

One Rule to Rule Them All: Incorporating 40 CFR 264 requirements into Uranium Recovery Rules

Thursday, July 9, 2026
Adam Wingate



**Department of
Environmental Quality**

One Rule to Rule Them All: Incorporating 40 CFR 264 requirements into Uranium Recovery Rules

Thursday, July 9, 2026
Adam Wingate



**Department of
Environmental Quality**

The Problem:

Current Rules are Difficult to Use

Groundwater Regulations

- Under the “control” of Division of Water Quality
- Outdated and not specific to Uranium Recovery Facilities

Uranium Recovery Specific Rules

- Some specifics, but mostly refers to 10 CFR 40
- References and Substitutions make it near impossible to implement



The Problem:

Current Rules are Difficult to Use

R313-24-6. Clarifications or Exceptions.

For the purposes of Rule R313-24, 10 CFR 40.2a through 40.4; 40.12; 40.20(a); 40.21; 40.26(a) through (c); 40.31(h); the introductory paragraph of 40.36 and 40.36(a),(b),(d) and (f); 40.41(c); the introduction to 40.42(k) and 40.42(k)(3)(i); 40.46; 40.61(a) and (b); 40.65; and Appendix A to Part 40 (2015) are incorporated by reference with the following clarifications or exceptions:

- (1) The exclusion and substitution of the following:
 - (a) Exclude 10 CFR 40.26(c)(1) and replace with "(1) The provisions of Sections R313-12-51, R313-12-52, R313-12-53, R313-19-34, R313-19-50, R313-19-61, R313-24-1, Rules R313-14, R313-15, R313-18, and R313-24 (incorporating 10 CFR 40.2a, 40.3, 40.4, and 40.26 by reference)";
 - (b) In Appendix A to 10 CFR 40, exclude Criterion 5B(1) through 5H, Criterion 7A, Criterion 13, and replace the excluded Criterion with "Utah Administrative Code, R317-6, Ground Water Quality Protection"; and
 - (c) In Appendix A to 10 CFR 40, exclude Criterion 11A through 11F and Criterion 12.
- (2) The substitution of the following:
 - (a) "10 CFR 40" for reference to "this part" as found throughout the incorporated text;
 - (b) "director" for reference to "Commission" in the first and fourth references contained in 10 CFR 40.2a, in 10 CFR 40.3, 40.20(a), 40.26, 40.36(f), 40.41(c), 40.46 (a), 40.61, and 40.65; and "director" for reference to "NRC" in 10 CFR 40.36(b);
 - (c) "Rules R313-19, R313-21, or R313-22" for "Section 62 of the Act" as found in 10 CFR 40.12(a);
 - (d) "Section R313-15-402" for reference to "10 CFR 20.1402" and "Section R313-15-403" for reference to "10 CFR 20.1403" in 10 CFR 40.36(d);
 - (e) "Section R313-15-1109" for reference to "10 CFR 20.2108" in 10 CFR 40.36(f);
 - (f) "Rules R313-21 or R313-22" for reference to "the regulations in this part" in 10 CFR 40.41(c);
 - (g) "Section R313-19-100" for reference to "part 71 of this chapter" as found in 10 CFR 40.41(c);

The Problem:

Current Rules are Difficult to Use

R313-24-6. Clarifications or Exceptions.

For the purposes of Rule R313-24, 10 CFR 40.2a through 40.4; 40.12; 40.20(a); 40.21; 40.26(a) through (c); 40.31(h); the introductory paragraph of 40.36 and 40.36(a),(b),(d) and (f); 40.41(c); the introduction to 40.42(k) and 40.42(k)(3)(i); 40.46; 40.61(a) and (b); 40.65; and Appendix A to Part 40 (2015) are incorporated by reference with the following clarifications or exceptions:

- (1) The exclusion and substitution of the following:
 - (a) Exclude 10 CFR 40.26(c)(1) and replace with "(1) The provisions of Sections R313-12-51, R313-12-52, R313-12-53, R313-19-34, R313-19-50, R313-19-61, R313-24-1, Rules R313-14, R313-15, R313-18, and R313-24 (incorporating 10 CFR 40.2a, 40.3, 40.4, and 40.26 by reference)";
 - (b) In Appendix A to 10 CFR 40, ~~exclude Criterion 5B(1) through 5H, Criterion 7A, Criterion 13, and replace the excluded Criterion with "Utah Administrative Code, R317-6, Ground Water Quality Protection"; and~~
 - (c) In Appendix A to 10 CFR 40, exclude Criterion 11A through 11F and Criterion 12.
- (2) The substitution of the following:
 - (a) "10 CFR 40" for reference to "this part" as found throughout the incorporated text;
 - (b) "director" for reference to "Commission" in the first and fourth references contained in 10 CFR 40.2a, in 10 CFR 40.3, 40.20(a), 40.26, 40.36(f), 40.41(c), 40.46 (a), 40.61, and 40.65; and "director" for reference to "NRC" in 10 CFR 40.36(b);
 - (c) "Rules R313-19, R313-21, or R313-22" for "Section 62 of the Act" as found in 10 CFR 40.12(a);
 - (d) "Section R313-15-402" for reference to "10 CFR 20.1402" and "Section R313-15-403" for reference to "10 CFR 20.1403" in 10 CFR 40.36(d);
 - (e) "Section R313-15-1109" for reference to "10 CFR 20.2108" in 10 CFR 40.36(f);
 - (f) "Rules R313-21 or R313-22" for reference to "the regulations in this part" in 10 CFR 40.41(c);
 - (g) "Section R313-19-100" for reference to "part 71 of this chapter" as found in 10 CFR 40.41(c);

The Problem:

Current Rules are Difficult to Use

R313-24-6. Clarifications or Exceptions.

