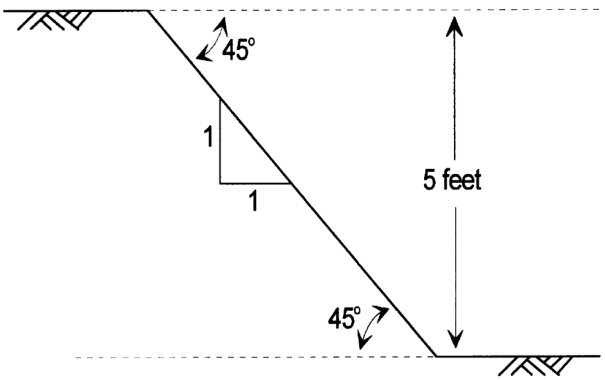
WAC 246-272A-0010 Definitions. The definitions used in this section apply throughout this chapter unless the context clearly indicates otherwise:

(1) "Additive" means a commercial product added to an OSS intended to affect the performance or aesthetics of an OSS.

(2) "ANSI" means American National Standards Institute.

(3) "Approved" means a written statement of acceptability issued by the local health officer or the department.

(4) "Bank" means any naturally occurring slope greater than 100 percent (45 degrees) and extending vertically at least five feet from the toe of the slope to the top of the slope as follows:



(5) "Bed" means a soil dispersal component consisting of an excavation with a width greater than three feet.

(6) "BL" means bacterial level.

(7) "Black water" means any waste from toilets or urinals.

(8) "BOD" means biochemical oxygen demand, typically expressed in mg/L.

(9) "Building drain" means that part of the lowest piping of a building's drainage system that receives the discharge of sewage from pipes inside the walls of the building and conveys it to the building sewer beginning two feet outside the building wall.

(10) "Building sewer" means that part of the horizontal piping of a drainage system extending from the building drain, which collects sewage from all the drainage pipes inside a building, to an OSS. It begins two feet outside the building wall and conveys sewage from the building drain to the OSS.

(11) "$CBOD_5$" means carbonaceous biochemical oxygen demand, typically expressed in mg/L.

(12) "Cesspool" means a pit receiving untreated sewage and allowing the liquid to seep into the surrounding soil or rock.

(13) "Conforming system" means any OSS or component, meeting any of the following criteria:

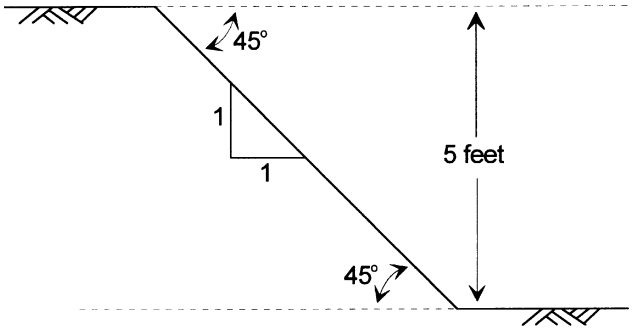
(a) In full compliance with new construction requirements under this chapter; or

(b) Approved, installed, and operating in accordance with requirements of previous editions of this chapter; or

(c) Permitted by the waiver process under WAC 246-272A-0420.

(14) "Cover material" means soil placed over a soil dispersal component composed predominately of mineral material with no greater than 10 percent organic content. Cover material may contain an organic surface layer for establishing a vegetative landscape to reduce soil erosion.

(15) "Cuts" means any artificially formed slope greater than 100 percent (45 degrees) and extending vertically at least five feet from the toe of the slope to the top of the slope as follows:



(16) "Department" means the Washington state department of health.

(17) "Designer" means a person who matches site and soil characteristics with appropriate on-site sewage technology. Throughout this chapter this term applies to both OSS designers licensed under chapter 18.210 RCW and professional engineers licensed under chapter 18.43 RCW.

(18) "Design flow" means the maximum volume of sewage a residence, structure, or other facility is estimated to generate in a 24-hour period. It incorporates both an operating capacity and a surge capacity for the OSS during periodic heavy use events. The sizing and design of the OSS components are based on the design flow.

