



Assessor's Guidelines for SVQ in Controlling Process Operations at SCQF level 6 (GL8F 23)

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About the Assessor's Guidelines

This guidance covers the SVQ in Controlling Process Operations at SCQF level 6 and 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 including general and specific Evidence Requirements. If you or your centre has any queries relating to one of the SVQs 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.

1 Introduction

SVQ in Controlling Process Operations at SCQF level 6

The SVQ in Controlling Process Operations at SCQF level 6 covers the skills required by candidates working on the operational management of water, waste water or sludge processes, using their technical skills in an operational supervisory role. The SVQ is based on national occupational standards developed by Energy & Utility Skills.

The majority of candidates' evidence for the award must be generated from real work activities. This means that any candidate undertaking the SVQ in Controlling Process Operations must be working in the water industry, supervising either water, waste water or sludge treatment operations, at one or more plants/assets. Assessors must ensure that sufficient evidence of workplace performance is provided before recommending certification.

The skills covered in the Controlling Process Operations SVQ include:

- ◆ monitoring and maintaining a safe working environment
- ◆ conducting a health and safety risk assessment of a workplace
- ◆ monitoring and maintaining the quality of treatment processes
- ◆ monitoring and maintaining treatment processing at optimum performance
- ◆ developing and sustaining productive working relationships with colleagues
- ◆ organising and carrying out the maintenance of process equipment

Completion of the requirements for each of the activities listed above results in a Unit award: six Units in total are needed. All of the activities are mandatory to gain an SVQ in Controlling Process Operations.

Candidates undertaking this SVQ may be working in a water, waste water or sludge treatment environment, and their evidence across the full SVQ must be generated while undertaking their daily work activities.

National Occupational Standards (NOS) and qualification structure

The content and structure of the SVQ in Controlling Process Operations derives from the national occupational standards (NOS) in Controlling Process Operations, developed by Energy & Utility Skills, the Sector Skills Council for the electricity, gas, water and waste management industries and approved in 2006. 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 are available on the SQA website (www.sqa.org.uk). The Units may also be obtained from the UK Standards website (www.ukstandards.org.uk) or from Energy & Utility Skills (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 this SVQ, the team identifies any queries or issues with the content of the NOS or the SVQ structure, please contact your External Verifier or SQA 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

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

SVQ1 (SCQF level 4)	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.
SVQ2 (SCQF level 5)	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.
SVQ3 (either SCQF level 6 or 7)	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.
SVQ4 (either SCQF level 8 or 9)	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.
SVQ5 (SCQF level 11)	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**.

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 must 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 must perform — is described by **Performance Criteria**. In the SVQ3 Controlling Process Operations and Managing and SVQ3 Controlling Process Operations materials, these are shown as following the words, ‘*The candidate can...*’

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

You may also come across statements on **scope**. These give an indication of the breadth of knowledge or performance that the candidate must cover — eg they could list the types of equipment or techniques 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 developed by the awarding body and is packaged along with 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 this may be a supervisor working in the candidate’s organisation, or may be from a training provider).
- ◆ **the internal verifier*:** an individual nominated by the assessment centre who ensures that assessors apply the standards uniformly and consistently (eg this may be the 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 — see SQA’s website (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), 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 SVQ in Controlling Process Operations at SCQF level 6.

2 SVQ in Controlling Process Operations at SCQF level 6

General SVQ Requirements

This section provides guidance on the collection, assessment and recording of SVQ evidence that applies across the SVQ in Controlling Process Operations. The general Evidence Requirements detailed below must be observed in addition to any SVQ- or Unit-specific requirements outlined in Section 3, 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 SQA.

2.1 General Evidence Requirements

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

Term	Explanation
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 the SVQ:

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. SQA 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 candidates' 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 is involved in monitoring and maintaining the quality of treatment processes, it is also likely that their activities will generate evidence for *Monitor and maintain a safe working environment*, or to produce some evidence towards the Units covering risk assessment or maintaining treatment processing at optimum performance).
- ◆ 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 Simulated activities: supporting evidence from the workplace

- ◆ The requirements for using simulated activities are outlined in the EU Skills assessment strategy. Candidates who are assessed using simulated activities must also provide supporting evidence from the workplace to confirm that they have also performed competently against the relevant NOS as part of their job role.
- ◆ In situations where simulated activities are used because undertaking those tasks in a real site situation would affect actual work on site (eg dealing with accidents and emergencies), assessors should ensure that their candidates provide supporting evidence of workplace performance from their daily work, where available.
- ◆ It is recognised that situations could arise where candidates have difficulty producing performance evidence from the workplace for particular skills, because they occur very rarely, and/or because there are health and safety implications to assessing them in the workplace (eg accidents and emergencies). If simulated activities have been used (in line with the SVQ requirements) to produce the primary performance evidence in this instance, and candidates cannot produce further performance evidence from their workplace, the assessor may use detailed discussion and questioning to explore the candidate's performance further against the NOS.

Please note — Assessors should ensure in using this approach that the candidate has not had enough opportunity to provide the appropriate performance evidence from their real work activities, rather than using this method as routine. If you have any queries surrounding the use of evidence from simulated activities as the primary performance evidence for any part of the NOS, please consult your External Verifier in the first instance.

2.1.6 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 qualifications 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 in this document, 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.

Please note — If any candidate works in a role where others report to them, their evidence for Unit HG3E 04 (Develop and sustain productive working relationships with colleagues), must include evidence both from their own line manager(s) and from those who report to them¹.

2.1.7 Employer involvement and contribution to assessment process

- ◆ In this SVQ, 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.

2.1.8 Evidence from technical treatment process activities

- ◆ Evidence provided for the Controlling Process Operations SVQ from technical treatment process activities should be produced from the range of treatment process activities for which the candidate is responsible.

¹ Candidates working at level 3 may or may not have people reporting to them, depending on their job role, **but** this is an absolute requirement of the SSC assessment strategy, and is therefore included in the SVQ guidance. If a candidate has no others reporting to them, evidence from their line manager(s)/supervisor(s) will be acceptable.

For example

If the candidate works in a clean water environment, monitoring all stages of the treatment cycle, from receiving the raw water to producing the potable product, their total evidence should reflect the extent of their role and responsibility.

- ◆ This means that candidates' evidence should be generated from their normal work activities, which should facilitate demonstration of consistent competence over time against the SVQ requirements.
- ◆ While candidates for this SVQ will have access to diverse documentary or product evidence from the workplace, assessors should also make use where possible of direct observation of the candidate as they carry out their daily work activities. This could provide evidence for several Units at the same time, and will also corroborate the evidence produced using other sources.
- ◆ Assessors may observe candidates on several occasions if appropriate, but further evidence to show consistent competence over time can be gathered from other sources if preferable — eg work records, witness testimonies, site logs/diaries, correspondence/e-mails, assessor questioning and discussion, etc
- ◆ **Please note:** There is no requirement (as with previous versions of the Controlling Process Operations SVQ) for assessors to observe specific NOS (skills or behaviours). This means that there is more flexibility in the way that observation is used, and is combined with other assessment methods to produce the total mix of evidence for the SVQ. The assessor and candidate should decide where they can make the most effective use of observation as part of their full mix of evidence.
- ◆ The individual Evidence Requirements for each Unit from the SVQ in Controlling Process Operations has been identified in the Unit-specific guidance at Section 3.

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 may 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 they 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 seek 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,
- ◆ 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:

- ◆ an operational manager could provide considerable information on the technical supervisory activities that the candidate undertakes covering water, waste water or sludge treatment operations during their usual work activities

or

- ◆ a colleague or team member could have useful information about how they interact with others and develop good working relationships as part of a team

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 various 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 centres 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 has been included in this document (Appendix 2).

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. The witness testimony must be subject to assessment, in the same way as any other type of evidence.

2.3 Knowledge assessment

You (or your centre) must have a strategy for assessing the Knowledge and Understanding requirements for the SVQ in Controlling Process Operations. 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. SQA also recommends that, where a candidate demonstrates during assessment that they have knowledge that applies to more than one Unit, the assessors should ensure that you record this coverage, to avoid unnecessary repetition of assessment activity. If candidates have undertaken written assessments 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 or other knowledge assessment materials used by the centre 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).

General knowledge requirements

The water industry specific NOS for the SVQ in Controlling Process Operations (ie Units FA9A 04, FA9C 04/F5DP 04/F5DR 04, FA9D 04/HG3C 04/HG3D 04 and FA9L 04) include requirements listed as 'Knowledge and Understanding — General'. These requirements are identical within each of the water industry specific Units.

Assessors must ensure that candidates' evidence covers these general Knowledge and Understanding requirements in full, but should be aware that evidence can be provided to meet them from across the whole SVQ (or all SVQ Units that the candidate undertakes) rather than on a Unit-by-Unit basis.

In the sample recording documents, a separate table is provided to cover the general Knowledge and Understanding requirements.

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 SVQ in Controlling Process Operations are likely to carry out their job role under their own initiative, and may need to carry out both routine and non-routine tasks. Subject to the requirements of their actual job role, it is also possible that they will be able to provide diverse workplace evidence (documents or products) to supplement assessor observations, discussions and witness testimonies. The candidates themselves could therefore adopt a more proactive approach to identifying the evidence available and cross-referencing it to the NOS, though this is **not** a requirement for undertaking the qualification. Candidates must be made aware of the SVQ requirements and what is expected of them and should understand the progress they are making through their SVQ; at this level, they could additionally be capable of relating their evidence to the SVQ requirements, though the assessor is responsible for deciding finally how the cross-referencing to the NOS is carried out.

2.5 Types of evidence

Candidates for the Controlling Process Operations SVQ 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.

Specific Evidence Requirements for each Unit from the qualifications are found in the following section. 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.

Assessors may observe candidates on more than one occasion if this is appropriate, and should maximise opportunities to observe candidates in the workplace, but evidence to show consistent competence and/or to confirm coverage of the total SVQ requirements (skills, behaviour and Knowledge and Understanding) may also be provided through other means (eg work records, witness testimonies, site logs/diaries, e-mails, 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.

Assessing 'behaviours'

The NOS for many of the Units require candidates to show that they meet particular behavioural standards. In each of the water-specific Units, these are:

- ◆ you work in a manner which is vigilant to possible risks and hazards
- ◆ you work in a manner which uses a range of leadership styles appropriate to different people and situations (not included in Unit FA9A 04)
- ◆ you work in a manner which shows pride in achieving high quality work

Assessors must ensure that candidates provide performance evidence to meet the behavioural requirements for each activity that they undertake. Some of the evidence is likely to be generated during assessor observations (and coverage must be recorded) and questioning, and it could also be provided through confirmation from line managers, supervisors or colleagues (eg in witness testimonies). Equally, candidates' workplace performance and appraisal records could provide evidence, although their use is not mandatory for any Unit.

A considerable number of 'behaviours' are listed in the Management Unit, HG3E 04 (Develop and Sustain Productive Working Relationships with Colleagues). Where possible, the awarding body has provided examples of evidence that can be used for this Unit in particular.

