

August 15, 2013

Mr. Mike Wilden, Director
Nevada Department of Health and Human Services
4126 Technology Way, Room 100
Carson City, NV 89706

Dear Mr. Wilden:

The U.S. Nuclear Regulatory Commission (NRC) uses the Integrated Materials Performance Evaluation Program (IMPEP) in the evaluation of Agreement State programs. Enclosed for your review is the draft IMPEP report, which documents the results of the Agreement State review held in Nevada on July 15-19, 2013. I was the team leader for the review. The review team's preliminary findings were discussed with Mr. Whitely and other members of your staff on the last day of the review. The review team's proposed recommendations are that the Nevada Agreement State Program be found adequate to protect public health and safety and compatible with NRC's program.

The NRC conducts periodic reviews of Agreement State programs 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. The process, titled IMPEP, employs a team of NRC and Agreement State staff to assess Agreement States' and NRC Regional Offices' radioactive materials programs. All reviews use common criteria in the assessment and place primary emphasis on performance. One additional area applicable to your program was identified as a non-common performance indicator and is also addressed in the assessment. The final determination of adequacy and compatibility of each Agreement State program, based on the review team's report, is made by a Management Review Board (MRB) composed of NRC managers and an Agreement State program manager who serves as a liaison to the MRB.

In accordance with procedures for implementation of IMPEP, we are providing you with a copy of the draft team report for your review and comment prior to submitting the report to the MRB. Comments are requested within 4 weeks from your receipt of this letter. This schedule will permit the issuance of the final report in a timely manner that will be responsive to your needs.

The team will review the response, make any necessary changes to the report, and issue it to the MRB as a proposed final report. Our preliminary scheduling places the Nevada MRB meeting on September 19, 2013. NRC will provide invitational travel for you or your designee to attend the MRB meeting at NRC Headquarters in Rockville, Maryland. The NRC has video conferencing capability if it is more convenient for the State to participate through this medium. Please contact me if you desire to establish a video conference for the meeting.

M. Wilden

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If you have any questions regarding the enclosed report, please contact me at 630-829-9661.

Thank you for your cooperation.

Sincerely,

/RA/

James L. Lynch
State Agreements Officer
Division of Nuclear Materials Safety

Enclosure:
As stated

cc w/encl: Richard Whitely, Administrator
Karen Beckley, Manager, Radiation Safety Program
Alan Jacobson, State of Maryland

M. Wilden

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As stated

cc w/encl: Richard Whitely, Administrator
Karen Beckley, Manager, Radiation Safety Program
Alan Jacobson, State of Maryland

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INTEGRATED MATERIALS PERFORMANCE EVALUATION PROGRAM
REVIEW OF THE NEVADA AGREEMENT STATE PROGRAM

July 15-19, 2013

DRAFT REPORT

EXECUTIVE SUMMARY

This report presents the results of the Integrated Materials Performance Evaluation Program (IMPEP) review of the Nevada Agreement State Program. The review was conducted during the period of July 15-19, 2013, by a review team composed of technical staff members from the U.S. Nuclear Regulatory Commission (NRC) and the State of Maryland.

Based on the results of this review, Nevada's performance was found satisfactory for all performance indicators reviewed: 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 and Compatibility Requirements.

The review team did not make any recommendations and determined that two recommendations from the 2009 IMPEP review should be closed and that the two remaining recommendations regarding the development and implementation of a data tracking system, and the timely promulgation of regulations, should remain open.

Accordingly, the review team recommends that the Nevada Agreement State Program be found adequate to protect public health and safety and compatible with the NRC's program. The review team recommends that the next IMPEP review take place in approximately four years.

1.0 INTRODUCTION

This report presents the results of the review of the Nevada Agreement State Program. The review was conducted during the period of July 15-19, 2013, by a review team composed of technical staff members from the U.S. Nuclear Regulatory Commission (NRC) and the State of Maryland. Team members are identified in Appendix A. The review was conducted in accordance with the "Implementation of the Integrated Materials Performance Evaluation Program and Rescission of Final General Statement of Policy," published in the *Federal Register* on October 16, 1997, and NRC Management Directive 5.6, "Integrated Materials Performance Evaluation Program (IMPEP)," dated February 26, 2004. Preliminary results of the review, which covered the period of June 6, 2009 to July 19, 2013, were discussed with Nevada managers on the last day of the review.

The Nevada Agreement State Program is administered by the Radiation Control Program (the Program). The Program is part of the Bureau of Health (the Bureau) aligned under the Division of Public and Behavior Health (the Division) in the Department of Health and Human Services (the Department). Organization charts for the Department, Division, and Program are included as Appendix B.

During the review period, the Nevada radiation protection program was briefly reorganized. In October 2012, Division administration decided to split the radioactive materials and radiation machines programs, with the materials program going to another Division. In March 2013, after further consideration of reorganization, a decision was made by the Division Administrator to restore the Program to its original structure.

At the time of the review, the Nevada Agreement State Program regulated 239 specific licenses authorizing possession and use of radioactive materials. The review focused on the radioactive materials program as it is carried out under the Section 274b. (of the Atomic Energy Act of 1954, as amended) Agreement between the NRC and the State of Nevada.

