



Maryland Department of the Environment

Emergency Generator Underground Storage Tank Systems

**International Facility Managers
Association**

May 24, 2018





Tank Registration

- All EG tanks must be registered with MDE
- New tanks / change in owner – 30 days to register





Tank Registration

- 509 Emergency generator UST systems registered with the Department
- 353 Different Facilities





Tank Registration

157 are < 20 years old
304 are 20 - 30 years old
42 are 30 - 40 years old
3 are 40 - 50 years old
1 are > 50 years old
1 (no install date)





Third Party Compliance Inspection

- 24-page inspection
- 3-year cycle
- 6-months after new installation
- 3-months after ownership change





Financial Responsibility

- The registered OWNER of an UST system must meet one or more of the financial responsibility mechanisms allowed by the federal regulations, 40 CFR 280 Subpart H.





FR continued

- 40 CFR §§280.90—280.116
- Policy Limits
- Dates
- Signature





Spill Prevention

- Spill Catchment basin
 - Annual testing required
- Label fill pipe with tank size and product stored
- Fill pipe inspection.



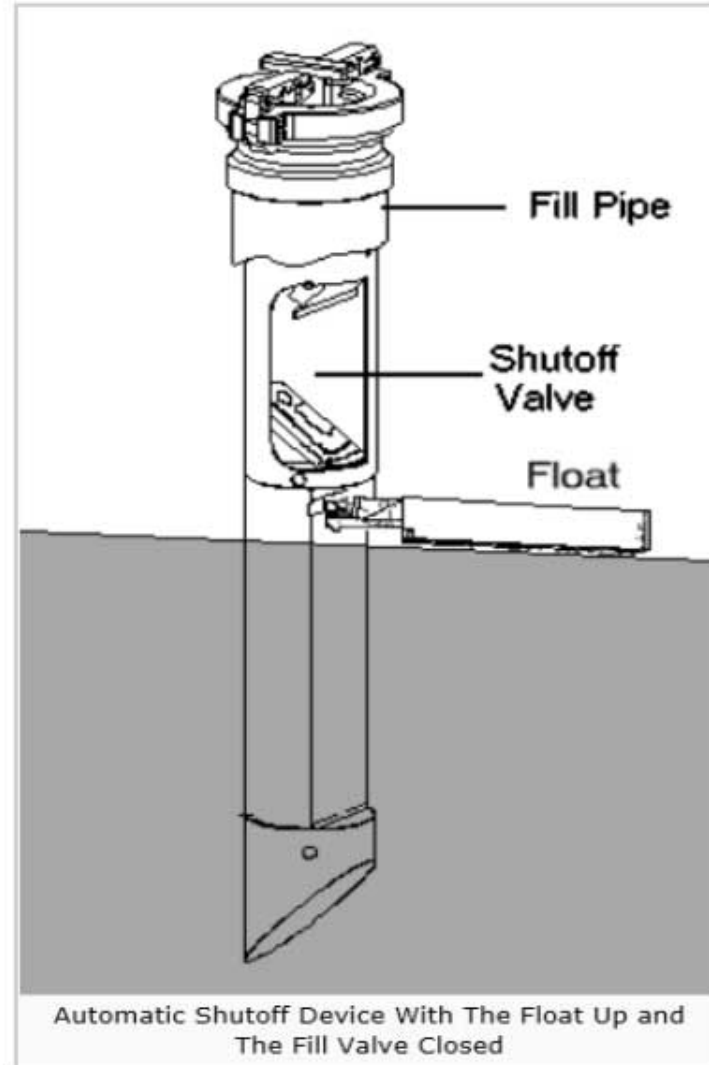
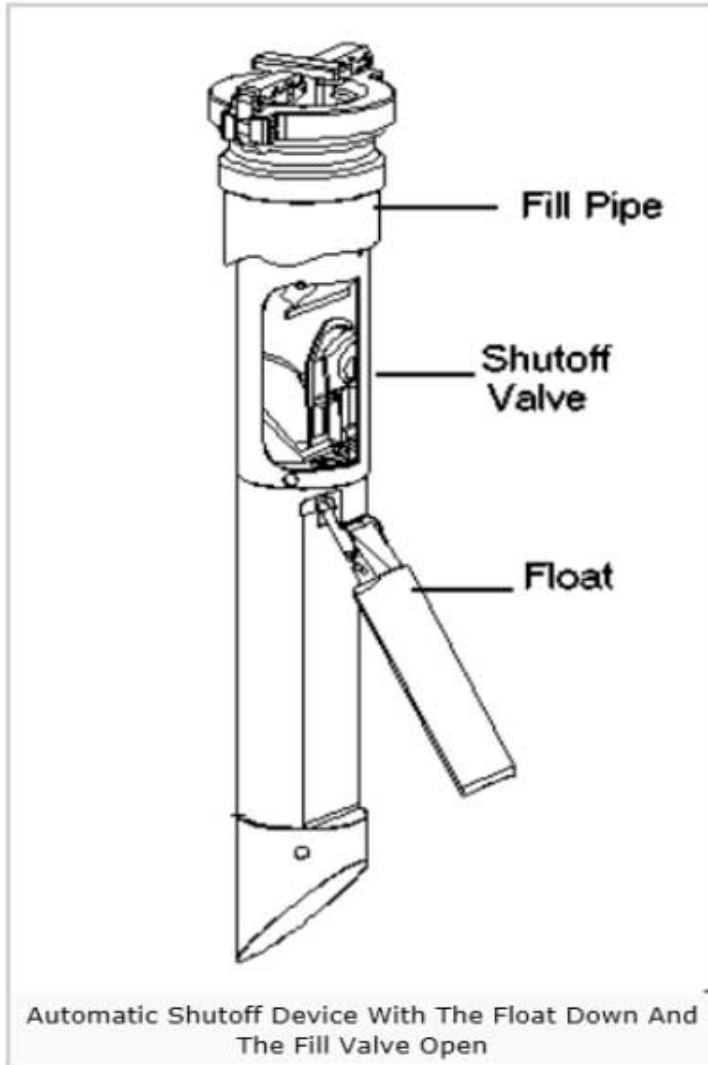




