

## UNITED STATES NUCLEAR REGULATORY COMMISSION

REGION IV 1600 E. LAMAR BLVD.

August 7, 2015

Ms. Karen Beckley, Manager Nevada Radiation Control Program Division of Public and Behavioral Health 675 Fairview Drive Suite 218 Carson City, NV 89706

Dear Ms. Beckley:

On July 9, 2015, staff from the U.S. Nuclear Regulatory Commission (NRC) held a periodic meeting with you and other members of your staff, at the Nevada Radiation Control Program offices in Carson City, NV. The purpose of the meeting was to discuss the status of the Nevada Agreement State Program. The NRC was represented by Linda Howell, Lisa Dimmick, and me.

I have enclosed the meeting summary, including any specific actions resulting from the discussions, for your review. A Management Review Board (MRB) meeting to discuss the outcome of the periodic meeting will be scheduled at a later date. The date, time, and phone number for the teleconference will be provided to you in a separate transmission.

If you determine that our conclusions do not accurately summarize the meeting discussion, or you have additional remarks about the meeting, please contact me at 817-200-1116, or by email at <a href="mailto:Binesh.Tharakan@nrc.gov">Binesh.Tharakan@nrc.gov</a>.

Sincerely,

/RA/

Binesh K. Tharakan, CHP Regional State Agreements Officer

Enclosure:

Nevada Periodic Meeting Summary

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Enclosure:

Nevada Periodic Meeting Summary

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#### NEVADA PERIODIC MEETING SUMMARY

DATE OF MEETING: JULY 9, 2015

NRC Attendees	NEVADA Attendees			
Binesh Tharakan, Regional State Agreements Officer, Region IV	Karen Beckley, Manager, Radiation Control Program			
Linda Howell, Deputy Director, Division of Nuclear Materials Safety, Region IV	Jon Bakkedahl, Radiation Control Supervisor			
Lisa Dimmick, IMPEP Coordinator, Office of Nuclear Material Safety and Safeguards	Adrian Howe, Radiation Control Supervisor			
	John Follette, Radiation Control Specialist III			
	Michael Schmidt, Radiation Control Specialist III			
	Cynthia Pacheco, Radiation Control Specialist II			
	Bradley Allured, Radiation Control Specialist II			
	Chad Westom, Chief, Bureau of Preparedness, Assurance, Inspection, and Statistics			

#### DISCUSSION:

The previous Integrated Material Performance Evaluation Program (IMPEP) review was conducted the week of July 15-19, 2013. At the conclusion of the 2013 IMPEP review, the team found Nevada's performance to be satisfactory for all performance indicators reviewed. The Program was found adequate to protect public health and safety and compatible with the NRC's program.

The 2013 IMPEP review team closed two recommendations: one from the 2005 IMPEP review in Technical Quality of Inspections and one from the 2009 IMPEP review in Compatibility Requirements. The review team kept two recommendations open: one from the 2005 IMPEP review in Technical Quality of Licensing Actions and one from the 2009 IMPEP review in Compatibility Requirements.

The review team recommended that the next IMPEP review take place in four years in 2017 and that a Periodic Meeting take place in two years. Therefore, a Periodic Meeting was held on July 9, 2015.

## TOPICS COVERED DURING THE MEETING INCLUDED:

## <u>Organization</u>

The Nevada Agreement State Program is administered by the Radiation Control Program (the Program). The Program is located within the Bureau of Preparedness, Assurance, Inspection, and Statistics (the Bureau), Division of Public and Behavioral Health (the Division), which is part of the Nevada Department of Health and Human Services. The Program is responsible for regulating the activities of 252 specific licensees authorized to use radioactive materials.

The Program has not been subject to reorganization since the 2013 IMPEP review.

## **Program Strengths**

- Inspection Completion Timeliness The Program reported being ahead of schedule on completing inspections in a timely manner.
- Availability of Supervisors The Program staff expressed that supervisors have worked extra hard to perform mentoring and qualification reviews.
- New Staff The Program staff stated the new employees have brought fresh new ideas to improve the efficiency of the Program.
- Diversity The staff has varied backgrounds in research, energy, nuclear medicine, as well
  as experience with federal and state regulatory programs.
- Leadership The staff reported that management has been patient with new staff and is
  providing adequate mentoring and training to allow staff time to develop and gain
  experience with radioactive materials licensing and inspection.
- Streamlining Inspections and Licensing The Program implemented the use of more forms, checklists, and guidance documents which improves effectiveness and efficiency and makes it easier for staff to complete licensing actions and inspections in a timely manner.
- In-House Training The Program's supervisors alternate between providing in-house training to new staff and reviewing the staff's progress towards qualifications. For example, when one supervisor provides the training, the other reviews it with the staff member to complete the qualification process.
- Equipment and Inventory The Program has updated its supply of survey meters and an adequate supply of instruments for training and inspections.

