

# CITY & GUILDS LEVEL 2 AWARD IN THE SAFE APPLICATION OF PESTICIDES USING SELF PROPELLED, MOUNTED, TRAILED HORIZONTAL BOOM SPRAYERS (PA2) 601/5141/9



## 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)

<b>Qualification Group No</b>	0 2 1 6	Pesticides
<b>Qualification Programme No</b>	0 2 1 6 - 5 0	L2 Award in the Safe Application of Pesticides Using Self Propelled, Mounted, Trailed Horizontal Boom Sprayers (PA2)
<b>Unit(s)</b>	1 1 1	Operating Mounted, Trailed and Self Propelled Hydraulic Nozzle or Rotary Atomiser Horizontal Boom Sprayers (PA2A) (D/505/7664)
	1 1 2	Operating Mounted, Trailed and Self Propelled Air / Fluid Nozzle Horizontal Boom Sprayers (PA2C) ((M505/7667)
	1 1 3	Operating Mounted, Trailed and Self Propelled Downward Air Assisted Horizontal Boom Sprayers (PA2E) (M/505/7670)
	1 1 4	Operating Mounted or Trailed Wick Type Applicators (PA2F) (F/506/8298)
	1 1 5	Operating Vehicle Mounted Kerb Sprayers Fitted with Hydraulic Nozzles/Rotary Atomisers (PA2AR) (D/505/7681)
<b>Guided Learning Hours (GLH)</b>		54
<b>Total Qualification Time (TQT)</b>		60
<b>Recommended Assessment Duration</b>		1.5 – 3 hours per Candidate
<b>Pre-Requisite Units</b>	1 0 1	Principles of Safe Handling and Application of Pesticides (PA1)

<b>Version and date</b>	<b>Change detail</b>	<b>Section</b>
1.1 November 2017	Added TQT details Deleted QCF / Learning Time	<b>Qualification at a glance, Structure</b>  <b>Throughout</b>
1.2 April 2022	GLH & TQT Clarified and highlighted  City & Guilds address revised	<b>Qualification at a glance</b> <b>Pg 6</b>

# City & Guilds Level 2 Award in the Safe Application of Pesticides Using Self Propelled, Mounted, Trailed Horizontal Boom Sprayers (PA2) Qualification Guidance

## Introduction

The scheme will be administered by City & Guilds

City & Guilds will:

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

## The Qualification

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

## Training

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

## Total Qualification Time

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

## Access to Assessment

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

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

The assessment consists of **five** optional units:

<b>Unit 111 – PA2A</b>	(Optional)	(Credit Value 3)	(Print pages 7 – 13 plus 40)
Outcome 1.	Know the legislative and safety regulations relating to application equipment <b>(Criteria 1.1 – 1.2)</b>		
Outcome 2.	Be able to assess the environmental factors relating to the mixing and application site <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 the applicator <b>(Criteria 4.1 – 4.5)</b>		
Outcome 5.	Be able to operate the application equipment <b>(Criteria 5.1 – 5.4)</b>		
Outcome 6.	Know how to carry out post-operational procedures <b>(Criteria 6.1 – 6.3)</b>		
<b>Unit 112 – PA2C</b>	(Optional)	(Credit Value 3)	(Print pages 14 – 20 plus 40)
Outcome 1.	Know the legislative and safety regulations relating to application equipment <b>(Criteria 1.1 – 1.2)</b>		
Outcome 2.	Be able to assess the environmental factors relating to the mixing and application site <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 the applicator <b>(Criteria 4.1 – 4.5)</b>		
Outcome 5.	Be able to operate the application equipment <b>(Criteria 5.1 – 5.4)</b>		
Outcome 6.	Know how to carry out post-operational procedures <b>(Criteria 6.1 – 6.3)</b>		
<b>Unit 113 – PA2E</b>	(Optional)	(Credit Value 3)	(Print pages 21 – 27 plus 40)
Outcome 1.	Know the legislative and safety regulations relating to application equipment <b>(Criteria 1.1 – 1.2)</b>		
Outcome 2.	Be able to assess the environmental factors relating to the mixing and application site <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 the applicator <b>(Criteria 4.1 – 4.5)</b>		
Outcome 5.	Be able to operate the application equipment <b>(Criteria 5.1 – 5.4)</b>		
Outcome 6.	Know how to carry out post-operational procedures <b>(Criteria 6.1 – 6.3)</b>		

**Unit 114 – PA2F**

(Optional)

(Credit Value)

(Print pages 28 – 33 plus 40)

Outcome 1.	Know the legislative and safety regulations relating to application equipment <b>(Criteria 1.1 – 1.2)</b>
Outcome 2.	Be able to assess the environmental factors relating to the mixing and application site <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 the applicator <b>(Criteria 4.1 – 4.5)</b>
Outcome 5.	Be able to operate the application equipment <b>(Criteria 5.1 – 5.4)</b>
Outcome 6.	Know how to carry out post-operational procedures <b>(Criteria 6.1 – 6.3)</b>

**Unit 115 – PA2AR**

(Optional)

(Credit Value)

(Print pages 34 – 40)

Outcome 1.	Know the legislative and safety regulations relating to application equipment <b>(Criteria 1.1 – 1.2)</b>
Outcome 2.	Be able to assess the environmental factors relating to the mixing and application site <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 the applicator <b>(Criteria 4.1 – 4.5)</b>
Outcome 5.	Be able to operate the application equipment <b>(Criteria 5.1 – 5.4)</b>
Outcome 6.	Know how to carry out post-operational procedures <b>(Criteria 6.1 – 6.3)</b>

Candidates must successfully achieve **all** assessment activities in their chosen unit(s).

**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 76 857300

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 to be aware of any local or national issues to prevent breach of security, safety and any cross contamination or damage to the local environment.

### Information

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

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

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

### Assessment Guidance for the Assessor

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

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

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

### Assessment Guidance for the Candidate

A list of registered Assessment Centres is available from City & Guilds NPTC. ([www.nptc.org.uk](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 the candidates 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**  
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**London**  
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## Unit 111 - Operating Mounted, Trailed and Self Propelled Hydraulic Nozzle or Rotary Atomiser Horizontal Boom Sprayers (PA2A)

