State of Utah

GARY R. HERBERT
Governor

SPENCER J. COX
Lieutenant Governor

Department of
Environmental Quality

Alan Matheson
Executive Director

DIVISION OF WASTE MANAGEMENT
AND RADIATION CONTROL
Rusty Lundberg
Acting Director

A meeting of the Waste Management and Radiation Control Board has been scheduled for January 10, 2019 at 1:30 p.m. at the Utah Department of Environmental Quality, Multi-Agency State Office Building, (Conference Room#1015), 195 North 1950 West, SLC.

(One or more members may participate telephonically.)
(Audio Conferencing Access Number: 1-877-820-7831; Passcode Number: 853610#)

AGENDA

I. Call to Order.

II. Recognition of Scott T. Anderson.

III. Public Comments.

IV. Declarations of Conflict of Interest.

V. Approval of Meeting Minutes for the November 8, 2018 Board Meeting ..... Tab 1 (**Board Action Item**)

VI. Underground Storage Tanks Update..... Tab 2

VII. Administrative Rules ..... Tab 3

A. Approval of final adoption to Hazardous Waste Rules UAC R315-273, Standards for Universal Waste Management (**Board Action Item**).

B. Approval of final adoption to Radiation Control Rules UAC R313-28-31, Use of X-Rays in the Healing Arts, General and Administrative Requirements (**Board Action Item**).

VIII. Approval of Mammography Imaging Medical Physicists (MIMP) in accordance with UCA 19-6-104(2)(b) (**Board Action Item**) ..... Tab 4

(Over)

195 North 1950 West • Salt Lake City, UT
Mailing Address: P.O. Box 144880 • Salt Lake City, UT 84114-4880
Telephone (801) 536-0200 • Fax (801) 536-0222 • T.D.D. (801) 536-4284
www.deq.utah.gov

IX. Low-Level Radioactive Waste Section..... Tab 5

A. EnergySolutions' request for a site-specific treatment variance from the Utah Hazardous Waste Management Rules. EnergySolutions seeks authorization to receive Cemented Uranium Extraction Process Residues for disposal (**Board Action Item**).

X. Other Business.

A. Misc. Information Items.
B. Scheduling of next Board meeting.

XI. Adjourn.

In compliance with the Americans with Disabilities Act, individuals with special needs (including auxiliary communicative aids and services) should contact Kimberly Diamond-Smith, Office of Human Resources at (801) 536-4285, Telecommunications Relay Service 711, or by email at "kdiamondsmith@utah.gov".

Waste Management and Radiation Control Board
Telephonic Meeting
Anchor Location: Utah Department of Environmental Quality
195 North 1950 West (Red Rocks Conference Room #3132), SLC
November 8, 2018
1:30 p.m.

Board Members Participating By Phone: Richard Codell, Danielle Endres, Steve McIff and Nathan Rich

Board Members Present at Anchor Location: Brett Mickelson (Chair), Dennis Riding (Vice-Chair), Alan Matheson, Vern Rogers and Shane Whitney

Board Members Excused/Absent: Mark Franc, Jeremy Hawk, Shawn Milne

Staff Members Present: Scott Anderson, Brent Everett, Therron Blatter, Arlene Lovato, Rusty Lundberg, Allan Moore, Bret Randall, Elisa Smith and Raymond Wixom

Other Phone Call Participants: None

Others Present at Anchor Location: Linda Ebert and Jessica Reimer

I. Call to Order.

Brett Mickelson (Chair) called the meeting to order at 1:35 p.m.; roll call was conducted (see above). Mark Franc was excused from the meeting.

II. Public Comments – None.

III. Declarations of Conflict of Interest.

Nathan Rich declared that he operates a facility that will be impacted by the Board's adoption of Solid Waste Rules R315-301 (R315-301-7). However, he does not feel that creates a conflict and will be voting on this matter.

IV. Approval of the Meeting Minutes for the October 11, 2018 Board Meeting (Board Action Item).

It was moved by Shane Whitney and seconded by Richard Codell and UNANIMOUSLY CARRIED to approve the October 11, 2018 Board Meeting minutes.

V. Approval of the Meeting Minutes for the October 25, 2018 Board Meeting (Board Action Item).

It was moved by Dennis Riding and seconded by Shane Whitney and UNANIMOUSLY CARRIED to approve the October 25, 2018 Board Meeting minutes.

VI. Underground Storage Tanks Update.

Brent Everett, Director of the Division of Environmental Response and Remediation (DERR), informed the Board that the cash balance of the Petroleum Storage Tank (PST) Trust Fund at the end of September 2018 was $13,847,507.00. The preliminary estimate for the cash balance of the PST Trust Fund for the end of October 2018 is $14,309,324.00. The PST Trust Fund is managed on a cash balance basis to ensure sufficient coverage for known claims that have been reported. The balance of the PST Trust Fund is watched closely to ensure sufficient coverage for covered releases.

Mr. Everett also informed the Board that Utah's State Program Approval (SPA) application for the UST program has been signed by the Environmental Protection Agency, Region 8's Regional Administrator. The SPA application was published in the Federal Register on November 5, 2018, for the beginning of a 30-day public comment period. If no adverse comments are received by December 5, 2018, Utah's SPA will obtain final approval on January 4, 2019. Mr. Everett congratulated and thanked the staff for the more than two year effort that has gone into having SPA for the UST program. He also thanked the Board and other stakeholders for their involvement and feedback during the rule making process.

Mr. Riding asked if the DERR is now more comfortable making rule changes. Mr. Everett confirmed that once approval is final, the DERR will begin working with stakeholders and the Board to put rule changes into place that will assist with implementation of the program.

VII. Administrative Rules.

Approval of final adoption of proposed changes to Solid Waste Rules R315-301, to add a new subsection (R315-301-7) to establish self-inspection requirements in accordance with Section 19-6-109 of the Solid and Hazardous Waste Act (Board Action Item).

Allan Moore, Solid Waste Section Manager, reviewed the request for the Board to approve for final adoption proposed changes to R315-301-7, Self-Inspection of Solid Waste Management Facility, as published in the October 1, 2018 issue of the Utah State Bulletin with an effective date of November 9, 2018.

At the September 13, 2018, the Board approved formal rulemaking and public comment by filing with the Office of Administrative Rules and publishing in the Utah State Bulletin proposed changes to R315-301-7, Self-Inspection of Solid Waste Management Facility. A 30-day public comment period was held October 1, 2018 to October 31, 2018. No comments were received. Selected pages from the October 1, 2018 issue of the Utah State Bulletin were included in the Board's November 8, 2018 Board packet.

In the 2018 General Session, the Legislature passed House Bill 373, Waste Management Amendments. The amendments required the Division to establish rules for self-inspection of solid waste management facilities. The changes in R315-301-7 outline the requirements for solid waste management facilities that elect to perform self-inspections.

The Board is authorized under Subsection 19-6-105(1)(a) to establish minimum standards for protection of human health and the environment and for the storage, collection, transport, recovery, treatment and disposal of solid waste. Subsection 19-6-109(5)(a) directs the Division to provide an opportunity for an owner or operator of a solid waste management facility to conduct self-inspections. The rule changes to R315-301-7 also meet existing DEQ and state rulemaking procedures.

Board approval was needed for final adoption of the rule changes to R315-301-7, as published in the October 1, 2018 issue of the Utah State Bulletin and set an effective date of November 9, 2018. The Director recommended the Board approve final adoption of the rule changes to R315-301-7, as published in the October 1, 2018 issue of the Utah State Bulletin and set an effective date of November 9, 2018.

It was moved by Danielle Endres and seconded by Vern Rogers and UNANIMOUSLY CARRIED to approve for final adoption proposed changes to Solid Waste Rules R315-301, to add a new subsection (R315-301-7) to establish self-inspection requirements in accordance with Section 19-6-109 of the Solid and Hazardous Waste Act, with an effective date of November 9, 2018.

VIII. Other Business.

A. Misc. Information Items – None to Report.
B. Scheduling of next Board meeting.

The December 13, 2018 Board meeting was canceled. The next Board meeting was scheduled for January 10, 2019 at the Utah Department of Environmental Quality.

IX. Adjourn.

The meeting adjourned at 1:45 p.m.

UST STATISTICAL SUMMARY
December 1, 2017 -- November 30, 2018

PROGRAM

	December	January	February	March	April	May	June	July	August	September	October	November	(+/-) OR Total
Regulated Tanks	4,054	4,047	4,055	4,061	4,064	4,066	4,061	4,058	4,067	4,068	4,065	4,072	**18**
Tanks with Certificate of Compliance	3,969	3,968	3,969	3,968	3,976	3,976	3,982	3,986	3,992	3,986	3,989	3,990	**21**
Tanks without COC	85	79	86	93	88	90	79	72	75	82	76	82	**(3)**
Cumulative Facilitlies with Registered A Operators	1,306	1,304	1,307	1,307	1,305	1,264	1,261	1,296	1,300	1,299	1,300	1,302	**97.67%**
Cumulative Facilitlies with Registered B Operators	1,306	1,305	1,308	1,308	1,306	1,306	1,303	1,301	1,304	1,303	1,302	1,304	**97.82%**
New LUST Sites	8	10	6	8	1	7	6	15	5	7	7	9	**89**
Closed LUST Sites	13	11	15	8	5	13	5	15	16	6	16	4	**127**
Cumulative Closed LUST Sites	5072	5087	5100	5106	5110	5125	5131	5146	5162	5167	5182	5187	**115**

FINANCIAL

	December	January	February	March	April	May	June	July	August	September	October	November	(+/-)
Tanks on PST Fund	2,707	2,708	2,708	2,706	2,705	2,698	2,704	2,704	2,703	2,690	2,692	2,696	**(11)**
PST Claims (Cumulative)	676	677	680	686	687	686	687	688	686	687	688	688	**12**
Equity Balance	-$13,951,499	-$14,290,860	-$14,288,779	-$13,656,255	-$14,076,436	-$14,562,872	-$14,838,728	-$14,362,717	-$14,322,626	-$12,290,504	-$11,828,687	-$11,575,752	**$2,375,747**
Cash Balance	$14,493,396	$14,154,036	$14,156,117	$14,788,641	$14,368,460	$13,882,024	$13,606,168	$14,082,179	$14,122,270	$13,847,507	$14,309,324	$14,562,259	**$68,863**
Loans	0	0	0	0	0	1	0	0	0	0	0	0	**0**
Cumulative Loans	112	112	112	112	112	113	113	113	113	113	113	113	**1**
Cumulative Amount	$4,079,887	$4,079,887	$4,079,887	$4,079,887	$4,079,887	$4,229,887	$4,229,887	$4,229,887	$4,229,887	$4,229,887	$4,229,887	$4,229,887	**$150,000**
Defaults/Amount	0	1	1	1	1	1	1	1	1	1	1	1	**1**

	December	January	February	March	April	May	June	July	August	September	October	November	TOTAL
Speed Memos	18	12	22	17	28	51	31	16	38	20	29	25	**307**
Compliance Letters	6	4	4	6	1	1	7	3	13	7	6	0	**58**
Notice of Intent to Revoke	0	0	0	0	0	0	0	0	0	1	0	0	**1**
Orders	0	0	0	0	1	0	0	0	1	0	0	1	**3**

WASTE MANAGEMENT AND RADIATION CONTROL BOARD
Executive Summary
Public Comment - Proposed Rule Changes
UAC R315-273, Standards for Universal Waste Management
January 10, 2019

What is the issue before the Board?	Final approval from the Board is needed to adopt changes to UAC R315-273 to fix some errors found in the rule since the last rule amendment in 2016; to update the rules for lamp crushers so they reflect the current manufacturing and operating standards for lamp crushers; to remove some language that exempts lamp crushers from registration that does not meet the intent of the rule; and to add propylene glycol to the definition of antifreeze.
What is the historical background or context for this issue?	At the Board meeting on October 11, 2018, the Board approved the proposed changes to UAC R315-273 to be filed with the Office of Administrative Rules for publication in the Utah State Bulletin. The proposed rule changes were published in the November 1, 2018 issue of the Utah State Bulletin (Vol. 2018, No. 21). The public comment period for this rulemaking ended on December 3, 2018. No comments were received. Selected pages from the Utah State Bulletin showing the publication of the propose changes follow this Executive Summary.
What is the governing statutory or regulatory citation?	The Board is authorized under Subsection 19-6-105(1)(c) to make rules governing generators and transporters of hazardous wastes and owners and operators of hazardous waste treatment, storage and disposal facilities. The rule changes also meet existing DEQ and state rulemaking procedures.
Is Board action required?	Yes. Board approval for final adoption of the rule changes is necessary.
What is the Division Director's recommendation?	The Director recommends the Board approve final adoption of the rule changes to UAC R315-273 as published in the November 1, 2018 issue of the Utah State Bulletin and set an effective date of January 14, 2019.
Where can more information be obtained?	Please contact Tom Ball (801) 536-0251, tball@utah.gov or Rusty Lundberg (801) 536-4257, rlundberg@utah.gov.

