

GQA PAA\VQSET LEVEL 2 DIPLOMA IN BULK LIQUID OPERATIONS

500/6870/2

Centre Qualification Handbook

Competence-based Qualifications

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INTRODUCTION TO THE HANDBOOK

This qualification sits within the Regulated Qualifications Framework (RQF).

This Qualification Handbook has been developed to ensure that GQA Centres understand the requirements of the qualification. The Handbook contains the following information:

- Qualification Structure
- Assessment Requirements
- Assessment Methods
- Glossary
- Qualification Units

This Qualification Handbook has been developed to provide support in the implementation of the qualification as well as giving information to ensure that the assessment and quality assurance is consistent, robust and reliable within each centre and nationally. The handbook also contains details of the skills and/or knowledge the learner must obtain to achieve the units and qualification.

Qualification Structure

This section of the handbook summarises the content of the qualification and the skills and/or knowledge learners that achieve it can be expected to gain. It also outlines the units required to achieve the qualification and will give the learner an idea of how long the qualification will take to achieve through the Total Qualification Time (TQT) and how much contact time they can expect through the Guided Learning Hours (GLH). It also provides information about possible progression opportunities once the qualification has been achieved.

Assessment Requirements

The assessment requirements for the qualification will cover any specific information about how the qualification may be assessed, such as whether assessors require specific qualifications or occupational competence and whether simulation is permitted in the achievement process.

Assessment Methods

This section summarises the different assessment methods and types of evidence that support assessment; these may be used to demonstrate competence or the achievement of knowledge and understanding.

Qualification Units

The unit overview summarises the content of the unit and the skills and/or knowledge the learner will have gained on achievement of the unit. The units may also contain additional information in the assessment context which will describe the areas to be covered and any appropriate assessment guidance and evidence requirements which will outline additional assessment requirements and should be built into assessment plans and included on assessment records. The unit detail will also confirm whether simulation is permitted for that particular unit.

Qualification Assessment and Support Materials

Centres will be sent the following qualification assessment and support materials:

- Assessment Forms - it is not mandatory to use these forms. Centres may wish to use their own assessment documentation - these should be approved by the External Verifier prior to use.
- Learner Guide
- Qualification Handbook
- Registration Spreadsheet & Certification Claim Forms

LEVEL 2 DIPLOMA IN BULK LIQUID OPERATIONS

Qualification Summary

This qualification has been designed to provide recognition of the skills and knowledge of those working in Bulk Liquid Operations.

Total Qualification Time (TQT) and Guided Learning Hours (GLH)

Guided Learning Hours (GLH)

Guided Learning Hours are the time the learner is under the immediate supervision or guidance of a lecturer, supervisor, tutor or other appropriate provider or education or training.

The GLH for this qualification is 251

Total Qualification Time (TQT)

Total Qualification Time is comprised of 2 elements:

1. GLH
plus
2. an estimate of the number of hours a learner will reasonably be likely to spend in preparation, study or any other form of participation in education or training, including assessment, which takes place as directed by (but not under the immediate supervision of) a lecturer, supervisor, tutor or other appropriate provider or education or training

The TQT for this qualification is 390

Achieving the Qualification

To achieve the Diploma 12 Mandatory Units must be successfully achieved. Additional Units may be taken but are not required for the qualification.

Mandatory Units

Unit No.	Unit Name	Credit Value
BLO 01k	How to Monitor and Maintain Equipment and Infrastructure within Bulk Liquid Operations	3
BLO 01c	Monitor and Maintain Equipment and Infrastructure within Bulk Liquid Operations	2
BLO 02k	How to Prepare Pipelines and Hoses within Bulk Liquid Operations	3
BLO 02c	Prepare Pipelines and Hoses within Bulk Liquid Operations	2
BLO 03k	How to Control the Transfer of Bulk Liquid Products within Bulk Liquid Operations	4
BLO 03c	Control the Transfer of Bulk Liquid Products within Bulk Liquid Operations	4
BLO 04k	How to Provide Product Control Information within Bulk Liquid Operations	4
BLO 04c	Provide Product Control Information within Bulk Liquid Operations	4
BLO 05k	How to Establish and Maintain Effective Working Relationships within Bulk Liquid Operations	3
BLO 05c	Establish and Maintain Effective Working Relationships within Bulk Liquid Operations	2

BLO 06k	How to Contribute to the Safety of Bulk Liquid Operations	5
BLO 06c	Contribute to the Safety of Bulk Liquid Operations	3

Additional Units (not required for the qualification)

Unit No.	Unit Name	Credit Value
BLO 07k	How to Clean and Clear Bulk Liquid Storage Tanks within Bulk Liquid Operations	4
BLO 07c	Clean and Clear Bulk Liquid Storage Tanks within Bulk Liquid Operations	3
BLO 08k	How to Package Bulk Liquid Products within Bulk Liquid Operations	4
BLO 08c	Package Bulk Liquid Products within Bulk Liquid Operations	3

Progression

This qualification confirms occupational competence in Bulk Liquid Operations at Level 2 and learners have the opportunity to progress to team leader or management roles and associated qualifications at Level 3.

Further information can be found on the GQA website www.GQAqualifications.com or on the Register of Regulated Qualifications website <http://register.ofqual.gov.uk>

ASSESSMENT REQUIREMENTS

Assessors must ensure that, when assessing the skills, knowledge and/or understanding, the evidence produced by learners is:

- Valid - does evidence meet the requirements described in the unit?
- Authentic - has the learner produced the evidence?
- Current - has the evidence been produced recently and does it demonstrate current competence?
- Sufficient - is there enough evidence to demonstrate competence?

to enable reliable and consistent judgements to be made about the achievement of all the requirements of the unit(s) and qualification.

GQA Centres must ensure that people involved in the assessment process have the appropriate expertise and are adequately informed and supported to fulfil their responsibilities.

ASSESSMENT STRATEGY

Below is the information to support the assessment requirements of the qualification:

- Mandatory use of evidence from workplace performance
- Use of Simulation
- Occupational competence of assessors and verifiers

Mandatory use of evidence from workplace performance

- a. Unless the use of simulation is expressly permitted within the qualification or unit specific evidence requirements, evidence must demonstrate the learner's competence in a real or realistic environment.
- b. Knowledge and Understanding will be assessed via (pre-set and/or free form) questions, or by inference from performance, which cover three primary types of knowledge:
 - Knowledge of facts and procedures
 - Understanding of principles, concepts and underpinning procedures
 - How to apply principles and procedures in specific contexts

All questions must be asked by the assessor at appropriate moments throughout the assessment process, preferably linked to observed activity and/or review of documentary evidence. The questions asked of, and answers provided by, the learner must be recorded.

Use of Simulation

- c. The qualification or unit specific assessment requirements will define where evidence from simulation is acceptable, and in which contexts.

Simulation should be used only where direct evidence of learner performance cannot be obtained. Under these circumstances simulation may be used for summative assessment. Reasons for the use of simulation should be made clear to and agreed by the external verifier and should include the following details:

- which competence (and standards) the simulation was designed to assess;
- the kind of equipment, facilities and physical environment proposed for the simulation of performance. It is unlikely that the External Verifier will approve a simulation if it does not involve real plant and equipment;
- how the simulated activity relates to the learner's normal work context in terms of the pressures of time, access to resources and access to information, and the communication media; and

- how the simulation was set up and conducted, preferably supported by physical evidence such as photographs or inspection of a test rig.

Assessors, internal verifiers and external verifiers should monitor the proportion of evidence generated via simulations to ensure that it is not the primary source of a learner's claim to competence.

- d. Under these circumstances simulations are reserved for aspects of competence illustrated by the following contexts:
- where demonstration of emergency shutdown and related safety procedures would be; **dangerous and/or disruptive** to plant/environment/individuals; **too costly** such as total plant shutdown or dealing with spillage of dangerous substances; where **issues of confidentiality** restrict access to real work opportunities;
 - demonstrating specific aspects of the operation which rarely or never occur due to effective quality assurance systems;
 - the capacity to integrate disparate knowledge to cope with unforeseen events and to solve problems; or
 - aspects of working relationships and communications for which no opportunity has presented for the use of naturally occurring workplace evidence of learner performance.
- e. Simulation must enable the individual to demonstrate competence in a real or realistic work environment. In this context this means in specialist centres which replicate the workplace in terms of equipment and environment, reflect normal working situations and use relevant industrial or commercial standards and procedures. Short work placements or non-realistic work environments which do not replicate the pressures and requirements of normal commercial or industrial activities will not be acceptable. The bulk of the learner's evidence should be drawn from their normal working activity and not consist of artificially contrived opportunities for one-off demonstration of competence. Similarly equipment must be that used in current commercial and industrial contexts. Procedures and standards used should be those which are nationally or internationally recognised or devised by specific companies as standard operating procedure.
- f. Simulation must enable the individual to acquire his/her skills and knowledge in a realistic work environment. In this context this means in specialist centres which replicate the workplace in terms of equipment and environment, it reflects normal working situations and uses relevant industrial or commercial standards and procedures. Where possible providers should attempt to replicate the pressures and requirements of normal commercial or industrial activities. Equipment must be that used in current commercial and industrial contexts. Procedures and standards used should be those which are nationally or internationally recognised or devised by specific companies as standard operating procedure.
- g. Circumstances outside of those listed in Section D above may also be considered suitable for the use of simulation with the agreement of the External Verifier and GQA. Under these circumstances simulation may be used for formative assessment only.