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 111 1.1	Describe the legal requirements relating to applying pesticides using horizontal boom sprayers	Candidate to <b>describe two</b> operator's obligations in terms of legal requirements	<p>May include:</p> <ul style="list-style-type: none"> <li>all required guards are in place and equipment complies with legal requirements</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> <li>the operator must hold the appropriate certification for the equipment they are using</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 111 1.2	Describe how to apply pesticides safely using horizontal boom sprayers following industry best practice	<p>Candidate to <b>describe one</b> operator safety regulation in terms of using horizontal boom sprayers</p> <p>Candidate to <b>describe two</b> precautions the operator may take to protect self from pesticide contamination when operating the prime mover</p> <p>When preparing the prime mover and sprayer, the candidate is to <b>describe three</b> checks which the operator may carry out to protect self from physical danger during operation</p> <p>Candidate to <b>state four</b> aspects of safe practice to be considered when driving on uneven/sloping terrain</p> <p>Candidate to <b>state one</b> consideration for safe driving on a public highway</p>	<p>May include:</p> <ul style="list-style-type: none"> <li>comply with Pesticide Codes of Practice</li> <li>adopt industry best practice</li> <li>be aware of any safety implications imposed by Risk/COSHH assessment and comply with the requirements</li> </ul> <p>Sealed cab:</p> <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> <li>awareness of the siting of pressurised components within confines of cab</li> </ul> <p>Open cab/canopy/platform:</p> <ul style="list-style-type: none"> <li>use of appropriate PPE</li> <li>awareness of the siting of pressurised components within confines of cab/canopy/platform</li> </ul> <p>May include:</p> <ul style="list-style-type: none"> <li>compatibility of prime mover and sprayer</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> <p>May include:</p> <ul style="list-style-type: none"> <li>assess conditions</li> <li>select four wheel drive</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> <p>May include:</p> <ul style="list-style-type: none"> <li>independent brakes coupled together</li> <li>travelling at high speed makes vehicle unstable</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 111 2.1	Identify risks to the environment	Candidate to <b>identify all</b> relevant risks to the environment for the application site	<p>May include:</p> <ul style="list-style-type: none"> <li>ground conditions</li> <li>water courses</li> <li>environmental margins/strips/areas</li> <li>drains</li> <li>boreholes</li> <li>wildlife</li> <li>non-target plants</li> <li>sensitive crops/areas</li> <li>hedgerows</li> <li>housing</li> <li>public access</li> <li>other risks particular 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 111 2.2	Explain how to minimise risks to the environment	<p>Candidate to <b>explain</b> how to minimise the risks identified in 2.1</p> <p>Candidate to <b>state</b> the reason for minimising spray drift or off target application</p> <p>Candidate to <b>check</b> and <b>comment</b> on wind speed and direction</p> <p>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>avoid spray drift</li> <li>avoid off target application</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 (minimal environmental impact)</li> <li>appropriate timing of application</li> <li>avoidance of contamination to people and the environment</li> <li>use of an anemometer at suitable height or visual signs</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>nozzle type and size</li> <li>pressure</li> <li>forward speed</li> <li>boom height</li> <li>rotary atomiser speed</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 111 3.1  Unit 111 3.2  Continued	Read product information  Interpret product information	<p>The candidate is required to <b>read</b> and <b>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. 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 for key information on the label to be highlighted for use during the assessment</p>	<p>May include the following:</p> <ul style="list-style-type: none"> <li>product name</li> <li>active substance(s) (ingredient(s))</li> </ul> <p>Important information:</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:</p> <ul style="list-style-type: none"> <li>crop/target</li> <li>dose rate</li> <li>water volume</li> <li>timing</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 111 3.1 Unit 111 3.2			Mixing and spraying: <ul style="list-style-type: none"> <li>filling</li> <li>reduced volume applications (if applicable)</li> <li>recommended nozzles</li> <li>recommended pressure</li> <li>spray quality</li> <li>additional label information</li> <li>compatibility</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 111 4.1	Identify applicator components and controls	Candidate to <b>identify all</b> components and controls relating to the applicator being used for the assessment  <b>Identify and explain</b> the use of <b>two</b> types of nozzle, one of which could be that intended for use (not applicable to Rotary Atomiser sprayers)	May include: <ul style="list-style-type: none"> <li>main spray tank</li> <li>pump</li> <li>pulsation damper</li> <li>filling control and devices</li> <li>agitation control</li> <li>pressure adjustment control</li> <li>pressure gauge</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(s)</li> <li>nozzles/atomisers</li> <li>diaphragm check valves</li> <li>tank drain</li> <li>other components/controls specific to the applicator</li> </ul> May include: <ul style="list-style-type: none"> <li>flat fan – fine/medium/coarse spray</li> <li>air inclusion – medium/coarse spray, low-drift</li> <li>cone – fine spray, good coverage</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 111 4.2	Carry out pre-use checks to the prime mover	Candidate to <b>carry out all</b> pre-use checks relevant to the prime mover being used for the assessment	May include: <ul style="list-style-type: none"> <li>guards in place and in good condition</li> <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 style="text-align: right;"><b>Met ✓ Not Met X</b></p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unit 111 4.3  Continued	Carry out pre-use and operational checks to the sprayer	Candidate to <b>carry out all</b> pre-use and operational checks to the sprayer/applicator <b>Check</b> security of attachment of applicator mechanisms  <b>Check</b> for mechanical defects	May include all/some of the following as applicable to the sprayer/applicator: <ul style="list-style-type: none"> <li>safe unfolding of booms to avoid personal contamination and contact with Over Head Power Lines (OHPL) and any other overhead hazards</li> <li>fasteners tight</li> <li>straps inspected and adjusted if necessary</li> <li>linkage secure</li> <li>sideways movement restricted</li> <li>drawbar pin secured</li> <li>seized, worn or damaged controls/components</li> <li>atomiser drives and electrical connectors</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 111 4.3		<p><b>Check</b> that the applicator is lubricated correctly</p> <p><b>Check</b> boom settings, suspension and break-back devices</p> <p><b>Remove, clean and refit a filter</b></p> <p><b>Remove, clean/replace and refit a nozzle/restrictor</b></p> <p><b>Explain</b> how to use the control panel to ensure that the applicator is functioning correctly (if applicable)</p> <p><b>Part fill applicator</b></p> <p><b>Check</b> applicator for leaks and correct spray patterns</p> <p><b>State one</b> suitable action in the event of the control panel failing (if applicable)</p>	<ul style="list-style-type: none"> <li>• identification of lubrication points</li> <li>• visual inspection of lubrication points</li> <li>• visual inspection of levels</li> <li>• boom suspension operational</li> <li>• break-back efficiency</li> <li>• height adjustment</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, replace if damaged</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 replace if worn/damaged</li> <li>• refit</li> </ul> <p>May include:</p> <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 base settings</li> <li>• switch to manual/test mode where possible</li> </ul> <p>To include:</p> <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> <p>May include:</p> <ul style="list-style-type: none"> <li>• suitable site selected</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</li> <li>• 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> <p>May include:</p> <ul style="list-style-type: none"> <li>• stop pesticide application</li> <li>• manual operation of controls if possible</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 111 4.4  Continued	Calibrate the sprayer and record relevant data	<p>Candidate is required to <b>calibrate</b> the applicator and record <b>relevant</b> data</p> <p><b>Select and record</b> forward speed</p> <p><b>Calculate</b> required output/volume rate</p>	<p>Calibration may include the following:</p> <ul style="list-style-type: none"> <li>• suitable forward speed for crop/target and ground conditions</li> <li>• appropriate gear selected and engine speed established</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>	<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 111 4.4		<p>Select appropriate nozzle/atomiser using manufacturers literature (if available)</p> <p>Set operating pressure/disc speed</p> <p>Check nozzle/atomiser outputs</p> <p>State four pieces of calibration data that should be recorded</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>disc speed 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/atomiser 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/atomisers 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/atomiser fitted</li> <li>pressure/disc speed</li> <li>flow rate</li> </ul> <p>Met ✓ Not Met X</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unit 111 4.5	Calculate the quantities of pesticide and water required	Candidate to <b>calculate</b> quantities required for both a <b>specified area</b> and <b>full tank</b>	<p>To 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> <li>amount of pesticide required for full tank</li> </ul> <p>Met ✓ Not Met X</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unit 111 5.1	Measure the required quantities and add to the sprayer	<p>Candidate to <b>measure</b> and <b>add</b> quantities required for the area specified in 4.5</p> <p><b>Note: This may be a simulated pesticide product</b></p>	<p>To include:</p> <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>observance of pesticide manufacturers instructions for mixing sequence and agitation (or other recommended method)</li> <li>suitable site selected</li> <li>clean water supply</li> <li>accurate measurement of water</li> <li>accurate measurement of pesticide</li> <li>use of filling device (if fitted)</li> <li>avoidance of spillage</li> <li>return to secure storage</li> </ul> <p>Met ✓ Not Met X</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unit 111 5.2	Demonstrate safe and accurate application procedures	<p>Candidate to <b>describe two</b> possible methods to achieve accurate application</p> <p>Candidate to <b>explain</b> the appropriate procedure to follow when the applicator needs refilling part way through an application</p> <p>Candidate to <b>explain</b> the appropriate procedure to follow when a nozzle/restrictor becomes blocked during an application</p>	<p>May include any of the following:</p> <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> <p>Explanation to include:</p> <ul style="list-style-type: none"> <li>avoid contact with contaminated crop</li> <li>mark the location at which the applicator emptied</li> <li>refill applicator</li> <li>continue spraying by accurately matching at the appropriate point</li> </ul> <p>Explanation to include:</p> <ul style="list-style-type: none"> <li>select and use appropriate PPE</li> <li>care not to walk in contaminated crop</li> <li>clean or replace nozzle/restrictor as appropriate</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 111 5.2		Candidate to <b>apply</b> pesticide to treat a specified area appropriate to the candidates normal work situation and sufficient to demonstrate safe and accurate application procedures	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>operate controls to start and finish applying accurately at the beginning and end of each bout</li> <li>correct forward speed and pressure</li> <li>accurate matching of bouts / use of driving aids</li> <li>coping with obstacles (if applicable)</li> <li>all of specified area treated, minimising overlaps and misses</li> <li>awareness of changes in wind speed and direction</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 111 5.3	Carry out all activities protecting human health and the environment	<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	To include: <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 information and/or COSHH/Risk Assessment)</li> <li>prevention of public / bystander contamination</li> <li>safe filling procedure</li> <li>avoidance of spray drift</li> <li>avoidance of off-target application</li> <li>avoidance of over dosing/under dosing 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 111 5.4	Complete a treatment record	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 (or supplied by the Assessor if necessary)	Completion of the treatment record must be: <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 111 6.1	Explain how to manage surplus pesticide and dispose of waste material	Candidate to <b>explain one</b> method of dealing with surplus concentrate pesticide  Candidate to <b>explain two</b> methods of dealing with waste containers or packaging  Candidate to <b>explain two</b> methods of dealing with surplus dilute pesticide	May include: <ul style="list-style-type: none"> <li>return to temporary mobile store</li> <li>return to fixed store</li> </ul> Containers: <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> Packaging: <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> May include: <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 111 6.2	Explain how to clean and decontaminate the sprayer and, if applicable, the prime mover	Candidate to <b>explain four</b> factors that need to be considered when cleaning and decontaminating the sprayer 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 cleaning agent (if recommended/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</li> <li>• when cleaning should take place</li> <li>• safe procedures followed</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 111 6.3	Describe the storage requirements for the sprayer	Candidate to <b>describe three</b> factors to consider prior to storing the applicator	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>• controls left in appropriate positions</li> <li>• frost protection measures implemented</li> <li>• lubricate as required</li> <li>• store undercover and out of direct sunlight</li> <li>• store in a secure area</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 112 - Operating Mounted, Trailed and Self Propelled Air / Fluid Nozzle Horizontal Boom Sprayers (PA2C)

