



How a Dairy Manufacturer Turned Wastewater Constraints into a Scalable Compliance Solution



Background & Challenge

A U.S. **dairy manufacturer** operating multiple ingredient-processing facilities was facing increasing **challenges with wastewater management**. At several sites, the absence of on-site treatment led to low-strength effluent being discharged directly to municipal WWTPs, resulting in **increased surcharge exposure** associated with TSS, COD/BOD, and phosphorus.

Facilities were often land-locked, leaving little room for conventional infrastructure, while wastewater characteristics varied from site to site.

Orege's Solution & Service

Orege deployed its **mobile SLG-F unit** as a **compact, service-based pretreatment solution**, designed to operate across multiple sites and adapt to changing conditions. By combining **equipment, chemistry**, and on-site **expertise**, the approach enabled rapid implementation without major infrastructure.

Key components of the solution included:

- A **compact mobile unit** suited to constrained footprints
- A **tailored chemistry** program based on lab testing
- **Rapid deployment** and remobilization between sites
- **Full-service support**, including engineering, training, and operations





Results and Benefits

Orege's mobile pretreatment solution delivered immediate and measurable improvements in wastewater quality across multiple sites.

At one site, COD (Chemical Oxygen Demand) reduction averaged between 53% and 66%, with peaks up to 90%, while phosphorus removal averaged 73%. Even under more variable conditions at a second site, the system consistently reduced COD, showing its robustness.

Thanks to this solution, performance significantly lowered the company's exposure to wastewater surcharges by improving effluent quality and ensuring more reliable operations compliance.

Continuous monitoring and third-party validation further strengthened confidence in the treatment results.

Equally important, the project demonstrated the value of a flexible, service-based model.

Orege successfully deployed and adapted the solution across different sites and setups, providing operational support when needed and enabling the client to manage wastewater more efficiently without major capital investments.



This project redefined wastewater management as a stable and scalable component of the client's operations.