Graphical items and data in performance evidence

As part of their evidence, candidates may produce marked up plans or other graphical items relevant to their treatment process control or management work. 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 company risk assessment form that they completed while undertaking a job (rather than providing the blank copy of the generic form that is used)
- ◆ a candidate can show how they used any information received during a health and safety induction on-site during their treatment process control or management work

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 all candidates, and allow them, during verification sampling, to drill down into the detail of your assessment decisions.

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 SVQ need to show evidence of specific treatment process control or management activities undertaken 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 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 have been included in Section 5 of this document and were produced for each Unit, after consultation with existing assessment centres and EVs. Each Unit document reproduces the NOS and includes a cover sheet tailored to the requirements for that Unit, which allows the assessor to confirm how the SVQ requirements have been met.

The Unit evidence tables list the Performance Criteria, 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 refers 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.

A sample Index of Evidence is also included, which allows a master list of evidence for the SVQ to be kept, which can be cross-referenced to the Unit recording tables.

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, 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.*

3 Structure for the SVQ in Controlling Process Operations at SCQF level 6

This section outlines the requirements for the SVQ in Controlling Process Operations based on the assessment requirements and content of individual Units. The general Evidence Requirements covered in Section 2 apply across the full qualification, 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 2, and also of any specific requirements relating to the full SVQ or individual Units.

Please note — *This qualification relates to activities associated with water, waste water or sludge treatment operations. Candidates' SVQ evidence will reflect the environment (water, waste water or sludge) in which they control or manage and control process operations.*

SVQ in Controlling Process Operations at SCQF level 6 (GL8F 23)

To attain the qualification candidates must complete 6 Units in total.

Unit Code	SCQF level	SCQF credit points	SSC Ref	Unit Title
FA9A 04	6	9	EUSTPO01	Monitor and Maintain a Safe Working Environment
H8VX 04	7	8	PROHSS6	Conduct a Health and Safety Risk Assessment of a Workplace
HG3E 04	6	6	CFAM&LDD1	Develop and Sustain Productive Working Relationships with Colleagues
FA9L 04	6	12	EUSTPO15	Organise and Carry Out the Maintenance of Process Equipment
Candidates must complete one Unit from FA9C 04, F5DP 05 and F5DR 04				
FA9C 04	6	18	EUSTPO06	Monitor and Maintain the Quality of Treatment Processes
F5DP 04	6	18	EUSTPO06a	Monitor and Maintain the Quality of Treatment Processes (Water Treatment Processes)
F5DR 04	6	18	EUSTPO06b	Monitor and Maintain the Quality of Treatment Processes (Waste Water Treatment Processes)

Candidates must complete one Unit from FA9D 04, HG3C 04 and HG3D 04				
FA9D 04	6	13	EUSTPO07	Monitor and Maintain Treatment Processing at Optimum Performance
HG3C 04	6	13	EUSTPO07a	Monitor and Maintain Treatment Processing at Optimum Performance (Water Treatment Processes)
HG3D 04	6	13	EUSTPO07b	Monitor and Maintain Treatment Processing at Optimum Performance (Waste Water Treatment Processes)

The following pages outline the specific requirements for each Unit from the SVQ in Controlling Process Operations. 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: SVQ in Controlling Process Operations at SCQF level 6

FA9A 04 Monitor and Maintain a Safe Working Environment

Unit content

This Unit is about taking a systematic approach to monitoring safety on site, or in the location and the work activities that the candidate monitors in their job role. The individuals that they monitor could be working within their team, or any other workers for whom the candidate has responsibility, including contractors on site, who must work safely and follow organisational and health and safety procedures. It will also include visitors to the site (visiting either for work or for any other reason), who must know what is expected of them and whose activities and safety are monitored throughout their time on site or at the particular location.

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

- ◆ monitor safe systems of work
- ◆ monitor the safety of visitors
- ◆ use and communicate data and information
- ◆ resolve problems affecting work and environment safety

The candidate's evidence for this Unit must show that:

- ◆ **Work activity** covers:
 - process and treatment operation
 - operational maintenance
 - maintenance of the work environment
 - transporting waste products
 - that the candidate monitors in carrying out their job
- ◆ **Visitors** are:
 - members of the public
 - workers from other departments
 - contractors
 - representatives of statutory inspectorates
- ◆ **Health and safety requirements** are:
 - for the site
 - for the work
 - relevant to the types of visitors

Assessor guidance on evidence

- ◆ The SVQ requirements covers performance and knowledge requirements, and the 'Scope of the evidence'. The candidate's evidence in total must show that they have the skills and knowledge to cover all of the Scope items listed. Where no direct performance evidence exists from observations or other work records, the assessor need 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 performance in the workplace.
- ◆ You may use simulated activities to observe the candidate **dealing with and reporting accidents and emergencies** and **investigating complaints**.
- ◆ Candidates' evidence must show that they cover the **work activities, visitors** and **health and safety requirements** listed above.
- ◆ Candidates are likely to generate evidence for this Unit throughout their daily activities, as they need to ensure they monitor and maintain a safe working environment while carrying out their job role. If you are observing the candidate undertaking technical activities (monitoring and maintaining the quality of treatment processes; monitoring and maintaining treatment processes at optimum performance, etc), it is very likely that you will also identify coverage of aspects of this Unit. Please ensure that you record this as part of your reporting process, to minimise duplication of assessment.
- ◆ As this Unit covers health and safety requirements in the working environment and any locations on which the candidate is working, or for which they have responsibility, it is very likely that some of the evidence produced here can also be used towards Unit *H8VX 04 — Conduct a Health and Safety Risk Assessment of a Workplace*. Again, as an assessor, you should seek to identify where this can be done, to avoid duplicating assessment activities.
- ◆ **Knowledge and Understanding — General.** The general Knowledge and Understanding requirements are repeated across the treatment process operations Units in the award (FA9A 04, FA9C 04/F5DP 04/F5DR 04, FA9D 04/HG3C 04/HG3D 04 and FA9L 04), and you may confirm coverage of these requirements across the whole SVQ, or **across as many water industry specific Units as the candidate is undertaking**.
- ◆ **Knowledge and Understanding — Plant safety.** The 'plant safety' specific 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 FA9A 04 is a **mandatory Unit** in the SVQ in Controlling Process Operations.

H8VX 04 Conduct a Health and Safety Risk Assessment of a Workplace

Unit overview

This standard is for people carrying out risk assessments in the workplace. This could be an employer, line manager, supervisor, safety representative or employee.

This standard is about the competence needed to identify hazards, evaluate the risks and make recommendations to control the risk and to review the results.

Assessor guidance on evidence

- ◆ **All** of the evidence used for this Unit must come from the candidate's own performance in the workplace. Simulated activities may not be used for assessment for this Unit.
- ◆ Candidate's evidence must show that they can meet the standards consistently over time. Performance evidence must be provided against each of the Performance Criteria.
- ◆ Candidates' evidence should show as far as possible that they can cover the requirements through performance evidence, appropriate to their own workplace context. Performance evidence must be the primary source of evidence for this Unit, but this may be supported by assessor questioning and discussion to confirm the candidate's ability to perform competently across all range items listed, and to confirm the candidate's knowledge of risk assessment in the workplace.
- ◆ Candidates are likely to generate evidence for this Unit throughout their daily activities, as they will carry out operational risk assessments for various different work activities during their regular job role. If assessors are observing the candidate undertaking technical activities (monitoring and maintaining the quality of treatment processes; monitoring and maintaining treatment processes at optimum performance, etc), it is very likely that you will also identify coverage of aspects of this Unit. Assessors should ensure that they record this as part of your reporting process, to minimise duplication of assessment.
- ◆ It is very likely that the candidate will demonstrate skills and knowledge relating to health, safety and conducting risk workplace assessments while being assessed for other Units covering technical operational activities. Assessors should ensure that, where this happens, coverage of the knowledge is cross-referenced against Unit H8VX 04 as well as against the industry-specific Unit(s), 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 H8VX 04 is a **mandatory Unit** in the SVQ in Controlling Process Operations.

FA9C 04/F5DP 04/F5DR 04 **Monitor and Maintain the Quality of Treatment Processes**

Unit content

This Unit is about using data and information to monitor the treatment processes in treatment plants and to make adjustments when required.

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

- ◆ collect and monitor treatment process data
- ◆ use data and make decisions which will maintain optimum process performance
- ◆ use and communicate data and information
- ◆ resolve problems affecting treatment quality

In Unit FA9C 04/F5DP 04/F5DR 04, the candidate's evidence must show that:

- ◆ **Samples** are:
 - Inflow
 - partially treated flows
 - outflow
 - by-products
 - return liquors
 - as they relate to the candidate's area of responsibility
- ◆ **Adjustments to processes** are:
 - timers
 - flow rate
 - configuration
 - flow distribution
 - chemical doses

Assessor guidance on evidence

- ◆ The evidence used for this Unit must come from the candidate's own performance in the workplace. Simulated activities **may not** be used to assess this Unit.
- ◆ Candidates' evidence must show that they cover the samples and **adjustments to processes** listed above, as they relate to their area of responsibility.
- ◆ It is very likely that some of the evidence produced for this Unit can also be used towards gaining other Units from the award, including the two Units covering health and safety (*FA9A 04 Monitor and Maintain a Safe working Environment* and *H8VX 04 — Conduct a Health and Safety Risk Assessment of a Workplace*) and, potentially, the industry-specific Unit *FA9D 04/HG3C 04/HG3D 04 — Monitor and Maintain Treatment Processing at Optimum Performance*. If, in assessing a candidate for FA9C 04/F5DP 04/F5DR 04 you can also identify evidence that applies to other Units, please ensure that you record this as part of your reporting process, to minimise duplication of assessment.

- ◆ **Knowledge and Understanding — General.** The general Knowledge and Understanding requirements are repeated across the treatment process operations Units in the award (FA9A 04, FA9C 04/F5DP 04/F5DR 04, FA9D 04/HG3C 04/HG3D 04 and FA9L 04), and you may confirm coverage of these requirements across the whole SVQ, or **across as many water industry specific Units as the candidate is undertaking.** There is no need to assess each of the general Knowledge and Understanding requirements individually for each Unit.
- ◆ **Knowledge and Understanding — Treatment processes.** The ‘treatment processes’ specific 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. (Assessors, please note: the ‘treatment processes’ Knowledge and Understanding for this Unit, FA9C 04/F5DP 04/F6DR 04, **is different from** the ‘treatment processes’ knowledge in Unit FA9D 04/HG3C 04/HG3D 04. Please ensure that the knowledge requirements for both Units are covered in full if the candidate is undertaking both Units.)

Unit FA9C 04/F5DP 04/F5DR 04 is a **mandatory Unit** in the SVQ in Controlling Process Operations.

FA9D 04/HG3C 04/HC3D 04 **Monitor and Maintain Treatment Processing at Optimum Performance**

Unit content

This Unit is about setting operational objectives and parameters and monitoring them to ensure they are maintained throughout the processing cycle.

