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Natural Resources

Being a Successful UST owner- WE can do it!

The UST “How to” guide

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Missouri Department of
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How to prepare for an inspection

- Don’t panic
- Walk through your site
  - Under dispensers
  - Open all lids
  - Check your release detection equipment (ATG, measuring stick, wells)
- Look at previous inspection report
- Call with any questions
- Don’t panic

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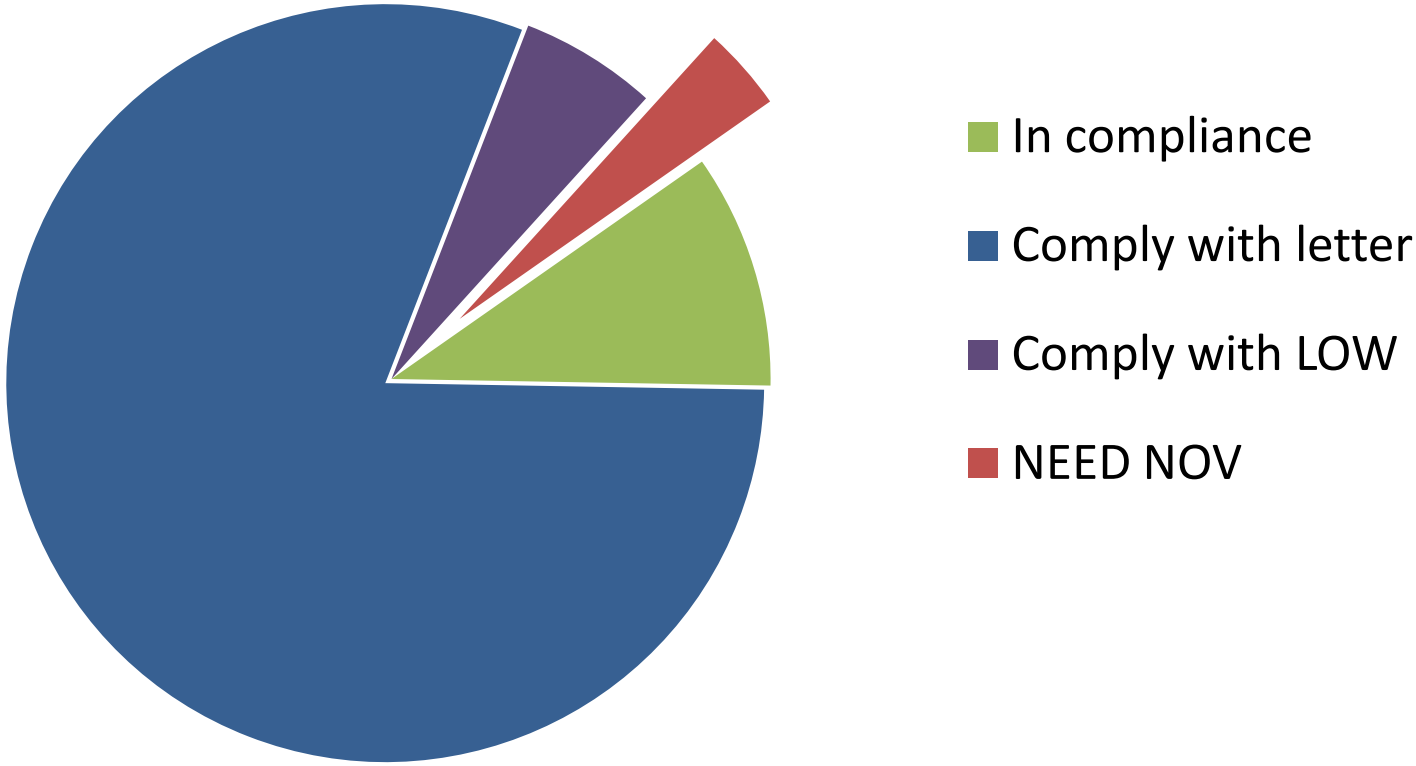
How to respond to an inspection

- Avoid yes/no/completed
- Be as descriptive as possible
  - What was repaired? Replaced? Simply restarted/reset?
- If appropriate, include documentation
  - Invoices or contractor statements
  - Photographs
- Feel free to call for clarification

Inspection Compliance Rates

- From three years of inspections:
  - 4361 compliance inspections
  - 88% of our active site inspections find something
  - Only 10% ever need an LOW
  - Less than 4% have an NOV

**Please note, data is from March 2012.


In compliance
Comply with letter
Comply with LOW
NEED NOV

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How to fix “problem” equipment

- There is typically more than one right answer!!
- Know your site, equipment and configuration
- Regularly using the same contractor helps
- Often we can find alternative ways within our regulations to tackle the problem
- Two heads are better than one!