(19) "Detention pond" means an earthen impoundment used for the collection and temporary storage of stormwater runoff.

(20) "Development" means the creation of a residence, structure, facility, subdivision, site, area, or similar activity resulting in the production of sewage.

(21) "Disinfection" means the process of destroying pathogenic microorganisms in sewage through the application of ultraviolet light, chlorination, or ozonation.

(22) "Distribution technology" means any arrangement of equipment or materials that distributes sewage within an OSS.

(23) "Drainrock" means clean washed gravel or crushed rock ranging in size from three-quarters inch to two and one-half inches and containing no more than two percent by weight passing a US No. 8 sieve and no more than one percent by weight passing a US No. 200 sieve.

(24) "DS&G" means department standards and guidance.

(25) "*E. coli*" means *Escherichia coli* bacteria. Counts of these organisms are typically used to indicate potential contamination from sewage or to describe a level of needed disinfection, typically expressed as colony forming units/100 mL.

(26) "Effluent" means liquid discharged from a sewage tank or other OSS component.

(27) "EPA" means United States Environmental Protection Agency.

(28) "Expanding clay" means a clay soil with the mineralogy of clay particles, such as those found in the Montmorillonite/Smectite Group, which causes the clay particles to expand when they absorb water, closing the soil pores, and contract when they dry out.

(29) "Expansion" means a change in a residence, facility, site, or use that:

(a) Causes the sewage quantity or quality to exceed the existing design flow of the OSS, for example, when a residence is increased

from two to three bedrooms or a change in use from an office to a restaurant; or

(b) Reduces the treatment or dispersal capability of the existing OSS or the reserve area, for example, when a building is placed over a reserve area.

(30) "Extremely gravelly" means soil with 60 percent or more, but less than 90 percent rock fragments by volume.

(31) "Failure" means a condition of an OSS or component that threatens the public health by inadequately treating sewage or by creating a potential for direct or indirect contact between sewage and the public. Examples of failure include:

(a) Sewage on the surface of the ground;

(b) Sewage backing up into a structure caused by slow soil absorption of septic tank effluent;

(c) Sewage leaking from a sewage tank or collection system;

(d) Cesspools or seepage pits where evidence of groundwater or surface water quality degradation exists;

(e) Inadequately treated effluent contaminating groundwater or surface water; or

(f) Noncompliance with standards stipulated on the permit.

(32) "Fecal coliform" or "FC" means bacteria common to the digestive systems of warm-blooded animals that are cultured in standard tests. Counts of these organisms are typically used to indicate potential contamination from sewage or to describe a level of needed disinfection typically expressed in colony forming units/100 mL.

(33) "Fill" means unconsolidated material that:

(a) Meets soil types 1-6 textural criteria and is used as part of a soil dispersal component;

(b) Is used to change grade or to enhance surface water diversion; or

(c) Is any other human-transported material.

(34) "Flood plain" means an area that is low-lying and adjacent to a stream or river that is covered by water during a flood.

(35) "GPD" means gallons per day.

(36) "Gravelly" means soils with 15 percent or more, but less than 35 percent rock fragments by volume.

(37) "Greywater" means sewage from any source in a residence or structure that has not come into contact with toilet or urinal wastes, including bathtubs, showers, bathroom sinks, washing machines, dishwashers, and kitchen sinks.

(38) "Groundwater" means subsurface water occupying the zone of saturated soil, permanently, seasonally, or as the result of the tides. Indications of groundwater may include:

(a) Water seeping into or standing in an open excavation from the soil surrounding the excavation or monitoring ports.

(b) Spots or blotches of different color or shades of color interspersed with a dominant color in soil, caused by reduction and oxidation of iron. These color patterns are redoximorphic features, commonly referred to as mottling. Redoximorphic features often indicate the intermittent presence of groundwater and may indicate poor aeration and impeded drainage.

(39) "Holding tank sewage system" means an OSS that incorporates a sewage tank without a discharge outlet, the services of a sewage pumper/hauler, and the offsite treatment and disposal for the sewage generated.

