PRE - COMMISSION CLEANING OF PIPEWORK SYSTEMS

The pre-commission cleaning of closed loop systems has become more important over recent years; due to the equipment used being more susceptible to blockages at strainers, control valves and small bore pipework.

System contaminants such as millscale, jointing compounds and fabricating debris need to be removed by chemical cleaning and high velocity flushing, which will then allow the on-going water treatment regime to work effectively in preventing corrosion and microbiological fouling.

Existing systems that have accumulated deposits due to a lack of correct water treatment can be cleaned with a similar method. Flushing pipework with water alone is not always sufficient to remove contaminates which adhere to the surfaces of the pipes.

HBE Risk Management follows the recommendations of BSRIA AG 1/2001.1 and BG 29/11, which consist in general of the following steps:

• Inspection of the system and identifying ideal flushing points, if these have not already been allowed for by the designer or mechanical contractor.

• Identifying whether the mechanical contractor is scheduled to carry out the static water flush prior to chemical cleaning.

• Flushing the system with water at high velocity to achieve the flushing velocities recommended by BSRIA or system design.

• Undertake chemical cleaning of the system water to remove corrosion deposits and to mobilise any suspended solids present.

• Bio-wash may be required prior to system cleaning.

• Testing the water for the presence of biological fouling, iron, conductivity pH, copper, aluminium etc. as well as testing the water for TVC, Pseudomonads and Sulfate-reducing bacteria.

• Analysis of samples at UKAS Accredited Laboratories.

• Addition of glycol and a corrosion inhibitor for long term protection.

• Installation of a side stream and hydro-cyclone filtration to remove suspended solids.

• Provide regular monitoring visits to chemically test the water, maintain the correct inhibitor level and to ensure that bacterial levels are within acceptable limits.
HBE Risk Management offers a range of testing and balancing services for air and water systems.

About HBE Risk Management

With over 30 years’ experience as trusted advisors to some of the UK and Ireland’s largest private and public sector organisations, HBE Risk Management, has the knowledge and expertise to ensure that our clients’ buildings not only meet, but exceed all legislative and health & safety requirements.

As an R&D-led organisation, our unrivalled team of health and safety experts, engineers and industry-leading scientists – working from locations right across the UK and Ireland – is constantly innovating and diversifying to ensure that we can respond to our clients’ needs with the latest, state-of-the-art health and safety solutions.

Whether you are responsible for an acute hospital, a manufacturing or industrial facility, an office block, a school, a sheltered housing scheme or other building to which the public have access, our industry-accredited team delivers leading environmental health expertise and a range of specialist services.

For more information call your local HBE Risk Management office, email info@hberm.com or visit www.hberm.com