# CITY & GUILDS LEVEL 2 AWARD IN THE SAFE APPLICATION OF PESTICIDES USING VARIABLE GEOMETRY BOOM OR BROADCAST SPRAYERS (PA3) 601/5142/0



### **QUALIFICATION GUIDANCE**

# **Independently Assessed**

### **Essential Qualification Information**

### Not to be used by the Candidate during Assessment

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

Qualification Group No	0 2 1 6	Pesticides
Qualification Programme No	0 2 1 6 - 5 1	L2 Award in the Safe Application of Pesticides Using Variable Geometry Boom or Broadcast Sprayers (PA3)
Unit(s)	1 2 1 1 2 2	Operating a Broadcast Sprayer with Air Assistance (PA3A) (T/505/7685) Operating a Variable Geometry Boom Sprayer with Air Assistance (PA3B) (F/505/7687) Operating a Variable Geometry Boom Sprayer without Air Assistance (PA3C) (L/505/7689)
Guided Learning Hours (GLH)		54
Total Qualification Time (TQT)		60
Recommended Assessment Duration		1.5 – 3 hours per Candidate
Pre-Requisite Units	1 0 1	Principles of Safe Handling and Application of Pesticides (PA1)

Version and date	Change detail	Section
1.1 November 2017	Added TQT details Deleted QCF / Learning Time	Qualification at a glance, Structure
		Throughout
1.2 April 2022	GLH & TQT clarified and highlighted	Qualification at a glance
	City & Guilds address updated	Pg 5

### City & Guilds Level 2 Award in the Safe Application of Pesticides Using Variable Geometry Boom or Broadcast Sprayers (PA3) 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 is divided in to three optional units:

Unit 121 (PA3A)	(Mandatory)	(Credit Value 3)	(Print pages 6 – 12 plus 27)				
Outcome 1. Outcome 2. Outcome 3. Outcome 4. Outcome 5. Outcome 6.	Be able to assess the element Be able to read and into Be able to prepare and Be able to operate the a		teria 4.1 – 4.5) ´ eria 5.1 – 5.4)				
Unit 122 (PA3B)	(Mandatory/Optional)	(Credit Value)	(Print pages 13 – 19 plus 27)				
Outcome 1. Outcome 2. Outcome 3. Outcome 4. Outcome 5. Outcome 6.	Know the legislative and safety regulations relating to application equipment (Criteria 1.1 – 1.2) Be able to assess the environmental factors relating to mixing and application (Criteria 2.1 – 2.2) Be able to read and interpret product information (Criteria 3.1 – 3.1) Be able to prepare and calibrate the applicator (Criteria 4.1 – 4.5) Be able to operate the application equipment (Criteria 5.1 – 5.4) Know how to carry out post-operational procedures (Criteria 6.1 – 6.3)						
Unit 123 (PA3C)	(Mandatory/Optional)	(Credit Value)	(Print pages <b>20 – 27</b> )				
Outcome 1. Outcome 2. Outcome 3. Outcome 4. Outcome 5. Outcome 6.	Be able to assess the element Be able to read and into Be able to prepare and Be able to operate the a		teria 4.1 – 4.5) ´ eria 5.1 – 5.4)				

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:

- 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  $\boxtimes$  is to be put in the box provided in the bottom right-hand column of each section.

#### **Appeals and Equal Opportunities**

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

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

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

#### Validation of Equipment

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

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

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

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

#### Safe Practice

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

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

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

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

Before any assessments take place, Assessor & Candidate should 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 <u>may not</u> refer to the Qualification Guidance Document.

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

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

#### **Assessment Guidance for the Assessor**

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

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

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

#### **Assessment Guidance for the Candidate**

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

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

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

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

The Qualification Guidance contains criteria relating to:

- Observation of practical performance
- Assessment of underpinning knowledge

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## Unit 121 – Operating a Broadcast Sprayer with Air Assistance (PA3A)

Candidate A Name:		Date:		Start Time:	Duration:							
Candidate	В	Name:		Date	e:	Start Time:	Dura	tion	1:			
Candidate	С	Name:		Date:		Start Time:	Dura	Duration:				
Candidate	D	Name:		Date	e:	Start Time:	Dura	ation	1:			
CRITERIA NUMBER		ASSESSMENT CRITERIA	ASSESSOR GUIDANCE			SSESSMENT ACTIVITIES		C.	AND B	IDAT C	TE D	
Unit 121 1.1	requ app air a spra	scribe the legal uirements relating to lying pesticides using assisted broadcast ayers	Candidate to <b>describe two</b> operator's obligations in terms of legal requirements	5	<ul> <li>complies with left</li> <li>comply with all r when operating highway</li> <li>comply with The (Sustainable Us)</li> <li>the operator mucertification for the complement of the complement</li></ul>	rds are in place and equipments all requirements elevant road traffic regulation or transporting on the public elevant Protection Products elevant Protection Products elevant Protection Products elevant Protection Products elevant	ns C					
Unit 121	pes ass spra	scribe how to apply ticides safely using air isted broadcast ayers following industry t practice	Candidate to describe one operator safety regulation i terms of air assisted broadcast sprayers	n	<ul><li>adopt industry b</li><li>be aware of any</li></ul>	sticide Codes of Practice lest practice safety implications imposed ssessment and comply with t						
			Candidate to <b>describe two</b> precautions the operator of take to protect self from pesticide contamination who perating the prime mover	nen	<ul> <li>close all window</li> <li>contaminated P</li> <li>awareness of th components wit</li> <li>Open cab/canopy/pla</li> <li>use of appropria</li> </ul>	on system is functional rs PE stored in external locker e siting of pressurised hin confines of cab  tform: ate PPE e siting of pressurised						
			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		<ul> <li>front weights</li> <li>wheel track widt</li> <li>correct tyre pres</li> <li>condition of tyre</li> <li>brake function</li> </ul>	orime mover and sprayer h ssures						
			Candidate to <b>state four</b> aspects of safe practice to considered when driving o uneven/sloping terrain  Candidate to <b>state one</b> consideration for safe driving	be n	<ul> <li>use of weights to correct turning posterior keep centre of go</li> <li>May include:</li> </ul>	el drive ed ection ng load on stability o stabilise prime mover procedure gravity as low as possible						
			on a public highway	•		akes coupled together In speed makes vehicle unsta Met ✓ Not I						

CRITERIA NUMBER	ASSESSMENT CRITERIA	ASSESSOR GUIDANCE	ASSESSMENT ACTIVITIES	C/	AND B	IDAT C	TE D
Unit 424	Identify risks to the	Candidate to identify all	May include:				
Unit 121	environment	relevant risks to the environment for the	ground conditions				
2.1		application site	<ul><li>water courses</li><li>environmental margins/strips/areas</li></ul>				
			drains				
			boreholes				
			wildlife				
			non-target plants				
			sensitive crops/areas				
			hedgerows				
			• housing				
			public access				
			other risks particular to the site				
			Met ✓ Not Met X	Ш	Ш		Ш
Unit 121	Explain how to minimise risks to the environment	Candidate to explain how to minimise the risks identified	use an appropriate pesticide (minimal environmental impact)				
		in <b>2.1</b>	careful timing of application				
2.2			check and maintain application rate				
			avoid off target application				
			observe buffer zones				
			comply with air assisted LERAP requirements				
			erect warning signs				
			notify neighbours				
		Candidate to <b>state</b> the	avoidance of contamination to people and the				
		reason for minimising off	environment				
		target application & spray drift					
		Candidate to check &	use of anemometer or visual signs at suitable				
		comment on wind speed & direction	height				
			wind direction				
		Candidate to state five	May include:		_	_	
		factors that affect spray drift	weather conditions				
			direction of spraying				
			<ul> <li>presence of natural/living windbreaks</li> <li>nozzle type and size</li> </ul>				
			pressure				
			• fan speed				
			• fan pitch				
			forward speed				
			nozzle configuration				
			target canopy density				
			use of air deflector(s)				
			Met ✓ Not Met X				
Unit 121	Read product information	The candidate is required to read and interpret the	May include the following:		_	_	l _
Ollit 121	Interpret product	information on a product label	• product name				
3.1	information	and provide relevant	active substance(s) (ingredient(s))				
Unit 121		information as requested by the Assessor	Important information:				
Offic 121		Note to the Assessor: A	• field of use				
3.2		product label is required. It is	crop/target				
		expected that the candidate will provide the product label.	maximum individual dose     maximum total dose				
		The label provided must be	maximum total dose     maximum number of treatments				
		for a currently approved	Thanham number of treatments				
		product and appropriate to the candidates normal work	specific product precautions/warnings				
		situation	operator protection				
		Note to the Candidate	environmental protection				
		(Assessor also to note): It is acceptable for key	restrictions on use				
		information on the label to be	Crop specific information:				
		highlighted for use during the	crop/target				
		assessment	dose rate				
Continued			water volume     timing				
			• timing		Ш	Ш	

CRITERIA NUMBER	ASSESSMENT CRITERIA	ASSESSOR GUIDANCE	ASSESSMENT ACTIVITIES	C/ A	AND B	IDAT C	TE D
		00:27:11:02	Mixing and spraying:				
Cont			filling     recommended nozzles				
Unit 121							
3.1			spray quality				
Unit 121			additional label information				
3.2			compatibility				
0.2			Met ✓ Not Met X				
Unit 121	Identify applicator controls and components	Candidate to identify <b>all</b> components and controls	May include all/any of the following:  main spray tank				
4.1	·	relating to the applicator being used for the	clean water tank				
4.1		assessment	hand wash tank				
			<ul><li>pump</li><li>pulsation damper</li></ul>				
			filling control and devices				
			agitation control				
			<ul><li>pressure adjustment control</li><li>pressure gauge</li></ul>				
			on/off				
			boom isolators				
			boom section pressure compensation controls     filters				
			• nozzles				
			diaphragm check valves				
			tank wash system				
			<ul><li>tank drain</li><li>fan blades and adjustment (if applicable)</li></ul>				
			fan speed control				
			air deflector(s)				
			trash guard     other components/controls specific to the				
			applicator				
		Identify and explain the use	May include:				
		of <b>one</b> type of nozzle, which could be that intended for use	hollow cone – good coverage				
			hollow cone air inclusion – drift reduction properties				
			Met ✓ Not Met X				
	Carry out pre use checks	Candidate to carry out all	May include:				
Unit 121	to the prime mover	pre-use checks <b>relevant</b> to the prime mover being used	guards in place and in good condition				
4.2		for the assessment	<ul> <li>visual inspection of the wheels and tyres</li> <li>tyre pressures</li> </ul>				
			fuel level adequate				
			engine oil level is within acceptable limits				
			hydraulic oil level is within acceptable limits (if accessible)				
			transmission oil level is within acceptable limits (if				
			accessible)  coolant level is adequate				
			engine air filter is clean				
			Met ✓ Not Met X				
Unit 121 4.3	Carry out pre-use and operational checks to the sprayer	Candidate to carry out all pre-use and operational checks to the sprayer/applicator	May include all/some of the following as applicable to the sprayer/applicator:				
		Check security of attachment	fasteners tight				
		of applicator mechanisms	straps inspected and adjusted if necessary				
			linkage secure     sideways movement restricted				
			drawbar pin secured				
		Chack for machanizat	seized, worn or damaged controls/components				
Continued		Check for mechanical defects	serzed, worn of damaged controls/components     electrical connector				

CRITERIA NUMBER	ASSESSMENT CRITERIA	ASSESSOR GUIDANCE	ASSESSMENT ACTIVITIES	C.	AND B	IDAT	TE D
Cont	-	Check that the applicator is lubricated correctly	identification of lubrication points				
Unit 121		Tabilitated confectify	visual inspection of lubrication points     visual inspection of levels				
		Domestic along and refit a	Candidate to:				
4.3		Remove, clean and refit a filter	remove and clean using appropriate method				
			contain spillage     chart replace if demand				
			check for defects, replace if damaged     refit				
		Remove, clean/replace and	Candidate to:				
		refit a nozzle/restrictor	remove and clean using appropriate method				
			contain spillage				
			check for defects replace if worn/damaged     refit				
		Explain how to use the	May include:				
		control panel to ensure that	functions of control panel				
		the applicator is functioning correctly (if applicable)	recognition of malfunctions before and during operation	_	_		
			check accuracy of base settings				
			switch to manual/test mode where applicable				
		Part fill applicator	To include:				
			<ul> <li>suitable site selected</li> <li>fill by usual on-site method, following approved</li> </ul>				
			procedures				
			clean water supply				
		Check applicator for air and	May include:				
		liquid leaks and correct spray patterns	<ul> <li>use higher than normal operating pressure</li> <li>visual check of all nozzles/atomisers for correct</li> </ul>				
			spray patterns, absence of blockages, streaking, pulsing				
			correct alignment				
			replace defective nozzles/atomisers/discs				
			lids and seals     liquid pipe work and connections				
			air pipework				
			• control valves				
			<ul><li>filters</li><li>pressure gauge</li></ul>				
			diaphragm check valves				
		State one suitable action in	May include:				
		the event of the control panel failing (if applicable)	stop pesticide application				
		3 ( 3) ( 3)	manual operation of controls if possible				
	Calibrate the sprayer and	Candidate is required to	Met ✓ Not Met X  Calibration may include the following:		Ш		
Unit 121	record relevant data	calibrate the applicator and record relevant data					
4.4		Select and record forward	suitable forward speed for crop/target and ground				
		speed	<ul><li>conditions</li><li>appropriate gear selected and engine speed</li></ul>				
			established				
			accurate measurement of distance     accurate measurement of time taken to cover				
			distance				
			correct use of formula to establish forward speed				
		Calculate required output/volume rate	correct use of formula				
		Select appropriate nozzle	use of manufacturers operators handbook				
Continued		using manufacturers literature (if available)	use of nozzle manufacturers literature     confirm requirements of product label				
			- committequirements of product laber			Ш	

