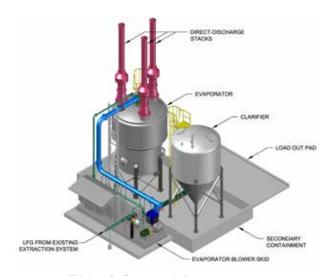


# LFG SPECIALTIES, LLC

### E-VAP® BRAND DIRECT DISCHARGE LEACHATE EVAPORATOR SYSTEM

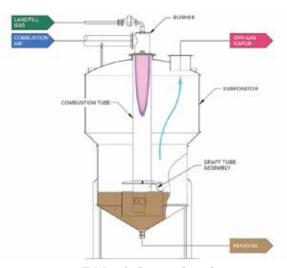


E-Vap® General Arrangement

# **PROJECT HIGHLIGHTS:**

- Design/build E-Vap® Brand Direct Discharge Leachate Evaporator System
- Fully integrated controls
- APTIM owns and operates the system until 2030
- Built to accommodate operation on Landfill Gas or Natural Gas





E-Vap® Cross Section

**40,000+**GALLONS PER DAY

24/7/365
REMOTELY ACCESSIBLE



Through steadfast research and development, APTIM is committed to creating sustainable solutions to per- and polyfluoroalkyl substances (PFAS) and landfill leachate. These contaminants cause groundwater contamination, air quality degradation, and bioaccumulation in wildlife and humans. Conventional management approaches are often insufficient to mitigate associated risks. APTIM's patented E-Vap Leachate Evaporator System is a technological solution to effectively treat leachate with a minimal impact on the environment.

# **OUR PROPRIETARY SOLUTION**

Designed and manufactured by APTIM's subsidiary LFG Specialties LLC, E-Vap is a patented, direct discharge leachate evaporator. Utilizing landfill gas or natural gas as the fuel source, the system vaporizes the liquid fraction within a vessel, discharging water vapor into the atmosphere and returning the high-solids residual (containing the PFAS compounds) to the landfill waste mass.



#### **BENEFITS OF E-VAP TECHNOLOGY**

- FINANCIAL SAVINGS: Our system costs less than pump and haul options.
- LONG-TERM STABILITY: Unlike other alternatives,
   E-Vap offers fixed operational costs.
- PROCESS AUTOMATION: Our technology operates
   24/7 with low maintenance required.
- PROCESSING CAPACITY: Our available unit capacities are 20,000 gallons per day (gpd), 30,000 gpd, and 40,000 gpd.
- FLEXIBLE CONFIGURATIONS: E-Vap is powered by the beneficial reuse of landfill gas, renewable natural gas, and natural gas.

#### **EMISSION DATA**

<20 PPMV NMOC

<0.30 LBS CO/MMBTU FIRED

<0.05 LBS NOX/MMBTU FIRED

#### **PROCESS + OPERATIONAL DATA**

E-Vap System Capacity	20,000 gpd	30,000 gpd	40,000 gpd
Landfill Gas 50% CH <sub>4</sub>	333 scfm = 9.10 MM Btu/hr	500 scfm = 13.67 MM Btu/hr	666 scfm = 18.20 MM Btu/hr
Est. Residual Generated	2,222 gpd	3,333 gpd	4,444 gpd
Est. Power Consumption*	1,350 kWh/per day	1,920 kWh/per day	2,670 kWh/per day
Equipment Footprint	40' x 75'		

<sup>\*</sup>Residual generation rates are based on an influent concentration of less than or equal to 1% total solids.