



City & Guilds NPTC Level 2 Award in the Safe Mixing and Transferring of Pesticides (PA8) (601/5147/X)

Version 1.0 (February 2024)

Assessment Pack – Centre and Candidate Version

Version and date	Change detail	Section
1.0 February 2024	First version	All

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Introduction

This assessment relates to the unit in the Qualification handbook. The assessment can be achieved at pass only. If any task is not yet met the candidate is unsuccessful.

This assessment is for the following units and learning outcomes:

171 Mixing and transferring pesticides covering the following learning outcomes:

1. Know the legislative and safety regulations relating to Mixing and transferring pesticides
2. Be able to assess the environmental factors relating to the mixing and transferring site
3. Be able to read and interpret product information
4. Be able to prepare the mixing and transferring equipment
5. Be able to operate the mixing and transferring equipment
6. Know how to carry out post-operational procedures

General guidance on the requirements for assessment can be found in the Assessor Guidance General guidance on the requirements for assessment can be found in the Assessor Guidance document available on the City & Guilds web site www.nptc.org.uk

The assessor must complete the Practical Table mark sheet for each candidate which should be kept by the assessor for a minimum period of twelve months.

Record of assessment (ROA)

A prepopulated record of assessment must be completed by the assessor following an assessment. The number of outcomes is listed above, these must be ticked into the relevant met or not met sections of the ROA.

ARAS Forms

An Assessment Result Advice Slip (ARAS form) must be completed by the assessor following an assessment. The ARAS is not a certificate but, based on the evidence of the candidate's performance, is a recommendation to City & Guilds that the candidate is either met or not met the assessment criteria. All feedback is to be recorded by the assessor on the feedback section of the ARAS form.

Assessment Time

The expected assessment time for this qualification is 1.5 – 3 hours.

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)

This is not an open book assessment, however additional technical information may be sought from the relevant manufacturer's operator manuals or any other appropriate training or safety publication.

Practical observation descriptor table

171 Mixing and transferring pesticides

Activity number and description from check list		Assessment criteria
1.1	Describe the legal requirements relating to Mixing and transferring pesticides	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
1.2	Describe how to mix and transfer pesticides following industry best practice	Operator safety regulation <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 Safe driving on a public highway

		<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
2.1	Identify risks to the environment	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
2.2	Explain how to minimise risks to the environment	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
3.1 - 3.2	Read product information Interpret product information	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
4.1	Identify the equipment components and controls	May include: <ul style="list-style-type: none"> • main tank • pump • ancillary power source • filling control and devices

		<ul style="list-style-type: none"> • agitation control • on/off control • filters • tank wash system • clean water tank • tank drain • other components/controls specific to the equipment
4.2	Carry out pre-use and operational checks to the equipment	<p>May include all/some of the following as applicable to the equipment:</p> <p>Mechanical defects</p> <ul style="list-style-type: none"> • seized, worn or damaged controls/components <p>Equipment lubrication:</p> <ul style="list-style-type: none"> • identification of lubrication points • visual inspection of lubrication points • visual inspection of levels (if applicable) <p>Security of attachment:</p> <ul style="list-style-type: none"> • fasteners tight • straps inspected and adjusted if necessary • drawbar pin secured (if applicable) <p>Remove, clean and refit a filter</p> <ul style="list-style-type: none"> • remove and clean using appropriate method • contain spillage • check for defects • refit <p>Part fill equipment</p> <ul style="list-style-type: none"> • suitable site selected • fill by usual on-site method, following approved procedures • clean water supply
5.1	Interpret instructions from the sprayer operator	<p>To include:</p> <ul style="list-style-type: none"> • identification of correct instructions • correct interpretation of instructions
5.2	Measure the required quantities and add to the equipment	<p>To include:</p> <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

