

Agenda

Department of Natural Resources and Environmental Control

Underground Storage Tank Advisory Committee Meeting

June 28, 2017

Introductions	10:00-10:05
Review of Minutes from May 10, 2017 Meeting	10:05-10:15
DNREC Response To Comment Document	10:15-12:00
Lunch Break	12:00-1:15
Continued Discussion as Needed	1:15-2:45
Goals for Next Meeting	2:45-2:50
Public Comment	2:50-3:00

UST Advisory Committee Meeting – June 28, 2017

Name (Please Print)	Address	Phone Number	E-mail address
Doyle Tiller	Tom Collins Blvd	302-739-5644	dtiller147@comcast.net
Jennifer Foster	Crescent	610 278 7203	jennifer.foster@compw.com
Joshua HZ	Wawa	610-558-8521	joshua.n.worth@unwv.com
Shelley Gabel	DTCC	302 259 6306	sgabel@dtcc.edu
Sandy Carl	Sunoco	610 833 3724	SANDRA.CARL@SUNOCO.COM
Babs Fawcett	DNREC		
MARK BAKER			MARK@WILSONBAKER.COM
Tom Kurzh	Royal Farm	410 812-9324	trush@royalfarm.com
Richard Negrete			rnegrete@gpminvestments.com

UST Advisory Committee Meeting – June 28, 2017

Name (Please Print)	Address	Phone Number	E-mail address
Melissa Wilmut	Nathan Group	410-412 6667	melissa.wilmut@nathan.org
R.T. LEICHT	STATE FISCAL MANSION		R.T.LEICHT@STATE.DC.US

USTAC Meeting Minutes

5-10-17

- Alex Rittberg called the meeting to order at 10:05am and presented a short PowerPoint that included: Introductions, discussion of the Agenda, the Purpose of USTAC, Meeting Governance, and the regulatory promulgation schedule.
- Question 1: Tom McKenna – how good is EPA with the turnaround time of 60 days?
 - Alex Rittberg answered that EPA is committed to keeping to their turnaround time.
- Question 2: Mark Baker - June 28th meeting, is that where we will see the results of these meetings?
 - Alex Rittberg answered yes.
- Alex Rittberg explained that Delaware was making some changes based on the 2015 federal changes and others based on Delaware's discretion.
- Alex Rittberg explained that Uncontained Sumps were a concern to the Department and presented information showing the number of leaks and releases from systems that did not have containment sumps.
- The previous meeting minutes were reviewed and approved.
- Changes Discussion:
 - Part B
 - 2.1.3
 - Requirement was put in place in 2008 with a 3 year phase out period. Eliminates double elbow swing joints on rigid (fiberglass piping) because mechanical vibration may untighten connection and cause leaks. We allowed facilities to weld their double elbow swing joints verses replace them with flex connectors. (Alex Rittberg)
 - Keeping date for historical purposes so we have something to reference if needed (Barbara Fawcett)
 - 2.4.1
 - Tom McKenna asked is secondary containment a defined term?
 - Alex Rittberg answered yes, DNREC is trying to work with Registrar's Office to continue to capitalize defined terms.
 - 2.4.3.4
 - Barbara Fawcett explained the difference between Part A and Part B Sections 1 and 2.
 - 2.9
 - 2.9.1.3: Alex Rittberg explained that DNREC was taking comments into consideration and developing language based on the last two meetings. 2.9.2.1.3 to 2.9.2.1.7:
 - Alex Rittberg explained that DNREC was eliminating the use of Observation tubes, monitoring wells, vadose zone vapor detection tubes, and U-tubes as approved methods of leak detection. These methods were phased out as a primary method of tank release detection in January 2013 because newer and better technology was available that could detect leaks sooner. Annual tank tightness testing was phased out sooner with the phase out occurring on

December 31, 2008. Again newer technologies could detect the release sooner.

- 2.9.4.3
 - Alex Rittberg stated that new language was being added, "The interstitial monitoring equipment shall be capable of producing a record of Release Detection monitoring results. Original test records or equivalent third party test reports shall be made available upon request." This change makes the requirement for interstitial monitoring equipment to produce a record consistent with 1.9.4.3 including adding the option that third party maintained records or the original test reports must be made available upon request. Alex Rittberg stated that comments from the previous meeting included concerns over keeping records for the life of the system, ATG print outs not being made to last, inspect tank tops sumps annually rather than monthly if they have sensors.
 - Alex Rittberg then explained that EPA- needs a means to audit 3rd party records and that owners would need to make sure ATG slips match 3rd party data. Alex Rittberg stated that DNREC would need to work with the owners to develop an auditing procedure based on how their systems work.
 - Tom Ruszin explained that their system can keep 12 months of data. Maybe reword to say 12 month
 - Barbara Fawcett added the DNREC conducts inspections once every three years, cannot change to 12 month, and suggested the records be archived so they can be produced for an audit.
- 2.9.5.2
 - Alex Rittberg stated that the record keeping requirement discusses that records be kept for the life of the system.
 - Barbara Fawcett stated the DNREC was still developing verbiage based off of concerns raised at previous meeting.
 - Alex Rittberg asked the USTAC what they thought was reasonable.
 - Mark Baker suggested adding language that records be kept for the time of ownership. He added that a 3 year retention time should be considered.
 - Tom McKenna said that records should be maintained as long as possible and at the time of sale, they should be able to produce them.
 - David Peterson asked if there was any benefit to looking at records 10 years old?
 - Peter Rollo stated yes, we can do research if there is a leak to see when the leak has occurred
 - Lori Spagnolo asked if DNREC had ever done that in the past?