## Program Challenges

Currently, the Program has two vacancies and three new staff members. The Program's supervisors have picked up the additional workload and are performing inspections to ensure that the Program does not develop a backlog of inspections. However, this slows down the progress training and qualifying new staff.

The Program staff and management believe that the Agreement State Program is not taken as seriously as it should be given the importance of the Program's mission. This lack of recognition within the State's organizational structure could affect the staff's morale; lead to complacency, or potentially affect the Program's ability to implement the mission effectively. The Program suggested that NRC management engage Organizational and Executive level

leaders to emphasize the importance and role of an Agreement State Program within the framework of the National Materials Program.

## Feedback for NRC:

The Program staff indicated that they appreciated the good support provided by NRC Region IV staff and the communications between the two agencies. They were also very appreciative of the NRC's continued funding of training for Agreement States and hopes that it continues given the fiscal climate at both the federal and state levels.

The Program staff emphasized the need to have more licensing and inspection courses since there has been turnover in many States and the competition for seats in NRC courses appears to have increased. The lack of training opportunities has slowed the ability of the Program to qualify new inspectors and license reviewers in a timely manner. Program supervision stated that up to six licensing and inspection courses each year may be necessary to accommodate NRC and Agreement State training needs.

The Program also expressed concern that it is difficult to travel across the country for a weeklong training course due to State travel and overtime restrictions. The number of hours required to attend one of these training courses significantly exceeds 40 hours. The Program noted they are still able to travel to out-of-state training and meetings; however, they are limited to a 40-hour workweek with no overtime or compensatory time for traveling. This has caused them difficulty in attending courses that start on Monday morning or end late on Friday. The State requested NRC to consider holding some training classes on the west coast.

The Program expressed an interest in participating on future IMPEP teams, if they can get it cleared through senior Division management. Ms. Dimmick explained the process of becoming an IMPEP team member and upcoming training sessions.

### Changes in Program Budget/Funding

There have been no significant changes in budget or funding for the Program. The Program is funded 100 percent by the fees it charges to licensees. The current operating budget for the Program is approximately 4.5 million dollars. Any fees that are in excess of this amount can and usually is transferred the General Fund to be used in other programs implemented by the State. The budget restrictions in Nevada were resolved in the last legislative session and the State is no longer implementing 48-hour furloughs and State personnel did receive a one percent annual raise last year. However, the raise was offset by a two percent increase in the contribution to the State's retirement plan.

## Technical Staffing and Training (2013 IMPEP: Satisfactory)

The Nevada Program is managed by the Radiation Control Program Manager. The Program is allocated for 6.7 Full Time Equivalent (FTE) positions. Currently there are two supervisors and four licensing and inspection staff members. There are two vacant positions within the program. Four staff members left the Program since the last IMPEP. Three individuals took

other positions and one retired. Three new staff members were hired and they each have less than one year of experience with the Program. The Program Manager reported that 6.7 FTE is still adequate to administer the program; however, the Program is seeking additional administrative assistant help in their Las Vegas field office. The Program reported that they have implemented NRC Inspection Manual Chapter 1248 training requirements for all staff.

# Status of Materials Inspection Program (2013 IMPEP: Satisfactory) Technical Quality of Inspections (2013 IMPEP: Satisfactory)

The Program had conducted 84 Priority 1, 2, and 3 inspections since the last IMPEP review. None were conducted overdue. Currently, no backlog of inspections exists. The inspection program is approximately 90 days ahead of schedule for completing inspections. This includes initial license inspections which are completed within nine months of license issuance and any follow-up inspections of licensees with performance issues, which are usually done within a year after the inspection that identified the performance problems. The Program also continues to inspect at least 20 percent of the reciprocity candidates in Nevada. The Program streamlined the use of inspection forms (e.g., Nevada equivalent to NRC Form 591M), checklists, inspection procedures, and guidance on tablets or laptops, so that most inspection results are left in the field with the licensee at the conclusion of an inspection. If there are any regulatory issues, they are resolved with the Program's supervisors prior to issuing a report in the field.

## Technical Quality of Licensing Actions (2013 IMPEP: Satisfactory)

The Program reported they have 252 specific licensees with no new licenses pending. All licensing actions are worked on in a timely manner. The Program received over 512 licensing actions since the last IMPEP review. They have a goal of processing most licensing actions within 30-60 days. Signature authority is performed by the Program Manager and Supervisors. The guidance used by the Program is equivalent to the NRC's NUREG-1556 series guidance.

No significant issues in licensing were discussed. The Program completed one major decommissioning action for Cardinal Health's cyclotron. This action was a full NUREG-1757 decommissioning plan. The plan was for the free release of the facility for unrestricted use. The Program's inspectors identified that the licensee failed to account for the foundation's rebar in RESRAD calculations. The licensee had to recalculate release criteria before the Program approved the decommissioning criteria. The licensee was able to successfully decommission the facility with the proper oversight from the Program.

