

Napa Bottling Center Napa, CA

CLIENT

Constellation Brands

SERVICES PROVIDED

Mechanical Engineering

Civil Engineering

Water Resources



Napa Bottling Center Process Wastewater Treatment System Improvements

Constellation Brands occupies a large existing bottling center in Napa, CA. The prior occupant, Treasury Wine Estates, had purchased and installed a large process wastewater treatment system to reduce BOD/TSS in their winery operation process waste, before discharging to Napa Sanitation District. The system was designed and built by Lyve Systems using extended aeration and clarifier processes to treat the waste. Due to the variability of pH and strength of the bottling center's process waste stream, the treatment system had constant problems and was not able to consistently treat the waste. In 2016 the system was idled and process wastewater was trucked for disposal to East Bay Municipal at a rough cost of \$1mil annually since that time.

Wallace Group partnered with American Winesecrets and Suez Water to retrofit the existing system into a membrane bioreactor. Using operations reports from past years, Wallace Group designed solutions for the prior issues including enhanced influent equalization, upgraded pH neutralization, the addition of UF membranes to retrofit the clarifiers into membrane tanks, and a new control narrative to operate the system as an MBR.

Wallace Group provided updated P&ID drawings and 3D mechanical drawings for the upgrades. American Winesecrets partnered with Suez Water to provide the components and installation labor necessary. Lyve Systems, the original builder, was contracted to provide upgraded controls to their existing PLC system, based on a control narrative provided by Wallace Group. The system was commissioned smoothly and has been providing consistent treatment since June 2019.

