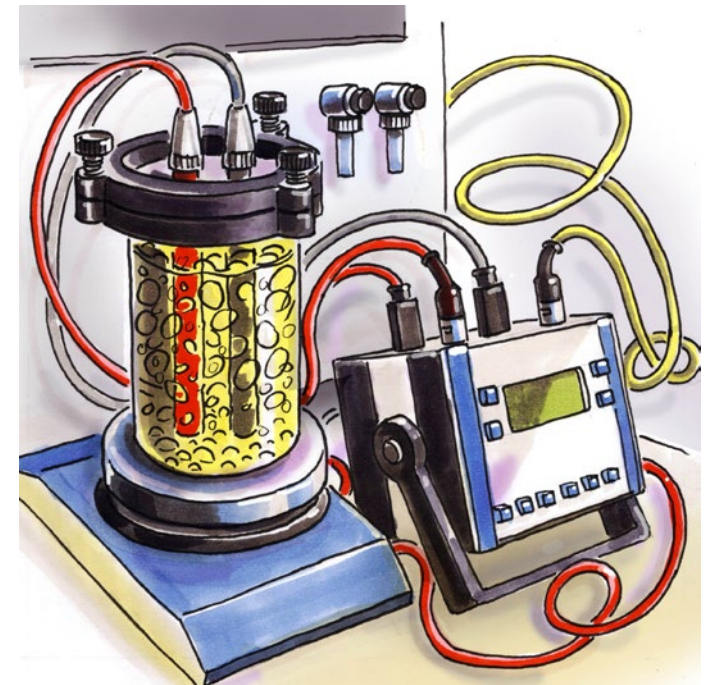
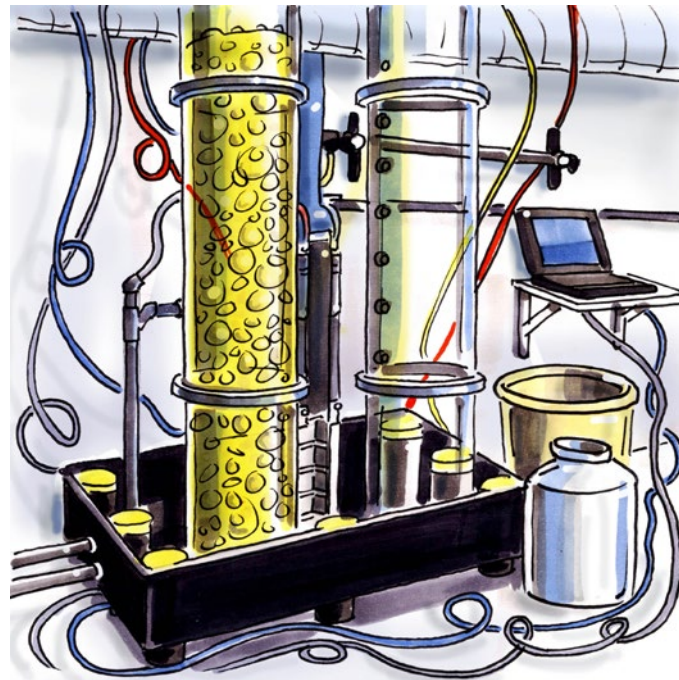
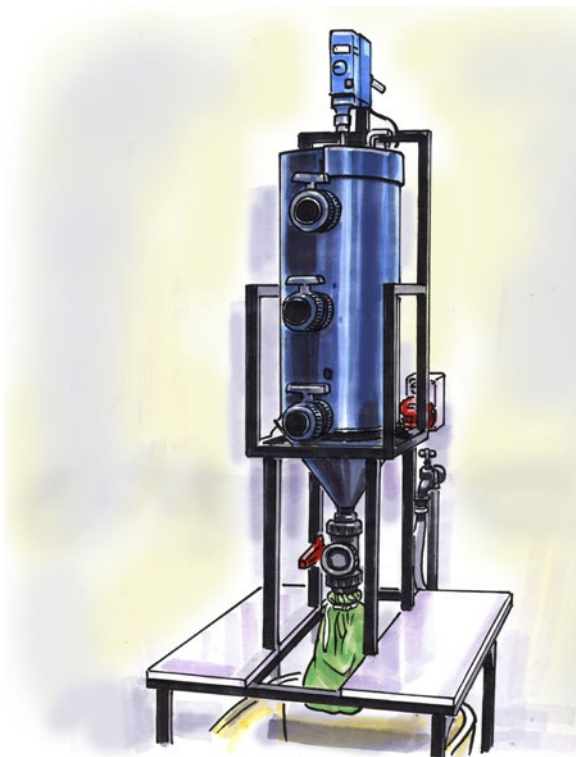




