



State of Utah

GARY R. HERBERT  
Governor

SPENCER J. COX  
Lieutenant Governor

Department of  
Environmental Quality

Amanda Smith  
Executive Director

DIVISION OF RADIATION CONTROL  
Rusty Lundberg  
Director

**Radiation Control Board**

Peter A. Jenkins, Ph.D., CHP – *Chair*  
Scott Bird – *Vice Chair*  
Brady Bradford  
Dick Codell, Ph.D.  
Jerry Hurst, Tooele County Commissioner  
Lindsey Christensen Nesbitt, Ph.D.  
Ulrich Rassner, M.D.  
Matt W. Rydalch  
Amanda Smith – *DEQ Executive Director*

Rusty Lundberg, *Executive Secretary*

**RADIATION CONTROL BOARD MEETING**  
**February 10, 2015**

**Multi Agency State Office Building (MASOB)**  
**195 North 1950 West, Salt Lake City, Utah**

(One or more members of the Board may participate telephonically)  
(Access Number: 1-877-820-7831 Passcode: 396230#)

**TENTATIVE AGENDA**

**WORKING LUNCH MEETING – 11:30 a.m.**

**Red Rocks Conference Room (#3132), Third Floor MASOB**

**I. Welcome**

**II. Administrative Rulemaking**

**a. Discussion Following Public Comment Period:**

- i. Proposed changes to R313-19, *Requirements of General Applicability to Licensing of Radioactive Material* and R313-37, *Physical Protection of Category 1 and Category 2 Quantities of Radioactive Material*
- ii. Proposed changes to R313-17-4, *Special Procedures for Decisions Associated with Licenses for Uranium Mills and Disposal of Byproduct Material*, regarding public participation procedures for licensing uranium mills and radioactive byproduct material management per 42 U.S.C. §2021(o)(3)

**III. Other Items**

**BOARD MEETING – 1:00 p.m.**

**Conference Room #1015, DEQ Board Room, First Floor (MASOB)**

**I. Welcome**

**II. Approval of the Minutes from the January 13, 2015 Board Meeting**

**III. Administrative Rulemaking**

**a. Action Following Public Comment Period:**

- i. Proposed changes to R313-19, *Requirements of General Applicability to Licensing of Radioactive Material* and R313-37, *Physical Protection of Category 1 and Category 2 Quantities of Radioactive Material*

**b. Final Adoption Following Public Comment Period:**

- i. Proposed changes to R313-17-4, *Special Procedures for Decisions Associated with Licenses for Uranium Mills and Disposal of Byproduct Material*, regarding public participation procedures for licensing uranium mills and radioactive byproduct material management per 42 U.S.C. §2021(o)(3)

**IV. Information Items**

**a. Nuclear Regulatory Commission (NRC) Update**

- i. Commission Chair
- ii. Utah program performance evaluation

**b. Uranium Recovery Sites**

- i. Energy Fuels Resources / White Mesa Mill – Ground Water Corrective Action Plan for Chloroform – public comment period – Status update

**c. 2015 Legislature -- Update**

**V. Public Comment**

**VI. Next Scheduled Board Meeting: Tuesday, March 10 , 2015, 1:00 p.m.**

Multi Agency State Office Building, Board Conference Room #1015  
195 North 1950 West  
Salt Lake City, Utah

For those individuals needing special assistance in accordance with the Americans with Disabilities Act, please contact Dana Powers at the Utah Department of Environmental Quality, at 195 North 1950 West, Salt Lake City, UT 84116, Office of Human Resources at (801) 536-4412, TDD (801) 536-4414, or by email at: [dpowers@utah.gov](mailto:dpowers@utah.gov).



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Matt W. Rydalch  
Amanda Smith – *Executive Director*  
Rusty Lundberg, *Executive Secretary*

**MINUTES  
OF  
THE UTAH RADIATION CONTROL BOARD**

**January 13, 2015**

Department of Environmental Quality  
Multi Agency State Office Building  
Conference Room 1015, 195 North 1950 West, Salt Lake City, Utah

**BOARD MEMBERS PRESENT**

Peter Jenkins, CHP, Ph.D.  
Scott Bird  
Richard Codell, Ph.D  
Ulrich Rassner, MD  
Matt Rydalch  
Commissioner Jerry Hurst  
Brady Bradford (Via Phone)  
Lindsey Christensen Nesbitt, Ph.D.  
Rusty Lundberg, Executive Secretary

**DRC STAFF/OTHER DEO MEMBERS  
PRESENT**

Craig Jones, DRC Section Manager  
John Hultquist, DRC Section Manager  
Laura Lockhart, AG Staff  
Spencer Wickham, DRC Staff  
Scott Anderson, DSHW Director  
Arlene Lovato, DSHW Staff  
Lisa Mechem, DRC Staff  
Charlie Bishop, DRC Staff

**BOARD MEMBERS  
ABSENT/EXCUSED**

Amanda Smith, Executive Director DEQ

**PUBLIC**

Vern Rogers, EnergySolutions  
Gary Guelker, Janet & Guelker

195 North 1950 West • Salt Lake City, UT  
Mailing Address: P.O. Box 144850 • Salt Lake City, UT 84114-4850  
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I. Welcome

Dr. Peter Jenkins, Chairman, called the meeting to order at 1:00 p.m. He welcomed the Board Members and the public.

II. Approval of the Minutes from the January 13, 2015 Board Meeting

Dr. Peter Jenkins, Chairman, asked if any members of the Board had any corrections to the minutes for the January 13, 2015 Board Meeting. None were requested.

**MOTION MADE BY MR. SCOTT BIRD TO APPROVE THE MINUTES OF JANUARY 13, 2015.**

**SECONDED BY DR. RICHARD CODELL.**

**MOTION CARRIED AND PASSED UNANIMOUSLY.**

III. Indoor Radon – Ms. Eleanor Divver showed the Board a short clip on Radon and informed the Board of the Radon Action Month / public outreach efforts and awareness, as January is Radon Action Month. She also mentioned the winners for the 2014 Radon Poster Contest, who would receive an award from the Governor later in January 2015.

IV. Administrative Rulemaking

a. Comments Received :

i. Mr. Rusty Lundberg, Executive Secretary, informed the Board of the comments received from EnergySolutions for R313-19 and R313-37. These rule changes institute and adopt federal requirements regarding protection of Category 1 and Category 2 sources of Radioactive material. The comment period was to end by December 1, 2014, but due to a petition of rulemaking that was submitted to NRC by the **Nuclear Energy Institute** regarding 10 CFR 37, the comment period was extended to January 9, 2015. Comments were received from the University of Utah, Intermountain Health Care, and EnergySolutions, which have been provided to the Board to review for rulemaking.

b. Approve for Rulemaking and Public Comment:

i. Mr. Spencer Wickham reviewed proposed changes to R313-15 and R313-38-3 in response to NRC requested changes to what was approved by the Board in the November 2014 Board meeting and sent out for public comment period. During the Public comment period, the NRC submitted a letter regarding the proposed changes and raised compatibility issues pertaining to substitutions and citations that existed in R313-15 and R313-38 that still needed to be addressed. Mr. Spencer Wickham, asked the Board to accept the Director's Recommendation to approve the filing of the proposed rules. Mr. Rusty Lundberg, Executive Secretary, further explained to resolve the NRC comments; changes to the proposed rules are required to meet the compatibility requirements for agreement states. Dr. Peter Jenkins, Chairman, raised some questions about accepting rules

by reference and the role of the Division of Administrative Rules. Mr. Rusty Lundberg, Executive Secretary, further clarified the intent for rulemaking. Additional comments were made by Dr. Lindsey Nesbitt and Dr. Ulrich Rassner in regards to Federal requirements and NRC guidelines.

**MOTION MADE BY MR. SCOTT BIRD TO ACCEPT THE DIRECTOR'S RECOMMENDATION AND TO INITIATE RULEMAKING BY APPROVING THE FILING OF THE PROPOSED RULE CHANGES TO R313-15-1208 AND R313-38-3 WITH THE DIVISION OF ADMINISTRATIVE RULES. .**

**SECONDED BY COMMISSIONER JERRY HURST.**

**MOTION CARRIED AND PASSED UNANIMOUSLY.**

## **V. Information Items**

### **a. Uranium Recovery Sites**

i. Energy Fuels Resources / White Mesa Mill – Mr. Rusty Lundberg, Executive Secretary, gave a status update and informed the Board of the comment period that had begun for the proposed Corrective Action Plan for on-site Chloroform Plume. The public comment period will end on February 13, 2015 and a public hearing is also being held in Blanding on February 11, 2015, giving the public and opportunity to comment on the corrective action plan.

b. **2014 4<sup>th</sup> Quarter Activities Report** – Mr. Rusty Lundberg, Executive Secretary, informed the Board of the activities report that was included in the Board packet for the Board to review and stay informed of the Division's accomplishments of the Regulated community. Dr. Peter Jenkins, Chairman, asked for further explanation on the notices of violation and incoming shipments, Mr. Rusty Lundberg, further clarified the information in the activities report.

c. **2015 Legislature** – Mr. Rusty Lundberg, Executive Secretary, informed the Board of the bill H.B. 78 sponsored by Representative Brad Dee that further clarifies Generator Site Permits. Dr. Peter Jenkins, Chairman, expressed his concerns about the proposed comments and reasoning behind the Board's decision in the rulemaking. Mr. Rusty Lundberg, Executive Secretary, also informed the Board of a Bill that is being discussed and will be presented in the 2015 Legislative session in February about the consolidation of the divisions of Radiation Control and Solid and Hazard Waste. Dr. Peter Jenkins and Dr. Ulrich Rassner expressed their concerns.

d. **Online Availability of DRC documents** – Mr. John Hultquist, informed the Board of the availability of documents online for all agencies in the Department of Environmental Quality for public access. The Utah Division of Radiation Control expects to have this service available in February.

**VI. Election of Chair and Vice Chair** – Dr. Peter Jenkins and Mr. Scott Bird were reelected by the Board to serve on the Radiation Control Board. **Motion was made by Mr. Matt**

**Rydalch to retain Dr. Peter Jenkins as Chairman and Mr. Scott Bird as Vice Chairman Second by Mr. Brady Bradford. Motion Carried and Passed Unanimously.**

**VII. Recognition of Commissioner Jerry Hurst -** Dr. Peter Jenkins, Chairman presented an award and recognized Commissioner Jerry Hurst for his outstanding service and contribution to the Utah Radiation Control Board.

**VIII. Public Comment**

No comment was received.

**IX. Next Scheduled Board Meeting:**

**Tuesday, February 10, 2015, 1:00 p.m.**

Multi Agency State Office Building, Board Conference Room #1015

195 North 1950 West

Salt Lake City, Utah

Meeting Adjourned 2:00 PM

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# UTAH RADIATION CONTROL BOARD

February 10, 2015

## PROPOSED RULE CHANGES

### BOARD ACTION ITEM

**R313-19-2, 19-7, & 19-100, Requirements of General Applicability to  
Licensing of Radioactive Material**

**R313-37, Physical Protection of Category 1 and Category 2  
Quantities of Radioactive Material**

### RULEMAKING PROCESS

At the Board meeting on October 14, 2014, Division staff presented information concerning substantive changes to the rules that address the security of large quantities of radioactive material that incorporate new Nuclear Regulatory Commission (NRC) requirements. These requirements are necessary for the Division to have compatible and adequate regulations as an Agreement State with the NRC.

