



State of Utah

SPENCER J. COX
Governor

DEIDRE HENDERSON
Lieutenant Governor

Department of
Environmental Quality

Kimberly D. Shelley
Executive Director

DIVISION OF WASTE MANAGEMENT
AND RADIATION CONTROL

Douglas J. Hansen
Director

A meeting of the Waste Management and Radiation Control Board has been scheduled for July 14, 2022, at 1:30 pm at the Utah Department of Environmental Quality, (Multi-Agency State Office Building) Conference Room #1015, 195 North 1950 West, SLC.

Board members and interested persons may participate electronically/telephonically.

Join via the Internet: meet.google.com/gad-sxsd-uvs
Join via the Phone: (US) +1 978-593-3748 PIN: 902 672 356#

AGENDA

- I. Call to Order.
- II. Public Comments on Agenda Items.
- III. Declarations of Conflict of Interest.
- IV. Approval of the meeting minutes for the June 9, 2022, Board meeting Tab 1
(Board Action Item)
- V. Petroleum Storage Tanks Update..... Tab 2
- VI. Underground Storage Tank Rules..... Tab 3
 - A. Final adoption of proposed changes to Underground Storage Tank Rules R311-200, 201, 203, 204, 205, 206, 207, 208, 211, and 212 **(Board Action Item)**.
- VII. Other Business.
 - A. Miscellaneous Information Items.
 - B. Scheduling of next Board meeting (August 11, 2022).
- VIII. Adjourn.

In compliance with the Americans with Disabilities Act, individuals with special needs (including auxiliary communicative aids and services) should contact Larene Wyss, Office of Human Resources at (801) 536-4284, Telecommunications Relay Service 711, or by email at "lwyss@utah.gov".

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Waste Management and Radiation Control Board Meeting Minutes
Utah Department of Environmental Quality
Multi-Agency State Office Building (Conf. Room #1015)
195 North 1950 West, SLC
June 9, 2022
1:30 p.m.

Board Members Participating at Anchor Location: Brett Mickelson (Chair), Dennis Riding (Vice-Chair), Kim Shelley, Steve McIff, Shane Whitney

Board Members Participating Virtually: Danielle Endres, Mark Franc, Nathan Rich, Vern Rogers, Scott Wardle

Board Members Absent/Excused: Richard Codell

UDEQ Staff Members Participating at Anchor Location:

Brent Everett, Doug Hansen, Morgan Atkinson, Lauren Hawkes, Jalynn Knudsen, Arlene Lovato, Stevie Norcross, Mike Pecorelli, Bret Randall, Elisa Smith, Otis Willoughby

Other UDEQ employees and interested members of the general public also participated either electronically or telephonically.

I. Call to Order.

Chairman Mickelson called the meeting to order at 1:30 pm. Roll call of Board members was conducted (see above).

II. Public Comments on Agenda Items – None.

III. Declarations of Conflict of Interest.

Vern Rogers declared a conflict of interest and will be abstaining from voting on Agenda Item VI. A. & B. (EnergySolutions variance requests).

IV. Approval of the meeting minutes from the May 12, 2022 Board meeting (Board Action Item).

It was moved by Danielle Endres and seconded by Scott Wardle and UNANIMOUSLY CARRIED to approve the May 12, 2022 Board meeting minutes.

V. Petroleum 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 April 2022, was \$25,762,988.00. The preliminary estimate of the cash balance of the PST Trust Fund for the end of May 2022, was \$26,411,258.00. The DERR continues to watch the balance of the PST Trust Fund closely to ensure sufficient cash is available to cover qualified claims for releases. There were no comments or questions.

Mr. Everett reported that the public comment period for the Underground Storage Tank Rules presented to the Board at the May 2022 meeting began June 1 and will run through July 1, 2022. At this time, the DERR has not received any comments from the public. Also, a public hearing on the proposed rules is scheduled for June 15, 2022 at 2:00 pm in our building. Mr. Everett informed the Board that the DERR intends to bring the Rules before the Board in July 2022 to request final approval for adoption. There were no comments or questions.

VI. Low-Level Radioactive Waste.

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

Otis Willoughby, Low-Level Radioactive Waste (LLRW) Section Manager, Division of Waste Management and Radiation Control, reviewed EnergySolutions, LLC's March 22, 2022, 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. EnergySolutions seeks authorization to receive an exemption from the treatment standards described in Utah Administrative Code (UAC) R315-40(a)(2) for macroencapsulated uranium extraction process residuals.

This agenda item was presented to the Board as an information item in the April 14, 2022 Board meeting. An Executive Summary and EnergySolutions request for a variance was provided to the Board members in their April 14, 2022 Board packet.

A notice for public comment was published in the Salt Lake Tribune, the Deseret News and the Tooele County Transcript Bulletin. The 30-day public comment period began April 14, 2022 and ended May 13, 2022. No public comments were received.