- Alex Rittberg answered yes, DNREC has looked back through release detection records to try and determine when a leak has occurred.
- Mr. Deschepper asked if DNREC could put specific language in the regulations that describes how an owner should maintain their records?
- Alex Rittberg answered that it's better for owners to have the flexibility and for DNREC not to prescribe how the records are maintained.
- Doyle Tiller suggested that DNREC provide a checklist listing which records need to be maintained and for how long.
- Barbara Fawcett and David Gilden stated that a checklist is provided in the Department's Compliance Assistance Manual and is available on the Department's website.
- Doyle Tiller asked if we needed to specify manufacturer certified?
- Barbara Fawcett stated that DNREC would consider adding that language.
- 2.9.8.1
 - Barb Fawcett stated that it's important to keep the sunset date.
- 2.9.11.2
 - Alex Rittberg stated that this section brings language from the federal rule changes pertaining to Statistical Inventory Reconciliation into Delaware's regulations. SIR has been and will continue to be considered an alternative method of release detection. It's primarily used when we have single walled tanks that may not have an ATG. The new language mirrors the federal requirement that SIR be a quantitative method.
- 2.9.11.2.4
 - Alex Rittberg stated that it's a new federal requirement that the SIR reports must be submitted within the 30 day reporting period.
 - Mark Baker expressed concerns that this doesn't make sense.
 - Alex Rittberg agreed and said that DNREC would ask EPA for clarification on the issue.
 - Barbara Fawcett added that DNREC will look at other States to see what they have done
 - Doyle Tiller stated that it should be clear that the owner needs to submit the report to DNREC.
- 2.14.2
 - Alex Rittberg stated that language was added that described when rigid piping is used, flexible connector(s) shall be installed at the tank end of each regulated substance piping, vent pipe and vapor recovery pipe as well as at the base of each dispenser and vent riser on all new installations. Double elbow swing joints are prohibited. Alex Rittberg described that this is similar to 2.13 but adds more specific language that double elbow swing

joints can't be used with rigid piping. Vent and vapor recovery piping have always been included. The concern is that the threads may come loose.

- Tom Ruszin described that requiring flex connectors at vent stacks could lead to problems because the weight of the stack can crush the connector and an owner would have to replace/repair repeatedly. (Mark Devey agreed)
- Dave Gilden asked if they could offer any solutions?
- Thomas Ruszin suggested allowing a steel elbow joint.
- Peter Rollo stated that if the vent pipes had the proper structural support then there wouldn't be a problem.

▪ 2.20.2

- Alex Rittberg described that the section is being renamed to "Piping Interstitial Monitoring Requirements" and that two paragraphs that discuss testing pressurized piping are being moved to the previous section describing pressurized piping without changing the language.
- Mark Baker stated the same concerns discussed at the last meeting about testing the interstitial space of double wall piping on older systems should not be required.
- Alex Rittberg stated that DNREC is working on new language for that Section. Barbara Fawcett stated that the current language has been in the regulations since 2008, and it's not been a concern?
- Ms. Foster asked if DNREC would allow companies to change registrations from double wall to single wall?
- Mark Baker asked DNREC to look at the new EPA requirements and that it seems DNREC is penalizing older systems.
- Alex Rittberg stated that DNREC understands that older systems may not be capable of passing testing, and DNREC would consider changing the language.
- Mr. Deschepper asked if there be a clause requiring owners to bring older systems up to the new standards.
- Barbara Fawcett added that it would be more feasible for an owner to install and use sensors.
- Steve Stookey pointed out that some systems have double walled piping but no sumps.
- Mark Baker stated that a lot of systems are approaching 30 years and would likely be replaced.

▪ 2.21.3

- Alex Rittberg stated that the word "continuous" were being added for consistency and reminded everyone that continuous interstitial monitoring can meet the line tightness test requirements.
- Tom McKenna asked what is meant by continuous?
- Peter Rollo answered that the system monitors continuously but only records if there is an alarm.

