

CSA Index



COMMISSIONING
SPECIALISTS
ASSOCIATION

CSA SOCIAL MEDIA #CSAHORSHAM OR #COMMISSIONING

HAVE YOU PAID YOUR 2026 SUBSCRIPTION INVOICE?

Payment terms are 30 days.

CSA ASSESSMENT EXAMS RETURNING IN-HOUSE

The CSA will shortly be bringing the end-of-assessment exams for Grades 1 to 4 back in-house. These will be delivered with a live CSA invigilator via Microsoft Teams, ensuring a consistent, secure and more accessible assessment experience for candidates.

Further details including the go-live date, will be shared with the membership once the final arrangements are in place.

CSA Web App
COMING SOON!

*This Edition of Index
is sponsored by:*

elexXion
WATER TREATMENT



CHAIRMAN'S SAY

I hope you all had a great Christmas, but a new year is already under way, and it looks like its going to be another adventure for the CSA.

Last year was itself a journey into the unknown, with our new CEO and the Executive Committee gradually working out how to shape the association's administrative machinery to better serve the members. We also had to deal with a significant increase in membership as a result of our commissioning training system being accepted by BESA and Skillcard as proof of competency. The increase was even larger than we anticipated once we got the equivalent system for water treatment staff accepted last autumn.

We also had another significant success with the relaunch of the Core Concepts training course for commissioning managers. We took quite a leap of faith when we significantly rewrote and renamed the previous version and decided to bring its delivery fully in-house. Its popularity clearly underlines that it was the correct decision.

But, back to this new year, 2026. The first major venture is that we have a comprehensive web-page re-vamp under way. This will incorporate much of the simpler admin functions and allow members to log-on and manage their account (membership, training progress and the like) without having to go through the CSA office. That will free up time for other things. Talking of the office, we have started tidying it up and getting it properly tested and certificated. Our staff are distributed across the UK from Glasgow down to Sussex, so the office gets very little use, especially as the majority of our gatherings are online. We are considering disposing of it. If anyone wants a freehold office in Horsham give us a call. I'm sure there's a deal to be done.

There are also other plans afoot. We have just had our first example of our new course, Commissioning Management for Project Teams. This is aimed at people like clients' project managers, the design team and the main contractor's PM.

The course explains what commissioning is, its importance to the success of the project and how a good commissioning manager, working to CIBSE Code M, can help the project team achieve their aims. This went down rather well with the audience and we aim to roll it out properly over the next few months. Getting that course under way has given us cause to pursue another aim. We have joined CPD UK and will be trying to get both the

seminar and the Core Concepts course accepted by them. That will allow attendees to log the courses as part of their continued development.

Oh, by the way, continued development brings something else to mind. In company with tidying up the DLC material presentation, common fonts, smarter diagrams and the like, we are aiming to bring the end of module exams on to our own platform. To do that we need to increase the cost of the DLCs slightly, but applicants will then not need to pay the current exam fee to use the BESA platform. The result? Overall, they pay less than they do now.

So, our plans are definitely ambitious, but we relish the challenge to make the CSA better for you. We sincerely hope that you can continue your support for our efforts.

Finally (and sadly), I recently heard that there has been some evidence of copying / cheating on DLC homeworks. It was so blatant that one of our non-technical admin. staff spotted it.

We have warned about this previously. Please be very aware that we will not permit a few lazy people to jeopardise our training system's good standing with BESA and SkillCard. Anyone caught is likely to find themselves suspended from CSA membership or even ejected from the association altogether.

THE SHIFT TOWARD CHEMICAL-FREE CLOSED LOOP SYSTEMS

The management of water quality in closed-loop heating and cooling systems within the building services sector is experiencing a significant and irreversible shift. This change is partly due to new guidance and legislation that have become necessary, driven by the increasing popularity of systems that operate without chemical inhibitors. This marks a major transformation in UK practices, as the use of chemical additives has been standard in UK construction for decades.

As demand grows from asset owners, system designers, and operators, a clear change in direction within the UK market is imminent. New UK publications are expected to launch in 2026, further supporting this movement.

In response to these developments, BSRIA will be publishing an alternative to BG29/50, titled BG89: Chemical-Free and Conditioned Water Solutions.

The government has initiated a draft for the industry technical review of its mandatory heat network assurance scheme, HNTAS TS1, which will enforce strict KPIs and requirements for both chemical-free and chemically operated systems.

DEPLETED WATER SYSTEMS: A NEW UK TERMINOLOGY FOR CHEMICAL FREE

Whilst the phrase “chemical-free water treatment” has become commonly known and widely recognised, HNTAS TS1 has created a new terminology referring to the process as “depleted water”

The term “Depleted water” systems, referencing the removal of both dissolved solids and reactive gases.

