**Section 906.30 Soil and Site Requirements**

In order to be suitable for mound construction, the site shall meet the following requirements and those listed in Appendix A, Exhibit A.

a) Percolation Rates. Percolation rates shall be used to determine the suitability of the site for accepting effluent. Percolation tests shall be performed according to the procedure outlined in Appendix A, Illustration G of the Private Sewage Disposal Code (77 Ill. Adm. Code 905). Excepting that, percolation tests shall be performed at a depth of 20-24 in. from the natural surface. However, in cases where a more slowly permeable soil horizon is above this depth the percolation tests shall be conducted in the more slowly permeable soil horizon. Those results shall be used in the design of the mound. For shallow permeable soils over pervious bedrock, the percolation test shall be run at a depth of 12-18 in. below the natural surface. For permeable soils with high water tables, the percolation test shall be run at a depth of 20-24 in. below the natural surface.

b) Depth to Pervious Rock or Seasonal High Water Table. There shall be a minimum of 24 in. of unsaturated soil between the soil surface and pervious bedrock or the seasonal high water table, including a perched water table, at the proposed mound site. High water tables can be determined by direct observation or by soil mottling. Occurrence of grey and red soil mottling patterns can be used to indicate periodic saturation with water.

c) Rocky Soils. If the soil contains 50% rock fragments or more by volume in the upper 24 in. of soil, the mound basal area shall be 25% larger than that normally required.

d) Slopes. The mound shall be placed upslope and not at the base of the slope of the existing ground. On a site where there is a complex slope, (two directions), the mound shall be situated such that the liquid is not concentrated in one area downslope. Upslope runoff shall be diverted around the mound. For the more permeable soils where the percolation rate is 18-179 min., slopes shall not exceed 12%. For tighter soils where the percolation rate is 180-360 min., slopes shall not exceed 6%.

e) Flood Plains. Construction of mound systems shall not be allowed in flood plains, drainage ways or depressions.

f) Sites with Trees and Large Boulders. Sites with large trees, numerous smaller trees or large boulders are unsuitable for the mound system. If no other site is available, the trees shall be cut off at ground level, leaving the stumps. An increase in mound basal area shall be required where stumps are involved, so that sufficient soil is available to accept the effluent. The increase in mound area shall equal the surface area of the stumps on the mound site.

g) Site Preparation

1) Vegetation shall be cut and removed from the site prior to construction. The site must then be plowed with a mold board plow 7-8 in. deep with the plowing done perpendicular to the slope. Plowing shall not be done with the furrow running up and down the slope. Chisel plowing may be used in place of mold board. Roto tilling is prohibited. However, roto tilling may be used to incorporate the vegetative cover in unstructured soil such as sand.

2) Site preparation shall not take place when the soil is too wet. The soil shall be considered too wet when a soil sample taken at a depth of 7-8 in. beneath the surface can be rolled between the palms of the hands into a continuous ribbon of soil. If the soil crumbles, site preparation can then proceed.

3) Once the site is plowed, all construction machinery and other vehicles shall be kept off the mound site. The fill material shall be deposited on the site with a backhoe or pushed on from the side, using a track type tractor, keeping 6 in. of fill beneath the tracks. At no time shall ruts be made in the plowed area. The fill shall be placed immediately after site preparation to avoid the possibility of precipitation falling on the plowed area.

4) All work shall be performed from the ends and upslope side, especially on fine textured soils.