Mr. Willoughby informed the Board that this is a waste stream from a uranium processing facility. The waste contains various chemicals; organics and metals. The facility itself encapsulates the material in small cans (~ 2 ½ gallons each) and then solidifies it in an 18 gallon drum that is delivered to EnergySolutions. EnergySolutions anticipates receiving approximately 1,500 cubic feet of cemented uranium extraction process residuals throughout the coming year. Once received, EnergySolutions will further encapsulate the waste, utilizing macroencapsulation, thereby isolating the waste from potential leaching media. Final disposal of the waste will occur in the Mixed Waste Landfill Cell at the EnergySolutions Mixed Waste Facility.

The Director recommends approval of this variance request. The Director's recommendation is based on the following findings: the proposed alternative treatment method meets the regulatory basis for a variance and will be as safe to human health and the environment as the required method.

Danielle Endres questioned the frequency the Board will continue to approve a one-time variance request for this particular waste stream, as the Board is continually seeing this type of variance request. Mr. Willoughby affirmed that this variance request has been brought before the Board numerous times in the past as this is an on-going process as the company continues to generate this particular type of waste stream as they conduct their business. Mr. Willoughby stated that as long as this particular company is in business and generating this waste stream and EnergySolutions is allowed to accept the waste stream, the Board will continue to see these variance requests on a yearly basis, as the rules only allow a variance request to be granted for a period of one year.

Raymond Wixom, Attorney General's Office, provided further information and clarification by reviewing Utah Administrative Code §19-6-111, the requirements for Variances. Specifically, one provision states the following: "a variance granted for more than one year shall contain a timetable for coming into compliance with this part and shall be conditioned on adherence to that timetable." Mr. Wixom further stated that when a facility such as EnergySolutions requests this type of variance they want to be able to permanently place the waste they are disposing of, they do not need to have a timetable for doing something that amounts to returning to compliance. Instead they want to be in compliance by burying the waste and that is why variances are not requested for more than one year.

Dennis Riding asked if the provision cited from the Utah Administrative Code mirrors anything in the Federal Code or is it strictly a Utah provision? Mr. Wixom stated this is a Utah provision. The federal program deals with variances by rule in the 40 CFR. Mr. Wixom stated he does not recall if there is a specific variance provision in the Resource Conservation and Recovery Act. This is something that the Utah Legislature determined was appropriate for controlling variances under the solid and hazardous waste programs. Mr. Riding specifically asked if the Federal Code requires a one-year renewal or if that is something that only the Utah Administrative Code requires. Mr. Wixom stated that is a Utah Code requirement.

It was moved by Shane Whitney and seconded by Steve McIff and UNANIMOUSLY CARRIED to approve EnergySolutions request for a one-time, site-specific treatment variance from the Utah Hazardous Waste Management Rules to receive Cemented Uranium Extraction Process Residues for disposal in EnergySolutions' Mixed Waste Landfill Cell. Vern Rogers abstained from voting.

B. EnergySolutions request for a site-specific treatment variance from the Hazardous Waste Management Rules. EnergySolutions seeks authorization to receive lithium and lithium-ion batteries for treatment and disposal (Board Action Item).

Otis Willoughby, Low-Level Radioactive Waste (LLRW) Section Manager, Division of Waste Management and Radiation Control, reviewed EnergySolutions, LLC's March 22, 2022 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. EnergySolutions seeks authorization to receive an exemption from Utah Administrative Code (UAC) R315-268-40 and R315-268-45 for the direct macroencapsulation treatment of lithium and lithium-ion batteries.

This agenda item was presented to the Board as an information item in the April 14, 2022 Board meeting. An Executive Summary and EnergySolutions request for a variance was provided to the Board members in their April 14, 2022 Board packet.

A notice for public comment was published in the Salt Lake Tribune, the Deseret News and the Tooele County Transcript Bulletin. The 30-day public comment period began April 14, 2022 and ended May 13, 2022. No public comments were received.

Mr. Willoughby informed the Board that this is a radioactive waste and in order to meet the regulatory standards, lithium and lithium-ion batteries would need to be shredded and mixed with chemicals to deactivate them; or punctured (and then considered debris) to macroencapsulate them. Both of these activities (shredding and puncturing) severely agitate the waste and would expose the reactive portion of the waste to open air which could cause an adverse reaction or explosion. Although this type of waste management is possible, from a safety and health standpoint it is inappropriate.

EnergySolutions' proposal is to manage this waste by directly microencapsulating it. Macroencapsulation is a permitted treatment technology that isolates hazardous waste from the environment, eliminating the potential of leaching media and harmful reactions from exposure to the environment. Macroencapsulation requires less handling of the waste and creates a waste form for disposal that is protective of human health and the environment. Final disposal of the waste will occur in the Mixed Waste Landfill Cell at the EnergySolutions Mixed Waste Facility. This also is an on-going waste stream process as various generators continue to generate this particular type of waste stream.

The Director recommends approval of this variance request. The Director's recommendation is based on the following findings: the proposed alternative treatment method meets the regulatory basis for a variance and will be as safe to human health and the environment as the required method.

