

TOXCHEM™

Predict & Report Toxic Emissions

Easy as ...

- 1. Build plant**
- 2. Select contaminants**
- 3. Observe emissions**

Toxchem is the most reliable and user-friendly software solution for estimating and reporting air emissions and contaminant fate during wastewater collection and treatment.

Eliminate high-risk complex spreadsheets and costly laboratory analyses for monitoring programs by putting Toxchem to work instead.



Advanced Features

- An unmatched number of unit processes to build comprehensive process layouts.
- State-of-the-art models to simulate different volatilization, adsorption and biodegradation mechanisms.
- New pH dependent volatilization models to evaluate the effects of pH on air emissions.
- Customizable mass transfer properties to more accurately evaluate variations in process design.
- Different biokinetic rate values for aerobic, anaerobic & anoxic zones within Biological Nutrient Removal Plants (BNR).
- Auto-calculation of the reduction in active biomass availability for biodegradation of organic compounds as solids retention time increases.
- A highly useful "backsolve" utility that enables users to easily reverse engineer an allowable headworks concentration given a downstream concentration limit.
- Sensitivity Analysis tool for studying the relationship between input parameters and model results.



Expert Water & Wastewater Treatment Modelling Software & Services

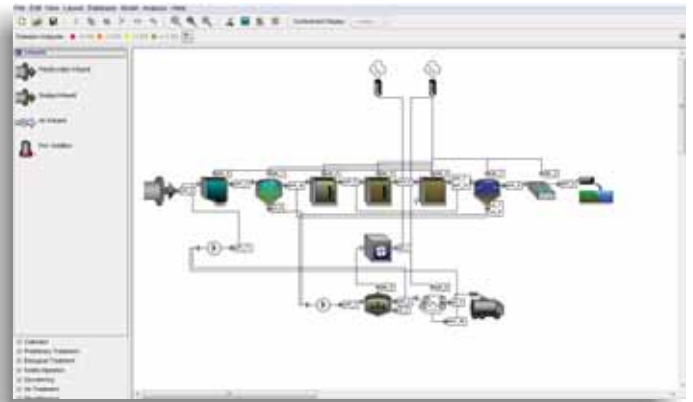
System Requirements

- Windows XP, Vista, or 7
- 512 MB of RAM or more
- 250 MB of free disk space

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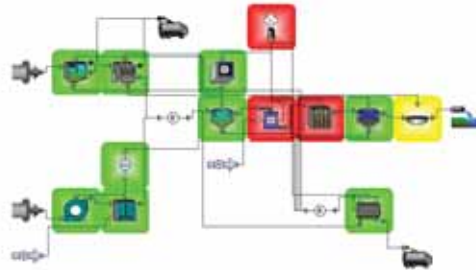
Drag-and-Drop Modelling

The redesigned Toxchem interface makes process configuration so much easier with drag-and-drop simplicity and on-screen labels for both process units and stream connections. Users can open multiple layout configurations simultaneously to compare minor process modifications without the need to open and close different files.



Reporting Wizards and Dashboards

Report wizards, on-screen summary dashboards and easy export to Excel saves time when reporting and viewing Toxchem results.

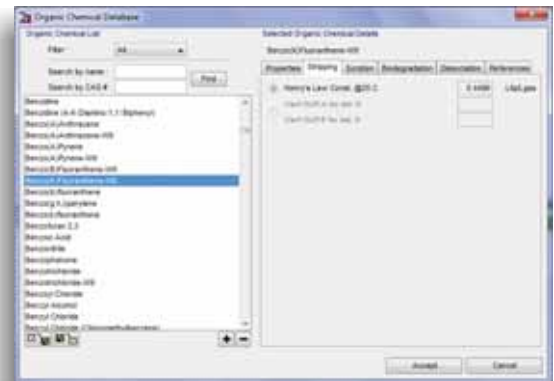


Overall Mass Balance

Contaminant Load	Mass (g/d)	% of total
Total Incoming	5000.0	100.0
Total Formed	0.0	0.0
To Air	59.3589	1.18718
To Wastewater	16.0156	0.320312
To Sludge	1.10075	0.0220151
To Oil	0.0	0.0
Removed in Air Treatment (Biodegraded)	5.181845	0.00363089
	4623.34	98.4600

Unparalleled Contaminant Database

Experience a broader modelling capability with Toxchem's comprehensive contaminants database which additionally offers those compound properties as specified in the EPA WATER9 model database and an extensive array of endocrine disrupting compounds (EDCs) and pharmaceutical and personal care products (PPCPs).



Typical Uses

- Regulatory reporting of VOC/HAP emissions (US EPA Clean Air Act Amendments and SARA reporting).
- Planning, designing and optimization of process schemes to reduce air emission.
- Bio-solids disposal management studies.
- Estimating maximum allowable headworks concentrations to avoid violation of emission limits, health and safety levels.
- Tracking contaminant mass balance and inventory.
- Potential air and effluent concerns from treating hauled wastes.

Our other products:

GPS-X

**CAPDEL
Works**

WATPRO

Hydromantis offers expert consulting for treatment plant modelling, design and optimization and is the developer and owner of the industry's most popular modelling and simulation software including: GPS-X, Toxchem, CapdelWorks and WatPro.

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