- 2.22.7
 - Alex Rittberg stated that double wall spill buckets need to be tested and this is more stringent than federal requirements, and that the manufacturer recommends testing. Alex Rittberg then stated that DNREC will maintain annual spill bucket testing and referred to release data presented as the reason why we plan to remain more stringent than the federal requirement.
- 2.23.3.2
 - Alex Rittberg described that DNREC was eliminating the use of ball floats within a 3 year period on all active systems, and they wouldn't be allowed on newly constructed systems and retrofits.
 - Steve Stookey asked what if the overfill device isn't accessible how can it be inspected once a year?
 - Dave Gilden answered that they have to be inspected when we go out every three years, so they have to be accessible.
 - Tom Ruszin asked are ball floats even in the CARB Orders? Tom Ruszin
 - Pete Rollo answered no, they are not in the CARB Order.
 - David Peterson asked about the release information presented in the PowerPoint, was the data about releases from double wall spill buckets or single wall buckets?
 - Dave Gilden answered that they were all single wall buckets.
- 2.26.1
 - Alex Rittberg stated that dispenser, tank top, transition and any other containment sump of a single wall design shall be liquid tight and shall be tested for liquid tightness once every thirty-six (36) months in accordance with the manufacturer's specifications, or when deemed necessary by the Department to determine if a threat to human health, safety or the environment exists. This brings all containments sumps up to the same standard of liquid tight and testing every 36 months. This requirement applies to single wall containment sumps not used for release detection.
 - Tom McKenna asked why it state's manufacturer's specifications?
 - Alex Rittberg agreed it needed rewording.
- 2.26.4
 - Alex Rittberg described that this Section adds language that liquid and debris shall be properly disposed in accordance with all local, state and federal requirements. This should ensure the proper disposal of water and debris in sumps.
 - Barbara Fawcett added that DNREC would not get more specific as we were previously asked because there needs to be flexibility in how the work is done because the equipment varies.
- 2.28.2
 - Alex Rittberg described that this section describes that sensors have to be placed on the bottom of and in accordance with the manufacturer's specifications.

- Peter Rollo explained that this wording is based off of manufacturer's guidelines.
 - Doyle Tiller - thought at some point they wanted the sensors slightly off of the bottom.
 - Peter Rollo answered that he contacted manufacturer's to verify and they want them as close to the bottom as possible.
 - 2.29.1.2
 - Alex Rittberg stated that this section requires that all Repairs and Replacements to existing UST Systems not meeting the requirements of 2.29.1 and 2.29.1.1 of this Part, shall meet the applicable design, installation, maintenance and operational standards in Part B, §1 of these Regulations. We are trying to say that all retrofit and upgrades and repairs that post construction testing and some form of soil sampling need to be approved by the Department prior to construction.
 - Tom McKenna asked if "repair" should stay there.
 - Peter Rollo answered yes, repair that requires digging is considered a Retrofit.
- Part E
 - 1.1.1
 - Lori Spagnolo discussed that if there was a release identified that it must be reported immediately rather than within 24 hours.
 - 1.1.1.2
 - A participant asked if DNREC could change the requirement that if contaminated soil was discovered as part of a Phase 2 investigation, a consultant should be required to inform the Tank Management Section and not have to call the spill release hotline.
 - Alex Rittberg said that DNREC would discuss this matter internally.
- Alex Rittberg then stated that Written Comments on the Draft Regulations can be sent to: DNREC_USTRegulations@state.de.us and that the next meeting will be held on Wednesday, June 28th, 10am-3pm and that two weeks prior to meeting DNREC will send out revised regulations with updates for review.
- The meeting was concluded at 1:33pm

Response to USTAC Meeting Questions

1. Part A, Clarifying that the dispenser is part of the Underground Storage Tank System:

Department Response: The Department modified the definition of “Dispenser System” and added it to the definition of “Underground Storage Tank System.” The dispensing part of a UST System includes all equipment installed to effect that result. The Federal Regulations state that a Dispensing System includes dispenser, check valves, shear valves (product and vapor), unburied risers, flexible connectors, and any other transitional components that connect the dispenser to the underground piping. These changes clarify that the Dispensing System as defined is fully regulated as part of the UST System by these regulations.

2. Part A, Definition of Liquid Tight?

Department Response: The Department modified the definition of “Liquid Tight” to clarify that it now includes spill prevention equipment.

3. Part A, 4.7 Repair Notification

Department Response: The Department added language to clarify when notification of Repairs will be required.

4. Part A, Replacement Definition. What constitutes a piping run?

Department Response: The Department deferred to the Federal Regulation interpretation of a piping run and, based on EPA Guidance, added a definition for “Piping Run”. When 50% or more of a piping run is damaged or needs to be replaced the entire piping run is to be replaced in accordance with all applicable Part B Section 1.0 requirements. As a general rule the Federal Regulations considers all pressure piping upstream from a single submersible pump to be part of a single piping run. Likewise all piping downstream from a suction pump to the storage tank to be a single piping run. The Department also added language to Part B Section 1.14.9 and 1.14.10 to clarify when an entire piping run needs to be replaced.

