March 28, 2002

Mr. Warren E. Jacobi, Manager
Radiation Services Program
Laboratory and Radiation Services Division
Colorado Department of Public Health
and Environment
8100 Lowry Boulevard
Denver, CO 80230-6928

Dear Mr. Jacobi:

We have reviewed the final Colorado regulations Part 18-Licensing Requirements for Uranium and Thorium Processing, which became effective on November 20, 2001. The regulations were received on January 16, 2002. The final regulations are in response to one of the amendments identified in the enclosed State Regulation Status (SRS) Data Sheet. The regulations were reviewed by comparison to the equivalent U.S. Nuclear Regulatory Commission (NRC) regulations in 10 CFR Part 40 and Appendix A of Part 40. In addition, we reviewed our August 28, 2001, your August 31, 2001 response, and our October 10, 2001 letters to you that addressed the proposed regulations. We also discussed our review of the regulations with Ken Weaver on February 19, 2002.

During our review, we noticed, in Criteria 9C and 9D, the "Department" was inadvertently inserted where only the NRC has licensing authority. Also, in §18.1.3, the last phrase in the second sentence, "unless that program fails to accomplish remedial action" should be removed because it is inconsistent with 10 CFR 40.2a(b). We have enclosed a strike out version of those two criteria and §18.1.3 for administrative revision.

As a result of the NRC review, we have determined that the regulations, as adopted, meet the compatibility and health and safety categories established in Office of State and Tribal Programs (STP) Procedure SA-200.

The SRS Data Sheet summarizes our knowledge of other Colorado regulations. 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 STP Web Site: http://www.hsrd.ornl.gov/nrc/rulemaking.htm.

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 me at (301) 415-2325 or Dr. Stephen N. Salomon of my staff at (301) 415-2368 or e-mail: SNS@NRC.GOV.

Sincerely,

/RA/
Josephine M. Piccone, Deputy Director
Office of State and Tribal Programs

Enclosures:
As stated

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 me at (301) 415-2325 or Dr. Stephen N. Salomon of my staff at (301) 415-2368 or e-mail: SNS@NRC.GOV.

Sincerely,

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Office of State and Tribal Programs

Enclosures:
As stated

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DCD (SP08) PDR (YES_✓)

Response to Incoming Document: ML020320440

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Criteria 9C and 9D, Part 18, Appendix A

We have struck out Department and related words where appropriate.

Criterion 9C. Title to the byproduct material licensed under this Part 18 and land, including any interests therein (other than land owned by the United States or by the State), which is used for the disposal of any such byproduct material, or is essential to ensure the long-term stability of such disposal site, must be transferred to the United States or the State in which such land is located, at the option of such State. In view of the fact that physical isolation must be the primary means of long-term control, and Government land ownership is a desirable supplementary measure, ownership of certain severable subsurface interests (for example, mineral rights) may be determined to be unnecessary to protect the public health and safety and the environment. In any case, however, the applicant/operator must demonstrate a serious effort to obtain such subsurface rights, and must in the event that certain rights cannot be obtained, provide notification in local public land records of the fact that the land is being used for the disposal of radioactive material and is subject to ~~either~~ a U.S. Nuclear Regulatory Commission ~~or Department~~ general ~~or specific~~ license prohibiting the disruption and disturbance of the tailings. In some rare cases, such as may occur with deep burial where no ongoing site surveillance will be required, surface land ownership transfer requirements may be waived with the approval of the ~~Department and~~ U.S. Nuclear Regulatory Commission. For licenses issued before November 8, 1981, the ~~Department and~~ U.S. Nuclear Regulatory Commission may take into account the status of the ownership of such land, and interests therein, and the ability of a licensee to transfer title and custody thereof to the United States or the State.

Criterion 9D. If the U.S. Nuclear Regulatory Commission~~, or the Department if title is held by the State,~~ subsequent to title transfer determines that use of the surface or subsurface estates, or both, of the land transferred to the United States or to a State will not endanger the public health, safety, welfare, or environment, the U.S. Nuclear Regulatory Commission~~, or the Department if title is held by the State, may~~ shall permit the use of the surface or subsurface estates, or both, of such land in a manner consistent with the provisions provided in these criteria. If the U.S. Nuclear Regulatory Commission~~, or the Department if title is held by the state,~~ permits such use of such land, it will provide the person who transferred such land with the right of first refusal with respect to such use of such land.

PART 18

LICENSING REQUIREMENTS FOR URANIUM AND THORIUM PROCESSING

Note: We struck out the phrase, “unless that program fails to accomplish remedial action.”

[This part was revised in its entirety and was effective November 30, 2001, unless otherwise noted in the left hand margin]

RH 18.1 Purpose and Scope.

18.1.1 The regulations in this part establish criteria, terms and conditions upon which the Department issues licenses to receive title to, receive, possess, use, transfer, or deliver source and byproduct materials, to operate uranium and thorium processing facilities and for the disposition of the resulting byproduct material. The requirements of this part are in addition to, and not in substitution for, other applicable requirements of these regulations.