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 112 1.1	Describe the legal requirements relating to applying pesticides using horizontal boom sprayers with thin fluid nozzles	Candidate to <b>describe two</b> operator's obligations in terms of legal requirements	<p>May include:</p> <ul style="list-style-type: none"> <li>all required guards are in place and equipment complies with legal requirements</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> <li>the operator must hold the appropriate certification for the equipment they are using</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 112 1.2	Describe how to apply pesticides safely using horizontal boom sprayers following industry best practice	<p>Candidate to <b>describe one</b> operator safety regulation in terms of using horizontal boom sprayers</p> <p>Candidate to <b>describe two</b> precautions the operator may take to protect self from pesticide contamination when operating the prime mover</p> <p>When preparing the prime mover and sprayer, the candidate is to <b>describe three</b> checks which the operator may carry out to protect self from physical danger during operation</p> <p>Candidate to <b>state four</b> aspects of safe practice to be considered when driving on uneven/sloping terrain</p> <p>Candidate to <b>state one</b> consideration for safe driving on a public highway</p>	<p>May include:</p> <ul style="list-style-type: none"> <li>comply with Pesticides Codes of Practice</li> <li>adopt industry best practice</li> <li>be aware of any safety implications imposed by Risk/COSHH Assessment and comply with the requirements</li> </ul> <p>Cabbed:</p> <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> <li>awareness of the siting of pressurised components within confines of the cab</li> </ul> <p>Open cab/canopy/platform:</p> <ul style="list-style-type: none"> <li>use of appropriate PPE</li> <li>awareness of the siting of pressurised components within confines of the cab/canopy/platform</li> </ul> <p>May include:</p> <ul style="list-style-type: none"> <li>compatibility of prime mover and sprayer</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> <p>May include:</p> <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> <p>May include:</p> <ul style="list-style-type: none"> <li>independent brakes coupled together</li> <li>travelling at high speed makes vehicle unstable</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 112 2.1	Identify risks to the environment	Candidate to <b>identify all relevant</b> risks to the environment for the application site	<p>May include:</p> <ul style="list-style-type: none"> <li>ground conditions</li> <li>water courses</li> <li>environmental margins/strips/areas</li> <li>drains</li> <li>boreholes</li> <li>wildlife</li> <li>non-target plants</li> <li>sensitive crops/areas</li> <li>hedgerows</li> <li>housing</li> <li>public access</li> <li>other risks particular 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 112 2.2	Explain how to minimise risks to the environment	<p>Candidate to <b>explain</b> how to minimise the risks identified in 2.1</p> <p>Candidate to <b>state</b> the reason for minimising spray drift or off target application</p> <p>Candidate to <b>check and comment</b> on wind speed and direction</p> <p>Candidate to <b>state five</b> factors that affect spray drift</p>	<p>Explanation to include the following points:</p> <ul style="list-style-type: none"> <li>check and maintain application rate</li> <li>avoid spray drift</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 (minimal environmental impact)</li> <li>careful timing of application</li> <li>avoidance of contamination to people and the environment</li> <li>use of anemometer at suitable height or visual signs</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> <li>boom 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 112 3.1  Unit 112 3.2  Continued	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 relevant 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 for key information on the label to be highlighted for use during the assessment</p>	<p>The following to be provided:</p> <ul style="list-style-type: none"> <li>product name</li> <li>active substance(s) (ingredient(s))</li> </ul> <p>Important information:</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:</p> <ul style="list-style-type: none"> <li>crop/target</li> <li>dose rate</li> <li>water volume</li> <li>timing</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 112 3.1 Unit 112 3.2			Mixing and spraying: <ul style="list-style-type: none"> <li>filling</li> <li>reduced volume applications (if applicable)</li> <li>recommended nozzles/restrictors</li> <li>recommended pressure</li> <li>spray quality</li> <li>additional label information</li> <li>compatibility</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 112 4.1	Identify applicator components and controls	Candidate to <b>identify all</b> components and controls relating to the applicator being used for the assessment  <b>Identify and explain</b> the use of <b>two</b> sizes of nozzle restrictor, one of which could be that intended for use	May include: <ul style="list-style-type: none"> <li>main spray tank</li> <li>pump</li> <li>compressor</li> <li>air inlet</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 flood jets</li> <li>diaphragm check valves</li> <li>tank drain</li> <li>other components/controls specific to the applicator</li> </ul> May include: <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 style="text-align: right;"><b>Met ✓ Not Met X</b></p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unit 112 4.2	Carry out pre-use checks to the prime mover	Candidate to <b>carry out all</b> pre-use checks <b>relevant</b> to the prime mover being used for the assessment	May include: <ul style="list-style-type: none"> <li>guards in place and in good condition</li> <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 style="text-align: right;"><b>Met ✓ Not Met X</b></p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unit 112 4.3	Carry out pre-use and operational checks to the sprayer	Candidate to <b>carry out all</b> pre-use and operational checks to the sprayer/applicator  <b>Check</b> security of attachment of applicator mechanisms	May include all/some of the following as applicable to the sprayer/applicator: <ul style="list-style-type: none"> <li>Safe unfolding of booms to avoid personal contamination and contact with Over Head Power Lines (OHPL) and any other over head hazards</li> <li>fasteners tight</li> <li>straps inspected and adjusted if necessary</li> <li>linkage secure</li> <li>sideways movement restricted</li> <li>drawbar pin secured</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 112 4.3		<p><b>Check</b> for mechanical defects</p> <p><b>Check</b> that the applicator is lubricated correctly</p> <p><b>Check</b> boom settings, suspension and break-back devices</p> <p><b>Remove, clean and refit a filter</b></p> <p><b>Remove, clean/replace and refit a nozzle restrictor and flood jet</b></p> <p><b>Explain</b> how to use the control panel to ensure that the applicator is functioning correctly (if applicable)</p> <p><b>Part fill applicator</b></p> <p><b>Check</b> applicator for leaks and correct spray patterns</p> <p><b>State one</b> suitable action in the event of the control panel failing (if applicable)</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</li> <li>boom suspension operational</li> <li>break-back efficiency</li> <li>height adjustment</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> <p>May include:</p> <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> <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 for correct spray patterns, absence of blockages, streaking, pulsing and correct alignment</li> <li>replace defective nozzle restrictors and/or flood jets</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> <li>stop pesticide application</li> <li>manual operation of controls if possible</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 112 4.4  Continued	Calibrate the sprayer and record relevant data	<p>Candidate is required to <b>calibrate</b> the applicator and record relevant data</p> <p><b>Select</b> and record forward speed</p> <p><b>Calculate</b> required output/volume rate</p>	<p>Calibration may include the following:</p> <ul style="list-style-type: none"> <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</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>	<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 112 4.4		<p>Select appropriate nozzle restrictor using manufacturers literature (if available)</p> <p>Set operating pressure for liquid and air</p> <p>Check nozzle outputs</p> <p>State four pieces of calibration data that should be recorded</p>	<ul style="list-style-type: none"> <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 nozzle restrictors and/or flood jets 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</li> <li>air pressure</li> <li>liquid pressure</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 112 4.5	Calculate the quantities of pesticide and water required for a specified area	Candidate to <b>calculate</b> quantities required for both a <b>specified area</b> and <b>full tank</b>	<p>To 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> <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 112 5.1	Measure the required quantities and add to the sprayer	<p>Candidate to <b>measure</b> and <b>add</b> quantities required for the area specified in 4.5</p> <p><b>Note: This may be a simulated pesticide product</b></p>	<p>To include:</p> <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>accurate measurement of pesticide</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> </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 112 5.2	Demonstrate safe and accurate application procedures	<p>Candidate to <b>describe two</b> possible methods to achieve accurate application</p> <p>Candidate to <b>explain</b> the appropriate procedure to follow when the applicator needs refilling part way through an application</p>	<p>May include any of the following:</p> <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> <p>Explanation to include:</p> <ul style="list-style-type: none"> <li>avoid contact with contaminated crop</li> <li>mark the spot at which the applicator emptied</li> <li>refill applicator</li> <li>continue spraying by accurately matching at the appropriate point</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 112 5.2		<p>Candidate to <b>explain</b> the appropriate procedure to follow when a nozzle restrictor or flood jet becomes blocked during an application</p> <p>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>Explanation to include:</p> <ul style="list-style-type: none"> <li>select and use appropriate PPE</li> <li>care not to walk in contaminated crop</li> <li>clean or replace nozzle restrictor or flood jet as appropriate</li> </ul> <p>To include:</p> <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>operate controls to start and finish applying accurately at the beginning and end of each bout</li> <li>correct forward speed and pressure for site conditions</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> <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 112 5.3	Carry out all activities protecting human health and the environment	<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	<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 spray drift</li> <li>avoidance of off-target application</li> <li>avoidance of over dosing/under dosing 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 112 5.4	Complete a treatment record	<p>Candidate is required to <b>complete</b> a treatment record</p> <p><b>Note to the Assessor:</b> The treatment record must be approved by the Assessor (or supplied by the Assessor if necessary)</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 112 6.1	Explain how to manage surplus pesticide and dispose of waste material	<p>Candidate to <b>explain one</b> method of dealing with surplus concentrate pesticide</p> <p>Candidate to <b>explain two</b> methods of dealing with waste containers and packaging</p> <p>Candidate to <b>explain two</b> methods of dealing 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>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 a 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 a 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 a 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 112 6.2	Explain how to clean and decontaminate the sprayer and, if applicable, the prime mover	Candidate to <b>explain four</b> factors need to be considered when cleaning and decontaminating the sprayer 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 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</li> <li>• when cleaning should take place</li> <li>• safe procedures followed</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 112 6.3	Describe the storage requirements for the sprayer	Candidate to <b>describe three</b> factors to consider prior to storing the applicator	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>• controls left in appropriate positions</li> <li>• frost protection measures implemented</li> <li>• lubricate as required</li> <li>• store undercover and out of direct sunlight</li> <li>• store in a secure area</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 113 - Operating Mounted, Trailed and Self Propelled Downward Air Assisted Horizontal Boom Sprayers (PA2E)

