

# Storage Tank Systems Questions and Answers

CHAPTERS 62-761, AND 62-762, FLORIDA ADMINISTRATIVE CODE

This Q&A is a living document and is subject to change and continuously being corrected and updated – December 2020

*Nothing herein is intended to modify department rules or guidance documents incorporated within those rules.*

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### **OVERFILL PROTECTION**

Rules 62-761.500(7), 62-762.501(2)(e), 62-762.502(2)(e), Florida Administrative Code (F.A.C.)

- **Question:** *If a facility has more than one method of overfill protection, must each device have an annual operability test?*
- *Effective October 2019, the owner/operator must choose one device to be designated the primary overfill device and it shall be tested every year and be on the equipment registration list. Any additional devices cannot interfere with the primary device. Secondary devices do not require an equipment registration, nor annual operability testing.*
  
- **Question:** *Regarding the failure criteria of a ball float that is set to restrict flow before 95% when there is also a flapper present: I propose that we have a valid presumption that if a ball float is present it is set about 90%, or at most it is below 95%, unless can be demonstrated otherwise, and so it would need removed if there is also a flapper?*
- *Per PEI/RP100, when installing flow shut-off devices, do not install a ball-float valve for overfill protection. Thus, when conducting the annual operability test if it is determined that a ball float valve and a flapper valve are present on the same UST, one device (preferably the ball float valve assembly) must be removed.*
  
- **Question:** *Can ball float valves and flapper valves be used together?*
- *Per PEI/RP100, when installing flow shut-off devices, do not install a ball-float valve for overfill protection. Thus, when conducting the annual operability test if it is determined that a ball float valve and a flapper valve are present on the same UST, one device (preferably the ball float valve assembly) must be removed.*
  
- **Question:** *Can a ball float valve be repaired?*
- *PEI/RP100-17 recommends that vent restrictors such as ball float valves no longer be used for overfill prevention. Rule [62-761.500\(7\)\(b\)2.](#), F.A.C., states that vent restrictors can no longer be installed or replaced after January 11, 2017. If a ball float valve device that was installed prior to January 11, 2017, needs to be repaired, the Department recommends that the device may be repaired one time in accordance with manufacturer's specifications, prior to permanent removal. Following repair, the device must be able to pass an operability test and must function as originally installed. Per Rule 62-761.500, F.A.C., vent restrictors must restrict flow to the storage tank when the storage tank is no more than 90 percent full and does not allow the storage tank to be filled beyond 95 percent capacity.*
  
- **Question:** *Can a facility that has its own maintenance employees test their own primary overfill device and what documentation would they need?*
- *The rule does not require a third-party to test the device and they can test their device as long as they didn't have to break concrete/disturb soil (as this would require a PSSC). They would need to do periodic testing. Documentation: They would need to develop a form to use to document their testing and that they need to be able to document what they did and what their findings were.*

## STORAGE TANK SYSTEMS QUESTIONS AND ANSWERS

- Question: Can you confirm if the Krueger At-A-Glance (Type D) visual fuel level site gauge has been approved for use in Florida under EQ-730?
- *It is now approved under [EQ-730](#).*
  
- Question: For shop fabricated ASTs, do we have the vendor follow recommended guidelines to determine operability from that gauge manufacturer? Or is there another process guideline to follow?
- *The Department requires that the owner/operator use the manufacturer's operability testing requirements if available. If none are available, they will follow "Recommended Practices for the Testing and Verification of Spill, Overfill, Leak Detection and Secondary Containment Equipment at UST Facilities, PEI/RP1200-17, 2017 Edition".*
  
- Question: Can the tank owner/operator test their own overfill devices or does it need to be 3<sup>rd</sup> party (mostly referring to aboveground systems), understanding some manufacturers may void the warranty on some equipment, (e.g., Veeder-Root)?
- *They can test their own designated primary device unless the manufacturer states otherwise.*
  
- Question: Testing the remote fill lines for shop fab ASTs with nitrogen/soap following the disconnection for testing the overfill prevention valves. Would this be required as fuel will be in the line above the check and isolation valves just above the fillbox containment when the delivery hose is disconnected and would also potentially leak during fueling if it wasn't tight / cross-threaded?
- *Assuming the remote fill lines are aboveground, only visual inspection of piping is required, and not required to be periodically tested.*
- *If underground, remote fill lines have to be secondarily contained and interstitially monitored.*
  
- Question:
  1. Is there any special training or certification needed to do the hydrostatic integrity testing of spill buckets, dispenser sumps, or STP sumps?
  2. How about operability testing for overfill protection?
- *1. If for some reason the testing requires that excavating or disturbance of the soil is necessary, then a PSSC (Pollutant Storage System Contractor) is required. If there is no excavation or soil disturbance, then the rule does not specifically require that this testing be conducted with any specified certification.*
  2. *The rule states that integrity testing is to be performed in accordance with the equipment manufacturer's specifications or in accordance with PEI/RP1200-12 (adopting 2017 edition in September). PEI states that competent technicians be used to complete the work, and also references to specific requirements of the equipment manufacturer. The same general rules apply to overfill protection.*
  
- Question: This question is related to annual operability testing of overfill devices for USTs. Is the Department going to require that drop tubes are pulled to check if the flapper valves are free moving? If the tank gauge has a high-level audible alarm, can we just test that for operability rather than pulling drop tubes?
- *Effective October 2019, the owner/operator must choose one device to be designated the primary overfill device and it shall be tested every year and be on the equipment registration list. Any additional devices cannot interfere with the primary device. Secondary devices do not require an equipment registration, nor annual operability testing.*

## STORAGE TANK SYSTEMS QUESTIONS AND ANSWERS

- **Question:** ASTs located within a secondary containment and with overflow device installed – it is required to perform the annual operability test to the overflow device?
- Yes, see Rule 62-762.501(2)(e), and .502(2)(e), F.A.C., (not subject to API 2350). They have to perform an operability test on their primary designated overflow device. Not on the secondary devices.
  
- **Question:** ASTs located within a secondary containment and with release detection device installed - it is required to perform the annual operability test?
- Yes, see Rule 62-762.601(7), and .602(7), F.A.C.
  
- **Question:** Our Rule requires at least one overflow protection method. NFPA 30 requires a means for determining the level of a liquid, an alarm to sound at 90%, and automatically stopped delivery at 95%.
- Rule 62-761.501, F.A.C., states that no tank can be filled beyond 95%. However, we state the owner/operator must choose at least one method. Of the devices an owner/operator chooses, one device must be designated, and an annual operability test must be conducted each calendar year.
  - 62-761.501(2)(e)2. All storage tanks shall be equipped with at least one of the following overflow protection devices or containment method:
    - a. A level gauge or other measuring device that accurately shows the level of regulated substances in the storage tank, and is visible to the transfer operator,
    - b. A high level (at 90 percent tank capacity) warning alarm that is either visible, audible, or both to the transfer operator and the transfer operator is to ensure the tank is not filled beyond 95 percent capacity,
    - c. A high level (at 95 percent tank capacity) liquid flow cutoff controller, or
    - d. An impervious dike field area designed to contain overfills. **(This is a containment method)**
- Inspectors can only cite violations based on our Rule. It is possible to revise this in rulemaking.
  