18.1.2 This part establishes performance objectives and procedural requirements applicable to any uranium or thorium material processing operation, to waste systems for byproduct material as in definition (2) of RH 1.4, and to related activities concerning uranium-bearing and thorium-bearing materials. It establishes specific technical and financial requirements for siting, construction, operation, and decontamination, reclamation and ultimate stabilization, as well as requirements for license transfer and termination, long-term site monitoring and surveillance, and ownership and ultimate custody of source material milling facilities and byproduct material impoundments.

18.1.3 The requirements of this part apply to byproduct material that is located at a site where milling operations are no longer active, if such site is not covered by the remedial action program of Title I of the Uranium Mill Tailings Radiation Control Act (UMTRCA) OF 1978 (92 STAT. 3021; 42 U.S.C. 7901). The regulations in this part do not establish procedures and criteria for the issuance of licenses for materials covered under Title I of the Uranium Mill Tailings Radiation Control Act of 1978 (92 Stat. 3021) ~~unless that program fails to accomplish remedial action~~. Disposal at a uranium or thorium processing site of radioactive material which is not type 2 byproduct material must not inhibit reclamation of the tailings impoundment or the ability of the U.S. Government to take title to the impoundment as long-term custodian.

RH 18.2 As used in this regulation:

"Active maintenance" means any significant activity needed during the period of long term care including ongoing activities such as the pumping and treatment of water from a site or one-time measures such as replacement of a disposal site's cover. Active maintenance does not include custodial activities such as repair of fencing, repair or replacement of monitoring equipment, revegetation, minor additions to soil cover, minor repair of disposal site cover, and general disposal site upkeep such as mowing grass.

"Aquifer" means a geologic formation, group of formations, or part of a formation capable of yielding a significant amount of ground water to wells or springs. Any saturated zone created by uranium or thorium operations would not be considered an aquifer unless the zone is or potentially is:

State: Colorado
[One amendment reviewed is identified by a ★ at the beginning of the equivalent NRC regulation.]

Tracking Ticket Number: 2-29
Date: March 28, 2002

NRC Chronology Identification	FR Notice (Date Due for State Implementation)	RATS ID	Proposed (P) / Final (F)[1] Rule / ML #[4]	NRC Review / Y, N[2] / Date / ML #[4]	Final State Regulation[1] (Effective Date)
Safety Requirements for Radiographic Equipment-Part 34	55 FR 843; (1/10/94)	1991-1	F	Y 5/29/97	6/30/94
ANT Certification of Radiographers-Part 34	56 FR 11504; (none)	1991-2			Not required[3]
Standards for Protection Against Radiation-Part 20	56 FR 23360; 56 FR 61352; 57 FR 38588; 57 FR 57877; 58 FR 67657; 59 FR 41641; 60 FR 20183; (1/1/94)	1991-3	F	N 8/18/97	1/1/94
Notification of Incidents-Parts 20, 30, 31, 34, 39, 40, 70	56 FR 64980; (10/15/94)	1991-4	F	Y 5/29/97	11/1/94
Quality Management Program and Misadministrations-Part 35	56 FR 34104; (1/27/95)	1992-1			
Eliminating the Recordkeeping Requirements for Departures from Manufacturer's Instructions-Parts 30, 35	57 FR 45566; (none)	1992-2			Not required[3]
Decommissioning Recordkeeping and License Termination: Documentation Additions [Restricted areas and spill sites]-Parts 30, 40	58 FR 39628; (10/25/96)	1993-1	F	N 6/14/00	7/1/97
Licensing and Radiation Safety Requirements for Irradiators-Part 36	58 FR 7715; (7/1/96)	1993-2	F	N 5/29/97	7/1/97
Definition of Land Disposal and Waste Site QA Program-Part 61	58 FR 33886; (7/22/96)	1993-3	F	Y 5/29/97	7/1/97
Self-Guarantee as an Additional Financial Mechanism-Parts 30, 40, 70	58 FR 68726; 59 FR 1618 (none)	1994-1	F	N 6/14/00	7/1/97
Uranium Mill Tailings Regulations: Conforming NRC Requirements to EPA Standards-Part 40	59 FR 28220; (7/1/97)	1994-2	F	Y 5/29/97	12/30/97
Timeliness in Decommissioning Material Facilities-Parts 30, 40, 70	59 FR 36026; (8/15/97)	1994-3	F	N 6/14/00	7/1/97
Preparation, Transfer for Commercial Distribution, and Use of Byproduct Material for Medical Use-Parts 30, 32, 35	59 FR 61767; 59 FR 65243 60 FR 322; (1/1/98)	1995-1	F	N 6/14/00	9/30/98
Frequency of Medical Examinations for Use of Respiratory Protection Equipment-Part 20	60 FR 7900; (3/13/98)	1995-2	F	N 6/14/01	1/1/98

