



# State of Utah

## DEPARTMENT OF ENVIRONMENTAL QUALITY DIVISION OF RADIATION CONTROL

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June 24, 1996

Charles Hackney  
State Agreements Program  
Nuclear Regulatory Commission  
611 Ryan Plaza Drive Suite 400  
Arlington, Texas 76011

Dear Mr. Hackney:

On May 31, 1996, changes to the Utah Administrative Code became effective. The changes pertain to R313-25, License Requirements for Land Disposal of Radioactive Waste, General Provisions. You may recall that states are required to make rule changes to be compatible with the 10 CFR Part 61 amendments to the definition of land disposal and waste site QA program (58 FR 33886). I believe that the changes we have made fulfill any compatibility requirements, but I request that NRC review and concur with this belief. A response to this request is desired by July 22, 1996, as this will allow me the opportunity to advise the Utah Radiation Control Board of the compatibility status at the next scheduled meeting.

Please find enclosed a hard copy and a WordPerfect electronic version of the rule. Text which was added is shown with an underline and text which was deleted is shown in brackets and is interlined. If you have questions, please contact me at (801) 536-4250.

Sincerely,

William J. Sinclair, Director  
Division of Radiation Control

Enclosure: As stated

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**From:** Mike Broschinsky  
**To:** EQDOMAIN.EQRAD.MLARSON  
**Date:** Thursday, June 6, 1996 11:04 am  
**Subject:** Nonsubstantive Change Effective Dates (May 2 through June 1, 1996)

Dear rule coordinator:

I have made the following nonsubstantive changes, which you filed with our office, effective as of the dates listed below. For your convenience, I have also listed the DAR file number.

Rule	DAR No.	Eff. Date
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R313-25	17732	05/31/96

## NOTICE OF NONSUBSTANTIVE RULE CHANGE

<b>Complete and Return to:</b> State of Utah Division of Administrative Rules (DAR) 3120 State Office Building; 450 North Main PO Box 141007 Salt Lake City, UT 84114-1007 Phone: (801) 538-3218, FAX: (801) 538-3844 State E-mail: <i>asitmain.rules</i>	<b>DAR File No.:</b>		
	Utah Admin. Code Ref.: R313-25		
	<b>Date Filed:</b>		
	<b>Time Filed:</b>		
	<b>Received by:</b>		
<b>Department:</b> Environmental Quality <b>Agency:</b> Radiation Control <b>Room No., Building:</b> State of Utah Office Park, Building 2 <b>Street Address:</b> 168 North 1950 West <b>Mailing Address:</b> PO Box 144850 <b>City, State ZIP:</b> Salt Lake City, UT 84114-4850 <b>Contact Person:</b> Dane Finerfrock <b>Telephone:</b> (801) 536-4250 <b>FAX:</b> (801) 533-4097			
<b>1. Title of Rule or Section:</b> License Requirements for Land Disposal of Radioactive Waste - General Provisions			
<b>2. Reason for Change:</b> Compatibility changes to meet NRC's requirement for Agreement States to adopt compatibility items three years from the effective date.			
<b>3. This change is a response to comments by the Administrative Rules Review Committee.</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
<b>4. Summary of Change:</b> Changes are compatibility changes as published by the NRC in 58 Federal Register No. 118, June 22, 1993. R313-25-2: Corrections to the definition of "Land disposal facility;" R313-25-7(10): changes referencing the quality assurance method to be employed.			
<b>5. Indexing Information-Keywords (maximum of four):</b> radiation, radioactive waste disposal			
<b>6. Enter filename of the file containing this rule's FULL text (Example: noxx-xxx.wpd).</b> <input type="text" value="R313-25.txt"/> (All rule text must be in code format.)			
A nonsubstantive change becomes effective on the date DAR makes the change in the <i>Utah Administrative Code</i> .			
<b>AGENCY AUTHORIZATION</b>			
<b>Agency Head or Designee:</b>	William J. Sinclair, Executive Secretary	<b>Date (mm/dd/yy):</b>	4/26/96

(For DAR Use Only)

Rule Effective Date (mm/dd/yy):

1 R313. Environmental Quality, Radiation Control.

2 R313-25. License Requirements For Land Disposal Of Radioactive Waste - General  
3 Provisions.

4 R313-25-1. Purpose and Scope.

5 The rules in this chapter establish procedures, criteria, and terms and  
6 conditions upon which the Department issues licenses for the land disposal of  
7 wastes received from other persons. The requirements of R313-25 are in addition  
8 to, and not in substitution for, other applicable requirements of these rules.  
9

10 R313-25-2. Definitions.

11 As used in R313-25, the following definitions apply:

12 "Active maintenance" means significant activity needed during the period  
13 of institutional control to maintain a reasonable assurance that the performance  
14 objectives in R313-25-19 and R313-25-20 are met. Active maintenance may include  
15 the pumping and treatment of water from a disposal unit, the replacement of a  
16 disposal unit cover, or other episodic or continuous measures. Active  
17 maintenance does not include custodial activities like repair of fencing, repair  
18 or replacement of monitoring equipment, revegetation, minor additions to soil  
19 cover, minor repair of disposal unit covers, and general disposal site upkeep.

20 "Buffer zone" means a portion of the disposal site that is controlled by  
21 the licensee and that lies under the disposal units and between the disposal  
22 units and the boundary of the site.

23 "Commencement of construction" means clearing of land, excavation, or other  
24 substantial action that could adversely affect the environment of a land disposal  
25 facility. The term does not mean disposal site exploration, necessary roads for  
26 disposal site exploration, borings to determine foundation conditions, or other  
27 preconstruction monitoring or testing to establish background information related  
28 to the suitability of the disposal site or the protection of environmental  
29 values.

