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



QUALIFICATION GUIDANCE

Independently Assessed

Essential Qualification Information

Not to be used by the Candidate during Assessment

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

Qualification Group No	0 2 1 6	Pesticides
Qualification Programme No	0 2 1 6 - 0 5	L2 Award in Safe Use of Pesticides Replacing Grandfather Rights (PAGR)
Unit(s)	0 5 1	The Principles of the Safe Handling and Application of Pesticides on own Land
	0 5 2	Hand Held Pesticide Application on own Land
	0 5 3	Operating Machines to apply Pesticides to own Land
	0 5 4	Application of Pesticides using other Specific Equipment or Methods on own Land
Guided Learning	0 5 1	GLH 26 (3 Credit Value 3)
Hours (GLH)	0 5 2	GLH 24 (3 Credit Value 3)
	0 5 3	GLH 24 (3 Credit Value 3)
	0 5 4	GLH 24 (3 Credit Value 3)
Total Qualification Time (TQT)		Minimum 60 Hours
Recommended	0 5 1	30 minutes per Candidate
Assessment Duration	0 5 2	1.5 – 3 hours per Candidate
Duration	0 5 3	2 – 3 hours per Candidate
	0 5 4	1 – 3 hours per Candidate

Version and date	Change detail	Section
1.2 November 2017	Added TQT details Deleted QCF / Learning Time	Qualification at a glance, Structure Throughout

City and Guilds NPTC Level 2 Award in Safe Use of Pesticides Replacing **Grandfather Rights (PAGR) Qualification Guidance**

Introduction

The scheme will be administered by City & Guilds

City & Guilds will:

Publish - Scheme regulations

- Qualification guidance
- Training material
- Trainers support material

Approve Centres to co-ordinate and administer the scheme Set standards for the training of Verifiers and Assessors Recruit, train and deploy Verifiers Manage verification

Issue Certificates to successful Candidates

The Qualification

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

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.

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

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

The assessment consists of one compulsory unit and three optional units:									
Unit 051	(Mandatory)	(Credit Value 3)	(Print pages 6 - 9 plus 34)						
Outcome 1. Outcome 2. Outcome 3. Outcome 4. Outcome 5. Outcome 6. Outcome 7.	Know the legislative requirements and codes of practice relating to the use of pesticides on own land (Criteria 1.1 – 1.2) Understand the relevance of pesticide product information (Criteria 2.1 – 2.1) Understand how to minimise the risk of human contamination and implement emergency procedures (Criteria 3.1 – 3.4) Know how to store and transport pesticides safely (Criteria 4.1 – 4.2) Know how to manage and dispose of surplus pesticide and waste materials (Criteria 5.1 – 5.2) Know the record keeping requirements associated with pesticide operations (Criteria 6.1 – 6.1) Understand how to minimise the risk of environmental contamination and implement emergency procedures (Criteria 7.1 –								
Unit 052	(Optional)	(Credit Value 3)	(Print pages 10 – 14 plus 34)						
Outcome 1. Outcome 2. Outcome 3. Outcome 4. Outcome 5. Outcome 6.	Understand the environmental Be able to read and interpret p Be able to prepare and calibra Be able to operate the applica	Know the legislative and safety regulations relating to sprayer/applicator use on own land (Criteria 1.1 – 1.2) Understand the environmental factors relating to mixing and application of pesticides (Criteria 2.1 – 2.2) Be able to read and interpret product information (Criteria 3.1 – 3.2) Be able to prepare and calibrate a hand held pedestrian applicator (Criteria 4.1 – 4.7) Be able to operate the application equipment to apply pesticides onto own land (Criteria 5.1 – 5.4) Understand how to carry out post-operational procedures (Criteria 6.1 – 6.3)							
Unit 053	(Optional)	(Credit Value 3)	(Print pages 15 – 24 plus 34)						
Outcome 1. Outcome 2. Outcome 3. Outcome 4. Outcome 5. Outcome 6.	Be able to assess the environr Be able to read and interpret p Be able to prepare and calibra Be able to operate the applica	mental factors relating to the mix pesticide product information (C te the applicator (Criteria 4.1 –	4.5) es on own land (Criteria 5.1 – 5.4)						
Unit 054	(Optional)	(Credit Value 3)	(Print pages 25 - 34)						
Outcome 1. Outcome 2. Outcome 3. Outcome 4.	Be able to assess the environment Be able to read and interpret p		,						

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)

Outcome 5. Outcome 6.

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

Plus one optional unit from any of the following:

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

There are no endorsements for this Award.

Quality Assurance

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

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

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

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

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

Performance Evaluation

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

- Meets or exceeds the assessment criteria by displaying a level of practical performance and/or underpinning knowledge.

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

Appeals and Equal opportunities

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

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

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

Validation of Equipment

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

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

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

Summary of responsibilities in the assessment process								
Centre responsibilities	Centre responsibilities Candidate responsibilities A							
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

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

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 their capabilities and judging whether that evidence is sufficient to attribute competence.

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

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

The Qualification Guidance contains criteria relating to:

- Observation of practical performance
- Assessment of underpinning knowledge

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

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

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

ODITEDIA	ACCECCMENT	400F000B	ACCECOMENT	_	ANID	ID 4 :	
CRITERIA NUMBER	ASSESSMENT CRITERIA	ASSESSOR GUIDANCE	ASSESSMENT ACTIVITIES	A	AND B	IDA1	IE D
NOWIDER	Identify an operators	Note to the Assessor: the	Includes compliance with:	A	В	C	<u> </u>
Unit 051	responsibilities under current legislation relating to the use of pesticides on own land	candidate is required to outline one key point from each piece of legislation specifically affecting pesticide	1. The Health & Safety at Work Act (1974) - specified duties under the act as an employer, employee or self employed person				
	OWN failu	legislation in bold , no's 3,4 and 5	2. The Management of Health and Safety at Work Regulations (1999) - a risk assessment must be carried for all activities				
			3. Control of Substances Hazardous to Health Regulations (2002) - a COSHH assessment must be carried out and complied with				
			4. The Control of Pesticide Regulations (1986) - only certified operators may use professional products				
			5. Personal Protective Equipment Regulations (1992) - PPE must be supplied, and worn				
			 6. Manual Handling Operations Regulations (1992) - not to manually handle, use safe lifting techniques 				
			 7. Provision and Use of Work Equipment Regulations (1998) - requires that regular checks are made to machinery and equipment 				
			 8. Wildlife and Countryside Act (1981) - operations must be carried out at times to minimise the impact on wildlife 				
		Note to the Assessor: the candidate is required to outline four key areas in	And the: The Plant Protection Products (Sustainable Use) Regulations (2012), which encompass the following:				
		bold covered by The Plant Protection Products (Sustainable Use) Regulations (2012)	 Users of pesticides need to take reasonable precautions to protect human health and the environment when storing, handling, using and disposing of pesticides 				
			keep up to date with pesticide related legislation				
			 use only currently authorised and legal pesticides, be aware of illegal or counterfeit products, buy only from reputable sources, check that the product delivered matches the product ordered 				
			 anyone purchasing a professional product must ensure that the end user holds a certificate of competence for application 				
			 a person using a pesticide must receive adequate training for the task and hold a training certificate or Certificate of Competence unless working under direct supervision 				
			consider using alternative methods to pesticide application e.g. Integrated Pest Management or Integrated Weed Management				
			 preference should be given to products not classified as dangerous for the aquatic environment nor containing priority hazardous 				
Continued			substances when the use of the product represents a risk to water quality				