Treatment processes to recover nutrients from urine



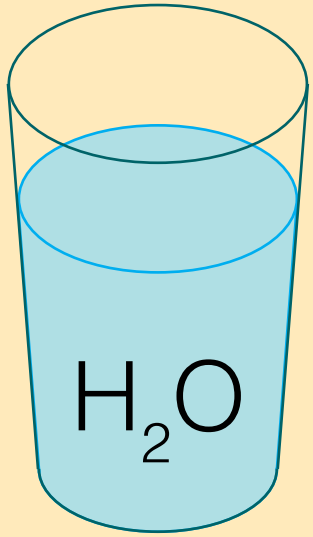
Urine



Urine

Water

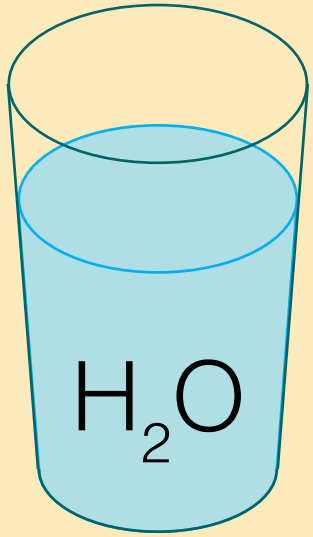
99%



Urine

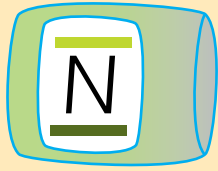
Water

99%

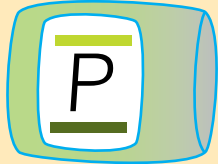


Nutrients

Macro-Nutrients



Nitrogen



Phosphorus

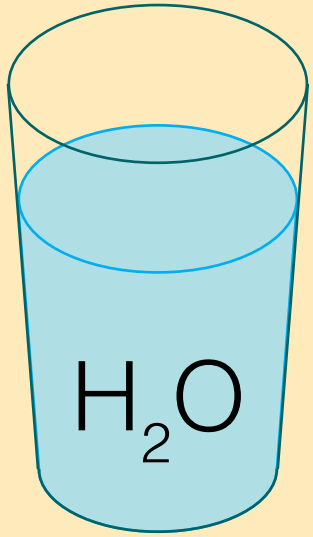


Potassium

Urine

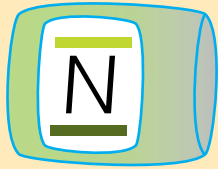
Water

99%

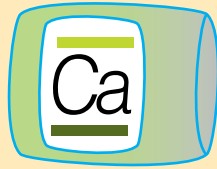


Nutrients

Macro-Nutrients



Nitrogen



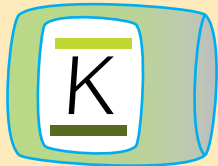
Calcium



Phosphorus



Magnesium



Potassium

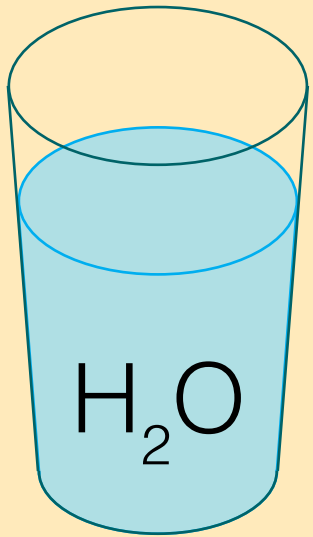


Sulphur

Urine

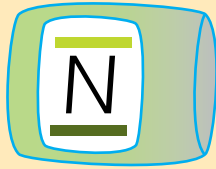
Water

99%

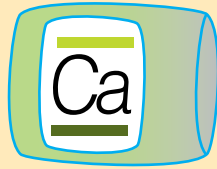


Nutrients

Macro-Nutrients



Nitrogen



Calcium



Phosphorus



Magnesium

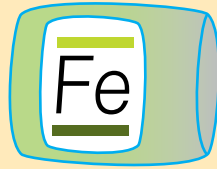


Potassium