HNTAS TS1 formalises this by setting out requirements for:

- Water purity
- System tightness
- Monitoring regimes
- Make-up water control
- Commissioning procedures

The forthcoming BSRIA BG89 guide further supports this approach, providing practical guidance for designers, installers and operators who wish to implement chemical-free strategies with confidence.

The emergence of these documents confirms that chemical-free water management is now a recognised and approved alternative water treatment method within the UK building services industry.

WHAT FACTORS HAVE DRIVEN THIS SHIFT ?

This is being driven by a combination of regulatory pressure, sustainability objectives and the increasing demand from those with operational experience, being early adopters of chemical-free systems, who have witnessed firsthand the benefits of using such methods.

Increasingly, designers, asset owners and facilities managers are questioning the long-standing reliance on chemically treated systems, instead seeking chemical-free closed-loop solutions that deliver long-term system stability, simplified integration, lower environmental impact and improved asset protection.

Manufacturer's requirements are also heavily influencing the shift in strategy, with many of the world's leading manufacturers, many from mainland Europe, where the use of chemical inhibitors is limited to “exceptional circumstances”.

European guidance has widely accepted that since transitioning from open vented systems (in the 1970s) to closed looped systems, dissolved oxygen levels can be successfully managed, therefore adapting their water treatment strategies to suit modern requirements.

The move toward chemical-free systems aligns strongly with broader industry drivers:

- Net zero and ESG targets
- Reduced chemical transport, storage and disposal
- Lower embodied and operational carbon
- Improved health and safety
- Simplified maintenance regimes

From an asset management perspective, the benefits are equally compelling. Systems designed around demineralised, oxygen-free water experience:

- Reduced corrosion-related failures
- Extended equipment lifespan
- Fewer interventions
- Lower whole-life costs
- Improved system reliability

VDI 2035 AND 6044 STEERING THE UK'S PERSPECTIVES ON WATER MANAGEMENT

It is important to recognise and understand the origins of the technical requirements for chemical-free managed systems. The growing influence of the forthcoming BSRIA BG89 and HNTAS TS1 highlights a significant shift in the UK market, drawing on technical expertise from the DACH regions (Germany, Austria, and Switzerland).

These documents have not emerged in isolation; rather, they have been heavily influenced by the long-established German standards VDI 2035 and VDI 6044, which have set a robust technical framework for non-chemical water treatment in closed systems for many years.

Many believe that these practices are new to the UK; however, this is not the case.

Leading HVAC manufacturers, many of which supply to the UK, have been stipulating for years that, as a key part of their warranty requirements, systems should comply with VDI 2035.

It is not limited to boiler manufacturer's that refer to VDI 2035 as part of their warranty requirements; control valve, pump, pipe and valve/fittings manufacturer's also reference the guidance within their O&M manuals.

As the UK transitions away from gas boiler installations, with growing demand for environmentally friendly alternative solutions, air source heat pumps and electric boiler installations are rapidly being adopted.

Manufacturers of such green technologies have very specific water treatment requirements where they look for a more technical and robust approach.

Designers and operators of such systems should be aware of these requirements, with both BSRIA BG89 and HNTAS TS1 emphasising the importance of good installation practice and routine maintenance.

The publication of UK-specific guidance reflects increasing demand within the UK for alternatives to chemically treated systems that align with net-zero ambitions, reduce operational risk, and deliver predictable system performance over the entire lifecycle.

WHY CHEMICAL-FREE SYSTEMS ARE GAINING MOMENTUM

Traditional chemically treated systems rely on corrosion inhibitors, biocides, dispersants and pH buffers to manage water quality. While these approaches can be effective in the short term, they introduce several challenges:

- Ongoing chemical dependency and cost
- Risk of overdosing or underdosing
- Environmental and disposal concerns
- Health and safety implications
- Inconsistent long-term performance
- Difficulty maintaining stable conditions over time

In contrast, chemical-free closed-loop systems aim to remove the root causes of corrosion and scaling rather than continually masking their effects. By controlling water purity, dissolved gases and electrochemical potential, these systems create a stable internal environment where corrosion reactions are fundamentally suppressed.

This approach mirrors the principles embedded in VDI 2035, which does not promote chemical dosing as a default solution but instead focuses on:

- Fill water quality – preferably low conductivity water
- Controlling the pH of the water – alkaline spectrum 8.2-10
- Operating with minimal oxygen levels – as low as feasibly possible

The result is a closed loop that is inherently stable, predictable and resilient.

VDI 2035 has long been recognised as a benchmark for preventing damage caused by corrosion and scale formation in hot water heating systems. Rather than prescribing chemical treatment, it defines water quality limits that, when achieved, significantly reduce the likelihood of system degradation.

