



Unit title	Restore Sewers and Ancillaries to a Working Condition
SQA code	H8MJ 04
SCQF level	5
SCQF credit points	10
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History of changes

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Title	Restore Sewers and Ancillaries to a Working Condition	
Learning Outcomes	Assessment Criteria	
The learner will:	The learner can:	
<p>1 Be able to prepare sewers and ancillaries for work activities in accordance with approved procedures and practices.</p>	<p>1.1 Locate accurately the position of sewers and ancillaries requiring remedial action in accordance with approved procedures and practices.</p> <p>1.2 Select an appropriate water supply in accordance with approved procedures and practices.</p> <p>1.3 Establish remedial action requirements in accordance with relevant technical procedures.</p> <p>1.4 Confirm the following are appropriate for remedial action: (a) Information. (b) Plant. (c) Tools and equipment.</p> <p>1.5 Notify individuals and organisations affected by remedial actions in accordance with company procedures.</p> <p>1.6 Report problems outside the scope of own role in accordance with relevant company procedures.</p> <p>1.7 Identify and report external factors which prevent jobs being carried out at the present time.</p> <p>1.8 Identify risks associated with confined spaces, and the associated control measures.</p>	
<p>2 Be able to carry out work activities to restore sewers and ancillaries to an appropriate condition in accordance with approved procedures and practices.</p>	<p>2.1 Check condition of tools and equipment used for remedial action in accordance with approved procedures and practices and manufacturer's specification.</p>	

	<p>2.2 Report defects and deficiencies in tools and equipment in accordance with relevant company procedures.</p> <p>2.3 Prepare tools and equipment in accordance with approved procedures and practices.</p> <p>2.4 Carry out work activities in accordance with approved procedures and practices at all times.</p> <p>2.5 Dispose of waste materials in accordance with approved procedures and practices.</p> <p>2.6 Verify and test maintained sewers and ancillaries in accordance with approved procedures and practices.</p>
<p>3 Be able to identify and report faults and damage to sewers and ancillaries in accordance with approved procedures and practices.</p>	<p>3.1 Identify faults and damage outside the scope of own job.</p> <p>3.2 Report faults and damage in accordance with relevant company procedures.</p> <p>3.3 Recommend possible temporary arrangements in accordance with approved procedures and practices to protect the operation and condition of:</p> <ul style="list-style-type: none"> (a) Sewers and ancillaries. (b) Properties. (c) The environment. <p>3.4 Produce accurate and legible records of faults and damage in accordance with relevant company procedures.</p> <p>3.5 Report faults and damage in accordance with relevant company procedures.</p>
<p>4 Understand the procedures for restoring sewers and ancillaries.</p>	<p>4.1 Describe the correct procedures for obtaining and using a water supply.</p>

	<p>4.2 Describe reporting procedures for restoring sewers and ancillaries to an appropriate condition.</p> <p>4.3 Describe reporting procedures for defects to tools and equipment.</p> <p>4.4 List types of sewerage systems and flow variations.</p> <p>4.5 Describe procedures for recording and reporting faults and damage.</p> <p>4.6 List the sources of information relevant to the activity and how to interpret them.</p> <p>4.7 Explain procedures for disposal of waste materials.</p>
<p>5 Understand the risks and hazards associated with restoring sewers and ancillaries to a working condition.</p>	<p>5.1 Describe risks associated with working in confined spaces and the necessary control measures in line with associated procedures.</p> <p>5.2 Describe potential hazards associated with sewage including:</p> <ul style="list-style-type: none"> (a) Trade effluents. (b) Uncontrolled discharges into the system. (c) Other hazardous objects. <p>5.3 Explain the dangers from vermin and the associated control measures.</p> <p>5.4 Explain risks associated with manual handling and the appropriate control measures.</p> <p>5.5 Describe the implications of inadequate remedial action.</p> <p>5.6 Describe problems that may be encountered during remedial action and ways in which they can be mitigated.</p>