		<ul style="list-style-type: none"> observance of pesticide manufacturers instructions for mixing and agitation
5.3	Demonstrate safe and accurate transfer procedures	<p>To include:</p> <ul style="list-style-type: none"> determine requirement from instructions correct amount transferred safe procedure avoidance of spillage
5.4	Carry out all activities protecting human health and the environment	<p>To include:</p> <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
5.5	Complete records	<p>Completion of the mixing/transferring record must be:</p> <ul style="list-style-type: none"> accurate legible (if handwritten)
6.1	Explain how to manage surplus pesticide and dispose of waste materials	<p>Surplus concentrate pesticide</p> <ul style="list-style-type: none"> return to temporary mobile store return to fixed store <p>Containers:</p> <ul style="list-style-type: none"> triple rinsed placed in secure storage until disposal Shapereturned to supplier collected by licensed waste contractor <p>Packaging:</p> <ul style="list-style-type: none"> thoroughly emptied placed in secure storage until disposal collected by licensed waste disposal contractor <p>Surplus dilute pesticide</p> <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
6.2	Explain how to clean and decontaminate the mixing and transferring equipment	<p>May include:</p> <ul style="list-style-type: none"> select and use appropriate PPE appropriate site

		<ul style="list-style-type: none"> • 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
6.3	Describe the storage requirements for the mixing and transferring equipment	<p>May include:</p> <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

Appendix 1 Practical table

171 Mixing and transferring pesticides

All criteria must be achieved.

Activity number and description	Achieved
1.1 Describe the legal requirements relating to Mixing and transferring pesticides	
1.2 Describe how to mix and transfer pesticides following industry best practice	
2.1 Identify risks to the environment	
2.2 Explain how to minimise risks to the environment	
3.1 Read product information	
3.2 Interpret product information	
4.1 Identify the equipment components and controls	
4.2 Carry out pre-use and operational checks to the equipment	
5.1 Interpret instructions from the sprayer operator	
5.2 Measure the required quantities and add to the equipment	
5.3 Demonstrate safe and accurate transfer procedures	
5.4 Carry out all activities protecting human health and the environment	
5.5 Complete records	
6.1 Explain how to manage surplus pesticide and dispose of waste materials	
6.2 Explain how to clean and decontaminate the mixing and transferring equipment	
6.3 Describe the storage requirements for the mixing and transferring equipment	

Appendix 2 Sources of general information

The following documents contain essential information for centres delivering City & Guilds qualifications. To download the documents and to find other useful documents, go to the **Centre Document Library** on www.cityandguilds.com or click on the links below:

Quality Assurance Standards: Centre Handbook

This document is for all approved centres and provides guidance to support their delivery of our qualifications. It includes information on

- Centre quality assurance criteria and monitoring activities
- Administration and assessment systems
- Centre-facing support teams at City & Guilds / ILM
- Centre quality assurance roles and responsibilities.

The Centre Handbook should be used to ensure compliance with the terms and conditions of the Centre Contract.

Quality Assurance Standards: Centre Assessment

Approved centres must have effective quality assurance systems to ensure optimum delivery and assessment of qualifications. Quality assurance includes initial centre approval, qualification approval and the centre's own internal procedures for monitoring quality. Centres are responsible for internal quality assurance and City & Guilds is responsible for external quality assurance. All external quality assurance processes reflect the minimum requirements for verified and moderated assessments, as detailed in the Centre Assessment Standards Scrutiny (CASS), section H2 of Ofqual's General Conditions. For more information on both CASS and City & Guilds Quality Assurance processes visit: the [What is CASS?](#) and [Quality Assurance Standards](#) documents on the City & Guilds website.

This document sets out the minimum common quality assurance requirements for our regulated and non-regulated qualifications that feature centre assessed components. Specific guidance will also be included in relevant qualification handbooks and/or assessment documentation.

It incorporates our expectations for centre internal quality assurance and the external quality assurance methods we use to ensure that assessment standards are met and upheld. It also details the range of sanctions that may be put in place when centres do not comply with our requirements, or actions that will be taken to align centre marking/assessment to required standards. Additionally, it provides detailed guidance on the secure and valid administration of centre-assessments.

Access arrangements - When and how applications need to be made to City & Guilds

provides full details of the arrangements that may be made to facilitate access to assessments and qualifications for candidates who are eligible for adjustments in assessment.

The **Centre Document Library** also contains useful information on such things as:

- Conducting examinations
- Registering learners

- Appeals and malpractice

Useful contacts

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City & Guilds Group

The City & Guilds Group is a leader in global skills development. Our purpose is to help people, organisations and economies develop their skills for growth. We work with education providers, employers and governments in over 100 countries across the world to help people, businesses and economies grow by shaping skills systems and supporting skills development.

The Group is made up of City & Guilds, ILM, Kineo, The Oxford Group, Gen2, and Intertrain. Together we set the standard for professional and technical education and corporate learning and development around the world.

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