In preparation for the review, a questionnaire addressing the common and applicable non-common performance indicators was sent to the Program on March 21, 2013. The Program provided its response to the questionnaire on June 28, 2013. A copy of the questionnaire response can be found in NRC's Agencywide Documents Access and Management System (ADAMS) using the Accession Number ML13183A116.

The review team's general approach for conduct of this review consisted of (1) examination of the Program's response to the questionnaire, (2) review of applicable Nevada statutes and regulations, (3) analysis of quantitative information from the Program's database, (4) technical review of selected regulatory actions, (5) field accompaniments of 3 inspectors, and (6) interviews with staff and managers. The review 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 Nevada Agreement State Program's performance.

Section 2.0 of this report covers the State's actions in response to recommendations made during previous reviews.

2.0 STATUS OF ITEMS IDENTIFIED IN PREVIOUS REVIEWS

During the previous IMPEP review, which concluded on June 5, 2009, the review team made four recommendations regarding the Nevada Agreement State Program's performance. The status of the recommendations is as follows:

1. The review team recommends that the Program revise their inspection procedures and provide training to implement a policy for timely and orderly license termination of licensed materials not in use. (Section 3.3 of the 2005 IMPEP Report.)

Current Status: The Program noted that this issue was also identified by a Nevada legislative audit as an item needing correction. In response to both the NRC and the legislative audit, the Program developed and implemented a procedure to ensure that those licenses that need to be terminated are terminated in a timely fashion. The staff has been trained and understands the procedure. The Program has also strengthened its enforcement procedure regarding license termination. This recommendation is closed.

2. 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).

Current Status: 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 database, made changes specific to its Program, and submitted it to the IT Department for approval. The Program was unable to obtain funding during fiscal year 2013 to complete this project but, if funding is available in fiscal year 2014, the database will be completed and put into use. In the interim, the Program modified its current database, implemented new quality assurance procedures for it, and continues to use it. The Program found that while not perfect, the current database is now more accurate. This recommendation remains open.

3. The review team recommends that the State submit proposed and final regulations to the NRC for compatibility reviews. (Section 4.1.2)

Current Status: Previously the Program believed it was not to send regulations to the NRC for final review until the regulations had been codified a practice that could take several years for the Legislative Council Bureau to complete. This was a misunderstanding which has been corrected. The Program now sends regulation packages for initial and final reviews in a timely manner. This recommendation is closed.

4. The review team recommends that the State develop all required regulations within the required timeframe. (Section 4.1.2)

Current Status: Over the previous review period, the State was found to be significantly behind on regulation development. Over the current review period it was noted that

while the State has made significant progress in rule development, the State continues to work towards becoming timely in its rule development process. Since the last review, the State also added an additional step in the rule development process, adding to the process time. The review team determined it appropriate to leave this recommendation open until the State demonstrates sustained performance in this area. This recommendation remains open.

3.0 COMMON PERFORMANCE INDICATORS

Five common performance indicators are used to review the NRC regional and Agreement State radioactive materials 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

Considerations central to the evaluation of this indicator include the Program's staffing level and staff turnover, as well as the technical qualifications and training histories of the staff. To evaluate these issues, the review team examined the Program's questionnaire response relative to this indicator, interviewed Program managers and staff, reviewed job descriptions and training records, and considered possible workload backlogs.

The Program, headed by the Program Manager, regulates approximately 239 specific licenses with 6.7 technical staff full-time equivalents (FTE), which is considered fully staffed. The Program has two offices, in Carson City and Las Vegas. There are two supervisors in the Carson City office. One supervisor manages radioactive materials licensing and inspection activities for both offices; the other supervisor manages incident response and special project activities for both offices. In addition, there is one supervisor in the Las Vegas office who manages machine-based radiation activities for both offices.

Four staff members left the Program, and three staff members joined the Program during the review period. One position was not filled, lowering the total technical FTE from 7.7 to 6.7. The Program Manager stated that the position is not likely to be filled under current economic conditions, but that the current staffing level is adequate to maintain a quality program. The new staff members have a wide range of technical experience and education, which brings depth of knowledge to the Program. Due to State budget difficulties, all employees are subject to a 48-hour furlough during the year. The review team determined that staffing levels were adequate for the Agreement State Program.

The Program has a documented training and qualification program for technical staff members that is consistent with the NRC/Organization of Agreement States Training Working Group Report and NRC's Inspection Manual Chapter (IMC) 1246, "Formal Qualification Programs in the Nuclear Material Safety and Safeguards Program Area." The review team suggested that the Program use the recently issued IMC 1248, "Qualification Programs for Federal and State Materials and Environmental Management Programs," with structured qualification journals.

Staff members are assigned increasingly complex duties as they progress through the qualification process. The review team noted that several staff members had not attended

required training courses, such as industrial radiography, brachytherapy, and well logging. Training in these areas would provide the Program additional flexibility in work assignments. The employees and supervisors were fully aware of the training needs. The review team concluded that the Program's training program is adequate to carry out its regulatory duties.

Based on the IMPEP evaluation criteria, the review team recommends that Nevada's performance with respect to the indicator, Technical Staffing and Training, be found satisfactory.

3.2 Status of Materials Inspection Program

The review team focused on five factors while reviewing this indicator: inspection frequency, overdue inspections, initial inspections of new licenses, timely dispatch of inspection findings to licensees, and performance of reciprocity inspections. The review team's evaluation was based on the Program's questionnaire response relative to this indicator, data gathered from the Program's database, examination of completed inspection casework, and interviews with managers and staff.