The more we know, the more flexible we can be.

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How to respond to an ATG alarm

- Run a new test
- If you repeatedly have fails, discuss with your ATG technician
- If you cannot pass a test, you need to report it and contact your technician
- Most alarms are not actual leaks
- Check observation wells for product

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How to “write your own regs”

- Owners, operators and contractors have valuable field experience to share- do so!
- Offer your advice, input, and preferences
- Ask questions
- Get involved **early**
- Think outside the box
- Debates and discussions are GOOD

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“Violation” prevention

- Most common violations
- Sites that require some head scratching
- Sites that YOU have found unique?

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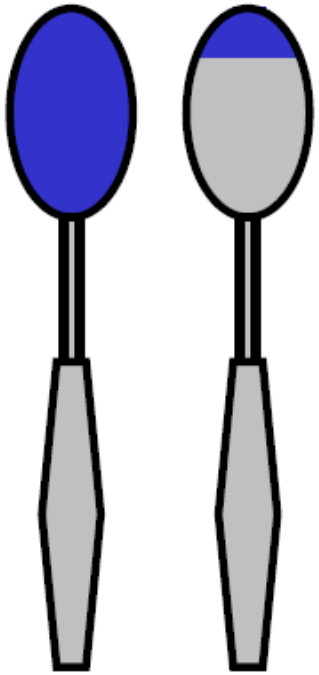
Most common issues found

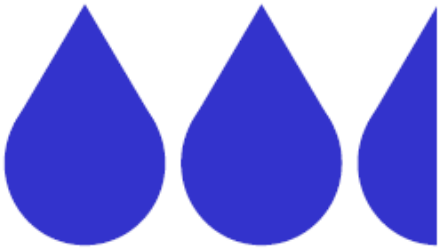
- Spill basins contain liquid/are damaged
- Metal in contact with soil or water
- ATG/ELLD in alarm
- Overfill prevention inoperable
- Improper inventory control/ SIR
- Drive plates damaged
- Leaks (typically small)
- Flexible connector installation

E-10 QUESTIONS & CONCERNS

What exactly is = 0.1 gph ?

