



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

February 2, 2024

Ty Howard, Deputy Director  
Utah Department of Environmental Quality  
195 North 1950 West  
Salt Lake City, UT 84116

Dear Ty Howard:

On January 9, 2023, the Management Review Board (MRB), which consisted of the U.S. Nuclear Regulatory Commission (NRC) senior managers and an Organization of Agreement States member, met to consider the results of the Integrated Materials Performance Evaluation Program (IMPEP) review of the Utah Agreement State Program. The MRB Chair, in consultation with the MRB, found the Utah Agreement State Program adequate to protect public health and safety and compatible with the NRC's program.

The enclosed final report documents the IMPEP team's findings and summarizes the results of the MRB meeting. Based on the results of the current IMPEP review, the MRB determined that the next periodic meeting take place in approximately 2 years with the next IMPEP review taking place in approximately 4 years.

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

Sincerely,

A handwritten signature in black ink, appearing to read "John W. Lubinski".

Signed by Lubinski, John  
on 02/02/24

John W. Lubinski, Director  
Office of Nuclear Material Safety  
and Safeguards

Enclosures:

1. 2023 Utah IMPEP Report
2. 2023 Utah MRB Meeting Participants

SUBJECT: UTAH FINAL IMPEP REPORT DATED February 2, 2024

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

SEPTEMBER 18-22, 2023

**FINAL REPORT**

## EXECUTIVE SUMMARY

The results of the Integrated Materials Performance Evaluation Program (IMPEP) review of the Utah Agreement State Program (Utah) are discussed in this report. The review was conducted from September 18-22, 2023. Inspector accompaniments were conducted during the weeks of June 19, 2023; August 7, 2023; and August 14, 2023.

The team recommended and the Management Review Board (MRB) Chair agreed that Utah's performance be found satisfactory for the following seven performance indicators: 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; Low-Level Radioactive Waste Disposal Program; and Uranium Recovery Program. The team recommended, and the MRB Chair agreed, that Utah's performance be found satisfactory but needs improvement for the performance indicator: Legislation, Regulations, and Other Program Elements.

The team proposed and the MRB Chair agreed to four new recommendations for improved program performance. The first recommendation is captured under Section 3.3, *Technical Quality of Inspections*, and relates to ensuring inspection reports are complete, thorough, and accurately reflect the inspection performed. The remaining three recommendations are captured under Section 4.1, *Legislation Regulations and Other Program Elements*. These three recommendations relate to: (1) updating licensing guidance to incorporate the essential objectives of the risk significant radioactive materials checklist; (2) performing an extent of condition review of all programmatic procedures required as a matter of compatibility; and (3) providing training to staff on revisions made to programmatic procedures resulting from the extent of condition review.

Accordingly, the team recommended and the MRB Chair agreed that the Utah Agreement State Program be found adequate to protect public health and safety and compatible with the NRC's program. The team recommended and the MRB Chair agreed that a periodic meeting take place in approximately 2 years with the next IMPEP review taking place in approximately 4 years.

## 1.0 INTRODUCTION

The Utah Agreement State Program (Utah) review was conducted from September 18-22, 2023, by a team of technical staff members from the U.S. Nuclear Regulatory Commission (NRC) and the States of South Carolina, Tennessee, and Wyoming. Team members are identified in Appendix A. Inspector accompaniments were conducted during the weeks of June 19, August 7, and August 14, 2023. The inspector accompaniments are identified in Appendix B. The review was conducted in accordance with the "Agreement State Program Policy Statement," published in the Federal Register on October 18, 2017 (82 FR 48535), and NRC Management Directive (MD) 5.6, "Integrated Materials Performance Evaluation Program (IMPEP)," dated July 24, 2019. Preliminary results of the review, which covered the period of September 14, 2019, to September 22, 2023, were discussed with Utah managers on the last day of the review.

In preparation for the review, a questionnaire addressing the common performance indicators and applicable non-common performance indicators was sent to Utah on May 9, 2023. Utah provided its response to the questionnaire on August 31, 2023. A copy of the questionnaire response is available in the NRC's Agencywide Documents Access and Management System (ADAMS) using the Accession Number [ML23250A079](#).

The 2023 IMPEP team issued a draft report to Utah on November 3, 2023, for factual comment ([ML23302A001](#)). Utah responded to the draft report by letter dated November 30, 2023, from Douglas J. Hansen, Director, Division of Waste Management and Radiation Control ([ML23339A182](#)).

The Utah Agreement State Program is administered by three programs: Radioactive Material, Low-Level Radioactive Waste (LLRW), and Uranium Mill. These programs are located within the Division of Waste Management and Radiation Control. The Division of Waste Management and Radiation Control is part of the Department of Environmental Quality. Organization charts for Utah are available in ADAMS ([ML23250A078](#)).

At the time of the review, Utah regulated 187 specific licenses authorizing possession and use of radioactive materials. The review focused on the agreement state program as it is carried out under Section 274b. (of the Atomic Energy Act of 1954, as amended) Agreement between the NRC and the State of Utah.

The team evaluated the information gathered against the established criteria for each of the common and applicable non-common performance indicators and made a preliminary assessment of Utah's performance.

## 2.0 PREVIOUS IMPEP REVIEW AND STATUS OF RECOMMENDATIONS

The previous IMPEP review concluded on September 13, 2019. The final report is available in ADAMS ([ML19329E246](#)). The results of the review are as follows:

Technical Staffing and Training: Satisfactory  
Recommendation: None

Status of the Materials Inspection Program: Satisfactory  
Recommendation: None

Technical Quality of Inspections: Satisfactory  
Recommendation: None

Technical Quality of Licensing Actions: Satisfactory  
Recommendation: None

Technical Quality of Incident and Allegation Activities: Satisfactory  
Recommendation: None

Compatibility Requirements (now known as Legislation, Regulations, and Other Program Elements): Satisfactory  
Recommendation: None

LLRW Disposal: Satisfactory  
Recommendations: None

Uranium Recovery (UR): Satisfactory  
Recommendation: None

Overall Finding: Adequate to protect public health and safety and compatible with the NRC's program.

### **3.0 COMMON PERFORMANCE INDICATORS**

Five common performance indicators are used to review the NRC and Agreement State radiation control programs. These indicators are: (1) Technical Staffing and Training; (2) Status of Materials Inspection Program; (3) Technical Quality of Inspections; (4) Technical Quality of Licensing Actions; and (5) Technical Quality of Incident and Allegation Activities.

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

The ability to conduct effective licensing and inspection programs is largely dependent on having a sufficient number of experienced, knowledgeable, well-trained technical personnel. Under certain conditions, staff turnover could have an adverse effect on the implementation of these programs and could affect public health and safety. Apparent trends in staffing must be assessed. Review of staffing also requires consideration and evaluation of the levels of training and qualification. The evaluation standard measures the overall quality of training available to, and taken by, materials program personnel.

##### **a. Scope**

The team used the guidance in State Agreements (SA) procedure [SA-103](#), "Reviewing the Common Performance Indicator: Technical Staffing and Training," and evaluated Utah's performance with respect to the following performance indicator objectives:

- A well-conceived and balanced staffing strategy has been implemented throughout the review period.
- Any vacancies, especially senior-level positions, are filled in a timely manner.
- There is a balance in staffing of the licensing and inspection programs.
- Management is committed to training and staff qualification.

