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Emergency Power Generator (EPG) UST Systems: One of the Last Frontiers

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Overview

1. Systems no longer deferred from release detection requirements.
2. What are the release detection requirements?
3. Which power generator systems are regulated?
4. Features of these systems that present a challenge to meeting RD requirements.
5. EPA resources and highlights of available documents.
6. Release detection and release response.

No Longer Deferred From Meeting Release Detection Requirements

Removed the 1988 deferral and requires release detection for all emergency generator tanks

- Required at installation for UST systems installed after October 13, 2015.

- By October 13, 2018, required for systems installed on or before October 13, 2015.

What Are The Release Detection Requirements

Subpart D

April 11, 2016

- Installed on or before – All method options available.
- Installed after – Secondary containment and interstitial monitoring.
- Tank
- Piping
  - Suction systems.
  - Pressurized systems.

What Are the Release Detection Requirements (Cont.)

Tank Options

- Interstitial monitor.
- ATG
- SIR, CITLD
- Manual tank gauge
- Groundwater or vapor monitoring
- Other method

Piping Options

- Suction piping
  - Safe or
  - 3-yr. LTT or 30-day
- Pressurized piping
  - ALLD, plus
  - Interstitial monit. or
  - Annual LTT
  - or tank method applicable to piping.

What Are the Release Detection Requirements (Cont.)

2015 Operational Requirements: Annual release detection equipment testing

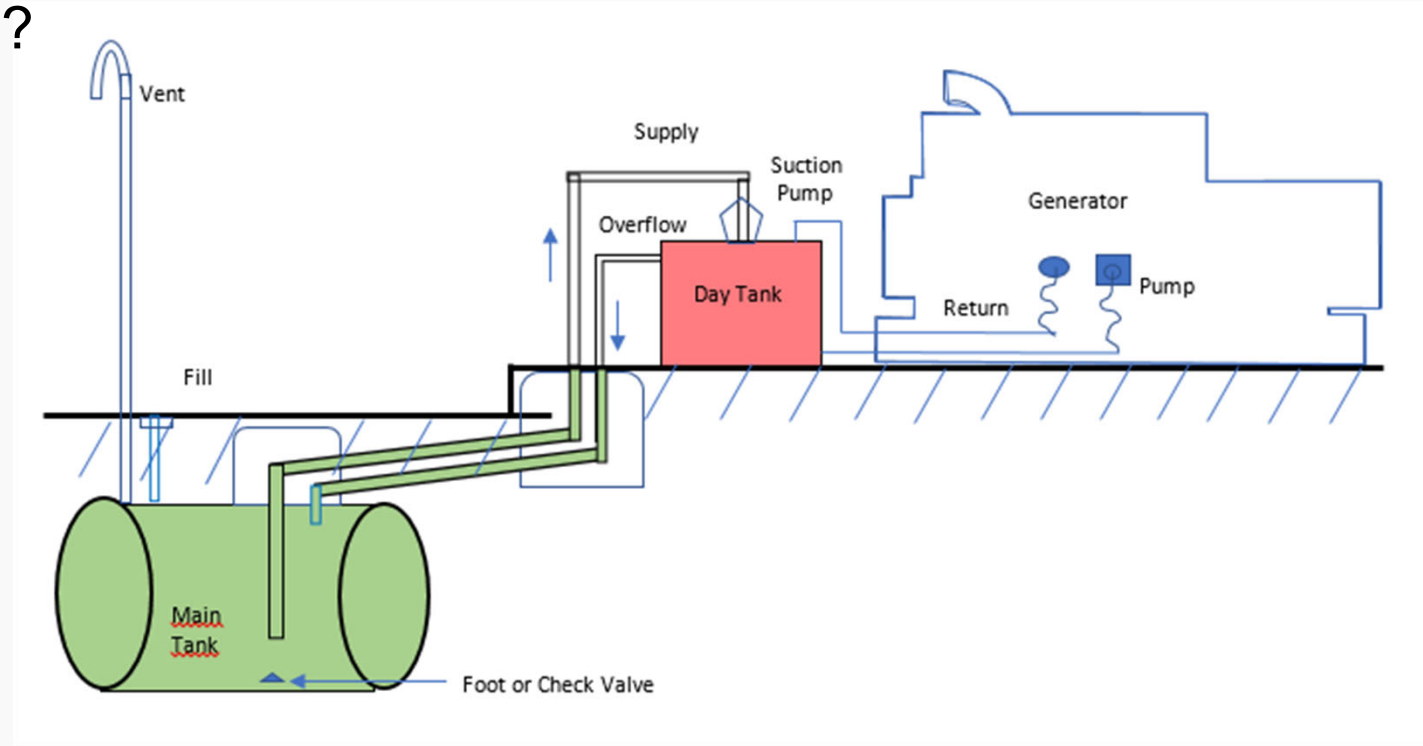
- Ensure release detection equipment is operating properly.
- Completed by October 13, 2018.
- Keep records for 3 years.

