

# SINGULAIR WASTEWATER TREATMENT SYSTEM

## DESIGN CONSIDERATIONS

### **A. Applicability**

The design considerations in this manual are applicable for installations in the State of Rhode Island.

### **B. Selection**

The Singulair treatment system is available in the following models and treatment capacities:

| Model   | Treatment capacity   |
|---------|--|
| 960/N   | Up to 500 gallons per day (1.9 cubic meters per day)           |
| 960/2.8 | From 501 to 750 gallons per day (2.8 cubic meters per day)     |
| 960/3.8 | From 751 to 1,000 gallons per day (3.8 cubic meters per day)   |
| 960/4.7 | From 1,001 to 1,250 gallons per day (4.7 cubic meters per day) |
| 960/5.7 | From 1,251 to 1,500 gallons per day (5.7 cubic meters per day) |

Select the Singulair model that has the closest treatment capacity to the design flow. The design flows dictated by codes are very generous and many disposal systems operate well below capacity. Aerobic systems work best when the average flows are near treatment capacities so do not select a model that is too large for the given application.

It is possible to use Singulairs for other than normal domestic installations or units operating in parallel to treat flows in excess of 1,500 gallons per day. For design assistance please consult with Siegmund Environmental Services, Inc.

### C. Design procedure:

The design of an ISDS utilizing the Singulair is identical to that which uses a septic tank **except** as follows:

1. The difference in elevation between the inlet invert and the outlet invert is **always 4"** for the Singulair.
2. The leaching system may be reduced by 35% if field conditions do not indicate the possibility of hydraulic overload. In the design it must be considered that the field reduction allowance is given due to the **quality** and not the quantity of the effluent. Note that sufficient land area must be available to permit installation of a full size leachfield as noted in item I.2 of the RIDEM certification, enclosed in this manual.
3. Maintenance considerations require easy access to the risers and their covers. Locate the Singulair so as not to make service unduly difficult. **Do not** locate a Singulair under decks with inadequate space for service work. Please provide an outside faucet near the Singulair.
4. Locate the electronic control center outside the building in the near vicinity of the Singulair in a location that is always accessible to service personnel.
5. For dimensions of tanks and other components see the attached drawings. **Do not exceed the 14" cover over the tank** unless you discuss the specifics with Siegmund Environmental Services, Inc.
6. Note that the optional chlorination /dechlorination system is not permitted in Rhode Island.
7. For RIDEM certification of the Singulair as Class II Aerobic Wastewater Treatment System see the attached document. **A copy of this document must be provided to the Owner prior to the submittal of the ISDS Application to RIDEM.**

The assistance of Siegmund Environmental Services, Inc. is always available during the design process. Drawing files in AUTOCAD format are available upon request.