

Agenda

Department of Natural Resources and Environmental Control

Underground Storage Tank Advisory Committee Meeting

May 10, 2017

Introductions	10:00-10:05
Review of the Minutes from April 12 Meeting	10:05-10:15
Discussion of draft regulations: Part B Section 2	10:15-12:00
Lunch Break	12:00-1:00
Discussion of draft regulations: Part E Requirements	1:00-2:45
Goals for Next Meeting	2:45-2:50
Public Comment	2:50-3:00

RSVP's UST Advisory Committee Meeting – May 10, 2017

Name	Company	Email	Phone Number
Tom McKenna	Delaware Geological Survey University of Delaware	mckennat@udel.edu	302-831-8257
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Mike Hayes	Delaware City Refining Company	Michael.hayes@pbfenergy.com	302-834-6212
Joseph Zay	Environmental Alliance, Inc.	jzay@envalliance.com	O: 302-234-4400 C: 302-354-3859

UST Advisory Committee Meeting – May 10, 2017

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UST Advisory Committee Meeting – May 10, 2017

Name (Please Print)	Address	Phone Number	E-mail address
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Barbara Twardt	DNR/BETMS		
Tom McKenna	857 Academy St DGS Bldg, Newark, DE 19703	831-8297	mckenna@udel.edu
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USTAC Advisory Committee

Meeting Minutes

April 12, 2017

Opening

The USTAC Advisory Committee was called to order at 10am on April 12, 2017 in New Castle, DE by Alex Rittberg.

Present

Alex Rittberg, David Gilden, William Kachel, Joseph Zay, Jennifer Foster, Sandy Carl, Jennifer Vavala, Sara Golladay, Anne Martin, Bill Logue, Lori Spagnolo, Tracy Spinden, Mike Moyer, Barbara Fawcett, Peter Rollo, R.T. Leicht, Richard Negrete, Christina Miller, Mark Smith, Cheryl Hess, Josh Worth, Thomas Ruszin, Ellen Valentino, David Peterson

Minutes

1. The presentation materials used to open the meeting can be found at <http://www.dnrec.delaware.gov/tanks/Pages/default.aspx>
2. Opening remarks by Alex Rittberg:
 - Each person attending was asked to introduce themselves and share their thoughts on what they consider a good regulation.
 - Minutes from the previous meeting were then approved.
 - Agenda Review
 - Discussed table of contents for Part A and Part B
 - Compliance Assistance Manual was made available
 - Discussed purpose of USTAC, Meeting Governance, Ground Rules, and Promulgation Schedule
 - May 10, 2017 – USTAC Meeting Part A, Part B, Part E (10am-3pm)
 - June 7, 2017 – USTAC Meeting Part B, Part E (10am-3pm)
 - July-September, 2017- EPA Review
 - November 12 ,2107 – Conduct USTAC Meeting
 - January 2018 – Conduct Public Workshops
 - March 2018 – Proposed Regulations to State Registrar
 - July 2018- Promulgation by Cabinet Secretary
 - October 2018 – State Program Approval
 - Cheryl Hess requested that a spreadsheet of changes be made available. Alex Rittberg responded that a spreadsheet would be posted prior to the May 10, 2017 meeting but cautioned that it would represent a snapshot in time as additional changes are still being made to the draft regulations.