- Agreement State training and qualification program is equivalent to NRC Inspection Manual Chapter (IMC) 1248, “Formal Qualifications Program for Federal and State Material and Environmental Management Programs.”
- Qualification criteria for new technical staff are established and are followed, or qualification criteria will be established if new staff members are hired.
- Individuals performing materials licensing and inspection activities are adequately qualified and trained to perform their duties.
- License reviewers and inspectors are trained and qualified in a reasonable period of time.

b. Discussion

The Radioactive Material Program is comprised of eight staff totaling five full-time equivalents (FTE). This includes one Division Director, one Assistant Division Director, one Radioactive Materials Program Manager, and five technical staff who are qualified to perform both licensing and inspection activities. Of the five technical staff, four are fully qualified and one has limited qualifications. Currently, there are no vacancies. During the review period, no technical staff vacancies occurred, and two managerial vacancies occurred. The former Division Director was promoted, and the position was vacant for approximately one month before being filled. Additionally, the former Deputy Division Director retired, and the position was reclassified to an Assistant Division Director. This position was vacant for approximately one month before being filled.

The team evaluated the Radioactive Material Program’s training and qualification program. The team determined that the training and qualification program did not contain the essential objectives of the NRC’s IMC 1248 and therefore is not compatible. Specifically, the team found that the training and qualification journal was missing equivalent independent study requirements and on the job training requirements. The team did not identify any deficiencies in the performance of licensing and inspection activities despite the Radioactive Material Program not having a compatible training and qualification program. Therefore, the team determined this to be a matter of compatibility rather than performance and has captured this item accordingly in Section 4.1 of this report.

The team confirmed that qualified licensing and inspection staff were completing and documenting at least 24 hours of refresher training every 2 years. No impacts related to the pandemic were noted in this indicator.

c. Evaluation

The team determined that, during the review period, Utah met the performance indicator objectives listed in Section 3.1.a, except for:

- The Radioactive Material Program’s training and qualification program did not meet the essential objectives of the NRC’s IMC 1248, “Formal Qualifications Program for Federal and State Material and Environmental Management Programs.”

Through interviews with staff and reviewing the results of inspection, licensing, and incident response activities detailed in this report, the team determined that current staff had sufficient knowledge of programmatic activities and understood the applicable regulations to perform their duties. No performance issues were identified. The team determined this to be

a performance concern related to compatibility rather than a performance concern related to staffing and training. The team further addresses this item and associated impacts to the indicator findings under Section 4.1 of this report.

Therefore, based on the IMPEP evaluation criteria in MD 5.6, the team recommends that Utah's performance with respect to the indicator, Technical Staffing and Training, be found satisfactory.

d. Management Review Board (MRB) Chair's Determination

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

### 3.2 Status of Materials Inspection Program

Inspections of licensed operations are essential to ensure that activities are being conducted in compliance with regulatory requirements and consistent with good safety and security practices. The frequency of inspections is specified in IMC 2800, "Materials Inspection Program," and is dependent on the amount and type of radioactive material, the type of operation licensed, and the results of previous inspections. There must be a capability for maintaining and retrieving statistical data on the status of the inspection program.

a. Scope

The team used the guidance in [SA-101](#), "Reviewing the Common Performance Indicator: Status of the Materials Inspection Program," and evaluated Utah's performance with respect to the following performance indicator objectives:

- Initial inspections and inspections of Priority 1, 2, and 3 licensees are performed at the prescribed frequencies (<https://www.nrc.gov/materials/miau/mat-toolkits.html>).
- Deviations from inspection schedules are normally coordinated between technical staff and management.
- There is a plan to perform any overdue inspections and reschedule any missed or deferred inspections or a basis has been established for not performing any overdue inspections or rescheduling any missed or deferred inspections.
- Candidate licensees working under reciprocity are inspected in accordance with the criteria prescribed in IMC 2800 and other applicable guidance or compatible Agreement State Procedure.
- Inspection findings are communicated to licensees in a timely manner (30 calendar days, or 45 days for a team inspection), as specified in [IMC 0610](#), "Nuclear Material Safety and Safeguards Inspection Reports."

b. Discussion

The Radioactive Material Program performed 238 Priority 1, 2, 3, and initial inspections during the review period. The team determined that no Priority 1, 2, 3 or initial inspections were conducted overdue during the review period, and none were overdue at the time of the review. The Radioactive Material Program's inspection frequencies are the same as and in most cases more frequent than, the NRC's inspection frequencies for similar license types in IMC 2800.



A sampling of 63 inspection reports indicated that one of the inspection findings was communicated to the licensee beyond the Radioactive Material Program's goal of 30 days after the inspection exit or 45 days after the team inspection exit. This inspection finding involved violations that required legal review and was subsequently sent to the licensee 37 days after the inspection exit.

The Radioactive Material Program's performance of reciprocity inspections was accomplished using a risk-informed program specific procedure. The team verified that the Radioactive Material Program followed its risk-informed procedures and determined that greater than 20 percent of candidate reciprocity inspections were performed each calendar year. No impacts related to the pandemic were noted in this indicator.

c. Evaluation

The team determined that, during the review period, Utah met the performance indicator objectives listed in Section 3.2.a. Based on the criteria in MD 5.6, the team recommends that Utah's performance with respect to the indicator, Status of Materials Inspection Program, be found satisfactory.

d. MRB Chair's Determination

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

### 3.3 Technical Quality of Inspections

Inspections, both routine and reactive, provide reasonable assurance that licensee activities are carried out in a safe and secure manner. Accompaniments of inspectors performing inspections and the critical evaluation of inspection records are used to assess the technical quality of an inspection program.

a. Scope

The team used the guidance in [SA-102](#), "Reviewing the Common Performance Indicator: Technical Quality of Inspections," and evaluated Utah's performance with respect to the following performance indicator objectives:

- Inspections of licensed activities focus on health, safety, and security.
- Inspection findings are well-founded and properly documented in reports.
- Management promptly reviews inspection results.
- Procedures are in place and used to help identify root causes and poor licensee performance.
- Inspections address previously identified open items and violations.
- Inspection findings lead to appropriate and prompt regulatory action.
- Supervisors, or senior staff as appropriate, conduct annual accompaniments of each inspector to assess performance and assure consistent application of inspection policies.
- For Programs with separate licensing and inspection staffs, procedures are established and followed to provide feedback information to license reviewers.
- Inspection guides are compatible with NRC guidance.

- An adequate supply of calibrated survey instruments is available to support the inspection program.

b. Discussion

The team evaluated 24 inspection reports and enforcement documentation, and interviewed inspectors involved in materials inspections conducted during the review period. The team reviewed casework for inspections conducted by four of the five Radioactive Material Program inspectors during the review period and covered medical, industrial, commercial, academic, research, and service licenses. The fifth qualified inspector (as mentioned in Section 3.1) did not perform any inspections during the review period and therefore, the team did not have any inspection work to review.

The team determined that generally inspection findings were well-founded and appropriately documented. However, the team found that 4 of 24 inspection reports included information that was not relevant to the inspection performed or included errors regarding the scope of the inspection. The team found that these errors were administrative in nature and did not deter from the overall findings reported to the licensee for each of these inspections. The team determined that the inspection findings presented to the licensees were well-founded and did identify licensee performance issues as appropriate. The root cause of the administrative errors in the inspection findings was determined to be a result of the staff copying and pasting from previous inspection write-ups.

A team member accompanied three inspectors during the week of June 20, 2023. The inspector accompaniments were conducted and are identified in Appendix B. The inspectors were accompanied during health, safety, and security inspections. During the accompaniments, the inspectors demonstrated appropriate use of inspection procedures, knowledge of the regulations, and appropriate use of calibrated survey instruments. The team determined that Utah inspectors were adequately trained, conducted interviews with appropriate personnel, observed licensed activities, conducted independent and confirmatory radiation measurements, and utilized appropriate health physics practices.