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

- ◆ establish the conditions for optimum plant performance
- ◆ collect and use information to plan operational maintenance
- ◆ monitor operational maintenance
- ◆ communicate data and information to colleagues
- ◆ resolve problems affecting treatment performance

In Unit FA9D 04/HG3C 04/HC3D 04, the candidate's evidence must show that:

- ◆ **Equipment** is:
 - mechanical
 - electrical

- ◆ **Maintenance — for equipment** is:
 - greasing and lubrication
 - repacking of glands
 - replacing simple parts not requiring craftsmen
 - cleaning accumulations of dirt and debris
 - basic instrument maintenance

- ◆ **Maintenance — for plant environment condition** is:
 - cleansing of process facilities and buildings
 - security systems
 - fences and gates
 - structural elements
 - ground areas
 - buildings

- ◆ **Plant priorities** are:
 - process performance
 - plant availability
 - final output quality
 - capacity requirements
 - reduced human resources

Assessor guidance on evidence

- ◆ The evidence used for this Unit must come from the candidate's own performance in the workplace. Simulated activities **may not** be used to assess this Unit.
- ◆ Candidates' evidence must show that they cover the **equipment, maintenance — for equipment, maintenance — for plant environment condition and plant priorities** listed above, as they relate to their area of responsibility.
- ◆ It is very likely that some of the evidence produced for this Unit can also be used towards gaining other Units from the award, including the two Units covering health and safety (*FA9A 04 — Monitor and Maintain a Safe Working Environment* and *H8VX 04 — Conduct a Health and Safety Risk Assessment of a Workplace*) and, potentially, the industry-specific Unit *FA9C 04/F5DP 04/F5DR 04 — Monitor and Maintain the Quality of Treatment Processes*. If, in assessing a candidate for *FA9D 04/HG3C 04/HG3D 04*, you can also identify evidence that applies to other Units, please ensure that you record this as part of your reporting process, to minimise duplication of assessment.
- ◆ **Knowledge and Understanding — General.** The general Knowledge and Understanding requirements are repeated across the treatment process operations Units in the award (*FA9A 04*, *FA9C 04/F5DP 04/F5DR 04*, *FA9D 04/HG3C 04/HG3D 04* and *FA9L 04*), and you may confirm coverage of these requirements across the whole SVQ, or **across as many water industry specific Units as the candidate is undertaking**. There is no need to assess each of the general Knowledge and Understanding requirements individually for each Unit.
- ◆ **Knowledge and Understanding — Treatment processes.** The 'treatment processes' specific 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. (Assessors, please note: the 'treatment processes' Knowledge and Understanding for this Unit, *FA9D 04/HG3C 04/HG3D 04*, **is different from** the 'treatment processes' knowledge in Unit *FA9C 04/F5DP 04/F5DR 04*. Please ensure that the knowledge requirements for both Units are covered in full if the candidate is undertaking both Units.)

Unit *FA9D 04/HG3C 04/HG3D 04* is a **mandatory Unit** in the SVQ in Controlling Process Operations.

HG3E 04 **Develop and Sustain Productive Working Relationships with Colleagues**

Unit overview

This standard is about developing and sustaining productive working relationships with colleagues within your own organisation.

This standard is relevant to managers and leaders who work with colleagues in their own organisation but not with external stakeholders.

This standard links closely with all the other standards in key area DD Build and sustain relationships and also with CFAM&LAA3 Develop and maintain your professional networks.

Assessor guidance on evidence

- ◆ All of the evidence for this Unit must come from real work activities.
- ◆ Candidates are likely to generate evidence for this Unit throughout their daily activities, as they will need to interact with colleagues in order to carry out their job role. If you are observing the candidate undertaking technical activities (sampling, testing, carrying out treatment processes, etc), it is very likely that you will also identify coverage of aspects of this Unit. Please ensure that you record this as part of your reporting process, to minimise duplication of assessment.
- ◆ The evidence for this Unit **must include** valid evidence from those to whom the candidate reports (line manager/supervisor) and from those who report to the candidate, if applicable (this does not apply if the candidate does not have anyone reporting to them, but is mandatory in all other cases — if candidates do not have anyone reporting to them, then please ensure that this is validated and clearly recorded in your assessment records). One way to provide this is through witness testimony from the colleagues concerned. (Please note that witness testimonies are not limited to those working at a different level from the candidate: they may also be colleagues working at the same level or in different departments, organisations, etc).
- ◆ You 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), 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 or tanker drivers, who may need to access the site).
- ◆ The assessment of Units in this format, and in particular, the assessment of behaviours, is new to water industry SVQs, including the Controlling Process Operations qualifications. In general, evidence for this Unit could be generated from:
 - notes, minutes or records of formal and informal meetings with colleagues, including details of any actions agreed and how the candidate has fulfilled them

- e-mails, memos and correspondence with colleagues, including details of any actions agreed and how the candidate has met them
 - witness statements from colleagues confirming how the candidate interacts with them and how they fulfil any commitments made
 - notes or other records of feedback given to colleagues by the candidate, or to the candidate by colleagues
 - personal statements by the candidate describing how they have interacted with colleagues and the reasons for action taken.
- ◆ Candidates working at SCQF level 6 are likely to have access to diverse documentary evidence and records of interactions with colleagues, which reflects the more varied nature of their role. The awarding body has not provided industry-specific examples of evidence that can be used at this level against individual NOS requirements, **but** assessors should encourage candidates to focus on the different circumstances and ways in which they communicate with colleagues, as these points are likely to generate the most effective workplace evidence. (Eg Changes of shift or hand-over situations, where there is a clear requirement to communicate with colleagues in order to provide effective operational updates, are good sources of workplace evidence. At SCQF level 6, there could also be more involvement with other departments, and, particularly, other organisations — contractors, regulatory inspectors, etc — and communications and correspondence with these colleagues is likely to yield robust evidence of developing productive working relationships.)
 - ◆ Knowledge and Understanding. The Knowledge and Understanding for this Unit is split into three sections:
 - general (relating to developing productive working relationships)
 - industry/sector specific (relating to the regulations, codes of practice, performance and behaviour standards and working culture of the industry in which the candidate works), and
 - context specific (relating to the specific work, processes, systems, reporting requirements and circumstances that apply to the candidate’s organisation and particular work situation).

Please remember, as an assessor, that the candidate needs to demonstrate their Knowledge and Understanding **as it relates to their particular job role**, in controlling process operations.

For example

Working culture of the industry or sector. The candidate needs to be aware of the working culture in the water industry and their own organisation. Sources of evidence for this could include their knowledge of areas such as equal opportunities and the application of the organisation’s equal opportunities policy; or health, safety and hygiene issues and policies, how these might affect their interactions with colleagues (eg third party visitors to sites, minimising H&S risks, etc).

Power, influence and politics within the organisation. Here, you could explore the candidate's knowledge of the organisation's structure and roles and responsibilities as they relate to their own job role. Who has responsibility for what aspects of treatment operations within their company? Who is able to authorise particular actions (eg in the event of an emergency), or implement changes to processes as a result of operational problems?

Unit HG3E 04 is a **mandatory Unit** in the SVQ in Controlling Process Operations.

FA9L 04 Organise and Carry out the Maintenance of Process Equipment

Unit content

This Unit is about identifying what operational maintenance is required, and ensuring that the maintenance activities are undertaken correctly, to ensure the efficient operation of process plant and equipment. The plant and equipment must be restored to operable condition and all waste materials disposed of correctly at the conclusion of the maintenance work.

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

- ◆ determine the feasibility of maintenance work
- ◆ prepare for operational maintenance to be carried out safely
- ◆ restore equipment and the plant environment to operable conditions
- ◆ use and communicate data and information
- ◆ resolve problems arising from the maintenance

In Unit FA9L 04, the candidate's evidence must show that:

- ◆ **Equipment** is:
 - electrical
 - mechanical

- ◆ **Maintenance — for equipment** is:
 - greasing and lubrication
 - repacking of glands
 - replacing simple parts (not requiring craftsmen)
 - cleaning accumulations of dirt and debris
 - basic instrument maintenance

- ◆ **Plant environment** includes:
 - security systems
 - fences and gates
 - structural elements
 - ground areas
 - buildings

- ◆ **Safety procedures and practices** cover:
 - machinery system and electrical isolation
 - lubrication hygiene
 - machinery guarding

- ◆ Malfunctions are of:
 - equipment
 - instrumentation
 - plant environment

- ◆ **Plant operating priorities** cover:
 - process performance
 - plant availability
 - final output quality
 - capacity requirements
 - reduced human resources

- ◆ **Temporary arrangements** include:
 - divert flows
 - bypass a treatment process

Assessor guidance on evidence

- ◆ The evidence used for this Unit must come from the candidate's own performance in the workplace. Simulated activities **may not** be used to assess this Unit.
- ◆ Candidates' evidence must show that they cover the **equipment, maintenance — for equipment, plant environment, safety procedures and practices, malfunctions, plant operating priorities** and **temporary arrangements** listed above, as they relate to their area of responsibility. There are numerous requirements to be covered, and it is expected that the evidence of coverage will come from a variety of sources, including observation, workplace records, documents and/or products, and questioning that allows the candidate to demonstrate how they have covered the various items in their work activities.
- ◆ It is very likely that some of the evidence produced for this Unit can also be used towards gaining other Units from the award, including the two Units covering health and safety (*FA9A 04 — Monitor and Maintain a Safe Working Environment* and *H8VX 04 — Conduct a Health and Safety Risk Assessment of a Workplace*) and, potentially, the industry-specific Unit *FA9C 04/F5DP 04/F5DR 04 Monitor and Maintain the Quality of Treatment Processes* and Unit *FA9D 04/HG3C 04/HG3D 04 Monitor and Maintain Treatment Processing at Optimum Performance*. If, in assessing a candidate for *FA9L 04*, you can also identify evidence that applies to other Units, please ensure that you record this as part of your reporting process, to minimise duplication of assessment.
- ◆ **Knowledge and Understanding — General.** The general Knowledge and Understanding requirements are repeated across the treatment process operations Units in the award (*FA9A 04*, *FA9C 04/F5DP 04/F5DR 04*, *FA9D 04/HG3C 04/HG3D 04* and *FA9L 04*), and you may confirm coverage of these requirements across the whole SVQ, or **across as many water industry specific Units as the candidate is undertaking**. There is no need to assess each of the general Knowledge and Understanding requirements individually for each Unit.

- ◆ **Knowledge and Understanding — Treatment processes and maintenance.**
The ‘treatment processes and maintenance’ Knowledge and Understanding requirements for this Unit are quite extensive and 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 FA9L 04 is a **mandatory Unit** in the SVQ in Controlling Process Operations.

4 Appendices

Appendix 1:

Sample line manager/supervisor observation report

Job Report

Workplace job report — assessor confirmation

Candidate's name		Candidate's number	
-------------------------	--	---------------------------	--

Work address/location		Date of work	
		How long did the job take? (in days/hours)	

What were the job instructions?	
Location details for: access environment	
What work did you carry out?	

<p>What materials and equipment did you use?</p>	
---	--

<p>What PPE did you use?</p>	
-------------------------------------	--

<p>What regulations, industry standards and specifications, Codes of Practice and company procedures did you need to meet?</p>	
---	--

<p>Were there any problems during the work, that you were able to solve?</p>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
---	-------------------------------------	------------------------------------

<p>If YES, what was the problem, and what did you do?</p>	
--	--

<p>Were there any problems when doing the job, that you needed to report?</p>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
--	-------------------------------------	------------------------------------

If YES, what was the problem? What did you do to report it?	
--	--

What records did you keep or update during the job and after you had finished?	
---	--

Additional notes on this job

I confirm that this is a true report of work that I undertook at the above location on the date stated.

