WAC 246-272A-0220 Soil and site evaluation. (1) Only professional engineers, designers, or local health officers may perform soil and site evaluations. Soil scientists may only perform soil evaluations.

(2) The person evaluating the soil and site shall:

(a) Report:

(i) A sufficient number of soil logs to evaluate conditions within:

(A) The initial soil dispersal component; and

(B) The reserve area.

(ii) The groundwater conditions, the date of the observation, and the probable maximum height;

(iii) The topography of the proposed initial OSS, the reserve area, and those areas immediately adjacent that contain characteristics impacting the design;

(iv) The drainage characteristics of the proposed initial OSS, the reserve area and those areas immediately adjacent that contain characteristics impacting the design;

(v) The existence of structurally deficient soils subject to major wind or water erosion events such as slide zones and dunes;

(vi) The existence of designated flood plains;

(vii) Other areas identified in the local management plan required in WAC 246-272A-0015; and

(viii) The location of existing features affecting OSS placement, such as, but not limited to:

(A) Wells;

(B) Water sources and supply lines;

(C) Surface water and stormwater infiltration areas;

(D) Abandoned wells;

(E) Outcrops of bedrock and restrictive layers;

(F) Buildings;

(G) Property lines and lines of easement;

(H) Interceptors such as footing drains, curtain drains, and drainage ditches;

(I) Cuts, banks, and fills;

(J) Driveways and parking areas;

(K) Existing OSS; and

(L) Underground utilities;

(b) Use the soil and site evaluation procedures and terminology in accordance with Chapter 5 of the *On-site Wastewater Treatment Systems Manual*, EPA 625/R-00/008, February 2002 except where modified by, or in conflict with, this chapter;

(c) Use the soil names and particle size limits of the United States Department of Agriculture Natural Resources Conservation Service classification system;

(d) Determine texture, structure, compaction, and other soil characteristics that affect the treatment and water movement potential of the soil by using normal field or laboratory procedures such as particle size analysis; and

(e) Classify the soil as in Table V:

Table V
Soil Type Descriptions

Soil Type	Soil Textural Classifications
1	Gravelly and very gravelly coarse sands, all extremely gravelly soils excluding those with soil types 5 and 6 as the nongravel portion, and all soil types with greater than or equal to 90% rock fragments.
2	Coarse sands.
3	Medium sands, loamy coarse sands, loamy medium sands.
4	Fine sands, loamy fine sands, sandy loams, loams.
5	Very fine sands, loamy very fine sands; or silt loams, sandy clay loams, clay loams and silty clay loams with a moderate or strong structure (excluding platy structure).
6	Other silt loams, sandy clay loams, clay loams, silty clay loams.
7 Unsuitable for treatment or dispersal	Sandy clay, clay, silty clay, strongly cemented or firm soils, soil with a moderate or strong platy structure, any soil with a massive structure, any soil with appreciable amounts of expanding clays.

(3) The owner of the property or the owner's agent shall:

(a) Prepare the soil log excavation to:

(i) Allow examination of the soil profile in its original position by:

(A) Excavating pits of sufficient dimensions to enable observation of soil characteristics by visual and tactile means to a depth three feet deeper than the anticipated infiltrative surface at the bottom of the soil dispersal component; or

(B) Stopping at a shallower depth if a water table or restrictive layer is encountered;

(ii) Allow determination of the soil's texture, structure, color, bulk density or compaction, water absorption capabilities or permeability, and elevation of the highest seasonal water table; and

(b) Assume responsibility for constructing and maintaining the soil log excavation in a manner to prevent injury as required by chapter 296-155 WAC.

(4) The local health officer:

(a) Shall render a decision on the height of the water table within 12 months of receiving the application under precipitation conditions typical for the region;

(b) May require water table measurements to be recorded during months of probable high-water table conditions, if insufficient information is available to determine the highest seasonal water table;

(c) May require any other soil and site information affecting location, design, or installation;

(d) May reduce the required number of soil logs for OSS serving a single-family residence if adequate soils information has previously been developed; and

(e) May require another site and soil evaluation if the site has been altered since the initial site and soil evaluation was submitted to the local health officer.

[Statutory Authority: RCW 43.20.050(3), 43.20.065, chapters 70A.105 and 70A.110 RCW. WSR 24-06-046, § 246-272A-0220, filed 3/1/24, effective 4/1/25. Statutory Authority: RCW 43.20.050. WSR 05-15-119, § 246-272A-0220, filed 7/18/05, effective 7/1/07.]