The team reviewed the paperwork associated with the Radioactive Material Program's performance of supervisory accompaniments of qualified inspectors. The team determined that all inspectors were accompanied at least annually during the review period. Additionally, the team found that the Radioactive Material Program maintained an adequate supply of radiation detection instrumentations during the review period. The instrumentation was calibrated at appropriate intervals and was appropriate for the types of licensed activities being inspected. No impacts related to the pandemic were noted in this indicator.

c. Evaluation

The team determined that, during the review period, Utah met the performance indicator objectives listed in Section 3.3.a except for:

- Inspection findings were not well-founded and properly documented in 4 of the 24 reports reviewed.

The team determined that the errors in the inspection findings were a result of the staff copying and pasting from previous inspection documentation. Therefore, the team is making one recommendation for improved program performance. The team recommends that Utah:

- Take appropriate measures to ensure that inspection records are complete, thorough, and accurately reflect the inspection performed.

The team discussed whether a rating of satisfactory or a rating of satisfactory but needs improvement was more appropriate for this indicator. MD 5.6 states in Section III.D.1 that “a finding of “satisfactory” is appropriate when a review demonstrates the presence of the following conditions,” including:

- An evaluation of inspection casework indicates that inspections are complete, inspection findings are well-founded, and inspection results are reviewed promptly by program management.

Section III.D.2 states that “consideration should be given to a finding of “satisfactory but needs improvement” when a review demonstrates the presence of one or more of the following conditions” including:

- An evaluation of inspection casework indicates that more than a few, but less than most, of the inspections: (1) fail to address potentially important health, safety, or security concerns; (2) are incomplete; (3) indicate problems with respect to thoroughness, technical quality, and consistency; or (4) indicate no management review of inspection results.

The team determined that more than a few but less than most of the inspection findings included information that was not relevant to the inspection performed or included errors with regards to the scope of the inspection and therefore, demonstrated the presence of the bullet mentioned for a finding of satisfactory but needs improvement. However, the team found that the errors were administrative in nature and did not deter from the overall findings reported to the licensee for each inspection. Additionally, the team determined that the inspectors’ performances observed during the inspector accompaniments indicated that the inspectors were knowledgeable of the requirements for each license type and were able to identify potential health, safety, and security concerns. Therefore, the team determined that a finding of satisfactory but needs improvement was not warranted for this indicator.

Based on the IMPEP evaluation criteria in MD 5.6, the team recommends that Utah’s performance with respect to the indicator, Technical Quality of Inspections, be found satisfactory.

#### d. MRB Chair’s Determination

The MRB Chair agreed with the team’s recommendation and found Utah’s performance with respect to this indicator satisfactory and agreed to open one new recommendation.

### 3.4 Technical Quality of Licensing Actions

The quality, thoroughness, and timeliness of licensing actions can have a direct bearing on public health and safety, as well as security. An assessment of licensing procedures, implementation of those procedures, and documentation of communications and associated

actions between the Utah licensing staff and regulated community is a significant indicator of the overall quality of the licensing program.

a. Scope

The team used the guidance in [SA-104](#), "Reviewing the Common Performance Indicator: Technical Quality of Licensing Actions," and evaluated Utah's performance with respect to the following performance indicator objectives:

- Licensing action reviews are thorough, complete, consistent, and of acceptable technical quality with health, safety, and security issues properly addressed.
- Essential elements of license applications have been submitted and elements are consistent with current regulatory guidance (e.g., pre-licensing guidance, Title 10 of the *Code of Federal Regulations* (10 CFR) Part 37, financial assurance, etc.).
- License reviewers, if applicable, have the proper signature authority for the cases they review independently.
- License conditions are stated clearly and can be inspected.
- Deficiency letters clearly state regulatory positions and are used at the proper time.
- Reviews of renewal applications demonstrate a thorough analysis of a licensee's inspection and enforcement history.
- Applicable guidance documents are available to reviewers and are followed (e.g., NUREG-1556 series, pre-licensing guidance, regulatory guides, etc.).
- Licensing practices for risk significant radioactive materials (RSRM) are appropriately implemented including the physical protection of Category 1 and Category 2 quantities of radioactive material (10 CFR Part 37 equivalent).
- Documents containing sensitive security information are properly marked, handled, controlled, and secured.

b. Discussion

During the review period, the Radioactive Material Program performed 368 radioactive materials licensing actions. The team evaluated 27 of those licensing actions. The licensing actions selected for review included 5 new applications, 12 amendments, 6 renewals, 2 terminations, 1 change of control/ownership, and 1 financial assurance. The team evaluated casework which included the following license types: broad scope, medical diagnostic and therapeutic, well logging, industrial radiography, research and development, academic, nuclear pharmacy, gauges, panoramic irradiator, and service provider. The casework sample represented work from all staff who were qualified to independently perform licensing actions during the review period.

The team reviewed the Radioactive Material Program's procedures, license conditions, and use of their peer review system. Staff use the Radioactive Material Program's administrative licensing procedure, the NRC's NUREG 1556 series, and other NRC guidance for license reviews. Licensing actions were well documented and addressed health, safety, and security issues. Renewal applications demonstrated a thorough analysis of the licensee's inspection and enforcement history. All necessary licensee commitments were obtained, and deficiency letters and license conditions were well supported by information contained in the licensing files. The team determined that appropriate financial assurance instruments were properly submitted when required, and that licenses containing security related information were properly marked. For all actions, secondary level reviews were performed

by a Phase II reviewer, and one out of ten actions were further reviewed by the Radioactive Material Program Manager. All licenses were issued by the Division Director.

The team assessed the Radioactive Material Program's implementation of the NRC's "Checklist to Provide a Basis for Confidence that Radioactive Material will be used as Specified on the License" (Pre-Licensing Guidance). The team noted that the Radioactive Material Program performed pre-licensing visits on all new licenses and all transfers of control, and properly implemented the guidance. Additionally, the team assessed the Radioactive Material Program's implementation of the NRC's RSRM checklist. The team noted that the 2019 IMPEP Final Report stated "The team found that although the essential objectives of the RSRM checklist were being met, the Program was not documenting the use of the checklist. The team determined that the licensing actions were properly identified as RSRM action, information was being entered into the National Source Tracking System, and on-site security reviews were conducted by the Program, as appropriate. At the time of the review, the Program committed to revising its procedure to include the use and documentation of the RSRM checklist." During the 2023 review period, the 2023 IMPEP team determined that the staff were implementing the essential objectives of the RSRM checklist, like the information presented in the 2019 IMPEP review report, however, the administrative licensing guidance did not address the process being implemented by staff or when to implement the process. The team also determined that even with the lack of formal guidance, from the licensing actions reviewed, the staff did not miss evaluating a licensee for RSRM when appropriate. Therefore, the team has determined this is a matter of compatibility rather than performance and will further address the lack of equivalent guidance in Section 4.1 of this report.