(40) "Hydraulic loading rate" means the amount of effluent applied to a given treatment step, expressed as gallons per square foot per day or gal/sq.ft./day.

(41) "Industrial wastewater" means the water or liquid carried waste from an industrial process. These wastes may result from any process or activity of industry, manufacture, trade or business, from the development of any natural resource, or from animal operations such as feedlots, poultry houses, or dairies. Industrial wastewater includes contaminated stormwater and leachate from solid waste facilities.

(42) "Infiltration pond" means an earthen impoundment used for the collection, temporary storage, and infiltration of stormwater runoff.

(43) "Infiltrative surface" means the surface within a treatment component or soil dispersal component to which effluent is applied and through which effluent moves into original, undisturbed soil or other porous treatment media.

(44) "Installer" means a person approved by the local health officer to install an OSS or OSS components.

(45) "Local health officer" means the health officer of the city, county, or city-county health department or district within the state of Washington, or a representative authorized by and under the direct supervision of the local health officer, as defined in chapter 70.05 RCW.

(46) "LOSS" means a large on-site sewage system under chapter 246-272B WAC.

(47) "Maintenance" means the actions necessary to keep the OSS components functioning as designed.

(48) "Maintenance service provider" means a management entity certified by the local health officer and conducts a comprehensive analysis of an OSS.

(49) "Malfunction" means a damaged or deficient previously conforming OSS component that may be corrected by means of a minor repair.

(50) "Massive structure" means the condition of a soil layer in which the layer appears as a coherent or solid mass not separated into peds of any kind.

(51) "mg/L" means milligrams per liter.

(52) "mL" means milliliter.

(53) "Minimum usable land area" means the minimum land area within the minimum lot size required per development using an OSS, which is based on soil type and type of water supply. Minimum usable land area is free of all physical restrictions and meet minimum vertical and horizontal separations.

(54) "Minor repair" means the repair or replacement of any of the following existing damaged or malfunctioning OSS components except that the repair or replacement of a sewage tank, treatment component, or soil dispersal component is not considered a minor repair:

(a) Control panels;
(b) Building sewers;
(c) Any other portions of tightline in the OSS;
(d) Risers and riser lids;
(e) Sewage tank baffles;
(f) Effluent filters;
(g) Sewage tank pumps and lids;
(h) Pump control floats; and
(i) OSS inspection boxes and ports.

(55) "Moderate structure" means well-formed distinct peds evident in undisturbed soil. When disturbed, soil material parts into a mixture of whole peds, broken peds, and material that is not in peds.

(56) "Modification" means the alteration of an existing OSS component that does not result in an expansion of the system. A modification is not considered a repair.

(57) "Monitoring" means periodic or continuous checking of an OSS, which is performed by observations and measurements, to determine if the system is functioning as intended and if system maintenance is needed. Monitoring also includes maintaining accurate records that document monitoring activities.

(58) "NSF" means NSF International.

(59) "O&G" means oil and grease, a component of sewage typically originating from food stuffs such as animal fats or vegetable oils, or consisting of compounds of alcohol or glycerol with fatty acids such as soaps and lotions, typically expressed in mg/L.

(60) "Operating capacity" means the average daily volume of sewage an OSS can treat and disperse on a sustained basis. The operating capacity, which is lower than the design flow, is an integral part of the design and is used as an index in OSS monitoring.

(61) "Ordinary high-water mark" means the mark on lakes, streams, springs, and tidal waters, found by examining the beds and banks and ascertaining where the presence and action of waters are so common and usual, and so long continued in all ordinary years, as to mark upon the soil a character distinct from that of the abutting upland with respect to vegetation, as that condition exists on the effective date of this chapter, or as it may naturally change thereafter. The following conditions apply where the ordinary high-water mark cannot be found:

(a) The ordinary high-water mark adjoining marine water is the elevation at mean higher high tide; and

(b) The ordinary high-water mark adjoining freshwater is the line of mean high water.