In particular HNTAS "depleted water" specifically sets out requirements to meet the most stringent parts of VDI 2035 and 6044 by insisting on the following to meet the KPIs listed:

- Demineralised or low-salt water to reduce conductivity
- Strict control of fill and top-up water
- Avoidance of oxygen ingress through system design
- pH control
- Use of devices such as electrochemical reaction tanks and demineralised water filling stations to maintain water quality throughout the operational life span of the system.

HOW DEMINERALISED WATER AND ELECTROCHEMISTRY ARE REDEFINING WATER QUALITY MANAGEMENT

The Role of Demineralised Water

The use of demineralised water will play a vital role in UK systems which operate without the use of inhibitors.



BSRIA BG89 refers to demineralised water as conditioned water, recognising the benefits of its use when operating a closed loop system. HNTAS TS1 "Depleted water" however, insists on the use of demineralised water (low conductivity water).

When looking at "conditioned water", water which has undergone ionic change, it's important to note that softened water simply removes only hardness salts, whereas demineralised water removes virtually all dissolved ions, resulting in very low conductivity.

Low conductivity water not only greatly reduces the risk of corrosion (as a result of preventing electrochemical reactions) but also reduces the risk of bacteria formation and the subsequent risk of MIC corrosion, something which is a staple requirement in the UK industry.

Demineralised water is typically produced using one or more of the following processes:

- Reverse osmosis (RO) – removes the majority of dissolved solids
- Ion exchange resins – remove remaining cations and anions

Typically, in the UK, ion exchange filling stations are the preferred method, due to their ease of integration into a system design, simple maintenance requirements, being able to control the pH of the fill water (if using approved/premium blends of mixed bed resin) and not requiring a wastewater discharge licence.

RO plants result in low pH at the time of filling (pH4-6), are complexed to maintain and do require a water discharge licence or environmental permit due to the concentrated waste which is produced.

The use of mix bed ion exchange resins creates a purified water, where calcium, magnesium, chlorides, sulphates and nitrate ions that would otherwise contribute to scale formation, galvanic corrosion, increased electrical conductivity and bacterial growth have been removed. Low conductivity water is simple to measure, predictable and stable.

Alongside benefits of corrosion and bacteria control, improved heat transfer and efficiency is obtained through reduced system fouling and scale formation.

When used for initial filling and controlled top-up, demineralised water establishes a stable baseline that removes the need for traditional chemical inhibitors.

THE USE OF ELECTROCHEMISTRY IN CHEMICAL FREE SYSTEMS

Electrochemistry: Creating a Stable, Oxygen-Free Environment

While demineralised water addresses the rate at which corrosion occurs, suppressing the reaction where oxygen reacts with the internal metal surfaces, electrochemical water conditioning addresses dissolved gases (particularly oxygen), which remains the primary driver of corrosion in sealed systems.

Both HNTAS and BSRIA recognise and address the importance of minimising oxygen entry into any system through correct system design and maintenance.

Many are concerned that top-up water and future system refilling could be the downfall of a chemical-free systems, where we should look to minimise this for obvious reasons, this is not actually the case. Dissolved oxygen in water is limited to 8-11 mg/l and experience have shown these quantities, although significantly higher than the target parameter <0.1 mg/l, lead to minimal water side corrosion.

Where in fact, oxygen entry, through continued diffusion through incorrectly maintained expansion and pressurisation, incorrectly commissioned systems and/or use of incorrect selection and usage of materials are actually the main cause of water side corrosion.

BSRIA BG89 and HNTAS TS1 recognise the importance of correct material selection and the specification of pressure maintenance devices, with a view of minimising continued oxygen ingress. Electrochemical devices operate by selectively removing dissolved oxygen from the system water. By reducing oxygen levels to extremely low concentrations, the cathodic and anodic reactions required for corrosion are effectively suppressed.

This aligns directly with the principles of VDI 2035 and 6044, which emphasise the elimination of oxygen ingress and the importance of airtight, sealed systems.

The use of electrochemical reaction vessels helps maintain tolerable levels of dissolved oxygen, which are present in all systems as a result of fluctuations in pressure, temperature and flow rates, which naturally occur throughout normal day-to-day operation.

Electrochemical processes also naturally influence pH, typically stabilising it within an ideal range for mixed-metal systems. Unlike chemically buffered systems, this pH stability is achieved without additives and remains consistent over time, provided system integrity is maintained.

Electrochemical reaction vessels can be seen to provide constant corrosion control due to persistently removing the root cause of corrosion (dissolved oxygen) while maintaining the naturally occurring oxide layers (pH control) that further protect the metals within a modern system.

The combined effect is a passivated system environment in which corrosion products do not form, magnetite remains stable, and water clarity improves progressively. The use of electrochemistry is already widely used in the UK, with BSRIA BG50 recognising the benefits of the technology.

