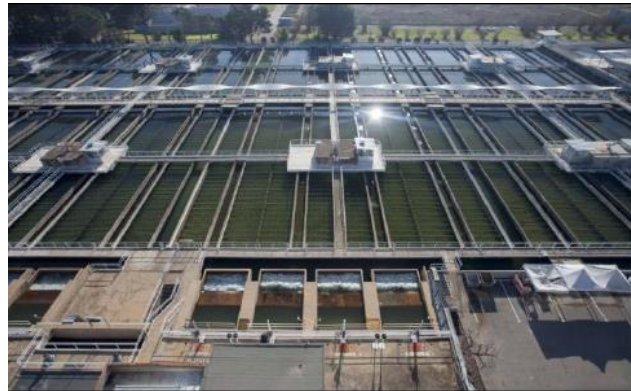


Application Note

Colifast ALARM monitors raw water intake on drinking water treatment plant in Barcelona



Parts of the drinking water treatment plant by the river Ter

The customer

The drinking water treatment plant (DWTP) belongs to the Catalan water and wastewater company ATL (Ens d'Abastament d'Aigua Ter-Llobregat ATL). ATL turns the water of the rivers Ter and Llobregat into drinking water. The DWTP cleaning the Ter has a capacity of 8 m³ / sec and can with that supply drinking water to a big part of the inhabitants of Barcelona and the surrounding municipalities.

Technical information

Colifast ALARM is a fully automated online instrument that collects a 100 mL water sample, incubates at a given temperature and analyses the sample for total coliforms, fecal coliforms or *E. coli*. The ATL instrument requires on average a five minute hands-on maintenance every 14 days. Those five minutes involves changing the bottle of growth medium, emptying the waste container, and refilling the acid rinse solution container. The customer requested having the instrument give a signal when a sample is taken and another when bacteria is detected. In this way ATL can get the amount of hours it took to detect into their PLC system.

Background

ATL wishes to know that the drinking water they supply to the people of Barcelona, meets the hygienic standard that is required. By reducing the time from sampling to result to only 15 hours, they gain time to act when water quality is poor. After a period of local calibration the customer now views the detection of bacteria in 10 hours or less as a warning signal. The warning signal aids the operators in adjusting the water treatment according to the actual water quality. The customer is very satisfied with the operation of the Colifast ALARM.

The application

Colifast ALARM is installed on the intake of the DWTP that treats the water from Ter. It collects a 100 mL water sample every 15 hours so that the operators on the plant can adjust water treatment accordingly. The instrument has alternated between analyzing for *E. coli* and total coliforms in periods. Changing the method is very simple and can be done by the operators themselves whenever needed.

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