Cont Unit 121 4.4  Check sprayer output  Check o		
Check sprayer output  Check suppured on and persuited  Tregistration number of vehicle		
Check sprayer output  - check output - compare with target output - vary pressure to make small adjustments - change nozzles if required - or any other acceptable method  May include: - registration number of vehicle - tyre size and pressure - gear selected - engine speed - fan speed - inozzle stitted - inozzle positions - pressure - flow rate  Unit 121  4.5  Calculate quantities of pesticide and water required for both a specified area and full tank - specified area and full tank - amount of pesticide required for specified area - amount of pesticide required for full tank - amount of pesticide re		
Unit 121 4.5  Calculate quantities of required area and full tank  Weasure the required quantities and add to the sprayer  Measure the required quantities and add to the sprayer  Measure the required quantities and add to the sprayer  Measure the required area and full tank  Candidate to measure and add quantities required for specified in 4.5  Note: This may be a simulated pesticide in 4.5  Note: This may be a simulated pesticide in 4.5  Note: This may be a simulated pesticide your delay the product provided by the Assessor  Candidate to measure and add quantities required for specified area a simulated pesticide in 4.5  Note: This may be a simulated pesticide your delay the product label and/or COSHH Assessment)  State four pieces of change nozzles frequired with target output  • vary pressure to make small adjustments  change nozzles frequired  • or any other acceptable method  May include:  • registration number of vehicle  • tyre size and pressure  • gear selected  • engine speed  • vehicle forward speed  • application volume  • nozzle positions  • pressure  • flow rate  Met ✓ Not Met X   To include:  • amount of water required for specified area  • amount of pesticide required for specified area  • amount of pesticide required for specified area  • amount of pesticide required for the method)  • observance of pesticide manufacturers instructions for mixing sequence and agitation (or other recommended method)  • suitable site selected  • clean water supply  • accurate measurement of water  • accurate measurement of pesticide  • use of filling device (if fitted)  • avoidance of spillage  Met ✓ Not Met X		
State four pieces of calibration data that should be recorded  State four pieces of calibration data that should be recorded  State four pieces of calibration data that should be recorded  State four pieces of calibration data that should be recorded  State four pieces of calibration data that should be recorded  State four pieces of calibration data that should be recorded  State four pieces of calibration data that should be recorded  State four pieces of calibration data that should be recorded  May include:  registration number of vehicle  tyre size and pressure  e gear selected  e engine speed  fan speed  fan speed  fan speed  e nozzle positions  perssure  e flow rate  Met ✓ Not Met X  To include:  amount of pesticide required for specified area  amount of pesticide required for full tank  Met ✓ Not Met X  To include:  correct selection and use of PPE/RPE (as required by the product label and/or COSHH Assessment)  observance of pesticide manufacturers instructions for mixing sequence and agitation (or other recommended method)  suitable site selected  clean water supply  accurate measurement of water  accurate measurement of water  accurate measurement of water  accurate measurement of speticide  use of filling device (if fitted)  avoidance of spillage  Met ✓ Not Met X		
Unit 121 4.5  Calculate quantities of pesticide and water required quantities and add to the sprayer  Unit 121 5.1  Measure the required quantities and add to the sprayer  Candidate to measure and sumulated pesticide product provided by the Assessor  Candidate to measure and add quantities required for the area specified by the Assessor  Change nozzles if required or any other acceptable method  May include:  • change nozzles if required or any other acceptable method  May include:  • registration number of vehicle  • tyre size and pressure  • gear selected  • engine speed  • vehicle forward speed  • application volume  • nozzle positions  • pressure  • flow rate  Met ✓ Not Met X   To include:  • amount of pesticide required for specified area  • amount of pesticide required for full tank  Met ✓ Not Met X   To include:  • correct selection and use of PPE/RPE (as required by the product label and/or COSHH Assessment)  • observance of pesticide manufacturers instructions for mixing sequence and agitation (or other recommended method)  • suitable site selected  • clean water supply  • accurate measurement of water  • accurate measurement of water  • accurate measurement of water  • accurate measurement of speticide  • use of filling device (if fitted)  • avoidance of spillage  Met ✓ Not Met X		
State four pieces of calibration data that should be recorded  State four pieces of calibration data that should be recorded  May include:  • registration number of vehicle • type size and pressure • gear selected • engine speed • vehicle forward speed • application volume • nozzles fitted • nozzle positions • pressure • flow rate  Met ✓ Not Met X   To include: • amount of pesticide required for specified area amount of pesticide required for specified area amount of pesticide required for specified area amount of pesticide required for full tank  Measure the required quantities required for the area specified in 4.5  Note: This may be a simulated pesticide product provided by the Assessor  To include: • or any other acceptable method  May include: • registration number of vehicle • type size and pressure • gear selected • engits required or specified area amount of water required for specified area amount of pesticide required for specified area amount of pesticide required for full tank  Met ✓ Not Met X  To include: • or any other acceptable method  May include: • registration number of vehicle • or not of water required for to the amo		
State four pieces of calibration data that should be recorded    May include:   registration number of vehicle   registration number of vehicle   ryre size and pressure   gear selected   ryre size and pressure   gear selected   registration number of vehicle   ryre size and pressure   registration vehicle   ryre size and pressure   registration number of vehicle   ryre size and pressure   registration number of vehicle   registration vehicle   registration   registration   registration vehicle   registration   reg		
unit 121 4.5  Calculate quantities of pesticide and water required  Unit 121 5.1  Measure the required  Quantities and add to the sprayer  Measure the required  Measure the required  Assessment  Candidate to measure and add quantities required for the area specified in 4.5  Note: This may be a simulated pesticide product provided by the Assessor  Calculate quantities of calculate quantities required for both a specified area and full tank  Met ✓ Not Met X  To include:  amount of water required for specified area amount of pesticide required for specif		
be recorded    be recorded		
Unit 121 4.5  Unit 121 S.1  Measure the required sprayer  Candidate to measure and quantities and add to the sprayer  Candidate to measure and aid quantities and add to the sprayer  Candidate to measure and aid quantities required for the area specified in 4.5  Note: This may be a simulated pesticide product provided by the Assessor  Candidate to measure and aid quantities required for the area specified area and full tank  Candidate to measure and aid quantities required for the area specified area and full tank  Met V Not Met X  To include:  amount of pesticide required for specified area amount of pesticide required for specified area amount of pesticide required for specified area amount of pesticide required for full tank  Met V Not Met X  Note: This may be a simulated pesticide product provided by the Assessment)  observance of pesticide manufacturers instructions for mixing sequence and agitation (or other recommended method)  suitable sits eslected  clean water supply  accurate measurement of water  accurate measurement of of pesticide  use of filling device (if fitted)  avoidance of spillage  Met V Not Met X		
Unit 121 4.5  Calculate quantities of pesticide and water required  Unit 121 5.1  Measure the required quantities and add to the sprayer  Candidate to measure and add quantities and add to the sprayer  Candidate to measure and simulated pesticide product provided by the Assessor  Candidate to measure and assessor  Candidate to measure and assessor  Candidate to measure and and quantities required for specified area amount of pesticide required for specified		
Unit 121 4.5  Calculate quantities of pesticide and water required required 121 4.5  Unit 121 5.1  Measure the required quantities and add to the sprayer  Candidate to measure and simulated pesticide product provided by the Assessor  For include:  amount of water required for specified area and full tank  Met ✓ Not Met X  To include:  amount of water required for specified area amount of pesticide required for full tank  Met ✓ Not Met X  To include:  amount of pesticide required for specified area amount of pesticide required for full tank  Met ✓ Not Met X  To include:  amount of pesticide required for full tank  Met ✓ Not Met X  To include:  amount of pesticide required for full tank  Sessment)  observance of pesticide manufacturers instructions for mixing sequence and agitation (or other recommended method)  suitable site selected  clean water supply  accurate measurement of water  accurate measurement of pesticide  use of Ifling device (if fitted)  avoidance of spillage  Met ✓ Not Met X		
Unit 121 4.5  Calculate quantities of pesticide and water required required required wantities required for both a specified area and full tank  Unit 121 5.1  Measure the required quantities and add to the sprayer  Measure the required area specified in 4.5  Note: This may be a simulated pesticide product provided by the Assessor  Candidate to measure and add quantities required for the area specified in 4.5  Note: This may be a simulated pesticide product provided by the Assessor  Candidate to measure and add quantities required for the area specified in 4.5  Note: This may be a simulated pesticide product provided by the Assessor  To include:  amount of vater required for specified area amount of pesticide required for full tank  Met ✓ Not Met X  Condidate to measure and add quantities required for the area specified in 4.5  Note: This may be a simulated pesticide product provided by the Assessment)  observance of pesticide manufacturers instructions for mixing sequence and aglitation (or other recommended method)  suitable site selected  clean water supply  accurate measurement of water  accurate measurement of pesticide  use of filling device (if fitted)  avoidance of spillage  Met ✓ Not Met X		
Unit 121 4.5  Calculate quantities of pesticide and water required for specified area and full tank  Unit 121 5.1  Measure the required quantities and add to the sprayer  Measure the required area and full tank  Met ✓ Not Met X  Candidate to calculate quantities required for both a specified area and full tank  Met ✓ Not Met X  To include:  amount of pesticide required for specified area amount of pesticide required for specified area amount of pesticide required for full tank  Met ✓ Not Met X  To include:  amount of pesticide required for full tank  Met ✓ Not Met X  Note: This may be a simulated pesticide product provided by the Assessor  To include:  correct selection and use of PPE/RPE (as required by the product label and/or COSHH Assessment)  observance of pesticide manufacturers instructions for mixing sequence and agitation (or other recommended method)  suitable site selected  clean water supply  accurate measurement of water  accurate measurement of pesticide  use of filling device (if fitted)  avoidance of spillage  Met ✓ Not Met X		
Unit 121 4.5  Calculate quantities of pesticide and water required 4.5  Measure the required quantities and add to the sprayer  Measure the required quantities required for the area specified in 4.5  Note: This may be a simulated pesticide product provided by the Assessor  Candidate to measure and add quantities required for the area specified by the Assessor  To include:  amount of water required for specified area  amount of pesticide required for specified area  amount of pesticide required for full tank  Met ✓ Not Met X  To include:  amount of pesticide required for specified area  amount of pesticide required for specified area  amount of pesticide required for full tank  Met ✓ Not Met X  To include:  amount of pesticide required for specified area  amount of pesticide required for full tank  Met ✓ Not Met X  To include:  amount of pesticide required for specified area  amount of pesticide required for full tank  Met ✓ Not Met X  Calculate quantities of pesticide required for specified area  amount of pesticide required for specified area  amount of pesticide required for full tank  Met ✓ Not Met X   To include:  amount of pesticide required for specified area  amount of pesticide required		
Unit 121 4.5  Calculate quantities of pesticide and water required  Unit 121 4.5  Measure the required quantities and add to the sprayer  Measure the required quantities required for the area specified in 4.5  Note: This may be a simulated pesticide product provided by the Assessor  Candidate to calculate quantities required for both a specified area and full tank  Met ✓ Not Met X  To include:  amount of pesticide required for specified area amount of pesticide required for full tank  Met ✓ Not Met X  To include:  amount of pesticide required for full tank  Met ✓ Not Met X  Note: This may be a simulated pesticide product provided by the Assessment)  observance of pesticide manufacturers instructions for mixing sequence and agitation (or other recommended method)  suitable site selected  clean water supply  accurate measurement of water  accurate measurement of pesticide  use of filling device (if fitted)  avoidance of spillage  Met ✓ Not Met X		
Unit 121 4.5  Calculate quantities of pesticide and water required  Unit 121 5.1  Measure the required quantities required for both a specified area and full tank  Met ✓ Not Met X  To include:  amount of water required for specified area amount of pesticide required for specified area amount of pesticide required for specified area amount of pesticide required for full tank  Met ✓ Not Met X  To include:  amount of pesticide required for specified area amount of pesticide required for specified area amount of pesticide required for the area specified in 4.5  Note: This may be a simulated pesticide product provided by the Assessor  To include:  correct selection and use of PPE/RPE (as required by the product label and/or COSHH Assessment)  observance of pesticide manufacturers instructions for mixing sequence and agitation (or other recommended method)  suitable site selected  clean water supply  accurate measurement of water  accurate measurement of pesticide  use of filling device (if fitted)  avoidance of spillage  Met ✓ Not Met X		
Unit 121 4.5  Calculate quantities of pesticide and water required  4.5  Measure the required quantities required for both a specified area and full tank  Measure the required quantities required for the area specified in 4.5  Note: This may be a simulated pesticide product provided by the Assessor  Candidate to measure and add quantities required for the area specified in 4.5  Note: This may be a simulated pesticide product provided by the Assessor  To include:  amount of pesticide required for specified area  amount of pesticide required for full tank  Met ✓ Not Met X  Candidate to measure and add quantities required for the area specified in 4.5  Note: This may be a simulated pesticide product provided by the Assessor  To include:  correct selection and use of PPE/RPE (as required by the product label and/or COSHH Assessment)  observance of pesticide manufacturers instructions for mixing sequence and agitation (or other recommended method)  suitable site selected  clean water supply  accurate measurement of water  accurate measurement of pesticide  use of filling device (if fitted)  avoidance of spillage  Met ✓ Not Met X		
Unit 121 4.5  Calculate quantities of pesticide and water required pesticide area and full tank  Measure the required quantities and add to the sprayer  Candidate to measure and add quantities required for the area specified in 4.5  Note: This may be a simulated pesticide product provided by the Assessor  Met ✓ Not Met X  To include:  amount of pesticide required for specified area amount of pesticide required for full tank  Met ✓ Not Met X  To include:  amount of pesticide required for specified area amount of pesticide area amount of pesticide required for specified area amount of pesticide area amount of pesticide area amount of pesticide are		
Unit 121 4.5    Calculate quantities of pesticide and water required for both a specified area and full tank   To include:   amount of water required for specified area   amount of pesticide required for specified area   amount of pesticide required for specified area   amount of pesticide required for full tank   Met ✓ Not Met X       Unit 121   Unit 121   Measure the required quantities and add to the sprayer   Candidate to measure and add quantities required for the area specified in 4.5   Note: This may be a simulated pesticide product provided by the Assessor   Observance of pesticide manufacturers instructions for mixing sequence and agitation (or other recommended method)   Suitable site selected   Clean water supply   accurate measurement of water   accurate measurement of pesticide   use of filling device (if fitted)   avoidance of spillage   Met ✓ Not Met X		
Unit 121 4.5  Measure the required quantities and add to the sprayer  Measure the required quantities and add to the sprayer  Mote: This may be a simulated pesticide product provided by the Assessor  Measure the required quantities and add to the sprayer  To include:  Candidate to measure and add quantities required for the area specified in 4.5  Note: This may be a simulated pesticide product provided by the Assessor  To include:  Correct selection and use of PPE/RPE (as required by the product label and/or COSHH Assessment)  Observance of pesticide manufacturers instructions for mixing sequence and agitation (or other recommended method)  suitable site selected  clean water supply  accurate measurement of water  accurate measurement of pesticide  use of filling device (if fitted)  Met ✓ Not Met X  Met ✓ Not Met X		
## A.5    To include:   amount of pesticide required for specified area		
4.5    Measure the required quantities and add to the sprayer		
Unit 121  Unit 121  Solution 121  Unit 121  Unit 121  Unit 121  Solution 121  Unit 12		
Unit 121  5.1  Measure the required quantities and add to the sprayer  Candidate to measure and add quantities required for the area specified in 4.5  Note: This may be a simulated pesticide product provided by the Assessor  Note: This may be a simulated pesticide product provided by the Assessor  Solution in the area specified in 4.5  Note: This may be a simulated pesticide product provided by the Assessor  Candidate to measure and add quantities required for the area specified in 4.5  Note: This may be a simulated pesticide product provided by the Assessor  Solution in the area specified in 4.5  Solution in the area specified in 4.5  Note: This may be a simulated pesticide product provided by the Assessment)  Solution in the area specified in 4.5		
Unit 121  5.1  Measure the required quantities and add to the sprayer  Candidate to measure and add quantities required for the area specified in 4.5  Note: This may be a simulated pesticide product provided by the Assessor  Note: This may be a simulated pesticide product provided by the Assessor  Solution in the area specified in 4.5  Note: This may be a simulated pesticide product provided by the Assessor  Candidate to measure and add quantities required for the area specified in 4.5  Note: This may be a simulated pesticide product provided by the Assessor  Solution in the area specified in 4.5  Solution in the area specified in 4.5  Note: This may be a simulated pesticide product provided by the Assessment)  Solution in the area specified in 4.5		
Unit 121 5.1  display="blook of the area specified in 4.5"  Note: This may be a simulated pesticide product provided by the Assessor  Note: This may be a simulated pesticide product provided by the Assessor  observance of pesticide manufacturers instructions for mixing sequence and agitation (or other recommended method)  suitable site selected  clean water supply  accurate measurement of water  accurate measurement of pesticide  use of filling device (if fitted)  avoidance of spillage  Met ✓ Not Met X		1
the area specified in 4.5  Note: This may be a simulated pesticide product provided by the Assessor  Note: This may be a simulated pesticide product provided by the Assessor  • observance of pesticide manufacturers instructions for mixing sequence and agitation (or other recommended method) • suitable site selected • clean water supply • accurate measurement of water • accurate measurement of pesticide • use of filling device (if fitted) • avoidance of spillage  Met ✓ Not Met X		
Note: This may be a simulated pesticide product provided by the Assessor  Assessment)  Observance of pesticide manufacturers instructions for mixing sequence and agitation (or other recommended method)  suitable site selected  clean water supply  accurate measurement of water  accurate measurement of pesticide  use of filling device (if fitted)  avoidance of spillage  Met ✓ Not Met X		
simulated pesticide product provided by the Assessor   Observance of pesticide manufacturers instructions for mixing sequence and agitation (or other recommended method)  ■ suitable site selected  ■ clean water supply  ■ accurate measurement of water  ■ accurate measurement of pesticide  ■ use of filling device (if fitted)  ■ avoidance of spillage  ■ Met ✓ Not Met X		
product provided by the Assessor    Instructions for mixing sequence and agitation (or other recommended method)   □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □		
Suitable site selected  clean water supply accurate measurement of water accurate measurement of pesticide use of filling device (if fitted) avoidance of spillage  Met ✓ Not Met X  □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □		
clean water supply     accurate measurement of water     accurate measurement of pesticide     use of filling device (if fitted)     avoidance of spillage  Met ✓ Not Met X  □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □		
accurate measurement of water     accurate measurement of pesticide     use of filling device (if fitted)     avoidance of spillage      Met ✓ Not Met X  □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □		
accurate measurement of pesticide     use of filling device (if fitted)     avoidance of spillage     Met ✓ Not Met X     □     □     □     □     □     □     □     □     □     □     □     □		- I -
use of filling device (if fitted)     avoidance of spillage     Met ✓ Not Met X     □ □     □ □		
avoidance of spillage     Met ✓ Not Met X     □     □		
Met ✓ Not Met X		
Demonstrate safe and Candidate to describe <b>two</b> May include:	H	<u>'                                     </u>
Unit 121 accurate application possible methods of marking of crop rows		
procedures out the site to achieve marker poles		
5.2 accurate spraying GPS		
Candidate to <b>state two</b> May include:		
effects of increasing the fan speed  a larger volume of air is produced, which can deliver the pesticide into a larger target with a		
higher error density		,   _
■ increased risk of damage to delicate fruits or		
berries		
a larger volume of air could create excessive		
spray drift		
Candidate to <b>explain one</b> May include:		
reason for adjusting fan pitch		
engine speeds to save fuel and machine wear		
a suitable volume of air can be achieved to deliver		
the pesticide to the target site		
Candidate to <b>explain one</b> May include:		
reason why different nozzle crop density may vary at different heights		
sizes may be used along the crop heights may vary		
Continued boom or nozzles may be shut off crop neights may vary		