5. Part A, Monitoring Tube Covers

Department Response: DNREC’s Water Resources Division prefers that the observation tubes not be labeled as any type of well, because then they would have to be permitted and constructed to well installation regulations. Owners can choose to obtain blank covers or remove wording referencing “well.” Installation of monitoring tubes are not required by the Department. The Department confirmed that blank covers with a triangle and the wording “Do Not Fill” are currently available and can assist owners in identifying the manufacturer of these covers.

6. Part A, Reference Standards

Department Response: The word “applicable” will be removed.

7. Part A, Section 4, What happens with installations and retrofits that are not approved within specified time frames?

Department Response: The Department is not comfortable with allowing owners to construct new UST systems or perform Repair, Retrofit, and Upgrades that involve excavations or the removal of containment sumps without Department approval because DNREC does not want to put the owner in a position where the owner has to re-do underground work that is inconsistent with the approved design. As this type of work is underground, modifying it if needed, would be costly and not practical.

The Department can be more flexible with repairs, retrofits and upgrades that are aboveground or where the work will take place within a containment sump. The Department added language to Part A Section 4.7.3 that allows an owner to conduct this type of work in the event that the Department does not approve or deny the proposed work within 14 days. In these types of situations, the owner would be required to inform the Department two days before the work will occur and assume the risk performing additional work to meet applicable regulations. The Department will continue to accommodate emergency situations via phone and email in an expeditious manner, and has not modified the regulations to address emergency situations. The Department extended the time given to approve repairs, retrofits, and upgrades from ten days to fourteen days because the Department is proposing to define a day as a calendar day, and believes two weeks is a reasonable timeframe to review and approve the work.

8. Part A, General Requirements, Special dispensation for placing product in newly installed tanks for testing prior to acquiring financial responsibility.

Department Response: The Department requires proof of financial responsibility before regulated substances can be placed into the tanks. If needed for ballast, water is to be used. No changes have been made to address this concern.

9. Part A, Section 4.4.3 – Transfer of Ownership

Department Response: The Department added language to Part A Section 4.4.2 stating that the sale price could be redacted from the executed bill of sale in the ownership transfer submittal.

10. Part A, 4.7.1 Retrofit or Upgrade Notifications - Approval

Department Response: See Item 7 above

11. Part A, 4.7.4 Retrofit or Upgrade Notifications - Inspection

Department Response: The Department changed notification to (2) Days instead of 48 hours. Requirement for notification remains unchanged. Method of notification is up to the owner or contractor.

12. Part A, 4.7.5 Retrofit or Upgrade – Start of Construction

Department Response: The Department changed 60 days to 90 days.

13. Part A, Information Access/Recordkeeping

Department Response: The Department's requirement to submit records for inspection within 10 days of the request will remain unchanged. Following an inspection the Department typically sends the owner a request for information letter stating a specific time period for the owner to produce the necessary records, generally this process takes longer than the 10 days listed in the regulations.

14. Part A, Delivery Prohibition

Department Response: The Department added the following language to Part A, Section 9.1.3: "Use or sale of the existing inventory of regulated substance is permitted unless the Department determines that an imminent threat to human health, safety or the environment exists."

15. Requirement to use a Certified Contractor when requesting a No Further Action Letter:

Department Response: The Department added language in Part A Sections 1.2.1 and Section 12 that requires owners of underground storage tanks that have not been removed or closed in place to use a certified contractor when performing these activities if they are seeking a No Further Action Letter from our Department. If they are not seeking a No Further Action letter, they do not have to use a certified contractor.

16. Part B, Section 1.9.4 – Reducing the 30 Day Walk Around to some time period greater than 30 days for sites with continuous interstitial monitoring?

Department Response: The Department changed the draft regulations to allow for annual inspections of submersible turbine pump containment sumps provided the owner has demonstrated that the UST system uses interstitial monitoring for leak detection, has liquid tight sumps, piping is sloped correctly, and the sensors are functional and wired for positive shutdown. All other items subject to the current 30 day walk around inspection schedule will continue to be inspected every 30 days.

17. Part B, section 1.9.4.3 – Using Third Party Reports in place of ATG Printouts?

Department Response: At the March, 2017 NWGLDE Spring Meeting (the Department Engineer is a member of this National Workgroup) the workgroup was asked if third party leak detection reports could be approved by the workgroup? The work group only approves leak detection equipment not the reporting aspect. However, the EPA representative of the work group stated the while the third party reports can be used, the information must come directly from the ATG. Therefore, the owner must still maintain ATG printouts to be presented to the Department upon request for verification that the third party reports contain the same information.

18. Part B, Section 1.9.5 – Maintaining records for the life of the UST is too much to ask for from the owners and a shorter time period is requested i.e. three years? What happens in an ownership transfer when the new owner is not provided with leak detection record from the previous owner?

Department Response: The Department changed the regulations in Part A Sections 5.1.3 to require owners and operators to maintain a list of routine operation and maintenance records for a period of three years. The Department also included a list of records that need to be maintained by the owner and operator for the time period that they own or operate the UST system. The Department also changed the regulations in Part A Section 4.4.4 to reflect that the seller must make certain records available to the new owner at the time of ownership transfer.