CRITERIA NUMBER	ASSESSMENT CRITERIA	ASSESSOR GUIDANCE	ASSESSMENT ACTIVITIES	A	AND	DIDA	TE D
Cont Unit 051 1.1			the amount of pesticide used and frequency a low as reasonably practicable on: Roads, Railway lines, very permeable surfaces and sealed surfaces where there is a greater risk of run off or contamination of surface and groundwater; areas used by the general put or vulnerable groups; areas in the close vicinity of healthcare facilities; protected areas identified under the Water Framework Directive; and areas recently treated by	lic			
			pesticides which will be accessible to agricultural workers equipment must be inspected in line with				
			current legislative requirementsapplication must be confined to the intended				
			target Mat (Not Mat	,			
Unit 051	Identify an operators responsibilities under current codes of practice	Candidate to provide two responsibilities under current codes of practice	Met✓ Not Met May include: • follow current Code of Practice for the safe use pesticides				
1.2	relating to the use of pesticides on own land		 use pesticides in a safe manner carry out and comply with an environmental assessment of the application site 				
			 ensure that equipment is in good condition the application equipment has been correctly calibrated 				
	Explain the relevance of	Candidate to provide four	Met ✓ Not Met May include:	<u>х</u> 🗀		\perp	\vdash
Unit 051 2.1	product label information	explanations relating to the relevance of product label information	 Important information – must be strictly complie with hazards associated with the product 	d			
			 enviromental precautions PPE requirements active substance(s) – in the event of an 				
			emergencyapproved field of use – the industry sector for				
			which the product is approvedmaximum dose rate – must not be exceeded				
			 timing of application(s) – manufacturer's recommendations must be followed current authorisation number – evidence of 				
			 authorisation approved adjuvants – only approved adjuvants can be used as recommended 				
			Met ✓ Not Met	x 🗆			
Unit 051	Identify possible routes of pesticide contamination	Candidate to identify three possible routes of contamination	May include: through the eye absorption through the skin				
			inhalationingestioninjection				
	Identify appropriate	Candidate to identify all	Met ✓ Not Met Quality standard marks e.g. CE Mark.	х <u> </u>			
Unit 051 3.2	Personal Protective Equipment (PPE) for pesticide application	items of PPE that may be required for pesticide application and state the	type, condition and features of: gloves coveralls				
		importance of quality marks, type and condition	face shieldsfootwearrespirators				
			Met ✓ Not Met	x 🗆			
Unit 051	Identify the symptoms of pesticide contamination	Candidate to state two symptoms of pesticide contamination	May include: • headache • nausea • stomach pains				
		document in whole or in part is forbidden with	 rashes/blistering of skin Met ✓ Not Met 				

CRITERIA NUMBER	ASSESSMENT CRITERIA	ASSESSOR GUIDANCE	ASSESSMENT ACTIVITIES	C A	AND B	IDA [*]	TE D
Unit 051	Explain appropriate procedures for dealing with	Candidate is required to explain how to deal only with	Appropriate procedures for dealing with pesticide contamination include:				
3.4	pesticide contamination	contamination	self – rapidly identify contamination and decontaminate, remove contaminated PPE and clothing, seek medical advice if needed				
			third parties – protect yourself, relocate to safe area, decontaminate if possible, remove contaminated PPE and clothing contact emergency services				
			information access – product label and the Material Safety Data sheet (MSDS) made available				
			Met ✓ Not Met X				
Unit 051 4.1	State how pesticides should be stored	Candidate is required to state three ways in which pesticides should be stored	To include: in original container, with product labels maintain stock security to avoid theft and misuse careful handling to reduce chances of spillage				
			 adequate containment facilities product segregation to avoid dangerous occurrences 				
	Ctata haw pacticides	Condidate is required to state	Met ✓ Not Met X	Ш	Ш	닏	Ш
Unit 051 4.2	State how pesticides should be transported	Candidate is required to state two ways in which pesticides should be transported	 mobile storage is secure and meets current codes of practice careful handling to reduce chances of spillage adequate containment facilities 				
			return unused concentrated pesticide to the store maintain stock security to avoid theft and mis-use				
			Met ✓ Not Met X				
Unit 051	Identify appropriate methods of reducing waste from pesticide application	Candidate to identify one way to reduce waste from pesticide application	May include:				
5.1			correct calibration of sprayer/applicator				
			Met ✓ Not Met X				
Unit 051 5.2	State how to manage and dispose of surplus concentrate and dilute pesticides	Candidate to state two ways in which to manage and dispose of surplus concentrate and dilute pesticides	For concentrated pesticide it may include: collected by a licensed waste disposal contractor return to supplier if currently approved				
			For dilute pesticide it may include: back on to the site/target as long as it is below the maximum dose rate treated by a specialist treatment facility on site				
			(e.g. a lined bio bed)				
	State how to manage and	Candidate to state three	Met ✓ Not Met X May include:	Ш	Ш	닏	Ш
Unit 051 5.3	Dispose of waste materials arising from pesticide operations	ways in which to manage and dispose of waste materials arising from pesticide	dealing appropriately with empty packaging and containers - licensed waste disposal contractor triple rinse manually				
		operations	container disposal - licensed waste disposal contractor secure storage until disposal				
			return to the supplier				
			collected by a licensed waste disposal contractor for disposal if out of approval or suspect in any other way (e.g. counterfeit)				
			Met ✓ Not Met X				
Unit 051 6.1	Identify the records required to comply with legislation and best practice in respect to	Candidate to identify two records required to comply with legislation and best practice	May include:				
	pesticide operations		control measure records duplicate stock records (storage records)				
			pesticide treatment recordswaste transfer notes				
			Met ✓ Not Met X				

