

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.

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