

MRC FM SPECIFICATION

SITE	HARWELL
BUILDING	Mary Lyon Centre (MLC)
PACKAGE TYPE	WATER (Wa)
SPECIFICATION NAME	Water Treatment (WT)

Revision/Approval

Rev	Author	Details	Date
1.0	A.Elsley	Completed	22-06-2016

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Water Treatment/Analysis & Cleaning Maintenance Specification

The Contractor shall provide a professionally managed, high quality Water Treatment/Analysis & Cleaning maintenance service that as a minimum complies with:

- Manufacturers recommendations as set out in their O&M schedules or as required to meet the needs of the as-built environment.
- Relevant BS EN Standards
- SFG20

Legal Obligations

Without prejudice to the generality of the foregoing the Contractor must observe, perform and comply with all the relevant provisions of the following together with any amendments thereto:

- Management of Health and Safety at Work Regulations 1999
- Workplace (Health, Safety and Welfare) Regulations 1992
- Personal Protective Equipment (PPE) Regulations 1992
- Provision and Use of Work Equipment Regulations (PUWER) 1998
- Manual Handling Operations Regulations 1992
- Health & Safety (First Aid) Regulations 1981
- The Health & Safety Information for Employees (Amendment) Regulations 2009:
- The Employer's Liability (Compulsory Insurance) Regulations 1998:
- Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 1995 (RIDDOR)
- The Control of Noise at Work Regulations 2005
- Electricity at Work Regulations 1989
- Requirements for Electrical Installations: IET Wiring Regulations BS 7671 : 2008 incorporating Amendment No.1 : 2001 (BS767 : 2008 + A1 : 2011)
- Control of Substances Hazardous to Health Regulations 2002 (COSHH)
- Chemicals (Hazard Information and Packaging for Supply) Regulations 2009
- Construction (Design & Management) Regulations 2015
- The Gas Safety (Installation & Use) Regulations 1998
- Health & Safety at Work etc. Act 1974
- The Control of Asbestos Regulations 2012
- Lifting Operations & Lifting Equipment Regulations 1998 (LOLER)
- Building Regulations 2010
- 2014 EU Fluorinated Greenhouse Gas (Fgas0 Regulations
- The Environmental Protection Act 1990
- The Regulatory Reform (Fire Safety) Order 2005
- The Fire Safety (Employees' Capability) (England) Regs 2010
- The Control of Legionella Bacteria in Water Systems ACOP & Guidance L8.
- The Notifications of Cooling Towers and Evaporative Condensers Regulations 1992
- The Health & Safety (Safety Signs and Signals) Regulations 1996
- Health & Safety (Employee Consultation) Regulations 1996
- Pressure Systems Safety Regulations 2000
- Disability Discrimination Act 1995

- The Confined Spaces Regulations 1997
- 2014 F-Gas Regulations

The contractor must ensure that the Harwell site's Water Treatment complies with all legislation governing these systems.

Through the use of industry best practice and the introduction of innovation, the service will achieve and demonstrate value for money on a continuous basis.

The Contractor shall deliver, but not limited to:

Equipment	Buildings and Equipment Description
	MLC <ul style="list-style-type: none"> • Boilers & closed systems (water treatment) • Chemical Analysis • Air Handling Units • Water Tanks • Brine Tank (external) • Supply of chemicals
Maintenance	Requirements – General
	Provide a detailed planned maintenance schedule/ check list to comply with the requirements of this specification.
Chemicals	Requirements
	<p>The following chemicals will be supplied on contract, when required. They will be delivered to site in 250litre containers and pumped over to the receiving tanks to remove the need for any manual handling: -</p> <ul style="list-style-type: none"> • GE Water and Process Technologies Cortrol IS3070 (boiler sulphite product) limited to a maximum of 1500kg per annum • GE Water and Process Technologies OptiSperse CP6453 (boiler phosphate/polymer) limited to a maximum of 1500kg per annum • GE Water and Process Technologies CorrShield MD4100 (closed system molybdate product) limited to a maximum of 300kg per annum
Service & Bacterial Sampling	Requirements
	The cost includes monthly service by one of our service technicians to carry out detailed chemical analysis of the boilers and quarterly analysis of the closed systems. An electronic report will be

