REVISED

ONSITE SEPTIC TANK/PUMPS SPECIFICATIONS

FOR

THE PINE GROVE WASTEWATER

MANAGEMENT PROJECT

Amador Water Agency

Revision Date: 1/9/01
OVERVIEW

The Pine Grove Wastewater system incorporates onsite septic tanks and pump systems. These systems will be installed at the expense of the property owner, independent of the collection main/leachfield construction.

The generic set-up for a single-family residence or small business would be a single 1,500-gallon, two-compartment septic tank with a pump placed in the secondary chamber. This minimum configuration will be adequate for those users at 200 gallons per day (gpd) or less (≤ one equivalent dwelling unit “EDU”)

Any usage greater than 200 gpd requires specific engineering, planning and specification. Those services can be provided by a registered civil engineer.

SPECIFICATIONS

The generic septic tank set-up consists of a 1,500-gallon septic tank, Orenco ® P100511 pump (without ¼ inch flow controller) or equal, MF-EC float assembly, effluent screen, and A-1 control panel with cycle counter. The septic/pump tanks will require access risers. Per the attached detail, Orenco ® risers and lids or traffic-rated alternatives are to be used. Traffic bollards will be allowed in lieu of traffic-rated equipment. Existing septic system components may be incorporated into this equipment (i.e., existing septic tank with documented watertightness test may be okay) subject to Amador Water Agency, Amador County, and Design Engineer’s (Morlan Civil Engineering) approval.

Food preparation facilities will require grease trap facilities, with modifications/new installation as necessary.

CONCLUSION

This outline is meant as a guide for the customer and Amador Water Agency personnel. The Amador Water Agency will oversee specification and construction inspection of the ≤ 200 gpd facility.

Food service facilities and users over 200 gpd will need special design considerations.

Revised 1/9/01
Use this pump

P100512, 230V- 6 stage
P100511, 115V- 6 stage
P100511, 115V- 5 stage
P100512, 230V- 5 stage w/ 1/5" Flow Controller

Refer to Price List Page 6

Total Dynamic Head, TDH

Net Discharge, GPM
12" Biotube® Duplex Pump Vaults

With External Flow Inducers
For use with Duplex Orenco 4"
Submersible Effluent Pumps

General

Orenco 12" Biotube Pump Vaults are composed of PVC cylindrical vaults with an ABS base, a Biotube screen cartridge and two support pipes. Effluent seeps through inlet holes around the perimeter of the Biotube vault and flows through the Biotubes to the external flow inducers. Orenco Biotube Pump Vaults are covered by US patents 4,433,372 and 5,426,335.

Applications

Orenco 12" Pump Vaults are used to screen effluent being pumped from septic tanks or separate dosing tanks in STEP systems and on-site wastewater disposal systems.

Standard Models

X4D1254-1819, X5D1260-2424,
X4D1260–2424, X5D1272-3630,
X4D1272-3630, X5D1272-3630,
X4D1272-3636, X5D1284-3636,
X4D1294-3636, X5D1284-3636.

Specifications

1) The Biotube screen mesh contains holes 1/8" square and has a nominal open area of 50%.
2) Turbine Effluent Pumps with flow rates 40 gpm and under can be housed with a 4" flow inducer; pumps with flow rates over 40 gpm should be housed in a 5" flow inducer.
3) When pumping from a single compartment tank or two compartment septic tank where both compartments are simultaneously drawn down during pumping, the discharge rate should not exceed approximately 40 gpm. Higher flow rates require a watertight baffle or multiple tank arrangement typically with an effluent filter in the primary tank.

Materials of Construction:

Vaults: PVC
Biotube Cartridge: Natural polypropylene.
Base: ABS.
Float Stem: Sch. 40 PVC.
Support Pipe: Sch. 80 PVC.
Drain Port Flapcheck: Neoprene rubber.