EUSTPO07 - SQA Unit Code HG3C 04

Monitor and maintain treatment processing at optimum performance

▪ Overview	This unit is about setting operational objectives and parameters and monitoring them to ensure they are maintained throughout the processing cycle.

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Performance criteria

You must be able to:

Establish the conditions for optimum plant performance

P1 translate the employer's specification into objectives for quality standards and flow

P2 set the parameters for plant efficiency, financial performance, and breakdown occurrence

P3 evaluate periodically the operational and maintenance objectives and parameters

P4 plan the facilities in the work environment so they are conducive to efficient work

P5 use the regulatory requirements and the employer's specification as the basis for all aspects of the performance of the process facilities

P6 monitor the plant for optimum performance and adjust maintenance to ensure it conforms continually to regulatory requirements and the employer's specification

You must be able to:

Collect and use information to plan operational maintenance

P7 analyse plant records and maintenance schedules to decide the equipment and instrumentation which require maintenance

P8 incorporate information from inspections and investigations within the maintenance schedules

P9 assess plant priorities and problems and hazards arising from equipment out of service to inform the maintenance plans

P10 produce maintenance schedules which are accurate, meet the specification and plant operating instructions, and reflect safe working practices

P11 take account of scheduled outages of other in-company plants when producing plans

P12 produce plans which make effective use of physical labour availability

You must be able to:

Monitor operational maintenance

P13 collate data for monitoring from schedules and specifications and compile the information into operational maintenance schedules

P14 reconcile progress of the maintenance against other plant priorities

P15 organise unscheduled operational maintenance promptly

P16 monitor the maintenance work carried out against maintenance schedules, equipment and process specifications, and plant operating instructions

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You must be able to:

Communicate data and information to colleagues

P17 use a range of methods to communicate with the work team and other workers on the site about operational activities

P18 provide the designated people with the maintenance schedule, risk assessments, permits to work and other documentation and instructions they need to carry out the scheduled work in the manner specified in the plant operating instructions

P19 make details of planned outages available in good time to workers on site

P20 provide instructions for unscheduled maintenance requirements to the designated maintenance personnel in a way which is fit-for-purpose

P21 use verbal and other communication methods which suit the task to convey explicitly what is required to be done

P22 ensure discrepancies arising from investigations are recorded promptly and by the methods laid down in the plant operating instructions

P23 maintain up-to-date data audit trails and make sure they are accessible

You must be able to:

Resolve problems affecting treatment performance

P24 minimise the adverse effects on the process which results from taking equipment or plant out of use

P25 arrange for investigations to be carried out promptly where problems arise

P26 rectify maintenance deficiencies which arise from using the monitoring data

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Knowledge and understanding

You need to know and understand:

General

K1 UK and EC legislation, standards, codes of practice, and industry regulations for health, safety, and hygiene
K2 UK and EC legislation, standards, codes of practice, and industry regulations for environmental protection and measures to reduce harmful emissions and substances
K3 dealing with statutory inspectorates
K4 dealing with emergency situations
K5 safe working practices when dealing with equipment, instrumentation and environment
K6 maintaining safety – smoking, eating, drinking and drugs
K7 duty of care
K8 protecting people and the environment from pollutants both inside and outside the workplace
K9 personal conduct and behaviour and responsibilities towards colleagues and the general public
K10 the role and purpose of data audit trails in quality assurance, health and safety and regulatory requirements

You need to know and understand:

Treatment processes

K11 keeping up-to-date with changes in legislation, standards, and codes of practice
K12 determining the maintenance needs of the process plant, equipment and environment
K13 planning and interacting effectively with other sites within the company regarding outages and effects on the site and use of components or the site itself
K14 satisfying the maintenance needs of the process, plant and environment
K15 making plant and equipment available for maintenance whilst maintaining the process at the predetermined level of performance
K16 assessing the effectiveness of maintenance work carried out
K17 assessing the effect of plant and equipment breakdown
K18 minimising the effects of broken down plant and equipment on the process
K19 monitoring the maintenance activities carried out by own staff and other departments' staff
K20 interpreting the requirements of relevant regulations
K21 translating the employer's specification for plant performance into operational and maintenance objectives
K22 assessing the implications of non-compliance with regulations and the

	employer's specification
K23	keeping up-to-date with changes in legislation, standards, and codes of practice

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Additional Information

Behaviours

You work in a manner which:

1. is vigilant to possible risks and hazards
2. uses a range of leadership styles appropriate to different people and situations
3. shows pride in achieving high quality work

Glossary

Equipment
mechanical; electrical

Maintenance
for equipment; greasing and lubrication; repacking of glands; replacing simple parts not requiring craftsmen; cleaning accumulations of dirt and debris; basic instrument maintenance

Maintenance
for plant environment condition; cleansing of process facilities and buildings; security systems; fences and gates; structural elements; ground areas; buildings

Plant priorities
process performance; plant availability; final output quality; capacity requirements; reduced human resources

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