



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION IV  
1600 EAST LAMAR BOULEVARD  
ARLINGTON, TEXAS 76011-4511

September 20, 2022

Mr. Doug Hansen, Director  
Division of Waste Management  
and Radiation Control  
Department of Environmental Quality  
P.O. Box 144880  
Salt Lake City, UT 84114-4880

SUBJECT: UTAH PERIODIC MEETING SUMMARY 2021

Dear Mr. Hansen:

A periodic meeting with Utah was conducted virtually on September 15, 2021. The purpose of this meeting was to review and discuss the implementation of Utah's Agreement State Program. The Nuclear Regulatory Commission (NRC) was represented by Linda Howell, Deputy Director, Division of Nuclear Materials Safety, and Jacqueline D. Cook, Regional State Agreements Officer, from the NRC's Region IV office.

I have completed and enclosed a general meeting summary. If you feel that our comments, conclusions, or actions to be taken do not accurately summarize the meeting discussion, or have any additional remarks about the meeting in general, please contact me at (817) 200-1132 or via email at [Jackie.Cook@nrc.gov](mailto:Jackie.Cook@nrc.gov) to discuss your concerns.

Sincerely,

A handwritten signature in cursive script, appearing to read "Randy Erickson", is positioned above the typed name.

Erickson, Randy signing on behalf  
of Cook, Jacqueline  
on 09/20/22

Jacqueline D. Cook  
Regional State Agreements Officer

Enclosure:  
Periodic Meeting Summary for Utah

SUBJECT: UTAH PERIODIC MEETING SUMMARY 2021 DATED SEPTEMBER 20, 2022

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UTAH PERIODIC MEETING SUMMARY 2021 DATED SEPTEMBER 20, 2022

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ADAMS:

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Keyword:

By:

☒ Yes ☐ No☒ Publicly Available☐ Sensitive

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INTEGRATED MATERIALS PERFORMANCE EVALUATION PROGRAM

PERIODIC MEETING WITH THE STATE OF UTAH

TYPE OF OVERSIGHT: NONE

September 15, 2021

Enclosure

## PERIODIC MEETING PARTICIPANTS

### **NRC**

- Linda Howell: Deputy Division Director, Division of Nuclear Materials Safety, NRC Region IV
- Jackie Cook: RSAO, NRC Region IV

### **State of Utah**

- Doug Hansen: Division of Waste Management and Radiation Control Director
- Stevie Norcross: Assistant Director
- Jalynn Knudsen: Assistant Director
- Phil Goble: Uranium Mills/Radioactive Materials Section Manager
- Otis Willoughby: Low Level Waste Compliance Section Manager

## 1.0 INTRODUCTION

This report presents the results of the periodic meeting held virtually between the U.S. Nuclear Regulatory Commission (NRC) and the State of Utah. The meeting was held on September 15, 2021, and was conducted in accordance with Nuclear Materials Safety and Safeguards (NMSS) Procedure SA-116, "Periodic Meetings between IMPEP Reviews," dated June 3, 2009.

The Utah Agreement State Program is administered by the Division of Waste Management and Radiation Control (the Division). Within the Division are the Low-Level Radioactive Waste (LLRW) Section and the Uranium Mills/Radioactive Materials (U Mills/RAM) Section.

At the time of the meeting, the Utah Agreement State Program regulated 194 specific licenses authorizing possession and use of radioactive materials. The meeting 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 Utah.

The Program's last Integrated Materials Performance Evaluation Program (IMPEP) review was from September 9-13, 2019. That report is in the NRC's Agencywide Documents Access and Management System (ADAMS) under Accession [ML19329E246](#). A Management Review Board (MRB) meeting to discuss the outcome of the IMPEP review was held on November 21, 2019.

During the November 21, 2019, MRB meeting, Utah's performance was found to be satisfactory for all performance indicators reviewed. The team did not make any new recommendations.

Accordingly, the team recommended, and the MRB agreed, that the Utah 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 with all performance indicators found satisfactory, the team recommended, and the MRB agreed, that the next full IMPEP review take place in approximately 4 years with a periodic meeting to be held in approximately 2 years.

## 2.0 COMMON PERFORMANCE INDICATORS

Five common performance indicators are used to review the NRC's Regional Office and Agreement State radioactive materials programs during an IMPEP review. 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.

