



Mariebergs Waterworks

Sweden

Plant Description

Mariebergs waterworks supplies water to the urban communities of Uddevalla, Herrestad, Sunningen, Torp, Hogstorp, Utby, Sundsandvik, Havsten and Ammenäs.

The plant has a production capacity of 19,000 m³/day and a pump capacity of 250 l/s. Average consumption per day is 12,600 m³/day. In a year the plant produces 3.9 – 4.2 million m³ of clean drinking water.



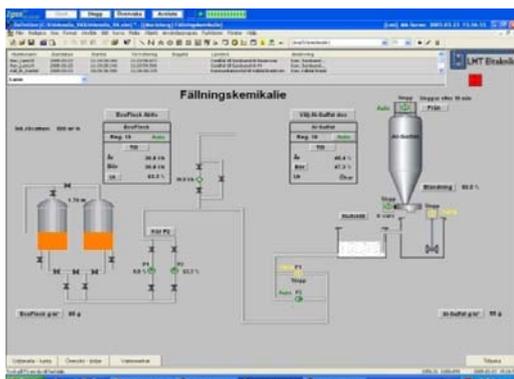
In the spring of 2005 LMT Elteknik AB installed a new process monitoring system, IGSS, from 7-Technologies.

The water's way to Mariebergs waterworks

Fresh water is retrieved from Bäveån using a pump station at Köperöd. The water is stored in Köperödssjöarna, before it is led to the waterworks. If necessary, the water can be pumped directly from Bäveån, about 1 km upstream of the waterworks.

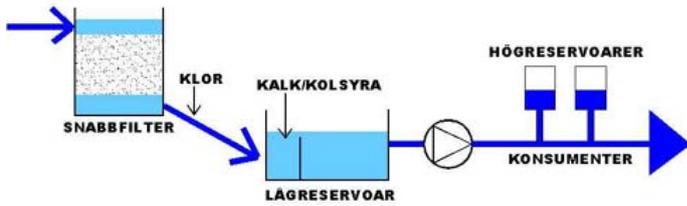
Most of the water flow to Bäveån comes via Risån from Öresjö, about 15 km southeast of the center of Uddevalla. A smaller part comes from Herrestadsfjället.

At the Marieberg waterworks, lime is added to the water to raise its pH-value and the water stability is increased by adding with carbon-acid. Through an in-shell mixture, aluminum-salt is added in careful doses in order to remove any organic pollutants in the water. Any Pollutants in the water will collect in large flocks and sink to the bottom of the tanks.



The pollutant flocks are separated in four parallel water treatment production lines, two with flat bottom sedimentation basins and two with spiral blades. The flocks which fail to sediment are separated in seven fast-filters, each containing active carbon.

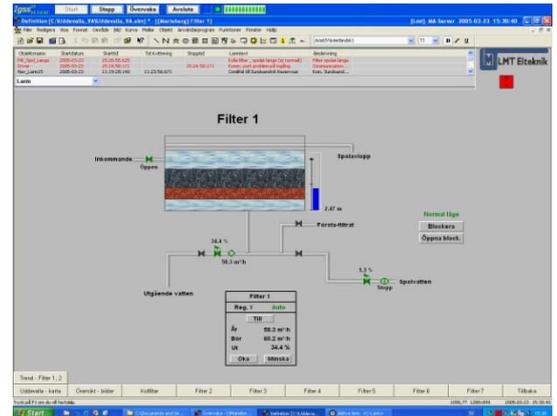
CUSTOMER CASE



The active carbon also reduces any odors in the water. The filters are back-flushed at regular intervals with pure water in order to clean them.

The clean water is then disinfected with chlorine before it is stored in a low reservoir under the waterworks.

To prevent corrosion in the distribution network, the water's pH and hardness is increased.



Owner

Uddevalla Municipality

IGSS

The supervising system consists of a 10,000 object multi-user system with 9 operator stations, call terminal and alarm call. One of the operator stations is located at the town hall. The large number of objects was selected by Uddevalla municipality in order to be able to manage planned future expansion.

System Integrator

LMT Elteknik AB – www.lmt.se

