the NRC's program. Rhode Island had periodic meetings in 2012 and 2014 along with quarterly monitoring calls. Rhode Island has been addressing its performance weaknesses. Rhode Island's next IMPEP is planned for October 2015.

STATES REMOVED FROM AN OVERSIGHT PROCESS

Kentucky:

The Kentucky Agreement State Program continued on monitoring following the June 2012 IMPEP due to performance weaknesses with overdue inspections and regulations. Following the periodic meeting in June 2014, 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.

Maine:

The Maine Agreement State Program was placed on monitoring following the June 2013 periodic meeting. The Maine program exhibited declining performance largely attributed to staffing vacancies. At the time of the May 2014 periodic meeting, the State had addressed the staffing vacancies and associated performance issues. The MRB determined the Maine program could be taken off monitoring. The next IMPEP review of the Maine Agreement State Program is scheduled for May 2015.

STATES NOT SUBJECT TO AN OVERSIGHT PROCESS

The Colorado and North Carolina Agreement State Programs have overall program findings of either "not compatible" or "adequate to protect public health and safety, but needs improvement;" however, neither program are subject to heightened oversight or monitoring.

Colorado:

At the June 30, 2014, MRB, 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. 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 NRC requirements. The submitted statutory language is under review by the NRC. The MRB concluded that Colorado's path forward to resolve the statutory compatibility issues was reasonable and therefore, did not warrant additional oversight. The next meeting with Colorado will be a periodic meeting in July 2016.

North Carolina:

At the June 5, 2014, MRB, the North Carolina Agreement State Program was found adequate to protect public health and safety, but needs improvement due to performance issues with technical staffing and training, overdue inspections, and sealed source and device evaluations. The North Carolina program was able to resolve, or had a plan in place to resolve, the identified performance issues prior to the MRB meeting. Therefore, the MRB determined that the performance issues did not warrant additional oversight at this time. The next meeting with North Carolina will be a periodic meeting in April 2015.

QUALITATIVE REVIEW OF IMPEP DATA

The NRC staff evaluates IMPEP reports for trends in performance specifically in the area of recommendations issued to address program weaknesses. The outcome of the qualitative review serves to enhance the IMPEP program and improve communication in the National Materials Program (NMP).

The evaluation showed that the NMP could benefit from additional information on inspections, specifically training regarding performance-based inspection techniques and insights on inspecting medical events. The NRC staff presented webinars on these topics in September and December, 2014, respectively. The evaluation also showed that recommendations are commonly offered for programs to (1) implement qualification journals for technical staff, (2) improve the timely adoption of regulations, or (3) ensure timely notification of events to the National Materials Events Database and the NRC Operations Center.

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 evaluation showed 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.

SUMMARY

The NRC and the Agreement States continue to work in cooperation to achieve a coherent and compatible nationwide 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 the IMPEP program's blending of State and Federal resources. In addition to the cooperation demonstrated through the IMPEP process, the NRC and the Agreement States continue to work together on a number of issues. IMPEP results indicate that 31 Agreement States and the NRC's materials programs are adequate to protect public health, safety, and the environment, and 6 Agreement State programs are adequate, but needing improvement. This is unchanged from 2013. The NRC staff continually seeks and receives Agreement State involvement in improving the nationwide protection of health, safety, security and the environment. The Agreement States routinely contribute resources to the NRC working groups on issues such as rulemaking, updating guidance, and revising policy. The Agreement States have provided significant input, and will continue to play an instrumental role, in the NRC's actions to ensure 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. IMPEP Report Status Tracking Fiscal Year 2014
- 4. Heightened Oversight and Monitoring Status Chart

SUMMARY OF AGREEMENT STATES' ADEQUACY AND COMPATIBILITY STATUSES (As of March 12, 2015)

STATE	FISCAL YEAR OF REVIEW	ADEQUACY FINDING	COMPATIBILITY FINDING
Alabama	2010	adequate	compatible
Arizona	2012	adequate	compatible
Arkansas	2014	adequate	compatible
California	2012	adequate	not compatible
Colorado	2014	adequate	not compatible
Florida	2011	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	2011	adequate	compatible
Maryland	2011	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	2011	adequate	compatible
New Mexico	2013	adequate	compatible
New York 2014		adequate	not compatible
North Carolina	2014	adequate, but needs improvement	compatible
North Dakota	2013	adequate, but needs improvement	compatible
Ohio	2014	adequate	compatible
Oklahoma	2010	adequate	compatible

