



State of Utah

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Department of
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DIVISION OF WASTE MANAGEMENT
AND RADIATION CONTROL
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Director

November 22, 2017

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Division of Material, Safety, State, Tribal and
Rulemaking
Office of Nuclear Material Safety and Safeguards
U.S. Nuclear Regulatory Commission
T8-E18
Washington, D.C. 20555-0001

RE: Utah Division of Waste Management and Radiation Control Response
Subsections A.I, B.V, and C.I of the IMPEP Questionnaire

Dear Mr. Rakovan:

In preparation for the upcoming follow-up Integrated Materials Performance Evaluation Program (IMPEP) review scheduled for December 12-14, 2017, we have completed a response to subsections A.I, B.V, and C.I of the enclosed IMPEP Questionnaire, as requested in Mr. Duncan White's letter dated August 31, 2017. For your convenience in reviewing the questionnaire, those sections and our responses are highlighted in yellow. Also, please note that our response in subsection C.1.27 includes our comments on the current State Regulation Status (SRS) Data Sheet (Tracking Ticket Number: 17-40) dated June 27, 2017.

I look forward to this important program review and appreciate your recently stepping in as the team leader. If you have any questions, please contact Rusty Lundberg by phone at (801) 536-4257 or by email at rlundberg@utah.gov.

Sincerely,

Scott T. Anderson, Director
Division of Waste Management and Radiation Control

(Over)

DRC-2017-009243

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Enclosure: IMPEP Questionnaire Response – Subsections A.I, B.V, and C.I (DRC-2017-009242)

c: Binesh Tharakan, NRC Region IV, RSAO
Kristen Schwab, M.S., Dept. of Health, WA

INTEGRATED MATERIALS PERFORMANCE EVALUATION PROGRAM
QUESTIONNAIRE

Utah Department of Environmental Quality
Reporting Period: August 1, 2015 to December 14, 2017

Note: If there has been no change in the response to a specific question since the last IMPEP questionnaire, the State or Region may copy the previous answer, if appropriate.

A. GENERAL

1. Please prepare a summary of the status of the State's or Region's actions taken in response to each of the open recommendations from previous IMPEP reviews.

Technical Quality of Incident and Allegation Activities (2015 IMPEP Satisfactory but Needs Improvement)

- The recommendations from the 2015 IMPEP review regarding this indicator was acted on and were addressed in the 2016 periodic review and report.

Compatibility Requirements (2015 IMPEP Unsatisfactory)

- During the 2017 General Session of the Utah Legislature, S.B. 79 was passed, amending the Utah Radiation Control Act, to address the incompatibility findings of the 2015 IMPEP with respect to the statutory provisions for financial surety for a low-level radioactive waste (LLRW) disposal facility. In a letter dated June 27, 2017, (ML17143A410), the NRC states that as a result of their review of S.B. 79, no further comments were necessary, essentially resolving the incompatibility matter.

B. COMMON PERFORMANCE INDICATORS

I. Technical Staffing and Training

2. Please provide the following organization charts, including names and positions:

- (a) A chart showing positions from the Governor down to the Radiation Control Program Director;

¹ Estimated burden per response to comply with this voluntary collection request: 53 hours. Forward comments regarding burden estimate to the Records Management Branch (T-5 F52), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, and to the Paperwork Reduction Project (3150-0183), Office of Management and Budget, Washington, DC 20503. If an information collection does not display a currently valid OMB control number, NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

- (b) A chart showing positions of the radiation control program, including management; and;
 - (c) Equivalent charts for sealed source and device evaluation, low-level radioactive waste and uranium recovery programs, if applicable.
3. Please provide a staffing plan, or complete a listing using the suggested format below, of the professional (technical) full-time equivalents (FTE) applied to the radioactive materials program by individual. Include the name, position, and, for Agreement States, the fraction of time spent in the following areas: administration, materials licensing & compliance, emergency response, low-level radioactive waste, uranium recovery, other. If these regulatory responsibilities are divided between offices, the table should be consolidated to include all personnel contributing to the radioactive materials program.