Occupational competence of Assessor and Verifiers

h. Assessors:

- must be competent in the units they are assessing. This is shown through the assessor having achieved the award they are assessing OR providing quality evidence to the external verifier that they are able to make valid judgements of the competence of learners. This could be done through a combination of a) personal interview, b) review of employment histories and/or c) examination of the assessor's judgement during assessments.
- must have a working knowledge of awards and a full understanding of that part of the award for which they have responsibility.
- should hold or be working towards suitable qualifications for assessment, as defined by GQA.

i. Internal verifiers:

- must be either working in the appropriate sector itself OR they must be able to demonstrate they possess practical and up-to-date knowledge of current working practices appropriate to the sector in which they are carrying out verification practices; and
- must be appointed by a GQA recognised centre
- must have a working knowledge of the awards they are internally verifying
- should hold or be working towards suitable qualifications for verification, as defined by GQA.

ASSESSMENT METHODS AND TYPES OF EVIDENCE

The following section gives information on the different assessment methods/types of evidence that support assessment. The following assessment methods/types of evidence may be used to demonstrate competence or that the learner has achieved the required level of knowledge and understanding.

Observation of Performance

Observation allows the assessor to see learners carrying out their work activities. It will take place primarily in the workplace but can also be undertaken in a training scheme. Natural discussion should take place where possible during observation, allowing the assessor to ask questions relating to what they are observing at the time. Assessors must capture their observations either by a written report and/or other methods (e.g. video, audio recording).

Questioning

This method of assessment can be used to ensure that the learner has knowledge and understanding to support their skills. Questions can be used to check knowledge - these questions can either be verbal during or at the end of an observation, or they can be set in a written format in formal or informal conditions. As some units may focus entirely on learners' knowledge, assessors may encourage a variety of evidence to meet the requirements of the unit - use of verbal and/or written questions, learner statements and professional discussion (see below). Verbal questioning or professional discussion should be captured, either by written notes or audio recording.

Products

Work product evidence may be generated as a result of work activities undertaken by learners, and could include reports, letters, or records of work carried out.

Witness Statement or Testimony

A Witness Statement or Testimony is confirmation by others that the learner carried out an activity or series of activities relevant to the requirements of the unit. It could be written by the learner and signed by the witness to confirm that it did take place, or the witness may write the statement. Alternatively, the assessor could speak to the witness and record the discussion. The statement can then be used as evidence within an assessment.

There may be occasions when an Expert Witness may be required to contribute to the assessment process. GQA's definition of an Expert Witness is 'an experienced employee who works in partnership with the assessor, by observing the learner carrying out their duties and recording their observations in line with the assessment procedures'. It should be noted that while the Expert Witness makes a valued contribution to the assessment process, it is the assessor who makes the assessment decision.

Simulation

Simulations are a source of performance evidence showing how an activity is carried out. Simulations require careful planning to ensure that they reflect as near as possible "real life" conditions and the requirements of the qualification(s). As a result of this the costs to set up a simulation may be considerable. Simulations are likely to be used in the following situations:

- they occur infrequently (e.g. dealing with emergencies)
- they involve unusual working conditions (e.g. working in isolation, outside the workplace)
- the work is hazardous
- it is not cost effective

Any use of simulation should be discussed and agreed with the GQA External Verifier and approved prior to implementation.

Recognition of Prior Learning (RPL)

This is the process whereby credit is given to experienced individuals for their previous achievements. It requires careful mapping of the individual's experience to the unit(s) to ensure that it meets the requirements. This exercise must be referred to the External Verifier to ensure that all the evidence presented is acceptable.

Professional Discussion

A Professional Discussion gives the learner the opportunity to tell their assessor what they are doing and why they are doing it in a particular way. The discussion should be supported by appropriate evidence - an observation report, work product or witness testimony. Professional Discussions should be planned to give the learner the chance to prepare, and should be recorded.

Learner Statements

A Learner Statement is an account of an activity that took place, described by the learner. A detailed statement could demonstrate skill, and also provides evidence of knowledge and understanding. Learner statements should be authenticated by an appropriate person.

Photographs and use of other media

Photographs and use of other media, e.g. video and audio, can provide detail of work activities carried out and questioning. Photographs are more effective when used with supporting statements. Video and audio evidence should be effectively referenced to allow specific activities or questioning to be found easily. It is important to note that if photographs and other media are to be used, the learner and assessor should ensure that permission is gained from all people who may be involved.

GLOSSARY

Term	Definition
Access Arrangements	Arrangements that are approved in advance of an examination or assessment to allow achievement to be demonstrated by learners with a disability, special learning needs (including where the learner's first language is not English, Welsh or Irish) or to avoid unlawful discrimination
Appeal	The process through which an awarding organisation may be challenged on the outcome of an enquiry about results or, where appropriate, other procedural decisions affecting a centre or an individual learner
Assessment	The process of making judgements about the extent to which a learner's work meets the requirements of a unit, or any additional assessment requirements of a qualification
Assessor	A person who assesses a learner's work
Award of Qualifications	A certificate (electronic or paper-based) issued to an individual that recognises their achievement
Award	A qualification with a TQT value between 10 and 129
Awarding Organisation	A body recognised by the qualifications regulators to award qualifications
Centre	An organisation accountable to an awarding organisation for assessment arrangements leading to the award of qualifications
Centre Recognition	A process through which a centre wishing to offer an award or awards is confirmed as being able to maintain the required quality and consistency of assessment, and comply with other requirements of the awarding organisation
Certificate (1) for a Unit or Qualification	A record of attainment of a qualification issued by an awarding organisation
Certificate (2)	A qualification with a TQT value between 130 and 369
Credit	An award that may be made to a learner in recognition of the achievement of a unit or qualification
Credit Value	The number of credits that may be awarded to a learner for the successful achievement of a unit or qualification
Diploma	A qualification with a TQT value of 370 or above
Guided Learning Hours	The number of hours of teacher-supervised or directed study time required to teach a qualification or unit of a qualification
Learning Time	The amount of time a learner at the level of the unit is expected to take, on average, to complete the unit to the standard required
Level	An indication of the relative demand, complexity and/or depth of achievement, and/or the autonomy of the learner in demonstrating that achievement

Term	Definition
Mandatory Units	Units that must be achieved for the qualification to be awarded
National Occupational Standards (NOS)	Describe what a person needs to do, know and understand in a job to carry out the role in a consistent and competent way
Optional Unit	A unit that a learner may choose to complete to achieve the required number of units for award of the qualification
Pathway	A route to the achievement of a qualification that requires particular units to be achieved and is identified by an endorsement to a qualification title
Qualification	An award made to a Learner for the achievement of the required units or other components for that qualification
Qualification Level	An indication of the relative demand, complexity and/or depth of achievement, and/or the autonomy of the learner, represented by a qualification
Qualifications Regulators	Government-designated statutory organisations required to establish national standards for qualifications and secure consistent compliance with them
Recognition of Prior Learning (RPL)	A method of assessment that considers whether a learner can demonstrate that they can meet the assessment requirements for a unit through knowledge, understanding or skills they already possess and do not need to develop through a course of learning
Sector Skills Council	A body responsible for formulating and reviewing occupational standards for a specific sector across the UK, and for supporting the development of units and qualifications based on these standards. Each SSC is an employer-led, independent organisation and is licensed by government
Standardisation Of Assessment	A process to ensure that assessment leading to the award of qualifications is applied consistently by individuals, centres and awarding organisations
Unique Learner Number (ULN)	The unique number that is used to identify an individual learner
Unit	A component of a qualification

LEVEL 2 DIPLOMA IN BULK LIQUID OPERATIONS

CONTENT OF THE QUALIFICATION

MANDATORY UNITS

UNIT BLO 01K	HOW TO MONITOR AND MAINTAIN EQUIPMENT AND INFRASTRUCTURE WITHIN BULK LIQUID OPERATIONS
LEVEL	2
CREDIT VALUE	3
GUIDED LEARNING HOURS	30

Unit Overview

This unit addresses the knowledge required to monitor and maintain equipment and infrastructure within bulk liquid operations. This unit deals with monitoring and maintaining product storage conditions, and cleaning operational equipment.

Assessment Guidance and Evidence Requirements

The learner should provide evidence to meet all the required knowledge and understanding within this unit. This could be provided through different types of evidence and assessment methods, for example learner statements, questioning and professional discussion which should be recorded for verification.

- This unit is subject to the requirements set out in the Cogent Assessment Strategy.
- The assumption is made that the learner is likely to be an apprentice or experienced operator seeking progression.

Information on use of Assessment Context

During this work the individual must take account of the relevant operational requirements and safe working practices AS THEY APPLY TO THEM.