Which Power Generator Systems Are Regulated?

- *"Does the power generator system have to comply with federal UST regulation?*

Which Power Generator Systems Are Regulated? (Cont.)

- *"Does the power generator system have to comply with federal UST regulation?*
- Is 10 percent or more of "total system" beneath the surface of the ground?



Which Power Generator Systems Are Regulated? (Cont.)

- Does any federal UST regulatory exclusion apply?
- Most are unlikely to apply:
  - Farm or residential tank of 1,100 gallons or less capacity used for storing motor fuel for noncommercial purposes.
  - Septic tank.
  - Surface impoundment, pit, pond, or lagoon.
  - Storm water or wastewater collection system.
  - Flow-through process tank.
  - Liquid trap or associated gathering lines directly related to oil or gas production and gathering operations.

Which Power Generator Systems Are Regulated? (Cont.)

- Does any federal UST regulatory exclusion apply?
- These are most likely to apply:
  - **Heating oil exclusion**

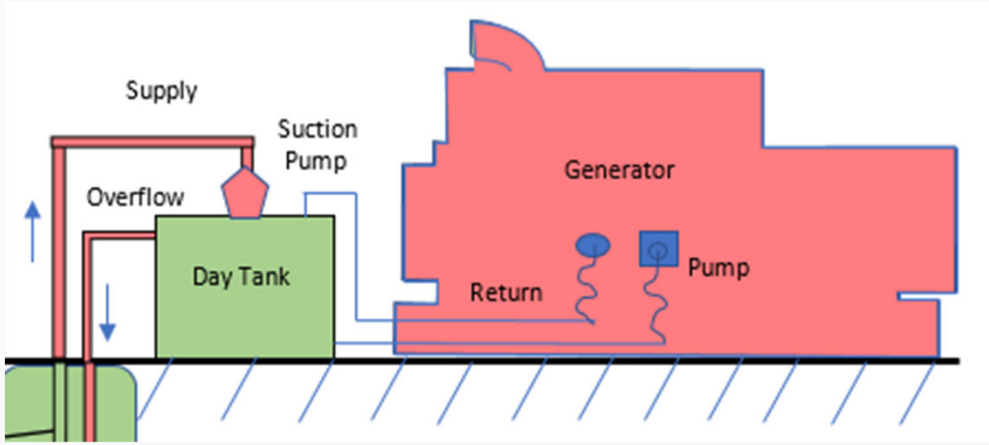
    Storage systems used for storing heating oil for consumptive use on the premises where stored.

    See www.epa.gov/ust/frequent-questions-about-underground-storage-tanks
  - **Underground exclusions areas**

    Storage systems situated in an underground area—such as a basement, cellar, mineworking, drift, shaft, or tunnel—if the tank or combination of tanks is situated on or above the surface of the floor. **No portion of any tank can be beneath the surface of the ground or otherwise covered with earthen material.**

Features Of These Systems That Present A Challenge To Meeting RD Requirements.

- The power generator and other components regulated beyond UST regs
  - NFPA language about no valves in supply and return lines.
- Day tanks and other connected aboveground tanks
  - Regulated per definition of UST.
- Product return piping
  - Nonoperational components



Features Of These Systems That Present A Challenge To Meeting RD Requirements (Cont.)