UTAH STATE BULLETIN

OFFICIAL NOTICES OF UTAH STATE GOVERNMENT
Filed October 02, 2018, 12:00 a.m. through October 15, 2018, 11:59 p.m.

Number 2018-21
November 01, 2018

Nancy L. Lancaster, Managing Editor

The *Utah State Bulletin (Bulletin)* is an official noticing publication of the executive branch of Utah state government. The Office of Administrative Rules, part of the Department of Administrative Services, produces the *Bulletin* under authority of Section 63G-3-402.

The Portable Document Format (PDF) version of the *Bulletin* is the official version. The PDF version of this issue is available at https://rules.utah.gov/. Any discrepancy between the PDF version and other versions will be resolved in favor of the PDF version.

Inquiries concerning the substance or applicability of an administrative rule that appears in the *Bulletin* should be addressed to the contact person for the rule. Questions about the *Bulletin* or the rulemaking process may be addressed to: Office of Administrative Rules, PO Box 141007, Salt Lake City, Utah 84114-1007, telephone 801-538-3003. Additional rulemaking information and electronic versions of all administrative rule publications are available at https://rules.utah.gov/.

The information in this *Bulletin* is summarized in the *Utah State Digest (Digest)* of the same volume and issue number. The *Digest* is available by e-mail subscription or online. Visit https://rules.utah.gov/ for additional information.

Office of Administrative Rules, Salt Lake City 84114

Utah state bulletin.
Semimonthly.
1. Delegated legislation--Utah--Periodicals. 2. Administrative procedure--Utah--Periodicals.
I. Utah. Office of Administrative Rules.

KFU440.A73S7
348.792'025--DDC 85-643197

TABLE OF CONTENTS

(7) Procedures and auxiliary equipment designed to minimize patient and personnel exposure commensurate with the needed diagnostic information shall be utilized.

(a) The speed of the screen and film combinations used shall be the fastest speed consistent with the diagnostic objective of the examinations. Film cassettes without intensifying screens shall not be used for routine diagnostic radiological imaging, with the exception of standard film packets for intra-oral use in dental radiography. If the requirements of R313-28-31(6)(a) cannot be met, an exemption may be requested pursuant to R313-12-55.

(b) The radiation exposure to the patient shall be the minimum exposure required to produce images of good diagnostic quality.

(c) X-ray systems, other than fluoroscopic, computed tomography, dental or veterinary units, shall not be utilized in procedures where the source to patient distance is less than 30 centimeters.

KEY: dental, X-rays, mammography, beam limitation
Date of Enactment or Last Substantive Amendment: [~~March 24, 2015~~|2018]
Notice of Continuation: July 1, 2016
Authorizing, and Implemented or Interpreted Law: 19-3-104; 19-6-107

Environmental Quality, Waste Management and Radiation Control, Waste Management
R315-273
Standards for Universal Waste Management

NOTICE OF PROPOSED RULE
(Amendment)
DAR FILE NO.: 43252
FILED: 10/11/2018

RULE ANALYSIS

PURPOSE OF THE RULE OR REASON FOR THE CHANGE: The purpose of these amendments to Rule R315-273 is to fix some errors found in this rule since the last rule amendment in 2016, update this rules for lamp crushers so that they reflect the current manufacturing and operating standards for lamp crushers, remove some language that exempts lamp crushers from registration that does not meet the intent of this rule, and add propylene glycol to the definition of antifreeze.

SUMMARY OF THE RULE OR CHANGE: Antifreeze was added to this rule in 2016. Since that time, the Division of Waste Management and Radiation Control (Division) has learned that propylene glycol is frequently used as a substitute for ethylene glycol in low toxicity, environmentally friendly automotive antifreeze. The Division is aware that auto repair and maintenance shops do not discriminate between ethylene glycol and propylene glycol when flushing radiators so both chemicals are mixed together in collection containers prior to being recycled or disposed. In order to continue to encourage the recycling of waste antifreeze and avoid any potential compliance issues at facilities where the two chemicals are mixed together, the Division is adding propylene glycol to the definition of antifreeze at Subsection R315-273-9(c). Language found in Sections R315-273-10 and R315-273-30 that exempts generators from having to register their lamp crushers is being deleted from this rule. No justification can be found for this exemption and a recent review of this rule determined that this exemption does not meet the intent of this rule which is to have all lamp crushers registered. Subsections R315-273-13(d)(3)(i) and R315-273-33(d)(3)(i) require the accumulation container used with a drum top lamp crusher to be designed specifically for crushing lamps. No such container exists. Instead, drum top lamp crushers are designed to be attached to open top 55-gallon drums. Therefore, the language is being changed to state that the handler should use an accumulation container specified by the manufacturer of the lamp crusher. Language found in Subsections R315-273-13(d)(3)(iii) and R315-273-33(d)(3)(iii) specifying that a lamp crusher shall have a bag filter followed by a HEPA filter and an activated carbon filter is being changed to state that this configuration is the minimum requirement. Many lamp crushers have more filters than the three specified in this rule and the Division does not want to exclude handlers from using lamp crushers with more than three filters. The term “Waste-antifreeze” is being deleted from Subsections R315-273-14(f) and R315-272-34(f) to allow facilities managing waste antifreeze to use this term to label containers of waste antifreeze that is not being managed as a hazardous waste or as a universal waste. A typographical error is being fixed at Subsection R315-273-6(a) where the subsections were numbered (1), (2), and (4). The 4 is being changed to a 3. Typographical errors at Subsections R315-273-14(f) and R315-273-34(f) where there are extra spaces in the terms “Universal Waste-antifreeze”. The extra spaces are being deleted.

STATUTORY OR CONSTITUTIONAL AUTHORIZATION FOR THIS RULE: Section 19-6-104 and Section 19-6-105 and Section 19-6-106

ANTICIPATED COST OR SAVINGS TO:
♦ THE STATE BUDGET: These rule changes will not affect the state budget because only one state agency operates a registered drum top lamp crusher and no state agencies are exempt from having to register a drum top lamp crusher. It is not anticipated that the changes made by these amendments will increase or decrease the cost of operating the one registered drum top lamp crusher. Any state agencies that may be recycling waste antifreeze can continue to do so with the added benefit of being able to legally recycle waste antifreeze containing propylene glycol along with ethylene glycol.

♦ LOCAL GOVERNMENTS: These rule changes will not affect local governments because no local governments operate a registered or exempt drum top lamp crusher. Any local governments that may be recycling waste antifreeze can continue to do so with the added benefit of being able to legally recycle waste antifreeze containing propylene glycol along with ethylene glycol.
♦ SMALL BUSINESSES: It is not anticipated that these rule changes will add any additional cost of doing business to small businesses nor will there be any savings. The changes for drum top lamp crushers are being made because the Division conducted inspections of businesses that are operating drum top lamp crushers and determined that this rule did not reflect how drum top lamp crushers are designed and operated. These rule changes are being made so that this rule reflects the design and operation of this equipment. The Division is not aware of any small businesses that have been operating a drum top lamp crusher under the exemption from registration that is being removed from this rule. There are approximately 1,758 businesses in Utah that perform automobile repair and maintenance. It is not known how many of these are small businesses and how many flush radiators or collect waste antifreeze from other repair or maintenance processes. As stated previously, auto repair and maintenance shops do not discriminate between ethylene glycol and propylene glycol when flushing radiators so both chemicals are mixed together in collection containers prior to being recycled or disposed. Small businesses that are currently recycling waste antifreeze without discriminating between the two chemicals antifreeze will not see any additional cost or savings from the addition of propylene glycol to the definition of antifreeze.
♦ PERSONS OTHER THAN SMALL BUSINESSES, BUSINESSES, OR LOCAL GOVERNMENTAL ENTITIES: It is not anticipated that these rule changes will add any additional cost of doing business to persons other than small businesses, businesses, or local governments nor will there be any savings. The changes for drum top lamp crushers are being made because the Division conducted inspections of businesses that are operating drum top lamp crushers and determined that this rule did not reflect how drum top lamp crushers are designed and operated. These rule changes are being made so that this rule reflects the design and operation of this equipment. The Division is not aware of any persons that are operating a drum top lamp crusher under the exemption from registration that is being removed from this rule. There are approximately 1,758 businesses in Utah that perform automobile repair and maintenance. It is not known how many of these are persons other than small businesses or businesses and how many flush radiators or collect waste antifreeze from other repair or maintenance processes. As stated previously, auto repair and maintenance shops do not discriminate between ethylene glycol and propylene glycol when flushing radiators so both chemicals are mixed together in collection containers prior to being recycled or disposed. Persons other than small businesses or businesses that are currently recycling waste antifreeze without discriminating between the two chemicals antifreeze will not see any additional cost or savings from the addition of propylene glycol to the definition of antifreeze.

COMPLIANCE COSTS FOR AFFECTED PERSONS: It is anticipated that there will be no additional compliance costs for affected persons associated with these rule amendments because they do not add any additional compliance costs that do not already exist. The Division is not aware of any persons that are operating drum top lamp crushers under the exemption from registration that is being removed from this rule therefore, the Division does not anticipate that there will be any additional compliance costs associated with these changes.

COMMENTS BY THE DEPARTMENT HEAD ON THE FISCAL IMPACT THE RULE MAY HAVE ON BUSINESSES: Since this rule requiring the registering of drum top lamp crushers was adopted in 2016, the Division has registered only one drum top lamp crusher. Several applications for registration have been received and many have been withdrawn during the review process. Several applications are still being reviewed. It is not anticipated that these rule changes for drum top lamp crushers will have any fiscal impact on any of the facilities operating drum top lamp crushers. It is not anticipated that these changes to the addition of proplylene glycol to the definition of antifreeze will have any fiscal impact on any of the businesses in Utah that collect and recycle waste antifreeze.

THE FULL TEXT OF THIS RULE MAY BE INSPECTED, DURING REGULAR BUSINESS HOURS, AT:
ENVIRONMENTAL QUALITY
WASTE MANAGEMENT AND RADIATION
CONTROL, WASTE MANAGEMENT
SECOND FLOOR
195 N 1950 W
SALT LAKE CITY, UT 84116-3097
or at the Office of Administrative Rules.

DIRECT QUESTIONS REGARDING THIS RULE TO:
♦ Rusty Lundberg by phone at 801-536-4257, by FAX at 801-536-0222, or by Internet E-mail at rlundberg@utah.gov
♦ Thomas Ball by phone at 801-536-0251, or by Internet E-mail at tball@utah.gov

INTERESTED PERSONS MAY PRESENT THEIR VIEWS ON THIS RULE BY SUBMITTING WRITTEN COMMENTS NO LATER THAN AT 5:00 PM ON 12/03/2018

THIS RULE MAY BECOME EFFECTIVE ON: 12/14/2018

AUTHORIZED BY: Scott Anderson, Director

Appendix 1: Regulatory Impact Summary Table*

Fiscal Costs	FY 2019	FY 2020	FY 2021
State Government	$0	$0	$0

Local Government	$0	$0	$0
Small Businesses	$0	$0	$0
Non-Small Businesses	$0	$0	$0
Other Person	$0	$0	$0
Total Fiscal Costs:	**$0**	**$0**	**$0**
Fiscal Benefits			
State Government	$0	$0	$0
Local Government	$0	$0	$0
Small Businesses	$0	$0	$0
Non-Small Businesses	$0	$0	$0
Other Persons	$0	$0	$0
Total Fiscal Benefits:	**$0**	**$0**	**$0**
Net Fiscal Benefits:	**$0**	**$0**	**$0**

***This table only includes fiscal impacts that could be measured. If there are inestimable fiscal impacts, they will not be included in this table. Inestimable impacts for State Government, Local Government, Small Businesses and Other Persons are described in the narrative. Inestimable impacts for Non-Small Businesses are described in Appendix 2.**

Appendix 2: Regulatory Impact to Non-Small Businesses
There are approximately 1,758 businesses in Utah that are registered as Automobile Repair and Maintenance businesses (NAICS 811192, 811192, 811111, 811122, 811121, 811198, 811118, 811113). It is not known how many of these are non-small businesses. However; these rule changes are not expected to have any fiscal impact on non-small businesses revenues or expenditures because those businesses that collect waste antifreeze do not discriminate between ethylene glycol and propylene glycol when flushing radiators so both chemicals are mixed together in collection containers prior to being recycled or disposed, and these changes would allow this practice to continue and do not create any new or additional regulatory requirements. Additionally, there are no non-small businesses that are operating registered drum top lamp crushers and the Division is not aware of any non-small businesses that are operating drum top lamp crushers under the exemption so these rule changes for drum top lamp crushers are not expected to have any fiscal impact on non-small businesses.