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 113 1.1	Describe the legal requirements relating to applying pesticides using horizontal boom sprayers	Candidate to <b>describe two</b> operator's obligations in terms of legal requirements	<p>May include:</p> <ul style="list-style-type: none"> <li>all required guards are in place and equipment complies with legal requirements</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> <li>the operator must hold the appropriate certification for the equipment they are using</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 113 1.2	Describe how to apply pesticides safely using horizontal boom sprayers following industry best practice	<p>Candidate to <b>describe one</b> operator safety regulation in terms of using horizontal boom sprayers</p> <p>Candidate to <b>describe two</b> precautions the operator may take to protect self from pesticide contamination when operating the prime mover</p> <p>When preparing the prime mover and sprayer, the candidate is to <b>describe three</b> checks which the operator may carry out to protect self from physical danger during operation</p> <p>Candidate to <b>state four</b> aspects of safe practice to be considered when driving on uneven/sloping terrain</p> <p>Candidate to <b>state one</b> consideration for safe driving on a public highway</p>	<p>May include:</p> <ul style="list-style-type: none"> <li>comply with Pesticides Codes of Practice</li> <li>adopt industry best practice</li> <li>be aware of any safety implications imposed by Risk/COSHH Assessment and comply with the requirements</li> </ul> <p>Cabbed:</p> <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> <li>awareness of the siting of pressurised components within confines of the cab</li> </ul> <p>Open cab/canopy/platform:</p> <ul style="list-style-type: none"> <li>use of appropriate PPE</li> <li>awareness of the siting of pressurised components within confines of the cab/canopy/platform</li> </ul> <p>May include:</p> <ul style="list-style-type: none"> <li>compatibility of prime mover and sprayer</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> <p>May include:</p> <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> <p>May include:</p> <ul style="list-style-type: none"> <li>independent brakes coupled together</li> <li>travelling at high speed makes vehicle unstable</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 113 2.1	Identify risks to the environment	Candidate to <b>identify all relevant</b> risks to the environment for the application site	<p>May include:</p> <ul style="list-style-type: none"> <li>ground conditions</li> <li>water courses</li> <li>environmental margins/strips/areas</li> <li>drains</li> <li>boreholes</li> <li>wildlife</li> <li>non-target plants</li> <li>sensitive crops/areas</li> <li>hedgerows</li> <li>housing</li> <li>public access</li> <li>other risks particular 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 113 2.2	Explain how to minimise risks to the environment	<p>Candidate to <b>explain</b> how to minimise the risks identified in 2.1</p> <p>Candidate to <b>state</b> the reason for minimising spray drift or off target application</p> <p>Candidate to <b>check and comment</b> on wind speed and direction</p> <p>Candidate to <b>state five</b> factors that affect spray drift</p>	<p>Explanation to include the following points:</p> <ul style="list-style-type: none"> <li>check and maintain application rate</li> <li>avoid spray drift</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 (minimal environmental impact)</li> <li>careful timing of application</li> <li>avoidance of contamination to people and the environment</li> <li>use of anemometer at suitable heights or visual signs</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>nozzle type and size</li> <li>air outlet/nozzle angle</li> <li>air assistance</li> <li>liquid pressure</li> <li>forward speed</li> <li>boom 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 113 3.1	Read product information	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>The following to be provided:</p> <ul style="list-style-type: none"> <li>product name</li> <li>active substance(s) (ingredient(s))</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 113 3.2	Interpret product information	<p><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</p> <p><b>Note to the Candidate (Assessor also to note):</b> It is acceptable for key information on the label to be highlighted for use during the assessment</p>	<p>Important information:</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>	<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 113 3.2			Crop specific information: <ul style="list-style-type: none"> <li>• crop/target</li> <li>• dose rate</li> <li>• water volume</li> <li>• timing</li> </ul> Mixing and spraying: <ul style="list-style-type: none"> <li>• filling</li> <li>• reduced volume applications (if applicable)</li> <li>• recommended nozzles</li> <li>• recommended pressure</li> <li>• spray quality</li> <li>• additional label information</li> <li>• compatibility</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 113 4.1	Identify applicator components and controls	Candidate to <b>identify all</b> components and controls relating to the applicator being used for the assessment  <b>Identify and explain</b> the use of <b>two</b> types of nozzle, one of which could be that intended for use (if applicable)	May include: <ul style="list-style-type: none"> <li>• main spray tank</li> <li>• pump</li> <li>• pressure relief device</li> <li>• pulsation damper</li> <li>• filling control and devices</li> <li>• agitation control</li> <li>• liquid pressure adjustment control</li> <li>• fan</li> <li>• air intake</li> <li>• air bag/sleeve</li> <li>• fan speed adjustment control</li> <li>• air outlet angle control</li> <li>• fan speed indicator</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>• nozzles</li> <li>• nozzle angle control</li> <li>• diaphragm check valves</li> <li>• tank drain</li> <li>• other components/controls specific to the applicator</li> </ul> May include: <ul style="list-style-type: none"> <li>• flat fan – fine/medium/coarse spray</li> <li>• air inclusion – medium/coarse spray, low drift</li> <li>• cone – fine spray, good coverage</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 113 4.2	Carry out pre-use checks to the prime mover	Candidate to <b>carry out all</b> pre-use checks <b>relevant</b> to the prime mover being used for the assessment	May include: <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 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 113 4.3	Carry out pre-use and operational checks to the sprayer	<p>Candidate to <b>carry out all</b> pre-use and operational checks to the sprayer/applicator</p> <p><b>Check</b> security of attachment of applicator mechanisms</p> <p><b>Check</b> for mechanical defects</p> <p><b>Check</b> that the applicator is lubricated correctly</p> <p><b>Check</b> boom settings, suspension and break-back devices</p> <p><b>Remove, clean and refit a filter</b></p> <p><b>Remove, clean/replace and refit a nozzle</b></p> <p><b>Explain</b> how to use the control panel to ensure that the applicator is functioning correctly <b>(if applicable)</b></p> <p><b>Part fill applicator</b></p> <p><b>Check</b> applicator for liquid and air leaks, and correct spray patterns</p> <p><b>State one</b> suitable action in the event of the control panel failing (if applicable)</p>	<p>May include all/some of the following as applicable to the sprayer/applicator:</p> <ul style="list-style-type: none"> <li>Safe unfolding of booms to avoid personal contamination and contact with Over Head Power Lines (OHPL) and any other over head hazards</li> <li>fasteners tight</li> <li>straps inspected and adjusted if necessary</li> <li>linkage secure</li> <li>sideways movement restricted</li> <li>drawbar pin secured</li> <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</li> <li>boom suspension operational</li> <li>break-back efficiency</li> <li>height