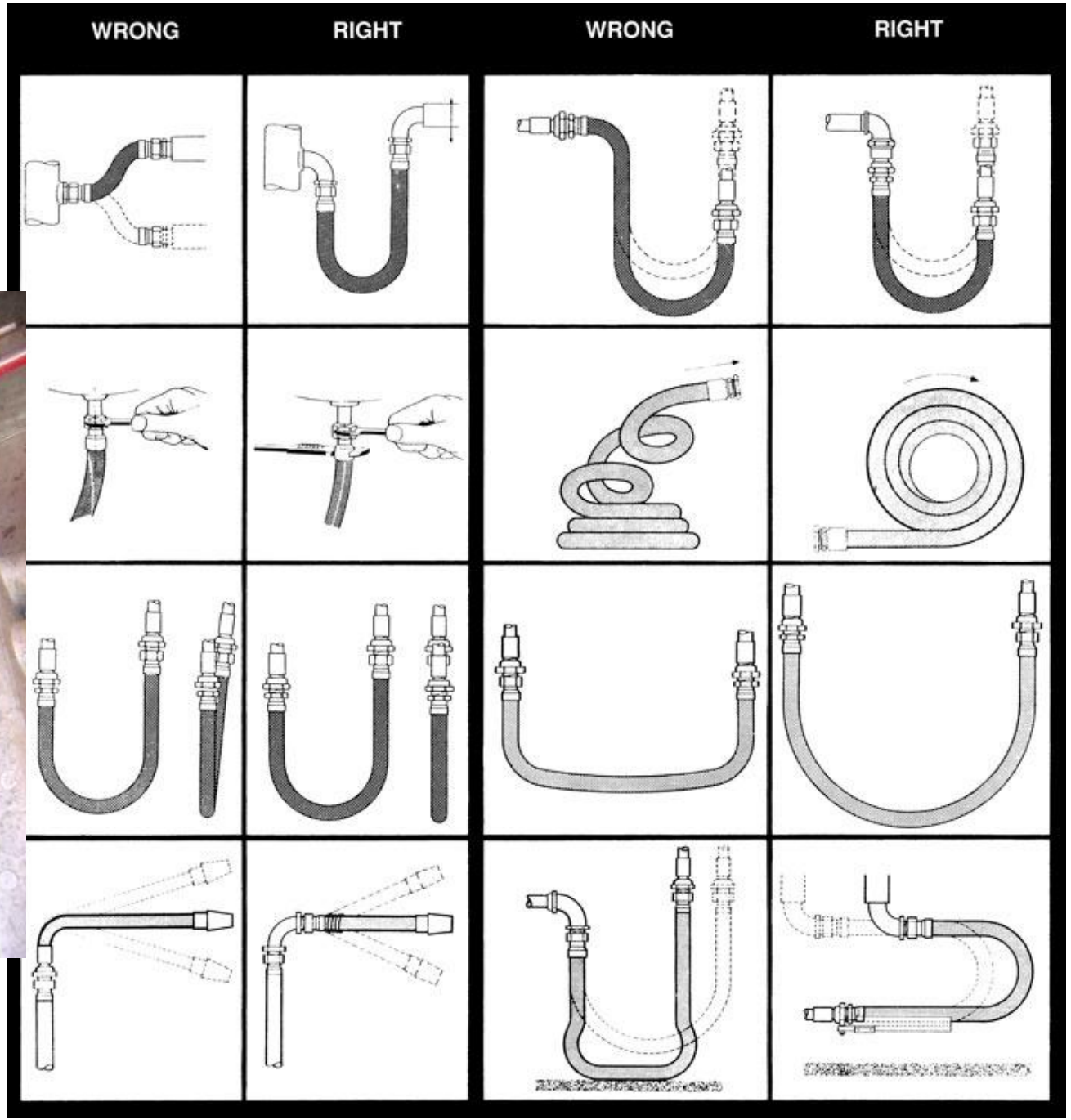
12.8 ounces/hour = 1.2 teaspoons/minute = 2.5 drops/second



