

COGWT28

Monitor water treatment for evaporative cooling systems



Overview

This unit is for those involved in:

- 1 monitoring water treatment programme
- 2 comparing conditions against control parameters
- 3 progressing corrective actions
- 4 identifying the cause of faults and errors

Previous Version

None

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Performance criteria

- You must be able to:*
- P1 work safely at all times, complying with health and safety procedures in line with company policies
 - P2 identify the resources required to monitor the treatment programme
 - P3 follow a programme of specified tests to assess the efficacy of the treatment programme
 - P4 convert the test result into the control factor in accordance with company operating procedures
 - P5 compare the control factor against the specified control limits for the treatment programme
 - P6 identify faults and errors in the water treatment programme in accordance with company operating procedures
 - P7 identify which corrective actions are required
 - P8 progress a programme of corrective actions in accordance with company operating procedures
 - P9 record information and write report using company documentation in accordance with company operating procedures
 - P10 provide the documentation to the relevant people

Knowledge and understanding

You need to know and understand:

- K1 what your personal responsibilities with regard to health and safety in the working area are
- K2 what your legal responsibility for your own health and safety, and the health and safety of others is
- K3 what working practices ensure that the working environment is conducive to good health
- K4 what the approved codes of practice/working practices are and why it is important to follow them
- K5 how and when to complete a work task risk assessment
- K6 when specific site requirements are in place and what to do to comply with them
- K7 the different types of domestic water systems
- K8 problems encountered in the systems
- K9 the different types of evaporative cooling systems
- K10 what relevant standards and guidelines apply
- K11 the company operating procedures relating to monitoring water treatment for closed water systems
- K12 where to obtain the test programme
- K13 how to follow a testing programme
- K14 how to convert test results into control factors
- K15 how to compare control factors against control limits
- K16 the range of potential corrective actions that may be employed
- K17 the corrective actions that can be taken within the limits of your responsibility
- K18 how to progress corrective actions outside of the limits of your responsibility
- K19 who to report the information to
- K20 what documentation to use
- K21 how to complete the documentation
- K22 who the relevant people are
- K23 how to provide the documentation

Additional Information

Glossary

Evaporative cooling systems

Includes cooling towers, condensers, adiabatic chillers, humidifiers, wet scrubbers

Water treatment programme

Can include for any water system: chemical and non chemical processes, monitoring and inspection, sampling, equipment provision and servicing, legionella risk assessment, cleaning operations, remedial engineering works, other products and services associated with water systems

Resources

Includes materials, access equipment, PPE, test equipment, sample requirements

Control factor

Physical, engineering, chemical, microbiological, product

Tests

Includes chemical, microbiological, mechanical, physical

Standards and guidelines

Includes relevant health, safety and environmental regulations, COSHH, Codes of Practice, British, European and International standards, site procedures

Company operating procedure

Includes company requirements, instructions and method statements

Documentation

Includes analysis/report sheets, log book records

Relevant people

As defined in the programme design, log book, company procedures

Working practices

Permit to work, confined space working, working at heights, manual handling, PPE, COSHH etc

Problems encountered

Scale, corrosion, fouling, chemical, mechanical, environmental

Water chemistry

The chemistry involved with the provision, use and treatment of closed water system processes

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