



**WCS** Group

The H<sub>2</sub>O experts

MARLOWE Critical Services

-  WATER TREATMENT
-  WASTEWATER
-  WATER HYGIENE
-  AIR HYGIENE
-  WATER ENGINEERING
-  TRAINING SERVICES



**Stay healthy**

Effective **water treatment**  
**and hygiene** for hospitals  
and care homes

## Healthy. Hygienic. Heartfelt.

Properly treated and managed water and air can have a significant impact on health, safety and comfort of patients, visitors and staff within healthcare buildings. Safe, clean water, fresh indoor air and reliable ambient temperatures all contribute to comfort and reputation. WCS Group's healthcare team have decades of experience with NHS Trusts and Care Homes – we understand your concerns with compliance, cleanliness, operating expenditure, efficiencies and environmental footprint.

## What do we do?

We supply Legionella and Pseudomonas Aeruginosa sampling, Risk Assessments, Site Surveys, Water Treatment, Water and Air Hygiene, remedial engineering and Legionella training to deliver "highest standard" outcomes and lower operating costs which;

- Enable better disinfection control
- Help identify and control bacteria growth
- Ensure sustainable solutions with optimised ROI
- Enable optimal water quality / air hygiene
- Reduce deferred maintenance
- Increase operational efficiency
- Promote green initiatives / reduce waste
- Extend the service life of assets (cooling towers, boilers etc)

## How we deliver

Our Water Engineers, Hygienists, Water Safety Group advisors, Risk Assessors and Engineers assess, service, report and help maintain healthcare assets. We guard against corrosion, bacteria and scale. We manage Legionella risk. We supply solutions configured to individual sites and CQC, BSRIA and HSG 274 standards for;

- ClO<sub>2</sub> and alternative disinfection control
- TMV servicing and shut-off checks
- HTHW, MTHW, LTHW, chiller water analysis, monitoring / treatment
- Cooling towers and steam boilers
- Chemical cycle, dosing, supply and monitoring
- Sampling via UKAS accredited laboratories for Legionella, Pseudomonas species, Pseudomonas Aeruginosa, TVC, E-coli, Coliforms, Endotoxins
- Treatment – Legionella control, disinfection and cleaning
- Replacing hollow for solid struts on cold water storage tanks
- Legionella training (refresher is mandatory)

## Why WCS Group?

- Patient safety and compliance assurance
- We service 2,000+ NHS and Care Home sites
- Solutions are proven but unique to your site
- We can improve asset management and life cycle enabling new performance levels
- Sustainable solutions to ISO 9001, ISO 14001
- Huge savings from Remote Temperature Monitoring
- Extensive Water Safety Group shared knowledge
- Local and NHS-approved – see case studies

## National coverage, local service

We maintain the largest team of water treatment and Legionella control specialists in the UK and share specialist healthcare and NHS knowledge and best practice, nationwide.

## Healthcare experience includes:

We are now working for over 70 NHS Trusts



## At a glance

### Training

We have a series of courses including "Legionella Awareness For Everyone" and ProQual L2 Control of Waterborne Infections in Healthcare.

- Aimed at hospital and healthcare site operators, technicians, staff responsible for infection control, estate management and maintenance and Duty Holders with responsibility for water and Legionella
- Provides essential microbiology knowledge and the health effects of water-borne bacteria including Legionella Pneumophila and Pseudomonas Aeruginosa
- How to control and manage bacteria in water systems
- Compliance with ACoP L8 and HTM04-01
- See "Training" at [www.wcs-group.co.uk](http://www.wcs-group.co.uk) for course details, dates and locations

### Better infection and secondary infection control

**Ultralox 40** is a regulatory compliant and approved Active Chlorine alternative to Chlorine Dioxide – highly effective against bacteria and water-borne pathogens.

- DWI/DEFRA approved for use in drinking water
- Proven biocide for effective control of biofilm
- Now widely disinfection / secondary disinfection control measure
- Reduces the risk of Legionella and other water-borne pathogens



Ultralox 40



**GENOX** is a low hazard HOCl biocide. DWI approved. From as little as 4 pence/m<sup>3</sup> of treated water, these units are now used widely across NHS sites.