The review team verified that Nevada's inspection frequencies for all types of radioactive material licenses are at least as frequent as license types listed in IMC 2800, "Materials Inspection Program." The review team confirmed the Program is conducting Increased Controls inspections in conjunction with the routine health and safety inspections.

The review team found that the Program conducted a total of 255 inspections over the review period. Of those, 110 were identified as Priority 1, 2, and 3 inspections. None were conducted overdue. The Program also conducted a total of 39 initial inspections over the review period. None were conducted overdue. Additionally, the Program performed 214 followup inspections over the review period. When the Program issues violations, the Program performs a followup inspection of the issues identified during the previous inspection to ensure that corrective actions have been implemented. This followup inspection is conducted within one year. Followup inspections do not alter the inspection intervals assigned to each licensee. Overall, the review team found that the Program performed no inspections overdue during the review period.

The review team evaluated the Program's timeliness in providing inspection findings to licensees. The majority of the Program's routine inspections were documented with the issuance of a NV-591 Form, "Inspection Findings and Licensee Acknowledgement Form," and left with the licensee at the completion of the on-site inspection. The NV-591 form is used for clear inspections and for those resulting in violations. If a NV-591 form cannot be issued in the field, inspection findings are transmitted by letter to the licensee from the Program office. A sampling of 23 inspection reports found that none of the inspection findings were communicated to the licensees beyond the Program's goal of 30 days following the inspection.

The review team found that over the review period, the Program issued a total of 163 reciprocity permits of which 52 were candidates for inspection based upon the criteria found in IMC 1220, "Processing of NRC Form 241 and Inspection of Agreement State Licensees Operating under 10 CFR 150.20". The review team determined that the Program exceeded the NRC's criteria of inspecting 20 percent of candidate licensees operating under reciprocity in all but one year (2010) covered by the review period. The review team found that in 2010, the Program was in a

period of transition and was down two inspectors. Program managers made a deliberate decision to focus their limited staff resources on licensing and inspection of Nevada licensees during that year, resulting in only 8 percent of reciprocity candidate licensees being inspected.

Based on the IMPEP evaluation criteria, the review team recommends that Nevada's performance with respect to the indicator, Status of Materials Inspection Program, be found satisfactory.

3.3 Technical Quality of Inspections

The review team evaluated the inspection reports, enforcement documentation, inspection field notes, and interviewed inspectors for 23 radioactive materials inspections conducted during the review period. The casework reviewed included inspections conducted by six Bureau inspectors and covered inspections of various license types, including: academic broad scope, medical-therapy, medical-diagnostic, fixed and portable gauges, industrial radiography, self-shielded irradiators, cyclotron, nuclear pharmacy, well-logging, and Increased Security Controls for Large Quantities of Radioactive Materials (Increased Controls). Appendix C lists the inspection casework files reviewed, as well as the results of the inspector accompaniments.

Based on the evaluation of casework, the review team noted that inspections covered all aspects of the licensee's radiation safety programs. The review team found that inspection reports were thorough, complete, consistent, and of high quality, with sufficient documentation to ensure that a licensee's performance with respect to health and safety was acceptable. The documentation supported violations, recommendations made to licensees, unresolved safety issues, the effectiveness of corrective actions taken to resolve previous violations and discussions held with licensees during exit interviews.

The inspection procedures utilized by the Program are consistent with the inspection guidance outlined in IMC 2800. An inspection report is completed by the inspector which is then reviewed and signed by the Supervisor and then by the Program Manager. Supervisory accompaniments were conducted annually for all inspectors.

The review team determined that the inspection findings were appropriate and that prompt regulatory actions were taken, as necessary. Inspection findings were clearly stated and documented in the reports issued to the licensees on the Inspection Findings and Licensee Acknowledgement Form at the conclusion of the inspection or an appropriate letter detailing the results of the inspection within 30-days. When the Program issues a form or a letter describing violations, the licensee is required to provide a written corrective action plan, based on the violations cited, within 30 days. All findings are reviewed by the Supervisor and Program Manager.

The review team noted that the Program has an adequate supply of survey instruments to support their inspection program. Appropriate, calibrated survey instruments, including Geiger-Mueller (GM) meters, scintillation detectors, ion chambers, micro-R meters, portable multi-channel analyzers and neutron detectors were observed to be operable and available. Instruments are calibrated at least annually, or as needed, by a consultant with National Institute

of Standards and Technology traceable sources. The Program uses a spread sheet to track each instrument, its current location, and next calibration date.

The review team accompanied all three of the Program's inspectors in March 2013. The inspectors conducted inspections at a hospital performing both diagnostic and therapy procedures and at two industrial radiography facilities. Two of the inspections included a review of the licensees' implementation of the Increased Controls requirements. Appendix C lists the inspector accompaniments. The inspectors demonstrated performance-based inspection techniques and knowledge of the regulations. The inspectors were well trained, prepared for the inspections, and thorough in their audits of the licensees' radiation safety and security programs. The inspectors conducted interviews with appropriate personnel, observed licensed operations, conducted confirmatory measurements, and utilized good health physics practices. The inspectors held entrance and exit meetings with the appropriate level of licensee management. The review team determined that the inspections were adequate to assess radiological health, safety, and security at the licensed facilities.

