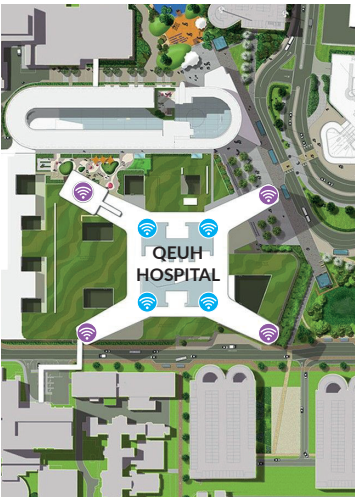


# QUEEN ELIZABETH UNIVERSITY HOSPITAL

NHS Greater Glasgow and Clyde

**The Problem:** Rare pathogenic bacteria causing Hospital Acquired Infections (HAI) had forced ward closures in high-risk clinical areas in a newly built hospital estate, culminating in a high profile critical incident.



## THE OPTIONS

1. Stock tank disinfection and cleaning would resolve the immediate issue, but the Trust needed a long term solution to stop bacteria from recolonising the water system.
2. Install a water treatment system, solving the short and long term issue. Hydrogen Peroxide, Copper Silver Ionization and Chlorine Dioxide were all considered as potential biocidal solutions.

## OUR SOLUTION

### Month 1

- Chlorine Dioxide was chosen for its combination of ease of use, comparatively high oxidation capacity and low oxidation strength (corrosivity), and the ability of Scotmas to respond at speed and continue to support the installation through an ongoing service contract.
- Rapid installation of dosing systems at high-risk points in the hospital estate to counter the immediate emergency.
- Compact, small footprint Bravo WA ClO<sub>2</sub> generators were used. Installation required minimal disruption to mains supplies.
- Elimination of harmful bacteria and management of the immediate emergency situation.

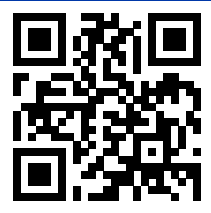
### Month 3

- Microbiological testing throughout the estate confirmed the effectiveness of ClO<sub>2</sub> in combatting the problem.

- Roll out of Bravo WA ClO<sub>2</sub> generators continued to the entire site, backed up with remote monitoring and control via Scotmas Sentinel Guard and Sentinel Link units in areas of greatest clinical risk e.g. SCBU, Renal and High Dependency Wards.
- Scotmas consultancy worked closely with the Water Safety Group and Estates teams, using Scotmas Insite data and constant microbial testing to guide the dosing strategy to overcome the complex engineering challenges in the building.
- Daily and weekly checks and monthly generator servicing by Scotmas Engineers provided further data on system operation and ensured any ongoing issues were rapidly identified and resolved.
- NHS Glasgow and Greater Clyde Health later rolled out the Bravo WA to four more hospitals, representing all their major healthcare facilities.

## THE RESULTS

- Managed and minimised the risk, helping to resolve a very high profile public health incident.
- Estates term confidence that any risks in the water infrastructure were being managed and actioned by a Scotmas team of ClO<sub>2</sub> experts with over 20 years' healthcare application experience.
- Provision of minute by minute data for full control and reporting which contributed to audit data and maintaining best in class Duty of Care.



## SCOTMAS GROUP

Pinnaclehill Industrial Estate, Kelso, TD5 8AU, Scotland  
+44 (0)1573 226901 enquiries@scotmas.com  
www.scotmas.com



## SCOTMAS HEALTHCARE

Chlorine Dioxide Water Treatment Solutions

**Scotmas Group**  
Pinnaclehill Industrial Estate  
Kelso TD5 8AU Scotland

Phone: +44 (0)1573 226901  
E-mail: enquiries@scotmas.com  
Website: www.scotmas.com



## ALPHA WA

- Small scale ClO<sub>2</sub> generator, ideal for sites with variable, intermittent water usage
- Particularly suitable for residential care facilities and surgeries
- Automated alternative to inconsistent, expensive manual dosing
- Very small footprint, can be installed with minimal capital works or disruption to supply



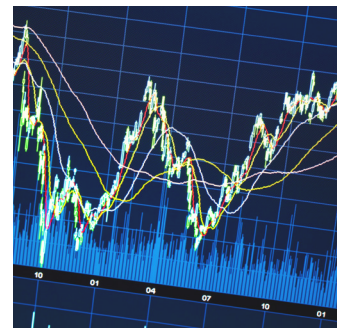
## BRAVO WA

- Simple installation direct to your water line or in tank
- Water jacketed reactor maximises generator safety
- Full remote monitoring via Insite with onboard datalogging and alert reporting
- Capability to integrate with multiple remote sensors on the site up to 1km via LoRA Radio Link



## INSITE

- State of the art web based performance monitoring tool
- Instant reporting of water consumption across each dosing point
- Detailed measurement of key ClO<sub>2</sub> residual, pH and temperature
- Remote monitoring and adjustment of dosing equipment to respond to changing environmental conditions or biosecurity events



## SCOTMAS HEALTHCARE

Alpha WA

Bravo WA

Chlorine Dioxide

Cidox Tablets

Technical Support

InSite

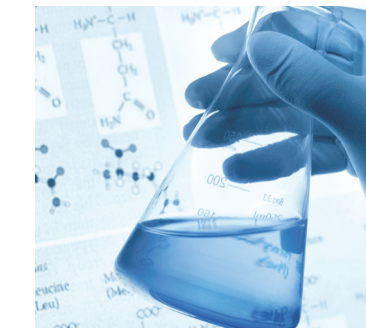
## TECHNICAL SUPPORT

- Nationwide coverage by highly skilled engineers and on site technical support
- Centralised customer service with next day delivery for parts and chemicals
- Professional team of Microbiologists, Chemists, Design Engineers and fully validated water treatment specialists



## CHLORINE DIOXIDE

- The fastest acting and broadest spectrum biocide available
- Measurable residual values to keep water in peak condition
- Kills Viruses, Bacteria and Fungi with proven activity against spores and oocysts such as Giardia and Cryptosporidium
- Low dose rates ensure no chemical taints or odours



## CIDOX TABLETS

- The easiest to use Chlorine Dioxide disinfectant for Disinfection on Demand
- Works in challenging conditions against bacteria, fungi and spores
- No up-front investment in dosing equipment or messy mixing of powders or liquids
- Powerful action targets biocide where it is needed most