Conclusion: A greener, simpler approach to asset management.

The growing demand for chemical-free closed-loop systems reflects a fundamental change in how water quality is perceived and managed. Influenced by the proven principles of VDI 2035 and VDI 6044 and supported by emerging UK guidance such as BSRIA BG89 and HNTAS TS1, the industry is moving decisively away from chemical dependency and toward engineered water stability.

Demineralised water, combined with electrochemical conditioning, offers a robust, sustainable and technically sound alternative—one that addresses the root causes of corrosion and scaling rather than continually treating their symptoms.

As these approaches become more widely adopted, chemical-free water management is set to become not the exception, but the new standard for modern closed-loop systems.



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Awards Winner
2025

Shawfair DH Network

CSA PROJECT OF THE YEAR



NEIL BURDESS

CEO

As we move into 2026, the CSA continues its focus on strengthening professional standards, improving the member experience, with exciting developments already underway and more on the horizon.

Thank You to Our Committees & Tutors

Firstly a big thanks to all our committee members and Tutors for your dedication and hard work over the past year. The CSA thrives on the energy and expertise of volunteers across our Marketing, Training, Technical, and Water Treatment committees. We're always looking for new, active members to join these groups. If you're interested in getting more involved, please do reach out.

Website and Digital Platform

Building on the website revamp mentioned by our Chairman, I'm delighted to share that we're expanding this into a comprehensive CSA digital platform. This will offer members a seamless experience for managing memberships, automated payments, accessing training, and engaging with CSA resources, all in one place. Watch this space for launch details and previews.

CSA Re-brand

We're excited to be rolling out the CSA's new branding. You'll soon see our refreshed logo and visual identity across all platforms. The first glimpse will be our new membership certificates, which are a significant step up from previous versions. The re-brand will be phased in over the coming months, so expect to see more updates soon.

The screenshot shows the 'Water Treatment' section of the CSA digital platform. It features a 'Career Progression' section with a circular icon of a person in a hard hat. Below it, a box states 'Gain recognised qualifications on your own schedule with a CSA Water Treatment Membership' and lists several qualification paths, each with a checkmark icon.

The screenshot shows the 'Commissioning Management Core Concepts' section. It includes a 'View Section' header, a 'Shortcuts' sidebar with buttons for 'Edit Section', 'Delete Section', 'New Section', and 'Back to Chapter', and a main content area titled 'CC1.1 Introduction' with a detailed description of air movement within buildings.

DLC Progress

Our commitment to high-quality training continues:

- Commissioning DLC A revamp is now complete.
- Commissioning DLC B updates are on track for completion by the end of Q1 2026.

Commissioning Compendium Update

Early this year, we'll be releasing major updates to the Air and Water commissioning sections of the CSA Compendium. These will be followed by further enhancements, all of which will be available in our new digital compendium on the new CSA members platform.

Collaboration with Industry Associations

We're proud to be working closely with organisations such as CIBSE, BESA, BSRIA, the Nuclear Commissioning Excellence Forum, and the Data Centre Specialists Interest Group. Together, we're developing new guides and resources to support best practice across the commissioning sector.

Thank you for your continued support. Here's to a successful and innovative 2026 for the CSA and all its members!



TONY ANDERSON

CHIEF TECHNICAL OFFICER

Through the hard work, determination and support of the whole CSA team a variety of key CSA projects now available to members or very near to completion.

2026 Upcoming Changes to CSA Examinations

We have had discussions both internally and externally and we will be soon transferring from the BESA platform to the internal CSA exam platform combined with CSA Invigilation. This will apply to all Commissioning and Water Treatment exams, from DLC A to DLC C and Grade 4. We will be hosting exams with our widely used testing platform (free to use) and invigilating these exams internally using the commonly used Microsoft Teams programme.

Students currently undertaking or scheduled to take exams on the BESA platform should continue as normal. The CSA will release full details in the coming weeks including go-live dates when our internal system is fully available. This change will also align all CSA tests to follow the model used for our CM Core Concepts examination & delivery.

Commissioning Management Core Concepts Course - Additional dates added for 2026

If you are looking to achieve a CSA Commissioning Manager grade (CM 1, 2 or 3) this training course helps you achieve your grade.

The CSA's unique 2-day training course is specifically designed for Commissioning Managers; this fully aligns with CIBSE CCM Commissioning Code M: Commissioning Management. This course has been continually adjusted and practical examples added to provide real world examples of the 25 CM activities.

In 2026, we already have 12 potential courses forecasted so far! If you are looking to book your place onto the next available course, please contact office@csa.org.uk.

Water Treatment Developments

Under the leadership of Roger Carlin and his team, the Water Treatment Pathway is in full operation with two water treatment engineers navigating their way

through all 3 WT DLC's (A through C) and successfully passing their Grade 4 Exam in 2025.

