



# **Assessor's Guidelines for SVQ3 Leakage Control SCQF level 6 (GA1K 23)**

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# About the Centre Guidance Notes

This guidance covers the SVQ3 Leakage Control SCQF level 6 (GA1K 23) is designed to provide assessment centres with information on the content, structure and delivery of the SVQ.

This document provides both general guidance, applicable across the SVQ, and more detailed information on each award, including general and specific Evidence Requirements. If you or your centre has any queries relating to the SVQ or its delivery, please contact either your allocated External Verifier (EV) or SQA contact.

This guidance (and updated versions issued during the lifetime of the SVQ) will be available on **[www.sqa.org.uk](http://www.sqa.org.uk)** produced on CD, though hard copies can be provided by CABWI Awarding Body on request (contact CABWI Awarding Body, 1 Queen Anne's Gate, London, SW1H 9BT; Tel: 020 7957 4523; e-mail: **[enquiries@cabwi.co.uk](mailto:enquiries@cabwi.co.uk)**). The CD also includes evidence recording documents for each Unit, copies of the national occupational standards (NOS) in Network Construction Operations (Water), and Core Skills Signposting (as developed by Energy & Utility Skills).

Further information relating to the delivery of SVQs, including copies of the current SVQ forms and general SVQ centre guidance, may be obtained direct from the Scottish Qualifications Authority at the following address:

Scottish Qualifications Authority  
The Optima Building  
58 Robertson Street  
Glasgow  
G2 8DQ

**[www.sqa.org.uk](http://www.sqa.org.uk)**

SQA Customer Contact Centre:  
Tel: 0845 279 1000  
E-mail: **[customer@sqa.org.uk](mailto:customer@sqa.org.uk)**

# 1 Introduction

## Overview

The SVQ3 Leakage Control covers the skills required by leakage control technicians, whose role it is to control and minimise leakage on the water distribution network. This SVQ is based on national occupational standards developed by Energy & Utility Skills.

The majority of candidates' evidence for this SVQ must be generated from real work activities. This means that any candidate undertaking SVQ3 Leakage Control must be working in the water industry or for a specialist leakage contractor and controlling leakage on a regular basis. Assessors must ensure that sufficient evidence of workplace performance is provided before recommending certification.

The skills covered in the Leakage Control SVQ include:

- ◆ ensuring your actions reduce risks to health and safety throughout operational activities
- ◆ evaluating data to identify potential leakage
- ◆ determining leakage control methods and techniques in response to water loss
- ◆ programming, deploying and collecting data from data-logging equipment
- ◆ utilising and confirming the performance of measuring equipment on the distribution network
- ◆ providing leadership for a team
- ◆ establishing the integrity of a discrete area on the distribution network
- ◆ carrying out step-testing operations and re-commissioning the distribution network
- ◆ resolving leakage related issues with customers.

Completion of the requirements for each of the activities listed above results in a Unit award: six Units in total are needed for a full SVQ3.

## National Occupational Standards (NOS) and award structures

The content and structure of the SVQ3 Leakage Control derives from the national occupational standards (NOS) in Leakage Detection and Control, developed by Energy & Utility Skills, the Sector Skills Council for the electricity, gas, water and waste management industries and approved in 2007. The SVQ requirements are produced in line with the NOS, award structures and assessment strategy, following consultation with representatives from water companies, industry training providers and other industry stakeholders.

Copies of the NOS in their final approved format can be provided with the centre guidance notes. The Units may also be obtained from the UK Standards website ([www.ukstandards.org.uk](http://www.ukstandards.org.uk)) or from Energy & Utility Skills ([www.euskills.co.uk](http://www.euskills.co.uk)). Updates to the content of the NOS may be made incrementally to keep pace with industry practice, but all centres will be advised of revisions in advance of implementation, with updated SVQ guidance if required.

If, in delivering the Leakage Control SVQ, the team identifies any queries or issues with the content of the NOS or the SVQ structure, please contact your External Verifier or awarding body in the first instance. We can then advise you on the most suitable course of action and consult further with Energy & Utility Skills or the regulatory authorities, as necessary. Energy & Utility Skills can be contacted at the following address:

Energy & Utility Skills Limited  
Friars Gate Two  
1011 Stratford Road  
Shirley  
Solihull  
West Midlands  
B90 4BN.  
Tel: 0845 077 9922  
Fax: 0845 077 9933  
Website: [www.euskills.co.uk](http://www.euskills.co.uk)

## About SVQs and the SCQF

Scottish Vocational Qualifications (SVQs) are work-based qualifications which set the level of occupational competence for each sector of the economy and are usually delivered in the workplace or in partnership with a college or other training provider. The qualifications have been designed by standards-setting bodies made up of experienced practitioners who represent employers, professional bodies, trade unions, education and voluntary organisations.

Each standards-setting body is responsible for developing national standards which define *what* employees (or potential employees) must be able to do, *how well*, and *in what circumstances*, to show that they are competent in their work.

Each SVQ which a standards-setting body develops has to fit into a broad framework which allows qualifications in the UK and throughout Europe to be compared.

There are SVQs for nearly all occupations in Scotland and they are available at SVQ levels 1–5. SVQs are currently notionally placed in the SCQF as the individual SVQs may be at differing SCQF levels and have differing amount of credit points, depending on the structure and context of the SVQ. SVQs are a means of recognising the skills and knowledge people need in employment, ie job competence. Successful completion of an SVQ provides clear evidence that the learner works to nationally recognised occupational standards.

Each Unit defines one aspect of a job or work-role, and says what it is to be competent in that aspect of the job. To be awarded a full SVQ, learners must achieve each of the SVQ Units which make it up by demonstrating that they are competent in that aspect of the job. The Units which make up the SVQ can also be taken as freestanding awards. Some SVQs or SVQ Units are incorporated into other awards or programmes including HNCs and Modern Apprenticeships.

## **Explanation of levels**

<b>SVQ1 (SCQF level 4)</b>	Competence involves the application of knowledge and skills in the performance of a range of varied work activities, most of which may be routine or predictable.
<b>SVQ2 (SCQF level 5)</b>	Competence involves the application of knowledge and skills in a significant range of varied work activities, performed in a variety of contexts. At this level, there will be activities, which are complex or non-routine and there is some individual responsibility and autonomy. Collaboration with others, perhaps through membership of a work group or team, may often be a requirement.
<b>SVQ3 (either SCQF level 6 or 7)</b>	Competence involves the application of knowledge and skills in a broad range of varied work activities, most of which are complex and non-routine. There is considerable responsibility and autonomy, and control or guidance of others is often present.
<b>SVQ4 (either SCQF level 8 or 9)</b>	Competence involves the application of knowledge and skills in a broad range of complex technical or professional work activities, performed in a wide variety of contexts and with a substantial degree of personal responsibility and autonomy. Responsibility for the work of others and the allocation of resources is often present.
<b>SVQ5 (SCQF level 11)</b>	Competence involves the application of skills and a significant range of fundamental principles across a wide and often unpredictable variety of contexts. Very substantial personal autonomy and often significant responsibility for the work of others and for the allocation of substantial resources feature strongly, as do personal accountability.

For further information on SCQF go to **[www.scqf.org.uk](http://www.scqf.org.uk)**.



## How are standards defined in SVQs?

All SVQs consist of standards which can be broken down into various parts.

**Units** define the broad functions carried out in the sector, and are made up of a number of **Elements**. These **Elements** describe the activities which employees have to perform, and will require candidates to demonstrate certain skills or Knowledge and Understanding.

The quality of performance in what people must be able to do — how well they have to perform — is described by **Performance Criteria**. These may also be called **statements of competence** or **what candidates should do**.

The section on **Knowledge and Understanding** says what candidates must know and understand, and how this knowledge applies to their jobs.

You may also come across statements on **scope**. These statements could, for example, list the equipment that candidates are expected to be familiar with and use in their occupational area.

Increasingly, you may see changes to this format as standards become more user-friendly and are written in plain English. For example, there may be some standards containing **Range Statements** or **Evidence Requirements**, but over time these should disappear. You may, however, find that information on the context, nature and amount of evidence which is required to prove competence (which used to be given in Range Statements and Evidence Requirements) is now defined in the **assessment guidance** for the qualification. Assessment guidance is drawn up by the awarding body and is packaged along with the standards to form the SVQ.

## Who is involved in SVQs?

There are several roles:

- ◆ **the candidate:** the person who wants to achieve the SVQ (eg an employee)
- ◆ **the assessor\*:** the person who assesses the candidates and decides if they are competent (eg supervisor)
- ◆ **the internal verifier\*:** an individual nominated by the centre (eg a company) who ensures that assessors apply the standards uniformly and consistently (eg supervisor's line manager)
- ◆ **the External Verifier\*:** an individual appointed by SQA who ensures that standards are being applied uniformly and consistently across all centres offering the SVQ

\*Assessors and verifiers in centres will be asked by SQA to prove they have the appropriate occupational competence to assess and verify the SVQ. Occupational competence has been defined by the standards-setting body in the assessment strategy for this SVQ(s) — see SQA’s website: [www.sqa.org.uk](http://www.sqa.org.uk).

Assessors and verifiers are also expected to obtain an appropriate qualification in assessment and verification — this can be the Assessor/Verifier qualifications (based on the national occupational standards in assessment and verification), or an alternative qualification which SQA also recognises.

## **An Assessment Strategy for the SVQ**

As part of their review of the SVQ, the standards-setting body (Energy & Utility Skills) has developed an assessment strategy which defines a range of requirements:

- ◆ the occupational expertise requirements for assessors and verifiers
- ◆ a definition of simulation
- ◆ definition of the workplace
- ◆ information on a model of independent assessment or external quality control

The relevant parts of the assessment strategy are published on SQA’s website ([www.sqa.org.uk](http://www.sqa.org.uk)), and both SQA and assessment centres must comply with these requirements.

## **Why would people be interested in the SVQ?**

People will take SVQs for a variety of reasons — to gain promotion, to prove their job competence, or for personal development. There will be other reasons too. One of the first things to do is to find out why your candidates want to do the SVQ, and to advise them of the appropriateness of the qualification. If anyone is acting as a coach or mentor to your candidates, they might help you to do this.

## **How do candidates begin?**

### **Choosing the SVQ**

You should ensure that candidates are given guidance before starting out on an SVQ — they need advice to ensure that their existing job remit, skills, experience and plans for progression are matched to their chosen SVQ. As the assessor, you do not have to carry out the matching process, but whoever is responsible for this should ensure that the assessment opportunities that are available to the candidate are also considered against the SVQ requirements.

## **Assessor and candidate roles**

### **The assessor's role**

As the assessor, your role is to:

- ◆ ensure candidates understand what is to be assessed and how it is to be assessed
- ◆ ensure the conditions and resources required for assessment are available
- ◆ help candidates to identify and gather evidence
- ◆ observe and record candidates carrying out the activities described in the standards — records should say what has been observed, how it was carried out, and what it demonstrates
- ◆ assess products of the candidate's own work
- ◆ question candidates and record the results
- ◆ help candidates to present evidence
- ◆ authenticate the evidence that candidates provide
- ◆ judge evidence and make assessment decisions
- ◆ identify gaps or shortfalls in candidates' competence
- ◆ provide feedback to candidates throughout the assessment process
- ◆ record achievement

### **The candidate's role**

It is up to the candidate to ensure that they:

- ◆ prepare for assessment — become familiar with the standards, what is to be assessed and how it is to be assessed
- ◆ help to identify sources of evidence and how these could be assessed
- ◆ carry out activities, and/or produce products of their own work, and/or answer questions
- ◆ gather and present evidence
- ◆ receive and act on feedback from the assessor

The following sections contain detailed guidance on the requirements for delivering the SVQ3 in Leakage Control.

# 2 SVQ3 Leakage Control SCQF level 6

## General SVQ Requirements

This section provides guidance on the collection, assessment and recording of SVQ evidence that applies across the SVQ3 Network Construction Operations (Water) SCQF levels 6 and 7. The general evidence requirements detailed below must be observed in addition to any SVQ— or Unit-specific requirements outlined in Section C, which covers the SVQ structure and specific Units.

The following details are listed in this section to avoid repetition for each Unit. If you have any queries arising relating to any of the evidence requirements, please do not hesitate to contact your External Verifier or the awarding body.

## General Evidence Requirements

Assessors should seek to identify five key qualities in candidates' evidence:

<b>Term</b>	<b>Explanation</b>
Valid	The evidence demonstrates competence against the SVQ requirements.
Authentic	The evidence is demonstrably the candidate's own work. (If it relates to a team activity, the candidate should be able to confirm what their role was within the team.)
Reliable	The total evidence must show genuine and sustained competence against the NOS (not a single occasion: you should be confident that they could demonstrate the same skill levels on a different occasion if required).
Sufficient	There must be enough evidence available against the SVQ requirements for you to make an assessment decision.
Current	The in total evidence must show current competence (ie it must not be so old that its presence would lead you to query whether the candidate is still able to perform the task.)

The following general Evidence Requirements apply when assessing SVQ3 Leakage Control SCQF level 6:

### 2.1.1 Coverage of full SVQ requirements

- ◆ The total evidence for each Unit must cover all SVQ requirements for skills and competencies, Knowledge and Understanding (as defined in the NOS), and the scope of the evidence, and must meet any Evidence Requirements specified for that Unit.
- ◆ You must be confident that all of the SVQ Unit requirements are covered before assessing the candidate as 'competent'.

### 2.1.2 Consistent competence over time

- ◆ The candidate's evidence for each Unit must show that they meet the NOS **consistently** in their work, **over a period of time**.
- ◆ The dates of the evidence provided (whether an observation report, witness testimony or other evidence from the workplace) must allow you to confirm that the candidate has carried out the required tasks on several different occasions.
- ◆ It is helpful if the diverse pieces of evidence are taken from dates that are days, weeks or months apart, to show that the candidate's competent performance is not a singular or unusual occurrence.

*(Please note — Assessors may ask how many pieces of evidence are sufficient to show consistent competence against the SVQ requirements. The awarding body recommends that each candidate's competence is judged on its own merits.*

*It is likely that different candidates will have different amounts of evidence available to satisfy particular SVQ Unit requirements, depending upon their job roles. It is your job as an assessor to decide when a candidate has provided sufficient evidence of competence, and this will vary between candidates.*

*As a guideline, candidates could consider providing evidence of at least three occasions of performance against the NOS. You must remember, though, that the candidate must cover all SVQ requirements to a sufficient standard, and this could require evidence taken from more than three occasions.)*

### 2.1.3 Varied evidence gathered from different work activities and situations

- ◆ Candidates' performance and Knowledge Evidence must come primarily from their own work activities.
- ◆ Evidence should be **varied** and must arise from **different workplace situations** (ie different activities, undertaken at different times, which demonstrate their ability to meet the standard on a regular basis within their job role, rather than on a single assessment occasion).
- ◆ The mix of evidence must be provided from various sources and assessment methods, which, taken holistically, can be used to determine competence. This diversity will reflect the candidate's job role and act as a measure of authenticity.

- ◆ Assessors and candidates must not rely on a single type or source of evidence for any one Unit: providing diverse evidence is a robust way of demonstrating consistent competence over time, and confirming authenticity.

#### **2.1.4 Evidence that occurs naturally**

- ◆ Assessors should make use of candidate's evidence as it occurs naturally. This applies to documentary or product evidence, but also to evidence from observations, line managers'/supervisors' reports, and witness testimonies.
- ◆ One work task undertaken by a candidate can generate evidence for a number of Units. Assessors should be vigilant to this, and be able to identify where a candidate's evidence can be cross-referenced to other parts of the SVQ (eg where the candidate uses data-logging equipment on the network, this will generate evidence for Unit FA9R 04, but it is very likely also to produce some evidence towards the Unit covering health and safety (FA8G 04), and, potentially, other Units from the qualification).
- ◆ The more an assessor can identify opportunities for candidates to use one piece of evidence towards a number of Units, the less chance there is of unnecessary repetition of assessment activity or evidence gathering. Where possible, assessors should try to use of this kind of holistic approach, and should encourage candidates to think about how the different tasks they do during the day can relate to different parts of their SVQ.

#### **2.1.5 Witness testimonies**

- ◆ Assessors should consider the potential for witness testimony to provide a valuable contribution to the candidate's total evidence. This is particularly useful to confirm employer contribution to the SVQ process, which is recommended for all awards based on NOS developed by Energy & Utility Skills.
- ◆ More detailed notes on witness testimony are provided but assessors must ensure that witness testimonies are subjected to the same level of assessment as any other piece of evidence.
- ◆ There are risks associated with the use of witness testimony as SVQ evidence, and assessors must be aware of these. Please ensure that you read the notes on witness testimony below, to ensure that robust procedures are put in place for its use, before you ask your candidates to provide such evidence from managers or colleagues.

#### **2.1.6 Employer involvement and contribution to assessment process**

- ◆ Centres should ensure, where possible, that there is employer contribution to the assessment process.
- ◆ This can be demonstrated in different ways, although the most likely will be through the use of witness testimonies or other reports from candidates' managers and colleagues.
- ◆ Evidence from managers or colleagues can be useful to provide confirmation of candidates' work as part of a team and to show that their work meets the requirements of their organisation.

## 2.1.7 Evidence from leakage control activities

- ◆ To gain a full SVQ3 Leakage Control, candidates must undertake six Units: five Units (FA8G 04, FA8L 04, FA8A 04, FA9R 04 and FC07 04) and the candidate may select a further Unit from FA9V 04, FA8K 04, FA82 04 OR FC01 04.
- ◆ Candidates must provide evidence of carrying out the main activities identified in the SVQ consistently, over a period of time. This means that the evidence should be provided from a number of different jobs undertaken on different occasions (ie not during the same shift, for example, but days, weeks or months apart), to confirm consistent competence. The candidate's evidence must be sufficient to meet the full Evidence Requirements for the SVQ, as outlined in the national occupational standards.
- ◆ The individual observation requirements for each Unit from the SVQ3 Leakage Control are identified in the Unit-specific guidance at Section 3.
- ◆ Candidate's evidence should be generated from their normal work activities, which should facilitate demonstration of consistent competence over time against the SVQ requirements. The total evidence for the SVQ should show that the candidate is controlling leakage on the distribution network consistently over a period of several months, and is likely to include both assessor observations and other workplace evidence arising naturally from the candidate's work. (NB The assessor has flexibility to decide when they will carry out any on site observations, as these may be subject to logistical or practical constraints.)
- ◆ In addition to observation reports from an assessor, evidence to show consistent competence over time can be gathered from other sources if preferable, including:
  - company records of leakage detection activities undertaken (hard copy or electronic)
  - records (eg photographs) from operational activities
  - marked-up plans, sketches or photographs of the network and its configuration
  - e-mails, or other records of correspondence, either with the candidate's own department, other departments, or with customers
  - witness testimonies
  - work records
  - assessor questioning and discussion, etc

Assessors and candidates should decide together which sources of evidence are most appropriate to confirm competence against the SVQ requirements.

**Please note:** There is no requirement for assessors to observe specific NOS. This means that there is more flexibility in the way that observation is used, and is dovetailed with other assessment methods to produce the total mix of evidence for the SVQ. The key is to ensure that observation takes place to cover candidates' regular work activities, as they occur.

## 2.2 Witness testimony

Witness testimony can contribute significantly to the candidate's mix of evidence and provide external confirmation of different aspects of their work activities. Each testimony, statement or report from a witness can, additionally, provide evidence for several Units, and can be used to confirm current competence or consistency over time, or to provide supporting evidence for workplace documentation and records.

Witness testimonies are not observed assessments, and must be subjected to the same assessor scrutiny as any other type of performance evidence.

This specific guidance is designed to address the particular risks attached to witness testimony as a type of evidence. Assessors should be aware of these risks, and be able to take action to minimise them.

In discussing requirements for and potential sources of witness testimony with a candidate, you should ensure that they are briefed on good practice for witness testimonies, so that they know what characteristics you seeking when assessing any witness testimonies that they provide.

### Witness credibility

The credibility of the witness is vital to the value of witness testimony as robust evidence. Witnesses can be drawn from a variety of sources, including:

- ◆ the candidate's line manager/supervisor
- ◆ a senior manager with experience of the candidate's work
- ◆ a colleague or associate from their team or another part of the business, or a related business (eg a project manager on site)
- ◆ someone who reports to the candidate
- ◆ a client — either internal or external to the business

The choice of suitable witnesses varies between candidates, and some candidates will have access to more supporting evidence of this kind than others.