The Board approved the filing of this rule with the Division of Administrative rules and directed staff to give notice to the public for a 30-day comment period. The proposed rule changes were published in the November 1, 2014 issue of the *Utah State Bulletin*. On November 2, 2014, Division staff issued a List Server notice that invited the Public to submit comments on the proposed rulemaking. Additional information about the opportunity to submit comments was provided on the Division's website. Affected licensees of the Division were sent a letter dated October 15, 2014, explaining the proposed rule and providing information regarding new requirements of these licensees once the rule became effective.

On November 26, 2014, the Division received a letter from Daniel A. Strum of *EnergySolutions* requesting that the Division extend the public comment period to January 12, 2015. That date would correspond to the close of a public comment period on a petition for rulemaking to the U.S. Nuclear Regulatory Commission (NRC) from the Nuclear Energy Institute (NEI). The petition for rulemaking would add a new exemption in 10 CFR 37.11(d) to include large components and licensed material stored in robust structures to be disposed at a permanent disposal facility, such as *EnergySolutions*.

In a Division letter dated December 1, 2014, the Director agreed to extend the public comment period for the rulemaking actions until the close of business on January 9, 2015. The January 9, 2015, deadline was set in order for Division staff to collect the comments received for the Board meeting on January 13, 2015. In a letter dated December 3, 2014, the Executive Secretary of the Board sent a letter to all affected licensees informing them of the extended public comment period.

## **COMMENTS RECEIVED**

By the close of business on January 9, 2015, the Division had received comments from EnergySolutions, the University of Utah, IHC Healthcare Services, and the NRC. At that Board meeting, Board members were provided a copy of the comments received, but the Division had not had an opportunity to review the comments and prepare a response to the comments. The Division has completed a response to the comments and is enclosed in the Board meeting information.

## **RECOMMENDATION**

The Director recommends that the Board take the following action:

1. Approve the changes to R313-19-2, 19-7, &19-100, and direct Division staff to finalize the rulemaking action and set an effective date of February 17, 2015; and
2. Direct Division staff to prepare a Change in Proposed Rule (CPR) with the Division of Administrative Rules (DAR) to correct the errors in R313-37 identified by the NRC. The CPR is to be filed with DAR in time for the changes to the proposed rules can be published in the *Utah State Bulletin* on March 1, 2015. Direct Division staff to set an effective date for the rule of April 30, 2015.

An additional option for the Board's consideration would be to amend the existing proposed rule to incorporate the pertinent portions of the exemption request of NEI regarding large components in advance of the NRC completing their rulemaking action. Depending on the final action by the NRC with respect to NEI's rulemaking petition, the Board could, at that time, evaluate if any other revisions to R313-37 would be necessary for compatibility purposes.

**R313. Environmental Quality, Radiation Control.**

**R313-19. Requirements of General Applicability to Licensing of Radioactive Material.**

**R313-19-2. General.**

- (1) A person shall not manufacture, produce, receive, possess, use, transfer, own or acquire radioactive material except as authorized in a specific or general license issued pursuant to Rules R313-21 or R313-22 or as otherwise provided in Rule R313-19.
- (2) In addition to the requirements of Rules R313-19, R313-21 or R313-22, all licensees are subject to the requirements of Rules R313-12, R313-15, and R313-18. Licensees engaged in source material milling operations, authorized to possess byproduct material, as defined in Section R313-12-3 (see definition (b)) from source material milling operations, authorized to possess and maintain a source material milling facility in standby mode, authorized to receive byproduct material from other persons for disposal, or authorized to possess and dispose of byproduct material generated by source material milling operations are subject to the requirements of Rule R313-24. Licensees engaged in land disposal of radioactive material are subject to the requirements of Rule R313-25. Licensees using radioactive material in the healing arts are subject to the requirements of Rule R313-32. Licensees authorized to use sealed sources containing radioactive materials in panoramic irradiators with dry or wet storage of radioactive sealed sources, underwater irradiators, or irradiators with high dose rates from radioactive sealed sources are subject to the requirements of Rule R313-34. Licensees engaged in industrial radiographic operations are subject to the requirements of Rule R313-36. Licensees possessing category 1 or category 2 quantities of radioactive material, as defined in Section R313-37-3 (incorporating 10 CFR 37.5 by reference), are subject to the physical protection requirements of Rule R313-37. Licensees engaged in wireline and subsurface tracer studies are subject to the requirements of Rule R313-38. ~~Licensees authorized to use sealed sources containing radioactive materials in panoramic irradiators with dry or wet storage of radioactive sealed sources, underwater irradiators, or irradiators with high dose rates from radioactive sealed sources are subject to the requirements of Rule R313-34, licensees engaged in industrial radiographic operations are subject to the requirements of Rule R313-36, licensees using radionuclides in the healing arts are subject to the requirements of Rule R313-32, licensees engaged in land disposal of radioactive material are subject to the~~

~~requirements of Rule R313-25, and licensees engaged in wireline and subsurface tracer studies are subject to the requirements of Rule R313-38. Licensees engaged in source material milling operations, authorized to possess byproduct material, as defined in Section R313-12-3 (see definition (b)) from source material milling operations, authorized to possess and maintain a source material milling facility in standby mode, authorized to receive byproduct material from other persons for disposal, or authorized to possess and dispose of byproduct material generated by source material milling operations are subject to the requirements of Rule R313-24.]~~

### **R313-19-7. Carriers.**

Common and contract carriers, freight forwarders, warehousemen, and the U.S. Postal Service are exempt from the regulations in Rules R313-19, R313-21, R313-22, R313-32, R313-34, R313-36, R313-37, and R313-38 and the requirements for a license set forth in Subsection 19-3-104(3) to the extent that they transport or store radioactive material in the regular course of carriage for another or storage incident thereto.

### **R313-19-100. Transportation.**

For purposes of Section R313-19-100, 10 CFR 71.0(c), 71.1(a), 71.3, 71.4, 71.13, 71.14(a), 71.15, 71.17, 71.19(a), 71.19(b), 71.19(c), 71.20 through 71.23, 71.47, 71.83 through 71.89, 71.97, 71.101(a), 71.101(b), 71.101(c) (1), 71.101(g), 71.105, 71.127 through 71.137, and Appendix A to Part 71 (2014) [~~(2010)~~] are incorporated by reference with the following clarifications or exceptions:

- (1) The exclusion of the following:
  - (a) In 10 CFR 71.4 the following definitions:
    - (i) "close reflection by water";
    - (ii) "licensed material";
    - (iii) "optimum interspersed hydrogenous moderation";
    - (iv) "spent nuclear fuel or spent fuel"; and
    - (v) "state."
- (2) The substitution of the following date reference:
  - (a) "October 1, 2011" for "October 1, 2008".
- (3) The substitution of the following rule references:
  - (a) "R313-36 (incorporating 10 CFR 34.31(b) by reference)" for "Sec. 34.31(b) of this chapter" as found in 10 CFR 71.101(g);
  - (b) "R313-15-502" for reference to "10 CFR 20.1502";
  - (c) "R313-14" for reference to "10 CFR Part 2 Subpart B";
  - (d) "Rule R313-32, 10 CFR Part 35," for reference to "10 CFR

- part 35";
- (e) "R313-15-906(5)" for reference to "10 CFR 20.1906(e)";
  - (f) "R313-19-100(5)" for "Sec.71.5";
  - (g) "10 CFR 71.101(a), 71.101(b), 71.101(c)(1), 71.101(g), 71.105, and 71.127 through 71.137" for "subpart H of this part" or for "subpart H" except in 10 CFR 71.17(b), 71.20(b), 71.21(b), 71.22(b), 71.23(b);
  - (h) "10 CFR 71.0(c), 71.1(a), 71.3, 71.4, 71.17(c)(2), 71.20(c)(2), 71.21(d)(2), 71.83 through 71.89, 71.97, 71.101(a), 71.101(b), 71.101(c)(1), 71.101(g), 71.105, and 71.127 through 71.137" for "subparts A, G, and H of this part";
  - (i) "10 CFR 71.47" for "subparts E and F of this part"; and
  - (j) "10 CFR 71.101(a), 71.101(b), 71.101(c)(1), 71.101(g), 71.105, and 71.127 through 71.137" for "Sec. Sec. 71.101 through 71.137."
- (4) The substitution of the following terms:
- (a) "Director" for:
    - (i) "Commission" in 10 CFR 71.0(c), 71.17(a), 71.20(a), 71.21(a), 71.22(a), 71.23(a), and 71.101(c)(1);
    - (ii) "Director, Division of Nuclear Safety, Office of Nuclear Security and Incident Response" in 10 CFR 71.97(c)(1), and 71.97(f)(1);
    - (iii) "Director, Office of State Programs, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001" in 10 CFR 71.97(c)(3)(iii);
    - (iv) "NRC" in 10 CFR 71.101(f);
  - (b) "Director, the U.S. Nuclear Regulatory Commission, or an Agreement State" for "Commission" in 10 CFR 71.3;
  - (c) "The Governor of Utah" for:
    - (i) "the governor of a State" in 71.97(a);
    - (ii) "each appropriate governor" in 10 CFR 71.97(c)(1);
    - (iii) "the governor" in 10 CFR 71.97(c)(3);
    - (iv) "the governor of the state" in 10 CFR 71.97(e);
    - (v) "the governor of each state" in 10 CFR 71.97(f)(1);
    - (vi) "a governor" in 10 CFR 71.97(e);
  - (d) "State of Utah" for "State" in 71.97(a), 71.97(b)(2), and 71.97(d)(4);
  - (e) "the Governor of Utah's" for:
    - (i) "the governor's" in 10 CFR 71.97(a), 71.97(c)(3), 71.97(c)(3)(iii), 71.97(e), and 71.97(f)(1);
    - (ii) "governor's" in 10 CFR 71.97(c)(1), and 71.97(e);
  - (f) "Specific or general" for "NRC" in 10 CFR 71.0(c);
  - (g) "The Director at the address specified in R313-12-110" for reference to "ATTN: Document Control Desk, Director, Spent

- Fuel Project Office, Office of Nuclear Material Safety and Safeguards" in 10 CFR 71.101(c) (1);
- (h) "Each" for "Using an appropriate method listed in Sec. 71.1(a), each" in 10 CFR 71.101(c) (1);
  - (i) "The material must be contained in a Type A package meeting the requirements of 49 CFR 173.417(a)." for "The fissile material need not be contained in a package which meets the standards of subparts E and F of this part; however, the material must be contained in a Type A package. The Type A package must also meet the DOT requirements of 49 CFR 173.417(a)." as found in 10 CFR 71.22(a) and 71.23(a);
  - (j) "Licensee" for "licensee, certificate holder, and applicant for a COC"; and
  - (k) "Licensee is" for reference to "licensee, certificate holder, and applicant for a COC are."
- (5) Transportation of licensed material
- (a) Each licensee who transports licensed material outside the site of usage, as specified in the license issued by the Director, the U.S. Nuclear Regulatory Commission or an Agreement State, or where transport is on public highways, or who delivers licensed material to a carrier for transport, shall comply with the applicable requirements of the U.S. Department of Transportation regulations in 49 CFR parts 107, 171 through 180, and 390 through 397 (2009), appropriate to the mode of transport.
    - (i) The licensee shall particularly note DOT regulations in the following areas:
      - (A) Packaging--49 CFR part 173: subparts A (49 CFR 173.1 through 49 CFR 173.13), B (49 CFR 173.21 through 49 CFR 173.40), and I (49 CFR 173.401 through 49 CFR 173.477).
      - (B) Marking and labeling--49 CFR part 172: subpart D (49 CFR 172.300 through 49 CFR 172.338); and 49 CFR 172.400 through 49 CFR 172.407 and 49 CFR 172.436 through 49 CFR 172.441 of subpart E.
      - (C) Placarding--49 CFR part 172: subpart F (49 CFR 172.500 through 49 CFR 172.560), especially 49 CFR 172.500 through 49 CFR 172.519 and 49 CFR 172.556; and appendices B and C.
      - (D) Accident reporting--49 CFR part 171: 49 CFR 171.15 and 171.16.
      - (E) Shipping papers and emergency information--49 CFR part 172: subparts C (49 CFR 172.200 through 49 CFR 172.205) and G (49 CFR 172.600 through 49 CFR 172.606).

