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## Overview

This Standard is about determining what maintenance is needed and organising for maintenance work to be carried out on treatment processing plant and equipment.

It includes assessing the maintenance work required, determining the appropriate work team to carry out the maintenance, isolating plant and equipment as required, issuing and displaying safety warnings and informing affected people -when plant and equipment is to be shut down and when it will be re-started and re-commissioned.

The Standard is suitable for supervisors at water, waste water and sludge treatment processing plants.

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## Performance criteria

*You must be able to:*

1. assess the amount and level of wear or damage to components, equipment or instruments
2. assess plant operating priorities and report on findings and conclusions on the feasibility and cost-effectiveness of repairs
3. assess whether plant and equipment maintenance can be carried out by treatment operatives or requires a third-party contractor
4. refer recommendations for a third-party contractor to the designated person, where authority to make decisions to commission work is outside your responsibility
5. isolate or shut-down plant and equipment for maintenance in line with procedures and required timescale
6. confirm the work team that will carry out the plant and equipment maintenance
7. arrange for plant and equipment maintenance work to be carried out in accordance with the required timescale and using safe methods of work
8. arrange for waste materials to be disposed of in accordance with safe working practice and organisational procedures.
9. restore plant and equipment to specified operational performance in line with organisational requirements and safety procedures
10. arrange for operational maintenance on equipment and instruments requiring isolations to be done at a time appropriate to plant use
11. inform affected people when plant and equipment is to be shut down and when to expect plant and equipment to be re-started and re-commissioned
12. issue and display safety warnings in advance of operational changes to plant and equipment
13. maintain and store maintenance records in an auditable format and in the designated place
14. provide access to maintenance records on request
15. resolve routine problems in line with procedures and your responsibilities
16. report any instances where the maintenance activities cannot be met fully or where defects are identified which are outside the planned schedule
17. report problems and seek assistance from designated people for difficulties outside your area of responsibility

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18. put temporary arrangements in place to protect the operation of the plant until problems are resolved
  19. report and resolve situations where maintenance over-runs the agreed timescales

## Knowledge and understanding

*You need to know and understand:*

1. water industry legislation, standards, codes of practice, and industry regulations for health, safety, and hygiene in relation to your job role
2. water industry legislation, standards, codes of practice, and industry regulations for environmental protection and measures to reduce harmful emissions and substances in relation to your job role
3. the organisation's process for safe working practices when dealing with equipment, instrumentation and environment
4. the role and purpose of data audit trails in quality assurance, health and safety and regulatory requirements
5. operation and maintenance methods and procedures and consequences of carrying out maintenance incorrectly and out with limits of responsibility and authority maintenance schedules and related specifications.
6. the organisation's procedures and the factors to be considered for isolation, diverting flows, bypassing treatment process units, operating temporary plant and shut down of plant and equipment
7. typical and unusual problems which may occur during maintenance and how these can be resolved
8. the need for information which is provided to other people relating to maintenance activities
9. the organisation's maintenance records, documentation and authorisation procedures and limits of responsibility and authority
10. the organisation's start-up and re-commissioning procedures
11. the organisation's reporting lines and procedures
12. the factors to be considered when shutting down and isolating plant and equipment and procedures to be used
13. your responsibilities for resolving typical and unusual problems
14. the implications and consequences of carrying out maintenance activities
15. why it is important to comply with the organisation's confidentiality policies and cyber security protocols
16. why it is important to maintain site security
17. the importance of storing information according to organisational requirements
18. the way maintenance information is utilised and the implications of

its use

19. information which is provided to other people relating to maintenance activities
20. what work is required to bring the plant back to the specified condition
21. how to translate the employer's specification for plant performance into operational and maintenance objectives
22. how to decide if repairs can be carried out as first-line maintenance or whether a third-party contractor is required

EUSTPC04

Organise maintenance of treatment processing plant and equipment



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