The key is to ensure that the witness:

- ◆ understands the context and operations of the candidate's job role, and
- ◆ can contribute detailed and credible information at the appropriate level about the candidate's activities described, in a context that is familiar to them

### For example:

- ◆ a leakage manager or network manager could provide considerable information on the operational leakage control activities that the candidate undertakes during usual work activities

or

- ◆ a colleague or team member could have useful information about how they interact with others and carry out their role as part of a team. This could be particularly useful in the context of Unit FA9V04 — *Provide leadership for your team*, within this SVQ



It is up to assessors and candidates to identify witnesses who can provide sufficient detail against specific SVQ performance requirements. Assessors should also consider that one testimony can provide evidence for several Units.

It is important to ensure that the witness is working at a level or in a context where they will be able to report meaningfully on the candidate's activities: in an operational context, this means that they are likely to be working at least at the same level as the candidate. Alternatively, where Units relate to the development of productive working relationships, it would be appropriate to seek testimony from witnesses who interact with the candidate at different levels.

## **Witness testimony content**

Assessors must be able to validate and authenticate the content of a report or statement. This means that the witness testimony should:

- ◆ include clear information on the witness's name, job title, relationship to the candidate, and date (and be signed by the witness)
- ◆ include the witness's contact details, to allow for follow-up or authentication of the evidence (the candidate's permission should be sought before contacting a witness)
- ◆ refer to the candidate by name
- ◆ give a meaningful statement that can be used as evidence — ie it must include suitable detail about specific work activities (time, date, location, job instructions, etc) that are witnessed, and must be a statement of fact. A supervisor or line manager may be qualified to comment on the candidate's competent performance in terms of meeting operational and company requirements, for instance, but they should not be asked for an opinion on whether the candidate has met the SVQ requirements: that is the assessor's role.

There should be sufficient detail in a witness testimony to ensure that the report or statement refers to specific activities that the witness saw that particular candidate undertaking. This enhances witness credibility and provides a potential source of validation (eg through job records showing that the candidate was working in the stated location at the time the activities were witnessed).

Assessors should be alert to the potential for insufficient detail to be provided, or for situations where a witness provides testimony for several candidates, which is identical in each case. Even when working under supervision or as part of a team, the candidate will have a specific contribution to make, and a robust witness statement should be able to identify and confirm the candidate's own activities.

## **Recording witness testimony**

Formats for recording witness testimony vary between witnesses and between centres — some assessment teams have a preferred pro forma that they issue to witnesses, while others prefer to leave the content and expression entirely up to the witness. An example of a witness testimony pro forma is at Appendix 2. A copy is available in Word, for centres to adapt as required for their own use.

As a guideline, in developing a more specific witness testimony form for this award, the centre should bear in mind that it is not recommended that a candidate's manager or other potential witness is given a list of statements with which they must agree or disagree. It is preferable to include open questions, which require them to think of specific examples of the candidate's work and provide more detailed responses about the candidate's own role and activities.

## **2.3 Knowledge assessment**

You (or your centre) must have a strategy for assessing the knowledge and understanding requirements for the SVQ3 Leakage Control SCQF level 6. This is likely to involve a combination of evidence generated from performance, during discussions with the assessor, and from assessor questioning (either in written or oral format). It is recommended that the candidate's ability to meet the knowledge requirements is assessed through discussions and oral questioning, during the course of observed assessments or assessment meetings. The awarding body also recommends that, where a candidate demonstrates during assessment that they have knowledge that applies to more than one Unit, the assessor should ensure that they record this coverage, to avoid unnecessary repetition of assessment activity. If candidates have undertaken written assessment that can be related to the knowledge requirements, these may also be used to confirm relevant NOS coverage.

For an assessor to confirm SVQ competence, the candidate must provide evidence against all of the Knowledge and Understanding requirements for a Unit, so any areas that are not initially identified as correct must be revisited elsewhere in the candidate's total evidence. You should also remember that all question banks must be stored securely in the centre, and that candidates must not leave the assessment meeting or test situation with any materials that are used for knowledge assessment in controlled circumstances (question banks, test papers, etc).

## **2.4 Approaches to collecting evidence: assessor- or candidate-led**

Some candidates will relate more easily than others to SVQ terminology, gathering evidence and matching the tasks they do in their daily work to the SVQ requirements. This depends upon candidates' individual aptitudes and preferences, and also on their job role, the amount of responsibility they have within their organisation, and the amount of evidence that they can typically generate from their work activities. Assessment approaches can vary according to each candidate or group of candidates.

Candidates working on the SVQ3 Leakage Control qualification are likely to carry out their job role under their own initiative and have considerable autonomy to carry out diverse leakage control activities. They require the skills and knowledge to identify and handle numerous different circumstances and conditions that they, or those reporting to them, encounter on the distribution network.

It is possible that the candidate will be able to provide workplace evidence (documents or products) to supplement assessor observations, discussions and witness testimonies, and some candidates will be happy to adopt a more proactive approach to identifying their own potential sources of evidence against the NOS. Others will be more comfortable if the assessor is more proactive. Either approach is acceptable providing the SVQ requirements are met.

## **2.5 Types of evidence**

Candidates for the SVQ3 Leakage Control will provide evidence from various sources. Assessors should look for a variety of evidence, from different sources, to provide a total picture of candidates' skills.

A table showing the various different types of evidence, their advantages, risks and potential solutions for managing the risks can be found at Appendix 3. This could be useful to you in planning and carrying out your assessments, or as a general reference tool.

As the advantages and risks vary according to the assessment method or type of evidence, it is always appropriate to combine a variety of evidence types in assessing any Unit or full SVQ. This approach:

- ◆ allows evidence to be produced from several different sources, and in different forms, against the SVQ requirements
- ◆ ensures that candidates have the opportunity to use one piece of evidence to meet the NOS for a number of Units, and
- ◆ allows them to make use of the full range of evidence that is available to them in their workplace

In planning assessments with candidates, assessors should encourage them to consider as many possible sources of evidence that they have available to them, and to refer to their assessor if they are unsure about the validity of evidence, rather than assuming that it will have no value.

### **Graphical items and data in performance evidence**

As part of their evidence, candidates may produce marked up plans, etc showing the network and metered areas on which they are working, or readings and performance data from equipment taken during leakage control operations. These are particularly useful for providing additional and detailed information relating to specific locations and jobs covered, and can be used to reinforce authenticity.

As stated at Appendix 3, the risk associated with these types of evidence is that they are not meaningful for the SVQ unless the candidate can explain their relevance (either in a note or through assessor questioning).

The candidate must be able to show how this kind of workplace material relates to their job role and specific work activities, and the assessor must ensure that they satisfy themselves of the authenticity and validity of the evidence against the NOS (eg be able to confirm that a plan or photograph relates to a specific job — and corroborate, if necessary, with reference to other records (eg records on company systems, etc)).

## **Using generic workplace documentation**

Candidates may have access to a variety of generic workplace documentation, produced either by their employer or at customer premises (eg company risk assessment formats, health and safety policies, HSE forms, health and safety induction details or policies produced at third party premises).

This documentation is valuable as evidence only if a candidate can show how it relates to their particular job role or specific activities, and the assessor must ensure that they review generic documents on this basis. It is not sufficient for candidates to include generic material amongst their evidence without any explanation of its relevance.

### **For example:**

It is more credible if:

- ◆ a candidate provides a generic company risk assessment form that they completed while undertaking a job
- ◆ a candidate can show how they used any information received during a health and safety induction on-site during their leakage control work.

Specific evidence requirements for each Unit from the Leakage Control SVQ are found in the Section 3. Most types of evidence are acceptable for any Unit, and candidates should make use of as much evidence as possible that arises naturally from their work activities. The Unit outlines confirm the skills that are covered within each Unit, and identify any particular evidence that is required.

## 2.6 Recording SVQ evidence

Assessors must ensure that sufficient records are produced to provide an audit trail for the assessment process.

Assessors' records must show:

- ◆ how they confirmed the candidate's competence against the SVQ requirements (NOS and any SVQ Evidence Requirements)
- ◆ that the SVQ assessment process is applied consistently to all of their candidates (assessors are likely to work with other assessors and IVs at the centre to develop systems and processes that allow this to be done)
- ◆ a clear audit trail

It is vital that assessment records are robust, as they provide the starting point for internal and External Verifiers to sample records and monitor the assessment process. Assessors need to ensure that their records allow the IV and EV to follow the audit trail through the SVQ delivery process as applied to your candidates and allow them to drill down into the detail of your assessment decisions during the verification sampling process.

### The SVQ audit trail

You must ensure that your records show your involvement in the stages of SVQ delivery. These will include:

- ◆ **Candidate induction and registration** — candidates must be aware that they have been registered with the awarding body, and the induction or first assessment meeting is commonly used to conduct skills scans or otherwise identify how the candidate's job role relates to the SVQ and what Units they will undertake. It is also important, if possible, to identify any particular assessment requirements (eg personal needs relating to language or literacy issues or physical disabilities that could limit access to premises) at this stage, so that you can plan to meet the candidate's needs.
- ◆ **Assessment planning** — the assessment team should have systems in place for assessment planning, relating both to the planning of the SVQ assessment process, and more detailed assessment planning with individual candidates (which is likely to be reviewed at the end of each assessment meeting, so that you and the candidates know what is expected at the next assessment).
- ◆ **Observations and assessment meetings** — each meeting with a candidate should generate some form of assessment record. The type of report can differ depending upon your assessment activity. If you observe a candidate, you may prefer to use a tailored observation report form that allows you to concentrate on the tasks you are watching, while a discussion-based meeting could use a more generic template (see sample generic report at Appendix 4).

As candidates for the Leakage Control SVQ need to show evidence of specific leakage control activities undertaken on site to meet the Evidence Requirements, it is also important that assessor reports (and particularly records of observations), line managers' reports, witness testimonies or other job records confirm details of the job location and work undertaken. This is useful not only to assessors in ensuring that the evidence is authentic and reflects the candidate's job role, but also to internal and External Verifiers when validating assessment records during the sampling process.

A tailored observation report could be more suitable for this SVQ, to align the leakage control activities with the NOS requirements, but a more generic report is useful for general assessment discussions or meetings at all levels.

- ◆ **Coverage of the national occupational standards** — it is important as candidates go through the SVQ process that there is a record of how their evidence meets the NOS. This allows assessors to:
  - ensure that any mandatory types of evidence are provided
  - show how far the candidate has progressed for any Unit
  - identify gaps in the evidence and plan how further evidence can be provided
- ◆ **SVQ Unit sign off to confirm coverage** — assessors need to confirm when the Unit requirements have been satisfied, so that they can recommend Unit (and, eventually, full SVQ certification). It could be helpful to provide a cover sheet or overview of how the assessment decision was reached, that can also require the candidate to confirm that the evidence is their own work. This could also act as the starting point for an IV or EV during sampling.

The assessment and verification team must identify how each Unit will be signed off and confirmed.

- ◆ **Feedback to candidates and action planning** — this should be covered in the assessment reports, or potentially through correspondence records between assessors and candidates, but it is an important part of the ongoing SVQ delivery process, as candidates need to be aware of their current progress, and to know what further action or evidence is needed for them to complete the Unit or award. Candidates should also be given the opportunity to provide feedback to their assessors (see sample assessment report, Appendix 4).

## 2.7 Using the sample recording format

Sample evidence recording documents were produced for each Unit, after consultation with existing assessment centres and EVs. These are provided in separate files with this guidance (in Word format). Each Unit document reproduces the NOS and includes a cover sheet that allows the assessor to confirm how the SVQ requirements have been met, and which is tailored to the specific Evidence Requirements for that Unit.

The Unit evidence tables list the skills and competencies, knowledge and understanding items and 'scope of the evidence' specific to each Unit, so that assessors can use them without referring to a separate NOS document. (Please note that 'scope of the evidence' in this context links, principally, to the 'Terms used within the standards' that appear in the Unit overviews in the final approved NOS Units.)

If using this format, assessors could either:

- ◆ provide a brief description of or reference for the evidence (under 'Evidence Ref/Description'), including a file reference if applicable (eg if the candidate is keeping an evidence file or portfolio), marking where the evidence meets the NOS requirement
- or
- ◆ maintain a separate master list of SVQ evidence, giving each piece of evidence a reference number which is then inserted into the table against specific NOS requirements as necessary

The tables are designed to provide an at-a-glance indication for assessors and candidates of the progress made against the NOS for that Unit. Assessors can initial against each NOS requirement when they feel that this has been covered.

The assessor can use the cover sheet to confirm that all Evidence Requirements are met, and both candidate and assessor sign on completion of the Unit. The IV and EV can also sign to show where they have sampled.

**Please note** — *The purpose of the tables is to provide a record of the candidate's progress through the SVQ, and it is up to the assessor to confirm completion of a Unit. Some candidates could be comfortable in using the recording tables, but it is not mandatory for the candidates to complete any or all of this information on their own.*

**Centres may use the samples exactly as provided (in Word), adapt them for the use of their own assessment team, or use their own formats and templates, according to centre requirements.**

**If the centre wishes to use a different format, the EV will need to see sample documents that the team intends to use for this SVQ at the point of centre approval, to ensure that the proposed recording mechanism shows how the NOS are covered and the SVQ Evidence Requirements are met.**

It is not mandatory for candidates to maintain an evidence file or portfolio, but there must be a clear record of where each piece of evidence is located, either in the evidence recording documents or in a separate master list of evidence. Some candidates and centres prefer to use a portfolio or evidence file system, as the supporting evidence is held in one place, but it may not be appropriate to all candidates or situations. If alternative evidence storage methods are used, the centre must maintain a robust record of where evidence is located, because the IV and EV may require access to the original evidence when sampling, in order to validate the evidence and confirm authenticity.

***Please note*** — *The sample recording formats are produced with a view to their use at SVQ centres, and on the basis of feedback provided during delivery of previous water industry SVQs. The joint awarding bodies would like to receive any suggestions from centres about the format of assessment records and reports and how they can be improved, and may update the sample materials during the lifetime of the SVQ, as a result of centre comments. Please advise the External Verifier or contact SQA/CABWI direct in order to feed back on the sample recording formats.*

***In using or adapting the sample format, the centre must not change the content of the national occupational standards.*** *The NOS are the benchmark that assessors use to ascertain candidates' competence. If they are altered, the candidate's competence may not be fully confirmed.*

Section 3 contains details specific to each of the SVQ3 Leakage Control, based on the assessment requirements and content of individual Units.



## 3 Structure for SVQ3 in Leakage Control SCQF level 6

This section outlines the requirements for the SVQ3 Leakage Control, based on the assessment requirements and content of individual Units. The generic evidence requirements covered in Section 2 apply across the full award, and most of this information is not repeated in the Unit-specific notes that follow. Assessors should be aware of the general requirements covered in Section B, and also of any specific requirements relating to the full SVQ or individual Units.

**Please note** — *This qualification relates to activities undertaken on the water distribution network. It is therefore imperative that candidates follow the National Water Hygiene code and where appropriate Scottish Water's Distribution Operation and Maintenance Procedures (DOMS) at all times throughout their leakage control activities. Their evidence for the SVQ should reflect this.*

### SVQ3 structure for Leakage Control (GA1K 23)

#### Mandatory Units

SQA ref	SCQF level	SCQF credit points	SSC ref	Title
FA8G 04	5	8	LD&C1	Ensure Your Own Actions Reduce Risks to Health and Safety
FA8L 04	6	7	LD&C11	Evaluate Data to Identify Potential Leakage
FA8A 04	6	9	LD&C4	Determine Leakage Detection Methods and Techniques in Response to Water Loss
FA9R 04	6	9	LD&C5	Programme, Deploy and Collect Data from Data-logging Equipment
FC07 04	6	9	LD&C6	Utilise and Confirm Performance of Measuring Equipment on the Distribution Network

#### Optional Units

SQA ref	SCQF level	SCQF credit points	SSC ref	Title
FA9V 04	6	9	LD&C12 (MSC B5)	Provide Leadership for your Team
FA8K 04	6	6	LD&C10	Establish the Integrity of a Discrete Area on the Distribution Network
FA82 04	6	9	LD&C7	Carry out Step-testing Operations and Re-commission the Distribution Network
FC01 04	5	5	LD&C8	Resolve Leakage-related Issues with Customers

The following pages outline the specific requirements for each Unit from the SVQ3 Leakage Control. This includes an overview of the Unit, and identifies any mandatory Evidence Requirements for that Unit.

Please note that the full detail of the national occupational standards is not reproduced in this section, but are reproduced in full for each Unit, in the sample evidence recording documents.

# Assessors' Unit Notes: SVQ3 Leakage Control SCQF level 6

## FA8G 04 Ensure Your Own Actions Reduce Risks to Health and Safety

### Unit content

This Unit is about ensuring that health and safety risks in the workplace are identified and minimised, in line with current legislation, organisational requirements, and the candidate's job role. It covers the candidate's own workplace, customer premises, and site locations on the distribution network where the candidate is detecting leakage.

The candidate must:

- ◆ be aware of potential risks in the workplace, and must know how to respond to these appropriately, whether by taking action to resolve the risks or reporting situations which could endanger people in the workplace and seeking further advice
- ◆ ensure that their own actions do not cause risks to health and safety
- ◆ show that they understand health and safety requirements in the workplace
- ◆ be aware of health and safety policies as they apply to their role (whether in their own workplace or on customer premises)
- ◆ check their own working practices and work area for any risk, and respond appropriately when a risk is identified.

Candidates need to provide evidence that they have the skills and competencies to:

- ◆ identify hazards and risks in the workplace
- ◆ reduce risks to health and safety in the workplace

### Assessor guidance on evidence

- ◆ The terms identified in the Leakage NOS Unit as 'Terms used within the standards' have been designated as 'Scope of the evidence' for the purposes of the SVQ. Candidates' evidence in total must show that they can cover these items, through performance evidence. Where no direct performance evidence exists from observations or other work records, the assessor needs to use questioning and discussion to ascertain the candidate's competence.
- ◆ The majority of the evidence used for this Unit must come from the candidate's own work activities, both in their own 'reporting base' and working on the water distribution network. As the candidate's job role revolves around detecting leaks on the distribution network, **the majority of the evidence provided for this Unit must come from their on-site leakage detection activities.**

- ◆ The assessor **must** carry out **at least one direct assessor observation** of the candidate for Unit FA8G 04. A realistic working environment may be used to generate part of the evidence for the SVQ, providing the requirements for the realistic working environment are met, and its use has been discussed and agreed in advance with the centre's External Verifier. (Please note that any centre wishing to use a realistic working environment for assessing any Unit from the Leakage Control SVQ3 must show that there is a demonstrable need to use it.)
- ◆ 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 (including site risk assessments produced prior to leakage detection activities, and how the candidate uses them in conjunction with the circumstances s/he encounters on site).
- ◆ The activities covered in Unit FA8G 04 underpin the safe completion of operational activities that candidates undertake within their job role. Much of the evidence that candidates produce for this Unit is likely to be generated from the operational leakage control activities covered in the other Units from this SVQ. You should be aware when assessing candidates (both observed assessments and assessment of other types of evidence) of the opportunities that exist to cross-reference both performance and knowledge evidence to this Unit, to minimise duplication of assessment.
- ◆ **Knowledge and Understanding.** The Knowledge and Understanding requirements for this Unit must be covered in full for Unit accreditation. The candidate 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.

Unit FA8G 04 is a **mandatory Unit** in the Leakage Control SVQ3.

Unit FA8G 04 is also a mandatory Unit in the following SVQs:

- ◆ SVQ2 in Leakage Detection (SQA Ref — GA1L 22)
- ◆ SVQ3 in Water Byelaws Enforcement (SQA Ref — GA1X 23)

Candidates who have gained this Unit while working towards any of these SVQs may transfer the accreditation over to the Leakage Control award. Likewise, if they gain this Unit while undertaking a Leakage Control SVQ, they may transfer the accreditation to any of the other awards.

## **FA8L 04 Evaluate Data to Identify Potential Leakage**

### **Unit content**

This Unit is designed to allow the candidate to show their competence in obtaining and analysing data from control and monitoring activities to identify areas of potential leakage.

