CASE STUDY

CAUSTIC RECOVERY

Yalumba – Oxford Landing
Barossa Valley, SA

The use of caustic at Oxford Landing Winery has been reduced by 55%.

This site, owned by Yalumba, uses a stored solution of 2% active OH as titratable hydroxide in stirred tanks. The whole winery (except for the receival area, which has its own system) is serviced by the recycled caustic system, using intermediate bulk container (IBC) containers (see photo over page).

The tank wash process in use at the site is:
- Pre-rinse with recycled water to the wastewater drains.
- Caustic wash using caustic from the recycled caustic system (can be heated from winery hard lined hot water system).
- Post-rinse is captured for re-use in pre-rinsing.

The caustic recovery system at Oxford Landing Winery also operates a mobile tank cleaning unit (TCU) (see photo over page). This consists of a pump and heat exchanger with four onboard tanks for caustic, citric and two water tanks for pre- and post- caustic rinse. The operation of the TCU is:
- Pre-rinse tank using water from the TCU and collect the water.
- Change to the caustic, recirculate and collect (can be heated).
- Rinse remaining caustic film with rinse water from the TCU and send to drain.
- Recirculate the citric neutralising solution.
- Use clean mains water for the final rinse and collect in the TCU for reuse in the next rinse.

Caustic solution storage tanks at Yalumba's Oxford Landing Winery.

March 2011

Reference

Ide, J. (2007) *Target 1:1 Wine to Water Ratio*. Towards Best Practice Through Innovation in Winery Processing, Australian Society of Viticulture and Oenology Seminar Proceedings.

Acknowledgement

Prepared by DO Consulting for Peter R Day Resource Strategies
Winery Wastewater Management & Recycling – Communications Project