In 2026, we have already had the 1st Water Treatment candidate pass their Grade 5, Stage 2 Thesis!

We extend our thanks to Roger and the entire Water Treatment team for their dedication and hard work, bringing much needed training material to the industry. If you are interested in the Water Treatment DLC Pathway or taking a Water Treatment DLC please get in contact with us at office@csa.org.uk.

Final Words

The CSA have been working hard to improve the membership experience and have put into place a variety of checks and changes to make the members experience more tangible and simpler to use.

As part of additional internal checks we have recently uncovered a very small and limited section of individuals "copying" during content submissions. We would remind all of our members to read the articles of the association.



MEMBERSHIP CONDUCT

The Association needs to remind all members that direct copying of any DLC coursework, exams, thesis or dissertations will not be tolerated under any circumstances. Our internal checking systems recently identified such an issue, resulting in the suspension of an individual member.

Maintaining the integrity of our professional standards is essential, and the CSA will always take decisive action where breaches of our constitution occur.



CSA OFFICE NEWS

2026 promises to be an exciting year with the launch of the CSA web app, new CSA branding and more!

Improvements are incoming to make everything better for you, our members.

If you have already paid your 2026 invoices you would of already seen our new and improved certificates like the water treatment example pictured here. These will be available inside the app once it launches alongside your digital membership cards so they will always be accessible to you whether on site or to download. As more information becomes available about the app we will of course keep you all updated. Please note SKILLcard have been informed of the certificate changes and payment terms are still 30 days from the date of the invoice.

There are also lots of sponsorship opportunities available for 2026 and if you are interested in sponsoring Index or the awards please get in touch with me for more details.

Lets welcome our new members to the association:



INDIVIDUALS

Momtajul SK, Matthew Paton, Reece Silverstein, Sean Strathearn, Liam McGarry, Ryan Druce, Matthew Wood, Michael Whittingham, Stephen Climpson, Dion Aloysius, Daniel Allen, Alfie Eccles, Daniel Lucas, Jack Hughes, Darryl Smith, Matthew Sludden, Gary Middleton, Hossam Mohamed Hassan, Erwin Verdillo, Ahmed Sobhy Yassin Sherif, Adam Taylor, Elliot Kett, Josh Hoare, Alfie Ripley, Charlie Wilson, Eng Anas Hefny, Philip Dobson, Nicholas Catacos, Bradley Walter, Andin Drazhi, Abdelrahman Tarek Ahmed, Lewis Whitehouse, Abid Khan, Milad Majidifar, Keith Rawlingson, Anthony Groom, Vignesh Mathiyazhagan, Jack Lindsay, Nicholas Chan Kit Joo, Antonio Nunes, Oliver Stapleton, John Paul Espiritu, Merajuddin Mohammed, Kane Lewin, Simon Marlow, Aaron Whiteside, Louie Anderson, Mark Woodgate, Dinesh Kalaimani, Sean Gardner, Mohammad Azharudeen, Sean Bettridge, Alfie Rollason, Juan David Endo Perez, Jesse Mirfin, Martin Balsamo, Joe Clark, Jack Phillip White, Richard Banton, Stephen Jackman, Shyamkumar Hariharan, Dylan Manser, Jacob Page, Matthew Smart, Patrick Farrell, Russel Plowman, Bradley Cunliffe, John Cunliffe, Gareth Pulman, Jamie Thomson, Rory Corbett, Ian Westwood, Harrison Leonard, Alfie Quinn, Scott Connolly, Nehemiah Falconer, Matthew Lu, Alfie Cutbush, Joe Mavin and James Davies.

CORPORATES

A.B.L Technical Services, HVAC Plant Proving Ltd, TABCOMM, Vims Engineering Services, Peritus Consultancy Ltd, EBC-International Ltd, Visible Energy Technical Services LLC, North East Commissioning Solutions, Morgan Sindall Construction Ltd, Tab Engineering Services LLC, Morgan Sindall Group

Joanne Rowe – CSA Association Secretary and Office Manager



COMMISSIONING
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Gala Awards
2026

Park Plaza Riverbank Hotel - Thursday, 8th October 2026

NOMINATIONS OPEN
MARCH 2026

Recognising and Rewarding Commissioning Excellence

If you or your company have a success that deserves industry wide recognition, these awards provide the perfect platform to get your accomplishments acknowledged, rewarded and celebrated.

Following the huge success of last year's presentation ceremony, the 2026 Gala Awards Evening will again be staged at the stunning Park Plaza Riverbank Hotel in London on the evening of Thursday, 8th October. So, make a note in your diary, and be sure to consider which products, projects, initiatives and staff members you will be nominating. And who knows, you could join our roster of past Winners!