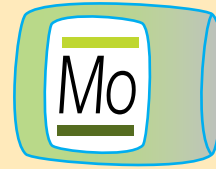


Sulphur

Micro-Nutrients



Iron



Molybdenum



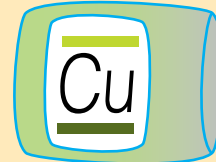
Manganese



Zinc



Boron

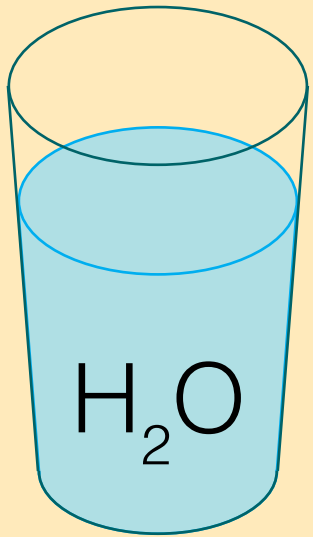


Copper

Urine

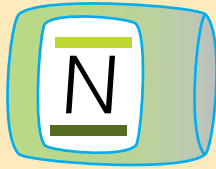
Water

99%

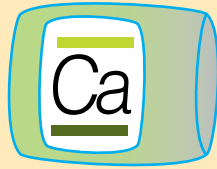


Nutrients

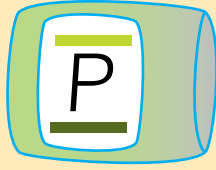
Macro-Nutrients



Nitrogen



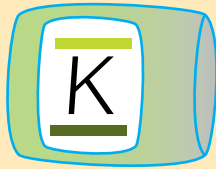
Calcium



Phosphorus



Magnesium

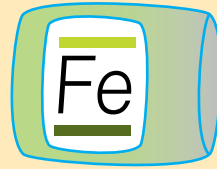


Potassium

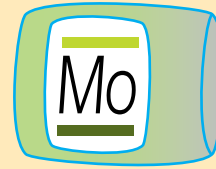


Sulphur

Micro-Nutrients



Iron



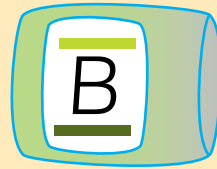
Molybdenum



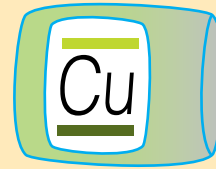
Manganese



Zinc

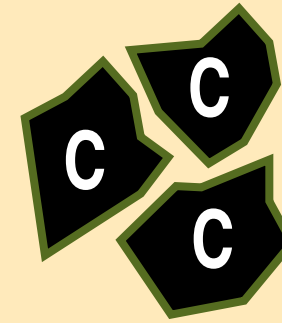


Boron

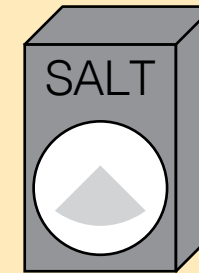


Copper

Other Substances



Bulk organics

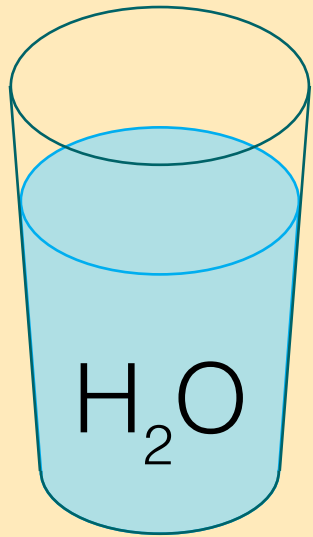