The scope of the work is such that within the limits of the individual's responsibility they must be able to demonstrate that they know and understand:

- How to select, use and care for PPE (e.g. sight/hearing protection, gloves, footwear, hard hats, respirators)
- How to clarify unclear or conflicting information
- The implications of statutory (e.g. HASAWA and COSHH) and organisational requirements
- How to interpret operational requirements (e.g. policies, procedures, instructions, codes of practice, standards, schedules)
- The principles of monitoring atmosphere, water, temperature, pressure and product volume
- The characteristics and requirements of logical, systematic investigation
- How to recognise damaged and distressed equipment and infrastructure (to include bunding)
- The location of all relevant safety systems and equipment
- The information to communicate (e.g. written, verbal, electronic) and to whom

Learning Outcome and Assessment Criteria

Learning outcomes The learner will:	Assessment criteria The learner can:
1. Know why the inspection is being carried out	1.1. Describe the purpose of the inspection (e.g. routine inspection, inspection in response to observed problems, inspecting for distress, damage, poor functioning)
2. Know how to identify signs of distress and damage and poor functioning	2.1. Describe the signs of distress and damage and poor functioning (e.g. physical damage, corrosion, leakage, joint distortion, out of date certification) 2.2. Illustrate the information, and the format, required by the appropriate authority in relation to distress and damage and poor functioning (e.g. location, extent, possible causes)
3. Know the range of actions available to restore product storage conditions	3.1. Explain the range of actions available in the light of previous treatments applied 3.2. Describe the appropriate actions to take to restore product storage conditions (e.g. draining off excess water) 3.3. Describe what to do when the conditions cannot be restored
4. Know how to clean and maintain operational equipment	4.1. Describe the range of equipment to be cleaned (e.g. filters) 4.2. Explain how to prepare equipment for cleaning (e.g. isolating, disconnecting, disassembling) 4.3. Describe the range of techniques, agents and cleaning equipment and when to use them 4.4. Describe how to replace equipment 4.5. Explain their responsibilities regarding disconnecting and disassembling the equipment
5. Know the disposal techniques and locations	5.1. Describe the disposal techniques and locations
6. Know the operational procedures in relation to monitoring and maintaining equipment and infrastructure	6.1. Explain how to select, use and care for PPE (e.g. sight/hearing protection, gloves, footwear, hard hats, respirators) 6.2. Explain the implications of statutory (e.g. HASAWA and COSHH) and organisational requirements 6.3. Describe how to interpret operational requirements (e.g. policies, procedures, instructions, codes of practice, standards, schedules) 6.4. Describe the characteristics and requirements of logical, systematic investigation 6.5. Describe the location of all relevant safety systems and equipment 6.6. Identify the information to communicate (e.g. written, verbal, electronic) and to whom 6.7. Explain how to clarify unclear or conflicting information

UNIT BLO 01C	MONITOR AND MAINTAIN EQUIPMENT AND INFRASTRUCTURE WITHIN BULK LIQUID OPERATIONS
LEVEL	2
CREDIT VALUE	2
GUIDED LEARNING HOURS	4

Unit Overview

This unit addresses the skills required to monitor and maintain equipment and infrastructure within bulk liquid operations. This unit deals with monitoring and maintaining product storage conditions, and cleaning operational equipment.

Assessment Guidance and Evidence Requirements

Evidence Requirements

The learner should on a minimum of two different products:

- Demonstrate, using both fixed and portable equipment as appropriate, how to monitor the relevant product storage conditions e.g. atmospheric, water, temperature, pressure and volume
- Demonstrate how to effectively drain excess water from bulk liquids products using both gravity and piped drainage methods. Taking into account safety and environmental issues, imploding of container due to vacuum, cross contamination and recognising the interface between product / water.
- Demonstrate cleaning and replacing of operational equipment

Assessment Guidance

- The use of simulation is not acceptable in the assessment of this unit.
- Workplace performance evidence is mandatory.
- This unit is subject to the requirements set out in the Cogent Assessment Strategy.
- This unit should not be taken prior to taking “Unit BLO 01k - How to Monitor and Maintain Equipment and Infrastructure within Bulk Liquid Operations.”
- The assumption is made that the learner is likely to be an apprentice or experienced operator seeking progression.

Information on use of Assessment Context

During this work the individual must take account of the relevant operational requirements and safe working practices AS THEY APPLY TO THE LEARNER.

Within the limits of their own responsibility the learner must show that they can:

Monitor and inspect product storage taking into account the following conditions:

- Atmosphere
- Water
- Temperature
- Pressure
- Volume

Deal with either liquid or powder in:

- Tanks
- Containers
- Vehicles
- Ships

Apply the appropriate cleaning techniques to relevant operational equipment (Filters - cartridge or non-cartridge, Strainers, Pumps, Driers Heaters, Slop Tanks):

- Washing in water, product, detergents, solvents
- Back-flushing
- Blowing
- Steaming
- Flushing with water, product, detergents, solvents
- Scouring
- Pigging
- Purging and blowing

The scope of the work is such that within the limits of the individual’s responsibility they must be able to demonstrate:

- How to select, use and care for PPE (e.g. sight/hearing protection, gloves, footwear, hard hats, respirators)
- How to clarify unclear or conflicting information
- The implications of statutory (e.g. HASAWA and COSHH) and organisational requirements
- How to interpret operational requirements (e.g. policies, procedures, instructions, codes of practice, standards, schedules)
- The characteristics and requirements of logical, systematic investigation
- How to recognise damaged and distressed equipment and infrastructure (to include bunding)
- The location of all relevant safety systems and equipment
- The information to communicate (e.g. written, verbal, electronic) and to whom

Learning Outcome and Assessment Criteria

Learning outcomes The learner will:	Assessment criteria The learner can:
1. Be able to monitor and maintain product storage conditions	1.1. Carry out inspections at the appropriate frequency 1.2. Perform complete, logical and systematic investigation of suspected malfunction 1.3. Take appropriate action to restore product storage conditions
2. Be able to communicate all relevant information	2.1. Communicate all relevant information to appropriate people
3. Be able to clean operational equipment	3.1. Prepare the equipment for cleaning 3.2. Use appropriate cleaning agents and techniques 3.3. Ensure that cleaned equipment is left in an appropriate condition and location 3.4. Remove, dispose and replace equipment where appropriate 3.5. Dispose of drainings, bottoms and washings
4. Be able to follow operational procedures in relation to monitoring and maintaining equipment and infrastructure	4.1. Work safely in accordance with operational requirements

UNIT BLO 02K	HOW TO PREPARE PIPELINES AND HOSES WITHIN BULK LIQUID OPERATIONS
LEVEL	2
CREDIT VALUE	3
GUIDED LEARNING HOURS	30

Unit Overview

This unit addresses the knowledge required to prepare pipelines and hoses within bulk liquid operations. This unit deals with rigging lines and setting valves on pipeline systems; filling pipelines with product and displacing pipeline and hose contents.

Assessment Guidance and Evidence Requirements

The learner should provide evidence to meet all the required knowledge and understanding within this unit. This could be provided through different types of evidence and assessment methods, for example learner statements, questioning and professional discussion which should be recorded for verification.

- This unit is subject to the requirements set out in the Cogent Assessment Strategy.
- The assumption is made that the learner is likely to be an apprentice or experienced operator seeking progression.

Information on use of Assessment Context

During this work the individual must take account of the relevant operational requirements and safe working practices AS THEY APPLY TO THEM.

The scope of the work is such that within the limits of the individual's responsibility they must be able to demonstrate that they know and understand:

- How to select, use and care for PPE (e.g. sight/hearing protection, gloves, footwear, hard hats, respirators)
- The implications of statutory (e.g. HASAWA and COSHH) and organisational requirements
- How to interpret operational requirements (e.g. policies, procedures, instructions, codes of practice, standards, schedules)
- The signs of pressure problems in pipelines and hoses (e.g. abnormal gauge readings, joint and valve leakage including valve passing, lifting of pressure relief valves)
- The cases of pressure problems in pipelines and hoses (e.g. line typography, pumping rates, influence of ambient temperature)
- The information to communicate (e.g. written, verbal, electronic) and to whom

Learning Outcome and Assessment Criteria

Learning outcomes The learner will:	Assessment criteria The learner can:
1. Know the types and principles of use of rigging equipment	1.1. Describe the types and principles of use of rigging equipment (e.g. connectors, jointing materials, fasteners, hoses)
2. Know how to prepare pipelines and hoses	2.1. Describe how to make connections (e.g. correct type, number, size of fastener, leakage prevention, complete line, secure line) 2.2. Explain the meaning of the signs and symbols used to denote hose test conditions 2.3. Describe fastening requirements and tightening techniques 2.4. Explain how and when to vent air and vapour 2.5. Describe how and when to recover vapour
3. Know how to check pipelines and deal with problems	3.1. Describe how to check the integrity of pipelines 3.2. Describe the causes and signs of pressure problems 3.3. Describe how to de-pressurise pipelines and hoses
4. Know the operational procedures in relation to preparing pipelines and hoses	4.1. Explain how to select, use and care for PPE (e.g. sight/hearing protection, gloves, footwear, hard hats, respirators) 4.2. Explain the implications of statutory (e.g. HASAWA and COSHH) and organisational requirements 4.3. Describe how to interpret operational requirements (e.g. policies, procedures, instructions, codes of practice, standards, schedules) 4.4. Identify the information to communicate (e.g. written, verbal, electronic) and to whom

UNIT BLO 02C	PREPARE PIPELINES AND HOSES WITHIN BULK LIQUID OPERATIONS
LEVEL	2
CREDIT VALUE	2
GUIDED LEARNING HOURS	6

Unit Overview

This unit addresses the skills required to prepare pipelines and hoses within bulk liquid operations. This unit deals with rigging lines and setting valves on pipeline systems; filling pipelines with product and displacing pipeline and hose contents.

Assessment Guidance and Evidence Requirements

Evidence Requirements

The learner should on a minimum of two occasions with different products:

- Demonstrate the preparation checks required on any rigging equipment, piping (temporary or permanent) and physical line up configuration (joints, connections, valves positions, routing)
- Demonstrate how to correctly flood / pressure up and vent pipelines with appropriate medium
- Demonstrate how to check ullage
- Demonstrate how to displace contents of pipelines / hoses

Assessment Guidance

- The use of simulation is not acceptable in the assessment of this unit.
- Workplace performance evidence is mandatory.
- This unit is subject to the requirements set out in the Cogent Assessment Strategy.
- This unit should not be taken prior to taking “Unit BLO 02k - How to Prepare Pipelines and Hoses within Bulk Liquid Operations.”
- The assumption is made that the learner is likely to be an apprentice or experienced operator seeking progression.