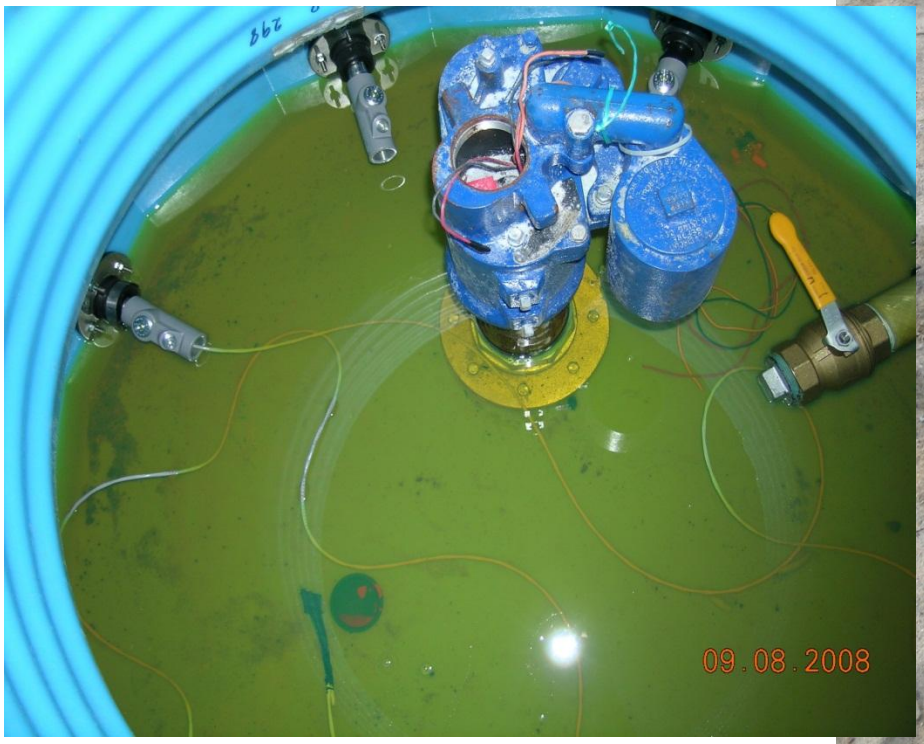


0.1 gph = 0.1 ml/second

Flexible Connectors



Overfill indicators



LLDs and piping

- Master/satellite piping systems
- Limitations on total volume
  - Watch on manifold and large diameter runs
  - Different for flex vs rigid piping
- Vertical piping rises
- Backflow prevention valves
- Unique piping configurations
- AST to UST piping

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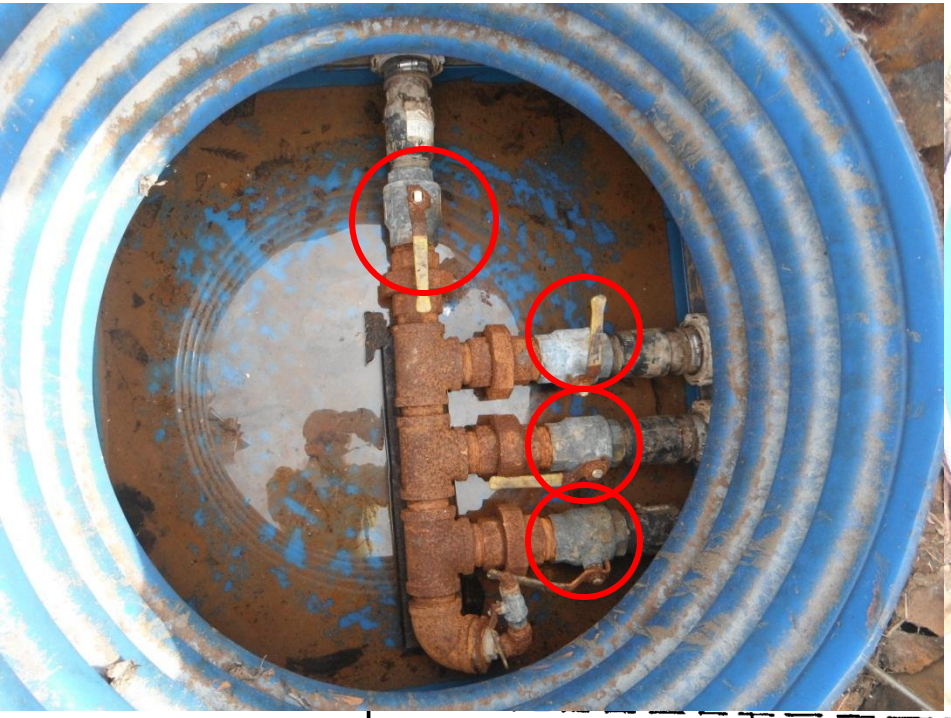

