

# Leachate Treatment

*landfills • mines*



- ✓ *Treated effluent suitable for reuse or discharge*
- ✓ *Package plants/self-contained systems built and delivered, ideal for decentralized waste facility*

*Clean water – cleaner future!*

Utilizing new technologies, leachate from landfills or mines can be inexpensively treated with an on-site wastewater treatment system. An on-site system either prevents harmful contaminants from entering the environment, or removes the cost of trucking or piping it to the municipal wastewater plant where it may disrupt the biology and decrease the utility's efficiency.

Leachate can be composed of a complex variety of compounds with varying degrees of biodegradability. Most leachates contain refractories (too toxic for bacteria) from industry, such as PCBs, phenols, naphthenic acids, lignins, PAHs, coal tar waters, or polychlorinated biphenyls (PCB). Drug residues and hormones may also be found in leachates.

Leachates may also consist of PFOAs - the chemical in most plastics such as food wraps - artificial sweeteners, and the endocrine disruptor Bisphenol A are endemic in our environment and can be removed from leachate in the same process.

Therefore a leachate system design begins with a water analysis and pilot study to determine operating costs. It may be more efficient to treat just a portion of the leachate, to pre-treat, or to post-treat after primary treatment such as an aeration pond.

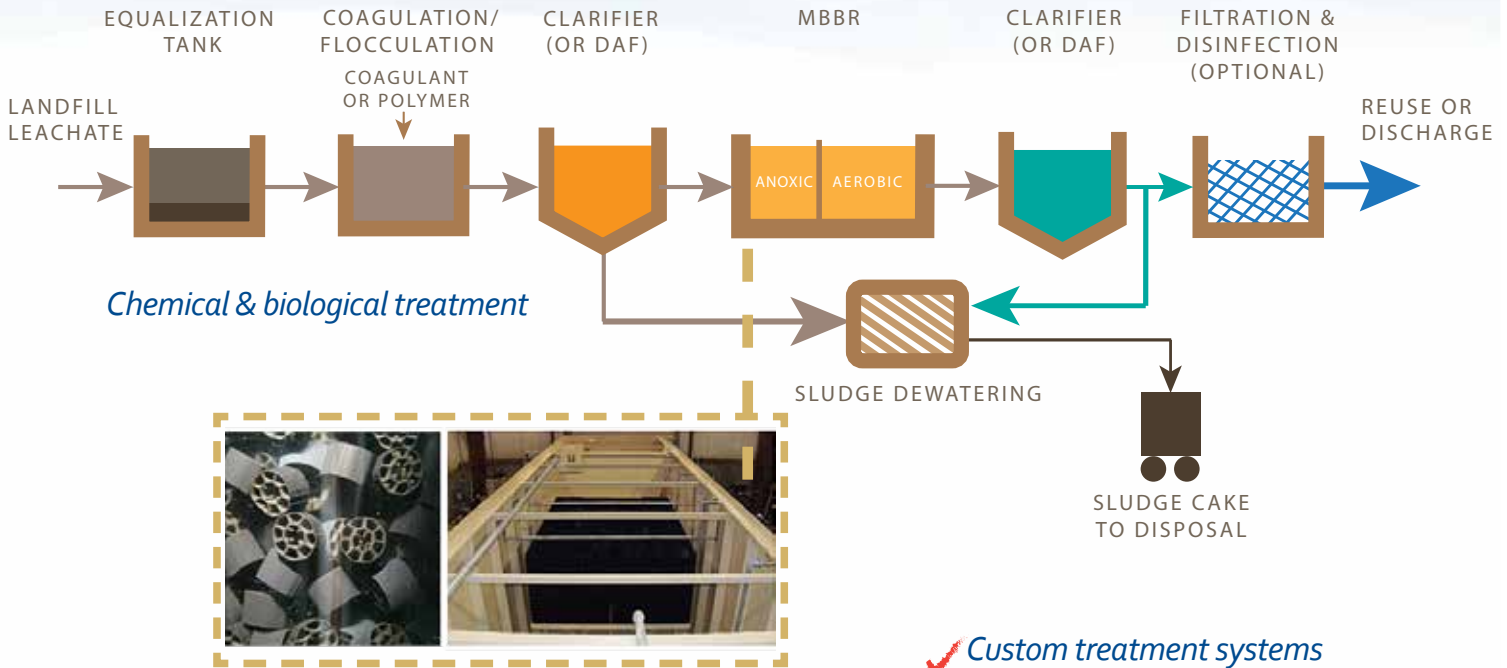
BI Pure Water's engineering department of chemical, wastewater, electrical, and mechanical engineers design a system utilizing the best technology available, to each customer's unique requirements, at an affordable price.



*Custom Engineered Package Treatment Systems*

# Typical leachate treatment process

## Landfill leachate treatment with MBBR:



*Chemical & biological treatment*

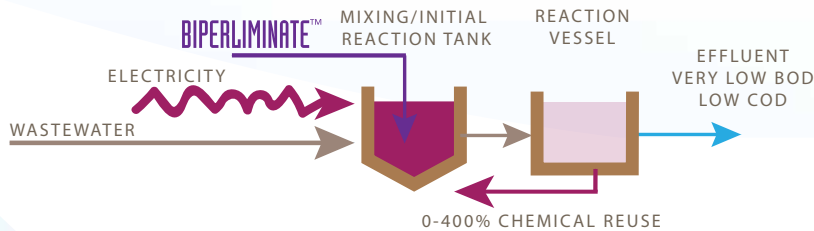


**Moving Bed Bioreactor (MBBR)** is a biological fixed-film process using microorganisms that reside inside media. Media is either free-floating or fixed structured.

✓ *Custom treatment systems designed from 30 to 3000 m<sup>3</sup>/day*

✓ *Container size footprint*

## Leachate treatment with Advanced Oxidation:



*North American award winning design & manufacture*



Toll free: 888-901-3111

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