The head of Department of Environmental Quality, Alan Matheson, has reviewed and approved this fiscal analysis.

****"Non-small business" means a business employing 50 or more persons; "small business" means a business employing fewer than 50 persons.**

R315. Environmental Quality, Waste Management and Radiation Control, Waste Management.
R315-273. Standards for Universal Waste Management.
R315-273-6. Standards for Universal Waste Management -- Applicability for Utah Specific Wastes.

(a) Antifreeze.

(1) The requirements of Rule R315-273 apply to persons managing antifreeze, as described in Section R315-273-9, except those listed in Subsection R315-273-6(a)(2).

(2) Antifreeze not covered under Rule R315-273. The requirements of Rule R315-273 do not apply to persons managing the following antifreeze:

(i) Antifreeze, as described in Section R315-273-9,that is not yet a waste under Rule R315-261, including antifreeze that does not meet the criteria for waste generation in Subsection R315-273-6(a)(4).

(ii) Antifreeze, as described in Section R315-273-9 that is not hazardous waste. Antifreeze is a hazardous waste if it exhibits one or more of the characteristics identified in Sections R315-261-20 through 24.

([4]3) Generation of waste antifreeze.

(i) Antifreeze becomes a waste on the date it is discarded, e.g., when sent for reclamation.

(ii) Antifreeze becomes a waste on the date the handler decides to discard it.

(b) Aerosol Cans

(1) The requirements of Rule R315-273 apply to persons managing aerosol cans, as described in Section R315-273-9, except those listed in Subsection R315-273-6(b)(2).

(2) Aerosol cans not covered under Rule R315-273. The requirements of Rule R315-273 do not apply to persons managing the following aerosol cans:

(i) Aerosol cans, as described in Section R315-273-9, that are not yet wastes under Rule R315-261, including those that do not meet the criteria for waste generation in subsection R315-273(b)(3).

(ii) Aerosol cans, as described in Section R315-273-9, that are not hazardous waste. An aerosol can shall be managed as a hazardous waste if the can or its contents exhibit one or more of the characteristics identified in Sections R315-261-20 through 24, or if its contents are listed in Sections R315-261-30 through 35.

(3) Generation of waste aerosol cans.

(i) An aerosol can becomes a waste on the date it is discarded or is no longer useable. For purposes of Rule R315-273, an aerosol can is considered to be no longer useable when:

(A) the can is as empty as proper work practices allow;

(B) the spray mechanism no longer operates as designed;

(C) the propellant is spent; or

(D) the product is no longer used.

(ii) An unused aerosol can becomes a waste on the date the handler decides to discard it.

R315-273-9. Standards for Universal Waste Management -- Definitions.

(a) "Aerosol can" means a container with a total capacity of no more than 24 ounces of gas under pressure and is used to aerate and dispense any material through a valve in the form of a spray or foam.

(b) "Ampule" means an airtight vial made of glass, plastic, metal, or any combination of these materials.

(c) "Antifreeze" means an ethylene glycol or propylene glycol based mixture that lowers the freezing point of water and is used as an engine coolant.

(d) "Battery" means a device consisting of one or more electrically connected electrochemical cells, which is designed to receive, store, and deliver electric energy. An electrochemical cell is a system consisting of an anode, cathode, and an electrolyte, plus such connections, electrical and mechanical, as may be needed to allow the cell to deliver or receive electrical energy. The term battery also includes an intact, unbroken battery from which the electrolyte has been removed.

(e) "Destination facility" means a facility that treats, disposes of, or recycles a particular category of universal waste, except those management activities described in Subsections R315-273-13(a) and (c) and Subsections R315-273-33(a) and (c). A facility, at which a particular category of universal waste is only accumulated, is not a destination facility for purposes of managing that category of universal waste.

(f) "Drum-top lamp crusher" means a device attached to a drum or container that mechanically reduces the size of lamps and includes a bag filter followed in series by a HEPA filter and an activated carbon filter. Drum-top crushers are the only devices that can be approved for the use of crushing lamps.

(g) "FIFRA" means the Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. 136-136y).

(h) "Generator" means any person, by site, whose act or process produces hazardous waste identified or listed in Rule R315-261 or whose act first causes a hazardous waste to become subject to regulation.

(i) "Lamp," also referred to as "universal waste lamp" is defined as the bulb or tube portion of an electric lighting device. A lamp is specifically designed to produce radiant energy, most often in the ultraviolet, visible, and infra-red regions of the electromagnetic spectrum. Examples of common universal waste electric lamps include, but are not limited to, fluorescent, high intensity discharge, neon, mercury vapor, high pressure sodium, and metal halide lamps.

(j) "Large Quantity Handler of Universal Waste" means a universal waste handler, as defined in Section R315-273-9 who accumulates 5,000 kilograms or more total of universal waste; batteries, pesticides, mercury-containing equipment, lamps, or any other universal waste regulated in Rule R315-273, calculated collectively; at any time. This designation as a large quantity handler of universal waste is retained through the end of the calendar year in which the 5,000 kilogram limit is met or exceeded.

(k) "Mercury-containing equipment" means a device or part of a device, including thermostats, but excluding batteries and lamps, that contains elemental mercury integral to its function.

(l) "On-site" means the same or geographically contiguous property which may be divided by public or private right-of-way, provided that the entrance and exit between the properties is at a cross-roads intersection, and access is by crossing as opposed to going along the right of way. Non-contiguous properties owned by the same person but connected by a right-of-way which he controls and to which the public does not have access, are also considered on-site property.

(m) "Pesticide" means any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any pest, or intended for use as a plant regulator, defoliant, or desiccant, other than any article that:

(1) Is a new animal drug under FFDCA section 201(w), or

(2) Is an animal drug that has been determined by regulation of the Secretary of Health and Human Services not to be a new animal drug, or

(3) Is an animal feed under FFDCA section 201(x) that bears or contains any substances described by (1) or (2) above.

(n) "Small Quantity Handler of Universal Waste" means a universal waste handler, as defined in this Section R315-273-9 who does not accumulate 5,000 kilograms or more of universal waste at any time.

(o) "Thermostat" means a temperature control device that contains metallic mercury in an ampule attached to a bimetal sensing element, and mercury-containing ampules that have been removed from these temperature control devices in compliance with the requirements of Subsection R315-273-13(c)(2) or 33(c)(2).

(p) "Universal Waste" means any of the following hazardous wastes that are subject to the universal waste requirements of Rule R315-273:

(1) Batteries as described in Section R315-273-2;

(2) Pesticides as described in Section R315-273-3;

(3) Mercury-containing equipment as described in Section R315-273-4;

(4) Lamps as described in Section R315-273-5;

(5) Antifreeze as described in Subsection R315-273-6(a); and

(6) Aerosol cans as described in Subsection R315-273-6(b).

(q) "Universal Waste Handler:"

(1) Means:

(i) A generator, as defined in Section R315-273-9, of universal waste; or

(ii) The owner or operator of a facility, including all contiguous property, that receives universal waste from other universal waste handlers, accumulates universal waste, and sends universal waste to another universal waste handler, to a destination facility, or to a foreign destination.

(2) Does not mean:

(i) A person who treats, except under the provisions of Subsection R315-273-13(a) or (c), or 33(a) or (c), disposes of, or recycles universal waste; or

(ii) A person engaged in the off-site transportation of universal waste by air, rail, highway, or water, including a universal waste transfer facility.

(r) "Universal Waste Transfer Facility" means any transportation-related facility including loading docks, parking areas, storage areas and other similar areas where shipments of universal waste are held during the normal course of transportation for ten days or less.

(s) "Universal Waste Transporter" means a person engaged in the off-site transportation of universal waste by air, rail, highway, or water.

R315-273-10. Standards for Universal Waste Management, Standards for Small Quantity Handlers of Universal Waste -- Applicability.

Sections R315-273-10 through 20 apply to small quantity handlers of universal waste, as defined in Section R315-273-9[~~except that the registration requirement of Subsection R315-273-13(d)(3) and Subsections R315-273-13(d)(6) and (7) do not apply to generators~~].

R315-273-13. Standards for Universal Waste Management, Standards for Small Quantity Handlers of Universal Waste -- Waste Management.

(a) Batteries. A small quantity handler of universal waste shall manage universal waste batteries in a way that prevents releases of any universal waste or component of a universal waste to the environment, as follows:

(1) A small quantity handler of universal waste shall contain any universal waste battery that shows evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions in a container. The container shall be closed, structurally sound, compatible with the contents of the battery, and shall lack evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions.

(2) A small quantity handler of universal waste may conduct the following activities as long as the casing of each individual battery cell is not breached and remains intact and closed, except that cells may be opened to remove electrolyte but shall be immediately closed after removal:

(i) Sorting batteries by type;

(ii) Mixing battery types in one container;

(iii) Discharging batteries so as to remove the electric charge;

(iv) Regenerating used batteries;

(v) Disassembling batteries or battery packs into individual batteries or cells;

(vi) Removing batteries from consumer products; or

(vii) Removing electrolyte from batteries.

(3) A small quantity handler of universal waste who removes electrolyte from batteries, or who generates other solid waste, e.g., battery pack materials, discarded consumer products, as a result of the activities listed above, shall determine whether the electrolyte and/or other solid waste exhibit a characteristic of hazardous waste identified in Sections R315-261-20 through 24.

(i) If the electrolyte and/or other solid waste exhibit a characteristic of hazardous waste, it is subject to all applicable requirements of Rules R315-260 through 266, 268 and 270. The handler is considered the generator of the hazardous electrolyte and/or other waste and is subject to Rule R315-262.

(ii) If the electrolyte or other solid waste is not hazardous, the handler may manage the waste in any way that is in compliance with applicable federal, state or local solid waste regulations.

(b) Pesticides. A small quantity handler of universal waste shall manage universal waste pesticides in a way that prevents releases of any universal waste or component of a universal waste to the environment. The universal waste pesticides shall be contained in one or more of the following:

(1) A container that remains closed, structurally sound, compatible with the pesticide, and that lacks evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions; or

(2) A container that does not meet the requirements of Subsection R315-273-13(b)(1), provided that the unacceptable container is overpacked in a container that does meet the requirements of Subsection R315-273-13(b)(1); or

(3) A tank that meets the requirements of 40 CFR 265.190 through 202, except for 40 CFR 265.197(c) and 40 CFR 265.200 and 201, 40 CFR 265 is adopted by reference in R315-265; or

(4) A transport vehicle or vessel that is closed, structurally sound, compatible with the pesticide, and that lacks evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions.

(c) Mercury-containing equipment. A small quantity handler of universal waste shall manage universal waste mercury-containing equipment in a way that prevents releases of any universal waste or component of a universal waste to the environment, as follows:

(1) A small quantity handler of universal waste shall place in a container any universal waste mercury-containing equipment with non-contained elemental mercury or that shows evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions. The container shall be closed, structurally sound, compatible with the contents of the device, shall lack evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions, and shall be reasonably designed to prevent the escape of mercury into the environment by volatilization or any other means.

