

WATERWIDE

THE INDUSTRIAL WATER TREATMENT SPECIALIST

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Environmental Water Monitoring

As pollution legislation becomes tighter and tighter, so Companies are forced to look seriously at the issues concerning waste and waste disposal on their sites. No longer can 'heads be buried in the sand' hoping that the problems associated with waste go away.

Water Companies are getting tougher and have Government (and public) backing to put pressure on the polluters to clean up their act.

One of the more recent Standards to come to the market place is the Environmental Management standard BS EN ISO 14001

HOME MARKET

The home market continues to grow as more and more clients become aware of the dedicated professional service offered by WATERWIDE.

Most prolifically and since January of this year, our Midlands activity has increased significantly with the efforts of our well known and respected Water Treatment Specialist, Mr Mark Sadowski.

Companies conforming to this Standard have to show that they are monitoring and controlling waste on their sites. This also covers discharge waters from their sites.

WATERWIDE are currently involved with monitoring and analysing both process, effluent and run off waters from a number of sites to cover this aspect of the Standard.

Only by being aware of the quality of the water leaving the site, can the company comply with the British Standard 14001.

For more info contact your local WATERWIDE Service Engineer.

EXPORT INFO

Eighteen months ago, WATERWIDE broke into the Scandinavian water treatment market through a joint venture with a Norwegian company. Supplying specialist water treatment products and technical backup, the venture is proving a big success with sales continually increasing. Technical support, superior products, problem solving ability and good local knowledge has been the key to success.

WATERWIDE Appointment

Janina Penn

We take this opportunity of introducing WATERWIDE's newest team member, **Janina Penn**.

Janina takes on an office based field support role and comes to us with a strong technical background.



Having worked in a senior position in a contract research laboratory environment for many years, Janina will be looking to work closely with and support our field engineers in providing clients with an alternative head office contact.

Her specialist knowledge in microscopy will also strengthen our analytical problem solving in this area .

WATERWIDE is renowned in the market place for its technical expertise and Janina's appointment demonstrates our continued pursuit of providing the best and most technically competent water treatment service available.

Microbiological Monitoring

(Now that summer's here!!)

As the ambient temperature rises during the summer months, so microbial activity in water increases.

Clients with water based cooling systems and processes which use water should be aware of this and ensure that monitoring systems which highlight microbial water quality are in place.

WATERWIDE supply a range of microbial testing kits which will allow both general and specific bacteria to be identified and enumerated.

Kits for monitoring fungi and yeast's are also available.

TIME FOR AN OVERHAUL OF THE BOILER DOSING EQUIPMENT

With many heating boilers being shut down for the summer, now is the time to check on the operation of the boiler water dosing equipment. WATERWIDE can supply pumps and spares kits for most units as well as providing associated ancillary equipment such as dosing lines, injectors and tanks.

The Ryznar Index is an American derived calculation used to determine how scale forming or corrosive a particular water is likely to be. It is an alternative to the Langelier Index used in the UK.

Technical Forum

Case History - On Line Cleaning of a Heating System

WATERWIDE was asked to assess, report on and make recommendations on the waterside condition of an old heating system in a five storey building. The radiators had been giving poor heat transfer in most areas, being especially noticeable on the top floors, which in order to get any heat, had to be regularly bled of gas. A make up water and system water sample were taken together with three small sections of pipe which were removed for inspection from the system pipework. These were found to contain a high degree of fouling. New sections of mild steel pipe line were inserted in place of the removed sections and the water samples and pipe samples taken away for investigation.

Analysis of the deposit found inside the pipe sections indicated predominantly hydrated iron oxide with minor amounts of calcium carbonate being present.

The water samples were subjected to both mineral and microbiological analysis.

The system water showed a chloride figure similar to the make up water, but hardness and Total Dissolved Solid levels which were significantly lower.

The investigation concluded that the pipework was suffering from years of corrosion and together with a high aerobic bacteria microbiological test result in the system water sample (Circa 10^4 - 10^5 cfu/ml) the combination of the fouling due to corrosion deposits resulting in reduced flow and hence heat exchange and the gassing caused by excessive bacterial activity, was deemed the cause of the problem.

In recommending a suitable treatment programme, WATERWIDE were aware that in order to re establish heat transfer, the system would need to be cleaned of the iron oxide deposits and the bacterial activity minimised. We were also aware that owing to the age of the system and the degree of corrosion/fouling noted in the pipe specimens, that any clean up programme needed to be a gradual affair. A quick and harsh clean would produce a lot of both heavy and suspended debris which could in turn block the system up completely, (thus preventing any circulation, and hence ultimately resulting in pipework having to be stripped out), and a potential to uncover within a few hours, a system full of holes as the corrosion deposits were removed.

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Tablet Dispensers
Dosing Pots

Site Water Surveys

Risk Assessments for HSG(70)
Water Audits

Monitoring Equipment

Corrosion Test Racks
Sample Coolers

Technical Forum Continued

We therefore opted for a mixed chelant based formulation (DERUSTER 84) which would clean up and remove the iron oxide deposits on line in a controlled manner. In order to remove the solids produced by this gradual cleaning process, a WATERWIDE cyclone separator was installed across the flow and return lines together with two in line coarse filters to protect the recirculation pumps.

Over a period of six weeks, heat gradually returned to all radiators as flow improved. Once sufficient heat transfer was evident, but without having fully removed all deposits (hence minimising the number of leaks), the system water containing the DERUSTER 84 was drained down to foul sewer and the system re-charged with fresh mains water. An inhibitor (C893) was introduced to minimise further corrosion and a long term microbiocide (M836) added to prevent further microbial activity.