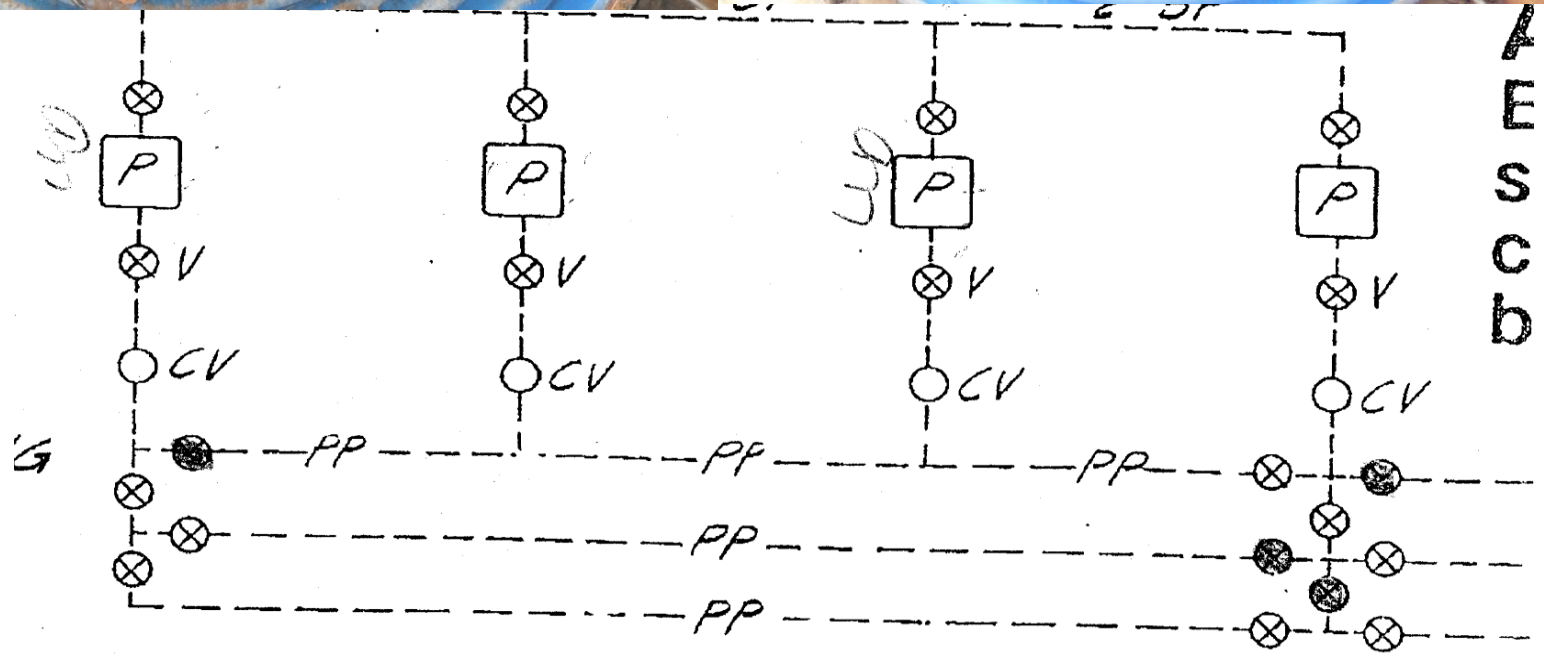
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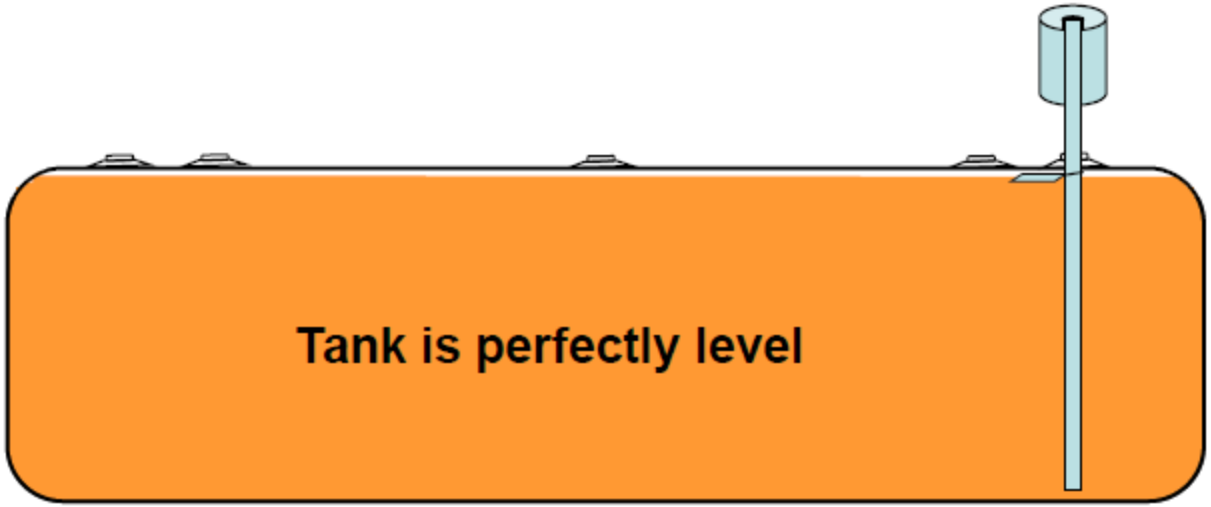