CRITERIA	ASSESSMENT	ASSESSOR	ASSESSMENT	C	AND	IDAT	ΓЕ
NUMBER	CRITERIA	GUIDANCE	ACTIVITIES	Α	В	С	D
	Identify the risks to the	Candidate to identify two	May include:				
Unit 051	environment from pesticides	risks to the environment from pesticides	pollution of water and the aquatic environment				
7.1	pesticides	pesticides	pollution of specially designated areas				
7			 pollution or destruction of wildlife habitats 				
			off target application/contamination				
			Met ✓ Not Met X				
	Describe how to carry out	Candidate to describe three	May include:				
Unit 051	pesticide application to minimise the risk to the	ways in which to carry out pesticide application to	reasonable precautions must be taken to protect the environment				
7.2	environment minimise the risk to the environment	application must be confined to the intended target					
			application carried out at an appropriate time of day				
			protection of human health and the environment				
			apply only in suitable weather conditions				
			Informing neighbours/other interested parties				
			 protection of the public accessing rights of way 				
			Met ✓ Not Met X				
	Explain appropriate	Candidate to describe how	May include:				
Unit 051	procedures for dealing with environmental	to deal with one spillage and suspected animal poisoning	 dealing with minor spillages – containment, collection and disposal 				
7.3	contamination from pesticides	 dealing with major spillages – contain if possible, Inform appropriate Environmental Agency and the emergency services 					
			dealing with suspected animal poisoning – phone Wildlife Incident Investigation Scheme				
			Met ✓ Not Met X				

Unit 052 - Hand Held Pesticide Application on own Land

Candidate	A Name:		Date:		Start Time:	Dura	atior	1:		
Candidate	B Name:		Dat	e:	Start Time:	Dura	atior	1:		
Candidate	C Name:		Date:		Start Time:	Dura				
Candidate	D Name:		Dat	e:	Start Time:	Dura	atior	1:		
Unit 052 1.1	Describe the legal requirements relating to applying pesticides using pedestrian operated hand held application equipment to own land	Candidate to describe on legal obligation in terms of the requirements on the operator Assessor to note: if alrea assessed in unit one, this criteria need not be reassessed	:	Practice comply with The (Sustainable Us ensuring that the and all required	current Pesticide Code of e Plant Protection Products te) (Regulations 2012) e equipment is in good cond guards are in place as state anual (if applicable) Met ✓ Not	ed in				
Unit 052 1.2	Describe how to apply pesticides safely using hand held pedestrian equipment to own land following industry best practice	Candidate to describe on operator safety regulation terms of using hand held pedestrian equipment		be aware of any	les of best practice r safety implications imposed sessment and comply with					
		Candidate to describe the operational features of bot overall and spot treatment three are required for each technique	th -	consistent nozzlaccurate on/off pmatching of bour	ng speed g to maintain constant presso le height points	ure				
				 spot treatment include use of a suitable maintaining a suitable timed application avoidance of un avoidance of 'of 	e nozzle uitable height ns	Met X				
Unit 052 2.1	Identify risks to the environment when mixing and applying pesticides	Candidate to identify five possible risks to the environment		 pollution of water pesticide entering pollution of borer pesticide container detrimental affer application to not damage to sensent damage to hedgen affecting housing limiting public/arr 	ound conditions are not suitable courses and drains sholes, water protection zone mination of environmental material on wildlife on-target plants sitive crops/areas gerows	es argins				

CRITERIA NUMBER	ASSESSMENT CRITERIA	ASSESSOR GUIDANCE	ASSESSMENT ACTIVITIES	C.	AND B	IDA [*]	TE D
Unit 052	Explain how to minimise the risks to the	Candidate to explain how to minimise the risks identified	Explanation to include the following points: use of an appropriate pesticide, preference given				
2.2	environment when mixing and applying pesticides on	in 2.1	to product with least environmental impact				
2.2	own land		careful timing of application				
			check and maintain application rate				
			avoiding spray drift avoid situations where run off occurs				
			observing buffer zones				
			erection of warning signs				
			notify neighbours before application				
			signage to inform the public of pesticide application				
		Candidate to check and commen t on wind speed and	use of anemometer at suitable height or visible signs				
		direction	wind direction				
		Candidate to state the	Statement to include:				
		reason for minimising off target application and spray drift	awareness of the possible effects of drift to crops, people, wildlife, water and the environment				
		Candidate to state three	May include:				
		factors that may affect spray drift	weather conditions				
			 direction of spraying nozzle type and size 				
			nozzle type and sizepressure				
			walking speed				
			nozzle height				
			defective equipment				
			Met ✓ Not Met X				
	Read product information	The candidate is required to	The following to be tested:				
Unit 052	Interpret preduct	read and interpret the information on a product	product name				
3.1	Interpret product information	label and provide relevant information as requested by	active substance(s) (ingredient(s))				
Unit 052		the Assessor	Relevant information may include: • field of use				
2.0		Note to the Assessor: a	crop/target				
3.2		product label is required. It is expected that the candidate	maximum individual dose				
		will provide the product label	maximum total dose				
		The label provided must be	maximum number of treatments				
		for a currently approved	specific product precautions/warnings				
		product and appropriate to the candidates normal work	operator protection				
		situation	environmental protection				
		Note to the Candidate (Assessor also to note): It is	 restrictions on use Crop specific information may include: 				
		acceptable to highlight key	crop/target				
		information on the label prior to assessment and use it to	dose rate				
		provide information to the	water volume				
		assessor during assessment	• timing				
			Mixing and spraying may include: filling				
			 reduced volume applications (if applicable) 				
			recommended nozzle(s)				
			recommended pressure				
			spray quality				
			compatibility				
			additional label information				
			Met ✓ Not Met X				