- **Question:** (1) Are sight glasses required to be DEP approved? (2) Is it acceptable for the annual test of clock gauges and sight glasses to stick the tank and compare the results to the tank chart? (3) Are fillports located within the concrete secondary containment compliant to the requirements of Rule 62-762.501(2)?
- (1) The Equipment Registration Rule [62-762.851(2)(d)] exempts sight glasses from requirement for DEP Approval.  
(2) **Annual Test** – As long as the test performed verifies the operability of the overflow device.  
(3) **Fillport in Secondary Containment** – There is no specific requirements in the Rule. However, the impervious concreted dike field is designed to contain overfills so anything with that area must comply with secondary containment requirements.

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### RELEASE DETECTION

Rules 62-761.600, 62-762.601, 62-762.602, F.A.C.

- **Question:** If a sensor that will shut off the pump is still an option for line leak detection, which it appears it is at 62-761.600(3)(b)3.:  
*Electronic interstitial monitoring devices. Storage tank systems without line leak detectors shall have electronic interstitial monitoring devices that are capable of detecting a release of 10 gallons within one hour and shutting off the pump. Any instance where the monitoring device has shut off the pump is considered a positive response. The positive response shall be recorded as part of the release detection records and reported and investigated as an incident pursuant to Rule 62-761.430, F.A.C.*

## STORAGE TANK SYSTEMS QUESTIONS AND ANSWERS

This has been accepted at a couple of facilities in the past, and the depth of the sump equals 10 gallons was calculated and verified that depth would trip the sensor, and also that the sensor is programmed to shut-down the pump.

- *In those limited situations, this is an adequate solution.*
- Question: Does bulk product underground piping now require line leak detectors (LLDs)? The rule doesn't talk about bulk & small diameter piping. In the past, the line leak detectors were only required for small diameter piping.
- *There is not a requirement for LLDs for bulk product piping. The AST rule is clear on this, while the UST rule has been revised to refer to bulk product piping requirements in the AST rule. LLDs are only required for small diameter pressurized piping in contact with the soil.*
- Question: For non-traditional pressurized piping that does not utilize traditional Submersible Turbine Pumps - STPs (such as certain generator systems), are line leak detectors (LLDs) required?
- *There's no requirement for an LLD unless the system has the standard STP and small diameter piping in contact with soil.*
- Question: Are LLDs required to be installed downstream of the solenoid valve? If installed in the STP port, as usual, the solenoid valve is always going to be downstream of the LLD. I'm not sure if it's practical to install the LLD downstream of the solenoid – I would think if the solenoid opens at the same time the pump turns on, it would be testing the entire line.
- *Line leak detectors must be installed in accordance with manufacturer recommendations or Section 7 of PEI/RP200-13, 2013 Edition (this was also verified with industry manufacturers). Line leak detectors are **not** required for piping that is not in contact with the soil.*
- Question: Is there a requirement to take LEL (Lower Explosive Limit) readings to check for product vapors from aboveground storage tank interstitial spaces for monthly monitoring along with performing visual monitoring for liquids?
- *There is no requirement in the current 62-762, F.A.C., to conduct vapor monitoring of interstices. Interstices are to be monitored for water and product.*
- Question: Should an owner/operator be keeping a history of PLLD (Pressurized Line Leak Detection) alarms?
- *A PLLD is a release detection device and 62-761.600(3)2., F.A.C., states that any instance in which the PLLD has shut off power to the pump is considered a positive response. It must be recorded as part of the release detection records and be investigated as an incident. A facility does not have to keep monthly tapes for the PLLD but does have to keep records of any positive responses.*
- Question: Is your agency starting to require dual-point hydrostatic interstitial sensors for new USTs installed on wet sites?
- *62-761.600(2)(a)1. Liquid level monitoring systems with electronic hydrostatic sensors. This method shall be able to detect incidents by determining changes in liquid levels within the interstice and monitoring reservoir and to provide immediate electronic notification with an audible or visual alarm to the owner or operator if liquid levels cannot be maintained. Any alarm that indicates that liquid levels are not being maintained is considered a positive response. The positive response shall be recorded as part of the release detection records and reported and investigated as an incident pursuant to Rule 62-761.430, F.A.C.*

## STORAGE TANK SYSTEMS QUESTIONS AND ANSWERS

*\*\*If someone is using a brine-filled UST then they need to be able to detect changes in the liquid level within the interstice, thus they should use a high and low-level monitor. These should be captured in the EQs.*

- **Question:** Does a PLLD (Pressurized Line Leak Detector) require an annual operability test?
- *Yes, in accordance with 62-761.600(4) Annual operability testing of release detection systems. All release detection devices shall be tested annually at intervals not exceeding 12 months to ensure proper operation. The test must either simulate an actual alarm condition or shall be conducted according to the manufacturer's specifications, and shall include, at a minimum, a determination of whether the device operates as designed. Remote testing of the system can be performed by the manufacturer if the remote test is included in the third-party certification by a Nationally Recognized Testing Laboratory.*
- **Question:** We have many truck repair and maintenance facilities that perform oil changes. The tank system has pressurized small diameter underground and aboveground piping. Waste oil is poured into a containment basin in the maintenance garage then pumped using a diaphragm pump through the underground piping to the aboveground piping, discharging into the aboveground waste oil tank. Is a leak detector required in the above scenario for the pressurized underground piping associated with this aboveground waste oil storage tank system?
- *No, it is not. A piping line from a catchment basin that uses a diaphragm pump to move product to a tank is not considered pressurized piping.*

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### **SPILL CONTAINMENT DEVICES/PIPING SUMPS/DISPENSER SUMPS**

Rules 62-761.500, 62-762.501, 62-762.502, F.A.C.

