

# Water recovery plant reduces wastewater by 80% and eliminates the need for expensive tankering



**Recent expansion at their Herefordshire manufacturing base, meant that Bevisol were due to exceed their wastewater discharge allowance. Using innovative water recapture methods, Envirogen were able to reduce wastewater discharge by 80% making huge cost savings and meeting environmental targets.**

‘Bevisol approached us with a very clear problem,’ states Bill Denyer, Director of Service Operations & Beverage Systems at Envirogen. ‘As a successful non-brand owning manufacturer of alcoholic and non-alcoholic beverages, they work with many different products and as such have a varied wastewater stream. Strong business growth had led to a recent expansion of their manufacturing centre and with this came increased waste output. Bevisol were keen to reduce their environmental impact and, with the new discharge rates close to the discharge permit consent, it made sense to address this issue now.’

Denyer goes on to say: ‘Already, Bevisol were having to resort to tankering to remove the excess wastewater and this was starting to become an expensive activity. An ion exchange system was generating 40m<sup>3</sup> of water per regeneration cycle, so this was the key focus for the water recycling plans.’

### **Using engineering know-how to design the perfect containerised solution**

‘Thorough effluent testing was key to designing the best solution. We quickly established that, with the correct pre-treatment and osmotic pressure it would be possible to recover significant amounts of water from this process.’

‘Bevisol needed a system that would integrate fully with their current plant and would require no downtime for installation. As space was limited inside the factory, we proposed a containerised solution. The system is completely relocatable, ensuring flexibility with any future expansion plans that our client might have.’



## Global Locations

### Europe

United Kingdom:

- Ledbury  
(European Headquarters)
- Derby  
(European Manufacturing & Service)

Netherlands, Amsterdam

(European Distribution Centre)

Italy, Milan

### North America

USA:

- Kingwood, Texas  
(USA Headquarters)
- Ewin, New Jersey
- Memphis, Tennessee
- Rancho Cucamonga, California

### Middle East

Kingdom of Bahrain

United Arab Emirates, Dubai

### South East Asia

Malaysia, Sarawak

### The new solution included:

- Water capture from ion exchange output to a holding vessel

- Automatic pH assessment and neutralisation dosing, combined with recirculation for even distribution
- Ultrafiltration membranes for effective removal of suspended solids and colloidal matter

*“The thorough analysis undertaken by Envirogen at the early stages, meant a robust workable solution was put in place. From the word go our costs were reduced, environmental impact lessened, and efficiency and capability within the plant increased”*

Chris Newall, Managing Director, Bevisol

### Key outcomes:

- 80% of wastewater now recovered and fed back through to processing
- No tankering required, resulting in carbon and cost savings
- Additional future expansion work now possible within current discharge permit

**Bevisol are a non-brand owning drinks manufacturing company, based in Herefordshire, UK. Their products include: cider, perry, made wines and alcohol bases for ready to drink products.**

**For more information about Envirogen water solutions and to find out how we can help your business grow, please contact us:**

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