

# CITY & GUILDS NPTC LEVEL 2 AWARD IN SAFE USE OF PESTICIDES REPLACING GRANDFATHER RIGHTS (QCF) (PAGR) 601/1388/1



## QUALIFICATION GUIDANCE

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 - 0 5	L2 Award in Safe Use of Pesticides Replacing Grandfather Rights (QCF) (PAGR)
Unit(s)	0 5 1	The Principles of the Safe Handling and Application of Pesticides on own Land
	0 5 2	Hand Held Pesticide Application on own Land
	0 5 3	Operating Machines to apply Pesticides to own Land
	0 5 4	Application of Pesticides using other Specific Equipment or Methods on own Land
Learning Time (LT)	0 5 1	LT 26 (3 Credits)
	0 5 2	LT 24 (3 Credits)
	0 5 3	LT 24 (3 Credits)
	0 5 4	LT 24 (3 Credits)
Recommended Assessment Duration	0 5 1	30 minutes per Candidate
	0 5 2	1.5 – 3 hours per Candidate
	0 5 3	2 – 3 hours per Candidate
	0 5 4	1 – 3 hours per Candidate

(\* Please see note on page 2)

# City and Guilds NPTC Level 2 Award in Safe Use of Pesticides Replacing Grandfather Rights (QCF) (PAGR) 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

This qualification is specifically for those who were previously exempt under 'Grandfather Rights' who apply pesticides on land they own or occupy. From 26<sup>th</sup> November 2015 under the requirements of the Plant Protection Products (Sustainable Use) Regulation (2012) – a training certificate or Certificate of Competence is required for anyone who is going to apply any professional product. This qualification satisfies those requirements and will be awarded to Candidates who achieve the required level of competence in the units to which their Certificate relates.

## What is the Qualifications and Credits Framework?

OFQUAL have introduced the Qualifications and Credit Framework (QCF) to increase flexibility for learners and employers. Qualifications may be built up from individual units according to rules of combination. The units are compiled by City and Guilds NPTC and agreed with the Chemicals Regulation Directorate of the Health and Safety Executive.

## 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.

## \* Learning Time (LT)

**Learning Time (LT)** is a better indicator of the time requirement needed for a candidate to achieve competence in this qualification. It has replaced Guided Learning Hours (GLH) which are defined as *"tutor or teacher led hours"*. LT is defined as **"a notional measure of the learning time a typical learner might be expected to take to complete and achieve all learning outcomes"**. It takes into account prior learning and encompasses: formal learning (including classes, tutorials, on line tuition), coaching and mentoring, practical work, relevant IT activity, information retrieval, expected private study and revision, work-based activity which leads to assessment, practice to achieve competence, formative assessment, programme planning and feedback.

## Access to Assessment

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

Only candidates born **before 31st December 1964** are eligible to take this qualification. There is no upper age limit.

The assessment consists of **one** compulsory unit and **three** optional units:

<b>Unit 051</b>	(Mandatory)	(Credit Value 3)	(Print pages 6 - 9 plus 34)
Outcome 1.	Know the legislative requirements and codes of practice relating to the use of pesticides on own land <b>(Criteria 1.1 – 1.2)</b>		
Outcome 2.	Understand the relevance of pesticide product information <b>(Criteria 2.1 – 2.1)</b>		
Outcome 3.	Understand how to minimise the risk of human contamination and implement emergency procedures <b>(Criteria 3.1 – 3.4)</b>		
Outcome 4.	Know how to store and transport pesticides safely <b>(Criteria 4.1 – 4.2)</b>		
Outcome 5.	Know how to manage and dispose of surplus pesticide and waste materials <b>(Criteria 5.1 – 5.2)</b>		
Outcome 6.	Know the record keeping requirements associated with pesticide operations <b>(Criteria 6.1 – 6.1)</b>		
Outcome 7.	Understand how to minimise the risk of environmental contamination and implement emergency procedures <b>(Criteria 7.1 – 7.1)</b>		
<b>Unit 052</b>	(Optional)	(Credit Value 3)	(Print pages 10 – 14 plus 34)
Outcome 1.	Know the legislative and safety regulations relating to sprayer/applicator use on own land <b>(Criteria 1.1 – 1.2)</b>		
Outcome 2.	Understand the environmental factors relating to mixing and application of pesticides <b>(Criteria 2.1 – 2.2)</b>		
Outcome 3.	Be able to read and interpret product information <b>(Criteria 3.1 – 3.2)</b>		
Outcome 4.	Be able to prepare and calibrate a hand held pedestrian applicator <b>(Criteria 4.1 – 4.7)</b>		
Outcome 5.	Be able to operate the application equipment to apply pesticides onto own land <b>(Criteria 5.1 – 5.4)</b>		
Outcome 6.	Understand how to carry out post-operational procedures <b>(Criteria 6.1 – 6.3)</b>		

**Access to Assessment continued ...**

**Unit 053** (Optional) (Credit Value 3) (Print pages 15 – 24 plus 34)

- Outcome 1. Know the legislative and safety regulations relating to application equipment on own land **(Criteria 1.1 – 1.2)**
- Outcome 2. Be able to assess the environmental factors relating to the mixing and application site **(Criteria 2.1 – 2.2)**
- Outcome 3. Be able to read and interpret pesticide product information **(Criteria 3.1 – 3.2)**
- Outcome 4. Be able to prepare and calibrate the applicator **(Criteria 4.1 – 4.5)**
- Outcome 5. Be able to operate the application equipment to apply pesticides on own land **(Criteria 5.1 – 5.4)**
- Outcome 6. Understand how to carry out post-operational procedures **(Criteria 6.1 – 6.3)**

**Unit 054** (Optional) (Credit Value 3) (Print pages 25 - 34)

- Outcome 1. Know the legislative and safety regulations relating to application equipment on own land **(Criteria 1.1 – 1.2)**
- Outcome 2. Be able to assess the environmental factors relating to the mixing and application 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 and calibrate other specific equipment **(Criteria 4.1 – 4.7)**
- Outcome 5. Be able to operate the application equipment **(Criteria 5.1 – 5.4)**
- Outcome 6. Know how to carry out post-operational procedures **(Criteria 6.1 – 6.3)**

Candidates must successfully achieve **all** assessment activities in the **mandatory unit** and **one, or more** optional unit.

<b>Mandatory Unit</b> – Unit 1 The principles of safe handling and application of pesticides on own land	
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**Plus one optional unit from any of the following:**

Optional Units	Type of equipment covered by the unit
Unit 2 Hand held pesticide application on own land	Hand held applicators; hydraulic and atomiser types, application to water using hydraulic and atomiser types, slug pellet applicators, granule applicators to land, granule applicators to water and any other type of hand held applicator.
Unit 3 Operating machines to apply pesticides to own land	All types of mounted boom sprayer, all types of mounted wick applicators, mounted or trailed broadcast sprayers, mounted or trailed variable geometry boom sprayers with/without air assistance, mounted or trailed pellet or granular applicators.
Unit 4 Applying pesticides using other specific equipment or methods	Fogging, misting and smokes, batch dipping, seed treating equipment, application of pesticides to material as a continuous process, sub surface liquid pesticide application, all types of boat mounted applicators and any other item of pesticide equipment not covered in units 2 and 3.

**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

The candidate may refer to operator manuals, training materials (including the workbook for this qualification) or safety publications during the assessment. But they **may not** refer to the Qualification Guidance Document **during the assessment**.

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.
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## 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.

### Assessment Guidance for the Assessor continued...

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](http://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 their 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

