

### **CASE STUDY:**

## **MUNZ-MENDENHALL DETENTION FACILITY**

25,000 GPD MEMPAC™-M25 Lake Hughes, CA



# DESIGN PARAMETERS

**MODEL SUPPLIED: MEMPAC-M25** 

#### **INFLUENT PARAMETERS**

AVERAGE DAILY FLOW 25,000 GPD

INFLUENT BOD 400

INFLUENT TSS 400

INFLUENT TYPE DETENTION FACILITY

#### **EFFLUENT QUALITY**

 BOD
 < 10 MG/L</th>

 TSS
 < 10 MG/L</th>

## **PROJECT TEAM**

#### FLUID RESOURCE MANAGEMENT

Robin Ransford 805.597.7100

#### LA COUNTY INTERNAL SERVICES DEPARTMENT

Joel Sears Jsears@isd.lacounty.gov

IRI

ibiwater.com

## **OVERVIEW**

### **PROJECT DETAILS**

Cloacina was brought into a project that was over budget and infeasible to build from a time standpoint. We were able to get the project into budgetary compliance and expedite the project timeline by more than a year by providing a MEMPAC-M25 which drastically reduced the amount of on-site work and modifications necessary for engineering and construction which would have been difficult to navigate due to the remote location of this project.



For project videos, additional photos and more information, visit cloacina.com/munz-mendenhall



## CLOACINA SUPPLIED THE FOLLOWING FOR THIS PROJECT:

Value engineering for the original project which specified a non-packaged MBR approach allowing for significant project savings. Cloacina pulled in the design and control of several existing treatment processes allowing for a single point of control.

**EQUIPMENT:** 

MEMPAC-M25 package membrane bioreactor with BNR

LIFT STATION:

Converted and upgraded existing equalization basin into a Cloacina equalization transfer system complete with aeration manifolds and controls for existing blowers

**HEADWORKS:** 

Provided and integrated an in-line grinder prior to equalization with a Cloacina 2mm washer compactor screen and platform on the MEMPAC-M25.

**SECONDARY TREATMENT:** 

Standard Cloacina MEMPAC-M25 MLE/MBR process with BNR

**CLARIFICATION:** 

Duplex UF membrane cassettes complete with automated CIP systems for each cassette

**CONTROLS:** 

Cloacina standard controls system with graphical representation of all equipment, charting, trending and alarming and a maintenance tracking module

**SLUDGE HANDLING:** 

Cloacina MEMPAC-M25 was provided with our automated wasting module. An existing calamity pond was also converted into a sludge drying bed.