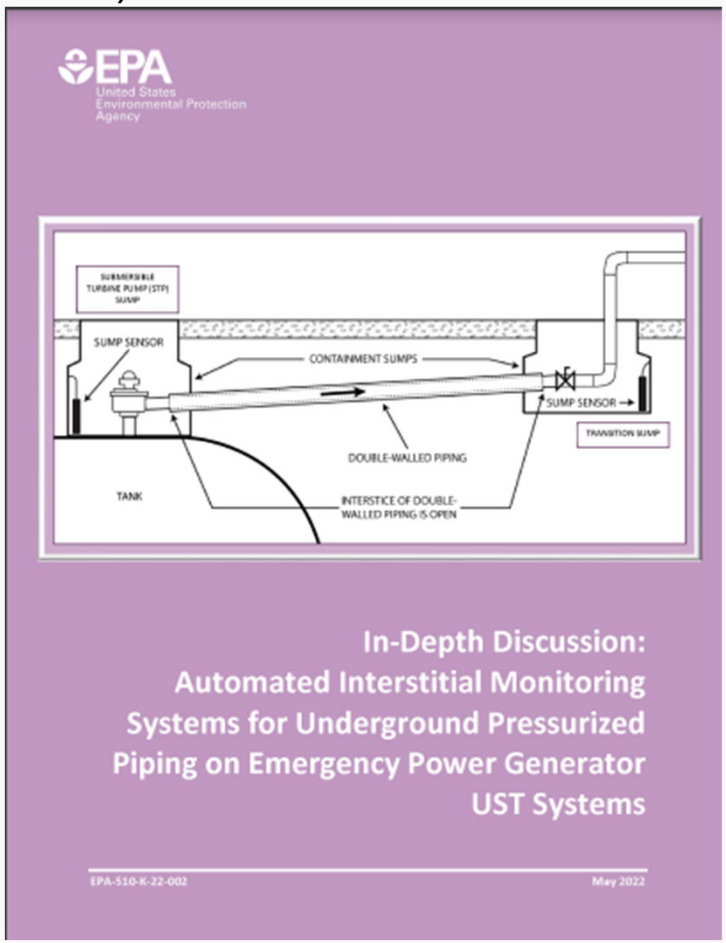
- NFPA 110
  - Section 7.9.13
    - No valves in return or supply lines.
  - Section 5.6.3.2
    - Solenoid valves, where used, must have nonelectric operator or manual bypass valve.
- Comply for UST program purposes, if governed by NFPA 110, by using a solenoid valve as indicated in Section 5.6.3.2.

Available Resources

- Straight Talk On Tanks.
- UST Technical Compendium.
  - https://www.epa.gov/ust/underground-storage-tank-ust-technical-compendium-about-2015-ust-regulation#generators
- Requirements For Emergency Power Generator UST Systems
- AIM (Automated Interstitial Monitoring) Systems Guidance (2 parts)
  - Using An Automated Interstitial Monitoring System To Meet Federal UST Requirements For Underground Pressurized Piping On Emergency Power Generator UST Systems
  - Federal UST Requirements: Automated Interstitial Monitoring Systems For Emergency Power Generator UST Systems

Highlights of New EPA Guidance Documents

(https://www.epa.gov/ust/emergency-power-generator-ust-systems-2015-requirement-release-detection)



Highlights of New EPA Guidance Documents
(Requirements For Emergency Power Generator UST Systems)

- Shop-fab vs. field-construct ASTs (p.2)
- CP requirements for ASTs (p.17)
- RD for ASTs
- Piping in aboveground rooms such as basements.
- Walkthrough inspection items for ASTs.
- Addressing leaks and releases from aboveground components (p.59)

Highlights of New EPA Guidance Documents
(Requirements For Emergency Power Generator UST Systems)

- Spill & overfill for ASTs (p.17)
- CP requirements for ASTs (p.28)
- RD for ASTs (p.33)
- Piping in rooms such as basements (p.38)
- Walkthrough inspection items for ASTs (p.51)
- Addressing leaks and releases from aboveground components (p.59)

Highlights of New EPA Guidance Documents

[AIM (Automated Interstitial Monitoring) Systems Guidance (2 parts)]

- Part 1: User's guide.
  - Descriptions & examples of systems.
  - Checklists.
- Part 2: Rationale, reg. allowance, technical.

- 3 categories of AIM systems.
- Relies on integrity of secondary containment.
- Recommended for EPG UST systems only.

Release Detection And Broader Release Response Concerns

- Release detection concerns are not specific to underground components.
- Facility concern is for complete environmental protection.
- Actions may be required by federal UST regulation due to aboveground component impacts.
- Other local, state, and federal programs may apply.

Release Detection And Broader Release Response Concerns (Cont.)

- Facilities subject to the SPCC regulation
  - Intended to help facilities prevent a discharge of oil into navigable waters or adjoining shorelines) are required to follow certain federal reporting requirements.
  - In general, SPCC requires that any person in charge of an onshore or offshore facility must notify the National Response Center (NRC) immediately after he or she has knowledge of the discharge. Oil discharges that reach navigable waters must be reported to the NRC at 1-800-424-8802 or 1-202 426-2675. The NRC is the federal government's centralized reporting center, which is staffed 24 hours per day by U.S. Coast Guard personnel.

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