19. Part B, Section 1.10.3: The regulated community has requested relief from the anchoring requirements, i.e. float out calculations, and leave it up to the owner and/or contractor to determine the depth?

Department Response: The Department considers stability calculations very importance when installing new tanks. These calculations dictate the correct depth tanks need to be installed for them to be stable and not move. A stable tank translates into a tank that won't cause a release due to movement. Stability calculations are based on PEI Recommended Practice 100 and assume a worst case scenario i.e. empty tank, tank pit completely full of water and a depth resulting in a factor of safety if 1.2. Ideally the goal is to pass the calculations without having to include a hold-down system in the calculations since this will add to installation costs. Tanks installed today are larger and correspondingly have to be installed deeper. The Department can provide cost effective designs/guidance upon request.

20. Part B, Section 1.14.3 – Can the slope requirement be removed for underground piping?

Department Response: On New Installations:

Allowing product lines to be installed without the appropriate slope tends to create humps or dips in the piping that will cause leak detection problems. For example leaks on the far side of a hump, if small enough, will not be detected by the leak detector. The hump maintains enough pressure that the leak detector cannot detect a leak in this situation and can also trap air which can interfere with leak detector operation. Dips are traps for air to accumulate in lines again interfering with leak detector operation. The time it takes for the interstitial space to transmit a release to a sensor can be greatly increased or never occur. Continuous slope back to the tanks is the most efficient and cost effective way ensure leak detectors will operate efficiently and allow sensors to detect a release in the shortest amount of time, minimizing environmental contamination.

For Existing Systems:

When replacement of piping is desired and the slope requirement cannot be met, the Department has allowed installing the product piping without the correct slope under its alternative approval process, provided there are sensors in all sumps and all sensors are wired for positive shutdown. The additional sensors are needed since where a release will go is no longer predictable. The Department intends to continue the practice of addressing situations where a facility cannot meet the slope requirement through the alternate approval process.

21. Part B, Section 1.19.1.6 – Testing piping secondary is not necessary since the EPA does not require it?

Department Response: The Department changed the regulations to make a distinction between pressurized piping installed prior to 2008 and pressurized piping installed after 2008. If the double walled piping was installed prior to 2008 only the primary wall of the pipe needs to be tested during a line tightness test. For systems installed after 2008 both the primary and secondary walls need to be tested during an annual line tightness test. Since the piping secondary is the last line of defense between a release and the environment, the Department sees a need to verify its integrity. As stated in the UST regulations all facilities utilizing continuous interstitial monitoring can opt out of the annual line tightness test requirement that is part of line leak detector testing provided the sensors can be evaluated monthly as part of the ATG Console programming. Federal UST regulations Part 280, Subpart D (b) (i) (A) and (B) covers these requirements and also reaffirms that line tightness testing and line leak detector testing go together. Additionally all new facilities installed in Delaware after 2008 have installed continuous interstitial monitoring. Since facilities must have a functioning continuous interstitial monitoring system in place and operating to opt out of line tightness testing, continuous interstitial monitoring would be recognized as the primary leak detection method for piping. Should a facility choose to test the lines anyway, that would constitute a voluntary action on their part and would not change the primary line leak detection method. However, should that test fail they would be required to notify the Department of a test failure. Please be aware that in the course of retrofit, repair or upgrade work requiring line tightness testing, both the primary and secondary are required to be tested at that time regardless of whether or not they are required to be tested annually.

22. Part B, Section 1.21- Spill Prevention Requirements – Removal of existing double wall spill bucket testing options provide no further incentive to install these types of spill containment?

Department Response: True double walled spill buckets are described in the Federal UST regulations. They stipulate that doubled walled spill buckets with interstitial monitoring are required to have the bucket integrity evaluated every 30 days or at the monthly walk through. The manufacturer also requires the interstitial sensor to be tested as well as the bucket itself. Currently the manufacturer requires the sensor to be removed for testing and once reinstalled the spill bucket is vacuum tested which tests both primary and secondary simultaneously.

Not all double walled spill buckets are truly double walled. They are labeled as such due to the ability to remove the primary bucket without the need to break concrete but don't have an interstitial sensor. They are treated like any spill bucket and the primary test is hydrostatic. When the Department first began receiving sampling results as spill buckets were replaced, the level of contamination required a hydrogeologic investigation in many cases. Therefore, in 2008, annual testing was added to the Delaware UST regulations without objection. During the first few years most every bucket tested failed until the failure rate leveled off (see below for relevant data presented at a past internal Department meetings). To this day, the Department continues to receive regular retrofit requests to replace a failed spill bucket. This reinforces that spill bucket failures will continue at a steady pace.