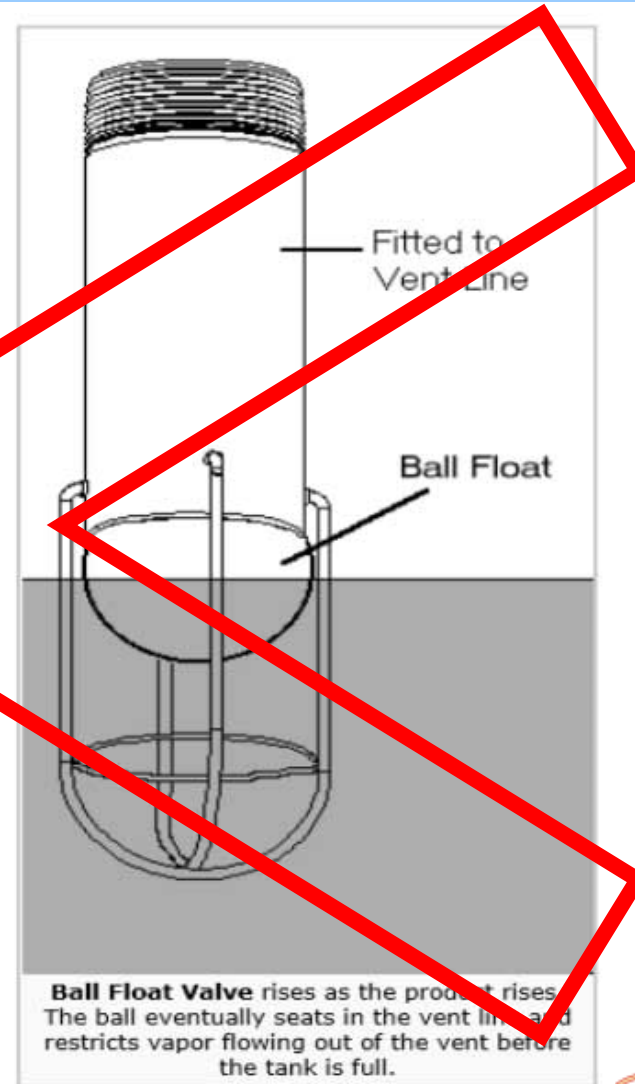
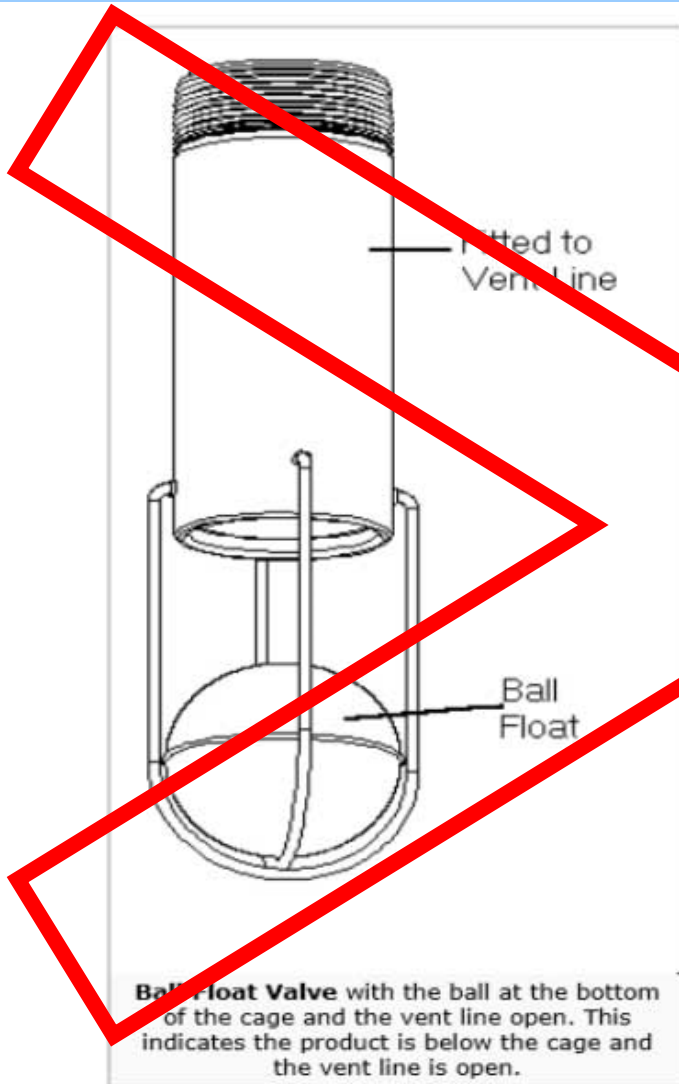
Overfill Prevention