(62) "OSS" means on-site sewage system, an integrated system of components, located on or nearby the property it serves, which conveys, stores, treats, and provides subsurface soil treatment and dispersal of sewage. It consists of a collection system, a treatment component or treatment component sequence, and a soil dispersal component. An OSS also refers to a holding tank sewage system or other system that does not have a soil dispersal component. The term "on-site sewage system (OSS)" does not include any system regulated by a water quality discharge permit issued under chapter 90.48 RCW.

(63) "PAG" means policy advisory group.

(64) "PDP" means product development permit.

(65) "Ped" means a unit of soil structure such as blocks, column, granule, plate, or prism formed by natural processes.

(66) "Person" means any individual, corporation, company, association, society, firm, partnership, joint stock company, or any governmental agency, or the authorized agents of these entities. For the purposes of WAC 246-272A-0430 and 246-272A-0440, a person is defined to include:

(a) Applicant;

(b) Reapplicant;

(c) Permit holder; or

(d) Any individual associated with (a), (b) or (c) of this subsection including, but not limited to:

(i) Board members;

(ii) Officers;
(iii) Managers;
(iv) Partners;
(v) Association members;
(vi) Agents; and
(vii) Third persons acting with the knowledge of such persons.

(67) "Planned unit development" means a subdivision characterized by a unified site design, clustered residential units or commercial units, and areas of common open space.

(68) "Platy structure" means soil that contains flat peds that lie horizontally and often overlap. This type of structure impedes the vertical movement of water.

(69) "Pressure distribution" means a system of small diameter pipes equally distributing effluent throughout an OSS, as described in the *DS&G for Pressure Distribution Systems*, 2022. A subsurface drip system is considered a pressure distribution system.

(70) "Professional engineer" means a person who is currently licensed as an engineer under the provisions of chapter 18.43 RCW.

(71) "Proprietary product" means a sewage treatment and distribution technology, method, or material subject to a patent or trademark.

(72) "Public domain technology" means a sewage treatment and distribution technology, method, or material not subject to a patent or trademark.

(73) "Public sewer system" means a sewerage system:

(a) Owned or operated by a city, town, municipal corporation, county, or other approved ownership consisting of a collection system and necessary trunks, pumping facilities and a means of final treatment and disposal; and

(b) Approved by or under permit from the department of ecology, the department of health, or a local health officer.

(74) "Puget Sound counties" means Clallam, Island, Kitsap, Jefferson, Mason, San Juan, Seattle-King, Skagit, Snohomish, Tacoma-Pierce, Thurston, and Whatcom. All other counties are defined as non-Puget Sound counties.

(75) "Pump chamber" means a watertight receptacle placed after a septic tank, sewage tank, or other treatment facility that contains the required controls and alarms to convey sewage effluent to a treatment or dispersal component.

(76) "Pumper" means a person approved by the local health officer to remove and transport sewage or septage from an OSS.

(77) "Record drawing" means an accurate graphic and written record of the location and features of the OSS that are needed to properly monitor, operate, and maintain that system. Also known as an "as-built" drawing.

(78) "Remediation" means any action, approved by the local health officer, which attempts to restore the function of a previously conforming OSS dispersal component that has failed. Remediation is not considered:

(a) A minor repair;
(b) A repair;
(c) An additive; or
(d) A treatment or distribution technology that allows the OSS to meet a specific treatment level.

(79) "Repair" means the relocation, replacement, or reconstruction of a failed OSS, or any OSS components not included in the list for a minor repair, which have failed in order to restore the OSS to a nonfailure status.

(80) "Reserve area" means an area of land approved for the installation of a conforming OSS that is protected and maintained for replacement of the OSS upon its failure.

(81) "Residential sewage" means sewage having the constituency and quality typical of residential septic tank effluent consistent with treatment level E identified in Table III in WAC 246-272A-0110.

(82) "Restrictive layer" means a stratum impeding the vertical movement of water, air, and growth of plant roots, such as hardpan, claypan, fragipan, caliche, some compacted soils, bedrock, and unstructured clay soils.

(83) "Rock fragment" means rock or mineral fragments having a diameter of two millimeters or more. Examples include, gravel, cobbles, stones, and boulders.

(84) "Seepage pit" means an excavation more than three feet deep where the sidewall of the excavation is designed to dispose of septic tank effluent. Seepage pits are also known as dry wells.

