

# **CASE STUDY:**

# THE WINE GROUP - CONCANNON BOTTLING FACILITY

24,000 GPD MEMPAC<sup>™</sup>-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

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### **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



## **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

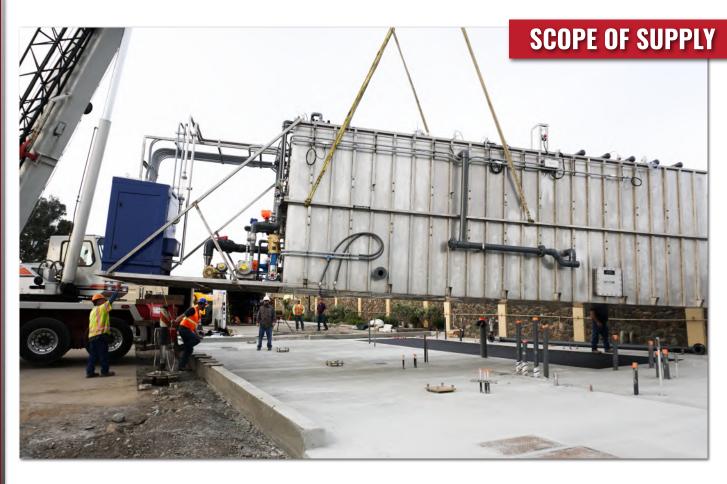
Cloacina and Fluid Resource Management provided complete design/build services and assisted the Client with city and county permitting

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