A typical landfill design utilizes a soil layer with vegetation on top as the erosion layer. This layer acts as an erosion control, reducing water infiltration through evapotranspiration and providing nutrients for vegetation growth. Below this is the infiltration layer, also known as the "low permeability" layer. This layer, installed above the solid waste, employs low permeability materials to minimize water infiltration into the waste. For this specific study, the RCRA does not require a composite system for this layer as long as the permeability requirement (K1 × 10–5 cm/s) is met. Ideally, a drainage layer and a filter layer are placed between the topsoil and the infiltration layer. The drainage layer, angled for gravitational drainage, removes water that infiltrates through the topsoil, reducing the amount reaching the infiltration layer. The drainage layer's discharge occurs at the landfill flanks and toe. To prevent clogging, a filter layer (geosynthetic fabric or sand) traps soil fines from the topsoil, preventing them from clogging the drain.