### 2.1 Technical Staffing and Training (2019 IMPEP Rating: Satisfactory)

The Radioactive Material Section (RAM Section) is comprised of 4 staff members (4.5 full time equivalent) for the RAM Section when fully staffed. Currently, the RAM Section has no vacancies.

The RAM Section has a training and qualification program compatible with NRC's Inspection Manual Chapter (IMC) 1248, "Qualification Programs for Federal and State Materials and Environmental Management Programs" including the requirements for refresher training every 2 years for each technical staff.

### 2.2 Status of the Materials Inspection Program (2019 IMPEP Rating: Satisfactory)

The program did not perform any inspections overdue following the 2019 IMPEP review, even though they had suspended performing routine inspections for a two-month period during the pandemic. Ninety Priority 1, 2, and 3 inspections and four initial inspections had been completed since the 2019 review, none being completed overdue and none are currently overdue. The RAM Section is using administrative procedures for reciprocity inspections which has a 20 percent goal. The 20 percent goal was reached in 2019 and 2020. So far in 2021, the RAM Section has inspected 7 reciprocity candidates (60 percent).

### 2.3 Technical Quality of Inspections (2019 IMPEP Rating: Satisfactory)

Every RAM Section inspector was accompanied accordingly by the supervisor in 2019 and 2020. At the time of the periodic meeting, 50% of the RAM Section inspectors have been accompanied, as appropriate, by the RAM Section Manager.

Since the 2019 IMPEP review, 1 inspection was performed remotely in response to an incident and due to the Covid-19 pandemic.

The RAM Section has a management review process which uses administrative procedures in which inspections that need to be performed during the calendar year are assigned. In 2020 due to the Covid-19 pandemic, some of the inspections were announced. Once the inspection is complete, an inspection debriefing with the RAM Section Manager is done. The goal is to get the inspection letter to the licensee within 30 days. The 30-day clock does not start until the inspector has all the information they need or when they exit with the Radiation Safety Officer. The RAM Section Manager reviews the inspection reports (memos). The RAM Section uses a spreadsheet to make sure all memos are sent out within 30 days. During the time of this periodic meeting, none of the inspection letters have been sent to the licensee exceeding 30 days.

2.4 Technical Quality of Licensing Actions  
(2019 IMPEP Rating: Satisfactory)

The RAM Section had approximately 194 specific licensees at the time of this periodic meeting. The RAM Section had performed 159 licensing actions since the last IMPEP in 2019.

There are 3 large, complicated, or unusual licensees the RAM Section has – broad scope medical, broad scope medical/research and development, and a 10 CFR Part 36 pool irradiator.

Some of the licensees did not survive the Covid-19 pandemic and the RAM Section is trying to contact these licensees to terminate their licenses. Since the Covid-19 pandemic, 8 licenses have been terminated. Six licensees have paid their renewal fee but they have not submitted their renewal application due to the Covid-19 pandemic.

The RAM Section is implementing the pre-licensing guidance and the checklist for Risk-Significant Radioactive Materials, as appropriate.

2.5 Technical Quality of Incident and Allegation Activities  
(2019 IMPEP Rating: Satisfactory)

At the time of this meeting, the RAM Section had received 8 events and 6 of these events had been closed since the date of this periodic meeting. The remaining two events have not been closed since they were recently received, and they are still needing information from the licensees before being closed.

Since the 2019 IMPEP review, 5 allegations were referred to the RAM Section by the NRC.

3.0 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) Low-Level Radioactive Waste Disposal (LLRW) Program, and (4) Uranium Recovery (UR) Program. The NRC's Agreement with Utah does not relinquish regulatory authority for SS&D. Therefore, Legislation, Regulations and Other Program Elements, LLRW Disposal Program and UR Program applied to this meeting.

3.1 Legislation, Regulations and Other Program Elements  
(Formerly Compatibility Requirements)  
(2019 IMPEP Rating: Satisfactory)

Utah's regulatory process is unchanged since the 2019 IMPEP. Utah's administrative rulemaking process takes approximately 5 months from drafting to finalizing a rule. The public, 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.

At the time of the periodic meeting, the following amendment (Regulation Amendment Tracking Sheet (RATS) Identification [ID]) was overdue:

## Utah Periodic Meeting Summary

RATS ID 2015-3: "Revisions to Transportation Safety Requirements and Harmonization with International Atomic Energy Agency Transportation Requirements", 10 CFR Part 71 amendment (80 FR 33987) that was due for Agreement State adoption by August 15, 2020  
Utah submitted their final regulations in June 2022. NRC had one minor comment which they will be addressing in a future regulation package submittal.

