

CITY & GUILDS LEVEL 2 AWARD IN THE SAFE MIXING AND TRANSFERRING OF PESTICIDES (PA8) 601/5147/X



QUALIFICATION GUIDANCE

Version 1.3 April 2022

Independently Assessed

Essential Qualification Information

Not to be used by the Candidate during Assessment

You will require some of this information to accurately complete the Record of Assessment (ROA)

Qualification Group No	0 2 1 6	Pesticides
Qualification Programme No	0 2 1 6 - 5 6	L2 Award in the Safe Mixing and Transferring of Pesticides (PA8) (Y/505/7758)
Unit(s)	1 7 1	Mixing and Transferring Pesticides GLH 28 (Credit value 3)
Recommended Assessment Duration		1.5 – 2.5 hours per Candidate
Pre-Requisite Units	1 0 1	Principles of Safe Handling and Application of Pesticides (PA1) GLH 26 (Credit value 3)
Guided Learning Hours (GLH)		54 Hours
Total Qualification Time (TQT)		60 Hours

Version and date	Change detail	Section
1.2 November 2017	Added TQT details Deleted QCF / Learning Time	Qualification at a glance Structure Throughout
1.3 April 2022	GLH and TQT clarified and highlighted	Structure

City & Guilds Level 2 Award in the Safe Mixing and Transferring of Pesticides (PA8) Qualification Guidance

Introduction

The scheme will be administered by City & Guilds

City & Guilds will:

- Publish
 - Scheme regulations
 - Qualification guidance
 - Training material
 - Trainers support material
- Approve Centres to co-ordinate and administer the scheme
- Set standards for the training of Verifiers and Assessors
- Recruit, train and deploy Verifiers
- Manage verification
- Issue Certificates to successful Candidates

The Qualification

The qualification will be awarded to Candidates who achieve the required level of competence in the units to which their Certificate relates.

Training

The Code of Practice for Using Plant Protection Products states "By Law everyone who uses pesticides professionally must have received adequate training in using pesticides safely". Candidates are strongly advised to ensure that they will be able to meet the standards required in the assessment.

Total Qualification Time

Total Qualification Time (TQT) is the total amount of time, in hours, expected to be spent by a Learner to achieve a qualification. It includes both guided learning hours (which are listed separately) and hours spent in preparation, study and assessment.

Access to Assessment

Assessment Centres will be responsible for arranging the assessment on behalf of the Candidate.

The minimum age limit for Candidates taking Certificates of Competence is 16 years. There is no upper age limit.

The assessment consists of **one** compulsory unit:

Unit 171 (PA8)

(Mandatory)

(Credit Value 3)

- | | | |
|------------|--|-----------------------------|
| Outcome 1. | Know the legislative and safety regulations relating to mixing and transferring pesticides | (Criteria 1.1 – 1.2) |
| Outcome 2. | Be able to assess the environmental factors relating to the mixing and transferring site | (Criteria 2.1 – 2.2) |
| Outcome 3. | Be able to read and interpret product information | (Criteria 3.1 – 3.2) |
| Outcome 4. | Be able to prepare the mixing and transferring equipment | (Criteria 4.1 – 4.2) |
| Outcome 5. | Be able to operate the mixing and transferring equipment | (Criteria 5.1 – 5.5) |
| Outcome 6. | Know how to carry out post-operational procedures | (Criteria 6.1 – 6.3) |

Candidates must successfully achieve **all** assessment activities in the above unit.

There are no endorsements for this Award.

Quality Assurance

Verification is a process of monitoring assessment; it is an essential check to confirm that the assessment procedures are being carried out in the way City & Guilds has specified. The overall aim of Verification is to establish a system of quality assurance that is acceptable in terms of both credibility and cost effectiveness.

Approved Assessors will be subject to a regular visit by a Verifier at a time when assessments are being undertaken.

Documents completed by the Assessor may be inspected by a Centre appointed Internal Verifier and a City & Guilds approved Verifier at any time.

Compliance with the verification requirements is a pre-requisite for Assessors remaining on the list of approved Assessors.