Candidate's signature _____ **Date** _____

If you are this candidate's line manager or supervisor and witnessed them carrying out the activities described, please comment and confirm below.

I confirm that I witnessed this candidate carrying out the activities described in this report on the date stated, and I am satisfied that the work was completed according to the instructions provided and in line with industry requirements and standards.

Line manager/Supervisor's signature _____ **Date** _____

Workplace job report — Assessor confirmation

Candidate's name		Candidate's CABWI no.	
Assessor's name		Date	

Confirmation of job report(s) dated:	
I have assessed the above report(s) and confirm that the evidence applies to the following Units/elements in the SVQ in Controlling Process Operations at SCQF level 6.	
Has the candidate provided any other workplace evidence to support the detail of this report? (eg documents, records, correspondence, photographic/recorded evidence). If so, please make a brief note of this evidence or a cross-reference to the relevant information its location.	

Additional assessor notes/comments

Please indicate your confirmation as appropriate and sign below:

I have assessed this report and am satisfied that it is a valid and reliable account of the work activities undertaken.

The candidate's line manager/supervisor observed the candidate undertaking the work activities described in this report and has endorsed the report as an accurate record of the activities undertaken. I am satisfied that this endorsement is valid.

Assessor's signature _____ **Date** _____

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 process control and/or management 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.

Witness's name _____

Witness's job title _____

Witness's signature _____ **Date** _____

(this sheet can be printed on letter-headed paper)

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
1 Direct assessor observation in the workplace	<ul style="list-style-type: none"> ◆ The most direct form of assessment. ◆ Assessor can observe the candidate carrying out daily work activities. ◆ Observation likely to result in evidence for several Units at once. 	<ul style="list-style-type: none"> ◆ Logistical difficulties — labour and time intensive for assessors ◆ 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). 	<ul style="list-style-type: none"> ◆ Use of simulated activities in a realistic working environment (see below). ◆ Use of robust witness testimony from candidate's line manager. ◆ Limit mandatory observation and require diverse supporting evidence from workplace.
2 Direct assessor observation (simulated activities/realistic working environment)	<ul style="list-style-type: none"> ◆ Allows direct assessor observation. ◆ The centre has more control over the location and tasks covered — can ensure coverage of qualification requirements. ◆ Can be used to assess activities encountered rarely, or where there are practical or safety considerations (eg health and safety issues; emergency procedures). 	<ul style="list-style-type: none"> ◆ Potential for simulated situation not to reflect the candidate's working practice accurately. ◆ Does not provide evidence from real work activities. 	<ul style="list-style-type: none"> ◆ Robust controls required for the realistic working environment and tasks to be assessed. ◆ Requires robust supporting performance evidence from the workplace. ◆ 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).
3 Witness testimony	<ul style="list-style-type: none"> ◆ Useful record of candidate's work activity, provided by someone who has watched them working. 	<ul style="list-style-type: none"> ◆ Is the witness credible? Do they understand what is required, and do they have the skills and knowledge to provide an accurate witness testimony? 	<ul style="list-style-type: none"> ◆ Need to record details of witnesses, and how their relationship is to candidates. ◆ Centres need to brief witnesses clearly on what they should provide in a witness testimony.

Type of evidence	Advantages	Risks/Disadvantages	Suggested solutions
3 Witness testimony (cont)	<ul style="list-style-type: none"> ◆ 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. ◆ Allows candidate to focus on the work activity, in a familiar environment, without the presence of an assessor observing them. ◆ Can support direct assessor observation evidence by showing consistency over time. 	<ul style="list-style-type: none"> ◆ Risks to objectivity of witness: what is their relationship to the candidate? ◆ Need for witnesses to ensure they provide a statement of fact, not an opinion on competence against the qualification requirements. ◆ Insufficient detail provided in reports: risk of statements being too generic. 	<ul style="list-style-type: none"> ◆ Centres may use pro forma, to prompt witnesses to provide an appropriate level of detail about the specific candidate or work activity. ◆ The use of witness testimonies from more than one source is recommended, as above. ◆ All witness testimonies must be subject to assessment by an A1 assessor.
4 Documentary evidence or product from the workplace	<ul style="list-style-type: none"> ◆ Useful to confirm detail of jobs undertaken for consistent competence, or varied work activities and to meet qualification requirements in full. ◆ Workplace documentation may provide confirmation of jobs completed, and also of coverage of qualification requirements on completion of appropriate records. 	<ul style="list-style-type: none"> ◆ Authenticity — is this a genuine record that can be verified against other types of evidence or workplace records? ◆ Storage — impracticality of storing large quantities of documentation or workplace products with evidence records. 	<ul style="list-style-type: none"> ◆ 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).

Type of evidence	Advantages	Risks/Disadvantages	Suggested solutions
4 Documentary evidence or product from the workplace (cont)	<ul style="list-style-type: none"> ◆ 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). ◆ Use of products to confirm technical skills (eg beads from completed PE fusion joints). 	<ul style="list-style-type: none"> ◆ Availability of records — some job records are held electronically in employer's IT system, and need to be available to assessors. 	<ul style="list-style-type: none"> ◆ 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). ◆ 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).
5 Assessment meetings with candidates (general informal discussions)	<ul style="list-style-type: none"> ◆ Direct evidence from assessor. ◆ Can be used to confirm or discuss candidate's evidence and identify gaps remaining for future action. ◆ Oral questions can be asked of candidates, to confirm performance or Knowledge Evidence. 	<ul style="list-style-type: none"> ◆ 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. ◆ 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. 	<ul style="list-style-type: none"> ◆ Assessors can use a pro forma for assessment discussions as required. ◆ 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).

Type of evidence	Advantages	Risks/Disadvantages	Suggested solutions
5 Assessment meetings with candidates (general informal discussions) (cont)			<ul style="list-style-type: none"> ◆ 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).
6 Professional discussion interview	<ul style="list-style-type: none"> ◆ More formal, structured interview — allows the assessor to guide the discussion and to tailor the subjects covered to gaps in the candidate's evidence. ◆ Candidates have the opportunity to discuss their work in depth. ◆ Can generate a significant amount of evidence against various Units. ◆ 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. 	<ul style="list-style-type: none"> ◆ Requires assessor to conduct extensive preparation with close reference to the Unit and qualification requirements and record detail of what is covered. ◆ Not suitable for all candidates, particularly if they become nervous in a more formal assessment environment, or do not respond well to pressure. ◆ 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. 	<ul style="list-style-type: none"> ◆ Robust and detailed recording mechanism is needed — audio or video records, combined with a written pro forma or report could be useful here. ◆ 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. ◆ 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.

Type of evidence	Advantages	Risks/Disadvantages	Suggested solutions
7 Recognition of prior learning (RPL)	<ul style="list-style-type: none"> ◆ Useful to confirm skills and knowledge that the candidate has already demonstrated (eg through gaining other qualifications). ◆ Useful to confirm experience of previous work undertaken. ◆ Has potential to reduce the assessment burden for both candidate and assessor. ◆ Can be used to request equivalence or exemptions for the qualification being undertaken. 	<ul style="list-style-type: none"> ◆ Requires assessor authentication. ◆ Evidence must be validated against the current qualification requirements. ◆ Age of the previous accreditation is important — it may not confirm the candidate’s current competence. 	<ul style="list-style-type: none"> ◆ 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). ◆ It is recommended that centres do not use RPL evidence that is too old to confirm current competence. ◆ 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). ◆ 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.

Type of evidence	Advantages	Risks/Disadvantages	Suggested solutions
8 Written answers to knowledge questions	<ul style="list-style-type: none"> ◆ Allows centre to assess the knowledge of larger numbers of candidates simultaneously and then concentrate on gaps in knowledge during future observations and assessments. ◆ Robust record of candidate's responses to knowledge questions, capable of being readily stored. 	<ul style="list-style-type: none"> ◆ 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. ◆ Rigid format — does not allow assessors to probe a candidate's knowledge further. ◆ Risks to security — candidates must not have sight of question papers prior to assessment. ◆ Where large numbers of candidates may be involved, multiple versions of question papers could be required. 	<ul style="list-style-type: none"> ◆ It is not recommended as the only form of knowledge assessment used by centres. ◆ Candidates' evidence must cover all of 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. ◆ 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.
9 Records of oral questioning and answers given	<ul style="list-style-type: none"> ◆ Allows assessors to explore a candidate's knowledge freely depending upon responses to initial questions. ◆ The assessor is responsible for recording the responses and cross-referencing against Unit and qualification requirements. 	<ul style="list-style-type: none"> ◆ Logistical difficulties for assessors in recording questions and answers in written report form. ◆ Need to ensure consistency of approach to individual candidates in questioning (less obvious than using question papers). 	<ul style="list-style-type: none"> ◆ Assessors can use a combination of recording methods if required — audio, video and/or written reports.

Type of evidence	Advantages	Risks/Disadvantages	Suggested solutions
9 Records of oral questioning and answers given (cont)	<ul style="list-style-type: none"> ◆ Can be used during any assessment discussions or observation to support candidate's performance evidence. 	<ul style="list-style-type: none"> ◆ Need to ensure responses are cross-referenced to Unit/qualification requirements. 	<ul style="list-style-type: none"> ◆ 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.
10 Audio or video evidence, and photographs	<ul style="list-style-type: none"> ◆ Useful to confirm some aspects of authenticity (eg as a record of assessor discussions or interviews). ◆ 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. ◆ Visual evidence in particular can be useful as a starting point for discussions with candidates, etc. ◆ Evidence can readily be made available for IV and EV sampling. ◆ Allows assessor to revisit the evidence after recording to confirm the detail of the Unit/qualification coverage if necessary. 	<ul style="list-style-type: none"> ◆ 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. ◆ Secure storage arrangements may be needed to preserve integrity of audio or visual evidence. ◆ It is not sufficient for candidates to provide visual material without any elaboration. ◆ 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. ◆ Need to be able to relate evidence to the qualification requirements. 	<ul style="list-style-type: none"> ◆ Assessors to ensure evidence (particularly photographic evidence) can be authenticated. ◆ Discuss individual photographic or video evidence with the candidate to confirm how it relates to their work activities and the Unit or qualification requirements. ◆ 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).

Type of evidence	Advantages	Risks/Disadvantages	Suggested solutions
10 Audio or video evidence, and photographs (cont)			<ul style="list-style-type: none"> ◆ 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.) ◆ 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).

Type of evidence	Advantages	Risks/Disadvantages	Suggested solutions
<p>11 Use of electronic storage media for candidates' evidence</p>	<ul style="list-style-type: none"> ◆ 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. ◆ Potentially allows quick communication of evidence between assessor and candidate (via e-mail). ◆ 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. 	<ul style="list-style-type: none"> ◆ 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? ◆ Storage questions — need for candidates, assessors, IVs and EVs to be able to navigate through the stored evidence at different stages of qualifications delivery. 	<ul style="list-style-type: none"> ◆ 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. ◆ 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.