(2) A small quantity handler of universal waste may remove mercury-containing ampules from universal waste mercury-containing equipment provided the handler:

(i) Removes and manages the ampules in a manner designed to prevent breakage of the ampules;

(ii) Removes the ampules only over or in a containment device, e.g., tray or pan sufficient to collect and contain any mercury released from an ampule in case of breakage;

(iii) Ensures that a mercury clean-up system is readily available to immediately transfer any mercury resulting from spills or leaks from broken ampules from that containment device to a container that meets the requirements of Section R315-262-34;

(iv) Immediately transfers any mercury resulting from spills or leaks from broken ampules from the containment device to a container that meets the requirements of Section R315-262-34;

(v) Ensures that the area in which ampules are removed is well ventilated and monitored to ensure compliance with applicable OSHA exposure levels for mercury;

(vi) Ensures that employees removing ampules are thoroughly familiar with proper waste mercury handling and emergency procedures, including transfer of mercury from containment devices to appropriate containers;

(vii) Stores removed ampules in closed, non-leaking containers that are in good condition;

(viii) Packs removed ampules in the container with packing materials adequate to prevent breakage during storage, handling, and transportation;

(3) A small quantity handler of universal waste mercury-containing equipment that does not contain an ampule may remove the open original housing holding the mercury from universal waste mercury-containing equipment provided the handler:

(i) Immediately seals the original housing holding the mercury with an air-tight seal to prevent the release of any mercury to the environment; and

(ii) Follows all requirements for removing ampules and managing removed ampules under Subsection R315-273-13(c)(2); and

(4)(i) A small quantity handler of universal waste who removes mercury-containing ampules from mercury-containing equipment or seals mercury from mercury-containing equipment in its original housing shall determine whether the following exhibit a characteristic of hazardous waste identified in Sections R315-261-20 through 24:

(A) Mercury or clean-up residues resulting from spills or leaks; and/or

(B) Other solid waste generated as a result of the removal of mercury-containing ampules or housings, e.g., the remaining mercury-containing device.

(ii) If the mercury, residues, and/or other solid waste exhibits a characteristic of hazardous waste, it shall be managed in compliance with all applicable requirements of Rules R315-260 through 266, 268, and 270. The handler is considered the generator of the mercury, residues, and/or other waste and shall manage it in compliance with Rule R315-262.

(iii) If the mercury, residues, and/or other solid waste is not hazardous, the handler may manage the waste in any way that is in compliance with applicable federal, state or local solid waste regulations.

(d) Lamps. A small quantity handler of universal waste shall manage lamps in a way that prevents releases of any universal waste or component of a universal waste to the environment, as follows:

(1) A small quantity handler of universal waste shall contain any lamp in containers or packages that are structurally sound, adequate to prevent breakage, and compatible with the contents of the lamps. Such containers and packages shall remain closed and shall lack evidence of leakage, spillage or damage that could cause leakage under reasonably foreseeable conditions.

(2) A small quantity handler of universal waste shall immediately clean up and place in a container any lamp that is broken and shall place in a container any lamp that shows evidence of breakage, leakage, or damage that could cause the release of mercury or other hazardous constituents to the environment. Containers shall be closed, structurally sound, compatible with the contents of the lamps and shall lack evidence of leakage, spillage or damage that could cause leakage or releases of mercury or other hazardous constituents to the environment under reasonably foreseeable conditions.

(3) A small quantity handler of universal waste may crush universal waste lamps using a drum-top lamp crusher designed specifically for crushing lamps provided that the small quantity handler submits a drum-top lamp crusher registration application to and receives approval from the Director. The registration application shall demonstrate that the small quantity handler shall operate the drum-top lamp crusher to ensure the following:

(i) The lamps are crushed in a closed accumulation container [~~designed specifically for crushing lamps~~]as specified by the manufacturer of the drum-top lamp crusher;

(ii) The lamps are crushed in a controlled manner that prevents the release of mercury vapor or other contaminants in exceedance of the manufacturer's specifications;

(iii) The drum-top lamp crusher shall have a filtration system consisting of, at a minimum, a bag filter followed in series by a HEPA filter and an activated carbon filter;

(iv) The drum-top lamp crusher is installed, maintained, and operated in accordance with written procedures developed by the manufacturer of the equipment including specific instructions for the frequency of filter changes;

(v) Filters are either characterized to demonstrate that they are not a hazardous waste or managed as a hazardous waste;

(vi) A spill clean-up kit is available;

(vii) The area in which the drum-top crusher is operated is well ventilated and monitored to ensure compliance with applicable OSHA exposure levels for mercury;

(viii) An employee using the drum-top lamp crusher is trained annually on the written operating, safety, personal protection and maintenance procedures of the system;

(ix) An employee using the drum-top lamp crusher is trained annually in emergency procedures;

(x) An operating record is kept and consists of the following:

(A) the number and size of lamps crushed per calendar day, per calendar month, and per calendar year;

(B) the schedule for the change out of filters;

(C) date and time of filter change out;

(D) date, type, and time of equipment maintenance;

(E) any occurrence of equipment malfunction; and

(F) procedures for preventing equipment malfunctions.

(4) The operating record shall be maintained for at least three years.

(5) When a drum-top crusher is no longer used or is relocated, the area where the crusher was located shall be decontaminated of all mercury and other contaminants caused by the use of the drum-top lamp crusher. A report documenting the decontamination steps as well as supporting analytical data demonstrating successful remediation shall be submitted to the Director for approval within 30 days following completion of decontamination.

(6) The small quantity handler shall provide a closure plan along with a detailed written estimate, in current dollars, of the cost of disposing of the drum-top lamp crusher; decontamination of the area surrounding the drum-top lamp crusher, and any analytical costs required to show that decontamination is complete. Drum-top lamp crushers operated by the state or the federal government are exempt from the cost estimate requirement of Subsection R315-273-13(d)(6).

(7) The small quantity handler shall demonstrate financial assurance for the detailed cost estimates determined in Subsection R315-273-13(d)(6) using one of the options in Subsections R315-261-143(a) through (e). Drum-top lamp crushers operated by the state or the federal government are exempt from the financial assurance requirement of Subsection R315-273-13(d)(7).

(8) Crushed universal waste lamps may be managed as universal waste lamps under Rule R315-273 or they may be managed as hazardous waste in accordance with all applicable requirements of Rules R315-260 through 266 and 268.

(e) Antifreeze. A small quantity handler of universal waste shall manage universal waste antifreeze in a way that prevents releases of any universal waste or component of a universal waste to the environment. The universal waste antifreeze shall be contained in one or more of the following:

(1) A container that remains closed, structurally sound, compatible with the antifreeze, and that lacks evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions; or

(2) A container that does not meet the requirements of Subsection R315-273-13(e)(1), provided that the unacceptable container is overpacked in a container that does meet the requirements of Subsection R315-273-13(e)(1); or

(3) A tank that meets the requirements of 40 CFR 265.190 through 202, except for 40 CFR 265.197(c) and 40 CFR 265.200 and 201, 40 CFR 265 is adopted by reference in R315-265; or

(4) A transport vehicle or vessel that is closed, structurally sound, compatible with the antifreeze, and that lacks evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions.

(f) Aerosol cans. A small quantity handler of universal waste shall manage universal waste aerosol cans in a way that prevents release of any universal waste or component of a universal waste or accelerant to the environment as follows:

(1) A small quantity handler of universal waste shall immediately contain any universal waste aerosol can that shows evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions in a separate individual container. The individual container shall be closed, structurally sound, compatible with the contents of the universal waste aerosol can, and shall lack evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions.

(2) A small quantity handler of universal waste may accumulate universal waste aerosol cans in a specially designated accumulation container provided it is clearly marked for such use. The accumulation container shall be closed, structurally sound, compatible with the contents of the universal waste aerosol can, and shall lack evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions. The universal waste aerosol cans shall be sorted by type and compatibility of contents to ensure that incompatible materials are segregated and managed appropriately in separate accumulation containers.

(3) A small quantity handler of universal waste may puncture universal waste aerosol cans to remove and collect the contents of the aerosol can provided the handler:

(i) Ensures that the universal waste aerosol can is punctured in a manner designed to prevent the release of any universal waste or component of universal waste or accelerant to the environment;

(ii) Ensures that the puncturing operations are performed safely by developing and implementing a written procedure detailing how to safely puncture universal waste aerosol cans. This procedure shall include:

(A) the type of equipment to be used to puncture the universal waste aerosol cans safely;

(B) operation and maintenance of the unit;

(C) segregation of incompatible wastes;

(D) proper waste management practices, i.e., ensuring that flammable wastes are stored away from heat or open flames; and

(E) waste characterization;

(iii) Ensures that a spill clean-up kit is readily available to immediately clean up spills or leaks of the contents of the universal waste aerosol can which may occur during the can-puncturing operation;

(iv) Immediately transfers the contents of the universal waste aerosol can, or puncturing device if applicable, to a container that meets the requirements of Section R315-262-34;

(v) Ensures that the area in which the universal waste aerosol cans are punctured is well ventilated; and

(vi) Ensures that employees are thoroughly familiar with the procedure for sorting and puncturing universal waste aerosol cans, and proper waste handling and emergency procedures, relevant to their responsibilities during normal facility operations and emergencies.

(4)(i) A small quantity handler of universal waste who punctures universal waste aerosol cans to remove the contents of the aerosol can, or who generates other solid waste as a result of the activities listed above, shall determine whether the contents of the universal waste aerosol can, residues and/or other solid wastes exhibit a characteristic of hazardous waste identified in Sections R315-261-20 through 24, or are listed as a hazardous waste identified in Sections R315-261-30 through 35.

(ii) If the contents of the universal waste aerosol can, residues and/or other solid waste exhibit a characteristic of hazardous waste or are listed hazardous wastes, they shall be managed in compliance with all applicable requirements of Rules R315-260 through 266, 268, 270 and 124. The handler is considered the generator of the contents of the universal waste aerosol can, residues, and/or other waste and is subject to the requirements of Rule R315-262. In addition to the Rule R315-262 labeling requirements, the container used to accumulate, store, or transport the hazardous waste contents removed from the punctured universal waste aerosol can shall be labeled with all applicable EPA Hazardous Waste Codes found in Sections R315-261-20 through 24 and Sections R315-261-30 through 35.

(iii) If the contents of the universal waste aerosol can, residues, and/or other solid waste are not hazardous, the handler may manage the waste in a way that is in compliance with applicable federal, state or local solid waste regulations.

R315-273-14. Standards for Universal Waste Management, Standards for Small Quantity Handlers of Universal Waste -- Labeling/Marking.

A small quantity handler of universal waste shall label or mark the universal waste to identify the type of universal waste as specified below:

(a) Universal waste batteries, i.e., each battery, or a container in which the batteries are contained, shall be labeled or marked clearly with any one of the following phrases: "Universal Waste-Battery(ies)," or "Waste Battery(ies)," or "Used Battery(ies);"

(b) A container, or multiple container package unit, tank, transport vehicle or vessel in which recalled universal waste pesticides as described in Subsection R315-273-3(a)(1) are contained shall be labeled or marked clearly with:

(1) The label that was on or accompanied the product as sold or distributed; and

(2) The words "Universal Waste-Pesticide(s)" or "Waste-Pesticide(s);"

(c) A container, tank, or transport vehicle or vessel in which unused pesticide products as described in Subsection R315-273-3(a)(2) are contained shall be labeled or marked clearly with:

(1)(i) The label that was on the product when purchased, if still legible;

(ii) If using the labels described in Subsection R315-273-14(c)(1)(i) is not feasible, the appropriate label as required under the Department of Transportation regulation 49 CFR part 172;

(iii) If using the labels described in Subsections R315-273-14(c)(1)(i) and (ii) is not feasible, another label prescribed or designated by the waste pesticide collection program administered or recognized by a state; and

(2) The words "Universal Waste-Pesticide(s)" or "Waste-Pesticide(s)."

(d)(1) Universal waste mercury-containing equipment, i.e., each device, or a container in which the equipment is contained, shall be labeled or marked clearly with any of the following phrases: "Universal Waste-Mercury Containing Equipment," "Waste Mercury-Containing Equipment," or "Used Mercury-Containing Equipment."

(2) A universal waste mercury-containing thermostat or container containing only universal waste mercury-containing thermostats may be labeled or marked clearly with any of the following phrases: "Universal Waste-Mercury Thermostat(s)," "Waste Mercury Thermostat(s)," or "Used Mercury Thermostat(s)."

(e) Each lamp or a container or package in which such lamps are contained shall be labeled or marked clearly with one of the following phrases: "Universal Waste-Lamp(s)," or "Waste Lamp(s)," or "Used Lamp(s)".

(f) A container, tank, or transport vehicle or vessel in which antifreeze is contained shall be labeled or marked clearly with the words "Universal Waste-[-]antifreeze".[~~or "Waste- antifreeze."~~]

(g) Universal waste aerosol cans, i.e., each can, or a container in which the universal waste aerosol cans are contained or accumulated, shall be labeled or marked clearly with any one of the following phrases: "Universal Waste-Aerosol Can(s)", or "Waste Aerosol Can(s)".

R315-273-30. Standards for Universal Waste Management, Standards for Large Quantity Handlers of Universal Waste -- Applicability.