The Department is not removing the incentive to install double wall spill buckets. With the implementation of Stage I EVR, several double wall spill bucket models are now available without sensors and still provide the ability to replace the primary bucket without breaking concrete. Even spill buckets that normally come with sensors can have the sensor removed and the opening plugged. In both cases, only the primary spill buckets need to be tested.

Installing double wall spill buckets with sensors is a voluntary action by the owner. The Department also verifies this choice with the owner to be sure they are aware of the testing that will be required. The UST regulations also stipulate that the manufacturer's operation, maintenance and testing requirements are to be followed. Therefore, the UST system owner knows of all the additional requirements when they choose double wall spill buckets with sensors. The Department concludes that no further revisions are necessary.

23. Part B, Section 1.22.3 – Phase out Requirements of ball floats. Can ball floats remain in place when overfill valves in the drop tube are installed?

Department Response: In a ball float only scenario, a ball float is required to be installed at 90% of tank capacity. In a potential overfill situation, a ball float only restricts flow. It will not stop flow. Additionally, when Vapor Recovery went into effect, a ball float also had to be installed at the vapor riser for it to function properly. Installation at any other location would create an open vent situation. This means even if the ball float engages, the tank is still able to release vapor or continue to vent via the vapor connection and the overfill requirement would not be achieved. If Stage I EVR equipment were installed with a ball float installed in another location other than the vapor riser, the EVR tests would likely fail until the ball float is removed and the opening capped.

Leaving a ball float at 90% of tank capacity in conjunction with the installation of a drop tube shut off valve at 95% prevents the overfill prevention equipment from operating as designed. Drop tube shutoff valves need a minimum flow rate achieved during normal gravity fill operations. Since a ball float is installed lower in the tank, it interferes with this flow rate by slowing flow to the point that the overfill valve would not engage as designed and the overfill requirement would not be met. Therefore, to ensure the overfill drop tube shutoff valve operates as designed, existing ball floats must be removed. Ball floats will not be permitted to be installed as a secondary measure when drop tube overfill valves are installed. Therefore the requirement to remove ball floats will remain in effect.

24. Part B, Section 1.22.6 – There are concerns from the regulated community that annual removal of overfill devices would result in the destruction of the device during the removal process requiring annual replacement.

Department Response: The Department is changing the requirement for owners and operators to inspect overfill devices to once every three years which is consistent with the federal regulations.

25. Part B, Section 1.25.1 – Are vent riser sumps subject to sump testing?

Department Response: Vent sumps are covered by the revised sump testing requirements. It is not the Department's intent to include sumps used as access manholes for Monitoring Tube, ATG and Interstitial risers as sumps to be tested.

26. Part B, Section 1.27.3 – It was brought up that interstitial sensors cannot be installed at the lowest point.

Department Response: Fiberglass tanks with a brine filled interstice have a reservoir on top of the tank where the sensor is placed. In this case the sensor is placed at the bottom of the reservoir instead of the bottom of the tank interstice. In either case the sensor is mounted at the lowest point.

27. Part B, Section 2.94 – Having a third party maintain release detection records.

Department Response: See response #17 above.

28. Part B, Section 2.9.5.2- How long should records be maintained.

Department Response: See response #18 above.

29. Part B, Section 2.9.11.2.4 When do you have to report SIR results.

Department Response: The EPA clarified in their May 2017 Question and Answer Document that all release detection methods, including SIR must obtain a conclusive result of pass or fail within a 30-day monitoring period. The Department changed the language in Part B Section 2.9.11.2.4 to reflect this language.

30. Part B, Section 2.14.2: Allowing double elbow swing joints at vent riser connection.

Department Response: If properly designed and constructed the vent riser should have sufficient support to readily allow the use of a flex connector to connect it to the vent piping without issue. The Department does not support changing the draft language.

31. Part B, Section 2.20. Testing of Secondary Wall of Underground Piping during annual tightness test.

Department Response: See response #21 above.

32. Part B, Section 2.23. Phasing out the use of vent line flow restrictors (ball floats)

Department Response: See response #23 above.

33. Part B, Section 2.26.1 and 2.26.2 Containment Sump Testing


Department Response: The Department changed Part B 2.26.1 and 2.26.2 deleting the phrase “and the manufacture’s specification” since it is required in Part B 2.26.3. The intention of Sections 2.26.1 and 2.26.2 are to describe when containment sump testing shall be performed, and the intention of 2.26.3 is to describe how it is to be done. By stating that the testing shall be done in accordance with the manufacturer’s instructions in Part B Section 2.26.3, allows other types of testing than hydrostatic testing to be performed.

EAR2017-015

June 28, 2017


Delaware USTAC

Agenda



• Introductions	10:00-10:05
• Review of Minutes from May 10, 2017 Meeting	10:05-10:15
• DNREC Response To Comment Document	10:15-12:00
• Lunch Break	12:00-1:00
• Continued Discussion as Needed	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



USTAC 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 28 2017	Make any necessary changes to 3rd draft and share with USTAC and EPA

Promulgation Schedule (Cont.)