- **Concern:** Sump and Boot issues – need guidance for consistency
- *Sump Integrity and Boot Issue Guidance is pending from the District Disciplines Team. Once finalized, a copy of the guidance document or a link to the document will be added to this Q&A.*
- **Question:** A single-walled spill bucket contained in a secondary sump (which has no access for visual inspection). It was determined in the past that these would be treated as single-walled and facility would need to conduct a closure assessment if they ever failed. With the new rule in place, is this the way they are still going to be treated?
- *If spill bucket fails, then it is an incident and the incident investigation may lead to sampling.*
- **Question:** If a single-walled spill bucket is located in a sump, how often must the sump be tested?
- *There are two options if the sump only contains the tank fill, vapor recovery, tank interstitial port, ATG port (or any combination of these) and does not contain the STP or act as a transition sump for suction piping.*
  1. *The sump does not need to be tested, but the single-walled spill bucket itself would need to be tested by Jan. 11, 2018, and then every year thereafter, not to exceed 12 months. However, if during monthly exams of the secondary containment an incident is discovered, then the o/o may be required to test the secondary as well. Or, if the spill bucket fails, then the o/o may have to test the secondary as part of an incident investigation. **OR***
  2. *Test the sump and spill bucket every three years, not to exceed 36 months, and the sump must contain a registered electronic release detection device. A failure of either the sump or the spill bucket may require an incident investigation.*

## STORAGE TANK SYSTEMS QUESTIONS AND ANSWERS

- **Question:** How to handle periodic testing of the multi-port sump? Is the single-walled spill bucket required to be integrity tested starting January 11, 2018, and every twelve (12) months thereafter while the sump is integrity tested starting October 13, 2018, and every three (3) years thereafter?
- *Yes, if the sump contains the STP (submersible turbine pump) or acts as a transition sump for suction piping, the single-walled spill bucket will need to be tested annually and the containment sump will require testing every three years, not to exceed 36 months. However, if during monthly exams of the secondary containment an incident is discovered, then the o/o may be required to test the secondary as well. Or, if the spill bucket fails, then the o/o may have to test the secondary as part of an incident investigation.*
  
- **Question:** If the water in a sump has a sheen, but it is less than one inch, is it required to be removed?
- *This would be considered PCW and would need to be removed.*
  
- **Question:** Transition and piping sumps associated with ASTs that are not below grade?
- *We have revised rules 62-761.700, 62-762.701, and .702, F.A.C., to clarify this issue. to state, "in contact with the soil."*
  
- **Question:** In 62-761.200 definition (4)(a)2., indicates certified contractor required for "...and spill containment". In the past, we did not require PSSC for primary, only of Spill Containment Unit.
- *PSSC is only required if disturbing backfill.*
  
- **Question:**
  1. Is there any special training or certification needed to do the hydrostatic integrity testing of spill buckets, dispenser sumps, or STP sumps?
  2. How about operability testing for overfill protection?
- *1. If for some reason the testing requires that excavating or disturbance of the soil is necessary, then a PSSC is required. If there is no excavation or soil disturbance, then the rule does not specifically require that this testing be conducted with any specified certification, however, per PEI RP1200, "the use of skilled, professional service technicians with experience in UST systems...". This applies to AST systems as well.*
  2. *The rule states that integrity testing is to be performed in accordance with the equipment manufacturer's specifications or in accordance with PEI/RP1200. The Petroleum Equipment Institute states that competent technicians be used to complete the work, and also references to specific requirements of the equipment manufacturer. The same general rules apply to overfill protection.*
  
- **Question:** How long does a facility have to repair a unit that fails a containment integrity evaluation?
- *We have revised the rules to state:*

**62-761.700(1)(a)** *Repairs shall be performed if any component of a storage tank system has:*

  1. *A release or discharge or contributed to a release or discharge of a regulated substance; or*
  2. *An operational or structural problem that could potentially result in a release or discharge or lead to the presence of groundwater or surface water in the interstice of a double-walled storage tank or integral piping.*

*(b) through (d) No change.*

*(e) A storage tank system that requires repair but cannot be repaired within 90 days to operate in accordance with the requirements of this chapter shall be taken out-of-service in accordance with subsection 62-761.800(1), F.A.C. If the system cannot be repaired within 365 days after being taken out-of-service, it shall be permanently closed pursuant to subsection 62-761.800(2), F.A.C.*

### 62-761.430 Incidents

Notification:

24 hours to investigate

72 hours to notify county of an incident on INF

14 days to complete investigation of incident unless owner/operator requests longer

**62-761.430(4)** In cases where an INF is required to be submitted, the investigation shall be completed within 14 days of the date of discovery of the incident to determine if a discharge has occurred. Incident investigations that require additional time can be extended with the prior written approval of the Department or county.

**62-761.800(2) Closure of storage tank systems.**

(a) The following storage tank systems must be closed in accordance with the provisions of this subsection:

1. A storage tank system that fails to meet or, if required, is not modified to meet the Storage Tank System Requirements of Rule 62-761.500, F.A.C., within 90 days of discovery.
2. A storage tank system that requires repair pursuant to Rule 62-761.700, F.A.C., but is not repaired within 90 days to operate in accordance with the requirements of this chapter shall be taken out-of-service. If the system is not repaired within 365 days after being taken out-of-service, it shall be permanently closed.

- **Question:** Who is authorized to certify the integrity testing for spill buckets and piping and dispenser sumps. Does it have to be a third-party or anyone can do it and if not done by a third-party how could I verify that it was done per manufacture requirements?
- There is no requirement for a third-party tester unless specified by the manufacturer. For further guidance see PEI/RP1200. Petroleum Equipment Institute (PEI) discusses the importance of using skilled, professional service technicians with experience in UST systems. PEI also requires that testers shall provide adequate documentation of the services that have been performed. All test results should include a detailed description of the tests and inspections performed to back up the pass/fail criteria. PEI provides some example forms that should be completed at a minimum to document results.
- **Question:** How is a competent technician defined?
- Per PEI RP1200, "the use of skilled, professional service technicians with experience in UST systems...". This applies to AST systems as well.
  - Can an owner/operator do a hydro test?
  - Unless specifically trained, the owner/operator should not be doing their own hydro test.
- **Question:** Does an owner/operator (o/o) have to submit an INF every time water is identified in a multi-port sump (includes - tank fill, vapor recovery, and ATG probe)?
- If the multi-port sump contained water in excess of an inch (enough to trigger your sump sensor to alarm) then there is an incident. Once an incident is discovered, an owner/operator has 72 hours to investigate it to determine whether there has been a discharge or not, before an INF is required. If within that 72-hour window you determine that it's just a water intrusion issue and not a release that has led to a discharge, then it does not need to be reported on an INF. The o/o does need to document the findings and maintain them for future inspection. If the discovery of the incident occurred during an inspection, then the o/o needs to provide the inspector with either an INF or an investigation report that there was no discharge, within the 72-hour window. The multi-port sump is somewhat unique in that it is not required equipment. However, if it is voluntarily installed, then it should be maintained. If there are sensors in the sump then it should be proactively monitored for release detection. In addition, products may be released into these containment units from overfill situations.
- **Question:** Does a concrete pad under an AST which is in contact with the soil require integrity testing?