- (F) Hazardous material employee training--49 CFR part 172: subpart H (49 CFR 172.700 through 49 CFR 172.704).
  - (G) Security plans--49 CFR part 172: subpart I (49 CFR 172.800 through 49 CFR 172.804).
  - (H) Hazardous material shipper/carrier registration--49 CFR part 107: subpart G (49 CFR 107.600 through 49 CFR 107.606).
- (ii) The licensee shall also note DOT regulations pertaining to the following modes of transportation:
- (A) Rail--49 CFR part 174: subparts A through D (49 CFR 174.1 through 49 CFR 174.86) and K (49 CFR 174.700 through 49 CFR 174.750).
  - (B) Air--49 CFR part 175.
  - (C) Vessel--49 CFR part 176: subparts A through F (49 CFR 176.1 through 49 CFR 176.99) and M (49 CFR 176.700 through 49 CFR 107.720).
  - (D) Public Highway--49 CFR part 177 and parts 390 through 397.
- (b) If DOT regulations are not applicable to a shipment of licensed material, the licensee shall conform to the standards and requirements of the DOT specified in paragraph (a) of this section to the same extent as if the shipment or transportation were subject to DOT regulations. A request for modification, waiver, or exemption from those requirements, and any notification referred to in those requirements, must be filed with, or made to, the Director, P.O. Box 144850, Salt Lake City, Utah 84114-4850.

**KEY: license, reciprocity, transportation, exemptions**

**Date of Enactment or Last Substantive Amendment: xxxxx-xx-xxxx**

**Notice of Continuation: September 23, 2011**

**Authorizing, and Implemented or Interpreted Law: 19-3-104; 19-3-108**

**R313. Environmental Quality, Radiation Control.**

**R313-37. Physical Protection of Category 1 and Category 2 Quantities of Radioactive Material.**

**R313-37-1. Purpose and Authority.**

- (1) The rules in R313-37 prescribe requirements for the physical protection program for a licensee that possesses an aggregated category 1 or category 2 quantity of radioactive material.
- (2) The rules set forth herein are adopted pursuant to the provisions of Subsections 19-3-104(4) and 19-3-104(8).
- (3) The requirements of R313-37 are in addition to, and not in substitution for, the other requirements of these rules.

**R313-37-2. Scope.**

These requirements provide reasonable assurance of the security of category 1 and category 2 quantities of radioactive material by protecting these materials from theft or diversion. Specific requirements for access to material and, use, transfer, and transportation of material are included.

**R313-37-3. Clarifications or Exceptions.**

For purposes of R313-37, 10 CFR 37.5, 37.11(c), 37.21 through 37.43(d) (8), 37.45 through 37.103, and Appendix A to 10 CFR 37 (2014), are incorporated by reference with the following clarifications or exceptions:

- (1) The exclusion of the following:
  - (a) In 10 CFR 37.5, exclude definitions for "Act", "Agreement State", "Becquerel", "Byproduct Material", "Commission", "Curie", "Government Agency", "License", "License issuing authority", "Lost or missing licensed material", "Person", "State", and "United States";
  - (b) In 10 CFR 37.77, exclude the wording "Notifications to the NRC must be to the NRC's Director, Division of Security Policy, Office of Nuclear Security and Incident Response, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001. The notification to the NRC may be made by email to RAMQC SHIPMENTS@nrc.gov or by fax to 301-816-5151.";  
and
  - (c) In 10 CFR 37.81(g), exclude the wording "In addition, the licensee shall provide one copy of the written report addressed to the Director, Division of Security

Policy, Office of Nuclear Security and Incident Response, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001.";

(2) The substitution of the following wording:

(a) "Utah Radiation Control Rule" for references to:

(i) "Commission regulation" in 10 CFR 37.101; and

(ii) "regulation" in 10 CFR 37.103;

(b) "Utah Radiation Control Rules" for reference to:

(i) "regulations and laws" in 10 CFR 37.31(d);

(ii) "Commission requirements" in 10 CFR 37.43(a) (3) and 37.43(c) (1) (i); and

(iii) "regulations in this part" in 10 CFR 37.103;

(c) "Director" for references to:

(i) "appropriate NRC regional office listed in Section 30.6(a) (2)" in 10 CFR 37.45(b);

(ii) "Commission" in 10 CFR 37.103;

(iii) "NRC" in 10 CFR 37.31(d), 37.43(c) (3) (iii), 37.57(a) and (c), 37.77, and 37.77(a) (1) [first instance] and (3);

(iv) "NRC's Director, Division of Security Policy, Office of Nuclear Security and Incident Response, U.S. Nuclear Regulatory Commission, Washington, DC 29555-0001" in 10 CFR 37.77(c) (2) and 37.77(d);

(v) "NRC's Director of Nuclear Security, Office of Nuclear Security and Incident Response, U.S. Nuclear Regulatory Commission, Washington, DC 29555-0001" in 10 CFR 37.77(c) (1);

(vi) "NRC's Operations Center" in 10 CFR 37.81(a) and (b);

(vii) "NRC's Operations Center (301-816-5100)" in 10 CFR 37.57(a) and (b) and 37.81(a) through (f);

(viii) "NRC regional office listed in section 30.6(a) (2) of this chapter" in 10 CFR 37.41.(a) (3); and

(ix) "NRC regional office specified in section 30.6 of this chapter" in 10 CFR 37.41(a) (3);

(d) "Director, the U.S. Nuclear Regulatory Commission, or an Agreement State" for references to "Commission or an Agreement State" in 10 CFR 37.71 and 37.71(a) and (b);

(e) "U.S. Nuclear Regulatory Commission's Security Orders or the legally binding requirement issued by Agreement

States" for references to "Security Orders" in 10 CFR 37.21(a) (3), 37.25(b) (2), and 37.41(a) (3);

(f) "mail, hand delivery, or electronic submission" for references to "an appropriate method listed in section 37.7" in 10 CFR 37.57(c) and 37.81(g); and

(g) "shall, by mail, hand delivery, or electronic submission," for reference to "shall use an appropriate method listed in section 37.7 to" in 10 CFR 37.27(c);

(3) The substitution of the following rule references:

(a) "R313-19-41(4)" for reference to "section 30.41(d) of this chapter."

(b) "R313-19-100 [incorporating 10 CFR ~~37~~71.97 by reference]" for reference to "section 71.97 of this chapter" in 10 CFR 37.73(b);

(c) "R313-19-100 [incorporating 10 CFR ~~37~~71.97(b) by reference]" for reference to "section 71.97(b) of this chapter" in 10 CFR 37.73(b); and

(d) "10 CFR 73" for references to "part 73 of this chapter" in 10 CFR 37.21(c) (4), 37.25(b) 2), and 37.27(a) (4).

**KEY: radioactive material, security, fingerprinting, transportation**

**Date of Enactment or Last Substantive Amendment: xxxxxxxx xx, xxxx**

**Notice of Continuation: None**

**Authorizing, and Implemented or Interpreted Law: 19-3-104; 19-3-108**

# UTAH RADIATION CONTROL BOARD

## RESPONSE TO COMMENTS

February 10, 2015

### **UAC R313-19-2, 19-7, & 19-100, Requirements of General Applicability to Licensing of Radioactive Material UAC R313-37, Physical Protection of Category 1 and Category 2 Quantities of Radioactive Material**

The Radiation Control Board (Board) is proposing rulemaking to modify parts of the radiation control rules in R313-19, and to create a new Rule, R313-37, dealing with the physical protection of Category 1 and Category 2 quantities of radioactive material. These rule changes were presented to the Board at the October 14, 2014, Board meeting. The Board directed staff of the Division of Radiation Control (Division) to publish the rule changes in the *Utah State Bulletin*, and to receive comments during a 30-day public comment period.

The rule changes were published in the November 1, 2014, Bulletin, and a 30-day public comment period was initially set to run from the publication date to the close of business on December 1, 2014. On November 26, 2014, the Division received a letter from Daniel A. Strum of *EnergySolutions* requesting that the Division extend the public comment period to January 12, 2015. That date would correspond to the close of a public comment period on a petition for rulemaking to the U.S. Nuclear Regulatory Commission (NRC) from the Nuclear Energy Institute (NEI). The petition for rulemaking would add a new exemption in 10 CFR 37.11(d) to include large components and licensed material stored in robust structures to be disposed at a permanent disposal facility, such as *EnergySolutions*.

In a Division letter dated December 1, 2014, the Director agreed to extend the public comment period for the rulemaking actions until the close of business on January 9, 2015. The January 9, 2015, deadline was set in order for Division staff to collect the comments received for the Board meeting on January 13, 2015. In a letter dated December 3, 2014, the Executive Secretary of the Board sent a letter to all affected licensees informing them of the extended public comment period.

By the close of business on January 9, 2015, the Division had received comment from *EnergySolutions*, the University of Utah, IHC Healthcare Services, and the NRC. At that Board meeting, Board members were provided a copy of the comments received, but the Division had not had an opportunity to review the comments and offer a response to the comments.

The following presents the comments received during the public comment period and a response to each comment.

#### **Comment 1**

In a letter dated January 9, 2015, *EnergySolutions* recommended that the Division postpone action on the proposed new Rule (R313-37) pending the completion of an ongoing regulatory proceeding at the NRC. *EnergySolutions'* rationale for this recommendation is that the Division has until March 19, 2016, to adopt these rules (per NRC's requirement for Agreement States, like

Utah), and deferring action would be more efficient should the NRC decide to accept the NEI petition.

## **Response to Comment 1**

While the deadline to adopt rules equivalent to NRC's regulations in 10 CFR 37 is March 19, 2016, the NRC has not yet made a decision whether or not to agree to start the rulemaking process for the requested change to the regulations. It is uncertain that the NRC will be able to complete the rulemaking as requested in the rulemaking petition and allow sufficient time for the Board to complete the final adoption of the rules addressing the requirements in 10 CFR 37 prior to the March 19, 2016, deadline.

As to the efficiency of delaying the adoption of the rules until after NRC acts on the rulemaking petition, if the Board does not finalize this rulemaking action in order to set an effective date on or before March 1, 2015 or approve the recommended changes to incorporate NRC's requested revisions, the current rulemaking proposal will lapse and subsequent rule changes will require initiating a completely new rulemaking action.

There are likely specific benefits to *EnergySolutions*, other licensees, and to the Division by not delaying the current rulemaking action. Currently, *EnergySolutions* is required to employ additional increased security measures, by license condition and a letter from the Division dated November 14, 2005, whenever they receive a waste shipment containing a Category 1 or Category 2 quantity of radioactive material. If adopted, R313-37 would exempt *EnergySolutions* from the requirements of the rule for all shipments of waste containing Category 1 or Category 2 quantities, except for waste containing discrete sources, ion-exchange resins, or activated material that weighs less than 2,000 kilograms (4,409 pounds). The adoption of R313-37 would actually lessen the impact of additional security measures on *EnergySolutions*. Additionally, R313-12-55(1) states that the Board may, upon application or upon its own initiative, grant exemptions or exceptions from the requirements of these rules as it determines are authorized by law and will not result in undue hazard to public health and safety or the environment. This affords the potential for added regulatory discretion. The Division also recognizes that enforcement discretion will likely be necessary for licensees subject to the security and physical protection requirements for a period of time following their effective date. Applying such discretion, for example, to large components could be considered a reasonable approach up until the time the NRC takes final action on the rulemaking petition submitted by NEI.