August –October 2017	EPA Review
November 15, 2017	Conduct USTAC4 Meeting
January 2018	Conduct Public Workshops
March 2018	Proposed Regulations to State Registrar
July 2018	Promulgation by Cabinet Secretary
October 2018	State Program Approval Submitted

Written Comments on the Draft
Regulations Can be sent to

DNREC_USTRegulations@state.de.us



Public Comment

USTAC Meeting Minutes

5-10-17

- Alex Rittberg called the meeting to order at 10:05am and presented a short PowerPoint that included: Introductions, discussion of the Agenda, the Purpose of USTAC, Meeting Governance, and the regulatory promulgation schedule.
- Question 1: Tom McKenna – how good is EPA with the turnaround time of 60 days?
 - Alex Rittberg answered that EPA is committed to keeping to their turnaround time.
- Question 2: Mark Baker - June 28th meeting, is that where we will see the results of these meetings?
 - Alex Rittberg answered yes.
- Alex Rittberg explained that Delaware was making some changes based on the 2015 federal changes and others based on Delaware's discretion.
- Alex Rittberg explained that Uncontained Sumps were a concern to the Department and presented information showing the number of leaks and releases from systems that did not have containment sumps.
- The previous meeting minutes were reviewed and approved.
- Changes Discussion:
 - Part B
 - 2.1.3
 - Requirement was put in place in 2008 with a 3 year phase out period. Eliminates double elbow swing joints on rigid (fiberglass piping) because mechanical vibration may untighten connection and cause leaks. We allowed facilities to weld their double elbow swing joints verses replace them with flex connectors. (Alex Rittberg)
 - Keeping date for historical purposes so we have something to reference if needed (Barbara Fawcett)
 - 2.4.1
 - Tom McKenna asked is secondary containment a defined term?
 - Alex Rittberg answered yes, DNREC is trying to work with Registrar's Office to continue to capitalize defined terms.
 - 2.4.3.4
 - Barbara Fawcett explained the difference between Part A and Part B Sections 1 and 2.
 - 2.9
 - 2.9.1.3: Alex Rittberg explained that DNREC was taking comments into consideration and developing language based on the last two meetings. 2.9.2.1.3 to 2.9.2.1.7:
 - Alex Rittberg explained that DNREC was eliminating the use of Observation tubes, monitoring wells, vadose zone vapor detection tubes, and U-tubes as approved methods of leak detection. These methods were phased out as a primary method of tank release detection in January 2013 because newer and better technology was available that could detect leaks sooner. Annual tank tightness testing was phased out sooner with the phase out occurring on

December 31, 2008. Again newer technologies could detect the release sooner.

- 2.9.4.3

- Alex Rittberg stated that new language was being added, "The interstitial monitoring equipment shall be capable of producing a record of Release Detection monitoring results. Original test records or equivalent third party test reports shall be made available upon request." This change makes the requirement for interstitial monitoring equipment to produce a record consistent with 1.9.4.3 including adding the option that third party maintained records or the original test reports must be made available upon request. Alex Rittberg stated that comments from the previous meeting included concerns over keeping records for the life of the system, ATG print outs not being made to last, inspect tank tops sumps annually rather than monthly if they have sensors.
- Alex Rittberg then explained that EPA- needs a means to audit 3rd party records and that owners would need to make sure ATG slips match 3rd party data. Alex Rittberg stated that DNREC would need to work with the owners to develop an auditing procedure based on how their systems work.
 - Tom Ruszin explained that their system can keep 12 months of data. Maybe reword to say 12 month
 - Barbara Fawcett added the DNREC conducts inspections once every three years, cannot change to 12 month, and suggested the records be archived so they can be produced for an audit.

- 2.9.5.2

- Alex Rittberg stated that the record keeping requirement discusses that records be kept for the life of the system.
- Barbara Fawcett stated the DNREC was still developing verbiage based off of concerns raised at previous meeting.
- Alex Rittberg asked the USTAC what they thought was reasonable.
- Mark Baker suggested adding language that records be kept for the time of ownership. He added that a 3 year retention time should be considered.
- Tom McKenna said that records should be maintained as long as possible and at the time of sale, they should be able to produce them.
- David Peterson asked if there was any benefit to looking at records 10 years old?
- Peter Rollo stated yes, we can do research if there is a leak to see when the leak has occurred
- Lori Spagnolo asked if DNREC had ever done that in the past?