The online entry forms will be available for completion at www.csa-awards.co.uk between March and July, so what have you got to lose, submit any number of entries and if selected as a 2026 Finalist by our esteemed Judging Panel, enjoy some fantastic publicity as we countdown to the Gala Awards Ceremony on the 8th October.

2025 Award Winners

Project of the Year (Less than £20M)

Sponsored by BSRIA

Winner: 6RG MEP CLERK OF WORKS
SERVICE: 76 Sir John Rogerson's Quay

Project of the Year (More than £20M)

Sponsored by BSRIA

Winner: MORGAN SINDALL
CONSTRUCTION: Newton Nursery

Environmental Contribution Award

Sponsored by MEDIACONTROL

Winner: AIRTECH PREMIER: Air Change
Rate Reduction, Pharmaceutical Laboratory,
Stevenage

Commissioning Engineer of the Year

Sponsored by Ashford

Winner: Chris Jones - END SYSTEMS

Commissioning Manager of the Year

Sponsored by WTP
SPECIALTY CHEMICALS

Winner: David Richmond - TAYLOR &
STAPLETON

Commissioning Provider of the Year

Sponsored by MBS
MODERN BUILDING SERVICES

Winner: BANYARDS

Investment in Training Award

Sponsored by CORE

Winner: ASHFORD ACADEMY

Student of the Year

Sponsored by RED

Winner: Dion Aloysius - HDR

Diversity in Commissioning Award

Sponsored by HDR

Winner: CROWN HOUSE TECHNOLOGIES

Water Treatment Project of the Year

Sponsored by CZI
CSA CONFERENCES

Winner: PHOENIX COMMISSIONING
SERVICES: Shawfair Energy Centre and
District Heating Network

Water Treatment Engineer of the Year

Sponsored by WTM
water by design

Winner: Stuart MacLennan - ASHFORD
ENVIRONMENTAL SERVICES

Water Treatment Provider of the Year

Sponsored by CHESTERFIELD
WT CONSULTANTS LTD
INDEPENDENT WATER TREATMENT ADVICE

Winner: ASHFORD ENVIRONMENTAL
SERVICES

Special Recognition Award

Sponsored by CSA
COMMISSIONING
SPECIALISTS
ASSOCIATION

Winner: Andrew Watkin - AIRTECH

CxM Core Concepts

Latest, industry-focused training designed for today's commissioning managers

Next available dates:

February - 26th & 27th

March - 17th & 18th

April - 21st & 22nd



Practical Learning

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CSA Grading

Essential knowledge base for CxM Grades (CM1–CM3)

Fully Updated

Reflects current regulations, standards and best practices

Interactive Format

Six structured modules from concept to occupancy

Expert-Led

Taught by commissioning managers with 30+ years' industry experience

CSCS SKILLcard

Pathway for commissioning managers to obtain a SKILLcard

CSA CELEBRATIONS

WE WOULD LIKE TO CONGRATULATE THE FOLLOWING FOR THEIR ACHIEVEMENTS:

COMMISSIONING DLCS

ANDRE VAN TONGEREN
IZZUDDIN KAMARUDDIN
SAMUEL CHERRY
SIA KAAI TUNG
RYAN SCOTT
SANDEEP NALLA
ALEX COULSON
BRADLEY MATTHEWS
THOMAS CANNING
LEE CHOENG YAO
SONNY BORAM
NICHOLAS CHAN
VAL MAHAYAG
RAMESHKUMAR
BALAKRISHHNAN
ROSS CAMERON
EFAN JONES

GEORGE TANNER
KRISTOPHER SMITH
YAP KEAN CHIANG
JACK LILLEY
HARRY WASPE
LEON WRIGHT
ANDREW DOYLE
ANDREW SPENCER
GEORDIE SHAW STUART
DALE MILNE
BRADEN THOMSON
JOSHUA KIRKHAM
MAX MURPHY
HUGH PROUTE
DOMINIC HUCKLE
EMANUELE DE RONZO
MATTHEW LU

LIAM HEAD
ISAC GEAVAR
JOSEPH BAILEY
GEORGE CLARK
JACK WHITE
CHRIS HALDANE
HARRISON LEONARD
STEVEN THOMSON
BEN HARDMAN
JONATHAN MURRAY
STEVEN THOMSON
ERWIN VERDILLO
ANDRE VAN TONGEREN
HARRY DELL
NICHOLAS SSENFUKA
TERENCE MOORE
BEN SMART

