GEORGIA
DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION DIVISION

Emergency Generator UST system leak detection requirements if installed prior to 12/15/2017 (should be implemented by 12/15/2020). If installed after 12/15/2017 then release detection requirements should be implemented immediately.

Beginning on December 15, 2020 regulated emergency generator tank systems installed prior to December 15, 2017 are required to implement tank and piping leak detection. The emergency generator tank systems installed prior to April 7, 2008 can use the following release detection for monthly monitoring:

- Monthly in-tank leak detection with an automatic tank gauge (ATG)
- Monthly Statistical Inventory Reconciliation (SIR)
- Monthly interstitial monitoring (IM) [if the tank is double walled]

Existing emergency generator tanks installed after April 7, 2008 can only use monthly interstitial monitoring for release detection.

Aboveground day tanks are also regulated and are required to be monitored monthly.

For piping leak detection, the first step would be to determine the configuration of your supply and return lines.

- Pressurized piping installed before April 7, 2008.
    - Mechanical Line Leak Detector (MLLD) with an annual line tightness test and leak detector test.
    - Electronic Line Leak Detector (ELLD) with an annual leak detector test and monthly 0.2 GPH test with an annual 0.1 GPH test.
    - Double walled piping can use an IM sensor that has positive shut-off and an annual sensor test.
    - **If the emergency generator is used for a hospital or data center,** then you can use an ELLD with alarm only or an IM sensor with continuous alarm if the piping is double walled.

- Existing Pressurized piping installed after April 7, 2008
    - Must be double walled with an IM sensor that has positive shut-off and have an annual sensor test.
    - **If the emergency generator is used for a hospital or data center**, then the IM sensor can be used with continuous alarm.
- Suction piping installed before April 7, 2008
    - Safe suction or European suction
        - Only one check valve at the suction pump and the piping is sloped back to the tank then **NO** leak detection is required.
    - American suction
        - Check valve at the top of the tank then one of following can be used
            - Line Tightness Test every 3 years
            - Monthly SIR
            - Double walled piping can use an IM sensor that has positive shut-off and an annual sensor test.
- Existing suction piping installed after April 7, 2008
    - Safe suction or European suction
        - Does not require release detection.
    - American suction
        - Must be double walled with IM that has positive shut-off and an annual sensor test.
        - **If the emergency generator is used for a hospital or data center**, then IM sensor can be used with continuous alarm.
- Gravity fed piping
    - If the piping is sloped back to the tank **NO** release detection is required.

The following diagrams show five typical configurations of piping for emergency generators and the types of piping leak detection that are acceptable. If your system is not configured like these and you are unsure what leak detection methods will be acceptable then contact the UST Management Program at (404) 362-2687.

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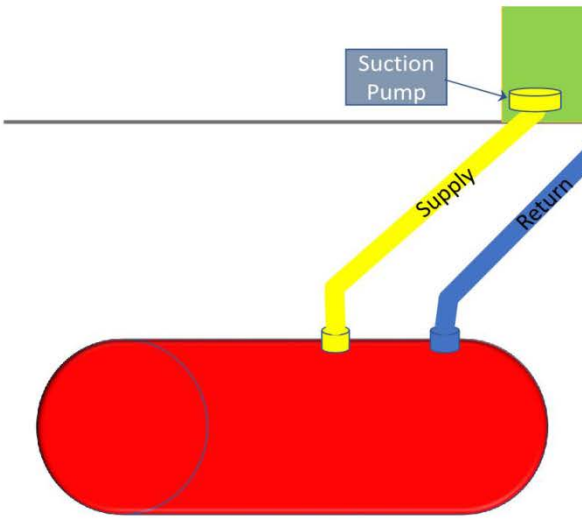
Generator UST Piping Version 1



- Underground supply and return lines slope back to the tank.
  - Supply is suction
  - Return is gravity
- Fuel is dispensed at a higher elevation than the tank top.
  - Supply Line
    - If the only check valve is at the suction pump, then safe suction. Exempt for release detection.
    - If the check valve is at the tank, then American suction. Requires LTT every 3 years, or monthly monitoring.
    - If the piping is installed after April 7, 2008 IM is required.
  - Return Line
    - Fuel flows back to the tank once the day tank is full.
    - If the piping is sloped back to the tank, then release detection is not required.