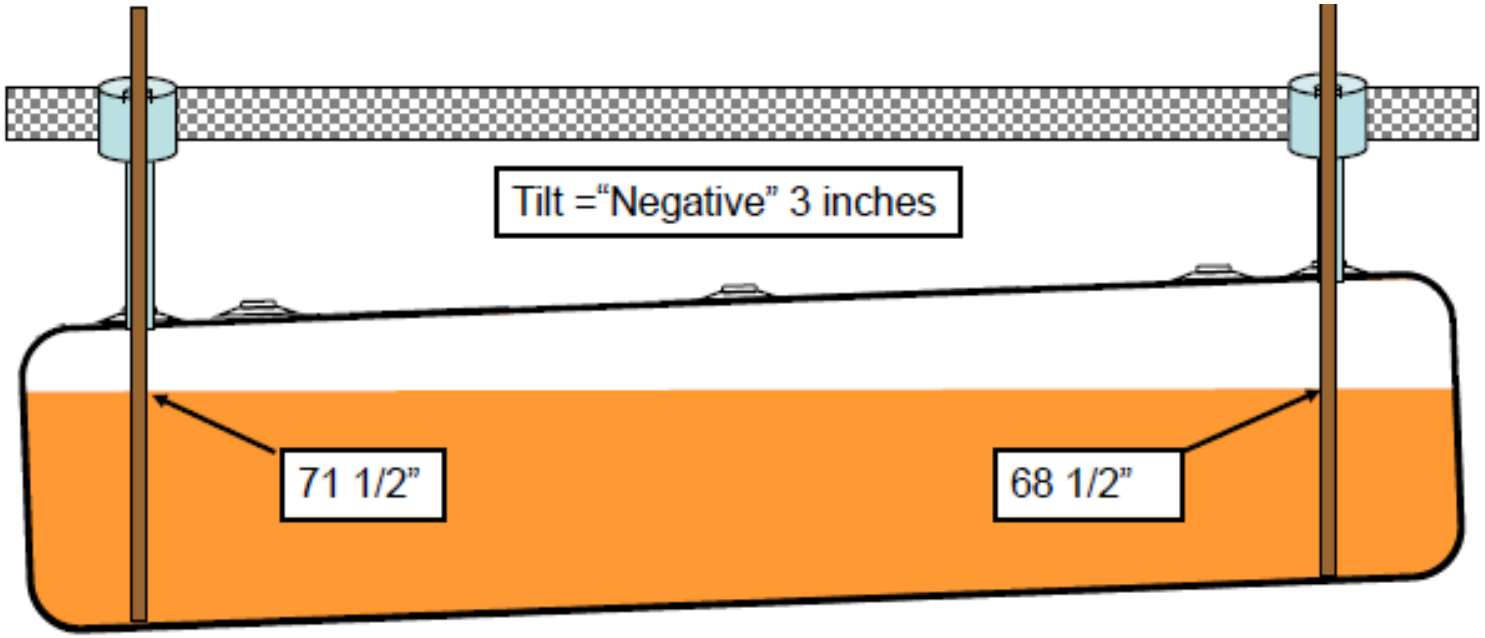
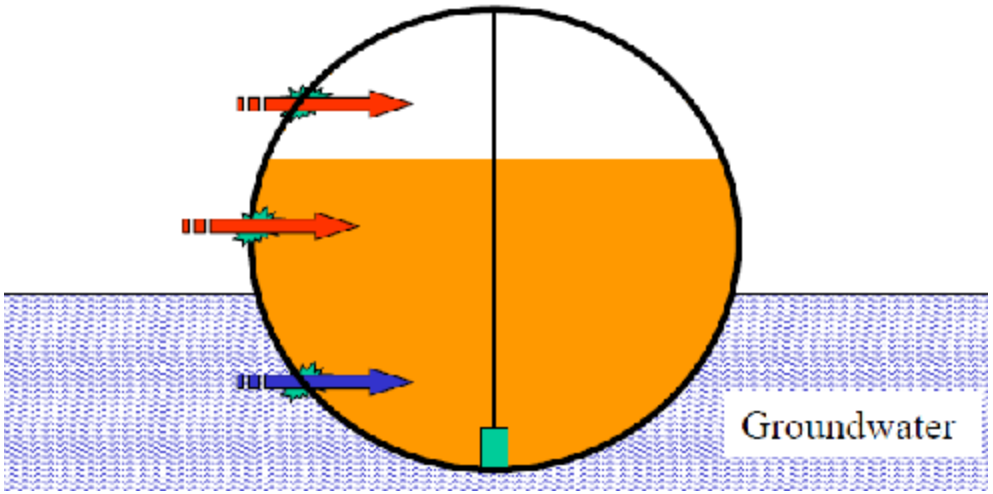
Tank release detection issues