The candidate must be able to:

- ◆ obtain relevant information from specified control and monitoring activities
- ◆ use information from different sources to build up a comprehensive picture of flow and pressure in the area being monitored
- ◆ analyse the data against the expected pattern of data for the area, and identify the type and nature of any discrepancies
- ◆ report details of any further investigations required where a viable explanation cannot be found
- ◆ formulate conclusions about the distribution system's operation based on analysis and interpretation of the available data
- ◆ highlight any area that appears to show leakage problems
- ◆ estimate water loss from the area based on the available data
- ◆ document the details of the area and the water loss calculations, according to organisational requirements
- ◆ ensure that any additional information relating to the particular area and situation is considered, where it could influence the outcome of their analysis

Candidates need to provide evidence that they have the skills and competencies to:

- ◆ analyse data
- ◆ identify areas of potential leakage

### **Assessor guidance on evidence**

- ◆ The terms identified in the Leakage NOS Unit as 'Terms used within the standards' have been designated as 'Scope of the evidence' for the purposes of the SVQ. Candidates' evidence in total must show that they can cover these items, through performance evidence. Where no direct performance evidence exists from observations or other work records, the assessor needs to use questioning and discussion to ascertain the candidate's competence.
- ◆ The majority of the evidence for this Unit must come from real work activities. A realistic working environment may be used to generate part of the evidence for the SVQ, providing the requirements for the realistic working environment are met, and its use has been discussed and agreed in advance with the centre's External Verifier. (Please note that any centre wishing to use a realistic working environment for assessing any Unit from Leakage Control SVQ3 must show that there is a demonstrable need to use it.)

- ◆ The assessor may carry out a direct observation of the candidate in their workplace (which will generate an observation report), though this is not mandatory.
- ◆ If, in assessing a candidate undertaking this Unit, the assessor identifies evidence that can also be used towards other Units from the SVQ3 Leakage Control (eg Unit FA8G 04 — Ensure Your Own Action Reduce Risks to Health and Safety), they should ensure that they record where such evidence is produced in their assessor report, to minimise duplication of assessment.
- ◆ The evidence for this Unit is likely to be generated through a mixture of observation reports, witness testimonies, assessor-guided discussions and questioning, and workplace records, reports, or documentation.
- ◆ **Knowledge and Understanding.** The Knowledge and Understanding requirements for this Unit must be covered in full for Unit accreditation. The candidate may demonstrate considerable knowledge through their workplace performance, but it is likely that some assessor questioning will be needed to confirm that all knowledge requirements are met.

Unit FA8L 04 is a **mandatory Unit** in the Leakage Control SVQ3, and must be taken to gain a full award.

## **FA8A 04 Determine Leakage Detection Methods and Techniques in Response to Water Loss**

### **Unit content**

This Unit is designed to allow the candidate to show their competence in identifying appropriate leakage detection methods and techniques to be used where water loss has been identified on the distribution network. To make this decision, the candidate must use information available from existing records and data to determine whether acoustic, flow and pressure or visual leakage detection methods are required, singly or in combination, according to the situation.

The candidate must be able to:

- ◆ use information from existing data and records to establish the details of the specific leakage situation
- ◆ identify whether acoustic, flow and pressure or visual leakage detection methods are required, or whether a combination of techniques is most appropriate, in response to the identified situation
- ◆ decide how urgent the leakage situation is, and identify the condition of the distribution infrastructure
- ◆ decide whether there are any major factors in play that influence the selection of leakage detection methods
- ◆ evaluate which leakage detection method will provide the greatest chance of success
- ◆ identify the equipment and resource requirements and availability
- ◆ identify the effects of proposed detection methods on water supply, water quality and customers
- ◆ take account of the health, safety, hygiene and environmental considerations that could arise from using the proposed methods and techniques
- ◆ record information about the detection methods used and ensure the details are passed to the relevant people.

Candidates need to provide evidence that they have the skills and competencies to:

- ◆ establish the circumstances relating to the area of potential leakage
- ◆ select appropriate leakage detection methods and techniques

### **Assessor guidance on evidence**

- ◆ The terms identified in the Leakage NOS Unit as 'Terms used within the standards' have been designated as 'Scope of the evidence' for the purposes of the SVQ. Candidate's evidence in total must show that they can cover these items, through performance evidence. Where no direct performance evidence exists from observations or other work records, the assessor needs to use questioning and discussion to ascertain the candidate's competence.

- ◆ The majority of the evidence for this Unit must come from real work activities. A realistic working environment may be used to generate part of the evidence for the SVQ, providing the requirements for the realistic working environment are met, and its use has been discussed and agreed in advance with the centre's External Verifier. (Please note that any centre wishing to use a realistic working environment for assessing any Unit from the Leakage Control SVQ3 must show that there is a demonstrable need to use it.)
- ◆ The assessor may carry out a direct observation of the candidate in their workplace (which will generate an observation report), though this is not mandatory.
- ◆ If, in assessing a candidate undertaking this Unit, the assessor identifies evidence that can also be used towards other Units from the Leakage Control SVQ3 (eg Unit FA8G 04 — Ensure Your Own Action Reduce Risks to Health and Safety), they should ensure that they record where such evidence is produced in their assessor report, to minimise duplication of assessment.
- ◆ The evidence for this Unit is likely to be generated through a mixture of observation reports, witness testimonies, assessor-guided discussions and questioning, and workplace records, reports, or documentation.
- ◆ **Knowledge and Understanding.** The Knowledge and Understanding requirements for this Unit must be covered in full for Unit accreditation. The candidate may demonstrate considerable knowledge through their workplace performance, but it is likely that some assessor questioning will be needed to confirm that all knowledge requirements are met.

Unit FA8A 04 is a **mandatory Unit** in the Leakage Control SVQ3, and must be taken to gain a full award.



## **FA9R 04 Programme, Deploy and Collect Data from Data-logging Equipment**

### **Unit content**

This Unit is designed to allow the candidate to show their competence in programming, installing and collecting data from one or more pressure, flow or noise-loggers on the water distribution network.

The candidate must be able to:

- ◆ select appropriate data loggers for the monitoring activity required
- ◆ program selected equipment safely and according to operational instructions and required parameters
- ◆ deploy the data-logging equipment correctly in line with the monitoring to be undertaken
- ◆ record programming and deployment information and ensure these details are provided to the relevant people
- ◆ collect data from the equipment
- ◆ provide the data collected to the relevant people
- ◆ identify and take action to resolve any problems that arise during programming, deployment and data collection activities

Candidates need to provide evidence that they have the skills and competencies to:

- ◆ programme data-logging equipment
- ◆ deploy and recover data-logging equipment
- ◆ collect data from data-logging equipment

### **Assessor guidance on evidence**

- ◆ The terms identified in the Leakage NOS Unit as 'Terms used within the standards' have been designated as 'Scope of the evidence' for the purposes of the SVQ. Candidates' evidence in total must show that they can cover these items, through performance evidence. Where no direct performance evidence exists from observations or other work records, the assessor needs to use questioning and discussion to ascertain the candidate's competence.
- ◆ The majority of the evidence used for this Unit must come from the candidate's own leakage control activities in the workplace.
- ◆ The assessor must carry out at least one direct assessor observation of the candidate for Unit LDC3 05. A realistic working environment may be used to generate part of the evidence for the SVQ, providing the requirements for the realistic working environment are met, and its use has been discussed and agreed in advance with the centre's External Verifier. (Please note that any centre wishing to use a realistic working environment for assessing any Unit from the Leakage Control SVQ3 must show that there is a demonstrable need to use it.)

- ◆ 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.
- ◆ If, in assessing a candidate undertaking this Unit, the assessor identifies evidence that can also be used towards other Units from the Leakage Control SVQ3 (eg Unit FA8G 04 — Ensure Your Own Action Reduce Risks to Health and Safety), they should ensure that they record where such evidence is produced in their assessor report, to minimise duplication of assessment.
- ◆ **Knowledge and Understanding.** The Knowledge and Understanding requirements for this Unit must be covered in full for Unit accreditation. The candidate may demonstrate considerable knowledge through their workplace performance, but it is likely that some assessor questioning will be needed to confirm that all knowledge requirements are met.

Unit FA9R 04 is a **mandatory Unit** in the Leakage Control SVQ3, and must be taken to gain a full award.

## **FC07 04 Utilise and Confirm Performance of Measuring Equipment on the Distribution Network**

### **Unit content**

This Unit is designed to allow the candidate to show their competence in conducting maintenance checks on measuring equipment that is used during leakage control activities on the water distribution network.

The candidate must be able to:

- ◆ complete maintenance checks on meters and gauges
- ◆ take meter readings
- ◆ set up and remove meters and gauges on the network
- ◆ locate meters and gauges on the network, carry out operational checks and identify problems caused by damage, faulty operation, leaks or maintenance requirements
- ◆ ensure that readings taken are accurate, and record readings and other relevant information about the equipment
- ◆ select the correct equipment for the operation being undertaken and ensure it is in working order
- ◆ attach the equipment to the pipework and ensure it is correctly installed.

Candidates need to provide evidence that they have the skills and competencies to:

- ◆ confirm the ongoing performance of equipment and take readings
- ◆ set up and remove temporary flow and pressure measuring equipment

### **Assessor guidance on evidence**

- ◆ The terms identified in the Leakage NOS Unit as 'Terms used within the standards' have been designated as 'Scope of the evidence' for the purposes of the SVQ. Candidates' evidence in total must show that they can cover these items, through performance evidence. Where no direct performance evidence exists from observations or other work records, the assessor needs to use questioning and discussion to ascertain the candidate's competence.
- ◆ The majority of the evidence used for this Unit must come from the candidate's own leakage control activities in the workplace.
- ◆ The assessor must carry out at least one direct assessor observation of the candidate for Unit FC07 04. A realistic working environment may be used to generate part of the evidence for the SVQ, providing the requirements for the realistic working environment are met, and its use has been discussed and agreed in advance with the centre's External Verifier. (Please note that any centre wishing to use a realistic working environment for assessing any Unit from the Leakage Control SVQ3 must show that there is a demonstrable need to use it.)
- ◆ 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.

- ◆ If, in assessing a candidate undertaking this Unit, the assessor identifies evidence that can also be used towards other Units from the Leakage Control SVQ3 (eg Unit FA8G 04 — Ensure Your Own Action Reduce Risks to Health and Safety), they should ensure that they record where such evidence is produced in their assessor report, to minimise duplication of assessment.
- ◆ **Knowledge and Understanding.** The Knowledge and Understanding requirements for this Unit must be covered in full for Unit accreditation. The candidate may demonstrate considerable knowledge through their workplace performance, but it is likely that some assessor questioning will be needed to confirm that all knowledge requirements are met.

Unit FC07 04 is a **mandatory Unit** in the Leakage Control SVQ3, and must be taken to gain a full award.

## FA9V 04 Provide Leadership for your team

### Unit content

This Unit is part of the suite of NOS developed by the Management Standards Centre (the standards setting body for Management and Leadership), and uses a slightly different format from the other Units in the Leakage Control SVQ, which were all developed by Energy & Utility Skills. In addition to Performance Criteria and Knowledge and Understanding requirements, candidates undertaking this Unit must also show that they can cover the **Behaviours which underpin effective performance**, through performance evidence.

The Unit is designed to allow the candidate to show their competence in providing leadership and direction to the members of their team, and motivating and supporting them to achieve both the team's and their own personal work objectives.

The candidate must provide evidence to show that they can:

- ◆ set out and communicate the purpose and objectives of the team to all members
- ◆ involve team members in planning the achievement of objectives
- ◆ ensure that individual team members have personal work objectives and understand how these contribute to the achievement of team objectives
- ◆ encourage and support team members to achieve their personal objectives and those of the team
- ◆ provide recognition when objectives are achieved
- ◆ win the trust and support of team members through their performance
- ◆ guide the team through difficulties and challenges, including internal conflicts
- ◆ encourage and recognise creativity and innovation
- ◆ support and advise team members where required
- ◆ motivate team members to promote their own ideas
- ◆ encourage team members to take the lead where they have the knowledge and expertise
- ◆ monitor activities and team progress.

### Assessor guidance on evidence

- ◆ Candidates' evidence in total must show that they can cover the Performance Criteria and Behaviours consistently over time. The evidence will be derived from diverse sources, but it is likely that the assessor will also need to use questioning and discussion to ascertain the candidate's competence across all aspects of the NOS.
- ◆ All of the evidence for this Unit must come from real work activities. **Simulated activities or realistic working environments may not be used to produce evidence for this Unit.**
- ◆ The assessor may carry out a direct observation of the candidate in their workplace (which will generate an observation report), though this is not mandatory.

- ◆ If, in assessing a candidate undertaking this Unit, the assessor identifies evidence that can also be used towards other Units from the Leakage Control SVQ3 (eg Unit FA8G 04 — Ensure Your Own Actions Reduce Risks to Health and Safety, or one of the leakage control specific Units), they should ensure that they record where such evidence is produced in their assessor report, to minimise duplication of assessment.
- ◆ Assessors should be aware that candidates may not realise that they carry out some of the activities in this Unit on a regular basis (eg resolving conflicts of interest or disagreements within a team), so you may need to question them in some detail to identify less obvious sources of evidence. (eg conflicts of interest or disagreements may not revolve around major incidents or issues — they can relate to situations as regular as prioritising work activities, setting up or changing rotas, resolving issues or queries with external parties, such as engineers working on site, etc).
- ◆ The assessment of Units in this format, and in particular, the assessment of behaviours, is new to water industry awards, including the Leakage Control SVQ3. In general, evidence for this Unit could be generated from<sup>1</sup>:
  - notes and other records of meetings with individuals and the team that the candidate has led (to discuss and agree objectives and work plans; showing how team problems have been resolved; during creative activities to generate ideas)
  - performance management data on the quality and quantity of individual team performance, and the achievement of objectives and plans
  - individual and team objectives and work plans or schedules agreed with the team
  - records of the candidate’s appraisals and performance review meetings (to show their role in agreeing individual and team objectives and work plans; or their role in encouraging innovation and creativity in the team)
  - personal statement (commentary on how the candidate involved team members in agreeing demanding but realistic individual and team objectives and work plans; how they motivated individuals, encouraged them to take responsibility and dealt with individual and team problems; or on how the candidate led the team in developing ideas and innovative approaches to situations encountered during their daily activities)
  - witness statements by team members (about how the candidate encouraged them to set demanding but realistic objectives and accept responsibility for achieving them; about how the candidate helped them to overcome problems and motivated them to achieve objectives and take on responsibility for activities; or about how the candidate led them to develop creative ideas and innovation)
  - records of agreement by managers to introduce innovative ideas that the candidate’s team has developed
  - data on performance improvements arising directly from innovations proposed by the team.

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<sup>1</sup> These bullet points align with the evidence guidance that was produced by the Management Standards Centre to align with the management and leadership NOS.

- ◆ The evidence for this Unit is likely to be generated through a mixture of observation reports, witness testimonies from colleagues working at the same level as and at different levels from the candidate (including team members for whom the candidate has line management responsibility), assessor-guided discussions and questioning, and workplace records, reports, or documentation.
- ◆ **Knowledge and Understanding.** The Knowledge and Understanding requirements for this Unit must be covered in full for Unit accreditation. The candidate may demonstrate considerable knowledge through their workplace performance, but it is likely that some assessor questioning will be needed to confirm that all knowledge requirements are met.

Unit FA9V 04 is an optional Unit in the Leakage Control SVQ3. This is one of four optional Units that candidates can choose to take in order to gain a full award.

This Unit is also a mandatory Unit in the in Managing and Controlling Process Operations SVQ3. If a candidate has achieved the Unit while working towards the Managing and Controlling Process Operations award, and subsequently changes functions to move into a water distribution role, covering leakage, they may transfer the accreditation to the Leakage Control SVQ3 award. Likewise, if they gain this Unit as part of the Leakage Control SVQ and move to a process operations role, they may transfer the accreditation to the other award.

## **FA8K 04 Establish the Integrity of a Discrete Area on the Distribution Network**

### **Unit content**

This Unit is designed for candidates who are involved in proving metered areas on the distribution network, and who undertake the isolation and re-commissioning of sections of the network as part of this activity.

The candidate must be able to:

- ◆ identify the section of the network to be isolated and the network fittings to be used
- ◆ ensure customers whose water supply and/or quality will be affected by the isolation have been informed and that agreed service levels are maintained
- ◆ operate network fittings correctly to isolate the section of the network, and ensure that the section is fully isolated
- ◆ check that there is no contamination and records the details of the isolation
- ◆ check that the information available from plans and network records agrees with the situation that exists on site (ie network fittings are as expected; boundary valves are accessible, working correctly and water tight)
- ◆ identify and report problems with valves and meters
- ◆ establish the inflow and outflow meters for the area and record changes to any equipment
- ◆ ensure boundary valves are marked correctly on network plans
- ◆ confirm the section of the network that is to be re-commissioned and identify the network fittings to be used
- ◆ operate network fittings correctly to re-commission the network
- ◆ carry out flushing operations on the re-commissioned section as required
- ◆ ensure appropriate samples are taken
- ◆ provide re-commissioning details to those who need them.

Candidates need to provide evidence that they have the skills and competencies to:

- ◆ isolate a section of the distribution network
- ◆ prove the integrity of the metered area
- ◆ re-commission a section of the distribution network



## Assessor guidance on evidence

- ◆ The terms identified in the Leakage NOS Unit as 'Terms used within the standards' have been designated as 'Scope of the evidence' for the purposes of the SVQ. Candidates' evidence in total must show that they can cover these items, through performance evidence. Where no direct performance evidence exists from observations or other work records, the assessor needs to use questioning and discussion to ascertain the candidate's competence.
- ◆ The majority of the evidence used for this Unit must come from the candidate's own leakage control activities in the workplace.
- ◆ The assessor must carry out at least one direct assessor observation of the candidate for Unit FA8K 04. A realistic working environment may be used to generate part of the evidence for the SVQ, providing the requirements for the realistic working environment are met, and its use has been discussed and agreed in advance with the centre's External Verifier. (Please note that any centre wishing to use a realistic working environment for assessing any Unit from the Leakage Control SVQ3 must show that there is a demonstrable need to use it.)
- ◆ 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.
- ◆ If, in assessing a candidate undertaking this Unit, the assessor identifies evidence that can also be used towards other Units from the SVQ3 Leakage Control SVQ3 (eg Unit FA8G 04 — Ensure Your Own Actions Reduce Risks to Health and Safety), they should ensure that they record where such evidence is produced in their assessor report, to minimise duplication of assessment.
- ◆ **Knowledge and Understanding.** The Knowledge and Understanding requirements for this Unit must be covered in full for Unit accreditation. The candidate may demonstrate considerable knowledge through their workplace performance, but it is likely that some assessor questioning will be needed to confirm that all knowledge requirements are met.

Unit FA8K 04 is an optional Unit in the Leakage Control SVQ3. This is one of four optional Units that candidates can choose to take in order to gain a full award.

## **FA82 04 Carry Out Step-Testing Operations and Re-Commission the Distribution Network**

### **Unit content**

This Unit is designed to allow the candidate to show their competence in carrying out step-testing by isolating and re-commissioning pipework on the water distribution network.

The candidate must be able to:

- ◆ prepare the site and equipment for step-testing activities
- ◆ isolate the appropriate section of the distribution network
- ◆ carry out the step-test
- ◆ identify and address any problems that arise
- ◆ re-commission the network when all work is fully completed
- ◆ record all details of the step-testing activity in line with organisational requirements and provide this information to the relevant people
- ◆ ensure that safety and hygiene processes are followed throughout the step-testing operation.

Candidates need to provide evidence that they have the skills and competencies to:

- ◆ prepare the site for step-testing activities
- ◆ isolate a section of the distribution network
- ◆ carry out step-testing activities
- ◆ re-commission a section of the distribution network.

### **Assessor guidance on evidence**

- ◆ The terms identified in the Leakage NOS Unit as 'Terms used within the standards' have been designated as 'Scope of the evidence' for the purposes of the SVQ. Candidates' evidence in total must show that they can cover these items, through performance evidence. Where no direct performance evidence exists from observations or other work records, the assessor needs to use questioning and discussion to ascertain the candidate's competence.
- ◆ The majority of the evidence for this Unit must come from real work activities. A realistic working environment may be used to generate part of the evidence for the SVQ, providing the requirements for the realistic working environment are met, and its use has been discussed and agreed in advance with the centre's External Verifier. (Please note that any centre wishing to use a realistic working environment for assessing any Unit from the Leakage Control SVQ3 must show that there is a demonstrable need to use it.)
- ◆ The assessor may carry out a direct observation of the candidate in their workplace (which will generate an observation report), though this is not mandatory.