Based on the IMPEP evaluation criteria, the review team recommends that Nevada's performance with respect to the indicator, Technical Quality of Inspections, be found satisfactory.

3.4 Technical Quality of Licensing Actions

The review team examined completed licensing casework and interviewed license reviewers for 22 specific licensing actions. Licensing actions were reviewed for completeness, consistency, proper radioisotopes and quantities, qualifications of authorized users, adequacy of facilities and equipment, adherence to good health physics practices, financial assurance, operating and emergency procedures, appropriateness of license conditions, and overall technical quality. The casework was also reviewed for timeliness, use of appropriate deficiency letters and cover letters, reference to appropriate regulations, supporting documentation, consideration of enforcement history, pre-licensing visits, peer/supervisory review, and proper signatures.

The licensing casework was selected to provide a representative sample of licensing actions completed during the review period. Licensing actions selected for evaluation included: 1 new license, 5 renewals, 5 decommissioning or termination actions, and 11 amendments. Files reviewed included a cross-section of license types, including: broad scope, medical diagnostic and therapy including: high dose rate remote afterloader, radioiodine therapy, temporary/permanent implant brachytherapy, gamma knife, industrial radiography, research and development, nuclear pharmacy, portable and fixed gauges, manufacturers, and self-shielded irradiators. The casework sample represented work from seven license reviewers. A listing of the licensing casework evaluated is provided in Appendix D.

The review team found that the licensing actions were thorough, complete, consistent, and of high quality with health, safety, and security issues properly addressed. License tie-down conditions were stated clearly and were supported by information contained in the file. Deficiency letters clearly stated regulatory positions, were used at the proper time, and identified substantive deficiencies in the licensees' documents. Terminated licensing actions were well documented, showing appropriate transfer and survey records. License reviewers use the Bureau's licensing guides and/or NRC NUREG-1556 series guidance documents, policies,

checklists, and standard license conditions specific to the type of licensing actions to ensure consistency in licenses.

Licensing actions are assigned a number and tracked on a spreadsheet. The licensing and inspection supervisor assigns licensing actions based on the reviewer's qualifications. Licenses are subjected to peer and supervisory reviews before being signed out by the Program manager. The Program continues to hand deliver and review with the licensee all new licenses and licenses with a change of location or Radiation Safety Officer. This action serves to ensure that licensees have adequate radiation safety and security programs in place and serves to meet the objective of a pre-licensing visit.

Based on the casework evaluated, the review team concluded that the licensing actions were of high quality and consistent with the Branch licensing procedures and NUREG-1556 guidance documents, the State's regulations, and good health physics practices. The review team attributed the consistent use of templates and quality assurance reviews to the overall quality noted in the casework reviews.

The review team examined the Program's licensing practices regarding the Increased Controls and Fingerprinting Orders. The review team noted that the State uses legally binding license conditions that meet the criteria for implementing the Increased Controls Orders, including fingerprinting, as appropriate. The review team analyzed the Program's methodology for identifying those licenses and found the rationale was thorough and accurate. The review team confirmed that license reviewers evaluated new license applications and license amendments using the same criteria. The Program requires full implementation of the Increased Controls prior to issuance of a new license or license amendment that meets the established criteria.

The review team examined the Program's implementation of its procedure for the control of sensitive information. This procedure addresses the identification, marking, control, handling, preparation, transportation, transmission, and destruction of documents that contain sensitive information related to the Increased Controls. The review team noted that the Program controls access to all of its licensing and inspection files through the use of safes and cipher locks.

Based on the IMPEP evaluation criteria, the review team recommends that Nevada's performance with respect to the indicator, Technical Quality of Licensing Actions, be found satisfactory.

3.5 Technical Quality of Incident and Allegation Activities

In evaluating the effectiveness of the Program's actions in responding to incidents and allegations, the review team examined the Program's response to the questionnaire relative to this indicator, evaluated selected incidents reported for Nevada in the Nuclear Material Events Database (NMED) against those contained in the Program's files, and evaluated the casework for 13 radioactive materials incidents. A list of the incident casework examined may be found in Appendix E. The review team also evaluated the Program's response to eight allegations involving radioactive materials, including two allegations referred to the State by the NRC during the review period.

The incidents selected for review included the following categories: lost/stolen radioactive material, potential overexposure, medical event, and equipment failure. The review team determined that the Program's response to incidents was complete and comprehensive. Initial responses were prompt and well-coordinated, and the level of effort was commensurate with the health and safety significance. The Program dispatched inspectors for on-site investigations in six of the cases reviewed and took suitable enforcement and followup actions. If the incident met the reportability thresholds, as established in the Office of Federal and State Materials and Environmental Management Programs (FSME) Procedure SA-300 "Reporting Material Events," the State notified the NRC Headquarters Operations Center and entered the information into NMED, in a prompt manner.

An additional incident occurred during the onsite review, and an IMPEP team member accompanied a Program inspector on the response to a potential public health and safety incident. The Local Law Enforcement Agency identified what appeared to be a contaminated area at a public beach. The response by the Program was prompt and well-coordinated. The inspector attributed the radiation levels to naturally occurring potassium-40.