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

## Unit 051 – The Principles of the Safe Handling and Application of Pesticides on own Land

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 051 1.1	Identify an operators responsibilities under current legislation relating to the use of pesticides on own land	<p><b>Note to the Assessor:</b> the candidate is required to <b>outline one key point</b> from each piece of legislation specifically affecting pesticide legislation in <b>bold, no's 3,4 and 5</b></p> <p><b>Note to the Assessor:</b> the candidate is required to <b>outline four</b> key areas in <b>bold</b> covered by The Plant Protection Products (Sustainable Use) Regulations (2012)</p>	<p>Includes compliance with:</p> <ul style="list-style-type: none"> <li>1. The Health &amp; Safety at Work Act (1974) - specified duties under the act as an employer, employee or self employed person</li> <li>2. The Management of Health and Safety at Work Regulations (1999) - a risk assessment must be carried for all activities</li> <li><b>3. Control of Substances Hazardous to Health Regulations (2002)</b> - a COSHH assessment must be carried out and complied with</li> <li><b>4. The Control of Pesticide Regulations (1986)</b> - only certified operators may use professional products</li> <li><b>5. Personal Protective Equipment Regulations (1992)</b> - PPE must be supplied, and worn</li> <li>6. Manual Handling Operations Regulations (1992) - not to manually handle, use safe lifting techniques</li> <li>7. Provision and Use of Work Equipment Regulations (1998) - requires that regular checks are made to machinery and equipment</li> <li>8. Wildlife and Countryside Act (1981) - operations must be carried out at times to minimise the impact on wildlife</li> </ul> <p>And the:</p> <p><b>The Plant Protection Products (Sustainable Use) Regulations (2012)</b>, which encompass the following:</p> <ul style="list-style-type: none"> <li>Users of pesticides need to take reasonable precautions to protect human health and the environment when storing, handling, using and disposing of pesticides</li> <li>keep up to date with pesticide related legislation</li> <li><b>use only currently authorised and legal pesticides, be aware of illegal or counterfeit products, buy only from reputable sources, check that the product delivered matches the product ordered</b></li> <li><b>anyone purchasing a professional product must ensure that the end user holds a certificate of competence for application</b></li> <li>a person using a pesticide must receive adequate training for the task and hold a training certificate or Certificate of Competence unless working under direct supervision</li> <li><b>consider using alternative methods to pesticide application e.g. Integrated Pest Management or Integrated Weed Management</b></li> <li><b>preference should be given to products not classified as dangerous for the aquatic environment nor containing priority hazardous substances when the use of the product represents a risk to water quality</b></li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Continued				<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
Cont... Unit 051 1.1			<ul style="list-style-type: none"> <li>the amount of pesticide used and frequency is a low as reasonably practicable on: Roads, Railway lines, very permeable surfaces and sealed surfaces where there is a greater risk of run off or contamination of surface and groundwater; areas used by the general public or vulnerable groups; areas in the close vicinity of healthcare facilities; protected areas identified under the Water Framework Directive; and areas recently treated by pesticides which will be accessible to agricultural workers</li> <li>equipment must be inspected in line with current legislative requirements</li> <li>application must be confined to the intended target</li> </ul> <p style="text-align: right;"><b>Met ✓ Not Met X</b></p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unit 051 1.2	Identify an operators responsibilities under current codes of practice relating to the use of pesticides on own land	Candidate to <b>provide two</b> responsibilities under current codes of practice	May include: <ul style="list-style-type: none"> <li>follow current Code of Practice for the safe use of pesticides</li> <li>use pesticides in a safe manner</li> <li>carry out and comply with an environmental assessment of the application site</li> <li>ensure that equipment is in good condition</li> <li>the application equipment has been correctly calibrated</li> </ul> <p style="text-align: right;"><b>Met ✓ Not Met X</b></p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unit 051 2.1	Explain the relevance of product label information	Candidate to <b>provide four</b> explanations relating to the <b>relevance</b> of product label information	May include: <ul style="list-style-type: none"> <li>Important information – must be strictly complied with</li> <li>hazards associated with the product</li> <li>enviromental precautions</li> <li>PPE requirements</li> <li>active substance(s) – in the event of an emergency</li> <li>approved field of use – the industry sector for which the product is approved</li> <li>maximum dose rate – must not be exceeded</li> <li>timing of application(s) – manufacturer’s recommendations must be followed</li> <li>current authorisation number – evidence of authorisation</li> <li>approved adjuvants – only approved adjuvants can be used as recommended</li> </ul> <p style="text-align: right;"><b>Met ✓ Not Met X</b></p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unit 051 3.1	Identify possible routes of pesticide contamination	Candidate to <b>identify three</b> possible routes of contamination	May include: <ul style="list-style-type: none"> <li>through the eye</li> <li>absorption through the skin</li> <li>inhalation</li> <li>ingestion</li> <li>injection</li> </ul> <p style="text-align: right;"><b>Met ✓ Not Met X</b></p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unit 051 3.2	Identify appropriate Personal Protective Equipment (PPE) for pesticide application	Candidate to <b>identify all</b> items of PPE that may be required for pesticide application and <b>state</b> the importance of quality marks, type and condition	Quality standard marks e.g. CE Mark. type, condition and features of: <ul style="list-style-type: none"> <li>gloves</li> <li>coveralls</li> <li>face shields</li> <li>footwear</li> <li>respirators</li> </ul> <p style="text-align: right;"><b>Met ✓ Not Met X</b></p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unit 051 3.3	Identify the symptoms of pesticide contamination	Candidate to <b>state two</b> symptoms of pesticide contamination	May include: <ul style="list-style-type: none"> <li>headache</li> <li>nausea</li> <li>stomach pains</li> <li>rashes/blistering of skin</li> </ul> <p style="text-align: right;"><b>Met ✓ Not Met X</b></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 051 3.4	Explain appropriate procedures for dealing with pesticide contamination	Candidate is required to <b>explain</b> how to deal only with contamination	Appropriate procedures for dealing with pesticide contamination include: <ul style="list-style-type: none"> <li>self – rapidly identify contamination and decontaminate, remove contaminated PPE and clothing, seek medical advice if needed</li> <li>third parties – protect yourself, relocate to safe area, decontaminate if possible, remove contaminated PPE and clothing contact emergency services</li> <li>information access – product label and the Material Safety Data sheet (MSDS) made available</li> </ul> <p style="text-align: right;"><b>Met ✓ Not Met X</b></p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unit 051 4.1	State how pesticides should be stored	Candidate is required to <b>state three</b> ways in which pesticides should be stored	To include: <ul style="list-style-type: none"> <li>in original container, with product labels</li> <li>maintain stock security to avoid theft and misuse</li> <li>careful handling to reduce chances of spillage</li> <li>adequate containment facilities</li> <li>product segregation to avoid dangerous occurrences</li> </ul> <p style="text-align: right;"><b>Met ✓ Not Met X</b></p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unit 051 4.2	State how pesticides should be transported	Candidate is required to <b>state two</b> ways in which pesticides should be transported	<ul style="list-style-type: none"> <li>mobile storage is secure and meets current codes of practice</li> <li>careful handling to reduce chances of spillage</li> <li>adequate containment facilities</li> <li>return unused concentrated pesticide to the store</li> <li>maintain stock security to avoid theft and mis-use</li> </ul> <p style="text-align: right;"><b>Met ✓ Not Met X</b></p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unit 051 5.1	Identify appropriate methods of reducing waste from pesticide application	Candidate to <b>identify one</b> way to reduce waste from pesticide application	May include: <ul style="list-style-type: none"> <li>accuracy of calibration calculations</li> <li>correct mixing of pesticides</li> <li>correct calibration of sprayer/applicator</li> </ul> <p style="text-align: right;"><b>Met ✓ Not Met X</b></p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unit 051 5.2	State how to manage and dispose of surplus concentrate and dilute pesticides	Candidate to <b>state two</b> ways in which to manage and dispose of surplus concentrate and dilute pesticides	For concentrated pesticide it may include: <ul style="list-style-type: none"> <li>collected by a licensed waste disposal contractor</li> <li>return to supplier if currently approved</li> </ul> For dilute pesticide it may include: <ul style="list-style-type: none"> <li>back on to the site/target as long as it is below the maximum dose rate</li> <li>treated by a specialist treatment facility on site (e.g. a lined bio bed)</li> </ul> <p style="text-align: right;"><b>Met ✓ Not Met X</b></p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unit 051 5.3	State how to manage and Dispose of waste materials arising from pesticide operations	Candidate to <b>state three</b> ways in which to manage and dispose of waste materials arising from pesticide operations	May include: <ul style="list-style-type: none"> <li>dealing appropriately with empty packaging and containers - licensed waste disposal contractor</li> <li>triple rinse manually</li> <li>container disposal - licensed waste disposal contractor</li> <li>secure storage until disposal</li> <li>return to the supplier</li> <li>collected by a licensed waste disposal contractor for disposal if out of approval or suspect in any other way (e.g. counterfeit)</li> </ul> <p style="text-align: right;"><b>Met ✓ Not Met X</b></p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unit 051 6.1	Identify the records required to comply with legislation and best practice in respect to pesticide operations	Candidate to identify <b>two</b> records required to comply with legislation and best practice	May include: <ul style="list-style-type: none"> <li>training records</li> <li>environmental assessment records</li> <li>COSHH assessment records</li> <li>control measure records</li> <li>duplicate stock records (storage records)</li> <li>pesticide treatment records</li> <li>waste transfer notes</li> </ul> <p style="text-align: right;"><b>Met ✓ Not Met X</b></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 051 7.1	Identify the risks to the environment from pesticides	Candidate to identify <b>two</b> risks to the environment from pesticides	May include: <ul style="list-style-type: none"> <li>• pollution of water and the aquatic environment</li> <li>• pollution of specially designated areas</li> <li>• pollution or destruction of wildlife habitats</li> <li>• off target application/contamination</li> </ul> <p style="text-align: right;"><b>Met ✓ Not Met X</b></p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unit 051 7.2	Describe how to carry out pesticide application to minimise the risk to the environment	Candidate to <b>describe three</b> ways in which to carry out pesticide application to minimise the risk to the environment	May include: <ul style="list-style-type: none"> <li>• reasonable precautions must be taken to protect the environment</li> <li>• application must be confined to the intended target</li> <li>• application carried out at an appropriate time of day</li> <li>• protection of human health and the environment</li> <li>• apply only in suitable weather conditions</li> <li>• Informing neighbours/other interested parties</li> <li>• protection of the public accessing rights of way</li> </ul> <p style="text-align: right;"><b>Met ✓ Not Met X</b></p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unit 051 7.3	Explain appropriate procedures for dealing with environmental contamination from pesticides	Candidate to <b>describe</b> how to deal with <b>one spillage</b> and suspected animal poisoning	May include: <ul style="list-style-type: none"> <li>• dealing with minor spillages – containment, collection and disposal</li> <li>• dealing with major spillages – contain if possible, Inform appropriate Environmental Agency and the emergency services</li> <li>• dealing with suspected animal poisoning – phone Wildlife Incident Investigation Scheme</li> </ul> <p style="text-align: right;"><b>Met ✓ Not Met X</b></p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## Unit 052 – Hand Held Pesticide Application on own Land

<b>Candidate A</b>	<b>Name:</b>	<b>Date:</b>	<b>Start Time:</b>	<b>Duration:</b>
<b>Candidate B</b>	<b>Name:</b>	<b>Date:</b>	<b>Start Time:</b>	<b>Duration:</b>
<b>Candidate C</b>	<b>Name:</b>	<b>Date:</b>	<b>Start Time:</b>	<b>Duration:</b>
<b>Candidate D</b>	<b>Name:</b>	<b>Date:</b>	<b>Start Time:</b>	<b>Duration:</b>