## STORAGE TANK SYSTEMS QUESTIONS AND ANSWERS

- *Containment Integrity Evaluations (CIEs) are only required for tanks, piping, spill containment, and sumps that are in contact with the soil. A single-walled AST is not in contact with the soil when it is located in an impervious dike-field area that includes a concrete pad. Yes, the dike field area is in contact with the soil, but the rule does not require a CIE for a dike field area.*
- [Question: Do double-walled spill buckets with electronic interstitial monitoring need to be visually inspected every six months?](#)
- *No, only the piping sumps and dispenser sumps.*
- [Question: Can a facility simply conduct annual containment integrity tests of the primary portion of its double-walled spill buckets to meet the periodic integrity testing rule requirements, in lieu of conducting interstitial integrity tests every 3 years?](#)
- *The Department's current rule requires that double-walled spill buckets shall be installed to allow for interstitial monitoring and that any component of a storage tank system with an interstice shall have a method of interstitial monitoring. Thus, any double-walled spill bucket must be treated as a double-walled bucket and that includes the requirement for an initial interstitial integrity test by 10/13/18, and three-year testing after that. In addition to meeting this requirement, if a facility wishes to voluntarily conduct annual containment integrity testing of the primary portion of the spill bucket, then of course, that effort would be applauded.*
- [Question: Does the Department consider the AST fuel transfer stations to be piping sumps that may require a containment and integrity test?](#)
- *This seems to be bulk product piping. A piping sump as defined is a component installed as secondary containment or a monitoring port at the lowest point in the piping for release detection.*
  - *If there is no conversion from double-walled piping to single-walled within the "sump" so that the sump would collect a release, then I would argue that it's **not a piping sump**.*
  - *Also, if all the associated piping at the facility that is in contact with the soil is not secondarily contained then I would argue that it's **not a piping sump**.*
  - *And finally, if the "sump" is associated with the forwarding pump to an industrial process then the piping after the pump is not considered to be integral piping and I would argue that it's **not a piping sump**.*
  - *2019 definition of "sump". Subsection 62-762.201(74) "Sump" means a storage tank system component installed as secondary containment to prevent discharges of regulated substances. Sumps include dispenser sumps, piping sumps, spill containment systems, and hydrant sumps.*
- [Question: EQ-688 \(S. Bravo System\) is a double-walled spill bucket which is continuously monitored by a volume of propylene glycol. Is this acceptable for the integrity test since it is in the manufacturer's specifications?](#)
- *Yes, since it has continuous monitoring of the liquid level and is in the manufacturer's requirements.*
- [Question: Would it be acceptable to epoxy seal a leak in the penetration boot seal behind the metal collar \(not referring to a testing boot\)?](#)
- *The manufacturer would have to be contacted to see if they would permit this type of repair.*
- [Question: Does a liquid gauge in a double-walled spill bucket, like a float gauge, require annual operability testing?](#)
- *Yes.*
- [Question: Explain when sampling is required for double-walled spill buckets.](#)
- *See the last page for [Double-Walled Spill Containment \(Bucket\) System Testing and Sampling Requirements](#).*

**CLOSURE AND OUT-OF-SERVICE REQUIREMENTS**

Rules 62-761.800, 62-762.801, 62-762.802, F.A.C.

- **Question:** What is the expectation for shop fab tanks that are out-of-service for longer than 365 days that are returning to service. Using STI SP001-2011 we state the tank “must be evaluated.”
- *Tanks only need to be evaluated by the owner/operator by completing the STI SP001 Monthly Checklist which is a visual inspection.*
  
- **Question:** Will a TCAR (Tank Closure Assessment Report aka sampling) be required for systems removed without notification? There have been numerous ASTs where the tank has disappeared when an inspector shows up for an inspection. Sampling has been required in these cases since it is unknown if the tank actually failed /caused a discharge and then the owner promptly removed it not wanting to contact regulatory agencies.
- *Yes, sampling will be required for a UST system.  
If an AST system is not in contact with soil, then there is not a requirement for a Closure Integrity Evaluation. If there are no unresolved incidents such as visible signs of a possible discharge, then there is no requirement for sampling. Cite for failure to notify and failure to submit a limited closure.*
  
- **Question:** Scenario: Closure of UST system dock piping & dispenser liners, both of which are not in contact with soil, so the Closure Integrity Evaluation & Limited Closure Report forms do not apply (?). I’m sure we want to document something though.
- *Integrity testing is now required for dispenser sumps and piping over the surface waters of the state. For now: Cite for failure to notify prior to closure, ask for a copy of the disposal receipts and cite for failure to notify for install of replacement piping (if that’s the case).*
  
- **Question:** How do we handle tanks that are discovered to be out-of-service with no Financial Responsibility after April 11, 2017? What sort of timeframe should we give them to close the un-insured tank?
- *Cite violation, do the level of effort, and after 90 days refer to the district. The district will require them to close after the 90 days.*
  
- **Question:** The Department’s rule reference guidelines concerning instructions for conducting sampling during storage tank closure require that a soil sample from the location in each source area (tank farm, integral piping, dispenser island), that yields the highest hydrocarbon measurement is to be analyzed. The guidelines state that each dispenser island is considered a source area. What is the Department’s definition of a dispenser island?
- *The Department considers a dispenser island to be the location of one or more dispensers that are positioned in line with each other such that they may be accessed by a vehicle advancing parallel down the line of the dispenser(s).*

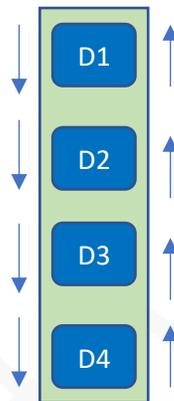
*On the following page are a couple of examples of dispenser island set-ups:*

## STORAGE TANK SYSTEMS QUESTIONS AND ANSWERS

**Scenario 1: Four** dispenser islands with four dispensers. (Each Multi-Dispenser has a common dispenser sump serving each side of the Dispenser)



**Scenario 2: One** dispenser island with four dispensers. (Each Multi-Dispenser has a common dispenser sump serving each side of the Dispenser)



**Scenario 3: Two** separated dispenser islands with two dispenser sumps. (Each Multi-Dispenser has a common dispenser sump serving each side of the Dispenser)



- **Question:** If a site does a Closure Integrity Evaluation (CIE) for a system then takes it properly out-of-service and it is more than 45 days until they close, will they have to do another CIE?
- The Rule states in 62-761.800(3)(a)1., F.A.C., that a CIE must be performed **no more than** 45 days prior to closure.

**SURVEY / ENGINEER DRAWINGS**

Rules 62-761.500, 62-762.501, 62-762.502, F.A.C.

