

2.1.3 Soil Design Subgroup Corrections

A soil design subgroup may be lowered as indicated in this section. (**Subgroup correction is used to determine the application rate only; it will not change surface water or ground water separation requirements.**)

1. Soil with moderate or strong platy structure should be lowered one subgroup for design purposes.
2. Soil should be lowered one subgroup if 35%–60% of its volume is rock fragments (very gravelly, very stony).
3. Soil should be lowered by two subgroups if 60%–95% of its volume is rock fragments (extremely gravelly, extremely stony).
4. Soil with 95% or greater rock fragments is unsuitable as an effective soil for subsurface sewage disposal.
5. Uniform fine and very fine sand (e.g., blow sands) should be lowered two subgroups for design purposes. Soils that qualify for this modification have a coefficient of uniformity less than three ($C_u < 3.0$).

Example:

A soil evaluation results in the designation of loamy sand with rock fragments volumes estimated at 70% of the total soil volume below the effective soil depth of the drainfield installation. The loamy sand would be assigned a soil design subgroup of A-2b consistent with Table 2-4. Due to the estimated volume of rock fragments, the soil design subgroup would then be lowered by two subgroups resulting in an assigned soil design subgroup of B-2. Based on these determinations, the drainfield would be sized consistent with the B-2 soil application rate (0.45 GPD/ft², Table 2-9) to increase the available soil surface available for effluent treatment due to the soil surface being reduced by large fraction rock. However, both the required vertical (effective soil depth, IDAPA 58.01.03.008.02.c) and the horizontal separation distances (IDAPA 58.01.03.008.02.d) shall meet the requirements for soil design group A soils.

2.2 Separation Guidelines

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2.2.1 Separation Distance Hierarchy

Separation distances to features of concern or interest are required by IDAPA 58.01.03. Separation distances include both vertical and horizontal separation distances, including effective soil depths, to features of concern, interest, or limiting layers. Section 2.2 of this manual provides guidance on reducing separation distances based on site-specific conditions. The guidance on reducing separation distances is provided to help find permitting solutions for difficult sites that may not meet the full separation distances required by IDAPA 58.01.03. These reductions will only be granted after it is documented that the site cannot meet the separation distances required by IDAPA 58.01.03. When performing a site evaluation for issuing a subsurface sewage disposal permit, the following separation distance hierarchy should be followed:

1. IDAPA 58.01.03