Danielle Endres commented that during her time on the Board, it is very rare that public comments are received and asked for clarification regarding the Division's process in attempting to solicit public comments in regard to these types of variance requests. Mr. Willoughby explained the process the Division goes through to solicit public comments on variance requests which includes publishing the variance request notice in the Salt Lake Tribune, Deseret News, and Tooele Transcript newspapers, as well as publishing the variance request on the State of Utah Public Notice website and sending the variance notice to the various mailing lists the Division maintains. Mr. Willoughby affirmed that minimal interest is received from the general public on these type of variance requests. Mr. Willoughby stated that the Division's website has a specific section dedicated to these types of notices for anyone interested in reviewing/tracking variance requests. Also, Division staff is always willing to help the general public with any questions they may have regarding these matters and is willing to take any public comments received. However, it is rare that they generate any interest from the general public.

It was moved by Dennis Riding and seconded by Shane Whitney and UNANIMOUSLY CARRIED to approve EnergySolutions, LLC request for a one-time, site-specific treatment variance from the Utah Hazardous Waste Management Rules to receive lithium and lithium-ion batteries for treatment and disposal in EnergySolutions' Mixed Waste Landfill Cell. Vern Rogers abstained from voting.

VII. Informational Highlight.

A. A presentation on E-Cigarette/Vape Waste Disposal for Schools.

Stevie Norcross, PhD, Assistant Director for the Division of Waste Management and Radiation Control, informed the Board that these types of informational items/presentations that Division staff are working on will be incorporated into the Board meeting as time allows.

Since this is the first time presenting to the Board, Dr. Norcross provided some background information regarding her previous employment/education. Dr. Norcross informed the Board that she joined the Division of Waste Management and Radiation Control (DWMRC) a little over a year and a half ago, previously she was employed with the Utah Department of Health leading a team in the lab conducting Newborn Screening for the state of Utah, and prior to that worked in industry. Dr. Norcross received her doctorate degree from Purdue University and is a Utah native; raised in Magna, Utah.

Dr. Norcross presented a PowerPoint presentation highlighting E-Cigarette/Vape Waste Disposal for Utah Schools with a touchpoint on the Board's January 2022 approval of a Stipulation and Consent Order for Clean Harbors Aragonite (CHA) that included a 50% credit to CHA if a Supplemental Environmental Project (SEP) for E-Cigarette waste pickup and disposal in schools was completed. This presentation also included an update on the SEP E-Cigarette waste collection events that occurred either at school districts or local health departments. The SEP covered the cost of E-Cigarette waste consolidation, transportation, and disposal for schools. To date, 242 lbs of E-Cigarette Waste has been disposed of.

Dr. Norcross also reviewed 2020 House Bill 58, that amended Utah Code Title 53G (Public Education System) that addresses Student Use of E-Cigarettes and Other Substances. This amendment requires schools to develop policy for confiscation and proper disposal of E-Cigarettes. Dr. Norcross stated the challenge schools are facing is that they are now required to confiscate E-Cigarettes, but they do not know how to properly handle and dispose of the hazardous waste. Dr. Norcross informed the Board that E-Cigarettes (also known as vapes) contain Nicotine, are acute hazardous waste as defined by the Environmental Protection Agency, which means they pose a specific health and safety risk and must be disposed according to the applicable rules and regulations. Nicotine is listed as a P075 waste due to its acute toxicity. Lithium-ion batteries are also hazardous waste.

Dr. Norcross also provided information regarding the DWMRC collaboration efforts with the Department of Health's Tobacco Prevention and Control Program for E-Cigarette Waste Collection Events for Utah Schools. The DWMRC has prepared informational booklets on the applicable rules and regulations for

properly managing E-Cigarette waste, which were distributed to over 500 schools (high schools, middle schools/junior high schools, and K-12) in the state and are available at ecigwaste.utah.gov.

Dr. Norcross also reviewed the E-Cigarette waste management resources available to schools, including Printable E-Cigarette Waste Container Label & Waste Tracking Sheet. A media event was also played for the Board: [Archived Video \(tveyes.com\)](https://www.tveyes.com)

Dr. Norcross thanked Deborah Ng, Hazardous Waste Section Manager for DWMRC, the DEQ's Communication Team, the Utah Department of Health, and the school districts for all their collaboration in these efforts.

A copy of the E-Cigarette/Vape Waste Disposal for Utah Schools Informational Highlight for WMRC Board presentation is included in the meeting minutes. No questions were asked regarding this matter.

VIII. Other Business.

A. Miscellaneous Information Items.

Doug Hansen, Director of the Division of Waste Management and Radiation Control, provided an update on Utah Administrative Code (UAC) R315-101 (Risk Assessment Rule). Director Hansen reminded the Board that in 2021, the Board approved for public comment extensive revisions to UAC R315-101. The Division has received numerous public comments from stakeholders and has incorporated their comments in the proposed rules where applicable as well as answered many pending questions. Division staff are now nearing the end of this process and anticipate bringing this matter back to the Board later this summer (August/September). At that time, the Division will request the Board to formally (start over the entire process) approve to proceed with formal rulemaking and public comment period the proposed rule changes to UAC R315-101.

