

1 - Standard Septic System Designs Using Pumps
2 - Reduction in Size of Standard Septic Systems When Low Flow Plumbing Fixtures Are Installed in a Dwelling

PURPOSE

The purpose of this procedure is to provide clear direction to staff and the public as to the requirements for pump systems and the sizing requirements for pump systems and the sizing requirements for standard septic systems where water saving devices are used in the building.

GENERAL

In January of 1993, regulations were adopted for non-standard septic systems which included specifications for design of sumps and pumps and also reductions in sizing for non-standard systems when water saving devices are used in a building. The applicability of these requirements to standard septic system installations needs to be clarified.

AUTHORITY

Guidelines and Regulations for Non-Standard Sewage Disposal Systems

This procedure supersedes Division of Environmental Health Instruction No. 6-93

PROCEDURE

A. SUMP AND PUMP REQUIREMENTS FOR STANDARD SEPTIC SYSTEMS

The sump and pump requirements for standard septic systems are identical to those for non-standard septic systems. All installations shall comply with Appendix J of the Guidelines and Regulations for Non-Standard Sewage Disposal Systems.

B. SIZING REQUIREMENTS FOR STANDARD SEPTIC SYSTEMS WHERE WATER SAVING DEVICES ARE USED

Standard septic systems are normally sized for 150 gallons of sewage per day per bedroom in a dwelling or the projected peak daily flow for a commercial establishment.

Reductions in these design flows may be approved by the Well and Septic Section when certain water saving devices are incorporated permanently into the buildings being served. Reductions may be granted when each of the following is provided:

1. Reductions of up to 20% may be granted where 1.6 gallon low flush toilets are installed in all

bathrooms for residential and commercial systems. Installations where water saving devices will reduce more than 20% of design flows shall require designs and final inspections by Registered Environmental Health Specialists or Registered Civil Engineers and recordation of water use restrictions against the deed.

2. The septic tank shall be fitted with an effluent filter (e.g. Zabel or Orenco Filters).
3. The leachfield shall be either a) a dual leachfield with each half designed at 75% of the reduced design flow (either 50% or 150% additional reserve expansion area must be provided based upon the date the lot was created¹), or b) a dosed leachfield using a pump with with equal distribution to gravity leachlines, the leachfield shall be sized based upon 100% of the reduced flow (an expansion area of 100% or 200% must be provided based upon the date the lot was created¹).

Approved by:

Date posted 9/27/02

/s/ Richard L. Holmer

Richard L. Holmer, Operations Manager

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¹ - Lots created after October 1971 require 200% reserve expansion area. In a dual leachfield system, a portion of the reserve expansion area is constructed with the initial system.