In adopting rules to incorporate the regulations in 10 CFR 37, changes to R313-19 are also necessary. One of these changes involved the regulations in 10 CFR 71.97, which are incorporated by reference in R313-19-100. All that needed to be changed in R313-19-100 to address the change to 10 CFR 71.97 was to change the date of incorporation from "2010" to "2014." This change to the date of the incorporated sections of 10 CFR 71 will also address changes to 10 CFR 71 related to the advance notification to Native American tribes of transportation of certain types of nuclear waste (RATS ID # 2012-2). This is another rulemaking action that must be completed prior to August 10, 2015. If the current rulemaking action is completed prior to August 10, 2015, two rulemaking actions required by the NRC to maintain regulatory compatibility will be addressed at one time and would result in added rulemaking efficiency.

An additional option for the Board's consideration would be to amend the existing proposed rule to incorporate the exemption request of NEI regarding large components in advance of the NRC

completing their rulemaking action. Depending on the final action by the NRC with respect to NEI's rulemaking petition, the Board could, at that time, evaluate if any other revisions to R313-37 would be necessary for compatibility purposes.

## **Comment 2**

Both IHC Healthcare and the University of Utah expressed a desire that the Division hold stakeholder meeting(s) so that licensees may fully understand the Division's expectations for implementation and compliance before the effective date of the rule is set.

## **Response to Comment 2**

The Division understands the concern that our affected licensees have regarding this, or any, new regulation. The Division is certainly willing to hold a stakeholder meeting or multiple meetings to discuss implementation strategies and options as well as compliance inspections associated with the new security rules.

When the additional increased security measures were put in place at the federal level, the NRC advised that, during the first inspection under these new requirements, credit should be given to licensees who make a "good-faith" effort to be in compliance. (See the NRC's document number EGM 06-003.) This type of discretion in the inspection of affected licensees who are attempting to comply with the new rules is something that the Division would continue for the first inspection following the effective date of the rules. The Division's intent is not to set up our licensee's for failure. We commit to work with our licensees in the early days following the adoption of these rules, and to provide them with the knowledge and understanding they need to be in compliance.

The Division does not have a time when the stakeholder meeting could be held, but would look at the potential for holding an initial meeting or workshop prior to the effective date. There are a number of factors to be considered, including the time required to prepare and distribute information in advance of the meeting.

## **Comment 3**

Both IHC Healthcare and the University of Utah expressed concerns related to differences between the NRC Orders or the Division's Increased Controls license conditions, specifically as it relates to the fingerprinting orders for individuals needing unrestricted access to Category 1 or Category 2 quantities of radioactive material. Again, the desire to have a stakeholder meeting was expressed.

## **Response to Comment 3**

The Division understands the concerns expressed by our licensees concerning the applicability of the requirements under the NRC's Orders or the Division's license conditions, and how these requirements may differ from those of the new rules. The Division is willing to discuss any concerns regarding the new rules with our licensees at any time. Concerns about specific rules will certainly be topics for the stakeholder meeting mentioned in the Response to Comment 2.

With regard to the status of individuals previously approved to have unescorted access to Category 1 or Category 2 quantities, these individuals are grandfathered under 10 CFR 37.25(b).

New individuals wanting this level of access must complete the process in 10 CFR 37.25 (a), and all individuals must undergo a reinvestigation every 10 years from the last date the individual was approved [10 CFR 37.25(c)].

It is the Division's plan to amend all affected licenses after the effective date of the rules by removing the license conditions related to Increased Controls and the Fingerprinting Orders. The Division will coordinate with the NRC regarding the one Utah licensee that is still directly under an NRC Order. The plan is that the NRC will rescind the Order for that licensee on or as reasonably possible following the effective date of the proposed rule changes.

#### **Comment 4**

Both IHC Healthcare and the University of Utah expressed concerns over how the Division would use or adopt the NRC's publication NUREG-2155 "Implementation Guidance for 10 CFR Part 37, 'Physical Protection of Category 1 and Category 2 Quantities of Radioactive Material.'"

#### **Response to Comment 4**

NUREG-2155 is intended to be guidance in the implementation of the requirements in 10 CFR 37. The document is useful as a reference document to clarify the NRC's intent, to provide examples of how licensees can achieve compliance, or to define specific terms that are not contained in the rules. However, it cannot be used to cite a licensee that is not following what the guide says. The licensee must be in compliance with the rules. How the licensee achieves compliance is a matter left to the licensee. Comments and suggestions in the guidance may also be topics for discussion in the stakeholder meeting mentioned previously.

The Division uses guidance for a variety of purposes, including for the preparation and evaluation of license applications and amendments. While the guides may provide specific wording or suggestions for how a licensee is to provide information to the Division, the licensee is allowed the freedom to provide information relevant to the application or amendment request in whatever form or with whatever wording the licensee desires. The Division staff would then use the guidance to ensure that the license application or amendment request meets the intent of the guidance and contains the required information necessary to ensure that radioactive materials are being used safely and the Division has confidence that the licensee can reasonably comply with the rules.

#### **Comment 5**

Both IHC Healthcare and the University of Utah expressed concerns over the effective date, and whether or not there would be an implementation date set for when licensees needed to be in compliance with the new rules.

#### **Response to Comment 5**

This relates to the discussion in the Response to Comment 2 regarding the licensees' making a "good-faith" effort to be in compliance with the requirements. While there are additional or changed requirements in the rules that differ from those of the security-related license conditions, much of what is required in the rules remains the same as it is at this time. Some of the "enhancements" may be to add periodic tasks that would not need to be done immediately upon the effective date of the rules. Some changes would affect new hires or notifications of

shipments of radioactive material; activities that may not occur on a regular basis.

Additionally, the Division sent to all affected licensees a copy of the proposed rule changes and a document entitled "Examples of Requirement Changes in R313-37" following the Board's approval to send the proposed rules out for public comment. This document was sent to licensees, not only to inform licensees of additional or changed requirements, but to help licensees prepare themselves to be compliant with the new rules following their effective.

The Division recognizes that it may be more difficult for some licensees to come into compliance with the new rules. However, there are licensees that are a part of a company with offices in different states. Some of these licensees may already be required to be in compliance with the new security rules per their company's policies and procedures. Additionally, the effective date for the new rules has been pushed back from the originally expected date of December 16, 2014. Due to all of the reasons stated above, the Division does not believe that compliance by the effective date does not present a serious issue for the Division or the licensees.

The Board may recommend the Division exercise regulatory discretion such that it has the effect similar to setting an unofficial implementation date separate from the effective date of the rules. If so, the Division would work with licensees to assist in their efforts to come into compliance with the rules by an unofficial implementation date.

#### **Comment 6**

In a letter dated December 16, 2014, the NRC identified two errors in referencing rules in the proposed rules in R313-37.

The first error involved an incorporated rule in R313-19-100 that was referred to in both R313-37-3(b) and (c). The rule reference should have read "10 CFR 71.97" not "10 CFR 37.97."

The second error is found in R313-37-3(2)(b)(ii). The rule reference should have read "37.43(c)(1)(ii)" not "37.43(c)(1)(i)."

Pending Board approval, these errors will be need to be addressed in a Change in Proposed Rule (CPR) that would need to be filed with the Division of Administrative rules before February 28, 2105. If filed by February 17, 2015, the additional changes will then be published as a CPR in the March 1, 2015, edition of the *Utah State Bulletin* with a designated effective date sometime before June 30, 2015.

Alternatively, the Board could approve the rules as is, and the Division would have to make the rule changes requested by the NRC in a separate rulemaking action. In any case, the Division is committed to make the corrections to the rules as noted by the NRC.



January 9, 2015

CD15-0008

Mr. Rusty Lundberg  
Director  
Utah Division of Radiation Control  
195 North 1950 West  
Salt Lake City, Utah 84114-4850

Re: Comments on new proposed rule, R313-37, "Physical Protection of Category 1 and Category 2 Quantities of Radioactive Material"

Dear Mr. Lundberg:

EnergySolutions has reviewed the subject proposed rule regarding the Physical Protection of Byproduct Material. We recommend that the Utah Radiation Control Board postpone the action on the proposed new rule, R313-37, pending the completion of an ongoing regulatory proceeding at the U.S. Nuclear Regulatory Commission (NRC). This regulatory proceeding considers a petition for rulemaking from the Nuclear Energy Institute (NEI), which has the potential to substantively change the requirements of Part 37 *et al.* and the Utah counterparts. Because the State of Utah has until March 19, 2016 to take action, deferring action would be more efficient should the NRC decide to accept the NEI petition.

In June 2014, the NEI filed a petition to the NRC requesting that they amend their regulations on the Physical Protection of Byproduct Material, 10 CFR 37 *et al.*, to "remove unnecessary and burdensome requirements on licensees with established physical security programs." More specifically, NEI requested the rule be amended to clarify and expand the exemptions in 10 CFR 37.11, and particularly promotes the addition of a new exemption, §37.11(d), to include large components and material stored in robust structures.

In general, EnergySolutions is in agreement with NEI's request that the NRC revise their regulations on the Physical Protection of Byproduct Material and we have provided comments to the NRC to that effect. In addition to the changes to Part 37 proposed by NEI, EnergySolutions also has proposed that the NRC make several additional changes to Part 37 as it pertains to low-level radioactive waste (LLRW). Our principal comments are that

- The applicability of Part 37 be limited to disused discrete radioactive sources
- LLRW that has been disposed in bulk or engineered disposal vaults be explicitly excluded from Part 37
- The 2,000 kg exemption threshold for exempting activated components is excessively conservative and should be reduced to 500kg



Attached to this letter is a copy of the detailed comments EnergySolutions provided to the NRC.

We appreciate the opportunity to provide comments. Questions regarding these comments may be directed to me at (801) 649-2109 or [dshrum@energysolutions.com](mailto:dshrum@energysolutions.com).

Sincerely,

Daniel B. Shrum  
Senior Vice President  
Regulatory Affairs

**COMMENTS ON THE PHYSICAL PROTECTION OF CATEGORY 1 AND CATEGORY 2  
QUANTITIES OF RADIOACTIVE MATERIAL**

This attachment provides additional detail to support our proposed changes to NRC rules for the Physical Protection of Byproduct Material, 10 CFR 37 *et al.* We are in support of the petitioner's proposal that changes should be made to "remove unnecessary and burdensome requirements on licensees with established physical security programs." We also believe that changes beyond those proposed by the petitioner are merited to reduce unduly burdensome requirements on licensees, while still meeting the needs of an enhanced security for radioactive material quantities of concern.

***1. EnergySolutions supports the proposal that 10 CFR 37.11 should be revised to exempt major radioactive components and material in robust structures***

In section B1 of the NEI petition, NEI references Enforcement Guidance Memorandum EGM-14-001 in which NRC staff recognizes the size and weight of large components as significant impediments to theft and diversion. We fully agree that major radioactive components (e.g., steam generators, pressurizers, reactor pressure vessel closures) are inherently low risk items for theft or diversion and believe that these considerations apply irrespective of the presence of a Part 73 Security program. We further propose that they are equally applicable at LLRW processor and disposal locations.

Take for example a processed mid-sized steam generator (pictured below). The activity distribution of the steam generator was minimally dispersible and had dose rates from accessible surfaces much less than 0.1 Gy/h (10 rads/h) at a distance of one-meter. EnergySolutions believes that an explicit exemption from Part 37 *et al.* is appropriate for these components. We further believe that, as proposed by the petitioner, this exemption should extend beyond the limitations in the current enforcement discretion, which allows for reactor site storage in "robust structures." These components cannot be moved without special equipment and the design of the components renders any substantial dispersal of the contained radioactivity extremely unlikely. This is an inherent feature of major radioactive components and is not dependent upon storage in a robust structure.



