Methane Recovery and Transportation Using CNG Direct
Applications for CNG Delivery

- Emergency Response
- Temporary Natural Gas Supply
- Demand increase
- Pipeline not Accessible
- Portable Equipment
- Pipeline Servicing/Evacuation
- Mobile CNG Vehicle Fueling
Power Generation – Aggregate - Agriculture Pumps - Municipalities - Pipeline servicing - Metal Production - Food Processing - Drilling Rigs - Fracking Units - Bio-Gas recovery - Flare Gas Recovery - Waste Management – all potential natural gas users with no pipeline gas adequate pressures/volumes or methane content
CNG Pods

Available Pod Capacity

- 50,000 SCF
- 86,000 SCF
- 100,000 SCF
- 200,000 SCF
- 350,000 SCF
- 430,000 SCF

Capture/ Delivery Capacity
10 MMSCFD per site
Methane Gas Recovery

- Oil Field
- Refinery
- Wastewater treatment
- Food Waste
- Landfill
- Dairy
Gas Cleanup-Siloxane

- Siloxane Removal
- L2 to D6
Gas Cleanup- H2S

- H2S Removal

**SITE SPECIFICATIONS**

- ~ 300 scfm gas flow
- GEJ 320 series biogas engine
- CH4 in biogas approx. 52%
- H2S levels in raw gas average <150 ppm with spikes
- H2S levels in treated gas <0.10 ppm over 1 year
- No media change-out for 1 year
Compression Station

• CNG Compressors 4200psi
• Electric or engine driven
• Typical additional equipment:
  • Refrigerant Skid
  • Dryer
  • Fill posts
  • Chillers
Loading Site Example

- Small Footprint
- Quick Site setup
  - Permanent 30 days construction
  - Temporary 1 day setup
- Low pressure Gas supply
  - Minimum .5psi
Transportation

- Drivers require Class A Hazmat endorsement
- DOT certified pods with hazmat placards
- Can be towed using pintle hitch or 5th wheel trailers
- Utilize CNG Vehicles
Offloading Station

Pressure Reduction System

- 3600 psi to 5 psi
- Flow capability up to 10 MMSCFD
- Typical Equipment
  - Decanting posts
  - Pressure Reducing Modules
  - Heating Control Modules
Unloading Site Layout

Gas Processing Plant

Pressure Reduction Unit
3600psi In - 450psi Out

- Natural Gas 450psi. supply outlet
- CNG 3600psi. supply inlet
- Electrical power from building
Offloading Site Example #2

CNG Trailer #1

30'

Regulator Trailer

CNG Trailer #2

40'

Regulator/Customer Connection

480v Source

High Pressure Lines

Low Pressure Hose

480v Connection
CNG Direct’s Flare Gas Recovery:

- 2017 Flare Gas Recovery 803 MMSCF
- 2018 Expected Flare Gas Recovery 2200MMSCF