### 3.2. LLRW Disposal Program (2019 IMPEP Rating: Satisfactory)

#### Technical Staffing and Training

Staffing of the LLRW disposal program consists of 1 health physicist, 2 geologists and 1 transportation specialist. The geologists and transportation specialist are lacking course work Utah is actively requesting staff participation in upcoming training courses as they become available to ensure the staff is fully trained.

#### Status of LLRW Disposal Inspection Program

Utah has 1 licensee with inspections divided into health physics modules (completed), engineering modules (completed and in process for 2021), and operations modules for a total of 12 modules. Ground water and best available technology modules have been late due to a large workload, but the workload has been decreasing.

In 2020, the inspections were not completed due to Covid-19, but they will be completed for the 2021 calendar year and will be done by the end of the calendar year.

Mixed Waste State Issued Part B inspection due next week. Utah completed the inspection on September 21, 2021.

At the time of the periodic meeting, Utah had been unable to complete field inspections due to the retirement of the individual previously holding the position. The individual retired on July 1, 2021, the position was filled in December 2021, and inspections resumed in January 2022. In the interim, a staff member had been assigned to perform field inspections in support of the Generator Site Access Program.

#### Technical Quality of Inspections

Supervisory inspector accompaniments are up to date.

Any findings are discussed and then the reports are sent to the Section Manager. The report is finalized and entered into their document management system. A close out letter is then sent.

The large licensee has no compliance issues.

Two to three notices of violation to the GSA Program were issued to the licensee but they were brought back into compliance based on their corrective actions.

#### Technical Quality of Licensing Actions

One licensing action, an amendment, to the license was completed since 2019. The amendment was for low-level waste and is ready to be sent for public comment. The licensee will need to increase their surety amount.

For the 11(e)(2) section of the license: reduce footprint of embankment by 2/3, with the future possibility of termination.

A new license application was received for depleted uranium. Completeness reviews were performed April and May 2021. Revised submittal was received in late October 2021; in early



## Utah Periodic Meeting Summary

November 2021, another completeness review is expected for the depleted uranium new license application.

Exempt waste cell (Class A) section of the license: 10 percent new license application; ancillary.

Groundwater Disposal section of the license: time for renewal. Several permits up for renewal but Utah has had shifting priorities.

### Technical Quality of Incidents and Allegation Activities

None

## 3.3 Uranium Recovery Program (2019 IMPEP Rating: Satisfactory)

### Technical Staffing and Training

Staffing of the Uranium Recovery program includes 5 health physicists, 2 engineers, and 2 hydrogeologists. During the time of the periodic meeting, there was no staff turnover.

### Status of Uranium Recovery Inspection Program

Each of the modules are assigned at the beginning of every year. Since the time of the last IMPEP review, there were not any overdue. The Uranium Mills Section is following the same process as LLRW for their inspection program.

### Technical Quality of Inspections

No reports have been issued after the 30-day metric. All inspector accompaniments have been done. The reports are reviewed by the U Mills/RAM Section Manager.

### Technical Quality of Licensing Actions

There are 3 licenses. Two licensing actions were done since the last IMPEP review – 1 major and 1 minor licensing amendments.

### Technical Quality of Incidents and Allegation Activities

A couple of allegations received in-house, but none referred by NRC.

There were no incidents since the last IMPEP review.

## 4.0 SUMMARY

Within the scope of the periodic meeting, no programmatic concerns were noted at this time. The Utah Agreement State Program is an effective and vital part of the Division of Waste Management and Radiation Control.

Current Utah initiatives include replacing the current database with a web-based database from Sales Force similar to our Web Based Licensing database. It is being developed for the RAM side and they hope to have it implemented within less than a year.

The State of Utah has authorized licensees for the use of radiation to treat arthritis in pets utilizing tin-117.

The State of Utah has had some inquiries regarding the small module thorium salt nuclear reactors, but they refer those calls to Region II (for new reactors).

## Utah Periodic Meeting Summary

Current NRC initiatives discussed were the National Materials Program, Inspection Manual Chapter 2800 and an upcoming information session on September 27, 2021, lessons learned during COVID-19 PHE, and updating the Uranium Recovery inspection procedures.