The team found two licenses that had expiration dates of December 31, 2022, during its review of licensing actions. These licenses appeared to be expired as the team could not locate any current information in the licensing files to point otherwise. In talking to Radioactive Material Program staff, the team learned that one of the licenses that appeared to be expired was under timely renewal; however, the team determined the deemed timely letter and renewal submission were missing from the file. Staff stated that the letter was sent to this licensee in November 2022, and the license had not expired. Additionally, for the second license identified, it was found that the licensee submitted its renewal application on July 18, 2023, almost 7 months after license expiration and that Utah subsequently issued a deemed timely letter on July 20, 2023. At the time of the on-site review, the team determined that the Radioactive Material Program did not have a clear and easy way of tracking the expiration dates of all its licenses, as license files were paper based. During the review, the team learned that the Radioactive Material Program was working on implementation of a new electronic licensing database. The team believes that with the implementation of the new electronic licensing database, this issue will be resolved. All licenses will be audited as a result of being added to the database and additionally, notice of expiration letters will be automatically generated and sent to the licensees when the license nears expiration. Therefore, the team is not making a recommendation related to this finding. During the MRB, Utah program management stated that staff had completed the transfer of all license data from the previous system to the new electronic system.

The team assessed the backlog of licensing renewal actions noted in Utah's IMPEP questionnaire response. At the time of the on-site review, the Radioactive Material Program had 66 pending renewals, the longest of which had been with the program for four years, and 20 amendments that had been open for a year or more. With regards to the renewal applications referenced in the questionnaire, the team observed that these were being

reviewed and several were awaiting responses from the licensees. Since licensing files were mainly paper based, working remotely caused delays in the performance of licensing actions during the pandemic. New licenses and amendments that could pose risks to health and safety were prioritized during this time. Renewals were given the lowest priority for completion. The team determined that the overall backlog of licensing renewal and amendment actions stemmed from competing priorities, completing inspections on time, facilitating the transition to a new digital database, and effects of the pandemic.

c. Evaluation

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

d. MRB Chair's Determination

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

### 3.5 Technical Quality of Incident and Allegation Activities

The quality, thoroughness, and timeliness of response to incidents and allegations of safety concerns can have a direct bearing on public health, safety, and security. An assessment of incident response and allegation investigation procedures, actual implementation of these procedures internal and external coordination, timely incident reporting, and investigative and follow-up actions, are a significant indicator of the overall quality of the incident response and allegation programs.

a. Scope

The team used the guidance in [SA-105](#), "Reviewing the Common Performance Indicator: Technical Quality of Incident and Allegation Activities," and evaluated Utah's performance with respect to the following performance indicator objectives:

- Incident response and allegation procedures are in place and followed.
- Response actions are appropriate, well-coordinated, and timely.
- On-site responses are performed when incidents have potential health, safety, or security significance.
- Appropriate follow-up actions are taken to ensure prompt compliance by licensees.
- Follow-up inspections are scheduled and completed, as necessary.
- Notifications are made to the NRC Headquarters Operations Center for incidents requiring a 24-hour or immediate notification to the Agreement State or NRC.
- Incidents are reported to the Nuclear Material Events Database (NMED) and closed when all required information has been obtained.
- Allegations are investigated in a prompt, appropriate manner.
- Concerned individuals are notified within 30 days of investigation conclusions.
- Concerned individuals' identities are protected, as allowed by law.

b. Discussion

During the review period, 17 incidents were reported to the Radioactive Material Program. The team evaluated all 17 incidents which included 9 lost, found, or stolen radioactive materials; 1 damaged equipment; 4 medical generator failures; 2 medical events; and 1 electrical fire. Staff were dispatched for on-site follow-up for all 17 of the cases reviewed.

When notified of an incident, management determines the appropriate level of response, which ranges from an immediate response to an in-office review or follow-up during the next routine inspection. Those determinations are made based on both the circumstances and the health and safety significance of the incident. The team found that the Radioactive Material Program's evaluation of incident notifications and its response to those incidents was thorough, well balanced, complete, and comprehensive.

The team also evaluated the Radioactive Material Program's reporting of incidents to the NRC's Headquarters Operations Officer (HOO). The team noted that for each incident requiring HOO notification, the Utah Radioactive Material Program reported the incidents within the required time frame. The team identified four incidents that had not been completed and closed in the NRC's NMED including one incident with a request for additional information. The team spoke with staff about these events and the staff immediately took action to complete and close the events and provide the additional information as requested.

During the review period, 12 allegations were received by the Radioactive Material Program. The team evaluated all 12 allegations, including 11 allegations that the NRC referred to the State, during the review period. The team found that staff took prompt and appropriate action in response to each of the concerns raised. The team determined that all allegations reviewed were appropriately closed, concerned individuals were notified timely of the actions taken, and the identities of concerned individuals were protected whenever possible in accordance with State law.

The team verified that incident and allegation procedures are in place and used as appropriate by staff. No impacts related to the pandemic were noted in this indicator.

c. Evaluation

The team determined that, during the review period, Utah met the performance indicator objectives listed in Section 3.5.a. Based on the criteria in MD 5.6, the team recommends that Utah's performance with respect to the indicator, Technical Quality of Incident and Allegation Activities, be found satisfactory.

d. MRB Chair's Determination

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

## 4.0 NON-COMMON PERFORMANCE INDICATORS

Four non-common performance indicators are used to review Agreement State programs: (1) Legislation, Regulations, and Other Program Elements; (2) Sealed Source and Device (SS&D) Evaluation Program; (3) LLRW Disposal Program; and (4) UR Program. The NRC retains regulatory authority for SS&D; therefore, it is the only non-common performance indicator that does not apply to this review.

### 4.1 Legislation, Regulations, and Other Program Elements

State statutes should authorize the State to establish a program for the regulation of agreement material and provide authority for the assumption of regulatory responsibility under the State's agreement with the NRC. The statutes must authorize the State to promulgate regulatory requirements necessary to provide reasonable assurance of adequate protection of public health, safety, and security. The State must be authorized through its legal authority to license, inspect, and enforce legally binding requirements, such as regulations and licenses. The NRC regulations that should be adopted by an Agreement State for purposes of compatibility or health and safety should be adopted in a time frame so that the effective date of the State requirement is not later than 3 years after the effective date of the NRC's final rule. Other program elements that have been designated as necessary for maintenance of an adequate and compatible program should be adopted and implemented by an Agreement State within 6 months following NRC designation. A Program Element Table indicating the Compatibility Categories for those program elements other than regulations can be found on the NRC website at the following address: <https://scp.nrc.gov/regtoolbox.html>.

#### a. Scope

The team used the guidance in [SA-107](#), "Reviewing the Non-Common Performance Indicator: Legislation, Regulations, and Other Program Elements," and evaluated Utah's performance with respect to the following performance indicator objectives. A complete list of regulation amendments can be found on the NRC website at the following address: <https://scp.nrc.gov/regtoolbox.html>.

- The Agreement State program does not create conflicts, duplications, gaps, or other conditions that jeopardize an orderly pattern in the regulation of radioactive materials under the Atomic Energy Act of 1954, as amended.
- Regulations adopted by the Agreement State for purposes of compatibility or health and safety were adopted no later than 3 years after the effective date of the NRC regulation.
- Other program elements, as defined in [SA-200](#) "Compatibility Categories and Health and Safety Identification for NRC Regulations and other Program Elements," that have been designated as necessary for maintenance of an adequate and compatible program, have been adopted and implemented within 6 months of NRC designation.
- The State statutes authorize the State to establish a program for the regulation of agreement material and provide authority for the assumption of regulatory responsibility under the agreement.
- The State is authorized through its legal authority to license, inspect, and enforce legally binding requirements such as regulations and licenses.
- Sunset requirements, if any, do not negatively impact the effectiveness of the State's regulations.



b. Discussion

Utah became an Agreement State on April 1, 1984. The Agreement State Program statutory authority is contained in the Utah Code Annotated, Title 19, Chapter 3, Radiation Control Act. The Division of Waste Management and Radiation Control is designated as Utah's radiation control agency.