2013	adequate	compatible
2014	adequate	compatible
2012	adequate, but needs improvement	compatible
2012	adequate	compatible
2012	adequate	compatible
2014	adequate	compatible
2011	adequate	compatible
2015	adequate	compatible
2013	adequate	compatible
2014	adequate	compatible
	2014 2012 2012 2012 2014 2011 2015 2013	2014 adequate 2012 adequate, but needs improvement 2012 adequate 2012 adequate 2014 adequate 2014 adequate 2011 adequate 2015 adequate 2013 adequate

SUMMARY OF NRC RADIOACTIVE MATERIALS PROGRAMS' ADEQUACY STATUSES (As of March 12, 2015)

REGION	REVIEW YEAR (FY)	ADEQUACY FINDING	
HQ SS&D	2015	adequate	
Region I	2010	adequate	
Region III	2012	adequate	
Region IV	2014	adequate	

IMPEP REPORT TRACKING FISCAL YEAR 2014

State or Region	Review Date Month/Year	Total Number of Days from Review to Release of Final Report (Goal: 104 Days)		
Arkansas	10/13	173		
Ohio	12/13	98		
Pennsylvania	1/14	122		
Georgia	1/14	119		
Texas	2/14	193		
North Carolina	3/14	129		
New York	3/14	189		
NRC Region IV	4/14	110		
Colorado	4/14	108		
Kansas	6/14	109		
Massachusetts	7/14	105		
Wisconsin 7/14		101		
Oklahoma	8/14	91		

Staff met the timeliness metric in only 3 of 13 IMPEP reports from FY 2014. Staff conducted causal analysis and identified the following contributing factors:

- There were 13 IMPEP reviews in FY 2014 which is a 30 percent increase over prior years.
- In FY 2014, the Agreement State Program Branch (ASPB) assumed the administrative processing of all three versions (draft, proposed final, and final) of an IMPEP report. In addition, the ASPB branch chief started signing the draft reports instead of the IMPEP team leader.
- Two IMPEP reviews were deferred and re-scheduled for a later date in the FY due to the government shutdown in October 2013.
- Differing views among the IMPEP team members from the Arkansas review delayed issuance of the draft report. The draft report was not issued until 111 days after the IMPEP exit meeting.

- A portion of the Texas IMPEP review was extended because the team member reviewing low-level radioactive waste (LLRW) was unexpectedly unavailable to support the onsite review. A portion of the LLRW indicator was reviewed at a later date. In addition, the Program had concerns with a portion of the report the IMPEP team worked with the Texas Program to resolve these concerns. As a result the draft report was not issued until 96 days after the IMPEP exit meeting.
- The ASPB was challenged over 6-week period in April and May to perform technical reviews of IMPEP reports and administratively process reports for three final IMPEP reports (Arkansas, Pennsylvania, Georgia) and two draft reports (North Carolina, Colorado). Other factors contributing to the Branch's challenges included the IMPEP project manager off-site conducting IMPEP reviews of New York and NRC Region IV, and high workload.
- There were two MRB's rescheduled. North Carolina was rescheduled at the request of the State. New York was rescheduled because the State submitted additional information in its response to the draft report requiring additional review by the IMPEP team and administrative processing time to remove PII information.

HEIGHTENED OVERSIGHT AND MONITORING CHART

(As of March 12, 2015)

State	Last IMPEP Review	Last Contact	Next Contact	Action(s) Due		
HEIGHTENED OVERSIGHT						
Georgia	1/27–31/2014	Periodic meeting 2/2015	Bimonthly call 4/2015	1. Bimonthly calls 2. Program Improvement Plan, updates prior to each bimonthly call 3. Next IMPEP planned for January 2016		
MONITORING	MONITORING					
California	10/17–21/2011	Quarterly call 2/2015	Quarterly call 5/2015	Quarterly calls Next IMPEP planned for October 2015		
Massachusetts	7/28–8/1/2014	Quarterly call 12/2014	Quarterly call 3/2015	Quarterly calls Next IMPEP planned for July 2018		
New Hampshire	10/2–5/2012	Periodic meeting 11/2014	Quarterly call 3/2015	Quarterly calls Next IMPEP planned for October 2016		
New York	3/17–28/2014	Quarterly call 12/2014	Quarterly call 3/2015	Quarterly calls Next IMPEP planned for March 2018		
North Dakota	4/22–26/2013	Quarterly call 12/2014	Quarterly call 3/2015	Quarterly calls Next IMPEP planned for June 2015		
Rhode Island	10/24–28/2011	Quarterly call 3/2015	Quarterly call 6/2015	Quarterly calls Next IMPEP planned for October 2015		