Sections R315-273-30 through 40 apply to large quantity handlers of universal waste, as defined in Section R315-273-9[~~except that the registration requirement of Subsection R315-273-33(d)(3) and Subsections R315-273-33(d)(6) and (7) do not apply to generators~~].

R315-273-33. Standards for Universal Waste Management, Standards for Large Quantity Handlers of Universal Waste -- Waste Management.

(a) Batteries. A large quantity handler of universal waste shall manage universal waste batteries in a way that prevents releases of any universal waste or component of a universal waste to the environment, as follows:

(1) A large quantity handler of universal waste shall contain any universal waste battery that shows evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions in a container. The container shall be closed, structurally sound, compatible with the contents of the battery, and shall lack evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions.

(2) A large quantity handler of universal waste may conduct the following activities as long as the casing of each individual battery cell is not breached and remains intact and closed, except that cells may be opened to remove electrolyte but shall be immediately closed after removal:

(i) Sorting batteries by type;

(ii) Mixing battery types in one container;

(iii) Discharging batteries so as to remove the electric charge;

(iv) Regenerating used batteries;

(v) Disassembling batteries or battery packs into individual batteries or cells;

(vi) Removing batteries from consumer products; or

(vii) Removing electrolyte from batteries.

(3) A large quantity handler of universal waste who removes electrolyte from batteries, or who generates other solid waste, e.g., battery pack materials, discarded consumer products, as a result of the activities listed above, shall determine whether the electrolyte and/or other solid waste exhibit a characteristic of hazardous waste identified in Sections R315-261-20 through 24.

(i) If the electrolyte and/or other solid waste exhibit a characteristic of hazardous waste, it shall be managed in compliance with all applicable requirements of Rules R315-260 through 266, 268 and 270. The handler is considered the generator of the hazardous electrolyte and/or other waste and is subject to Rule R315-262.

(ii) If the electrolyte or other solid waste is not hazardous, the handler may manage the waste in any way that is in compliance with applicable federal, state or local solid waste regulations.

(b) Pesticides. A large quantity handler of universal waste shall manage universal waste pesticides in a way that prevents releases of any universal waste or component of a universal waste to the environment. The universal waste pesticides shall be contained in one or more of the following:

(1) A container that remains closed, structurally sound, compatible with the pesticide, and that lacks evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions; or

(2) A container that does not meet the requirements of Subsection R315-273-33(b)(1), provided that the unacceptable container is overpacked in a container that does meet the requirements of Subsection R315-273-33(b)(1); or

(3) A tank that meets the requirements of 40 CFR 265.190 through 202, except for 40 CFR 265.197(c) and 40 CFR 265.200 and 201, 40 CFR 265 is adopted by reference in R315-265; or

(4) A transport vehicle or vessel that is closed, structurally sound, compatible with the pesticide, and that lacks evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions.

(c) Mercury-containing equipment. A large quantity handler of universal waste shall manage universal waste mercury-containing equipment in a way that prevents releases of any universal waste or component of a universal waste to the environment, as follows:

(1) A large quantity handler of universal waste shall place in a container any universal waste mercury-containing equipment with non-contained elemental mercury or that shows evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions. The container shall be closed, structurally sound, compatible with the contents of the device, shall lack evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions, and shall be reasonably designed to prevent the escape of mercury into the environment by volatilization or any other means.

(2) A large quantity handler of universal waste may remove mercury-containing ampules from universal waste mercury-containing equipment provided the handler:

(i) Removes and manages the ampules in a manner designed to prevent breakage of the ampules;

(ii) Removes the ampules only over or in a containment device, e.g., tray or pan sufficient to collect and contain any mercury released from an ampule in case of breakage;

(iii) Ensures that a mercury clean-up system is readily available to immediately transfer any mercury resulting from spills or leaks of broken ampules from that containment device to a container that meets the requirements of Section R315-262-34;

(iv) Immediately transfers any mercury resulting from spills or leaks from broken ampules from the containment device to a container that meets the requirements of Section R315-262-34;

(v) Ensures that the area in which ampules are removed is well ventilated and monitored to ensure compliance with applicable OSHA exposure levels for mercury;

(vi) Ensures that employees removing ampules are thoroughly familiar with proper waste mercury handling and emergency procedures, including transfer of mercury from containment devices to appropriate containers;

(vii) Stores removed ampules in closed, non-leaking containers that are in good condition;

(viii) Packs removed ampules in the container with packing materials adequate to prevent breakage during storage, handling, and transportation;

(3) A large quantity handler of universal waste mercury-containing equipment that does not contain an ampule may remove the open original housing holding the mercury from universal waste mercury-containing equipment provided the handler:

(i) Immediately seals the original housing holding the mercury with an air-tight seal to prevent the release of any mercury to the environment; and

(ii) Follows all requirements for removing ampules and managing removed ampules under Subsection R315-273-33(c)(2); and

(4)(i) A large quantity handler of universal waste who removes mercury-containing ampules from mercury-containing equipment or seals mercury from mercury-containing equipment in its original housing shall determine whether the following exhibit a characteristic of hazardous waste identified in Sections R315-261-20 through 24:

(A) Mercury or clean-up residues resulting from spills or leaks and/or

(B) Other solid waste generated as a result of the removal of mercury-containing ampules or housings, e.g., the remaining mercury-containing device.

(ii) If the mercury, residues, and/or other solid waste exhibits a characteristic of hazardous waste, it shall be managed in compliance with all applicable requirements of Rules R315-260 through 266, 268 and 270. The handler is considered the generator of the mercury, residues, and/or other waste and shall manage it in compliance with Rule R315-262.

(iii) If the mercury, residues, and/or other solid waste is not hazardous, the handler may manage the waste in any way that is in compliance with applicable federal, state or local solid waste regulations.

(d) Lamps. A large quantity handler of universal waste shall manage lamps in a way that prevents releases of any universal waste or component of a universal waste to the environment, as follows:

(1) A large quantity handler of universal waste shall contain any lamp in containers or packages that are structurally sound, adequate to prevent breakage, and compatible with the contents of the lamps. Such containers and packages shall remain closed and shall lack evidence of leakage, spillage or damage that could cause leakage under reasonably foreseeable conditions.

(2) A large quantity handler of universal waste shall immediately clean up and place in a container any lamp that is broken and shall place in a container any lamp that shows evidence of breakage, leakage, or damage that could cause the release of mercury or other hazardous constituents to the environment. Containers shall be closed, structurally sound, compatible with the contents of the lamps and shall lack evidence of leakage, spillage or damage that could cause leakage or releases of mercury or other hazardous constituents to the environment under reasonably foreseeable conditions.

(3) A large quantity handler of universal waste may crush universal waste lamps using a drum-top lamp crusher designed specifically for crushing lamps provided that the Large quantity handler submits a drum-top lamp crusher registration application to and receives approval from the Director. The registration application shall demonstrate that the large quantity handler shall operate the drum-top lamp crusher to ensure the following:

(i) The lamps are crushed in a closed accumulation container [~~designed specifically for crushing lamps~~]as specified by the manufacturer of the drum-top lamp crusher;

(ii) The lamps are crushed in a controlled manner that prevents the release of mercury vapor or other contaminants in exceedance of the manufacturer's specifications;

(iii) The drum-top lamp crusher shall have a filtration system consisting of, at a miniumum, a bag filter followed in series by a HEPA filter and an activated carbon filter;

(iv) The drum-top lamp crusher is installed, maintained, and operated in accordance with written procedures developed by the manufacturer of the equipment including specific instructions for the frequency of filter changes;

(v) Filters are either characterized to demonstrate that they are not a hazardous waste or managed as a hazardous waste;

(vi) A spill clean-up kit is available;

(vii) The area in which the drum-top crusher is operated is well ventilated and monitored to ensure compliance with applicable OSHA exposure levels for mercury;

(viii) The employee using the drum-top lamp crusher is trained annually on the written operating, safety, personal protection and maintenance procedures of the system;

(ix) The employee using the drum-top lamp crusher is trained annually in emergency procedures;

(x) An operating record is kept and consists of the following:

(A) the number and size of lamps crushed per calendar day, per calendar month, and per calendar year;

(B) the schedule for the change out of filters;

(C) date and time of filter change out;

(D) date, type, and time of equipment maintenance;

(E) any occurrence of equipment malfunction; and

(F) procedures for preventing equipment malfunctions.

(4) The operating record shall be maintained for at least three years.

(5) When a drum-top crusher is no longer used or is relocated, the area where the crusher was located shall be decontaminated of all mercury and other contaminants caused by the use of the drum-top lamp crusher. A report documenting the decontamination steps as well as supporting analytical data demonstrating successful remediation shall be submitted to the Director for approval within 30 days following completion of decontamination.

(6) The large quantity handler shall provide a closure plan along with a detailed written estimate, in current dollars, of the cost of disposing the drum-top lamp crusher; decontamination of the area surrounding the drum-top lamp crusher, and any analytical costs required to show that decontamination is complete. Drum-top lamp crushers operated by the state or the federal government are exempt from the cost estimate requirement of Subsection R315-273-33(d)(6).

(7) The large quantity handler shall demonstrate financial assurance for the detailed cost estimates determined in Subsection R315-273-33(d)(6) using one of the options in Subsections R315-261-143(a) through (e). Drum-top lamp crushers operated by the state or the federal government are exempt from the financial assurance requirement of Subsection R315-273-33(d)(7).

(8) Crushed universal waste lamps may be managed as universal waste lamps under Rule R315-273 or they may be managed as hazardous waste in accordance with all applicable requirements of Rules R315-260 through 266 and 268.

(e) Antifreeze. A large quantity handler of universal waste shall manage universal waste antifreeze in a way that prevents releases of any universal waste or component of a universal waste to the environment. The universal waste antifreeze shall be contained in one or more of the following:

(1) A container that remains closed, structurally sound, compatible with the antifreeze, and that lacks evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions; or

(2) A container that does not meet the requirements of Subsection R315-273-13(e)(1), provided that the unacceptable container is overpacked in a container that does meet the requirements of Subsection R315-273-13(e)(1); or

(3) A tank that meets the requirements of 40 CFR 265.190 through 202, except for 40 CFR 265.197(c) and 40 CFR 265.200 and 201, 40 CFR 265 is adopted by reference in R315-265; or

(4) A transport vehicle or vessel that is closed, structurally sound, compatible with the antifreeze, and that lacks evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions.

(f) Aerosol cans. A large quantity handler of universal waste shall manage universal waste aerosol cans in a way that prevents release of any universal waste or component of a universal waste or accelerant to the environment as follows:

(1) A large quantity handler of universal waste shall immediately contain any universal waste aerosol can that shows evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions in a separate individual container. The individual container shall be closed, structurally sound, compatible with the contents of the universal waste aerosol can, and shall lack evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions.

(2) A large quantity handler of universal waste may accumulate universal waste aerosol cans in a specially designated accumulation container provided it is clearly marked for such use. The accumulation container shall be closed, structurally sound, compatible with the contents of the universal waste aerosol can, and shall lack evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions. The universal waste aerosol cans shall be sorted by type and compatibility of contents to ensure that incompatible materials are segregated and managed appropriately in separate accumulation containers.

(3) A large quantity handler of universal waste may puncture universal waste aerosol cans to remove and collect the contents of the aerosol can provided the handler:

(i) Ensures that the universal waste aerosol can is punctured in a manner designed to prevent the release of any universal waste or component of universal waste or accelerant to the environment;

(ii) Ensures that the puncturing operations are performed safely by developing and implementing a written procedure detailing how to safely puncture universal waste aerosol cans. This procedure shall include:

(A) the type of equipment to be used to puncture the universal waste aerosol cans safely;

(B) operation and maintenance of the unit;

(C) segregation of incompatible wastes;

(D) proper waste management practices, i.e., ensuring that flammable wastes are stored away from heat or open flames; and

(E) waste characterization;

(iii) Ensures that a spill clean-up kit is readily available to immediately clean up spills or leaks of the contents of the universal waste aerosol can which may occur during the can-puncturing operation;

(iv) Immediately transfers the contents of the universal waste aerosol can, or puncturing device if applicable, to a container that meets the requirements of Section R315-262-34;

(v) Ensures that the area in which the universal waste aerosol cans are punctured is well ventilated; and

(vi) Ensures that employees are thoroughly familiar with the procedure for sorting and puncturing universal waste aerosol cans, and proper waste handling and emergency procedures, relevant to their responsibilities during normal facility operations and emergencies.

