Executive summary

Introduction

The fish biomonitor is designed to protect water supplies against harmful toxic compounds that could lead to acute intoxication of humans, who all drink water. The system is designed as a robust, fast reacting instrument with an alarm verification mechanism to give really valid alarms, if necessary. Minor attention has been given to the detection of very low toxic concentrations. The implementation of additional sensors has been the focus of 3.4.12.

Importance

The real-time fish biomonitor is a new instrument specifically designed for the monitoring of drinking water systems. It will protect drinking water against threats resulting from accidents or terrorist attacks. The fish biomonitor is a low-price/low-maintenance device which lends itself to multiple site applications within a water supply system. The simplicity supports its implementation in waterworks, making handling for operators very easy and understandable and avoiding false alarms. Additional sensors help to verify a possible alarm when these sensors detect changes in a fish alarm simultaneously.

Approach

The report presents results and experiences of practical operation using additional sensors such as chlorine, oxygen etc. An external program has been developed to display the data

Result

The sensors redox potential, oxygen, chlorine are connected to the small internal PC via a bus system. The data are stored in the internal data base as well as the configuration data and the calculations for virtual sensors.

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