- ◆ If, in assessing a candidate undertaking this Unit, the assessor identifies evidence that can also be used towards other Units from the Leakage Control SVQ3 (eg Unit FA8G 04 — Ensure Your Own Actions Reduce Risks to Health and Safety), they should ensure that they record where such evidence is produced in their assessor report, to minimise duplication of assessment.
- ◆ The evidence for this Unit is likely to be generated through a mixture of observation reports, witness testimonies, assessor-guided discussions and questioning, and workplace records, reports, or documentation.
- ◆ **Knowledge and Understanding.** The Knowledge and Understanding requirements for this Unit must be covered in full for Unit accreditation. The candidate may demonstrate considerable knowledge through their workplace performance, but it is likely that some assessor questioning will be needed to confirm that all knowledge requirements are met.

Unit FA82 04 is an optional Unit in the Leakage Control SVQ3. This is one of four optional Units that candidates can choose to take in order to gain a full award.

## **FC01 04      Resolve Leakage-related Issues with Customers**

### **Unit content**

This Unit is designed to allow the candidate to show their competence in liaising with customers specifically in relation to leakage related issues. These could involve dealing with abnormal meter readings, seepage of water, water damage and issues relating to water pressure and water noise. The candidate's customers will be both domestic and non-domestic users of the water supply, and the supply will be both single and joint.

The candidate must be able to:

- ◆ identify the problem that the customer is experiencing
- ◆ explain the position regarding legal responsibilities for resolving the problem, and company policy for dealing with leakage related issues
- ◆ decide whether the customer or the company must be responsible for resolving the problem
- ◆ ensure that the customer understands their responsibilities in relation to the situation
- ◆ agree action to resolve the issue with the customer (eg arranging for a leak to be repaired, having a meter reading taken, having a meter installed)
- ◆ refer to their manager or other appropriate person where required to deal with a problem which the customer refuses to accept
- ◆ record the details of the situation and the decisions taken to resolve the issue, in line with organisational requirements

Candidates need to provide evidence that they have the skills and competencies to:

- ◆ inform customers about leakage related issues
- ◆ agree a course of action to deal with the leakage related issues.

### **Assessor guidance on evidence**

- ◆ The terms identified in the Leakage NOS Unit as 'Terms used within the standards' have been designated as 'Scope of the evidence' for the purposes of the SVQ. Candidates' evidence in total must show that they can cover these items, through performance evidence. Where no direct performance evidence exists from observations or other work records, the assessor needs to use questioning and discussion to ascertain the candidate's competence.
- ◆ The majority of the evidence for this Unit must come from real work activities. A realistic working environment may be used to generate part of the evidence for the SVQ, providing the requirements for the realistic working environment are met, and its use has been discussed and agreed in advance with the centre's External Verifier. (Please note that any centre wishing to use a realistic working environment for assessing any Unit from the Leakage Control SVQ3 must show that there is a demonstrable need to use it.)

- ◆ The assessor may carry out a direct observation of the candidate in their workplace (which will generate an observation report), though this is not mandatory.
- ◆ If, in assessing a candidate undertaking this Unit, the assessor identifies evidence that can also be used towards other Units from the Leakage Control SVQ3 (eg Unit FA8G 04 — Ensure Your Own Actions Reduce Risks to Health and Safety), they should ensure that they record where such evidence is produced in their assessor report, to minimise duplication of assessment.
- ◆ The evidence for this Unit is likely to be generated through a mixture of observation reports, witness testimonies, assessor-guided discussions and questioning, and workplace records, reports, or documentation.
- ◆ **Knowledge and Understanding.** The Knowledge and Understanding requirements for this Unit must be covered in full for Unit accreditation. The candidate may demonstrate considerable knowledge through their workplace performance, but it is likely that some assessor questioning will be needed to confirm that all knowledge requirements are met.

Unit FC01 04 is an optional Unit in the in Leakage Control SVQ3. This is one of four optional Units that candidates can choose to take in order to gain a full award.

## **4 Appendices**

### **Appendix 1: Core Skills signposting**

## Core Skills signposting

### SVQ3 Leakage Control

During the development of the national occupational standards, Energy & Utility Skills signposted the Units from SVQ3 Leakage Control NOS against the Core Skills. This signposting is reproduced here, to show you where candidates undertaking a SVQ3 Leakage Control could have opportunities to generate evidence towards Core Skills qualifications, which can be assessed at the same time as the SVQ.

The Core Skills are:

- ◆ Communication (C)
- ◆ Information Technology (IT)
- ◆ Application of Number (AN)
- ◆ Problem Solving (PS)
- ◆ Working With Others(WO)

The following table lists the Units from the SVQ3 Leakage Control, and shows Core Skills coverage for each Unit. The numerical references show the level of the Core Skill covered, and refer to the Unit/element that maps to the Leakage Control Unit.

Unit	Title	Core Skills				
		C	IT	N	PS	WO
FA8G 04	Ensure Your Own Actions Reduce Risks to Health and Safety	Int 2 All tasks	-	-	Int 2 Task 1 Task 3	Int 2 All tasks
FA8L 04	Evaluate Data to Identify Potential Leakage	Int 2 All tasks	Int 2 Task 3	Int 1 All Tasks	Int 1 Task 1 Task 2	
FA8A 04	Determine Leakage Detection Methods and Techniques in Response to Water Loss	Int 1 All tasks	Int 1 Task 2	Acc3 Task 1 Task 2 Task 4	Acc 3 Task 1	
FA9R 04	Programme, Deploy and Collect Data from Data-logging Equipment	Int 1 Task 1 Task 2	Acc 3 Task 2	Acc 3 Task 1 Task 2 Task 3	Acc 3 Task 1	
FC07 04	Utilise and Confirm Performance of Measuring Equipment on the Distribution Network	Int 1 Task 1 Task 2	Acc 3 Task 2	Acc 3 Task 1 Task 2 Task 3	Acc 3 Task 1	
FA9V 04	Provide Leadership For Your Team	H	-	Int 1	Int 2	Int 2
FA8K 04	Establish the Integrity of a Discrete Area on the Distribution Network	Int 1 Task 1 Task 3	-	-	-	Int 2 Task 3

Unit	Title	Core Skills				
		C	IT	N	PS	WO
FA82 04	Carry Out Step-testing Operations and Re-commission the Distribution Network	Int 1 Task 1 Task 2	Acc 3 Task 2	Acc 3 All tasks	Acc 3 Task 1	-
FC01 04	Resolve Leakage-related Issues with Customers	Int 1 Task 1 Task 3	-	Acc 3 All tasks	-	Int 2 Task 1 Task 2 Task 4



## **Appendix 2: Sample witness testimony pro forma (Generic)**

## Witness testimony

Name of the person for whom witness testimony is given:

What is your working relationship with this person?

**Describe briefly what water network construction activities you have seen them undertaking, and how they undertook the work, giving examples of specific activities that you have witnessed where possible. (NB These activities may include operational water industry activities, or associated activities, such as minimising risks to health, safety and hygiene in the workplace, developing productive working relationships, etc.)**

I can confirm the candidate's performance was satisfactory.

Name of witness \_\_\_\_\_ Job title \_\_\_\_\_

Contact details \_\_\_\_\_

Witness's signature \_\_\_\_\_ Date \_\_\_\_\_

### Note to the assessment team

This is only an example of a witness testimony form. It can be tailored to particular competence requirements. For example, a question on this form could be, '*Give an example of how the candidate has...*', and you could put in a competence, for example, '*identified resource requirements*'. Alternatively, the appropriate Unit or qualification requirements could be photocopied and attached to this form (the competence or knowledge you would like the witness to comment on would need to be highlighted).

## **Appendix 3: Types of SVQ evidence and associated risks**

Type of evidence	Advantages	Risks/disadvantages	Suggested solutions
<b>1 Direct assessor observation in the workplace</b>	<ul style="list-style-type: none"> <li>◆ The most direct form of assessment.</li> <li>◆ Assessor can observe the candidate carrying out daily work activities.</li> <li>◆ Observation likely to result in evidence for several Units at once.</li> </ul>	<ul style="list-style-type: none"> <li>◆ Logistical difficulties — labour and time intensive for assessors.</li> <li>◆ Candidates may not work at a single site and may be called away to other sites at short notice (difficult to plan and carry out).</li> </ul>	<ul style="list-style-type: none"> <li>◆ Use of simulated activities in a realistic working environment (see below).</li> <li>◆ Use of robust witness testimony from candidate's line manager.</li> <li>◆ Limit mandatory observation and require diverse supporting evidence from workplace.</li> </ul>
<b>2 Direct assessor observation (simulated activities/realistic working environment)</b>	<ul style="list-style-type: none"> <li>◆ Allows direct assessor observation.</li> <li>◆ The centre has more control over the location and tasks covered — can ensure coverage of qualification requirements.</li> <li>◆ Can be used to assess activities encountered rarely, or where there are practical or safety considerations (eg health and safety issues; emergency procedures).</li> </ul>	<ul style="list-style-type: none"> <li>◆ Potential for simulated situation not to reflect the candidate's working practice accurately.</li> <li>◆ Does not provide evidence from real work activities.</li> </ul>	<ul style="list-style-type: none"> <li>◆ Robust controls required for the realistic working environment and tasks to be assessed.</li> <li>◆ Requires robust supporting performance evidence from the workplace.</li> <li>◆ May need further questioning to establish underpinning knowledge, particularly if candidate has difficulty meeting specific Performance Criteria with other workplace evidence (eg responding to emergencies).</li> </ul>
<b>3 Witness testimony</b>	<ul style="list-style-type: none"> <li>◆ Useful record of candidate's work activity, provided by someone who has watched them working.</li> <li>◆ Variety of potential sources can be identified, depending on the skills the candidate needs to cover (eg manager; colleague; associates from other departments; customers — internal or external to employer organisation) — allows for diversity of evidence.</li> </ul>	<ul style="list-style-type: none"> <li>◆ Is the witness credible? Do they understand what is required, and do they have the skills and knowledge to provide an accurate witness testimony?</li> <li>◆ Risks to objectivity of witness — what is their relationship to the candidate?</li> </ul>	<ul style="list-style-type: none"> <li>◆ Need to record details of witnesses, and how their relationship to candidates.</li> <li>◆ Centres need to brief witnesses clearly on what they should provide in a witness testimony.</li> <li>◆ Centres may use pro forma, to prompt witnesses to provide an appropriate level of detail about the specific candidate or work activity.</li> </ul>

Type of evidence	Advantages	Risks/disadvantages	Suggested solutions
<b>3 Witness testimony (cont)</b>	<ul style="list-style-type: none"> <li>◆ Allows candidate to focus on the work activity, in a familiar environment, without the presence of an assessor observing them.</li> <li>◆ Can support direct assessor observation evidence by showing consistency over time.</li> </ul>	<ul style="list-style-type: none"> <li>◆ Need for witnesses to ensure they provide a statement of fact, not an opinion on competence against the qualification requirements.</li> <li>◆ Insufficient detail provided in reports — risk of statements being too generic.</li> </ul>	<ul style="list-style-type: none"> <li>◆ The use of witness testimonies from more than one source is recommended, as above.</li> <li>◆ All witness testimonies must be subject to assessment by an A1 assessor.</li> </ul>
<b>4 Documentary evidence or product from the workplace</b>	<ul style="list-style-type: none"> <li>◆ Useful to confirm detail of jobs undertaken for consistent competence, or varied work activities and to meet qualification requirements in full.</li> <li>◆ Workplace documentation may provide confirmation of jobs completed, and also of coverage of qualification requirements on completion of appropriate records.</li> <li>◆ Can be used to corroborate information provided in other sources of evidence (eg witness testimonies or reports, candidate's own accounts during discussions with assessors).</li> <li>◆ Use of products to confirm technical skills (eg beads from completed PE fusion joints).</li> </ul>	<ul style="list-style-type: none"> <li>◆ Authenticity — is this a genuine record that can be verified against other types of evidence or workplace records?</li> <li>◆ Storage — impracticality of storing large quantities of documentation or workplace products with evidence records.</li> <li>◆ available to assessors.</li> <li>◆ Availability of records — some job records are held electronically in employer's IT system, and need to be.</li> </ul>	<ul style="list-style-type: none"> <li>◆ Assessors check the authenticity and validity of evidence, by questioning the candidate or corroborating against other records relating to the same job (eg observation reports, witness testimonies).</li> <li>◆ Centres need to have robust evidence recording system where it is not appropriate to store items of evidence with assessment records, etc (must state location of evidence).</li> <li>◆ Evidence (including IT records) must be capable of being produced for IV and EV review, until candidate certification is confirmed (otherwise it could be declared invalid).</li> </ul>
<b>5 Assessment meetings with candidates (general informal discussions)</b>	<ul style="list-style-type: none"> <li>◆ Direct evidence from assessor.</li> <li>◆ Can be used to confirm or discuss candidate's evidence and identify gaps remaining for future action.</li> </ul>	<ul style="list-style-type: none"> <li>◆ Sufficient detail must be recorded to confirm qualification/Unit coverage — particularly if a variety of different Units and requirements are being covered in one meeting.</li> </ul>	<ul style="list-style-type: none"> <li>◆ Assessors can use a pro forma for assessment discussions as required.</li> </ul>

Type of evidence	Advantages	Risks/disadvantages	Suggested solutions
<b>5 Assessment meetings with candidates (general informal discussions) (cont)</b>	<ul style="list-style-type: none"> <li>◆ Oral questions can be asked of candidates, to confirm performance or knowledge evidence.</li> </ul>	<ul style="list-style-type: none"> <li>◆ May confirm candidate's knowledge more readily than performance — how does the assessor ensure that the candidate can apply their knowledge in a workplace situation.</li> </ul>	<ul style="list-style-type: none"> <li>◆ Use of audio and video records for assessors to confirm the detail of qualification/Unit coverage — and they can be made available for IV/EV sampling (centre will need to have arrangements for storing audio or video evidence once assessed).</li> <li>◆ Assessors can use a variety of different types of questions depending on the circumstances, to confirm candidate's performance as well as knowledge (eg questions revolving around a 'What if...?' scenario, or asking the candidate to describe particular mainlaying or servicelaying work they have previously undertaken).</li> </ul>
<b>6 Professional discussion interview</b>	<ul style="list-style-type: none"> <li>◆ More formal, structured interview — allows the assessor to guide the discussion and to tailor the subjects covered to gaps in the candidate's evidence.</li> <li>◆ Candidates have the opportunity to discuss their work in depth.</li> <li>◆ Can generate a significant amount of evidence against various Units.</li> </ul>	<ul style="list-style-type: none"> <li>◆ Requires assessor to conduct extensive preparation with close reference to the Unit and qualification requirements and record detail of what is covered.</li> <li>◆ Not suitable for all candidates, particularly if they become nervous in a more formal assessment environment, or do not respond well to pressure.</li> </ul>	<ul style="list-style-type: none"> <li>◆ Robust and detailed recording mechanism is needed — audio or video records, combined with a written pro forma or report could be useful here.</li> <li>◆ This is not a mandatory form of evidence, but can be very useful — assessors should make sure they use this method with candidates who will benefit from it.</li> </ul>

Type of evidence	Advantages	Risks/disadvantages	Suggested solutions
<b>6 Professional discussion interview (cont)</b>	<ul style="list-style-type: none"> <li>◆ Useful mechanism for generating evidence to meet the qualification requirements and fill in gaps towards the end of the assessment process, or complete a candidate's assessment.</li> </ul>	<ul style="list-style-type: none"> <li>◆ Not suitable for all situations, eg at the start of the qualification/ assessment process. Candidate may not be comfortable with a more formal, in depth discussions if they are not familiar with assessment processes.</li> </ul>	<ul style="list-style-type: none"> <li>◆ The PDI, if used, should take place at a suitable stage in the assessment process — it is recommended that, if used with candidates who are new to the process, this is not their first experience of assessment. It can, though, be very effective in the later stages.</li> </ul>
<b>7 Recognition of prior learning (RPL)</b>	<ul style="list-style-type: none"> <li>◆ Useful to confirm skills and knowledge that the candidate has already demonstrated (eg through gaining other qualifications).</li> <li>◆ Useful to confirm experience of previous work undertaken.</li> <li>◆ Has potential to reduce the assessment burden for both candidate and assessor.</li> <li>◆ Can be used to request equivalence or exemptions for the qualification being undertaken.</li> </ul>	<ul style="list-style-type: none"> <li>◆ Requires assessor authentication.</li> <li>◆ Evidence must be validated against the current qualification requirements.</li> <li>◆ Age of the previous accreditation is important — it may not confirm the candidate's current competence.</li> </ul>	<ul style="list-style-type: none"> <li>◆ Centres wishing to use RPL must have a process for authenticating proposed RPL evidence and validating it against the current qualification requirements (including requesting the recognition of equivalence or exemption by the awarding organisation if appropriate).</li> <li>◆ It is recommended that centres do not use RPL evidence that is too old to confirm current competence.</li> <li>◆ Supporting evidence (eg witness testimony to confirm current competence) could be used in conjunction with RPL evidence to confirm current competence (depending on the age of the RPL).</li> <li>◆ Any queries about validity of RPL should be raised with the IV and, if necessary, EV, before undertaking an extensive validation exercise, to agree a suitable solution.</li> </ul>

Type of evidence	Advantages	Risks/disadvantages	Suggested solutions
<b>8 Written answers to knowledge questions</b>	<ul style="list-style-type: none"> <li>◆ Allows centre to assess the knowledge of larger numbers of candidates simultaneously and then concentrate on gaps in knowledge during future observations and assessments.</li> <li>◆ Robust record of candidate's responses to knowledge questions, capable of being readily stored.</li> </ul>	<ul style="list-style-type: none"> <li>◆ Not an integrated form of knowledge assessment — a 'test' situation could inhibit candidates unused to academic assessment, and it may not enable candidates to apply knowledge requirements readily to workplace performance.</li> <li>◆ Rigid format — does not allow assessors to probe a candidate's knowledge further.</li> <li>◆ Risks to security — candidates must not have sight of question papers prior to assessment.</li> <li>◆ Where large numbers of candidates may be involved, multiple versions of question papers could be required.</li> </ul>	<ul style="list-style-type: none"> <li>◆ It is not recommended as the only form of knowledge assessment used by centres.</li> <li>◆ Candidates' evidence must cover of all Knowledge and Understanding requirements for each Unit taken. Marking schemes, etc are not suitable for this situation, because the knowledge associated with any 'incorrect' answers will need to be confirmed through other means.</li> <li>◆ If using written questioning, the centre will need to ensure that it has verifiable arrangements for the security of papers, for controlling assessment conditions, for providing for candidates unable to complete written question papers, and for provision of multiple question papers over time.</li> </ul>
<b>9 Records of oral questioning and answers given</b>	<ul style="list-style-type: none"> <li>◆ Allows assessors to explore a candidate's knowledge freely depending upon responses to initial questions.</li> <li>◆ The assessor is responsible for recording the responses and cross-referencing against Unit and qualification requirements.</li> </ul>	<ul style="list-style-type: none"> <li>◆ Logistical difficulties for assessors in recording questions and answers in written report form.</li> <li>◆ Need to ensure consistency of approach to individual candidates in questioning (less obvious than using question papers).</li> <li>◆ Need to ensure responses are cross-referenced to Unit/qualification requirements.</li> </ul>	<ul style="list-style-type: none"> <li>◆ Assessors can use a combination of recording methods if required — audio, video and/or written reports.</li> <li>◆ For written reports, a pro forma covering questions asked and candidates' responses may be advisable. This can also cover cross-referencing to Unit/qualification requirements as necessary.</li> </ul>