Information on use of Assessment Context

During this work the individual must take account of the relevant operational requirements and safe working practices AS THEY APPLY TO THE LEARNER

Determine transfer equipment for any transfer operation likely to be handled. To include:

- Obtaining accurate details of products(s) to be transferred (for at least 1 product)
- Determining the required transfer conditions (for at least 1 product) taking account of any chemical and physical properties of product
- Determining required transfer equipment (for at least 1 product) which may include measurement and sampling equipment
- Establishing the sequence of transfer (for at least 1 product)

Prepare and test hoses prior to connection according to prescribed procedures. Procedures to cover confirmation of the following (subject to determining type of transfer equipment including hose, etc):

- Hoses to be suitable for product temperature etc.
- Pressure test of hoses to be in date
- Any expansion / contraction fittings
- Any return vapour hoses and connections

Ensure that hoses are balanced, slung, supported and connected / disconnected correctly, and visually checked.

Fill the pipeline with product, this may include filling by flooding and / or pressuring.

Monitor and compare pumping rates at specified intervals, taking account of all of the following:

- Agreed transfer rates - initial, maximum and topping off
- Units of measurement and terminology
- Pumping principles and procedures

Ensure containment of possible spillage by using all of the following:

- Bleed valves and blow-down equipment
- Drip trays and 'save alls'

Check and confirm appropriate lining up taking account of all of the following:

- Layout of the pipework and pumping system
- Colour coding systems for identification of pipes and valves
- Identification of appropriate connections

Prepare transfer lines according to prescribed procedures and test the:

- Integrity of isolation valves
- Availability of isolation flanges, spools, drains, spades and U bends

The scope of the work is such that within the limits of the individual's responsibility they must be able to demonstrate:

- How to select, use and care for PPE (e.g. sight/hearing protection, gloves, footwear, hard hats, respirators)
- The implications of statutory (e.g. HASAWA and COSHH) and organisational requirements
- How to interpret operational requirements (e.g. policies, procedures, instructions, codes of practice, standards, schedules)
- The signs of pressure problems in pipelines and hoses (e.g. abnormal gauge readings, joint and valve leakage including valve passing, lifting of pressure relief valves)
- The cases of pressure problems in pipelines and hoses (e.g. line typography, pumping rates, influence of ambient temperature)
- The information to communicate (e.g. written, verbal, electronic) and to whom

Learning Outcome and Assessment Criteria

Learning outcomes The learner will:	Assessment criteria The learner can:
1. Be able to make essential checks when preparing pipelines and hoses	1.1. Ensure that rigging equipment used conforms to the job specification 1.2. Ensure that all relevant valves are checked and set correctly 1.3. Check the integrity of pipelines 1.4. Ensure that the displacement medium, equipment and techniques are appropriate 1.5. Ensure that the amount of product remaining on completion is within given limits
2. Be able to prepare pipelines and hoses	2.1. Correctly make all connections 2.2. Correctly set all valves 2.3. Correctly fill the appropriate pipelines 2.4. Vent the air and vapour as appropriate 2.5. Effectively set and secure the pipelines
3. Be able to communicate relevant information about preparing pipelines and hoses	3.1. Ensure that confirmation is received regarding ullage and any other relevant tank movements 3.2. Communicate all relevant information to the appropriate people
4. Be able to follow operational procedures in relation to preparing pipelines and hoses	4.1. Use safe lifting and moving techniques 4.2. Work safely in accordance with operational requirements

UNIT BLO 03K	HOW TO CONTROL THE TRANSFER OF BULK LIQUID PRODUCTS WITHIN BULK LIQUID OPERATIONS
LEVEL	3
CREDIT VALUE	4
GUIDED LEARNING HOURS	38

Unit Overview

This unit addresses the knowledge required to control the transfer of bulk liquid products within bulk liquid operations. This unit deals with controlling and transfer of products; connecting and disconnecting transfer systems.

Assessment Guidance and Evidence Requirements

The learner should provide evidence to meet all the required knowledge and understanding within this unit. This could be provided through different types of evidence and assessment methods, for example learner statements, questioning and professional discussion which should be recorded for verification.

- This unit is subject to the requirements set out in the Cogent Assessment Strategy.
- The assumption is made that the learner is likely to be an apprentice or experienced operator seeking progression.

Information on use of Assessment Context

During this work the individual must take account of the relevant operational requirements and safe working practices AS THEY APPLY TO THEM.

The scope of the work is such that within the limits of the individual's responsibility they must be able to demonstrate that they know and understand:

- How to select, use and care for PPE (e.g. sight/hearing protection, gloves, footwear, hard hats, respirators)
- The implications of statutory (e.g. HASAWA and COSHH) and organisational requirements
- How to interpret operational requirements (e.g. policies, procedures, instructions, codes of practice, standards, schedules)
- The information to communicate (e.g. written, verbal, electronic) and to whom

Learning Outcome and Assessment Criteria

Learning outcomes	Assessment criteria
The learner will:	The learner can:
1. Know the principles of product movement control	1.1. Explain the principles of product movement control (e.g. valve operation, sequence, direction, tank ullage)
2. Know how to control the transfer of bulk liquid products	2.1. Describe how to maintain product flow rate taking account of the nature of the product 2.2. Explain how to identify and resolve irregularities 2.3. Explain how to make connections (e.g. correct type, number, size of fastener, gasket type, leakage prevention, complete line, secure line)
3. Know how to check transfer systems	3.1. Describe how to ensure that lines and hoses are clear of product, and valves at each end of the linkage are shut before connection and disconnection
4. Know the operational procedures in relation to controlling the transfer of bulk liquid products	4.1. Describe safe lifting and moving techniques and how these apply to the control of the transfer of bulk liquid products 4.2. Explain how to select, use and care for PPE (e.g. sight/hearing protection, gloves, footwear, hard hats, respirators) 4.3. Explain the implications of statutory (e.g. HASAWA and COSHH) and organisational requirements 4.4. Describe how to interpret operational requirements (e.g. policies, procedures, instructions, codes of practice, standards, schedules) 4.5. Identify the information to communicate (e.g. written, verbal, electronic) and to whom

UNIT BLO 03C	CONTROL THE TRANSFER OF BULK LIQUID PRODUCTS WITHIN BULK LIQUID OPERATIONS
LEVEL	3
CREDIT VALUE	4
GUIDED LEARNING HOURS	6

Unit Overview

This unit addresses the skills required to control the transfer of bulk liquid products within bulk liquid operations. This unit deals with controlling and transfer of products; connecting and disconnecting transfer systems.

Assessment Guidance and Evidence Requirements

Evidence Requirements

The learner should on a minimum of two occasions with different products if applicable:

- Demonstrate how to select appropriate hoses fit for purpose and make the correct connections
- Demonstrate how to carry out control actions including how and where to safely and promptly relieve excess pressure
- Demonstrate checks required prior to disconnection including isolations and blanking off as appropriate

Assessment Guidance

- The use of simulation is not acceptable in the assessment of this unit.
- Workplace performance evidence is mandatory.
- This unit is subject to the requirements set out in the Cogent Assessment Strategy.
- This unit should not be taken prior to taking “Unit BLO 03k - How to Control the Transfer of Bulk Liquid Products within Bulk Liquid Operations.”
- The assumption is made that the learner is likely to be an apprentice or experienced operator seeking progression.

Information on use of Assessment Context

During this work the individual must take account of the relevant operational requirements and safe working practices AS THEY APPLY TO THE LEARNER.

Within the limits of their own responsibility the learner must show that they can:

Connect and disconnect the following equipment relating to the relevant carriers (ship, road / rail vehicles, pipelines):

- Simple hoses and vapour return
- Articulated arms
- Fasteners
- Connectors
- Earthing
- Isolation
- Lifting

Using the appropriate movement type of transfer method - Gravity, Pumping or Pressure Variation control and monitor the following transfers to the relevant carrier (ship, road / rail vehicle, pipeline):

- Incoming to facility
- Outgoing from facility
- Between onsite tanks
- Between on and off site tanks

Check for the following irregularities:

- Product and line conditions
- Flow rates
- Product leakage (identified or suspected)

The scope of the work is such that within the limits of the individual's responsibility they must be able to demonstrate:

- How to select, use and care for PPE (e.g. sight/hearing protection, gloves, footwear, hard hats, respirators)
- The implications of statutory (e.g. HASAWA and COSHH) and organisational requirements
- How to interpret operational requirements (e.g. policies, procedures, instructions, codes of practice, standards, schedules)
- The information to communicate (e.g. written, verbal, electronic) and to whom

Learning Outcome and Assessment Criteria

Learning outcomes The learner will:	Assessment criteria The learner can:
1. Be able to make checks prior to controlling the transfer of bulk liquid products	1.1. Receive appropriate authority to proceed 1.2. Ensure that transfer pipeline system is correctly set up
2. Be able to control the transfer of bulk liquid products	2.1. Correctly carry out control actions 2.2. Effectively maintain the product flow rate and nature of the product throughout the movement 2.3. Select hoses which are fit for purpose 2.4. Correctly make all connections 2.5. Safely and promptly relieve excess pressure
3. Be able to make checks when controlling the transfer of bulk liquid products	3.1. Make all necessary checks before disconnection 3.2. Ensure that flanges are correctly isolated and/or blanked off as appropriate
4. Be able to communicate relevant information about controlling the transfer of bulk liquid products	4.1. Receive appropriate confirmation that the required quantities have been received 4.2. Communicate all relevant information to the appropriate people
5. Be able to follow operational procedures in relation to controlling the transfer of bulk liquid products	5.1. Use safe lifting and moving techniques 5.2. Work safely in accordance with operational requirements

UNIT BLO 04K	HOW TO PROVIDE PRODUCT CONTROL INFORMATION WITHIN BULK LIQUID OPERATIONS
LEVEL	3
CREDIT VALUE	4
GUIDED LEARNING HOURS	32

Unit Overview

This unit addresses the knowledge required to provide product control information within bulk liquid operations. This unit is about the individual's contribution to taking samples for analysis and deals with: taking samples; taking measurements and performing calculations; blending and adding materials.