CRITERIA NUMBER	ASSESSMENT CRITERIA	ASSESSOR GUIDANCE	ASSESSMENT ACTIVITIES		AND		
NUMBER	UNITERIA	Candidate to explain the	May include:	Α	В	С	D
Cont		procedure if the tank needs	mark the point where the tank emptied				
		refilling part way through	measure and mix required quantities				
Unit 121		application	continue application at the marked point				
5.2			continuo apprication at the marked point				
0.2		Area treated must be typical	To include:				
		of the candidates normal	treatment area clearly identified				
		work situation and be sufficient to demonstrate safe	operate controls to start and finish application at	_			
		and accurate application	the beginning and end of each row/bed				
			<ul> <li>forward speed maintained/correct forward speed for site conditions</li> </ul>				
			pressure maintained				
			accurate matching of bouts				
			obstacles dealt with correctly (if applicable)				
			area treated maintaining adequate penetration				
			and coverage				
			area treated minimising overlaps and misses				
			awareness of changing crop density and				
			appropriate action taken(if applicable)				
			awareness of changing weather conditions and			l _	
			appropriate action taken (if applicable)				
			Met ✓ Not Met X				
	Carry out all activities	Note to the Assessor:	To include:				
Unit 121	protecting human	Assessor to be <b>satisfied</b> that	prevention of personal injury and contamination				
<b>5</b> 2	health and the environment	the candidate has carried out all activities protecting	through correct selection and use of PPE/RPE (as				
5.3		human health and the	required by the product information and/or COSHH/Risk Assessment)				
		environment	prevention of public / bystander contamination				
			safe filling procedure				
			avoidance of excessive spray drift				
			avoidance of off-target application/contamination			lп	
			avoidance of over dosing/under dosing crop/target				
			Met ✓ Not Met X				
		The condidate is negligible		닏		ш	Ш
Unit 121	Complete a treatment record	The candidate is required to complete a treatment record	Completion of the treatment record must be:  accurate				
Omt 121	iccolu	Complete a treatment receiv					
5.4		Note to the assessor: the	legible (if handwritten)				
		treatment record must be approved or if necessary	Met ✓ Not Met X	Ш	Ш	Ш	
		supplied by the assessor					
	Explain how to manage	Candidate to explain one	Explanation may include:	-			
Unit 121	surplus pesticide and	method of managing surplus	return to temporary mobile store				
0.4	dispose of waste material	concentrate pesticide	return to fixed store				
6.1							
		Candidate to <b>explain two</b> method of dealing with waste	Containers:			_	
		packaging	triple rinsed				
		, partiagning	placed in secure storage until disposal				
			returned to supplier				
			collected by a licensed waste disposal contractor				
			Packaging:				
			thoroughly emptied				
			placed in secure storage until disposal				
			collected by a licensed waste disposal contractor				
		Candidate to <b>explain two</b>	Explanation may include:				
		methods of managing surplus	, ,				
		dilute pesticides	back on to site as long as it is below the maximum dose rate				
			use on another approved crop/target				
			treated by specialist treatment facility on site (e.g.				
			a lined bio bed)				
			collected by a licensed waste disposal contractor				
			Met ✓ Not Met X				
		1				ı	I

CRITERIA	ASSESSMENT	ASSESSOR	ASSESSMENT	C	AND	IDA.	ГЕ
NUMBER	CRITERIA	GUIDANCE	ACTIVITIES	Α	В	С	D
	Explain how to clean and	Candidate to explain four	May include:				
Unit 121	decontaminate	factors that need to be	select and use appropriate PPE				
6.2	the sprayer and, if applicable, the prime	considered when cleaning and decontaminating the	appropriate site				
0.2	mover	sprayer and, if applicable, the prime mover	thorough washing with water and suitable additive if required				
		•	internal and external surfaces				
			<ul> <li>use of in-built wash systems if provided</li> </ul>				
			care to ensure contamination 'hot-spots' are clean				
			thorough flushing of systems				
			safe disposal of contaminated washings				
			when cleaning should take place				
			safe procedures followed				
			Met ✓ Not Met X				
	Describe the storage	Candidate to describe three	May include:				
Unit 121	requirements for the	factors to consider prior to	ensure the applicator is clean and dry				
6.3	sprayer	storing the applicator	inspect for wear and damage				
0.5			replace any worn or damaged parts				
			ensure system is drained and any valves left in appropriate positions				
			frost protection/prevention implemented				
			lubricate as required				
			store undercover and out of direct sunlight				
			store in a secure area				
			Met ✓ Not Met X				

# Unit 122 – Operating a Variable Geometry Boom Sprayer with Air Assistance (PA3B)

Candidate A Name		Name:	Date:		<b>:</b>	Start Time:	Dura	ation	1:				
Candidate	В	Name:		Date:		Start Time:	Dura	ation					
Candidate	С	Name:		Date:		Start Time:	Dura	ation					
Candidate	D	Name:		Date: Start Time: Du				uration:					
CRITERIA NUMBER		ASSESSMENT CRITERIA	ASSESSOR GUIDANCE		1	SSESSMENT ACTIVITIES		C.	AND B	IDAT C	TE D		
Unit 122 1.1	requapp air a	cribe the legal uirements relating to lying pesticides using assisted variable metry boom sprayers	Candidate to <b>describe two</b> operator's obligations in terms of legal requirements		complies with let comply with all rewhen operating highway comply with The (Sustainable Use the operator must be comply with the operator must be complied with the complied with	ds are in place and equipme gal requirements elevant road traffic regulation or transporting on the public Plant Protection Products e) Regulations 2012 st hold the appropriate he equipment they are using	ns C						
Unit 122 1.2	pes assi boo	cribe how to apply ticides safely using air isted variable geometry m sprayers following ustry best practice	Candidate to <b>describe one</b> operator safety regulation i terms of using air assisted variable geometry boom sprayers	in •	<ul><li>adopt industry be</li><li>be aware of any</li></ul>	ticide Codes of Practice est practice safety implications imposed sessment and comply with t							
			Candidate to <b>describe two</b> precautions the operator make to protect self from pesticide contamination who perating the prime mover	nay nen	sealed cab:  fit carbon filter use of in-cab col ensure ventilatio close all window contaminated Pf awareness of the components with open cab/canopy/plati	on system is functional s PE stored in external locker e siting of pressurised nin confines of cab form:							
			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	N	front weights wheel track widtl correct tyre pres condition of tyres	orm  prime mover and sprayer  h sures							
			Candidate to <b>state four</b> aspects of safe practice to considered when driving o uneven/sloping terrain  Candidate to <b>state one</b> consideration for safe driving on a public highway	be in	May include:  assess condition select four whee appropriate spee correct gear sele effect of changin use of weights to correct turning p keep centre of g  May include: independent bra	el drive ed ection og load on stability o stabilise prime mover							

CRITERIA	ASSESSMENT	ASSESSOR	ASSESSMENT	C	AND		ΓΕ
NUMBER	CRITERIA	GUIDANCE	ACTIVITIES	Α	В	С	D
	Identify risks to the	Candidate to identify all	May include:				
Unit 122	environment	relevant risks to the environment for the	ground conditions				
2.1		application site	water courses				
2.1			<ul> <li>environmental margins/strips/areas</li> </ul>				
			drains				
			boreholes				
			wildlife				
			non-target plants				
			sensitive crops/areas				
			hedgerows				
			housing				
			public access				
			other risks particular to the site				
			Met ✓ Not Met X	Ш	Ш	Ш	Ш
	Explain how to minimise	Candidate to <b>explain</b> how to	May include:				
Unit 122	risks to the environment	minimise the risks identified	use an appropriate pesticide (minimal				
2.2		in <b>2.1</b>	environmental impact)				
2.2			careful timing of application				
			check and maintain application rate				
			avoid off target application				
			observe buffer zones				
			comply with air assisted LERAP requirements				
			erect warning signs				
			notify neighbours				
		Candidate to <b>state</b> the reason for minimising off target application and spray	avoidance of contamination to people and the environment				
		drift					
		Candidate to check and	use of anemometer or visual signs at suitable	l	_	_	
		<b>comment</b> on wind speed and direction	height				
		direction	wind direction				
		Candidate to state five	May include:				
		factors that affect spray drift	weather conditions				
			direction of spraying				
			presence of natural/living windbreaks				l
			nozzle type and size				
			• pressure				
			• fan speed				
			· ·				
			<ul><li>fan pitch</li><li>air flow direction</li></ul>				
			• forward speed				
			nozzle configuration				
			boom geometry				
			target canopy density				
			use of air deflector(s)				
			Black / Alco Black W		_	_	
			Met ✓ Not Met X	Ш	Ш	Ш	Ш

