

Legionnaire's disease and Legionella prevention using temperature monitoring

It is suggested that there is an average of 350 reported cases of Legionnaire's disease every year in the UK.

Legionnaires' disease is not contagious, although it can be fatal by causing a form of pneumonia. It is formed from an infection by Legionella bacteria found in water and soil. High risk systems can include cooling towers, steamers, showers, baths, air conditioning units and much more.

Reducing the risk of Legionnaire's disease and Legionella within water systems can best be achieved using temperature monitoring and control. As Legionella thrives between 20°C - 45°C best practice should be to ensure the following temperatures are maintained at all times:

- Hot water stored above 60°C
- Cold water should be kept below 20°C

There are many temperature monitoring solutions on the market that may seem to adhere to these requirements, but only the Hanwell monitoring system provides a flexible and reliable solution to internal, outdoor and remote water and soil monitoring applications.

Manual monitoring and checking of the conditions that allow Legionella to thrive are time consuming, laborious and open to error.

Here at IMC we have developed several semi and fully automated systems and methods for monitoring, reporting and automatic alarming.

By mixing a combination of wireless monitoring transmitters and handheld thermometers with bar code scanning technology, preventative monitoring becomes a breeze. Hard to access areas can be monitored with wireless sensors that can measure pipe and tank

temperatures as well as flow using non-intrusive ultra-sonic clamps on flow meters.

Easier to access places such as wash rooms and shower rooms can be fitted with inexpensive thermocouples leading out to a junction box identified with a unique bar code. To take a measurement the handheld is plugged in to the junction box and an instant reading is taken due to the thermocouple being permanently mounted. Once the reading is taken the barcode is scanned and data is stored.

The handheld data is downloaded by Bluetooth to the central monitoring system keeping all records in one place. Alarms are generated from both wireless sensors and handheld readings alike.

For remote offsite locations our iSense units can be used bringing data into the centralised system using the mobile phone network.

Legal Duties

Those responsible for water systems have certain duties to meet under Health and Safety law. The Health and Safety at Work Act 1974 (HSWA), Control of Substances Hazardous to Health Regulations 1999 (COSHH) and Management of Health and Safety at Work Regulations 1999 (MHSWR) all cite the HSE's Approved Code of Practice L8 as the recommended guidelines for the management of risk of exposure to Legionella.

Sources:

<http://www.hse.gov.uk/pubns/iacl27.pdf>



For more information about this application and solution, please contact us on +44 (0) 1462 688 070 or at sales@the-imcgroup.com