Assessment Guidance and Evidence Requirements

The learner should provide evidence to meet all the required knowledge and understanding within this unit. This could be provided through different types of evidence and assessment methods, for example learner statements, questioning and professional discussion which should be recorded for verification.

- This unit is subject to the requirements set out in the Cogent Assessment Strategy.
- The assumption is made that the learner is likely to be an apprentice or experienced operator seeking progression.

Information on use of Assessment Context

During this work the individual must take account of the relevant operational requirements and safe working practices AS THEY APPLY TO THEM.

The scope of the work is such that within the limits of the individual's responsibility they must be able to demonstrate that they know and understand:

- The range of activities relevant to the workplace
- How to select, use and care for PPE (e.g. sight/hearing protection, gloves, footwear, hard hats, respirators)
- The implications of statutory (e.g. HASAWA and COSHH) and organisational requirements
- How to interpret operational requirements (e.g. policies, procedures, instructions, codes of practice, standards, schedules)
- The information to communicate (e.g. written, verbal, electronic) and to whom

Learning Outcome and Assessment Criteria

Learning outcomes The learner will:	Assessment criteria The learner can:
1. Know how to take samples	1.1. Identify the different types of containers used and their specific uses 1.2. Describe how to reinstate source conditions (e.g. re-establish equipment integrity, close dip-hatch, reinstate nitrogen blanket)
2. Know how to check measurement equipment	2.1. Explain the importance of well-maintained equipment 2.2. Describe how to ensure that the measurement equipment (e.g. dip tape, weigh-scales, thermometers, gauges, meters) is fit for purpose (e.g. calibration, condition, capability, range) both before and after measurement (e.g. cleaning)
3. Know how to take measurements and perform calculations	3.1. Explain how to perform the relevant calculations (e.g. use of industry/HMC&E approved formulae, appropriate calibration charts, data accuracy e.g. product temperature, dip and ullage measurements, weight measurements) 3.2. Describe how to recognise and deal with unexpected results 3.3. Identify the units in which the materials are measured
4. Know how to blend and add materials	4.1. Explain the principles of contamination avoidance
5. Know the operational procedures in relation to providing product control information	5.1. Describe how to deal with spillage 5.2. Explain how to conform with, and respond to, relevant specifications and regulations (e.g. relating to the quality, dilution and quantities of the material) 5.3. Explain how to select, use and care for PPE (e.g. sight/hearing protection, gloves, footwear, hard hats, respirators) 5.4. Explain the implications of statutory (e.g. HASAWA and COSHH) and organisational requirements 5.5. Describe how to interpret operational requirements (e.g. policies, procedures, instructions, codes of practice, standards, schedules) 5.6. Identify the information to communicate (e.g. written, verbal, electronic) and to whom

UNIT BLO 04C	PROVIDE PRODUCT CONTROL INFORMATION WITHIN BULK LIQUID OPERATIONS
LEVEL	3
CREDIT VALUE	4
GUIDED LEARNING HOURS	6

Unit Overview

This unit addresses the skills required to provide product control information within bulk liquid operations. This unit is about the individual's contribution to taking samples for analysis and deals with: taking samples; taking measurements and performing calculations; blending and adding materials.

Assessment Guidance and Evidence Requirements

Evidence Requirements

The learner should on a minimum of two occasions with different products if applicable:

- Demonstrate how to identify correct container type, its cleanliness and label data requirements
- Demonstrate how to correctly wear any additional PPE and use any additional equipment required
- Demonstrate the appropriate sampling techniques that minimises the potential hazards and maintains the sample integrity
- Demonstrate how to check that the measurement equipment is fit for purpose
- Demonstrate a measurement and calculation task while maintaining the integrity of the product
- Demonstrate how to blend and add correct quantities including precautions required to avoid contamination

Assessment Guidance

- The use of simulation is not acceptable in the assessment of this unit.
- Workplace performance evidence is mandatory.
- This unit is subject to the requirements set out in the Cogent Assessment Strategy.
- This unit should not be taken prior to taking "Unit BLO 04k - How to Provide Product Control Information within Bulk Liquid Operations."
- The assumption is made that the learner is likely to be an apprentice or experienced operator seeking progression.

Information on use of Assessment Context

During this work the individual must take account of the relevant operational requirements and safe working practices AS THEY APPLY TO THE LEARNER.

Within the limits of their own responsibility the learner must show that they can:

- Prepare for and take samples within own working environment. These may include: bottom, lower, middle, upper, composite, running and skimming.
- Take samples from own working environment. Sample sources may include: tanks, containers, pipelines and ship tanks.

Take measurements and perform calculations using direct and meter measurement. Physical quantities may include:

- Product quantities
- Pressure
- Ullage
- Product density
- Product temperature
- Vapour space content

Context of measurements may include:

- Between transfers
- During transfers (receipt of product at tank)
- For stock records
- For client or other agency

The scope of the work is such that within the limits of the individual's responsibility they must be able to demonstrate:

- The range of activities relevant to the workplace
- How to select, use and care for PPE (e.g. sight/hearing protection, gloves, footwear, hard hats, respirators)
- The implications of statutory (e.g. HASAWA and COSHH) and organisational requirements
- How to interpret operational requirements (e.g. policies, procedures, instructions, codes of practice, standards, schedules)
- The information to communicate (e.g. written, verbal, electronic) and to whom

Learning Outcome and Assessment Criteria

Learning outcomes The learner will:	Assessment criteria The learner can:
1. Be able to prepare to provide product control information	1.1. Properly obtain containers appropriate for the sample material 1.2. Properly obtain and use appropriate PPE 1.3. Accurately identify the location of the nearest safety equipment
2. Be able to take samples	2.1. Take samples using the appropriate specified method 2.2. Effectively minimise the potential hazards according to the nature of the sample 2.3. Correctly reinstate source conditions
3. Be able to maintain the integrity of the sample	3.1. Ensure that the integrity of the sample is maintained 3.2. Ensure that the sample is fully identified by recording and labelling and promptly taken to the designated point
4. Be able to check measurement equipment	4.1. Ensure that the measurement equipment is fit for purpose before and after use
5. Be able to take measurements and perform calculations	5.1. Effectively maintain the integrity of the product and environmental conditions throughout 5.2. Correctly take and record measurements 5.3. Accurately perform all calculations 5.4. Accurately and fully investigate all unexpected results
6. Be able to blend and add materials	6.1. Confirm that the correct quantities are available 6.2. Ensure that the prepared materials are stored and labelled as appropriate 6.3. Effectively avoid contamination of all mixing and handling equipment and preparation area 6.4. Correctly add the materials to product
7. Be able to communicate relevant product control information	7.1. Communicate all relevant information to the appropriate people
8. Be able to follow operational procedures in relation to providing product control information	8.1. Work safely in accordance with operational requirements

UNIT BLO 05K	HOW TO ESTABLISH AND MAINTAIN EFFECTIVE WORKING RELATIONSHIPS WITHIN BULK LIQUID OPERATIONS
LEVEL	2
CREDIT VALUE	3
GUIDED LEARNING HOURS	30

Unit Overview

This unit addresses the knowledge required to establish and maintain effective working relationships within bulk liquid operations. The individual will be involved in activities such as exchanging information on work area at handover; establishing and maintaining effective working relationships with colleagues and others.

Assessment Guidance and Evidence Requirements

The learner should provide evidence to meet all the required knowledge and understanding within this unit. This could be provided through different types of evidence and assessment methods, for example learner statements, questioning and professional discussion which should be recorded for verification.

- This unit is subject to the requirements set out in the Cogent Assessment Strategy.
- The assumption is made that the learner is likely to be an apprentice or experienced operator seeking progression.

Information on use of Assessment Context

During this work the individual must take account of the relevant operational requirements and safe working practices AS THEY APPLY TO THEM.

The scope of the work is such that within the limits of the individual's responsibility they must be able to demonstrate that they know and understand:

- The implications of relevant statutory (e.g. HASAWA and COSHH) and organisational requirements
- How to interpret operational requirements (e.g. policies, procedures, instructions, codes of practice, standards, schedules)
- The implications of the relevant fiscal and Excise requirements
- The implications of poor communication
- The need for good relationships
- The need for proper handover and the impact of inadequate handover
- The means to ensure information given has been effectively received
- The information to communicate (e.g. written, verbal, electronic) and to whom

Learning Outcome and Assessment Criteria

Learning outcomes The learner will:	Assessment criteria The learner can:
1. Know the significance of effective handovers	1.1. Describe how to access and use relevant documentation (e.g. handover logs, permits) 1.2. Describe how the handover log relates to the overall safety and status of plant, equipment and operations 1.3. Explain the relevance of each log item to the operation of the plant 1.4. Explain the need for proper handover and the impact of inadequate handover
2. Know how to establish and maintain effective working relationships with colleagues and others	2.1. Identify those likely to be encountered in the workplace (to include colleagues, contractors and visitors) 2.2. Explain the need for good relationships
3. Know how to communicate relevant information and to whom	3.1. Describe how to recognise reasonable requests 3.2. Describe what is considered essential information 3.3. Identify the relevant personnel who are to give information to them 3.4. Explain the implications of poor communication 3.5. Describe the means to ensure information given has been effectively received 3.6. Identify the information to communicate (e.g. written, verbal, electronic) and to whom
4. Know the operational procedures in relation to establishing and maintaining effective working relationships	4.1. Describe their responsibilities in relation to their work area 4.2. Explain the reasons for taking particular readings and measurements and their significance 4.3. Describe the appropriate procedures to follow (e.g. company grievance/disciplinary procedures) when a working relationship has broken down 4.4. Describe how to identify, control and minimise work area hazards as they apply to colleagues and others 4.5. Explain the implications of relevant statutory (e.g. HASAWA and COSHH) and organisational requirements 4.6. Describe how to interpret operational requirements (e.g. policies, procedures, instructions, codes of practice, standards, schedules) 4.7. Explain the implications of the relevant fiscal and Excise requirements

UNIT BLO 05C	ESTABLISH AND MAINTAIN EFFECTIVE WORKING RELATIONSHIPS WITHIN BULK LIQUID OPERATIONS
LEVEL	2
CREDIT VALUE	2
GUIDED LEARNING HOURS	6

Unit Overview

This unit addresses the skills required to establish and maintain effective working relationships within bulk liquid operations. The individual will be involved in activities such as exchanging information on work area at handover; establishing and maintaining effective working relationships with colleagues and others.

