



<b>Unit title</b>	Remove Materials or Deposits from Sewers or Drains by Water Jetting
<b>SQA code</b>	H8ME 04
<b>SCQF level</b>	5
<b>SCQF credit points</b>	12
<b>SSC ref</b>	EUS SD5

## History of changes

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Title	Remove Materials or Deposits from Sewers or Drains by Water Jetting	
Learning Outcomes		Assessment Criteria
The learner will:		The learner can:
1	Be able to interpret the given information relating to the work and resources and in accordance with approved procedures when removing materials or deposits by water jetting.	1.1 Interpret and extract relevant information from the following documentation: <ul style="list-style-type: none"> <li>(a) Risk assessments.</li> <li>(b) Method statements.</li> <li>(c) Legislation.</li> <li>(d) Codes of Practice.</li> <li>(e) Operating instructions.</li> <li>(f) Manufacturers' information.</li> </ul>
2	Know the information and procedures relating to the work and resources and in accordance with organisational procedures when removing materials or deposits by water jetting.	2.1 Explain organisational procedures for the following: <ul style="list-style-type: none"> <li>(a) Reporting inappropriate information.</li> <li>(b) Reporting unsuitable resources.</li> </ul> 2.2 Explain the organisational procedures for implementing the following: <ul style="list-style-type: none"> <li>(a) Rectifying inappropriate information.</li> <li>(b) Rectifying unsuitable resources.</li> </ul> 2.3 Describe different types of information including the source and how they are interpreted in relation to: <ul style="list-style-type: none"> <li>(a) Drawings.</li> <li>(b) Specifications.</li> <li>(c) Schedules.</li> <li>(d) Manufacturers' information.</li> <li>(e) Organisational instructions.</li> </ul>

<b>Learning Outcomes</b>	<b>Assessment Criteria</b>
<b>The learner will:</b>	<b>The learner can:</b>
<p>3 Be able to comply with relevant legislation and organisational procedures when removing materials or deposits by water jetting.</p>	<p>3.1 Maintain safe working practices when removing materials or deposits by water jetting.</p> <p>3.2 Use personal protective equipment (PPE) to carry out the activity in accordance with legislation and organisational requirements when removing materials or deposits by water jetting.</p> <p>3.3 Install and maintain safety measures for the working area in accordance with legislation and organisational requirements when removing materials or deposits by water jetting.</p> <p>3.4 Comply with information and instructions derived from risk assessments and method statements.</p>
<p>4 Understand how to comply with relevant legislation, special legal documents, official guidance and organisational procedures when removing materials or deposits by water jetting.</p>	<p>4.1 Describe own responsibilities under current legislation, special legal documents, official guidance and organisational procedures whilst working:</p> <ul style="list-style-type: none"> <li>(a) In the workplace.</li> <li>(b) Below ground Level.</li> <li>(c) In confined spaces.</li> <li>(d) At height.</li> <li>(e) With tools and equipment.</li> <li>(f) With materials and substances.</li> <li>(g) With movement and storage of materials.</li> <li>(h) By manual handling.</li> </ul> <p>4.2 Describe organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative.</p>

Learning Outcomes	Assessment Criteria
The learner will:	The learner can:
	<p>4.3 Explain why and when personal protective equipment (PPE) should be used, relating to removing materials or deposits by water jetting, and the types, purpose and limitations of each type.</p> <p>4.4 Explain the accident reporting procedures.</p> <p>4.5 Identify who is the person(s) responsible for making reports.</p> <p>4.6 Explain how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with:</p> <ul style="list-style-type: none"> <li>(a) Fires.</li> <li>(b) Spillages.</li> <li>(c) Injuries.</li> <li>(d) Other task-related hazards.</li> </ul>
<p>5 Understand how to select the required quantity and quality of resources for the methods of work in accordance with approved procedures to remove materials or deposits by water jetting.</p>	<p>5.1 Describe characteristics, quality, uses, limitations and defects associated with the resources in relation to:</p> <ul style="list-style-type: none"> <li>(a) Water supply, fuel supply, power supply, chemicals, abrasives, protective materials and equipment.</li> <li>(b) Barriers, guards, pump Units, hose assemblies, guns, lances, control valves, nozzles.</li> <li>(c) Ancillary equipment.</li> </ul> <p>5.2 Explain how to select resources associated with own work in relation to:</p> <ul style="list-style-type: none"> <li>(a) Materials and substances.</li> <li>(b) Hand tools.</li> <li>(c) Water jetting plant and associated equipment.</li> </ul>

Learning Outcomes	Assessment Criteria
The learner will:	The learner can:
	<p>5.3 Explain how problems associated with the resources are reported.</p> <p>5.4 Explain how the organisational procedures are used.</p> <p>5.5 Explain the potential hazards associated with the resources and method of work.</p>
<p>6 Be able to minimise the risk of damage to the work and surrounding area in accordance with approved procedures when removing materials or deposits by water jetting.</p>	<p>6.1 Protect the work and its surrounding area from damage when removing materials or deposits by water jetting.</p> <p>6.2 Minimise damage and maintain a clean work space when removing materials or deposits by water jetting.</p> <p>6.3 Dispose of waste in accordance with legislation.</p>
<p>7 Know how to minimise the risk of damage to the work and surrounding area in accordance with approved procedures when removing materials or deposits by water jetting.</p>	<p>7.1 Describe how to protect work from damage and the purpose of protection in relation to:</p> <ul style="list-style-type: none"> <li>(a) General workplace activities.</li> <li>(b) Other occupations.</li> <li>(c) Adverse weather conditions.</li> </ul> <p>7.2 Explain why the disposal of waste should be carried out in relation to the work.</p>
<p>8 Be able to complete the work within the allocated time and in accordance with approved procedures when removing materials or deposits by water jetting.</p>	<p>8.1 Complete work within the allocated time when removing materials or deposits by water jetting.</p>

