

DRC-03  
October 1989

**CORRECTED COPY**

**UTAH DEPARTMENT OF ENVIRONMENTAL QUALITY  
DIVISION OF RADIATION CONTROL  
RADIOACTIVE MATERIAL LICENSE**

Pursuant to Utah Code Ann. Title 19, Chapter 3 and the Radiation Control Rules, Utah Administrative Code R313, and in reliance on statements and representations heretofore made by the licensee designated below, a license is hereby issued authorizing such licensee to transfer, receive, possess and use the radioactive material designated below; and to use such radioactive material for the purpose(s) and at the place(s) designated below. This licensee is subject to all applicable rules, and orders now or hereafter in effect and to any conditions specified below.

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	LICENSEE	)	3. License Number UT 1800308
		)	Amendment #16
1. Name	RWM-Utah, Inc.	)	*****
		)	4. Expiration Date
2. Address	P.O. Box 1580	)	August 31, 2010
	Sandy, Utah 84091	)	*****
		)	5. License Category - 4-b
		)	In accordance with letter dated July
		)	12, 2006, this license is amended in
		)	its entirety.

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6. Radioactive material (element and mass number)	7. Chemical and/or physical form	8. Maximum quantity licensee may possess at any one time
A. Any radioactive material except alpha emitters	A. Packaged Waste	A. Not to exceed 1.85 terabecquerels (50 Ci)*
B. Alpha emitters except: (1) special nuclear material (2) source material; and (3) as identified below	B. Packaged Waste	B. Not to exceed quantities above the minimum limit specified in R313-22-35(4)*
C. Uranium (Natural)	C. Packaged Waste	C. Not to exceed quantities above the minimum limit specified in R313-22-35(4)*
D. Uranium-233	D. Packaged Waste	D. Not to exceed quantities above the minimum limit specified in R313-22-35(4)*
E. Uranium-234	E. Packaged Waste	E. Not to exceed quantities above the minimum limit specified in R313-22-35(4)*

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- |                |                   |   |
|----------------|-------------------|---|
| F. Uranium-235 | F. Packaged Waste | F. Not to exceed quantities above the minimum limit specified in R313-22-35(4)* |
| G. Uranium-238 | G. Packaged Waste | G. Not to exceed quantities above the minimum limit specified in R313-22-35(4)* |
| H. Plutonium   | H. Packaged Waste | H. Not to exceed quantities above the minimum limit specified in R313-22-35(4)* |
| I. Thorium     | I. Packaged Waste | I. Not to exceed quantities above the minimum limit specified in R313-22-35(4)* |

\* See License Condition number 14 for additional restrictions on limits of possession

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**9. AUTHORIZED USE**

A. through I. Packaged radioactive waste may be received, repackaged, and stored for disposal only. Disposal of radioactive waste may be only by transfer to a radioactive waste disposal facility licensed by the Executive Secretary, an Agreement State or the Nuclear Regulatory Commission, or by decay in storage.

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**CONDITIONS**

- 10. Radioactive waste shall be received and stored only at the licensee's facility located at 3631 West 500 South, Salt Lake City, Utah.
- 11. The licensee shall comply with the provisions of R313-18, "Notices, Instructions and Reports to Workers, by Licensees or Registrants--Inspections" and R313-15, "Standards for Protection Against Radiation."
- 12. The radioactive waste may be received, stored and/or transferred only by, or under the supervision of, the Radiation Safety Officer or individuals who have satisfactorily completed the training program as specified in the licensee's application dated July 25, 2005 and letter dated April 5, 2006, and have been designated by the Radiation Safety Officer. The licensee shall maintain records of individuals who have been so designated.