Assessment Guidance and Evidence Requirements

Evidence Requirements

The learner should on a minimum of two occasions:

- Demonstrate a delivery and an acceptance of a comprehensive work area handover to and from a colleague
- Demonstrate a method of communicating clear and accurate information to others

Assessment Guidance

- The use of simulation is acceptable in the assessment of this unit.
- Workplace performance evidence is mandatory.
- This unit is subject to the requirements set out in the Cogent Assessment Strategy.
- This unit should not be taken prior to taking “Unit BLO 05k - How to Establish and Maintain Effective Working Relationships within Bulk Liquid Operations.”
- The assumption is made that the learner is likely to be an apprentice or experienced operator seeking progression.

Information on use of Assessment Context

During this work the individual must take account of the relevant operational requirements and safe working practices AS THEY APPLY TO THE LEARNER.

Within the limits of their own responsibility the learner must show that they can:

- use a style of communication (language and terminology) that is clear, concise and accurate and suited to the workplace and the situation
- follow procedures and acted promptly, when dealing with communications.
- promptly seek clarification, if experiencing difficulties in interpreting communications
- record relevant information accurately and legibly
- relay information (that is accurate and complete) about current operational status, to and from relevant personnel at handover stage, leaving the work area clean and free of hazards
- treat others in a manner which promotes and maintains goodwill and is appropriate to the situation
- promptly and willingly met reasonable requests and queries from others
- provide prompt, clear and accurate information to others
- offer additional support when others have difficulties and seek help where necessary
- promptly report unresolved breakdowns in working relationships to an appropriate person
- work safely in accordance with operational requirements and associated Safe Systems of Work

The scope of the work is such that within the limits of the individual's responsibility they must be able to demonstrate:

- The implications of relevant statutory (e.g. HASAWA and COSHH) and organisational requirements
- How to interpret operational requirements (e.g. policies, procedures, instructions, codes of practice, standards, schedules)
- The implications of the relevant fiscal and Excise requirements
- The implications of poor communication
- The need for good relationships
- The need for proper handover and the impact of inadequate handover
- The means to ensure information given has been effectively received
- The information to communicate (e.g. written, verbal, electronic) and to whom

Learning Outcome and Assessment Criteria

Learning outcomes The learner will:	Assessment criteria The learner can:
1. Be able to exchange information on work area at handover	1.1. Ensure that the information exchanged provides a full, clear and accurate description of the current status of the work area 1.2. Clarify and confirm any information that is unclear or conflicting BEFORE acceptance 1.3. Identify the implications of changing plant conditions on further work 1.4. Carry out the handover with appropriate people at the designated time and location
2. Be able to complete documentation	2.1. Complete all relevant documentation accurately
3. Be able to establish and maintain effective working relationships with colleagues and others	3.1. Interact with colleagues and others in an appropriate manner
4. Be able to communicate relevant information as appropriate	4.1. Provide relevant others (to include contractors and visitors) with clear and sufficient (oral, written and visual) information to meet identified needs 4.2. Provide clear, accurate and prompt information to colleagues and others 4.3. Communicate all relevant information to the appropriate people
5. Be able to follow operational procedures in relation to establishing and maintaining effective working relationships	5.1. Work safely in accordance with operational requirements

UNIT BLO 06K	HOW TO CONTRIBUTE TO THE SAFETY OF BULK LIQUID OPERATIONS
LEVEL	2
CREDIT VALUE	5
GUIDED LEARNING HOURS	43

Unit Overview

This unit addresses the knowledge required to contribute to the safety of bulk liquid operations. This unit is about the individual's contribution to the safety aspects of working in a bulk liquid environment. This unit deals with: maintaining a safe working area; reporting incidents, hazardous conditions and emergencies; contributing to the correction of incidents, hazardous conditions and emergencies.

Assessment Guidance and Evidence Requirements

The learner should provide evidence to meet all the required knowledge and understanding within this unit. This could be provided through different types of evidence and assessment methods, for example learner statements, questioning and professional discussion which should be recorded for verification.

- This unit is subject to the requirements set out in the Cogent Assessment Strategy.
- The assumption is made that the learner is likely to be an apprentice or experienced operator seeking progression.

Information on use of Assessment Context

During this work the individual must take account of the relevant operational requirements and safe working practices AS THEY APPLY TO THEM.

The scope of the work is such that within the limits of the individual's responsibility they must be able to demonstrate that they know and understand:

- How to select, use and care for PPE (e.g. sight/hearing protection, gloves, footwear, hard hats, respirators)
- The implications of statutory (e.g. HASAWA and COSHH) and organisational requirements
- How to interpret operational requirements (e.g. policies, procedures, instructions, codes of practice, standards, schedules)
- Site emergency procedures
- The site layout and working area (to include the location and position of emergency exits, muster points and emergency equipment)
- The potential hazards associated with the particular working area
- The types of activity occurring, and possible hazards, in adjacent areas
- Their own responsibilities and duties
- The reasons for use of safety equipment and devices and protective clothing
- The procedures for obtaining medical assistance
- The safety roles of others
- The appropriate responses to alarms (e.g. fire, gas)
- The potential hazards associated with work procedures and the safety precautions required
- The relevance of risk assessment in the workplace
- Their duties under current environmental legislation
- The information to communicate (e.g. written, verbal, electronic) and to whom

Learning Outcome and Assessment Criteria

Learning outcomes The learner will:	Assessment criteria The learner can:
1. Know how to maintain a safe working area	1.1. Describe how to keep the working area satisfactorily clean and tidy 1.2. Describe the potential incidents within their area of responsibility and the action to be taken 1.3. Identify the types of activity occurring, and possible hazards, in adjacent areas 1.4. Identify the potential hazards associated with work procedures and the safety precautions required
2. Know how to deal with a safety hazard	2.1. Describe the appropriate actions to take on identification of safety hazards, for example: <ul style="list-style-type: none"> • rectification of hazard • prompt reporting • discontinuation of work • making affected others, including contractors, company personnel and visitors, aware of the hazard • directing affected others to a safe area 2.2. Explain the effect of an emergency (e.g. on personnel, equipment, site, environment)
3. Know the types of incident to report	3.1. Identify the types of incidents which should be reported (e.g. fire, flood, uncontrolled release of product, explosion, injured person, equipment or service failure)
4. Know the first response to an incident	4.1. Describe the procedure for responding at an early stage of an incident (e.g. fire, flood, uncontrolled release of product, explosion, injured person, equipment or service failure) 4.2. Explain how the alarm should be raised for each type of incident 4.3. Explain the procedures for obtaining medical assistance 4.4. Describe the appropriate first response to casualties 4.5. Explain the appropriate responses to alarms (e.g. fire, gas)
5. Know the information to communicate in order to operate safely	5.1. Identify the information to communicate (e.g. written, verbal, electronic) and to whom
6. Know how the site layout impacts on safety	6.1. Describe the site layout and working area (to include the location and position of emergency exits, muster points and emergency equipment) 6.2. Explain the site emergency procedures 6.3. Explain how to access, interpret and implement site emergency plans and procedures (e.g. environmental)
7. Know the roles of self and others when there is a safety issue	7.1. Describe their own responsibilities during emergencies 7.2. Describe the safety roles of others

<p>8. Know the importance of having emergency equipment in good order and how it adds to the safety of the work environment</p>	<p>8.1. Explain how to identify and report defects in safety equipment and approved tools</p> <p>8.2. Describe the need for and use of specified emergency equipment</p> <p>8.3. Explain the reasons for use of safety equipment and devices and protective clothing</p>
<p>9. Know the operational procedures in relation to contributing to the safety of bulk liquid operations</p>	<p>9.1. Describe the procedures for dealing with unauthorised people in the work area</p> <p>9.2. Explain how to select, use and care for PPE (e.g. sight/hearing protection, gloves, footwear, hard hats, respirators)</p> <p>9.3. Explain the implications of statutory (e.g. HASAWA and COSHH) and organisational requirements</p> <p>9.4. Describe how to interpret operational requirements (e.g. policies, procedures, instructions, codes of practice, standards, schedules)</p> <p>9.5. Explain the relevance of risk assessment in the workplace</p> <p>9.6. Explain their duties under current environmental legislation</p>

UNIT BLO 06C	CONTRIBUTE TO THE SAFETY OF BULK LIQUID OPERATIONS
LEVEL	2
CREDIT VALUE	3
GUIDED LEARNING HOURS	20

Unit Overview

This unit addresses the skills required to contribute to the safety of bulk liquid operations. This unit is about the individual's contribution to the safety aspects of working in a bulk liquid environment. This unit deals with: maintaining a safe working area; reporting incidents, hazardous conditions and emergencies; contributing to the correction of incidents, hazardous conditions and emergencies.

