2.3 Standard Percolation Test

The use of the percolation test is for checks on site surveys and soil analysis data ONLY. It is not to be used as the sole determiner of a proposed disposal site's infiltrative capability. The most recent version of the following ASTM standards should be applied when evaluating a site's infiltrative capability.

- ASTM D 3385 Standard Test Method for Infiltration Rate of Soils in Field Using Double-Ring Infiltrometer.
- ASTM D 5093 Standard Test Method for Field Measurement of Infiltration Rate Using a Double-Ring Infiltrometer with a Sealed-Inner Ring.

Percolation and application rates by soil type are shown in Table 2-10.

Table 2-10. Percolation and Application Rates by Soil Type

Soil Class	Soil Type	Percolation Rate, minutes/inch [a]	Application Rate gals/day/ft^2 [b]
NA	Gravel, Coarse Sand [c]	< 1	Not Suitable
A-1	Medium Sand	1 - 3	1.20
A-2a	Medium Sand, poorly graded	4 - 5	1.0
A-2b	Fine Sand, Loamy Sand	6 - 15	0.75
B-1	Sandy Loam	16 - 30	0.60
B-2	Loam, Silt Loam	31 - 60	0.45
C-1	Sandy or Silty Clay Loam [d]	45 - 60	0.30
C-2	Clay Loam [d]	61 - 120	0.20
NA	Clays, Organic Muck, Duripan, Hardpan, Claypan	> 120	Not Suitable

[a] Estimates only; actual percolation rates as determined using ASTM D-5093 or ASTM D-3385 may differ.
[b] Application rates are for domestic wastes. A safety factor of 1.5 or more should be used for wastes of significantly different characteristics.
[c] See medium sand definition for a material that may be acceptable for use.
[d] Soils without expandable clays