**330 ton (490 tons with shielding & dunnage) being moved from barge slip to processing facility**

At the time of shipment, the steam generator pictured above contained approximately 5.6 TBq (150 Ci) of  $^{60}\text{Co}$ , equal to approximately 18 times the category 2 quantity threshold, but exhibited external dose rates of only 0.5 mSv/h to 0.6 mSv/h (50 to 60 mrad/h), or less than 1% of the most limiting dose rate associated with IAEA category 2 threshold effects. The steam generator shell is 3.75 inches of carbon steel in the region of the tube bundle, and the nominal 5,000 m<sup>2</sup> of internal Inconel tube surface contains most of the radioactivity as a thin layer of relatively fixed, insoluble surface contamination. Surreptitious movement or theft of such components is not possible, and substantial damage resulting in dispersal of the radioactivity is not a credible threat. For these reasons, EnergySolutions recommends that items that can be categorized as major radioactive components should not be required to adhere to Part 37 controls.

As mentioned in Section B2 of the petition, if major radioactive components are not exempt from these requirements, licensees will need to change their NRC-approved Part 73 security plans in order to meet the regulations set forth by Physical Protection of Byproduct Material regulations. This alteration of NRC-approved security plans will have an associated financial burden, which will ultimately be passed along to the consumer and not provide enhancements to public radiological safety. This reinforces the recommended request to exempt major radioactive components.

EnergySolutions supports the recommendation to amend the rule and expand the exemptions in 37.11 to include §37.11(d), which notes the exemption of large components and robust structures containing category 1 or category 2 quantities of radioactive material.

EnergySolutions does not support the creation of a new definition for “large component.” We believe the objective of the petitioner can be accomplished by referring to “major radioactive component” as currently defined in 10 CFR 50.2.

**2. *Spent ion exchange resins (IERS) should be added as a specific exemption in Part 37.11(c)***

As noted in IAEA *Categorization of Radioactive Sources*, derived deterministic dose limits (threshold) define a "dangerous source" and are used to normalize and categorize sealed sources of differing radionuclide composition and activity. The guidance was issued specifically for small sealed sources. The IAEA ERP Method 2003 (IAEA-TECDOC-953) states the following examples of the potential exposure scenarios of a dangerous source:

- a small source removed from a shield and carried in a pocket for 10 hours
- a small source inadvertently left in a bedroom for an extended time frame
- a sealed container is breached and the individual consumes some of the material (and assuming the ingestion is "...10x the largest fraction of the material ever known to have been accidentally eaten").

These examples clearly demonstrate that the need for controls is intended for application to high specific activity and physically small sources. Due to the fact that these derivations are based upon physically small sealed sources, exposure scenarios involving dispersed low specific activity material, such as an ion exchange resin (IER), require alternative metrics and less stringent criteria because the activity is being distributed over a much larger volume of inert material and the significant self-absorption in the resin media.

To further demonstrate the lack of applicability to IERs, a sample calculation is provided below comparing the dose rates for a typical industrial radiography source (2 cm in length) and a large IER package (100 ft<sup>3</sup>).

Radiography source:	100 Gy/h at 2.54 cm (10,000 rads/h at 2.54 cm)	1 Gy/h at 30 cm (100 rads/h at 30 cm)	0.10 Gy/h at 1 m (10 rads/h at 1 m)
Resin liner:	0.04 Gy/h at 2.54 cm (4 rads/h at 2.54 cm)	0.03 Gy/h at 30 cm (3 rads/h at 30 cm)	<0.01 Gy/h at 1 m (<1 rads/h at 1 m)

As demonstrated above, the radiography source emits a significantly higher dose rate than the resin liner. Based on the IAEA guidance and the dosimetric analyses, we believe that applying these physical controls to IERs is unwarranted. Therefore, EnergySolutions recommends that the scope of applicability for the Physical Protection of Byproduct Material be limited to disused discrete radioactive sources, as initially intended in the base IAEA protection model and as implemented by other national authorities (e.g., Canada), and not apply to IERs.

**3. *Implement a dose rate criteria to provide clarity on the applicability of the regulation on all radioactive material***

In the petition, NEI notes in Section B3, that the scope and requirements in 10 CFR 37.11(c) are ambiguous. EnergySolutions agrees and believes some of the ambiguity can be relieved if an additional criterion, such as dose rate, is provided to the applicable radioactive material.

The exposure potential from activated materials and items are highly variable and external dose rates depend upon the actual physical distribution of activity and the self-absorption characteristics of the item. Two simple calculations are provided below to represent possible irradiated items in which  $^{60}\text{Co}$  is a significant contributor to the external dose rates.

Scenario 1: A 30 cm diameter iron right cylinder with a length of 350 cm, containing 8.1 Ci of  $^{60}\text{Co}$  has a calculated photon dose rate of approximately 0.9 rads/h at a distance of 1 meter to the midpoint of its length.

Scenario 2: A 300 cm diameter iron disk with a height of 3.7 cm, containing 8.1 Ci of  $^{60}\text{Co}$  has a calculated photon dose rate of 3.5 rads/h at a distance of 1 meter from its center.

As demonstrated above, the potential for exposure greatly depends upon the geometry of the object, even two objects of similar volume containing the same activity. Accordingly, EnergySolutions recommends that maximum realistically accessible dose rates be a primary factor in determining if Part 37 controls are applicable. To marry this criterion to the lowest threshold value for category 2 source deterministic effects, it is recommended that the item exhibit accessible dose rates in excess of 0.1 Gy/h (10 rads/h). Additionally, EnergySolutions recommends accessible dose rate be defined as the dose rate measured or calculated at a distance of one-meter from the material.

#### ***4. Remove the requirement of additional physical controls for aggregated exempted waste***

In addition to the relief of ambiguity through dose rates, EnergySolutions believes that some of the ambiguity referenced in Section B3 of the petition is due to the fact that 10 CFR 37.11 contains a partial exemption (Parts B, C and D of the rule) for aggregated category 1 and category 2 quantities of radioactive materials in waste, yet specifies additional physical controls in paragraph (c). By requiring these additional controls, this effectively creates a new category of materials security. In many cases, the large numbers of packages, high mass and large volumes of waste render these additional controls expensive and unnecessary. This is impractical, particularly where hundreds or thousands of low activity packages are co-located within a single security barrier for purposes of operational efficiency. These new security provisions are contrary to the actual radiological risk associated with LLRW and will be costly to implement, while providing little or no improvement to public radiological risks.

Therefore, if LLRW continues to be subject to these controls, then realistic considerations should be included to avoid wasting resources on otherwise low-risk materials. These include volume and mass limits when aggregating materials relative to the category 1 and 2 quantity threshold values. EnergySolutions recommends individual or aggregated packages of  $> 1 \text{ m}^3$  of volume or  $\geq 500 \text{ kg}$  of mass be excluded from Part 37 controls, including the new 10 CFR 37(c) security requirements.

#### ***5. Physical protection of byproduct material should not be required for waste that has been permanently disposed***

The same logic applicable to major radioactive components (i.e., the need for special equipment to extract and move items) is applicable to radioactive wastes once permanently disposed in bulk or in engineered disposal vaults in a licensed disposal facility. This includes disused sources that have been encapsulated or otherwise properly processed and disposed. For this reason, EnergySolutions recommends all LLRW be categorically excluded from Part 37 once disposed. This change should be identified as Agreement State Compatibility Category B in order to ensure that it is effectively and consistently adopted at the disposal sites, all of which are regulated by Agreement States.

#### **6. Reduce the mass-based exemption for activated components**

EnergySolutions supports a specific exclusion for activated components, 37.11(c), but believes the 2,000 kg exemption threshold is extremely conservative. This position is based on our operational experience, which typically involves handling in excess of 15,000 tons of LLRW annually. EnergySolutions has found that practical considerations render material handling problematic when the mass of packages or components exceeds approximately 500 kg. Mechanical equipment (e.g., fork trucks, cranes, chain hoists) is required to handle such items. The required use of such equipment essentially forms a practical barrier to theft or diversion. Furthermore, a specific basis is not provided for the 2,000 kg threshold; therefore, EnergySolutions recommends that the mass threshold be revised to be 500 kg.

In order to implement comments 2 through 6, EnergySolutions proposes that Part §37.11(c) be revised to read as follows (new language shown in **bold type** and deletions in ~~strike through~~):

“A licensee that possesses radioactive waste that **contains an aggregated or individual package of category 1 or category 2 quantities of radioactive material in excess of 1 m<sup>3</sup> of volume or ≥ 500 kg of mass** is exempt from the requirements of subparts B, C, and D of this part. Except that any radioactive waste that contains discrete sources, ~~ion exchange resins,~~ or activated material that weighs less than 500 kg (1,103 lbs) ~~2,000 kg (4,409 lbs)~~ **and has an accessible dose rate in excess of 0.1 Gy/h (10 rads/h) measured or calculated at a distance of one-meter from the material** is not exempt from the requirements of this part. **All radioactive waste that has been disposed as defined in part 61 of this chapter is exempt from the requirements of subparts B, C, and D of this part.** The licensee shall implement the following requirements to secure the radioactive waste...”

#### **7. Metrication alignment of radioactive waste regulations**

To better align radioactive waste security regulations, Part 20 and Part 37 *et al.*, EnergySolutions recommends that 10 CFR 37 *et al.* regulations note quantities on records (and calculations) in traditional units as the standard. This would follow the already used and implemented regulation specified in 20.2101(a), with quantities in SI units following in parentheses for information purposes as specified in 20.2101(b).



**INTERMOUNTAIN MEDICAL CENTER**

January 8, 2015

Rusty Lundberg, Director  
Utah Division of Radiation Control  
195 North 1950 West  
P.O. Box 144850  
Salt Lake City, Utah 84114-4850

RE: Comments regarding proposed rule R313-37, "Physical Protection of Category 1 and Category 2 Quantities of Radioactive Material."

Dear Mr. Lundberg:

After reviewing the proposed rule R313-37, I now have the following comments/questions:

- 1) The licensee requests the Utah Division of Radiation Control to hold stakeholder meeting(s) so that licensees may fully understand the Division's expectations for implementation and compliance before the effective date of the rule is set.
- 2) In R313-37 [incorporating 10 CFR 37.5 by reference] "Fingerprint orders means the orders issued by the U.S. Nuclear Regulatory Commission (NRC) or the legally binding requirements issued by Agreement States [Administrative License Amendment(s)] that require fingerprints and criminal history record checks for individuals with unescorted access to category1 and category 2 quantities of radioactive material or safeguards information-modified handling."

COMMENT(S):

Please provide licensee's with a clear comparison between R313-37 and the legally binding requirements [Orders – issued by the Utah Division of Radiation Control as Administrative Amendment(s) to radioactive material licenses]. Also, provide an explanation on how R313-37 affects the current Orders (identified above).

- 3) The NRC has published Implementation Guidance for 10 CFR 37, “Physical Protection of Category 1 and Category 2 Quantities of Radioactive Material” in NUREG-2156. [NOTE: This guidance is approximately 270 pages long.]

QUESTION(S):

- a) Does the Utah Division of Radiation Control plan to adopt the above NRC implementation guidance?  
b) If so, will there be any changes proposed to the NUREG implementation guidance?

COMMENT:

Licensees must be given adequate time to thoroughly review any implementation guidance and have the opportunity to ask questions before the effective date of this rule is set.