<b>Unit 052</b> <b>1.1</b>	Describe the legal requirements relating to applying pesticides using pedestrian operated hand held application equipment to own land	Candidate to <b>describe one</b> legal obligation in terms of the requirements on the operator  <b>Assessor to note:</b> if already assessed in unit <b>one</b> , this criteria need not be re-assessed	May include: <ul style="list-style-type: none"> <li>comply with the current Pesticide Code of Practice</li> <li>comply with The Plant Protection Products (Sustainable Use) (Regulations 2012)</li> <li>ensuring that the equipment is in good condition and all required guards are in place as stated in the operators manual (if applicable)</li> </ul> <p style="text-align: right;"><b>Met ✓ Not Met X</b></p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Unit 052</b> <b>1.2</b>	Describe how to apply pesticides safely using hand held pedestrian equipment to own land following industry best practice	Candidate to <b>describe one</b> operator safety regulation in terms of using hand held pedestrian equipment  Candidate to <b>describe</b> the operational features of <b>both</b> overall and spot treatment - <b>three</b> are required for each technique	May include: <ul style="list-style-type: none"> <li>comply with codes of best practice</li> <li>be aware of any safety implications imposed by Risk/COSHH Assessment and comply with the requirements</li> </ul> <p>Overall treatment includes:</p> <ul style="list-style-type: none"> <li>consistent walking speed</li> <li>regular pumping to maintain constant pressure</li> <li>consistent nozzle height</li> <li>accurate on/off points</li> <li>matching of bouts</li> <li>avoidance of 'off target' application</li> </ul> <p>Spot treatment includes:</p> <ul style="list-style-type: none"> <li>use of a suitable nozzle</li> <li>maintaining a suitable height</li> <li>timed applications</li> <li>avoidance of under/over dosing</li> <li>avoidance of 'off target' application</li> </ul> <p style="text-align: right;"><b>Met ✓ Not Met X</b></p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Unit 052</b> <b>2.1</b>	Identify risks to the environment when mixing and applying pesticides	Candidate to <b>identify five</b> possible risks to the environment	May include any of the following: <ul style="list-style-type: none"> <li>'run off' if the ground conditions are not suitable</li> <li>pollution of water courses</li> <li>pesticide entering drains</li> <li>pollution of boreholes, water protection zones</li> <li>pesticide contamination of environmental margins</li> <li>detrimental affect on wildlife</li> <li>application to non-target plants</li> <li>damage to sensitive crops/areas</li> <li>damage to hedgerows</li> <li>affecting housing</li> <li>limiting public/animal access to the area</li> <li>any other risks specific to the site</li> </ul> <p style="text-align: right;"><b>Met ✓ Not Met X</b></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 052 2.2	Explain how to minimise the risks to the environment when mixing and applying pesticides on own land	<p>Candidate to <b>explain</b> how to minimise the risks identified in 2.1</p> <p>Candidate to <b>check and comment</b> on wind speed and direction</p> <p>Candidate to <b>state</b> the reason for minimising off target application and spray drift</p> <p>Candidate to state <b>three</b> factors that may affect spray drift</p>	<p>Explanation to include the following points:</p> <ul style="list-style-type: none"> <li>• use of an appropriate pesticide, preference given to product with least environmental impact</li> <li>• careful timing of application</li> <li>• check and maintain application rate</li> <li>• avoiding spray drift</li> <li>• avoid situations where run off occurs</li> <li>• observing buffer zones</li> <li>• erection of warning signs</li> <li>• notify neighbours before application</li> <li>• signage to inform the public of pesticide application</li> </ul> <p>• use of anemometer at suitable height or visible signs</p> <p>• wind direction</p> <p>Statement to include:</p> <ul style="list-style-type: none"> <li>• awareness of the possible effects of drift to crops, people, wildlife, water and the environment</li> </ul> <p>May include:</p> <ul style="list-style-type: none"> <li>• weather conditions</li> <li>• direction of spraying</li> <li>• nozzle type and size</li> <li>• pressure</li> <li>• walking speed</li> <li>• nozzle height</li> <li>• defective equipment</li> </ul> <p style="text-align: right;"><b>Met ✓ Not Met X</b></p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unit 052 3.1 Unit 052 3.2	Read product information Interpret product information	<p>The candidate is required to <b>read and interpret</b> the information on a product label and provide <b>relevant</b> information as requested by the Assessor</p> <p><b>Note to the Assessor:</b> a product label is required. It is expected that the candidate will provide the product label</p> <p>The label provided must be for a currently approved product and appropriate to the candidates normal work situation</p> <p><b>Note to the Candidate (Assessor also to note):</b> It is acceptable to highlight key information on the label prior to assessment and use it to provide information to the assessor during assessment</p>	<p>The following to be tested:</p> <ul style="list-style-type: none"> <li>• product name</li> <li>• active substance(s) (ingredient(s))</li> </ul> <p>Relevant information may include:</p> <ul style="list-style-type: none"> <li>• field of use</li> <li>• crop/target</li> <li>• maximum individual dose</li> <li>• maximum total dose</li> <li>• maximum number of treatments</li> <li>• specific product precautions/warnings</li> <li>• operator protection</li> <li>• environmental protection</li> <li>• restrictions on use</li> </ul> <p>Crop specific information may include:</p> <ul style="list-style-type: none"> <li>• crop/target</li> <li>• dose rate</li> <li>• water volume</li> <li>• timing</li> </ul> <p>Mixing and spraying may include:</p> <ul style="list-style-type: none"> <li>• filling</li> <li>• reduced volume applications (if applicable)</li> <li>• recommended nozzle(s)</li> <li>• recommended pressure</li> <li>• spray quality</li> </ul> <ul style="list-style-type: none"> <li>• compatibility</li> <li>• additional label information</li> </ul> <p style="text-align: right;"><b>Met ✓ Not Met X</b></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 052 4.1	Carry out pre use checks to the sprayer/applicator	Candidate to <b>carry out all</b> pre-use checks <b>relevant</b> to the sprayer/applicator being used for the assessment  Candidate to <b>part fill the sprayer/applicator</b> and <b>check</b> for satisfactory operation	To include all/any of the following: <ul style="list-style-type: none"> <li>Sprayer/applicator de-pressurized</li> </ul> Sprayer/applicator components to be inspected for serviceability and contamination that may include <b>any</b> of the following <b>applicable</b> to the sprayer/applicator: <ul style="list-style-type: none"> <li>tank</li> <li>lid</li> <li>filters</li> <li>hoses</li> <li>connections</li> <li>seals</li> <li>on/off control</li> <li>lance</li> <li>straps</li> <li>pump (if accessible)</li> <li>batteries</li> <li>engine</li> </ul> To include: <ul style="list-style-type: none"> <li>sprayer/applicator checked for leaks under pressure</li> <li>any problems identified to be rectified if within operators level of responsibility and ability</li> <li>condition confirmed as suitable for operation</li> </ul> <b>Met ✓ Not Met X</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unit 052 4.2	Identify suitable operating pressure and select nozzles according to application requirements	Candidate to <b>identify</b> and <b>explain</b> the use of the nozzle <b>fitted</b> to the applicator and <b>one</b> other  Candidate to <b>select</b> the correct pressure  Candidate to <b>check</b> nozzle is fitted correctly, it's condition and spray pattern using any appropriate method	Any two of the following: <ul style="list-style-type: none"> <li><b>Deflector</b> - medium/coarse spray quality, generally used to apply herbicides</li> <li><b>air inclusion</b> - medium/coarse spray quality, good drift reduction properties</li> <li><b>full cone</b> - medium/coarse spray quality, suitable for spot treatment and spraying around obstacles</li> <li><b>fan nozzle</b> - fine, medium or coarse spray quality suitable for use with hand held applicators</li> <li><b>hollow cone</b> - fine spray quality, generally used for insecticide and fungicide treatment</li> </ul> To include: <ul style="list-style-type: none"> <li>correct pressure selected for the nozzle and method of application</li> </ul> To include: <ul style="list-style-type: none"> <li>nozzle fitted correctly</li> <li>nozzle undamaged</li> <li>correct spray pattern for nozzle</li> </ul> <b>Met ✓ Not Met X</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unit 052 4.3	Make appropriate adjustments to the application equipment	Candidate is required to <b>demonstrate</b> how to make adjustments to the sprayer/applicator	May include: <ul style="list-style-type: none"> <li>altering pressure setting</li> <li>changing nozzles</li> </ul> <b>Met ✓ Not Met X</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unit 052 4.4	Calibrate the sprayer/applicator and record relevant data	The candidate is required to <b>calibrate</b> the sprayer/applicator and <b>record relevant</b> data  Candidate to <b>record relevant</b> calibration data  <b>Note to the Assessor:</b> any method of calibration may be used providing it is capable of allowing for different walking speeds and spray widths and is appropriate for the applicator	Calibration to include: <ul style="list-style-type: none"> <li>calculation of water volume rate</li> <li>check water volume rate against product information recommendations</li> <li>re-calibrate if necessary</li> </ul> Calibration data may include: <ul style="list-style-type: none"> <li>applicator used</li> <li>walking speed/time</li> <li>nozzle(s) fitted (spray width if appropriate)</li> <li>pressure setting</li> </ul> <b>Met ✓ Not Met X</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

CRITERIA NUMBER	ASSESSMENT CRITERIA	ASSESSOR GUIDANCE	ASSESSMENT ACTIVITIES	CANDIDATE			
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Unit 052 4.5	Measure the area to be treated	<b>Note to the Assessor:</b> a rectangular area of approximately 200sq metre typical of the candidates normal work situation  Candidate to <b>measure</b> the area. The Assessor may assist under direction of the candidate	To include: • accurate measurement of dimensions required  <b>Met ✓ Not Met X</b>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
Unit 052 4.6	Calculate the area to be treated	Candidate to <b>calculate</b> the area	To include: • accurate calculation of area required  <b>Met ✓ Not Met X</b>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
Unit 052 4.7	Calculate the quantities of pesticide and water required (or amount of premix required)	Candidate to <b>calculate</b> quantities required for the area calculated in 4.6 and a full tank	To include: • amount of water required for specified area • amount of pesticide required for specified area • amount of water required for a full tank • amount of pesticide required for full tank or • amount of premix required  <b>Met ✓ Not Met X</b>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Unit 052 5.1	Measure the required quantities and add to the sprayer/applicator, or attach pesticide container	Candidate to <b>measure</b> and <b>add</b> quantities required for the area specified in 4.6 and add to the sprayer/applicator, or attach pesticide container containing premix  <b>Note: this will normally be a simulated pesticide product</b>	To include all of the following: • correct selection and use of PPE (as required by the product label, COSHH and Risk Assessment) • suitable site selected • fill following product recommendations and approved procedures • correct use of water supply • accurate measurement of water • accurate measurement of pesticide • avoidance of spillage or • attach pesticide container  <b>Met ✓ Not Met X</b>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Unit 052 5.2	Demonstrate safe and accurate application procedures	The candidate is required to <b>treat</b> the area in 4.6 <b>demonstrating</b> safe and accurate application procedures	To include: • treatment area clearly identified • walking speed maintained • accurate switch on/off points • accurate matching of bouts • obstacles dealt with correctly (if applicable) • area treated minimising overlaps and misses • awareness of changing weather conditions and appropriate action taken (if applicable) • avoidance of off target application  <b>Met ✓ Not Met X</b>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Unit 052 5.3	Carry out all activities protecting human health and the environment	<b>Note to the Assessor:</b> the Assessor to be satisfied that the candidate has carried out <b>all</b> activities protecting human health and that of the environment during the assessment process	To include: • prevention of personal injury safe working procedures followed • prevention of contamination through correct selection and use of PPE (as required by the product information, COSHH and Risk Assessment) • prevention of public/bystander contamination • safe filling procedure • avoidance of off-target application • avoidance of overdosing crop/target/plant material  <b>Met ✓ Not Met X</b>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Unit 052 5.4	Complete a treatment record	The candidate is required to <b>complete</b> a treatment record  <b>Note to the Assessor:</b> the treatment record must be approved or if necessary supplied by the Assessor	Completion of the treatment record must be: • accurate • legible (if handwritten)  <b>Met ✓ Not Met X</b>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<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 052 6.1	Explain how to manage surplus pesticide and dispose of waste material	<p>Candidate to <b>explain one</b> method of managing surplus concentrate pesticide</p> <p>Candidate to <b>explain one</b> way of dealing with containers</p> <p>Candidate to <b>explain one</b> method of dealing with waste packaging</p> <p>Candidate to <b>explain one</b> method of managing surplus dilute pesticides</p>	<p>Explanation may include:</p> <ul style="list-style-type: none"> <li>return to temporary mobile store</li> <li>return to fixed store</li> </ul> <p>Containers:</p> <ul style="list-style-type: none"> <li>triple rinsed</li> <li>placed in secure storage until disposal</li> <li>returned to supplier</li> <li>collected by licensed waste contractor</li> </ul> <p>Packaging:</p> <ul style="list-style-type: none"> <li>thoroughly emptied</li> <li>placed in secure storage until disposal</li> <li>collected by licensed waste disposal contractor</li> </ul> <p>Explanation may include:</p> <ul style="list-style-type: none"> <li>back on to site as long as it is below the maximum dose rate</li> <li>use on another approved crop/target</li> <li>treated by specialist treatment facility on site (e.g. a lined bio bed)</li> <li>collected by licensed waste disposal contractor</li> </ul> <p><b>Met ✓ Not Met X</b></p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unit 052 6.2	Describe how to clean and decontaminate the sprayer/applicator	Candidate to <b>describe</b> how to clean the sprayer/applicator after use	<p>May include any of the following appropriate to the sprayer/applicator:</p> <ul style="list-style-type: none"> <li>select and use correct PPE</li> <li>selection of an appropriate site for cleaning the sprayer/applicator</li> <li>triple rinse the applicator following product information recommendations</li> <li>thorough flushing of system</li> <li>safe disposal of contaminated washings in an appropriate manner following good practice</li> <li>safe procedures followed</li> </ul> <p><b>Met ✓ Not Met X</b></p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unit 052 6.3	State the storage requirements for the sprayer/applicator after use	Candidate to <b>state two</b> factors to consider when storing the sprayer/applicator	<p>May include:</p> <ul style="list-style-type: none"> <li>de-pressurisation</li> <li>ensure the sprayer/applicator is clean and dry</li> <li>inspect for wear or damage</li> <li>carry out repairs</li> <li>lubricate if required</li> <li>frost protection measures implemented</li> <li>nozzles and filters removed prior to freezing conditions</li> <li>store in a secure area</li> <li>store under cover and out of direct sunlight</li> </ul> <p><b>Met ✓ Not Met X</b></p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## Unit 053 - Operating Machines to Apply Pesticides to own Land