Sodium chloride

Urine

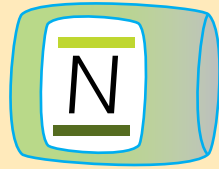
Water

99%

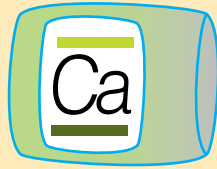


Nutrients

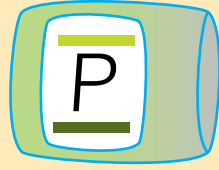
Macro-Nutrients



Nitrogen



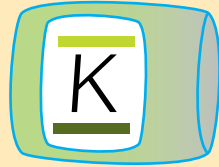
Calcium



Phosphorus



Magnesium

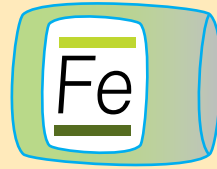


Potassium

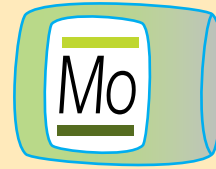


Sulphur

Micro-Nutrients



Iron



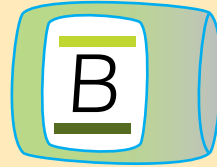
Molybdenum



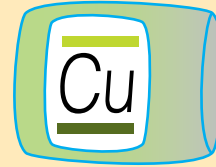
Manganese



Zinc

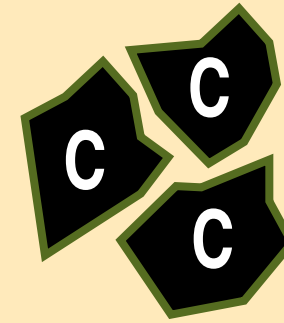


Boron

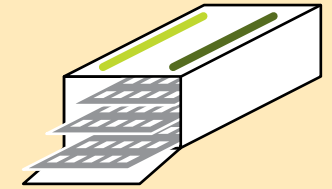


Copper

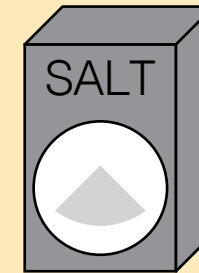
Other Substances



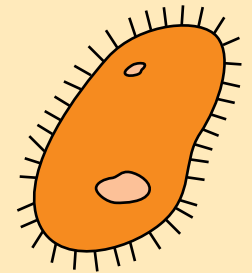
Bulk organics



Micro-pollutants



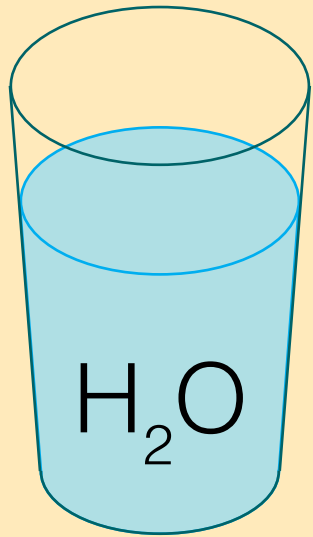
Sodium chloride



Pathogens

Urine

Water

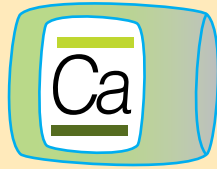


