LEGO-V Renewable Natural Gas Station

# Seneca Landfill





### Seneca Landfill Video

https://www.senecalandfill.com/videos







## Seneca Landfill

- 2,500 cubic feet of landfill gas are extracted every minute.
- *LEGO-V* generates enough renewable energy to heat over **5,000** homes per year.
- Since 2011, Seneca Landfill has converted landfill gases into enough green energy to heat over 40,000 homes in Western Pennsylvania.





# LEGO-V





#### LEGO-V Video

https://youtu.be/wKLfYWWR5hM



### LEGO-V Components

#### Site Controls

- Climate Control Connex Box
  - Electrical Room, PLC, Cameras, & Display Panel.
- Priority Panel Cabinet
  - Designed to direct the flow from the compressors to on-site storage banks & Dispensers.
- Flow Meter
  - $\circ$   $\,$  Meters the volume of CNG  $\,$





Connex Box Electrical Room



Gas Meter



**Priority Panel Cabinet** 

#### Gas Dryer

- Dual Tower
- Desiccant filled
- 500 cfm





- Compressors
- Two (2) 250 hp units
- Compress gas from 125 psi to 5,000 psi
- Room for 3rd Compressor





### Gas Storage

- Two (2) Banks of three (3) vessels
   6 total vessels
- Each Vessel holds 12,000 CF of CNG at 5,000 psi
- Burst Protection: Designed to handle 2.25 times service pressure
- During hot days, gas expands & is less dense therefore, less energy
- CNG Garbage Truck holds approximately 9,000 CF of CNG





#### Dispensing

- Kraus Dual Hose
- High Pressure Dispensers
- High Flow/HEavy Duty Nozzles
- 5,000 CFM fill rate
- Credit Card / Fuel Card
  Capabilities
- Virtual Pipeline Capabilities





## LEGO-V

#### **Additional Photos**





## Vogel CNG Trucks



- Vogel Holdings has over 90 CNG Trucks
- Gas tanks are 80 DGE (approx 350 gallons)
- Hold approx 9,000 CF of CNG at 4,000 psi







# Vogel Companies













## Questions

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