CRITERIA NUMBER	ASSESSMENT CRITERIA	ASSESSOR GUIDANCE	ASSESSMENT ACTIVITIES	C.	AND B	IDA [*]	TE D
Unit 052	Carry out pre use checks	Candidate to carry out all	To include all/any of the following:				
Unit 052	to the sprayer/applicator	pre-use checks relevant to the sprayer/applicator being	Sprayer/applicator de-pressurized				
4.1		used for the assessment	Sprayer/applicator components to be inspected for serviceability and contamination that may include any				
			of the following applicable to the sprayer/applicator:				
			tank Iid				
			• filters				
			• hoses				
			• connections				
			• seals				
			on/off control				
			• lance				
			strapsnump (if accessible)				
			pump (if accessible)batteries				
			• engine				
		0 111 1 1 1 1 1 1 1 1 1					
		Candidate to part fill the sprayer/applicator and	To include:				
		check for satisfactory	 sprayer/applicator checked for leaks under pressure 				
		operation	any problems identified to be rectified if within				
			operators level of responsibility and ability				
			condition confirmed as suitable for operation				
			Met ✓ Not Met X	Ш	Ш	Ш	
Unit 052	Identify suitable operating pressure and select	Candidate to identify and explain the use of the nozzle	Any two of the following:				
Offic 032	nozzles according to	fitted to the applicator and	Deflector - medium/coarse spray quality, generally used to apply herbicides				
4.2	application requirements	one other	, , , , , , , , , , , , , , , , , , , ,				
			air inclusion - medium/coarse spray quality, good drift reduction properties				
			full cone - medium/coarse spray quality, suitable				
			for spot treatment and spraying around obstacles				
			fan nozzle - fine, medium or coarse spray quality				
			suitable for use with hand held applicators				
			hollow cone - fine spray quality, generally used				
			for insecticide and fungicide treatment				
		Candidate to select the	To include:				
		correct pressure	correct pressure selected for the nozzle and				
			method of application				
		Candidate to check nozzle is	To include:				
		fitted correctly, it's condition and spray pattern using any	nozzle fitted correctly				
		appropriate method	nozzle undamaged				
			correct spray pattern for nozzle				
			Met ✓ Not Met X				
Unit 052	Make appropriate adjustments to the	Candidate is required to demonstrate how to make	May include:				
Offit 052	application equipment	adjustments to the	altering pressure setting				
4.3		sprayer/applicator	changing nozzles				
			Met ✓ Not Met X	Ш	Ш	Ш	Ш
Unit 052	Calibrate the sprayer/applicator and	The candidate is required to calibrate the	Calibration to include:				
	record relevant data	sprayer/applicator and	calculation of water volume rate check water volume rate against product				
4.4		record relevant data	information recommendations				
			re-calibrate if necessary				
		Candidate to record relevant	Calibration data may include:				
		calibration data	applicator used				
		Note to the Assessor: any	walking speed/time				
		method of calibration may be used providing it is capable of	nozzle(s) fitted (spray width if appropriate)				
		allowing for different walking	pressure setting				
		speeds and spray widths and is appropriate for the	Met ✓ Not Met X				
		applicator					
	l	-1		<u> </u>	I	I	لــــــا

CRITERIA	ASSESSMENT	ASSESSOR	ASSESSMENT			IDAT	
NUMBER	CRITERIA Measure the area to be	GUIDANCE Note to the Assessor:	ACTIVITIES To include:	Α	В	С	D
Unit 052 4.5	treated	a rectangular area of approximately 200sq metre typical of the candidates	accurate measurement of dimensions required Met ✓ Not Met X				
		normal work situation Candidate to measure the area. The Assessor may assist under direction of the candidate					
Unit 052	Calculate the area to be treated	Candidate to calculate the area	To include: accurate calculation of area required				
4.6			Met ✓ Not Met X				
Unit 052 4.7	Calculate the quantities of pesticide and water required (or amount of premix required)	Candidate to calculate quantities required for the area calculated in 4.6 and a full tank	To include: amount of water required for specified area amount of pesticide required for specified area amount of water required for a full tank amount of pesticide required for full tank or amount of premix required				
			Met ✓ Not Met X				
Unit 052 5.1	Measure the required quantities and add to the sprayer/applicator, or attach pesticide container	Candidate to measure and add quantities required for the area specified in 4.6 and add to the sprayer/applicator, or attach pesticide container containing premix Note: this will normally be a simulated pesticide product	To include all of the following: correct selection and use of PPE (as required by the product label, COSHH and Risk Assessment) suitable site selected fill following product recommendations and approved procedures correct use of water supply accurate measurement of water accurate measurement of pesticide avoidance of spillage or attach pesticide container				
			Met ✓ Not Met X				
Unit 052 5.2	Demonstrate safe and accurate application procedures	The candidate is required to treat the area in 4.6 demonstrating safe and accurate application procedures	To include: • treatment area clearly identified • walking speed maintained • accurate switch on/off points • accurate matching of bouts • obstacles dealt with correctly (if applicable) • area treated minimising overlaps and misses • awareness of changing weather conditions and appropriate action taken (if applicable) • avoidance of off target application Met ✓ Not Met X				
Unit 052 5.3	Carry out all activities protecting human health and the environment	Note to the Assessor: the Assessor to be satisfied that the candidate has carried out all activities protecting human health and that of the environment during the assessment process	To include: • prevention of personal injury safe working procedures followed • prevention of contamination through correct selection and use of PPE (as required by the product information, COSHH and Risk Assessment) • prevention of public/bystander contamination • safe filling procedure • avoidance of off-target application • avoidance of overdosing crop/target/plant material Met ✓ Not Met X				
Unit 052	Complete a treatment record	The candidate is required to complete a treatment record	Completion of the treatment record must be:				
5.4	Todata	Note to the Assessor: the treatment record must be approved or if necessary supplied by the Assessor	 accurate legible (if handwritten) Met ✓ Not Met X 				

CRITERIA	ASSESSMENT	ASSESSOR	ASSESSMENT	C	AND	IDA	ſΕ
NUMBER	CRITERIA	GUIDANCE	ACTIVITIES	Α	В	С	D
Unit 052	Explain how to manage	Candidate to explain one	Explanation may include:	l _			
Unit 052	surplus pesticide and dispose of waste material	method of managing surplus concentrate pesticide	return to temporary mobile store				
6.1			return to fixed store				
		Candidate to explain one	Containers:				
		way of dealing with	triple rinsed				
		containers	placed in secure storage until disposal				
			returned to supplier				
			collected by licensed waste contractor				
		Candidate to explain one	Packaging:				
		method of dealing with waste	thoroughly emptied				
		packaging	placed in secure storage until disposal				
			collected by licensed waste disposal contractor				
		Candidate to explain one	Explanation may include:				
		method 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 licensed waste disposal contractor				
			Met ✓ Not Met X				
	Describe how to clean and	Candidate to describe how	May include any of the following appropriate to the				
Unit 052	decontaminate the	to clean the	sprayer/applicator:				
6.2	sprayer/applicator	sprayer/applicator after use	select and use correct PPE				
0.2			 selection of an appropriate site for cleaning the sprayer/applicator 				
			triple rinse the applicator following product information recommendations				
			thorough flushing of system				
			safe disposal of contaminated washings in an				
			appropriate manner following good practice				
			safe procedures followed				
			Met ✓ Not Met X				
	State the storage	Candidate to state two	May include:				
Unit 052	requirements for the	factors to consider when	de-pressurisation				
6.3	sprayer/applicator after use	storing the sprayer/applicator	ensure the sprayer/applicator is clean and dry				
0.5			inspect for wear or damage				
			carry out repairs				
			Iubricate if required				
			frost protection measures implemented				
			 nozzles and filters removed prior to freezing conditions 				
			store in a secure area				
			store under cover and out of direct sunlight				
			Met ✓ Not Met X				
			Wet 7 Not Wet A	Ш	Ш	Ш	Ш