(4)(i) A large quantity handler of universal waste who punctures universal waste aerosol cans to remove the contents of the aerosol can, or who generates other solid waste as a result of the activities listed above, shall determine whether the contents of the universal waste aerosol can, residues and/or other solid wastes exhibit a characteristic of hazardous waste identified in Sections R315-261-20 through 24, or are listed as a hazardous waste identified in Sections R315-261-30 through 35.

(ii) If the contents of the universal waste aerosol can, residues and/or other solid waste exhibit a characteristic of hazardous waste or are listed hazardous wastes, they shall be managed in compliance with all applicable requirements of Rules R315-260 through 266, 268, 270 and 124. The handler is considered the generator of the contents of the universal waste aerosol can, residues, and/or other waste and is subject to the requirements of Rule R315-262. In addition to the Rule R315-262 labeling requirements, the container used to accumulate, store, or transport the hazardous waste contents removed from the punctured universal waste aerosol can shall be labeled with all applicable EPA Hazardous Waste Codes found in

Sections R315-261-20 through 24 and Sections R315-261-30 through 35.

(iii) If the contents of the universal waste aerosol can, residues, and/or other solid waste are not hazardous, the handler may manage the waste in a way that is in compliance with applicable federal, state or local solid waste regulations.

R315-273-34. Standards for Universal Waste Management, Standards for Large Quantity Handlers of Universal Waste -- Labeling/Marking.

A large quantity handler of universal waste shall label or mark the universal waste to identify the type of universal waste as specified below:

(a) Universal waste batteries, i.e., each battery, or a container or tank in which the batteries are contained, shall be labeled or marked clearly with any one of the following phrases: "Universal Waste-Battery(ies)," or "Waste Battery(ies)," or "Used Battery(ies);"

(b) A container, or multiple container package unit, tank, transport vehicle or vessel in which recalled universal waste pesticides as described in Subsection R315-273-3(a)(1) are contained shall be labeled or marked clearly with:

(1) The label that was on or accompanied the product as sold or distributed; and

(2) The words "Universal Waste-Pesticide(s)" or "Waste-Pesticide(s);"

(c) A container, tank, or transport vehicle or vessel in which unused pesticide products as described in Subsection R315-273-3(a)(2) are contained shall be labeled or marked clearly with:

(1)(i) The label that was on the product when purchased, if still legible;

(ii) If using the labels described in Subsection R315-273-34(c)(1)(i) is not feasible, the appropriate label as required under the Department of Transportation regulation 49 CFR part 172;

(iii) If using the labels described in Subsections R315-273-34(c)(1)(i) and (1)(ii) is not feasible, another label prescribed or designated by the pesticide collection program; and

(2) The words "Universal Waste-Pesticide(s)" or "Waste-Pesticide(s)."

(d)(1) Mercury-containing equipment, i.e., each device, or a container in which the equipment is contained, shall be labeled or marked clearly with any of the following phrases: "Universal Waste-Mercury Containing Equipment," "Waste Mercury-Containing Equipment," or "Used Mercury-Containing Equipment."

(2) A universal waste mercury-containing thermostat or container containing only universal waste mercury-containing thermostats may be labeled or marked clearly with any of the following phrases: "Universal Waste-Mercury Thermostat(s)," "Waste Mercury Thermostat(s)," or "Used Mercury Thermostat(s)."

(e) Each lamp or a container or package in which such lamps are contained shall be labeled or marked clearly with any one of the following phrases: "Universal Waste-Lamp(s)," or "Waste Lamp(s)," or "Used Lamp(s)".

(f) A container, tank, or transport vehicle or vessel in which antifreeze is contained shall be labeled or marked clearly with the words "Universal Waste-[~~-~~]antifreeze".[~~ or "Waste- antifreeze."~~]

(g) Universal waste aerosol cans, i.e., each can, or a container in which the universal waste aerosol cans are contained or accumulated, shall be labeled or marked clearly with any one of the following phrases: "Universal Waste-Aerosol Can(s)", or "Waste Aerosol Can(s)".

KEY: hazardous waste, universal waste
Date of Enactment or Last Substantive Amendment: [~~August 31, 2017~~]2018
Authorizing, and Implemented or Interpreted Law: 19-6-105; 19-6-106

Health, Family Health and Preparedness, Emergency Medical Services
R426-3
Licensure

NOTICE OF PROPOSED RULE
(Amendment)
DAR FILE NO.: 43257
FILED: 10/15/2018

RULE ANALYSIS

PURPOSE OF THE RULE OR REASON FOR THE CHANGE: These changes update language to be consistent with Title 26-8a, replace the existing emergency rule for ambulance providers, remove language for air ambulance licensing, and amend mutual aid requirements for ambulance providers.

SUMMARY OF THE RULE OR CHANGE: These amendments update language to be consistent with Title 26-8a by changing the term "licensed" to include individuals, and delete language for the licensure of air ambulance providers since a new rule (R426-10) is being concurrently submitted to address those requirements. These amendments also reflect an expectation of mutual aid support to adjoining EMS service areas for ground ambulance providers.

STATUTORY OR CONSTITUTIONAL AUTHORIZATION FOR THIS RULE: Section 26-8a

ANTICIPATED COST OR SAVINGS TO:
♦ THE STATE BUDGET: These proposed rule changes are not expected to have any fiscal impact on state government revenues or expenditures because they are for the changing of terminology and documentation for licensed ambulance providers. State expenditures and staff time are not affected.
♦ LOCAL GOVERNMENTS: A possible fiscal benefit will result to all licensed ambulance service providers by removing the requirement for a written mutual aid agreement with adjoining geographical service areas as a condition of licensing or license renewal.

WASTE MANAGEMENT AND RADIATION CONTROL BOARD
Executive Summary
Public Comment - Proposed Rule Changes
UAC R313-28-31, Use of X-Rays in the Healing Arts, General and Administrative Requirements
January 10, 2019

What is the issue before the Board?	Final approval from the Board is needed to adopt changes to UAC R313-28-31 to clarify that x-ray equipment purchased for use in Utah must be certified and identified as meeting requirements set by the FDA for x-ray equipment being used in the United States as required by 21 CFR 1010.2 and 1010.3.
What is the historical background or context for this issue?	At the Board meeting on October 11, 2018, the Board approved the proposed changes to UAC R313-28-31 to be filed with the Office of Administrative Rules for publication in the Utah State Bulletin. The proposed rule changes were published in the November 1, 2018 issue of the Utah State Bulletin (Vol. 2018, No. 21). The public comment period for this rulemaking ended on December 3, 2018. No comments were received. Selected pages from the Utah State Bulletin showing the publication of the propose changes follow this Executive Summary.
What is the governing statutory or regulatory citation?	The Board is authorized under Subsection 19-6-104 to make rules that are necessary to implement the provision of the Radiation Control Act. The rule changes also meet existing DEQ and state rulemaking procedures.
Is Board action required?	Yes. Board approval for final adoption of the rule changes is necessary.
What is the Division Director's recommendation?	The Director recommends the Board approve final adoption of the rule changes to UAC R313-28-31 as published in the November 1, 2018 issue of the Utah State Bulletin and set an effective date of January 14, 2019.
Where can more information be obtained?	Please contact Tom Ball (801) 536-0251, tball@utah.gov or Rusty Lundberg (801) 536-4257, rlundberg@utah.gov.

UTAH STATE BULLETIN

OFFICIAL NOTICES OF UTAH STATE GOVERNMENT
Filed October 02, 2018, 12:00 a.m. through October 15, 2018, 11:59 p.m.

Number 2018-21
November 01, 2018

Nancy L. Lancaster, Managing Editor

The *Utah State Bulletin (Bulletin)* is an official noticing publication of the executive branch of Utah state government. The Office of Administrative Rules, part of the Department of Administrative Services, produces the *Bulletin* under authority of Section 63G-3-402.

The Portable Document Format (PDF) version of the *Bulletin* is the official version. The PDF version of this issue is available at https://rules.utah.gov/. Any discrepancy between the PDF version and other versions will be resolved in favor of the PDF version.

Inquiries concerning the substance or applicability of an administrative rule that appears in the *Bulletin* should be addressed to the contact person for the rule. Questions about the *Bulletin* or the rulemaking process may be addressed to: Office of Administrative Rules, PO Box 141007, Salt Lake City, Utah 84114-1007, telephone 801-538-3003. Additional rulemaking information and electronic versions of all administrative rule publications are available at https://rules.utah.gov/.

The information in this *Bulletin* is summarized in the *Utah State Digest (Digest)* of the same volume and issue number. The *Digest* is available by e-mail subscription or online. Visit https://rules.utah.gov/ for additional information.

Office of Administrative Rules, Salt Lake City 84114

Utah state bulletin.
Semimonthly.
1. Delegated legislation--Utah--Periodicals. 2. Administrative procedure--Utah--Periodicals.
I. Utah. Office of Administrative Rules.

KFU440.A73S7
348.792'025--DDC 85-643197

TABLE OF CONTENTS

~~(b) the Board's coordination efforts with the Department of Health - State Division of Substance Abuse and Mental Health and the state suicide prevention coordinator.~~]

[~~B. LEA responsibilities:~~

~~(1)~~](3) An LEA[~~s~~] shall implement youth suicide prevention programs for students in secondary grades, including grades 7 through 12 and grade 6, if grade 6 is part of a secondary grade model.

[~~(2)~~](4) [~~The programs~~]An LEA's youth suicide prevention program shall include the components provided in Subection [~~53A-15-1301~~]53G-9-702 (2).

[~~(3) LEAs shall update bullying, cyber-bullying, harassment, hazing, and retaliation policy(ies) consistent with Section 53A-11a-301 and R277-613, including~~](5) An LEA shall establish a policy governing the required parent notification outlined in Sections [~~53A-11a-203~~]53G-9-604(2) and [~~53A-11a-301~~]53G-9-605(3)(e) and Subsection R277-613-4[~~C and D~~].

[~~(4)~~](6) An LEA[~~s~~] shall provide necessary reporting information consistent with Subection [~~53A-15-1301~~]53G-9-702[~~(3)~~](7) [~~and (5)~~] for the Board's report on the coordination of suicide prevention programs and seminar program implementation to the Legislature's Education Interim Committee.

KEY: public schools, suicide prevention programs, parent notifications, seminars
Date of Enactment or Last Substantive Amendment: October 9, 2014
Authorizing, and Implemented or Interpreted Law: Art X Sec 3; [~~53A-1-401~~]53E-3-401(3)

Environmental Quality, Waste Management and Radiation Control, Radiation
R313-28-31
General and Administrative Requirements

NOTICE OF PROPOSED RULE
(Amendment)
DAR FILE NO.: 43253
FILED: 10/11/2018

RULE ANALYSIS

PURPOSE OF THE RULE OR REASON FOR THE CHANGE: X-ray inspectors from the Division are finding x-ray equipment being used in medical facilities in Utah that have been purchased from oversees sources. In some cases, this equipment does not meet the safety requirements set forth in this rule making the use of the equipment a potential hazard to the health of the operator and the patient. In all cases, it has been determined that the equipment was not certified and identified as being approved by the federal Food and Drug Administration (FDA) for use in the United States. The purpose of this amendment is to clarify that x-ray equipment purchased for use in Utah must be certified and identified as meeting requirements set by the FDA for x-ray equipment being used in the United States as required by 21 CFR 1010.2 and 1010.3.

SUMMARY OF THE RULE OR CHANGE: Subsection R315-28-31(a) is being added to this rule. The subsection clarifies that x-ray equipment purchased for use in Utah shall be FDA approved for use in the United States and shall be certified and identified in accordance with 21 CFR 1010.2 and 1010.3.

STATUTORY OR CONSTITUTIONAL AUTHORIZATION FOR THIS RULE: Section 19-3-104 and Section 19-6-104

ANTICIPATED COST OR SAVINGS TO:
♦ THE STATE BUDGET: There will be no cost or savings to the state due to this amendment because this amendment does not add any new requirements or remove any existing requirements. X-ray equipment manufactured and sold for use in the United States is already required by the federal FDA to be certified and identified as approved for use in the United States. This amendment simply places this requirement in state rules.
♦ LOCAL GOVERNMENTS: There will be no cost or savings to local governments due to this amendment because this amendment does not add any new requirements or remove any existing requirements. X-ray equipment manufactured and sold for use in the United States is already required by the federal FDA to be certified and identified as approved for use in the United States. This amendment simply places this requirement in state rules.
♦ SMALL BUSINESSES: There will be no cost or savings to small businesses due to this amendment because this amendment does not add any new requirements or remove any existing requirements. X-ray equipment manufactured and sold for use in the United States is already required by the federal FDA to be certified and identified as approved for use in the United States. This amendment simply places this requirement in state rules.
♦ PERSONS OTHER THAN SMALL BUSINESSES, BUSINESSES, OR LOCAL GOVERNMENTAL ENTITIES: There will be no cost or savings to persons other than small businesses, businesses or local government entities due to this amendment because this amendment does not add any new requirements or remove any existing requirements. X-ray equipment manufactured and sold for use in the United States is already required by the federal FDA to be certified and identified as approved for use in the United States. This amendment simply places this requirement in state rules.