After assessment has been completed the Qualification Guidance is to be retained by the Assessor for 12 months and is to be made available for inspection by a Centre appointed Internal Verifier, a City & Guilds approved Verifier or when a centre visit takes place by a Quality Systems Consultant (QSC).

Performance Evaluation

The result of each assessment activity is evaluated against the following criteria:

- M =** Met Meets or exceeds the assessment criteria by displaying a level of practical performance and/or underpinning knowledge. If the Criterion has been MET, a tick is to be put in the box provided in the bottom right-hand column of each section.
- NM =** Not Met Does not satisfy the requirements of the assessment criteria, being unable to perform the practical task satisfactorily or safely or having insufficient underpinning knowledge. If the Criterion is NOT MET, a cross is to be put in the box provided in the bottom right-hand column of each section.

Appeals and Equal Opportunities

Centres must have their own auditable, appeals procedures. If a Candidate is not satisfied with the examination conditions or a Candidate feels the opportunity for examination is being denied, the Centre Manager should, in the first instance, address the problem. If, however the problem cannot be resolved, City & Guilds will arbitrate and a Principal Verifier may be approached to offer independent advice. All appeals must be clearly documented by the Centre Manager and made available to the Principal Verifier or City & Guilds if advice is required.

Should occasions arise when Centres are not satisfied with any aspect of the verification process, they should contact the Quality Assurance Manager at City & Guilds NPTC, Building 500, Abbey Park, Stareton, Warwickshire, CV8 2LY. Telephone 024 7685 7300

Access to the qualification is open to all, irrespective of gender, race, creed or special needs. Subject to H&S restrictions the Centre Manager should ensure that no learner is subjected to unfair discrimination on any grounds in relation to access to assessment and to the fairness of the assessment. QCA requires City & Guilds to monitor centres to check whether equal opportunities policies are being adhered to.

Validation of Equipment

All equipment being used for this assessment must comply with the relevant requirements of the Provision and Use of Work Equipment Regulations (PUWER) 1998.

Vehicles must comply with Department of Transport and Road Traffic Acts where relevant.

Any machinery/equipment complying with current legal requirements is acceptable for the assessment, provided it is suitably equipped for **all** assessment activities to be carried out.

Summary of responsibilities in the assessment process		
Centre responsibilities	Candidate responsibilities	Assessor responsibilities
A suitable site is made available for the assessment to take place		Ensuring that the site provided is suitable for the assessment to take place
Machinery, equipment and materials are available to enable assessment of all the activities to take place	To be familiar with the machinery/equipment being used for the assessment	Ensuring that the machinery, equipment and materials provided satisfy the assessment requirements
	To bring appropriate Personal Protective Equipment (PPE) to the assessment	Ensuring that candidate's PPE complies with the requirements of the assessment
	To bring relevant training materials (including calibration sheet if applicable)	
	To bring a product label appropriate for the assessment	To ensure that the product label is appropriate for the assessment (or provide a suitable alternative)

Safe Practice

The Assessor and Candidate must wear Personal Protective Equipment (PPE) when appropriate.

The Assessor must ensure that a Site Specific Risk Assessment is carried out.

All equipment must be operated in such a way that the Candidate, Assessor, other persons and the environment are not endangered. Failure to operate safely and comply with these requirements will result in the Candidate not meeting the required standard.

A breach of Health and Safety that puts any person at risk during the assessment process will result in the assessment being terminated and the Candidate not meeting the required standard. The Assessor may stop the assessment on the grounds of safety at any time at their discretion.

Before any assessments take place, Assessor & Candidate should be aware of any local or national issues to prevent breach of security, safety and any cross contamination or damage to the local environment.

Information

During the assessment the candidate may refer to operator manuals, training materials or safety publications, but they **may not** refer to the Qualification Guidance Document.

Questions should be related to the background or employment aspirations of the candidate.

Candidates who undertake this assessment and have met the requirements are reminded of their legal obligation to receive/undertake appropriate additional training in the use of any equipment that differs from that used during the assessment, but which they are nevertheless qualified to use.

Assessment Guidance for the Assessor

This qualification can only be assessed by an Assessor who is suitably qualified and meets the requirements of the awarding body. The Assessor must be independent **and cannot have been involved with the training of the Candidate**. Please see City & Guilds Centre Manual for guidance.