WATER TREATMENT DLCS

KEIREN PATON - C(WT) - PASS
JOSHUA CHARLTON - C(WT) - PASS
KIERAN WHETHAM - A(WT) - PASS
SAMUEL WILD - A(WT) - PASS
DANIEL ALLEN - C(WT) - PASS
PAUL DAVIES - B(WT) - PASS
ALFIE SMITH - A(WT) - PASS
JOHN WILSON - A(WT) - PASS
FREDDY HAM WALLACE - A(WT) - PASS
LIAM LEWIS - A(WT) - PASS
HASSAN QADEER - A(WT) - PASS
DAVID KNOWLSON - A(WT) - PASS
BEN TAYLOR - A(WT) - PASS
JAMES ANDERSON - A(WT) - PASS

GRADE 4

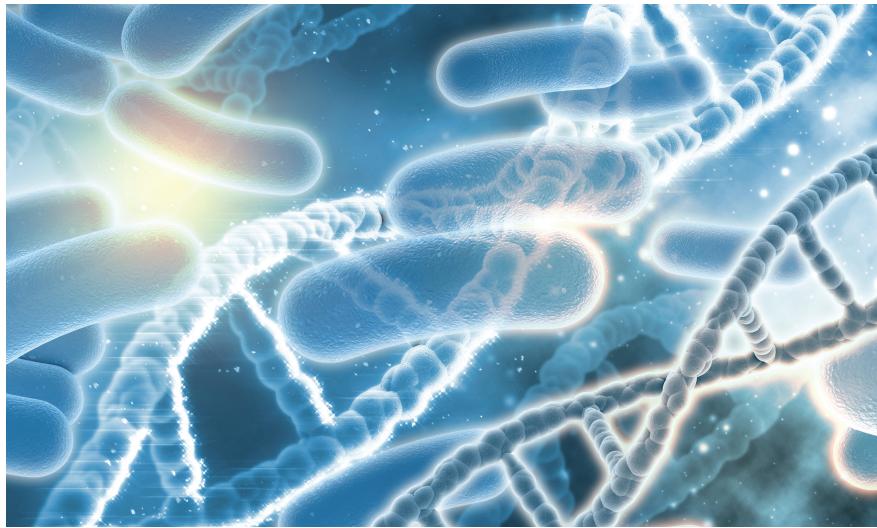
KEIREN PATON (WATER) - PASS
JOSHUA CHARLTON (WATER) - PASS
AHMED ABDELAZIZ - PASS
CHRIS HALDANE - PASS
SAMY GAMAL - PASS
SUJITH PATTERI - PASS
ADAM RIDGE - PASS
BEN SMART - PASS
KRISOPHER SMITH - PASS

GRADE 4 WATER & G5 THESIS

DANIEL ALLEN - PASS

Congratulations to everyone!

The NHS Estates Technical Bulletin (NETB No. 2024/3), released on 27th August 2024, has recently been brought to the attention of the Commissioning Specialists Association (CSA). While not a new document, its implications for water safety in healthcare projects are significant, and we are advising all members, particularly water treatment engineers and commissioning managers to review its requirements and ensure compliance.



Read the full NHS bulletin here: <https://www.england.nhs.uk/publication/nhs-estates-technical-bulletin-netb-no-2024-3/>

OBJECTIVE OF THE BULLETIN

The objective of this bulletin is to enhance existing guidance set out in HTM 04-01 Safe Water in Healthcare Premises, specifically to address risks from nontuberculous mycobacteria (NTM) and other waterborne pathogens. The focus is on protecting patients at high risk of healthcare associated infections, such as those undergoing transplants, chemotherapy, or with compromised immune systems.

KEY POINTS FOR COMMISSIONING AND WATER TREATMENT PROFESSIONALS

1. High-Risk Patient Focus

Healthcare facilities serving lung transplant recipients, cystic fibrosis patients, oncology patients, and other individuals with increased vulnerability must be designed and operated to minimise exposure to waterborne pathogens.

2. NTM Testing and Tender Clarity

Nontuberculous mycobacteria (NTM) is not routinely included in standard water sampling, and detection methods are not yet standardised, while several UKAS accredited laboratories can culture and detect Nontuberculous Mycobacteria (NTM), the UKHSA's Rare and Imported Pathogens Laboratory (RIPL) at Porton Down is currently

the UK's only national reference facility for specialist or confirmatory NTM testing. This can contribute to extended turnaround times. Water treatment companies must check all tender documents for NTM requirements and, if absent, raise this as a risk and seek written clarification.

3. Extended Commissioning Regimes

Commissioning and draw-off regimes may add up to eight weeks and significant labour costs to NHS projects. Extended flushing, assurance sampling, and strict acceptance criteria are required before handover. These must be factored into commissioning programmes and tender submissions.

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4. Precautionary Principle

Due to scientific gaps around NTM, the NHS advocates a precautionary approach: act early and err on the side of safety, even if all risks are not fully quantified.