- Pumped Delivery/Gravity drop
- Inspection of overfill protection equipment
 - Drop Tube Flapper Valve
 - Audible External high level alarm
 - ~~– Ball Float / Vent Restrictor (NOT ALLOWED)~~









Corrosion Protection



- Bare metal cannot be in contact with soil
- Fiberglass and UL approved non-corrodible material are exempt

Corrosion Protection on Tank/Pipe

- Problem
 - Metal components in contact with soils/water
- Solution
 - Containment sumps
 - Cathodic protection system
 - Isolate metal system components





Inventory Records

- Tanks must be gauged prior to and after each delivery
- Record of each gauging event must be maintained onsite





Release Detection - Tank

- Tanks installed after March 1, 2008
- Monitoring every 30-days
 - ATG
 - Interstitial Monitoring





Release Detection - Tank

- Tanks installed after January 12, 2009 must have interstitial monitoring as method of release detection





Automatic Tank Gauging

- ATG equipment must have a third-party approval and be able to detect a leak of 0.2 gallons per hour. A leak test using ATG must be performed at least once a month. Many ATGs also monitor system piping.

Interstitial Monitoring

- IM can only be used on UST systems that have secondary containment. Monitoring of the secondary space can be for fluids or vapors. Monitoring must take place at least every 30 days.
- Most electronic systems monitor continuously and provide alarms to the tank operator.



Release Detection - Piping

- Pressurized piping
- Suction Piping
 - Safe Suction
 - U.S. Suction



Pressurized Piping

- Pressurized piping must be equipped with an automatic line leak detector and tested yearly by a precision test or by monthly monitoring with one of the release detection methods.



Suction Piping

- Safe Suction -
 - If there is only one check valve in the piping, and it is located directly below the pump, no other release detection is required.



Suction Piping

- US Suction -
 - If there are multiple check valves in the piping, and/or check valve is not located directly below the pump (i.e. foot valve)...
 - Piping must be tested every two years by a precision test or monitored monthly with one of the release detection methods.



Operator Training

- Class A & B Operator
- Class C Operator
- Written instructions
- List of Emergency Contacts





New Regulations

- Expecting to be release early 2019
- Follow current MDE regulations until new regulations are implemented!!!





New Regulations

- All Emergency Generator UST systems will be required to maintain monthly release detection records
- (Interstitial Monitoring / ATG)





New Regulations

- Monthly Walkthrough inspection
 - Fill pipe
 - Spill buckets
 - Containment sumps
 - Evidence of spillage
 - Etc...





Aboveground Storage Tanks

- If total combined storage of ASTs is more than 10,000-gallons
 - Oil Operations Permit (MDE)
- If total combined storage in generators is more than 1,320-gallons
 - S.P.C.C. (Spill, Prevention, Control, Counter measures)
 - (EPA)



Questions



Oil Control Program
410-537-3442

24-Hour Reporting
866-633-4686