COMPLIANCE COSTS FOR AFFECTED PERSONS: There should be no additional compliance costs for affected persons because federal rule already requires x-ray equipment manufactured and sold for use in the United States to meet FDA requirements. Anyone who has purchased equipment that does not meet these requirements is already in violation of federal rules and should not have purchased the equipment. When an inspector finds this type of equipment in use the facility is informed that they cannot use the

equipment and must purchase equipment that meets the requirements. It is unknown how many persons may have purchased equipment that does not meet the requirements so the potential additional cost of compliance is inestimable.

COMMENTS BY THE DEPARTMENT HEAD ON THE FISCAL IMPACT THE RULE MAY HAVE ON BUSINESSES: It is not anticipated that adoption of this rule amendment will have any fiscal impact on businesses because they should already be in compliance with federal rules. This amendment simply reinforces the fact that the federal rule applies in Utah and provides x-ray inspectors with a Utah rule to cite when they encounter facilities with equipment that does not meet the requirements.

THE FULL TEXT OF THIS RULE MAY BE INSPECTED, DURING REGULAR BUSINESS HOURS, AT:

ENVIRONMENTAL QUALITY
WASTE MANAGEMENT AND RADIATION CONTROL, RADIATION
SECOND FLOOR
195 N 1950 W
SALT LAKE CITY, UT 84116-4880
or at the Office of Administrative Rules.

DIRECT QUESTIONS REGARDING THIS RULE TO:
♦ Rusty Lundberg by phone at 801-536-4257, by FAX at 801-536-0222, or by Internet E-mail at rlundberg@utah.gov
♦ Thomas Ball by phone at 801-536-0251, or by Internet E-mail at tball@utah.gov

INTERESTED PERSONS MAY PRESENT THEIR VIEWS ON THIS RULE BY SUBMITTING WRITTEN COMMENTS NO LATER THAN AT 5:00 PM ON 12/03/2018

THIS RULE MAY BECOME EFFECTIVE ON: 12/14/2018

AUTHORIZED BY: Scott Anderson, Director

Appendix 1: Regulatory Impact Summary Table*

Fiscal Costs	**FY 2019**	**FY 2020**	**FY 2021**
State Government	$0	$0	$0
Local Government	$0	$0	$0
Small Businesses	$0	$0	$0
Non-Small Businesses	$0	$0	$0
Other Person	$0	$0	$0
Total Fiscal Costs:	**$0**	**$0**	**$0**
Fiscal Benefits			
State Government	$0	$0	$0
Local Government	$0	$0	$0
Small Businesses	$0	$0	$0
Non-Small Businesses	$0	$0	$0
Other Persons	$0	$0	$0
Total Fiscal Benefits:	**$0**	**$0**	**$0**
Net Fiscal Benefits:	**$0**	**$0**	**$0**

***This table only includes fiscal impacts that could be measured. If there are inestimable fiscal impacts, they will not be included in this table. I nestimable impacts for State Government, Local Government, Small Businesses and Other Persons are described in the narrative. Inestimable impacts for Non-Small Businesses are described in Appendix 2.**

Appendix 2: Regulatory Impact to Non-Small Businesses
This rule change is not expected to have any fiscal impact on non-small businesses revenues or expenditures because any business operating x-ray equipment in Utah must already have equipment that complies with federal FDA requirements that are cited in this rule amendment.

The head of Department of Environmental Quality, Alan Matheson, has reviewed and approved this fiscal analysis.

****"Non-small business" means a business employing 50 or more persons; "small business" means a business employing fewer than 50 persons.**

R313. Environmental Quality, Waste Management and Radiation Control, Radiation.
R313-28. Use of X-Rays in the Healing Arts.
R313-28-31. General and Administrative Requirements.

(1) Persons shall not make, sell, lease, transfer, lend, or install x-ray equipment or the accessories used in connection with x-ray equipment unless the accessories and equipment, when properly placed in operation and properly used, will meet the applicable requirements of these rules.

(a) X-ray equipment shall be FDA approved for use in the United States and shall be certified in accordance with 21 CFR 1010.2 and identified in accordance with 21 CFR 1010.3.

(2) The registrant shall be responsible for directing the operation of the x-ray machines which are under the registrant's administrative control. The registrant or registrant's agent shall assure that the requirements of R313-28-31(2)(a) through R313-28-31(2)(i) are met in the operation of the x-ray machines.

(a) An x-ray machine which does not meet the provisions of these rules shall not be operated for diagnostic purposes, when directed by the Director.

(b) Individuals who will be operating the x-ray equipment shall be instructed in the registrant's written radiation safety program and be qualified in the safe use of the equipment. Required operator qualifications are listed in R313-28-350.

(c) The registrant of a facility shall create and make available to x-ray operators written safety procedures, including patient holding and restrictions of the operating technique required for the safe operation of the x-ray systems. Individuals who operate x-ray systems shall be responsible for complying with these rules.

(d) Except for individuals who cannot be moved out of the room and the patient being examined, only the staff and ancillary personnel or other individuals needed for the medical procedure or training shall be present in the room during the radiographic exposure and shall be positioned as follows:

(i) individuals other than the patient shall be positioned so that no part of the body will be struck by the useful beam unless protected by not less than 0.5 mm lead equivalent material;

(ii) the x-ray operator, other staff, ancillary personnel and other individuals needed for the medical procedure shall be protected from primary beam scatter by protective aprons or barriers unless it can be shown that by virtue of distances employed, EXPOSURE levels are reduced to the limits specified in R313-15-201; and

(iii) patients who are not being examined and cannot be removed from the room shall be protected from the primary beam scatter by whole body protective barriers of not less than 0.25 mm lead equivalent material or shall be so positioned that the nearest portion of the body is at least two meters from both the tube head and nearest edge of the image receptor.

(e) For patients who have not passed reproductive age, gonad shielding of not less than 0.5 mm lead equivalent material shall be used during radiographic procedures in which the gonads are in the useful beam, except for cases in which this would interfere with the diagnostic procedure.

(f) Individuals shall be exposed to the useful beam for healing arts purposes only when the exposure has been specifically ordered and authorized by a licensed practitioner of the healing arts after a medical consultation. Deliberate exposures for the following purposes are prohibited:

(i) exposure of an individual for training, demonstration or other non-healing arts purposes; and

(ii) exposure of an individual for the purpose of healing arts screening except as authorized by R313-28-31(2)(i).

(g) When a patient or film must be provided with auxiliary support during a radiation exposure:

(i) mechanical holding devices shall be used when the technique permits. The written procedures, required by R313-28-31(2)(c), shall list individual projections where mechanical holding devices can be utilized;

(ii) written safety procedures, as required by R313-28-31(2)(c), shall indicate the requirements for selecting an individual to hold patients or films and the procedure that individual shall follow;

(iii) the individual holding patients or films during radiographic examinations shall be instructed in personal radiation safety and protected as required by R313-28-31(2)(d)(i);

(iv) Individuals shall not be used routinely to hold film or patients;

(v) In those cases where the patient must hold the film, except during intraoral examinations, portions of the body other than the area of clinical interest struck by the useful beam shall be protected by not less than 0.5 mm lead equivalent material; and

(vi) Facilities shall have protective aprons and gloves available in sufficient numbers to provide protection to personnel who are involved with x-ray operations and who are otherwise not shielded.

(h) Personnel monitoring. Individuals who are associated with the operation of an x-ray system are subject to the applicable requirements of R313-15.

(i) Healing arts screening. Persons proposing to conduct a healing arts screening program shall not initiate the program without prior approval of the Director. When requesting approval, that person shall submit the information outlined in R313-28-400. If information submitted becomes invalid or outdated, the Director shall be notified immediately.

(3) Maintenance of records and information. The registrant shall maintain at least the following information for each x-ray machine:

(a) model numbers of major components;

(b) record of surveys or calculations to demonstrate compliance with R313-15-302, calibration, maintenance and modifications performed on the x-ray machine; and

(c) a shielding design report for the x-ray suite which states assumed values for workload and use factors and includes a drawing of surrounding areas showing assumed values for occupancy factors.

(4) X-ray records. Facilities shall maintain an x-ray record containing the patient's name, the types of examinations, and the dates the examinations were performed. When the patient or film must be provided with human auxiliary support, the name of the human holder shall be recorded. The registrant shall retain these records for three years after the record is made.

(5) Portable or mobile equipment shall be used only for examinations where it is impractical to transfer the patient to a stationary radiographic installation.

(6) Hand-held medical x-ray systems. X-ray equipment designed to be hand-held shall comply with Section R313-28-31, excluding Subsection R313-28-31(5), and R313-28-52, excluding Subsections R313-28-52(8)(b)(i) and (ii).

(a) When operating hand-held equipment for which it is not possible for the operator to remain at least six feet from the x-ray machine during x-ray exposure, protective aprons of at least 0.5 millimeter lead equivalence shall be provided for the operator to protect the operator's torso and gonads from backscatter radiation;

(b) In addition to the dose limits in R313-15-301, operators of hand-held x-ray equipment shall ensure that members of the public that may be exposed to scatter radiation or primary beam transmission from the hand-held device are not exposed above 2 milliroentgen per hour;

(i) Operators will ensure that members of the public likely to be exposed to greater than 2 milliroentgen per hour will be provided protective aprons of at least 0.5 millimeter lead equivalence or are moved to a distance such that the exposure rate to the individual is below 2 milliroentgen per hour; and

(c) In addition to the requirements of Subsection R313-28-350(1), each operator of hand-held x-ray equipment shall complete the training program supplied by the manufacturer prior to using the x-ray unit. Records of training shall be maintained on file for examination by an authorized representative of the Director.

(7) Procedures and auxiliary equipment designed to minimize patient and personnel exposure commensurate with the needed diagnostic information shall be utilized.

(a) The speed of the screen and film combinations used shall be the fastest speed consistent with the diagnostic objective of the examinations. Film cassettes without intensifying screens shall not be used for routine diagnostic radiological imaging, with the exception of standard film packets for intra-oral use in dental radiography. If the requirements of R313-28-31(6)(a) cannot be met, an exemption may be requested pursuant to R313-12-55.

(b) The radiation exposure to the patient shall be the minimum exposure required to produce images of good diagnostic quality.

(c) X-ray systems, other than fluoroscopic, computed tomography, dental or veterinary units, shall not be utilized in procedures where the source to patient distance is less than 30 centimeters.

KEY: dental, X-rays, mammography, beam limitation
Date of Enactment or Last Substantive Amendment: [~~March 24, 2015~~|2018]
Notice of Continuation: July 1, 2016
Authorizing, and Implemented or Interpreted Law: 19-3-104; 19-6-107

Environmental Quality, Waste Management and Radiation Control, Waste Management
R315-273
Standards for Universal Waste Management

NOTICE OF PROPOSED RULE
(Amendment)
DAR FILE NO.: 43252
FILED: 10/11/2018

RULE ANALYSIS

PURPOSE OF THE RULE OR REASON FOR THE CHANGE: The purpose of these amendments to Rule R315-273 is to fix some errors found in this rule since the last rule amendment in 2016, update this rules for lamp crushers so that they reflect the current manufacturing and operating standards for lamp crushers, remove some language that exempts lamp crushers from registration that does not meet the intent of this rule, and add propylene glycol to the definition of antifreeze.