Type of evidence	Advantages	Risks/disadvantages	Suggested solutions
<b>9 Records of oral questioning and answers given (cont)</b>	<ul style="list-style-type: none"> <li>◆ Can be used during any assessment discussions or observation to support candidate's Performance Evidence.</li> </ul>		
<b>10 Audio or video evidence, and photographs</b>	<ul style="list-style-type: none"> <li>◆ Useful to confirm some aspects of authenticity (eg as a record of assessor discussions or interviews).</li> <li>◆ Avoids need for quantities of physical evidence to be stored — digital storage mechanisms can be used on-site, and stored using IT systems, memory sticks, etc.</li> <li>◆ Visual evidence in particular can be useful as a starting point for discussions with candidates, etc.</li> <li>◆ Evidence can readily be made available for IV and EV sampling.</li> <li>◆ Allows assessor to revisit the evidence after recording to confirm the detail of the Unit/qualification coverage if necessary.</li> </ul>	<ul style="list-style-type: none"> <li>◆ Some authenticity issues may be compromised by excessive use of visual (video and particularly photographic evidence) in particular — issues of being able to relate evidence directly to the candidate's work activity.</li> <li>◆ Secure storage arrangements may be needed to preserve integrity of audio or visual evidence.</li> <li>◆ It is not sufficient for candidates to provide visual material without any elaboration.</li> <li>◆ Evidence provided in audio form only (eg recorded discussion with the assessor) may be insufficient to confirm the detail of the physical activities undertaken by the candidate.</li> <li>◆ Need to be able to relate evidence to the qualification requirements.</li> </ul>	<ul style="list-style-type: none"> <li>◆ Assessors to ensure evidence (particularly photographic evidence) can be authenticated.</li> <li>◆ Discuss individual photographic or video evidence with the candidate to confirm how it relates to their work activities and the Unit or qualification requirements.</li> <li>◆ If the candidate intends to make use of video evidence or photographs, it is recommended that they take account of the need to establish a clear link with their own work activities (eg ensuring that the candidate is recorded undertaking their activities, so their involvement in the work situation is clear).</li> <li>◆ If assessors use audio or visual evidence, a robust audit trail is needed to show where the Unit/qualification requirements are met, and confirm the assessment decision. (This could require some form of report or audit trail document in addition to the audio/visual record.)</li> </ul>

Type of evidence	Advantages	Risks/disadvantages	Suggested solutions
<b>10 Audio or video evidence, and photographs (cont)</b>			<ul style="list-style-type: none"> <li>◆ For qualifications at levels 1 and 2, where candidates may have access to limited amounts of documentary evidence and records, and work in an environment that requires them to undertake ‘hands-on’ operational work, some visual record of performance — rather than audio only — is likely to be needed to meet the specific qualifications requirements (eg, direct assessor observation and report, witness testimony, video recording, etc).</li> </ul>
<b>11 Use of electronic storage media for candidates’ evidence</b>	<ul style="list-style-type: none"> <li>◆ Avoids need for quantities of physical evidence to be stored — digital storage mechanisms can be used on-site and stored using IT systems, CDs, memory sticks, etc.</li> <li>◆ Potentially allows quick communication of evidence between assessor and candidate (via e-mail).</li> <li>◆ Allows the candidate to retain scanned or saved soft copies of job-related information easily where the originals may be required to be stored in a central function or elsewhere according to company or regulatory requirements.</li> </ul>	<ul style="list-style-type: none"> <li>◆ Authenticity issues — if this is a scanned document, can it be authenticated? Where is the original held? Is it evidence of the candidate’s own work?</li> <li>◆ Storage questions — need for candidates, assessors, IVs and EVs to be able to navigate through the stored evidence at different stages of qualifications delivery.</li> </ul>	<ul style="list-style-type: none"> <li>◆ Assessors to ensure that they validate and authenticate evidence during assessment activity. This could include requesting the original documents or records provided, and questioning the candidate in detail about the particular activities associated with the evidence, so that a decision is made regarding its relevance to the qualification requirements.</li> </ul>

Type of evidence	Advantages	Risks/disadvantages	Suggested solutions
<b>11 Use of electronic storage media for candidates' evidence (cont)</b>			<ul style="list-style-type: none"> <li>◆ Assessors must make the final decision about candidates' competence against the Unit and qualifications requirements: storage mechanisms such as e-portfolios could be very useful, but it is for the assessor to determine when the candidate is competent, and they must also have an audit trail to prove this.</li> <li>◆ IVs and EVs to ensure that where electronic storage mechanisms are used for assessment, they incorporate authentication of the evidence records into sampling activities (eg by asking for copies of original documents produced by particular candidates to be made available for verification; by discussing some of these aspects in some detail with assessors and with candidates during verification).</li> </ul>

## **Appendix 4: Sample assessor report form (generic)**

## Assessor Report Form

<b>Assessment Report Number</b>		
<b>Candidate's name</b>	<b>SQA Candidate Number</b>	<b>Date of Assessment</b>
<b>Assessor's name</b>	<b>SQA Assessment Centre</b>	<b>Assessment Venue</b>
		<b>Time of Assessment</b>
<b>Description of what is to be assessed (together with Unit and Element references)</b>		
<b>Summary of evidence seen (cross-referenced against Units and Element)</b>		
<b>Feedback given to the candidate</b>		

**Detail the outcome of the assessment**

**Candidate feedback/comments**

**Action points**

**Date, time and location of next assessment**

**What will be assessed**

**Has a copy of this form been given to the candidate for their evidence? Yes/No**

**Internal Verifier informed of assessment decision? Yes/No**

**Assessor's signature** \_\_\_\_\_ **Date** \_\_\_\_\_

**Candidate's signature** \_\_\_\_\_ **Date** \_\_\_\_\_

If the internal verifier has sampled this report, please complete the details below:

**Internal verifier's name** \_\_\_\_\_ **Date** \_\_\_\_\_

**Internal verifier's signature** \_\_\_\_\_

SQA Unit ref	NOS ref	
		Question
		Candidate's response
		Question
		Candidate's response
		Question
		Candidate's response
		Question
		Candidate's response
		Question
		Candidate's response



SQA Unit ref	NOS ref	
		Question
		Candidate's response
		Question
		Candidate's response
		Question
		Candidate's response
		Question
		Candidate's response
		Question
		Candidate's response

## **5 Recording Documents**

### **Assessment Summary and Confirmation**

## SVQ3 Leakage Control GA1K 23 Cover Sheet

<b>Candidate's name</b>		<b>Candidate's SQA Number</b>	
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<b>Date registered for qualification</b>		<b>Assessment Centre</b>	
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<b>Job Role/Location, or other information relevant to this qualification</b>	
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### Unit completion

<b>Unit title</b>	<b>SQA ref</b>	<b>Mandatory/optional</b>	<b>Assessor</b>	<b>Date of final assessment</b>	<b>Internal verifier</b>
Ensure Your Own Actions Reduce Risks to Health and Safety	FA8G 04	Mandatory			
Evaluate Data to Identify Potential Leakage	FA8L 04	Mandatory			
Determine Leakage Detection	FA8A 04	Mandatory			
Programme, Deploy and Collect Data from Data-Logging Equipment	FA9R 04	Mandatory			
Utilise and Confirm Performance of Measuring Equipment on the Distribution Network	FC07 04	Mandatory			
Provide Leadership for Your Team	FA9V 04	Optional			
Establish the Integrity of a Discrete Area on the Distribution Network	FA8K 04	Optional			
Carry Out Step-testing Operations and Re-commission the Distribution Network	FA82 04	Optional			
Resolve Leakage-related Issues with Customers	FC01 04	Optional			

**NB For a full qualification, candidates must complete all five mandatory Units plus one of the four optional Units.**

**Candidate declaration**

I confirm that the evidence for this **SVQ3 Leakage Control** is my own work, and I have collected my evidence in line with the qualification requirements.

**Candidate’s signature** \_\_\_\_\_ **Date** \_\_\_\_\_

**Assessor confirmation**

I confirm that I have assessed the evidence produced and am satisfied that the candidate has demonstrated competence for the Units from the **SVQ3 Leakage Control** as listed above

**Assessor’s signature** \_\_\_\_\_ **Date** \_\_\_\_\_

**Internal verifier confirmation (If sampled)**

I confirm that I am satisfied that the evidence has been produced in line with the qualification requirements for **SVQ3 Leakage Control**, and that the certificates may be claimed from SQA.

**Internal verifier’s signature** \_\_\_\_\_ **Date** \_\_\_\_\_

**External Verifier’s confirmation (If sampled)**

**External Verifier’s signature** \_\_\_\_\_ **Date** \_\_\_\_\_

**SVQ3 Leakage Control SCQF level 5 (GA1K 23)**

<b>Candidate's name</b>		<b>Employer</b>	
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<b>Assessor's name</b>			
<b>Internal verifier's name</b>		<b>Assessment centre</b>	

**Index of evidence**

<b>Evidence ref</b>	<b>Description of evidence</b>	<b>Date produced</b>	<b>Location of evidence</b>	<b>Evidence assessed (assessor initials/date)</b>

<b>Evidence ref</b>	<b>Description of evidence</b>	<b>Date produced</b>	<b>Location of evidence</b>	<b>Evidence assessed (assessor initials/date)</b>

# Assessment Summary and Confirmation

## Unit FA8G 04 Ensure Your Actions Reduce Risks to Health and Safety

SCQF level	5	Credit Value	8	GLH	52
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Candidate's name		Assessor's name	
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<b>Types of evidence provided for this Unit</b> (please tick as appropriate)	Assessor observation report	<input type="checkbox"/>	Witness testimony	<input type="checkbox"/>
	Workplace records/products (includes designs)	<input type="checkbox"/>	Record of assessor-candidate discussions	<input type="checkbox"/>
	Professional discussion interview	<input type="checkbox"/>	Written knowledge questions	<input type="checkbox"/>
	Records of oral questions and candidate's answers	<input type="checkbox"/>	RPL	<input type="checkbox"/>

### Evidence Requirements for Unit FA8G 04 (please tick as appropriate)

	Yes	No		Yes	No
Has any evidence been produced from assessor observation of the candidate in a realistic working environment?	<input type="checkbox"/>	<input type="checkbox"/>	If a realistic working environment was used for observation, did it meet the qualification requirements?	<input type="checkbox"/>	<input type="checkbox"/>

### The evidence is:

	Yes	No		Yes	No
<b>Valid</b> — meets the qualification requirements and demonstrates competence for Unit FA8G 04	<input type="checkbox"/>	<input type="checkbox"/>	<b>Authentic</b> — is the candidate's own work and can be verified as genuine	<input type="checkbox"/>	<input type="checkbox"/>
<b>Reliable</b> — shows genuine sustained competence over a period of time	<input type="checkbox"/>	<input type="checkbox"/>	<b>Sufficient</b> — total evidence covers all Performance Criteria, knowledge and understanding and scope requirements for FA8G 04	<input type="checkbox"/>	<input type="checkbox"/>
<b>Current</b> — recent enough to show current competence	<input type="checkbox"/>	<input type="checkbox"/>			

## **Unit FA8G 04      Ensure Your Actions Reduce Risks to Health and Safety**

### **Candidate declaration**

I confirm that the evidence listed for **Unit FA8G 04** is my own work, and I have collected my evidence in line with the qualification requirements.

**Candidate's signature** \_\_\_\_\_ **Date** \_\_\_\_\_

### **Assessor confirmation**

I confirm that I have assessed the evidence produced and am satisfied that the candidate has demonstrated competence against the qualification requirements for **Unit FA8G 04**.

**Assessor's signature** \_\_\_\_\_ **Date** \_\_\_\_\_

**Assessor's counter-signature** (if appropriate) \_\_\_\_\_ **Date** \_\_\_\_\_

### **If sampled**

**Internal verifier's name** \_\_\_\_\_

**Internal verifier's signature** \_\_\_\_\_ **Date** \_\_\_\_\_

**External Verifier's name** \_\_\_\_\_

**External Verifier's signature** \_\_\_\_\_ **Date** \_\_\_\_\_



## Unit FA8G 04      Ensure Your Actions Reduce Risks to Health and Safety

Candidate's name \_\_\_\_\_

<b>1 Identify the hazards and risks in the workplace</b>	
<b>Performance Criteria — the candidate can:</b>	<b>Evidence or File X-Ref/Coverage</b>
1.1 Correctly name and locate the persons responsible for health and safety in the <b>workplace</b> .	
1.2 Identify which <b>organisational policies</b> are relevant to working practices.	
1.3 Identify those working practices in your work activities which could harm yourself or other persons.	
1.4 Identify those potential <b>hazards and risk</b> in the <b>workplace</b> and respond to them in accordance with <b>approved procedures and practices</b> .	
1.5 Identify the appropriate procedures for reporting to the persons responsible for health and safety in the <b>workplace</b> potential <b>hazards and risks</b> .	
<b>Knowledge and Understanding</b>	<b>Evidence or File X-Ref/Coverage</b>
1 Agreed working policies relating to controlling hazards and risks to health and safety.	
2 Responsibilities for health and safety in your work activities.	
3 The responsible persons to report health and safety matters too.	
4 Legal duties for health and safety in the workplace as required by relevant legislation.	
5 What hazards and risks may exist in the workplace.	
6 The particular health and safety hazards and risks which may be present in your own work activities, and the precautions you must take.	

## Unit FA8G 04      Ensure Your Actions Reduce Risks to Health and Safety

Candidate's name \_\_\_\_\_

<b>1 Identify the hazards and risks in the workplace</b>	
<b>Knowledge and Understanding</b>	<b>Evidence or File X-Ref/Coverage</b>
7 The importance of being aware of changing circumstances in the working environment which may introduce potential hazards and risks.	
8 The importance of dealing with or promptly reporting hazards and risks.	
9 The requirements and guidance on the precautions.	
<b>2 Reduce risks in the workplace</b>	
<b>Performance Criteria — the candidate can:</b>	<b>Evidence or File X-Ref/Coverage</b>
2.1 Follow the most recent organisational policies for your work activities.	
2.2 Carry out work activities in accordance with approved procedures and practices.	
2.3 Respond appropriately to hazards and risks.	
2.4 Ensure your conduct and personal presentation in the workplace does not endanger their health and safety or that of others in line with approved procedures and practices.	
2.5 Follow the organisational policies and suppliers' or manufacturers' instructions for the safe use of equipment, materials and products.	
<b>Knowledge and Understanding</b>	<b>Evidence or File X-Ref/Coverage</b>
1 The specific organisational policies covering your work activities.	
2 The suppliers' and manufacturers' instructions for the safe use of equipment, materials and products.	

## Unit FA8G 04      Ensure Your Actions Reduce Risks to Health and Safety

Candidate's name \_\_\_\_\_

<b>2 Assess the level of risk for specified activities</b>	
<b>Knowledge and Understanding</b>	<b>Evidence or File X-Ref/Coverage</b>
3 Safe working practices for your own work activities.	
4 The importance of personal presentation in maintaining health and safety in the workplace.	
5 The importance of personal conduct in maintaining the health and safety of yourself and others.	
6 Your responsibility for responding to hazards and risks in accordance with approved procedures and practices.	
7 How to make suggestions for reducing risks to health and safety within your work activities to the responsible persons.	
8 How to report any differences between organisational policies and suppliers' or manufacturers' instructions as appropriate.	
<b>Scope of evidence</b>	<b>Evidence or File X-Ref/Coverage</b>
<b>1 Workplace</b>	
The <b>workplace</b> is the single or multiple areas in which the candidate carries out their work and where their work may impact upon others.	
<b>2 Hazard</b>	
A hazard is something with potential to cause harm.	
<b>3 Risk</b>	
A <b>risk</b> is the likelihood of a hazard's potential being realised.	
<b>4 Hazards and risks include:</b>	
(a) the use and maintenance of tools and equipment	

## Unit FA8G 04      Ensure Your Actions Reduce Risks to Health and Safety

Candidate's name \_\_\_\_\_

Scope of evidence	Evidence or File X-Ref/Coverage
<b>4 Hazards and risks</b> include:	
(b) the use of materials or substances	
(c) working practices which may not conform to laid down policies	
(d) unsafe behaviour	
(e) accidental breakages and spillages	
(f) environmental factors	
(g) working on the highway	
<b>5 Personal presentation</b> includes:	
(a) personal hygiene	
(b) use of personal protection equipment	
(c) clothing and accessories suitable to the particular workplace	
<b>6 Organisational policies</b> cover:	
(a) the use of safe working methods and equipment	
(b) the safe use of hazardous substances	

## Unit FA8G 04      Ensure Your Actions Reduce Risks to Health and Safety

Candidate's name \_\_\_\_\_

Scope of evidence	Evidence or File X-Ref/Coverage
<b>6 Organisational policies</b> cover:	
(c) smoking, eating, drinking and drugs	
(d) what to do in the event of an emergency	
(e) personal presentation	
(f) generic risk assessments for the location of the work	
<b>7 Approved procedures and practices</b> include:	
(a) statutory	
(b) regulatory	
(c) health, safety and environment compliance, including hygiene	
(d) relevant company procedures (including third party health and safety policies)	
<b>8 Personal presentation</b> includes:	
(a) emergency	

## Unit FA8L 04

## Evaluate Data to Identify Potential Leakage

SCQF level	6	Credit Value	7	GLH	36
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Candidate's name		Assessor's name	
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<b>Types of evidence provided for this Unit</b> (please tick as appropriate)	Assessor observation report	<input type="checkbox"/>	Witness testimony	<input type="checkbox"/>
	Workplace records/products (includes designs)	<input type="checkbox"/>	Record of assessor-candidate discussions	<input type="checkbox"/>
	Professional discussion interview	<input type="checkbox"/>	Written knowledge questions	<input type="checkbox"/>
	Records of oral questions and candidate's answers	<input type="checkbox"/>	RPL	<input type="checkbox"/>

### Evidence Requirements for Unit FA8L 04 (please tick as appropriate)

	Yes	No		Yes	No
Has any evidence been produced from assessor observation of the candidate in a realistic working environment?	<input type="checkbox"/>	<input type="checkbox"/>	If a realistic working environment was used for observation, did it meet the qualification requirements?	<input type="checkbox"/>	<input type="checkbox"/>

### The evidence is:

	Yes	No		Yes	No
<b>Valid</b> — meets the qualification requirements and demonstrates competence for Unit FA8L 04	<input type="checkbox"/>	<input type="checkbox"/>	<b>Authentic</b> — is the candidate's own work and can be verified as genuine	<input type="checkbox"/>	<input type="checkbox"/>
<b>Reliable</b> — shows genuine sustained competence over a period of time	<input type="checkbox"/>	<input type="checkbox"/>	<b>Sufficient</b> — total evidence covers all Performance Criteria, knowledge and understanding and scope requirements for FA8L 04	<input type="checkbox"/>	<input type="checkbox"/>
<b>Current</b> — recent enough to show current competence	<input type="checkbox"/>	<input type="checkbox"/>			

## Unit FA8L 04 Evaluate Data to Identify Potential Leakage

### Candidate declaration

I confirm that the evidence listed for **Unit FA8L 04** is my own work, and I have collected my evidence in line with the qualification requirements.

Candidate's signature \_\_\_\_\_ Date \_\_\_\_\_

### Assessor confirmation

I confirm that I have assessed the evidence produced and am satisfied that the candidate has demonstrated competence against the qualification requirements for **Unit FA8L 04**.

Assessor's signature \_\_\_\_\_ Date \_\_\_\_\_

Assessor's counter-signature (if appropriate) \_\_\_\_\_ Date \_\_\_\_\_

### If sampled

Internal verifier's name

Internal verifier's signature \_\_\_\_\_ Date \_\_\_\_\_

External Verifier's name

External Verifier's signature \_\_\_\_\_ Date \_\_\_\_\_

## Unit FA8L 04

## Evaluate Data to Identify Potential Leakage

Candidate's name \_\_\_\_\_

<b>1 Analyze data</b>	
<b>Performance Criteria — the candidate can:</b>	<b>Evidence or File X-Ref/Coverage</b>
1.1 Obtain all of the <b>data</b> from specified control and monitoring activities.	
1.2 Combine <b>data</b> from more than one source and from more than one point on the distribution system to provide a comprehensive picture of flow and pressure in the specified area.	
1.3 Analyse and assess the <b>data</b> received against the pattern of data you would expect in the specified area.	
1.4 Establish the type and nature of the differences which appear in the <b>data</b> analysis.	
1.5 Report details of the need for <b>further investigation</b> in accordance with <b>approved procedures and practices</b> where you are unable to analyse the <b>data</b> to provide a viable explanation of identified differences.	
1.6 Formulate conclusions about the way the distribution system is operating based on accurate analysis and interpretation of <b>data</b> .	
<b>Knowledge and Understanding</b>	<b>Evidence or File X-Ref/Coverage</b>
1 The purpose of control and monitoring activities.	
2 The consequences of incorrectly performing control and monitoring activities.	
3 How to interpret data from different control and monitoring activities.	
4 Factors which affect network performance.	
5 How to read and interpret flow and pressure information.	



