

**Application:** Disinfection of cold and hot water of water supply system in order to comply with drinking water regulations.

Location of the installation: restaurant in the city of Wevelgen, Belgium.



The restaurant and the pond with a rich birds population. Water for kitchen is taken from this pond to the holding tank and after treatment is used at the kitchen.

Water consumption: ~10 m3/day of the pond water.

**Problem they wanted to solve:** This restaurant has place for about 600 people and is open 4 days per week. As there is neither city water nor well water available they have to use and treat the pond water the quality of which you may see on the picture above. Once a week the quality of the water is controlled by the local authorities. Due to inefficient treatment technologies the client had big problems with the city. Previous

treatment was with chlorine what very often resulted in high chlorine residual but still with persistent bacteria contamination.



Water quality can be judged on this picture

Previously use technology: chlorination.

The reasons for choosing Envirolyte technology: chlorination did not solve bacteria contamination problems.

**Solution:** The water from the pond is first treated with 5% anolyte dosing. After this treatment the water goes through a sand and carbon filter. No more smell of chlorine and then the dosing pump controlled by Redox starts dosing in the water flow. This client made his best experience to keep the Redox at ~700 to 800 mV. Below 700 mV the dosing pump start working.



Redox control unit



The owner Mr. Willy Denutte



The engine/installation room with different control systems

## **Type of the Envirolyte equipment:** EL – 900.



EL 900 with anolyte storage tank

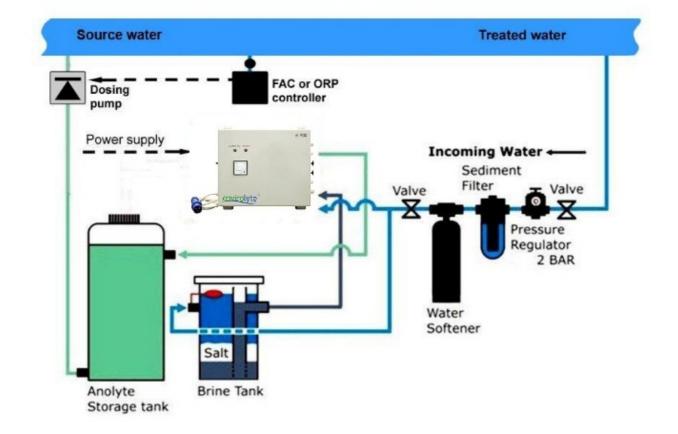
**Installation:** Cold and hot water is treated 24/7.Disinfection is controlled through ORP/Redox residual.



FAC is also tested once a day.



The same anolyte treated water is now used for this little fish pond



### Below can be seen a schematic of the system layout

# The reported benefits of using Environment water disinfecting technology :

#### Safety

-no danger of chlorine gas explosion and hazards associated with transportation of any other chlorine based disinfectant;

-no need to mix or dilute hazardous chemicals;

-environmental friendly solution;

#### Efficiency

- elimination of biofilms and inactivation of pathogenic microorganisms including Legionella species, and nil bacteria counts;

- creates a longer-lasting residual than traditional chlorination, often at a lower dosage -right dosage, no more no less – corrosion is reduced;

-significant reduction of Trihalomethane and other DBP;

#### **Cost reducing**

-Envirolyte system is fully automatic and only requires a minimal operator attention;
-no need for transport, handling or storage of chlorine gas or hypochlorite;
-on site installation in close proximity of urban population;
-anolyte is also used for cleaning/disinfection of different surfaces in the restorant;

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