Assessment Guidance and Evidence Requirements

Evidence Requirements

The learner should on a minimum of two different occasions:

- Demonstrate evidence of identifying a safety hazard including appropriate action taken
- Demonstrate an appropriate method to communicate a health / safety issue to others
- Demonstrate how to identify appropriate means within scope of authority how to minimise an incident / emergency / environmental impact
- Demonstrate how to locate and use emergency procedures within own work area

Assessment Guidance

- The use of simulation is acceptable in the assessment of this unit. Simulation is only suitable when:
 - Reporting incidents, hazardous conditions and emergencies
 - Contributing to the correction of incidents, hazardous conditions and emergencies.
- This unit is subject to the requirements set out in the Cogent Assessment Strategy.
- This unit should not be taken prior to taking "Unit BLO 06k - How to Contribute to the Safety of Bulk Liquid Operations."
- The assumption is made that the learner is likely to be an apprentice or experienced operator seeking progression.

Information on use of Assessment Context

During this work the individual must take account of the relevant operational requirements and safe working practices AS THEY APPLY TO THE LEARNER.

Within the limits of their own responsibility the learner must show that they can:

Obtain and use all relevant safety equipment / approved tools, to include all of the following: safety showers, eye baths, gas detection equipment, fire fighting equipment.

Identify safety hazards in own area to include:

- Housekeeping
- Trip and fall hazard
- Open access
- Gas / toxic release
- Source of ignition
- Slip hazard

Take appropriate action to include at least one of the following:

- Rectification of hazard
- Prompt reporting
- Discontinuation of work
- Making affected others including contractors, company personnel and visitors aware
- Directing affected others to a safe area

Ensure that all relevant security procedures are followed. This may include:

- Watch keeping
- Security permits
- Swiped access - ID
- Visitor pass
- ISPS

Establish and maintain working relationships in own working environment. This may include:

- Colleagues in the same work group
- Colleagues in other work groups
- Immediate supervisors
- Those for whom the learner has responsibility
- Personnel in other departments
- External contacts / contractors

Ensure all relevant communication methods are used in a clear and efficient manner:

- Radio protocol
- Telephone calls
- Shift handover logs
- Record sheets
- Written / typed documentation

Identify and confirm the location of key personnel.

Follow emergency plans and procedures to cover all of the following:

- Safety
- Fire
- Occupational health
- Pollution control
- Security
- Liquid / Gas / toxic release

Verify the nature, location and scope of the incident. Incident to include at least one of the following:

- Fire
- Flood
- Uncontrolled release / spillage of product(s)
- Explosion
- Hazardous vapours
- Discovery of suspect package / bomb threat
- Discovery of injured person
- Accident involving person / equipment
- Major services failure
- Liquid / Gas / toxic release

Raise the appropriate alarm by the appropriate method to include all of the following:

- Mechanical / electrical means
- Notifying someone else
- Verbal
- Audio
- Visual

Follow appropriate site emergency plans, environmental procedures, plant emergency procedures in the event of one of the following situations taking place:

- Flood
- Uncontrolled release / spillage of product(s)
- Explosion
- Hazardous vapours
- Discovery of suspect package / bomb threat
- Discovery of injured person
- Accident involving person / equipment
- Major services failure

Identify products, materials and / or equipment that are hazardous to the environment. This may include:

- Air contamination
- Water contamination
- Ground contamination

Follow prescribed procedures for dealing with products, materials and / or equipment. To include prescribed procedures covering all of the following:

- Up to date legal requirements
- Environmental Protection Act
- Specific environmental procedures
- Workplace instructions
- Supplier's instructions
- Manufacturer's instructions

The scope of the work is such that within the limits of the individual's responsibility they must be able to demonstrate:

- How to select, use and care for PPE (e.g. sight/hearing protection, gloves, footwear, hard hats, respirators)
- The implications of statutory (e.g. HASAWA and COSHH) and organisational requirements
- How to interpret operational requirements (e.g. policies, procedures, instructions, codes of practice, standards, schedules)
- Site emergency procedures
- The site layout and working area (to include the location and position of emergency exits, muster points and emergency equipment)
- The potential hazards associated with the particular working area
- The types of activity occurring, and possible hazards, in adjacent areas
- Their own responsibilities and duties
- The reasons for use of safety equipment and devices and protective clothing
- The procedures for obtaining medical assistance
- The safety roles of others
- The appropriate responses to alarms (e.g. fire, gas)
- The potential hazards associated with work procedures and the safety precautions required
- The relevance of risk assessment in the workplace
- Their duties under current environmental legislation
- The information to communicate (e.g. written, verbal, electronic) and to whom

Learning Outcome and Assessment Criteria

Learning outcomes The learner will:	Assessment criteria The learner can:
1. Be able to maintain a safe working area	1.1. Ensure that clear access to and egress from working area is maintained at all times 1.2. Keep working area clean and tidy in accordance with requirements 1.3. Keep clear all escape routes and access to emergency and safety equipment
2. Be able to report incidents, hazardous conditions and emergencies	2.1. Accurately verify the nature, location and scope of incident 2.2. Effectively raise the appropriate alarms 2.3. Report the incident to the appropriate people in accordance with site reporting procedures
3. Be able to communicate relevant information as appropriate	3.1. Provide accurate and unambiguous information to the appropriate people 3.2. Effectively inform appropriate people as actions are taken
4. Be able to contribute to the correction of incidents, hazardous conditions and emergencies	4.1. Take the correct actions, in accordance with procedures, to deal with the incident 4.2. Effectively minimise the incident, hazard or emergency 4.3. Effectively minimise waste and loss 4.4. Correctly modify actions in response to changing conditions
5. Be able to follow operational procedures in relation to contributing to the safety of bulk liquid operations	5.1. Work safely in accordance with operational requirements 5.2. Contribute to the assessment of risk 5.3. Ensure that only authorised people are allowed access to the work area 5.4. Return safety equipment and tools to designated areas after use and report any defects

ADDITIONAL UNITS

UNIT BLO 07k	HOW TO CLEAN AND CLEAR BULK LIQUID STORAGE TANKS WITHIN BULK LIQUID OPERATIONS
LEVEL	3
CREDIT VALUE	4
GUIDED LEARNING HOURS	34

Unit Overview

This unit addresses the knowledge required to clean and clear bulk liquid storage tanks within bulk liquid operations. This unit deals with: preparing for the cleaning of storage tanks; cleaning and clearing tanks of product.

Assessment Guidance and Evidence Requirements

The learner should provide evidence to meet all the required knowledge and understanding within this unit. This could be provided through different types of evidence and assessment methods, for example learner statements, questioning and professional discussion which should be recorded for verification.

- This unit is subject to the requirements set out in the Cogent Assessment Strategy.
- The assumption is made that the learner is likely to be an apprentice or experienced operator seeking progression.

Information on use of Assessment Context

During this work the individual must take account of the relevant operational requirements and safe working practices AS THEY APPLY TO THEM.

The scope of the work is such that within the limits of the individual's responsibility they must be able to demonstrate that they know and understand:

- How to select, use and care for PPE (e.g. sight/hearing protection, gloves, footwear, hard hats, respirators)
- The implications of statutory (e.g. HASAWA and COSHH) and organisational requirements
- How to interpret operational requirements (e.g. policies, procedures, instructions, codes of practice, standards, schedules)
- The information to communicate (e.g. written, verbal, electronic) and to whom

Learning Outcome and Assessment Criteria

Learning outcomes The learner will:	Assessment criteria The learner can:
1. Know how to prepare for the cleaning of storage tanks	1.1. State the appropriate product levels to allow emptying to begin 1.2. Describe the principles of siting equipment (e.g. tank construction, product characteristics, vapour removal method, weather conditions) for maximum removal of vapour and equipment operation 1.3. Explain the importance of secure isolation
2. Know the range of de-gassing techniques available	2.1. Describe the range of de-gassing techniques available to them (e.g. convection, steam evaporation, flushing with gas, flushing with water) and how to apply them
3. Know the importance of information exchange	3.1. Identify the information to communicate (e.g. written, verbal, electronic) and to whom 3.2. Describe the information required on the containers 3.3. Explain how to interpret information on vapour removal targets
4. Know how to clean and clear tanks of product	4.1. Describe the range of available cleaning agents and techniques 4.2. Explain how and why to use neutralising agents 4.3. Describe when and how to transfer product
5. Know how to identify signs of tank damage	5.1. Describe how to identify signs of tank damage and distress (e.g. debris, surface corrosion, lining damage, cracking)
6. Know how to work safely	6.1. Describe the safety requirements specific to internal working (e.g. Confined Spaces Regulations) 6.2. Describe how to minimise contact during residue transfer 6.3. Describe safe lifting and moving techniques
7. Know the operational procedures in relation to cleaning and clearing bulk liquid storage tanks	7.1. Describe disposal requirements and locations 7.2. Explain how to work with and within the permit system 7.3. Describe how to ensure that the tools and equipment are fit for purpose 7.4. Explain how to select, use and care for PPE (e.g. sight/hearing protection, gloves, footwear, hard hats, respirators) 7.5. Explain the implications of statutory (e.g. HASAWA and COSHH) and organisational requirements 7.6. Describe how to interpret operational requirements (e.g. policies, procedures, instructions, codes of practice, standards, schedules)

UNIT BLO 07C	CLEAN AND CLEAR BULK LIQUID STORAGE TANKS WITHIN BULK LIQUID OPERATIONS
LEVEL	2
CREDIT VALUE	3
GUIDED LEARNING HOURS	4

Unit Overview

This unit addresses the skills required to clean and clear bulk liquid storage tanks within bulk liquid operations. This unit deals with: preparing for the cleaning of storage tanks; cleaning and clearing tanks of product.