One piece of legislation affecting the radiation control program was enacted into law during the review period. During the 2020 General Session of the Utah Legislature State Bill 88 entitled Environmental Quality Revisions was passed. This bill enacted two sections in the Utah Radiation Control Act: Section 19-3-103.1, Board authority and duties and Section 19-3-108.1, powers and duties of director. When the Division of Radiation Control and the Division of Solid and Hazardous Waste were merged in July 2015, language in the Radiation Control Act and the Solid and Hazardous Act were combined. The enactment of these two sections was done to clarify the authorities, powers, and duties of the Board and the Director regarding the Radiation Control Act. No new authorities, powers, or duties were created. In talking with Utah management, the team determined this legislative change was not submitted to the NRC for review once it had been approved. The team reviewed the legislative changes and did not identify any concerns with the change. After discussing this item with the NRC's Office of Nuclear Material Safety and Safeguards, the team determined that Utah should submit this legislative change for official NRC review. Following the on-site review, by letter dated November 21, 2023, Utah submitted the legislative change to the NRC for formal review.

Utah's administrative rulemaking process takes approximately 7 months from drafting to finalizing a rule. The public, the NRC, other agencies, and potentially impacted licensees and registrants are offered an opportunity to comment during the process. Comments are considered and incorporated, as appropriate, before the regulations are finalized and approved by the Waste Management and Radiation Control Board.

Utah Code provides that all administrative rules in effect on February 28 expire on May 1 each year unless reauthorized by the Legislature. Exempted from the May 1 expiration are all rules explicitly mandated by federal law or regulation, or rules founded on a provision of Utah's Constitution that vests the agency with specific constitutional authority to regulate. The Rulemaking Act also requires an agency to review each of its administrative rules within five years of the rule's original effective date or last five-year review. To retain a rule as part of the Utah Administrative Code, an agency must also file a "Five-Year Notice of Review and Statement of Continuation" before the rule's anniversary date. In April 2021, Utah performed a Five-Year Review of the following radiation control rules: Utah Administrative Code R313-12, 14, 16, 17, 18, 19, 22, 25, 28, 32, 36, and 70. The Five-Year Reviews for the remainder of the radiation control rules were due in January of 2022. The review was completed and submitted for the following rules early in October of 2021: Utah Administrative Code R313-15, 21, 24, 30, 34, 35, 37, and 38.

During the review period, seven NRC amendments were due for adoption. Utah adopted six of the seven amendments within 3 years of the effective date of the NRC regulation. The remaining amendment (Regulation Amendment Tracking System Identification Number 2020-2) was adopted one month late. There were no overdue regulations at the time of the on-site IMPEP review. Additionally, the team identified one Regulation Amendment Tracking Sheet (2018-1) that was reviewed in proposed format with no comments but had not been submitted to the NRC for review as a final rule and one sheet

(2013-2) that had five outstanding comments that needed to be addressed. The team brought these two items to the attention of Utah program management during the on-site review. Subsequently, by letter dated October 17, 2023, Utah submitted the final regulations associated with Regulation Amendment Tracking Sheet 2018-1 to the NRC for formal review. Additionally, during the MRB meeting, Utah program management stated that the comments associated with Regulation Amendment Tracking Sheet 2013-2 were actively being addressed and that rule changes associated with addressing those comments were in the process of being drafted.

The team also reviewed other program elements designated as necessary for the maintenance of an adequate and compatible program. The other program elements included, licensing guidance, inspection guidance, and programmatic procedures.

- As noted in Sections 3.1, 4.2 and 4.3, the team determined that Utah does not have training and qualification procedures that meet the essential objectives of the NRC's IMC 1248 training and qualification guidance for Appendices A, B, E, H, and I.
- Additionally, as captured in Section 4.2, the team found that the Utah's LLRW Program's procedures do not require notification of the NRC consistent with [SA-300](#), "Reporting Materials Events," and in Section 4.3, the team found inspection procedures being used by staff that had not been formalized by program management.
- Finally, the team noted in the 2019 IMPEP report that program management committed to revising its procedures to include the use and documentation of the RSRM checklist. The team found that this revision to program procedures did not occur nor did the program implement the use of the NRC's RSRM checklist. As discussed in Section 3.4 of this report, the team did determine that the Radioactive Material Program was meeting the essential objectives of the guidance based on what was seen in the licensing files even in the absence of an updated procedure.

No impacts related to the pandemic were noted in this indicator.

#### c. Evaluation

The team determined that, during the review period, Utah met the performance indicator objectives listed in Section 4.1.a, except for:

- Other program elements, including equivalent training and qualification procedures and equivalent guidance to the NRC's RSRM checklist, as defined in SA-200 that have been designated as necessary for maintenance of an adequate and compatible program, were not adopted, and implemented within 6 months of NRC designation.

As a result of these findings, the team is making three recommendations for improved program performance. The team recommends that Utah:

1. Update its administrative licensing guidance to incorporate the essential objectives of the RSRM checklist and document the process to be followed by program staff.
2. Perform an extent of condition review of all programmatic procedures to ensure the procedures required as a matter of compatibility are in place and that those procedures meet the essential objectives of the NRC's procedures.
3. Provide training to technical staff on revisions made to procedures resulting from the extent of condition review.

Based on the IMPEP evaluation criteria in MD 5.6, the team recommends that Utah's performance with respect to the indicator, Legislation, Regulations, and Other Program Elements, be found satisfactory but needs improvement.

d. MRB Chair's Determination

The MRB Chair agreed with the team's recommendation and found Utah's performance with respect to this indicator satisfactory but need improvement and agreed to open three new recommendations.

## 4.2 LLRW Disposal Program

The objective is to determine if the Utah LLRW Disposal program is adequate to protect public health and safety, and the environment. Five sub-elements are used to make this determination: (1) Technical Staffing and Training; (2) Status of LLRW Inspection Program; (3) Technical Quality of Inspections; (4) Technical Quality of Licensing Actions; and (5) Technical Quality of Incident and Allegation Activities.

a. Scope

The team used the guidance in [SA-109](#), "Reviewing the Non-Common Performance Indicator: Low-Level Radioactive Waste Disposal Program," and evaluated Utah's performance with respect to the following performance indicator objectives:

### Technical Staffing and Training

- Qualified and trained technical staff are available to license, regulate, control, inspect, and assess the operation and performance of the LLRW Disposal facility.
- Qualification criteria for new LLRW technical staff are established and are followed or qualification criteria will be established if new staff members are hired.
- Any vacancies, especially senior-level positions, are filled in a timely manner.
- There is a balance in staffing the LLRW licensing and inspection programs.
- Management is committed to training and staff qualification.
- Individuals performing LLRW licensing and inspection activities are adequately qualified and trained to perform their duties.
- LLRW license reviewers and inspectors are trained and qualified in a reasonable period of time.

### Status of LLRW Inspection Program

- The LLRW facility is inspected at prescribed frequencies.
- Statistical data on the status of the inspection program are maintained and can be retrieved.
- Deviations from inspection schedules are coordinated between LLRW technical staff and management.
- There is a plan to perform any overdue inspections and reschedule any missed or deferred inspections; or a basis has been established for not performing any overdue inspections or rescheduling any missed or deferred inspections.
- Inspection findings are communicated to licensees in a timely manner.