Director Hansen reported that the Director of Boards and Commissions has provided information regarding the reappointment process for those Board members appointments scheduled to expire in August. Director Hansen will follow up with an informational email to those affected Board members outlining the reappointment process which includes submitting an application for reappointment.

Director Hansen informed the Board that he has received information regarding the Board's compliance with House Bill 0022, Open and Public Meetings Act Modifications. This bill makes changes to the Open and Public Meetings Act related to electronic meetings and requires a public body to establish how a quorum is calculated for electronic meetings. Because Board meeting have a virtual component, this bill impacts the Board. Director Hansen reported that based on the Attorney General's Office review of DEQ policies, and the way this Board is conducted, the Board is in compliance with the requirements. However, a few recommendations/modifications may need to be implemented that include if Board members are participating virtually they leave their camera on during the meeting, and all non-unanimous votes during an electronic meeting to be taken by roll call. Director Hansen commented that a roll call confirmation is a good idea as sound issues or sound delays can occur with virtual voters.

Danielle Endres commented that she appreciates the ability to participate virtually.

B. Scheduling of next Board meeting (July 14, 2022).

The next meeting is scheduled for July 14, 2022 at 1:30 p.m. at the Utah Department of Environmental Quality, Multi-Agency State Office Building.

Interested parties can join via the Internet at <https://meet.google.com/gad-sxsd-uv5> or by phone at (US) +1 978-593-3748 PIN: 902 672 356#

IX. Adjourn.

The meeting adjourned at 2:35 pm.

PST STATISTICAL SUMMARY

June 1, 2021 -- May 31, 2022

PROGRAM

	June	July	August	September	October	November	December	January	February	March	April	May	(+/-) OR Total
Regulated Tanks	4,139	4,142	4,140	4,128	4,136	4,142	4,136	4,132	4,150	4,157	4,178	4,176	37
Tanks with Certificate of Compliance	4,067	4,065	4,056	4,050	4,052	4,060	4,049	4,048	4,059	4,061	4,057	4,057	(10)
Tanks without COC	72	77	84	78	84	82	87	84	91	96	121	119	47
Cumulative Facilities with Registered A Operators	1,291	1,294	1,290	1,291	1,288	1,284	1,288	1,287	1,285	1,284	1,288	1,286	98.17%
Cumulative Facilities with Registered B Operators	1,295	1,295	1,292	1,292	1,289	1,285	1,288	1,288	1,285	1,285	1,289	1,287	98.24%
New LUST Sites	10	8	3	8	5	7	2	10	12	9	7	6	87
Closed LUST Sites	17	6	0	9	4	6	1	2	13	13	14	13	98
Cumulative Closed LUST Sites	5374	5378	5378	5390	5397	5398	5399	5405	5419	5431	5447	5454	80
	FINANCIAL												
	June	July	August	September	October	November	December	January	February	March	April	May	(+/-)
Tanks on PST Fund	2,664	2,662	2,653	2,649	2,642	2,646	2,635	2,629	2,631	2,628	2,619	2,609	(55)
PST Claims (Cumulative)	696	701	701	702	702	702	702	703	704	705	706	705	9
Equity Balance	-\$6,964,420	-\$6,684,027	-\$5,540,984	-\$4,033,695	-\$3,921,878	-\$2,867,569	-\$2,900,167	-\$2,363,604	-\$1,761,847	-\$1,826,879	-\$1,634,540	-\$986,270	\$5,978,150
Cash Balance	\$21,470,860	\$21,751,253	\$22,894,296	\$23,363,833	\$23,475,650	\$24,529,959	\$24,497,361	\$25,033,924	\$25,635,681	\$25,570,649	\$25,762,988	\$26,411,258	\$4,940,398
Loans	0	0	0	0	0	0	0	0	0	0	0	1	1
Cumulative Loans	121	121	121	121	121	121	121	121	121	121	121	122	1
Cumulative Amount	\$4,738,367	\$4,738,367	\$4,738,367	\$4,738,367	\$4,738,367	\$4,738,367	\$4,738,367	\$4,738,367	\$4,738,367	\$4,738,367	\$4,738,367	\$4,740,989	\$2,622
Defaults/Amount	2	2	2	2	2	0	0	0	0	0	0	0	-2
	FINANCIAL												
	June	July	August	September	October	November	December	January	February	March	April	May	TOTAL
Speed Memos	76	82	51	78	100	77	61	41	50	76	59	78	829
Compliance Letters	7	15	16	21	8	21	16	11	18	16	15	9	173
Notice of Intent to Revoke	0	0	0	0	2	0	1	1	0	2	0	0	6
Orders	0	0	0	0	0	0	1	1	0	2	2	0	6

Utah Waste Management and Radiation Control Board Action Item Final Adoption of Proposed changes to R311, Utah Underground Storage Tank Rules

What is the issue before the Board?

