

# CHAMISAL VINEYARDS San Luis Obispo, CA



## CLIENT

Chamisal Vineyards

## OWNER

Chamisal Vineyards

## SERVICES PROVIDED

Water Resources

## SIZE

100,000 Cases Per Year

Wallace Group completed design and construction of an improved winery wastewater reclamation system for a 100,000 case-per-year production facility. The system is designed to meet state-mandated discharge requirements for land disposal, as well as minimize visual, noise, and odor impacts to maintain a desirable setting for the winery's tasting room and surrounding neighbors.

In 2005, Wallace Group was asked to assist with design and construction of a process wastewater treatment system for Chamisal's expanding production facility. The design of the process wastewater treatment included a septic tank for primary treatment, followed by a pH adjusting lift station and a constructed wetland for effluent polishing. The original treatment system was designed for 3,000 gallons of process wastewater per day. In 2012, the winery's production facility would again need to expand to keep up with the demand for their excellent wines. In order to increase production, they would also need to expand their process wastewater treatment system. Once again, the winery asked Wallace Group for assistance and we helped the winery design a treatment system that would utilize the existing storage pond by adding subsurface aeration through fine-bubble diffusion, and converting the pond from storage to secondary treatment. A new blower building was added to house the 20 horsepower blower and electrical controls. Pond grading and improvements were installed by a local construction company DKal Construction, with assistance from equipment supplier, EP Aeration, for installation of the treatment equipment and aeration system.

The new wastewater system uses ADS, Inc. fine-bubble diffusion which has been shown to operate at 25% below the industry standard for electrical requirements. In addition, the system is now capable of treating up to 12,500 gallons of process wastewater per day. Typical winery process water strength includes Biological Oxygen Demand (BOD) levels of 5,000 mg/L and Total Suspended Solids (TSS) of 600 mg/L. The system is designed to reduce these levels to 300 mg/L for both BOD and TSS. Treated process water is then re-used on site, adding to the winery's sustainable best management practices.

The project was completed just in time for the 2012 harvest and is currently operating beautifully.



Chamisal Winery was the first vineyard planted in the Edna Valley appellation in 1973 by the Gross family, who named the estate for the fragrant Chamise, a native white-flowering shrub that thrived on the property.