3. The USTAC then reviewed Part A – General Requirements for Underground Storage Tank Systems. Alex Rittberg then led a discussion section by section asking the USTAC to provide feedback on the changes proposed by DNREC as well as additional items within each section that they thought needed to be changed. The USTAC’s specific comments are listed below:
- Section 2- Definitions
 - Conceptual Site Model
 - Sandra Carl asked what why this definition was needed?
 - Lori Spagnolo explained it’s a term used during an environmental investigation to describe site conditions and the nature and extent of a release, prior to designing a remediation plan for the project.
 - Dispenser System (adding the EPA definition)
 - Alex Rittberg clarified that DNREC considers that the dispenser is part of the UST system and that perhaps the definitions should state that.
 - Sandra Carl asked if equipment above the “shear valve” should be considered part of the UST system. (David Peterson and Tom Ruszin agreed that this should be clarified.)
 - Alex Rittberg stated that the regulations should define where the system begins and ends and that DNREC will consider adding language to make it clearer.
R.T Leicht asked if “shear valve” was defined, TMS staff responded it is not defined
 - Institutional Controls
 - Ellen Valentino pointed out “including but limited” wording. Lori Spagnolo suggested eliminating the phrasing based on recent training. It was also pointed out that the word “not” was missing from the verbiage
 - Liquid Tight – change definition to be consistent with federal register language.
 - Sandra Carl suggested adding the term spill bucket to the definition, so that people that are not used to working with regulations will have a clearer understanding of what the regulations applies to. Alex Rittberg read the language about liquid tight from the federal register. The USTAC preferred the language from the federal register. Alex Rittberg stated that DNREC would consider modifying its definition.
 - Repair
 - Tom Ruszin asked that the definitions or repair, retrofit, and upgrade be looked at closely to ensure that it is clear when an

owner has to report these activities to DNREC. Alex Rittberg responded that the notification requirements for repair, retrofit, and upgrade are defined in Section 4.7.

- Replacement
 - Tom Ruszin suggested adding language clarifies that a piping run could mean just the piping between two dispensers' verses all of the piping back to the tank.
 - Lori Spagnolo suggested adding the phrase piping between two connection points. Alex Rittberg stated that DNREC would revisit the definition.

- Observation Tube
 - Tom Ruszin discussed that it was difficult to find a cover for an observation tube and that his company grinds off the word "well" on a monitoring well cover to comply with the regulations.
 - Others stated the important thing the cover needs to say is "Do Not Fill".
 - DNREC stated that Blank covers are available.
 - Peter Rollo clarified that DNREC's Water Resources Division preferred that the observation tubes not be labeled as monitoring wells, because then they would have to be permitted.
 - Lori Spagnolo suggested we work with Water Resources to see if we can come up with a different solution that would satisfy all parties involved.

○ Section 3: Reference Standards

- 3.1.1:
 - Ellen Valentino asked are the documents being referenced dated.
 - Alex Rittberg stated that the list of reference standards will be updated to include the edition and/or date of the reference standard that is being cited.
 - Cheryl Hess asked if the word "applicable" was needed.
 - Alex Rittberg and Barbara Fawcett agreed it's not needed and can be removed.

○ Section 4: Registration and Notification Requirements

- General comments:
 - Ellen Valentino stated that DNREC should include similar language recently adopted in the AST Regulations that addressed what would happen if DNREC did not review submittals within the timeframes allowed in the regulations.

Alex Rittberg explained that the AST regulations allow an owner to conduct a retrofit or repair at their own risk if DNREC has not responded to their notification in a timely manner. Barbara Fawcett cautioned that USTs systems are different in that when the work is backfilled and paved over after completion, excavating the work if it did not meet the regulatory requirements would be a costly endeavor for the owner.

- Tom Ruszin stated that some states do not review or approve retrofit, repair, or upgrade plans.
- 4.1.7: General Requirements
 - Tom Ruszin stated that the regulations should include an exception that would allow a newly constructed facility to receive a delivery for system testing purposes. Alex Rittberg stated that DNREC would consider adding language to address this situation.
- 4.4.3: Transfer of Ownership
 - Barbara Fawcett explained that DNREC is not requiring any new information as part of a change in ownership but rather is clarifying that a signed bill of sale is needed. Alex Rittberg explained that it is very important for the Department to know who the owner of the UST system is and that the new owner meets the financial liability requirements. DNREC agreed that the sale price could be redacted in the submittal.
- 4.7.1: Retrofit or Upgrade Notifications
 - Ellen Valentino repeated her suggestion of adding language stating what happens if DNREC does not respond to a submittal.
- 4.7.4
 - Ellen Valentino asked why do owners need to notify the Department two days in advance of the start of the building. Is it really necessary? Peter Rollo answered that the Compliance Officer may want the opportunity to inspect the work as it is being performed. Barbara Fawcett added that many retrofits come from compliance inspections. It gives TMS the chance to observe that the appropriate work has been completed. Ellen Valentino asked if the compliance officer could stop work if contractors were not following the approved plan. David Gilden explained that the compliance officer checks that the approved equipment is actually being installed and everything is following the plan that has been approved and that DNREC would only stop the work if the approved plan wasn't being followed.