If consultants were used to carry out the program's radioactive materials responsibilities, include their efforts. The table heading should be:

| <u>Name</u> | <u>Position</u> | <u>Area of Effort</u> | <u>FTE%</u> |
|-------------|-----------------|-----------------------|-------------|
|-------------|-----------------|-----------------------|-------------|

- 4. Please provide a listing of all new professional personnel hired into your radioactive materials program since the last review, indicate the date of hire; the degree(s) they received, if applicable; additional training; and years of experience in health physics or other disciplines, as appropriate.
- 5. Please list all professional staff who have not yet met the qualification requirements for a radioactive materials license reviewer or inspector. For each, list the courses or equivalent training/experience they need and a tentative schedule for completion of these requirements.
- 6. Identify any changes to your qualification and training procedure that occurred during the review period.
- 7. Please identify the technical staff that left your radioactive materials program during the review period and indicate the date they left.
- 8. List any vacant positions in your radioactive materials program, the length of time each position has been vacant, and a brief summary of efforts to fill the vacancy.
- 9. For Agreement States, does your program have an oversight board or committee which provides direction to the program and is composed of licensees and/or members of the public? If so, please describe the procedures used to avoid any potential conflict of interest.

II. Status of Materials Inspection Program

- 10. Please identify individual licensees or categories of licensees the State is inspecting less frequently than called for in NRC's Inspection Manual Chapter (IMC) 2800 and explain the reason for the difference. The list only needs to include the following information: license category or licensee name and license number, your inspection interval, and

rationale for the difference.

11. Please provide the number of routine inspections of Priority 1, 2, and 3 licensees, as defined in IMC 2800 and the number of initial inspections that were completed during each year of the review period.
12. Please submit a table, or a computer printout, that identifies inspections of Priority 1, 2, and 3 licensees and initial inspections that were conducted overdue.

At a minimum, the list should include the following information for each inspection that was conducted overdue during the review period:

- (1) Licensee Name
- (2) License Number
- (3) Priority (IMC 2800)
- (4) Last inspection date or license issuance date, if initial inspection
- (5) Date Due
- (6) Date Performed
- (7) Amount of Time Overdue
- (8) Date inspection findings issued

13. Please submit a table or computer printout that identifies any Priority 1, 2, and 3 licensees and initial inspections that are currently overdue, per IMC 2800. At a minimum, the list should include the same information for each overdue inspection provided for Question 12 plus your action plan for completing the inspection. Also include your plan for completing the overdue inspections.
14. Please provide the number of reciprocity licensees that were candidates for inspection per year as described in IMC 1220 and indicate the number of reciprocity inspections of candidate licensees that were completed each year during the review period.

III. Technical Quality of Inspections

15. What, if any, changes were made to your written inspection procedures during the reporting period?
16. Prepare a table showing the number and types of supervisory accompaniments made during the review period. Include:

| <u>Inspector</u> | <u>Supervisor</u> | <u>License Category</u> | <u>Date</u> |
|------------------|-------------------|-------------------------|-------------|
|------------------|-------------------|-------------------------|-------------|

17. Describe or provide an update on your instrumentation, methods of calibration, and laboratory capabilities. Are all instruments properly calibrated at the present time? Were there sufficient calibrated instruments available throughout the review period?

IV. Technical Quality of Licensing Actions

18. How many specific radioactive material licenses does your program regulate at this time?
19. Please identify any major, unusual, or complex licenses which were issued, received a

major amendment, were terminated, decommissioned, submitted a bankruptcy notification or renewed in this period.

20. Discuss any variances in licensing policies and procedures or exemptions from the regulations granted during the review period.
21. What, if any, changes were made in your written licensing procedures (new procedures, updates, policy memoranda, etc.) during the reporting period?
22. Identify by licensee name and license number any renewal applications that have been pending for one year or more. Please indicate why these reviews have been delayed and describe your action plan to reduce the backlog.

