

Case Study Orchard House Foods modify operations and save water



“ When we joined the FHC we knew we could improve our water efficiency, but the one-to-one technical support obtained from the on-site visit helped us focus on what to really look at. What surprised us is the amount of water efficiency improvements we could make by simple operational changes and that significant capital spend is not always necessary. So far, we have reduced our water consumption by around 7% - not bad by just changing the way we operate a few processes! ”

Jon Walker, Environment, Health & Safety Manager, Orchard House Foods Ltd



Orchard House Foods was the first business in the UK to commercialise freshly squeezed orange juice. They are the UK's market leader¹ in ready-to-eat fresh fruit products, fresh fruit patisserie and drinks for leading UK retailers. Orchard House Foods employs around 900 people in five purpose-built factories all located at Corby, Northamptonshire. They became a signatory of the Federation House Commitment (FHC) in late 2011. Soon after signing up to the FHC they received a free technical support on-site visit.

During this visit a water balance of the site was completed together with a quick walk-over review of site operations to identify water-saving opportunities.

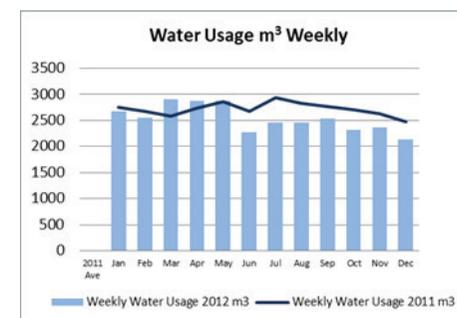
Since the initial site visit several actions have been implemented, including:

- installing water meters to enable water consumption to be monitored and tracked;
- benchmarking water use (expressed as m³ water per tonne of product) and setting targets;

- the alteration of operational practices to reduce water consumption:
 - only filling and using the fruit washing water baths as required; this action alone has saved 10 –15m³ per day;
 - reducing the number of flushes of fresh water used after cleaning; this is down from ten flushes to only the number required;
 - using hot water hoses for cleaning in some locations rather than cold; this uses a lot less water but slightly more energy;
 - pasteuriser pumps have been overhauled so aborted runs, which require washdown and start-up, are now rare.

Although the majority of these actions were only implemented in May/June 2012 there was a resultant drop in water consumption for the year of around 7% compared to 2011.

This can be seen from the water usage graph which is now routinely plotted and publicised for all staff to see.



Financial savings associated with this reduction in water use are expected to be over £9,000 per year.

Other water savings opportunities

have been identified (e.g. optimisation of CIP cycles and boiler condensate recovery improvements) and have been included in the company's continuous improvement plan. It has been estimated that these efficiency measures could reduce water use by a further 5 –10%.

¹ <http://www.ohf.co.uk/about.html> We remain the UK's market leader in ready-to-eat fresh fruit products, fresh fruit patisserie and drinks for leading UK retailers. Our commitment to innovation and NPD is renowned, as is our investment in our people.

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