- Sandra Carl asked if the regulations specified how the owner should notify the department, either by email, phone, or fax. Peter Rollo responded that most owners send in the approved form via email or fax, and then follow up with mailing a hard copy. Sandra Carl then asked if the regulations should specify the method that owners should use. Alex Rittberg said no because the technology could change or become outdated, other TMS staff felt it wasn't necessary as well.
- 4.7.5: added "repair"
 - Ellen Valentino stated that 60 days may not be enough time to get work started after an approval was granted due to weather and the time necessary to order the parts. She asked if the Department would consider 90 or 120 days. It may be too tight of a deadline.
 - Barbara Fawcett cautioned that the Department could not allow more than 90 days, because at 3 months, out of service requirements would be triggered.
 - Alex Rittberg stated that the Department would consider changing the timeframe from 60 to 90 days.
- Section 7 Information Access
 - Sandra Carl asked if a compliance Inspector requested printouts documenting release detection and everything is saved electronically, and the system is down, how long the owner would have to provide the information. Alex Rittberg responded that the owner would have at least 10 days to produce. Peter Rollo added that there are some exceptions such as vapor recovery permits and registration forms that must be maintained on site and always available for inspection.
- Section 9 Delivery Prohibition
 - Sandra Carl asked if language could be added clarifying that owners would still be allowed to sell their existing gasoline if they receive a delivery prohibition. Alex Rittberg responded that DNREC would consider adding language but stated it would have to include exceptions such as situations that involve an imminent threat of a release, or danger to human health and the environment.
- Section 10 Operator Training
 - Cheryl Hess asked if the governor's budget cuts were going to affect the training services offered by Deltech. Alex Rittberg responded that the Department was working on developing a training course online, maybe in 2018 and could take over the management of classroom or online training if Deltech backed out of the partnership.
 - Sandra Carl asked if DNREC is requiring everyone that has already been trained, to go through training again due to regulation changes. Alex Rittberg responded that DNREC would consider using other

outreach tools such as conducting workshops or mailing out fact sheets, to inform owners of the changes to the regulations and not necessarily require all of the operators to attend retraining.

- 10.1.9: Barbara Fawcett stated that this section needed to be updated because of the 45 day timing and the opportunity for test reciprocity.
- Section 11 Requirement to use a Certified Contractor
 - 11.1 and 11.2 Barbara Fawcett stated that DNREC is still developing language for this new section that addresses the Department's intent to be able to issue NFA letters only when certified contractors are used to permanently close an underground tank.

Part B: Requirements for Installation, Operation and Maintenance of Underground Storage Tank Systems Storing Regulated Substance Excluding Consumptive use Heating Fuel ST Systems or Hazardous Substance UST Systems

- Section 1.9.4 Interstitial Monitoring Release Detection for Tanks
 - 1.9.4.2 – Josh Worth stated that the requirement for visual inspection of containment sumps every 30 days should be reevaluated because it poses a safety hazard and seals around the lid would eventually fail due to the constant removal of the lid. Alex Rittberg reminded everyone that EPA federal regulations require the visual inspection once a year. Josh Worth suggested that perhaps every six months would work especially for owners that have sensors in their containment sump. Josh Worth suggested that DNREC could require owners who do not have sensors in their sumps to inspect the sump every 30 days. Sandra Carl agreed with Josh's comments, and stated that FL has moved to every 6 months for visual inspections. Add language for both scenarios like SC. Give two options. Tom Ruszin suggested verbiage that would allow the containment sumps to be monitored either visually or electronically. Alex Rittberg agreed that DNREC would look at SC verbiage and will consider rewording.
 - 1.9.4.3 Tom Ruszin asked this change was meant to address the use of specific software application managed by third parties such as Triton Tank. Alex Rittberg responded yes, and that some facilities use 3rd party data management systems and using the reports associated with these systems is acceptable.
- Section 1.9.5 Automatic Tank Gauge Release Detection for Tanks
 - 1.9.5.1.3 Ellen Valentino said that the requirement to maintain release detection records for the life of the system was too intense and asked whether this was more stringent than federal regulations? Alex Rittberg confirmed that the proposed change was more stringent since the federal regulations required the records to be maintained for three years. Ellen Valentino questioned why can't we use federal benchmark

