

Specifications:

Digester Model:

*Avatar 3B87*

- > 4,300 Gallons/Day Capacity
- > Plug Flow Type Mesophilic Anaerobic Digester

Site:

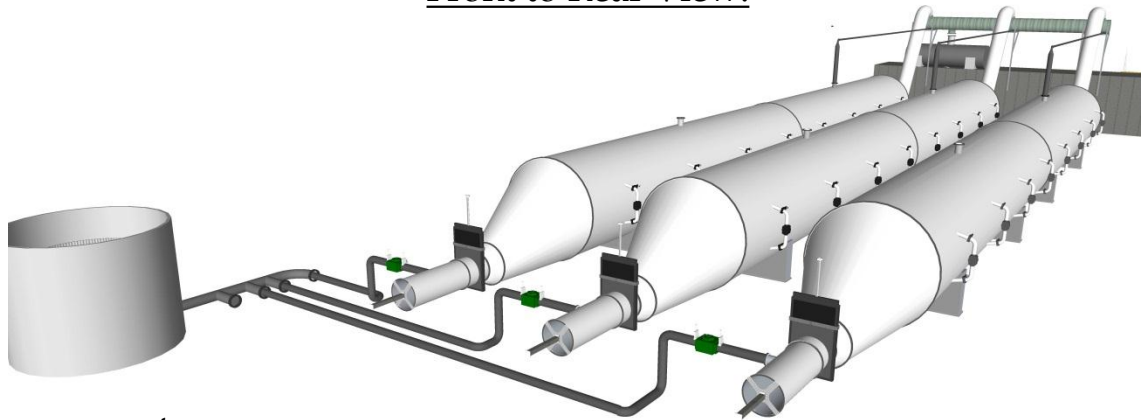
Location:

Host:

Herd Size:

Reviewer:

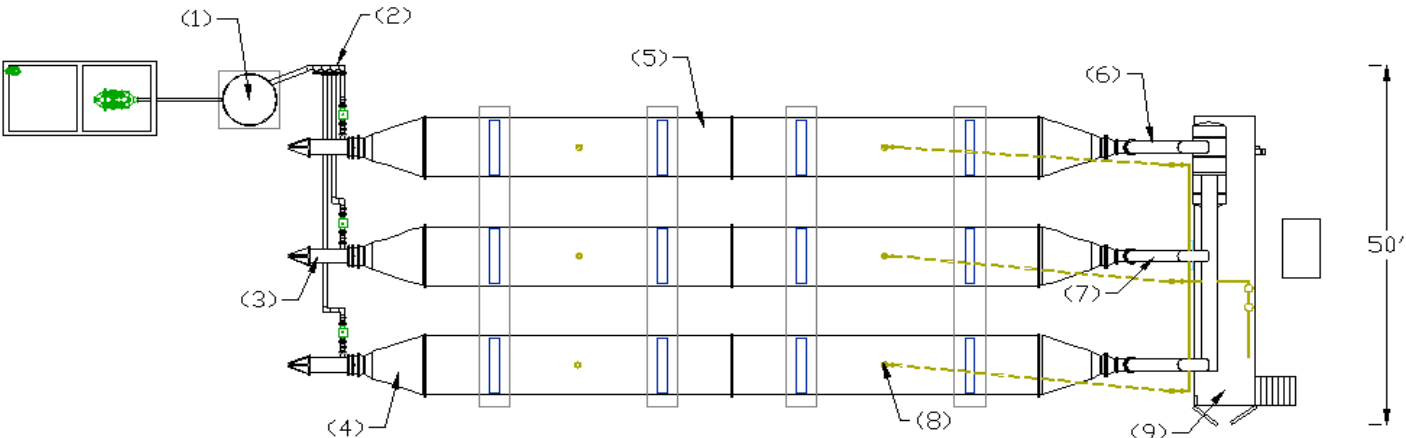
Front to Rear View:



Components:

- |                               |                                      |
|-------------------------------|--------------------------------------|
| 1. Injection / Heating Tank   | 6. Inclined Tail Section             |
| 2. Manure Intake Lines        | 7. Effluent Collection Hopper & Tank |
| 3. Injection Pump             | 8. Biogas Outlets                    |
| 4. Eccentric Reducer End Unit | 9. Shipping Container                |
| 5. Tubular Hull Section       |                                      |

140'



## System Specifications:

### *AnD-3B87*

Modular anaerobic digester with 3 parallel digester hulls. Hulls share heating/feed and effluent tanks. Calculations based on dairy manure only, other feedstocks will impact system specifications.

#### Digester Performance:

- **Digester Substrate:** Dairy manure plus appropriate co-digestion substrates
- **Plug Flow Retention Time:** 20 days
- **Feed Rate:** 4,300 gal per day
- **Digester Operating Temperature (internal):** min: 95°F, max: 105°F
- **Ambient Operating Temperatures:** 0°F to 120°F

#### Biogas Specifications:

- **Biogas Composition:** 60% methane, 40% CO<sub>2</sub>, 1200ppm H<sub>2</sub>S, trace NH<sub>3</sub>
- **Biogas Energy Content:** 600 BTU per cuft
- **Approx. Production Rate:** 18,000 cuft biogas per day
- **Approx. Energy Production Capacity:** 40 kW continuous

#### Digester Dimensions:

- **Hull Dimensions:** Length: 98' (*w/o injector pumps or tail sections*), Diameter: 8'
- **Tail Section Dimensions:** Incline Angle: 60°, Height: 17' 2"
- **Overall System Length:** 140' (*including heating and effluent tanks*)
- **Digester Footprint:** 50' wide x 140' long.

*\*Shelter options available*

#### Utility Requirements:

- **Electricity:** Single or three phase (preferred)