adjustment</li> <li>Candidate to: <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> </li> <li>Candidate to: <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> </li> <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> <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 for correct spray patterns, absence of blockages, streaking, pulsing and correct alignment</li> <li>replace defective nozzles</li> <li>lids and seals</li> <li>liquid pipe work and connections</li> <li>air bag/sleeve</li> <li>control valves</li> <li>filters</li> <li>liquid pressure gauge</li> <li>diaphragm check valves</li> <li>stop pesticide application</li> <li>manual operation of controls if possible</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 113 4.4	Calibrate the sprayer and record relevant data	<p>Candidate is required to <b>calibrate</b> the applicator and record <b>relevant</b> data</p> <p><b>Select</b> and record forward speed</p> <p><b>Calculate</b> required output/volume rate</p> <p><b>Select</b> appropriate nozzle and air speed using manufacturers literature (if available)</p> <p><b>Set operating pressure for liquid, and set air speed</b></p> <p><b>Check</b> nozzle outputs</p> <p><b>Note to the Assessor:</b> air assistance not required when checking nozzle output</p> <p><b>State</b> four pieces of calibration data that should be recorded</p>	<p>Calibration may include the following:</p> <ul style="list-style-type: none"> <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</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> <li>use of manufacturers operators handbook</li> <li>use of manufacturers literature</li> <li>confirm requirements of product label</li> <li>liquid pressure as determined by manufacturers literature</li> <li>air speed 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 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>nozzles fitted</li> <li>liquid pressure</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 113 4.5	Calculate the quantities of pesticide and water required for a specified area	Candidate to <b>calculate</b> quantities required for both a <b>specified area</b> and <b>full tank</b>	<p>To 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> <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 113 5.1	Measure the required quantities and add to the sprayer	<p>Candidate to <b>measure</b> and <b>add</b> quantities required for the area specified in 4.5</p> <p><b>Note: This may be a simulated pesticide product</b></p>	<p>To include:</p> <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>accurate measurement of pesticide</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> </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 113 5.2	Demonstrate safe and accurate application procedures	<p>Candidate to <b>describe two</b> possible methods to achieve accurate application</p> <p>Candidate to <b>explain</b> the appropriate procedure to follow when the applicator needs refilling part way through an application</p> <p>Candidate to <b>explain</b> the appropriate procedure to follow when a nozzle becomes blocked during an application</p> <p>Candidate to <b>explain</b> the appropriate procedure to follow in the event of the failure of the air assistance system</p> <p>Candidate to <b>state two</b> effects of increasing the speed of air assistance</p> <p>Candidate to <b>explain two</b> reasons for adjusting air outlet angle and/or nozzle angle</p> <p>Candidate to <b>apply</b> pesticide to treat a specified area appropriate to the candidates normal work situation and sufficient to demonstrate safe and accurate application procedures</p>	<p>May include any of the following:</p> <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> <p>Explanation to include:</p> <ul style="list-style-type: none"> <li>avoid contact with contaminated crop</li> <li>mark the spot at which the applicator emptied</li> <li>refill applicator</li> <li>continue spraying by accurately matching at the appropriate point</li> </ul> <p>Explanation to include:</p> <ul style="list-style-type: none"> <li>select and use appropriate PPE</li> <li>care not to walk in contaminated crop</li> <li>clean or replace nozzle as appropriate</li> </ul> <ul style="list-style-type: none"> <li>stop spraying</li> <li>continue to spray without using downwards air assistance (if conditions allow)</li> </ul> <p>May include:</p> <ul style="list-style-type: none"> <li>keeps the air bag/sleeve inflated over its entire length</li> <li>a larger air volume is produced, which may; <ul style="list-style-type: none"> <li>improve penetration of the spray into the crop</li> <li>lead to excessive drift</li> </ul> </li> </ul> <p>May include:</p> <p>inclining forward will:</p> <ul style="list-style-type: none"> <li>open the crop canopy and counteract the effect on the spray created by the forward speed of the sprayer</li> <li>counteract the effect on the spray created by a head wind</li> </ul> <p>inclining rearward will:</p> <ul style="list-style-type: none"> <li>open the crop canopy and counteract the effect on the spray created by a tail wind</li> </ul> <p>To include:</p> <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>correct air speed according to target and conditions</li> <li>correct air outlet and nozzle angle according to target and conditions</li> <li>operate controls to start and finish applying accurately at the beginning and end of each bout</li> <li>correct forward speed and pressure for site conditions</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> <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 113 5.3	Carry out all activities protecting human health and the environment	<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	To include: <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 spray drift</li> <li>avoidance of off target application</li> <li>avoidance of over dosing/under dosing 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 113 5.4	Complete a treatment record	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 (or supplied by the Assessor if necessary)	Completion of the treatment record must be: <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 113 6.1	Explain how to manage surplus pesticide and dispose of waste material	Candidate to <b>explain one</b> method of dealing with surplus concentrate pesticide  Candidate to <b>explain two</b> methods of dealing with waste containers and packaging	May include: <ul style="list-style-type: none"> <li>return to temporary mobile store</li> <li>return to fixed store</li> </ul> containers: <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 a licensed waste disposal contractor</li> </ul> packaging: <ul style="list-style-type: none"> <li>thoroughly emptied</li> <li>placed in secure storage until disposal</li> <li>collected by a licensed waste disposal contractor</li> </ul> May include: <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 a 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"/>
Unit 113 6.2	Explain how to clean and decontaminate the sprayer and, if applicable, the prime mover	Candidate to <b>explain four</b> factors that need to be considered when cleaning and decontaminating the sprayer 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 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, including air bag/sleeve</li> <li>safe disposal of contaminated washings</li> <li>when cleaning should take place</li> <li>safe procedures followed</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 113 6.3	Describe the storage requirements for the sprayer	Candidate to <b>describe three</b> factors to consider prior to storing the applicator	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>controls left in appropriate positions</li> <li>frost protection measures implemented</li> <li>lubricate as required</li> <li>store undercover and out of direct sunlight</li> <li>store in a secure area</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 114 - Operating Mounted or Trailed Wick Type Applicators (PA2F)