Unit 122 3.1 Unit 122 3.2  Note to the Assessor A product label is required to the Assessor As will provide the product and appropriate to the Assessor assessor to note); It is information on the belief to the displicituate for use during the assessment  Unit 122  Identify applicator controls  4.1  Unit 122  Identify applicator controls  and components  Candidate to Identify all components and commonity and provider and provider to the trip assessment  Candidate to Identify all components and commonity and provider a	CRITERIA NUMBER	ASSESSMENT CRITERIA	ASSESSOR GUIDANCE	ASSESSMENT ACTIVITIES	C.	AND B	IDA1	ΓE D
Interpret product information   Information on a product label and provide relevant information as requested by the Assessor	11 1/ 400	Read product information	•	May include the following:				
3.1   Information   and provide relevant information as requested by the Assessor   Note to the Assessor   A product label is required, it is expected that the candidate will provide the product label, for a currently approved product and appropriate to the Candidate (Assessor also to note); it is acceptable for key information on the label to be highlighted for use during the assessment	Unit 122	Interpret product		1				
Unit 122  13.2  13.2  14.1  15.2  15	3.1		and provide relevant	active substance(s) (ingredient(s))				
Note to the Assessor: A product label is required. It is will provide the product label. The label provided must be for a currently approved product and appropriate to the candidates normal work. Situsion  Note to the Candidate (Assessor also to note): It is acceptable for key information on the label to be highlighted for use during the assessment  Unit 122  Unit 122  Unit 122  Lidentify applicator controls and components and controls relating to the applicator being used for the assessment  Unit 120  Lidentify applicator controls and components and controls relating to the applicator being used for the assessment  Unit 120  Lidentify applicator controls and components and controls relating to the applicator being used for the assessment  Lidentify applicator controls and components and controls relating to the applicator being used for the assessment  Lidentify applicator controls and components and controls relating to the applicator being used for the assessment  Lidentify applicator controls and components and controls relating to the applicator being used for the assessment  Lidentify applicator controls and components and controls relating to the applicator being used for the assessment  Lidentify applicator controls and components and controls relating to the applicator being used for the assessment  Lidentify applicator controls and components and controls relating to the applicator being used for the assessment  Lidentify applicator controls and controls applicator being used for the assessment  Lidentify applicator controls and controls applicator being used for the assessment  Lidentify applicator controls and controls applicator and components are a control and controls applicator and components are a control and controls applicator and controls and components are a control and controls applicator and controls and controls applicator and controls and controls and controls and controls and controls and co	Unit 122							
product label is required, it is expected that the candidate that the candidate will provide the product label. The label provided may be product label. The label provided may be product and appropriate to the candidates normal work shustion  Note to the Candidates (Assessor also to note); it is acceptable for key information on the label to be highlighted for use during the assessment  Unit 122  dentify applicator controls and components and components and controls related to the assessment  Candidate to identify all components and controls related to the assessment  Unit 122  4.1  dentify applicator controls and components and controls related to the assessment  Candidate to identify all components and controls related to the assessment  Way include:  Candidate to identify all components and controls related to the applicator being used for the assessment  Unit 122  4.1  Candidate to identify all components and controls related to the applicator being used for the assessment  Candidate to identify all components and controls related to the applicator being used for the assessment  Candidate to identify all components and controls related to the applicator being used for the assessment  Candidate to identify all components and controls related to the applicator being used for the assessment  Candidate to identify all components and controls related to the applicator being used for the assessment  Candidate to identify all components and controls related to the applicator being used for the assessment  Candidate to identify all components and controls related to the applicator being used for the assessment  Candidate to identify all components and controls related to the applicator controls related to			Note to the Assesser: A					
expected that the candidate will provide the product ided, and protected and store a currently approved to product and appropriate to it or a currently approved to statusion.  Note to the Candidate (Assessor also to note): It is acceptable for key information on the label to be assessment.  Note to the Candidate (Assessor also to note): It is acceptable for key information on the label to be assessment.  Note to the Candidate (Assessor also to note): It is acceptable for key information on the label to be assessment.  Note to the Candidate (Assessor also to note): It is acceptable for key information on the label to be assessment.  Note to the Candidate (Assessor also to note): It is acceptable for key information on the label to be assessment.  Note to the Candidate to identify all components and controls evaluate the label to the assessment.  Identify applicator controls and components and controls evaluate to identify all components and controls evaluate to identify all components and controls evaluate to identify all components and control assessment.  Candidate to identify all components and controls evaluate to identify all components and controls evaluate to identify all components and control assessment.  Candidate to identify all components and control assessment.  Candidate to identify all components and control assessment.  And was instance.  May include:  main spray tank.  Met V Not Met X  Met V Not Met X  Met V Not Met X  Met includes on the included of the main spray tank.  Identify any quality all components and control assessment.  Identify and explain the use of one type of norzels, which is an included to identify all components and adjustment (if applicable) in tan speed control and include and identify all components and adjustment (if applicable) in tan speed control and include and identify all components and adjustment (if applicable) in tan speed control and include and identify all components and adjustment (if applicable) in tan speed control and identify all components and adjustment	3.2			I				
The label provided must be for a currently approved product and appropriate to the candidates normal work situation  Note to the Candidate (Assessor also on note): Itis of the Candidate (Assessor) also on the label to be highlighted for use during the assessment    Unit 122								
Identify applicator controls and components and controls and components and controls and appropriate to the assessment								
the candidates normal work situation  Note to the Cardidate (Assessor also to rote): it is carpested for lease to the injuliphed for use during the assessment    Cardidate to Identify all components and controls and components and			for a currently approved					
Mote to the Candidate (Assessor also to note): It is acceptable for key information on the label to be highlighted for used during the assessment     Crop specific information: croptange:   dose rate   dose r								
Note to the Candidate (Assessed also to note): it is acceptable for key information on the label to be highlighted for use during the assessment				· · · ·				
Crop specific information on the label to be highlighted for use during the assessment			Note to the Candidate	-				
Identify applicator controls assessment    Candidate to identify all components and controls relating to the assessment   Candidate to identify all components and controls relating to the applicator boling used for the assessment   Candidate to identify all components and controls relating to the applicator boling used for the assessment   Candidate to identify all components and controls relating to the applicator boling used for the assessment   Candidate to identify all components and controls relating to the applicator boling used for the assessment   Candidate to identify all components and controls relating to the applicator boling used for the assessment   Candidate to identify all components and controls relating to the applicator boling used for the assessment   Candidate to identify all components and controls relating to the applicator boling used for the assessment   Candidate to identify all components and controls   Candidate								
highlighted for use during the assessment    dose rate								
# water volume    timing				1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				
### State of the assessment ##			assessment					
Mixing and spraying:    filling				• timing				
Unit 122 4.1    Identify applicator controls and components and controls relating to the applicator being used for the assessment				Mixing and aproving:				
Trecommended nozzles				1				
Unit 122 4.1    Identify applicator controls and controls relating to the applicator being used for the assessment   Gamman and components   Gamman and components   Gamman and controls relating to the applicator being used for the assessment   Gamman and components   Ga								
Unit 122 4.1  Identify applicator controls and components  Identify applicator controls and components  Candidate to identify all components and controls relating to the applicator being used for the assessment  May include:  "main spray tank clean water tank clean water tank clean water tank compressor pulsation damper filling control and devices agitation control pressure adjustment control pressure gauge on/off boom break-backs boom isolators boom section pressure compensation controls filters nozzete diaphragm check valves tank wash system tank drain tank drain fan blades and adjustment (if applicable) fan speed control air deflector(s) trash guard  lidentify and explain the use of one type of nozzete, which could how the conductive traczete, which could how cone – good coverage				recommended pressure				
Unit 122 4.1    Identify applicator controls and components and controls relating to the applicator being used for the assessment				spray quality				
Unit 122 4.1    Identify applicator controls and components and controls relating to the applicator being used for the assessment				additional label information				
Unit 122 4.1    Identify applicator controls and components and controls relating to the applicator being used for the assessment     May include:								
Unit 122 4.1    Identify applicator controls and components   Candidate to identify all components and controls relating to the applicator being used for the assessment     May include:   Candidate to identify all components and controls relating to the applicator being used for the assessment								
Unit 122 4.1  and components  components relating to the applicator being used for the assessment  main spray tank clean water tank hand wash tank pump compressor pulsation damper filling control and devices agitation control pressure adjustment control pressure gauge on/off boom break-backs boom isolators boom section pressure compensation controls filters nozzles diaphragm check valves tank wash system tank drain fan blades and adjustment (if applicable) fan speed control air deflector(s) trash guard other components/controls specific to the applicator  May include: hollow cone – good coverage		Identify applicator controls	Candidate to identify all		Ш	Ш	Ш	닏
elating to the applicator being used for the assessment    Clean water tank	Unit 122		_					
hand wash tank pump compressor pulsation damper filling control and devices agitation control pressure adjustment control pressure gauge on/off boom break-backs boom section pressure compensation controls filters nozzles diaphragm check valves tank wash system tank drain fan blades and adjustment (if applicable) fan speed control air deflector(s) trash guard other components/controls specific to the applicator  May include: hollow cone – good coverage		·						
pump     compressor     pulsation damper     filling control and devices     agitation control     pressure adjustment control     pressure gauge     on/off     boom break-backs     boom isolators     boom section pressure compensation controls     filters     nozzles     diaphragm check valves     tank wash system     tank drain     fan blades and adjustment (if applicable)     fan speed control     air deflector(s)     trash guard     other components/controls specific to the applicator  Identify and explain the use of one type of nozzle, which could be thet integred for upon	4.1			hand wash tank				
pulsation damper     filling control and devices     agitation control     pressure adjustment control     pressure gauge     on/off     boom break-backs     boom isolators     boom section pressure compensation controls     filters     nozzles     diaphragm check valves     tank wash system     tank drain     fan blades and adjustment (if applicable)     fan speed control     air deflector(s)     trash guard     other components/controls specific to the applicator  Identify and explain the use of one type of nozzlee, which application  Identify and explain the use of one type of nozzlee, which application  May include:     hollow cone – good coverage				• pump				
filling control and devices								
agitation control pressure adjustment control pressure gauge on/off boom break-backs boom isolators boom section pressure compensation controls filters nozzles diaphragm check valves tank wash system tank drain fan blades and adjustment (if applicable) fan speed control fan speed control air deflector(s) trash guard other components/controls specific to the applicator    Identify and explain the use of one type of nozzle, which applicator   May include:   May include:   May include:   hollow cone – good coverage								
pressure adjustment control     pressure gauge     on/off     boom break-backs     boom isolators     boom section pressure compensation controls     filters     nozzles     diaphragm check valves     tank wash system     tank drain     fan blades and adjustment (if applicable)     fan speed control     air deflector(s)     trash guard     other components/controls specific to the applicator  Identify and explain the use of one type of nozzle, which applicated for use of one type of nozzle, which application  May include:     hollow cone – good coverage				1				
pressure gauge     on/off     boom break-backs     boom isolators     boom section pressure compensation controls     filters     nozzles     diaphragm check valves     tank wash system     tank drain     fan blades and adjustment (if applicable)     fan speed control     air deflector(s)     trash guard     other components/controls specific to the applicator  Identify and explain the use of one type of nozzle, which could be that introded for the could be that introducts the could be the could be that introducts the could be that introducts the could be t				1				
boom break-backs     boom isolators     boom section pressure compensation controls     filters     nozzles     diaphragm check valves     tank wash system     tank drain     fan blades and adjustment (if applicable)     fan speed control     air deflector(s)     trash guard     other components/controls specific to the applicator    Identify and explain the use of one type of nozzle, which could be that intereded for use								
boom isolators     boom section pressure compensation controls     filters     nozzles     diaphragm check valves     tank wash system     tank drain     fan blades and adjustment (if applicable)     fan speed control     air deflector(s)     trash guard     other components/controls specific to the applicator  Identify and explain the use of one type of nozzle, which only the therefore for use of the property of the prop				on/off				
boom section pressure compensation controls     filters     nozzles     diaphragm check valves     tank wash system     tank drain     fan blades and adjustment (if applicable)     fan speed control     air deflector(s)     trash guard     other components/controls specific to the applicator  Identify and explain the use of one type of nozzle, which could be that intended for use.  May include:     hollow cone – good coverage								
filters     nozzles     diaphragm check valves     tank wash system     tank drain     fan blades and adjustment (if applicable)     fan speed control     air deflector(s)     trash guard     other components/controls specific to the applicator    Identify and explain the use of one type of nozzle, which could be that intended for use								
nozzles     diaphragm check valves     tank wash system     tank drain     fan blades and adjustment (if applicable)     fan speed control     air deflector(s)     trash guard     other components/controls specific to the applicator    Identify and explain the use of one type of nozzle, which could be that intended for use				·				
tank wash system tank drain fan blades and adjustment (if applicable) fan speed control air deflector(s) trash guard other components/controls specific to the applicator  Identify and explain the use of one type of nozzle, which could be that intended for use								
tank drain  tank drain  fan blades and adjustment (if applicable)  fan speed control  air deflector(s)  trash guard  other components/controls specific to the applicator  Identify and explain the use of one type of nozzle, which could be that intended for use				diaphragm check valves				
fan blades and adjustment (if applicable)  fan speed control air deflector(s) trash guard other components/controls specific to the applicator  Identify and explain the use of one type of nozzle, which could be that intended for use				tank wash system				
fan speed control								
air deflector(s)  trash guard  trash guard  other components/controls specific to the applicator  Identify and explain the use of one type of nozzle, which could be that intended for use								
trash guard  other components/controls specific to the applicator  Identify and explain the use of one type of nozzle, which could be that intended for use				1				
other components/controls specific to the applicator      Identify and explain the use of one type of nozzle, which could be that intended for use      Hollow cone − good coverage      □								
Identify and explain the use of one type of nozzle, which could be that intended for use				other components/controls specific to the				
of <b>one</b> type of nozzle, which hollow cone – good coverage			Identify and explain the use				_	
could be that intended for use				_				
Honor conduit induction with reaction				1				
properties								
• flat fan – general purpose				flat fan – general purpose				
Met ✓ Not Met X				Met ✓ Not Met X				

