

BactoSense ID cuts wastewater and bathing water bacteria testing from days to minutes

Ecublens, Switzerland, September 29, 2026

- **bNovate's new BactoSense ID solution provides continuous real-time microbiological monitoring of wastewater and bathing water.**
- **The solution identifies and counts the bacteria operators and regulators care about: coliforms, enterococci, and E. coli.**
- **Seamless SCADA integration puts real-time data directly into existing plant operations that can be actioned immediately, helping to meet compliance and regulations.**

LAUSANNE, Switzerland – Near-real-time microbial monitoring of wastewater discharge and bathing waters is now possible thanks to the BactoSense ID solution created by Swiss-based bNovate Technologies.

Built on flow cytometry technology already trusted across drinking water, pharma, and food and beverage sectors, BactoSense ID is a continuous, automated water quality monitoring solution that rapidly quantifies and identifies critical and commonly regulated bacteria, such as coliforms, enterococci and E. coli, in under 60 minutes, compared with the 18 to 72 hours traditional lab tests take." *

The ability to rapidly detect, identify and count specific bacteria complements traditional lab-based testing while allowing faster responses to changing cell counts that threaten compliance, for example, in water reuse applications and regulations covering recreational bathing water areas such as public beaches and lakes.

BactoSense ID detects bacteria using reagents packed into cartridges that can be swapped depending on what needs to be tested. Unlike manual, offline testing, the solution delivers online, automated measurements and faster results, without sacrificing ease of use.

For wastewater plant operators, the reliable, rugged solution is optimised for treatment plant conditions. The continuous signal complements mandated periodic testing with real-time confidence, letting operators optimise treatment processes against actual bacteria levels rather than a fixed schedule, cutting electricity and/or chemical usage, while protecting against the fines, reputational damage, and downstream environmental impact of an undetected pollution event and helping to unlock ever larger-scale water reuse.

Seamless SCADA integration puts that real-time data directly into existing plant operations, giving operators the visibility they need without adding a separate system to manage.

For environmental agencies, BactoSense ID's rugged, field-deployable format is built for the seasonal, outdoor reality of bathing water monitoring. Under the EU Bathing Water Directive, official sites are typically tested as little as four times per season, with results taking two days or longer, leaving a gap where contamination can pass undetected. Seamless system integration and bNovate's cloud-based solutions give all stakeholders real-time visibility, enabling stakeholders to act before contamination reaches people.

BactoSense ID's instrument data can also be sent to public dashboards that offer live visibility of water quality in recreational bathing sites.

In both usage scenarios, bacterial load can swing sharply between one manual test and the next, so a contamination can pass undetected long before the next sample even gets taken. bNovate turns that occasional check into a continuous signal, increasing trust and traceability. For example, testing at one of Switzerland's largest wastewater treatment plants detected a 20-fold increase in coliform cell count within four hours of heavy rain. A lab-based test would have taken days to flag the same change.

Linking the BactoSense ID to bNovate's multi-point sampling device, BactoSwitch, enables automated measurements pre- and post-treatment step with a single analyser. This allows the plant to adjust disinfectant levels, or redirect the effluent stream, addressing cost pressure and compliance risk as two separate but connected problems. Real-time testing, importantly, also tells you when bacteria levels are once again acceptable.

Serge Gander, CEO of bNovate Technologies, said: "BactoSense ID is a quantum leap for bNovate and for rapid detection, identification and quantification of bacteria. It really moves us into a new era of innovation in water quality testing."

"Our aim is not to replace lab-based cultivation tests, but to complement them using different methodologies. This was not possible before. By closing the blind spots between the compliance samples and offering a kind of process signal, we are making microbiology actionable."

###

Editor's notes

*The ability to detect and identify E. coli will be available soon.

About bNovate Technologies

bNovate Technologies is a Swiss technology company specialising in real-time microbiological water monitoring. The company enables water professionals, industrial operators, and researchers worldwide to gain immediate, actionable insight into microbial water quality — replacing delayed manual laboratory results with continuous, reliable online data. The company has featured/published more than 70 peer-reviewed papers, has more than 500 systems deployed globally, and is a World Economic Forum Uplink Top 10 Innovator.

Media contact:

[Karim El-Koury](#)

CMO

bNovate Technologies

karim.el-koury@bnovate.com

+41 78 252 22 48

www.bnovate.com