Nutrients

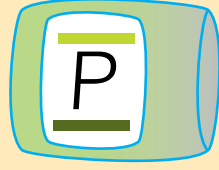
Macro-Nutrients



Nitrogen



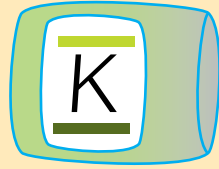
Calcium



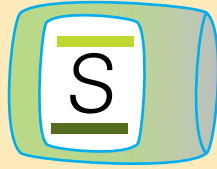
Phosphorus



Magnesium

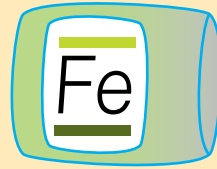


Potassium

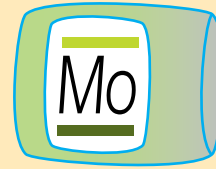


Sulphur

Micro-Nutrients



Iron



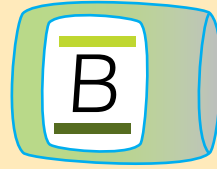
Molybdenum



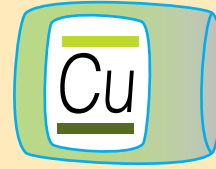
Manganese



Zinc

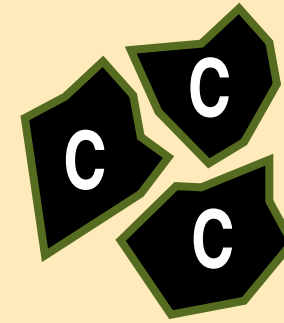


Boron

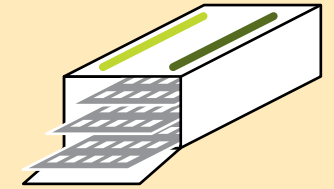


Copper

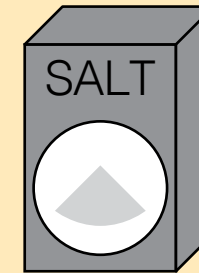
Other Substances



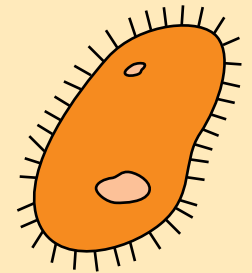
Bulk organics



Micro-pollutants



Sodium chloride

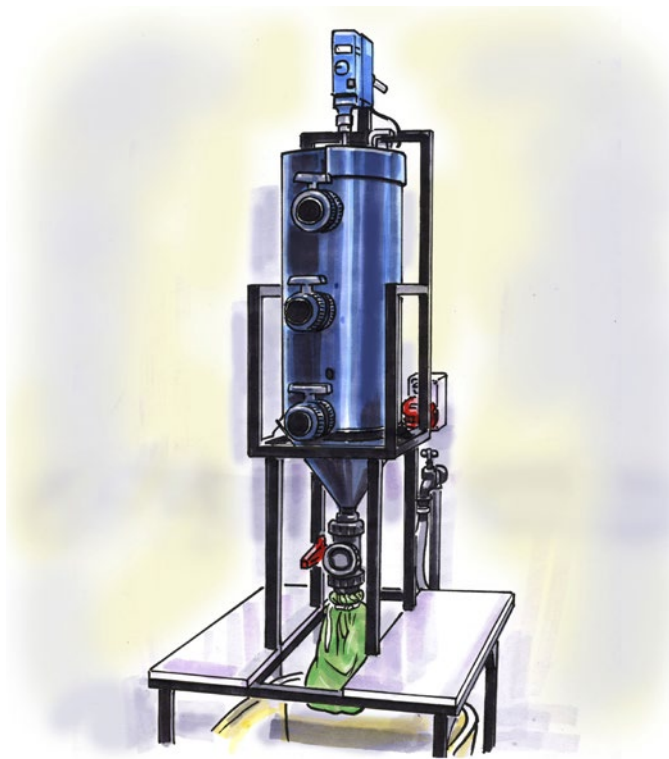


Pathogens

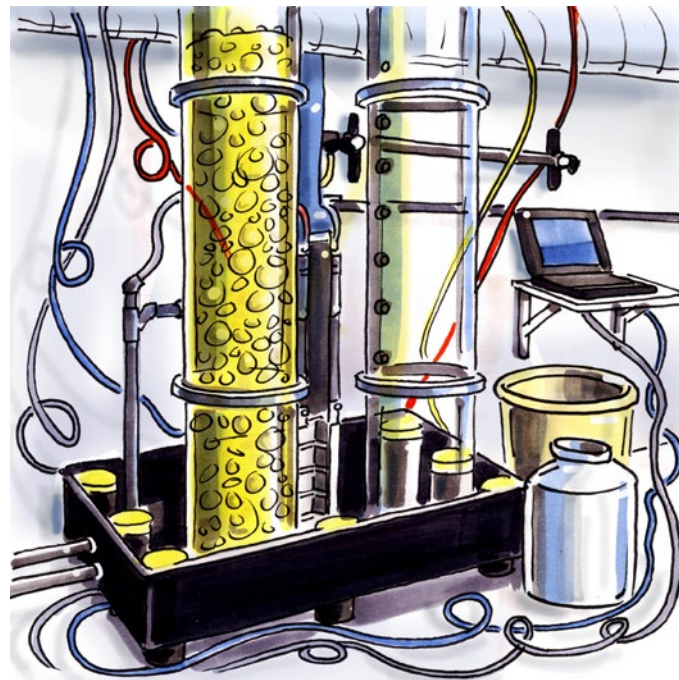




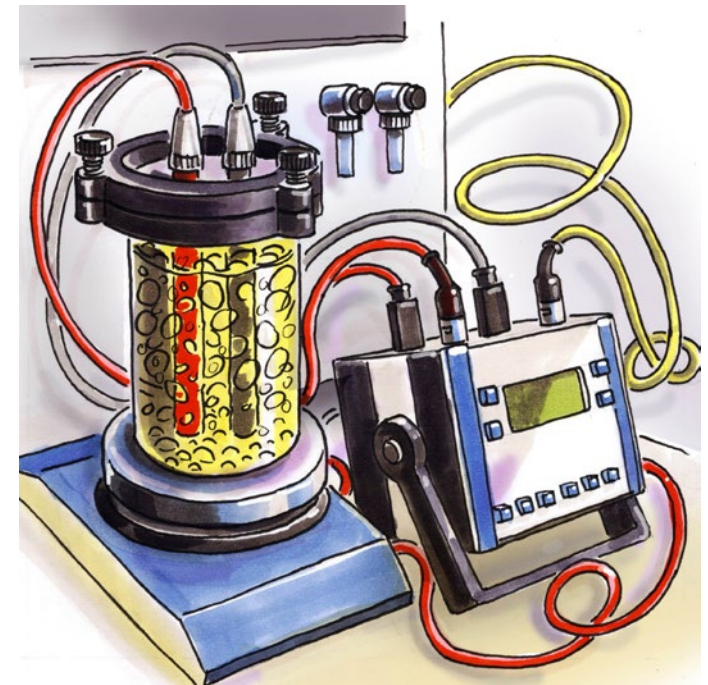
Treatment processes to recover nutrients from urine