on this? Alex Rittberg responded that keeping records for the life of the system is actually beneficial to the owner. Barbara Fawcett added that an owner can prove themselves innocent of a release if they maintain these records. David Peterson stated that if a station is bought from another owner, the new owner cannot control whether the previous owner maintained their proper records. Alex Rittberg shared that from a liability standpoint, it's not as crucial for DNREC to require the owner to maintain the records based on the fact that since January 2016 and owner of an active system is a responsible for releases no matter if they caused the release or when the release occurred. Alex Rittberg then asked, what would be reasonable timeframe for an owner to maintain the records? Ellen Valentino suggested federal benchmark. Lori Spagnolo suggested that owners be responsible for maintaining these records for the time that they own the facility. Alex Rittberg stated there will be internal discussion on this issue.

- Section 1.10 Anchoring Requirements
 - 1.10.3 –Tom Ruszin shared that his company chooses to dig their tanks 2-3 feet deeper than in other states because of Delaware's requirement that all hold down systems be electrically isolated and cathodically protected. This results in the sumps being deeper and creates a safety hazard when sumps have to be maintained. Tom Ruszin asked if there was any information available on tanks floating out because hold down systems have failed. Alex Rittberg stated that DNREC would look into this issue and provide a justification as to why this requirement was needed.
- Section 1.14. General Piping Installation Requirements
 - 1.14.3 – Tom Ruszin asked whether the 1/8" per foot slope requirement was necessary? Barbara Fawcett stated that although there are different opinions on this issue, she feels it is necessary for the proper function of release detection equipment. DNREC does not intend to remove this requirement as stated in Part B Section 1.14.3 and is preparing a technical response which will be presented at a future meeting. Alex Rittberg added that in the past, under the alternative procedures approval in Part A Section 6.0, DNREC has allowed facilities to replace piping at a facility that couldn't meet slope as long as they also install all secondary containment systems to perform interstitial monitoring with sensors wired for positive shut down. Barbara Fawcett added that DNREC does not consider the most recent version of PEI –RP 100 reliable on this issue, and stated that DNREC supports the options found in the 2005 version.
- Section 1.18 General Release Detection for Piping

- 1.18.5 – Participants discussed concerns about how far back DNREC would inspect records, and at what point would DNREC consider requiring the additional actions. Alex Rittberg stated that additional wording can be added to this paragraph that clarifies the type of situations and timeframes involved that would trigger the need for the Department to require tank tightness testing or additional actions under Part E. Lori Spagnolo suggested that the reference to release investigation procedures in Part E should be changed to indicated release investigation procedures.
- Section Pressurized Piping Requirements
 - 1.19.1.6- Ellen Valentino stated that secondary pipe testing may not be feasible with older tanks and if this was more stringent than the federal guidelines? If so, what's the rationale? Peter Rollo explained that this was not a new requirement, but rather an existing DNREC requirement that had been moved to a different section. Josh Worth stated that EPA no longer has this requirement. Ellen Valentino asked that if it's not required by the federal program, why is it necessary? Alex Rittberg pointed out that continuous interstitial monitoring can be used to meet the annual piping tightness test requirements, as described in 1.19.2.2. Sandra Carl expressed concerns that her company chooses to perform annual piping tightness testing as their primary method of piping release detection even though the stations are equipped with continuous interstitial monitoring, and that the regulations seem to force an owner to state that continuous interstitial monitoring should be used as their primary form of piping leak detection. Tom Ruszin suggested moving the verbiage out of line leak detector back to where it originally was. Lori Spagnolo suggested in the spreadsheet of changes to include why we are more stringent than the federal guidelines. Alex Rittberg summarized the stakeholders concerns and stated that DNREC would have more internal discussions on this matter.
 - 1.19.2.1 Tom Ruszin stated that he thought the word “may” was correct and should not be replaced by the word “shall”. Alex Rittberg stated that DNREC would review the language.
- Section 1.21 Spill Prevention Requirements
 - 1.21.8 Ellen Valentino stated that by removing the exemption for testing of double wall spill buckets, you are taking the incentive away from owners to install them and asked if they are still exempted under the federal regulations. Peter Rollo stated that the manufacturers of the Stage 1 EVR spill buckets and the associated CARB Orders require the double wall spill buckets to be tested. Alex Rittberg added that Delaware would be more stringent than the federal requirements since the federal requirements only require spill bucket testing every three