- **Question:** What is the requirement for a surveyor or engineer drawing to document changes to storage tank systems per the 62-761.710, F.A.C.? Examples listed below:
- *The purpose of the regulation is to document where piping and tanks are located underground (and to document their dimensions) hence the requirement for survey drawing. (only drawings conducted by a professional land surveyor or professional engineer are legally binding in Florida) See Rule 62-761.500(1)(i)*

**Scenarios/Response**

- 1) Integral piping replacement project where new flex piping is installed in an existing chase.
- 1 – *The piping would not be exposed to be surveyed; therefore, a survey would be difficult to impossible to be accurately conducted. No survey is required in this scenario.*
- 2) Entry boot replacement turns into a full UDC, STP sump, and integral piping replacement project. The existing piping is flex. New flex piping will be installed in the existing chase. UDC's and STP sumps will be replaced too.
- 2 – *Essentially this is the same as 1), new piping is in an existing chase. No survey is required in this scenario.*
- 3) Integral piping replacement where flex lines are replaced with fiberglass and vice versa. Trench work will be needed.
- 3 – *This is a new piping install where the piping trench will be open; therefore, a survey is required.*
- 4) Entry boots replacement project where the UDC's and STP sumps will be replaced. Existing piping will be kept.
- 4 – *No piping or tank work; therefore, no survey is required in this scenario.*
- 5) Segment of hard piping needs to be replaced because it failed. The failure occurred in the run not contained by the STP sumps and/or UDC's. The location of the run does not change. Trench work will be needed.
- 5 – *This is essentially a new piping install where the piping trench will be open; therefore, a survey is required.*
- 6) Project where you are changing from a tank manifold system to a line manifold system. (Example: Two regular tanks that are tank manifolded with a siphon bar will be converted to a line manifold system. The siphon bar will need to be disconnected and some line work conducted.)
- 6 – *If the ground contact/underground piping (manifold is piping) to be modified; then a survey is required.*
- 7) Integral piping replacement project for parts contained in the STP sump or UDC.
- 7 – *If the work is to be conducted is in a sump then there is no modification to piping run. No survey is required in this scenario.*
- **Question:** For tank/piping survey, if Engineer of Record signs and seals "redline" drawing/as-built is this sufficient?
- *No. It has to be a survey to a benchmark done to PLS (Professional Land Survey) criteria for all below-ground piping and tanks. Aboveground piping and tanks do not have to be surveyed.*

## STORAGE TANK SYSTEMS QUESTIONS AND ANSWERS

- [Question:](#) What is the corrective action if this is cited?
  - *This should be caught during the install inspection, prior to pouring concrete. Cite the violation and refer the violation to the district.*
- 

### VALVES

Rules 62-761.500, 62-762.501, 62-762.502, F.A.C.

- [Question:](#) Is there a due date for the installation of the anti-siphon valves for UST systems like there is for ASTs.
  - *Anti-siphon valve installation for underground storage tank systems installed prior to January 11, 2017, will have one year from the effective date of the new rule.*
  - [Question:](#) Do anti-siphon valves need annual testing?
  - *There is not a specific requirement in the rules for the periodic testing of anti-siphon valves.*
  - [Question:](#) What is the proper order of valves and how do we handle if the order is incorrect for installations prior to January 11, 2017?
  - *According to PEI RP200-13 the order shall be **tank -> block (isolation) valve -> anti-siphon valve**. The PEI RP-200-96 also uses that order. It seems that the agency's 2001 memo erroneously clouded the issue. Going forward: All new installs and repairs shall follow the PEI RP200-13 Section 7 and NFPA 30A Section 11.2. The Facility Guide produced by Broward will be updated correcting the pictures on page 19. Facilities that have serviceable block valves and anti-siphon valves installed with the anti-siphon valve upstream of the block valve may continue to operate until repairs to either the valves or associated piping is required.*
  - [Question:](#) Do shear valves need annual testing? NFPA 30A requires annual testing and we frequently run into issues with anchoring loose due to corrosion or sloppy repair work and sticking valves.
  - *The Department has not historically required the testing as part of our rule requirements. If we decide to require this, it will require additional rule language.*
  - [Question:](#) Is an anti-siphon valve needed on an AST supplying fuel to a pump motor for fire pumps/water lines
  - *If a facility can meet the requirement of Chapter 11.4 of NFPA 20 (signed off by the fire dept. having jurisdiction) then an anti-siphon valve would not be needed if the piping does not drop below the level of the engine fuel transfer pump.*
  - [Question:](#) If a facility is doing maintenance and upgrading their shear valves and not disturbing the piping nor the dispenser sump, is a line tightness test required after replacement?
  - *As long as the facility is only replacing the shear valves as maintenance and they are not disturbing the integral piping or the dispenser sump, they will not have to do a tightness test defined as, "Primary integrity test" means an evaluation of the liquid tightness of the primary tank or integral piping. The owner/operator will have to test the efficacy of the shear valve in accordance with manufacturer requirements or as per PEI/RP1200-12 before placing it into service.*
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**GENERAL STORAGE TANK QUESTIONS**

- **Question:** Is a time-share property residential? In past interpretations, the FDEP lawyer who was asked stated that they are not residential and operate more like a hotel, i.e., the timeshare is run by a corporation.
- *Time-shares are not residential. (Transient housing). As long as there are not permanent residents.*
  
- **Question:** Is a condominium building still considered residential if individual owners rent out their units on a monthly or weekly basis? **\*\* If units/apartments within a condominium building are owned by a company such as Limited Liability Corporations (LLCs) and are offered for lease, then the condominium is commercial. \*\***
- *Condominiums are residential.*
- **Question:** Is an assisted living facility residential? The building has a common area first floor with a lobby, cafeteria, and a small shop for convenience items, but the rest of the building is apartments (senior living apartments, but it is not a nursing home).
- *Non-residential - The facility is a commercialized building that caters to transient occupants essentially the facility is an apartment complex, the facility rents space to the occupants*
- *Residential – The property must be a non-commercialized building utilized exclusively as a dwelling unit as a home where the residents own the building.*
  
- **Question:** Is an AST at a residence that is larger than 550 gallons and not used for utilities regulated, i.e., a tank used to fill a boat / truck / airplane at a residence?
- *Yes, it is regulated.*
  
- **Question:** Is a genset at a clubhouse for a group of residential condos that will have a restaurant, pools, workout facility, etc., be considered residential? The genset at the condo's towers do meet the exemption.
- *A genset at the clubhouse with a restaurant, pool, workout facilities is not exempt.*
  
- **Question:** Are tank systems attached to loading racks exempt? There is a bulk UST facility that pipes to loading racks.
- *2017 Rule version 62-762.300(2)(v) Any rail or tanker truck loading or unloading operations (loading racks) specified in Chapter 28 of Flammable and Combustible Liquids Code, Bulk Loading and Unloading Facilities for Tank Cars and Tank Vehicles, NFPA 30, 2015 Edition,*  
*2004 Rule version 62-761.300(2)(w) Any rail or tanker truck loading or unloading operations (loading racks) specified in Chapter 5 of NFPA 30.*  
*Only the Chapter number of Bulk Loading and Unloading Facilities for Tank Cars and Tank Vehicles in NFPA 30 has changed in the exemption. Tanks and piping up to the first flange or connection within the loading rack containment area are regulated*
  
