

Outsourcing the SCADA system saves internal server infrastructure

## Safety and comfort with ARAbella online in the cloud for small sewage treatment plants with high demands

- Highest protection against hacker attacks
- Very modern web-based SCADA system
- Full cost control with license solution
- Access to latest software and most recent technology



Official in charge Michel Hess at the sewage treatment plant "Am Twannbach" controls all processes with ARAbella online in the cloud.

## **Starting situation**

Many smaller sewage treatment plants are not manned permanently but are monitored by officials in charge of other treatment plants or by someone named by the municipality. This is the situation also in the waste water treatment systems of Erlach, La Ferrière, Twann and Prèles. Their owners were looking for a possible remote service solution to quickly obtain the full picture

of all processes going on or to change parameters without the need to travel a long distance in each case. Even if a web-based SCADA system is the best possible solution, the owners should also be able to pay for the system and its maintenance. Costly investments or the maintenance of an internal server infrastructure is not what the owners can shoulder, for cost reasons. Therefore, a license for an online solution with a SCADA system in the cloud met with their intense interest.

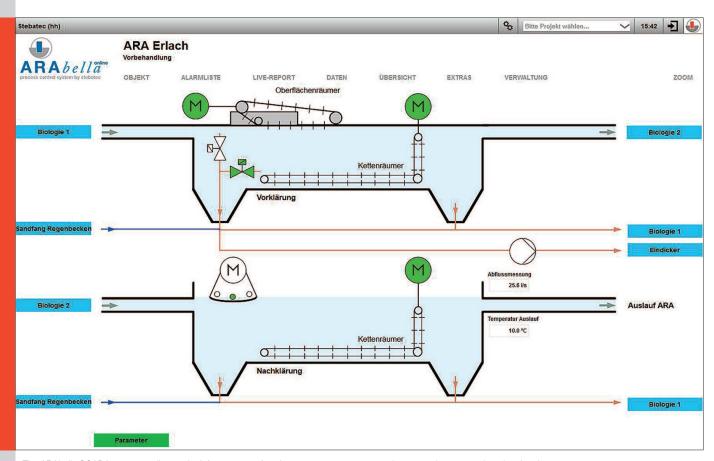
## Requirement

- Remote-controlled SCADA system
- Low-cost and budgeted solution
- · Controls and interventions on site should be retained
- High failsafe performance and guaranteed access at all the times

## **Implementation**

All four plants have been connected to ARAbella online, a web-based SCADA system from STEBATEC during the last three years. This solution is safe against hacker attacks that a small sewage treatment plant would hardly be able to afford on that level. In addition, the redundant

ARAbella servers and internet access points massively improve the reliability of the system. The local control by touchscreen or manual switch and the control at the plant are retained while access is possible from anywhere via internet. All four owners decided for the license solution, which is a great advantage to them. This is the case with small plants, in general, or where a



The ARAbella SCADA system replicates the infrastructure of each sewage water treatment plant—seen is a screenshot showing the pre-treatment process in the plant of Erlach.

transitory solution is needed because several treatment plants are intended to merge. Payment of the license fee puts a whole package of services at firm, planned cost at the owner's disposal. In particular, no investments in costly infrastructures such as servers, UPS, a backup system or the redundant power supply of all hardware components are required. Besides, the customers can always use the most recent software version because all updates run automatically and are included. Despite the cost-efficient license solution, all four waste water treatment plants now enjoy the advantage of a highly modern SCADA system compatible with latest technologies. And all processes can be remote controlled without long and time-consuming journeys.



DThe STEBAnet hardware used for data exchange between the control systems at the customer's end and the ARAbella server comprises a landline modem, an Ethernet switch, a mobile radio modem up to and with 4G, a router and a firewall. In addition, the hardware permits STEBATEC to remotely access the customer's systems for maintenance purposes.