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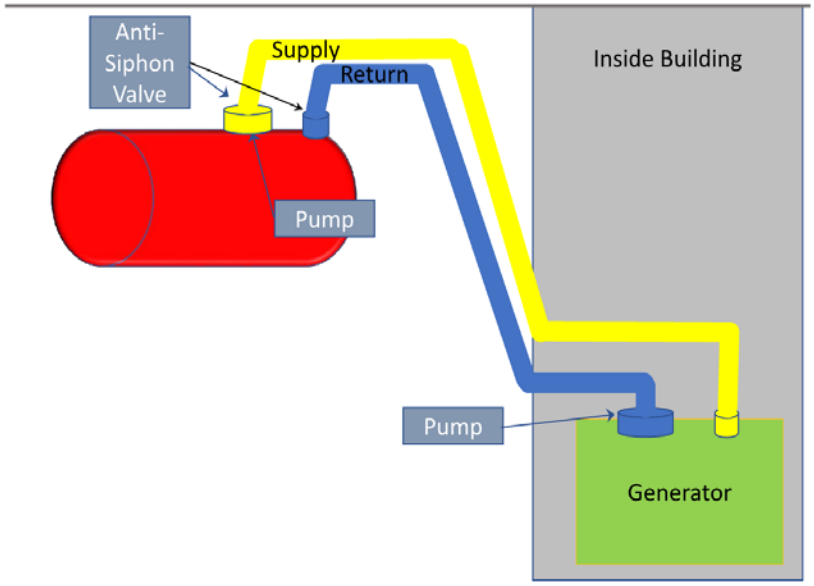
Generator UST Piping Version 2



- Underground supply and return lines do not slope back to the tank.
  - Supply is pressurized
  - Return is pressurized
  - Supply Line
    - Requires an ALLD and annual LTT or monthly monitoring
    - IM is required if installed after April 7, 2008.
  - Return Line
    - Requires an ALLD and annual LTT or monthly monitoring
    - IM is required if installed after April 7, 2008

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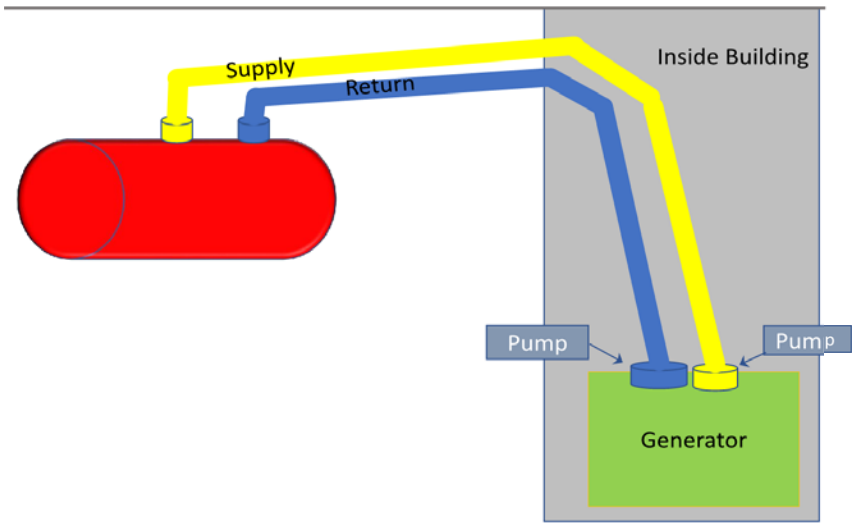
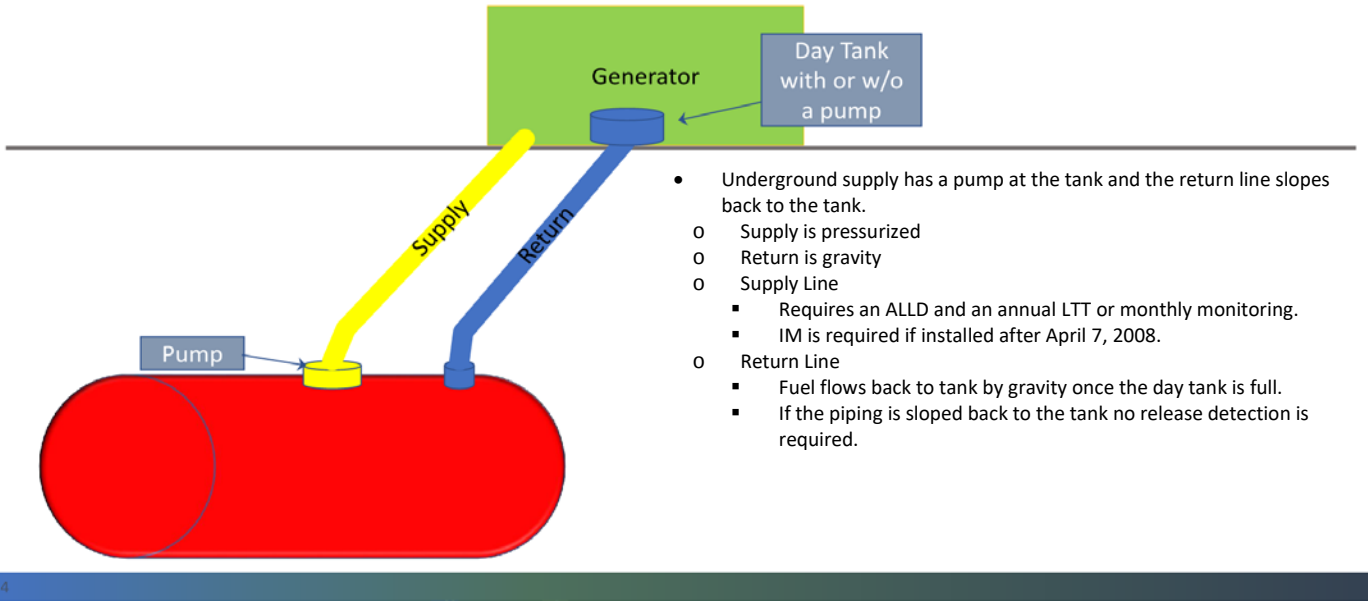
Generator UST Piping Version 3



