



Unit title	Cleanse Water Mains
SQA code	HC3X 04
SCQF Level	5
SCQF credit points	5
SSC ref	DC05

History of changes

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Title	Cleanse Water Mains	
Learning Outcomes		Assessment Criteria
The learner will:		The learner can:
1	Prepare the system for cleansing.	<p>1.1 Identify the cleansing activity to be carried out and confirm customer notification, according to organisational requirements and procedures.</p> <p>1.2 Confirm the system is configured to Enable the cleansing activity to be carried out.</p> <p>1.3 Take the relevant action to resolve problems which occur during preparation.</p> <p>1.4 Record relevant information in accordance with organisational requirements.</p> <p>1.5 Follow safe working and hygiene practices for preparing to cleanse mains according to relevant procedures, regulatory and statutory requirements.</p>
2	Carry out cleansing operations.	<p>2.1 Select appropriate equipment for the cleansing method to be used.</p> <p>2.2 Confirm the equipment is in the required operational condition and is correctly installed in accordance with the manufacturer's specification and organisational requirements.</p> <p>2.3 Carry out cleansing procedures in accordance with organisational requirements.</p> <p>2.4 Dispose of discharged water in a safe manner, and to minimise the effect on the environment, according to regulatory and organisational requirements.</p> <p>2.5 Confirm the effectiveness of the cleansing operation on water quality.</p> <p>2.6 Take the relevant action when problems arise with the cleansing operation.</p>

Learning Outcomes	Assessment Criteria
The learner will:	The learner can:
	<p>2.7 Inform relevant people of cleansing details in accordance with organisational requirements.</p> <p>2.8 Follow safe working and hygiene practices for cleansing mains in line with relevant procedures, regulatory and statutory requirements.</p>
<p>3 Know and understand how to cleanse water mains.</p>	<p>3.1 Explain the reasons for cleansing and the need to cleanse mains.</p> <p>3.2 Explain why it may be inappropriate to cleanse mains.</p> <p>3.3 Describe the limitations of cleansing and of different cleansing methods.</p> <p>3.4 Outline the organisational procedures regarding customer notification.</p> <p>3.5 Describe the preparation procedures and calculations which may need to be carried out (eg flow velocities).</p> <p>3.6 Describe the implications of using flow velocities that are too high or too low.</p> <p>3.7 Describe typical and unusual problems which might occur when cleansing mains.</p> <p>3.8 Outline recording and reporting procedures, including:</p> <ul style="list-style-type: none"> (a) recording requirements for cleansing (b) reporting procedures for problems (c) the information that is required (d) who to inform when cleansing has taken place. <p>3.9 Outline how to dispose safely of water used in cleansing.</p> <p>3.10 Describe the damage which can be caused by incorrect disposal of water.</p>

Learning Outcomes	Assessment Criteria
The learner will:	The learner can:
	<p>3.11 Describe the sampling procedures to be used in mains cleansing operations.</p> <p>3.12 State how to use equipment correctly and safely during mains cleansing.</p> <p>3.13 Outline the acceptable water quality parameters that should be confirmed following cleansing.</p> <p>3.14 Outline the safety and hygiene practices and regulatory and statutory requirements relating to:</p> <ul style="list-style-type: none"> (a) working in the public highway (b) use of tools and equipment (c) personal hygiene.

Additional information about the Unit
Unit purpose and aim(s)
<p>This Unit is designed to allow learners working on the water distribution network to demonstrate their competence in cleansing water mains and pipework. Cleansing must be undertaken using one of the following methods:</p> <ul style="list-style-type: none"> (a) systematic flushing (b) water scouring (c) air scouring (d) foam swabbing. <p>The system must be configured so that cleansing can be carried out properly, and customers affected by the cleansing operation must be advised. Learners must select and use appropriate equipment for the cleaning activity, and must dispose of discharged water safely to in line with service level requirements.</p> <p>Learners must record details of the cleansing activity in line with organisational requirements, and must follow safe working and hygiene practices at all times.</p>
Details of the relationship between the Unit and relevant national occupational standards (if appropriate)
EUSDC05 — Cleanse water mains
Details of the relationship between the Unit and other standards or curricula (if appropriate)
N/A
Assessment requirements specified by a sector or regulatory body (if appropriate)
<p>Some terms, used in the Assessment Criteria, cover a range of situations, as follows:</p> <ol style="list-style-type: none"> 1 Problems include: <ul style="list-style-type: none"> (a) problems with equipment (b) problems with the distribution pipework (c) problems with the cleansing process. 2 Action taken to resolve problems includes: <ul style="list-style-type: none"> (a) rectification of problems within your responsibility (b) reporting of problems outside your responsibility. 3 Cleansing method is one of: <ul style="list-style-type: none"> (a) systematic flushing (b) water scouring (c) air scouring (d) foam swabbing.

**Assessment requirements specified by a sector or regulatory body (if appropriate)
(cont)**

Assessor observation in a realistic working environment (RWE), agreed in advance with the EV, may contribute to the Unit evidence. Networks replicated in the RWE must be pressurised to a level consistent with, and must contain a substance which replicates, the workplace network. The learner must be required to cleanse a length of main that they would typically cleanse in the workplace. It must have the same types of complexities and must cover a range of different fittings.

Assessment (evidence) Requirements**Workplace evidence**

The majority of the evidence used for this Unit must come from the learner's own work activities, both in their own 'reporting base' and working on the water distribution network.

Knowledge and Understanding

The Knowledge and Understanding requirements for this Unit must be covered in full. The learner may demonstrate considerable knowledge through their workplace performance and during observed assessments, but it is likely that some assessor questioning will be needed to confirm that all knowledge requirements are met. The centre may use oral and/or written questioning to cover the knowledge requirements.

Guidance on Instruments of Assessment

The evidence for this Unit is likely to be generated through a mixture of observation reports, assessor-guided discussions and questioning, and workplace records, reports or documentation.