Entec

Creating the environment for business

Project CLEVER - Water and Effluent Minimisation for SMEs

Northumbrian Water and Environment Agency

Project CLEVER (Coastal Liquid Effluent VolumE Reduction) was a collaborative project between Northumbrian Water, the Environment Agency and Entec. It was partially funded by the Government Office for the North East (GONE) through the European Regional Development Fund (ERDF). The aim was to work with 10 small to medium sized enterprises (SMEs) who were incurring additional trade effluent charges as a result of the Urban Waste Water Treatment Directive.

Entec provided waste minimisation expertise to the 10 SMEs who included food processors, abattoirs, soft drinks manufacturers and a specialist blender of detergent products. A structured approach was adopted for each site that involved the:

- preparation of a water balance;
- prioritisation of areas for closer study;
- development of minimisation opportunities;
- cost-benefit assessments; and
- preparation of case studies for dissemination.

The details of Entec's work varied from site to site but some common themes did emerge. There were numerous examples where we demonstrated that water use could be dramatically reduced by the installation of simple flow controls (at no or low cost). Ensuring that water is only supplied to machinery when it is in operation is very effective in optimising water use, again at no or low cost. We also demonstrated that there were substantial opportunities to minimise water use in cleaning operations in food and drink companies, without compromising hygiene standards. Historically, the need for a clean production environment and the relatively low costs of water supply and effluent discharge have led to some very inefficient practices.

At the end the project, case studies were prepared to publicise the achievements of the participating companies and spread the information on good practice to other water users. No cost and low cost savings worth £150,000 per annum were identified during the project. This was equivalent to a reduction in total water and effluent costs of almost 40% across the 10 sites.

Demonstrating how a good practice approach can result in real cost savings