

# Drinking water supply



## Context

Even though water is fed into the supply pipes in perfect condition according to the drinking water regulations, problems with corrosion, scale deposits and bacteria appear mainly in areas where water stagnates. Our research shows that this is often caused by problems of an electromagnetic nature. Processes of oxidation, corrosion, the behaviour of ions in water and biological processes are primarily controlled by the electromagnetic environment.



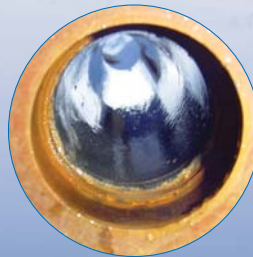
## Practical examples

**Protection from corrosion:** In November 1998 a prototype of Aqua-4D® was installed in Orsieres, Switzerland. Six years later pipes and boilers were checked, with the following surprising results: The main water pipe did not show any corrosion and no scale deposits. The pictures show the successful result. It follows that also the state of the boilers had improved.

**Protection from scale deposits:** In Venthonne (Switzerland, 1,100 inhabitants) a check 9 months after installing our system showed two boilers that had previously been covered in a thick layer of lime to be completely free of deposits. At the school, the use of acids for cleaning the showers was stopped, and the inhabitants confirmed that household appliances did not need to be cleaned of deposits any more.



Pipe without treatment



Pipe with treatment



## Happy customers...

« The public response has been extremely positive »  
... we conclude that this new installation has improved the situation significantly ... lime doesn't accumulate in the boilers any more, and even the existing layers have disappeared.

Municipality of Venthone, Switzerland, G.Clivaz

« ... the appliances have proven to be effective »  
... and continue to fulfil our expectations in clearing existing lime deposits, just like in your proposal on how to deal with this problem.

Switzerland, Orsieres, J-M. Droz



## Advantages in this application area

### Protection from corrosion, lime deposits and the biofilm

Aqua-4D® modifies the crystal structure of calcium carbonate. It prevents new deposits forming and enables removal of existing scale. The passivation of the internal surfaces protects from corrosion. The biofilm is detached and new formation is inhibited.

### Prevention of bacterial growth

The combined effect (anti scale, anti corrosion and anti biofilm) enables prevention of bacteria development. Electromagnetic waves allows us to work on stagnant water to avoid these adverse effects.

### Increased life expectancy of installations

Through the prevention of damage through corrosion and blocked pipes, maintenance costs are significantly reduced, life expectancy of the installations is increased, and capital investments are protected.