Unit 053 - Operating Machines to Apply Pesticides to own Land

Candidate /	A Name:		Dat	te:	Start Time:	Dura	ation):		
Candidate I	B Name:		Da	te:	Start Time:	Dura	ation	1:		
Candidate (C Name:		Dat	te:	Start Time:	Dura	ation	1:		
Candidate I	D Name:		Dat	te:	Start Time:	Dura	ation	1:		
CRITERIA	ASSESSMENT	ASSESSOR		AS	SSESSMENT		C	AND	IDA7	ſΕ
NUMBER	CRITERIA	GUIDANCE		, and the second	ACTIVITIES		Α	В	С	D
Unit 053	Describe the legal requirements relating to applying pesticides using machinery and equipment	ALL MACHINES Candidate to describe two operator's obligations in terms of legal requirements		 ensure that all re 	rent Pesticides Codes of Pra equired guards are in place a					
	on own land	Note to Assessor: If this halready been assessed in the second of the se	nas	when operating of	elevant road traffic regulatio or transporting on the public					
		assess in this unit			Plant Protection Products e) Regulations 2012)					
					Met√ Not I	Viet X				
Unit 053	Describe how to apply pesticides safely using machinery following	ALL MACHINES Candidate to describe one operator safety regulation i	_	•	es of best practice safety implications imposed	1 by				
	industry best practice on own land	terms of using sprayer/application equipment			sessment and comply with t					
		ALL MACHINES (as appropriate) Candidate to describe two precautions the operator m take to protect themselves from pesticide contamination when operating the prime mover	nay	close all windows	n system is functional					
				Open canopy/platform use of appropriat avoid siting press confines of cano	te PPE surised components within					
		ALL MACHINES When preparing the prime mover and sprayer/application equipment, the candidate is to describe two checks which the operator may cal out to protect themselves from physical danger during operation	rry	May include: compatibility of p application equip front weights wheel track width correct tyre press condition of tyres brake function	n sures					
		ALL MACHINES Candidate to state three aspects of safe practice to considered when driving or uneven/sloping terrain		use of weights tocorrect turning presented	I drive (if fitted) ed ection g load on stability o stabilise prime mover					
		ALL MACHINES Candidate to state one consideration for safe drivin on a public highway	ng	•	kes coupled together speed makes vehicle unsta					