The Division of Environmental Response and Remediation (DERR) requests that the Utah Waste Management and Radiation Control Board approve proposed changes to the Utah Underground Storage Tank (UST) rules for final adoption, with an effective date of July 15, 2022. The Board approved the proposed changes for publication and public comment during its May 2022 meeting.

Background:

Due to legislation passed in the 2021 session, Senate Bill SB-40 Storage Tanks Amendments, the DERR began regulating specific types of Aboveground Petroleum Storage Tanks (APSTs). The bill was approved by the House and Senate in the 2021 General Legislative Session and signed by Governor Cox on March 16, 2021.

The bill addresses the regulation of storage tanks, both APSTs and USTs. Highlighted provisions of SB-40 include; the definition of terms, addressing fees, closures, notification requirements, financial assurance requirements, provides for rulemaking, addresses the Environmental Assurance Program and participation in the Petroleum Storage Tank Fund, and imposes restrictions on the delivery of petroleum. These changes have been in effect since May 5, 2021, requiring the DERR to solely manage closures, petroleum spill reporting, investigation and cleanup for new regulated APST releases.

Important dates include:

1. May 5, 2021: Closures, Spill reporting, investigation, and cleanup of APST releases will be managed by the DERR.
2. June 30, 2022: APST owners must complete a “Utah Notification for Aboveground Petroleum Storage Tanks” form to register their tanks and pay applicable fees.
3. June 30, 2023: APST owners must demonstrate financial responsibility and obtain a Certificate of Compliance.
4. July 1, 2023: Restrictions on the delivery of petroleum (red tag) and possible civil penalties for APSTs out of compliance.

The rules to be amended are:

R311-200 Underground Storage Tanks: Definitions.

R311-201 Underground Storage Tanks: Certification Programs and UST Operator Training.

R311-203 Underground Storage Tanks: Technical Standards.

R311-204 Underground Storage Tanks: Closure and Remediation.

R311-205 Underground Storage Tanks: Site Assessment Protocol.

R311-206 Underground Storage Tanks: Certificate of Compliance and Financial Assurance Mechanisms.

R311-207 Accessing the Petroleum Storage Tank Trust Fund for Leaking Petroleum Storage Tanks. R311-208 Underground Storage Tank Penalty Guidance

R311-211 Corrective Action Cleanup Standards Policy-UST and CERCLA Sites

R311-212 Administration of the Petroleum Storage Tank Loan Program

Notice of the proposed changes and the public comment period was sent to Petroleum Storage Tank (PST) owner/operators, certified individuals, and other persons interested in PST rulemaking, and was published in major newspapers throughout the state. The proposed changes were published in the *Utah State Bulletin* on June 1, 2022. The public comment period was held June 1, 2022 to

July 1, 2022, with a public hearing to receive comments on the proposed changes held on June 15, 2022. No comments were received at the hearing but three comments were received via email and have been included in the packet. The comments have been given due consideration. The following is a summary of each comment and the Division's response.

Comment #1:

This comment pertains to the applicability of adding cathodic protection to unprotected buried steel piping. The commenter later determined that the issue was covered in the referenced fire code standard and the comment was retracted.

Comment #2:

This comment pertains to requiring compliance with federal Spill Prevention, Control, and Countermeasures (SPCC) regulations for APSTs. It also addresses issues related to certification for contractors who work on APST versus USTs. The comments are generally considered to be outside the scope of the regulatory authority provided by the SB40. The technical aspects of the comments are not directly applicable to these specific R311 Underground Storage Tank Rule changes or the requirements outlined to achieve a Certificate of Compliance. However, the comments do have merit and the Division will consider the recommendations as a future modification to R311 with input from stakeholders, industry, and the regulated community to gain a better understanding of the highlighted training and certifications, and their practical impacts on the APST regulation as set forth by the Legislature.

Comment #3:

This comment pertains to training required to be a certified PST Consultant. This training requirement is part of the existing rule and is not addressed in the proposed changes. As such it is not relevant for consideration as part of this rule change comment period. The Division will evaluate this comment for consideration in a future rule change.

What is the governing statutory or regulatory citation?

The Board is authorized under Subsection 19-6-403(1)(a) to make rules that provide for the administration of the petroleum storage tank program and more specifically, compliance with the Underground Storage Tank Act by an APST. Furthermore, changes to the Underground Storage Tank Act made by SB-40 instruct the Board to make rules specific to the definitions of: agricultural operations (19-6-402), reportable and suspected releases from APSTs (19-6-407(2)), historic contamination (19-6-428(3)), and new releases (19-6-428(3)); methods for APST owner/operators to demonstrate financial responsibility (19-6-407(2)); and red tagging non-compliant APSTs (19-6-407(2)). The proposed rule changes also meet existing DEQ and state rulemaking procedures.

Is Board action required?

Yes, Board action is required for final adoption of the rule changes published in the June 1, 2022 issue of the Utah State Bulletin and set an effective date of July 15, 2022.