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 114 1.1	Describe the legal requirements relating to applying pesticides using wick type applicators	Candidate to <b>describe two</b> operator's obligations in terms of legal requirements	May include: <ul style="list-style-type: none"> <li>all required guards are in place and equipment complies with legal requirements</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> <li>the operator must hold the appropriate certification for the equipment they are using</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 114 1.2	Describe how to apply pesticides safely using wick type applicators following industry best practice	Candidate to <b>describe one</b> operator safety regulation in terms of using wick type applicators  Candidate to <b>describe two</b> precautions the operator may take to protect self from pesticide contamination when operating the prime mover  When preparing the prime mover and applicator, the candidate is to <b>describe three</b> checks which the operator may carry out to protect self from physical danger during operation  Candidate to <b>state four</b> aspects of safe practice to be considered when driving on uneven/sloping terrain  Candidate to <b>state one</b> consideration for safe driving on a public highway	May include: <ul style="list-style-type: none"> <li>comply with Pesticides Codes of Practice</li> <li>adopt industry best practice</li> <li>be aware of any safety implications imposed by Risk/COSHH Assessment and comply with the requirements</li> </ul> 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> Open cab/canopy/platform: <ul style="list-style-type: none"> <li>use of appropriate PPE</li> </ul> May include: <ul style="list-style-type: none"> <li>compatibility of prime mover and sprayer</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> 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> May include: <ul style="list-style-type: none"> <li>independent brakes coupled together</li> <li>travelling at high speed makes vehicle unstable</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 114 2.1	Identify risks to the environment	Candidate to <b>identify all relevant</b> risks to the environment for the application site	<p>May include:</p> <ul style="list-style-type: none"> <li>ground conditions</li> <li>water courses</li> <li>environmental margins/strips/areas</li> <li>drains</li> <li>boreholes</li> <li>wildlife</li> <li>non-target plants</li> <li>sensitive crops/areas</li> <li>hedgerows</li> <li>housing</li> <li>public access</li> <li>other risks particular 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 114 2.2	Explain how to minimise risks to the environment	<p>Candidate to <b>explain</b> how to minimise the risks identified in 2.1</p> <p>Candidate to <b>state</b> the reason for minimising off target application</p>	<p>Explanation to include the following points:</p> <ul style="list-style-type: none"> <li>check and maintain application rate</li> <li>observe buffer zones</li> <li>inform neighbours</li> <li>erect warning signs</li> <li>use an appropriate pesticide (minimal environmental impact)</li> <li>careful timing of application</li> <li>avoidance of contamination to people and the environment</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 114 3.1 3.2	Read product information Interpret product information	<p>The candidate is required to <b>read</b> and <b>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. 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 for key information on the label to be highlighted for use during the assessment</p>	<p>The following to be provided:</p> <ul style="list-style-type: none"> <li>product name</li> <li>active substance(s) (ingredient(s))</li> </ul> <p>Important information:</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:</p> <ul style="list-style-type: none"> <li>crop/target</li> <li>dose rate</li> <li>timing</li> <li>dilution rate</li> <li>mixing and filling</li> <li>additional label information</li> <li>compatibility</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 114 4.1  Continued	Identify applicator components and controls	Candidate to <b>identify all</b> components and controls relating to the applicator being used for the assessment	<p>May include:</p> <ul style="list-style-type: none"> <li>main tank</li> <li>wick</li> <li>pump</li> <li>filling control and devices</li> <li>agitation control</li> <li>pressure adjustment control</li> <li>pressure gauge</li> <li>on/off control</li> <li>filters</li> <li>clean water tank</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 114 4.1			<ul style="list-style-type: none"> <li>nozzles/distribution system</li> <li>diaphragm check valves</li> <li>tank drain</li> <li>other components/controls specific to the 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 114 4.2	Carry out pre-use checks to the prime mover	Candidate to <b>carry out all</b> pre-use checks <b>relevant</b> to the prime mover being used for the assessment	<p>May include:</p> <ul style="list-style-type: none"> <li>guards in place and in good condition</li> <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 style="text-align: right;"><b>Met ✓ Not Met X</b></p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unit 114 4.3	Carry out pre-use and operational checks to the applicator	<p>Candidate to <b>carry out all</b> pre-use and operational checks to the applicator</p> <p><b>Check</b> security of attachment of applicator mechanisms</p> <p><b>Check</b> for mechanical defects</p> <p><b>Check</b> that the applicator is lubricated correctly</p> <p><b>Remove, clean and refit a filter</b></p> <p><b>Part fill applicator</b></p> <p><b>Check</b> applicator for leaks and correct distribution</p>	<p>May include all/some of the following as applicable to the applicator:</p> <ul style="list-style-type: none"> <li>Safe unfolding of booms to avoid personal contamination and contact with Over Head Power Lines (OHPL) and any other over head hazards</li> <li>fasteners tight</li> <li>straps inspected and adjusted if necessary</li> <li>linkage secure</li> <li>sideways movement restricted</li> <li>drawbar pin secured</li> <li>seized, worn or damaged controls/components</li> <li>electrical connectors</li> <li>condition of wick</li> <li>identification of lubrication points</li> <li>visual inspection of lubrication points</li> <li>visual inspection of levels</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>To include:</p> <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> <p>May include:</p> <ul style="list-style-type: none"> <li>visual check of all nozzles/distribution system for even application to wick</li> <li>replace defective nozzles/distribution system components</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> <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 114 4.4	Set up the applicator and record relevant data	Candidate is required to <b>set up</b> the applicator and record relevant data <b>Select</b> forward speed  <b>Check</b> frame settings  <b>Prime wick</b>  <b>State two</b> pieces of operational data that should be recorded	Set up may include the following:  <ul style="list-style-type: none"> <li>suitable forward speed for target and ground conditions</li> <li>height adjustment</li> <li>travel slowly forward to ensure even distribution</li> <li>time required to prime wick (wet/dry)</li> <li>adjust flow rate to wick</li> </ul> May include: <ul style="list-style-type: none"> <li>registration number of vehicle</li> <li>gear selected</li> <li>priming time for wick</li> <li>liquid pressure (if applicable)</li> <li>flow rate setting</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 114 4.5	Calculate the quantities of pesticide and water required for a specified area	Candidate to <b>calculate</b> quantities required for both a <b>specified area</b> and <b>full tank</b>	To include: <ul style="list-style-type: none"> <li>amount of water required for specified area</li> <li>amount of pesticide required for specified area</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 114 5.1	Measure the required quantities and add to the applicator	Candidate to <b>measure</b> and <b>add</b> quantities required for the area specified in <b>4.5</b>  <b>Note: This may be a simulated pesticide product</b>	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>accurate measurement of pesticide</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> </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 114 5.2	Demonstrate safe and accurate application procedures	Candidate to <b>describe two</b> possible methods to achieve accurate application  Candidate to <b>explain</b> the appropriate procedure to follow when the applicator needs refilling part way through an application  Candidate to <b>describe one</b> problem relating to application that could occur when working on sideways (laterally) sloping ground  Candidate to <b>explain</b> the appropriate procedure to follow when a nozzle or distribution system becomes blocked during an application	May include any of the following: <ul style="list-style-type: none"> <li>blob markers</li> <li>marker poles</li> <li>applicator wheelings</li> <li>use of GPS</li> </ul> Explanation to include: <ul style="list-style-type: none"> <li>avoid contact with contaminated crop</li> <li>mark the spot at which the applicator emptied</li> <li>refill applicator</li> <li>continue application by accurately matching at the appropriate point</li> </ul> May include: <ul style="list-style-type: none"> <li>increased saturation of lowest side of wick</li> <li>decreased saturation of highest side of wick</li> </ul> Explanation to include: <ul style="list-style-type: none"> <li>select and use appropriate PPE</li> <li>care not to walk in contaminated crop</li> <li>clean or replace nozzle/distribution system as appropriate</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 114 5.2		Candidate to apply pesticide to treat a specified area appropriate to the candidate's normal work situation and sufficient to demonstrate safe and accurate application procedures	To include: <ul style="list-style-type: none"> <li>ensure wick is level or aligned to the target</li> <li>correct wick height according to target</li> <li>operate controls to start and finish applying accurately to the target</li> <li>avoidance of over-saturating wick</li> <li>avoidance of under-saturating wick</li> <li>correct forward speed for site conditions</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> </ul> Met ✓ Not Met X	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unit 114 5.3	Carry out all activities protecting human health and the environment	<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	To include: <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 drips from wick</li> <li>avoidance of off target application</li> <li>avoidance of over dosing/under dosing crop/target</li> </ul> Met ✓ Not Met X	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unit 114 5.4	Complete a treatment record	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 (or supplied by the Assessor if necessary)	Completion of the treatment record must be: <ul style="list-style-type: none"> <li>accurate</li> <li>legible (if handwritten)</li> </ul> Met ✓ Not Met X	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unit 114 6.1		Candidate to <b>explain one</b> method of dealing with surplus concentrate pesticide  Candidate to <b>explain two</b> method of dealing with waste containers and packaging  Candidate to <b>explain two</b> methods of dealing with surplus dilute pesticide	May include: <ul style="list-style-type: none"> <li>return to temporary mobile store</li> <li>return to fixed store</li> </ul> Containers: <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 a licensed waste disposal contractor</li> </ul> Packaging: <ul style="list-style-type: none"> <li>thoroughly emptied</li> <li>placed in secure storage until disposal</li> <li>collected by a licensed waste disposal contractor</li> </ul> May include: <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 a licensed waste disposal contractor</li> </ul> Met ✓ Not Met X	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unit 114 6.2	Explain how to clean and decontaminate the applicator and, if applicable, the prime mover	Candidate to <b>explain four</b> factors that need to be considered when cleaning and decontaminating the applicator 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 required</li> <li>internal and external surfaces</li> <li>cleaning of the wick</li> <li>thorough flushing of systems</li> <li>safe disposal of contaminated washings</li> <li>when cleaning should take place</li> <li>safe procedures followed</li> </ul> Met ✓ Not Met X	<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 114 6.3	Describe the storage requirements for the applicator	Candidate to <b>describe three</b> factors to consider prior to storing the applicator	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>• controls left in appropriate positions</li> <li>• frost protection measures implemented</li> <li>• lubricate as required</li> <li>• store undercover and out of direct sunlight</li> <li>• store in a secure area</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 115 - Operating Vehicle Mounted Kerb Sprayers Fitted with Hydraulic Nozzles/Rotary Atomisers (PA2AR)