(85) "Septage" means liquid or solid material removed from sewage tanks, cesspools, portable toilets, type III marine sanitation devices, vault toilets, pit toilets, recreational vehicle holding tanks, or similar systems that receive only domestic sewage.

(86) "Septic tank" means a watertight treatment receptacle receiving the discharge of sewage from a building sewer or sewers, designed and constructed to separate settleable and floating solids from the liquid, detention and anaerobic digestion of the organic matter, prior to discharge of the liquid.

(87) "Sewage" means any urine, feces, and the water carrying human wastes, including kitchen, bath, and laundry wastes from residences, buildings, industrial establishments, or other places.

(88) "Sewage quality" means contents in sewage that include:

(a) $CBOD_5$, TSS, and O&G;

(b) Other parameters that may adversely affect treatment. Examples include pH, temperature, and dissolved oxygen; or

(c) Other constituents that create concerns due to specific site sensitivity. Examples include fecal coliform, *E. coli*, phosphorus, and nitrogen.

(89) "Sewage tank" means a prefabricated or cast-in-place septic tank, pump chamber, dosing chamber, holding tank, grease interceptor, recirculating filter tank or any other tanks as they relate to OSS including tanks for use with proprietary products.

(90) "Soil dispersal component" means a technology that releases effluent from a treatment component into the soil for dispersal, final treatment and recycling.

(91) "Soil log" means a detailed description of soil characteristics providing information on the soil's capacity to act as an acceptable treatment and dispersal medium for sewage.

(92) "Soil scientist" means a person certified by the American Society of Agronomy as a Certified Professional Soil Scientist.

(93) "Soil type" means one of seven numerical classifications of fine earth particles and rock fragments as described in WAC 246-272A-0220 (2)(e).

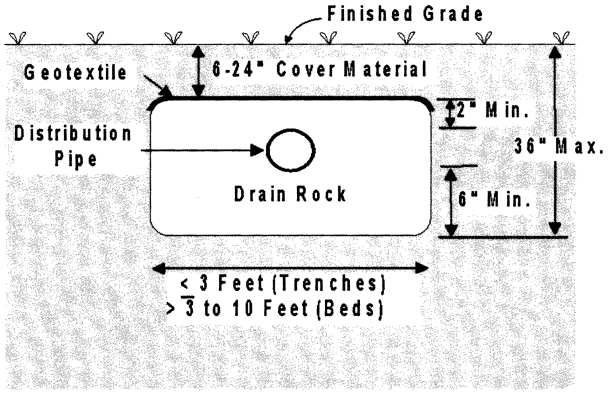
(94) "Standard methods" means the *23rd Edition of Standard Methods for the Examination of Water and Wastewater*, prepared and published jointly by the American Public Health Association, the American Water Works Association and the Water Environment Federation.

(95) "Strong structure" means peds are distinct in undisturbed soil. They separate cleanly when soil is disturbed, and the soil material separates mainly into whole peds when removed.

(96) "Subdivision" means a division of land or creation of lots or parcels, described under chapter 58.17 RCW, including both long and short subdivisions, planned unit developments, and mobile home parks.

(97) "Subsurface drip system" means an efficient pressurized wastewater distribution system that can deliver small, precise doses of effluent to soil surrounding the drip distribution piping, also known as dripline, as described in the *DS&G for Subsurface Drip Systems*, 2020.

(98) "SSAS" means a subsurface soil absorption system that is a soil dispersal component of trenches or beds containing either a distribution pipe within a layer of drainrock covered with a geotextile, or an approved gravelless distribution technology, designed and installed in suitable soil, with either gravity or pressure distribution of the treatment component effluent.



(99) "Suitable" means original, undisturbed, unsaturated soil of soil types 1-6 with at least the vertical separation established in this chapter.

(100) "Surface water" means any fresh or marine body of water flowing or contained in natural or artificial unlined depressions for significant periods of the year, including natural and artificial lakes, ponds, springs, rivers, streams, swamps, marshes, irrigation canals, and tidal waters.

(101) "TAG" means the technical advisory group established in WAC 246-272A-0400.