What is the Division Director's recommendation?

The Director recommends that the Board adopt the rule changes published in the June 1, 2022 issue of the Utah State Bulletin and set an effective date of July 15, 2022.

Where can more information be obtained?

For questions or additional information visit <https://deq.utah.gov/environmental-response-and-remediation/proposed-changes-to-r311-underground-storage-tank-rules> or contact David Wilson, by email at djwilson@utah.gov or by phone at (385) 251-0893.



UST comments <ustcomments@utah.gov>

Comment on R311-203-5(10)(d) proposed rules

2 messages

Rick Saathoff <rsaathoff@utah.gov>
To: ustcomments@utah.gov

Wed, Jun 1, 2022 at 9:02 AM

R311-203-5(10)(d) beginning July 1, 2026, if applicable, APSTs and associated piping are required to have cathodic protection that meets the standards set forth in IFC 5704.2.7.9 and National Fire Protection Agency (NFPA) 30.23.3.5 and must have a passing cathodic protection test every 3 years. The test must meet the requirements of Subsection R311-203-5(5).

My comment is it should be clarified if existing steel piping can have cathodic protection added, or if existing steel piping must be replaced for tanks using the EAP for financial responsibility.



Rick Saathoff, M.S.

Environmental Scientist
Release Prevention and Compliance

Call or Text: (385) 251-1382

environmentalresponse.utah.gov



Emails to and from this email address may be considered public records and thus subject to Utah GRAMA requirements.

Rick Saathoff <rsaathoff@utah.gov>
To: UST comments <ustcomments@utah.gov>

Wed, Jun 22, 2022 at 3:41 PM

After reviewing NFPA 30.23.3.5, it looks like my concern is already addressed, so please disregard this comment.

23.3.5* External Corrosion Protection for Underground Storage Tank. Underground tanks and their piping shall be protected by either of the following:

- (1) A properly engineered, installed, and maintained cathodic protection system in accordance with recognized engineering standards of design
- (2) Approved or listed corrosion-resistant materials or systems

23.3.5.1* Selection of the type of protection to be employed shall be based upon the corrosion history of the area and the judgment of a qualified engineer.

23.3.5.2* The authority having jurisdiction shall be permitted to waive the requirements for corrosion protection where an engineering evaluation demonstrates that such protection is not necessary.

23.4 Location of Underground Storage Tanks.

Comment #2

Comments on Draft Revisions to R311-200 to wrap Aboveground Petroleum Storage Tanks into Pre-existing Underground Storage Tank Rules

June 30, 2022

Comments submitted by email to ustcomments@utah.gov; tblatter@utah.gov; djwilson@utah.gov

My name is Peter Hendricks. I am a Utah Registered Chemical Engineer and a formerly registered APST Inspector through the Steel Tank Institute (STI). My career has been spent in petroleum industry and in environmental consulting, with my primary area of practice during my consulting years being oil spill prevention and, specifically, preparation of Spill Prevention, Control, and Countermeasure Plans (SPCC Plans) pursuant to the Federal EPA's Oil Pollution Prevention Rules (40 CFR Part 112). I have also served as Subject Matter Expert for a client with emergency generator fuel systems, reviewing designs for compliance with NFPA, Federal EPA, and State rules for both UST and APST systems.

I need to set the stage for my comments by asserting my view that tank regulators, tank operators, tank contractors, and tank consultants tend to deal with USTs or ASTs, there are few who are well versed in both. I refer to separate worlds – “UST World” and “AST World” to describe this reality. That also forms the fundamental basis of my comments. This draft rule appears to lack input from AST World. This draft rule suggests that crossing out the word UST and inserting PST will get the job done. Based on my reading, the proposed rule would make all existing UST operators, consultants, and contractors eligible to operate, consult, or contract on APSTs, but only because they are already that for USTs and not because they have any knowledge related to APSTs. USTs are very different from APSTs, from geotechnical considerations during design and installation through operations and monitoring, up to and including closure methods. UST operators, consultants, and contractors work in UST World, and generally are not familiar with AST World. In my experience it is not appropriate to provide APST work authority to those who work in UST World unless APST-specific competency is demonstrated first.

Further, portions of R311-203 as it exists and as proposed with APST inclusion, rely on reference to 40 CFR Part 280, which is entirely devoted to USTs.

I did not have the time to attempt a specific re-write of the draft rule, but I think a re-write is in order. Please consider my comments to support that effort. I think what the State needs for assurance that APST installations meet minimum standards is embedded within existing the Federal EPA SPCC Rule.

I understand that the State Legislature passed a Code change that requires “compliance with this chapter by an aboveground petroleum storage tank”, in reference to Title 19 Chapter 6, and that DERR needs to work within the Legislature's instructions as codified. The Code also requires APST registration by June 30, 2022; notification within 30 days of new APST installations; notification 30 days prior to APST closures; demonstration of financial assurance; registration and annual fee payment. The question is what is the intent of the Legislature? They are not the experts on USTs or APSTs, they need DERR to draft language that is appropriate for application of the chapter to APSTs. How can DERR bring in APST registration and certification to roll APSTs into Petroleum Storage Tank Fund programming while recognizing the difference between UST World and AST World? How should DERR ascertain adequacy of APST installations?