Struvite
Precipitation



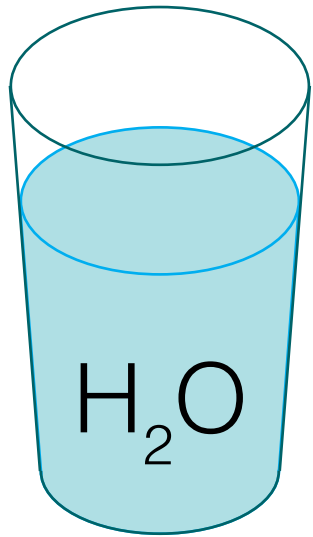
Nitrification &
Distillation



Electrolysis

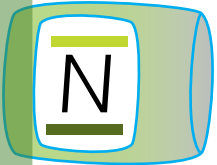
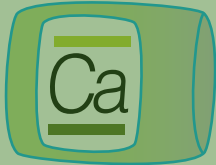
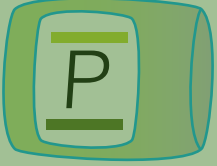

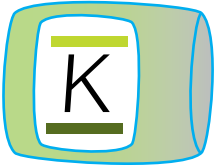



Water

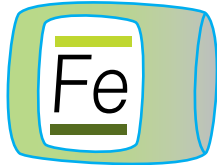



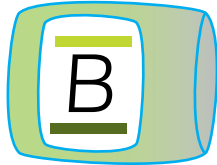
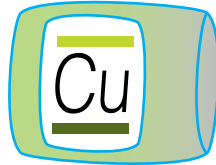