CRITERIA	ASSESSMENT	ASSESSOR	ASSESSMENT		AND		
NUMBER	CRITERIA Carry out pre use checks	GUIDANCE Candidate to carry out all	ACTIVITIES  May include:	Α	В	С	D
Unit 122	to the prime mover	pre-use checks relevant to	guards in place and in good condition				
	'	the prime mover being used	<ul> <li>visual inspection of the wheels and tyres</li> </ul>				
4.2		for the assessment	tyre pressures				
			fuel level adequate				
			engine oil level is within acceptable limits				
			hydraulic oil level is within acceptable limits (if				
			accessible)				
			transmission oil level is within acceptable limits (if		_		
			accessible)  coolant level is adequate				
			'				
			Singino all mor lo oloan				
			Met ✓ Not Met X				
Unit 122 4.3	Carry out pre-use and operational checks to the sprayer	Candidate to carry out all pre-use and operational checks to the sprayer/applicator	May include all/some of the following as applicable to the sprayer/applicator:				
		Check security of attachment	safe unfolding of booms to avoid personal				
		of applicator mechanisms	contamination and contact with Over Head Power				
			Lines (OHPL) and any other overhead hazards  • fasteners tight				
			straps inspected and adjusted if necessary				
			linkage secure				
			sideways movement restricted				
			drawbar pin secured				
		Check for mechanical	seized, worn or damaged controls/components				
		defects	electrical connectors				
		Check that the applicator is	identification of lubrication points				
		lubricated correctly	visual inspection of lubrication points				
			visual inspection of levels				
		Check boom settings,	boom suspension operational				
		suspension and break-back	break-back efficiency				
		devices	height adjustment				
		Remove, clean and refit a	Candidate to:				
		filter	remove and clean using appropriate method				
			contain spillage				
			check for defects, replace if damaged				
			refit				
		Remove, clean/replace and	Candidate to:				
		refit a nozzle/restrictor	remove and clean using appropriate method		$\Box$		
			contain spillage				
			check for defects replace if worn/damaged				
			refit				
		Evalein how to you the	May include:				
		Explain how to use the control panel to ensure that	,			_	
		the applicator is functioning	<ul> <li>functions of control panel</li> <li>recognition of malfunctions before and during</li> </ul>				
		correctly (if applicable)	operation				
			check accuracy of base settings				
			switch to manual/test mode where applicable				
		Part fill applicator	To include:				
		ι αιτ πιι αργιισατοί	suitable site selected	_	_		_
			fill by usual on-site method, following approved				
Constitution			procedures				
Continued			clean water supply				
			Glean water supply				

Cont. Unit 122 4.3  Calibrate the sprayer and record forward speed record forward speed record follower delay of available forward speed of complete delay of available forward speed of complete forward speed of complete forward speed of complete forward speed for complete forward speed for complete forward speed of complete forward speed for complete forward speed ostablished conditions.  Calculate required output/volume rate  Calculate required output complete for available for volume required output/volume rate  Calculate required output complete for available forward speed for complete forward speed for complet	CRITERIA NUMBER	ASSESSMENT CRITERIA	ASSESSOR GUIDANCE	ASSESSMENT ACTIVITIES	C.	AND B	IDAT	ΓE
Unit 122 4.3  Calibrate the sprayer and record follower specified area and record forward speed for crophage and angular specified area and full tank  Calibrate the sprayer and record follower rate  State one sutable antion in the event of the control panel failing  Calibrate the sprayer and record follower is specified and sealed and record follower specified and sealed and sealed specified area and supplications are specified and sealed and sealed specified area and supplications are specified and sealed and sealed specified area and supplications are specified and sealed and sealed specified area and supplications are specified and sealed		ORTERIA	Check applicator for air and					
Calibrate the sprayer and record relevant date   Calibration in the event of the control parent family   Calibrate the sprayer and record relevant date   Select and record floward speed   Calibration may include the following:	Unit 122			visual check of all nozzles/atomisers for correct spray patterns, absence of blockages, streaking,				
Island pipe work and connectors	4.3			correct alignment				
unit 122 4.4  Calibrate the sprayer and record forward speed  Calculate required output/volume rate  Sec operating pressure  Calculate required output/volume rate  Sec operating pressure  Calculate required output/volume rate  Sec operating pressure  Check sprayer output  Check sprayer				liquid pipe work and connections				
State one suitable action in the event of the control panel   aling   color delevant data   color delevant dat				air ducting checked for leaks				
State one suitable action in the event of the control panel failing  Unit 122 4.4  Calibrate the sprayer and record relevant data Select and record relevant data Select and record forward speed established  Calculate required to opportise goar selected and engine speed established  Calculate required output/volume rate Select appropriate pozzle suring manufacturers literature (if available)  Set operating pressure  Check sprayer output  Check output  Check s				pressure gauge				
tailing				May include:				
Calculate required output/volume rate  Select appropriate nozzle granufacturers illerature (if available)  Set operating pressure  Check sprayer output  Check output  Compare with larget output  Check output			•	manual operation of controls if possible				
A.4  4.4  4.4  4.4  4.4  4.4  4.4  4.4		Calibrate the sprayer and	Candidate is required to				屵	닏
speed    Speed		record relevant data	record relevant data					
Calculate required output/volume rate Select appropriate nozzle using manufacturers literature (if available) Set operating pressure  Check sprayer output  Check output  Compare with larget output  Check output  Compare with larget output  Compare wit				<ul><li>conditions</li><li>appropriate gear selected and engine speed</li></ul>				
Calculate required output/volume rate  Select appropriate nozzle using manufacturers literature (if available)  Set operating pressure  Check sprayer output  Check sprayer and facturers pleratures prequired the system  Displayer and facturers iterature  Check sprayer and facturers plerature for product label  May include:  Pragistration number of vehicle  To registration number of vehi				accurate measurement of distance				
Select appropriate nozzle using manufacturers literature (if available)  Set operating pressure  Set operating pressure  Check sprayer output  Check sprayer output  State four pieces of calibration data that should be recorded  State four pieces of calibration data that should be recorded  Check sprayer output  State four pieces of calibration data that should be recorded  Check of calibration data that should be recorded  State four pieces of calibration data that should be recorded  State four pieces of calibration data that should be recorded  State four pieces of calibration data that should be recorded  State four pieces of calibration data that should be recorded  State four pieces of calibration data that should be recorded  State four pieces of calibration data that should be recorded  State four pieces of calibration data that should be recorded  State four pieces of calibration data that should be recorded  State four pieces of calibration data that should be recorded  May include:  • registration number of vehicle  • tyre size and pressure  • gear selected  • angular data pressure  • pressure  • flow rate  Met ✓ Not Met X  □ □ □  □ □ □  □ □ □  Unit 122  4.5  Calculate quantities of presticide area and full tank  • amount of pesticide required for specified area  • amount of pesticide required for specified area  • amount of pesticide required for specified area  • amount of pesticide required for full tank							l	
using manufacturers literature (if available)  Set operating pressure  Check sprayer output  Check sprayer output  Check sprayer output  State four pieces of calibration data that should be recorded  State four pieces of calibration data that should be recorded  State four pieces of calibration data that should be recorded  Check output  State four pieces of calibration data that should be recorded  State four pieces of calibration data that should be recorded  State four pieces of calibration data that should be recorded  State four pieces of calibration data that should be recorded  State four pieces of calibration of the pressure to make small adjustments  change nozzles if required  or any other acceptable method  May include:  • registration number of vehicle  • registration volume  • nozzles fitted  • nozzle positions  • pressure  • flow rate  Met ✓ Not Met X  □ □ □  □ □  □ □ □  □ □ □  □ □ □ □  □ □ □ □  □ □ □ □  ■ To include:  • amount of water required for specified area  • amount of pesticide required for full tank				correct use of formula				
Set operating pressure  Check sprayer output  Check output  Compare with target output  Compare with targ			using manufacturers literature	use of nozzle manufacturers literature				
Check sprayer output    Check sprayer output			Set operating pressure	pressure as determined by nozzle chart				
State four pieces of calibration data that should be recorded			Check sprayer output	check output				
State four pieces of calibration data that should be recorded  State four pieces of calibration data that should be recorded  May include:  • registration number of vehicle  • tyre size and pressure  • gear selected  • engine speed  • tan speed  • vehicle forward speed  • application volume  • nozzle positions  • pressure  • flow rate  Met ✓ Not Met X   Calculate quantities of pesticide and water required for specified area specified area and full tank  To include:  • registration number of vehicle  • tyre size and pressure  • gear selected  • engine speed  • vehicle forward speed  • nozzle positions  • pressure  • flow rate  To include:  • amount of water required for specified area  • amount of pesticide required for lull tank				vary pressure to make small adjustments				
calibration data that should be recorded			State four pieces of					
• engine speed • fan speed • vehicle forward speed • vehicle forward speed • application volume • nozzles fitted • nozzle positions • pressure • flow rate  Unit 122  4.5  Calculate quantities of pesticide and water required  Candidate to calculate quantities required for both a specified area and full tank  To include: • amount of water required for specified area • amount of pesticide required for specified area • amount of pesticide required for full tank  • amount of pesticide required for full tank			calibration data that should	<ul><li>registration number of vehicle</li><li>tyre size and pressure</li></ul>				
• vehicle forward speed • application volume • nozzles fitted • nozzle positions • pressure • flow rate  Unit 122  4.5  Calculate quantities of pesticide and water required  Candidate to calculate quantities required for both a specified area and full tank  To include: • amount of water required for specified area • amount of pesticide required for specified area • amount of pesticide required for full tank  • vehicle forward speed • application volume • nozzle positions • pressure • flow rate  To include: • amount of water required for specified area • amount of pesticide required for specified area • amount of pesticide required for full tank				engine speed				
• nozzle fitted • nozzle positions • pressure • flow rate  Unit 122 4.5  • nozzle positions • pressure • flow rate  To include: • amount of water required for specified area • amount of pesticide required for full tank  • nozzle positions • pressure • flow rate  To include: • amount of water required for specified area • amount of pesticide required for specified area • amount of pesticide required for full tank				vehicle forward speed				
Unit 122  4.5  Calculate quantities of pesticide and water required  Candidate to calculate quantities required for both a specified area and full tank  flow rate  Met ✓ Not Met X  □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □				nozzle positions				
Unit 122 4.5  Calculate quantities of pesticide and water required  Candidate to calculate quantities required for both a specified area and full tank  Calculate quantities of quantities required for both a specified area and full tank  To include:  amount of water required for specified area  amount of pesticide required for full tank  amount of pesticide required for full tank				·	l	_		
<ul> <li>4.5</li> <li>pesticide and water required for both a specified area and full tank</li> <li>amount of water required for specified area amount of pesticide required for full tank</li> <li>amount of pesticide required for full tank</li> <li>amount of pesticide required for full tank</li> </ul>		Calculate average	Condidate to color					
amount of pesticide required for full tank		pesticide and water	quantities required for both a	amount of water required for specified area				
	4.5			amount of pesticide required for full tank				

CRITERIA NUMBER	ASSESSMENT CRITERIA	ASSESSOR GUIDANCE	ASSESSMENT ACTIVITIES	A	AND B	IDA <sup>-</sup>	TE D
	Measure the required	Candidate to measure and	To include:				1
Unit 122 5.1	quantities and add to the sprayer	add quantities required for the area specified in 4.5	<ul> <li>correct selection and use of PPE/RPE (as required by the product label and/or COSHH Assessment)</li> </ul>				
		Note: This may be a simulated pesticide product provided by the Assessor	<ul> <li>observance of pesticide manufacturers instructions for mixing sequence and agitation (or other recommended method)</li> </ul>				
		ASSUSSOI	<ul> <li>suitable site selected</li> </ul>				
			<ul> <li>clean water supply</li> </ul>				
			<ul> <li>accurate measurement of water</li> </ul>				
			<ul> <li>accurate measurement of pesticide</li> </ul>				
			<ul> <li>use of filling device (if fitted)</li> </ul>				
			avoidance of spillage				
			Met ✓ Not Met 2				
	Demonstrate safe and	Candidate to describe <b>two</b>	May include:				
Unit 122	accurate application procedures	possible methods of marking out the site to achieve	<ul> <li>crop rows</li> </ul>				
5.2	procedures	accurate spraying	<ul> <li>marker poles</li> </ul>				
0.2		3	• GPS				
		Candidate to <b>state two</b>	May include:				
		effects of increasing the air flow	a larger volume of air is produced, which can deliver the pesticide into a larger target with a				
			<ul> <li>higher crop density</li> <li>increased risk of damage to delicate fruits or</li> </ul>			Ш	
			berries				
			a larger volume of air could create excessive				
			spray drift				
		Candidate to explain one	May include:				
		reason for adjusting fan pitch	a larger volume of air can be produced at lower				
		(if applicable)	engine speeds to save fuel and machine wear				
			a suitable volume of air can be achieved to delive	r			
			the pesticide to the target site				
		Candidate to <b>explain</b> the	May include:				
		procedure if the tank needs	<ul> <li>mark the point where the tank emptied</li> </ul>				
		refilling part way through	measure, mix and fill with required quantities				
		application	continue application at the marked point				
		Candidate to annly posticide	To include:				
		Candidate to <b>apply</b> pesticide to treat a specified area				_	
		appropriate to the candidate's	troduiton drod ordany raditaned				
		normal work situation and	<ul> <li>operate controls to start and finish application at the beginning and end of each row/bed</li> </ul>				
		sufficient to demonstrate safe and accurate application	forward speed maintained/correct forward speed				
		procedures	for site conditions				
			pressure maintained				
			accurate matching of bouts				
			obstacles dealt with correctly (if applicable)				
			area treated minimising overlaps and misses     awareness of changing crop density and				
			<ul> <li>awareness of changing crop density and appropriate action taken(if applicable)</li> </ul>	Ιп			
			awareness of changing weather conditions and				
			appropriate action taken (if applicable)				
			Met ✓ Not Met 2				
	Carry out all activities	Note to the Assessor:	To include:				
Unit 122 5.3	protecting human health and the environment	Assessor to be satisfied that the candidate has carried out all activities protecting human health and the environment	<ul> <li>prevention of personal injury and contamination through correct selection and use of PPE/RPE (a required by the product information and/or COSHH/Risk Assessment)</li> </ul>	;   <sub> </sub>			
			prevention of public / bystander contamination				
			safe filling procedure				
			avoidance of excessive spray drift				
			avoidance of off-target application/contamination				
			avoidance of over dosing/under dosing crop/targe				
			Met ✓ Not Met )				
			Mer > Mor Mer >	<u> </u>	Ш	Ш	