The review team examined the Program's implementation of its incident and allegation processes, including written procedures for handling allegations and incident response, file documentation, notification of incidents to the NRC Headquarters Operations Center, and the use of NMED software. When notification of an incident or an allegation is received, the Program Manager and supervisors determine the appropriate level of initial response.

In evaluating the effectiveness of the Program's response to allegations, the review team evaluated the completed casework for eight allegations, including two that NRC referred to the State during the review period. The review team concluded that the Program took prompt and appropriate actions in response to concerns raised. The review team noted that the Program documented the investigations of concerns and retained all necessary documentation to appropriately close the allegations. The Program notified the concerned individuals of the conclusion of its investigations. The review team determined that the Program adequately protected the identity of concerned individuals.

Based on the IMPEP evaluation criteria, the review team recommends that Nevada's performance with respect to the indicator, Technical Quality of Incident and Allegation Activities, be found satisfactory.

4.0 NON-COMMON PERFORMANCE INDICATORS

Four non-common performance indicators are used to review Agreement State programs: (1) Compatibility Requirements, (2) Sealed Source and Device Evaluation Program, (3) Low-Level Radioactive Waste Disposal Program, and (4) Uranium Recovery Program. The NRC's Agreement with Nevada does not relinquish authority to regulate a uranium recovery program, so only the first three non-common performance indicators were applicable to this review.

4.1 Compatibility Requirements

4.1.1 Legislation

Nevada became an Agreement State in 1972. Legislative authority to create an agency and enter into an Agreement with the NRC is granted in Nevada Revised Statutes (NRS) Section 459. The Nevada State Health Division is designated as the State's radiation control agency. Another NRS section that affects the Agreement State program includes NRS 439, "Public Health Administrative Procedures." The review team noted that no significant legislation affecting the radiation control program was passed since the previous review.

4.1.2 Program Elements Required for Compatibility

The Nevada Radiation Control Program regulations, found in Chapter 459 of the Nevada Administrative Code, apply to all ionizing radiation, whether emitted from radionuclides or devices. Nevada requires a license for possession and use of all radioactive material. The review team noted that the State's rules and regulations are not subject to "sunset" provisions. The State may adopt other agency's regulations by reference and has the authority to issue legally binding requirements (e.g., license conditions) in lieu of regulations until compatible regulations become effective.

The review team examined the State's process for adopting regulations. The Program informed the review team that in 2011, an additional step was added to the regulation development process. After drafting regulations, in addition to sending a copy to the NRC for review, the Program now sends regulations to the Division Deputy Administrator who edits the regulations. Regulations are then sent to the Legislative Council Bureau (LCB) for review and comment. The LCB is a legal office within Nevada that first reviews and then later codifies regulations for all Nevada regulatory agencies. When the overall process is complete (including resolution of NRC comments), the adopted regulations are sent back to the LCB for codification. Once codified, the newly formatted regulations are sent to the Secretary of State's Office for filing. After approximately 30 to 45 days the regulations become final. The State can adopt some NRC regulations by reference which speeds up the adoption process significantly.

During the review period, Nevada submitted 16 final regulation amendments to NRC for a compatibility review. Current NRC policy requires that Agreement States adopt certain equivalent regulations or legally binding requirements no later than 3 years after the effective date of NRC's regulations. A total of 15 of the 16 final amendments were overdue for State adoption at the time of submission. The NRC's compatibility review of the final amendments resulted in no comments.

At the time of this review, the following amendment was overdue:

- "Medical Use of Byproduct Material – Authorized User Clarification," 10 CFR Part 35 (74 FR 33901), that was due for Agreement State implementation on September 28, 2012.

The Program is drafting final regulations for this amendment but the rule package is currently pending in the Division. The review team noted that the State had made significant process in

the promulgation of regulations since the last IMPEP review, but still faced challenges in negotiating the arduous State regulatory process.

A complete list of upcoming regulation amendments that will need to be addressed in the future may be found on the NRC website at the following address:

http://nrc-stp.ornl.gov/rss_regamendents.html.

Based on the IMPEP evaluation criteria, the review team recommends that Nevada's performance with respect to the indicator, Compatibility Requirements, be found satisfactory.

4.2 Sealed Source and Device Evaluation Program

There are currently two manufacturers/distributors licensed by the Program. One of the licensees assembles and distributes generally licensed devices in accordance with sealed source and device (SS&D) registry certificates issued by another Agreement State. The second licensee manufactures gun and bow sights in accordance with an NRC-issued SS&D registry certificate and distributes them under an NRC exempt distribution license.

During a previous IMPEP review, the State indicated that it planned to return its SS&D authority to the NRC; however, this plan did not receive management approval. At the time of the review, the Program had no staff members qualified to perform safety evaluations of SS&D applications and amendments. The Program entered into an agreement with the State of California whereby California's qualified SS&D reviewers will conduct product safety evaluations for the State of Nevada.

During the review period, the Program issued one SS&D certificate to a now terminated licensee. The licensee distributed generally licensed exit signs. Technical evaluation of the certificate was performed by California SS&D reviewers and was signed by the Program Manager and one of the supervisors. Issuance of the sheet was performed in close coordination with FSME.

As the Program did not perform technical evaluation of SS&D certificates during the review period, the review team did not further review this indicator.