	<p>generated and e-mailed to site.</p> <ul style="list-style-type: none"> • Annual clean and chlorination of the CWS tanks. • One full microbiological analysis for the 2 closed systems per annum, to measure Pseudomonas, TVC, sulphate reducing bacteria and nitrite reducing bacteria • 15 Legionella samples and 10 TVC samples per annum post chlorination of the CWS tanks, random calorifiers and random hot and cold water outlets including collection and reporting.
AHU Clean & Chlorination	Requirements
	<ul style="list-style-type: none"> • Cleaning and chlorination of the relevant sections on five AHU'S annually • Supply of chemicals for chlorination and neutralisation <p>Cleaning</p>
Additional	Requirements
	Legionella sample from external Brine Tank
Other	Parts supplied & fitted during the visit
	<p>Essential parts required to carry out the actual service can be included in the above.</p> <p>All additional parts supplied/fitted during the service visits are chargeable in addition to the above.</p>
Documentation	Requirements
	<p>A service report will be completed and sent in PDF format within 2 days of each visit; it will need to include any identified defects or remedial work required.</p> <p>An electronic service report can be e-mailed to the Head of Engineering & Estates, with the Chief Engineer & Facilities Support Manager copied in.</p> <p>Site specific risk assessments and method statements (RAMS) will be required before the commencement of any work.</p>
Other	Remedial/Reactive works
	A transparent quote for any suggested remedial/reactive works in relation to any identified faults/failures to be provided within 5 working days.

Other	General
	<p>Engineer(s) to report to the Engineering & Estates Office before starting and leaving site.</p> <p>Normal working hours are: 08:00 – 17:00 Mon-Thurs 08:00 – 16:00 Fri</p> <p>The site (area where work has taken place) to be left clean & tidy.</p> <p>12month warranty/guarantee of work carried out (including parts).</p>
NOTE	Restrictions and Entry Procedures for visitors to the Mary Lyon Centre (MLC) Animal Unit
	<p>48 hour Exclusion: Visitors who have been in another mouse facility or in contact with rodent material are not allowed to enter the MLC for 48 hours. This exclusion period minimizes the risk of introducing infectious diseases into our mouse colony.</p> <p>Other animals can harbour laboratory mouse pathogens: At least 18 common mouse pathogens have alternative hosts such as wild mice, pet mice, rats, hamsters, guinea pigs, rabbits and gerbils. Ownership of rodent pets, inadvertent contact with mice and rats through ownership of cats, snakes (fed mice), horses and livestock or pursuits such as rabbit shooting, also risk contact with infected animals. If you have had direct or indirect contact with the animals mentioned, you may be refused entry or are required to undertake a full wet shower before entering the unit. Please speak to the member of staff showing you through the barrier or phone in advance to discuss any problems.</p> <p>The Entry Procedure into the MLC Main Unit: There are male and female changing areas. To enter the changing rooms you step over a 20cm high 50cm wide barrier and don disposable shoe covers. You must remove your outer clothing and place these in a lockable locker. We stock a range of sizes in clothing and shoes but if you feel we may not have your size then please let us know and we will attempt to supply them. You will be provided with 100% polyester trousers, tunic and socks. As you proceed to step over the floor barrier you will be provided with unit shoes. On entering the air shower corridor you must wash your hands with bactericidal hand soap and dress in the provided one-piece coverall and mobcap. Individuals with beards will be provided with beard guards.</p> <p>All staff and visitors entering the unit must proceed through the air barrier. This is a chamber in which high velocity HEPA filtered air is blown at the individual to cleanse clothing of allergens and any other dust particles. Individuals with contact lenses should keep their eyes shut during the fifty-second cycle, and those with sensitive hearing may wish to cover their ears.</p> <p>On exiting the air shower you will be escorted to the area you are visiting.</p>

	<p>Exit Procedure: You will exit the unit via the air showers and remove all the personal protective clothing provided as instructed, in the changing area.</p> <p>All personal protective clothing will be provided and a member of the MLC staff will be available for assistance at all times.</p>
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