years and exempt double wall spill buckets from the testing requirements.

○ Section 1.22 Overfill Protection Requirements

1.22.3-Alex Rittberg stated that it was the Department's intent to phase out the use of ball floats altogether within 3 years after promulgation of the new regulations. Cheryl Hess asked if the ball float needed to be physically removed. David Gildeen responded yes, that it needed to be physically removed. Ellen Valentino asked for data that the ball floats are causing problems and to provide some sort of justification because it's expensive to do this. Sandra Carl asked if ball floats can be used as a secondary method. Peter Rollo explained that they cannot because the two systems would interfere with each other.

1.22.6- Concerns were expressed that removing the overfill devices was not practical and could be costly and result in breaking concrete each year if the equipment seized and there was no other way to remove it. Peter Rollo responded that equipment was now available that made it easier to inspect the functionality of the overfill devices on an annual basis.

○ Section 1.25 Containment Sump Requirements

- 1.25.1 David Peterson asked if vent riser sumps were subject to spill bucket testing. Peter Rollo said they were. Alex Rittberg responded that DNREC would add more specific language as to which sumps the liquid tightness testing requirement applies to. Barbara Fawcett stated that DNREC would re-word 1.25.4.2 to make it clearer that other methods besides hydrostatic testing could be used to demonstrate that a sump is liquid tight.

○ Section 1.27 Testing Procedures for Sensors

- 1.27.3 – testing for sump and interstitial space, where sensors are located. Tom Ruszin stated this does not work for a wet space such as determining water in a tank and that in that instance the sensors would need to be mounted higher.

○ Section 1.32 Internal Lining Requirements

- 1.32.3 – Alex Rittberg explained that DNREC was going to keep language that had a strikethrough to allow for lining of tanks for compatibility reasons. Barbara Fawcett added the paragraphs will likely be re-worded to make this clearer. Someone asked whether

DNREC currently allows a tank to be constructed inside another tank. Peter Rollo stated that Delaware does not allow the use of a tank inside of a tank technology.

- 1.33 Marina Regulations
 - 1.33 –Ellen Valentino suggested reaching out to trade group for Marinas so that they can participate in future meetings.

4. Additional remarks:

- Next meeting is scheduled for May 10, 2017 (10am - 3pm)
 - Goals for this meeting are to finish Part B and start on Part E
- June meeting will reflect changes from today's meeting
- Spreadsheet of changes will be posted (snap shot of where DNREC is)
- No public comments

Adjournment

The Meeting was adjourned at 2:47pm by Alex Rittberg. The next general meeting will be May 10, 2017.

Minutes submitted by: Jennifer Vavala

Approved by: Alex Rittberg

PART B.