4.3 Low-level Radioactive Waste Disposal Program

The former U.S. Ecology low-level radioactive waste disposal facility, located in Nye County, opened in 1962 and received radioactive waste for burial until 1992. The former licensee completed the State-approved closure plan and the license was subsequently transferred to the State of Nevada. The Nevada State Health Division assumed all oversight responsibilities and became custodian of the site. The site has continuous security. One of the Program supervisors is named as Radiation Safety Officer on the license.

The review team determined that the Program performs quarterly visits to the site for a visual examination of the trench cap and to conduct radiation surveys. The review team's evaluation of the quarterly visit reports identified an adequate analysis of site radiological hazards. No further evaluation of this indicator was performed by the review team.

5.0 SUMMARY

As noted in Sections 3.0 and 4.0 above, Nevada's performance was found satisfactory for all of the performance indicators reviewed. The review team did not make any new recommendations and determined that two recommendations from the 2009 IMPEP review should be closed. The review team determined that the other two recommendations from the 2009 IMPEP review should remain open pending enhancements of the data tracking system and the regulation promulgation process.

Accordingly, the review team recommends that the Nevada Agreement State Program be found adequate to protect public health and safety and compatible with the NRC's program. Based on the results of the current IMPEP review, the review team recommends that the next full IMPEP review take place in approximately four years.

LIST OF APPENDICES

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APPENDIX A

IMPEP REVIEW TEAM MEMBERS

| Name | Area of Responsibility |
|--------------------------------|--|
| James Lynch, Region III | Team Leader Technical Staffing and Training Inspection Accompaniments |
| Randy Erickson, Region IV | Status of Materials Inspection Program Compatibility Requirements |
| Alan Jacobson, Maryland | Technical Quality of Inspections |
| Orysia Masnyk Bailey, Region I | Technical Quality of Licensing Actions Technical Quality of Incident and Allegation Activities |

APPENDIX B

NEVADA ORGANIZATION CHARTS

ADAMS ACCESSION NO.: ML13211A345

APPENDIX C

INSPECTION CASEWORK REVIEWS

NOTE: CASEWORK LISTED WITHOUT COMMENT IS INCLUDED FOR COMPLETENESS.

File No.: 1

Licensee: Sierra Vista Surgery Center
Inspection Type: Routine, Unannounced
Inspection Date: 2/15/13

License No.: 16-12-0648-01
Priority: 3
Inspector: JB

File No.: 2

Licensee: Desert Radiologist
Inspection Type: Routine, Unannounced
Inspection Date: 10/4/12

License No.: 03-12-0327-01
Priority: 3
Inspector: TS

File No.: 3

Licensee: University of Nevada - Las Vegas
Inspection Type: Routine, Unannounced
Inspection Date: 3/19/13

License No.: 03-13-0305-01
Priority: 5
Inspector: JB

File No.: 4

Licensee: North Vista Hospital
Inspection Type: Routine, Unannounced
Inspection Date: 12/8/10

License No.: 03-12-0291-01
Priority: 3
Inspector: TS

File No.: 5

Licensee: United Blood Services
Inspection Type: Routine, Unannounced
Inspection Date: 4/5/12

License No.: 16-11-0300-01
Priority: 5
Inspectors: AH, EM

File No.: 6

Licensee: Baker Hughes
Inspection Type: Routine, Unannounced
Inspection Date: 5/12/12

License No.: 00-11-0659-01
Priority: 3
Inspector: TM

File No.: 7

Licensee: Carson Tahoe Regional Medical Center
Inspection Type: Routine, Unannounced
Inspection Date: 4/13/11

License No.: 01-12-0032-01
Priority: 3
Inspector: TM

File No.: 8

Licensee: Black Eagle Consulting
Inspection Type: Routine, Unannounced
Inspection Date: 4/15/13

License No.: 00-11-0409-02
Priority: 1
Inspector: JB

File No.: 9

Licensee: Western Technologies
Inspection Type: Routine, Unannounced
Inspection Date: 3/6/13

License No.: 00-11-0019-01
Priority: 1
Inspector: JF

File No.: 10

Licensee: Aztech Inspection and Testing
Inspection Type: Routine, Unannounced
Inspection Date: 8/15/12

License No.: 00-11-0482-02
Priority: 1
Inspectors: TS, JF

File No.: 11

Licensee: Black Eagle Consulting
Inspection Type: Routine, Unannounced
Inspection Date: 5/11/12

License No.: 00-11-0409-02
Priority: 1
Inspector: TM

File No. 12

Licensee: Bigelow Aerospace
Inspection Type: Routine, Unannounced
Inspection Date: 8/24/10

License No.: 03-11-0622-01
Priority: 2
Inspector: TS

File No. 13

Licensee: Davis Laboratories
Inspection Type: Routine, Unannounced
Inspection Date: 8/12/12

License No.: 00-11-0113-01
Priority: 1
Inspector: TS

File No.: 14

Licensee: Barrick Goldstrike Mines
Inspection Type: Routine, Unannounced
Inspection Date: 9/22/12

License No.: 05-11-0276-01
Priority: 5
Inspector: TM

File No.: 15

Licensee: Urology Reno
Inspection Type: Routine, Unannounced
Inspection Date: 4/30/12

License No.: 16-12-0644-01
Priority: 2
Inspector: TM

File No.: 16

Licensee: St. Mary's Regional Medical Center
Inspection Type: Routine, Unannounced
Inspection Date: 2/15/12

