

Editing a Case – Part 4

Advanced editing

The behaviour of leachate and gas flow in partially saturated conditions.

Further information about the way the LDAT constitutive equation incorporates the van Genuchten equations and the concept of effective density in order to simulate the partially saturated flow conditions found in landfill waste deposits may be downloaded as reference: **Role of van Genuchten equations and effective density**.

The parameter values that control these equations are found under the following button\group combinations:

Active elements\ Effective density coefficients

Model\ van Genuchten values

Calculation data\ van Genuchten options

The chemical inhibition of bio-degradation.

Both pH inhibition and water content inhibition play an important role in the rate at which waste materials bio-degrade.

The inhibition models used by LDAT are discussed in the reference: **Inhibition functions**.

These functions are built in to the LDAT degradation algorithm. They cannot be changed, but they can be switched on or off. This is done under Calculation data\ Inhib/Temp options. The default setting is 'false' which means that inhibition is not suppressed.

Heat generation and transfer.

This Active elements\ Heat generation and transfer editor sets the values for the parameters of the Heat generation and transfer equations used by LDAT. These equations are explained in the two references: **Heat generation and transfer** and **LDAT heat generation and transport algorithm**