### Technical Quality of Inspections

- Inspections of LLRW licensed activities focus on health, safety, and security.
- Inspection findings are well-founded and properly documented in reports.
- Management promptly reviews inspection results.
- Procedures are in place and used to help identify root causes and poor licensee performance.
- Inspections address previously identified open items, non-compliances, and violations.
- Inspection findings lead to appropriate and prompt regulatory action.
- Supervisors, or senior staff as appropriate, conduct annual accompaniments of each LLRW inspector to assess performance and assure consistent application of inspection policies.
- Inspection guides are consistent with NRC guidance.
- An adequate supply of calibrated survey instruments is available to support the inspection program.

### Technical Quality of Licensing Actions

- Licensing action reviews are thorough, complete, consistent, and of acceptable technical quality with health, safety, and security issues properly addressed.
- Applicable LLRW guidance documents are available to reviewers and are followed.
- Essential elements of license applications have been submitted and elements are consistent with current NRC or Agreement State regulatory guidance for describing the isotopes and quantities used, qualifications of authorized users, facilities, equipment, locations of use, operating and emergency procedures, and any other requirements necessary to ensure an adequate basis for the licensing action.
- LLRW license reviewers, if applicable, have the proper signature authority for the cases they review independently.
- License tie-down conditions are stated clearly and can be inspected.
- Deficiency letters clearly state regulatory positions and are used at the proper time.
- Reviews of renewal applications demonstrate a thorough analysis of a licensee's inspection and enforcement history.
- Licensing practices for RSRM are appropriately implemented including fingerprinting orders (10 CFR Part 37 equivalent).
- Documents containing sensitive security information are properly marked, handled, controlled, and secured.

### Technical Quality of Incident and Allegation Activities

- LLRW incident response, and allegation procedures are in place and followed.
- Response actions are appropriate, well-coordinated, and timely.
- On-site responses are performed when incidents have potential health, safety, or security significance.
- Appropriate follow-up actions are taken to ensure prompt compliance by licensees.
- Follow-up inspections are scheduled and completed, as necessary.
- Notifications are made to the NRC Headquarters Operations Center for incidents requiring a 24-hour or immediate notification to the Agreement State or NRC.
- Incidents are reported to the NMED and closed when required information is obtained.
- Allegations are investigated in a prompt, appropriate manner.

- Concerned individuals are notified of investigation conclusions.
- Concerned individuals' identities are protected, as allowed by law.

b. Discussion

At the time of the IMPEP review, the LLRW Program consisted of one active/operational licensee that is a near surface disposal facility that accepts Class A waste and 11.e(2) byproduct material.

#### Technical Staffing and Training

The LLRW Program has eight technical staff, a Program Manager, an Assistant Division Director, and a Division Director, totaling 10 FTE. The team found that the high level of turnover was due to planned retirements. Currently, there are no vacancies. During the review period, seven of the staff members left and seven staff members were hired. The positions were vacant from a few weeks to a month. Four of the technical staff are considered fully qualified and four are in the process of going through qualifications. The team determined that qualified staff have achieved 24 hours of refresher training every 24 months as required.

The team reviewed the LLRW Program's training and qualification program. The team determined that it does not meet the essential objectives of the NRC's IMC 1248, Appendix E. Additionally, the team found that the LLRW Program's qualification program documents do not indicate independent self-study or on the job training requirements. The team found that the lack of an equivalent training program had not affected the performance of the LLRW Program's staff as further detailed in the sub-elements below. Therefore, the team determined this was a matter of compatibility rather than a matter of performance related to LLRW technical staffing and training and it is further discussed in Section 4.1 of this report.

#### Status of LLRW Disposal Inspection Program

The LLRW Program performed 105 module inspections during the review period. The review determined that the LLRW Program completed the LLRW inspections in accordance with the NRC's inspection frequency.

Inspection findings for the LLRW Disposal program were communicated by formal correspondence to the licensee within 30 days following the inspection. The LLRW Program's inspection procedure was last updated in September 2023.

#### Technical Quality of Inspections

The team evaluated 13 inspection files which included waste acceptance, hydrogeological, radiological, security, and environmental hazards, and determined that the inspection reports were thorough, complete, consistent, and had sufficient documentation to ensure that licensee performance with respect to health, safety and security was acceptable. The findings were well-founded, supported by regulations, and were appropriately documented.

The team accompanied two inspectors at the Energy Solutions' Clive LLRW Disposal facility during the week of August 7, 2023. The team observed inspectors as they performed inspections related to radiation safety, radiation postings, ALARA, and the Ground Water

Quality Discharge Permit. The review found each of the inspectors to be well-trained, prepared for their inspections, and thorough in their reviews. Documentation reviewed was thorough and complete. Records indicated that supervisory inspector accompaniments were performed each year of the review period. Additionally, the team found that the LLRW Program maintained an adequate supply of radiation detection instrumentation during the review period. The instrumentation was calibrated at appropriate intervals and was appropriate for the types of licensed activities being inspected.

#### Technical Quality of Licensing Actions

The LLRW Program completed three license amendments during the review period. The LLRW Program had initiated two reviews for new applications and was continuing work related to one license renewal review. The team examined financial assurance documents associated with the LLRW Disposal site and portions of all six LLRW licensing actions that were worked on during the review period.

The team found that the LLRW Program's evaluation of licensing actions and license conditions were thorough, complete, consistent, and of acceptable technical quality with health, safety, and security issues properly addressed. During the previous review, the team noted that the LLRW Program was not following all the administrative requirements outlined in its LLRW technical procedure for the review of licensing actions including using the appropriate transmittal cover letters or completing checklists. During this review, the team found that the LLRW Program began implementing an internal electronic document processing system to track reviews and approvals and included peer reviews consistent with its procedures.

#### Technical Quality of Incident and Allegation Activities

The team evaluated the one incident and the one allegation received by the LLRW Program during the review period. The team found that the LLRW Program had written procedures for the handling, review, analysis, response and follow-up of incidents and allegations. The team found that the LLRW Program's incident response procedures do not require notification of the NRC consistent with State Agreements Procedure SA-300, "Reporting Material Event." The absence of consistency did not affect the LLRW Program's performance in notifying the NRC for the one incident it received. Therefore, the team determined this to be a matter of compatibility rather than a performance issue related to the sub-indicator and captured it further in Section 4.1 of this report. For the allegation, the team found that staff took prompt and appropriate action in response to each of the concerns raised. The review team determined that the allegation reviewed was appropriately closed, the concerned individual was timely notified of the actions taken, and allegeders' identities were protected whenever possible in accordance with State law.

No impacts related to the pandemic were noted in this indicator.

#### c. Evaluation

The team determined that, during the review period, Utah met the performance indicator objectives listed in Section 4.3.a. Based on the criteria in MD 5.6, the team recommends that Utah's performance with respect to the indicator, LLRW Disposal Program, be found satisfactory.

d. MRB Chair's Determination

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

### 4.3 UR Program

The objective is to determine if Utah's UR Program is adequate to protect public health and safety, and the environment. Five sub-elements are used to make this determination: (1) Technical Staffing and Training; (2) Status of UR Inspection Program; (3) Technical Quality of Inspections; (4) Technical Quality of Licensing Actions; and (5) Technical Quality of Incident and Allegation Activities.

a. Scope

The team used the guidance in [SA-110](#), "Reviewing the Non-Common Performance Indicator, Uranium Recovery Program," and evaluated Utah's performance with respect to the following performance indicator objectives:

#### Technical Staffing and Training

- Qualified and trained technical staff are available to license, regulate, control, inspect, and assess the operation and performance of the UR program.
- Qualification criteria for new UR technical staff are established and are being followed or qualification criteria will be established if new staff members are hired.
- Any vacancies, especially senior-level positions, are filled in a timely manner.
- There is a balance in staffing the UR licensing and inspection programs.
- Management is committed to training and staff qualification.
- Individuals performing UR licensing and inspection activities are adequately qualified and trained to perform their duties.
- UR license reviewers and inspectors are trained and qualified in a reasonable period of time.