License No.: 16-12-0244-02
Priority: 3
Inspector: TM

File No.: 17

Licensee: 21st Century Oncology
Inspection Type: Routine, Unannounced
Inspection Date: 6/29/10

License No.: 03-12-0429-01
Priority: 2
Inspector: TS

File No.: 18

Licensee: Cardinal Health
Inspection Type: Routine, Unannounced
Inspection Date: 5/23/13

License No.: 03-11-0332-02
Priority: 2
Inspector: JF

File No.: 19

Licensee: University Medical Center
Inspection Type: Routine, Unannounced
Inspection Date: 6/8/11

License No.: 03-12-0034-03
Priority: 2
Inspectors: TS, TM

File No.: 20

Licensee: Sunrise Medical Center
Inspection Type: Routine, Unannounced
Inspection Date: 12/20/11

License No.: 03-12-0395-02
Priority: 2
Inspectors: JF, TS

File No.: 21

Licensee: Newmont Mining
Inspection Type: Routine, Unannounced
Inspection Date: 4/6/10

License No.: 08-11-0364-01
Priority: 5
Inspector: TM

File No.: 22

Licensee: PETNET Solutions
Inspection Type: Routine, Unannounced
Inspection Date: 2/15/12

License No.: 03-11-0468-01
Priority: 2
Inspector: TS

File No.: 23

Licensee: PETNET Solutions
Inspection Type: Routine, Unannounced
Inspection Date: 2/15/12

License No.: 03-11-0468-02
Priority: 2
Inspector: TS

INSPECTOR ACCOMPANIMENTS

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

Accompaniment No.: 1

Licensee: Sunrise Hospital and Medical Center
Inspection Type: Routine, Unannounced
Inspection Date: 3/4/13

License No.: 03-12-0325-01
Priority: 2
Inspector: JB

Accompaniment No.: 2

Licensee: Davis Laboratories, Inc.
Inspection Type: Routine, Unannounced
Inspection Date: 3/5/13

License No.: 00-11-0113-01
Priority: 1
Inspector: TM

Accompaniment No.: 3
Licensee: Western Technologies, Inc.
Inspection Type: Routine, Unannounced
Inspection Date: 3/6/13

License No.: 00-11-0019-01
Priority: 1
Inspector: JF

APPENDIX D

LICENSE CASEWORK REVIEWS

NOTE: CASEWORK LISTED WITHOUT COMMENT IS INCLUDED FOR COMPLETENESS.

File No.: 1

Licensee: University of Nevada - Reno

Type of Action: Termination

Date Issued: 10/31/12

License No.: 16-13-0003-08

Amendment No.: 2

License Reviewer: SR

File No.: 2

Licensee: Cardinal Health 414, LLC

Type of Action: Amendment

Date Issued: 2/13/13

License No: 03-11-0332-03

Amendment No.: 1

License Reviewer: JB

File No.: 3

Licensee: A2Z NDT

Type of Action: New

Date Issued: 5/14/13

License No.: 00-11-0693-01

Amendment No.: 0

License Reviewer: JB

File No.: 4

Licensee: United Blood Services

Type of Action: Renewal

Date Issued: 5/31/12

License No.: 16-11-0300-01

Amendment No.: 8

License Reviewer: AH

File No.: 5

Licensee: Grizzly Materials & Testing

Type of Action: Termination

Date Issued: 6/28/11

License No.: 00-11-0589-01

Amendment No.: 5

License Reviewer: TM

File No.: 6

Licensee: Black Eagle Consulting, Inc.

Type of Action: Amendment

Date Issued: 4/23/13

License No.: 00-11-0409-02

Amendment No.: 3

License Reviewer: JB

File No.: 7

Licensee: Sunrise Hospital and Medical Center

Type of Action: Amendment

Date Issued: 3/14/13

License No.: 03-12-0395-02

Amendment No.: 17

License Reviewer: JB

File No.: 8

Licensee: Animal Imaging & Treatment Center

Type of Action: Renewal

Date Issued: 2/13/13

License No.: 03-12-0413-01

Amendment No.: 6

License Reviewer: SR

File No.: 9

Licensee: Renown Regional Medical Center
Type of Action: Amendment
Date Issued: 6/17/13

License No.: 16-12-0016-01
Amendment No.: 104
License Reviewer: AK

File No.: 10

Licensee: St. Rose Dominican Hospital
Type of Action: Amendment
Date Issued: 3/20/13

License No.: 03-12-0395-02
Amendment No.: 7
License Reviewer: SR

File No.: 11

Licensee: Black Eagle Consulting Company
Type of Action: Amendment
Date Issued: 1/24/13

License No.: 00-11-0409-01
Amendment No.: 11
License Reviewer: AK

File No.: 12

Licensee: Nevada Department of Transportation
Type of Action: Renewal
Date Issued: 6/3/13

License No.: 00-14-0407-01
Amendment No.: 12
License Reviewer: TM

File No.: 13

Licensee: Premier Magnesia, LLC
Type of Action: Renewal
Date Issued: 7/13/11

License No.: 13-11-0612-01
Amendment No.: 4
License Reviewer: AH

File No.: 14

Licensee: Varian Medical Systems
Type of Action: Amendment
Date Issued: 11/7/12

License No.: 03-11-0637-01
Amendment No.: 4
License Reviewer: TS

File No.: 15

Licensee: Best Lighting Products, Inc.
Type of Action: Termination
Date Issued: 12/17/12

License No.: 03-11-0494-02
Amendment No.: 14
License Reviewer: AK

File No.: 16

Licensee: QC Southwest
Type of Action: Renewal
Date Issued: 9/5/12

License No.: 00-11-0499-01
Amendment No.: 4
License Reviewer: TS

File No.: 17

Licensee: Renown Regional Medical Center
Type of Action: Termination
Date Issued: 4/12/10

License No.: 16-12-0430-01
Amendment No.: 24
License Reviewer: SR

File No.: 18

Licensee: PetNet Solutions, Inc.