The 2013 IMPEP review team kept one recommendation open from the 2005 IMPEP review for the indicator Technical Quality of Licensing Actions.

**Recommendation:** The review team recommends that the Program develop, implement, and maintain a reliable and comprehensive licensing and inspection database that serves as an effective and efficient planning, tracking, and management tool. (Section 3.4 of the 2005 IMPEP Report)

**Status:** At the end of the 2013 IMPEP review, the Program noted that development of a reliable database is still a work in progress, but it is moving forward. The Program secured a copy of the Oregon Agreement State Program's database, and made changes specific to Nevada Program. The Program submitted the changes to the IT Department for approval. However, the Program was unable to obtain funding during fiscal year 2013 to complete this project. The funding to complete the software modifications was made available in fiscal year 2014. The Program mirrored the Oregon database to Nevada's old database and is waiting on the IT contractor to complete a couple of reports and forms before making the final transition to the new database. The Program has developed written procedures for using the new database. This recommendation remains open.

## Technical Quality of Incidents and Allegations (2013 IMPEP: Satisfactory)

The Program continues to be sensitive to notifications of incidents and allegations. Incidents and allegations are quickly reviewed by Program supervision for potential effects on public health and safety and staff is dispatched to perform onsite investigations as required.

Since the last IMPEP review, the Program reported nine events to NMED. All of the events have been followed-up, reviewed, and closed by the Program.

No allegations have been received by the Program since the last IMPEP review. No allegations were referred to Nevada by the NRC since the last IMPEP.

In October 2014, one significant event was reported by the University of Nevada Las Vegas due to a fire in the chemistry lab. A researcher was working with approximately four grams of uranium/technetium metallic alloy, which is pyrophoric. The researcher left the laboratory for approximately five minutes. When he returned, he found the hood damaged and a small fire still burning. The fire was extinguished. No personnel were contaminated and the laboratory was closed pending investigation. The two HEPA filters for the fume hood, which were undamaged, prevented a release of radioactive material to the environment. UNLV and the Nevada Radiation Control Program investigated the incident. The Program ensured the licensee implemented corrective actions including procedure modifications and additional training for the UNLV staff to prevent recurrence.

## Compatibility Requirements (2013 IMPEP: Satisfactory)

There were no legislative or rules changes that impacted the Nevada Agreement State Program since the last IMPEP. Currently, the Program is up to date on all rule packages, including 10 CFR Part 37 rule promulgation. The NRC did not have any comments on Nevada's proposed 10 CFR Part 37 regulations. However, when the final Part 37 equivalent rules went to the Nevada Attorney General's office, they were returned to the Program to resolve some missing language that is required within the State of Nevada before making them effective. As a backup for the rule, the Program plans to submit a license condition to NRC for review if the missing language cannot be resolved by the end of 2015 and the rules cannot be implemented by March 19, 2016.

The 2013 IMPEP review team kept one recommendation open from the 2009 IMPEP review for the indicator Compatibility Requirements.

**Recommendation:** The review team recommends that the State develop all required regulations within the required timeframe. (Section 4.1.2 of the 2009 IMPEP Report)

**Status:** The 2009 IMPEP review team found the State to be significantly behind on regulation development. In 2013, the review team found that while the State had made significant progress in rule development, the State continues to work towards becoming timely in its rule development process. The 2013 IMPEP review team determined it was appropriate to leave this recommendation open until the State demonstrates sustained performance in this area. The Program is up to date on all rule packages, and is in the process of responding to the comments received from NRC regarding two proposed rule packages, 2013-2 and 2015-2. These two rule packages are due for adoption in 2016 and 2018, respectively. This recommendation remains open.

## Large, Complicated, or Unusual Authorizations for the Use of Radioactive Materials

Global Medical Isotopes Production has recently received a RAM license to construct a facility using accelerators to bombard deuterium to generate medical isotopes.

## State's Mechanisms to Evaluate Performance

The Program performs quality assurance checks of the database every three months. Supervisors conduct annual accompaniments of inspectors and a form is used to document the inspectors' performance during the accompaniment. The Program also has monthly performance metrics that are tracked by the Bureau.

#### Current NRC initiatives

The following NRC initiatives were discussed with the Program:

- Web-Based Licensing, National Source Tracking System, and the Integrated Source Management Portfolio
- State Communications Portal
- Commission Paper on Agreement State Policy Statements, Compatibility, and IMPEP Performance Metrics, as well as upcoming Management Directive 5.6 changes
- Project AIM

#### Conclusion

The NRC staff recommends that the next IMPEP review be conducted as scheduled in July 2017.