**REQUIREMENTS FOR INSTALLATION, OPERATION AND MAINTENANCE OF
UNDERGROUND STORAGE TANK SYSTEMS STORING REGULATED SUBSTANCE
EXCLUDING CONSUMPTIVE USE HEATING FUEL UST SYSTEMS OR
HAZARDOUS SUBSTANCE UST SYSTEMS**

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USTAC Meeting

May 10, 2014

Part E: Requirements for Reporting, Release Investigation, Remedial Action and No Further Action Determinations for Underground Storage Tank Systems

- Definition: **Institutional Controls**” means non-engineered instruments, such as administrative and legal controls including but not limited to an Environmental Covenant (EC) as described in 7 Del. C. §§7907-7920, the Uniform Environmental Covenants Act (UECA), that help minimize the potential for human exposure to contamination and protect the integrity of the remedy.
- Semantics/Reference consistency:
 - Change Tank Management Branch to Tank Management Section
 - Change DNREC to Department
 - Change abnormal to unusual (as in operating conditions)
 - LNAPL: Mobile to Migrating; Free to Mobile (per ITRC)
- Section 1.2.1.3: Added: A signal **or alarm** from any Release Detection...(as an unusual operating conditions)
- Section 1.2.1: Added **1.2.1.9: Evidence of liquid in the interstitial space of secondary containment systems** (as an unusual operating condition)
- Section 2.2: **Changed or to and/or after 2.2.1.2.1 and 2.2.1.2.2** (regarding indicated release procedures)
- Section 5 Remedial Action Requirements. [add language]
 - Added 5.2.11 To add environmental impacts as an evaluative criteria for proposed remedial technologies.
 - **5.2.11 The RAWP may include green sustainable remediation practices, processes, and technologies in accordance with ASTM E2893-16 Standard Guide for Greener Cleanup. ITRC Green and Sustainable Remediation: A Practical Framework. GSR-2.**
 - And 5.2.12 To add Institutional Controls as a method of reducing potential exposure to hazardous substances.
 - **5.2.12 The RAWP may include the use of Institutional Controls to reduce the potential for exposure to hazardous substances. Institutional Controls may include land use restrictions, activity restrictions, groundwater use restrictions, operations and maintenance requirements, or other Institutional Controls.**
- Section 6: No Further Action Requirements
 - Add 6.1.1.4 to require execution of any required Institutional Controls as prerequisite for No Further Action determination.
 - **6.1.1.4 and...Institutional Controls as required by the Department, including the placement of an Environmental Covenant (EC) on a facility as provided for in 7 Del. C. Section 7907-7920, the Uniform Environmental Covenants Act (UECA) have been established.**
- **Question: Section 6.1.1.1, 6.1.1.2 and 6.1.1.3: change and to and/or to allow for a covenant to serve as a remedy?**

May 10, 2017

Delaware USTAC

Agenda

- Introductions 10:00-10:05
- Review of the Minutes from April 12th, 2017 Meeting 10:05-10:15
- Discussion of draft regulations: Part B 10:15-12:00
- Lunch Break 12:00-1:00
- Discussion of draft regulations: Part E Requirements 1:00-2:45
- Goals for Next Meeting 2:45-2:50
- Public Comment 2:50-3:00

Purpose of USTAC

- The purpose of the Underground Storage Tank Advisory Committee is to provide feedback and assist the Department in developing changes to the Delaware Underground Storage Tank Regulations and improving Delaware's Underground Storage Tank Program.
- Members are expected to share their perspective and technical expertise to assist DNREC in these efforts.

Meeting Governance

Chair: Alex Rittberg and Co-Chair Lori Spagnolo (Primary Facilitators)
Focuses on the process – the how of the session. Preserves the integrity and disciplined use of the process. Guides the process without directing it. Invites people to attend the meeting and designates them as committee members.

Committee Members: Share responsibility for a successful group session with the primary facilitator.

Note Taker: Jenn Vavala Takes detailed notes of the meeting for distribution later.

Timekeeper: Sara Golladay Monitors how long the group is taking to accomplish its tasks. Provides regular updates to keep group members moving forward.