- **Question:** Is Diesel Exhaust Fluid regulated?
- *The Department's review of the SDS information has determined the DEF gives off an ammonia odor which would meet the definition of an ammonia derivative in the regulation. However, the product contains less than 0.3% ammonia. Therefore, it would meet the de minimis exemption provided in the regulations, making this product exempt from the requirements of 62-761 and 62-762, Florida Administrative Code.*

- **Question:** A facility has three underground storage tanks. One of the tanks is compartmented with one of the compartments containing diesel fuel and the other designated for future-use. The tank was installed in 2006 and the future-use compartment has never been placed “in-service” nor contained fuel. This tank is registered in-service. The tank, product line, and line leak detector associated with the future-use tank have never been tested because the system never contained fuel. The monthly interstitial monitoring and annual sensor operability tests are being performed. What are the requirements for this future-use compartment of the storage tank system?
  - *Since the compartment never contained fuel, it can stay indefinitely without a product. Since the tank likely performed an interstitial integrity test during installation, so that the one compartment could be placed into service, the in-service compartment in the tank can remain in service. If the future-use compartment is brought into service, the owner/operator will be required to conduct testing on the product line, line leak detector, and any associated release detection devices to bring the compartment into operation the first time.*
  - *If the compartment was out-of-service due to repairs, the owner/operator would have one year from the out-of-service date to make the repairs, or the owner/operator would have to close the entire tank, and a Closure Integrity Evaluation would be required.*
- **Question:** For facilities with Parabeam, would the owner/operator still need to use Tank Tech to conduct the periodic testing once they have exceeded their two years between tests and voided their warranty?
- See page 9 on [EQ-403-A2](#) or page 10 of [EQ-729-A](#). They have the following stipulations in Exhibit A.
  - 4. All tank testing companies and personnel shall be required to be approved, trained, and certified by TTI.
  - 5. Only certified personnel shall test the PHS (Phoenix Hybrid UL Containment Systems) or other upgraded systems installed by Tank Tech, Inc.
- **Question:** There is a pump system to be installed at a Domestic Wastewater Treatment Plant. These are 750-gallon sub-base diesel tanks, which are used to pump wastewater. The language in the previous and current AST rule is written differently, see the rules language below.
  - Old rule language:
    - (j) Any wastewater treatment tank system that is part of a wastewater treatment facility regulated under Section 402 or 307(b) of the Clean Water Act;
  - Current rule language:
    - (j) Any storage tank system that contains wastewater that is part of a wastewater treatment facility regulated under Section 402 or 307(b) of the Clean Water Act;
- *In the current rule language, the exemption (j) is for a tank that contains wastewater that is part of a wastewater treatment facility. One option for existing storage tanks that have not previously been approved/registered is to do an Alternative Procedure for that tank. Another alternative is to have the storage tank manufacturer send in an Equipment Registration request.*
- **Question:** There is a compartmented underground storage tank that stored diesel fuel and the owner/operator no longer wants to continue using that compartment. What process do they need to follow to put that specific compartment out-of-service?
- *The owner/operator will need to clean the diesel compartment, including backflushing the product line back to the tank in order to take that compartment and associated piping and dispenser out-of-service. Once the compartment of the tank is out-of-service (in FIRST, not registration), the facility owner and operator must acknowledge this entire storage tank is now on the time clock as out-of-service for a maximum of 10 continuous years per 62-761.800(1)(e), F.A.C., then it must be permanently closed. However, the facility owner/operator can place that compartment back in service (this would be done in FIRST) and put product in the clean compartment at any time during the 10-year period.*
- **Question:** How do you properly register a compartmented tank?

## STORAGE TANK SYSTEMS QUESTIONS AND ANSWERS

- *When the owner registers the tank, they will list one (1) content for the tank (worst pollutant preferred) and then need to add Code L under Construction on the Form*
- **Question:** Do mineral acid tank coatings require an EQ Registration?  
*The Mineral Acid Rule no longer refers to Rule subsection 62-762.850(2), F.A.C., and so it does not require an EQ number.*
- **Question:** A facility has two vertical 4,000 gal AST's (8' diameter X 12' high). One AST contains auto engine oil. Another AST contains hydraulic oils that are Class IIIB liquids. What are the secondary containment requirements? What is the minimum distance between the tanks? What are the emergency venting requirements?
- *If the Class IIIB liquids meet the definition of high viscosity, secondary containment is not required. For **spacing** see (See NFPA 30 Section 22.4.2.1.2.)*  
**22.4.2.1.2** Tanks used only for storing Class IIIB liquids shall not be required to be separated by more than 3 ft (0.9 m) provided they are not within the same diked areas as, or within the drainage path of, a tank storing Class I or Class II liquid. If located within the same diked area as, or within the drainage path of, a tank storing a Class I or Class II liquid, the tank storing Class IIIB liquid shall be spaced in accordance with the requirements for Class IIIA liquids in **Table 22.4.2.1.**

**Venting** - Per Phil Snyderburn - Collier County - they can vent inside the room if it's in a room since it's IIIB and not capable of forming an explosive mixture. Technically, the vents are required to go outside the building with the exception being the emergency vents if it's a UL-2085. They still need emergency vents on all compartments, including the interstice, plus the normal (ambient) vent on every primary compartment holding liquids.

- **Question:** Is a Convault AST with two 500-gallon compartments with an interstice between compartments considered non-regulated?
- *Yes, it is non-regulated since the compartments have an interstice capable of being monitored for leaks. If there is just a wall (bulkhead) between compartments and no interstice between each tank, then it would be considered a 1,000-gallon tank and would be regulated. The tank would be registered with content code of the "worst pollutant" of the two compartments and then need to add Code L under Construction on the Form.*

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### **STORAGE TANK EQUIPMENT REGISTRATION**

Rules 62-761.850, 62-762.851, F.A.C.