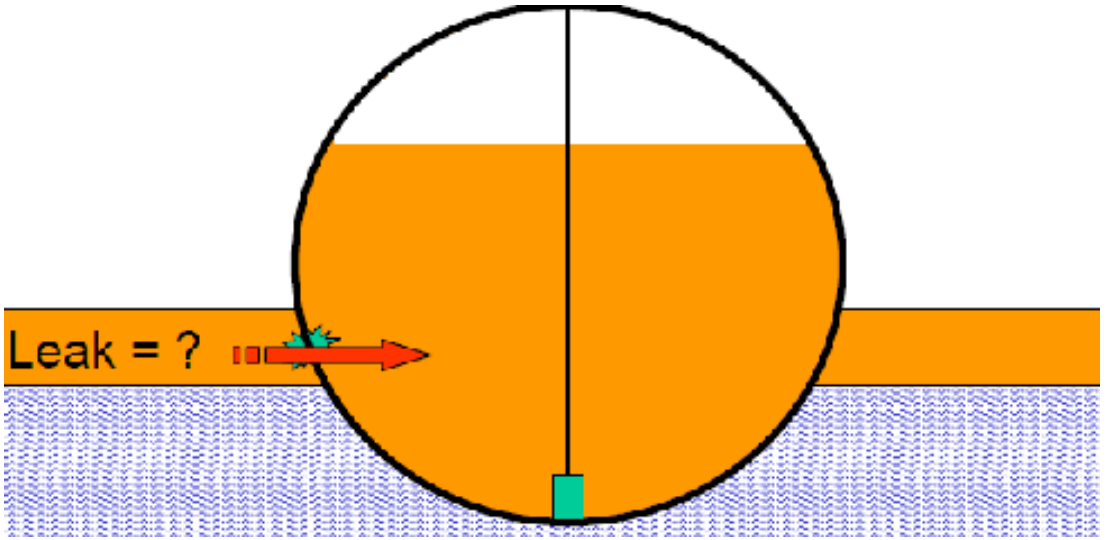
- Siphon connected tanks
- Vapor recovery equipment
- Detecting water ingress
- Tank tightness testing
  - Measuring water ingress in ethanol
  - Product in backfill around tank


Tank is perfectly level


Tilt ="Negative" 3 inches
71 1/2"
68 1/2"



Tank Tightness Testing Concern



Emergency Generator Storage Tanks

- Pressurized piping
  - Sumps sensors / LLD
- Suction piping
  - Safe suction- no testing
  - Unsafe suction- LTT every 3 years
    - No check valves except inside at day tank/pump
    - Piping sloped- all contents run back into tank
      - Tank must be lower than piping end


WARNING

20 11:28 AM

ANY OTHER UNIQUE SITUATIONS?

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Contact us

- Questions about regulations
- Changing your system
- Fixing a problem
- Addressing a leak
- Suggesting new “fixes”
- ANYTHING!

(573) 522-5665 or Tanks-compliance@dnr.mo.gov

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We, the regulators, do **not**:

- Test the equipment
- Fix the equipment
- Respond to alarms
- Cleanup spill and overfills
- Conduct regular maintenance
- Clean out the sumps
- Train the new staff
- Keep track of all the records
- Do the sampling
- Conduct the cleanups
- Close the tanks

“YOU” DO!

Pay for it

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Coming together is a beginning; keeping together is progress; working together is success.

--Henry Ford