Type of evidence	Advantages	Risks/Disadvantages	Suggested solutions
11 Use of electronic storage media for candidates' evidence (cont)			<ul style="list-style-type: none"> ◆ 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).

Appendix 4

Sample assessor report form (generic)

Assessor Report Form

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

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

SVQ in Controlling Process Operations GL8F 23 Cover Sheet

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

Unit Title	SQA Ref	Mandatory/Optional	Assessor	Date of final assessment	Internal Verifier
Monitor and Maintain a Safe Working Environment	FA9A 04	Mandatory			
Conduct a Health and Safety Risk Assessment of a Workplace	H8VX 04	Mandatory			
Develop and Sustain Productive Working Relationships with Colleagues	HG3E 04	Mandatory			
Organise and Carry Out the Maintenance of Process Equipment	FA9L 04	Mandatory			
Candidates must complete one Unit from FA9C 04, F5DP 04 and F5DR 04					
Monitor and Maintain the Quality of Treatment Processes	FA9C 04	Mandatory (Optional)			

Unit Title	SQA Ref	Mandatory/ Optional	Assessor	Date of final assessment	Internal Verifier
Monitor and Maintain the Quality of Treatment Processes (Water Treatment Processes)	F5DP 04	Mandatory (Optional)			
Monitor and Maintain the Quality of Treatment Processes (Waste Water Treatment Processes)	F5DR 04	Mandatory (Optional)			
Candidates must complete one Unit from FA9D 04, HG3C 04 and HG3D 04					
Monitor and Maintain Treatment Processing at Optimum Performance	FA9D 04	Mandatory (Optional)			
Monitor and Maintain Treatment Processing at Optimum Performance (Water Treatment Processes)	HG3C 04	Mandatory (Optional)			
Monitor and Maintain Treatment Processing at Optimum Performance (Waste Water Treatment Processes)	HG3D 04	Mandatory (Optional)			

NB For a full qualification, candidates must complete six mandatory Units.

Candidate declaration

I confirm that the evidence for this **SVQ in Controlling Process Operations** 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 **SVQ in Controlling Process Operations** 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 **SVQ in Controlling Process Operations**, 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** _____

SVQ in Controlling Process Operations (GL8F 23)

General knowledge

Evidence may be provided from any or all of the Process Operations specific Units — FA9A 04, FA9C 04/F5DP 04/F5DR 04, FA9D 04/HG3C 04/HG3D 04 and FA9L 04.

Candidate's name		Employer	
Assessor's name			

General Knowledge and Understanding for treatment process operations	Evidence or File X-Ref/Coverage
GK1 UK and EC legislation, standards, codes of practice, and industry regulations for health, safety and hygiene.	
GK2 UK and EC legislation, standards, codes of practice, and industry regulations for environmental protection and measures to reduce harmful emissions and substances.	
GK3 Dealing with statutory inspectorates.	
GK4 Dealing with emergency situations.	
GK5 Safe working practices when dealing with equipment, instrumentation and environment.	
GK6 Maintaining safety — smoking, eating, drinking and drugs.	
GK7 Duty of care.	
GK8 Protecting people and the environment from pollutants both inside and outside the workplace.	
GK9 Personal conduct and behaviour and responsibilities towards colleagues and the general public.	
GK10 The role and purpose of data audit trails in quality assurance, health and safety and regulatory requirements.	

Assessment Summary and Confirmation

Unit FA9A 04 Monitor and Maintain a Safe Working Environment

SCQF level	6	Credit Value	9
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Candidate's name		Assessor's name	
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Types of evidence provided for this Unit (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 FA9A 04 (please tick as appropriate)

	Yes	No		Yes	No
Have simulated activities been used to cover dealing with and reporting accidents and emergencies?	<input type="checkbox"/>	<input type="checkbox"/>	Have simulated activities been used to cover investigating complaints?	<input type="checkbox"/>	<input type="checkbox"/>

The evidence is:

Valid — meets the qualification requirements and demonstrates competence for Unit FA9A 04	<input type="checkbox"/>	<input type="checkbox"/>	Authentic — is the candidate's own work and can be verified as genuine	<input type="checkbox"/>	<input type="checkbox"/>
Reliable — shows genuine sustained competence over a period of time	<input type="checkbox"/>	<input type="checkbox"/>	Sufficient — total evidence covers all Performance Criteria, knowledge and understanding and scope requirements for FA9A 04	<input type="checkbox"/>	<input type="checkbox"/>
Current — recent enough to show current competence	<input type="checkbox"/>	<input type="checkbox"/>			

Unit FA9A 04 Monitor and Maintain a Safe Working Environment

Candidate declaration

I confirm that the evidence listed for **Unit FA9A 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 FA9A 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 FA9A 04 Monitor and Maintain a Safe Working Environment

Candidate's name _____

1 Monitor safe systems of work	
Performance Criteria — the candidate can:	Evidence or File X-Ref/Coverage
1.1 Implement and establish safe systems of work which ensure workers observe safe working practices at all times.	
1.2 Make sure systems are in place and working effectively to monitor lone workers.	
1.3 Monitor process and treatment operations, operational maintenance, waste products and environment maintenance and take steps to make sure the systems are working and relevant.	
1.4 Make adjustments to systems and procedures where evidence indicates changes are required to the way work is carried out.	
1.5 Use risk assessments to guide safety effectiveness.	
1.6 Analyse risk assessment produced by third parties and implement practices and procedures to minimise or eliminate potential risks.	
1.7 Monitor and maintain the issuing, storage, maintenance and use of specialised safety equipment in line with employer's safe systems of work.	
1.8 Monitor the use and wear of personal protective equipment (PPE) and take steps to resolve breaches or failures to follow procedures.	
1.9 Monitor workers who handle or lift heavy or bulky articles to make sure they always use the approved safe methods set down within regulations.	
1.10 Monitor and maintain safe systems for vehicle movements and unloading.	
1.11 Monitor and respond to feedback on the receipt, storage, handling and transportation of all hazardous materials against the risk assessment.	

Unit FA9A 04 Monitor and Maintain a Safe Working Environment

1 Monitor safe systems of work	
Performance Criteria — the candidate can:	Evidence or File X-Ref/Coverage
1.12 Maintain permit to work systems.	
2 Monitor the safety of visitors	
Performance Criteria — the candidate can:	Evidence or File X-Ref/Coverage
2.1 Make sure systems are in place and being used which make sure all visitors know, understand and follow safety requirements and procedures during their time on site.	
2.2 Make sure visitors are monitored throughout their time on site to ensure they conform to the safety policy and procedures.	
2.3 Make sure systems are in place and being used to make contractors aware of the safety policy and any restrictions or special rules placed on them.	
2.4 Make sure contractors are monitored throughout their time on site and ensure they conform to the requirements placed on them.	
2.5 Monitor and maintain any conditions or restrictions regarding movement around the site and access to restricted areas.	
3 Use and communicate data and information	
Performance Criteria — the candidate can:	Evidence or File X-Ref/Coverage
3.1 Use the data and information from workplace risk assessments to inform the way systems and activities are designed, monitored and changed.	
3.2 Make sure workers know what safe work systems and methods are in place and that they understand and use them.	
3.3 Report accidents promptly in the way laid down in the employer's procedures.	
3.4 Raise awareness amongst workers about the effects their work can, and does, have on the general environment and the public at large.	

Unit FA9A 04 Monitor and Maintain a Safe Working Environment

3 Use and communicate data and information	
Performance Criteria — the candidate can:	Evidence or File X-Ref/Coverage
3.5 Keep records of visitors' activity as set down in procedures.	
3.6 Maintain up-to-date data audit trails and make sure they are accessible.	
4 Resolve problems affecting work and environment safety	
Performance Criteria — the candidate can:	Evidence or File X-Ref/Coverage
4.1 Make changes and remedy any unsafe work activities promptly.	
4.2 Raise matters about potential unsafe working with senior colleagues and seek solutions.	
4.3 Investigate complaints from workers in the team, as soon as practicable, and take the necessary steps to resolve them.	
4.4 Investigate complaints from people working on site, or location, for whom they are responsible and take the necessary steps to resolve them.	
4.5 Raise unsafe working promptly with workers who are acting in a way which could result in harm to themselves or others and achieve changes to their activity or behaviour.	
Behaviour which underpins effective performance — the candidate can:	Evidence or File X-Ref/Coverage
B1 Work in a manner which is vigilant to possible risks and hazards.	
B2 Work in a manner which shows pride in achieving high quality work.	

Unit FA9A 04 Monitor and Maintain a Safe Working Environment

Knowledge and Understanding — Plant safety:	Evidence or File X-Ref/Coverage
1 Monitoring the safety of work activities of your own staff, and others who work on your site.	
2 Ensuring organisational staff are familiar with safe systems of work to be employed during work activities .	
3 Dealing with contractors concerning matters of safety on your site.	
4 Making visitors to the site aware of the site safety requirements appropriate to the reason for their visit.	
5 Producing and using your own risk assessments and those used by third parties.	
6 Access to restricted areas and sensitive areas.	
7 Health screening.	
8 Safe movement of vehicles around the site.	
9 Safe unloading from vehicles.	
10 Site induction programmes for longer-term visitors and contractors.	

Unit FA9A 04 Monitor and Maintain a Safe Working Environment

Scope of evidence	Evidence or File X-Ref/Coverage
1 The work activity includes:	
(a) process and treatment operation	
(b) operational maintenance	
(c) maintenance of the work environment	
(d) transporting waste products	
2 Visitors include:	
(a) members of the public	
(b) workers from other departments	
(c) contractors	
(d) statutory inspectorate	
3 Health and safety requirements include:	
(a) health and safety requirements for the site	
(b) health and safety requirements for the work	
(c) relevant to the types of visitors	

Unit H8VX 04 Conduct a Health and Safety Risk Assessment of a Workplace

SCQF level	7	Credit Value	8
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Candidate's name		Assessor's name	
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Types of evidence provided for this Unit (Please tick as appropriate)			
Assessor observation report	<input type="checkbox"/>	Witness testimony	<input type="checkbox"/>
Workplace records/products (includes job reports and documentation)	<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 from NRSWA assessment	<input type="checkbox"/>		

Evidence Requirements for Unit H8VX 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:

Valid: meets the qualification requirements and demonstrates competence for Unit H8VX 04	<input type="checkbox"/>	<input type="checkbox"/>	Authentic: is the candidate's own work and can be verified as genuine	<input type="checkbox"/>	<input type="checkbox"/>
Reliable: shows genuine sustained competence over a period of time	<input type="checkbox"/>	<input type="checkbox"/>	Sufficient: total evidence covers all Performance Criteria, Knowledge and Understanding and Range requirements for H8VX 04	<input type="checkbox"/>	<input type="checkbox"/>
Current: recent enough to show current competence	<input type="checkbox"/>	<input type="checkbox"/>			

Unit H8VX 04 Conduct a Health and Safety Risk Assessment of a Workplace

Candidate declaration

I confirm that the evidence listed for **Unit H8VX 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 I am satisfied that the candidate has demonstrated competence against the qualification requirements for **Unit H8VX 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 H8VX 04 **Conduct a Health and Safety Risk Assessment of a Workplace**

Candidate's name _____

Performance Criteria — the candidate can:	Evidence or File X-Ref/Coverage
1.1 Clearly define why and where the risk assessment will be carried out.	
1.2 Recognise your own limitations and seek expert advice and guidance on operational controls when appropriate.	
1.3 Select appropriate methods for identifying hazards and evaluating risks.	
1.4 Prioritise those areas at work where hazards with a potential for serious harm to health are most likely to occur.	
1.5 Identify hazards which have the potential to cause harm and/or loss.	
1.6 Review internal and external standards and guidelines.	
1.7 Confirm that appropriate precautions are in place.	
1.8 Assess the level of risk and record significant findings.	
1.9 Consider and prioritise where further controls are required.	
1.10 Present the results and reasonably practicable recommendations of the risk assessment to the responsible people.	
1.11 Review and revise the risk assessment as appropriate.	

