

CASE STUDY

INCREASE IN STERILE SERVICES DEPARTMENT CAPACITY AND CAPABILITY WITH MINIMISED RISK OF INTERRUPTION TO OPERATIONS



Neville Fowler, Technical Manager, Guy's, and St Thomas' Hospital in London explains how a scoping project undertaken by the Trust, identified the need for a backup sterile services department (SSD), to provide cover and security for potential breakdowns within the hospital's current facilities.

Guy's and St Thomas'
NHS Foundation Trust **NHS**

Whilst the current facility at St Thomas' Hospital could meet existing demand, it was decided the additional support would come from a new facility to be built in Guy's Hospital. The current sterile services department at St Thomas' would be refurbished, bringing it up to current legislative standards.

As an existing proven supplier to the Trust, we were selected to design, install and commission the reverse osmosis water purification package.

The ultimate aim was for the sterile services department to be shared between both Guy's and St Thomas' Hospital, providing increased capacity with the potential to supply services to other hospitals within the area.

The hospital, innovative in its development, saw the opportunity to help maximise staff productivity by combining wash areas within the facility. To achieve this, it decided to have three separate workflows (all contaminated areas):

- Main instrument wash
- Endoscopy wash
- Medical Disinfection Unit (MDU)

This design would allow staff to move between the areas quickly, effectively, and safely, meeting demand as required and maximising the resources available.

The construction process at both sites went through a tender process. CFES Ltd were awarded the contract giving them responsibility for building the new facility at Guy's Hospital and the refurbishment at St Thomas'.

The Trust purchased Belimed washer-disinfectors, porous load sterilisers and Getinge Lancer endoscope reprocessors directly from the manufacturers, whilst Envirogen was chosen to supply the new RO water purification system at Guy's and to refurbish and increase output of the current equipment at St Thomas'.



GUY'S HOSPITAL – NEW REVERSE OSMOSIS WATER PURIFICATION SOLUTION

To meet the pure water demand at Guy's, Envirogen supplied a duplex RO system, which automatically operates in duty standby mode ensuring regular and equal usage between the units. This duplex design also provides coverage for any scheduled service. A 1,000 litre treated water storage tank was installed to buffer the water supply to the washer disinfectors and clean steam generators.

An EndoTherm Mini was installed to feed the two supplementary Getinge Lancer Endoscope reprocessors. The EndoTherm Mini was chosen because it is compact, dependable, and cost effective.



NEVILLE FOWLER,
Operational Estates Manager, Horton General Hospital, says:

“Within 2 years it would pay for itself with the savings on chemicals and the reduction in staffing costs due to its automatic self sanitisation.”

The complete development of the new area at Guy's Hospital took eight months finishing on schedule and budget.

ST THOMAS' HOSPITAL – PLANT REFURBISHMENT AND UPGRADE

As the current water purification supplier to this site, Envirogen refurbished an existing hot set RO system within the sterile services department and created a complete duplex design. As with Guy's Hospital, an EndoTherm Mini was installed to feed the Endoscope reprocessors within the theatres department.



NEVILLE FOWLER,
Operational Estates Manager, Horton General Hospital, says:

“What I like about the EndoTherm Mini is that we don't have to touch them. They require minimal attention. We see the TVC results, they are always zero.”

The redevelopment of the St Thomas' site took seven months. Again, within the allocated/planned work schedule, with all suppliers working closely together to ensure delivery dates were achieved.

PURESEP SERVICE PLAN CONTRACT MAXIMISES PRODUCTIVITY

To support the water purification equipment supplied to the Guy's and St Thomas' the Trust chose to take a multi-year PureCare service contract with critical spares pack. This maximises productivity and prevents unplanned down time with any potential risks being identified during routine maintenance.

The sites now process >125,000 trays a year through their Sterile Services Department. The Trust has the largest dental school in the UK with 250 chairs, from which they process 2 million dental instruments a year.

Since opening the new department at Guy's, they also undertake all the Sterile Services Department work for Great Ormond Street Hospital. Additionally, the Trust is able to consider additional external work for other hospitals in the area, helping ensure the continued operation of the site and maximising the benefits and return on investment to the Trust.

KEY OUTCOMES:

- Maximised staff productivity
- High-cost savings for both chemicals and reduction in staffing costs due to automation
- The site is easily able to now process >125,000 trays a year through their SSD
- A planned schedule with all delivery dates achieved
- A PureCare service contract to maximise productivity and prevent unplanned downtime



ENVIROGEN

ABOUT THE CLIENT

Guy's and St Thomas' NHS Foundation Trust includes 5 of the UK's best known hospitals – Guy's, St Thomas', Evelina London Children's Hospital and Royal Brompton and Harefield Hospitals. They are among the UK's busiest and most successful foundation trusts, with a long history of high quality care, clinical excellence, research, and innovation.

Guy's and St Thomas'
NHS Foundation Trust 

ABOUT ENVIROGEN

Envirogen is a leading international provider of water and wastewater treatment solutions. We solve complex challenges relating to water availability and quality, and help our customers to increase productivity, reduce costs and meet environmental and sustainability targets.

We do this through offering:

- Best in class water and wastewater treatment and process filtration technology
- Expertise in design, project management and engineering
- World class manufacturing and servicing capability



UK HEADQUARTERS

Envirogen Group
Unit 9, Wimsey Way, Alfreton Trading Estate
Alfreton, Derbyshire, DE55 4LS
T: +44 (0) 1773 441029
E: enquiries@envirogengroup.com

EUROPEAN HEADQUARTERS

Envirogen Technologies bv
Penningweg 71, 1507 DG Zaandam, The Netherlands
T: +31 75 204 7200
E: NLinfo@envirogengroup.com

NORTH AMERICAN HEADQUARTERS

Envirogen Technologies
2627 Chestnut Ridge Road, Suite 200
Kingwood, TX 7733
T: 713.979.9142
E: info@envirogen.com

We have a network of regional sales and service teams worldwide:

UK and Europe: UK, The Netherlands, Germany, France, Italy.

USA: Texas, Tennessee, New Jersey, California, Nevada.

For further details, visit our website or contact our main office locations above.

www.envirogengroup.com

Follow Envirogen Group on LinkedIn 