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 053 1.1	Describe the legal requirements relating to applying pesticides using machinery and equipment on own land	<b>ALL MACHINES</b> Candidate to <b>describe two</b> operator's obligations in terms of legal requirements  <b>Note to Assessor:</b> If this has already been assessed in unit 1, there is no need to re-assess in this unit	May include: <ul style="list-style-type: none"> <li>Comply with current Pesticides Codes of Practice</li> <li>ensure that all required guards are in place and in good condition</li> <li>comply with all relevant road traffic regulations when operating or transporting on the public highway</li> <li>comply with The Plant Protection Products (Sustainable Use) Regulations 2012</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
			<b>Met ✓ Not Met X</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Unit 053 1.2	Describe how to apply pesticides safely using machinery following industry best practice on own land	<b>ALL MACHINES</b> Candidate to <b>describe one</b> operator safety regulation in terms of using sprayer/application equipment  <b>ALL MACHINES (as appropriate)</b> Candidate to <b>describe two</b> precautions the operator may take to protect themselves from pesticide contamination when operating the prime mover	May include: <ul style="list-style-type: none"> <li>comply with codes of best practice</li> <li>be aware of any safety implications imposed by Risk/COSHH assessment and comply with the requirements</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
			Cabbed: <ul style="list-style-type: none"> <li>fit carbon filter</li> <li>use of in-cab controls</li> <li>ensure ventilation system is functional</li> <li>close all windows</li> <li>contaminated PPE stored in external locker</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
			Open canopy/platform: <ul style="list-style-type: none"> <li>use of appropriate PPE</li> <li>avoid siting pressurised components within confines of canopy</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
			<b>ALL MACHINES</b> When preparing the prime mover and sprayer/application equipment, the candidate is to <b>describe two</b> checks which the operator may carry out to protect themselves from physical danger during operation	May include: <ul style="list-style-type: none"> <li>compatibility of prime mover and sprayer/application equipment</li> <li>front weights</li> <li>wheel track width</li> <li>correct tyre pressures</li> <li>condition of tyres</li> <li>brake function</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<b>ALL MACHINES</b> Candidate to <b>state three</b> aspects of safe practice to be considered when driving on uneven/sloping terrain	May include: <ul style="list-style-type: none"> <li>assess conditions</li> <li>select four wheel drive (if fitted)</li> <li>appropriate speed</li> <li>correct gear selection</li> <li>effect of changing load on stability</li> <li>use of weights to stabilise prime mover</li> <li>correct turning procedure</li> <li>keep centre of gravity as low as possible</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<b>ALL MACHINES</b> Candidate to <b>state one</b> consideration for safe driving on a public highway	May include: <ul style="list-style-type: none"> <li>independent brakes coupled together</li> <li>travelling at high speed makes vehicle unstable</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<b>Met ✓ Not Met X</b>	<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 053 2.1	Identify risks to the environment from mixing and applying pesticides	<b>ALL MACHINES</b> Candidate to <b>identify five</b> risks to the environment	<p>May include any of the following:</p> <ul style="list-style-type: none"> <li>• 'run off' if the ground conditions are not suitable</li> <li>• pollution of water courses</li> <li>• pesticide entering drains</li> <li>• pollution of boreholes, water protection zones</li> <li>• pesticide contamination of environmental margins</li> <li>• detrimental affect on wildlife</li> <li>• application to non-target plants</li> <li>• damage to sensitive crops/areas</li> <li>• damage to hedgerows</li> <li>• affecting housing</li> <li>• limiting public/animal access to the area</li> <li>• any other risks specific to the site</li> </ul> <p style="text-align: right;"><b>Met ✓ Not Met X</b></p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unit 053 2.2	Understand how to minimise risks to the environment from mixing and applying pesticides	<p><b>ALL MACHINES</b> Candidate to <b>explain</b> how to minimise the risks identified in 2.1</p> <p><b>ALL MACHINES</b> Candidate to <b>state</b> the reason for minimising spray drift</p> <p><b>SPRAYERS/GRANULAR APPLICATORS</b> Candidate to <b>check</b> and <b>comment</b> on wind speed and direction</p> <p><b>SPRAYERS</b> Candidate to <b>state five</b> factors that affect spray drift</p>	<p>Explanation may include the following points:</p> <ul style="list-style-type: none"> <li>• check and maintain application rate</li> <li>• observe buffer zones</li> <li>• comply with LERAP requirements</li> <li>• inform neighbours</li> <li>• erect warning signs</li> <li>• use an appropriate pesticide</li> <li>• careful timing of application</li> <li>• avoid spray drift (sprayers only)</li> </ul> <p><b>ALL MACHINES</b> • awareness of the likely effects of off-target application</p> <ul style="list-style-type: none"> <li>• visible signs or use of an anemometer at suitable height</li> <li>• wind direction</li> </ul> <p>May include:</p> <ul style="list-style-type: none"> <li>• weather conditions</li> <li>• direction of spraying</li> <li>• restrictor size</li> <li>• air pressure</li> <li>• fluid pressure</li> <li>• forward speed</li> </ul> <p>or</p> <ul style="list-style-type: none"> <li>• boom height (boom sprayer)</li> <li>• angle of boom (variable geometry boom sprayers)</li> <li>• downward air pressure (air assisted boom sprayers)</li> <li>• air assistance speed and volume (air assisted broadcast sprayers)</li> </ul> <p style="text-align: right;"><b>Met ✓ Not Met X</b></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 053  3.1  Unit 053  3.2	Read pesticide product information	<b>ALL MACHINES</b> <b>Note to the Assessor:</b> 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					
	Interpret pesticide product information	<b>Note to the Candidate (Assessor also to note):</b> It is acceptable to highlight key information on the label prior to assessment and use it to provide information to the assessor during assessment	The following to be provided: <ul style="list-style-type: none"> <li>product name</li> <li>active substance(s) (ingredient(s))</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<b>ALL MACHINES</b> The candidate is required to read the label and provide ANY key information requested by the Assessor	Important information: <ul style="list-style-type: none"> <li>field of use</li> <li>crop/target</li> <li>maximum individual dose</li> <li>maximum total dose</li> <li>maximum number of treatments</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<b>WICK APPLICATORS ONLY</b>	<ul style="list-style-type: none"> <li>dilution rate (wick applicators)</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<b>SLUG PELLETT APPLICATORS ONLY</b>	<ul style="list-style-type: none"> <li>'no spread' zone (slug pellet applicators)</li> <li>baiting recommendations (slug pellet applicators)</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<b>SLUG PELLETT AND GRANULAR APPLICATORS ONLY</b>	<ul style="list-style-type: none"> <li>restrictions on use (slug pellets/granular products)</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<b>ALL MACHINES</b>	To include: <ul style="list-style-type: none"> <li>specific product precautions/warnings</li> <li>operator protection</li> <li>environmental protection</li> <li>restrictions on use</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			Crop specific information: <ul style="list-style-type: none"> <li>crop/target</li> <li>dose rate timing</li> <li>timing</li> <li>water volume (if applicable)</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<b>ALL MACHINES</b>	Mixing and spraying/application: <ul style="list-style-type: none"> <li>filling</li> <li>reduced volume applications (if applicable)</li> <li>additional label information</li> <li>compatibility</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<b>SPRAYERS ONLY</b>	<ul style="list-style-type: none"> <li>recommended nozzles</li> <li>recommended pressure</li> <li>spray quality</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<b>WICK APPLICATORS ONLY</b>	<ul style="list-style-type: none"> <li>suitability (for wick applicators)</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<b>Met ✓ Not Met X</b>	<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 053 4.1	Identify sprayer/application equipment components and controls	<p><b>SPRAYERS ONLY (as applicable)</b> Candidate to <b>identify all</b> components and controls <b>relating</b> to the <b>sprayer/application equipment</b> being used for the assessment</p> <p><b>AIR FLUID SPRAYERS ONLY</b> <b>Identify and explain</b> the use of <b>one</b> size of nozzle restrictor, it should be the one fitted to the sprayer/application equipment <b>(if applicable)</b></p> <p><b>SPRAYERS ONLY</b> <b>Identify and explain</b> the use of the nozzle <b>fitted</b> to the sprayer/application equipment <b>(if applicable)</b></p> <p><b>WICK APPLICATORS ONLY</b></p> <p><b>SLUG PELLETT APPLICATORS ONLY</b></p> <p><b>GRANULAR APPLICATORS ONLY</b></p>	<p>May include all/any of the following as appropriate to sprayer:</p> <ul style="list-style-type: none"> <li>main spray tank</li> <li>pump</li> <li>compressor</li> <li>air in-let</li> <li>pressure relief device</li> <li>pulsation damper</li> <li>filling control and devices</li> <li>agitation control</li> <li>fluid pressure adjustment control</li> <li>air pressure adjustment control</li> <li>air and fluid pressure gauges</li> <li>on/off control</li> <li>boom isolators</li> <li>boom section pressure compensation controls</li> <li>filters</li> <li>tank wash system</li> <li>clean water tank</li> <li>nozzle flow restrictors</li> <li>nozzle nozzles</li> <li>diaphragm check valves</li> <li>tank drain</li> <li>other components/controls specific to the sprayer</li> </ul> <p>May include:</p> <ul style="list-style-type: none"> <li>green (35) - 50-120 l/ha. low volume application</li> <li>blue (40) 60 -150 l/ha. medium volume application</li> <li>yellow (50) - 90-250 l/ha. High volume application</li> </ul> <p>Types of nozzle and their uses:</p> <ul style="list-style-type: none"> <li>flat fan nozzle - standard boom nozzle (hydraulic/air assisted types)</li> <li>air fluid - medium/coarse spray, low drift, LERAP 3 star</li> <li>cone - good coverage for fungicides and insecticides</li> </ul> <ul style="list-style-type: none"> <li>wick (wick applicators)</li> <li>wick glands (wick applicator)</li> </ul> <p>May include:</p> <ul style="list-style-type: none"> <li>on/off control</li> <li>metering mechanism</li> <li>bias mechanism (if applicable)</li> <li>hopper, agitator, disc speed control</li> <li>boom isolators (if applicable)</li> <li>other components/controls specific to the applicator</li> </ul> <p>May include:</p> <ul style="list-style-type: none"> <li>on/off control</li> <li>metering mechanism</li> <li>other components/controls specific to the applicator</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<b>Met ✓ Not Met X</b>	<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 053 4.2	Carry out pre-use checks to the prime mover	<p><b>ALL MACHINES</b> Candidate to <b>carry out all</b> pre-use checks <b>relevant</b> to the prime mover being used for the assessment</p> <p><b>(Note to the Assessor)</b> If the candidate can confirm verbally that pre use checks were carried prior to the assessment. There is no requirement for them to be carried out again</p> <p><b>SLUG PELLETT APPLICATORS ONLY</b></p>	<p>May include:</p> <ul style="list-style-type: none"> <li>visual inspection of the wheels and tyres</li> <li>tyre pressures</li> <li>fuel level adequate</li> <li>engine oil level is within acceptable limits</li> <li>hydraulic oil level is within acceptable limits (if accessible)</li> <li>transmission oil level is within acceptable limits (if accessible)</li> <li>coolant level is adequate</li> <li>engine air filter is clean</li> </ul> <p>pellet shield (slug pellet applicator)</p> <p style="text-align: right;"><b>Met ✓ Not Met X</b></p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unit 053 4.3	Carry out pre-use and operational checks to the sprayer/application equipment	<p><b>ALL MACHINES</b> Candidate to <b>carry out all</b> pre-use and operational checks to the sprayer/application equipment</p> <p><b>Check</b> for mechanical defects</p> <p><b>Check</b> that the sprayer/application equipment is lubricated correctly</p> <p><b>Check</b> security of attachment of sprayer/application equipment</p> <p><b>SLUG PELLETT APPLICATORS ONLY</b></p> <p><b>SPRAYERS ONLY</b> <b>Check</b> boom settings, suspension and break-back devices <b>(if applicable)</b></p> <p><b>Check</b> broadcast sprayer settings</p> <p><b>Remove, clean and refit</b> a filter</p> <p><b>Remove, clean/replace and refit</b> a nozzle restrictor and nozzle</p>	<p>May include all/some of the following <b>as applicable</b> to the sprayer/application equipment:</p> <ul style="list-style-type: none"> <li>seized, worn or damaged controls/components</li> <li>identification of lubrication points</li> <li>visual inspection of lubrication points</li> <li>visual inspection of levels (if applicable)</li> <li>bolts tight</li> <li>straps inspected and adjusted if necessary</li> <li>linkage secure (if applicable)</li> <li>sideways movement restricted (if applicable)</li> <li>drawbar pin secured (if applicable)</li> <li>levelled</li> <li>fitted with spread limiter plates (slug pellet applicator/granular applicator, if applicable)</li> <li>boom suspension operational</li> <li>parallel linkage operational</li> <li>break-back efficiency</li> <li>height adjustment</li> <li>boom geometry (variable geometry boom sprayer)</li> <li>operation of fan</li> <li>nozzle positions</li> <li>alignment of unit to target</li> <li>adjustment of air direction/shutters</li> </ul> <p>Candidate to:</p> <ul style="list-style-type: none"> <li>remove and clean using appropriate method</li> <li>contain spillage</li> <li>check for defects</li> <li>refit</li> </ul> <p>Candidate to:</p> <ul style="list-style-type: none"> <li>remove and clean using appropriate method</li> <li>contain spillage</li> <li>check for defects</li> <li>replace if worn/damaged</li> <li>refit</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Continued							

