

Challenge

AB Houston Brewery faced the pressing need to meet its 2025 water stewardship goals while optimizing operations. The brewery generated significant wastewater, with biological oxygen demand (BOD) levels averaging 300 mg/L and peaking at 500 mg/L. Given the absence of a free BOD threshold, the brewery incurred surcharges for all wastewater treatment. Additionally, the brewery sought a sustainable solution but preferred to avoid the complexities and capital expenditure involved in managing its own wastewater treatement.

Solution

Cambrian provided a Water Reuse System installed downstream of the existing anaerobic pre-treatment system. Through the WEPA (Water Energy Purchase Agreement), Cambrian offered the system with zero capital investment. This solution utilized Cambrian's BlueCycle MBR (Membrane Bioreactor) and RO/UV systems to deliver EPA-quality water for non-brewing applications within the facility. The tertiary treatment seamlessly integrated with the brewery's system, allowing AB Houston to reduce wastewater volumes and repurpose water sustainably.

Results

Water Recycled/Cleaned 50% of the brewery's one million gallons per day of wastewater

Daily Water Delivery Up to 400,000 gallons of EPAquality reuse water for nonbrewing operations.

Weekly Treatment 2MM+ gallons of wastewater treated to reuse standards

Cost Savings

20% reduction in wastewater and clean water expenses

Lower Operational Risk No need for the brewery to manage their wastewater treatment, reducing complexity and costs.



