Application: Disinfection of cold and hot water of water supply system in order to prevent Legionella contamination.

Location of the installation: Yacht club in Belgium, city of Newport.

Clubhouse with shower facilities

Water consumption: ~12 m3/day of cold and hot water.

Problem they wanted to solve: Legionella contamination. The club house has 40 shower rooms for women and 40 for men. In 2004 two men died because of Legionella infection they had acquired in the club. The local authorities were going to close the club if the owner would not provide an effective water treatment.

Previously use technology: chlorination

Restaurant and office

The reasons for choosing Envirolyte technology: as a result of using chlorination damages of the piping line were detected while Legionella contamination still persisted.

Installation: The mayor of Newport contacted Envirolyte distributor in Belgium to find a solution for his problem. We proposed EL - 900 installation equipped with sound and phone alarm controlled by Redox set at 550 mV. If Redox goes below 550 mV the technician in charge is informed by phone alarm and in the office the sound alarms blows up.
Cold and hot water is treated 24/7.Water softener is installed prior to ELA-90. Non-electrical pump is used for injecting anolyte. Disinfection is controlled through ORP/Redox residual.

Solution: The shower water was controlled by an official lab 2 times per day. Samples were taken at the end of each shower installation and also at the hand wash places. Before treatment with ANK the results were positive with Legionella. After EL-900 installation and two-month test run ever since the result are negative for Legionella.

Type of the Envirolyte equipment: EL - 900.

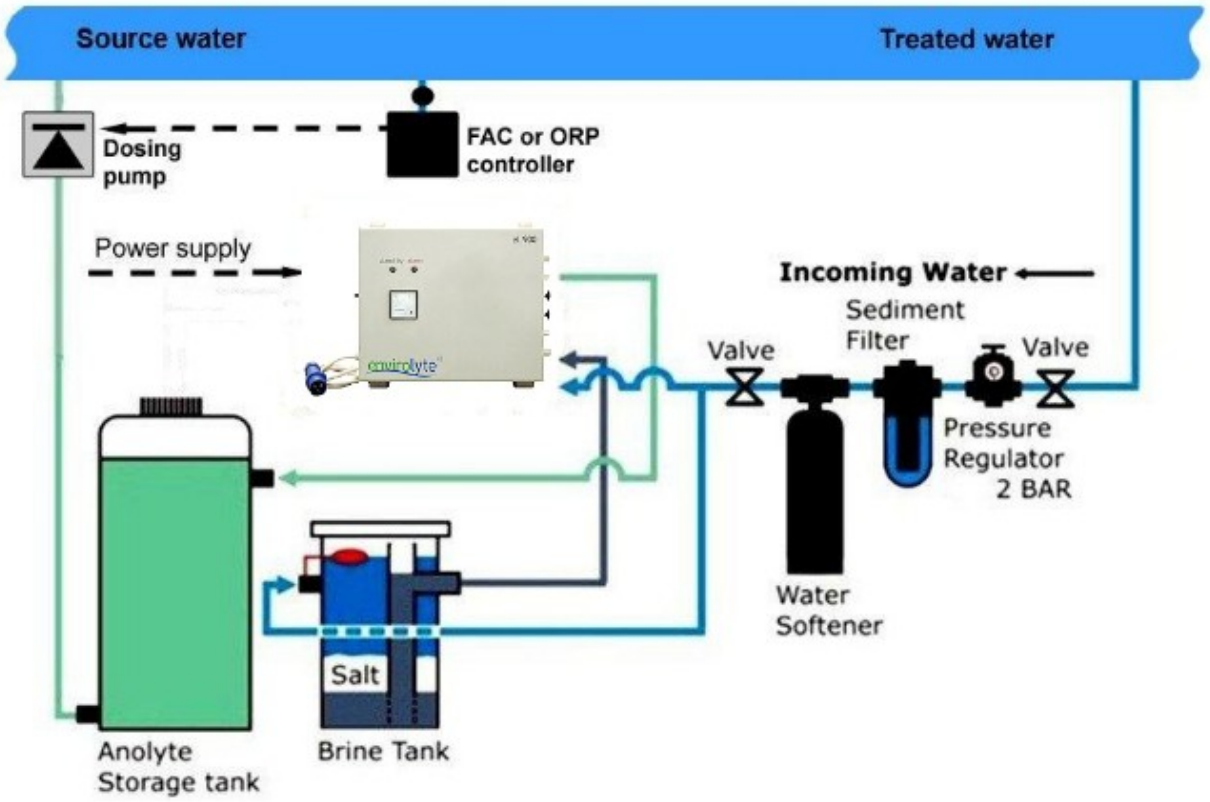
EL 900 with anolyte storage tank

ANK injected at 0.3% ratio

Installation: Cold and hot water is treated 24/7.Water softener is installed prior to EL-900. Non electrical pump is used for injecting anolyte. Disinfection is controlled through ORP/Redox residual.

The complete water system is equipped with a water softener. Redox control probe is installed in the water pipe 3 meter after the injection point.

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 club's surfaces;