Meeting Governance

USTTAC Meeting Ground Rules

- Start and End on Time
- No side conversations
- Respect the agenda
- Keep an open mind
- Respect differences of opinion
- No personal attacks
- Be positive
- Speak one at a time and give everyone a chance to speak
- Be honest and have trust
- Ask questions
- Help facilitator, scribe and note taker capture ideas accurately.
- State a purpose when introducing each new topic.
- Decisions by consensus with motions and votes
- Bio breaks as needed
- Share responsibility for team's progress

Promulgation Schedule

Tuesday January 24, 2017	Discuss Initial Draft of Changes with the USTAC
Friday March 31, 2017	Share 2nd draft of changes with USTAC and EPA
Wednesday, April 12, 2017	USTAC Meeting Part A and Part B (10 a.m. - 3 p.m.)
Wednesday, May 10, 2017	USTAC Meeting Part A, Part B, Part E (1 - 3 p.m.)
Wednesday, June 28 2017	USTAC Meeting Part A, Part B, Part C, Part D, Part E (1 - 3 p.m.)
Thursday July 6 2017	Make any necessary changes to 3rd draft and share with USTAC and EPA

Promulgation Schedule (Cont.)

July - September, 2017	EPA Review
November 15, 2017	Conduct USTAC ₄ Meeting
January 2018	Conduct Public Workshops
March 2018	Proposed Regulations to State Registrar
July 2018	Promulgation by Cabinet Secretary
October 2018	State Program Approval

Discussion of Draft Changes to UST Regulations

Draft changes based on Federal Rule Changes

- Airport Hydrant Fuel Systems and Field Constructed Tanks
- Emergency Generator Tanks
- Operator Training
- 30 Day Walk Around Inspections
- Overfill Protection
- Secondary Containment
- Containment Sump Testing
- Other Definitions
- Reference Standards

Discussion of Draft Changes to UST Regulations

Changes not driven by Federal Rule Changes

- Additional Rules for USTs located at Marinas
- Consistency with ITRC Regarding NAPL Definitions
- Sustainable Remediation Techniques
- Use of Institutional Controls

Delaware Regulations Governing Underground Storage Tanks

Part A: General Requirements for Underground Storage Tank Systems

Part B: Installation, Operation and Maintenance: Excludes Heating Fuel

Part C: Installation, Operation and Maintenance: Heating Fuel

Part D: Installation, Operation and Maintenance: Hazardous Substances

Part E: Requirements for Release Reporting, Corrective Action

Delaware Regulations Governing Underground Storage Tanks

Part F: Financial Responsibility

Part G: Contractor Certification

Part H: Governing Reimbursement for Petroleum Contamination Site Cleanup

Part I: Field Constructed Tanks

Part J: Airport Hydrant Fuel Systems

Uncontained Sump Concerns:

- Product released goes directly into the environment with no alarms
- Corrosion concerns with soil and water in direct contact with product piping

60 out of 291 Gas Dispensing Facilities Do Not Have Containment Sumps

Uncontained Sumps



Dispenser Sump Replacement Projects

Dispenser Sump Data

Year	Total Replaced	Lust impacts	% of replacement with LUST impact	Hydro Investigations (above tier zero)	% of total with hydro impact
2013	37	13	35.1%	0	0.0%
2014	5	2	40.0%	0	0.0%
2015	4	2	50.0%	0	0.0%
2016	19	2	10.5%	0	0.0%
Total ('13-'16)	65	19	29.2%	0	0.0%

Containment Sump Replacement Projects

Tank Top Sump (STP) Data

Year	Total Replaced	Lust impacts	% of replacement with LUST impact	Hydro Investigations (above tier zero)	% of total with hydro impact
2013	17	10	58.8%	0	0.0%
2014	25	10	40.0%	0	0.0%
2015	25	5	12.0%	0	0.0%
2016	36	5	13.9%	1	2.8%
Total ('13-'16)	103	28	27.2%	1	1.0%

Spill Bucket Failure Projects

Spill Bucket (SB) Data - not including Spill Buckets replaced due to VR Decommissioning

Year	Total Replaced	Lust impacts	% of replacement with LUST impact	Hydro Investigations (above tier zero)	% of total with hydro impact
2013	21	18	85.7%	4	19.0%
2014	34	19	55.9%	5	14.7%
2015	48	20	41.7%	0	0.0%
2016	44	18	40.9%	0	0.0%
Total ('13-'16)	147	75	51.0%	9	6.1%

Secondary Containment Requirements

DNREC Has Had Secondary Containment Requirements in Place Since 2008

New Federal Requirements:

- Requires new and replaced tanks and piping to be double walled.
- Requires interstitial monitoring (and sumps if they are used for interstitial monitoring)
- Requires under-dispenser containment for new dispenser systems

What DNREC would like to change:

- Phase out non liquid tight containment found at the tank top and under dispensers.



