LEACHATE AND CONDENSATE Collection and Treatment Tanks

Tank designs to meet the lifecycle cost of a landfill.

Leachate and condensate from landfills can contain hazardous constituents either as a direct result of the waste disposed in the facility (e.g., household hazardous wastes) or as a result of the breakdown of the chemical compounds found in waste (e.g., leachate derived constituents)

Poly Processing Company's Cross-linked Polyethylene tanks will perform under almost any circumstance:

- Chemically compatible with most every dissolved and solid material found in landfill leachate / condensate including acids, aldehydes, ammonia, pathogens, metals, etc.
- 20 times the Environmental Stress Crack Resistance of High Density Linear Polyethylene tanks
- Seamless construction which eliminates the potential for chemical attack points and bad welds / joints found in Fiberglass tanks and Steel tanks.
- Cross-linked Polyethylene tanks are not affected by the unpredictable composition of leachate / condensate and never need maintenance. Leachate / condensate will severely damage epoxy, concrete, and powder coated tanks leading to costly maintenance.
- Installations in typical landfills as well as hazardous waste landfills for over 25 years with no issues



TECHNICAL OVERVIEW:

Leachate and Condensate Collection and Treatment Tanks

TANK

IMFO[®] Vertical Flat Bottom of XLPE:

- 230-13,650 gallons
- 1.35-1.9 spg rating

Non-IMFO® alternatives:

SAFE-Tank® XLPE:

- 55-8,700 gallons
- 1.35-1.9 spg rating for primary tank
- Spg ratings for secondary tanks must be equal to primary tank.
- All other tank sizes must equal primary tank spg rating.

Standard Vertical Flat Bottom XLPE:

- 30-13,650 gallons
- 1.35-1.9 spg rating

SECONDARY CONTAINMENT

Recommend **SAFE-Tank**[®] secondary XLPE as shown above.

Non-SAFE-Tank® alternatives:

- PPC secondary containment basin
- Other secondary containment suitable for leachate or condensate of adequate size for use

PLUMBING TO THE TANK

- Required use of **flexible connections** with fittings on lower third of sidewall
 - » Allows for lateral and vertical expansion and contraction of the tank
 - » Reduces pump and piping vibration stress on the tank
- Expansion joints must meet the following minimum requirements:
 - » Axial Compression $\geq 1.5''$
 - » Axial Extension ≥ 0.625″
 - » Lateral Deflection \geq 0.750"
 - » Angular Deflection \geq 14°
 - » Torsional Rotation $\geq 4^{\circ}$

VENTING

Please refer to the venting chart on www.polyprocessing.com/ pdf/technical/Venting.pdf

FOUNDATION AND RESTRAINTS

- PPC IMFO[®] tank pad or smooth concrete, asphalt or steel foundation designed to accommodate IMFO[®], SAFE-Tank[®] or vertical tank
- No restraint or ladder attachment bands circumscribing the tank are allowed. Cable restraint systems must pass cables over the top of the tank.

TEMPERATURE

Product should not exceed 100°F at delivery to prevent damage to tank.

OPTIONS

Side manways for easy cleaning (as shown), restraint systems for wind and seismic, level gauges, ladders, heating pads, insulation, mixer mounts, and engineering stamp



Full drain IMFO® Slope or Flat Bottom



110% containment

SAFE-Tank®



Optional: side manway