CRITERIA NUMBER	ASSESSMENT CRITERIA	ASSESSOR GUIDANCE	ASSESSMENT ACTIVITIES	CANDIDATE			
				A	B	C	D
Cont... Unit 053 4.3		<b>Part fill</b> sprayer/application equipment	To include: <ul style="list-style-type: none"> <li>suitable site selected</li> <li>fill by usual on-site method, following approved procedures</li> <li>clean water supply</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<b>Check</b> electronic components on electrostatically charged application equipment ( <b>if applicable</b> )	To include checking: <ul style="list-style-type: none"> <li>the control box</li> <li>wiring on the sprayer</li> <li>nozzle charging heads</li> <li>earth wires and strap</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<b>SLUG PELLETT APPLICATOR ONLY</b> for cleanliness, mechanical and electrical defects	May include: <ul style="list-style-type: none"> <li>hopper metering and delivery systems</li> <li>seized worn or damaged components</li> <li>drive systems</li> <li>condition and tension of belts, method of adjustment</li> <li>electrical connections</li> <li>fan blades</li> <li>deflector plates</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<b>SPRAYER ONLY</b> <b>Check</b> sprayer/application equipment for liquid and air leaks, and correct spray patterns ( <b>as applicable</b> )	To include as applicable: <ul style="list-style-type: none"> <li>use higher than normal operating pressure</li> <li>visual check of all nozzles for correct spray patterns, absence of blockages, streaking, pulsing and correct alignment</li> <li>replace defective nozzle restrictors and/or nozzles</li> <li>lids and seals</li> <li>liquid and air pipe work and connections</li> <li>control valves</li> <li>filters</li> <li>liquid and air pressure gauge</li> <li>diaphragm check valves</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<b>WICK APPLICATORS ONLY</b>	<ul style="list-style-type: none"> <li>wick (wick applicators)</li> <li>wick glands (wick applicator)</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<b>SLUG PELLETT APPLICATORS ONLY</b>	<ul style="list-style-type: none"> <li>pellet distribution pattern (slug pellet applicator)</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<b>GRANULE APPLICATORS ONLY</b>	<ul style="list-style-type: none"> <li>granule distribution pattern (granule applicator)</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<b>ALL MACHINES (if appropriate)</b> <b>Explain</b> how to use the control panel to ensure that the sprayer/application equipment is functioning correctly ( <b>if applicable</b> )	To include: <ul style="list-style-type: none"> <li>functions of control panel</li> <li>recognition of malfunctions before and during operation</li> <li>check accuracy of calibration</li> <li>switch to manual/test mode where applicable</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<b>ALL MACHINES</b> <b>State one</b> suitable action in the event of the control panel failing ( <b>if applicable</b> )	To include: <ul style="list-style-type: none"> <li>stop pesticide application</li> <li>manual operation of controls if possible</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
				<b>Met ✓ Not Met X</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

CRITERIA NUMBER	ASSESSMENT CRITERIA	ASSESSOR GUIDANCE	ASSESSMENT ACTIVITIES	CANDIDATE			
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Unit 053 4.4	Calibrate the sprayer/application equipment and record relevant data	<p>Candidate is required to <b>calibrate</b> the sprayer/application equipment and record <b>relevant</b> data</p> <p><b>SLUG PELLETT/GRANULE APPLICATOR ONLY</b></p> <p><b>ALL MACHINES</b> Select and record forward speed</p> <p>Calculate required output/volume rate</p> <p><b>SPRAYER ONLY</b> Select appropriate nozzle restrictor using manufacturers literature (if applicable/available)</p> <p>Set operating pressure for liquid and air (if applicable)</p> <p>Check nozzle outputs (if applicable)</p> <p><b>ALL MACHINES</b> State four pieces of calibration data that should be recorded (appropriate to the sprayer/application equipment being used)</p> <p><b>SPRAYERS ONLY</b></p> <p><b>SLUG PELLETT APPLICATOR ONLY</b></p> <p><b>SLUG PELLETT/GRANULE APPLICATOR ONLY</b></p>	<p>Calibration may include the following:</p> <ul style="list-style-type: none"> <li>trial run on ground to establish acceptable performance (slug pellet/granule applicator)</li> <li>suitable forward speed for crop/target and ground conditions</li> <li>appropriate gear selected and engine speed established (if applicable)</li> <li>accurate measurement of distance (100m)</li> <li>accurate measurement of time taken to cover distance (100m)</li> <li>correct use of formula to establish forward speed</li> <li>correct use of formula</li> <li>use of manufacturers operators handbook</li> <li>use of manufacturers literature</li> <li>confirm requirements of product label</li> <li>pressure as determined by manufacturers literature</li> <li>pressurise/purge appropriate to the system</li> <li>use a measuring jug to check output from at least one nozzle per boom section (minimum of three per applicator)</li> <li>compare with target output</li> <li>vary pressure to make small adjustments</li> <li>change nozzles restrictors and/or nozzles (if required)</li> <li>or any other acceptable method</li> </ul> <p>May include:</p> <ul style="list-style-type: none"> <li>registration number of vehicle</li> <li>tyre size and pressure</li> <li>gear selected</li> <li>engine speed</li> <li>vehicle forward speed</li> <li>application volume</li> <li>nozzle restrictor fitted (if applicable)</li> <li>air pressure</li> <li>liquid pressure</li> <li>flow rate</li> <li>air outlet angle (air assisted boom sprayer)</li> <li>nozzle angle (air assisted boom sprayer)</li> <li>fan setting (air assisted boom sprayer)</li> <li>applicator settings (slug pellet applicator)</li> <li>product being used (slug pellet/granule applicator)</li> <li>spreading width (slug pellet/granule applicator)</li> </ul> <p style="text-align: right;"><b>Met ✓ Not Met X</b></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 053 4.5	Calculate the quantities of pesticide and water required for a specified area	<b>SPRAYERS/WICK APPLICATORS</b> Candidate to <b>calculate</b> quantities required for both a specified area and full tank	To include: <ul style="list-style-type: none"> <li>amount of water required for specified area</li> <li>amount/weight of pesticide required for specified area</li> <li>amount of water required for a full tank</li> <li>amount of pesticide required for full tank</li> </ul> <p style="text-align: right;"><b>Met ✓ Not Met X</b></p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unit 053 5.1	Measure or weigh the required quantities of pesticide and water and add to the sprayer/application equipment	<b>ALL MACHINES</b>  <b>SPRAYERS/WICK APPLICATORS</b> Candidate to <b>measure/weigh</b> and <b>add</b> quantities required for the area specified in 4.5  <b>WICK APPLICATORS ONLY</b>  <b>SLUG PELLETT/GRANULE APPLICATORS ONLY</b>	To include: <ul style="list-style-type: none"> <li>accurate measurement of pesticide (all machines)</li> </ul> To include: <ul style="list-style-type: none"> <li>correct selection and use of PPE (as required by the product label and/or COSHH Assessment)</li> <li>suitable site selected</li> <li>fill by usual on-site method, following approved procedures</li> <li>clean water supply</li> <li>accurate measurement of water</li> <li>correct filling procedure</li> <li>use of filling device if fitted</li> <li>avoidance of spillage</li> <li>observance of pesticide manufacturers instructions for mixing and agitation</li> <li>priming of wicks (wick applicators)</li> <li>adjustment of flow rate for wicks (wick applicators)</li> <li>accurate filling of hopper (slug pellet/granule applicator)</li> </ul> <p style="text-align: right;"><b>Met ✓ Not Met X</b></p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unit 053 5.2	Demonstrate safe and accurate application procedures	<b>ALL MACHINES</b> Candidate to <b>describe one</b> possible methods of marking out the site to achieve accurate application  <b>ALL MACHINES</b> Candidate to <b>explain</b> the appropriate procedure to follow when the sprayer/application equipment needs refilling part way through an application (if applicable)  <b>SLUG PELLETT/GRANULE APPLICATORS ONLY</b>  <b>SPRAYERS ONLY</b> Candidate to <b>explain</b> the appropriate procedure to follow when a nozzle restrictor or nozzle becomes blocked during an application (if applicable)  <b>AIR ASSISTED SPRAYERS ONLY</b> Candidate to <b>state</b> what to do if the air assistance system fails (if applicable)	May include any of the following: <ul style="list-style-type: none"> <li>tramlines</li> <li>crop rows</li> <li>blob markers</li> <li>marker poles</li> <li>marker dyes</li> <li>use of GPS</li> </ul> Explanation to include: <ul style="list-style-type: none"> <li>select and use appropriate PPE</li> <li>avoid contact with contaminated crop</li> <li>mark the spot at which the sprayer/application equipment emptied</li> <li>refill sprayer/application equipment</li> <li>continue with application by restarting the appropriate point</li> <li>use of wheel marks (slug pellet/granule applicators)</li> </ul> Explanation to include: <ul style="list-style-type: none"> <li>clean or replace nozzle restrictor or nozzle as appropriate</li> <li>stop; or</li> <li>continue to spray in a mode suitable to weather conditions</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Continued							