Unit 053 2.2 Unit 053 3.2 Unit 053 3.2 Unit 053 3.2 Unit 053 3.3 Unit 053 3.3 Unit 053 3.3 Unit 053 3.5 Un	CRITERIA	ASSESSMENT	ASSESSOR	ASSESSMENT	C	AND	IDA	ΓЕ
2.1 Candidate to Identify five risks to the environment	NUMBER	CRITERIA	GUIDANCE		Α	В	С	D
2.11 and applying pesticides risks to the environment	Umit 050			, ,				
Unit 053 2.2 Understand how to minimise risks to the environment from mixing and applying pesticides ALL MACHINES Candidate to explain how to minimise risks identified in 2.1 ALL MACHINES Candidate to explain how to minimise risks identified and applying pesticides ALL MACHINES Candidate to explain how to minimise risks identified and applying pesticides ALL MACHINES Candidate to explain how to minimise risks identified and applying pesticides ALL MACHINES Candidate to explain how to minimise risks identified in 2.1 ALL MACHINES Candidate to explain how to minimise risks identified in 2.1 ALL MACHINES Candidate to explain how to minimise risks identified and applying pesticides ALL MACHINES Candidate to explain how to minimise apply in a performance of the properties	Unit 053			_				
Unit 053 Understand how to minimise the risks identified and applying pesticides 2.2 Understand how to minimise the risks identified and applying pesticides 2.2 Understand how to minimise the risks identified and applying pesticides 2.2 Understand how to minimise the risks identified and applying pesticides 2.2 ALL MACHINES Candidate to state the reason for minimise the risks identified and direction SPRAYERS/CRANULAR APPLICATOPS Candidate to state the reason for minimisen sproy drift SPRAYERS/CRANULAR APPLICATOPS Candidate to state the reason for minimising sproy drift SPRAYERS/CRANULAR APPLICATOPS Candidate to state five factors that affect spray drift factors that affect spray drift Way include: Way incl	21	and applying positoides	noko to tric crivirorinierit	 pollution of water courses 				
Unit 053 2.2 Understand how to minimise risks to the environment from mixing and applying pesticides and applying pesticides ALL MACHINES Candidate to explain how to minimise risks to the environment from mixing and applying pesticides ALL MACHINES Candidate to explain how to minimise the risks identified in 2.1 Explanation may include the following points: check and maintain application rate observe buffer zones observe buffer zones use an appropriate pesticide careful trining of application avoid spray drift (sprayers only) ALL MACHINES Candidate to state the reason for minimising spray drift SPRAYERS/Candidate to state the reason for minimising spray drift SPRAYERS/Candidate to state five factors that affect spray drift wind direction May include: veather conditions direction of spraying direction of spraying direction of spraying final pressure fluid press				 pesticide entering drains 				
Unit 053 2.2 Understand how to mirrinise risks to the mirrinise the risks identified and applying pesticides and apply				 pollution of boreholes, water protection zones 				
Unit 053 2.2 Understand how to minimise risks to the environment from mixing and applying pesticides ALL MACHINES Candidate to explain how to minimise risks identified in 2.1 Explanation may include the following points: when the environment from mixing and applying pesticides ALL MACHINES Candidate to explain how to minimise the risks identified in 2.1 Explanation may include the following points: when the environment from mixing and applying pesticides ALL MACHINES Candidate to state the reason for minimising spray drift SPRAYERS Candidate to state the reason for minimising spray drift SPRAYERS Candidate to state the reason for minimising spray drift SPRAYERS Candidate to state five factors that affect spray drift SPRAYERS Candidate to state five factors that affect spray drift In the sprayer of the likely effects of off-target application Visible signs or use of an anemometer at suitable height wind direction May include: Visible signs or use of an anemometer at suitable height wind direction In the sprayer of the likely effects of off-target application Visible signs or use of an anemometer at suitable height wind direction In the sprayer of the likely effects of off-target application Visible signs or use of an anemometer at suitable height wind direction In the sprayer of the likely effects of off-target application Visible signs or use of an anemometer at suitable height wind direction In the sprayer of the likely effects of off-target application Visible signs or use of an anemometer at suitable height wind direction In the sprayer of the likely effects of off-target application Visible signs or use of an anemometer at suitable height wind direction In the sprayer of the likely effects of off-target application Visible signs or use of an anemometer at suitable height wind direction In the sprayer of the likely effects of off-target application Visible signs or use of an anemometer at suitable height wind direction In the sprayer of the likely effects of off-target applicatio				 pesticide contamination of environmental margins 				
Unit 053 2.2 Understand how to minimise fisks to the environment from mixing and applying pesticides ALL MACHINES Candidate to explain how to minimise the risks identified in 2.1 Explanation may include the following points: otheck and maintain application rate observe buffer zones careful triming of application a avoid spray drift (sprayers only) ALL MACHINES Candidate to state the reason for minimising spray drift SPRAYERS/GRANULAR APPLICATORS Candidate to theck and comment on wind speed and direction SPRAYERS Candidate to state five factors that affect spray drift Way include: • weather conditions • wisible signs or use of an anemometer at suitable height wind direction May include: • weather conditions • direction of spraying • restrictor size • air pressure • forward speed or • boom height (boom sprayer) • angle of boom (variable geometry boom sprayers) • air assistance speed and volume (air assisted broadcast sprayers)				detrimental affect on wildlife				
Unit 053 2.2 Understand how to minimise risks to the environment from mixing and applying pesticides ALL MACHINES Candidate to explain how to minimise the risks identified in 2.1 Explanation may include the following points:				application to non-target plants				
Unit 053 2.2 Understand how to minimise risks to the environment from mixing and applying pesticides Unit 053 Candidate to explain how to minimise insks to the environment from mixing and applying pesticides Explanation may include the following points:				 damage to sensitive crops/areas 				
Unit 053 2.2 Understand how to minimise risks to the environment from mixing and applying pesticides Unit 053				damage to hedgerows				
Unit 053 2.2 Understand how to minimise risks to the environment from mixing and applying pesticides ALL MACHINES Candidate to explain how to minimise risks identified in 2.1 Explanation may include the following points:				affecting housing				
Unit 053 2.2 Understand how to minimise risks to the environment from mixing and applying pesticides ALL MACHINES Candidate to explain how to minimise the risks identified in 2.1 Explanation may include the following points:				 limiting public/animal access to the area 				
Unit 053 2.2 Understand how to minimise risks to the environment from mixing and applying pesticides 2.2 ALL MACHINES Candidate to explain how to minimise the risks identified in 2.1 Explanation may include the following points:								
Unit 053 Unit 054 Unit 055 Unit 055 Unit 056 Unit 057 Unit 057 Unit 058 Uni								
### Candidate to explain how to minimise risks to the environment from mixing and applying pesticides #### Candidate to explain how to minimise the risks identified in 2.1 #### Candidate to explain how to minimise the risks identified in 2.1 #### Candidate to explain how to minimise the risks identified in 2.1 #### Candidate to explain how to minimise the risks identified in 2.1 #### Candidate to explain how to minimise the risks identified in 2.1 #### Candidate to state five factors that affect spray drift #### Candidate to state five factors that affect spray drift ##### Candidate to state five factors that affect spray drift ###################################					Ш	Ш	Ш	Ш
### and applying pesticides ### and applying pesticide ### and applying pesticides ### and applying pesticide ### and applying pes	Umit 050							
and applying pesticides in 2.1 by observe buffer zones comply with LERAP requirements inform neighbours erect warning signs use an appropriate pesticide careful timing of application avoid spray drift (sprayers only) awareness of the likely effects of off-target application awareness of the likely effects of off-target application wind direction SPRAYERS Candidate to check and comment on wind speed and direction SPRAYERS Candidate to state five factors that affect spray drift May include: weather conditions direction of spraying restrictor size air pressure fluid pressure fluid pressure fluid pressure fluid pressure fluid pressure forward speed or boom height (boom sprayer) angle of boom (variable geometry boom sprayers) downward air pressure (air assisted boom sprayers) downward air pressure (air assisted boom sprayers) air assistance speed and volume (air assisted broadcast sprayers)	Unit 053							
comply with LERAP requirements inform neighbours erect warning signs use an appropriate pesticide careful timing of application avoid spray drift (sprayers only) **ALL MACHINES** Candidate to state the reason for minimising spray drift **SPRAYERS/GRANULAR* APPLICATORS* Candidate to check and comment on wind speed and direction **SPRAYERS* Candidate to state five factors that affect spray drift **Washing to the likely effects of off-target application **Washing to the likely effects of off-target applic	22			observe buffer zones				
ALL MACHINES Candidate to state the reason for minimising spray drift SPRAYERS/GRANULAR APPLICATORS Candidate to check and comment on wind speed and direction SPRAYERS Candidate to state five factors that affect spray drift May include:		11 7 01						
SPRAYERS Candidate to state the reason for minimising spray drift				 inform neighbours 				
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ALL MACHINES Candidate to state the reason for minimising spray drift SPRAYERS/GRANULAR APPLICATORS Candidate to check and comment on wind speed and direction SPRAYERS Candidate to state five factors that affect spray drift May include: • weather conditions • direction of spraying • restrictor size • air pressure • forward speed or downward air pressure (air assisted broadcast sprayers) • avoid spray drift (sprayers only) • awareness of the likely effects of off-target application				use an appropriate pesticide				
ALL MACHINES Candidate to state the reason for minimising spray drift SPRAYERS/GRANULAR APPLICATORS Candidate to check and comment on wind speed and direction SPRAYERS Candidate to state five factors that affect spray drift May include: • weather conditions • direction of spraying • restrictor size • air pressure • fluid pressure • forward speed or • boom height (boom sprayer) • angle of boom (variable geometry boom sprayers) • dire assisted boom sprayers) • air assistance speed and volume (air assisted broadcast sprayers)				careful timing of application				
Candidate to state the reason for minimising spray drift SPRAYERS/GRANULAR APPLICATORS Candidate to check and comment on wind speed and direction SPRAYERS Candidate to state five factors that affect spray drift May include: • weather conditions • direction of spraying • restrictor size • air pressure • fluid pressure • forward speed or • boom height (boom sprayer) • angle of boom (variable geometry boom sprayers) • downward air pressure (air assisted boom sprayers) • air assistance speed and volume (air assisted broadcast sprayers)				avoid spray drift (sprayers only)				
APPLICATORS Candidate to check and comment on wind speed and direction SPRAYERS Candidate to state five factors that affect spray drift May include: • weather conditions • direction of spraying • restrictor size • air pressure • fluid pressure • forward speed or • boom height (boom sprayer) • angle of boom (variable geometry boom sprayers) • downward air pressure (air assisted boom sprayers) • air assistance speed and volume (air assisted broadcast sprayers)			Candidate to state the reason for minimising spray	and the second of the second o				
Candidate to state five factors that affect spray drift weather conditions direction of spraying restrictor size air pressure fluid pressure forward speed or boom height (boom sprayer) angle of boom (variable geometry boom sprayers) downward air pressure (air assisted boom sprayers) air assistance speed and volume (air assisted broadcast sprayers)			APPLICATORS Candidate to check and comment on wind speed and	height				
Candidate to state five factors that affect spray drift weather conditions direction of spraying restrictor size air pressure fluid pressure forward speed or boom height (boom sprayer) angle of boom (variable geometry boom sprayers) downward air pressure (air assisted boom sprayers) air assistance speed and volume (air assisted broadcast sprayers)			SPRAYERS	May include:				
factors that affect spray drift ouirection of spraying ouirestrictor size ouir pressure ouirection of spraying ouirestrictor size ouir pressure ouirection of spraying ouirestrictor size ouir pressure ouirection of spraying ouirestrictor size ouirection of spraying ouirestrictor size ouirestrictor				1 ,				
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broadcast sprayers)				downward air pressure (air assisted boom				
				air assistance speed and volume (air assisted)				
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CRITERIA	ASSESSMENT	ASSESSOR	ASSESSMENT	C	AND	IDA ⁻	ΓΕ
NUMBER	CRITERIA Dead posticido product	GUIDANCE	ACTIVITIES	Α	В	С	D
Unit 053 3.1 Unit 053 3.2	Read pesticide product information Interpret pesticide product information	ALL MACHINES Note to the Assessor: A product label is required. It is expected that the candidate will provide the product label. The label provided must be for a currently approved product and appropriate to the candidates normal work situation					
		Note to the Candidate (Assessor also to note): It is acceptable to highlight key information on the label prior to assessment and use it to provide information to the assessor during assessment	The following to be provided: • product name • active substance(s) (ingredient(s))				
		ALL MACHINES The candidate is required to	Important information:			_	_
		read the label and provide	field of usecrop/target				
		ANY key information requested by the Assessor	maximum individual dose				
			maximum total dose				
			maximum number of treatments				
		WICK APPLICATORS ONLY	dilution rate (wick applicators)				
		SLUG PELLET	'no spread' zone (slug pellet applicators)				
		APPLICATORS ONLY	baiting recommendations (slug pellet applicators)				
		SLUG PELLET AND GRANUALR APPLICATORS ONLY	restrictions on use (slug pellets/granular products)				
		ALL MACHINES	To include: specific product precautions/warnings operator protection environmental protection restrictions on use				
			Crop specific information: crop/target dose rate timing timing water volume (if applicable)				
		ALL MACHINES	Mixing and spraying/application: filling reduced volume applications (if applicable) additional label information compatibility				
		SPRAYERS ONLY	 recommended nozzles recommended pressure spray quality 				
		WICK APPLICATORS ONLY	suitability (for wick applicators)				
			Met ✓ Not Met X				