V. Technical Quality of Incident and Allegation Activities

23. For Agreement States, please provide a list of any reportable incidents not previously submitted to NRC (See Procedure SA-300, *Reporting Material Events*, for additional guidance, OMB clearance number 3150-0178). The list should be in the following format:

| <u>Licensee Name</u> | <u>License #</u> | <u>Date of Incident/Report</u> | <u>Type of Incident</u> |
|----------------------|------------------|--------------------------------|-------------------------|
|----------------------|------------------|--------------------------------|-------------------------|

All incidents that were reportable have been submitted to NRC.

24. Identify any changes to your procedures for responding to incidents and allegations that occurred during the period of this review.

In August 2015, Radioactive Materials staff received allegation refresher training regarding SA-300 and the DWMRC incident/allegation procedures. At the same training, one individual (Russ Topham) was assigned to ensure that events were reported to the NRC within the appropriate timeframe and that incidents were complete and closed out in a timely manner.

On August 30, 2016 Robert Sant from Idaho National Laboratory conducted Nuclear Material Events (NMED) training for all applicable DWMRC staff, including the LLRW, Uranium Mills, and Radioactive Materials program staff.

C. NON-COMMON PERFORMANCE INDICATORS

I. Compatibility Requirements

25. Please list all currently effective legislation that affects the radiation control program. Denote any legislation that was enacted or amended during the review period.

During the 2017 General Session of the Utah Legislature, S.B. 79 was passed, amending the Utah Radiation Control Act, to address the incompatibility findings of the 2015 IMPEP with respect to the statutory amendments enacted in 2015 for financial surety for a low-level radioactive waste (LLRW) disposal facility. In a letter dated June 27, 2017,

(ML17143A410), the NRC states that as a result of their review of S.B. 79, no further comments were necessary, essentially resolving the incompatibility matter.

26. Are your regulations subject to a "Sunset" or equivalent law? If so, explain and include the next expiration date for your regulations.

The sunset provision for the Radiation Control Act was removed by legislative action in 2012. (S.B. 132, 2012 General Session). Consequently, the Radiation Control Act is not currently subject to a set expiration date.

However, administrative rules are subject, by state law (Utah Code Annotated (UCA) 63G-3-305), to a review at least every five years in order to evaluate the continued value of and need for a given rule. Specifically, the Utah Administrative Rulemaking Act requires state agencies to review each of their administrative rules within five years of the rule's original effective date or the last five-year review. The purpose of the review is to provide agencies with an opportunity to evaluate the rules to assess if the rules should be continued. In performing a five-year review, an agency may consider the need to amend or repeal rules that are archaic in form, are no longer used, are not based on existing statutory authority or are otherwise unnecessary.

The Radiation Control Act authorizes the Waste Management and Radiation Control Board (Board) to make rules governing the radiation control program (UCA §19-3-104(4)). Because the Administrative Rulemaking Act's definition of "agency" includes each state board authorized or required by law to make rules, it is appropriate that the Board approve the five-year review of a rule.

To retain a rule as part of the Utah Administrative Code, a "Five-Year Notice of Review and Statement of Continuation" must be filed with the Office of Administrative Rules, before the rule's five-year anniversary date. Completing the form and filing it before the five-year review date satisfies the provisions of the Administrative Rulemaking Act with respect to a five-year review.

As indicated by the table below, all radiation control rules underwent a required five-year review over the past two years and therefore remain in effect as valid state rules. The next five-year reviews will be due in 2021 and 2022.

