

# **MRC FM SPECIFICATION**

SITE	HARWELL
BUILDING	Building 383 & Building 524 Annex
PACKAGE TYPE	WATER (Wa)
SPECIFICATION NAME	Water Treatment (WT)

## Revision/Approval

Rev	Author	Details	Date
1.0	A.Elsley	Completed	22-06-16

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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. This comprises but is not limited to:

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
	<ul> <li>Building 383 &amp; Building 524 Annex</li> <li>Closed systems (water treatment)</li> <li>Chemical Analysis</li> <li>Water Tanks</li> <li>Brine Tank (external)</li> <li>Supply of chemicals</li> </ul>
Maintenance	Requirements - General
	Provide a detailed planned maintenance schedule/ check list to comply with the requirements of this specification.
Chemical usage & Analysis	Requirements
	Carry out quarterly service of the closed water systems, one located in Building 383 and one located in the new boiler house. The old system will approximately use 50kg of GE Water and Process Technologies CorrSheild NT4293 per annum. The new system will approximately use 100kg of GE Water and Process Technologies MD4100 per annum.
Tank Cleans	Requirements
	<ul> <li>Clean and chlorination of tank 5 Building 383 and the pipe feeding tanks 1 and 2 Building 383. Clean and disinfection of tanks 1 and 2 Building 383. Tanks 5 and 1 weekend work, tank 2 during normal working week.</li> <li>Clean and disinfection of MCWS pipework within Building 383 (tees off of the pipework between tank 5 and tanks 1-2).</li> <li>Clean and chlorination of three Santon POU hot water tanks for Building 524 Annex.</li> </ul>



Legionella & TVC samples	Requirements	
	10 Legionella samples and 10 TVC samples per annum post chlorination of the CWS tanks, random calorifier and random hot and cold water outlets, including collection and reporting.	
Lathe sud oils	Requirements	
	A dipslide will be taken once per month from the MRC's seven lathe sud oils. The cost includes dipslides, incubation and reporting time.	
Additional	Requirements	
	Legionella sample form the external Brine Tank.	
Other	Parts supplied & fitted during the visit	
	Essential parts required to carry out the actual service can be included in the above.	
	All additional parts supplied/fitted during the service visits are chargeable in addition to the above.	
Documentation	Requirements	
Documentation	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.  An electronic service report can be e-mailed to the Head of Engineering & Estates, with the Chief Engineer & Facilities Support Manager copied in.  Site specific risk assessments and method statements	
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The site (area where work has taken place) to be left clean & tidy.
12month warranty/guarantee of work carried out (including parts).