

# Luka Erceg of Drylet

**T**he process to treat and recycle biosolids can be time consuming and expensive for water treatment plants, but a new product called Aqua Assist is changing that. Added to wastewater treatment systems, Aqua Assist, developed by Drylet, uses a specially engineered microbe-delivery platform to break down and reduce biosolids, resulting in cost and equipment savings for treatment facilities.

Luka Erceg is the president and chief executive officer of Drylet. After spending more than 20 years in the chemical, utility, and energy industries, Mr. Erceg joined Drylet and helped market Aqua Assist to municipal treatment plants nationwide. Mr. Erceg recently sat down with Municipal Water Leader's lead writer, John Crotty, to discuss how Aqua Assist came to be, the advantages it has over traditional biosolid remediation techniques, and how it will continue to change the wastewater industry in the future.

**John Crotty:** Please tell our readership about your background and your initial connection to Drylet.

**Luka Erceg:** I first learned about the bioremediation technology in 2012 after being introduced to the man who invented it, Ramiro Treviño. I was busy growing a selective lithium extraction company that used geothermal brines as a feedstock. We worked on technologies that would allow compounds to be extracted, produced, and used for electric vehicle batteries. Mr. Treviño and I had a common intellectual property attorney at the time, and we began a dialog. It was fascinating to learn about the technology. A year and a half later, it was being used at a number of wastewater treatment plants and confined animal feeding operations.

Mr. Treviño is the owner of a



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food manufacturing company based north of Dallas. He decided that the technology was not central to what the company was doing, and he spun it off into its own company. I helped him think about how to do that and helped the company secure its first capital investment from a large Canadian strategic agricultural trading firm in late 2013. Both parties then asked me to stay on board as an independent director for the new company, and I stepped in as chief executive officer in February 2017.

**John Crotty:** Did you have any other experience in water before joining the company?

**Luka Erceg:** I started my career working for Phillips Services Corporation, which was active in waste management. Then I moved to the energy sector, which is very much tied to water. My lithium extraction company also had a number of water-related processes, which gave me a lot of insight into industrial water treatment.



We all worry about where our water comes from, but few people think about where the water goes after the toilet is flushed or the sink drains. The reality is that process is part of a cycle. That water will end up back at people's kitchen taps over time, so we should be serious about the part of the cycle that is wastewater treatment.

**John Crotty:** What is Aqua Assist, and how does it facilitate wastewater remediation?

**Luka Erceg:** Aqua Assist is a microbial delivery product that is added to wastewater treatment systems. It uses a carefully selected mix of microbes to improve the breakdown of biosolids. The net result is a reduction of biosolids by up to 50 percent, which in turn creates a plethora of other operating benefits. Aqua Assist is a high-surface-area material that is very absorbent, and we can put a lot of microbes on it. For example, 1 pound of our material provides the equivalent of 700,000 square feet (12 football fields) of surface area.

**John Crotty:** What does winning the Innovative Water Technology Award earlier this year at the Water Environment Foundation Technical Exhibition and Conference mean to your company, and how will you build on that success?

**Luka Erceg:** The award recognized the fact that we are not in business to sell microbes; we are here to provide a product that can enhance operations and be an alternative to all the capital expenditures that wastewater plants typically engage in. Much of the heavy equipment that treatment plants use is dedicated to the handling of solid waste, and our product reduces the need for such equipment. If over half the solids can be eliminated, that will also reduce the need for polymers, filter-press capacity, and many other technologies related to dewatering. Moreover, those technologies only condense solids rather than reduce



them, whereas our product actually eliminates solid waste. Our product is a cost-saving solution that can allow facilities to do more with less.

**John Crotty:** Are you pitching that benefit to municipalities that are looking to build new wastewater treatment or remediation plants?

**Luka Erceg:** Absolutely, and it is an example of how we are using the recognition of the Water Environment Foundation award. We now have added credibility when speaking with municipalities, and many people are paying attention. The big challenge in the municipal wastewater industry is the fact that innovation is not foremost in the minds of many people. Much of the innovation is incremental, and there are a lot of gatekeepers who often do not permit new ideas to advance quickly in the industry.

The United States is woefully behind Europe and China in wastewater treatment, and failure to understand the benefits of products like Aqua Assist is part of the reason. People are so accustomed to buying heavy equipment that it becomes easier and less risky to keep doing that. We try to explain to municipalities that we want them to build the facility they otherwise would have, but to add our product to it. They can still get the cost savings that way while extending the lifespan of their heavy equipment, which will save them even more. Reducing pollution should be the first priority for municipalities, and biosolids are a form of pollution. We cannot eliminate biosolids completely, but we can help nature process them better.

**John Crotty:** What else have you learned about working with municipalities, and has Drylet been able to adapt to the industry's needs?

**Luka Erceg:** I had the opportunity to work in Silicon Valley for 10 years, and I learned that the chasm we have to cross when introducing new technology to the wastewater industry is larger than for any other industry I have worked in. This is primarily due to the industry's reluctance to embrace innovation.

We do a lot of training with municipalities to help them understand our products, but it is a slow and time-consuming process. We have to educate people at every stage of the process, including city managers, plant managers, third-party contractors, and engineering firms. We have also learned that there is a disparity across the United States regarding how people think about the key drivers of wastewater facilities, including varying levels of state regulations that have to be mitigated.

**John Crotty:** What is your message to utilities about your company and its product?

**Luka Erceg:** We look at wastewater treatment plants like chemical plants, which do everything possible to reduce volatility in their operations. There needs to be a strong focus on operational excellence and reducing volatility so that there are consistent outcomes on a day-to-day basis. If we all bear down and really focus on operational enhancements at wastewater treatment plants, we can increase savings and operational outcomes for facilities and ratepayers. 