**Section 906.70 Distribution System (for sewage flows in excess of 800 gallons per day)**

a) Design criteria for laterals.

1) The variation in discharge rates from the perforations in any lateral shall not exceed ten percent.

2) The variation in discharge rates between the perforations of any two laterals shall not exceed 15%.

3) The pressure at the distal ends of the lateral shall be at least 2.5 feet of water.

b) Perforations. The perforation requirements of this Section shall be used in place of those of Section 906.60.

1) The perforations shall be spaced uniformly along the laterals and at an interval not to exceed 10 feet.

2) Perforations shall be installed perpendicular to the centerline of the lateral and along the lateral invert.

3) Perforation diameter shall be between ¼ and ⅝ inches.

4) To facilitate the draining of laterals between dosing cycles, a perforation shall be installed at the distal end of each lateral near the crown of the pipe.

c) Network Configuration

1) The laterals shall be installed in seepage beds. The lateral spacing shall equal the perforation spacing. The perforations of adjacent laterals in the bed shall be staggered.

2) Mounds employing multiple beds may be used. Also, multiple mounds may be employed. If bed elevations are not all equal, then this fact must be considered in the design of the pipe network in order to provide uniform dosing of effluent.

3) Manifold-to-lateral connections shall be made using tee-to-tee construction, with the manifold below the laterals (see Appendix A, Illustration G). If the design is such that the manifold does not drain between dosing cycles, then insulation or some other means shall be provided to prevent freezing. In addition, provisions shall be made for manual draining of the manifold.

4) Two separate distribution networks may be employed, with each network receiving alternate doses of effluent through the use of alternating pumps, valves, or siphons.

5) Siphons or siphon breaks shall be used in networks where the low water level in the pumping chamber is above the lateral inverts.

d) Pumping Chamber

1) Dosing volume. Dosing volume shall be determined by dividing the average daily sewage flow by the dosing frequency for the particular soil type, as is shown in Appendix A, Illustration H. Dosing volume shall be at least five times the pipe volume of the network. The dosing volume is the amount of liquid pumped or siphoned during each cycle minus the amount which drains back from the system after each dose.

2) Reserve capacity. If a single pump is used, a reserve capacity equal to one day's average sewage flow shall be provided. A reserve capacity is not required if multiple pumps or siphons are used.

3) A high water alarm switch shall be installed 2-3 inches above the pump or siphon activation level. The switch shall be on a circuit separate from the pump controls.

4) The pump or pumps shall be of a submersible type, designed for corrosive liquids. The control switches shall be corrosion resistant. All electrical contacts and relays shall be mounted outside the chamber. Provisions shall be made to prevent gases in the chamber from following the electrical conduits into the control box.