4) COMPLIANCE QUESTION(S):

- a) On the day the rule, identified above, becomes effective will licensees need to be compliant with all the elements of the rule? (i.e., LLEA coordination, reviews of and training of the security plan)?  
b) Will there be an implementation period established for R313-37? If so, what will that implementation period be?

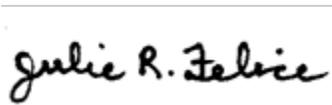
COMMENT(S):

- a) The licensee requests an adequate implementation period be set so licensees have time to adapt to the new requirements in R313-37 and also have time to comply with all R313-37 requirements.  
b) Again, the licensee requests the Utah Division of Radiation Control to hold stakeholder meeting(s) so that licensees may fully understand the Division’s expectations for implementation and compliance before the effective date of the rule is set.

Intermountain Healthcare’s General Ethic Standards state: “We know, abide by and understand the specific laws, policies and procedures that apply to our jobs and assignments, and to us as individuals.” Intermountain Healthcare desires to be fully compliant with all regulatory requirements. In order to do so, we must fully understand the proposed regulations and understand the Division’s expectations for implementation and compliance.

If you have any questions regarding this information or need clarification, please feel free to contact me.

Respectfully,



**Julie R. Felice, CPM, Health Physicist**

Director of Radiation Safety and Radiation Safety Officer

Intermountain Healthcare, Inc., Central Region

(801) 507-7951



January 9, 2015

Rusty Lundberg, director  
Utah Division of Radiation Control  
195 North 1950 West  
P.O. Box 144850  
Salt lake City, Utah 84114-4850

Re: Comments to proposed rule R313-37, "Physical Protection of Category 1 and Category 2 Quantities of Radioactive material."

Dear Mr. Lundberg:

I have completed a review of the proposed rule R313-37, and have the following questions and comments:

Questions:

1. There is a substantial guidance document from the U.S. Nuclear Regulatory Commission that accompanies 10 CFR 37. It is not a simple task to cross compare all aspects of an existing program, and if needed make changes that may cross many lines of authority within the University, and provide the program changes and documentation. Will this guidance document be adopted and if so, will any changes be made by Utah?
2. There is a statement in R313-37 [incorporating 10 CFR37.5 by reference] "Fingerprint orders means the orders issued by the U.S. Nuclear Regulatory Commission (NRC) or the legally binding requirements issued by Agreement States [Administrative License Amendment(s)] that require fingerprints and criminal history record checks for individuals with unescorted access to category 1 and category 2 quantities of radioactive material or safeguards information-modified handling." Such a statement points out the need for stakeholder meeting(s) to assist the licensee in fully understanding the expectation of the Division for the implementation and compliance of the rule before the actual effective date of the rule is set. Will there be stakeholder meetings to assist the licensees in assuring that they understand the Division's expectations for the implementation?

Comments:

1. Please provide licensee's with a clear comparison between R313-37 and the legally binding requirements, [Orders – issued by the Utah Division of Radiation Control as Administrative Amendment(s) to radioactive material licensees]. Also provide an explanation on how R313-37 affects these current Orders (identified above).

2. Related to question #2 above, it is requested that the Utah Division of Radiation Control hold stakeholder meeting(s) so that licensees may fully understand the Division's expectations for the implementation and compliance before the effective date of the rule is set.
3. It is requested that an adequate implementation period be set so licensees have time to adapt to the new requirements of R313-37 and also have time to comply with all the requirements.

Thank you for taking these questions and comments into consideration.

Sincerely,

A handwritten signature in black ink, appearing to read "Karen S. Langley". The signature is written in a cursive style with a long horizontal flourish extending to the right.

Karen S. Langley

Director, Radiological Health Department  
Radiation Safety Officer



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

December 16, 2014



Mr. Rusty Lundberg, Director  
Utah Division of Radiation Control  
195 North 1950 West  
Salt Lake City, UT 84114

Dear Mr. Lundberg:

We have reviewed the proposed regulations to the Utah regulations, Utah Radiation Control Rules R313-37, received by our office on October 1, 2014. These regulations were reviewed by comparison to the equivalent U.S. Nuclear Regulatory Commission (NRC) rules and the requirements of the one amendment identified in the enclosed State Regulation Status (SRS) Data Sheet. We discussed our review of the regulations with you on December 16, 2014.

As a result of our review, we have two comments that have been identified in the enclosure. Please note that we have limited our review to regulations required for compatibility and/or health and safety. Under our current procedure, a finding that the Utah regulations meet the compatibility and health and safety categories of the equivalent NRC regulation may only be made based on a review of the final Utah regulations. However, we have determined that if your proposed regulations were adopted, incorporating our comments and without other significant change, they would meet the compatibility and health and safety categories established in the Office of Nuclear Material Safety and Safeguards (NMSS) Procedure SA-200, "Compatibility Categories and Health and Safety Identification for NRC Regulations and Other Program Elements."

We request that when the proposed regulations are adopted and published as final regulations, a copy of the "as published" regulations be provided to us for review. As requested in NMSS Procedure SA-201, "Review of State Regulatory Requirements," please highlight the final changes, and provide a copy to Division of Material Safety, State, Tribal and Rulemaking Programs, NMSS.

The SRS Data Sheet summarizes our knowledge of the status of other Utah regulations, as indicated. Please let us know if you note any inaccuracies, or have any comments on the information contained in the SRS Data Sheet. This letter, including the SRS Data Sheet, is posted on the NMSS Web site: <http://nrc-stp.ornl.gov/rulemaking.html>.

Additionally, please note that NRC has previously issued certain security Orders to one Utah licensee. We have not listed the name of the licensee in this letter because that information is Official Use Only and cannot be made publicly available. Because the NRC-issued Orders are still legally binding, they must be rescinded by NRC concurrent with Utah's promulgation of final regulations. Accordingly, close coordination is needed between NRC and your office to ensure

R. Lundberg

-2-

there are no conflicts, duplications, or gaps regarding the security-related requirements for these licensees. Please contact Adelaide Giantelli, Source Management and Protection Branch, NMSS at (301) 415-3521 ([Adelaide.Giantelli@nrc.gov](mailto:Adelaide.Giantelli@nrc.gov)) for information regarding the affected State licensee and for coordination with rescission of the NRC-issued Orders for this licensee after State's promulgation and NRC's review of the final Utah regulations.

If you have any questions regarding the comments, the compatibility and health and safety categories, or any of the NRC regulations used in the review, please contact Michelle Beardsley, State Regulation Review Coordinator, at (610) 337-6942 ([Michelle.Beardsley@nrc.gov](mailto:Michelle.Beardsley@nrc.gov)) or Solomon Sahle at (301) 415-3781 ([Solomon.Sahle@nrc.gov](mailto:Solomon.Sahle@nrc.gov)).

Sincerely,



Pamela J. Henderson, Deputy Director  
Division of Material Safety, State, Tribal  
and Rulemaking Programs,  
Office of Nuclear Material Safety  
and Safeguards

Enclosures:

1. Compatibility Comments
2. Utah SRS Data Sheet

**COMPATIBILITY COMMENTS ON UTAH PROPOSED REGULATIONS**

STATE SECTION		NRC SECTION	RATS ID	CATEGORY	SUBJECT and COMMENTS
1	R313-37-3(3)(b) and (c)	37.73 (b)	2013-1	D	<p><b>Applicability of physical protection of category 1 and category 2 quantities of radioactive material during transit.</b></p> <p>Utah incorrectly references 10 CFR 37.97 when referencing R313-19-100 in R313-37-3(3)(b) and (c). The correct reference is 10 CFR 71.97.</p> <p>Utah needs to correct the reference in R313-37-3(3)(b) and (c) to read “R313-19-100 [incorporating 10 CFR 71.97 by reference]”, in order to meet the Compatibility Category D designation assigned to 10 CFR 37.73 (b).</p>
2	R313-37-3 (2)(b)(ii)	37.43 (c)(1)(ii)	2013-1	B	<p><b>General Security program requirements.</b></p> <p>In Section R313-37-3 (2)(b)(ii) Utah incorrectly references 37.43(c)(1)(i). The correct reference is 37.43(c)(1)(ii).</p> <p>Utah needs to correct the reference in R313-37-3(2)(b)(ii) to 37.43(c)(1)(ii) in order to meet the Compatibility Category B designation assigned to 10 CFR 37.43 (c)(1)(ii).</p>

# UTAH RADIATION CONTROL BOARD

## BOARD ACTION

### RECOMMENDATION FOR FINAL ADOPTION AND RESPONSE TO COMMENTS February 10, 2015

#### **R313-17-4, Special Procedures for Decisions Associated with Licenses for Uranium Mills and Disposal of Byproduct Material**

**Background:** R313-17-4 was proposed to meet the requirements of 42 U.S.C. § 2021(o)(3)(A)(ii) for an opportunity for cross-examination in licensing procedures specifically associated with 11e.(2) byproduct material. DRC had previously met this requirement through the procedures provided in the Utah Administrative Procedures Act (Utah Code Ann. §§ 63G-4-101 through 601, hereinafter UAPA), but since the creation of permit review proceedings in Utah Code Ann. § 19-1-301.5, UAPA no longer applies to DRC's licensing proceedings.

In its November 10, 2014 Board meeting, the Board proposed some additional changes to R313-17-4 to address comments received. Those changes are primarily language clarifications, but two changes went beyond that and prompted the Board to send the changed language back out for public comment on the changes. The first change specified that the hearing officer for the question and answer hearing shall not be either the DRC Director or a member of the Director's staff. Proposed R313-17-4(5)(c). The second change clarified that the remedy of allowing questions and answers on appeal in the event of a failure to offer an adequate question and answer hearing before the Director makes his decision should apply only if the complainant had exhausted its remedies below.

**Comments and Response to Comments:** No comments were received that specifically addressed the proposed changes.

However, comments were received from Uranium Watch requesting additional changes to other parts of the rule. In particular, the commenter felt the opportunity for cross-examination should apply in more circumstances than the rule currently indicates. A comment response document is attached.

**Recommendation:** The Director recommends that the rule be approved with the changes proposed in November 2014 and as published in the December 15, 2014 issue of the *Utah State Bulletin*.

## COMMENTS RECEIVED FROM URANIUM WATCH (SARAH FIELDS)

The following summarizes Uranium Watch's comments. The comments in their entirety are included as Attachment 1.

**General response:** None of Uranium Watch's comments address the changes that are the subject of this notice and comment opportunity and are therefore beyond the scope of the current rulemaking. Because the Board will likely be interested in the Division's response to the comments, however, the responses have been provided below.

**Comment No. 1:** The scope of the rule's applicability is defined through R313-17-4(2)(a) as limited to those actions described in R313-17-2(a)(i). Those actions include, e.g., new licenses, license renewal and other major licensing actions. This does not include all potential agency actions that must be addressed under 42 U.S.C. § 2021(o)(3)(A). There is nothing in 42 U.S.C. § 2021(o)(3)(A) that limits its application to the actions listed in R313-17-2(a)(i).

**Response No. 1:** Since only DRC's compliance with the requirements of 42 U.S.C. § 2021(o)(3)(A)(ii) was affected by the new permitting procedures of Utah Code Ann § 19-1-301.5, only that requirement was intended to be addressed by the proposed rule, and not all of 42 U.S.C. § 2021(o)(3)(A) as this comment assumes.

The scope of R313-17-4 is a reasonable interpretation of the requirements of 42 U.S.C. § 2021(o)(3)(A)(ii).<sup>1</sup> NRC is responsible for determining the State of Utah's compliance with the requirements of rule, including its proposed scope. The proposed rule was reviewed by NRC when it was originally proposed on September 1, 2014. NRC provided comments, but did not comment on the proposed scope.