The Candidate is to be notified of the place and time of assessment and when formal assessment commences and ceases.

Assessors are reminded that assessment is a formal process and that assessment must be carried out using this Qualification Guidance. All relevant assessment criteria must be assessed as specified in the Qualification Guidance. Assessment will be carried out by direct observation and by oral questioning of the Candidate. **Where a specific number of responses are required these may include other suitable answers not specified if they are deemed to be correct by the Assessor.** The performance of the Candidate is to be recorded on the Qualification Guidance as directed by completing the tick boxes. Space has been provided on the Qualification Guidance for the person assessing to record relevant information which can be utilised to provide feedback to the Candidate. After assessment has been completed the Qualification Guidance document is to be retained by the assessor and provided if required.

Assessment Guidance for the Candidate

A list of registered Assessment Centres is available from City & Guilds NPTC. (www.nptc.org.uk)

Assessment is a process by which it is confirmed that the candidate is competent in the unit(s) within the award to which the assessment relates. It is the process of collecting evidence about the candidate's capabilities and judging whether that evidence is sufficient to attribute competence.

The Candidate must be registered through the City & Guilds approved Assessment Centre for this qualification prior to the assessment.

The results of the assessment will be recorded on the Record of Assessment form (ROA).

The Qualification Guidance contains criteria relating to:

- Observation of practical performance
- Assessment of underpinning knowledge

Published by
City & Guilds
5-6 Giltspur Street
London UK EC1A 9DE
T +44 (0)24 7685 7300
F +44 (0)24 7669 6128
www.nptc.org.uk
e-mail: information@cityandguilds.com

City & Guilds is a registered charity established to promote education and training

Unit 171 – Mixing and Transferring Pesticides

Candidate A	Name:	Date:	Start Time:	Duration:
Candidate B	Name:	Date:	Start Time:	Duration:
Candidate C	Name:	Date:	Start Time:	Duration:
Candidate D	Name:	Date:	Start Time:	Duration:

CRITERIA NUMBER	ASSESSMENT CRITERIA	ASSESSOR GUIDANCE	ASSESSMENT ACTIVITIES	CANDIDATE			
				A	B	C	D
Unit 171 1.1	Describe the legal requirements relating to mixing and transferring pesticides	Candidate to describe two operator's obligations in terms of legal requirements	May include: <ul style="list-style-type: none"> all required guards are in place and equipment complies with legal requirements comply with all relevant road traffic regulations when operating or transporting on the public highway comply with The Plant Protection Products (Sustainable Use) Regulations 2012 the operator must hold the appropriate certification for the equipment they are using <p style="text-align: right;">Met ✓ Not Met X</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unit 171 1.2	Describe how to mix and transfer pesticides following industry best practice	Candidate to describe one operator safety regulation in terms of using mixing and transferring equipment Candidate to state three considerations for safe driving on a public highway	May include: <ul style="list-style-type: none"> comply with Pesticide Codes of Practice adopt industry best practice be aware of any safety implications imposed by Risk/COSHH Assessment and comply with the requirements May include: <ul style="list-style-type: none"> independent brakes coupled together travelling at high speed makes vehicle unstable valves secured all equipment securely stowed all pesticides securely stowed <p style="text-align: right;">Met ✓ Not Met X</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unit 171 2.1	Identify risks to the environment	Candidate to identify all relevant risks to the environment for the application site	May include: <ul style="list-style-type: none"> ground conditions water courses environmental margins/strips/areas drains boreholes wildlife sensitive crops/areas hedgerows housing public access other risks particular to the site <p style="text-align: right;">Met ✓ Not Met X</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unit 171 2.2	Explain how to minimise risks to the environment	Candidate to explain how to minimise the risks identified in 2.1	May include: <ul style="list-style-type: none"> suitable mixing / transfer site safe filling procedure safe transfer procedure containment of spillage safe storage of pesticide <p style="text-align: right;">Met ✓ Not Met X</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