CRITERIA	ASSESSMENT	ASSESSOR	ASSESSMENT	C	AND		
NUMBER	CRITERIA	GUIDANCE	ACTIVITIES	Α	В	С	D
Unit 122	Complete a treatment record	The candidate is required to <b>complete</b> a treatment record	Completion of the treatment record must be:				
OIIIL 122	IGCOIU	·	• accurate				
5.4		Note to the Assessor: the treatment record must be	legible (if handwritten)				
		approved or if necessary	Met ✓ Not Met X				
		supplied by the assessor					
	Explain how to manage	Candidate to explain one	Explanation may include:				
Unit 122	surplus pesticide and	method of managing surplus	return to temporary mobile store				
6.1	dispose of waste material	concentrate pesticide	return to fixed store				
0.1		Candidate to <b>explain two</b>	Containers:				
		method of dealing with waste					
		packaging	<ul> <li>triple rinsed</li> <li>placed in secure storage until disposal</li> </ul>				
			returned to supplier				
			collected by a licensed waste disposal contractor				
			collected by a licerised waste disposal contractor				
			Packaging:				
			thoroughly emptied				
			placed in secure storage until disposal				
			collected by a licensed waste disposal contractor				
		Candidate to explain two	Explanation may include:				
		methods of managing surplus	back on to site as long as it is below the maximum				
		dilute pesticides	dose rate				
			<ul> <li>use on another approved crop/target</li> </ul>				
			treated by specialist treatment facility on site (e.g.		_	_	
			a lined bio bed)				
			collected by a licensed waste disposal contractor				
			Met ✓ Not Met X				
	Explain how to clean and	Candidate to explain four	May include:				
Unit 122	decontaminate the sprayer and, if	factors that need to be considered when cleaning	select and use appropriate PPE/RPE				
6.2	applicable, the prime	and decontaminating the	appropriate site				
<b>V.</b> _	mover	sprayer and, if applicable, the	thorough washing with water and suitable additive     fraguised.				
		prime mover	if required    internal and external surfaces				
			use of in-built wash systems if provided				
			care to ensure contamination 'hot-spots' are clean				
			thorough flushing of systems				
			safe disposal of contaminated washings				
			when cleaning should take place				
			safe procedures followed				
			Met ✓ Not Met X				
	Describe the storage	Candidate to describe three	May include:	Ш	ш	Ш	ш
Unit 122	requirements for the	factors to consider prior to	ensure the applicator is clean and dry	П			
	sprayer	storing the applicator	<ul> <li>inspect for wear and damage</li> </ul>				
6.3			replace any worn or damaged parts				
			ensure system is drained and any valves left in				
			appropriate positions				
			frost protection/prevention implemented				
			lubricate as required				
			store undercover and out of direct sunlight				
			store in a secure area				
			Met ✓ Not Met X				
			HICE - HADE MIEE V	Ш	Ш	Ш	

# Unit 123 – Operating a Variable Geometry Boom Sprayer without Air Assistance (PA3C)

Candidate	Α	Name:		Date:	:	Start Time:	Dura	tion	1:		
Candidate	В	Name:		Date:		Start Time:	Dura	tion	1:		
Candidate	C	Name:		Date:		Start Time:	Dura	tion	1:		
Candidate	D	Name:		Date:	:	Start Time:	Dura	tion	1:		
CRITERIA NUMBER		ASSESSMENT CRITERIA	ASSESSOR GUIDANCE			SSESSMENT ACTIVITIES		C.	AND B	IDAT C	TE D
Unit 123 1.1	requapp vari	scribe the legal uirements relating to olying pesticides using able geometry boom ayers without air istance	Candidate to describe two operator's obligations in terms of legal requirements	•	complies with let comply with all re when operating highway comply with The (Sustainable Use the operator mus certification for the	ds are in place and equipmed gal requirements elevant road traffic regulation or transporting on the public Plant Protection Products e) Regulations 2012 st hold the appropriate he equipment they are using	ns ;				
Unit 123 1.2	pes vari spra ass	scribe how to apply sticides safely using sable geometry boom sayers without air stance following stry best practice	Candidate to describe one operator safety regulation i terms of using variable geometry boom sprayers		adopt industry be be aware of any	ticide Codes of Practice est practice safety implications imposed sessment and comply with					
			Candidate to <b>describe two</b> precautions the operator m take to protect self from pesticide contamination who perating the prime mover	nen •	use of in-cab cor ensure ventilatio close all windows contaminated PF awareness of the	n system is functional					
			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	•	pen cab/canopy/plate use of appropria awareness of the components with cab/canopy/plate	form: te PPE e siting of pressurised nin confines of					
			Candidate to <b>state four</b> aspects of safe practice to considered when driving or uneven/sloping terrain	• • • • • • • • • • • • • • • • • • •	front weights wheel track width correct tyre pres- condition of tyres brake function  May include: assess condition select four whee	sures s s I drive					
			Candidate to <b>state one</b> consideration for safe driving on a public highway		correct gear sele effect of changin use of weights to correct turning p keep centre of gi  May include: independent bra	ection g load on stability o stabilise prime mover rocedure ravity as low as possible kes coupled together speed makes vehicle unsta					
						Met ✓ Not I	MIGI V	Ш	Щ		ഥ

CRITERIA	ASSESSMENT	ASSESSOR	ASSESSMENT			IDAT C	TE D
NUMBER	CRITERIA Identify risks to the	GUIDANCE Candidate to identify all	ACTIVITIES  May include:	Α	В	C	ט
Unit 123	environment	relevant risks to the	ground conditions				
2.4		environment for the	water courses				
2.1		application site	environmental margins/strips/areas				
			drains				
			• boreholes				
			wildlife				
			non-target plants				
			sensitive crops/areas				
			hedgerows				
			housing				
			public access				
			other risks particular to the site				
			Met ✓ Not Met X				
	Explain how to minimise	Candidate to <b>explain</b> how to	May include:				
Unit 123	risks to the environment	minimise the risks identified	use an appropriate pesticide (minimal				
		in <b>2.1</b>	environmental impact)				
2.2			careful timing of application				
			check and maintain application rate				
			avoid off target application				
			observe buffer zones				
			comply with LERAP requirements				
			erect warning signs				
			notify neighbours				
			Hotaly Holginboure				
		Candidate to <b>state</b> the reason for minimising off	avoidance of contamination to people and the environment				
		target application and spray	CHARGINGTE				
		drift					
		Candidate to check and	use of anemometer or visual signs at suitable				
		comment on wind speed and	height				
		direction	wind direction				
		Candidate to state five	May include:				
		factors that affect spray drift	weather conditions				
			direction of spraying				
			presence of natural/living windbreaks				
			nozzle type and size				
			pressure				
			forward speed				
			nozzle configuration				
			boom geometry				
			target canopy density				
			Met ✓ Not Met X				
	Read product information	The candidate is required to	May include the following:				屵
Unit 123	rtodd proddot imorridaion	read and interpret the	product name				
	Interpret product	information on a product label	<ul><li>active substance(s) (ingredient(s))</li></ul>				
3.1	information	and provide <b>relevant</b> information as requested by	active substance(s) (ingredient(s))				
Unit 123		the Assessor	important information:				
UIIIL 123		Note to the Assessor: A	field of use				
3.2		product label is required. It is	crop/target				
		expected that the candidate	maximum individual dose				
		will provide the product label.  The label provided must be	maximum total dose				
		for a currently approved	maximum number of treatments				
		product and appropriate to		_			
		the candidates normal work	specific product precautions/warnings				
		situation	operator protection				
		Note to the Candidate (Assessor also to note): It is	environmental protection				
		acceptable for key	restrictions on use				
		information on the label to be					
Continued		highlighted for use during the					
		assessment					

CRITERIA	ASSESSMENT	ASSESSOR	ASSESSMENT		AND		
NUMBER	CRITERIA	GUIDANCE	ACTIVITIES crop specific information:	Α	В	С	D
Cont						l _	
Gont			crop/target     dose rate				
Unit 123			water volume				
2.4							
3.1			• timing				
Unit 123			mixing and spraying:				
2.0			• filling				
3.2			recommended nozzles				
			recommended pressure				
			spray quality				
			additional label information				
			compatibility				
			Met ✓ Not Met X		П		
	Identify applicator controls	Candidate to identify all	May include:				
Unit 123	and components	components and controls	main spray tank				
		relating to the applicator	clean water tank				
4.1		being used for the assessment	hand wash tank				
			• pump				
			pulsation damper				
			filling control and devices				
			agitation control				
			pressure adjustment control				
			pressure gauge				
			• on/off				
			boom break-backs				
			boom isolators				
			boom section pressure compensation controls				
			filters				
			nozzles				
			diaphragm check valves				
			tank wash system				
			tank drain				
			other components/controls specific to the				
			applicator				
		Identify and explain the use	May include:				
		of <b>one</b> type of nozzle, which	hollow cone – good coverage				
		could be that intended for use	hollow cone air inclusion – drift reduction				
			properties				
			flat fan – general purpose				
			Met ✓ Not Met X				
	Carry out pre use checks	Candidate to carry out all	May include:				
Unit 123	to the prime mover	pre-use checks relevant to	guards in place and in good condition				
4.2		the prime mover being used for the assessment	<ul> <li>visual inspection of the wheels and tyres</li> </ul>				
7.2			tyre pressures				
			fuel level adequate				
			engine oil level is within acceptable limits				
			hydraulic oil level is within acceptable limits (if accessible)				
			<ul> <li>transmission oil level is within acceptable limits (if</li> </ul>				
			accessible)				
			coolant level is adequate				
			engine air filter is clean				
			Met ✓ Not Met X				
							二

CRITERIA NUMBER	ASSESSMENT CRITERIA	ASSESSOR GUIDANCE	ASSESSMENT ACTIVITIES	C A	AND B	IDA.	TE D
Unit 123 4.3	Carry out pre-use and operational checks to the sprayer	Candidate to carry out all pre-use and operational checks to the sprayer/applicator	May include all/some of the following as applicable to the sprayer/applicator:				
		Check security of attachment of applicator mechanisms	safe unfolding of booms to avoid personal contamination and contact with Over Head Power Lines (OHPL) and any other overhead hazards     fasteners tight				
			straps inspected and adjusted if necessary				
			linkage secure				
			<ul><li>sideways movement restricted</li><li>drawbar pin secured</li></ul>				
			·				
		Check for mechanical defects	seized, worn or damaged controls/components     electrical connectors				
		Check that the applicator is	identification of lubrication points				
		lubricated correctly	visual inspection of lubrication points				
			visual inspection of levels				
		Check boom settings,	boom suspension operational				
		suspension and break-back devices	break-back efficiency     height adjustment				
			g				
		Remove, clean and refit a filter	Candidate to:				
			contain spillage				
			check for defects, replace if damaged				
			refit				
		Remove, clean/replace and	Candidate to:				
		refit a nozzle/restrictor	<ul> <li>remove and clean using appropriate method</li> <li>contain spillage</li> </ul>				
			check for defects replace if worn/damaged				
			• refit				
		Explain how to use the control panel to ensure that	May include:  • functions of control panel				
		the applicator is functioning correctly (if applicable)	<ul> <li>recognition of malfunctions before and during operation</li> <li>check accuracy of base settings</li> </ul>				
			switch to manual/test mode where applicable				
		Part fill applicator	To include:				
		Tartim applicator	suitable site selected				
			fill by usual on-site method, following approved procedures	l_			
			clean water supply				
		Check applicator for leaks	May include:				
		and correct spray patterns	use higher than normal operating pressure				
			<ul> <li>visual check of all nozzles/atomisers for correct spray patterns, absence of blockages, streaking, pulsing</li> </ul>				
			correct alignment				
			replace defective nozzles/atomisers/discs     lide and socials				
			<ul><li>lids and seals</li><li>pipe work and connections</li></ul>				
			control valves				
			filters     pressure gauge				
			<ul><li>pressure gauge</li><li>diaphragm check valves</li></ul>				
		State one suitable action in	May include:				
		the event of the control panel	stop pesticide application				
		failing (if applicable)	manual operation of controls if possible				
			Met ✓ Not Met X				

CRITERIA NUMBER	ASSESSMENT CRITERIA	ASSESSOR GUIDANCE	ASSESSMENT ACTIVITIES	C.	AND B	IDAT	TE D
_	Calibrate the sprayer and	Candidate is required to	Calibration may include the following:			<b>-</b>	
Unit 123 4.4	record relevant data	calibrate the applicator and record relevant data					
4.4		Select and record forward speed	<ul> <li>suitable forward speed for crop/target and ground conditions</li> </ul>				
			appropriate gear selected and engine speed established				
			accurate measurement of distance				
			accurate measurement of time taken to cover distance				
			correct use of formula to establish forward speed				
		Calculate required output/volume rate	correct use of formula				
		Select appropriate nozzle	use of manufacturers operators handbook				
		using manufacturers literature (if available)	use of nozzle manufacturers literature				
		(ii availabio)	confirm requirements of product label				
		Set operating pressure	pressure as determined by nozzle chart				
			pressurise/purge appropriate to the system				
		Check sprayer output	check output				
			compare with target output     vary pressure to make small adjustments				
			change nozzles if required				
			or any other acceptable method				
		State four pieces of	May include:				
		calibration data that should be recorded	registration number of vehicle				
		be recorded	tyre size and pressure				
			<ul><li>gear selected</li><li>engine speed</li></ul>				
			vehicle forward speed				
			application volume				
			<ul> <li>nozzles fitted</li> <li>nozzle positions</li> </ul>				
			<ul><li>nozzle positions</li><li>pressure</li></ul>				
			flow rate				
			Met ✓ Not Met X				
Unit 123	Calculate quantities of pesticide and water	Candidate to <b>calculate</b> quantities required for both a	To include:  amount of water required for specified area				
	required	specified area and full tank	amount of water required for specified area				
4.5			amount of pesticide required for full tank				
			Met ✓ Not Met X				
Unit 123	Measure the required	Candidate to measure and	To include:				
5.1	quantities and add to the sprayer	add quantities required for the area specified in 4.5 Note: This may be a	correct selection and use of PPE/RPE (as required by the product label and/or COSHH Assessment)				
		simulated pesticide product provided by the Assessor	observance of pesticide manufacturers instructions for mixing sequence and agitation (or other recommended method)				
			suitable site selected     clean water supply				
			clean water supply     accurate measurement of water				
			accurate measurement of pesticide				
			use of filling device (if fitted)				
			avoidance of spillage				
	Demonstrate safe and	Candidate to describe <b>two</b>	Met ✓ Not Met X  May include:	oxdot	Ш	닏	닏
Unit 123	accurate application	possible methods of marking	crop rows				
5.2	procedures	out the site to achieve accurate spraying	marker poles				
		and opining	• GPS				
Continued						<u> </u>	<u> </u>