## Unit FA8L 04 Evaluate Data to Identify Potential Leakage

Candidate's name \_\_\_\_\_

<b>1 Analyse data</b>	
<b>Knowledge and Understanding</b>	<b>Evidence or File X-Ref/Coverage</b>
6 Why you may be unable to effectively analyse data.	
7 Reporting procedures including the use of feedback from previous investigations.	
<b>2 Identify areas of potential leakage</b>	
<b>Performance Criteria — the candidate can:</b>	<b>Evidence or File X-Ref/Coverage</b>
2.1 Base conclusions about the operation of the distribution system on thorough and reliable analysis and interpretation of <b>data</b> from control and monitoring activities.	
2.2 Highlight and draw attention to any area which appears to be exhibiting leakage problems.	
2.3 Estimate the water loss from the specified area according to <b>data</b> analysis and conclusions reached.	
2.4 Document area characteristics in detail, and water loss calculations, in an appropriate format in accordance with <b>approved procedures and practices</b> .	
2.5 Ensure judgements take into account any relevant <b>additional information</b> .	
<b>Knowledge and Understanding</b>	<b>Evidence or File X-Ref/Coverage</b>
1 How to interpret data.	
2 Types of leakage problems and ways they manifest themselves on the network.	
3 How to relate analysed data to network plans.	
4 Recording and reporting requirements.	

## Unit FA8L 04 Evaluate Data to Identify Potential Leakage

Candidate's name \_\_\_\_\_

<b>2 Identify areas of potential leakage</b>	
<b>Knowledge and Understanding</b>	<b>Evidence or File X-Ref/Coverage</b>
5 The factors to be taken into account when making a judgement about leakage problems.	
<b>Scope of evidence</b>	<b>Evidence or File X-Ref/Coverage</b>
<b>1 Data</b> includes:	
(a) flow and pressure	
(b) historic	
(c) data from fixed installations	
(d) data from temporary installations	
(e) results from previous investigations	
(f) customer complaints	
<b>2 Further investigation</b> include:	
(a) equipment performance	
(b) area characteristics	
(c) additional operational activities taking place	

## Unit FA8L 04 Evaluate Data to Identify Potential Leakage

Candidate's name \_\_\_\_\_

Scope of evidence	Evidence or File X-Ref/Coverage
<b>3 Approved procedures and practices</b> include:	
(a) regulatory	
(b) health, safety and environment	
(c) relevant company procedures	
(d) emergency	
(e) national water hygiene	
<b>4 Additional information</b> includes:	
(a) network condition	
(b) network operations	
(c) consumption variations	

## Unit FA8A 04 Determine Leakage Detection Methods and Techniques in Response to Water Loss

SCQF level	6	Credit Value	9	GLH	46
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Candidate's name		Assessor's name	
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<b>Types of evidence provided for this Unit</b> (please tick as appropriate)	Assessor observation report	<input type="checkbox"/>	Witness testimony	<input type="checkbox"/>
	Workplace records/products (includes designs)	<input type="checkbox"/>	Record of assessor-candidate discussions	<input type="checkbox"/>
	Professional discussion interview	<input type="checkbox"/>	Written knowledge questions	<input type="checkbox"/>
	Records of oral questions and candidate's answers	<input type="checkbox"/>	RPL	<input type="checkbox"/>

### Evidence Requirements for Unit FA8L 04 (please tick as appropriate)

	Yes	No		Yes	No
Has any evidence been produced from assessor observation of the candidate in a realistic working environment?	<input type="checkbox"/>	<input type="checkbox"/>	If a realistic working environment was used for observation, did it meet the qualification requirements?	<input type="checkbox"/>	<input type="checkbox"/>

### The evidence is:

	Yes	No		Yes	No
<b>Valid</b> — meets the qualification requirements and demonstrates competence for Unit FA8A 04	<input type="checkbox"/>	<input type="checkbox"/>	<b>Authentic</b> — is the candidate's own work and can be verified as genuine	<input type="checkbox"/>	<input type="checkbox"/>
<b>Reliable</b> — shows genuine sustained competence over a period of time	<input type="checkbox"/>	<input type="checkbox"/>	<b>Sufficient</b> — total evidence covers all Performance Criteria, knowledge and understanding and scope requirements for FA8A 04	<input type="checkbox"/>	<input type="checkbox"/>
<b>Current</b> — recent enough to show current competence	<input type="checkbox"/>	<input type="checkbox"/>			

## **Unit FA8A 04 Determine Leakage Detection Methods and Techniques in Response to Water Loss**

### **Candidate declaration**

I confirm that the evidence listed for **Unit FA8A 04** is my own work, and I have collected my evidence in line with the qualification requirements.

**Candidate's signature** \_\_\_\_\_ **Date** \_\_\_\_\_

### **Assessor confirmation**

I confirm that I have assessed the evidence produced and am satisfied that the candidate has demonstrated competence against the qualification requirements for **Unit FA8A 04**.

**Assessor's signature** \_\_\_\_\_ **Date** \_\_\_\_\_

**Assessor's counter-signature** (if appropriate) \_\_\_\_\_ **Date** \_\_\_\_\_

### **If sampled**

**Internal verifier's name** \_\_\_\_\_

**Internal verifier's signature** \_\_\_\_\_ **Date** \_\_\_\_\_

**External Verifier's name** \_\_\_\_\_

**External Verifier's signature** \_\_\_\_\_ **Date** \_\_\_\_\_

## Unit FA8A 04 Determine Leakage Detection Methods and Techniques in Response to Water Loss

Candidate's name \_\_\_\_\_

<b>1 Establish the circumstances relating to the area of potential leakage</b>		
<b>Performance Criteria — the candidate can:</b>		<b>Evidence or File X-Ref/Coverage</b>
1.1	Interpret information from <b>existing records and data</b> which will inform the choice of <b>leakage detection methods and techniques</b> .	
1.2	Assess the quantity and rate of water loss to determine and advise on the urgency and acceptable timescales for dealing with the identified water loss.	
1.3	Determine the necessity for disruption to supply and potential extent of disruption in order to deal with the identified water loss situation.	
1.4	Establish the condition and types of the distribution infrastructure and its suitability for specific leakage detection activities.	
1.5	Decide any <b>major factors</b> and their details which may impact on the choice of <b>leakage detection methods and techniques</b> .	
1.6	Assess the suitability of <b>leakage detection methods and techniques</b> from an analysis of the distribution network and its current characteristics.	
1.7	Use trend information details to determine the potential impact of the use of <b>leakage detection methods and techniques</b> .	
<b>Knowledge and Understanding</b>		<b>Evidence or File X-Ref/Coverage</b>
1	How to access and use existing records and data.	
2	How to interpret data and information.	
3	Leakage detection methods and techniques and those used by the employing organisation.	
4	How to determine the urgency of an identified water loss situation and who to advise.	

## Unit FA8A 04 Determine Leakage Detection Methods and Techniques in Response to Water Loss

Candidate's name \_\_\_\_\_

<b>1 Establish the circumstances relating to the area of potential leakage</b>	
<b>Knowledge and Understanding</b>	<b>Evidence or File X-Ref/Coverage</b>
5 How to determine supply disruption details.	
6 The relevance of condition and type of distribution infrastructure to leakage detection methods and techniques.	
7 What major factors you might need to consider which could impact on the choice of detection methods and techniques.	
8 How to determine the suitability of leakage detection methods and techniques.	
9 How to analyse trend information.	
10 Organisational service standards for leakage activities.	
<b>2 Select appropriate leakage detection methods and techniques</b>	
<b>Performance Criteria — the candidate can:</b>	<b>Evidence or File X-Ref/Coverage</b>
2.1 Evaluate the limitations and capabilities of suitable <b>leakage detection methods and techniques</b> according to the circumstances identified.	
2.2 Determine those <b>leakage detection methods and techniques</b> which will have the greatest chance of success according to the specified circumstances.	
2.3 Specify, and sequence, the extent and combination of <b>leakage detection methods and techniques</b> which will produce the most effective leakage detection activity.	
2.4 Determine the equipment and resource requirements for suitable <b>methods and techniques</b> .	
2.5 Establish the availability of equipment and the cost effectiveness of its use.	

## Unit FA8A 04 Determine Leakage Detection Methods and Techniques in Response to Water Loss

Candidate's name \_\_\_\_\_

<b>2 Select appropriate leakage detection methods and techniques</b>	
<b>Performance Criteria — the candidate can:</b>	<b>Evidence or File X-Ref/Coverage</b>
2.6 Determine the potential effects on the water supply, water quality and customers of suitable <b>methods and techniques</b> .	
2.7 Determine the health, safety and environmental implications of suitable <b>methods and techniques</b> .	
2.8 Confirm the viability of your chosen <b>methods and techniques</b> with relevant personnel.	
2.9 Record relevant information regarding selected <b>leakage detection methods and techniques</b> according to organisational requirements.	
<b>Knowledge and Understanding</b>	<b>Evidence or File X-Ref/Coverage</b>
1 How to evaluate the limitations and capability of suitable leakage detection methods and techniques according to the circumstances identified.	
2 How to determine those leakage detection methods and techniques which will have the greatest chance of success according to the specified circumstances.	
3 How to specify, and sequence, the extent and combination of leakage detection methods and techniques which will produce the most effective leakage detection activity.	
4 How to determine the equipment and resource requirements for suitable methods and techniques.	
5 How to establish the availability of equipment and the cost effectiveness of its use.	
6 How to determine the potential effects on the water supply, water quality and customers of suitable methods and techniques.	
7 How to determine the health, safety and environmental implications of suitable methods and techniques.	



**Unit FA8A 04 Determine Leakage Detection Methods and Techniques in Response to Water Loss**

Candidate's name \_\_\_\_\_

<b>2 Select appropriate leakage detection methods and techniques</b>	
<b>Performance Criteria</b> — the candidate can:	<b>Evidence or File X-Ref/Coverage</b>
8 How to confirm the viability of your chosen methods and techniques with relevant personnel.	
9 How to record relevant information regarding selected leakage detection methods and techniques according to organisational requirements.	
<b>Scope of evidence</b>	<b>Evidence or File X-Ref/Coverage</b>
<b>1 Existing records and data</b> include:	
(a) the network infrastructure and assets	
(b) flow and pressure data	
(c) known metered use	
(d) known calculated use	
(e) customers	
(f) effect on water quality	
(g) environmental details	
<b>2 Leakage detection methods and techniques</b> include:	
(a) acoustic methods	
(b) visual methods	

**Unit FA8A 04 Determine Leakage Detection Methods and Techniques in Response to Water Loss**

Candidate's name \_\_\_\_\_

Scope of evidence	Evidence or File X-Ref/Coverage
<b>2 Leakage detection methods and techniques</b> include:	
(c) flow and pressure methods	
<b>3 Major factors</b> relate to::	
(a) customers	
(b) traffic	
(c) resources	

## Unit FA9R 04 Programme, Deploy and Collect Data-logging Equipment

SCQF level	6	Credit Value	9	GLH	48
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Candidate's name		Assessor's name	
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<b>Types of evidence provided for this Unit</b> (please tick as appropriate)	Assessor observation report	<input type="checkbox"/>	Witness testimony	<input type="checkbox"/>
	Workplace records/products (includes designs)	<input type="checkbox"/>	Record of assessor-candidate discussions	<input type="checkbox"/>
	Professional discussion interview	<input type="checkbox"/>	Written knowledge questions	<input type="checkbox"/>
	Records of oral questions and candidate's answers	<input type="checkbox"/>	RPL	<input type="checkbox"/>

### Evidence Requirements for Unit FA9R 04 (please tick as appropriate)

	Yes	No		Yes	No
Has any evidence been produced from assessor observation of the candidate in a realistic working environment?	<input type="checkbox"/>	<input type="checkbox"/>	If a realistic working environment was used for observation, did it meet the qualification requirements?	<input type="checkbox"/>	<input type="checkbox"/>

### The evidence is:

	Yes	No		Yes	No
<b>Valid</b> — meets the qualification requirements and demonstrates competence for Unit FA9R 04	<input type="checkbox"/>	<input type="checkbox"/>	<b>Authentic</b> — is the candidate's own work and can be verified as genuine	<input type="checkbox"/>	<input type="checkbox"/>
<b>Reliable</b> — shows genuine sustained competence over a period of time	<input type="checkbox"/>	<input type="checkbox"/>	<b>Sufficient</b> — total evidence covers all Performance Criteria, knowledge and understanding and scope requirements for FA9R 04	<input type="checkbox"/>	<input type="checkbox"/>
<b>Current</b> — recent enough to show current competence	<input type="checkbox"/>	<input type="checkbox"/>			

## Unit FA9R 04 Programme, Deploy and Collect Data-logging Equipment

### Candidate declaration

I confirm that the evidence listed for **Unit FA9R 04** is my own work, and I have collected my evidence in line with the qualification requirements.

**Candidate's signature** \_\_\_\_\_ **Date** \_\_\_\_\_

### Assessor confirmation

I confirm that I have assessed the evidence produced and am satisfied that the candidate has demonstrated competence against the qualification requirements for **Unit FA9R 04**.

**Assessor's signature** \_\_\_\_\_ **Date** \_\_\_\_\_

**Assessor's counter-signature** (if appropriate) \_\_\_\_\_ **Date** \_\_\_\_\_

### If sampled

**Internal verifier's name** \_\_\_\_\_

**Internal verifier's signature** \_\_\_\_\_ **Date** \_\_\_\_\_

**External Verifier's name** \_\_\_\_\_

**External Verifier's signature** \_\_\_\_\_ **Date** \_\_\_\_\_

## Unit FA9R 04 Programme, Deploy and Collect Data from Data-logging Equipment

Candidate's name \_\_\_\_\_

1 Programme data-logging equipment	
Performance Criteria — the candidate can:	Evidence or File X-Ref/Coverage
1.1 Use details of the <b>monitoring activity</b> to enable decisions to be made about choice of <b>data-logging equipment</b> .	
1.2 Confirm <b>data-logging equipment</b> is in working order and is safe before using it.	
1.3 Follow the programming sequence for the <b>equipment type</b> .	
1.4 Set and enter the relevant parameters for the <b>monitoring activity</b> and confirm programming as required.	
1.5 Record programming and deployment details and maintain these as required throughout the monitoring period.	
1.6 Take relevant <b>action</b> to deal with programming or deployment <b>problems</b> .	
Knowledge and Understanding	Evidence or File X-Ref/Coverage
1 The purposes for using data-logging equipment and the information each type provides.	
2 How to programme and use data-logging equipment.	
3 Recording requirements.	
4 Typical and unusual problems and how to deal with them.	

## Unit FA9R 04 Programme, Deploy and Collect Data from Data-logging Equipment

Candidate's name \_\_\_\_\_

<b>2 Deploy and recover data-logging equipment</b>	
<b>Performance Criteria — the candidate can:</b>	<b>Evidence or File X-Ref/Coverage</b>
2.1 Select the <b>data-logging equipment</b> according to instructions received and the monitoring activity to be carried out.	
2.2 Check and confirm the <b>data-logging equipment</b> and the equipment to be logged is in working order and is safe.	
2.3 Resolve any <b>problems</b> when <b>data-logging equipment</b> or the equipment to be logged is not working properly.	
2.4 Prepare the <b>data-logging equipment</b> as required for the specified monitoring activity.	
2.5 Install the <b>data-logging equipment</b> in the specified location and confirm its correct operation.	
2.6 Provide deployment details to relevant personnel.	
2.7 Remove specified <b>data-logging equipment</b> on completion of the monitoring period.	
2.8 Follow safe working and hygiene practices in accordance with <b>approved procedures and practices</b> .	
<b>Knowledge and Understanding</b>	<b>Evidence or File X-Ref/Coverage</b>
1 How to use data-logging equipment.	
2 The purpose of monitoring.	
3 How to resolve problems with logging equipment and the equipment to be logged and the limits of responsibility.	
4 How to prepare equipment for use.	

## Unit FA9R 04 Programme, Deploy and Collect Data from Data-logging Equipment

Candidate's name \_\_\_\_\_

<b>2 Deploy and recover data-logging equipment</b>	
<b>Knowledge and Understanding</b>	<b>Evidence or File X-Ref/Coverage</b>
5 How to install and check equipment.	
6 Who to provide recorded data to.	
7 How to remove equipment.	
8 Safety and hygiene practices and related regulatory and statutory requirements.	
<b>3 Collect data from data-logging equipment</b>	
<b>Performance Criteria — the candidate can:</b>	<b>Evidence or File X-Ref/Coverage</b>
3.1 Identify data collection requirements from specified data-logging equipment.	
3.2 Collect the data recorded by specified data-logging equipment, according to organisational requirements.	
3.3 Provided recorded data to the relevant person, according to organisational requirements.	
3.4 Take relevant action when problems occur in collecting the data.	
<b>Knowledge and Understanding</b>	<b>Evidence or File X-Ref/Coverage</b>
1 The data provided by different types of logging equipment.	
2 Data collection methods.	
3 Who needs the recorded data.	

## Unit FA9R 04 Programme, Deploy and Collect Data from Data-logging Equipment

Candidate's name \_\_\_\_\_

Knowledge and Understanding	Evidence or File X-Ref/Coverage
4 Typical and unusual problems and how to deal with them.	
Scope of evidence	Evidence or File X-Ref/Coverage
<b>1 Data-logging equipment</b> includes:	
(a) pressure loggers	
(b) noise loggers	
(c) flow loggers	
(d) correlating loggers	
<b>2 Monitoring activity</b> covers:	
(a) permanent DMA monitoring	
(b) temporary metered areas for leak detection or investigation	
(c) surveying	
(d) ad hoc monitoring	
<b>3 Relevant action</b> taken includes:	
(a) rectification of problems within the responsibility of the job role	
(b) reporting of problems outside the responsibility of the job role.	



**Unit FA9R 04 Programme, Deploy and Collect Data from Data-logging Equipment**

Candidate's name \_\_\_\_\_

Scope of evidence	Evidence or File X-Ref/Coverage
<b>4 Problems</b> include difficulties with::	
(a) operation of equipment	
(b) incompleteness of data	
(c) location of equipment	
<b>5 Approved procedures and practices</b> are::	
(a) environmental	
(b) regulatory	
(c) emergency	
(d) operational	
(e) health, safety and environment	
(f) relevant company procedures	
(g) national water hygiene	

**Unit FA9R 04 Programme, Deploy and Collect Data from Data-logging Equipment**

Candidate's name \_\_\_\_\_

Scope of evidence	Evidence or File X-Ref/Coverage
<b>6</b> Methods of <b>data collection</b> include:	
(a) on-site downloads	
(b) remote downloads	
(c) data logger retrieval	

## Unit FC07 04 Utilise and Confirm Performance of Measuring Equipment on the Distribution Network

SCQF level	6	Credit Value	9	GLH	48
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Candidate's name		Assessor's name	
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<b>Types of evidence provided for this Unit</b> (please tick as appropriate)	Assessor observation report	<input type="checkbox"/>	Witness testimony	<input type="checkbox"/>
	Workplace records/products (includes designs)	<input type="checkbox"/>	Record of assessor-candidate discussions	<input type="checkbox"/>
	Professional discussion interview	<input type="checkbox"/>	Written knowledge questions	<input type="checkbox"/>
	Records of oral questions and candidate's answers	<input type="checkbox"/>	RPL	<input type="checkbox"/>

### Evidence Requirements for Unit FA9R 04 (please tick as appropriate)

	Yes	No		Yes	No
Has any evidence been produced from assessor observation of the candidate in a realistic working environment?	<input type="checkbox"/>	<input type="checkbox"/>	If a realistic working environment was used for observation, did it meet the qualification requirements?	<input type="checkbox"/>	<input type="checkbox"/>

### The evidence is:

	Yes	No		Yes	No
<b>Valid</b> — meets the qualification requirements and demonstrates competence for Unit FC07 04	<input type="checkbox"/>	<input type="checkbox"/>	<b>Authentic</b> — is the candidate's own work and can be verified as genuine	<input type="checkbox"/>	<input type="checkbox"/>
<b>Reliable</b> — shows genuine sustained competence over a period of time	<input type="checkbox"/>	<input type="checkbox"/>	<b>Sufficient</b> — total evidence covers all Performance Criteria, knowledge and understanding and scope requirements for FC07 04	<input type="checkbox"/>	<input type="checkbox"/>
<b>Current</b> — recent enough to show current competence	<input type="checkbox"/>	<input type="checkbox"/>			

**Unit FC07 04      Utilise and Confirm Performance of Measuring Equipment on the Distribution Network**

**Candidate declaration**

I confirm that the evidence listed for **Unit FC07 04** is my own work, and I have collected my evidence in line with the qualification requirements.

