



**eVOQUA**

WATER TECHNOLOGIES

# **Wastewater Solutions for Food & Beverage Processors**

## **Customer Success Stories**



**TRANSFORMING WATER. ENRICHING LIFE.**

# Treating Food & Beverage Wastewater

Food and beverage processors use large quantities of water to transform raw ingredients into marketable products. This naturally results in a lot of wastewater, which needs to be responsibly managed in order to comply with environmental regulations and minimize operational costs.

Learn how these real-world food and beverage processors benefited by investing in an on-site wastewater treatment system from Evoqua's ADI Systems.

# International Confectionery Manufacturer Expands Operations



# Morinaga & Co., Ltd

Location: North Carolina, USA | Solution: ADI® MBR

Morinaga's Hi-Chew fruit candies were being made in Taiwan and imported to the United States, but an explosion in popularity prompted them to build a new 20-acre production facility in America.

The new facility required a dependable wastewater treatment system that could treat confectionery wastewater to meet discharge limits, ensuring Morinaga remained environmentally compliant.

ADI Systems designed, built, and commissioned an ADI® MBR system, which would provide Morinaga a reliable, easy-to-operate solution that could treat wastewater with high concentrations of sugars and vegetable oil with minimal operator attention.

Learn more about how the ADI® MBR helped Morinaga reduce its overall operating and maintenance costs.



**Treatment Technology  
Allows Pinnacle Foods  
to Expand**

# Pinnacle Foods

Location: Illinois, USA | Solution: ADI-BVF® Reactor

In order to successfully expand, Pinnacle Foods needed a proven technology that could treat combined wastewater from its syrup and salad dressing production lines.

ADI Systems designed and built an ADI-BVF® reactor to effectively pre-treat the combined wastewater streams. The low-rate anaerobic technology was constructed in a space-saving above-ground tank.

The BVF reactor not only produces a high-quality effluent, it has also decreased sludge generation, lowering costs associated with sludge disposal. The exceptionally long solids retention time allows for greater flexibility for sludge wasting.

[Click here to read more about Pinnacle Foods' wastewater treatment system expansion.](#)

# Ken's Foods Reduces Operation and Maintenance Costs by 50%



# Ken's Foods

Location: Massachusetts, USA | Solution: ADI® AnMBR

Ken's Foods' wastewater treatment system required an upgrade to treat more flow and load. Proven performance and cost-effectiveness led the food processor to integrate ADI Systems' AnMBR technology into its existing anaerobic treatment system.

The ADI® AnMBR system has increased treatment capacity at Ken's Foods' plant by 60% and the high-quality effluent meets all discharge limits. The solution has also reduced SBR power and aeration requirements by 85%, and lowered operation and maintenance costs by 50%. Biogas from the system is used to scour membranes, heat the wastewater treatment system, and provide building heat, further lowering costs.

Learn more about how the ADI® AnMBR has improved Ken's Foods' plant operations.





# Helping AB Mauri Rise Above Its Wastewater Challenge

# AB Mauri

Location: Veracruz, Mexico | Solution: ADI® BVF Reactor & ADI® SBR

AB Mauri, a large manufacturer of baker's yeast, turned to Evoqua's ADI Systems to rise above a wastewater challenge at its new manufacturing plant. The innovative ADI-BVF® reactor treats the bulk of the organic load, converting the majority of this load into biogas. Wastewater then flows to the ADI® SBR to remove more organics and nutrients.

AB Mauri can now remain environmentally compliant by reducing the organic load from its wastewater, while at the same time reducing its carbon footprint by utilizing the resulting biogas.

Learn more about AB Mauri's anaerobic and aerobic wastewater treatment system.



**The Kellogg Company  
Upgrades Its Wastewater  
Treatment Facility**

# The Kellogg Company

Location: Kentucky, USA | Solution: ADI® AnMBR & ADI® MBR

To accommodate production increases, The Kellogg Company Pikeville Plant selected ADI Systems to upgrade its wastewater treatment system. The ADI® AnMBR process provides very effective anaerobic digestion of the plant's food processing wastewater, and the MBR system further polishes the AnMBR effluent.

The upgraded system has demonstrated an overall COD removal of greater than 99.5%. Other parameters all meet strict discharge limits, allowing the final effluent to be discharged directly into a local creek. The system has provided the company with savings on operating and maintenance costs and allowed for a 25% increase in design flow and 44% increase in design organic load.

Learn more about how this Kellogg plant is treating its food processing wastewater.

# Helping Furmano's Create Energy from Food Waste



# Furmano Foods

Location: Pennsylvania, USA | Solution: ADI® BVF Reactor

Furmano Foods, a beans, tomatoes, and vegetables producer, required an upgrade and expansion of its wastewater treatment system to accommodate production increases.

Evoqua's ADI Systems designed and built an anaerobic pretreatment system for digestion of organic wastes at Furmano's production facility.

The ADI-BVF® reactor reliably treats the plant's food processing wastewater. It accommodates fluctuations in load, yet maintains consistent performance. The treatment system also helps maximize biogas, which is used as a renewable energy source to heat the reactor, helping Furmano's save money on heating costs.

[Read more about this innovative waste-to-energy project.](#)

# Rethink Your Wastewater Strategy

Industrial processors that have made the shift to treating wastewater as a resource rather than treating it like waste are minimizing costs and realizing the first-hand benefits of rethinking their perspective on wastewater.

Evoqua's ADI Systems' sustainable technologies are helping industrial processors worldwide recover naturally-occurring on-site resources to become more environmentally responsible. Our money-saving, planet-saving technologies can assist industrial processors in water reuse, waste reduction, and energy generating initiatives.

**We can offer a customized solution to meet your plant's unique needs—  
today and tomorrow.**



# ADI<sup>®</sup> 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.

[www.evoqua.com](http://www.evoqua.com)