Chapter 10

SEPTIC TANK EFFLUENT PUMP (STEP) SYSTEMS

10.01 General Provisions

10.02 Technical Specifications

- 10.02.1 On-Site Interceptor Tank
- 10.02.2 Risers and Lids
- 10.02.3 Pumping Assemblies

10.03 Application

10.04 Inspection

Chapter 10

SEPTIC TANK EFFLUENT PUMP (STEP) SYSTEMS

10.01 General Provisions

a. With the approval of the District, STEP systems which pump to a public sewer line may be installed when:

1. A public gravity sewer is adjacent to the lot, and
2. Gravity access to a public sewer line cannot reasonably be obtained, and
3. The District determines that a public pump station serving multiple properties is not a more appropriate solution, and
4. Only one house or building is connected to the STEP system and pressure line, and
5. Unless approved by the District, the public sewer line at the point of connection is a polyvinyl chloride (PVC) material, and flows in the public line are such that hydrogen sulfide generation will not be a problem.

b. The STEP system operation, maintenance, electricity, replacement, and sludge removal costs are the responsibility of the property owner. The property owner is also responsible for the repair or replacement of the tank and connections if infiltration occurs.

c. The District or City shall be permitted to enter upon private property for the purpose of inspection, observation, measurement, sampling, and testing of the STEP system.

10.02 Technical Specifications

10.02.1 On-Site Interceptor Tank

a. Tanks shall be 1000 gallon precast concrete, fiberglass or polyethylene and shall have been designed by a registered engineer and approved by the local regulatory agencies. The manufacturer shall provide the structural design and certification to the District or City for review.

b. The tank shall be guaranteed in writing by the tank manufacturer for a period of two years from the date of delivery to the site.

c. The tank shall successfully pass a hydrostatic test at the time of manufacture and after installation at the site. An alternate method is a vacuum test. The hydrostatic test shall measure the water loss due to exfiltration during a two-hour period where the tank is filled with water to the riser. The two-hour loss shall not exceed six gallons for concrete, and no loss for polyethylene and fiberglass tanks.

d. The tank shall be installed in accordance with the manufacturer's instructions. The installation and testing shall be witnessed by District or City personnel.

10.02.2 Risers and Lids

a. Inlet risers, if required, shall be ribbed PVC. Risers shall be at least 12-inches high and shall have a minimum nominal diameter of 21-inches.

b. Outlet risers shall be ribbed PVC. Outlet risers shall be at least 12-inches high and a minimum nominal diameter of 24-inches.

c. Lids shall be Orenco Systems Model FL-21g or FL-24g, or equal, and provided with neoprene gasket, and stainless steel bolts.

d. Risers and lids shall be free from infiltration.

10.02.3 Pumping Assemblies

The pumping system shall be an Orenco Pumping System, or equal, that is designed by a registered engineer to meet the application of its intended use.

10.03 Application

The applicant shall submit to the District or City two copies of the engineering plans prepared by a licensed professional engineer. The application shall also show that gravity sewer is not available to the lot, that there is no practical way to serve the lot with gravity sewer, and that there will not be a hydrogen sulfide problem at the point of connection to the gravity system.

The District or City may set and charge additional fees for the plan review and inspection of STEP system installations.

Prior to final acceptance by the District or City, the Property Owners shall furnish an easement for access to the property stating that a STEP system exists on the property, that it is a private system (not owned or maintained by the District), and that the District or City shall be permitted to enter upon the subject property for the purpose of inspection, observation, measurement, sampling, and testing of the STEP system.

10.04 Inspection

Inspection and testing of the individual STEP system, by the appropriate jurisdiction, shall be required prior to final acceptance by the District or City.