CRITERIA NUMBER	ASSESSMENT CRITERIA	ASSESSOR GUIDANCE	ASSESSMENT ACTIVITIES	CANDIDATE			
				A	B	C	D
Unit 171 3.1 Unit 171 3.2	Read product information Interpret product information	The candidate is required to read and interpret the information on a product label and provide relevant information as requested by the Assessor Note to the Assessor: A product label is required. It is expected that the candidate will provide the product label. The label provided must be for a currently approved product and appropriate to the candidates normal work situation Note to the Candidate (Assessor also to note): It is acceptable for key information on the label to be highlighted for use during the assessment	The following to be provided: <ul style="list-style-type: none"> • product name • active substance(s) (ingredient(s)) Important information: <ul style="list-style-type: none"> • field of use • crop/target • maximum individual dose • specific product precautions/warnings • operator protection • environmental protection Crop specific information: <ul style="list-style-type: none"> • crop/target • dose rate • water volume • filling • mixing • additional label information • compatibility <p style="text-align: right;">Met ✓ Not Met X</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unit 171 4.1	Identify the equipment components and controls	Candidate to identify all components and controls relating to the equipment being used for the assessment	May include: <ul style="list-style-type: none"> • main tank • pump • ancillary power source • filling control and devices • agitation control • on/off control • filters • tank wash system • clean water tank • tank drain • other components/controls specific to the equipment <p style="text-align: right;">Met ✓ Not Met X</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unit 171 4.2	Carry out pre-use and operational checks to the equipment	Candidate to carry out all pre-use and operational checks to the equipment Check for mechanical defects Check that the equipment is lubricated correctly Check security of attachment of equipment mechanisms Remove, clean and refit a filter Part fill equipment	May include all/some of the following as applicable to the equipment: <ul style="list-style-type: none"> • seized, worn or damaged controls/components • identification of lubrication points • visual inspection of lubrication points • visual inspection of levels (if applicable) • fasteners tight • straps inspected and adjusted if necessary • drawbar pin secured (if applicable) Candidate to: <ul style="list-style-type: none"> • remove and clean using appropriate method • contain spillage • check for defects • refit • suitable site selected • fill by usual on-site method, following approved procedures • clean water supply <p style="text-align: right;">Met ✓ Not Met X</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unit 171 5.1	Interpret instructions from the sprayer operator	Candidate to interpret instructions from sprayer operator	To include: <ul style="list-style-type: none"> • identification of correct instructions • correct interpretation of instructions <p style="text-align: right;">Met ✓ Not Met X</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

CRITERIA NUMBER	ASSESSMENT CRITERIA	ASSESSOR GUIDANCE	ASSESSMENT ACTIVITIES	CANDIDATE			
				A	B	C	D
Unit 171 5.2	Measure the required quantities and add to the equipment	Candidate to measure and add quantities required for the instruction specified in 5.1 Note: This will be a simulated pesticide product	To include: <ul style="list-style-type: none"> correct selection and use of PPE (as required by the product label and/or COSHH/Risk Assessment) suitable site selected fill by usual on-site method, following approved procedures clean water supply accurate measurement of water accurate measurement of pesticide correct filling procedure use of filling device if fitted avoidance of spillage observance of pesticide manufacturers instructions for mixing and agitation <p style="text-align: right;">Met ✓ Not Met X</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unit 171 5.3	Demonstrate safe and accurate transfer procedures	Candidate to safely and accurately transfer the diluted pesticide to the applicator	To include: <ul style="list-style-type: none"> determine requirement from instructions correct amount transferred safe procedure avoidance of spillage <p style="text-align: right;">Met ✓ Not Met X</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unit 171 5.4	Carry out all activities protecting human health and the environment	Note to the Assessor: Assessor to be satisfied that the candidate has carried out all activities protecting human health and the environment	To include: <ul style="list-style-type: none"> prevention of personal injury and contamination through correct selection and use of PPE (as required by the product label and/or COSHH/Risk Assessment) prevention of public/bystander contamination safe filling/transferring procedure avoidance of spillage <p style="text-align: right;">Met ✓ Not Met X</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unit 171 5.5	Complete records	Candidate is required to complete a treatment record Note to the Assessor: The treatment record must be approved by the Assessor (or supplied by the Assessor if necessary)	Completion of the mixing/transferring record must be: <ul style="list-style-type: none"> accurate legible (if handwritten) <p style="text-align: right;">Met ✓ Not Met X</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unit 171 6.1	Explain how to manage surplus pesticide and dispose of waste materials	Candidate to explain one method of dealing with surplus concentrate pesticide Candidate to explain two methods of dealing with waste containers and packaging Candidate to explain two methods of dealing with surplus dilute pesticide	May include: <ul style="list-style-type: none"> return to temporary mobile store return to fixed store Containers: <ul style="list-style-type: none"> triple rinsed placed in secure storage until disposal returned to supplier collected by licensed waste contractor Packaging: <ul style="list-style-type: none"> thoroughly emptied placed in secure storage until disposal collected by licensed waste disposal contractor May include: <ul style="list-style-type: none"> transfer to applicator for application back on to site as long as it is below the maximum dose rate transfer to applicator for use on another approved crop/target treated by specialist treatment facility on site (e.g. a lined bio bed) collected by licensed waste disposal contractor <p style="text-align: right;">Met ✓ Not Met X</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