(102) "Timed dosing" means delivery of discrete volumes of sewage at prescribed time intervals.

(103) "TN" means total nitrogen, typically expressed in mg/L.

(104) "Treatment component" means a technology that treats sewage in preparation for further treatment or dispersal into the soil environment. Some treatment components, such as mound systems, incorporate a soil dispersal component in lieu of separate treatment and soil dispersal components.

(105) "Treatment component sequence" means any series of treatment components that discharges treated sewage to the soil dispersal component.

(106) "Treatment level" means one of the following levels (A, B, C, BL1, BL2, BL3, E, & N) to:

(a) Identify treatment component performance demonstrated through requirements specified in WAC 246-272A-0110; and

(b) Match site conditions of vertical separation and soil type with treatment components.

(107) "Trench" means a soil dispersal component consisting of an excavation with a width of three feet or less.

(108) "TSS" means total suspended solids, a measure of all suspended solids in a liquid, typically expressed in mg/L.

(109) "Unit volume of sewage" means:

(a) Flow from a single-family residence;

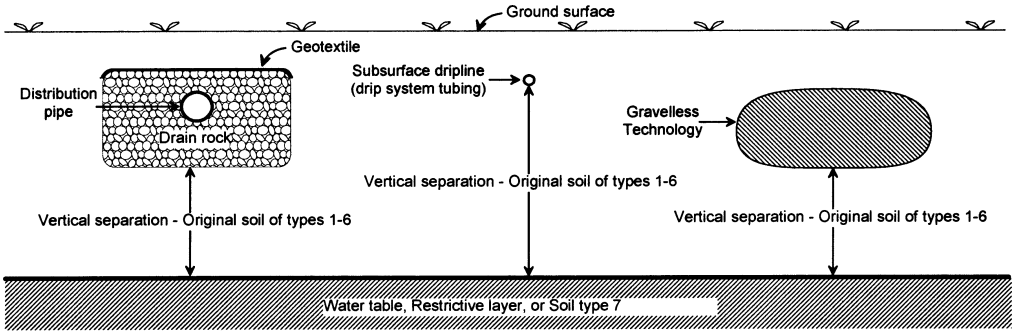
(b) Flow from a mobile home site in a mobile home park; or

(c) Four hundred fifty gallons of sewage per day where the proposed development is not single-family residences or a mobile home park.

(110) "Unknown OSS" means an OSS that was installed without the knowledge or approval of the local health jurisdiction, including those that were installed before such approval was required.

(111) "Unpermitted sewage discharge" means the discharge of sewage or treated effluent from an unknown OSS.

(112) "Vertical separation" means the depth of suitable soils between the bottom infiltrative surface of a soil dispersal component and the highest seasonal water table, a restrictive layer, or soil type 7 as illustrated below by the profile drawing of subsurface soil absorption systems:



(113) "Very gravelly" means soil containing 35 percent or more, but less than 60 percent rock fragments by volume.

(114) "Water supply protection zone" means the land area around each existing or proposed well site to protect the water supply from contamination.

(115) "Water table" means the upper surface of the groundwater, whether permanent or seasonal. Also see "groundwater" as defined in this section.

(116) "Well" means any excavation that is constructed when the intended use of the well is for the location, diversion, artificial recharge, observation, monitoring, dewatering or withdrawal of groundwater for agricultural, municipal, industrial, domestic, or commercial use. The following are not considered a well:

(a) A temporary observation or monitoring well used to determine the depth to a water table for locating an OSS;

(b) An observation or monitoring well used to measure the effect of an OSS on a water table;

(c) An interceptor or curtain drain constructed to lower a water table; and

(d) A dewatering well used temporarily for the purpose of a sewage tank or pump chamber installation.

[Statutory Authority: RCW 43.20.050(3), 43.20.065, chapters 70A.105 and 70A.110 RCW. WSR 24-06-046, § 246-272A-0010, filed 3/1/24, effective 4/1/25. Statutory Authority: RCW 43.20.050. WSR 05-15-119, § 246-272A-0010, filed 7/18/05, effective 9/15/05.]