Type of Action: Amendment

Date Issued: 5/15/13

License No.: 03-1-0468-01

Amendment No.: 18

License Reviewer: JB

File No.: 19

Licensee: Cardinal Health 414, LLC

Type of Action: Termination

Date Issued: 11/17/11

License No.: 01-11-0150-01

Amendment No.: 56

License Reviewer: AK

File No.: 20

Licensee: University of Nevada – Las Vegas

Type of Action: Amendment

Date Issued: 4/11/11

License No.: 13-13-0305-01

Amendment No.: 40

License Reviewer: AK

File No.: 21

Licensee: Comprehensive Cancer Centers of Nevada

Type of Action: Amendment

Date Issued: 6/10/13

License No.: 03-12-0491-01

Amendment No.: 18

License Reviewer: AK

File No.: 22

Licensee: Comprehensive Cancer Centers of Nevada

Type of Action: Amendment

Date Issued: 5/14/13

License No.: 03-12-0525-01

Amendment No.: 21

License Reviewer: AK

APPENDIX E

INCIDENT CASEWORK REVIEWS

NOTE: CASEWORK LISTED WITHOUT COMMENT IS INCLUDED FOR COMPLETENESS.

File No.: 1

Licensee: Robinson Mining Company

Date of Incident: 4/29/10

Investigation Date: 4/29/10

License No.: 17-11-0372-01

NMED No.: 100222

Type of Incident: Equipment Failure

Type of Investigation: Site

File No.: 2

Licensee: St. Mary's Regional Hospital

Date of Incident: 3/16/10

Investigation Date: 5/14/10

License No.: 16-12-0244-02

NMED No.: 100263

Type of Incident: Medical Event

Type of Investigation: Site

File No.: 3

Licensee: West Valley Imaging

Date of Incident: 7/21/10

Investigation Date: 7/21/10

License No.: 03-23-0384-02

NMED No.: 100381

Type of Incident: Medical Event

Type of Investigation: Telephone

File No.: 4

Licensee: Round Mountain Gold Corporation

Date of Incident: 3/10/10

Investigation Date: 3/15/10

License No.: 13-11-0097-01

NMED No.: 100126

Type of Incident: Equipment Failure

Type of Investigation: Telephone

File No.: 5

Licensee: Las Vegas Paving

Date of Incident: 3/10/10

Investigation Date: 3/11/10

License No.: 00-22-0255-01

NMED No.: 100114

Type of Incident: Lost/Stolen RAM

Type of Investigation: Site

File No.: 6

Licensee: James Hardie Building Products

Date of Incident: 1/1/05

Investigation Date: 7/9/12

License No.: General

NMED No.: 120408

Type of Incident: Lost/Stolen RAM

Type of Investigation: Telephone

File No.: 7

Licensee: Summerlin Medical Center

Date of Incident: 12/23/11

Investigation Date: 12/28/11

License No.: 03-12-0388-01

NMED No.: 120089

Type of Incident: Lost/Stolen RAM

Type of Investigation: Telephone

File No.: 8

Licensee: 21st Century Oncology

Date of Incident: 10/12/12

Investigation Date: 10/15/12

License No.: 03-12-0429-01

NMED No.: 120621

Type of Incident: Medical Event

Type of Investigation: Telephone

File No.: 9

Licensee: St. Mary's Regional Hospital
Date of Incident: 5/14/13
Investigation Date: 5/14/13

License No.: 16-12-0244-02
NMED No.: 130242
Type of Incident: Medical Event
Type of Investigation: Telephone

File No.: 10

Licensee: Acclaim Material Testing
Date of Incident: 12/28/09
Investigation Date: 12/28/09

License No.: 00-11-0471-01
NMED No.: 100004
Type of Incident: Equipment Failure
Type of Investigation: Site

File No.: 11

Licensee: University of Nevada – Las Vegas
Date of Incident: 4/5/11
Investigation Date: 8/31/12

License No.: 03-13-0305-01
NMED No.: 120515
Type of Incident: Overexposure
Type of Investigation: Site

File No.: 12

Licensee: Bracco Diagnostics
Date of Incident: 2/11/11
Investigation Date: 12/5/11

License No.: 03-12-0453-01
NMED No.: 110646
Type of Incident: Medical Event
Type of Investigation: Site

File No.: 13

Licensee: University Medical Center
Date of Incident: 12/9/09
Investigation Date: 12/10/09

License No.: 13-12-0034-01
NMED No.: 110339
Type of Incident: Medical Event
Type of Investigation: Telephone