GENOX Model T05



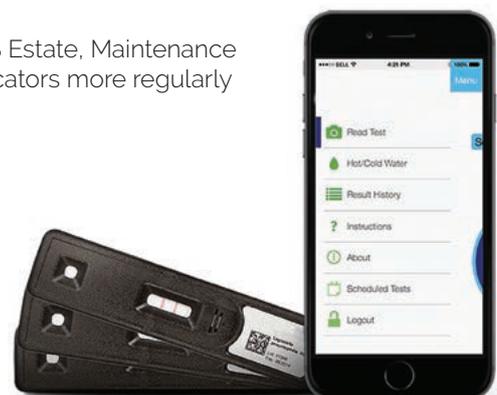
GENOX Model T10



GENOX Model T20

### Legionella self-testing diagnosis for NHS Trusts

Hydrosense in-field 25-minute Legionella test strips and kits will help NHS Estate, Maintenance and Patient Safety Officers establish more regular Legionella all-clear indicators more regularly as part of a wider infection control and UKAS lab test strategy.



Call Alex Winter on 0113 200 5214  
([alex.winter@wcs-group.co.uk](mailto:alex.winter@wcs-group.co.uk)) for more details

### Case study 1 **Setting new NHS water safety standards**



#### **Situation**

This large NHS Hospital Trust were looking for 'highest standards' hygiene risk management, water safety, operating efficiency and Legionella control across their estate – including hydrotherapy pools and high-risk care wards.

#### **Result**

WCS Group have a full-time team on site (Project Manager, Technicians, Water Engineers) and act as Water Safety Group Primary Hygienist Advisor. We design and manage a full water hygiene programme via audits (flushing and scale), temperature monitoring and profiling, extensive sampling of the high-risk patient care areas as highlighted by the Trust's Water Safety Policy, follow up investigations and remediation's of positive results, Plant inspections, TMV servicing, shower descale and disinfections, legionella risk assessments and chemical & filtration care for the 2 x hydrotherapy pools on site. Water quality is improved. Currently we are adding over 100,000 assets on to the Marlowe Customer Portal and eLogBook.

### Case study 2 **Improving visibility of Legionella risk**



#### **Situation**

This residential and care home Group (71+ sites) wanted improved visibility of Legionella and hygiene-related risk and proactive management of water and hygiene assets to improve water quality and maintain outstanding hygiene.

#### **Result**

WCS Group's 100-day plan enables us to conduct Risk Assessments and Legionella Control Reviews across the portfolio and prioritise sites representing the greatest risk. We laid down a fit-for-purpose CQC hygiene programme for the whole Group based on 'best in class' sector benchmarks. Rapid remedial major plumbing works, inspection of water storage tanks, monthly temperature checks and TMV services are used alongside cleaning and disinfection of showers to continually manage hygiene and Legionella risk. We flush, clean and manage critical assets and we test, sample and report on Legionella and Pseudomonas Aeruginosa risk. Water quality, safety and hygiene is managed and controlled in line with pre-agreed KPIs without compromise.

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### Case study 3 **Formalising a Legionella control policy**



#### **Situation**

An NHS Trust providing acute hospital services for one major site and numerous health services locally, required a formalised Legionella Risk and Control Policy. They also wanted on-site engineering expertise to deal with assets showing signs of heightened Legionella risk.

#### **Result**

WCS Group assisted by sharing a 'best practice' Legionella framework to fully conform to CQC, HSG 274 and ACoP L8 and match top benchmarks seen in other NHS environments. We assigned permanent on-site staff to identify sources of bacteria and high-risk assets, isolate them and remove them in order to improve water quality, standards of hygiene and manage risk. We take samples and test for Pseudomonas Aeruginosa, Legionella, TVC, E-coli, Coliforms and Endotoxins. We provide technical and non-technical Legionella training and refresher training (mandatory under ACoP L8). We inspect, flush, clean and disinfect water storage tanks and inspect and manage steam boilers to ensure efficient operation and supply of safe hot and cold water and comfortable ambient indoor temperatures.

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### Case study 4 **Getting a second opinion**



#### **Situation**

A newly arrived H&S Estate Manager wanted to audit and sense-check maintenance and hygiene work undertaken by a large in-house team across 20+ Mental Healthcare sites. They also required independent Risk Assessments and Legionella Risk Reviews.

