WAC 246-272A-0234 Design requirements—Soil dispersal components. (1) All soil dispersal components, except one using a subsurface dripline product, must be designed to meet the following requirements:

(a) Maximum hydraulic loading rates described in Table VIII.

Table VIII
Maximum Hydraulic Loading Rate

		Column A	Column B
Soil Type	**Soil Textural Classification Description**	**Loading Rate for Residential Septic Tank Effluent Using Gravity or Pressure Distribution gal./sq. ft./day**	**Loading Rate for Residential Effluent Meeting Treatment Level C & BL3 or Higher Effluent Quality Using Pressure Distribution gal./sq. ft./day**
1	Gravelly and very gravelly coarse sands, all extremely gravelly soils excluding those with soil types 5 & 6 as the nongravel portion, all soil types with greater than or equal to 90% rock fragments.	1.0	1.2
2	Coarse sands.	1.0	1.2
3	Medium sands, loamy coarse sands, loamy medium sands.	0.8	1.0
4	Fine sands, loamy fine sands, sandy loams, loams.	0.6	0.8
5	Very fine sands, loamy very fine sands; or silt loams, sandy clay loams, clay loams and silty clay loams with a moderate structure or strong structure (excluding a platy structure).	0.4	0.56
6	Other silt loams, sandy clay loams, clay loams, silty clay loams.	0.2	0.2
7	Sandy clay, clay, silty clay and strongly cemented firm soils, soil with a moderate or strong platy structure, any soil with a massive structure, any soil with appreciable amounts of expanding clays.	Unsuitable	Unsuitable

(b) Calculation of the absorption area is based on:

(i) The design flow in WAC 246-272A-0230(2); and

(ii) Loading rates equal to or less than those in Table VIII of this section as applied to the infiltrative surface of the soil dispersal component or the finest textured soil within the vertical separation selected by the designer, whichever has the finest texture.

(c) Requirements for the method of distribution must correspond to those in WAC 246-272A-0230, Table VI.

(d) Soil dispersal components having daily design flow between 1,000 and 3,500 gallons of sewage per day must:

(i) Only be located in soil types 1-5;

(ii) Only be located on slopes of less than 30 percent, or 17 degrees; and

(iii) Have pressure distribution including time dosing.

(2) The local health officer may allow the maximum hydraulic loading rates in Table VIII of this section. Loading rates identified

in Column B must not be combined with any dispersal component size reductions.

(3) All soil dispersal components using a subsurface dripline product must be designed to meet the following requirements:

(a) The absorption area calculation is based on:

(i) The design flow in WAC 246-272A-0230(2); and

(ii) Loading rates dependent on the soil type, other soil and site characteristics, and the spacing of dripline and emitters as directed in Table VIII of this section;

(b) A minimum installation of six inches into original, undisturbed soil;

(c) Timed dosing; and

(d) Daily design flows greater than 1,000 gallons of sewage per day:

(i) Located only in soil types 1-5;

(ii) Located only on slopes of less than 30 percent, or 17 degrees.

(4) All SSAS must meet the following requirements:

(a) The infiltrative surface may not be deeper than three feet below the finished grade, except under special conditions approved by the local health officer. The depth of such system must not exceed 10 feet from the finished grade;

(b) A minimum of six inches of sidewall must be located in suitable soil;

(c) Beds are only designed in soil types 1, 2, 3 or in fine sands with a width not exceeding 10 feet. Gravity beds must have a minimum of one lateral for every three feet in width;

(d) Individual laterals greater than 100 feet in length must use pressure distribution;

(e) A layer of between six and 24 inches of cover material; and

(f) Other features must conform with the "*On-site Wastewater Treatment Systems Manual*," United States Environmental Protection Agency EPA-625/R-00/008 February 2002 except where modified by, or in conflict with this section or local rules.

(5) SSAS with drainrock and distribution pipe must meet the following requirements:

(a) A minimum of two inches of drainrock above the distribution pipe;

(b) A minimum of six inches of drainrock below the distribution pipe; and

(c) Location of the sidewall below the invert of the distribution pipe in original undisturbed soil.

(6) The local health officer may allow the infiltrative surface area in a SSAS to include six inches of the SSAS sidewall height when meeting the required absorption area where total recharge by annual precipitation and irrigation is less than 12 inches per year.

(7) The local health officer may permit OSS consisting of septic tanks and a gravity SSAS in soil type 1 if all the following criteria are met:

(a) The OSS serves a single-family residence;

(b) The lot size is two and one-half acres or larger;

(c) Annual precipitation in the region is less than 25 inches per year from a reputable source approved by the local health officer;

(d) The OSS is located outside the 12 counties bordering Puget Sound; and

(e) The geologic conditions beneath the dispersal component must satisfy the minimum unsaturated depth requirements to groundwater as

determined by the local health officer. The method for determination is described by "*Design Guideline for Gravity Systems in Soil Type 1*," 2017.

(8) Both the primary and reserve areas must be sized at least 100 percent of the approved loading rates. The local health officer may require the sizing of the reserve area using the loading rate in Table VIII of this section. Column A must be used when sizing the primary area using Column B.

[Statutory Authority: RCW 43.20.050(3), 43.20.065, chapters 70A.105 and 70A.110 RCW. WSR 24-06-046, § 246-272A-0234, filed 3/1/24, effective 4/1/25. Statutory Authority: RCW 43.20.050. WSR 05-15-119, § 246-272A-0234, filed 7/18/05, effective 7/1/07.]