**Candidate's signature** \_\_\_\_\_ **Date** \_\_\_\_\_

**Assessor confirmation**

I confirm that I have assessed the evidence produced and am satisfied that the candidate has demonstrated competence against the qualification requirements for **Unit FC07 04**.

**Assessor's signature** \_\_\_\_\_ **Date** \_\_\_\_\_

**Assessor's counter-signature** (if appropriate) \_\_\_\_\_ **Date** \_\_\_\_\_

**If sampled**

**Internal verifier's name** \_\_\_\_\_

**Internal verifier's signature** \_\_\_\_\_ **Date** \_\_\_\_\_

**External Verifier's name** \_\_\_\_\_

**External Verifier's signature** \_\_\_\_\_ **Date** \_\_\_\_\_

## Unit FC07 04      Utilise and Confirm Performance of Measuring Equipment on the Distribution Network

Candidate's name \_\_\_\_\_

<b>1      Confirm the ongoing performance of equipment and take readings</b>	
<b>Performance Criteria — the candidate can:</b>	<b>Evidence or File X-Ref/Coverage</b>
1.1 Obtain work instructions and determine an appropriate sequence of activities to provide cost-effective use of time according to work requirements.	
1.2 Accurately and safely locate the <b>equipment</b> according to instructions received.	
1.3 Carry out operational checks on the <b>equipment</b> , connections and ancillary items according to organisational procedures.	
1.4 Take the <b>relevant actions</b> where <b>problems</b> arise with the <b>equipment</b> , connections and ancillary items.	
1.5 Take accurate readings according to <b>equipment</b> type and reading systems.	
1.6 Record information about the <b>equipment</b> and readings in a way which ensures there is no room for misinterpretation and which is in line with organisational requirements.	
<b>Knowledge and Understanding</b>	<b>Evidence or File X-Ref/Coverage</b>
1 How to prioritise work activities.	
2 Types of equipment and usual/normal operating parameters.	
3 How to carry out operational checks.	
4 How to identify problems with equipment.	
5 Typical and unusual problems and how to deal with them.	

## Unit FC07 04      Utilise and Confirm Performance of Measuring Equipment on the Distribution Network

Candidate's name \_\_\_\_\_

<b>1      Confirm the ongoing performance of equipment and take readings</b>	
<b>Knowledge and Understanding</b>	<b>Evidence or File X-Ref/Coverage</b>
6      How to take readings from different types of equipment.	
7      Recording procedures.	
<b>2      Set up and remove temporary flow and pressure measuring equipment</b>	
<b>Performance Criteria — the candidate can:</b>	<b>Evidence or File X-Ref/Coverage</b>
2.1    Select appropriate <b>equipment</b> in accordance with instructions received.	
2.2    Confirm the <b>equipment</b> is in working order and where this is not the case you report the details to the relevant person.	
2.3    Attach the <b>equipment</b> in the required position on the pipework, in accordance with all instructions.	
2.4    Check and confirm the <b>equipment</b> is correctly installed and is working properly throughout the job.	
2.5    Remove the <b>equipment</b> in the specified manner on completion of the specified job.	
2.6    Follow safe working and hygiene processes in accordance with <b>approved procedures and practices</b> .	
<b>Knowledge and Understanding</b>	<b>Evidence or File X-Ref/Coverage</b>
1      Different types of equipment and its use.	
2      Organisational reporting requirements.	

**Unit FC07 04      Utilise and Confirm Performance of Measuring Equipment on the Distribution Network**

Candidate's name \_\_\_\_\_

<b>2      Set up and remove temporary flow and pressure measuring equipment</b>	
<b>Knowledge and Understanding</b>	<b>Evidence or File X-Ref/Coverage</b>
3      Equipment attachment and removal methods.	
4      Safety and hygiene processes and related regulatory and statutory requirements.	
<b>Scope of evidence</b>	<b>Evidence or File X-Ref/Coverage</b>
<b>1      Equipment</b> include:	
(a)   meters	
(b)   gauges	
<b>2      Relevant action</b> taken to resolve problems includes:	
(a)   rectification of problems within the responsibility of the job role	
(b)   reporting of problems outside the responsibility of the job role.	
<b>3      Problems</b> include:	
(a)   damage	
(b)   leaks	
(c)   faulty operation	
(d)   maintenance requirements	

**Unit FC07 04      Utilise and Confirm Performance of Measuring Equipment on the Distribution Network**

**Candidate's name** \_\_\_\_\_

Scope of evidence	Evidence or File X-Ref/Coverage
<b>3 Problems include:</b>	
(e) flooding	
(f) freezing	
<b>4 Approved procedures and practices are:</b>	
(a) regulatory	
(b) health, safety and environment	
(c) relevant company procedures	
(d) emergency	



## Unit FA9V 04 Provide Leadership for Your Team

SCQF level	6	Credit Value	9	GLH	?
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Candidate's name		Assessor's name	
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<b>Types of evidence provided for this Unit</b> (please tick as appropriate)	Assessor observation report	<input type="checkbox"/>	Witness testimony	<input type="checkbox"/>
	Workplace records/products (includes designs)	<input type="checkbox"/>	Record of assessor-candidate discussions	<input type="checkbox"/>
	Professional discussion interview	<input type="checkbox"/>	Written knowledge questions	<input type="checkbox"/>
	Records of oral questions and candidate's answers	<input type="checkbox"/>	RPL	<input type="checkbox"/>

### Evidence Requirements for Unit FA9R 04 (please tick as appropriate)

	Yes	No		Yes	No
Has any evidence been produced from assessor observation of the candidate in a realistic working environment?	<input type="checkbox"/>	<input type="checkbox"/>	If a realistic working environment was used for observation, did it meet the qualification requirements?	<input type="checkbox"/>	<input type="checkbox"/>

### The evidence is:

	Yes	No		Yes	No
<b>Valid</b> — meets the qualification requirements and demonstrates competence for Unit FA9V 04	<input type="checkbox"/>	<input type="checkbox"/>	<b>Authentic</b> — is the candidate's own work and can be verified as genuine	<input type="checkbox"/>	<input type="checkbox"/>
<b>Reliable</b> — shows genuine sustained competence over a period of time	<input type="checkbox"/>	<input type="checkbox"/>	<b>Sufficient</b> — total evidence covers all Performance Criteria, knowledge and understanding and scope requirements for FA9V 04	<input type="checkbox"/>	<input type="checkbox"/>
<b>Current</b> — recent enough to show current competence	<input type="checkbox"/>	<input type="checkbox"/>			

**Unit FA9V 04 Provide Leadership for Your Team**

**Candidate declaration**

I confirm that the evidence listed for **Unit FA9V 04** is my own work, and I have collected my evidence in line with the qualification requirements.

**Candidate’s signature** \_\_\_\_\_ **Date** \_\_\_\_\_

**Assessor confirmation**

I confirm that I have assessed the evidence produced and am satisfied that the candidate has demonstrated competence against the qualification requirements for **Unit FA9V 04**.

**Assessor’s signature** \_\_\_\_\_ **Date** \_\_\_\_\_

**Assessor’s counter-signature** (if appropriate) \_\_\_\_\_ **Date** \_\_\_\_\_

**If sampled**

**Internal verifier’s name** \_\_\_\_\_

**Internal verifier’s signature** \_\_\_\_\_ **Date** \_\_\_\_\_

**External Verifier’s name** \_\_\_\_\_

**External Verifier’s signature** \_\_\_\_\_ **Date** \_\_\_\_\_

## Unit FA9V 04 Provide Leadership for your Team

Candidate's name \_\_\_\_\_

<b>1 Outcomes of effective performance</b>	
<b>Performance Criteria — the candidate can:</b>	<b>Evidence or File X-Ref/Coverage</b>
1.1 Set out and positively communicate the purpose and objectives of the team to all members.	
1.2 Involve members in planning how the team will achieve its objectives.	
1.3 Ensure that each member of the team has personal work objectives and understands how achieving these will contribute to achievement of the team's objectives.	
1.4 Encourage and support team members to achieve their personal work objectives and those of the team and provide recognition when objectives have been achieved.	
1.5 Win, through your performance, the trust and support of the team for your leadership.	
1.6 Steer the team successfully through difficulties and challenges, including conflict within the team.	
1.7 Encourage and recognise creativity and innovation within the team.	
1.8 Give team members support and advice when they need it, especially during periods of setback and change.	
1.9 Motivate team members to present their own ideas and listen to what they say.	
1.10 Encourage team members to take the lead when they have the knowledge and expertise and show willingness to follow their lead.	
1.11 Monitor activities and progress across the team without interfering.	

## Unit FA9V 04 Provide Leadership for your Team

<b>2 Behaviours</b>	
<b>Performance Criteria</b> — the candidate can show that they:	<b>Evidence or File X-Ref/Coverage</b>
2.1 Create a sense of common purpose.	
2.2 Take personal responsibility for making things happen.	
2.3 Encourage and support others to take decisions autonomously.	
2.4 Act within the limits of your responsibility.	
2.5 Make time available to support others.	
2.6 Show integrity, fairness and consistency in decision-making.	
2.7 Seek to understand people's needs and motivations.	
2.8 Model behaviour that shows respect, helpfulness and co-operation.	
<b>K1 General Knowledge and Understanding</b>	
<b>Knowledge and Understanding</b>	<b>Evidence or File X-Ref/Coverage</b>
K1.1 Different ways of communicating effectively with members of a team.	
K1.2 How to set objectives which are SMART (Specific, Measurable, Achievable, Realistic and Time-bound).	
K1.3 How to plan the achievement of team objectives and the importance of involving team members in this process.	
K1.4 The importance of, and being able to show team members, how personal work objectives contribute to. achievement of team objectives.	

## Unit FA8E 04      Develop Productive Working Relationships with Colleagues

<b>K1    General Knowledge and Understanding</b>	
<b>Knowledge and Understanding</b>	<b>Evidence or File X-Ref/Coverage</b>
K1.5 That different styles of leadership exist.	
K1.6 How to select and successfully apply a limited range of different methods for motivating, supporting and encouraging team members and recognising their achievements.	
K1.7 Types of difficulties and challenges that may arise, including conflict within the team, and ways of identifying and overcoming them.	
K1.8 The importance of encouraging others to take the lead and ways in which this can be achieved.	
K1.9 The benefits of and how to encourage and recognise creativity and innovation within a team.	
<b>K2    Industry- or Sector-specific Knowledge and Understanding</b>	
<b>Knowledge and Understanding</b>	<b>Evidence or File X-Ref/Coverage</b>
K2.1 Legal, regulatory and ethical requirements in the industry/sector.	
<b>K3    Context-specific Knowledge and Understanding</b>	
<b>Knowledge and Understanding</b>	<b>Evidence or File X-Ref/Coverage</b>
K3.1 The members, purpose, objectives and plans of their team.	
K3.2 The personal work objectives of members of their team.	
K3.3 The types of support and advice that team members are likely to need and how to respond to these.	
K3.4 Standards of performance for the work of their team.	

## Unit FA8K 04      Establish the Integrity of a Discrete Area on the Distribution Network

SCQF level	6	Credit Value	6	GLH	32
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Candidate's name		Assessor's name	
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<b>Types of evidence provided for this Unit</b> (please tick as appropriate)	Assessor observation report	<input type="checkbox"/>	Witness testimony	<input type="checkbox"/>
	Workplace records/products (includes designs)	<input type="checkbox"/>	Record of assessor-candidate discussions	<input type="checkbox"/>
	Professional discussion interview	<input type="checkbox"/>	Written knowledge questions	<input type="checkbox"/>
	Records of oral questions and candidate's answers	<input type="checkbox"/>	RPL	<input type="checkbox"/>

### Evidence Requirements for Unit FA9R 04 (please tick as appropriate)

	Yes	No		Yes	No
Has any evidence been produced from assessor observation of the candidate in a realistic working environment?	<input type="checkbox"/>	<input type="checkbox"/>	If a realistic working environment was used for observation, did it meet the qualification requirements?	<input type="checkbox"/>	<input type="checkbox"/>

### The evidence is:

	Yes	No		Yes	No
<b>Valid</b> — meets the qualification requirements and demonstrates competence for Unit FA8K 04	<input type="checkbox"/>	<input type="checkbox"/>	<b>Authentic</b> — is the candidate's own work and can be verified as genuine	<input type="checkbox"/>	<input type="checkbox"/>
<b>Reliable</b> — shows genuine sustained competence over a period of time	<input type="checkbox"/>	<input type="checkbox"/>	<b>Sufficient</b> — total evidence covers all Performance Criteria, knowledge and understanding and scope requirements for FA8K 04	<input type="checkbox"/>	<input type="checkbox"/>
<b>Current</b> — recent enough to show current competence	<input type="checkbox"/>	<input type="checkbox"/>			

**Unit FA8K 04      Establish the Integrity of a Discrete Area on the Distribution Network**

**Candidate declaration**

I confirm that the evidence listed for **Unit FA8K 04** is my own work, and I have collected my evidence in line with the qualification requirements.

**Candidate's signature** \_\_\_\_\_ **Date** \_\_\_\_\_

**Assessor confirmation**

I confirm that I have assessed the evidence produced and am satisfied that the candidate has demonstrated competence against the qualification requirements for **Unit FA8K 04**.

**Assessor's signature** \_\_\_\_\_ **Date** \_\_\_\_\_

**Assessor's counter-signature** (if appropriate) \_\_\_\_\_ **Date** \_\_\_\_\_

**If sampled**

**Internal verifier's name** \_\_\_\_\_

**Internal verifier's signature** \_\_\_\_\_ **Date** \_\_\_\_\_

**External Verifier's name** \_\_\_\_\_

**External Verifier's signature** \_\_\_\_\_ **Date** \_\_\_\_\_

## Unit FA8K 04 Establish the Integrity of a Discrete Area on the Distribution Network

Candidate's name \_\_\_\_\_

1 Isolate a section of the distribution network	
Performance Criteria — the candidate can:	Evidence or File X-Ref/Coverage
1.1 Identify the section of the distribution network which needs to be isolated, according to work requirements.	
1.2 Confirm that customers who will be affected are informed, and that service levels will be maintained, in accordance with organisational requirements.	
1.3 Identify the <b>network fittings</b> from those on the ground and those on network plans which will be involved in the isolation activity and report any differences you find.	
1.4 Confirm that there are no obvious sources of potential contamination on the <b>network fittings</b> within the isolated section.	
1.5 Access and correctly operate the relevant <b>network fittings</b> in the required sequence.	
1.6 Inform those who need to know that the section of the network has been isolated as required.	
1.7 Record <b>details</b> of the isolation activity accurately and completely and inform those who need to know that the section has been isolated.	
1.8 Follow safe working and hygiene practices according to relevant procedures, regulatory and statutory.	
Knowledge and Understanding	Evidence or File X-Ref/Coverage
1 How to read network plans.	
2 The effect that isolating a section of the network may have on the wider distribution system the immediate zone, water quality and customers.	
3 Organisational requirements for informing customers.	



## Unit FA8K 04      Establish the Integrity of a Discrete Area on the Distribution Network

Candidate's name \_\_\_\_\_

<b>1      Isolate a section of the distribution network</b>	
<b>Knowledge and Understanding</b>	<b>Evidence or File X-Ref/Coverage</b>
4      Potential sources of contamination of network fittings.	
5      How to operate network fittings and the importance of doing it in the required sequence.	
6      How to check that isolation has been successful, the importance of doing this, and who to inform that it has been completed.	
7      Recording requirements.	
8      Safety and hygiene practices and related regulatory and statutory requirements — including the Health and Safety at Work Act and the New Roads and Street Works Act.	
<b>2      Prove the integrity of the metered area</b>	
<b>Performance Criteria — the candidate can:</b>	<b>Evidence or File X-Ref/Coverage</b>
2.1    Obtain relevant information regarding the metered area being monitored.	
2.2    Confirm the location of specified fittings against information provided.	
2.3    Confirm the boundary valves are as specified and accessible and in working condition.	
2.4    Identify network fittings and equipment requiring repair and maintenance and report the details to the relevant person.	
2.5    Confirm that known leaks on network fittings have been repaired prior to proving.	
2.6    Confirm the water tightness of boundary valves according to organisational procedures.	

## Unit FA8K 04      Establish the Integrity of a Discrete Area on the Distribution Network

Candidate's name \_\_\_\_\_

<b>2      Prove the integrity of the metered area</b>	
<b>Performance Criteria — the candidate can:</b>	<b>Evidence or File X-Ref/Coverage</b>
2.7 Where you find valves which are not in the expected state you identify the possible reasons and determine an appropriate course of action.	
2.8 Confirm that system pressures are not adversely affected during valve operations.	
2.9 Establish those meters which provide the total inflow and outflow to the metered area and confirm they are accessible and in working condition.	
2.10 Accurately record changes made to fittings and equipment and provide this information to the relevant person.	
2.11 Check that permanent boundary valves are accurately marked on site and network plans.	
2.12 Follow safe working and hygiene practices according to relevant procedures, regulatory and statutory requirements.	
<b>Knowledge and Understanding</b>	<b>Evidence or File X-Ref/Coverage</b>
1 The information available regarding the metered area and where to obtain it.	
2 How to interpret network plans.	
3 The importance of checking accessibility and working conditions of boundary valves.	
4 The importance of checking repair of network fittings.	
5 Who to report repair and maintenance details to.	
6 Procedures for water tightness of boundary valves.	

## Unit FA8K 04      Establish the Integrity of a Discrete Area on the Distribution Network

Candidate's name \_\_\_\_\_

<b>2      Prove the integrity of the metered area</b>	
<b>Knowledge and Understanding</b>	<b>Evidence or File X-Ref/Coverage</b>
7      Reasons why valves may not be in the expected status, and the implications of changing them.	
8      The consequences of making any changes or variations to water quality and supply, with regard to organisational limits.	
9      The importance of not affecting system pressures.	
10     How to interpret network flow information.	
11     Recording requirements.	
12     The importance of checking site and network plans.	
13     Safety and hygiene practices and related regulatory and statutory requirements — including the Health and Safety at Work Act and the New Roads and Street Works Act.	
<b>3      Re-commission a section of the distribution network</b>	
<b>Performance Criteria — the candidate can:</b>	<b>Evidence or File X-Ref/Coverage</b>
3.1    Check that the section of the network is ready for re-commissioning, according to work requirements.	
3.2    Identify the <b>network fittings</b> to be used for re-commissioning.	
3.3    Identify the hygiene procedures used and any which need to be undertaken prior to re-commissioning and carry them out accordingly.	
3.4    Access and correctly operate the relevant <b>network fittings</b> in the required sequence.	

## Unit FA8K 04      Establish the Integrity of a Discrete Area on the Distribution Network

Candidate's name \_\_\_\_\_

<b>3      Re-commission a section of the distribution network</b>	
<b>Performance Criteria — the candidate can:</b>	<b>Evidence or File X-Ref/Coverage</b>
3.5 Carry out flushing operations and discharge water in accordance with organisational procedures.	
3.6 Confirm that mains water sampling is carried out as required, according to organisational procedures.	
3.7 Record re-commissioning details accurately and completely and provide the time of re-commissioning to those who need to know.	
3.8 Follow safe working and hygiene practices according to relevant procedures, regulatory and statutory requirements.	
<b>Knowledge and Understanding</b>	<b>Evidence or File X-Ref/Coverage</b>
1 Work requirements for re-commissioning a section of the network.	
2 How to read network plans.	
3 When and how to carry out hygiene procedures.	
4 How to operate network fittings and the importance of doing it in the required sequence.	
5 Flushing procedures.	
6 Water disposal procedures and the potential damage which can be caused by incorrect disposal.	
7 The need for sampling.	
8 Recording requirements and who needs to be informed about re-commissioning.	