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Cont... Unit 053 5.2		<p><b>SPRAYERS ONLY</b> Candidate to <b>apply</b> pesticide to treat a specified area appropriate the candidates normal work situation and sufficient enough to demonstrate safe and accurate application procedures</p> <p><b>ALL MACHINES</b></p> <p><b>WICK APPLICATORS ONLY</b></p> <p><b>SLUG PELLETT APPLICATORS ONLY</b></p> <p><b>SLUG PELLETT/GRANULE APPLICATORS ONLY</b></p>	<p>To include:</p> <ul style="list-style-type: none"> <li>ensure boom is level or aligned to the target</li> <li>ensure unit is aligned to target (air assisted broadcast sprayers)</li> <li>correct boom height according to target and type of nozzle</li> <li>correct angle of boom (variable geometry sprayers)</li> <li>correct angle of unit (air assisted sprayers)</li> <li>correct volume air controls (air assisted sprayers)</li> <li>correct forward speed and pressure for site conditions</li> </ul> <p><b>ALL MACHINES</b></p> <ul style="list-style-type: none"> <li>operate controls to start and finish applying accurately at the beginning and end of each bout</li> <li>accurate matching of bouts / use of driving aids</li> <li>coping with obstacles</li> <li>all of specified area treated, minimising overlaps and misses</li> <li>awareness of changes in wind speed and direction</li> </ul> <ul style="list-style-type: none"> <li>wick in contact with target (wick applicators)</li> <li>correct height and angle of applicator (slug pellet applicators)</li> <li>maintenance of 'no spread zone' (slug pellet/granule applicators)</li> </ul> <p style="text-align: right;"><b>Met ✓ Not Met X</b></p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unit 053 5.3	Carry out all activities protecting human health and the environment	<p><b>ALL MACHINES</b> <b>Note to the Assessor:</b> Assessor to be <b>satisfied</b> that the candidate has carried out <b>all activities</b> protecting human health and the environment throughout the assessment</p>	<p>To include:</p> <ul style="list-style-type: none"> <li>prevention of personal injury and contamination through correct selection and use of PPE (as required by the product label and/or COSHH assessment)</li> <li>prevention of public / bystander contamination</li> <li>safe filling procedure</li> <li>avoidance of off-target application</li> <li>avoidance of overdosing crop/target</li> </ul> <p style="text-align: right;"><b>Met ✓ Not Met X</b></p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unit 053 5.4	Complete a treatment record	<p><b>ALL MACHINES</b> Candidate is required to <b>complete</b> a treatment record. <b>Note to the Assessor:</b> The treatment record must be approved by the Assessor</p>	<p>Completion of the treatment record must be:</p> <ul style="list-style-type: none"> <li>Accurate</li> <li>Legible (if handwritten)</li> </ul> <p style="text-align: right;"><b>Met ✓ Not Met X</b></p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unit 053 6.1	Explain how to manage surplus pesticide and dispose of waste materials arising from pesticide application	<p><b>ALL MACHINES</b> Candidate to <b>explain</b> method of managing with surplus concentrate pesticide</p> <p>Candidate to <b>explain</b> method of dealing with waste containers and packaging</p> <p>Candidate to <b>explain one</b> methods of managing with surplus dilute pesticide</p>	<p>May include:</p> <ul style="list-style-type: none"> <li>return to temporary mobile store</li> <li>return to fixed store</li> </ul> <p><b>Containers:</b></p> <ul style="list-style-type: none"> <li>triple rinsed</li> <li>placed in secure storage until disposal</li> <li>returned to supplier</li> <li>collected by licensed waste disposal contractor</li> </ul> <p><b>Packaging:</b></p> <ul style="list-style-type: none"> <li>thoroughly emptied</li> <li>placed in secure storage until disposal</li> <li>collected by licensed waste disposal contractor</li> </ul> <p>May include:</p> <ul style="list-style-type: none"> <li>back on to site as long as it is below the maximum dose rate</li> <li>use on another approved crop/target</li> <li>treated by specialist treatment facility on site (e.g. a lined bio bed)</li> <li>collected by licensed waste disposal contractor</li> </ul> <p style="text-align: right;"><b>Met ✓ Not Met X</b></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 053 6.2	Explain how to clean and decontaminate the sprayer/application equipment and, if applicable, the prime mover	<b>ALL MACHINES</b> Candidate to <b>explain three</b> factors need to be considered when cleaning and decontaminating the sprayer/application equipment/ and, if applicable, the prime mover	May include: <ul style="list-style-type: none"> <li>select and use appropriate PPE</li> <li>appropriate site</li> <li>thorough washing with water and suitable additive (if applicable/required)</li> <li>internal and external surfaces</li> <li>use of in-built wash systems if provided</li> <li>care to ensure contamination 'hot-spots' are clean</li> <li>thorough flushing of systems</li> <li>safe disposal of contaminated washings when cleaning should take place</li> <li>safe procedures followed</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<b>SLUG PELLETT APPLICATORS ONLY</b>  <b>GRANULE APPLICATORS ONLY</b>	<ul style="list-style-type: none"> <li>safe disposal of pellets/contaminated soil arising from cleaning operation (slug pellet applicators)</li> <li>safe disposal of granules/contaminated soil arising from cleaning operation (granule applicators)</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Met ✓ Not Met X</b>				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unit 053 6.3	Describe the storage requirements for the sprayer/application equipment	<b>ALL MACHINES</b> Candidate to <b>describe two</b> factors to consider prior to storing the sprayer/application equipment	May include: <ul style="list-style-type: none"> <li>ensure the applicator is clean and dry</li> <li>inspect for wear and damage</li> <li>replace any worn or damaged parts</li> <li>ensure system is drained and any valves left in appropriate positions</li> <li>lubricate as required</li> <li>store undercover and out of direct sunlight</li> <li>store in a secure area</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<b>SPRAYERS ONLY</b>	<ul style="list-style-type: none"> <li>if appropriate, draw antifreeze through the system, particularly the pump</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Met ✓ Not Met X</b>				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



## Unit 054 – Application of Pesticides using other Specific Equipment or Methods on own Land

<b>Candidate A</b>	Name:	Date:	Start Time:	Duration:
<b>Candidate B</b>	Name:	Date:	Start Time:	Duration:
<b>Candidate C</b>	Name:	Date:	Start Time:	Duration:
<b>Candidate D</b>	Name:	Date:	Start Time:	Duration:

CRITERIA NUMBER	ASSESSMENT CRITERIA	ASSESSOR GUIDANCE	ASSESSMENT ACTIVITIES	CANDIDATE			
				A	B	C	D
Unit 054  1.1	Describe the legal requirements relating to applying pesticides using other specific equipment or methods on own land	<p><b>ALL EQUIPMENT</b> Candidate to <b>describe one</b> legal obligation in terms of the requirements on the operator</p> <p><b>FOGGING AND MISTING EQUIPMENT ONLY (and if appropriate, smokes)</b></p> <p><b>BOAT MOUNTED EQUIPMENT ONLY</b></p>	<p>May include:</p> <ul style="list-style-type: none"> <li>• comply with current Pesticides Code of Practice</li> <li>• comply with The Plant Protection Products (Sustainable Use) Regulations (2012)</li> <li>• ensuring that the equipment is in good condition and all required guards are in place as stated in the operators manual</li> </ul> <p>In addition to include:</p> <ul style="list-style-type: none"> <li>• HSE Approved Code of Practice on Fumigation</li> </ul> <p>In addition to include:</p> <ul style="list-style-type: none"> <li>• ensure product is approved for aquatic use</li> <li>• seek Environment Agency approval</li> </ul> <p style="text-align: right;"><b>Met ✓ Not Met X</b></p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unit 054  1.2	Describe how to apply pesticides safely using other specific equipment/methods following industry best practice	<p><b>ALL EQUIPMENT</b> Candidate to <b>describe one</b> operator safety regulation in terms of using other specified equipment</p> <p><b>BOAT MOUNTED EQUIPMENT ONLY</b> Candidate to <b>describe two</b> operator safety requirements when using boat mounted equipment</p> <p>Candidate to <b>state one</b> factor which may affect the speed of the boat</p> <p><b>FOGGING AND MISTING EQUIPMENT ONLY (and if appropriate smokes)</b> Candidate to <b>state one</b> potential risk using pyrotechnic devices or hot fogging machines</p> <p>Candidate to <b>state two</b> factors that may influence CIPC application</p>	<p>May include:</p> <ul style="list-style-type: none"> <li>• comply with industry codes of best practice</li> <li>• be aware of any safety implications imposed by Risk/COSHH Assessment and comply with the requirements</li> </ul> <p>In addition to include:</p> <ul style="list-style-type: none"> <li>• assess the risk of contamination downstream, e.g. water extraction, sensitive sites and livestock</li> <li>• work in an upstream direction (if applicable)</li> <li>• availability of life ring/rescue devices</li> <li>• be aware of any safety implications</li> </ul> <p>May include:</p> <ul style="list-style-type: none"> <li>• wind speed</li> <li>• water flow</li> <li>• weed obstruction</li> </ul> <p>In addition to include:</p> <ul style="list-style-type: none"> <li>• fire</li> <li>• burns from hot equipment</li> </ul> <p>For the store may include:</p> <ul style="list-style-type: none"> <li>• box stacking patterns</li> <li>• box spaces and enclosures</li> <li>• duct and lateral covers</li> <li>• low speed recirculation fans</li> <li>• operation of control systems</li> <li>• inverters</li> <li>• even distribution</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Continued				<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
Cont... Unit 054 1.2		Candidate to <b>state two</b> factors that may influence CIPC application  <b>MOBILE SEED TREATMENT ONLY</b> Candidate to <b>state two</b> factors relating to selecting an appropriate site for mobile seed treating equipment	For the crop, it may include: <ul style="list-style-type: none"> <li>dry tuber surfaces</li> <li>minimal signs of sprouting</li> <li>even crop temperature</li> <li>proposed end use</li> <li>previous treatments (quantities and timing)</li> <li>clearance intervals before consumption</li> <li>maximum residue levels</li> </ul> In addition to include: <ul style="list-style-type: none"> <li>accessibility to site</li> <li>suitable ground conditions</li> <li>machine level</li> </ul> <p style="text-align: right;"><b>Met ✓ Not Met X</b></p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unit 054 2.1	Identify risks to the environment	<b>ALL EQUIPMENT</b> Candidate to <b>identify all relevant</b> risks to the environment  <b>BOAT MOUNTED EQUIPMENT ONLY</b> Candidate to <b>identify two relevant</b> environmental factors relating to the aquatic environment	May include the following: <ul style="list-style-type: none"> <li>wildlife</li> <li>non-target plants</li> <li>hedgerows</li> <li>housing</li> <li>public access</li> <li>sensitive crops/areas</li> <li>water courses</li> <li>boreholes</li> <li>drains</li> <li>livestock drinking points</li> <li>recreational use</li> <li>water extraction points</li> <li>temperature</li> <li>other risks specific to the site</li> </ul> In addition to include: <ul style="list-style-type: none"> <li>de-oxygenation of water</li> <li>removal of fish cover</li> <li>removal of bankside wildlife habitat</li> <li>removal of bankside vegetation leading to bank erosion</li> </ul> <p style="text-align: right;"><b>Met ✓ Not Met X</b></p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unit 054 2.2  Continued	Explain how to minimise risks to the environment	<b>ALL EQUIPMENT</b> Candidate to <b>explain</b> how to minimise the risks identified in 2.1  Candidate to <b>check and comment</b> on wind speed and direction ( <b>if applicable</b> )  Candidate to <b>state</b> the reason for minimising off target application and spray drift ( <b>if applicable</b> )  <b>SPRAYERS ONLY</b> Candidate to state <b>five</b> factors that may affect spray drift ( <b>if applicable</b> )	May include the following: <ul style="list-style-type: none"> <li>use of an appropriate pesticide</li> <li>careful timing of application</li> <li>check and maintain application rate</li> <li>avoid spray drift (if applicable)</li> <li>observe buffer zones (if applicable)</li> <li>erect warning signs</li> <li>operate within any temperature parameters (if applicable)</li> <li>notify neighbours before application (if applicable)</li> <li>use of anemometer at suitable height or visible signs</li> <li>wind direction (if applicable)</li> </ul> Statement to include: <ul style="list-style-type: none"> <li>awareness of the possible effects of drift to crops, people, wildlife, water and the wider environment (if applicable)</li> </ul> In addition to include: <ul style="list-style-type: none"> <li>wind speed and direction</li> <li>nozzle type and size</li> <li>pressure</li> <li>forward speed</li> <li>nozzle height</li> <li>defective equipment</li> </ul>	<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
Cont... Unit 054 3.1 Unit 054 3.2		<b>SEED TREATMENT EQUIPMENT ONLY</b>	in addition may include: <ul style="list-style-type: none"> <li>appropriate for the type of equipment</li> <li>appropriate for crop/variety</li> </ul> <p style="text-align: right;"><b>Met ✓ Not Met X</b></p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unit 054 4.1	Identify the components and controls on the equipment	<b>ALL EQUIPMENT AS APPLICABLE</b> Candidate to <b>identify</b> all components and controls <b>relevant</b> to the equipment being used	May include: <ul style="list-style-type: none"> <li>on/off control</li> <li>pump</li> <li>pulsation damper</li> <li>filling controls and devices</li> <li>agitation control</li> <li>pressure/volume control</li> <li>regulator</li> <li>pressure relief valve</li> <li>pressure gauge</li> <li>boom isolators</li> <li>tank</li> <li>tank wash system</li> <li>lid</li> <li>filters</li> <li>nozzles</li> <li>hoses</li> <li>valves</li> <li>connections</li> <li>seals</li> <li>metering devices</li> <li>mechanical/electrical controls</li> <li>programming controls</li> <li>warning lights</li> <li>test mode operation</li> <li>conveyors</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<b>NOZZLES AS APPLICABLE</b> Candidate to <b>identify</b> and <b>state</b> the use of one type of nozzle fitted to the equipment	Types of nozzles and their uses may include: <ul style="list-style-type: none"> <li>flat fan - standard boom nozzle,</li> <li>air inclusion - medium/coarse spray, low-drift, LERAP 2/3 star rating</li> <li>cone - good coverage for fungicides and insecticides</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<b>SEED TREATMENT EQUIPMENT ONLY</b> Candidate to <b>state</b> function of controls, operation of incorporation system and how to change a pesticide container <b>(if appropriate)</b>	May include: <ul style="list-style-type: none"> <li>function of controls</li> <li>mixer incorporation system</li> </ul> <p style="text-align: right;"><b>Met ✓ Not Met X</b></p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unit 054 4.2	Carry out pre use checks to the prime mover (if applicable)	Candidate to <b>check</b> the prime mover for safe operation <b>(if applicable)</b>	May include: <ul style="list-style-type: none"> <li>integrity of power source</li> <li>fluid levels</li> <li>fail-safe systems</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<b>BOAT MOUNTED EQUIPMENT ONLY</b> Candidate to <b>carry out all</b> appropriate pre use checks to the boat	In addition may include: <ul style="list-style-type: none"> <li>suitable boat for the situation</li> <li>accessibility of boat controls</li> <li>accessibility of sprayer controls</li> <li>even loading</li> <li>safe, secure mooring when transferring pesticides and equipment</li> </ul> <p style="text-align: right;"><b>Met ✓ Not Met X</b></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 054 4.3	Carry out pre-use checks to the application equipment	<b>ALL EQUIPMENT</b> Candidate to <b>check</b> the application equipment for safe operation	May include: <ul style="list-style-type: none"> <li>seized, worn or damaged controls/components</li> <li>metering &amp; delivery systems</li> <li>drive systems</li> <li>condition &amp; tension of belts</li> <li>security of attachment to prime mover</li> <li>lubrication of components</li> <li>checking for leaks under pressure</li> <li>any problems identified to be rectified if within operators level of responsibility and ability</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<b>SPRAYERS ONLY</b> Candidate to <b>check and comment</b> on the condition and function of the boom	In addition may include: <ul style="list-style-type: none"> <li>boom suspension operational</li> <li>break-back devices operating correctly (if applicable)</li> <li>height adjustment operational</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		Candidate to <b>remove, clean and refit</b> a filter	To include: <ul style="list-style-type: none"> <li>removal and cleaned appropriately</li> <li>contained spillage</li> <li>check for defects</li> <li>refit/replace as applicable</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		Candidate to <b>remove, clean and refit</b> a nozzle	To include: <ul style="list-style-type: none"> <li>removal and cleaned appropriately</li> <li>contained spillage</li> <li>check for defects</li> <li>refit/replace if worn or damaged</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		Candidate to <b>part fill</b> the applicator and <b>test</b>	May include: <ul style="list-style-type: none"> <li>suitable site selected</li> <li>fill by usual on-site method, following approved procedures</li> <li>clean water supply</li> <li>use higher than normal operating pressure</li> <li>visual check of all nozzles/atomisers for correct spray patterns, absence of blockages, streaking, pulsing and correct alignment</li> <li>replace defective nozzles/atomisers/discs</li> <li>lids and seals</li> <li>pipe work and connections</li> <li>control valves</li> <li>filters</li> <li>pressure gauge</li> <li>diaphragm check valves</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<b>CONTINUOUS PROCESS VIA A CONVEYOR ONLY</b>	In addition may include: <ul style="list-style-type: none"> <li>preparing area, clearance of floor space</li> <li>material feed system operating correctly</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<b>Met ✓ Not Met X</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unit 054 4.4	Calibrate the application equipment and record relevant data	<b>ALL EQUIPMENT</b> The candidate is required to <b>calibrate</b> the application equipment	May include: <ul style="list-style-type: none"> <li>accurate measurements</li> <li>accurate timings</li> <li>accurate calculations</li> <li>correct use of formulae</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<b>Note to the Assessor:</b> Any appropriate method of calibration may be used		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Continued		Candidate to <b>record relevant</b> calibration data	Calibration data may include: <ul style="list-style-type: none"> <li>equipment settings used</li> <li>product used for calibration</li> <li>application rate achieved</li> </ul>	<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