30 "Custodial agency" means an agency of the government designated to act on  
31 behalf of the government owner of the disposal site.

32 "Disposal" means the isolation of wastes from the biosphere by placing them  
33 in a land disposal facility.

34 "Disposal site" means that portion of a land disposal facility which is  
35 used for disposal of waste. It consists of disposal units and a buffer zone.

36 "Disposal unit" means a discrete portion of the disposal site into which  
37 waste is placed for disposal. For near-surface disposal, the disposal unit may  
38 be a trench.

39 "Engineered barrier" means a man-made structure or device intended to  
40 improve the land disposal facility's performance under R313-25.

41 "Hydrogeologic unit" means a soil or rock unit or zone that has a distinct  
42 influence on the storage or movement of ground water.

43 "Inadvertent intruder" means a person who may enter the disposal site after  
44 closure and engage in activities unrelated to post closure management, such as  
45 agriculture, dwelling construction, or other pursuits which could, by disturbing  
46 the site, expose individuals to radiation.

47 "Intruder barrier" means a sufficient depth of cover over the waste that  
48 inhibits contact with waste and helps to ensure that radiation exposures to an  
49 inadvertent intruder will meet the performance objectives set forth in R313-25,  
50 or engineered structures that provide equivalent protection to the inadvertent  
51 intruder.

52 "Land disposal facility" means the land, buildings and structures, and  
53 equipment which are intended to be used for the disposal of radioactive waste(s  
54 into the subsurface of the land).

55 "Monitoring" means observing and making measurements to provide data to  
56 evaluate the performance and characteristics of the disposal site.

57 "Near-surface disposal facility" means a land disposal facility in which  
58 waste is disposed of within approximately the upper 30 meters of the earth's  
59 surface.

60 "Site closure and stabilization" means those actions that are taken upon  
61 completion of operations that prepare the disposal site for custodial care, and  
62 that assure that the disposal site will remain stable and will not need ongoing  
63 active maintenance.

64 "Stability" means structural stability.

1 survey control program; methods and areas of waste storage; and methods to  
2 control surface water and ground water access to the wastes. The description  
3 shall also include a description of the methods to be employed in the handling  
4 and disposal of wastes containing chelating agents or other non-radiological  
5 substances which might affect meeting the performance objectives of R313-25

6 (7) A description of the disposal site closure plan, including those  
7 design features which are intended to facilitate disposal site closures and to  
8 eliminate the need for active maintenance after closure.

9 (8) Identification of the known natural resources at the disposal site  
10 whose exploitation could result in inadvertent intrusion into the wastes after  
11 removal of active institutional control.

12 (9) Descriptions of the kind, amount, classification and specifications  
13 of the radioactive material proposed to be received, possessed, and disposed of  
14 at the land disposal facility.

15 (10) Descriptions of quality ~~[control programs]~~ assurance programs,  
16 tailored to low-level waste disposal, including audit and managerial controls,  
17 for the determination of natural disposal site characteristics and for quality  
18 control during the design, construction, operation, and closure of the land  
19 disposal facility and the receipt, handling, and emplacement of waste.

20 (11) A description of the radiation safety program for control and  
21 monitoring of radioactive effluents to ensure compliance with the performance  
22 objective in R313-25-19 and monitoring of occupational radiation exposure to  
23 ensure compliance with the requirements of R313-15 and to control contamination  
24 of personnel, vehicles, equipment, buildings, and the disposal site. The  
25 applicant shall describe procedures, instrumentation, facilities, and equipment  
26 appropriate to both routine and emergency operations.

27 (12) A description of the environmental monitoring program to provide data  
28 and to evaluate potential health and environmental impacts and the plan for  
29 taking corrective measures if migration is indicated.

30 (13) Descriptions of the administrative procedures that the applicant will  
31 apply to control activities at the land disposal facility.

### 32 R313-25-8. Technical Analyses.

33 The specific technical information shall also include the following  
34 analyses needed to demonstrate that the performance objectives of R313-25 will  
35 be met:

36 (1) Analyses demonstrating that the general population will be protected  
37 from releases of radioactivity shall consider the pathways of air, soil, ground  
38 water, surface water, plant uptake, and exhumation by burrowing animals. The  
39 analyses shall clearly identify and differentiate between the roles performed by  
40 the natural disposal site characteristics and design features in isolating and  
41 segregating the wastes. The analyses shall clearly demonstrate a reasonable  
42 assurance that the exposures to humans from the release of radioactivity will not  
43 exceed the limits set forth in R313-25-19.

44 (2) Analyses of the protection of inadvertent intruders shall demonstrate  
45 a reasonable assurance that the waste classification and segregation requirements  
46 will be met and that adequate barriers to inadvertent intrusion will be provided.

47 (3) Analysis of the protection of individuals during operations shall  
48 include assessments of expected exposures due to routine operations and likely  
49 accidents during handling, storage, and disposal of waste. The analysis shall  
50 provide reasonable assurance that exposures will be controlled to meet the  
51 requirements of R313-15.

52 (4) Analyses of the long-term stability of the disposal site shall be  
53 based upon analyses of active natural processes including erosion, mass wasting,  
54 slope failure, settlement of wastes and backfill, infiltration through covers  
55 over disposal areas and adjacent soils, and surface drainage of the disposal  
56 site. The analyses shall provide reasonable assurance that there will not be a  
57 need for ongoing active maintenance of the disposal site following closure.

### 58 R313-25-9. Institutional Information.

59 The institutional information submitted by the applicant shall include:

60 (1) A certification by the federal or state agency which owns the disposal  
61 site that the agency is prepared to accept transfer of the license when the  
62 provisions of R313-25-16 are met and will assume responsibility for institutional  
63  
64