

Case Study

Saving Water: Make it Your Business

O-I Adelaide - Water saving initiatives

O-I Adelaide, a glass manufacturer located in West Croydon, has completed a number of projects to increase water efficiency at the site.

O-I's Adelaide plant has a very strong water minimisation focus driven by its water efficiency committee, which holds regular meetings to review data, plan new water saving initiatives, evaluate targets, report to staff and facilitate work groups.

The site's water consumption has reduced by 60L/tonne, from a total of 339L/tonne in 2006-07 down to 276L/tonne in 2007-08. Overall O-I Adelaide has saved approximately 25,000kL annually.

O-I Adelaide's management has demonstrated commitment towards water efficiency. Water consumption is closely monitored and kL/tonne of product is recorded. Internal sub meters are fitted throughout the site, with an electronic reading system and a high use alarm on the wastewater discharge meter.

Production meetings are held every morning and daily graphs of the last 24 hours water use are presented. The water consumption trends are discussed and if they are above the benchmark of 240kL /day, the problem is found and rectified. A yearly planning conference is held to set performance targets for the business, water use is one of the metrics set. Tasks and actions to achieve the business targets are set and reviewed on a monthly basis.

The following water minimisation and reuse projects have been implemented;

- Cooling tower and engine room reverse osmosis bleeds are being captured to replace drinking water used for batch wetting and in the urinal. This project was implemented in March 2008 and at least 4,500kL should be saved.
- Water lost from the hot glass quenching (cullet) system is topped up with a combination of captured process water (cooling tower bleed) and drinking water. Storage capacity of process

water was not sufficient and a project was implemented to better manage hot glass quenching water through the use of additional storage capacity. Once through drinking water was also used on the cullet chute when there was a job change. This has now been replaced with cullet water by changing the distribution to provide a separate line from the cullet recirculation pumps. In total approximately 16,700kL has been saved in this area.

- The cooling towers have been improved by changing the chemical dosing system and installing meters - expected to save about 1,000kL annually.
- The operating temperature of the compressors has also been increased, which reduces the load on the cooling towers. Three cooling towers were found to be running unnecessarily, and have now been turned off.
- Drinking water was being used for dust suppression on the cullet stockpiles. This was turned off in January 2007 with no negative impacts. This has saved about 2,000kL annually.
- WELS rated 6 star urinals have been installed and process water is used to flush the factory urinal. There are also push button hand wash taps within the amenities, which flow at less than 6 litres per minute (L/min) and low flow showers.
- Trigger nozzles have been placed on all hoses.

Congratulations to O-I Adelaide for their water saving efforts. The Business Water Saver Program will continue to work with O-I Adelaide to implement water saving opportunities into the future.

Further information

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