DWMRC-14 01/16

UTAH DIVISION OF WASTE MANAGEMENT AND RADIATION CONTROL CERTIFICATE - TERMINATION AND DISPOSITION RADIOACTIVE MATERIAL

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INSTRUCTIONS:

Submit this form to: Utah Division of Waste Management and Radiation Control P.O. Box 144880, Salt Lake City, Utah 84114-4880. Please place an X or N/A (Not applicable) in the space preceding each number.

	LICENSEE	3. License Number				
1. Name						
2. Address		4. Expiration Date				
	CERTIFICATE					
1.	All use of radioactive materials authorized under the above-referenced license has been terminated.					
2.	Any radioactive contamination resulting from use of materials possessed under the authorization granted by the above-referenced license has been accounted for as follows (choose applicable answer):					
	a. No possibility of contamination exists. A survey does not need to be performed to determine the presence of contamination. A brief explanation justifying this conclusion is attached.					
	b. Radioactive contamination has been removed to the and information specified in R313-22-36(10).	e extent practicable. Attached are the reports				
3.	All sealed sources containing licensed material, possessed under the above-referenced license, other than Hydrogen-3, with a half-life greater than 30 days and in a form other than gas were tested for contamination and/or leakage within six months prior to transfer and were transferred to an individual specifically licensed to possess them.					
4.	All radioactive material previously procured and/or possessed under the authorization granted by the above-referenced license has been disposed of as follows:					
	a. Transferred in accordance with R313-19-41 to (Name and Address)					
	which is authorized to possess such material under License Number Issued by (Licensing Agency):					

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	_	b.	Decayed, surveyed, and disposed of as non-	radioactive trash.		
	_	C.	Other (attach additional pages).			
	5.		dioactive material has ever been procured and/or possessed by the licensee under the authorization by the above-referenced license.			
	6.	Addition	nal remarks (attached additional pages).			
radioa Radiat	ctive r	materia ontrol	on behalf of the licensee, hereby ce al under the jurisdiction of the Divis are not possessed by the licensee. be terminated.	ion of Waste Management and		
DATE:				SIGNATURE:		
				TITLE:		

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INSTRUCTIONS FOR RADIATION SURVEY REPORT

Prior to the release of facilities and equipment for uncontrolled use, the licensee shall submit a radiation survey report to confirm the absence of radioactive material or to establish the levels of residual radioactive contamination, unless the licensee demonstrates the absence of residual radioactive contamination in some other acceptable manner. (Refer to Table 1, Acceptable Surface Contamination Levels for Uncontrolled Release of Facilities and Equipment.)

In accordance with R313-22-36(10), please provide the following information, as appropriate:

- 1. Report levels of radiation in units of microrads per hour of beta and gamma radiation at one centimeter and gamma radiation at one meter from surfaces; and report levels of radioactivity, including alpha, in units of disintegrations per minute, or microcuries, per 100 square centimeters removable and fixed on surfaces; microcuries per milliliter in water; and picocuries per gram in contaminated solids such as soils or concrete.
 - Regulatory guidance concerning radiation levels in water and in contaminated solids, such as soils or concrete, is available from the Division of **Waste Management and Radiation Control**.
- 2. Specify the instrumentation used and certify that each instrument was properly calibrated and tested.
- 3. Submit a plan for decontamination, if required, in regards to remaining radioactive contamination.
 - Regulatory guidance is available from the Division of Waste Management and Radiation Control to assist a licensee in the preparation of a plan for decontamination of facilities or equipment.

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TABLE 1 Acceptable Surface Contamination Levels for Uncontrolled Release of Facilities and Equipment*

Nuclide ^a	Average b,c,f	Maximum ^{b,d,f}	Removable b,e,f
U-Nat, U-235, U-238 and associated decay products	5,000 dpm alpha /100 cm ²	15,000 dpm alpha /100 cm ²	1,000 dpm alpha /100 cm ²
Transuranics, Ra-226, Ra-228, Th-230, Th- 228, Pa-231, Ac-227, I-125, I-129	100 dpm/100 cm ²	300 dpm/100 cm ²	20 dpm/100 cm ²
Th-nat, Th-232, Sr-90, Ra-223, Ra-224, U- 232, I-126, I-131, I-133	1,000 dpm/100 cm ²	3,000 dpm/100 cm ²	200 dpm/100 cm ²
Beta-gamma emitters (nuclides with decay modes other than alpha emission or spontaneous fission) except Sr-90 and others noted above	5,000 dpm beta- gamma/100 cm ²	15,000 dpm beta- gamma/100 cm ²	1,000 dpm beta- gamma/100 cm ²

- Where surface contamination by both alpha- and beta-gamma emitting nuclides exists, the limits established for alphaand beta-gamma emitting nuclides should apply independently.
- As used in this table, dpm (disintegrations per minute) means the rate of emission by radioactive material as determined by correcting the counts per minute observed by an appropriate detector for background, efficiency, and geometric factors associated with the instrumentation.
- Measurements of average contaminant should not be averaged over more than one square meter. For objects of less surface area, the average should be derived from each such object.
- d The maximum contamination level applies to an area of not more than 100 cm².
- The amount of removable radioactive material per 100 cm² of surface area should be determined by wiping the area with a dry filter or soft absorbent paper, applying moderate pressure, and assessing the amount of radioactive material on the wipe with appropriate instrument of known efficiency. When removable contamination on objects of less surface area is determined, the pertinent levels should be reduced proportionally and the entire surface should be wiped.
- The average and maximum radiation levels associated with surface contamination resulting from beta-gamma emitters should not exceed 0.2 mrad/hr at 1 cm and 1.0 mrad/hr at 1 cm, respectively, measured through not more than 7 milligrams per square centimeter of total absorber.
- * Contamination on equipment or surfaces shall not be covered by paint, plating or other covering material unless contamination levels, as determined by a survey and documented and confirmed by a survey by the Division of Waste Management and Radiation Control, are below the limits specified. Contamination on the interior surfaces of pipes, drainlines, or ductwork shall be determined by measurements using radiation survey instrument(s) and smear tests at all traps and other appropriate access points, provided that contamination at those locations are likely to be representative of contamination on the interior of pipes, drainlines, or ductwork.