



Research for the use of anaerobic brackish well water

Drinking water company Brabant Water in the Netherlands started research on the semi-practical scale for the extraction and purification of anaerobic well water. An innovative concept is used in which brackish water is purified and becomes drinking water. This concept consists of extraction of brackish well water, followed by direct treatment with reverse osmosis membranes and infiltration of the concentrate back into the soil. The province of Noord-Brabant supports this research with a financial contribution.

The produced permeate is at the moment added to the incoming raw water of the industrial water production company in Zevenbergen. Logisticon Water Treatment has been awarded with the order to install an extraction well, an infiltration well and 2 observation wells and also to design and construct a 40ft insulated container with an RO installation. All will have a hydraulic capacity of 50 m³/h. The RO installation is working on anaerobic groundwater, without pre-treatment and is very complete. The unit is equipped with speed controlled pumps, PLC control for remote control, a CIP installation, possibility for use of chemicals dosage, leakage water detection, grounding, lighting, lightning protection etc. All to keep the unit anaerobic and the membranes clean, even with high Fe levels.

The objective is to reduce the chloride content to values below 50 mg/l, well within the limits of the Drinking Water Supply Decree.

