



WASHINGTON

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Chapter 246-272 WAC
Onsite Sewage Systems
Rules and Regulations of the State Board of Health
September 15, 2005

<http://www.doh.wa.gov/ehp/ts/WW/pubs-ww-2.htm#onsite-regs>

Washington's Rules and Regulations were last updated September 15, 2005. Chapter 246-272A WAC is the latest revision and was approved by the State Board of Health on July 15, 2005, with different sections becoming effective at different dates.

There are a number of changes, some administrative, some technical. On the administrative side, one major change is how proprietary products are registered for use in the state. Formerly, this process was not in rule and now is in rule. In addition, the testing protocols and performance levels are clearly specified. Another key change is that local health jurisdictions, who administer these minimum state regulations, must develop and implement plans for the management of the onsite program, including the monitoring and maintenance of onsite sewage systems in their jurisdictions. For those jurisdictions that border the Puget Sound estuary, there are specific and detailed requirements.

On the technical side, changes include: additional treatment levels and distribution requirements based on site characteristics of soil type, vertical separation and horizontal separations; limitations on the use of disinfection for achieving the fecal coliform parameter of the treatment levels; inclusion of a total

nitrogen treatment level; decreased loading rates for many soil textures; increased reliance on soil structure; and clear specification of what determines the treatment level/method of distribution and the loading rate to the soil.

Washington State Code specifies the treatment level and method of distribution base on the soil type available and vertical separation selected (or available). These treatment levels are not field compliance levels but product testing levels established by the national testing protocols listed in the rule and achieved treatment levels during the testing.

See tables below for treatment levels and a summary of the treatment level requirements:

Treatment Levels
Table 3, P. 45

Level	Parameters				
	CBOD ₅ (mg/L)	TSS (mg/L)	FOG (mg/L)	FC (#/100ml)	TN (mg/L)
A	10	10	---	200	---
B	15	15	---	1,000	---
C	25	30	---	50,000	---
D	25	30	---	---	---
E	125	80	20	---	---
N	---	---	---	---	20

Treatment Levels & Distribution
Table VI, P. 65

Vertical Separation	Soil Type		
	1	2	3 — 6
≥12" < 18"	A	B	B
≥18" < 24"	B	B	B
≥24" < 36"	B	C	E
≥36" < 60"	B	E	E
≥60"	C	E	E

Pressure distribution with time-dosing
 Pressure distribution
 Gravity distribution

In the State of Washington, the local health officer may only approve technologies that are described in rule, are listed with Washington State according to the listing process

and for which a recommended standard and guidance document is available from the department.

Current rule requires a management entity when an Onsite Sewage System (OSS) serves more than one development (or home). Otherwise it is optional in the rule [246-272-15501 (5)(a)(ii) and (iii)]. In the Recommended Standards and Guidance for most proprietary treatment technologies, there is a requirement for a maintenance contract. Compliance with this latter requirement is variable, and often poor.

The State of Washington does require onsite professionals to be certified. For designers and regulators who evaluate designs, there is a state licensing under the Board of Professional Engineers and Land Surveyors. For all others (installers, pumpers and O&M providers), the certification is with the local health jurisdiction. There is a state exam for designers and regulators. For all others, there is usually some sort of exam by the local health jurisdiction. Designers and regulators must renew annually.

Soil characteristics are the only method of evaluating soils specified in the rules. Percolation tests are rarely, if ever, used, unless the permeability of a soil horizon is in question. If an inspection is requested by the homeowner the new rule requires homeowners to assure a complete evaluation of the system components and/or property to determine functionality, maintenance needs and compliance with regulations and permits:

- 1) At least once every 3 years for all systems consisting solely of a septic tank and gravity subsurface soil absorption system (SSAS).
- 2) Annually for all other systems unless more frequent inspections are specified by the local health officer.

For conducting site evaluations before an onsite system is installed the process varies by local health jurisdiction. The State rule allows only professional engineers, licensed designers or local health officers to perform soil and site evaluations. Soil scientists may only perform soil evaluations. In Washington State, system design is based on soil characterization using soil log pits, and on other site features such as slope, items requiring horizontal setbacks and in some cases, annual precipitation. Site evaluations are usually performed by a licensed designer who submits a site plan and proposed design to the local health jurisdiction. The local health jurisdiction will then make a site visit to confirm soil descriptions, topography and other site features relevant to public health protection and then render a decision about the proposal by issuing a permit or returning the proposal back to the designer with comment. For further details, see section 246-272-11001 of the rule.

Permits for systems with design flows up to 3500 gallons per day (gpd) are issued by the local health officer. For systems with design flows greater than 3500 gpd up to 14,500 gpd are reviewed and approved by the state Department of Health, except for about 5 local jurisdictions that do so by memorandum of understanding with the Department of Health. Systems with flows greater than 14,500 gpd come under the jurisdiction of the state Department of Ecology.

As of September 15, 2005, experimental systems are no longer allowed in the state. Beginning July 1, 2007, the local health officer may issue a product development permit for any proprietary treatment component or sequence for product developers to explore and develop new technologies prior to product testing and registration. It will not be an alternative to the testing and registration process specified in the rule.

Alternative systems are not defined in the new rule. Systems will be categorized by the type of effluent they are designed to treat (e.g. typical residential strength, high strength, black water component only, or total nitrogen reduction in residential or high strength effluents), and by the treatment level they achieve during testing according to the protocol specified for the category of effluent.

There is funding or financing options for homeowners for the repair or replacement of a failing or malfunctioning onsite system, but not for construction of a new system. Several counties, including Thurston, Kitsap, and Jefferson have revolving funds. Contact the following for information concerning funding and financing to assist individual homeowners:

Mr. Dan Filip
Department of Ecology
Water Quality Financial Assistance
(360) 407-6509
dfil461@ECY.WA.GOV

Or

Mr. Selden Hall, at the address above.

Onsite training programs are available throughout the state. Both of the following offer a variety of classes on onsite sewage, for information, please contact:

Mr. David Lenning
Washington State Department of Health
PO Box 47825
Olympia **Washington** 98504-7825

Mr. John Thomas, Executive Director
WOSSA
PMB 856 Suite #10
2315 N Pearl Street
Tacoma, **Washington** 90406
253-297-2837
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Currently, no funded onsite wastewater demonstration, research or testing projects exist in the State. However, the Burnett National Onsite Demonstration Project (NODP) site still exists.

Burnett NODP
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