UTAH ADMINISTRATIVE CODE*
R313 RADIATION CONTROL RULEMAKING ACTIONS
2016 -2017

| <u>OAR No</u> | <u>Filing Title</u> | <u>Status</u> | <u>Type</u> | <u>Submitted</u> | <u>Effective</u> |
|-----------------------|---|---------------|---------------|------------------|------------------|
| 41185 | R 313- 38 Licenses and Radiation Safety Requirements for Well Logging | Codified | 5 Year Review | 1/17/2017 | 1/17/2017 |
| 41184 | R 313- 37 Physical Protection of Category 1 and Category 2 Quantities of Radioactive Material | Codified | 5 Year Review | 1/17/2017 | 1/17/2017 |
| 41183 | R 313- 35 Requirements for X-Ray Equipment Used for Non-Medical Applications | Codified | 5 Year Review | 1/17/2017 | 1/17/2017 |
| 41181 | R 313- 34 Requirements for Irradiators | Codified | 5 Year Review | 1/17/2017 | 1/17/2017 |
| 41180 | R 313- 30 Therapeutic Radiation Machines | Codified | 5 Year Review | 1/17/2017 | 1/17/2017 |
| 41179 | R 313- 24 Uranium Mills and Source Material Mill Tailings Disposal Facility Requirements | Codified | 5 Year Review | 1/17/2017 | 1/17/2017 |
| 41178 | R 313- 21 General Licenses | Codified | 5 Year Review | 1/17/2017 | 1/17/2017 |
| 41177 | R 313- 15 Standards for Protection Against Radiation | Codified | 5 Year Review | 1/17/2017 | 1/17/2017 |
| 40583 | R 313- 70 Payments, Categories and Types of Fees | Codified | 5 Year Review | 7/1/2016 | 7/1/2016 |
| 40582 | R 313- 36 Special Requirements for Industrial Radiographic Operations | Codified | 5 Year Review | 7/1/2016 | 7/1/2016 |
| 40581 | R 313- 32 Medical Use of Radioactive Material | Codified | 5 Year Review | 7/1/2016 | 7/1/2016 |
| 40580 | R 313- 28 Use of X-Rays in the Healing Arts | Codified | 5 Year Review | 7/1/2016 | 7/1/2016 |
| 40579 | R 313- 25 License Requirements for Land Disposal of Radioactive Waste - General Provisions | Codified | 5 Year Review | 7/1/2016 | 7/1/2016 |
| 40578 | R 313- 22 Specific Licenses | Codified | 5 Year Review | 7/1/2016 | 7/1/2016 |
| 40577 | R 313- 19 Requirements of General Applicability to Licensing of Radioactive Material | Codified | 5 Year Review | 7/1/2016 | 7/1/2016 |
| 40576 | R 313- 18 Notices, Instructions and Reports to Workers by Licensees or Registrants--Inspections | Codified | 5 Year Review | 7/1/2016 | 7/1/2016 |
| 40575 | R 313- 17 Administrative Procedures | Codified | 5 Year Review | 7/1/2016 | 7/1/2016 |

| | | | | | |
|-----------------------|---|----------|---------------|-----------|-----------|
| 40574 | R 313- 16 General Requirements Applicable to the Installation, Registration, Inspection, and Use of Radiation Machines | Codified | 5 Year Review | 7/1/2016 | 7/1/2016 |
| 40573 | R 313- 14 Violations and Escalated Enforcement | Codified | 5 Year Review | 7/1/2016 | 7/1/2016 |
| 40572 | R 313- 12 General Provisions | Codified | 5 Year Review | 7/1/2016 | 7/1/2016 |
| 40259 | R 313- 26 Generator Site Access Permit Requirements for Accessing Utah Radioactive Waste Disposal Facilities | Codified | 5 Year Review | 3/10/2016 | 3/10/2016 |

* Online official Utah Administrative Code at <https://rules.utah.gov>

NOTE: Utah statutes are available online at https://le.utah.gov/Documents/code_const.htm and Utah administrative rules are available online at <https://rules.utah.gov/publications/utah-adm-code/>.

27. Please review and verify that the information in the enclosed State Regulation Status (SRS) sheet is correct. For those regulations that have not been adopted by the State, explain why they were not adopted, and discuss actions being taken to adopt them. If legally binding requirements were used in lieu of regulations and they have not been reviewed by NRC for compatibility, please describe their use.