- **Question:** ASTs with piping that appears to be stainless primary with FRP stainless secondary. The transition sumps appear they are going to be custom made stainless. The AST Rule has an exemption for metallic piping for registration but there appears to be an exception to the exemption for piping that goes over surface waters. Do either the piping or the containment sumps have to be registered?
- *Since the piping is Fiberglass Reinforced Plastic (FRP) and stainless, it would have to be registered. The piping sump does have to be registered. A dispenser sump would have to be registered unless it is mounted directly upon the storage tank or otherwise associated with storage tank systems that do not have underground integral piping.*

## STORAGE TANK SYSTEMS QUESTIONS AND ANSWERS

- Question: For tanks that were previously considered day tanks (>550 gallons) and were not regulated, are now regulated based on our new definition of day tank. Now that they are required to meet all storage tank system requirements. The main question is, what if the tank is not approved/registered equipment? Do they need to submit an AP request or take some other action? And, if so, by what date?
  - *If the day tank equipment has not been previously registered (with Registration), then they will need to register the tank(s) and request an Alternative Procedure for the tank(s). This must be done immediately upon being cited by county through Elena Compton, and once the AP is approved, the violation should be closed without enforcement.*
  - Question: Regarding the previous day tank question, should the counties request an installation inspection, or will the installation inspection wrap into the next routine inspection?
  - *Since these tanks were not previously regulated, and now are due to the rule revision in 2017, the county should wrap the inspection into the next routine inspection for that facility. The storage tank facility registration also needs to be updated.*
- 

### VAPOR RECOVERY

- Question: Who follows up on Vapor Recovery if it is required but not installed?
  - *DEP provided Vapor Recovery handout to staff. This is the fact sheet to hand out if you choose, we are not requiring it to be handed out. The owner(s) /operator(s) can be referred to the [Division of Air Resource Management](#).*
  - Question: Does the definition of spill containment systems exclude vapor buckets?
  - *Vapor recovery spill containments are not subject to the testing requirements, however, if a facility installs a vapor spill containment, they are required to maintain it by removing liquids/debris and maintaining structural integrity.*
- 

### API COLOR-SYMBOL SYSTEM API RP 1637 AND THE PROMOTIONAL BOOKLET

Rules 62-761.210, 62-762.211, F.A.C.

- Question: In the promotional booklet, there is no ring for the ethanol designation, i.e., API 1637. We have a lot of stations with recreational fuel for boats. The fuel dropper could mistakenly fill the wrong tank if not properly labeled.
  - *The promotional booklet will be updated in the future. API RP 1637 – Under Section 2.2.2, it states that an option for operators using gasoline with oxygenates (e.g., E-10), will use the appropriate symbol for whatever grade of gasoline **and include** a white circle for high-grade and mid-grade and a black circle around the low-grade gasoline blend.*
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**OPERATOR TRAINING**

Rule 62-761.350, F.A.C.

- **Question:** Do tanker drivers have any responsibility to check each convenience store before dropping fuel into their USTs, to ensure there is a Class B or C operator on-site?
- *The delivery driver is not responsible for verifying Operator Training certificates. However, they are responsible to verify the facility has a valid registration placard displayed at the facility prior to dropping product into the tank(s).*
  
- **Question:** What are the due dates for A, B, and C Operator Training and Operator Training Providers?
  - **10/13/2018** - The deadline that owners of UST systems must have designated and trained operators.
  
- **Question:** How should inspectors verify that the training has been completed? The rule references Class B operators providing a “list of all Class C operators who have been trained at the facility”. Is there any guidance for what this list should look like or what is acceptable?
- *Class A and Class B operators will have a certificate from the Operator Training Provider. A copy of the certificates must be maintained at each facility for review during the inspection or the certificates can be provided electronically within 72 hours. Class C operators are not required to have a certificate, but a list of all trained Class C operators must be maintained with the name of the Class C operator and the date of the training. The list can be provided for review during the inspection or electronically within 72 hours.*
- **Question:** Are we citing the violation based on who is on-site during our inspection? For instance, if a Class A/B operator, or an independent facility owner who is Class A/B certified, is on-site for the compliance inspection, can we give the facility a violation for not having Class C since the rule requires only one person with one of the three trainings to be on-site during operational hours?
- *The facility must provide documentation for all Class A, Class B, and Class C operators for the facility. Note, a person may be designated as more than one class of operator as long as they are trained appropriately. For example, the Class B operator is also a Class C operator and the B operator can train any other Class C operators.*
  
- **Question:** If I have a Class A/B Operator Training Certificate from Tennessee that I received prior to your rulemaking in 2017, is it still valid?
- *If a Class A/B Operator received their training (Tennessee or any other) prior to July 10, 2017 (180 days after the rule was adopted on January 11, 2017), then it is valid until they receive a significant non-compliance violation at the facility and are required to be retrained in accordance with subsection [62-761.350\(6\)](#), F.A.C. See also subsection [62-761.850\(3\)](#), F.A.C. (see the following two questions for additional information)*
  
- **Question:** Do operators have to be retrained periodically? The certifications do not have expiration dates listed on them. How frequently should operators be certifying themselves?
- *The operator certificates do not expire. However, operators may need to be retrained if the facility does not maintain compliance.*

## STORAGE TANK SYSTEMS QUESTIONS AND ANSWERS

- **Question:** The rule states that in an event of “significant non-compliance”, the Class A and Class B operators must be retrained within 30 days of being notified. They define “significant non-compliance” as failure to maintain compliance for release detection, spill containment/overflow protection, construction, or financial responsibility. Are we enforcing this and making Class A/Class B operators retake the course in the event of a violation related to those categories?
- *Retraining is required after a facility receives a Notice of Violation (NOV) issued by the Department for significant noncompliance. For retraining to be required, a facility would have been referred for enforcement as the issuance of a NOV is part of the enforcement process and may be used for facilities that do not return to compliance.*
- **Question:** The rule states that Class A/Class B operators must ensure that site-specific emergency response procedures are maintained in an easily accessible location at the facility. Should we be verifying these emergency response procedures are present at the facility?
- *Facilities are required to provide documentation of required operator training (certificates for Class A and Class B and a list of Class C). Inspectors should be checking to verify the procedures are in place and effective in case of an emergency at the facility.*
- **Question:** If a UST owner has been out-of-service prior to the 8/7/2014 adoption of the Operator Training Rule, 62-761.350, F.A.C., are they required to have Operator Training Certification while out-of-service?
- *Not until they bring their tanks back into service per 62-761.350(1) Owners or operators shall identify and designate for each **in-service** underground storage tank system facility, including unmanned facilities, at least one named individual for each class of operator – Class A, Class B, and Class C. This can be one person performing all three roles.*

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### **FIELD ERECTED ASTS**

- **Question:** Is an API 653 inspection required, if the field-erected AST is out-of-service longer than 365 days?
  - *Per 62-762.802(2)(d)1., if the AST is out-of-service longer than 365 days it must be structurally evaluated in accordance with API 653 before being placed back into service.*
  - **Question:** However, there will be no annual recurring API 653 inspection requirement?
  - *Correct, you would just need to evaluate the AST prior to bringing it back into service.*
  - **Question:** Would this apply even if the original API 653 inspection report does not identify any mandatory repairs and gives the tank a 10- or 20-year cycle for the next periodic internal inspection and is out-of-service for over 365 days? Did this requirement change?
  - *Yes. The Department’s previous rules required that an out-of-service AST be structurally evaluated per API 653 if the AST was out-of-service for more than 6 months. So, an additional 6-months grace period has been provided with the new rule.*
-

**FINANCIAL RESPONSIBILITY**

Rules 62-761.420, 62-762.421, F.A.C.