#### **Result**

WCS Group reviewed all Log Books and audited temperature data recorded by the in-house maintenance staff to provide peace of mind. We provided annual Risk Assessments and Legionella Risk Reviews to corroborate the hygiene work managed in-house. We supported internal resourcing through inspection, cleaning and disinfection of cold water storage tanks, flushes, cleaning and de-scaling of critical assets. We inspect TMVs and de-scale and disinfect all showers in accordance with ACoP L8. We survey acquisition buildings pre-purchase to help with due diligence and collaborate on new-build projects to ensure hygiene operation planning and delivery is surprise-free. We support the in-house maintenance team with major plumbing engineering services that are CQC, HSG 274 and ACoP L8 compliant.

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## Case study 5 **Better care and attention to detail**



### **Situation**

A specialist healthcare provider for people with complex mental health, personality disorder and physical health needs wanted a water hygiene and treatment specialist more in-keeping with its own commitment to care and quality

### **Result**

WCS Group was mandated to conduct Legionella Risk Assessments, monthly sampling and testing for Pseudomonas Aeruginosa, Legionella, TVC, E-coli, Coliforms and Endotoxins. We agreed to share highest benchmark Legionella and hygiene standards already evidenced in Critical Care environments and attainable by the customer.

We manage Closed System heating and cooling operational improvements and all hygiene needs to ensure absolute reliability of safe, clean water, fresh air, comfortable ambient temperatures, strict compliance to HSG 274 and ACoP L8.

## Case study 6 **Getting organised and investing in health**



### **Situation**

A 976+ bed residential care and palliative care home provider wanted to drive operating standards and more closely manage hygiene and Legionella risk. It wanted a water and air hygiene specialist to independently advise on assets, performance, risk and remedial solutions.

### **Result**

WCS Group was appointed several years ago and immediately began a Risk Assessment and Legionella Control Review of 22+ sites. We create fit-for-purpose schematics, photographic asset registers, new Log Books and benchmarked water samples and testing data against realistic improvements. Whilst no Legionella incidents had occurred, the Property Services Manager was concerned water samples on some sites were close to ACoP L8 guidance upper level safe limits. We began investigating sources and asset risk in order to isolate and remove equipment and dead-legs and sources of bacteria growth. We are working closely with the Manager to get individual sites to 'Outstanding' for hygiene-related infrastructure as described by CQC.

## Case study 7 **UV Filter solves TVC issue**



### **Situation**

A hospital identified raised levels of TVC to a care area some distance away from the water mains. They required a solution to reduce TVC levels and mitigate further risk.

### **Result**

We carried out a full clean and disinfection of pipework supplying water to the affected area. We recommended and installed a UV filter and we re-sampled. The unit has been running for 2 years without issue and TVC levels have remained low. Today, we handle Pseudomonas sampling, Closed System analysis, all Risk Assessments, Legionella training and drinking water analysis. We are also now instigating Stenotrophomonas maltophilia sampling in accordance with the hospital's commitment to patient safety.

## Case study 8 **FM requiring expert water outsourcing support**



### **Situation**

This large, international teaching hospital required highest standards water hygiene and water treatment support across its Cancer Centre, specialised adult organ transplantation, acute and elderly medicine unit, A&E and maternity services managed through an FM.

### **Result**

WCS Group has supported this FM and a huge site for over 10 years (including new buildings). We ensure uncompromised patient safety and full Legionella compliance. Supporting the in-house maintenance team, we assist with Water Hygiene services including temperature monitoring, review of Log Books and a rigorous sampling regime for Legionella and Pseudomonas Aeruginosa. We monitor and sample ClO2 levels. We also provide Water Treatment services onsite – Closed System analysis and support for hot and chilled water systems including monitoring and remedial support to fight against scale, corrosion and bacteria.

Case study 9  
**Dialysis Unit with a problem**



**Situation**

A hospital was receiving multiple pseudomonas aeruginosa counts (some were over 10,000) and wasn't getting the answers they required. The incumbent water company was short on answers for an effective solution.

**Result**

WCS Group attended the site and carried out an emergency response review of assets, sample results, Log Book and clinical procedures. We identified inadequate clinical procedures, an improper cleaning regime, poor disposal of dialysis bags as well as non-conforming temperatures regimes on site. We provided step-change procedural advice, Legionella refresher training and a new recommended flushing regime and designated dialysis bag sinks which restored the Unit to full compliance and best practice. Sampling reveals no pseudomonas aeruginosa counts or events in the ward which we continue to manage for water hygiene, treatment and patient safety compliance.

Case study 10  
**2-hour Softener response**



**Situation**

This Mental Health Hospital managed by an FM experienced a broken water softener which couldn't be coaxed back to life. They called WCS Group for a solution in accordance with the patient safety commitment.