Cont Unit 123 5.2 Candidate to explain the procedure of the teach necessor and proposation of the management of the procedure of the teach necessor and the management of the procedure of the teach necessor and the management of the procedure of the teach of the procedure of the teach of the procedure of the teach necessary and the procedure of the teach of of	CRITERIA NUMBER	ASSESSMENT CRITERIA	ASSESSOR GUIDANCE	ASSESSMENT ACTIVITIES	C.	AND B	IDA1	ΓE
Unit 123 5.2 Carry cut all siturities Carry cut all schrides Society human health and the environment Carry cut all schrides Assessor to be satisfied that the environment Assessor to be satisfied but all application of present on taken (if application and appropriate actor taken (if application and present out all activities and such application and present out all activities and application and			•	May include:				
S.2  Candidate to explain the appropriate procedure to follow when a continue application to include appropriate procedure to follow when a continue application of the comment and the procedure to follow when a continue application of the continue application at the beginning and end of each trovbed demand and authorities procedure and accordance and accordance application procedures  Link 123  Link 123  Link 123  Link 123  Link 123  Carry our all activities procedure and the environment and the environme	Cont							
Carridate to explain the appropriate procedure to explain the appropriate procedure to the process of the pro	Unit 123			• • •				
Unit 123 Carry out all activities procedures  Carry out all activities procedure to the environment wheth and the environment whether the condicate is required to the environment whether the condicate is required to a sproved and submitted and depose of the ages procedure as specified and spropriate to the cardidate's normal work shadon and sufficient encough to accurate application procedures  Unit 123 Carry out all activities procedures  Note to the Assessor:  Assessor to be satisfied that the candidate has carried out all activities protecting human health and the environment whether the candidate has carried out all activities protecting human health and the environment record must be approved or of stage application procedure as treatment record must be approved or if necessary accurate the environment and deposes of dealing with vester treatment record must be approved or if necessary supplies by the assessor:  Note to the Assessor:  **Carry out all activities protecting human health and the environment health and the environment record must be approved or if necessary supplies by the product information and/or OSH-R/nisk Assessaring proposition of presonal injury and contamination and or accordance of over dosing/funder dosing crophaged.  **Description of public information and/or OSH-R/nisk Assessaring proposition of the treatment record must be approved or if necessary supplies by the assessor: the teaching of dealing with vester packaging.  **Candidate to explain one method of dealing with vester packaging.  **Candidate to explain one method of dealing with vester packaging.  **Candidate to explain one method of passing and passing and the passing of the passing				continue application at the marked point				
International parameters   Control to walk in contaminated crop   Cardidate to paphy posticidate to treat a specified area appropriate to the candidate to treat a specified area appropriate to the candidate appropriate to the candidate shoring work situation and accurate application procedures   To include:	5.2		Candidate to <b>explain</b> the	Explanation to include:				
Carry out all activities procedures   Carry out all activities procedures   Carry out all activities procedures   Carry out all activities   Carry out all				select and use appropriate PPE				
Cardidate to explain one method of dealing waste packed area appropriate a treatment record must be appropriate a treatment record of public PyterRak Assessment)    Complete a treatment   Complete a treatment record must be approved of in accessary supplied by the assessor and dispose of waste material    Cardidate to explain one methods of managing surplus dispose of waste material				care not to walk in contaminated crop				
to treat a specified area appropriet to the candidate is normal work situation and sufficient remough to consider the candidate is considered in the beginning and earl of each rowbed of considered procedures.    Carry out all activities protecting human health and the environment leads and disposed of waste material leads and disposed of waste leads to explain the leads of the				clean or replace nozzle/restrictor as appropriate				
to treat a specified area appropriet to the candidate is normal work situation and sufficient remough to consider the candidate is considered in the beginning and earl of each rowbed of considered procedures.    Carry out all activities protecting human health and the environment leads and disposed of waste material leads and disposed of waste leads to explain the leads of the			Candidate to apply pesticide	To include:				
unit 123 Carry out all activities protecting human health and the environment  Carry out all activities protecting human health and the environment  S.3  Note to the Assessor: the teamment economent of complete a treatment record must be approached by the assessor of the Assessor: the teamment record must be approached by the assessor of the Assessor of the Candidate to explain one membroid of dealing with wastel packaging  Candidate to explain one membroid of dealing with wastel packaging  Candidate to explain none membroid of dealing with wastel packaging surplus dilute pesticides  appropriate treatment facility on site (e.g., a land of the second of the condidate is required to conditions or approved of in secure storage until disposal or return to fixed storage until disposal or return to fixed storage until disposal or return to fixed storage until disposal or returned to fixed the second contamination disposed or waste material  Dint 123  Camplete a treatment coord must be approved or if necessary supplied by the assessor contamination or membroid of dealing with wastel packaging  Candidate to explain none membroid of dealing with wastel packaging  Candidate to explain none membroid of dealing with wastel packaging  Candidate to explain none membroid of dealing with wastel packaging  Candidate to explain none membroid of dealing with wastel packaging  Candidate to explain none membroid of dealing with wastel packaging  Candidate to explain none membroid of dealing with wastel disposal or return to fixed store  Candidate to explain none membroid of dealing with wastel packaging  Candidate to explain none membroid of dealing with wastel disposal or return to fixed store  Candidate to explain none membroid of dealing with wastel disposal or return to fixed store to supplier  Candidate to explain none membroid or managing surplus diffixed to explain the								
the beginning and end of each rowbied common demonstrate safe and accurate application procedures    Cardy out all activities protecting human health and the environment and the environm			appropriate to the candidate's					
Carry out all activities protecting human health and the environment   The candidate is required to complete a treatment record must be approved or if necessary supplied by the assessor:   Note to the Assessor:   To include:   Prevention of placing of Harget application or prevention of personal injury and contamination through correct selection and use of PPERPE (as recognized by the product information and/or COSHHRisk Assessment)   Prevention of placing deplicable)   Prevention of personal injury and contamination through correct selection and use of PPERPE (as required by the product information and/or COSHHRisk Assessment)   Prevention of placing by the product information and/or COSHHRisk Assessment)   Prevention of pulcing by the product information and/or COSHHRisk Assessment)   Prevention of pulcing by the product information and/or contamination   Prevention of pulcing by the product information and/or contamination   Prevention of pulcing by the product information and/or contamination   Prevention of pulcing by the product of the prevention of pulcing by the pulcing by the prevention of pulcing by the prevention of pulcing by the pulcing by the pulcing by the prevention of pulcing by the pulcing b				the beginning and end of each row/bed				
Unit 123 5.4  Complete a treatment record must be approved or if necessary supplied by the assessor:  Note to the Assessor:  Assessor to be satisfied that the environment health and the environment  The candidate is required to complete a treatment record must be approved or if necessary supplied by the assessor was record adispose of waste material  Explain how to manage adiable by the production of health approval or if necessary supplied by the production of health and supplied by the production of personal injury and contamination through correct selection and use of PPERPE (as required to complete a treatment record must be approved or if necessary supplied by the production of personal injury and contamination through correct selection and use of PPERPE (as required to complete a treatment record must be approved or if necessary supplied of if necessary supplied of if necessary supplied of if necessary supplied of if necessary supplied by the production of purplied in the packaging of interest to explain one method of dealing with waste packaging  Candidate to explain one method of dealing with waste packaging  Candidate to explain two methods of managing surplus dilute pesticides  Candidate to explain two methods of managing surplus dilute pesticides  Candidate to explain two methods of managing surplus dilute pesticides  Candidate to explain two methods of managing surplus dilute pesticides  Candidate to explain two methods of managing surplus dilute pesticides  Candidate to explain two methods of managing surplus dilute pesticides  Candidate to explain two methods of managing surplus dilute pesticides  Candidate to explain two methods of managing surplus dilute pesticides  Candidate to explain two methods of managing surplus dilute pesticides  Candidate to explain two methods of managing surplus dilute pesticides  Candidate to explain two methods of managing surplus dilute pesticides  Candidate to explain two methods of managing surplus dilute pesticides  Candidate to explain two methods of managing su				· · · · · · · · · · · · · · · · · · ·				
accurate matching of boots   accurate matching of boots   and propriets action taken (if applicable)   area treated minimising overlaps and misses   awareness of changing crop density and appropriate action taken (if applicable)   awareness of changing overlaps and misses   awareness of changing overlaps and misses   awareness of changing weather conditions and appropriate action taken (if applicable)   awareness of changing weather conditions and appropriate action taken (if applicable)   awareness of changing weather conditions and appropriate action taken (if applicable)   awareness of changing weather conditions and appropriate action taken (if applicable)   awareness of changing measure that the candidate is a statisfied that the candidate is activated by the product information and/or CoSH-HRSik Assession and used of PE-IRPE (as required by the product information and/or 2 prevention of public / bystander contamination   avaidance of stray drift   avoidance of stray drift   avoidance of stray drift   avoidance of of-target application/contamination   avaidance of of-target application/contamination   avaidance of of-target application/contamination   avaidance of over desing/under dosing crophaget   accurate								
Unit 123 S.3  Carry out all activities protecting human health and the environment and the environment with the environment and the environment an			procedures	· ·				
Unit 123 5.3  Carry out all activities protecting human health and the environment and				5				
a wareness of changing crop density and appropriate action taken (if applicable)				* ` ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '				
Unit 123 S.3  Carry out all activities protecting human health and the environment than the environment of the environment and the environment of the environment and the environment of							Ш	
Unit 123 5.3  Carry out all activities protecting human health and the environment salth and the environment all cardidate has carried out the environment all cardidate has carried out all activities protecting human health and the environment all cardidate has carried out the candidate has carried out the product information and/or COSH-WRisk Assessment) prevention of public / bystander contamination avoidance of off-at-aget application/contamination avoidance of over dosing/under dosing crop/target legible (if handwritter)  Unit 123  Explain how to manage surplus pesticide and dispose of waste material  Candidate to explain one method of managing surplus dispose of waste material  Explain how to manage surplus pesticide and dispose of waste material  Candidate to explain one method of managing surplus explained in secure storage until disposal extreme to supplier collected by a licensed waste disposal c					П		П	П
Unit 123 5.3  Carry out all activities protecting human health and the environment of the				awareness of changing weather conditions and				
Unit 123 5.3  Carry out all activities protecting human heath and the environment the endidate has carried out all activities protecting human health and the environment the endidate has carried out all activities protecting human health and the environment the endidate has carried out all activities protecting human health and the environment the endidate has carried out all activities protecting human health and the environment the endidate has carried out all activities protecting human health and the environment the endidate is required to COSHI-Hizki Assessment) proved of the safe filling procedure avoidance of off-target application/contamination avoidance of off-target application/contamination avoidance of over doising/under dosing cropharget  Unit 123 5.4  Unit 123 6.1  Explain how to manage surplus epsticide and dispose of waste material  Explanation may include:  Explanation may include:  The candidate to explain one method of dealing with waste packaging  Explanation may include:  The candidate to explain one method of dealing with waste packaging  Explanation may include:  The candidate is required to complete a treatment record must be:  The candidate to explain one method of dealing with waste packaging  Explanation may include:  The candidate is required to explain one method of dealing with waste packaging  The candidate is required to explain one method of dealing with waste packaging  The candidate is required to explain one method of dealing with waste packaging  The candidate is required to explain one method of dealing with waste packaging  The candidate is required to explain one method of dealing with waste packaging  The candidate is required to explain one method of managing surplus of the r				appropriate action taken (if applicable)				
## Assessor to be satisfied that the and the environment environment and the environment environment and the environment e				Met ✓ Not Met X				
## Assessor to be satisfied that the and the environment environment and the environment environment and the environment e		Carry out all activities	Note to the Assessor:	To include:				
all activities protecting human health and the environment COSHH/Risk Assessment)    COSHH/Risk Assessment)	Unit 123							
health and the environment    COSHH/Risk Assessment)	5.2	and the environment						
Prevention of public / bystander contamination	5.5							
Safe filling procedure   avoidance of spray drift   avoidance of spray drift   avoidance of off-target application/contamination   avoidance of over dosing/under dosing   crop/target   Met ✓ Not Met X				,				
unit 123  5.4  Complete a treatment record was dispose of waste material  Explain how to manage surplus pesticide and dispose of waste material  Explain how to manage sackaging  Candidate to explain one method of dealing with waste packaging  Candidate to explain one method of of managing surplus onlected by a licensed waste disposal contractor  Candidate to explain two methods of managing surplus dilute pesticides  Candidate to explain two methods of managing surplus dilute pesticides  Candidate to explain two methods of managing surplus dilute pesticides  Candidate to explain two methods of managing surplus dilute pesticides  Candidate to explain two methods of managing surplus dilute pesticides  Candidate to explain two methods of managing surplus dilute pesticides  Candidate to explain two methods of managing surplus dilute pesticides  Candidate to explain two methods of managing surplus dilute pesticides  Candidate to explain two methods of managing surplus dilute pesticides  Candidate to explain two methods of managing surplus dilute pesticides  Candidate to explain two methods of managing surplus dilute pesticides  Explanation may include:  • accurate  • legible (if handwritten)  • return to temporary mobile store  • return to fixed store  Containers:  • triple rinsed  • placed in secure storage until disposal  • collected by a licensed waste disposal contractor  Explanation may include:  • back on to site as long as it is below the maximum dose rate  • use on another approved crop/target  • treated by specialist treatment facility on site (e.g. a lined bio bed)  • collected by a licensed waste disposal contractor				safe filling procedure				
Unit 123  5.4  Complete a treatment record record trecord record a treatment record nust be:  ocmplete a treatment record must be:  ocmplete a freatment fecord must be:  ocmplete a treatment fecord must be:  ocmplete a freatment fecord must be:  ocmplete a freatment fecord must be:  ocmplete a fr								
Unit 123  5.4    Complete a treatment record   Complete a treatment record must be:   accurate   elegible (if handwritten)   Complete a treatment record must be:   accurate   elegible (if handwritten)   Complete a treatment record must be:   accurate   elegible (if handwritten)   Complete a treatment record must be:   accurate   elegible (if handwritten)   Complete a treatment record must be:   accurate   elegible (if handwritten)   Complete a treatment record must be:   accurate   elegible (if handwritten)   Complete a treatment record must be:   accurate   elegible (if handwritten)   Complete a treatment record must be:   accurate   elegible (if handwritten)   Complete a treatment record must be:   accurate   elegible (if handwritten)   Complete a treatment record must be:   accurate   elegible (if handwritten)   Complete a treatment record must be:   accurate   elegible (if handwritten)   Complete a treatment record must be:   accurate   elegible (if handwritten)   Complete a treatment record must be:   accurate   elegible (if handwritten)   Complete a treatment record must be:   accurate   elegible (if handwritten)   Complete a treatment record must be:   accurate   elegible (if handwritten)   Complete a treatment record must be:   accurate   elegible (if handwritten)   Complete a treatment record must be:   accurate   elegible (if handwritten)   Complete a treatment record must be:   accurate   elegible (if handwritten)   Complete a treatment record must be:   accurate   elegible (if handwritten)   Complete a treatment record must be:   accurate   elegible (if handwritten)   Complete a treatment record must be:   accurate   elegible (if handwritten)   Complete a treatment record must be:   accurate   elegible (if handwritten)   Complete a treatment record must be:   accurate   elegible (if handwritten)   Complete a treatment record must be:   accurate   elegi				avoidance of off-target application/contamination				
Unit 123  5.4    Complete a treatment record record   The candidate is required to complete a treatment record   Note to the Assessor: the treatment record must be approved or if necessary supplied by the assessor   Met ✓ Not Met X   □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □					l		_	
Unit 123  5.4  Complete a treatment record Note to the Assessor: the treatment record must be approved or if necessary supplied by the assessor  Candidate to explain one method of managing surplus concentrate pesticide  Candidate to explain one method of dealing with waste packaging  Candidate to explain one method of dealing with waste packaging  Candidate to explain one method of dealing with waste packaging  Candidate to explain one method of dealing with waste packaging  Candidate to explain one method of dealing with waste packaging  Candidate to explain one method of dealing with waste packaging  Candidate to explain two methods of managing surplus dilute pesticides  Candidate to explain two methods of managing surplus dilute pesticides  Candidate to explain two methods of managing surplus dilute pesticides  Candidate to explain two methods of managing surplus dilute pesticides  Candidate to explain two methods of managing surplus dilute pesticides  Candidate to explain two methods of managing surplus dilute pesticides  Candidate to explain two methods of managing surplus dilute pesticides  Candidate to explain two methods of managing surplus dilute pesticides  Candidate to explain two methods of managing surplus dilute pesticides  Candidate to explain two methods of managing surplus dilute pesticides  Candidate to explain two methods of managing surplus dilute pesticides  Candidate to explain two methods of managing surplus dilute pesticides  Candidate to explain two methods of managing surplus disposal contractor  Explanation may include:  • treated by a licensed waste disposal contractor  • back on to site as long as it is below the maximum dose rate  • use on another approved crop/target  • treated by specialist treatment facility on site (e.g. a lined bio bed)  • collected by a licensed waste disposal contractor				crop/target		Ш	Ш	
S.4    Source   Complete a treatment record   Note to the Assessor: the treatment record must be approved or if necessary supplied by the assessor   Suppli				Met ✓ Not Met X				
Solution to the Assessor: the treatment record must be approved or if necessary supplied by the assessor    Unit 123	11-14 400			Completion of the treatment record must be:				
Candidate to explain two methods of managing surplus of leading with waste packaging:    Candidate to explain one method of managing surplus packaging:	Unit 123	record	complete a treatment record					
Unit 123 6.1  Explain how to manage surplus pesticide and dispose of waste material dispose of waste material of dealing with waste packaging  Candidate to explain one method of dealing with waste packaging  Candidate to explain one method of dealing with waste packaging  Candidate to explain one method of dealing with waste packaging  Candidate to explain one method of dealing with waste packaging  Candidate to explain one method of dealing with waste packaging  Candidate to explain two methods of managing surplus dilute pesticides  Candidate to explain two methods of managing surplus dilute pesticides  Candidate to explain two methods of managing surplus dilute pesticides  Candidate to explain two methods of managing surplus dilute pesticides  Candidate to explain two methods of managing surplus dilute pesticides  Candidate to explain two methods of managing surplus dilute pesticides  Candidate to explain two methods of managing surplus dilute pesticides  Candidate to explain two methods of managing surplus dilute pesticides  Candidate to explain two methods of managing surplus dilute pesticides  Candidate to explain two methods of managing surplus dilute pesticides  Candidate to explain two methods of managing surplus dilute pesticides  Candidate to explain two methods of managing surplus dilute pesticides  Candidate to explain two methods of managing surplus dilute pesticides  Candidate to explain two methods of managing surplus dilute pesticides  Candidate to explain two methods of managing surplus dilute pesticide on tractor  Explanation may include:  Explanation may incl	5.4		Note to the Assessor: the	legible (if handwritten)		Ш	Ш	Ш
Unit 123 6.1  Explain how to manage surplus pesticide and dispose of waste material  Candidate to explain one method of managing surplus concentrate pesticide  Candidate to explain one method of dealing with waste packaging  Candidate to explain one method of dealing with waste packaging  Containers:  triple rinsed  placed in secure storage until disposal  returned to supplier  collected by a licensed waste disposal contractor  Packaging:  thoroughly emptied  placed in secure storage until disposal  returned to supplier  collected by a licensed waste disposal contractor  Explanation may include:  striple rinsed  placed in secure storage until disposal  placed in secure storage until disposal  collected by a licensed waste disposal contractor  Explanation may include:  supplied by the assessor  candidate to explain one method of managing surplus dilute pesticides  concentrate pesticide  triple rinsed  placed in secure storage until disposal  placed in secure storage until disposal  collected by a licensed waste disposal contractor  Explanation may include:  use on another approved crop/target  treated by specialist treatment facility on site (e.g. a lined bio bed)  collected by a licensed waste disposal contractor				Met ✓ Not Met X				
### Candidate to explain two methods of managing surplus dilute pesticides    Candidate to explain one method of dealing with waste packaging   Candidate to explain one method of dealing with waste packaging   Candidate to explain one method of dealing with waste packaging   Candidate to explain one method of dealing with waste packaging   Candidate to explain two methods of managing surplus dilute pesticides   Candidate to explain two methods of managing surplus dilute pesticides   Candidate to explain two methods of managing surplus dilute pesticides   Candidate to explain two methods of managing surplus dilute pesticides   Candidate to explain two methods of managing surplus dilute pesticides   Candidate to explain two methods of managing surplus dilute pesticides   Candidate to explain two methods of managing surplus dilute pesticides   Candidate to explain two methods of managing surplus dilute pesticides   Candidate to explain two methods of managing surplus dilute pesticides   Candidate to explain two methods of managing surplus dilute pesticides   Candidate to explain two methods of managing surplus dilute pesticides   Candidate to explain two methods of managing surplus dilute pesticides   Candidate to explain two methods of managing surplus dilute pesticides   Candidate to explain two methods of managing surplus dilute pesticides   Candidate to explain two methods of managing surplus dilute pesticides   Containers:    triple rinsed   Containers:   triple rinsed   Containers:   triple rinsed   Containers:   triple rinsed   Containers:   triple rinsed   Containers:   triple rinsed   Containers:   triple rinsed   Containers:   triple rinsed   Containers:   triple rinsed   Containers:   triple rinsed   Containers:   triple rinsed   Containers:   triple rinsed   Containers:   triple rinsed   Containers:   triple rinsed   Containers:   triple rinsed   Containers:   triple rinsed   Containers:   triple rinsed   Containers:   triple rinsed   Containers:   triple rinsed   Containers:   triple rinsed   Containe								
6.1    dispose of waste material   concentrate pesticide   Candidate to explain one method of dealing with waste packaging   triple rinsed   collected by a licensed waste disposal contractor   collected by a licensed waste dis		Explain how to manage		Explanation may include:				
Candidate to explain one method of dealing with waste packaging  Containers:  • triple rinsed  • placed in secure storage until disposal  • returned to supplier  • collected by a licensed waste disposal contractor  Packaging:  • thoroughly emptied  • placed in secure storage until disposal  • collected by a licensed waste disposal contractor  Candidate to explain two methods of managing surplus dilute pesticides  Candidate to explain two methods of managing surplus dilute pesticides  • return to fixed store  Containers:  • triple rinsed  • placed in secure storage until disposal  • collected by a licensed waste disposal contractor  Explanation may include:  • back on to site as long as it is below the maximum dose rate  • use on another approved crop/target  • treated by specialist treatment facility on site (e.g. a lined bio bed)  • collected by a licensed waste disposal contractor	Unit 123			return to temporary mobile store				
Candidate to explain one method of dealing with waste packaging    triple rinsed   placed in secure storage until disposal   placed in secure storage until	6.1	dispose of waste material	concentrate pesticide	return to fixed store				
method of dealing with waste packaging  • triple rinsed • placed in secure storage until disposal • returned to supplier • collected by a licensed waste disposal contractor  Packaging: • thoroughly emptied • placed in secure storage until disposal • thoroughly emptied • placed in secure storage until disposal • collected by a licensed waste disposal contractor  Candidate to explain two methods of managing surplus dilute pesticides  Explanation may include: • back on to site as long as it is below the maximum dose rate • use on another approved crop/target • treated by specialist treatment facility on site (e.g. a lined bio bed) • collected by a licensed waste disposal contractor	0.1		Candidate to <b>explain one</b>	Containers:				
packaging  • placed in secure storage until disposal • returned to supplier • collected by a licensed waste disposal contractor  Packaging: • thoroughly emptied • placed in secure storage until disposal • thoroughly emptied • placed in secure storage until disposal • collected by a licensed waste disposal contractor  Candidate to explain two methods of managing surplus dilute pesticides  Explanation may include: • back on to site as long as it is below the maximum dose rate • use on another approved crop/target • treated by specialist treatment facility on site (e.g. a lined bio bed) • collected by a licensed waste disposal contractor			-				П	П
returned to supplier     collected by a licensed waste disposal contractor     Packaging:     thoroughly emptied     placed in secure storage until disposal     collected by a licensed waste disposal contractor      Explanation may include:     back on to site as long as it is below the maximum dose rate     use on another approved crop/target     treated by specialist treatment facility on site (e.g. a lined bio bed)     collected by a licensed waste disposal contractor			packaging	•				
Packaging:  thoroughly emptied  placed in secure storage until disposal  collected by a licensed waste disposal contractor  Explanation may include:  back on to site as long as it is below the maximum dose rate  use on another approved crop/target  treated by specialist treatment facility on site (e.g. a lined bio bed)  collected by a licensed waste disposal contractor								
thoroughly emptied     placed in secure storage until disposal     collected by a licensed waste disposal contractor  Explanation may include:     back on to site as long as it is below the maximum dose rate     use on another approved crop/target     treated by specialist treatment facility on site (e.g. a lined bio bed)     collected by a licensed waste disposal contractor				collected by a licensed waste disposal contractor				
thoroughly emptied     placed in secure storage until disposal     collected by a licensed waste disposal contractor  Explanation may include:     back on to site as long as it is below the maximum dose rate     use on another approved crop/target     treated by specialist treatment facility on site (e.g. a lined bio bed)     collected by a licensed waste disposal contractor				Packaging:				
Candidate to explain two methods of managing surplus dilute pesticides  • placed in secure storage until disposal • collected by a licensed waste disposal contractor  Explanation may include: • back on to site as long as it is below the maximum dose rate • use on another approved crop/target • treated by specialist treatment facility on site (e.g. a lined bio bed) • collected by a licensed waste disposal contractor					Ιп	П	П	П
Candidate to explain two methods of managing surplus dilute pesticides  • collected by a licensed waste disposal contractor  Explanation may include:  • back on to site as long as it is below the maximum dose rate  • use on another approved crop/target  • treated by specialist treatment facility on site (e.g. a lined bio bed)  • collected by a licensed waste disposal contractor								
Candidate to explain two methods of managing surplus dilute pesticides  Explanation may include:  back on to site as long as it is below the maximum dose rate  use on another approved crop/target  treated by specialist treatment facility on site (e.g. a lined bio bed)  collected by a licensed waste disposal contractor				, , , , , , , , , , , , , , , , , , , ,				
methods of managing surplus dilute pesticides   back on to site as long as it is below the maximum dose rate  use on another approved crop/target  treated by specialist treatment facility on site (e.g. a lined bio bed)  collected by a licensed waste disposal contractor			Condidate to explain the			-		-
dilute pesticides  dose rate  use on another approved crop/target  treated by specialist treatment facility on site (e.g. a lined bio bed)  collected by a licensed waste disposal contractor			-	· · · · · · · · · · · · · · · · · · ·				
<ul> <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>								
<ul> <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>								
collected by a licensed waste disposal contractor				treated by specialist treatment facility on site (e.g.				
				,		l		
Met ✓ Not Met X				collected by a licensed waste disposal contractor				
				Met ✓ Not Met X				