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- 13. The Radiation Safety Officer for the activities authorized by this license is Edd Johnson.
- 14. The licensee shall not possess radioactive materials in quantities greater than those listed in Items 8.A through 8.I of this license and the possession limits listed in this condition. If there are two or more possible possession limits for the same radionuclide, the licensee shall not exceed the lower limit.
  - A. The licensee shall not possess radioactive materials in quantities equal to or greater than the following possession limits:

Radionuclide	Quantity of Concern <sup>1</sup> (terabecquerels)	Quantity of Concern <sup>2</sup> (curies)
Americium-241	0.6	16
Americium-241/Beryllium	0.6	16
Californium	0.2	5.4
Curium-244	0.5	14
Cobalt-60	0.3	8.1
Cesium-137	1	27
Gadolinium-153	10	270
Iridium-192	0.8	22
Promethium-147	400	11,000
Plutonium-238	0.6	16
Plutonium-239/Beryllium	0.6	16
Selenium-75	2	54
Strontium-90 (Yttrium-90)	10	270
Thulium-170	200	5,400
Ytterbium-169	3	81
Combinations of radioactive materials listed above <sup>3</sup>	See Footnote Below <sup>4</sup>	

<sup>1</sup> The aggregate activity of multiple, collocated sources of the same radionuclide should be included when the total activity equals or exceeds the quantity of concern.

<sup>2</sup> The primary values used for compliance with this table are terabecquerel. The curie values are rounded to two significant figures for informational purposes only.

<sup>3</sup> Radioactive materials are to be considered aggregated or collocated if breaching a common physical barrier (e.g. a locked door at the entrance to a storage room) would allow access to the radioactive material or devices containing the radioactive material.

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<sup>4</sup> If several radionuclides are aggregated, the sum of the ratios of the activity of each source, *i* of radionuclide, *n*,  $A(i,n)$ , to the quantity of concern for radionuclide *n*,  $Q(n)$ , listed for that radionuclide equals or exceeds one.  $[(\text{aggregated source activity for radionuclide A}) \div (\text{quantity of concern for radionuclide A})] + [(\text{aggregated source activity for radionuclide B}) \div (\text{quantity of concern for radionuclide B})] + \text{etc} \dots > 1$

B. The licensee shall not possess over 6,000 packages containing radioactive waste or a total volume of radioactive waste in excess of 45,000 cubic feet.

C. In addition to the possession limits in Item 8 and License Condition 14.A, the licensee shall further restrict the possession of licensed material to quantities below the minimum limit specified in R313-22-35(4) for establishing decommissioning financial assurance.

15. All sealed sources shall have leak tests performed prior to receipt for disposal. Records of these leak tests shall be maintained by the licensee for review by the Utah Division of Radiation Control.

16. The licensee shall maintain records of receipt, possession, and disposal or transfer of all licensed material. These records shall be maintained in a form that provides ready verification that the authorized possession limits and Conditions of the license are not exceeded.

17. The licensee shall only receive radioactive waste from waste generators who have complied with the requirements of R313-15-1006(3).

18. The licensee shall comply with the requirements of R313-15-1006(4).

19. Radioactive waste possessed under this license shall be stored in accordance with the statements, representations, and procedures included with the licensee's waste storage plan described in the licensee's application dated July 25, 2005 and letter dated February 14, 2006.

20. The possession of radioactive waste is limited by the following conditions:

A. Possession is limited to interim storage prior to disposal only;

B. Radioactive waste shall be received and stored in strong outside containers meeting all requirements of 49 CFR 171.8;

C. Radioactive waste, while held in storage, shall be packaged so as to meet all U.S. Department of Transportation packaging requirements applicable during transportation;