The most recent SRS data sheet is dated June 27, 2017 (TTN: 17-40) and a copy was provided in Mr. White's letter of August 31, 2017. The following comment is provided:

RATS ID 2013-2 – Revisions to the corresponding state rules were made in accordance with NRC's comments transmitted in a letter dated March 7, 2017 (ML16363A219) and adopted by the Utah Waste Management and Radiation Control Board on October 12, 2017 with an effective date of October 13, 2017. A letter transmitting the final revised rules has been drafted and will be submitted to the NRC by November 30, 2017.

28. If you have not adopted all amendments within three years from the date of NRC rule promulgation, briefly describe your State's procedures for amending regulations in order to maintain compatibility with the NRC, showing the normal length of time anticipated to complete each step.

The date for an Agreement State to adopt the rule changes under RATS ID 2013-2 was August 27, 2016. As noted in the above response, on October 12, 2017, the Waste Management and Radiation Control Board approved the adoption of the final rule changes for RATS ID 2013-2 and set an effective date of October 13, 2017. A letter transmitting the final revised rules has been drafted and will be submitted to the NRC by November 30, 2017.

II. Sealed Source and Device (SS&D) Evaluation Program

29. Prepare a table listing new and amended (including transfers to inactive status) SS&D registrations of sources and devices issued during the review period. The table heading should be:

| <u>SS&D Registry Number</u> | <u>Manufacturer, Distributor or Custom User</u> | <u>Product Type or Use</u> | <u>Date Issued</u> | <u>Type of Action</u> |
|---|---|--------------------------------|------------------------|---------------------------|
|---|---|--------------------------------|------------------------|---------------------------|

30. Please include information on the following questions in Section A, as they apply to the SS&D Program:

Technical Staffing and Training - Questions 2-9
Technical Quality of Licensing Actions - Questions 18-22
Technical Quality of Incident and Allegation Activities - Questions 23-24

III. Low-level Radioactive Waste Disposal Program

31. Please include information on the following questions in Section A, as they apply to the Low-Level Radioactive Waste Disposal Program:

Technical Staffing and Training - Questions 2-9
Status of Materials Inspection Program - Questions 10-14
Technical Quality of Inspections - Questions 15-17
Technical Quality of Licensing Actions - Questions 18-22
Technical Quality of Incident and Allegation Activities - Questions 23-24

IV. Uranium Recovery Program

32. Please include information on the following questions in Section A, as they apply to the Uranium Recovery Program:

Technical Staffing and Training - Questions 2-9
Status of Materials Inspection Program - Questions 10-14
Technical Quality of Inspections - Questions 15-17
Technical Quality of Licensing Actions - Questions 18-22
Technical Quality of Incident and Allegation Activities - Questions 23-24

MATERIALS REQUESTED TO BE AVAILABLE FOR THE ON-SITE PORTION OF AN IMPEP REVIEW

Please have the following information available for use by the IMPEP review team when they arrive at your office:

- List of open license cases, with date of original request, and dates of follow-up actions.
- List of licenses terminated during review period.
- Copy of current log or other document used to track licensing actions.
- List of all licensing actions completed during the review period (sorted by license reviewer, if possible).
- Copy of current log or other document used to track inspections.
- List of all inspections completed during the review period (sorted by inspector, if possible).
- List of inspection frequencies by license type.
- List of all allegations occurring during the review period. Show whether the allegation is open or closed and whether it was referred by NRC.
- List of all licenses that your agency has imposed additional security requirements upon.

ALSO, PLEASE HAVE THE FOLLOWING DOCUMENTS AVAILABLE:

- All State regulations
- Statutes affecting the regulatory authority of the State program
- Standard license conditions
- Technical procedures for licensing, model licenses, review guides
- SS&D review procedures, guides, and standards
- Instrument calibration records
- Inspection procedures and guides
- Inspection report forms
- Documented training plans, if applicable
- Records of results of supervisory accompaniments of inspections
- Emergency plan and communications list
- Procedures for investigating allegations
- Procedures for investigating incidents
- Enforcement procedures, including procedures for escalated enforcement, severity levels, civil penalties (as applicable)
- Job Descriptions