Nutrients

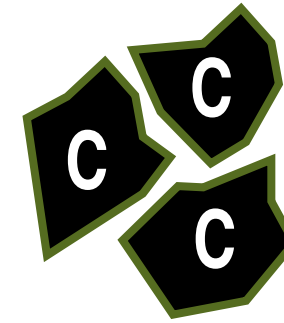
Macro-Nutrients

 N Nitrogen	 Ca Calcium
 P Phosphorus	 Mg Magnesium
 K Potassium	 S Sulphur

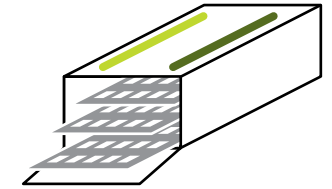
Micro-Nutrients

 Fe Iron	 Mo Molybdenum
 Mn Manganese	 Zn Zinc
 B Boron	 Cu Copper

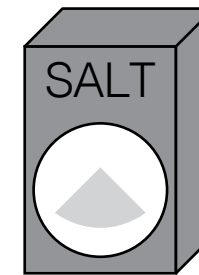
Other Substances



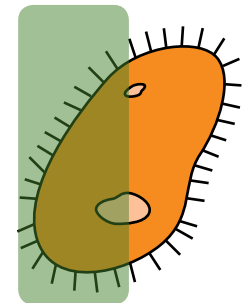
Bulk organics



Micro-pollutants



Sodium chloride

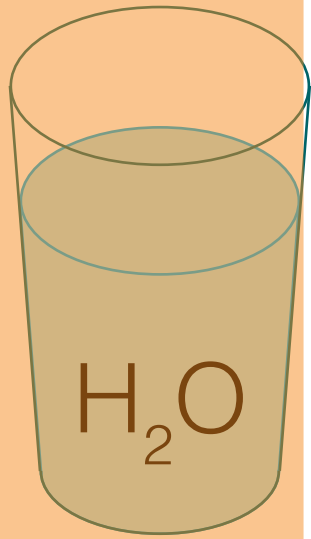


Pathogens



Struvite

Water

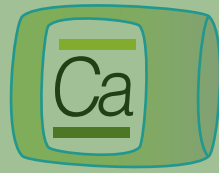


Nutrients

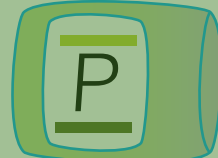
Macro-Nutrients



Nitrogen



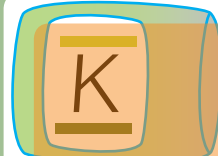
Calcium



Phosphorus



Magnesium

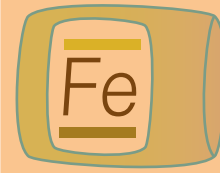


Potassium

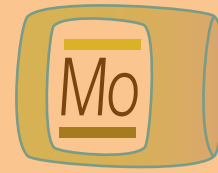


Sulphur

Micro-Nutrients



Iron



Molybdenum



Manganese



Zinc

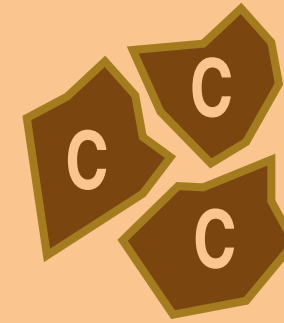


Boron

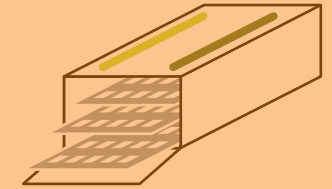


Copper

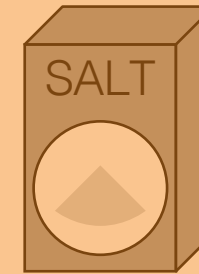
Other Substances



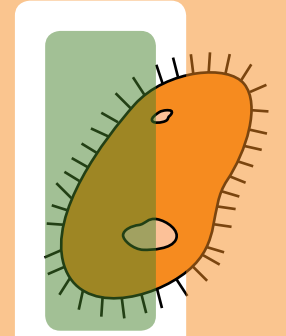
Bulk organics



Micro-pollutants



Sodium chloride



Pathogens

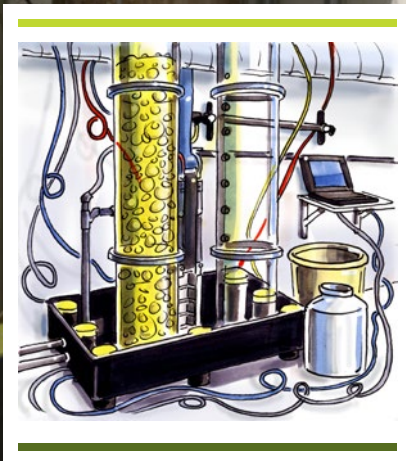


Struvite

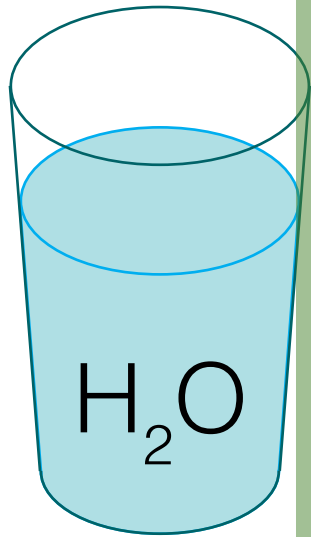
Effluent



the nitrogen
Stabilized
Challenges

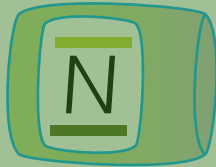


Water

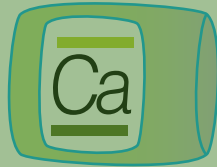


Nutrients

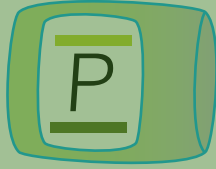
Macro-Nutrients



Nitrogen



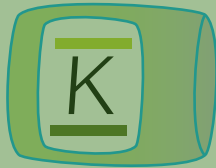
Calcium



Phosphorus



Magnesium

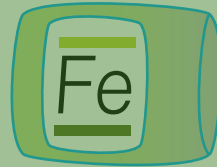


Potassium

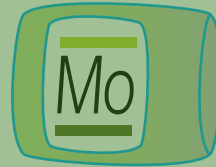


Sulphur