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Low-Level Waste Shipment Manifest Information and Reporting-Parts 20, 61	60 FR 15649; 60 FR 25983 (3/1/98)	1995-3	F	Y 6/20/97	1/1/97
Performance Requirements for Radiography Equipment-Part 34	60 FR 28323; (6/30/98)	1995-4	F	N 6/14/00	3/30/98
Radiation Protection Requirements: Amended Definitions and Criteria-Parts 19, 20	60 FR 36038; (8/14/98)	1995-5	F	N 6/14/00	3/30/98
Clarification of Decommissioning Funding Requirements-Parts 30, 40, 70	60 FR 38235; (11/24/98)	1995-6	P	N 10/16/96	
Medical Administration of Radiation and Radioactive Materials-Parts 20, 35	60 FR 48623; (10/20/98)	1995-7	P	N 4/27/98	
10 CFR Part 71: Compatibility with the International Atomic Energy Agency-Part 71	60 FR 50248; 61 FR 28724 (4/1/99)	1996-1	F	N 3/22/01	7/31/98
One Time Extension of Certain Byproduct, Source and Special Nuclear Materials Licenses-Parts 30, 40, 70	61 FR 1109; (none)	1996-2			Not required[3]
Termination or Transfer of Licensed Activities: Record keeping Requirements-Parts 20, 30, 40, 61, 70	61 FR 24669; (6/17/99)	1996-3			
Resolution of Dual Regulation of Airborne Effluents of Radioactive Materials; Clean Air Act-Part 20	61 FR 65120; (1/9/00)	1997-1	F	N 8/8/00	12/30/99
Recognition of Agreement State Licenses in Areas Under Exclusive Federal Jurisdiction Within an Agreement State-Part 150	62 FR 1662; (2/27/00)	1997-2	F	N 6/14/00	11/30/98
Criteria for the Release of Individuals Administered Radioactive Material-Parts 20, 35	62 FR 4120; (5/29/00)	1997-3	F	N 6/14/00	3/30/98
Fissile Material Shipments and Exemptions-Part 71	62 FR 5907; (none)	1997-4	P	N 4/27/98	Not required[3]
Licenses for Industrial Radiography and Radiation Safety Requirements for Industrial Radiography Operations-Parts 30, 34, 71, 150	62 FR 28947; (6/27/00)	1997-5	F	N 8/8/00	5/30/00
Radiological Criteria for License Termination-Parts 20, 30, 40, 70	62 FR 39057; (8/20/00)	1997-6	F	N 7/13/99	5/19/99
Exempt Distribution of a Radioactive Drug Containing One Micro curie of Carbon-14 Urea-Part 30	62 FR 63634; (1/02/01)	1997-7	F	N 6/14/00	9/30/98
Deliberate Misconduct by Unlicenced Persons-Parts 30, 40, 61, 70, 71, 150	63 FR 1890; 63 FR 13773 (2/12/01)	1998-1	F ML010380248	N 9/17/01 ML012630207	02/01/00
Self-Guarantee of Decommissioning Funding by Nonprofit and Non-Bond-Issuing Licensees- Parts 30, 40, 70	63 FR 29535; (none)	1998-2			Not required[3]
License Term for Medical Use Licenses-Part 35	63 FR 31604; (none)	1998-3			Not required[3]

NRC Chronology Identification	FR Notice (Date Due for State Implementation)	RATS ID	Proposed (P) / Final (F)[1] Rule / ML #[4]	NRC Review / Y, N[2] / Date / ML #[4]	Final State Regulation[1] (Effective Date)
Licenses for Industrial Radiography and Radiation Safety Requirements for Industrial Radiographic Operations-Part 34	63 FR 37059; (7/9/01)	1998-4	F	N 8/8/00	5/30/00
Minor Corrections, Clarifying Changes, and a Minor Policy Change-Parts 20, 35, 36	63 FR 39477; 63 FR 45393 (10/26/01)	1998-5	P ML012190395	N 12/27/01 ML020020371	
Transfer for Disposal and Manifests: Minor Technical Conforming Amendment-Part 20	63 FR 50127; (11/20/01)	1998-6	P ML012190395	N 12/27/01 ML020020371	
★Radiological Criteria for License Termination of Uranium Recovery Facilities-Part 40	64 FR 17506; (6/11/02)	1999-1	F ML020320440	N 3/28/02 ML020880468	11/20/01
Requirements for Those Who Possess Certain Industrial Devices Containing Byproduct Material to Provide Requested Information-Part 31	64 FR 42269; (none)	1999-2			Not required[3]
Respiratory Protection and Controls to Restrict Internal Exposure-Part 20	64 FR 54543; 64 FR 55524 (2/2/03)	1999-3			
Energy Compensation Sources for Well Logging and Other Regulatory Clarifications-Part 39	65 FR 20337; (5/17/03)	2000-1			
New Dosimetry Technology-Parts 34, 36, 39	65 FR 63750; (1/8/04)	2000-2			
Requirements for Certain Generally Licensed Industrial Devices Containing Byproduct Material - Parts 30, 31, 32	65 FR 79162	2001-1			

1. Or other generic Legally Binding Requirements.

2. (Y/N) Y means “Yes,” there are comments in the review letter that the State needs to address.
   N means “No,” there are no comments in the review letter.

3. Not required means these regulations are not required for purposes of compatibility.

4. ADAMS ML Number.