#### Status of UR Inspection Program

- The UR facility is inspected at prescribed frequencies.
- Statistical data on the status of the inspection program are maintained and can be retrieved.
- Deviations from inspection schedules are coordinated between UR technical staff and management.
- There is a plan to perform any overdue inspections and reschedule any missed or deferred inspections; or a basis has been established for not performing overdue inspections or rescheduling any missed or deferred inspections.
- Inspection findings are communicated to licensees in a timely manner.

#### Technical Quality of Inspections

- Inspections of UR licensed activities focus on health, safety, and security.
- Inspection findings are well-founded and properly documented in reports.
- Management promptly reviews inspection results.

- Procedures are in place and used to help identify root causes and poor licensee performance.
- Inspections address previously identified open items, non-compliance, and violations.
- Inspection findings lead to appropriate and prompt regulatory action.
- Supervisors, or senior staff as appropriate, conduct annual accompaniments of each UR inspector to assess performance and assure consistent application of inspection policies.
- Inspection guides are consistent with NRC guidance.
- An adequate supply of calibrated survey instruments is available to support the inspection program.

#### Technical Quality of Licensing Actions

- Licensing action reviews are thorough, complete, consistent, and of acceptable technical quality with health, safety, and security issues properly addressed.
- Applicable UR guidance documents are available to reviewers and are followed.
- Essential elements of license applications have been submitted and meet current NRC or Agreement State regulatory guidance (e.g., financial assurance, etc.).
- UR license reviewers, if applicable, have the proper signature authority for the cases they review independently.
- License conditions are stated clearly and can be inspected.
- Deficiency letters clearly state regulatory positions and are used at the proper time.
- Reviews of renewal applications demonstrate a thorough analysis of a licensee's inspection and enforcement history.
- Licensing practices for RSRM are appropriately implemented including fingerprinting orders (10 CFR Part 37 equivalent).
- Documents containing sensitive security information are properly marked, handled, controlled, and secured.

#### Technical Quality of Incident and Allegation Activities

- UR incident response, investigation, and allegation procedures are in place and followed.
- Response actions are appropriate, well-coordinated, and timely. On-site responses are performed when incidents have potential health, safety, or security significance.
- Appropriate follow-up actions are taken to ensure prompt compliance by licensees.
- Follow-up inspections are scheduled and completed, as necessary.
- Notifications are made to the NRC Headquarters Operations Center for incidents requiring a 24-hour or immediate notification to the Agreement State or the NRC.
- Incidents are reported to the NMED and closed when required information is obtained.
- Allegations are investigated in a prompt, appropriate manner.
- Concerned individuals are notified of investigation conclusions.
- Concerned individuals' identities are protected, as allowed by law.

#### b. Discussion

At the time of the IMPEP review, the Uranium Mill Program consists of one active conventional mill license which was authorized for disposal of 11.e(2) byproduct material, one conventional mill license currently under decommissioning and undergoing groundwater



assessment, one conventional mill licensee in stand-by status, and one LLRW licensee who holds a license for disposal of 11.e(2) byproduct material. The Uranium Mill Program does not have any in-situ uranium recovery facilities.

### Technical Staffing and Training

The Uranium Mill Program is comprised of 8 staff totaling approximately 5.5 FTE. This includes one Division Director, one Assistant Division Director, one Uranium Mill Program Manager, and five technical staff positions. At the time of the IMPEP review, there was one vacancy. The position had been vacant for over a year and there were no plans to fill the position because one of the engineers supporting the Uranium Mill Program transitioned from 0.25 FTE support during Utah's last IMPEP review period in 2019 to 1.0 FTE support, resulting in a net difference of 0.25 FTE when the other engineering position became vacant. If the position is not filled, the staffing level for the Uranium Mill Program will change to 7 staff totaling approximately 5.25 FTE. During the review period, two of the staff members left and one staff member was hired. The position that was filled was vacant from October 12, 2022, to January 9, 2023 (89 days). The team reviewed the Uranium Mill Program's training and qualification procedure. The team determined that the procedure was not equivalent to the NRC's training requirements listed in the NRC's IMC 1248 Appendices H and I. The team found that the absence of an equivalent training and qualification procedure did not impact the Uranium Mill Program's performance during the review period. Therefore, the team determined this to be a matter of compatibility rather than a performance issue related to UR staffing and training and captured it further under Section 4.1 of this report.

### Status of the UR Inspection Program

The Uranium Mill Program performed 76 field inspections during the review period, which included health physics, engineering, and surface-water/groundwater split sampling. The team reviewed 35 health physics inspections, 5 dam safety inspections, and 5 11.e(2) disposal inspections. In most cases, the review determined that Uranium Mill Program completed the UR inspections in accordance with the frequency in IMC 2801, Uranium Mill and 11e.(2) Byproduct Material Disposal Site and Facility Inspection Program. Inspection findings were communicated by formal correspondence to the licensee within 30 days following the inspection. In reviewing the Uranium Mill Program's inspection procedures, the team found that the Uranium Mill Program completes inspections differently from the NRC. The Uranium Mill Program separates the inspections into "modules," which cover different inspection topics. This difference made it difficult for the team to assess whether full scope inspections were being completed at the same intervals as the inspection frequencies listed in IMC 2801. Additionally, the frequency for inspection modules for dam safety are listed as every-other-year for the Uranium Mill Program. The NRC's IMC 2801 states that sites should be inspected annually, unless otherwise documented by management. The team determined through discussions with the Uranium Mill Program management that the program believed the every-other-year time frame was considered protective since another Agency in Utah was performing similar inspections in the off year. This decision was not documented as stated in the NRC's IMC 2801. Although the team had difficulty in determining whether the specific inspection frequencies for uranium mill inspection were being met, as compared to those in IMC 2801, the team determined there were no performance issues for any of the licensees and no concerns from a health and safety standpoint because of these findings. Therefore, the team determined this to be administrative in nature and a matter of compatibility as opposed to performance and

discusses it further under Section 4.1 of this report. Additionally, in Section 4.1, the team made a recommendation related to performance of an extent of condition review of all programmatic procedures required as a matter of compatibility. During the MRB, Utah program management stated this procedure would be included in the Uranium Mill Program's effort to address that recommendation.

#### Technical Quality of Inspections

The team evaluated 45 of the 76 Inspection files which included health physics inspections, dam safety inspections, and 11.e(2) disposal inspections. The team determined that the inspection reports were thorough, complete, consistent and had sufficient documentation to ensure that licensee performance with respect to health, safety, and security was acceptable. The findings were well-founded, supported by regulations, and were appropriately documented.

On August 14, 2023, the team accompanied two inspectors. UR licensed activities, involving environmental monitoring and 11e.(2) disposal, were observed. No performance issues were noted during the inspector accompaniments. The inspectors were thorough, and assessed the impact of licensed activities on health, safety, and security. Additionally, the inspectors were found to be reviewing items of health and safety significance but did not have division approved inspection procedures to follow. The team determined that despite using procedures that had not been formalized, the inspectors performed as expected. Therefore, the team found this to be a matter of compatibility and further captured it in Section 4.1 of this report. The radiation detection equipment used by the inspectors was noted to be in calibration and appropriate for the inspection being conducted.