- [Question: How do we handle a lapse in coverage regarding financial responsibility](#)
- *See the following scenarios:*

**Existing Facility Same Owner**

*The county would cite a violation for any lapse in coverage. The facility can resolve the violation by obtaining Financial Responsibility (FR) and coverage for any time during the termination period. If the lapse in coverage is greater than 90 days and before the County's 90-day referral deadline, a 2<sup>nd</sup> violation should be cited for not closing tank with 90 days lapse in FR, then refer to District Enforcement. The facility can resolve by obtaining FR coverage or close the system. The District should consider enforcement with a penalty if unable to obtain coverage during the termination period. Enforcement at UST facilities should consider including "Revocation of Placard" in accordance with 62-761.400(6)(d), Florida Administrative Code (F.A.C.). Economic advantage (unexpended cost of coverage) for the period without coverage should be taken into consideration.*

**New Owner Buys Facility with Lapse in FR at time of purchase**

*For new owners of existing storage tank systems that are out-of-service at the time of purchase and with a lapse in FR at the time of purchase, FR must be obtained by the owner within 15 days upon purchase of the existing tank system and preferably prior to accepting product into the tank system. Out-of-service requirements in subsections 62-761.800(1), 62-762.801(1), or 62-762.802(2), F.A.C., shall be followed while tanks are out of service. Prior to registering the tanks in-service and adding a regulated substance to the system, all required periodic testing must be performed. No violations should be cited unless the new owner fails to follow the outlined procedure. If FR is not obtained within 15 days of purchase, then the facility would be subject to the requirements of "Existing Facility Same Owner", unless the new owners can verify that they are attempting to obtain FR.*

**A facility in Foreclosure by Financial Institution with Lapse in FR**

*Financial institutions that are holders (owners of debt) of foreclosed facilities are not considered owners or operators of a tank system, in accordance with 40 CFR § 280.230, and should not be cited as a violation but noted as an Area of Concern. When the facility is sold at the settlement of the foreclosure, the new owner would have to acquire FR as stated above.*

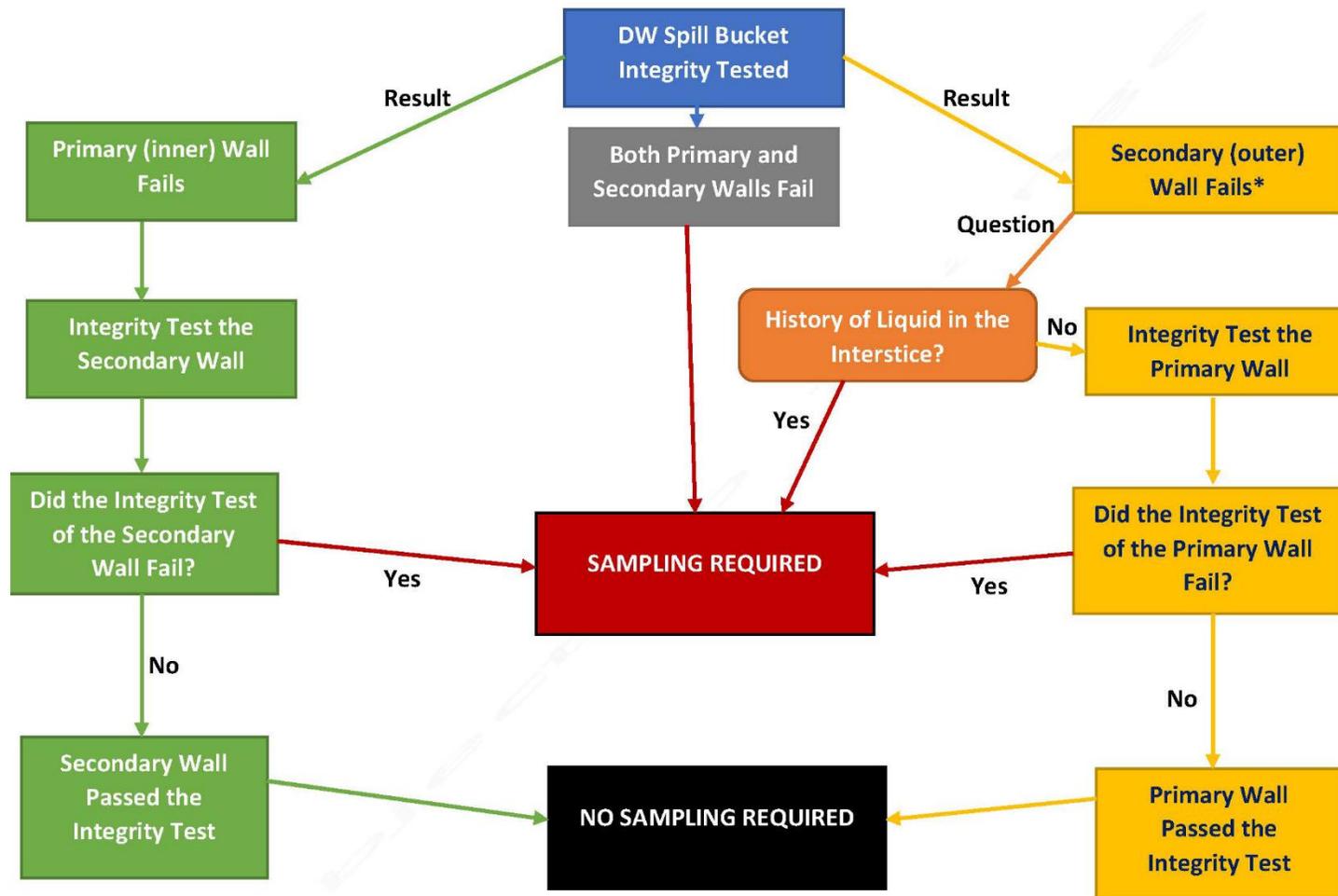
- [Florida Statutes 376.309](#) **Facilities, financial responsibility.**

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*Note: Nothing herein is intended to modify Department rules or guidance documents incorporated within those rules. This Q&A is a living document and is subject to change and continuously being corrected and updated.*

## DOUBLE-WALLED SPILL CONTAINMENT (BUCKET) SYSTEM TESTING AND SAMPLING REQUIREMENTS

If a vacuum test is conducted on the spill bucket's interstice and it fails and no further testing is conducted to determine whether the primary or secondary bucket was responsible for the failure, then soil sampling will be required. If further testing is conducted, please use the decision tree below.



\*If records are indicating there has been liquid in the interstice, then sampling is required.

*This is a general overview. Any situations not covered will be reviewed on a case-by-case basis.*