CRITERIA	ASSESSMENT	ASSESSOR	ASSESSMENT		AND	IDAT		
NUMBER			ACTIVITIES	Α	В	С	D	
Unit 053			May include all/any of the following as appropriate to					
0	and controls	Candidate to identify all	' '					
4.1		components and controls	1					
			compressor					
		equipment being used for	air in-let					
		the assessment	pressure relief device					
			pulsation damper					
			filling control and devices					
			agitation control					
			fluid pressure adjustment control					
			air pressure adjustment control					
			air and fluid pressure gauges					
			on/off control					
			boom isolators					
			boom section pressure compensation controls					
		AIR FLUID SPRAYERS ONLY Identify and explain the use of one size of nozzle restrictor, it should be the sprayer/application equipment (if applicable) SPRAYERS ONLY Identify and explain the use of the sprayer/application equipment (if applicable) SPRAYERS ONLY Identify and explain the use of the nozzle fitted to the sprayer/application equipment (if applicable) SPRAYERS ONLY Identify and explain the use of the nozzle fitted to the sprayer/application equipment (if applicable)	filters					
	Identify sprayer/application equipment components and controls AIR FLUID SPRAYERS ONLY (as applicable) Candidate to identify all components and controls relating to the sprayer/application equipment being used for the assessment AIR FLUID SPRAYERS ONLY (as applicable) SPRAYERS ONLY (as applicable) Candidate to identify all components and controls relating to the sprayer/application equipment being used for the assessment AIR FLUID SPRAYERS ONLY (as application equipment (if applicable) SPRAYERS ONLY (as application equipment (if applicable) SPRAYERS ONLY (identify and explain the use of the nozzle fitted to the sprayer/application equipment (if applicable) SPRAYERS ONLY (identify and explain the use of the nozzle fitted to the sprayer/application equipment (if applicable) WICK APPLICATORS ONLY SLUG PELLET APPLICATORS ONLY Ma	tank wash system						
			clean water tank					
			nozzle flow restrictors					
	Identify sprayer/application equipment components and controls SPRAYERS ONLY (as applicable) Candidate to identify all components and controls relating to the sprayer/application equipment being used for the assessment SPRAYERS ONLY (as applicable) Candidate to identify all components and controls relating to the sprayer/application equipment being used for the assessment SPRAYERS ONLY (as agir in-let expressure equipment of the assessment SPRAYERS ONLY (as agir in-let expressure equipment of the assessment SPRAYERS ONLY (as agir in-let expressure equipment of the assessment SPRAYERS ONLY (as agir in-let expressure equipment of the assessment SPRAYERS ONLY (as agir in-let expressure equipment of the assessment SPRAYERS ONLY (as agir in-let exprayer/application equipment (if applicable) SPRAYERS ONLY (as agir in-let exprayer/application equipment (if applicable) SPRAYERS ONLY (as agir in-let exprayer/application equipment (if applicable) SPRAYERS ONLY (as agir in-let exprayer/application equipment (if applicable) SPRAYERS ONLY (as agir in-let exprayer/application equipment (if applicable) SPRAYERS ONLY (as agir in-let exprayer/application equipment (if applicable) SPRAYERS ONLY (as agir in-let exprayer/application equipment (if applicable) SPRAYERS ONLY (as agir in-let exprayer/application equipment (if applicable) SPRAYERS ONLY (as agir in-let exprayer/application equipment (if applicable) SPRAYERS ONLY (as agir in-let exprayer/application equipment (if applicable) SPRAYERS ONLY (as agir in-let exprayer/application equipment (if applicable) SPRAYERS ONLY (as agir in-let exprayer/application equipment (if applicable) SPRAYERS ONLY (as agir in-let exprayer/application equipment (if applicable) SPRAYERS ONLY (as agir in-let exprayer/application equipment (if applicable) SPRAYERS ONLY (as agir in-let exprayer/application exprayer/application exprayer/application exprayer/application exprayer/application exprayer/application exprayer/application exprayer/application	nozzle nozzles						
			diaphragm check valves					
			tank drain					
			other components/controls specific to the sprayer					
		AID ELLIID SDDAVEDS	May include:					
	ON Ide of c res fitte spr	Identify and explain the use						
		restrictor, it should be the one yellow (50) - 90-250 I/ha. High volume application						
		fitted to the sprayer/application	yonow (co) so zoo ma. mgn volume application					
		equipment (if applicable)	Types of nozzle and their uses:					
		SPRAYERS ONLY						
			(hydraulic/air assisted types)					
			air fluid - medium/coarse spray, low drift, LERAP					
			3 star					
			cone - good coverage for fungicides and					
			Insecticides					
		WICK APPLICATORS ONLY	wick (wick applicators)					
			,					
		AFFEIGATORS ONET						
			gg					
			Diag internal (ii applicable)					
			noppor, agricult, also speed comme.					
			accimiseratore (ii applicazio)					
			other components/controls specific to the applicator					
			May include:					
		ONLY	on/off control					
			metering mechanism					
			applicator					
			Met ✓ Not Met X					
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CRITERIA	ASSESSMENT	ASSESSOR	ASSESSMENT		AND		
NUMBER	CRITERIA	GUIDANCE ALL MACHINES	ACTIVITIES May include:	Α	В	С	D
Unit 053 4.2	Carry out pre-use checks to the prime mover	Candidate to carry out all pre-use checks relevant to the prime mover being used for the assessment (Note to the Assessor) If the candidate can confirm	May include: visual inspection of the wheels and tyres tyre pressures fuel level adequate engine oil level is within acceptable limits hydraulic oil level is within acceptable limits (if accessible)				
		verbally that pre use checks were carried prior to the assessment. There is no requirement for them to be carried out again	 transmission oil level is within acceptable limits (if accessible) coolant level is adequate engine air filter is clean 				
		SLUG PELLET APPLICATORS ONLY	pellet shield (slug pellet applicator) Met ✓ Not Met X				
Unit 053 4.3	Carry out pre-use and operational checks to the sprayer/application equipment	ALL MACHINES Candidate to carry out all pre-use and operational checks to the sprayer/application equipment	May include all/some of the following as applicable to the sprayer/application equipment:				
		Check for mechanical defects	seized, worn or damaged controls/components				
		Check that the sprayer/application equipment is lubricated correctly	 identification of lubrication points visual inspection of lubrication points visual inspection of levels (if applicable) 				
		Check security of attachment of sprayer/application equipment	 bolts tight straps inspected and adjusted if necessary linkage secure (if applicable) sideways movement restricted (if applicable) drawbar pin secured (if applicable) levelled 				
		SLUG PELLET APPLICATORS ONLY	fitted with spread limiter plates (slug pellet applicator/granular applicator, if applicable)				
		SPRAYERS ONLY Check boom settings, suspension and break-back devices (if applicable)	 boom suspension operational parallel linkage operational break-back efficiency height adjustment boom geometry (variable geometry boom sprayer) 				
		Check broadcast sprayer settings	 operation of fan nozzle positions alignment of unit to target adjustment of air direction/shutters 				
		Remove, clean and refit a filter	Candidate to: remove and clean using appropriate method contain spillage check for defects refit				
Continued		Remove, clean/replace and refit a nozzle restrictor and nozzle	Candidate to: remove and clean using appropriate method contain spillage check for defects replace if worn/damaged refit				

