

MEMORANDUM

DATE: June 29, 2007
TO: Industry Professionals
FROM: Brad Sangston, R.S.
SUBJECT: Solids Pump Tanks

The Washington State Department of Health is developing Recommended Standards and Guidance (RS&G) for Performance, Application, Design, Construction, Installation and Testing of On-Site Sewage System Tanks. The current draft states that sewage tanks must be designed and constructed to be watertight in order to prohibit leakage of sewage from the tank for the purpose of limiting public exposure to sewage. They must also be designed to prevent the entrance of surface drainage and ground water into the tank, which may lead to hydraulic overload, unpredictable performance and failure of the sewage system.

Effective July 2, 2007, since the new RS&G does not cover the use of solids pump tanks, this memorandum is intended to inform you of Thurston County Environmental Health's position and requirements.

Solids pumps decrease the septic tank's ability to act as a settling chamber by increased agitation causing emulsification of the solids. Therefore, Environmental Health will use the following recognized priorities for new construction, repairs and other upgrades, and when feasible in accordance with Washington State department of Health's Recommended Standards and Guidance for Dosing Gravity Drainfield Systems:

- Priority 1: When the entire daily flow is to be pumped from the residence to a septic tank that is at a higher elevation (i.e.: from a daylight basement on a slope), a septic tank and pump chamber will be required to be installed per code where the sewage leaves the residence. The pump must be designed for effluent only.
- Priority 2: When pumping to an existing septic tank and drainfield, it is acceptable to install an approved two-compartment tank with the pump in the second compartment (emergency storage and sizing still applies). Many plastic tanks are not suitable for a pump tank in the second compartment because the divider is not waterproof or too weak to withstand differences in levels between the compartments.
- Priority 3: When the applicant can clearly demonstrate that priorities 1 and 2 are not physically feasible, they may apply for an exception to policy and propose to install a watertight 300 gallon solids pump chamber that will pump the sewage to an existing septic tank. These tanks must be leak tested to ensure that they are watertight to above the top of the tank lid prior to submittal of the Record Drawing. All access and inspection opening lids, access riser seams must also be watertight.

This does not include outbuildings with plumbing intended for occasional personal use only (For example: a bathroom in a garage).