Unit H8VX 04 **Conduct a Health and Safety Risk Assessment of a Workplace**

Candidate's name _____

Performance Criteria — the candidate can:	Evidence or File X-Ref/Coverage
1.12 Maintain suitable and sufficient records.	
1.13 Take suitable action to control or remove imminent risk.	
Knowledge and Understanding	Evidence or File X-Ref/Coverage
1 Relevant legal requirements and standards.	
2 The workplace hazards which are most likely to cause harm or loss.	
3 The importance of remaining alert to the presence of hazards in the workplace.	
4 Methods of identifying hazards and risk.	
5 The purpose, legal implications and importance of carrying out risk assessments.	
6 Techniques for carrying out a risk assessment.	
7 The particular health and safety risks which may affect your own job role and the precautions to be taken.	
8 The resources required for a risk assessment to take place.	
9 Information sources for risk assessments (e.g. HSE publications).	
10 What to do with the results of the risk assessment.	

Unit H8VX 04 **Conduct a Health and Safety Risk Assessment of a Workplace**

Candidate's name _____

Knowledge and Understanding	Evidence or File X-Ref/Coverage
11 The importance of dealing with, or promptly reporting relevant hazards and risks.	
12 Your own limitations, job responsibilities and capabilities.	
13 Where to find expert advice and guidance.	
14 The work areas and people for whom you are carrying out the assessment.	
15 Work activities of the people in the workplace where you are carrying out the risk assessment.	
16 Effective communication methods.	
17 How to identify suitable control measures.	

Unit H8VX 04 **Conduct a Health and Safety Risk Assessment of a Workplace**

Candidate's name _____

Glossary	Evidence or File X-Ref/Coverage
1 Control(s)	
The means by which the risks identified are eliminated or reduced to acceptable levels.	
2 Hazard	
A hazard is something with the potential to cause harm (this can include articles, substances, plant or machines, methods of work, the working environment and other aspects of work management).	
3 Notice	
Includes all types of enforceable statutory document which may be drafted and served on a duty holder, such as improvement, prohibition and deferred prohibition notices, notices of taking into possession or to leave undisturbed, notices under the Food and Environment Protection Act and the Control of Major Accident Hazards Regulations, as well as approvals and licences, and associated notices of withdrawal, amendment or extension.	
4 Personal presentation	
This includes personal hygiene, use of personal protective equipment, clothing and accessories suitable to the particular workplace.	

Unit H8VX 04 Conduct a Health and Safety Risk Assessment of a Workplace

Candidate's name _____

Glossary	Evidence or File X-Ref/Coverage
<p>5 Procedures</p>	
<p>A series of steps, instructions and/or decisions, a task. This includes the documentation prepared by the employer about the procedures to be followed for health, safety and welfare matters. Instructions covering, for example:</p> <ol style="list-style-type: none"> 1 the use of safe working methods and equipment 2 the safe use of hazardous substances 3 smoking, eating, drinking and drugs 4 what to do in the event of an emergency 5 personal presentation 	
<p>6 Risk</p>	
<p>A risk is the likelihood of potential harm from that hazard being realised. The extent of the risk depends on:</p> <ol style="list-style-type: none"> 1 the likelihood of that harm occurring; 2 the potential severity of that harm, i.e. of any resultant injury or adverse health effect; and 3 the population which might be affected by the hazard, i.e. the number of people who might be exposed. 	
<p>7 Stakeholders</p>	
<p>Is any person(s) or group with an interest in an organisation, which may include, employees (at any level), duty holders, employee representatives, contractors, customers, community.</p>	

Unit FA9C 04/F5DP 04/F5DR 04 Monitor and Maintain the Quality of Treatment Processes

SCQF level	6	Credit Value	18
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Candidate's name		Assessor's name	
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Types of evidence provided for this Unit (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 FA9C 04/F5DP 04/F5DR 04 (please tick as appropriate)

	Yes	No
All evidence comes from real work activities, carried out in the candidate's workplace (no simulation has been used).	<input type="checkbox"/>	<input type="checkbox"/>

The evidence is:

Valid — meets the qualification requirements and demonstrates competence for Unit FA9C 04/F5DP 04/F5DR 04	<input type="checkbox"/>	<input type="checkbox"/>	Authentic — is the candidate's own work and can be verified as genuine	<input type="checkbox"/>	<input type="checkbox"/>
Reliable — shows genuine sustained competence over a period of time	<input type="checkbox"/>	<input type="checkbox"/>	Sufficient — total evidence covers all Performance Criteria, knowledge and understanding and scope requirements for FA9C 04/F5DP 04/F5DR 04	<input type="checkbox"/>	<input type="checkbox"/>
Current — recent enough to show current competence	<input type="checkbox"/>	<input type="checkbox"/>			

Unit FA9C 04/F5DP 04/F5DR 04 Monitor and Maintain the Quality of Treatment Processes

Candidate declaration

I confirm that the evidence listed for **Unit FA9C 04/F5DP 04/F5DR 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 FA9C 04/F5DP 04/F5DR 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 FA9C 04/F5DP 04/F5DR 04 Monitor and Maintain the Quality of Treatment Processes

Candidate's name _____

1 Collect and monitor treatment process data	
Performance Criteria — the candidate can:	Evidence or File X-Ref/Coverage
1.1 Use the monitoring data collected to confirm flow recording instruments, quality monitors and level indicators are working as required in the plant specification.	
1.2 Use readings and other data to compare the plant with the schedule and operating instructions.	
1.3 Make sure the procedures for collecting data from on-site visual assessment and quality tests remain adequate and confirm to operating instructions.	
1.4 Make sure the procedures for taking samples for off-site testing remain adequate and conform to operating instructions.	
1.5 Monitor the collation and use of flow, quality and operational data and make sure they comply with schedule and operating instructions.	
1.6 Instigate special monitoring of process inputs and outputs where process adjustments have been made.	
2 Use data to make decisions which will maintain optimum process performance	
Performance Criteria — the candidate can:	Evidence or File X-Ref/Coverage
2.1 Assess process performance from flow, quality and operational records, and direct observations.	
2.2 Analyse data from records and direct observations and determine what adjustments are required.	
2.3 Prioritise corrective measures and resource them with a programme of work.	
2.4 Assess process inputs and outputs to determine whether the plant has responded to corrective adjustments and conforms to the plant specification.	
2.5 Implement day-to-day activities which maintain the conditions for the treatment process.	
2.6 Implement day-to-day activities to make sure the disposal of process by-products meets with the requirements of legislation, standards and codes of practice.	

Unit FA9C 04/F5DP 04/F5DR 04 Monitor and Maintain the Quality of Treatment Processes

2 Use data to make decisions which will maintain optimum process performance	
Performance Criteria — the candidate can:	Evidence or File X-Ref/Coverage
2.7 Implement work procedures to ensure there is a consistent approach to responding to alarms.	
2.8 Use energy monitoring of the pumping plant to maximise energy performance.	
3 Use and communicate data and information	
Performance Criteria — the candidate can:	Evidence or File X-Ref/Coverage
3.1 Monitor completed plant and process documentation and ensure it provides accurate and up-to-date data in the timescale required.	
3.2 Ensure the systems for storing and transmitting data and information are being complied with.	
3.3 Provide the designated operating personnel with clear information and instructions for adjusting processes.	
3.4 Provide the designated management personal with clear information about the adjustments to processes which are being made.	
3.5 Record and report process defects, the corrective measures taken, and the results and outcomes.	
3.6 Maintain up-to-date data audit trails and make sure they are accessible.	
4 Resolve problems affecting treatment quality	
Performance Criteria — the candidate can:	Evidence or File X-Ref/Coverage
4.1 Resolve issues with team members where there are shortfalls in the supply of data from treatment processes.	
4.2 Resolve issues where there are problems which arise form inaccurate or incomplete data from treatment processes.	

Unit FA9C 04/F5DP 04/F5DR 04 Monitor and Maintain the Quality of Treatment Processes

4 Resolve problems affecting treatment quality	
Performance Criteria — the candidate can:	Evidence or File X-Ref/Coverage
4.3 Investigate and resolve failures of process adjustments through instruments, configurations, flow, and doses.	
4.4 Consult and liaise with management personnel on further measures to be taken where there are failures to adjustments .	
Behaviour which underpins effective performance — the candidate can:	Evidence or File X-Ref/Coverage
B1 Work in a manner which is vigilant to possible risks and hazards.	
B2 Work in a manner which uses a range of leadership styles appropriate to different people and situations.	
B3 Work in a manner which shows pride in achieving high quality work.	
Knowledge and Understanding — Treatment processes:	Evidence or File X-Ref/Coverage
1 Using energy efficiently and cost-effectively.	
2 Own role, responsibilities and actions in sustaining favourable environmental conditions.	
3 How negative impacts on the environment are reduced or kept to a minimum.	
4 Applying fundamental principles to the treatment process and Unit processes for treating water or waste water.	
5 Disposing of the various process by-products.	
6 Predicting changes in quality and flow and the effects of these changes on the Unit processes and the final outflow.	