Assessment Guidance and Evidence Requirements

Evidence Requirements

The learner should carry out cleaning and de-gassing on a minimum of two separate occasions:

- Demonstrate how to correctly empty and clean a tank by removing vapour, transferring residue and apply relevant neutralising agents
- Demonstrate how to check that the tank is ready for cleaning and clearing of product and communicate the relevant information about its status

Assessment Guidance

- The use of simulation is not acceptable in the assessment of this unit.
- Workplace performance evidence is mandatory.
- This unit is subject to the requirements set out in the Cogent Assessment Strategy.
- This unit should not be taken prior to taking “Unit BLO 07k - How to Clean and Clear Bulk Liquid Storage Tanks within Bulk Liquid Operations.”
- The assumption is made that the learner is likely to be an apprentice or experienced operator seeking progression.

Information on use of Assessment Context

During this work the individual must take account of the relevant operational requirements and safe working practices AS THEY APPLY TO THE LEARNER.

Within the limits of their own responsibility the learner must show that they can:

Use the appropriate cleaning agent (Detergents, Solvents, Water) to both external (to include tank washing machine) and internal (manual or mechanised) cleaning dealing with ALL of the following residue types including understanding the precautions and limitations of each:

- Hazardous
- Non-hazardous
- Solids
- Liquids
- Recoverable
- Non-recoverable

The scope of the work is such that within the limits of the individual’s responsibility they must be able to demonstrate:

- How to select, use and care for PPE (e.g. sight/hearing protection, gloves, footwear, hard hats, respirators)
- The implications of statutory (e.g. HASAWA and COSHH) and organisational requirements

- How to interpret operational requirements (e.g. policies, procedures, instructions, codes of practice, standards, schedules)
- The information to communicate (e.g. written, verbal, electronic) and to whom

Learning Outcome and Assessment Criteria

Learning outcomes The learner will:	Assessment criteria The learner can:
1. Be able to prepare for the cleaning of storage tanks	1.1. Correctly empty the tank in accordance with work instructions 1.2. Ensure removal of vapour in accordance with targets 1.3. Safely transfer the residues to the appropriate locations and containers 1.4. Safely apply neutralising agents where appropriate
2. Be able to check operational requirements that the tank is ready for cleaning and clearing of product	2.1. Ensure that they have the appropriate permits, method statements and risk assessments 2.2. Obtain appropriate confirmation that tank is sufficiently free of product and vapour to proceed 2.3. Ensure that the tank is appropriately and securely isolated prior to and during internal working 2.4. Ensure that the work area is clear of unauthorised personnel before cleaning commences
3. Be able to clean and clear tanks of product	3.1. Correctly perform cleaning and clearing operations
4. Be able to communicate relevant information about cleaning and clearing bulk liquid storage tanks	4.1. Report any difficulties in emptying to the appropriate person 4.2. Ensure that the containers for transfer or holding of residual product are appropriately marked 4.3. Effectively notify the appropriate person on completion of activity 4.4. Communicate all relevant information to the appropriate people
5. Be able to follow operational procedures in relation to cleaning and clearing bulk liquid storage tanks	5.1. Use safe lifting and moving techniques 5.2. Ensure safe and efficient use of equipment 5.3. Work safely in accordance with operational requirements

UNIT BLO 08K	HOW TO PACKAGE BULK LIQUID PRODUCTS WITHIN BULK LIQUID OPERATIONS
LEVEL	2
CREDIT VALUE	4
GUIDED LEARNING HOURS	40

Unit Overview

This unit addresses the knowledge required to package bulk liquid products within bulk liquid operations. This unit deals with: preparing, filling and securing receptacles; decommissioning and cleaning equipment and systems; stowing packaged products.

Assessment Guidance and Evidence Requirements

The learner should provide evidence to meet all the required knowledge and understanding within this unit. This could be provided through different types of evidence and assessment methods, for example learner statements, questioning and professional discussion which should be recorded for verification.

- This unit is subject to the requirements set out in the Cogent Assessment Strategy.
- The assumption is made that the learner is likely to be an apprentice or experienced operator seeking progression.

Information on use of Assessment Context

During this work the individual must take account of the relevant operational requirements and safe working practices AS THEY APPLY TO THEM.

The scope of the work is such that within the limits of the individual's responsibility they must be able to demonstrate that they know and understand:

- How to select, use and care for PPE (e.g. sight/hearing protection, gloves, footwear, hard hats, respirators)
- The implications of statutory (e.g. HASAWA and COSHH) and organisational requirements
- How to interpret operational requirements (e.g. policies, procedures, instructions, codes of practice, standards, schedules)
- How to use safe lifting and handling techniques
- The information to communicate (e.g. written, verbal, electronic) and to whom

Learning Outcome and Assessment Criteria

Learning outcomes The learner will:	Assessment criteria The learner can:
1. Know how to prepare to fill and secure receptacles	1.1. Describe the nature and purpose of consumables (e.g. labels, sealing devices, securing devices) 1.2. Describe how to ensure that the isolation and containment devices and equipment are in full working order 1.3. Describe how to secure and connect the system and earthing connections to the correct product lines 1.4. Describe how to select the appropriate receptacle (e.g. considerations of type, condition, cleanliness, volume, dryness)
2. Know how to fill and secure receptacles	2.1. Explain how to position the receptacle 2.2. Describe the range of filling systems available to them 2.3. Describe how to correctly fill the receptacle (e.g. specified weight or volume of product) 2.4. Explain how to deal with overfills 2.5. Describe how to use sealing and securing devices (e.g. suitability, leakage prevention) 2.6. Describe the information required on the receptacles
3. Know how to decommission and clean equipment and systems	3.1. Describe the range of cleaning agents and techniques available to them 3.2. Describe the properties of the residual product 3.3. Describe how to leave the system and equipment in an appropriate condition
4. Know how to stow packaged products	4.1. Describe how to minimise the risks associated with stacking of receptacles (e.g. position, orientation, extent of covering)
5. Know the operational procedures in relation to packaging bulk liquid products	5.1. Explain the principles of use of ancillary equipment (e.g. safety, product control, product measurement) 5.2. Describe how to deal with leakage 5.3. Describe how to deal with leaking or damaged receptacles 5.4. Explain how to select, use and care for PPE (e.g. sight/hearing protection, gloves, footwear, hard hats, respirators) 5.5. Explain the implications of statutory (e.g. HASAWA and COSHH) and organisational requirements 5.6. Describe how to interpret operational requirements (e.g. policies, procedures, instructions, codes of practice, standards, schedules) 5.7. Describe how to use safe lifting and handling techniques 5.8. Identify the information to communicate (e.g. written, verbal, electronic) and to whom

UNIT BLO 08c	PACKAGE BULK LIQUID PRODUCTS WITHIN BULK LIQUID OPERATIONS
LEVEL	2
CREDIT VALUE	3
GUIDED LEARNING HOURS	4

Unit Overview

This unit addresses the skills required to package bulk liquid products within bulk liquid operations. This unit deals with: preparing, filling and securing receptacles; decommissioning and cleaning equipment and systems; stowing packaged products.

Assessment Guidance and Evidence Requirements

Evidence Requirements

The learner should on a minimum of two different occasions:

- Demonstrate correct method to prepare, fill and secure relevant receptacles
- Demonstrate how to decommission and clean equipment and systems including use of cleaning agents and precautions required to avoid contamination

Assessment Guidance

- The use of simulation is not acceptable in the assessment of this unit.
- Workplace performance evidence is mandatory.
- This unit is subject to the requirements set out in the Cogent Assessment Strategy.
- This unit should not be taken prior to taking “Unit BLO 08k - How to Package Bulk Liquid Products within Bulk Liquid Operations.”
- The assumption is made that the learner is likely to be an apprentice or experienced operator seeking progression.

Information on use of Assessment Context

During this work the individual must take account of the relevant operational requirements and safe working practices AS THEY APPLY TO THE LEARNER.

Within the limits of their own responsibility the learner must show that they can:

Fill a variety of receptacles such as Drums, Cans, Bottles and Intermediate Bulk Containers (IBC’s) using the relevant below systems:

- Fixed
- Metered
- Weight
- Transportable
- Volumetric
- Ullage

Apply the appropriate cleaning techniques and appropriate cleaning agent to relevant equipment and systems including understanding the precautions and limitations of each:

- Flushing
- Steam purging
- Blowing
- Water
- Steam
- Detergents

- Solvents
- Product

The scope of the work is such that within the limits of the individual's responsibility they must be able to demonstrate:

- How to select, use and care for PPE (e.g. sight/hearing protection, gloves, footwear, hard hats, respirators)
- The implications of statutory (e.g. HASAWA and COSHH) and organisational requirements
- How to interpret operational requirements (e.g. policies, procedures, instructions, codes of practice, standards, schedules)
- How to use safe lifting and handling techniques
- The information to communicate (e.g. written, verbal, electronic) and to whom

Learning Outcome and Assessment Criteria

Learning outcomes The learner will:	Assessment criteria The learner can:
1. Be able to prepare to fill and secure receptacles	1.1. Ensure appropriate stocks of consumables are available 1.2. Effectively confirm that the system is ready for use 1.3. Correctly select the appropriate receptacles 1.4. Ensure that the filling system is appropriate to the nature of the product
2. Be able to fill and secure receptacles	2.1. Correctly use ancillary equipment 2.2. Correctly secure and connect the system and earthing connections 2.3. Correctly fill the receptacle 2.4. Correctly use sealing and securing devices
3. Be able to decommission and clean equipment and systems	3.1. Ensure that gulleys and drainage channels are free of obstruction and clear of contamination 3.2. Ensure that hoses and sumps are clear of product and valves are shut prior to disconnection from line 3.3. Correctly disconnect all relevant equipment 3.4. Correctly blank off flanges and hoses 3.5. Use the correct cleaning agents and techniques
4. Be able to stow packaged products	4.1. Correctly store the receptacles in an appropriate location
5. Be able to communicate relevant information	5.1. Communicate all relevant information to the appropriate people
6. Be able to follow operational procedures in relation to packaging bulk liquid products	6.1. Work safely in accordance with operational requirements