It is rare for Utah State rules to be more restrictive than Federal Rules, but aspects of this proposed rule would clearly invoke more regulation on APST owners than that derived through Federal rules. Federal

Rules for oil spill prevention for APSTs are found in 40 CFR Part 112, generally referred to as the SPCC Rule. The Federal SPCC Rule contains requirements for owners/ operators of APSTs. I have prepared a comparison between some aspects of what I believe the State's amended Code and proposed rule want and what the Federal SPCC Rule requires to highlight commonalities and differences.

	Utah Code Title 19 Ch. 6 Part 4 UST Act & Draft Rule	40 CFR Part 112 Federal EPA SPCC Rule
ASTs Registration	required	none
APST small volume exemption	<501 gallons	<55 gallons
Facility small volume exemption	none	≤1320 gallons total oil storage in APSTs
Facility type exemption	Agricultural operations; Heating oil for on site use; petroleum facilities; O&G production facilities; Fueling facilities at commercial airports	DOT regulated vessel/ pipeline facility; USTs regulated under 40 CFR 280;
Other limits on tank type	Rests on the ground or has attached underground piping	None, captures elevated tanks, etc as well as those resting on the ground
Spill Prevention Plan	none	SPCC Plan required, template and simplified checklist for smaller quantity facilities
Construction of new APSTs		Per API-650, API-12F, UL-142, UL-2085 or other recognized industry standard
Inspection of tanks	Site checks optional	Inspections by third party inspectors certified per API-653; STI-SP-001 or other recognized industry standard. EPA may do periodic SPCC Facility inspections as well.
Tank tightness testing	19-6-413 requires it for registration	API-653 or STI SP-001 include specific methods and frequency of integrity testing for APSTs.
UST installers	19-6-416.5 requires installation companies to have a permit	No specific installer requirements.
Petroleum Storage Tank Fund/ Financial Assurance	Included	No fund; Financial Assurance only required for very large facilities (e.g. >1,000,000 gallons)

Areas in which the proposed rules is more restrictive than the current Federal SPCC Rule:

- Registration, and associated fees, are required
- No small facility exemption, SPCC Rule exempts those with ≤1320 gallons total oil storage

Those areas where the proposed State Rule are more restrictive than the Federal SPCC Rule may be necessary to meet the intent of capturing all APSTs ≥ 501 gallons and to include them in the Fund program and providing associated assurance that the subject APST installations meet minimum standards.

I understand the need for the State have some confidence that the owner/ operators of the APSTs are installing, operating, and closing those APSTs in accordance with good engineering practice. I assert that this need is better addressed by adopting the Federal SPCC requirements, perhaps by reference, instead of injecting APSTs into UST World. The SPCC Rule may have some gaps relative to what the State needs. For example:

- Owner/operators are required to prepare and implement (including APST inspections) an SPCC Plan but there are no associated regulatory submittals.
- The SPCC Rule provides relief for smaller operators, including allowing self-certification self-certified of the SPCC Plan for owner/operators with facilities storing less than 10,000 gallons of oil. Larger facilities must have their SPCC Plan certified by a P.E. (Registered Professional Engineer).
- Owner/operators of facilities with ≤ 1320 gallons total oil storage capacity are exempt from needing an EPA SPCC Plan but are not exempt from the State program if they have at least one APST with capacity ≥ 501 gallons

Those potential gaps between SPCC requirements and State needs would have to be examined to see if they are acceptable as-is, allowing the State to adopt the SPCC Rule as-is, or they requirements could be modified for the State by stipulating variance from the SPCC Rule to make requirements more aligned with the State Code requirements. For the examples above, The State could have owner/operators of registered APST include a self-certification that they have prepared and implemented an SPCC Plan or take it a step further and require submittal of the SPCC Plan to the State. If the State wants more than owner/ operator self-certification that the have prepared and implemented an SPCC Plan, the State can stipulate that owner/ operator of all State registered APSTs have a third-party PE certify the SPCC Plan. If the State needs all APSTs, even those at facilities with storage capacity ≤ 1320 gallons to follow the same requirements as facilities with larger capacity, it would need to stipulate clearly that all APSTs ≥ 501 gallons are in the program, both for registration and for preparation and implementation of an SPCC Plan.

Because they are buried and unavailable for visual and wall thickness testing, USTs present a more difficult inspection and testing problem than APSTs. Thus the details in 40 CFR 280 for certified installers, inspectors, testers, and removers. In AST World, there already are AST inspectors, certified for API 653 or STI SP-001, specifically for APSTs. THE EPA SPCC Rule includes requirements for tank inspection and integrity testing, "in accordance with industry standards". The Steel Tank Institute (STI) established it's SP-001 specifically to provide an industry standard for shop fabricated tanks. The STI web site currently lists 20 Utah individuals with active SP-001 inspector certification. The American Petroleum Institute (API) also has the long-standing API-650 and API-12F standards for storage tanks, and API-653 standard for inspection of storage tanks, with many certified inspectors. In AST World, there are also PEs familiar with the requirements of the SPCC Rule and spill prevention rules in various states.