5. Governance and Documentation

A Project Water Safety Group (PWSG) must be established for each project, responsible for developing and implementing a Project Water Safety Plan (PWSP) which should be submitted to the relevant Trust Authorised person for approval. All risks and mitigations should be documented from the concept stage, with input from water treatment, infection control, and commissioning specialists.

6. Procurement and Installation

All components and fittings must be new, individually packaged, and certified as safe for healthcare water systems. Wet-tested or previously used components are not acceptable. Only trained personnel, following PWSG-approved processes, should carry out installation and commissioning. All HTM 04-01 guidance must also be followed.



7. Sampling and Acceptance

Tender specifications must clearly define sampling and monitoring plans, including for NTM and acceptance criteria for handover. For high-risk areas. There should be no NTM detected at handover.

Recent completed projects have revealed that NTM is present in the utility provided incoming

potable water supplies. When it has been detected in the incoming water the trust advice has been that the levels detected at the outlets must not be greater than the incoming supply "an early sample is important to identify the presence of NTM in the incoming supply to enable an informed discussion with the Trust WSG".

ADDITIONAL RISKS AND CONSIDERATIONS

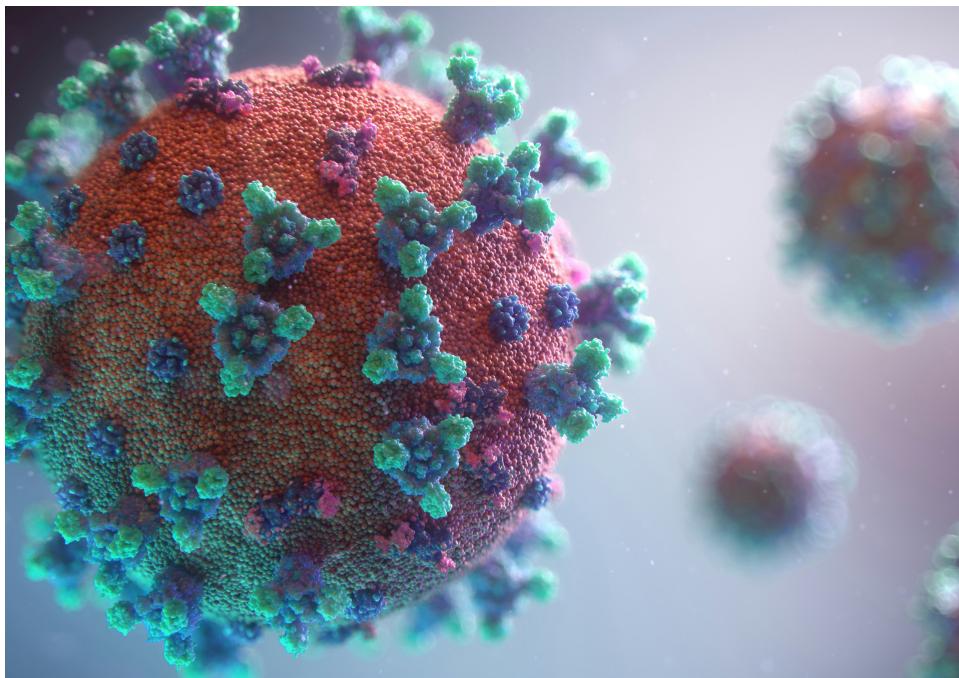
- **Point-of-Use Filtration:** For high-risk patients, outlets should be fitted with sterilising-grade point-of-use filters (0.2 micron), and staff must be trained in their maintenance during the commissioning stages.

- **Sustainability vs. Safety:** Efforts to reduce water and energy use (e.g., low-temperature systems, reduced flow) can inadvertently increase infection risks. All sustainability measures must be risk-assessed for patient safety.
- **Training and Competence:** All personnel involved in design, installation, commissioning,

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and maintenance must have specific training in healthcare water safety, including the unique risks of NTM and other pathogens.

- **Tender and Specification Risks:** If the tender or specification does not explicitly mention NTM or the extended commissioning regime, there is a risk of underestimating time, cost, and resource requirements. Ensure these are clarified and included.



WHAT SHOULD YOU DO?

- Review all NHS/Healthcare project tenders for explicit requirements on NTM and extended Sampling and draw off time during commissioning.
- Raise queries if NTM testing or extended regimes are not specified.
- Ensure all staff are trained and competent in the latest NHS water safety protocols.
- Factor in additional time and costs for commissioning and assurance sampling.
- Document all risks, mitigations, and communications with the client.

IN SUMMARY:

The NHS Estates Technical Bulletin 2024/3 is not new, but its requirements are now under the spotlight. All commissioning and water treatment professionals must be proactive, informed, and ready to adapt to these enhanced standards to protect patients and deliver compliant, safe buildings.

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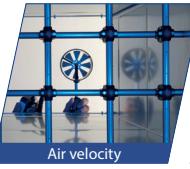
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