



CASE STUDY:

THE WINE GROUP - CONCANNON BOTTLING FACILITY

24,000 GPD MEMPAC™-I
Livermore, CA



DESIGN PARAMETERS

MODEL SUPPLIED: **MEMPAC-I**

INFLUENT PARAMETERS

AVERAGE DAILY FLOW	10,000 GPD
BIOCHEMICAL OXYGEN DEMAND	2500 MG/L
TOTAL SUSPENDED SOLIDS	600 MG/L
INFLUENT TYPE	DOMESTIC WASTEWATER

EFFLUENT QUALITY

BIOCHEMICAL OXYGEN DEMAND	< 10 MG/L
TOTAL SUSPENDED SOLIDS	< 10 MG/L

PROJECT TEAM

DIRECTOR OF ENGINEERING

THE WINE GROUP
Kevin Baskin
925.583.1530
kevinb@thewinegroup.com

ENGINEER

WALLACE GROUP
Shannon Jessica
805.544.4011
www.wallacegroup.us

INSTALLATION CONTRACTOR

FLUID RESOURCE MANAGEMENT
Robin Ransford
805.597.7100
www.frm-ops.com

PROJECT DETAILS



OVERVIEW

Cloacina provided a 24,000 Gallon Per Day (GPD) MEMPAC-I and all appurtenant equipment for the Concannon bottling facility located in Livermore, California

After design and in-house fabrication, the package plant was installed in less than 30 days

Cloacina and Fluid Resource Management provided complete design/build services and assisted the Client with city and county permitting

The MEMPAC-I reclaims 100% of the treated effluent which Concannon uses for vineyard irrigation

There is a city sewer connection but it has never been utilized



For project videos, additional photos and more information, visit cloacina.com/concannon



CLOACINA SUPPLIED THE FOLLOWING FOR THIS PROJECT:

LIFT STATION: *Integrated Cloacina controls package with third party vendors of the lift station, sludge dewatering press and UV disinfection equipment*

EQUALIZATION: *Cloacina provided a 23,000 gallon 304 stainless steel equalization tank with a stainless steel equipment skid that included aeration and transfer equipment controlled by the Cloacina system*

PRIMARY TREATMENT: *Roughing filter utilizing fixed media with distribution header and automated feed valve to the anoxic/aeration tank. This system also included a fixed film reactor freshening and aeration system.*

SECONDARY TREATMENT: *Fine bubble aeration diffuser, aeration blower, Dissolved Oxygen sensor for DO control of aeration blower and RAS pump*

BIOLOGICAL NUTRIENT REMOVAL: *Cloacina provided an integral anoxic tank and mixing equipment with ORP monitoring for BNR*

MEMBRANE CLARIFICATION: *Submerged flat sheet membranes, level transducer, SCFM meter, permeate/backpulse pump, permeate flow meter, on-line MLSS for automated wasting and automated CIP system*

IRRIGATION SUPPLY: *Cloacina integrated a pressure pump system to supply treated effluent for irrigation and sanitation purposes, further reducing the demand on potable water for the wastewater equipment*

CONTROLS: *Stainless steel MCC panel(s), touch screen HMI and remote monitoring*

SLUDGE DEWATERING: *Included a 10,000 gallon, 304 stainless steel tank with 8 GPM sludge Volute Dewatering Press and polymer make-up system*