

Amcor achieves success in factory water saving initiatives

Water Corporation through its Key Customer Relationship Management program (KCRM) has developed a range of partnering initiatives with key customers aimed at improving their water management process.

To date 138 customers have participated in the diagnostic sessions and the ongoing support programs.

Amcor Beverage Cans at Canning Vale is one of the selected customers in the KCRM program and a success story.

Amcor Beverage Cans is the Australasian market leader in metal packaging for beverages, offering a diverse range of packaging solutions for beer and soft drinks, as well as the ready to drink alcohol, energy drinks, wine, dairy, cordial, juice, water and functional drink markets.

The company's Canning Vale plant, built 22 years ago, is the most recently constructed beverage can factory within the Amcor group. It provides a large portion of metal packaging for Western Australia and runs smoothly and efficiently for its age.

Engineering Manager Greg Stevenson says the plant uses large amounts of scheme water throughout its operation for washing cans, treating water for industrial waste discharge and the cooling towers.

Greg's challenge to reduce water consumption in the interests of efficiency, cost savings and climate change began three years ago when he initiated a site water balance and water audit, aimed to reduce site water consumption.

Sub water meters were installed throughout the factory to monitor existing water usage. It was also intended to monitor future water use trends and detect pipe leakages.

"The sub water meters enabled us to develop a fairly accurate water usage map and a program where,

once a month, I could record the data and place that information on to a spreadsheet," Greg said.

"One of the biggest problems we have with water management is water leakage from the countless water pipes that flow throughout the factory, and because we are located on a sandy plain in Perth, underground pipes can leak and often we will not know about it until some damage occurs."

Now sub water meters in the area most affected by the leak register a big spike on its usage graph, allowing the engineer to hone in on the problem.

Greg says water saving is largely driven by top management in Amcor and the policy filters downwards into employees work and personal objectives. Educating staff on the value of water saving, introducing microbiological cubes in all site urinals that eliminate the need for flushing, and other such initiatives have also added to Amcor's big conservation picture. The successful installation of the sub water metres and a water audit came up with some surprising results.

Greg was aware that the bulk of the water was used for can washing. However, there was another 30% of water to be accounted for and it revealed that 15% of water was actually being consumed to treat water for industrial waste discharge and 10% evaporated through the cooling towers.

"We looked at reusing our waste water in the cooling towers, but residual salts and sulphates remaining in the water were likely to build up in the pipes over time and eventually cause equipment failure. I could not take that risk because if there are no cooling towers, there is no production," he said.

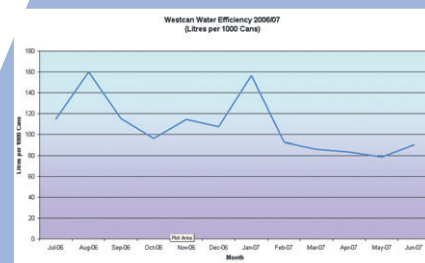
"The waste water plant however, provided some easier options, and for an investment of less than \$5000, we have reduced that machine's consumption to 5% of the total."

As Amcor's can production is expanding Greg measures his water reduction goal in terms of litres used per 1000 cans. On this basis, he has managed to reduce plant water consumption by 10% consistently over the last 12 months.

Future initiatives

Total water use now is 90 litres per 1000 cans and Greg aims to reduce that even further to 80 litres per 1000 cans in the near future.

Water Corporation Key Customer Relationship Manager Lee Pearson said Amcor Beverage Cans ongoing commitment to monitoring their water usage and looking for further water saving opportunities is a great example of how businesses are doing their part to help conserve WA's precious drinking water supplies..



Water efficiency : The spikes demonstrate the importance of detecting leaks



Washer Discharge : 70% of water must clean the cans after formation



Cooling towers : A surprising volume of water is evaporated



For more information on being Waterwise in your business, please visit www.watercorporation.com.au or contact Lee Pearson on (08) 9420 2649