SUMMARY OF THE RULE OR CHANGE: Antifreeze was added to this rule in 2016. Since that time, the Division of Waste Management and Radiation Control (Division) has learned that propylene glycol is frequently used as a substitute for ethylene glycol in low toxicity, environmentally friendly automotive antifreeze. The Division is aware that auto repair and maintenance shops do not discriminate between ethylene glycol and propylene glycol when flushing radiators so both chemicals are mixed together in collection containers prior to being recycled or disposed. In order to continue to encourage the recycling of waste antifreeze and avoid any potential compliance issues at facilities where the two chemicals are mixed together, the Division is adding propylene glycol to the definition of antifreeze at Subsection R315-273-9(c). Language found in Sections R315-273-10 and R315-273-30 that exempts generators from having to register their lamp crushers is being deleted from this rule. No justification can be found for this exemption and a recent review of this rule determined that this exemption does not meet the intent of this rule which is to have all lamp crushers registered. Subsections R315-273-13(d)(3)(i) and R315-273-33(d)(3)(i) require the accumulation container used with a drum top lamp crusher to be designed specifically for crushing lamps. No such container exists. Instead, drum top lamp crushers are designed to be attached to open top 55-gallon drums. Therefore, the language is being changed to state that the handler should use an accumulation container specified by the manufacturer of the lamp crusher. Language found in Subsections R315-273-13(d)(3)(iii) and R315-273-33(d)(3)(iii) specifying that a lamp crusher shall have a bag filter followed by a HEPA filter and an activated carbon filter is being changed to state that this configuration is the minimum requirement. Many lamp crushers have more filters than the three specified in this rule and the Division does not want to exclude handlers from using lamp crushers with more than three filters. The term “Waste-antifreeze” is being deleted from Subsections R315-273-14(f) and R315-272-34(f) to allow facilities managing waste antifreeze to use this term to label containers of waste antifreeze that is not being managed as a hazardous waste or as a universal waste. A typographical error is being fixed at Subsection R315-273-6(a) where the subsections were numbered (1), (2), and (4). The 4 is being changed to a 3. Typographical errors at Subsections R315-273-14(f) and R315-273-34(f) where there are extra spaces in the terms “Universal Waste-antifreeze”. The extra spaces are being deleted.

STATUTORY OR CONSTITUTIONAL AUTHORIZATION FOR THIS RULE: Section 19-6-104 and Section 19-6-105 and Section 19-6-106

ANTICIPATED COST OR SAVINGS TO:
♦ THE STATE BUDGET: These rule changes will not affect the state budget because only one state agency operates a registered drum top lamp crusher and no state agencies are exempt from having to register a drum top lamp crusher. It is not anticipated that the changes made by these amendments will increase or decrease the cost of operating the one registered drum top lamp crusher. Any state agencies that may be recycling waste antifreeze can continue to do so with the added benefit of being able to legally recycle waste antifreeze containing propylene glycol along with ethylene glycol.

WASTE MANAGEMENT AND RADIATION CONTROL BOARD
Executive Summary
Mammography Imaging Medical Physicists
January 10, 2019

What is the issue before the Board?	Approval of a new Mammography Imaging Medical Physicist.
What is the historical background or context for this issue?	Individuals referred to as Mammography Imaging Medical Physicists (MIMP) submit an application for review of qualifications to be Certified by the Board annually. The physicists perform radiation surveys and evaluate the quality control programs of the facilities in Utah providing mammography examinations. A new application has been received from Joseph McDonald, PhD, to be certified as a MIMP. Division staff reviewed the applicant's qualifications. Dr. McDonald meets the requirements detailed in R313-28-140.
What is the governing statutory or regulatory citation?	In accordance with R313-28-140 of the Utah Administrative Code, the Board may certify individuals who meet the qualifications listed in the rules to perform surveys and evaluate quality control programs of facilities in Utah providing mammography examinations.
Is Board action required?	Yes.
What is the Division Director's recommendation?	The Director recommends that a certificate of approval be issued to the applicant.
Where can more information be obtained?	Please contact Lisa Mechem, DVM, at (801) 536-4286 or via email at "lisamechem@utah.gov"

WASTE MANAGEMENT AND RADIATION CONTROL BOARD
Executive Summary
REQUEST FOR A SITE-SPECIFIC TREATMENT VARIANCE
Energy*Solutions*, LLC
January 10, 2019

What is the issue before the Board?	On November 20, 2018, Energy*Solutions*, LLC submitted a request to the Director of the Division of Waste Management and Radiation Control for a one-time site-specific treatment variance from the Utah Hazardous Waste Management Rules. Energy*Solutions* seeks authorization to receive Cemented Uranium Extraction Process Residues for disposal.
What is the historical background or context for this issue?	The Mixed Waste Facility proposes to receive up to 1,000 cubic feet of cemented monoliths containing enriched uranium residuals. This material retains hazardous waste codes for barium, cadmium, chromium, lead and spent solvents. The generator has encapsulated the waste in concrete for security reasons. Energy*Solutions* proposes to receive this waste for macroencapsulation in the Mixed Waste Landfill Cell rather than chemical stabilization, as required. This request is based on the fact that the waste has already been encapsulated in concrete at the generator's site. Treating this waste by the required method would mean grinding the waste and potentially exposing workers to unnecessary contamination. The proposed treatment will further encapsulate the waste and protect it from contact with precipitation, thereby decreasing the potential of leaching. A notice for public comment was published in the Salt Lake Tribune, the Deseret News and the Tooele County Transcript Bulletin on December 11, 2018. The comment period began December 11, 2018, and will end January 10, 2019.
What is the governing statutory or regulatory citation?	Variances are provided for in 19-6-111 of the Utah Solid and Hazardous Waste Act. This is a one-time site-specific variance from an applicable treatment standard as allowed by R315-268.44 of the Utah Administrative Code.
Is Board action required?	Yes, this is an action item before the Board.

What is the Division Director's recommendation?	The Director recommends approval of this variance request, if no adverse comments are received by 5pm on January 10, 2019. The Director's recommendation of approval of this variance is based on the following findings: the proposed alternative treatment method meets the regulatory basis for a variance, will be as safe to human health and the environment as the required method, and the required method would create additional waste, and require waste handling that could possibly expose workers to unnecessary contact with the waste.
Where can more information be obtained?	For technical questions, please contact Otis Willoughby (801) 536-0220. For legal questions, please contact Bret Randall at (801) 536-0284.

ENERGYSOLUTIONS

November 20, 2018 CD18-0211

Mr. Scott T. Anderson
Director
Division of Waste Management and Radiation Control
195 North 1950 West
Salt Lake City, UT 84114-4880

Subject: EPA ID Number UTD982598898 - Request for a Site-Specific Treatment Variance for Cemented Uranium Extraction Process Residues

Dear Mr. Anderson:

Energy*Solutions* hereby requests an exemption from the treatment standards described in Utah Administrative Code (UAC) R315-40(a)(2) for uranium extraction process residuals that retain the hazardous waste codes D005 (barium); D006 (cadmium); D007 (chromium); D008 (lead); D030 (2,4-dinitrotoluene); D032 (hexachlorobenzene) and F001, F002, and F005 (spent solvents) and are encased in cement. This exemption is requested for the purposes of safety, security, and transportation of the radioactive waste. This request is submitted in accordance with the requirements of UAC R315-260-19.

The regulatory requirement authorizing this request is found in UAC R315-268-44 which allows a site-specific variance from an applicable treatment standard provided the following condition is met:

> *UAC R315-268-44(h)(2) It is inappropriate to require the waste to be treated to the level specified in the treatment standard, or by the method specified as the treatment standard, even though such treatment is technically possible.*

This variance is being requested for approximately 1,000 cubic feet of cemented uranium extraction process residuals from Energy*Solutions* generator 9061-06. The waste is generated as part of a uranium recovery process that involves creating an enriched uranium contaminated ash through a thermal process and then recovering the enriched uranium through an organic solvent extraction process. The residual waste from this extraction system is collected in small cans (~ 2 ½ gallons each) and stored at the generator's facility. The process residuals within these cans are in the form of an ash generated through this process. The process residuals within the cans have been characterized through a random sampling and analysis process. At the beginning of this

campaign, approximately 2,000 cans of process residues were collected and stored by the generator. The process is ongoing and additional cans are being generated every year. Further, due to safety concerns, some of the cans are being split prior to the repackaging process described below; thereby generating more total material for disposal.

F-listed solvent codes within this waste are derived from rags that are burned in a furnace in order to recover the uranium present within them. None of the F-listed constituents were present above their respective treatment standard concentrations within the random characterization samples of the process residues. The random characterization samples were also analyzed for metals using the Toxicity Characteristic Leaching Procedure (TCLP). These samples detected elevated concentrations of barium (up to 6,740 mg/L TCLP), cadmium (up to 16.4 mg/L TCLP), chromium (up to 15.2 mg/L TCLP), and lead (up to 10.5 mg/L TCLP). Based on these elevated metal concentrations, the characteristic waste codes D005, D006, D007, and D008 were applied to the process residue. Slightly elevated concentrations of 2,4-dinitrotoluene (D030) and hexachlorobutadiene (D032) were also detected in separate analyses. The residue may potentially contain these codes also.

The uranium content within the process residues is enriched. From a health and safety standpoint, the enrichment makes the waste more hazardous to employees managing the waste. Further, enriched material has increased security concerns and must be managed appropriately. To ensure the enriched uranium concentration limits required for worker safety, security, and transportation of this waste are met, appropriate packaging procedures were created and are currently being utilized at the generator's facility. These packaging procedures include repackaging the cans into 16-gallon drums and filling the void spaces with cement; formal treatment for the elevated metals concentrations is not performed during this process. The generator has assessed other options, including treatment for the hazardous constituents; however, additional processing introduced unacceptable hazards from a health and safety, and security viewpoint. Additionally, the waste within the cans is inherently safe from a criticality aspect and the generator concluded that it is unwise to perform extra processing that could potentially change this aspect. Furthermore, encasing enriched uranium within concrete is the preferred method of stabilization as recommended by the Nuclear Regulatory Commission (NRC). The waste material packaged in these 16-gallon monolithic forms is inherently safe and is the form that will be shipped and received at the Energy*Solutions* Clive facility.

The characteristic hazardous waste codes associated with the process residues has numerical concentration-based treatment standards based upon the leachability of the contaminants. Treatment of the monolithic form for these concentration-based treatment

standards would entail a process that includes shredding of the monolith followed by mixing with a stabilizing reagent in a permitted mixer. Both of these steps could mobilize the enriched uranium and possibly cause airborne contamination, increasing the potential for releases to the environment as well as the potential for personnel exposure; thereby violating radiation protection (ALARA) principles. Also, the shredding of the solidified uranium ash results in a more accessible form of enriched uranium with potential security ramifications.

Energy*Solutions* proposes to macroencapsulate the waste, thereby isolating the waste from potential leaching media. Macroencapsulation is a permitted process utilized at the Clive facility that significantly reduces the potential for migration (leaching) of waste. Macroencapsulation requires less handling of the waste and creates a waste form for disposal that is protective of human health and the environment. Macroencapsulation also adds a further level of security restricting access to the enriched uranium.

In summary, a variance should be granted based upon three considerations:

1. for both health and security reasons, enriched uranium concentration within the waste precludes actual treatment of the waste;

2. processing this waste in preparation for stabilization treatment would increase worker exposures and the potential for releases to the environment; and

3. the leachability of the waste would be significantly reduced through macroencapsulation, thereby protecting human health and the environment.

Energy*Solutions* requested this same variance for this generator in letters dated July 20, 2007; July 28, 2008; July 15, 2009; July 15, 2010; July 28, 2011; August 13, 2012; July 15, 2013; July 25, 2015; November 4, 2015; and October 27, 2016. These previous requests were approved on September 13, 2007; September 13, 2008; September 10, 2009; September 9, 2010; September 8, 2011; September 13, 2012; September 12, 2013; August 14, 2014; December 10, 2015; January 12, 2017, and September 27, 2017.

Shipments began in April, 2008 and have been relatively continuous since that time. Since the last variance was approved, Energy*Solutions* has received approximately 900 cubic feet of this waste (the 16-gallon monoliths). Energy*Solutions* has received approximately 9,440 cubic feet of this waste since the first variance approval in 2008. This variance request is for the ongoing processing and disposal of additional uranium extraction process residues created by the generator.

Energy*Solutions* requests that a variance be granted to allow the receipt, macroencapsulation treatment and disposal of approximately 1,000 cubic feet of cemented uranium extraction process residuals that retain hazardous waste codes. Upon approval of this variance, the monolithic waste will be managed as debris.

The name, phone number, and address of the person who should be contacted to notify Energy*Solutions* of decisions by the Director is:

Mr. Vern C. Rogers
Manager, Compliance and Permitting
Energy*Solutions* LLC
299 South Main Street, Suite 1700
Salt Lake City, UT 84111
(801) 649-2000

Should there be any questions to this request, please contact me at 801-649-2144.

Sincerely,

Timothy L. Orton, P.E.
Environmental Engineer and Manager

cc: Don Verbica, DWMRC

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.