## Landfill leachate

### - solutions for treatment



#### Harmful compounds in leachate

For many landfills, the main challenge with treatment of leachate is the varying content of harmful compounds in the water. Impurities like heavy metals, ammonia and persistent chemicals like PFOS.

At Aquarden Technologies we are experts in treatment of problematic wastewater. For many years, Aquarden has been working with landfill owners to find the best treatment solution customized to their leachate.



Aquarden's SCWO system was awarded with the prestigious European Business Award for the Environment 2016 in Denmark. The prize is given to a new and innovative product and service that significantly contributes to a sustainable development.

#### Choice of technology

Today, leachate is primarily treated in traditional mechanical-biological treatment plants before discharge. This disposal approach is cost-consuming, produces large amounts of sludge and does not solve the problem with hardly degradable organics.

#### Cost effective

The choice of technology depends on the requirements and the legislation in your area. If a simple setup is enough to solve your problem, then this is what we deliver. The following technologies can be applied for treatment of leachate:

- Flocculation and precipitation
- Separation (flotation, band filter, sedimentation)
- Membrane processes (UF, NF and RO)
- Oxidation
- Sludge dewatering
- Super Critical Water Oxidation (SCWO)

To ensure the right solution for you, we recommend implementing a pilot plant prior to installation of the final solution, thereby ensuring selection of the most cost-effective solution.



Leachate from landfill before and after treatment in Aquarden's SCWO system. The end product is pure water that can be discharged to receiving water bodies.

### **About Aquarden Technologies**

Aquarden is a leading developer and producer of systems for treatment of toxic and highly contaminated wastewater. Our staff includes wastewater experts, skilled construction engineers and excellent craftsmen in the workshop. This enables us to take the project all the way from initial lab analysis to final installation.



Aguarden's ceramic membrane plant for treatment of leachate. Flow 5 m3/h.

Aquarden is one of the few companies in the world offering SCWO technology for the complete destruction of hardly degradable organic compounds. We have 3000 m<sup>2</sup> of production and development facilities in Skævinge, Denmark, and a top-notch laboratory. Aquarden produces solutions in both stainless steel and plastic.

Contact us to learn how you can get the most effective leachate treatment for your specific needs.

# YOU ARE INVITED!

We invite anyone interested in the purification and reuse of toxic wastewater to visit us in Denmark.

Check us out at **www.aquarden.com** to learn more about our technologies and sustainable wastewater treatment.

We are always open for a professional dialogue with focus on building long-term partnerships and customer relations.

Welcome to our future.



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