New Features in

New Unit Processes

Geobag Dewatering

This process will model the air emissions from the geotextile bags which are used for sludge containment and dewatering. The model takes into account the air-emissions from the surface of the Geobags, peripheral channels and collection channels. Anaerobic biodegradation of the contaminant is also included to model the residual contaminant concentration in the sludge.

Equalization Tank (Subsurface Mixing)

This process is used to model the air-emissions from tanks with sub-surface mixers. The main emission mechanisms for the basin are surface volatilization and volatilization due to low power sub-surface mixing. No biodegradation of contaminant is considered in the tank.

Model Improvements

Air Flow Rate Specification Method – You are now provided with the flexibility to specify the air flow rates at specific temperature and pressure conditions. The underlying models estimating the mass transfer rate during diffused aeration are modified to convert the air flow rates at specified conditions to field conditions. Correct specification of the air flow rates will improve the air emission outputs from the model.

Sub-surface Mixing Mass Transfer Rate – The underlying methods to estimate the sub-surface mass transfer rate have been improved to include the gas-film resistance. This modification improves the air-emission estimation for low volatility compounds.
View Manager

Do you have large layouts that you have difficulty navigating?

Our new View Manager can help you to define and jump to different areas of your plant.

Simply scroll and zoom the layout view to the desired section of the drawing board and 'save' that view with an appropriate label for later access.

Example of a large treatment plant

Access the View Manager from the menu bar

Jump to “Secondary Treatment - Train 1 & 2”

International Support

Toxchem is now available in the Korean language.