**Unit FA8K 04      Establish the Integrity of a Discrete Area on the Distribution Network**

**Candidate's name** \_\_\_\_\_

<b>3      Re-commission a section of the distribution network</b>	
<b>Knowledge and Understanding</b>	<b>Evidence or File X-Ref/Coverage</b>
9      Safety and hygiene practices and related regulatory and statutory requirements — including the Health and Safety at Work act and the New Roads and Street Works Act.	
<b>Scope of evidence</b>	<b>Evidence or File X-Ref/Coverage</b>
<b>1      Network fittings</b> include:	
(a)    isolation valves	
(b)    air valves	
(c)    hydrants	
<b>2      Details</b> include:	
(a)    date of isolation or re-commissioning	
(b)    time of isolation or re-commissioning	
(c)    section isolated or re-commissioned	

## Unit FA82 04 Carry Out Step-testing Operations and Re-commission the Distribution Network

SCQF level	6	Credit Value	9	GLH	44
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Candidate's name		Assessor's name	
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<b>Types of evidence provided for this Unit</b> (please tick as appropriate)	Assessor observation report	<input type="checkbox"/>	Witness testimony	<input type="checkbox"/>
	Workplace records/products (includes designs)	<input type="checkbox"/>	Record of assessor-candidate discussions	<input type="checkbox"/>
	Professional discussion interview	<input type="checkbox"/>	Written knowledge questions	<input type="checkbox"/>
	Records of oral questions and candidate's answers	<input type="checkbox"/>	RPL	<input type="checkbox"/>

### Evidence Requirements for Unit FA9R 04 (please tick as appropriate)

	Yes	No		Yes	No
Has any evidence been produced from assessor observation of the candidate in a realistic working environment?	<input type="checkbox"/>	<input type="checkbox"/>	If a realistic working environment was used for observation, did it meet the qualification requirements?	<input type="checkbox"/>	<input type="checkbox"/>

### The evidence is:

	Yes	No		Yes	No
<b>Valid</b> — meets the qualification requirements and demonstrates competence for Unit FA82 04	<input type="checkbox"/>	<input type="checkbox"/>	<b>Authentic</b> — is the candidate's own work and can be verified as genuine	<input type="checkbox"/>	<input type="checkbox"/>
<b>Reliable</b> — shows genuine sustained competence over a period of time	<input type="checkbox"/>	<input type="checkbox"/>	<b>Sufficient</b> — total evidence covers all Performance Criteria, knowledge and understanding and scope requirements for FA82 04	<input type="checkbox"/>	<input type="checkbox"/>
<b>Current</b> — recent enough to show current competence	<input type="checkbox"/>	<input type="checkbox"/>			

**Unit FA82 04      Carry Out Step-testing Operations and Re-commission the Distribution Network**

**Candidate declaration**

I confirm that the evidence listed for **Unit FA82 04** is my own work, and I have collected my evidence in line with the qualification requirements.

**Candidate's signature** \_\_\_\_\_ **Date** \_\_\_\_\_

**Assessor confirmation**

I confirm that I have assessed the evidence produced and am satisfied that the candidate has demonstrated competence against the qualification requirements for **Unit FA82 04**.

**Assessor's signature** \_\_\_\_\_ **Date** \_\_\_\_\_

**Assessor's counter-signature** (if appropriate) \_\_\_\_\_ **Date** \_\_\_\_\_

**If sampled**

**Internal verifier's name** \_\_\_\_\_

**Internal verifier's signature** \_\_\_\_\_ **Date** \_\_\_\_\_

**External Verifier's name** \_\_\_\_\_

**External Verifier's signature** \_\_\_\_\_ **Date** \_\_\_\_\_

**Unit FA82 04      Carry Out Step-testing Operations and  
Re-commission the Distribution Network**

Candidate's name \_\_\_\_\_

<b>1      Prepare the site for step-testing activities</b>	
<b>Performance Criteria — the candidate can:</b>	<b>Evidence or File X-Ref/Coverage</b>
1.1 Obtain step-testing plans and determine an appropriate sequence of activities and the <b>equipment</b> required.	
1.2 Determine the boundary, circulatory and step <b>valves</b> on network plans which will be utilised for step-testing activities.	
1.3 Confirm the <b>network fittings</b> are leak free and in working order, are in the correct location and are accessible prior to step-testing activities.	
1.4 Where problems have been identified with <b>network fittings</b> , confirm these have been rectified as required prior to step-testing.	
1.5 Set up the <b>equipment</b> required to ensure the specified tests provide optimum results, according to the area to be tested and its characteristics.	
1.6 Establish contingency plans for situations where <b>potential problems</b> might occur during step-testing.	
1.7 Confirm notification procedures are put in place in accordance with organisational requirements.	
1.8 Record preparation activities in accordance with organisational requirements.	
1.9 Follow safe working and hygiene processes in accordance with <b>approved procedures and practices</b> .	
<b>Knowledge and Understanding</b>	<b>Evidence or File X-Ref/Coverage</b>
1      How to read step-testing and network plans.	
2      How to carry out step-tests and the implications of the New Roads and Street Works Act on testing activities.	



**Unit FA82 04      Carry Out Step-testing Operations and  
Re-commission the Distribution Network**

Candidate's name \_\_\_\_\_

<b>1      Prepare the site for step-testing activities</b>	
<b>Knowledge and Understanding</b>	<b>Evidence or File X-Ref/Coverage</b>
3      How to identify those who may be affected by step-testing.	
4      How network fittings work and organisational procedures for rectifying problems with them.	
5      How to set up the equipment.	
6      The potential problems which may occur and how to deal with them.	
7      Organisational notification procedures.	
8      Recording procedures.	
9      Safety and hygiene processes and related regulatory and statutory requirements.	
<b>2      Isolate a section of the distribution network</b>	
<b>Performance Criteria — the candidate can:</b>	<b>Evidence or File X-Ref/Coverage</b>
2.1    Determine the section of the distribution network which needs to be isolated, in accordance with work requirements.	
2.2    Confirm that customers who will be affected are informed, and that service levels will be maintained, in accordance with organisational requirements.	
2.3    Compare the <b>network fittings</b> on the ground with those on network plans which will be involved in the isolation activity and report any differences you find.	
2.4    Confirm that there are no obvious sources of potential contamination on the <b>network fittings</b> within the isolated section.	

**Unit FA82 04      Carry Out Step-testing Operations and  
Re-commission the Distribution Network**

Candidate's name \_\_\_\_\_

<b>2      Isolate a section of the distribution network</b>	
<b>Performance Criteria — the candidate can:</b>	<b>Evidence or File X-Ref/Coverage</b>
2.5    Access and operate the relevant <b>network fittings</b> in the required sequence.	
2.6    Inform those who need to know that the section of the network has been isolated as required.	
2.7    Record <b>details</b> of the isolation activity in line with requirements and inform those who need to know that the section has been isolated.	
2.8    Follow safe working and hygiene processes in accordance with <b>approved procedures and practices</b> .	
<b>Knowledge and Understanding</b>	<b>Evidence or File X-Ref/Coverage</b>
1      How to read network plans.	
2      The effect that isolating a section of the network may have on the wider distribution system, the immediate zone, water quality and customers.	
3      Organisational requirements for informing customers.	
4      Potential sources of contamination of network fittings.	
5      How to operate network fittings and the importance of doing it in the required sequence.	
6      How to check that isolation has been successful, the importance of doing this, and who to inform that it has been completed.	
7      Recording requirements.	

**Unit FA82 04      Carry Out Step-testing Operations and  
Re-commission the Distribution Network**

Candidate's name \_\_\_\_\_

<b>2      Isolate a section of the distribution network</b>	
<b>Knowledge and Understanding</b>	<b>Evidence or File X-Ref/Coverage</b>
8      Safety and hygiene processes and related regulatory and statutory requirements.	
<b>3      Carry out step-testing activities</b>	
<b>Performance Criteria — the candidate can:</b>	<b>Evidence or File X-Ref/Coverage</b>
3.1      Make sure those affected by testing have been informed of the time and duration of tests and their effect on water supply.	
3.2      Set up monitoring <b>equipment</b> according to test requirements.	
3.3      Carry out the series of <b>valve</b> operations in the sequence and time periods specified in the step-testing plan.	
3.4      Make an accurate record of the times of valve operations and their duration.	
3.5      Use step-testing <b>equipment</b> correctly and safely according to the manufacturer's specification.	
3.6      Return supply systems to identified operating condition.	
3.7      Take <b>appropriate action</b> to resolve <b>potential problems</b> which occur during and immediately after step-testing.	
3.8      Determine and confirm that test information is valid and sufficient for completion of the test.	
3.9      Use test data to eliminate areas not requiring further investigation and highlight the discrete areas and specific details of potential leakage.	
3.10      Record step-testing details, data received and test analysis according to organisational requirements.	

**Unit FA82 04      Carry Out Step-testing Operations and  
Re-commission the Distribution Network**

Candidate's name \_\_\_\_\_

<b>3      Carry out step-testing activities</b>	
<b>Performance Criteria — the candidate can:</b>	<b>Evidence or File X-Ref/Coverage</b>
3.11 Carry out step-testing activities according to water quality and hygiene procedures, health and safety and organisational requirements.	
<b>Knowledge and Understanding</b>	<b>Evidence or File X-Ref/Coverage</b>
1      Organisational contact policies for those affected by step-testing activities.	
2      How to set up monitoring equipment.	
3      How to carry out step tests.	
4      The implications which valve operations can have on the network.	
5      Correct and safe use of step-testing equipment.	
6      How to return supply systems to identified operating conditions, and what operating conditions are covered.	
7      Typical and unusual problems which may occur during step-testing and the action to take.	
8      How to decide when the test is complete.	
9      Recording requirements.	
10      Safety and hygiene processes and related regulatory and statutory requirements.	

**Unit FA82 04      Carry Out Step-testing Operations and  
Re-commission the Distribution Network**

**Candidate's name** \_\_\_\_\_

<b>4    Re-commission a section of the distribution network</b>	
<b>Performance Criteria — the candidate can:</b>	<b>Evidence or File X-Ref/Coverage</b>
4.1 Check and confirm the section of the network is ready for re-commissioning, in accordance with work requirements.	
4.2 Identify the <b>network fittings</b> to be used for re-commissioning.	
4.3 Carry out the hygiene procedures which need to be undertaken prior to re-commissioning.	
4.4 Access and correctly operate the <b>relevant network</b> fittings in the required sequence.	
4.5 Carry out flushing operations and discharge water in accordance with organisational procedures.	
4.6 Confirm that mains water sampling is carried out, in accordance with organisational requirements.	
4.7 Record re-commissioning details in line with requirements and provide the time of re-commissioning to those who need to know.	
4.8 Follow safe working and hygiene processes in accordance with approved procedures and practices.	
<b>Knowledge and Understanding</b>	<b>Evidence or File X-Ref/Coverage</b>
1 Work requirements for re-commissioning a section of the network.	
2 How to read network plans.	
3 When and how to carry out hygiene procedures.	
4 How to operate network fittings and the importance of doing it in the required sequence.	

**Unit FA82 04      Carry Out Step-testing Operations and  
Re-commission the Distribution Network**

**Candidate's name** \_\_\_\_\_

<b>4 Re-commission a section of the distribution network</b>	
<b>Knowledge and Understanding</b>	<b>Evidence or File X-Ref/Coverage</b>
5 Flushing procedures.	
6 Water disposal procedures and the potential damage which can be caused by incorrect disposal.	
7 The need for sampling.	
8 Recording requirements and who needs to be informed about re-commissioning.	
9 Safety and hygiene processes and related regulatory and statutory requirements.	
<b>Scope of evidence</b>	<b>Evidence or File X-Ref/Coverage</b>
<b>1 Equipment</b> include:	
(a) meters	
(b) gauges	
(c) data-loggers	
(d) key and bar	
<b>2 Valves</b> include:	
(a) boundary	
(b) step	

**Unit FA82 04      Carry Out Step-testing Operations and  
Re-commission the Distribution Network**

**Candidate's name** \_\_\_\_\_

Scope of evidence	Evidence or File X-Ref/Coverage
<b>2 Valves</b> include:	
(c) circulatory	
<b>3 Network fittings</b> include:	
(a) isolation valves	
(b) air valves	
(c) hydrants	
<b>4 Potential problems</b> include:	
(a) customers	
(b) health and safety situations	
(c) accuracy of network plans	
(d) highway requirements	
(e) valve location, access and operation	
(f) implications for water quality	
(g) emergency situations	

**Unit FA82 04      Carry Out Step-testing Operations and  
Re-commission the Distribution Network**

**Candidate's name** \_\_\_\_\_

Scope of evidence	Evidence or File X-Ref/Coverage
<b>4    Potential problems</b> include:	
(h)    deviations in levels of service	
(i)    broken valves before and/or during operation	
(j)    flushing/flooding	
<b>5    Approved procedures and practices</b> are:	
(a)    regulatory	
(b)    health, safety and environment	
(c)    relevant company procedures	
(d)    emergency	
<b>6    Details</b> of the isolation activity include:	
(a)    date of isolation	
(b)    time of isolation	
<b>7    Appropriate action</b> taken to resolve potential problems includes:	
(a)    rectification of problems within the responsibility of the job role	
(b)    reporting of problems outside the responsibility of the job role	



## Unit FC01 04 Resolve Leakage-related Issues with Customers

SCQF level	5	Credit Value	5	GLH	26
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Candidate's name		Assessor's name	
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<b>Types of evidence provided for this Unit</b> (please tick as appropriate)	Assessor observation report	<input type="checkbox"/>	Witness testimony	<input type="checkbox"/>
	Workplace records/products (includes designs)	<input type="checkbox"/>	Record of assessor-candidate discussions	<input type="checkbox"/>
	Professional discussion interview	<input type="checkbox"/>	Written knowledge questions	<input type="checkbox"/>
	Records of oral questions and candidate's answers	<input type="checkbox"/>	RPL	<input type="checkbox"/>

### Evidence Requirements for Unit FC01 04 (please tick as appropriate)

	Yes	No		Yes	No
Has any evidence been produced from assessor observation of the candidate in a realistic working environment?	<input type="checkbox"/>	<input type="checkbox"/>	If a realistic working environment was used for observation, did it meet the qualification requirements?	<input type="checkbox"/>	<input type="checkbox"/>

### The evidence is:

	Yes	No		Yes	No
<b>Valid</b> — meets the qualification requirements and demonstrates competence for Unit FC01 04	<input type="checkbox"/>	<input type="checkbox"/>	<b>Authentic</b> — is the candidate's own work and can be verified as genuine	<input type="checkbox"/>	<input type="checkbox"/>
<b>Reliable</b> — shows genuine sustained competence over a period of time	<input type="checkbox"/>	<input type="checkbox"/>	<b>Sufficient</b> — total evidence covers all Performance Criteria, knowledge and understanding and scope requirements for FC01 04	<input type="checkbox"/>	<input type="checkbox"/>
<b>Current</b> — recent enough to show current competence	<input type="checkbox"/>	<input type="checkbox"/>			

**Unit FC01 04      Resolve Leakage-related Issues with Customers**

**Candidate declaration**

I confirm that the evidence listed for **Unit FC01 04** is my own work, and I have collected my evidence in line with the qualification requirements.

**Candidate's signature** \_\_\_\_\_ **Date** \_\_\_\_\_

**Assessor confirmation**

I confirm that I have assessed the evidence produced and am satisfied that the candidate has demonstrated competence against the qualification requirements for **Unit FC01 04**.

**Assessor's signature** \_\_\_\_\_ **Date** \_\_\_\_\_

**Assessor's counter-signature** (if appropriate) \_\_\_\_\_ **Date** \_\_\_\_\_

**If sampled**

**Internal verifier's name** \_\_\_\_\_

**Internal verifier's signature** \_\_\_\_\_ **Date** \_\_\_\_\_

**External Verifier's name** \_\_\_\_\_

**External Verifier's signature** \_\_\_\_\_ **Date** \_\_\_\_\_

## Unit FC01 04      Resolve Leakage-related Issues with Customers

Candidate's name \_\_\_\_\_

<b>1 Inform customers about leakage-related issues</b>	
<b>Performance Criteria — the candidate can:</b>	<b>Evidence or File X-Ref/Coverage</b>
1.1 Deal with <b>customers</b> in line with organisational requirements for customer contact.	
1.2 Ensure <b>customers</b> are treated in a courteous and helpful manner.	
1.3 Confirm the detail of the <b>leakage-related issue</b> with the <b>customer</b> .	
1.4 Provide accurate information about legal obligations and organisational policies regarding water pipes and <b>leakage issues</b> .	
1.5 Determine who has responsibility for leakage in accordance with <b>approved procedures and practices</b> .	
1.6 Where the <b>customer</b> has responsibility for leakage, confirm they have understood what this entails.	
1.7 Record <b>relevant information</b> according to organisational requirements.	
<b>Knowledge and Understanding</b>	<b>Evidence or File X-Ref/Coverage</b>
1 Codes of practice and organisational requirements for customer contact.	
2 Methods for deciding responsibility for leakage, and repair methods.	
3 Customers' legal obligations for leakage on service pipes.	
4 Organisational policies and legal obligations regarding leakage on service pipes.	
5 The importance of checking that the customer has understood what their responsibility entails.	

## Unit FC01 04      Resolve Leakage-related Issues with Customers

Candidate's name \_\_\_\_\_

<b>1 Inform customers about leakage-related issues</b>	
<b>Knowledge and Understanding</b>	<b>Evidence or File X-Ref/Coverage</b>
6 Recording requirements.	
<b>2 Agree a course of action to deal with leakage-related issues</b>	
<b>Performance Criteria — the candidate can:</b>	<b>Evidence or File X-Ref/Coverage</b>
2.1 Confirm the details of the leakage-related issue with the customer.	
2.2 Check and confirm customers understand their legal responsibilities and those of the organisation.	
2.3 Confirm responsibility for service pipe maintenance in accordance with approved procedures and practices.	
2.4 Agree a suitable course of action with the customer to meet legal and organisational responsibilities and requirements.	
2.5 In cases where the customer refuses to accept the defined course of action, refer the matter as required and inform the customer of the details.	
2.6 Deal with the customer in line with organisational requirements.	
2.7 Record relevant information according to organisational requirements.	
<b>Knowledge and Understanding</b>	<b>Evidence or File X-Ref/Coverage</b>
1 Organisational legal obligations and policies regarding leakage on service pipes.	
2 Customers' legal obligations for leakage on service pipes.	
3 The importance of checking that the customer understands the legal position regarding leaks on service pipes.	

## Unit FC01 04      Resolve Leakage-related Issues with Customers

Candidate's name \_\_\_\_\_

<b>2    Agree a course of action to deal with leakage-related issues</b>	
<b>Knowledge and Understanding</b>	<b>Evidence or File X-Ref/Coverage</b>
4    Organisational requirements for dealing with leaks on service pipes and for dealing with customers.	
5    Recording requirements.	
<b>Scope of evidence</b>	<b>Evidence or File X-Ref/Coverage</b>
<b>1    Customers</b> include those with:	
(a)   domestic supply	
(b)   non-domestic supply	
(c)   joint supply	
(d)   single supply	
<b>2    Leakage-related issues</b> include:	
(a)   service pipe leakage	
(b)   abnormal meter readings	
(c)   water seepage	
(d)   water damage	
(e)   water pressure	

## Unit FC01 04      Resolve Leakage-related Issues with Customers

Candidate's name \_\_\_\_\_

Scope of evidence	Evidence or File X-Ref/Coverage
<b>2    Leakage-related issues</b> include:	
(f)    water noise	
(g)    rebated amounts on meter use	
<b>3    Approved procedures and practices</b> are:	
(a)    regulatory	
(b)    health, safety and environment	
(c)    relevant company procedures	
(d)    emergency	
<b>4    Relevant information</b> includes:	
(a)    customer details	
(b)    statutory and non-statutory reports	
(c)    company documentation	
(d)    job instructions	
(e)    client documentation	

**Unit FC01 04      Resolve Leakage-related Issues with Customers**

Candidate's name \_\_\_\_\_

Scope of evidence	Evidence or File X-Ref/Coverage
5    The <b>course of action</b> agreed with the customer includes:	
(a)    arranging for location of a leak	
(b)    arranging a meter reading	
(c)    arranging repair of a leak	
(d)    arranging installation of a meter	
(e)    revisit after repair	