- Below ground portion of supply and return are sloped back to tank.
  - Supply is suction
  - Return is gravity
  - Supply Line
    - If the only check valve is at the suction pump, then safe suction. Exempt for release detection.
    - If the check valve is at the tank, then American suction. Requires LTT every 3 years or monthly monitoring.
    - IM is required if installed after April 7, 2008
  - Return Line
    - Below ground portion is gravity fed back to the tank, so no release detection is required.

Generator UST Piping Version 4



- Underground supply has a pump at the tank and the return line slopes back to the tank.
  - Supply is pressurized
  - Return is gravity
  - Supply Line
    - Requires an ALLD and an annual LTT or monthly monitoring.
    - IM is required if installed after April 7, 2008.
  - Return Line
    - Fuel flows back to tank by gravity once the day tank is full.
    - If the piping is sloped back to the tank no release detection is required.

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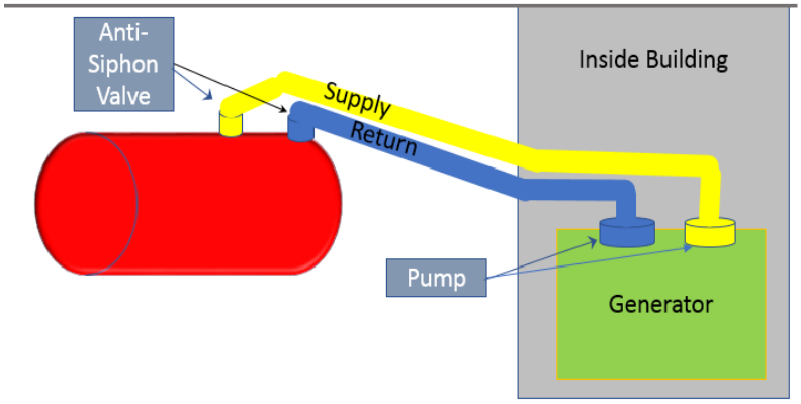
Generator UST Piping Version 5



- Underground supply and return lines do not slope back to the tank.
  - Supply is American suction
  - Return is pressurized
  - Supply Line
    - Requires LTT every 3 years or monthly monitoring.
    - IM is required if installed after April 7, 2008
  - Return Line
    - Requires an ALLD and annual LTT or monthly monitoring
    - IM is required if installed after April 7, 2008

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