CRITERIA NUMBER	ASSESSMENT CRITERIA	ASSESSOR GUIDANCE	ASSESSMENT ACTIVITIES	CANDIDATE			
				A	B	C	D
Unit 171 6.2	Explain how to clean and decontaminate the mixing and transferring equipment	Candidate to explain four factors that need to be considered when cleaning and decontaminating the equipment	May include: <ul style="list-style-type: none"> • select and use appropriate PPE • appropriate site • thorough washing with water and suitable additive if required • internal and external surfaces • use of in-built wash systems if provided • care to ensure contamination 'hot-spots' are clean • thorough flushing of systems • safe disposal of contaminated washings (usually transferred to applicator for disposal) • when cleaning should take place • safe procedures followed <p style="text-align: right;">Met ✓ Not Met X</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unit 171 6.3	Describe the storage requirements for the mixing and transferring equipment	Candidate to describe three factors to consider prior to storing the equipment	May include: <ul style="list-style-type: none"> • ensure the equipment is clean and dry • inspect for wear and damage • replace any worn or damaged parts • ensure system is drained and any valves left in appropriate positions • frost protection measures implemented • lubricate as required • store undercover and out of direct sunlight • store in a secure area <p style="text-align: right;">Met ✓ Not Met X</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Summary of Assessment (*The Assessor is to complete the following as appropriate*)

Candidate A	Candidate has met all of the assessment criteria	Tick <input checked="" type="checkbox"/> <input type="checkbox"/>	The Candidate has not met all of the assessment criteria; (state reason(s))	Tick <input checked="" type="checkbox"/> <input type="checkbox"/>
	Signed:		Date:	

Candidate B	Candidate has met all of the assessment criteria	Tick <input checked="" type="checkbox"/> <input type="checkbox"/>	The Candidate has not met all of the assessment criteria; (state reason(s))	Tick <input checked="" type="checkbox"/> <input type="checkbox"/>
	Signed:		Date:	

Candidate C	Candidate has met all of the assessment criteria	Tick <input checked="" type="checkbox"/> <input type="checkbox"/>	The Candidate has not met all of the assessment criteria; (state reason(s))	Tick <input checked="" type="checkbox"/> <input type="checkbox"/>
	Signed:		Date:	

Candidate D	Candidate has met all of the assessment criteria	Tick <input checked="" type="checkbox"/> <input type="checkbox"/>	The Candidate has not met all of the assessment criteria; (state reason(s))	Tick <input checked="" type="checkbox"/> <input type="checkbox"/>
	Signed:		Date:	

For use by Internal Verifier ONLY if the assessment process was internally verified
(Internal Verifier to complete ONE of the boxes below)

I observed an assessment process taking place and I am satisfied that the assessment was conducted in line with the qualification requirements.	Tick <input checked="" type="checkbox"/> <input type="checkbox"/>
I observed an assessment process taking place. The following were noted as areas of concern.	Tick <input checked="" type="checkbox"/> <input type="checkbox"/>
Signed:	
Date:	