Operator Training Requirements

DNREC Has Had UST Operator Training Requirements in Place Since 2010

New Federal Requirements:

- Owners must designate and ensure 3 classes (A, B, & C) of operators are trained
- Recordkeeping is required for as long as the operator is designated at the facility
- Retraining is required for Class A and B operators at facilities determined to be out of compliance

30 Day Walk Around Inspections

DNREC Has Had Routine Inspection Requirements in Place Since 2008

New Federal Requirements:

- Walk around inspection every 30 Days
- Check spill prevention equipment
- Check release detection equipment and records

Annually

- Check containment sumps
- Check hand held release detection equipment

What DNREC will need to change:

- 30 Days will Change to every 30 Days
- DNREC is currently more stringent in inspecting containment sumps as part of 30 day walk around inspection



Requirements for Overfill Protection

New Federal Requirements:

- Overfill protection equipment will be checked every 3 years.
- Inspect to make sure overfill operates as intended
- Ball Floats will not be allowed on retrofit or new installations.

What DNREC will need to change:

- DNREC will add an annual inspection requirement for owners/operators to demonstrate that overfill equipment functions properly.
- Prohibition on installing ball floats at new installation or when replacement is needed.

What DNREC would like to change: Phase out the use of ball floats on all systems.



Containment Sump Testing

DNREC Has Had Containment Sump Testing Requirements in Place Since 2008

New Federal Requirement:

- Test sumps used for piping interstitial monitoring to ensure they are liquid tight every 3 years.
- Double-walled sumps with periodic interstitial monitoring between the containment sump walls are not required to meet the testing requirement
- Keep records for 3 years

DNREC would like to change:


- Test all containment sumps to see if they are liquid tight every three years.



Removing Deferrals for Field-Constructed USTs and Airport Hydrant Fuel Distribution Systems

New Federal Requirements:

- Requires Release Reporting, Spill Prevention, Overfill Prevention, Release Protection, Cathodic Protection, Operator Training.
- Exceptions to meeting secondary containment requirement for some FCT & AHS piping
- Provides unique options for meeting release detection requirements



Removing Deferral for Emergency Generator USTs


DNREC has had requirements release detection for emergency generator USTs since 2008.

New Federal Requirements:

- Removes the deferral and requires release detection for existing tanks and piping associated with Emergency Generator USTs. New installations must meet all standards.

What DNREC will need to change:

- New and existing emergency generator USTs release detection for piping will need to be modified.



Part A Reference Organizations and Standards (Pages 14-17)

Reference Standards were added based on changes to the federal regulations to comply with technical requirements or because they were newly cited by DNREC.

Examples:

- 3.3.3.5 RP 1200, Recommended Practices for the Testing and Verification of Spill, Overfill, Leak Detection and Secondary Containment Equipment at UST Facilities
- 3.3.3.4 RP 1000 Marine Fueling Facility Systems (2011 Edition)

Still need to list specific editions of the documents.

Additional Requirements for USTs at Marinas

- Definitions of Marina UST, Marina Fueling Facility
- Referenced PEI RP 1000
- Require upgrade to marine grade equipment at new installation and retrofit.



Sustainable Remediation Techniques

- Referenced ASTM and ITRC Guidance
- Encouraged but not required
- Incorporated into Remedial Action Workplans



Institutional Controls

- Acknowledge that institutional controls can be incorporated into a remedial action workplan to manage the risk from exposure to hazardous substances.
 - When required ensure the institutional control has been put in place before issuing a No Further Action Letter
- Deed Notices
 - GMZ's
 - Environmental Covenants



Written Comments on the Draft Regulations Can be sent to

DNREC_USTRegulations@state.de.us



Opportunities for public participation and public comments.

Next Meeting Date Wednesday June 28th, 2017
10AM-3PM