CRITERIA	ASSESSMENT	ASSESSOR	ASSESSMENT		CANDIDATE		
NUMBER	CRITERIA	GUIDANCE	ACTIVITIES	Α	В	С	D
	Explain how to clean and decontaminate the sprayer and, if applicable, the prime mover	Candidate to explain four factors that need to be considered when cleaning and decontaminating the sprayer and, if applicable, the prime mover	May include:				Ī
Unit 123 6.2			<ul> <li>select and use appropriate PPE/RPE</li> </ul>				
			appropriate site				
			thorough washing with water and suitable additive if required				
			internal and external surfaces				
			use of in-built wash systems if provided				
			care to ensure contamination 'hot-spots' are clean				
			thorough flushing of systems				
			safe disposal of contaminated washings				
			when cleaning should take place				
			safe procedures followed				
			Met ✓ Not Met X				
	Describe the storage	Candidate to describe three	May include:				
Unit 123	requirements for the	factors to consider prior to storing the applicator	ensure the applicator is clean and dry				
6.3	sprayer		inspect for wear and damage				
0.3			replace any worn or damaged parts				
			ensure system is drained and any valves left in appropriate positions				
			frost protection/prevention implemented				
			lubricate as required				
			store undercover and out of direct sunlight				
			store in a secure area				
			Met ✓ Not Met X				

<b>Summary of Assessment</b>	(The Assessor is to cor	nplete the following as	appropriate)
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Candidate A	Candidate has met all of the assessment criteria	Tick ✓	The Candidate has not met all of the assessment criteria; (state reason(s))	Tick ✓						
	Signed: Date:									
Candidate B	Candidate has met all of the assessment criteria	Tick ✓	The Candidate has not met all of the assessment criteria; (state reason(s))	Tick ✓						
	Signed: Date:									
Candidate C	Candidate has met all of the assessment criteria	Tick ✓	The Candidate has not met all of the assessment criteria; (state reason(s))	Tick ✓						
	Signed: Date:									
Candidate D	Candidate has met all of the assessment criteria	Tick ✓	The Candidate has not met all of the assessment criteria; (state reason(s))	Tick ✓						
	Signed:	Date:								
For use by Internal Verifier ONLY if the assessment process was internally verified (Internal Verifier to complete ONE of the boxes below)										
I ob	I observed an assessment process taking place and I am satisfied that the assessment was conducted in line with the qualification requirements.									
I observed an assessment process taking place. The following were noted as areas of concern.										
Signed: Date:										