For the purposes of Rule R313-24, 10 CFR 40.2a through 40.4; 40.12; 40.20(a); 40.21; 40.26(a) through (c); 40.31(h); the introductory paragraph of 40.36 and 40.36(a),(b),(d) and (f); 40.41(c); the introduction to 40.42(k) and 40.42(k)(3)(i); 40.46; 40.61(a) and (b); 40.65; and Appendix A to Part 40 (2015) are incorporated by reference with the following clarifications or exceptions:

(1) The exclusion and substitution of the following:

(a) Exclude 10 CFR 40.26(c)(1) and replace with "(1) The provisions of Sections R313-12-51, R313-12-52, R313-12-53, R313-19-34, R313-19-50, R313-19-61, R313-24-1, Rules R313-14, R313-15, R313-18, and R313-24 (incorporating 10 CFR 40.2a, 40.3, 40.4, and 40.26 by reference)";

(b) In Appendix A to 10 CFR 40, exclude Criterion 5B(1) through 5H, Criterion 7A, Criterion 13, and replace the excluded Criterion with "Utah Administrative Code, R317-6, Ground Water Quality Protection"; and

(c) In Appendix A to 10 CFR 40, exclude Criterion 11A through 11F and Criterion 12.

(2) The substitution of the following:

(a) "10 CFR 40" for reference to "this part" as found throughout the incorporated text;

(b) "director" for reference to "Commission" in the first and fourth references contained in 10 CFR 40.2a, in 10 CFR 40.3, 40.20(a), 40.26, 40.36(f), 40.41(c), 40.46 (a), 40.61, and 40.65; and "director" for reference to "NRC" in 10 CFR 40.36(b);

(c) "Rules R313-19, R313-21, or R313-22" for "Section 62 of the Act" as found in 10 CFR 40.12(a);

(d) "Section R313-15-402" for reference to "10 CFR 20.1402" and "Section R313-15-403" for reference to "10 CFR 20.1403" in 10 CFR 40.36(d);

(e) "Section R313-15-1109" for reference to "10 CFR 20.2108" in 10 CFR 40.36(f);

(f) "Rules R313-21 or R313-22" for reference to "the regulations in this part" in 10 CFR 40.41(c);

(g) "Section R313-19-100" for reference to "part 71 of this chapter" as found in 10 CFR 40.41(c);

The Solution:

Back to Basics and Start from Scratch

Atomic Energy Act, Section 84(a)(2):

“The Commission shall insure that the management of any byproduct material, as defined in section 11 e. (2), is carried out in such manner as ... conforms with applicable general standards promulgated by the Administrator of the Environmental Protection Agency”

Atomic Energy Act, Section 274(o)(2):

“... a State shall require ... compliance with standards which shall be adopted by the State ... which are equivalent ... standards adopted and enforced by the Commission ... including requirements and standards promulgated by the Commission and the Administrator of the Environmental Protection Agency pursuant to sections 83, 84, and 275”

Atomic Energy Act, Section 275(b)(2):

“Such generally applicable standards promulgated pursuant to this subsection for nonradiological hazards shall provide for the protection of human health and the environment consistent with the standards required under subtitle C of the Solid Waste Disposal Act, as amended, which are applicable to such hazards”

Atomic Energy Act

40 CFR 61, Subpart W – National Emission Standards for Radon Emissions From Operating Mill Tailings

§ 61.252 “...comply with the requirements of 40 CFR 192.32(a)(1)...”

40 CFR 192, Subpart D – Standards for Management of Uranium Byproduct Materials Pursuant to Section 84 of the Atomic Energy Act of 1954, as Amended

§ 192.32(a)(1) “...conform to the requirements of § 264.221”
§ 192.32(a)(2) “...conform to the ground water protection standard in § 264.92...”

EPA Uranium Mill Rules

10 CFR 40 – Domestic Licensing of Source Material

10 CFR 40, Appendix A – Criteria Relating to the Operation of Uranium Mills and the Disposition of Tailings or Wastes Produced by the Extraction or Concentration of Source Material From Ores Processed Primarily for Their Source Material Content

NRC Uranium Mill Rules

40 CFR 264, Subpart F – Releases From Solid Waste Management Units

§ 264.92 Ground-water protection standard

40 CFR 264, Subpart K – Surface Impoundments

§ 264.221 Design and operating requirements

EPA RCRA Rules

One Rule to Rule Them All

**R313. Environmental Quality, Waste Management and Radiation Control, Radiation.
R313-24. Uranium Mills and Source Material Mill Tailings Disposal Facility Requirements.**

TABLE OF CONTENTS

Part 1: Introduction (100)

Part 2: Siting and Location Standards and Requirements (200)

Part 3: Performance Objectives (300)

Part 4: Design and Operating Standards (400)

Part 5: Groundwater Protection Standards (500)

Part 6: Licensing and Procedural Requirements (600)

Part 7: Final / Permanent Radon Barriers (700)

Part 8: Closure and Decommissioning (800)

Part 9: License Termination and Facility Transfer (900)

Part 10: Financial Assurance (1000)



**Department of
Environmental Quality**

Part 1 Rules Anticipated as Information Item at September Board Meeting

Program Scope and Authority

Definitions

- “Source Material Recovery”
- “Source Material Ore”
- “Natural Ore”

“*Bona Fide* Source Material Recovery Facility”

1. Applicant duty to demonstrate their operations constitute bona fide source material recovery operations
2. Clearly define what the facility can feed
 1. Establish our own Alternate Feed criteria
3. Prohibit the disposal of non-11e.(2) Byproduct



**Department of
Environmental Quality**