

MiProbe™



MiProbe™ Wastewater Treatment Applications

System Optimization

The automated MiProbe Sentry can be deployed for directly monitoring microbial processes in wastewater treatment plants from simple aeration ditches to activated sludge tanks and settling basins.

Actionable Data in real-time.

The MiProbe directly reports microbial response to the aerobic or anaerobic conditions, rather than the dissolved oxygen or oxygen reduction potential changes in the environment. The MiProbe requires no regular maintenance or cleaning – the biofilm is the active surface for the sensor probe.

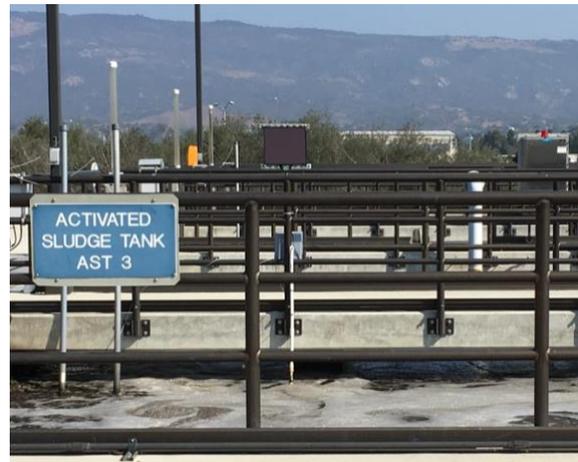


Figure 1 – Activated Sludge Monitoring Installation in Goleta, CA

- Process Monitoring without complex data filtration and manipulation.
- Setup Monitoring Alerts to know when changes have taken place.
- Track contamination impacts to microbial treatment processes and stages.
- Optimize processes by monitoring microbial response to system changes (e.g., DO concentration).
- Know what the microbes are doing, not just that the environment has changed.

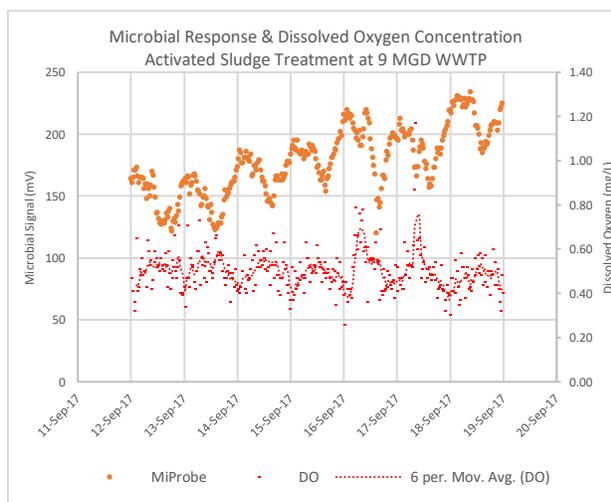


Figure 2 – Microbial response to dissolved oxygen concentration in an activated sludge reaction cell. A moving average of DO was required to reduce noise for visual comparison.

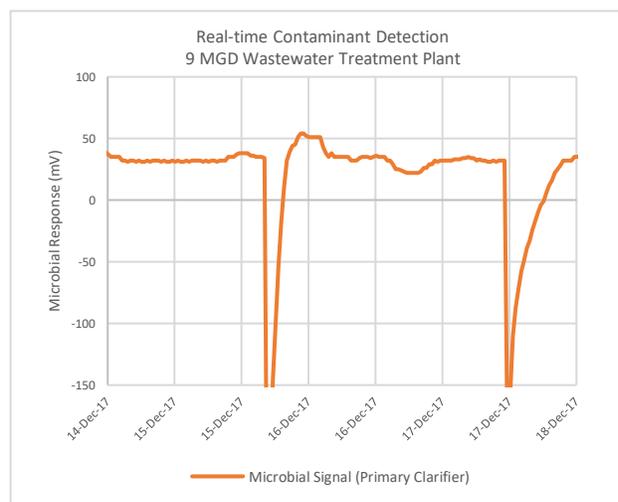


Figure 3 – Real-time microbial signal response to bronopol (microbial biocide) contamination from adjacent airport sewer discharge. Contaminant response demonstrated by negative spikes in the microbial signal.