**Result**

WCS Group were able to have a designated healthcare engineer on site within 2-hours. He found the plate heater exchange had scaled up resulting in the asset failing. We sourced a replacement part, fetched it and fitted it. We carried out a full service and found only one vessel working. We recommended and completed a full media change and a full rebuild of the softener. The hospital's maintenance team have been briefed on what to look for and are more knowledgeable of scale, corrosion and bacteria build-up in Closed Systems. Today, WCS Group offers this hospital tailored water hygiene and water treatment support in conjunction with their Water Safety Group strategy which we also advise on.

Case study 11  
**FM requires long-term outsourcing partner**



**Situation**

This national FM won an NHS Hospital Trust contract and required a no-nonsense approach to on-going water hygiene and proactive water safety management.

**Result**

WCS Group conducted a full risk assessment for this NHS Trust which carries out planned (elective) treatment and MRI, CT scanning and support services. We created an asset register and a full risk assessment in accordance with the operator's Patient Safety commitment. We provide monthly temperature checks and on-going Legionella and Pseudomonas Aeruginosa sampling, TMV Fail Safe inspections, de-scale and disinfections support. We inspect water tanks and managing full cleaning and, disinfection. In over five years, the hospital have had no significant water hygiene incidents and its reputation for patient safety is fully met.

Case study 12  
**Exacting hygiene programme support**



**Situation**

This District General Hospital supports 350,000 people with over 550 beds and 3,000 staff. They required all-inclusive water hygiene and patient safety support.

**Result**

For many years, we have provided a full water hygiene programme that has kept pace with new buildings and extension work. For the whole site, we monitor temperatures, design and manage rigorous sampling of the high risk patient care areas as per the Trust's Water Safety Policy, follow up investigations and remediation's of positive results. We conduct Plant inspections, TMV servicing, shower descale and disinfections, legionella risk assessments and mandatory Legionella refresher training. We also manage water tank inspections, cleaning and disinfection. The site has an excellent water safety record.

### Case study 13

#### **Legionella Count positive**



#### **Situation**

A large NHS Trust managing a major acute (General) Hospital experienced a positive Legionella Count and required specialist advice – quickly.

#### **Result**

WCS Group conducted a new Risk Assessment which uncovered a forgotten TMV. We replaced the TMV and re-sampled using an accredited UKAS laboratory. The re-sampling confirmed no further problems. Today, we monitor temperature, de-scale showers, inspect, clean and disinfect water storage tanks and provide Legionella training across the site. We are assisting this NHS Trust manage water hygiene in accordance with best practice and the patient safety commitment laid down by the Water Safety Group.

### Case study 14

#### **Requirement for thorough Risk Assessments**



#### **Situation**

This major hospital and specialist cancer group wanted to undertake more robust Risk Assessments which would genuinely benchmark risk by site and asset.

#### **Result**

We conducted our own comprehensive Risk Assessments to create a uniform benchmark of risk by portfolio and help site managers prioritise risk and raise operating and patient safety standards from 'good' to 'outstanding'. Risk Assessments are undertaken every two years. We also audit Log Books, supply water hygiene training and manage regular sampling. Recently a HW Cylinder produced a Legionella positive Count. We disinfected and re-tested the asset. At the operator's insistence, we also installed an Ionisation Unit in a belts and braces response.

## About WCS Group

- Leading water treatment specialist in healthcare
- Working across over 70+ NHS Trust Hospital sites and over 2,000 Care Home sites all over the UK
- Specialist Water Safety Group knowledge and participation
- Dedicated healthcare water technician teams servicing sites in North / Scotland, Central, Midlands, London and South East, South West, Northern Ireland and Republic of Ireland

## A Marlowe Critical Services company

WCS Group is the 'Water Treatment and Hygiene' division of the Marlowe Critical Services Group owned by parent Marlowe plc. The Group provides one access point for specialist 'highest standards' across **'Fire Life Safety & Security', 'Water Treatment & Hygiene', 'Air Quality & Testing', and Health and Safety Consulting**. Four divisions can be accessed singularly or in combination. The Group shares many common customers and collectively employs 2,200+ specialists, servicing 15,000+ customers, carrying out over two million service visits and helping manage over 12 million assets for circa 11% of the UK's 1.8 million non-residential buildings.

**Compliance. Assured.**



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