**Comment No. 2:** The licensing and regulation of 11e.(2) byproduct material also includes Division of Radiation Control (DRC) orders that impose significant conditions on a licensee, whether or not the DRC amends a license at the time of the issuance of an order.

**Response No. 2:** The commenter is mistaken. The requirements of 42 U.S.C. § 2021(o)(3)(A)(ii) are limited by the opening provisions of 42 U.S.C. § 2021(o)(3)(A), which states that the requirements apply "in the case of licenses . . ." It does not apply to orders. See Attachment 2 for the complete language.

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<sup>1</sup> The Division notes that an even more reasonable interpretation of the requirement is that, as the provision expressly states, it applies only to the initial license action and perhaps a renewal, not to subsequent license amendment actions. The Division has elected at this time, nevertheless, to recommend including other licensing actions within the scope of this rule.

**Comment No. 3:** The licensing and regulation of 11e.(2) byproduct material also includes Division of Radiation Control (DRC) orders that impose significant conditions on a licensee, whether or not the DRC amends a license at the time of the issuance of an order. As it is now set up, the DRC can avoid providing an opportunity, after public notice, for written comments and a public hearing, with a transcript, an opportunity for cross examination, and a written environmental analysis, by issuing an order that imposes conditions on the licensee and uranium recovery operation.

**Response No. 3:** DRC's order authority may be used to impose additional requirements, beyond those specified in the license See, e.g., R313-12-54. These are compliance orders, not licensing actions so the procedural steps specified in the comment do not apply; in fact, intervention is not even allowed. See R305-7-110, which denies intervention in enforcement matters. This is consistent with principles of enforcement discretion that are long-standing and necessary to allow an agency to direct its limited resources to the most important matters.

**Comment No. 4:** Paragraphs 4 through 9 address an action brought against DRC by Uranium Watch.

**Response No. 4:** The concerns raised by the commenter in these paragraphs relate to matters currently before an ALJ and are appropriately addressed in that context rather than in this rulemaking.

**Comment No. 5:** The Scope must be amended so that Permit Orders issued pursuant to R305-7-102(1)(l)(i) that amend or modify or a license or Orders issued pursuant to R313-14-1(3) [*sic* - should be R313-14-15(3)] that amend or modify a license are included in the Scope of R313-17-4.

**Response No. 5:** See response to Comment 1. The commenter has misunderstood purpose of the requirements in R313-14-15. As that rule states in the beginning:

*This Section describes the enforcement sanctions available to the Director and specifies the conditions under which they are to be used.*

See response to Comment No. 3. The hearing opportunities discussed in the provision clearly belong not to the general public but to the licensee, as part of an enforcement action.

**ATTACHMENT 1**  
**URANIUM WATCH COMMENTS**

# Uranium Watch

76 South Main Street, # 7 | P.O. Box 344  
Moab, Utah 84532  
435-260-8384

January 13, 2015

via electronic mail  
Rusty Lundberg  
Director  
Utah Division of Radiation Control  
P.O. Box 144850  
Salt Lake City, Utah 84114-4850  
[rlundberg@utah.gov](mailto:rlundberg@utah.gov)

Re: Comments on: Department of Environmental Quality, Division of Radiation Control, Notice of Propose Rule. DAR FILE NO. 38770. Special Procedures for Decisions Associated with Licenses for Uranium Mills and Disposal of Byproduct Material, Utah Administrative Code R313-17-4. UTAH STATE BULLETIN, December 15, 2014, Vol. 2014, No. 2014-24, page 40.

Dear Mr. Lundberg:

Herein please find comments by Uranium Watch regarding proposed changes to Utah Administrative Code R313-17-4. Uranium Watch submitted comments on an earlier version of this rule on October 1, 2014.

Below are comments on the Scope of the Proposed Rule:

*R313. Environmental Quality, Radiation Control.  
R313-17. Administrative Procedures.  
R313-17-4. Special Procedures for Decisions Associated with Licenses for  
Uranium Mills and Disposal of Byproduct Material.*

\*\*\*

*(2) Scope. This rule R313-17-4 applies only to licensing activities that meet both of the following criteria:*

*(a) they are licensing activities described in R313-17-2(a)(i)  
(A) through (I); and*

*(b) they are for licenses or license amendments for uranium mills  
and disposal of byproduct materials.*

1. The scope of the Proposed Rule is limited to licensing activities for uranium mills and disposal of byproduct materials that are licensing activities described in R313-17-2(a)(1):

R313-17-2. Public Notice and Public Comment Period.

(1) The Director shall give public notice of and provide an opportunity to comment on the following:

(a) A proposed major licensing action for license categories 2b and c, 4a, b, c, d and 6 identified in Section R313-70-7.

(i) Major licensing actions include:

(A) Pending issuance of a new license,

(B) Pending issuance of a license renewal,

(C) Pending approval of a license termination,

(D) An increase in process, storage, or disposal capacity,

(E) A geographic expansion,

(F) A change in engineering design, construction, or process controls that will more than likely cause an individual to receive a higher total effective dose equivalent or increase the annual quantity of radioactive effluents released to the environment,

(G) A decrease in environmental monitoring or sampling frequency,

(H) Pending approval of reclamation, decontamination or decommissioning plans,

(I) Pending approval of corrective actions to control or remediate existing radioactive material contamination, not already authorized by a license,

2. Therefore, the Scope does not include all of the potential agency actions related to licensing and regulation of 11e.(2) byproduct material that would fall under the provisions of 42 U.S.C. Section 2021(3)(A).

3. The R313-17-4 Regulations are meant to establish procedures to comply with a provision in the Atomic Energy Act, 42 U.S.C. §2021(3)(A) which states:

42 U.S.C. § 2021(o): State compliance requirements: compliance with section 2113(b) of this title and health and environmental protection standards; procedures for licenses, rulemaking, and license impact analysis; amendment of agreements for transfer of State collected funds; proceedings duplication restriction; alternative requirements

In the licensing and regulation of byproduct material, as defined in section 2014(e)(2) of this title, or of any activity which results in

the production of byproduct material as so defined under an agreement entered into pursuant to subsection (b) of this section, a State shall require--

\*\*\*

(3) procedures which--

(A) in the case of licenses, provide procedures under State law which include-

(i) an opportunity, after public notice, for written comments and a public hearing, with a transcript,

(ii) an opportunity for cross examination, and

(iii) a written determination which is based upon findings included in such determination and upon the evidence presented during the public comment period and which is subject to judicial review;

\*\*\*

(C) require for each license which has a significant impact on the human environment a written analysis (which shall be available to the public before the commencement of any such proceedings) of the impact of such license, including any activities conducted pursuant thereto, on the environment, which analysis shall include--

4. These provisions apply to licensing and regulation of uranium mills, but there is nothing in the AEA requirements that limits the types of licensing actions and regulation to those listed in R313-17-2(a)(1). The licensing and regulation of 11e.(2) byproduct material also includes Division of Radiation Control (DRC) **orders** that impose significant conditions on a licensee, whether or not the DRC amends a license at the time of the issuance of an order. As it is now set up, the DRC can avoid providing an opportunity, after public notice, for written comments and a public hearing, with a transcript, an opportunity for cross examination, and a written environmental analysis, by issuing an order that imposes conditions on the licensee and uranium recovery operation.

5. On July 23, 2014, the DRC issued an Order<sup>1</sup> that modified existing conditions in the White Mesa Uranium Mill License (UT1900479) and imposed significant new conditions on the license, without actually amending the license. For example, as a result of the Order, Energy Fuels is no longer authorized to dispose of tailings in Cell 2, although the License authorizes such disposal. The DRC could have amended the License Conditions in the license with this Order, but failed to do so. The Order did say that the DRC would incorporate those changes into the license as part of the License Renewal, but it will

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<sup>1</sup> Letter from Rusty Lundberg, Director, Utah Division of Radiation Control, to David Frydenlund, Senior Vice President General Counsel and Corporate Secretary Energy Fuels Resources (USA) Inc. Request to Cease Monthly Radon Flux Sampling Tailings Cell 2: Radioactive Material License Number UT 1900479, July 23, 2014; URC-2014-004489. <http://www.deq.utah.gov/businesses/E/energyfuels/docs/2014/07Jul/EnergyFuels072814.pdf>

probably be another couple years before that is finalized. The License Renewal has been an endless process. These issues should be the subject of public input today, not next year.

6. The July 23 Order was an Order, pursuant to R313-14-1(3). Section R313-14-1(3)(f) states:

(f) Orders may be made effective immediately, without prior opportunity for hearing, whenever it is determined that the public health, interest, or safety so requires, or when the Order is responding to a violation involving willfulness. Otherwise, a prior opportunity for a hearing is afforded. For cases in which a basis could reasonably exist for not taking the action as proposed, the licensee, permittee, or registrant shall be afforded an opportunity to show cause why the Order should not be issued in the proposed manner .

7. R313-14-1(3)(f) clearly anticipates an opportunity for a hearing, whether before or after the issuance of an Order. In the case of the July 23 Order, which was effective immediately, there was, in fact, no immediate public health or safety issue. The Order was issued responsive to a letter from the licensee, Energy Fuels Resources (USA) Inc., to the Utah Division of Air Quality (DAQ) requesting that they no longer be required to do monthly 40 C.F.R. Part 61 Subpart W compliance monitoring for “existing” Cell 2 at the White Mesa Mill. The Order was also responsive to a desire of the Environmental Protection Agency to clarify the status of Cell 2 at White Mesa.

8. The July 23 Order also met the definition of “Permit Order” under R305-7-102(1)(l)(i), because it modified or amended a license.

9. Uranium Watch understands that there are reasons to issue an immediate order if there is a health and safety issue. In this case, there was no immediate health and safety issue, because the licensee was already complying with the Subpart W, was submitting monthly radon compliance reports, and was required to take corrective actions to limit the radon emissions if the emissions exceeded the limit. The DRC could have provided an opportunity for public comments and a hearing either before or after issuing the Order, but failed to do so. Therefore, the DRC sought to circumvent the process required under the U.S.C. §2021(3)(A) and (C) requirements.

10. Therefore, the Scope must be amended so that Permit Orders issued pursuant to R305-7-102(1)(l)(i) that amend or modify a license or Orders issued pursuant to R313-14-1(3) that amend or modify a license are included in the Scope of R313-17-4.

11. If the DRC does not include Orders in the Scope of R313-17-4, I will bring the issue up to the Nuclear Regulatory Commission, because I believe that all relevant DRC licensing actions, including orders that amend or modify a license, are subject to the 42

U.S.C. §2021(3)(A) and (C) requirements. It would be good to get this right the first time.

Thank you for providing the opportunity for comment.

Sincerely,

/s/

Sarah Fields  
Program Director

## ATTACHMENT 2

### Atomic Energy Act §274(o), 42 USC §2021(o)

In the licensing and regulation of byproduct material, as defined in section 11e. (2) of this Act, or of any activity which results in the production of byproduct material as so defined under an agreement entered into pursuant to subsection b., a State shall require—

- (1) compliance with the requirements of subsection b. of section 83 (respecting ownership of byproduct material and land), and
- (2) compliance with standards which shall be adopted by the State for the protection of the public health, safety, and the environment from hazards associated with such material which are equivalent, to the extent practicable, or more stringent than, standards adopted and enforced by the Commission for the same purpose, including requirements and standards promulgated by the Commission and the Administrator of the Environmental Protection Agency pursuant to sections 83, 84, and 275, and
- (3) procedures which—
  - (A) **in the case of licenses**, provide procedures under State law which include—
    - (i) an opportunity, after public notice, for written comments and a public hearing, with a transcript,
    - (ii) an opportunity for cross examination, and
    - (iii) a written determination which is based upon findings included in such determination and upon the evidence presented during the public comment period and which is subject to judicial review . . . .

