

eVOQUA

WATER TECHNOLOGIES

Treating Dairy Wastewater

Tackling Whey, Fat, Oil, and Grease



TRANSFORMING WATER. ENRICHING LIFE.



NEED A RELIABLE *WHEY* TO TREAT DAIRY PROCESSING WASTEWATER?

Dairy processors worldwide are challenged to meet market demand while remaining environmentally and economically sustainable. To achieve this, they must carefully manage every step of the production process.

Read on for examples of dairy processors that have realized the value of on-site wastewater treatment.





Harnessing Biogas from Energy-Rich Wastewater


Laticínios Bela Vista Ltda.

Location: Bela Vista de Goiás, Brazil | Solution: BVF® Reactor

Laticínios Bela Vista Ltda. is the fifth largest dairy producer in Brazil. One of its production plants was undergoing an expansion, which led to more flow and organic load to its existing aerobic wastewater treatment system. The dairy processor wanted a wastewater solution that would provide sustainable bioenergy generation.

Anaerobic pretreatment of dairy effluent, which includes a tough-to-treat whey stream, in the BVF® reactor provides robust treatment and has greatly decreased sludge volumes. Money-saving biogas is captured and used in boilers. The collected biogas helps offset biomass and boiler fuel costs, and reduces the plant's environmental footprint.

[To read the full story, click here.](#)



“The project went extremely well. ADI Systems provided integral support throughout, with honest commitment to our goals and vision.”

Marcos Helou, Industrial Director,
Laticínios Bela Vista Ltda.



**Dairy Processor Milks Proven
Wastewater Treatment Technologies**

HP Hood

Location: Winchester, Virginia, USA | Solution: BVF® Reactor & Sequencing Batch Reactor (SBR)

HP Hood has grown to become one of the largest dairy operators in the United States. To keep pace with consumer demand, the dairy processor has undertaken several plant expansions over the years to accommodate production increases.

ADI Systems designed, built, and commissioned HP Hood's original wastewater treatment system, and was chosen for two subsequent wastewater treatment expansion projects. ADI Systems and HP Hood continue to maintain their long-standing relationship, working together to achieve environmental sustainability through responsible wastewater treatment.

[To read the full project project, click here.](#)

Modular Membrane Bioreactor System Facilitates Expansion



Noosa Yoghurt Company

Location: Bellvue, Colorado, USA | Solution: Membrane Bioreactor (MBR)

Noosa Yoghurt Company needed a reliable solution that would adapt to varying flows and wastewater characteristics and generate an effluent suitable for reuse on-site or direct discharge to comply with strict environmental regulations.

ADI Systems' MBR was selected because of its compact footprint, simple “plug-and-play” installation, and its proven ability to produce high-quality effluent. As demand for Noosa products increased, a second membrane tank was supplied to double treatment capacity and achieve biological nutrient removal. The clean, treated water is reused for cleaning cow barns and irrigating crops.

[Click here to learn more about Noosa Yoghurt's wastewater treatment solution.](#)



**A Quarter Million in
Cost Savings**

Richmond Dairies

Location: Casino, Northern New South Wales, AU | Solution: BVF® Reactor

Richmond Dairies produces wastewater with high concentrations of BOD, making it difficult to meet increasingly strict wastewater discharge limits.

The plant's DAF system was not meeting effluent expectations and it was creating odor concerns, which were particularly troublesome because the plant is located close to a residential area.

Committed to controlling quality at every stage of production, Richmond Dairies trusted ADI Systems to design/build its wastewater treatment system. The on-site treatment system produces high-quality effluent, significantly lowers costs, and helps control nuisance odors.

[To read the full project profile, click here.](#)

The Right Whey to Treat Dairy Wastewater



Dairygold Co-Operative Society Limited

Location: Mitchelstown, Co. Cork, Ireland | Solution: BVF® Reactor

Dairygold Co-Operative Society Limited is Ireland's second largest dairy processor. The company needed a wastewater treatment system that could reliably treat process wastewater containing powdered milk and cheese waste, as well as high-strength salty whey.

The BVF® reactor has proven to be a simple, efficient, low-maintenance method of treating dairy processing wastewater. Thanks to Dairygold's new anaerobic reactor, the dairy processor can be confident its process wastewater meets strict discharge limits. It can now also take advantage of naturally-occurring biogas to supplement heating requirements.

[To learn more about the expansion, click here.](#)

The Lion's Share of Wastewater Treatment




Lion Dairy & Drinks

Location: Brisbane, Australia | Solution: ADI-BVF® Reactor & Sequencing Batch Reactors (SBR)

Lion is a leading beverage and food company that produces many of Australia and New Zealand's favorite brands. The company's choice to use ADI Systems' technologies at its milk production facility has resulted in a reliable, resilient wastewater treatment system with low maintenance requirements.

The combination of the BVF® reactor and twin SBRs produces clean effluent suitable to be discharged to the municipal sewer. The anaerobic reactor collects biogas, which is used in a plant boiler to generate process heat for the factory. The success of the system led Lion to select the BVF® technology for its expanding cheese manufacturing facility in Burnie, Tasmania.

[Click here to learn more about Lion Dairy & Drinks wastewater treatment solution.](#)



“Congratulations to ADI Systems on a job well done. Thank you for making this a great success and one of the best projects I have been involved with.”

Mike Kinder, Project Manager,
Lion

ADI[®] Systems

an eVOQUA brand

ADI Systems, an Evoqua brand, is a world-leading wastewater treatment and waste-to-energy technology solution provider with over 35 years of experience treating industrial processing wastewater and organic waste. We understand the complex challenges and strive to engineer unique solutions for the industry. Sustainability is the foundation of our design and construction processes, and innovative clean tech research and development is the building block of our many successful projects around the world.

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