<b>Learning Outcomes</b>	<b>Assessment Criteria</b>
<b>The learner will:</b>	<b>The learner can:</b>
<p>9 Know how to complete the work within the allocated time in accordance with approved procedures when removing materials or deposits by water jetting.</p>	<p>9.1 Explain the purpose of the work programme and why deadlines should be kept in relation to:</p> <ul style="list-style-type: none"> <li>(a) Types of timetables and estimated completion times.</li> <li>(b) Organisational procedures for reporting circumstances which will affect the work programme.</li> </ul>
<p>10 Be able to remove materials or deposits by water jetting to the required specification and by complying with contract information and approved procedures.</p>	<p>10.1 Remove materials or deposits by water jetting by carrying out:</p> <ul style="list-style-type: none"> <li>(a) Jetting.</li> <li>(b) Directing.</li> <li>(c) Checking.</li> <li>(d) Monitoring.</li> <li>(e) Evaluating.</li> </ul> <p>10.2 Operate water jetting equipment to remove material and deposits from drains and sewers, including:</p> <ul style="list-style-type: none"> <li>(a) Brick</li> <li>(b) Clay</li> <li>(c) Concrete</li> <li>(d) Plastic</li> <li>(e) Metal</li> </ul> <p>10.3 Use and store hand tools, water jetting pumps and associated equipment in a safe manner.</p> <p>10.4 Identify the needs of other occupations and how to communicate within a team when removing materials or deposits by water jetting.</p> <p>10.5 Describe how to maintain the tools and equipment used when removing materials or deposits by water jetting.</p>

<b>Learning Outcomes</b>	<b>Assessment Criteria</b>
<b>The learner will:</b>	<b>The learner can:</b>
<p>11 Know how to comply with the given contract information to remove materials or deposits by water jetting to the required specification.</p>	<p>11.1 Describe how to apply safe work practices, to the following:</p> <ul style="list-style-type: none"> <li>(a) Preparing and using jetting equipment to clean drains and sewers. <ul style="list-style-type: none"> <li>(i) Brick.</li> <li>(ii) Clay.</li> <li>(iii) Concrete.</li> <li>(iv) Plastic.</li> </ul> </li> <li>(b) Monitoring and evaluating changes in surfaces and structures.</li> <li>(c) Securing temporary protection.</li> <li>(d) Monitoring plant and equipment for performance requirements.</li> <li>(e) Using hand tools, static plant and associated equipment.</li> </ul>



<b>Additional information about the Unit</b>
<b>Unit purpose and aim(s)</b>
<p>This Unit allows learners to demonstrate their competence in removing materials or deposits from sewers or drains by water jetting.</p> <p>Learners will need to show that they can identify the work requirements, follow specifications and apply risk assessments relating to the jetting operation they are carrying out. They must be able to select and use the equipment and materials for water jetting, to minimise the risk of damage to the work and the surrounding area, and to complete the water jetting operation to specifications, and within the required time. Throughout the operation, the learner must understand and comply with regulatory and legislative requirements, Codes of Practice, operating instructions and manufacturers' information and they must follow safe working and hygiene practices at all times.</p>
<b>Details of the relationship between the Unit and relevant national occupational standards (if appropriate)</b>
<p>Construction Skills. Suite: Associated industrial services (Construction) Unit: COSVR85 Remove materials/deposits by water jetting</p>
<b>Details of the relationship between the Unit and other standards or curricula (if appropriate)</b>
<b>Assessment requirements specified by a sector or regulatory body (if appropriate)</b>
<p>This Unit must be assessed in a work environment and in accordance with:</p> <ul style="list-style-type: none"> <li>◆ The Construction Skills 'Consolidated Assessment Strategy for Construction and the Built Environment.</li> <li>◆ Craft, Supervisory, Technical, Managerial and Professional Units and Qualifications and SVQs. Assessors for this Unit must use a combination of the following assessment methods: <ul style="list-style-type: none"> <li>— Observation of normal work activities within the workplace that clearly confirms the required skills.</li> <li>— Questioning the learner on knowledge criteria that clearly confirms the required understanding.</li> <li>— Review other forms of evidence that can clearly confirm industry required skills, knowledge and understanding.</li> </ul> </li> </ul> <p>Assessors for this Unit must have verifiable, current industry experience and a sufficient depth of occupational expertise and knowledge of setting up and preparing water jetting equipment to be effective and reliable when confirming a learner's competence.</p> <p>Workplace evidence of skills cannot be simulated.</p>

## **Assessment (evidence) Requirements**

### **Workplace evidence**

The performance evidence for this Unit must come from the learner's own work activities, both in their own 'reporting base' and from their operational water jetting 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. 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.