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 115 1.1	Describe the legal requirements relating to applying pesticides using vehicle mounted kerb sprayers	Candidate to <b>describe two</b> operator's obligations in terms of legal requirements	<p>May include:</p> <ul style="list-style-type: none"> <li>all required guards are in place and equipment complies with legal requirements</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> <li>the operator must hold the appropriate certification for the equipment they are using</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 115 1.2	Describe how to apply pesticides safely using vehicle mounted kerb sprayers following industry best practice	<p>Candidate to <b>describe one</b> operator safety regulation in terms of using vehicle mounted kerb sprayers</p> <p>Candidate to <b>describe two</b> precautions the operator may take to protect self from pesticide contamination when operating the prime mover</p> <p>When preparing the prime mover and sprayer, the candidate is to <b>describe three</b> checks which the operator may carry out to protect self from physical danger during operation</p> <p>Candidate to <b>state four</b> aspects of safe practice to be considered when driving on uneven/sloping terrain</p> <p>Candidate to <b>state one</b> consideration for safe driving on a public highway</p>	<p>May include:</p> <ul style="list-style-type: none"> <li>comply with Pesticides Codes of Practice</li> <li>adopt industry best practice particular in respect of non-porous surfaces and risk of contamination of surface and ground water</li> <li>be aware of any safety implications imposed by Risk/COSHH Assessment and comply with the requirements</li> </ul> <p>Cabbed:</p> <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> <li>awareness of the siting of pressurised components within confines of the cab</li> </ul> <p>Open cab/canopy/platform:</p> <ul style="list-style-type: none"> <li>use of appropriate PPE</li> <li>awareness of the siting of pressurised components within confines of the cab/canopy/platform</li> </ul> <p>May include:</p> <ul style="list-style-type: none"> <li>compatibility of prime mover and sprayer</li> <li>wheel track width</li> <li>correct tyre pressures</li> <li>condition of tyres</li> <li>brake function</li> </ul> <p>May include:</p> <ul style="list-style-type: none"> <li>assess conditions</li> <li>appropriate speed</li> <li>correct gear selection</li> <li>effect of changing load on stability</li> <li>correct turning procedure</li> <li>keep centre of gravity as low as possible</li> </ul> <p>May include:</p> <ul style="list-style-type: none"> <li>travelling at high speed makes vehicle unstable</li> <li>slow moving vehicle protocols</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 115 2.1	Identify risks to the environment	Candidate to <b>identify all relevant</b> risks to the environment for the application site	<p>May include:</p> <ul style="list-style-type: none"> <li>• hard surface run-off</li> <li>• drains</li> <li>• water courses</li> <li>• environmental areas</li> <li>• wildlife</li> <li>• non-target plants</li> <li>• sensitive crops/areas</li> <li>• hedgerows</li> <li>• housing</li> <li>• public access</li> <li>• other risks particular 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 115 2.2	Explain how to minimise risks to the environment	<p>Candidate to <b>explain</b> how to minimise the risks identified in 2.1</p> <p>Candidate to <b>state</b> the reason for minimising spray drift or off target application</p> <p>Candidate to <b>check and comment</b> on wind speed and direction</p> <p>Candidate to <b>state five</b> factors that affect spray drift</p>	<p>Explanation to include the following points:</p> <ul style="list-style-type: none"> <li>• check and maintain application rate</li> <li>• avoid run-off</li> <li>• avoid spray drift</li> <li>• observe buffer zones</li> <li>• inform neighbours</li> <li>• appropriate warning signs</li> <li>• use an appropriate pesticide (minimal environmental impact)</li> <li>• careful timing of application</li> <li>• avoidance of contamination to people and the environment</li> <li>• use of anemometer at suitable heights or visual signs</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>• nozzle type and size</li> <li>• pressure</li> <li>• forward speed</li> <li>• nozzle height</li> <li>• rotary atomiser speed</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 115 3.1 3.2  Continued	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 relevant 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. 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 for key information on the label to be highlighted for use during the assessment</p>	<p>The following to be provided:</p> <ul style="list-style-type: none"> <li>• product name</li> <li>• active substance(s) (ingredient(s))</li> </ul> <p>Important information:</p> <ul style="list-style-type: none"> <li>• field of use</li> <li>• 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>Target specific information:</p> <ul style="list-style-type: none"> <li>• target</li> <li>• dose rate</li> <li>• water volume</li> <li>• timing</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 115 3.1 3.2			mixing and spraying: <ul style="list-style-type: none"> <li>filling</li> <li>recommended nozzles</li> <li>recommended pressure</li> <li>spray quality</li> </ul> <ul style="list-style-type: none"> <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"/>
Unit 115 4.1	Identify applicator components and controls	Candidate to <b>identify all</b> components and controls relating to the applicator being used for the assessment  <b>Identify and explain</b> the use of <b>one</b> type of nozzle, which could be that intended for use (not applicable to Rotary Atomiser sprayers)	May include: <ul style="list-style-type: none"> <li>main spray tank</li> <li>pump</li> <li>filling control and devices</li> <li>agitation control</li> <li>pressure adjustment control</li> <li>pressure gauge</li> <li>on/off control</li> <li>boom isolators</li> <li>filters</li> <li>tank wash system</li> <li>clean water tank</li> <li>nozzles/atomisers/spray heads</li> <li>diaphragm check valves</li> <li>tank drain</li> <li>other components/controls specific to the applicator</li> </ul> May include: <ul style="list-style-type: none"> <li>Flat fan – fine/medium/coarse spray</li> <li>Air inclusion – medium/coarse spray, low drift</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 115 4.2	Carry out pre-use checks to the prime mover	Candidate to <b>carry out all</b> pre-use checks relevant to the prime mover being used for the assessment	May include: <ul style="list-style-type: none"> <li>visual inspection of the wheels and tyres</li> <li>tyre pressures</li> <li>fuel level adequate/motive batteries charged</li> <li>oil level(s) within acceptable limits</li> <li>coolant level is adequate</li> <li>engine air filter is clean</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 115 4.3	Carry out pre-use and operational checks to the sprayer/applicator	Candidate to <b>carry out all</b> pre-use and operational checks to the sprayer/applicator  <b>Check</b> security of attachment of applicator mechanisms  <b>Check</b> for mechanical defects  <b>Check</b> that the applicator is lubricated correctly  <b>Check</b> spray head attachment and break-back devices  <b>Remove, clean and refit a filter</b>	May include all/some of the following as applicable to the sprayer/applicator: <ul style="list-style-type: none"> <li>fasteners tight</li> <li>straps inspected and adjusted if necessary</li> <li>seized, worn or damaged controls/components</li> <li>atomiser drives and electrical connectors</li> <li>identification of lubrication points</li> <li>visual inspection of lubrication points</li> <li>visual inspection of levels</li> <li>height adjustment</li> <li>break-back efficiency</li> </ul> Candidate to: <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>	<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 115 4.3		<p><b>Remove, clean/replace and refit a nozzle/restrictor/spray head</b></p> <p><b>Explain</b> how to use the control panel to ensure that the applicator is functioning correctly <b>(if applicable)</b></p> <p><b>Part fill</b> applicator or <b>attach</b> pesticide container</p> <p><b>Check</b> applicator for leaks and correct spray patterns</p> <p><b>State one</b> suitable action in the event of the control panel failing (if applicable)</p>	<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> <p>functions