Any facilities with APSTs with total capacity over 1320 gallons are already required to have an SPCC Plan and facilities with over 10,000 gallons total oil capacity are required to have that SPCC Plan certified by a PE. Thus adopting EPA SPCC requirements into the State tank registration and certification programs would not cause an additional burden for many APST owner/operators.

Above I compared the SPCC Rule to the State needs. The SPCC inspection requirements for smaller shop fabricated storage tanks rely on STI SP-001, so it is also important to understand the SP-001 inspection requirements relative to the needs of the State. SP-001 categorizes APSTs as Category 1, 2, or 3 and sets inspection requirements accordingly:

- SP-001 Category 1 tanks are not captured by the proposed rule, unless connected to underground piping. Category 1 APSTs are APSTs that are elevated, have a Release Prevention Barrier (RPB) (e.g. liner or impervious concrete below the tank that would divert any tank bottom leak to the perimeter where it can be detected).
- SP-001 Category 2 tanks are APSTs in direct contact with the ground, with secondary containment but without a RPB. Due to direct contact with the ground they would be captured by the proposed rule.
- SP-001 Category 3 tanks are APSTs in direct contact with the ground and without secondary containment.

STI-SP-001 provides a table of inspection requirements based on APST Category and capacity. It requires at least external inspection and leak testing by a certified inspector every 10 years, but frequency is reduced to 5 years for large tank sizes and periodic internal inspections are also required for some tanks. SP-001 does allow owner/ operator only periodic inspections, for tanks ≤ 1100 gallons, resting on the ground but with secondary containment, and no requirement for periodic inspections by a certified inspector. The State may not be comfortable with allowing APST to only be inspected by the owner/ operator. If so, the State would need to stipulate that all registered APSTs must include inspection by third party certified inspectors.

Another area of discussion is buried piping connected to APSTs. There is reference to 40 CFR 280 within the SPCC Rule in regard to buried piping, thus some overlap between UST World and AST World. In my experience, only once have I seen buried piping connected to an APST that has double walled piping or a sump system for leak detection. If an APST is connected to buried piping, it is typically direct-bury, wrapped or coated steel, without cathodic protection. The SPCC Rule requires that direct bury pipe must have "a protective wrapping and coating". Further, the SPCC Rule requires that the owner/ operator "conduct integrity and leak testing of buried piping at the time of installation, modification, construction, relocation, or replacement." [40 CFR 112.8(d)(1) and (4)]. If the State were to consider my suggestion of adopting the SPCC Rule for APSTs, it would need to consider if the SPCC Rule requirements are adequate for the State's needs related to buried piping connected to APSTs, or if something more aligned with UST rules on piping system is warranted.

The State certifies UST installers and UST removers, and the draft rule extends them to ASTs. ASTs installations and removals are very different. ASTs need an appropriate foundation and tie-downs to that foundation, but that is in the realm of a good licensed general contractor with civil and mechanical subs. ASTs are much easier to close, as they can be completely emptied, flushed, disconnected, and internally inspected far more easily than a UST. Again, scope within the realm of a good licensed general

contractor. I do not think it is beneficial to the interests of the State to limit AST installations and closure to UST World contractors.

My comments focus on how the rule can be expanded and revised provide the State with assurance of adequacy of APST installations. Specifically, the State should recognize PEs and certified API-653 and SP-001 inspectors along with SPCC Rule compliance. I have not commented specifically on “PST Consultants” or language related to site assessment, contamination investigation, or contamination mitigation because impacted site investigations would be similar regardless of the source being a UST or an APST. Nor have I commented on the rules of engagement for the Fund, except for my thoughts on how existing AST World rules and knowledge can provide the assurances the State needs for APSTs to be associated with the Fund.

Thank you for considering my input.

Peter Hendricks, PE

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UST comments <ustcomments@utah.gov>

Proposed Changes to Utah UST Rules to Incorporate Aboveground Petroleum Storage Tanks

1 message

Jill Hernandez <JHernandez@kleinfelder.com>
To: "ustcomments@utah.gov" <ustcomments@utah.gov>

Thu, Jun 30, 2022 at 8:47 AM

Mr. Everett,

I reviewed the proposed rule changes and have just one request:

- Section R311-201-3.ii – This rule requires completion of an approved training course before a PST Consultant application is submitted; however, it has been UDEQ's policy to only have the training courses during the renewal training and not the initial training. I was told there was no training available before the initial certification. This is likely the time the training is most needed, but if the initial training class is not available, the initial training requirement should be deleted.

Thanks,

Jill Hernandez, PE

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