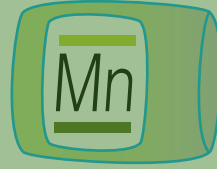
Micro-Nutrients



Iron



Molybdenum



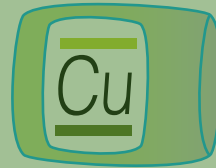
Manganese



Zinc

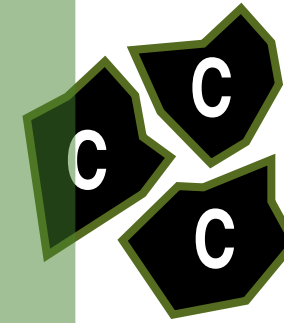


Boron

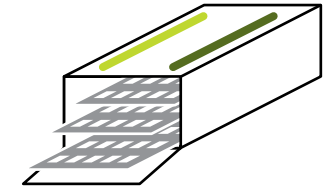


Copper

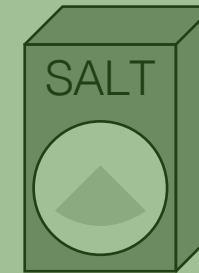
Other Substances



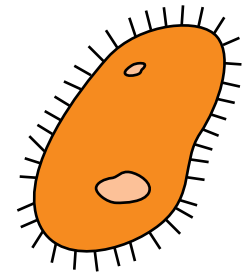
Bulk organics



Micro-pollutants



Sodium chloride

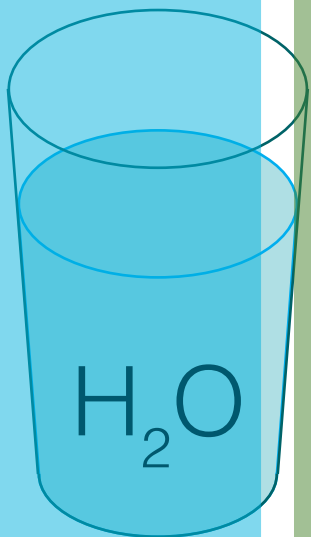


Pathogens



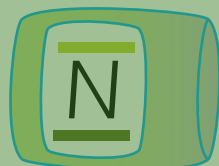
Nitrification/Distillation

Water

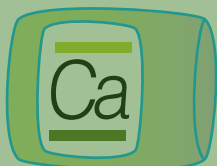


Nutrients

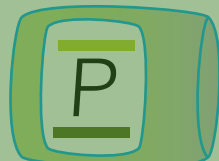
Macro-Nutrients



Nitrogen



Calcium



Phosphorus



Magnesium

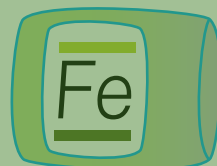


Potassium

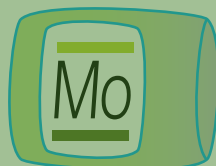


Sulphur

Micro-Nutrients



Iron



Molybdenum



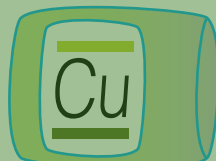
Manganese



Zinc

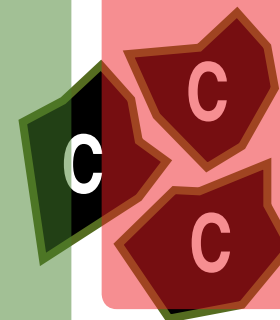


Boron

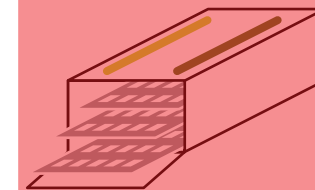


Copper

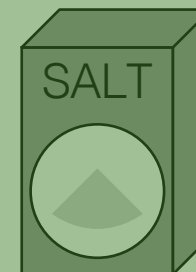
Other Substances



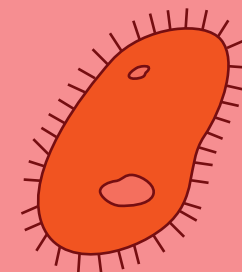
Bulk organics



Micro-pollutants



Sodium chloride



Pathogens

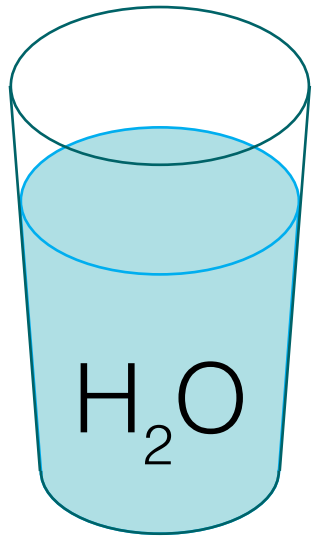
Distilled Water



Nitrification/Distillation

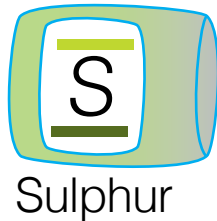
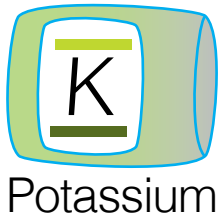
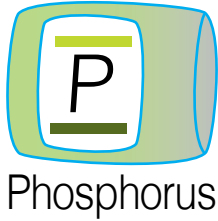


Water

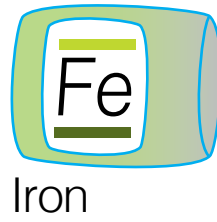


Nutrients

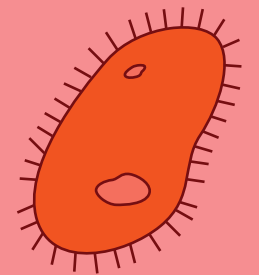
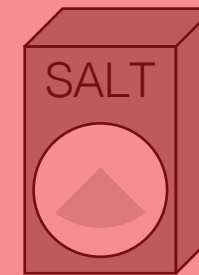
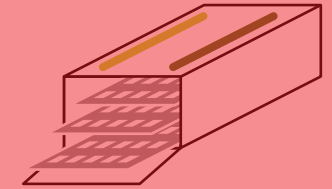
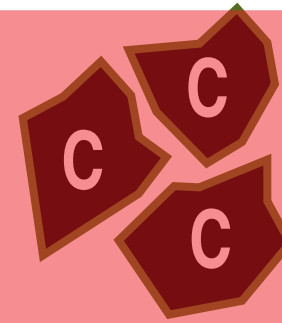
Macro-Nutrients



Micro-Nutrients



Other Substances



Electrolysis