- Alex Rittberg answered yes, DNREC has looked back through release detection records to try and determine when a leak has occurred.
- Mr. Deschepper asked if DNREC could put specific language in the regulations that describes how an owner should maintain their records?
- Alex Rittberg answered that it's better for owners to have the flexibility and for DNREC not to prescribe how the records are maintained.
- Doyle Tiller suggested that DNREC provide a checklist listing which records need to be maintained and for how long.
- Barbara Fawcett and David Gilden stated that a checklist is provided in the Department's Compliance Assistance Manual and is available on the Department's website.
- Doyle Tiller asked if we needed to specify manufacturer certified?
- Barbara Fawcett stated that DNREC would consider adding that language.
- 2.9.8.1
 - Barb Fawcett stated that it's important to keep the sunset date.
- 2.9.11.2
 - Alex Rittberg stated that this section brings language from the federal rule changes pertaining to Statistical Inventory Reconciliation into Delaware's regulations. SIR has been and will continue to be considered an alternative method of release detection. It's primarily used when we have single walled tanks that may not have an ATG. The new language mirrors the federal requirement that SIR be a quantitative method.
- 2.9.11.2.4
 - Alex Rittberg stated that it's a new federal requirement that the SIR reports must be submitted within the 30 day reporting period.
 - Mark Baker expressed concerns that this doesn't make sense.
 - Alex Rittberg agreed and said that DNREC would ask EPA for clarification on the issue.
 - Barbara Fawcett added that DNREC will look at other States to see what they have done
 - Doyle Tiller stated that it should be clear that the owner needs to submit the report to DNREC.
- 2.14.2
 - Alex Rittberg stated that language was added that described when rigid piping is used, flexible connector(s) shall be installed at the tank end of each regulated substance piping, vent pipe and vapor recovery pipe as well as at the base of each dispenser and vent riser on all new installations. Double elbow swing joints are prohibited. Alex Rittberg described that this is similar to 2.13 but adds more specific language that double elbow swing

joints can't be used with rigid piping. Vent and vapor recovery piping have always been included. The concern is that the threads may come loose.

- Tom Ruszin described that requiring flex connectors at vent stacks could lead to problems because the weight of the stack can crush the connector and an owner would have to replace/repair repeatedly. (Mark Devey agreed)
- Dave Gildden asked if they could offer any solutions?
- Thomas Ruszin suggested allowing a steel elbow joint.
- Peter Rollo stated that if the vent pipes had the proper structural support then there wouldn't be a problem.

▪ 2.20.2

- Alex Rittberg described that the section is being renamed to "Piping Interstitial Monitoring Requirements" and that two paragraphs that discuss testing pressurized piping are being moved to the previous section describing pressurized piping without changing the language.
- Mark Baker stated the same concerns discussed at the last meeting about testing the interstitial space of double wall piping on older systems should not be required.
- Alex Rittberg stated that DNREC is working on new language for that Section. Barbara Fawcett stated that the current language has been in the regulations since 2008, and it's not been a concern?
- Ms. Foster asked if DNREC would allow companies to change registrations from double wall to single wall?
- Mark Baker asked DNREC to look at the new EPA requirements and that it seems DNREC is penalizing older systems.
- Alex Rittberg stated that DNREC understands that older systems may not be capable of passing testing, and DNREC would consider changing the language.
- Mr. Deschepper asked if there be a clause requiring owners to bring older systems up to the new standards.
- Barbara Fawcett added that it would be more feasible for an owner to install and use sensors.
- Steve Stookey pointed out that some systems have double walled piping but no sumps.
- Mark Baker stated that a lot of systems are approaching 30 years and would likely be replaced.

▪ 2.21.3

- Alex Rittberg stated that the word "continuous" were being added for consistency and reminded everyone that continuous interstitial monitoring can meet the line tightness test requirements.
- Tom McKenna asked what is meant by continuous?
- Peter Rollo answered that the system monitors continuously but only records if there is an alarm.

- Peter Rollo explained that this wording is based off of manufacturer's guidelines.
 - Doyle Tiller - thought at some point they wanted the sensors slightly off of the bottom.
 - Peter Rollo answered that he contacted manufacturer's to verify and they want them as close to the bottom as possible.
 - 2.29.1.2
 - Alex Rittberg stated that this section requires that all Repairs and Replacements to existing UST Systems not meeting the requirements of 2.29.1 and 2.29.1.1 of this Part, shall meet the applicable design, installation, maintenance and operational standards in Part B, §1 of these Regulations. We are trying to say that all retrofit and upgrades and repairs that post construction testing and some form of soil sampling need to be approved by the Department prior to construction.
 - Tom McKenna asked if "repair" should stay there.
 - Peter Rollo answered yes, repair that requires digging is considered a Retrofit.
 - Part E
 - 1.1.1
 - Lori Spagnolo discussed that if there was a release identified that it must be reported immediately rather than within 24 hours.
 - 1.1.1.2
 - A participant asked if DNREC could change the requirement that if contaminated soil was discovered as part of a Phase 2 investigation, a consultant should be required to inform the Tank Management Section and not have to call the spill release hotline.
 - Alex Rittberg said that DNREC would discuss this matter internally.
- Alex Rittberg then stated that Written Comments on the Draft Regulations can be sent to: DNREC_USTRegulations@state.de.us and that the next meeting will be held on Wednesday, June 28th, 10am-3pm and that two weeks prior to meeting DNREC will send out revised regulations with updates for review.
- The meeting was concluded at 1:33pm