Cont... Unit 054 4.4		<p><b>ALL TYPES OF SPRAYERS, INCLUDING BOAT MOUNTED</b>  <b>Select</b> and <b>calculate</b> forward speed</p> <p><b>Calculate</b> required output/volume rate</p> <p><b>Select</b> appropriate nozzle using manufacturers literature (if available) and set pressure/disc speed</p> <p><b>Set</b> operating pressure</p> <p><b>Check</b> nozzle/atomiser outputs</p> <p>State <b>four</b> pieces of calibration data that should be recorded</p>	<p>In addition may include:</p> <ul style="list-style-type: none"> <li>suitable forward speed for target</li> <li>appropriate engine speed established (if applicable)</li> <li>accurate measurement of distance</li> <li>accurate measurement of time taken to cover distance</li> <li>correct use of formula to establish forward speed</li> <li>correct use of formula</li> </ul> <p>May include:</p> <ul style="list-style-type: none"> <li>use of manufacturers operators handbook</li> <li>use of nozzle/atomiser manufacturers literature</li> <li>confirm requirements of product label</li> <li>pressure as determined by nozzle chart</li> <li>pressurise/purge appropriate to the system</li> <li>use a measuring jug to check output from at least one nozzle/atomiser per boom section</li> <li>compare with target output</li> <li>vary pressure to make small adjustments</li> <li>change nozzles/atomisers if required</li> <li>or any other acceptable method</li> <li>boat Identification</li> <li>boat engine speed</li> <li>sprayer engine speed</li> <li>boat forward speed</li> <li>application volume</li> <li>nozzle/restrictor/disc fitted</li> <li>pressure/disc speed</li> <li>flow rate</li> </ul> <p style="text-align: right;"><b>Met ✓ Not Met X</b></p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unit 054 4.5	Measure the area to be treated (if applicable)	<p><b>ALL EQUIPMENT</b>  Candidate to <b>measure</b> the area or volume of material to be treated, which should be typical of the candidate's normal work. (The Assessor may assist under direction of the candidate)</p>	<p>To include:</p> <ul style="list-style-type: none"> <li>accurate measurements</li> </ul> <p style="text-align: right;"><b>Met ✓ Not Met X</b></p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unit 054 4.6	Calculate the area or volume to be treated	<p><b>ALL EQUIPMENT</b>  Candidate to <b>calculate</b> the area or volume of material to be treated</p>	<p>To include:</p> <ul style="list-style-type: none"> <li>accurate calculations</li> </ul> <p style="text-align: right;"><b>Met ✓ Not Met X</b></p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unit 054 4.7	Calculate the quantities of pesticide and water required for a specified area or volume	<p><b>ALL EQUIPMENT</b>  Candidate to <b>calculate</b> quantities required to treat the area or volume of material in <b>4.6</b></p> <p><b>CONTINUOUS PROCESS VIA A CONVEYOR ONLY</b></p>	<p>May include:</p> <ul style="list-style-type: none"> <li>amount of water required for specified area</li> <li>amount of pesticide required for specified area</li> </ul> <p>In addition to include:</p> <ul style="list-style-type: none"> <li>running time on full tank</li> </ul> <p style="text-align: right;"><b>Met ✓ Not Met X</b></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 054 5.1	Measure the required quantities and add to the applicator, or attach pesticide container	<b>ALL EQUIPMENT</b> Candidate to <b>measure</b> and <b>add</b> quantities required for the area or volume of material specified, attach pesticide container, or insert induction lance	To include all of the following: <ul style="list-style-type: none"> <li>correct selection and use of PPE (as required by the product label, COSHH and Risk Assessment)</li> <li>suitable site selected</li> <li>fill following product recommendations and approved procedures</li> <li>correct use of clean water supply (if applicable)</li> <li>accurate measurement of water (if applicable)</li> <li>accurate measurement of pesticide</li> <li>correct filling procedure</li> <li>use of filling device (if fitted)</li> <li>avoidance of spillage</li> </ul> or <ul style="list-style-type: none"> <li>prepare and attach pesticide container</li> </ul> <p style="text-align: right;"><b>Met ✓ Not Met X</b></p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unit 054 5.2	Demonstrate safe and accurate application procedures	<b>ALL EQUIPMENT</b> The candidate is required to <b>treat</b> the area or volume of material specified in <b>4.6 demonstrating</b> safe and accurate application procedures  <b>SPRAYERS ONLY</b> Candidate to <b>demonstrate</b> correct operation  <b>BOAT MOUNTED EQUIPMENT ONLY</b> Candidate to <b>carry out all</b> activities safely  <b>FOGGING AND MISTING EQUIPMENT (and if appropriate, smokes)</b> Candidate to <b>state two</b> considerations <b>before</b> application  Candidate to <b>state</b> importance of direction of travel when carrying out application  Candidate to <b>state two</b> factors <b>after</b> application  <b>BATCH DIPPING ONLY</b> Candidate requires to <b>state three</b> factors when carrying out the dipping process	May include: <ul style="list-style-type: none"> <li>treatment area or volume to be treated clearly identified</li> <li>constant speed or flow of material is maintained</li> <li>accurate switch on/off points</li> <li>accurate matching of bouts (if applicable)</li> <li>obstacles dealt with correctly (if applicable)</li> <li>area treated minimising overlaps and misses (if applicable)</li> <li>awareness of changing climatic conditions and appropriate action taken (if applicable)</li> </ul> To include: <ul style="list-style-type: none"> <li>ensure boom is level or aligned to the target</li> <li>correct boom height according to target and type of nozzle</li> <li>awareness of changes in wind speed and direction</li> </ul> To include: <ul style="list-style-type: none"> <li>extra person present at all times</li> <li>use of life jacket obligatory when near or on water</li> <li>no equipment on operator's back when operating from the boat</li> </ul> May include: <ul style="list-style-type: none"> <li>post signs at suitable locations for an adequate period</li> <li>secure doors</li> <li>clear obstructions</li> <li>ensure that all non targets are protected or removed</li> <li>ensure escape route is clear</li> </ul> May include: <ul style="list-style-type: none"> <li>direction of travel will always be to planned exit (indoors)</li> <li>working upwind, at 90° to prevailing wind direction</li> </ul> May include: <ul style="list-style-type: none"> <li>ventilate area prior to entry</li> <li>remove warning signs</li> <li>remove spent containers/devises (smokes only)</li> </ul> May include: <ul style="list-style-type: none"> <li>safe lifting/loading</li> <li>avoid splashing/ contamination</li> <li>correct immersion depth and time</li> <li>maintain correct temperature (if appropriate)</li> <li>correct top up procedure, maintaining concentration</li> <li>safe unloading</li> <li>correct draining time</li> <li>suitable storage site used</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Continued				<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
Cont... Unit 054 5.2		<p><b>SEED TREATMENT</b> Candidate to <b>state</b> how accuracy of dosage is ensured before application commences</p> <p>Candidate to <b>correctly monitor</b> seed treatment and ensure that end product is <b>labelled</b></p> <p>Candidate to <b>state three</b> factors to consider when changing either pesticide containers or pesticide</p> <p><b>CONTINUOUS PROCESS VIA A CONVEYOR ONLY</b> The candidate is required to <b>state three</b> factors to be considered for the entire process</p>	<p>Must include:</p> <ul style="list-style-type: none"> <li>test run to prove correct dose</li> <li>viscosity of material being applied has not been affected by changes in temperature</li> </ul> <p>May include:</p> <ul style="list-style-type: none"> <li>identify reasons why treatment may be incorrect</li> <li>visual inspection of treated seed</li> <li>safe handling of treated seed</li> <li>correct labelling</li> </ul> <p>May include:</p> <ul style="list-style-type: none"> <li>new container prepared</li> <li>purge pipe work</li> <li>correct changeover technique used</li> <li>system priming</li> <li>correct technique used for decanting nearly empty containers</li> <li>any spillage contained</li> </ul> <p>May include:</p> <ul style="list-style-type: none"> <li>safe lifting/loading</li> <li>continuous flow of material</li> <li>even distribution of pesticide on the material</li> <li>maintain temperature (if appropriate)</li> <li>safe unloading</li> <li>correct labelling of treated material</li> <li>correct draining time</li> <li>suitable storage site used</li> </ul> <p style="text-align: right;"><b>Met ✓ Not Met X</b></p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unit 054 5.3	Carry out all activities protecting human health and the environment	<p><b>ALL EQUIPMENT</b> <b>Note to the Assessor:</b> The Assessor to be satisfied that the candidate has carried out <b>all</b> activities protecting human health and that of the environment</p> <p><b>ALL EQUIPMENT</b> Candidate to <b>state one</b> action to take in the event of a malfunction</p>	<p>To include:</p> <ul style="list-style-type: none"> <li>prevention of personal injury and contamination through correct selection and use of PPE/RPE (as required by the product information, COSHH and Risk Assessment)</li> <li>prevention of public/bystander contamination</li> <li>safe filling procedure</li> <li>avoidance of off-target application</li> <li>avoidance of overdosing crop/target/plant material</li> </ul> <p>May include:</p> <ul style="list-style-type: none"> <li>stop pesticide application</li> <li>convert to manual operation (if possible)</li> <li>check output is correct</li> </ul> <p style="text-align: right;"><b>Met ✓ Not Met X</b></p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unit 054 5.4	Complete a treatment record	<p><b>ALL EQUIPMENT</b> The candidate is required to <b>complete</b> a treatment record</p> <p><b>Note to the Assessor:</b> the treatment record must be approved or if necessary supplied by the Assessor</p>	<p>Completion of the treatment record must be:</p> <ul style="list-style-type: none"> <li>accurate</li> <li>legible (if handwritten)</li> </ul> <p style="text-align: right;"><b>Met ✓ Not Met X</b></p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unit 054 6.1	Explain how to manage surplus pesticide and dispose of waste material	<p><b>ALL EQUIPMENT</b> Candidate to <b>explain one</b> method of managing surplus concentrate pesticide</p> <p>Candidate to <b>explain one</b> method of dealing with waste packaging</p>	<p>Explanation may include;</p> <ul style="list-style-type: none"> <li>return to temporary mobile store</li> <li>return to fixed store</li> </ul> <p>Containers:</p> <ul style="list-style-type: none"> <li>triple rinsed (if applicable)</li> <li>placed in secure storage until disposal</li> <li>returned to supplier</li> <li>collected by licensed waste disposal contractor</li> </ul> <p>Packaging:</p> <ul style="list-style-type: none"> <li>thoroughly emptied</li> <li>placed in secure storage until disposal</li> <li>collected by licensed waste disposal contractor</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Continued				<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
Cont... Unit 054 6.1		Candidate to <b>explain two</b> methods of managing surplus dilute pesticides  <b>BATCH DIPPING ONLY</b> Candidate requires to <b>state</b> how to dispose of accumulated sludge from tank	Explanation may include: <ul style="list-style-type: none"> <li>back on to target as long as it is below the maximum dose rate (if applicable)</li> <li>use on another approved crop/target (if applicable)</li> <li>treated by specialist treatment facility on site (e.g. a lined bio bed)</li> <li>collected by licensed waste disposal contractor</li> </ul> <ul style="list-style-type: none"> <li>appropriate method stated</li> </ul> <p style="text-align: right;"><b>Met ✓ Not Met X</b></p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unit 054 6.2	Explain how to clean and decontaminate the application equipment	<b>ALL EQUIPMENT</b> Candidate to <b>explain four</b> factors need to be considered when cleaning the application equipment and prime mover (if applicable)	May include: <ul style="list-style-type: none"> <li>select and use correct PPE</li> <li>selection of an appropriate site for cleaning the application equipment</li> <li>internal and external surfaces</li> <li>use of an in built system (if applicable)</li> <li>triple rinse the applicator following product information recommendations (if applicable)</li> <li>thorough flushing of system</li> <li>safe disposal of contaminated washings in an appropriate manner following good practice</li> <li>safe procedures followed</li> <li>contaminated cleanings suitably packaged and labelled ready for disposal</li> <li>frequency of cleaning stated</li> </ul> <p style="text-align: right;"><b>Met ✓ Not Met X</b></p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unit 054 6.3	Describe the storage requirements for the application equipment	<b>ALL EQUIPMENT</b> Candidate to <b>describe three</b> factors to consider when storing other specific equipment	May include: <ul style="list-style-type: none"> <li>de-pressurisation (if applicable)</li> <li>ensure the application equipment is clean and dry</li> <li>inspect for wear or damage</li> <li>repair or notify supervisor if not within operators level of responsibility and ability</li> <li>lubricate if required</li> <li>use of anti-freeze for frost protection (if applicable)</li> <li>nozzles and filters removed prior to freezing conditions (if applicable)</li> <li>store in a secure area</li> <li>isolation of any electrical controls</li> <li>store under cover and out of direct sunlight</li> </ul> <p style="text-align: right;"><b>Met ✓ Not Met X</b></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 <b>has met</b> all of the assessment criteria	Tick ✓ <input type="checkbox"/>	The Candidate <b>has not</b> met all of the assessment criteria; ( <b>state reason(s)</b> )	Tick ✓ <input type="checkbox"/>
	Signed:		Date:	

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

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

Candidate D	Candidate <b>has met</b> all of the assessment criteria	Tick ✓ <input type="checkbox"/>	The Candidate <b>has not</b> met all of the assessment criteria; ( <b>state reason(s)</b> )	Tick ✓ <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 and that the judgement of the Assessor was appropriate.	Tick ✓ <input type="checkbox"/>
I observed an assessment process taking place. The following were noted as areas of concern.	Tick ✓ <input type="checkbox"/>
Signed:	
Date:	