Unit FA9C 04/F5DP 04/F5DR 04 Monitor and Maintain the Quality of Treatment Processes

Knowledge and Understanding — Treatment processes:	Evidence or File X-Ref/Coverage
7 Assessing the effects of changes in quality and flow.	
8 Assessing the performance of each Unit process.	
9 Assessing variations in Unit process performance and the effects of these variations in the total treatment process.	
10 Assessing the effect of process failure.	
11 Implementing corrective actions to ensure the process meets its target performance.	
12 Assessing the effects of a breach of consent for discharges from the process plant.	
13 Assessing the adverse effect of variations from the pre-determined performance level for each process, and the impact on the local environment.	
14 Dealing with technical queries arising from deviations to pre-determined performance levels for Unit processes.	
15 Ensuring that the total treatment process and disposal of process by-products meet with the requirements of current UK and EC legislation, standards and relevant codes of practice.	
Scope of evidence	Evidence or File X-Ref/Coverage
1 Samples are taken from:	
(a) inflow	
(b) partially treated flows	
(c) outflow	

1 Samples are taken from:	
(d) by-products	
(e) return liquors	
2 Adjustments to processes include:	
(a) Timers	
(b) flow rate	
(c) Configuration	
(d) flow distribution	
(e) chemical doses	

Unit FA9D 04/HG3C 04/HG3D 04 Monitor and Maintain Treatment Processing at Optimum Performance

SCQF level	6	Credit Value	13
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Candidate's name		Assessor's name	
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Types of evidence provided for this Unit (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 FA9D 04/HG3C 04/HG3D 04 (please tick as appropriate)

	Yes	No
All evidence comes from real work activities, carried out in the candidate's workplace (no simulation has been used).	<input type="checkbox"/>	<input type="checkbox"/>

The evidence is:

Valid — meets the qualification requirements and demonstrates competence for Unit FA9D 04/HG3C 04/HG3D 04	<input type="checkbox"/>	<input type="checkbox"/>	Authentic — is the candidate's own work and can be verified as genuine	<input type="checkbox"/>	<input type="checkbox"/>
Reliable — shows genuine sustained competence over a period of time	<input type="checkbox"/>	<input type="checkbox"/>	Sufficient — total evidence covers all Performance Criteria, knowledge and understanding and scope requirements for FA9D 04/HG3C 04/HG3D 04	<input type="checkbox"/>	<input type="checkbox"/>
Current — recent enough to show current competence	<input type="checkbox"/>	<input type="checkbox"/>			

Unit FA9D 04/HG3C 04/HG3D 04 Monitor and Maintain Treatment Processing at Optimum Performance

Candidate declaration

I confirm that the evidence listed for **Unit FA9D 04/HG3C 04/HG3D 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 FA9D 04/HG3C 04/HG3D 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 FA9D 04/HG3C 04/HG3D 04 Monitor and Maintain Treatment Processing at Optimum Performance

Candidate's name _____

1 Establish the conditions for optimum plant performance	
Performance Criteria — the candidate can:	Evidence or File X-Ref/Coverage
1.1 Translate the employer's specification into objectives for quality standards and flow.	
1.2 Set the parameters for plant efficiency, final performance and breakdown occurrence.	
1.3 Evaluate periodically the operational and maintenance objectives and parameters.	
1.4 Plan the facilities in the work environment so they are conducive to efficient work.	
1.5 Use the regulatory requirements and the employer's specification as the basis for all aspects of the performance of the process facilities.	
1.6 Monitor the plant for optimum performance and adjust maintenance to ensure it confirms continually to regulatory requirements and the employer's specification.	
2 Collect and use information to plan operational maintenance	
Performance Criteria — the candidate can:	Evidence or File X-Ref/Coverage
2.1 Analyse plant records and maintenance schedules to decide the equipment and instrumentation which require maintenance .	
2.2 Incorporate information from inspections and investigations within the maintenance schedules.	
2.3 Assess plant priorities and problems and hazards arising from equipment out of service to inform the maintenance plans.	
2.4 Produce maintenance schedules which are accurate, meet the specification and plant operating instructions, and reflect safe working practices.	

Unit FA9D 04/HG3C 04/HG3D 04 Monitor and Maintain Treatment Processing at Optimum Performance

2 Collect and use information to plan operational maintenance	
Performance Criteria — the candidate can:	Evidence or File X-Ref/Coverage
2.5 Take account of scheduled outages of other in-company plants when producing plans.	
2.6 Produce plans which make effective use of physical labour availability.	
3 Monitor operational maintenance	
Performance Criteria — the candidate can:	Evidence or File X-Ref/Coverage
3.1 Collate data for monitoring from schedules and specifications and compile the information into operational maintenance schedules.	
3.2 Reconcile progress of the maintenance against other plant priorities .	
3.3 Organise unscheduled operational maintenance promptly.	
3.4 Monitor the maintenance work carried out against maintenance schedules, equipment and process specifications, and plant operating instructions.	
4 Communicate data and information to colleagues	
Performance Criteria — the candidate can:	Evidence or File X-Ref/Coverage
4.1 Use a range of methods to communicate with the work team and other workers on the site about operational activities	
4.2 Provide the designated people with the maintenance schedule, risk assessments, permits to work and other documentation and instructions they need to carry out the scheduled work in the manner specified in the plant operating instructions.	
4.3 Make details of planned outages available in good time to workers on site.	
4.4 Provide instructions for unscheduled maintenance requirements for the designated maintenance personnel in a way which is fit-for-purpose.	

Unit FA9D 04/HG3C 04/HG3D 04 Monitor and Maintain Treatment Processing at Optimum Performance

4 Communicate data and information to colleagues	
Performance Criteria — the candidate can:	Evidence or File X-Ref/Coverage
4.5 Use verbal and other communication methods which suit the task to convey explicitly what is required to be done.	
4.6 Ensure discrepancies arising from investigations are recorded promptly and by the methods laid down in the plant operating instructions.	
4.7 Maintain up-to-date data audit trails and make sure they are accessible.	
5 Resolve problems affecting treatment performance	
Performance Criteria — the candidate can:	Evidence or File X-Ref/Coverage
5.1 Minimise the adverse effects on the process which result from taking equipment or plant out of use.	
5.2 Arrange for investigations to be carried out promptly where problems arise.	
5.3 Rectify maintenance deficiencies which arise from using the monitoring data.	
Behaviour which underpins effective performance — the candidate can:	Evidence or File X-Ref/Coverage
B1 Work in a manner which is vigilant to possible risks and hazards.	
B2 Work in a manner which uses a range of leadership styles appropriate to different people and situations.	
B3 Work in a manner which shows pride in achieving high quality work.	

Unit FA9D 04/HG3C 04/HG3D 04 Monitor and Maintain Treatment Processing at Optimum Performance

Knowledge and Understanding — Treatment processes:	Evidence or File X-Ref/Coverage
1 Keeping up-to-date with changes in legislation, standards, and codes of practice.	
2 Determining the maintenance needs of the process plant, equipment and environment.	
3 Planning and interacting effectively with other sites within the company regarding outages and effects on the site and use of components or the site itself.	
4 Satisfying the maintenance needs of the process, plant and environment.	
5 Making plant and equipment available for maintenance whilst maintaining the process at the predetermined level of performance.	
6 Assessing the effectiveness of maintenance work carried out.	
7 Assessing the effect of plant and equipment breakdown.	
8 Minimising the effects of broken down plant and equipment on the process.	
9 Monitoring the maintenance activities carried out by own staff and other departments' staff.	
10 Interpreting the requirements of relevant regulations.	
11 Translating the employer's specification for plant performance into operational and maintenance objectives.	
12 Assessing the implications of non-compliance with regulations and the employer's specification.	
13 Keeping up-to-date with changes in legislation, standards and codes of practice.	

Unit FA9D 04/HG3C 04/HG3D 04 Monitor and Maintain Treatment Processing at Optimum Performance

Scope of evidence	Evidence or File X-Ref/Coverage
1 Equipment is:	
(a) mechanical	
(b) electrical	
2 Maintenance for equipment includes:	
(a) greasing and lubrication	
(b) repacking of glands	
(c) replacing simple parts (not requiring craftsmen)	
(d) cleaning accumulations of dirt and debris	
(e) basic instrument maintenance	
3 Maintenance for plant environment condition includes:	
(a) cleansing of process facilities and buildings	
(b) security systems	
(c) fences and gates	
(d) structural elements	
(e) ground areas	

Unit FA9D 04/HG3C 04/HG3D 04 Monitor and Maintain Treatment Processing at Optimum Performance

Scope of evidence	Evidence or File X-Ref/Coverage
(f) buildings	
4 Plant priorities include:	
(a) process performance	
(b) plant availability	
(c) final output quality	
(d) capacity requirements	
(e) reduced human resources	

Unit HG3E 04 Develop and Sustain Productive Working Relationships with Colleagues

SCQF level	6	Credit Value	6
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Candidate's name		Assessor's name	
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Types of evidence provided for this Unit (Please tick as appropriate)			
Assessor observation report	<input type="checkbox"/>	Witness testimony	<input type="checkbox"/>
Workplace records/products (includes job reports and documentation)	<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 from NRSWA assessment	<input type="checkbox"/>		

Evidence Requirements for Unit HG3E 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:

Valid: meets the qualification requirements and demonstrates competence for Unit HG3E 04	<input type="checkbox"/>	<input type="checkbox"/>	Authentic: is the candidate's own work and can be verified as genuine	<input type="checkbox"/>	<input type="checkbox"/>
Reliable: shows genuine sustained competence over a period of time	<input type="checkbox"/>	<input type="checkbox"/>	Sufficient: total evidence covers all Performance Criteria, Knowledge and Understanding and Range requirements for HG3E 04	<input type="checkbox"/>	<input type="checkbox"/>
Current: recent enough to show current competence	<input type="checkbox"/>	<input type="checkbox"/>			

Unit HG3E 04 Develop and Sustain Productive Working Relationships with Colleagues

Candidate declaration

I confirm that the evidence listed for **Unit HG3E 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 I am satisfied that the candidate has demonstrated competence against the qualification requirements for **Unit HG3E 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 HG3E 04 Develop and Sustain Productive Working Relationships with Colleagues

Candidate's name _____

Performance Criteria — the candidate can:	Evidence or File X-Ref/Coverage
1.1 Establish working relationships with relevant colleagues within your organisation.	
1.2 Recognise and respect the roles, responsibilities, interests and concerns of colleagues.	
1.3 Seek to create a climate of trust and mutual respect, particularly where you have no authority, or shared authority, over those you are working with.	
1.4 Seek to understand difficult situations and issues from colleagues' perspectives and provide support, where necessary, to move things forward.	
1.5 Provide colleagues with appropriate information to enable them to perform effectively.	
1.6 Consult colleagues in relation to key decisions and activities and take account of their views.	
1.7 Fulfil agreements made with colleagues and let them know.	
1.8 Advise colleagues promptly of any difficulties or where it will be impossible to fulfil agreements.	

Unit HG3E 04 Develop and Sustain Productive Working Relationships with Colleagues

Candidate's name _____

Performance Criteria — the candidate can:	Evidence or File X-Ref/Coverage
1.9 Identify and resolve conflicts of interest and disagreements with colleagues in ways that minimise damage to work activities and to the individuals involved.	
1.10 Monitor and review the effectiveness of working relationships with colleagues in order to identify areas for improvement.	
1.11 Seek and provide feedback in order to improve your own and your colleagues' performance.	
K1 General Knowledge and Understanding	
Knowledge and Understanding	Evidence or File X-Ref/Coverage
K1.1 The benefits of developing productive working relationships with colleagues.	
K1.2 Principles of effective communication and how to apply them in order to communicate effectively with colleagues.	
K1.3 Why it is important to recognise and respect the roles, responsibilities, interests and concerns of colleagues.	
K1.4 The importance of creating a climate of trust and mutual respect where you have no authority, or shared authority, over those you are working with.	

Unit HG3E 04 Develop and Sustain Productive Working Relationships with Colleagues

Candidate's name _____

K1 General Knowledge and Understanding	
Knowledge and Understanding	Evidence or File X-Ref/Coverage
K1.5 The importance of understanding difficult situations and issues from other perspectives and providing support, where necessary, to move things forward.	
K1.6 How to identify and meet the information needs of colleagues.	
K1.7 What information it is appropriate to provide to colleagues and the factors that need to be taken into consideration.	
K1.8 How to consult with colleagues in relation to key decisions and activities.	
K1.9 The importance of taking account, and being seen to take account, of the views of colleagues.	
K1.10 Why communication with colleagues on fulfilment of agreements or any problems affecting or preventing fulfilment is important.	
K1.11 How to identify conflicts of interest with colleagues and the techniques that can be used to manage or remove them.	
K1.12 How to identify disagreements with colleagues and the techniques for sorting them out.	