(Emphasis added.)

# UTAH STATE BULLETIN

OFFICIAL NOTICES OF UTAH STATE GOVERNMENT  
Filed November 15, 2014, 12:00 a.m. through December 01, 2014, 11:59 p.m.

Number 2014-24  
December 15, 2014

Nancy L. Lancaster, Editor  
Kenneth A. Hansen, Director  
Kimberly K. Hood, Executive Director

The *Utah State Bulletin (Bulletin)* is an official noticing publication of the executive branch of Utah state government. The Division of Administrative Rules, part of the Department of Administrative Services, produces the *Bulletin* under authority of Section 63G-3-402.

The Portable Document Format (PDF) version of the *Bulletin* is the official version. The PDF version of this issue is available at <http://www.rules.utah.gov/publicat/bulletin.htm>. Any discrepancy between the PDF version and other versions will be resolved in favor of the PDF version.

Inquiries concerning the substance or applicability of an administrative rule that appears in the *Bulletin* should be addressed to the contact person for the rule. Questions about the *Bulletin* or the rulemaking process may be addressed to: Division of Administrative Rules, PO Box 141007, Salt Lake City, Utah 84114-1007, telephone 801-538-3764. Additional rulemaking information and electronic versions of all administrative rule publications are available at <http://www.rules.utah.gov/>.

The information in this *Bulletin* is summarized in the *Utah State Digest (Digest)* of the same volume and issue number. The *Digest* is available by e-mail subscription or online. Visit <http://www.rules.utah.gov/publicat/digest.htm> for additional information.

**Environmental Quality, Radiation  
Control  
R313-17-4  
Special Procedures for Decisions  
Associated with Licenses for Uranium  
Mills and Disposal of Byproduct  
Material**

**NOTICE OF CHANGE IN PROPOSED RULE**

DAR FILE NO.: 38770

FILED: 11/26/2014

**RULE ANALYSIS**

**PURPOSE OF THE RULE OR REASON FOR THE CHANGE:** The reason for filing this change in proposed rule is to address the well-reasoned and justified comments that were submitted about the original filing (DAR No. 38770, published in the September 1, 2014, Bulletin).

**SUMMARY OF THE RULE OR CHANGE:** A change in proposed rule is proposed to: 1) be more specific about a citation to federal law; 2) eliminate some confusing and duplicative language; 3) specify that the director of the Division of Radiation Control shall not be the hearing officer for the question and answer hearings established in the rule; and 4) clarify that administrative remedies through the question and answer hearing process must be exhausted in order to obtain review on appeal. (DAR NOTE: This change in proposed rule has been filed to make additional changes to a proposed amendment that was published in the September 1, 2014, issue of the Utah State Bulletin, on page 95. Underlining in the rule below indicates text that has been added since the publication of the proposed rule mentioned above; strike-out indicates text that has been deleted. You must view the change in proposed rule and the proposed amendment together to understand all of the changes that will be enforceable should the agency make this rule effective.)

**STATUTORY OR CONSTITUTIONAL AUTHORIZATION FOR THIS RULE:** 42 USC 2021(o)(3)(A)(ii) and Subsection 19-3-104(4)

**ANTICIPATED COST OR SAVINGS TO:**

- ◆ **THE STATE BUDGET:** The change will not result in any additional costs; the only significant change proposed is a procedural clarification.
- ◆ **LOCAL GOVERNMENTS:** If local government participates in a proceeding, it will not have any additional costs; the only significant change proposed is a procedural clarification.
- ◆ **SMALL BUSINESSES:** If a small business participates in a proceeding, it will not have any additional costs; the only significant change proposed is a procedural clarification.

◆ **PERSONS OTHER THAN SMALL BUSINESSES, BUSINESSES, OR LOCAL GOVERNMENTAL ENTITIES:** No person will bear any additional costs; the only significant change proposed is a procedural clarification.

**COMPLIANCE COSTS FOR AFFECTED PERSONS:** No regulated entity will bear any additional costs; the only significant change proposed is a procedural clarification.

**COMMENTS BY THE DEPARTMENT HEAD ON THE FISCAL IMPACT THE RULE MAY HAVE ON BUSINESSES:** No regulated entity will bear any additional costs; the only significant change proposed is a procedural clarification.

**THE FULL TEXT OF THIS RULE MAY BE INSPECTED, DURING REGULAR BUSINESS HOURS, AT:**

ENVIRONMENTAL QUALITY  
RADIATION CONTROL  
THIRD FLOOR  
195 N 1950 W  
SALT LAKE CITY, UT 84116-3085  
or at the Division of Administrative Rules.

**DIRECT QUESTIONS REGARDING THIS RULE TO:**

- ◆ John Hultquist by phone at 801-536-4263, by FAX at 801-536-4250, or by Internet E-mail at [jhultquist@utah.gov](mailto:jhultquist@utah.gov)
- ◆ Laura Lockhart by phone at 801-536-0283, by FAX at 801-366-0292, or by Internet E-mail at [llockhart@utah.gov](mailto:llockhart@utah.gov)
- ◆ Rusty Lundberg by phone at 801-536-4257, by FAX at 801-533-4097, or by Internet E-mail at [rlundberg@utah.gov](mailto:rlundberg@utah.gov)

**INTERESTED PERSONS MAY PRESENT THEIR VIEWS ON THIS RULE BY SUBMITTING WRITTEN COMMENTS NO LATER THAN AT 5:00 PM ON 01/14/2015**

**THIS RULE MAY BECOME EFFECTIVE ON: 01/21/2015**

**AUTHORIZED BY: Rusty Lundberg, Director**

**R313. Environmental Quality, Radiation Control.**

**R313-17. Administrative Procedures.**

**R313-17-4. Special Procedures for Decisions Associated with Licenses for Uranium Mills and Disposal of Byproduct Material.**

- (1) Definitions. For purposes of this rule:
  - (a) "Byproduct material" has the same meaning as defined in 42 U.S.C. Section 2014(e)(2);
  - (b) "License" means a radioactive materials license for a uranium mill or disposal of byproduct material, including any ground water discharge permit incorporated in a license; and
  - (c) "Question and answer hearing" means the informal hearing described in paragraphs (3) through (5) held for the purpose of responding to questions from the public.
- (2) Scope. This rule R313-17-4 applies only to licensing activities that meet both of the following criteria:
  - (a) they are licensing activities described in R313-17-2(a)(i) (A) through (I); and

(b) they are for licenses or license amendments for uranium mills and disposal of byproduct materials.

(3) Opportunity for Question and Answer Hearing Prior to Director's Decision.

(a) For licensing actions that are subject to the scope of this rule, the division may, at its discretion, schedule a question and answer hearing at the time it proposes the action.

(b) If the division does not choose to schedule a question and answer hearing[session] at the time it proposes a licensing action, it shall provide notice to the public of an opportunity to request a question and answer hearing[session], and it shall schedule and hold a hearing[session] if there is a request from a member of the public.

(c) Notice of a hearing or an opportunity to request a hearing under this rule shall be made as provided in R313-17-3(5). Members of the public shall be given at least ten days to request a hearing.

(d) The division may combine the question and answer hearing with a licensing hearing held for the purpose of taking public comment on a proposed licensing action.

(4) Procedures Prior to Question and Answer Hearing.

(a) The division shall provide a notice of the question and answer hearing at least 30 days before the hearing. The notice shall also summarize the applicable procedures, including the obligation to provide questions in advance of the hearing.

(b) Any person who proposes to ask questions during the question and answer hearing shall submit the questions to the division. Questions must be received by the division by the deadline specified in the public notice, which shall be no fewer than 15 days after the notice of the question and answer hearing is posted. If a question relies on information that is not included in the licensing record, that information shall be submitted with the questions. The relevance of and the relevant portions of any supporting materials shall be described with reasonable specificity. Information submitted in accordance with this paragraph will become part of the record.

(c) If the Director determines that any of the questions submitted will not be answered during the question and answer hearing, as provided in paragraph (5)(f), the Director shall notify the person who submitted the questions prior to the hearing. Notification shall include a statement about the Director's reasons for the determination.

(5) Procedures for Question and Answer Hearing.

(a) The question and answer hearing shall ordinarily be held in the Department of Environmental Quality offices. Unless the question and answer hearing is held in a place near the proposed facility, the division shall provide an opportunity for the public to participate by telephone or other electronic means.

(b) The question and answer hearing ~~[session-]~~will ordinarily be scheduled for longer than three hours. The division may allocate time to those who have submitted questions after considering the number and nature of the questions submitted.

(c) A hearing officer who is not the director or a member of the director's staff shall manage the question and answer hearing. Representatives of the licensee and division staff shall attend the hearing.

(d) The question and answer hearing shall be recorded and transcribed. Alternatively, the division may elect to have a court reporter record and transcribe the hearing.

(e) The Director shall determine whether the initial and follow-up question will be answered by the applicant, by division staff,

or by both. Notwithstanding the Director's decision, the applicant may choose to respond to any question. After the response to a question, the person who submitted the question shall be allowed to follow up with additional questions based on the response provided.

(f) Appropriate questions are those that seek specific factual information about the license application, or about other documents created during the licensing process. The following kinds of questions do not require a response during a question and answer hearing[session]:

- (i) Questions that are not relevant to the licensing action;
- (ii) Questions that are based on information that is not in the record;
- (iii) Questions that are vague;
- (iv) Questions that require speculation;
- (v) Questions that seek legal conclusions;
- (vi) Questions that have been previously answered;
- (vii) Questions that are more appropriately characterized as comments; and

(viii) Questions that would not have to be answered during a trial-type hearing.

(g) Either the agency or the applicant may elect to answer a question even if it is a question that does not require a response under paragraph (f). No waiver will result from answering a question that does not require a response.

(h) Questions requesting information that is clear in the record may be answered by referring the questioner to the record.

(i) In the event that a questioner or the applicant disagrees with the Director's determinations under paragraphs (4)(c), (5)(b), or (5)(e), it may request a determination by the hearing officer. If the hearing officer disagrees with the Director's determination, the division or, as appropriate, the applicant may then:

- (i) comply with the hearing officer's determination during the question and answer hearing;
- (ii) comply with the hearing officer's determination by responding to the question in writing no fewer than 10 days before the end of the comment period; or
- (iii) notify the questioner or applicant that it contests the determination, and provide information to the questioner about the procedures available to it under paragraph (5)(j).

(j) If a decision of the hearing officer is contested as described in paragraph (5)(i)(iii), the person who asked the question may challenge that failure to comply with the hearing officer's decision on appeal. If the hearing officer's determination is upheld on appeal, the record on appeal shall be supplemented as described in paragraph (6) and R305-7-607.

(6) Formal Questioning During Appeal.

If no opportunity for a question and answer hearing is provided, or if an opportunity that was provided is found by the ALJ to have been deficient, an opportunity for questions and answers shall be provided on appeal as described in R305-7-607. This opportunity for questions and answers on appeal shall be available only to a petitioner who has exhausted procedures and remedies available under paragraphs R313-17-4(1) through R313-17-4(5). The scope of questions and answers on appeal shall be limited by the scope of the deficiency. [If the procedures in paragraphs (2) through (5) are not used before the Director's final determination, an opportunity for questioning shall be provided on appeal as described in R305-7-607.]

**KEY:** administrative procedures, comments, hearings, adjudicative proceedings

**Date of Enactment or Last Substantive Amendment:** [~~March 19, 2013~~2015]

**Notice of Continuation:** July 7, 2011

**Authorizing, and Implemented or Interpreted Law:** 19-3-104(4); 19-1-301 and 19-1-301.5

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**End of the Notices of Changes in Proposed Rules Section**