of control panel</p> <ul style="list-style-type: none"> <li>recognition of malfunctions before and during operation</li> <li>switch to manual/test mode where applicable</li> </ul> <p>suitable site selected</p> <ul style="list-style-type: none"> <li>fill by usual on-site method, following approved procedures</li> <li>clean water supply</li> <li>or</li> <li>attach pesticide container</li> </ul> <p>use higher than normal operating pressure</p> <ul style="list-style-type: none"> <li>visual check of all nozzles/atomisers/spray heads for correct spray patterns, absence of blockages, streaking and pulsing</li> <li>replace defective nozzles/atomisers/spray heads</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> <p>stop pesticide application</p> <ul style="list-style-type: none"> <li>manual operation of controls if possible</li> </ul> <p><b>Met ✓ Not Met X</b></p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unit 115 4.4	Calibrate the sprayer and record relevant data	<p>Candidate is required to <b>calibrate</b> the applicator and record <b>relevant</b> data</p> <p><b>Select and record</b> forward speed</p> <p><b>Calculate</b> required output/volume rate</p> <p><b>Select</b> appropriate nozzle/atomiser/spray head using manufacturers literature (if available)</p> <p><b>Set operating pressure/disc speed</b></p> <p><b>Check</b> nozzle/atomiser/spray head outputs</p>	<p>Calibration may include the following:</p> <ul style="list-style-type: none"> <li>suitable forward speed for target and ground conditions</li> <li>appropriate gear selected and 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> <li>use of manufacturers operators handbook</li> <li>use of nozzle/atomiser/spray head manufacturers literature</li> <li>confirm requirements of product label</li> <li>pressure as determined by nozzle chart</li> <li>disc speed as determined by manufacturers literature</li> <li>pressurise/purge appropriate to the system</li> <li>use a measuring jug to check nozzle/atomiser/spray head output</li> <li>compare with target output</li> <li>vary pressure/flow rate to make small adjustments</li> <li>change nozzles/atomisers/spray heads if required</li> <li><b>Or any other acceptable method</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			
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Cont... Unit 115 4.4		State <b>four</b> pieces of calibration data that should be recorded	May include: <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/atomiser/spray head 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 5 4.5	Calculate the quantities of pesticide and water required, if applicable	Candidate to <b>calculate</b> quantities required for both a <b>specified area</b> and <b>full tank</b>	To include: <ul style="list-style-type: none"> <li>amount of water required for specified area</li> <li>amount of pesticide required for specified area</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 115 5.1	Measure the required quantities and add to the sprayer or attach pesticide container	<b>Either:</b> Candidate to <b>measure</b> and <b>add</b> quantities required for the area specified in 4.5  <b>Note: This may be a simulated pesticide product</b>  <b>Or:</b> Candidate to attach pesticide container to applicator	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>accurate measurement of pesticide</li> <li>correct filling procedure</li> <li>avoidance of spillage</li> <li>observance of pesticide manufacturers instructions for mixing and agitation</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>container undamaged</li> <li>correct procedure for attaching container</li> <li>avoidance of spillage</li> <li>check for leakage</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 115 5.2	Demonstrate safe and accurate application procedures	Candidate to <b>explain</b> the appropriate procedure to follow when the applicator needs refilling part way through an application  Candidate to <b>explain</b> the appropriate procedure to follow when a nozzle/restrictor/spray head becomes blocked during an application  Candidate to <b>apply</b> pesticide to treat a specified area appropriate the candidates normal work situation and sufficient to demonstrate safe and accurate application procedures	Explanation to include: <ul style="list-style-type: none"> <li>avoid contact with contaminated area</li> <li>mark the spot at which the applicator emptied</li> <li>refill applicator</li> <li>continue spraying by accurately matching at the appropriate point</li> </ul> Explanation to include: <ul style="list-style-type: none"> <li>select and use appropriate PPE</li> <li>care not to walk on contaminated area</li> <li>clean or replace nozzle/restrictor/spray head as appropriate</li> </ul> To include: <ul style="list-style-type: none"> <li>ensure spray head is aligned to the target</li> <li>correct spray head height to achieve compliance with hard-surface recommendations</li> <li>operate controls to apply accurately</li> <li>correct forward speed and pressure for site conditions</li> <li>copied with obstacles</li> <li>all of specified area treated</li> <li>awareness of changes in wind speed and direction</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 115 5.3	Carry out all activities protecting human health and the environment	<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	To include: <ul style="list-style-type: none"> <li>prevention of public / bystander contamination</li> <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>safe filling procedure</li> <li>avoidance of spray drift</li> <li>avoidance of off target application</li> <li>avoidance of over dosing/under dosing 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 115 5.4	Complete a treatment record	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 (or supplied by the Assessor if necessary)	Completion of the treatment record must be: <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 115 6.1	Explain how to manage surplus pesticide and dispose of waste material	Candidate to <b>explain one</b> method of dealing with surplus concentrate pesticide  Candidate to <b>explain two</b> methods of dealing with waste containers and packaging  Candidate to <b>explain two</b> methods of dealing with surplus dilute pesticide	May include: <ul style="list-style-type: none"> <li>return to temporary mobile store</li> <li>return to fixed store</li> </ul> Containers: <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 a licensed waste disposal contractor</li> </ul> Packaging: <ul style="list-style-type: none"> <li>thoroughly emptied</li> <li>placed in secure storage until disposal</li> <li>collected by a licensed waste disposal contractor</li> </ul> May include: <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 target</li> <li>treated by specialist treatment facility on site (e.g. a lined bio bed)</li> <li>collected by a 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"/>
Unit 115 6.2	Explain how to clean and decontaminate the sprayer and, if applicable, the prime mover	Candidate to <b>explain four</b> factors that need to be considered when cleaning and decontaminating the sprayer 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 required</li> <li>internal and external surfaces</li> <li>use of in-built wash systems if provided</li> <li>thorough flushing of systems</li> <li>safe disposal of contaminated washings</li> <li>when cleaning should take place</li> <li>safe procedures followed</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 115 6.3	Describe the storage requirements for the applicator	Candidate to <b>describe three</b> factors to consider prior to storing the applicator	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>controls left in appropriate positions</li> <li>frost protection measures implemented</li> <li>lubricate as required</li> <li>store undercover and out of direct sunlight</li> <li>store in a secure area</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*)

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

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

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

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

**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.	<b>Tick</b> <input checked="" type="checkbox"/> <input type="checkbox"/>
I observed an assessment process taking place. The following were noted as areas of concern.	<b>Tick</b> <input checked="" type="checkbox"/> <input type="checkbox"/>
<b>Signed:</b>	
<b>Date:</b>	