

It's the most fundamental aspect of biological wastewater treatment. Are you monitoring the Biomass?



Our tool will help you realize a new level of process stability and efficiency... in 5 minutes!

For Industries:

- ✓ Detect toxic influent and its impact on your bioreactor
- ✓ Assess damage done by upsets and speed up the recovery process
- ✓ Pace dosing of nutrient blends and biostimulants
- ✓ Assess treatability of challenging substrates through bench scale jar tests

For Municipalities:

- ✓ Optimize F/M, Dissolved Oxygen, and other key process variables
- ✓ Eliminate excess solids and minimize sludge handling costs
- ✓ Detect sludge bulking well in advance of conventional parameters (i.e. SVI)
- ✓ Diagnose deflocculation and other settling issues

Accurately measure your true living biomass in minutes.

Wastewater operators, process engineers and plant managers have traditionally relied upon suspended solid measurements to quantify biomass in their process. However, solids tests detect dead biomass and inert material in addition to what is alive, resulting in inaccurate and unresponsive indicators of the living population. While Volatile Suspended Solids (VSS) tests are an attempt to be a better indicator of active biomass, it still cannot differentiate between live and dead cells. As such, 2nd Generation ATP monitoring renders this test unnecessary.

"LuminUltra's solutions helped us to identify the source of an upset in our process as well as monitor the health of the biomass during recovery. By utilizing the test, we were able to take enforcement action against the offending industries."



Jeanie Grandstaff
Environmental Manager
Hopewell Regional Wastewater
Treatment Facility – Hopewell, Virginia

LUMINULTRA[®]
microbial monitoring

Side by side comparison of LuminUltra's 2nd Generation ATP[®] to other microbiological tools.

| Analysis | 2 nd Generation ATP | Particulate Analysis | Respirometry |
|---|---|--|--------------------|
| What is detected? | Total microorganisms | Suspended solids | Metabolic activity |
| Interferences in detecting total living biomass | None | Dead biomass; non-biological particles | Respiration type |
| How long to get results? | Minutes | Hours | Minutes to hours |
| Can give results on-site? | Yes | Yes | Yes |
| What types of samples can be tested? | Fluids & solids | Fluids only | Fluids only |
| What is its best use? | Living biomass concentration and health | Total solids inventory | Aerobic activity |

Achieve proactive control instead of reacting to process changes.

LuminUltra's biological monitoring solution provides direct insight into your biomass, allowing you to observe how it responds to the changes around it and establish cause-and-effect relationships with all key variables. The benefits of this new information are many and provide tremendous value straight out of the box.

The perfect complement to your existing control strategy.

Through this complete solution you can now solve a problem as old as the industry itself.

- LuminUltra Wastewater (QG21W™) Test Kit
- LuminUltra Cloud™ Data Management & Decision Support Platform complete with:
 - Mobile app for rapidly inputting and managing data;
 - Robust analysis and reporting to put you in control
- PhotonMaster™ Luminometer + Bluetooth Module
- LuminUltra Academy - our online training and certification center

Our goal is to provide innovative solutions to Operators, Process Engineers, and Plant Managers who manage wastewater treatment processes.

What's in your water? Find out through the power of DNA!

Within minutes, ATP tests answer the question "Am I in control?", but what if the answer is "No"? What kind of specific risks are present? Metagenomics profiles can tell you not only what's there but in what relative proportion. This information identifies why control was lost and how to fix and prevent similar future problems. Ask about our advanced metagenomics testing services.

Ask us for a business case for using LuminUltra's solutions to save you time and money at sales@luminultra.com.

Proud distributor of LuminUltra's products



LUMINULTRA[®]
microbial monitoring