Unit HG3E 04 Develop and Sustain Productive Working Relationships with Colleagues

Candidate's name _____

K1 General Knowledge and Understanding	
Knowledge and Understanding	Evidence or File X-Ref/Coverage
K1.13 The damage that conflicts of interest and disagreements with colleagues can cause to individuals and organisations.	
K1.14 How to monitor and review the effectiveness of working relationships with colleagues.	
K1.15 How to get and make effective use of feedback from colleagues.	
K1.16 How to provide colleagues with feedback designed to improve their performance.	
K2 Industry/Sector specific Knowledge and Understanding	
Knowledge and Understanding	Evidence or File X-Ref/Coverage
K2.1 Sector-specific legislation, regulations, guidelines and codes of practice.	
K2.2 Standards of behaviour and performance in your industry or sector.	
K2.3 The culture of your industry or sector.	

Unit HG3E 04 Develop and Sustain Productive Working Relationships with Colleagues

Candidate's name _____

K3 Context specific Knowledge and Understanding	
Knowledge and Understanding	Evidence or File X-Ref/Coverage
K3.1 The vision, values, objectives, plans, structure and culture of your organisation.	
K3.2 Relevant colleagues, their work roles and responsibilities.	
K3.3 Agreements with colleagues.	
K3.4 The identified information needs of colleagues.	
K3.5 Mechanisms for consulting with colleagues on key decisions and activities.	
K3.6 Your organisation's planning and decision-making processes.	
K3.7 Mechanisms for communicating with colleagues.	
K3.8 Power, influence and politics within your organisation.	
K3.9 Standards of behaviour and performance that are expected in your organisation.	
K3.10 Mechanisms in place for monitoring and reviewing the effectiveness of working relationships with colleagues	

Unit HG3E 04 Develop and Sustain Productive Working Relationships with Colleagues

Candidate's name _____

Behaviours		
1	Identify people's preferred ways of communicating.	
2	Use communication media and styles appropriate to different people and situations.	
3	Present information clearly, concisely, accurately and in ways that promote understanding.	
4	Keep people informed of plans and developments in a timely way.	
5	Show respect for the views and actions of others.	
6	Comply with and ensure others comply with legal requirements, industry regulations, organisational policies and professional codes.	
7	Seek to understand people's needs and motivations.	
8	Clarify your own and others' expectations of relationships.	
9	Model behaviour that shows, and inspires others to show, respect, helpfulness and cooperation.	
10	Honour your commitments to others.	

Unit HG3E 04 Develop and Sustain Productive Working Relationships with Colleagues

Candidate's name _____

Behaviours		
11	Recognise when there are conflicts, acknowledge the feelings and views of all parties, and redirect people's energy towards a common goal.	
12	Take account of the impact of your own actions on others.	
Skills		
1	Communicating	
2	Empathising	
3	Information management	
4	Involving others	
5	Leading by example	
6	Managing conflict	
7	Networking	
8	Obtaining feedback	
9	Prioritising	
10	Providing feedback	
11	Stress management	
12	Valuing and supporting others	

Unit FA9L 04 Organise and Carry out the Maintenance of Process Equipment

SCQF level	6	Credit Value	12
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Candidate's name		Assessor's name	
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Types of evidence provided for this Unit (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 FA9L 04 (please tick as appropriate)

	Yes	No
All evidence comes from real work activities, carried out in the candidate's workplace (no simulation has been used).	<input type="checkbox"/>	<input type="checkbox"/>

The evidence is:

Valid — meets the qualification requirements and demonstrates competence for Unit FA9L 04	<input type="checkbox"/>	<input type="checkbox"/>	Authentic — is the candidate's own work and can be verified as genuine	<input type="checkbox"/>	<input type="checkbox"/>
Reliable — shows genuine sustained competence over a period of time	<input type="checkbox"/>	<input type="checkbox"/>	Sufficient — total evidence covers all Performance Criteria, knowledge and understanding and scope requirements for FA9L 04	<input type="checkbox"/>	<input type="checkbox"/>
Current — recent enough to show current competence	<input type="checkbox"/>	<input type="checkbox"/>			

Unit FA9L 04 Organise and Carry out the Maintenance of Process Equipment

Candidate declaration

I confirm that the evidence listed for **Unit FA9L 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 FA9L 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 FA9L 04 Organise and Carry out the Maintenance of Process Equipment

Candidate's name _____

1 Determine the feasibility of maintenance work	
Performance Criteria — the candidate can:	Evidence or File X-Ref/Coverage
1.1 Assess the amount and level of wear or damage to components, equipment or instruments and determine what work is required to bring the plant back to the specified condition.	
1.2 Determine the feasibility and viability of repairs.	
1.3 Assess plant operating priorities and report on findings and conclusions on the feasibility and cost-effectiveness of repairs.	
1.4 Make recommendations to designated personnel for repair or replacement of components, equipment or instruments where authority to make decisions to commission work is outside their responsibility.	
2 Prepare for operational maintenance to be carried out safely	
Performance Criteria — the candidate can:	Evidence or File X-Ref/Coverage
2.1 Follow the plant operating instructions to organise and carry out all operational maintenance work.	
2.2 Arrange for all materials, tools and parts to be available as recommended by manufacturers.	
2.3 Issue instructions to the designated personnel for stopping electrical and mechanical instruments and equipment .	
2.4 Arrange for operational maintenance on equipment and instruments requiring isolations to be done at a time appropriate to plant use.	
2.5 Take steps to confirm safe working practices are known and understood by personnel planned for the work.	

Unit FA9L 04 Organise and Carry out the Maintenance of Process Equipment

3 Restore equipment and the plant environment to operable conditions	
Performance Criteria — the candidate can:	Evidence or File X-Ref/Coverage
3.1 Make sure work is carried out safely and with equipment and tools and procedures specific to the site.	
3.2 Follow manufacturers' specifications and safety procedures for dealing with instruments and equipment .	
3.3 Confirm safety monitoring procedures and equipment is in place and functioning throughout the maintenance work.	
3.4 Monitor work practices to make sure safety is maintained at all times.	
3.5 Confirm the work team will start and re-commission equipment and instrumentation as specified in procedures.	
3.6 Use work methods which maintain the instrumentation and plant equipment in a stable condition throughout the maintenance work.	
3.7 Follow the employer's tools and parts accounting procedures.	
3.8 Restore operational performance by servicing instrumentation and equipment and replacing components where required.	
3.9 Return the condition of the plant environment to the employer's specification when maintenance is finished.	
3.10 Make sure waste materials and unwanted components are disposed of in accordance with safe working practices and approved procedures.	
4 Use and communicate data and information	
Performance Criteria — the candidate can:	Evidence or File X-Ref/Coverage
4.1 Provide reports to designated personnel where decisions outside their authority are required.	
4.2 Inform the designated personnel in advance of the planned maintenance by the methods set down in the plant operating instructions.	

Unit FA9L 04 Organise and Carry out the Maintenance of Process Equipment

4 Use and communicate data and information	
Performance Criteria — the candidate can:	Evidence or File X-Ref/Coverage
4.3 Communicate regularly with the person doing the work to ensure work underway is according to plan.	
4.4 Use performance checks, observation, noise, heat, vibration and remote monitoring to help identify malfunctions or other maintenance which might be required.	
4.5 Record maintenance work accurately in the designated place.	
4.6 Maintain up-to-date data audit trails and make sure they are accessible.	
5 Resolve problems arising from the maintenance	
Performance Criteria — the candidate can:	Evidence or File X-Ref/Coverage
5.1 Report malfunctions of instrumentation, equipment or the plant environment promptly to the designated personnel.	
5.2 Report malfunctions and maintenance requirements which are outside the responsibility for the job role and which require designated skilled people or maintenance work.	
5.3 Put temporary arrangements in place to protect the operation of the plant until problems are resolved.	
5.4 Report and resolve situations where maintenance over-runs the agreed timescales.	
Behaviour which underpins effective performance — the candidate can:	Evidence or File X-Ref/Coverage
B1 Work in a manner which is vigilant to possible risks and hazards.	
B2 Work in a manner which uses a range of leadership styles appropriate to different people and situations.	
B3 Work in a manner which shows pride in achieving high quality work.	

Unit FA9L 04 Organise and Carry out the Maintenance of Process Equipment

Knowledge and Understanding — Treatment processes and maintenance:	Evidence or File X-Ref/Coverage
1 Working safely and the use of risk assessments.	
2 Using personal protective equipment (PPE) safely.	
3 Working safely with tools and equipment .	
4 The role and purpose of data audit trails for quality assurance and regulatory requirements.	
5 Safe working practices when dealing with equipment , instrumentation and environment which may have malfunctions and maintenance requirements outside the scope of the job holder.	
6 Maintenance methods and procedures.	
7 Reporting lines and procedures.	
8 Maintenance authorisation procedures and limits of responsibility and authority.	
9 Materials and parts availability and sources.	

Unit FA9L 04 Organise and Carry out the Maintenance of Process Equipment

Knowledge and Understanding — Treatment processes and maintenance:		Evidence or File X-Ref/Coverage
10	Potential faults and difficulties which can occur during isolation and re-commissioning.	
11	Effects of inadequate maintenance .	
12	Effects of equipment and instrumentation breakdown.	
13	Characteristics of faulty equipment and instrumentation.	
14	Identification of malfunctions , operational and maintenance requirements in the equipment , instrumentation and environment as listed in the range statement.	
15	Methods to be used to divert flows bypass treatment process Units and operate temporary plant.	
16	Recording procedures.	
17	Keeping up-to-date with changes in legislation and standards.	
Scope of evidence		Evidence or File X-Ref/Coverage
1	Equipment includes:	
(a)	mechanical	
(b)	electrical	
2	Maintenance for equipment includes:	
(a)	greasing and lubrication	
(b)	repacking of glands	

Unit FA9L 04 Organise and Carry out the Maintenance of Process Equipment

Scope of evidence	Evidence or File X-Ref/Coverage
2 Maintenance for equipment includes:	
(c) replacing simple parts (not requiring craftsmen)	
(d) cleaning accumulations of dirt and debris	
(e) basic instrument maintenance	
3 Maintenance for plant environment includes:	
(a) security systems	
(b) fences and gates	
(c) structural elements	
(d) ground areas	
(e) buildings	
4 Safety procedures and practices cover:	
(a) machinery system and electrical isolation	
(b) lubrication hygiene	
(c) machinery guarding	
5 Malfunctions of:	
(a) equipment	

Unit FA9L 04 Organise and Carry out the Maintenance of Process Equipment

5 Malfunctions of:	
(b) instrumentation	
(c) plant environment	
6 Plant operating priorities cover:	
(a) process performance	
(b) plant availability	
(c) final output quality	
(d) capacity requirements	
(e) reduced human resources	
7 Temporary arrangements include:	
(a) divert flows	
(b) bypass a treatment process	