	<p>5.7 Describe responsibilities for health and safety in own work activities.</p> <p>5.8 Explain effects of influents on sewer condition.</p> <p>5.9 Describe implications of flooding and pollution.</p>
<p>6 Understand how to restore sewers and ancillaries to a working condition in line with procedures and practices.</p>	<p>6.1 Explain how to distinguish between public and private sewers.</p> <p>6.2 Describe the most suitable choice of materials and equipment given the nature of the work activity, and its potential impact on the environment.</p> <p>6.3 Describe the most appropriate remedial action to restore the sewer to safe and serviceable condition.</p> <p>6.4 Explain the likely impact of work activities on others.</p> <p>6.5 Explain how to identify faults and damage on sewers and ancillaries.</p> <p>6.6 Identify different types of temporary arrangements to recommend in different circumstances.</p>
<p>7 Be able to record and report work activities and outcomes in accordance with relevant company procedures.</p>	<p>7.1 Record work activities and outcomes in accordance with relevant company procedures.</p> <p>7.2 Report work activities in accordance with relevant company procedures.</p> <p>7.3 Ensure work activities conform with approved procedures and practices at all times.</p>

Additional information about the Unit

Unit purpose and aim(s)

This unit allows the learner to demonstrate competence in restoring the function of sewers and ancillaries. This can be on a planned basis or in response to notification of fault or damage. The learner will be able to identify the problem that has arisen, select and use appropriate tools and equipment to resolve it, and record and report all work activities in line with company procedures.

The learner must be aware of the risks associated with carrying out sewerage maintenance operations, and must follow safe working practices throughout any work activities, in line with health, safety and environmental requirements and company policies.

Details of the relationship between the Unit and relevant national occupational standards (if appropriate)

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Details of the relationship between the Unit and other standards or curricula (if appropriate)

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

Some terms, used in the assessment criteria, cover a range of situations, as follows:

1. **Approved procedures and practices** are:

- (a) Regulatory.
- (b) Health, Safety & Environment.
- (c) Relevant company procedures.

2. **External factors** are:

- (a) Weather.
- (b) Traffic.
- (c) Access.
- (d) Safety.
- (e) Working environment.
- (f) Environmental issues.

3. **Faults and damage** include:

- (a) Major structural damage.
- (b) Serious blockage.
- (c) Flooding.
- (d) Danger to public health.
- (e) Pollution.
- (f) Dangerous atmospheres.

4. **Sewers and ancillaries** include:
 - (a) Sewers.
 - (b) Drains.
 - (c) Ancillaries.
 - (d) Unpowered and electrically isolated ancillaries.
5. **Specification** includes:
 - (a) Tools and equipment.
 - (b) Maintenance of sewers and ancillaries.
 - (c) Verification and testing.
6. **Temporary arrangements** are:
 - (a) Flow diversion.
 - (b) Temporary pumping.
 - (c) Isolation to protect work area.
7. **Verify and test** by:
 - (a) Visual inspection.
 - (b) Performance test.
8. **Waste materials** include:
 - (a) Silt.
 - (b) Roots.
 - (c) Sewer debris.
9. **Work activities** are:
 - (a) Rodding.
 - (b) Drain and sewer repair (this may include trenchless techniques or excavation, as appropriate to the learner's job role).
 - (c) Cleaning and disinfection.
 - (d) Simple maintenance.

Some terms in the assessment criteria cover a range of situations. Refer to the full assessment requirements and guidance for this unit for a detailed list of terms and definitions, agreed with Energy & Utility Skills.

This unit must be assessed in line with the Energy & Utility Skills assessment strategy for vocational qualifications based on its national occupational standards.

The learner must either be observed by an assessor on at least one occasion, or must provide an observation report or witness testimony from their line manager as part of the evidence for this unit.

All evidence produced for this unit must come from real work activities undertaken by the learner in their workplace. Simulated activities or assessment in a realistic working environment may not be used for assessment of the unit.

Assessment (evidence) Requirements

Workplace evidence

The performance evidence used for this Unit must come from the learner's own work activities, both in their own 'reporting base' and from their operational sewerage maintenance activities. Simulated activities or activities carried out in a realistic working environment, for the purposes of assessment, may not be used for the assessment of this Unit.

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. The evidence must include an assessor observation report or a witness statement or report that has been assessed against the Unit requirements.