D. Radioactive waste shall be stored only in non-combustible containers; and

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- E. Notwithstanding A. through D. of this License Condition, radioactive waste may be repackaged by the licensee.
21. The licensee is authorized to hold radioactive material with a physical half-life of less than 120 days for decay in storage, provided the licensee:
- A. Monitors radioactive material at the surface before disposal and determines that its radioactivity cannot be distinguished from the background radiation level with an appropriate radiation detection survey meter set on its most sensitive scale and with no interposed shielding; and
  - B. Removes or obliterates all radiation labels on materials prior to disposal, except for radiation labels on materials that are within containers and that will be incinerated after they have been released from the licensee; and
  - C. Monitors packaged material prior to disposal in accordance with procedures specified in the licensee's application dated July 25, 2005.
  - D. Maintains records of the disposal of licensed materials for 3 years. The record must include the date of the disposal, the survey instrument used, the background radiation level, the radiation level measured at the surface of each waste container, and the name of the individual who performed the disposal.
22. Except for licensed material held for decay in storage, the maximum period the licensee is authorized to store radioactive waste is twenty-four (24) months.
23. The licensee shall conduct a monthly inventory, in accordance with Part I Section J, "Source Inventory," of the licensee's Standard Operating Policy and Procedures (Revised July 2005) provided as an attachment to the licensee's renewal application dated July 25, 2005, to account for all radioactive waste possessed under the license. The records of the inventory shall be maintained for three years from the date of the inventory for inspection by the Division, and shall include:
- A. The date of the inventory;
  - B. The activity of each radioisotope in each waste storage container;
  - C. The waste storage container tracking number to identify each container;
  - D. The total activity of all radioisotopes, described in Item 6.A of this License, in storage on the date of inventory;

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- E. The total activity of all radioisotopes, described in Item 6.B of this License, in storage on the date of inventory; and
  - F. The total volume of all radioisotopes in storage on the date of inventory.
24. The licensee shall retain the following information for each shipment of radioactive material received for disposal:
- A. The identity of each generator or broker;
  - B. The tonnage of waste received from each generator or broker;
  - C. The volume of waste received from each generator or broker;
  - D. The activity of each radioisotope in the waste received from each generator or broker;
  - E. The state from which the waste was received; and
  - F. The state(s) from which the waste was generated.

The licensee shall submit semi-annual summaries of this information for the time periods January 1 to June 30 and July 1 to December 31 to the Executive Secretary and may pay the fee for commercial radioactive waste disposal or treatment, required by 19-3-106, on a semi-annual basis if included with the summary. The fee and summary shall be received by the Executive Secretary during the month following the applicable time period.

25. A Radioactive Shipment Record, containing the following information for shipments received from each waste generator, shall be on file:
- A. Total activity in millicuries or becquerels;
  - B. Volume of material;
  - C. Principal radioisotopes;
  - D. Name and address of client from whom the waste was received;
  - E. Date of receipt of the package;
  - F. Physical form of the radioactive waste;

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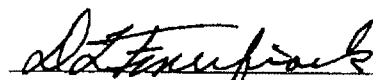
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- G. Cataloging system (numbering or lettering) used for the accountability and tracking of the radioactive waste; and
- H. Maximum radiation level at the surface of the container and at one meter from the container.
- 26. The licensee shall not dispose of any customer generated radioactive waste via the sanitary sewer system.
- 27. The licensee shall not incinerate any customer generated radioactive waste for purposes of treatment or disposal.
- 28. The licensee may transport licensed material or deliver licensed material to a carrier for transport in accordance with the provisions of R313-19-100, "Transportation."
- 29. The licensee shall notify the Executive Secretary in writing when the licensee decides to permanently discontinue activities involving materials authorized under the license and shall report the disposition of licensed material to the Executive Secretary.
- 30. The licensee shall maintain records of information important to safe and effective decommissioning at the location specified in Condition 10 in accordance with the provisions of R313-22-35(7) until this license is terminated by the Executive Secretary.
- 31. Except as specifically provided otherwise, by this license, the licensee shall conduct its program in accordance with the statements, representations, and procedures contained in the documents, including any enclosures, listed below. The Utah Radiation Control Rules shall govern unless the statements, representations, and procedures in the licensee's application and correspondence are more restrictive than the rules.
  - A. Application dated July 25, 2005 [LA# 170-2005]
  - B. Letter dated December 12, 2005 [LA# 351-2005]
  - C. Letter dated January 24, 2006 [LA# 170-2005]
  - D. Letter dated February 14, 2006 [LA# 170-2005]
  - E. Letter dated April 5, 2006 [LA# 170-2005]
  - F. Letter dated July 12, 2006 [LA# 201-2006]

UTAH RADIATION CONTROL BOARD

August 09, 2006  
Date

  
Dane L. Finerfrock, Executive Secretary