#### Technical Quality of Licensing Actions

The Uranium Mill Program completed 16 licensing actions during the review period. These actions included annual financial assurance updates, an alternate feed amendment, an amendment to a license condition, as well as two minor amendments. The team examined eight actions which included four amendments and four financial assurance actions.

The team determined that the licensing action reviews were thorough, complete, consistent, and of acceptable technical quality with health, safety, and security issues properly addressed. License conditions were clearly stated. Financial assurance documents were updated as required, and the financial assurance reviews followed the NRC's NUREG-1757, Volume 3 "Financial Assurance, Recordkeeping, and Timeliness (Revision 1)."

#### Technical Quality of Incident and Allegation Activities

The Uranium Mill Program received no reportable incidents and one allegation during the review period. The team reviewed the allegation received by the Uranium Mill Program and determined that the allegation was handled appropriately following the written procedures. The Uranium Mill Program has written procedures for the handling, review, analysis, response and follow-up of incidents and allegations.

No impacts related to the pandemic were noted in this indicator.

c. Evaluation

The team determined that, during the review period, Utah met the performance indicator objectives listed in Section 4.4.a. Based on the criteria in MD 5.6, the team recommends that Utah's performance with respect to the indicator, UR Program, be found satisfactory.

d. MRB Chair's Determination

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

## 5.0 SUMMARY

Utah's performance was found satisfactory for the performance indicators: Technical Staffing and Training, Status of Materials Inspection Program, Technical Quality of Inspections, Technical Quality of Licensing Actions, Technical Quality of Incidents and Allegation Activities, LLRW Disposal Program, and UR Program. Utah's performance was found satisfactory but needs improvement for the performance indicator Legislation, Regulations, and other Program Elements.

As a result of the performance concerns related to compatibility issues identified in Sections 3.3 and 4.1 of this report, the MRB Chair agreed to open four new recommendations for improved program performance:

- 1) Take appropriate measures to ensure that inspection records are complete, thorough, and accurately reflect the inspection performed. (Section 3.3)
- 2) Update its administrative licensing guidance to incorporate the essential objectives of the RSRM checklist and document the process to be followed by program staff. (Section 4.1)
- 3) Perform an extent of condition review of all programmatic procedures to ensure the procedures required as a matter of compatibility are in place and that those procedures meet the essential objectives of the NRCs procedures. (Section 4.1)
- 4) Provide training to technical staff on revisions made to procedures resulting from the extent of condition review. (Section 4.1)

Accordingly, the team recommended and the MRB Chair agreed that Utah be found adequate to protect public health and safety, and compatible with the NRC's program. The team recommended and the MRB Chair agreed that the next periodic meeting take place in approximately 2 years and the next IMPEP review take place in approximately 4 years.

## LIST OF APPENDICES

Appendix A IMPEP Review Team Members

Appendix B Inspector Accompaniments

## APPENDIX A

### IMPEP REVIEW TEAM MEMBERS

<b>Name</b>	<b>Areas of Responsibility</b>
Monica Ford, Region I	Team Leader Inspector Accompaniments Legislation, Regulations, and Other Program Elements
Shawn Seeley, Region I	Team Leader in Training LLRW Inspector Accompaniments Status of Materials Inspection Program
Adam Gause, South Carolina	Technical Staffing and Training
Juan Ayala, Region I	Technical Quality of Inspections
Matthew Greenwood, Tennessee	Technical Quality of Licensing Actions
Jackie Cook, Region IV	Technical Quality of Incident and Allegation Activities
Gehan Flanders, Region III	LLRW Disposal Program LLRW Inspector Accompaniments
Cristopher Grossman, NMSS	LLRW Disposal Program - Licensing
Brandi O'Brien, Wyoming	UR Program UR Inspector Accompaniments

APPENDIX B

INSPECTOR ACCOMPANIMENTS

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

Accompaniment No.: 1	License No.: UT25001029
License Type: HDR	Priority: 2
Inspection Date: 06/21/23	Inspector: TB

Accompaniment No.: 2	License No.: UT2500269
License Type: Industrial Radiography	Priority: 1
Inspection Date: 06/22/23	Inspector: PG

Accompaniment No.: 3	License No.: UT1800074
License Type: Panoramic Irradiator	Priority: 2
Inspection Date: 06/23/23	Inspector's initials: SW

Accompaniment No.: 4	License Nos.: UT2300249 & UT2300478
License Type: LLRW	Priority: 1
Inspection Date: 08/07/23	Inspector's initials: LK

Accompaniment No.: 5	License No.: Permit UGW 450005
License Type: LLRW	Priority: 1
Inspection Date: 08/08/23	Inspector's initials: CB

Accompaniment No.: 6	License No.: 1900479
License Type: UR	Priority: 1
Inspection Date: 08/14/23	Inspector's initials: RJ

Accompaniment No.: 7	License No.: 1900479
License Type: UR	Priority: 1
Inspection Date: 08/14/23	Inspector's initials: HM

## **Management Review Board (MRB) Meeting Participants – January 9, 2024**

### **Management Review Board:**

Cathy Haney, OEDO  
Jessica Bielecki, OGC

John Lubinski, NMSS  
John Monninger, RIV

James Grice, Colorado

### **IMPEP Team Members:**

Monica Ford, RI  
Shawn Seeley, NMSS  
Jackie Cook, RIV

Juan Ayala, RI  
Gehan Flanders, RIII  
Chris Grossman, NMSS

Matt Greenwood, Tennessee  
Adam Gause, South Carolina  
Brandi O'Brien, Wyoming

### **State of Utah:**

Douglas Hansen  
Stevie Norcross  
Bailey Anderson

Charles Bishop  
Brandon Davis  
Gage Fausto

Tyler Hegburg  
Larry Kellum  
Otis Willoughby

### **NRC Staff:**

Huda Akhavannik, NMSS  
Tammy Bloomer, RIV  
Mary Casto, NMSS  
Sheldon Clark, OGC  
Farrah Gaskins, RI  
Adelaide Giantelli, NMSS

Robert Johnson, NMSS  
Doug Mandeville, NMSS  
Sherrie Flaharty, NMSS  
Lisa Forney, RI  
Jeff Lynch, NMSS  
Karen Meyer, NMSS

Marti Posten-Brown, RIV  
Hector Rodriguez, OEDO  
Lee Smith, NMSS  
Candace Spore, NMSS  
Bill Von Till, NMSS  
Kevin Williams, NMSS

### **Ute Mountain Ute Tribe:**

Janice Archuleta  
Gwen Cantsee

Peter Ortego  
Scot Clow

Michael Keller

### **U.S. Senator Bennet Staff:**

Susanne Brooks

John Whitney

### **U.S. Senator Hickenlooper Staff:**

Carlee Brown

Helen Katich

### **U.S. Environmental Protection Agency:**

Treasure Bailey  
Kai Elgethun  
Linda Jacobson

Colin Larrick  
Kenyon Larsen  
Jonathan Major

Christopher Razzazian

### **Grand Canyon Trust:**

Chaitna Sinha

Aaron Paul

### **Energy Solutions:**

Jonathan Anderson

### **Organization of Agreement States:**

Keisha Cornelius

Beth Shelton

### **Other Members of the Public:**

Sarah Fields, Uranium Watch

Jim Nizamoff, State of Maine

The meeting began at approximately 1:00 p.m. and was adjourned at approximately 3:13 p.m.