CRITERIA	ASSESSMENT	ASSESSOR	ASSESSMENT	C	AND	IDA	ΓΕ
NUMBER	CRITERIA	GUIDANCE	ACTIVITIES	Α	В	С	D
Cont		Part fill sprayer/application equipment	To include:		_		
Oont		счиртен	suitable site selected				
Unit 053			fill by usual on-site method, following approved procedures				
4.3			clean water supply				
4.3				_			
		Check electronic	To include checking:				
		components on electrostatically charged	the control box				
		application equipment (if	wiring on the sprayer				
		applicable)	nozzle charging heads				
			earth wires and strap				
		SLUG PELLET	May include:				
		APPLICATOR ONLY for	hopper metering and delivery systems				
		cleanliness, mechanical and electrical defects	seized worn or damaged components				
		electrical defects	drive systems				
			condition and tension of belts, method of				
			adjustment				
			electrical connections				
			• fan blades				
			deflector plates				
		SPRAYER ONLY	To include as applicable:				
		Check sprayer/application	use higher than normal operating pressure				
		equipment for liquid and air leaks, and correct spray	visual check of all nozzles for correct spray				
		patterns (as applicable)	patterns, absence of blockages, streaking, pulsing		_	_	
		` ` ` ' /	and correct alignment				
			replace defective nozzle restrictors and/or nozzles				
			lids and sealsliquid and air pipe work and connections				
			control valves				
			• filters				
			liquid and air pressure gauge				
			diaphragm check valves				
		WICK APPLICATORS ONLY	wick (wick applicators)				
			wick glands (wick applicator)				
		SLUG PELLET	a mallat distribution mattern (alum mallat annicator)				
		APPLICATORS ONLY	pellet distribution pattern (slug pellet applicator)				
		CRANUL F ARRUGATORS	a manufaction at the state of t				
		GRANULE APPLICATORS ONLY	granule distribution pattern (granule applicator)				
		ALL MACHINES (if	To include:				
		appropriate) Explain how to use the	functions of control panel				
		control panel to ensure that	recognition of malfunctions before and during			_	
		the sprayer/application	operation				
		equipment is functioning correctly (if applicable)	check accuracy of calibration writch to manual/test made where applicable				
		concony (ii applicable)	switch to manual/test mode where applicable			Ш	
		ALL MACHINES	T				
		ALL MACHINES State one suitable action in	To include:				
		the event of the control panel	stop pesticide application				
		failing (if applicable)	manual operation of controls if possible				
			Met ✓ Not Met X				

CRITERIA	ASSESSMENT	ASSESSOR	ASSESSMENT		AND	_	
NUMBER	CRITERIA	GUIDANCE	ACTIVITIES	Α	В	С	D
Unit 053 4.4	Calibrate the sprayer/application equipment and record relevant data	Candidate is required to calibrate the sprayer/application equipment and record relevant data					
		SLUG PELLET/GRANULE	Calibration may include the following:				
		APPLICATOR ONLY	trial run on ground to establish acceptable performance (slug pellet/granule applicator)				
		ALL MACHINES Select and record forward speed	suitable forward speed for crop/target and ground conditions				
			 appropriate gear selected and engine speed established (if applicable) accurate measurement of distance (100m) 				
			accurate measurement of time taken to cover distance (100m)				
			correct use of formula to establish forward speed				
		Calculate required output/volume rate	correct use of formula				
		SPRAYER ONLY	use of manufacturers operators handbook				
		Select appropriate nozzle restrictor using manufacturers	use of manufacturers literature confirm requirements of product label				
		literature (if applicable/available)	Committed and the second secon				
		Set operating pressure for liquid and air	pressure as determined by manufacturers literature				
		(if applicable)	 pressurise/purge appropriate to the system 				
		Check nozzle outputs (if applicable)	use a measuring jug to check output from at least one nozzle per boom section (minimum of three per applicator)				
		Check nozzle outputs (if applicable)					
			change nozzles restrictors and/or nozzles (if				
			required)				
			or any other acceptable method				
		ALL MACHINES State four pieces of	May include:				
		calibration data that should	registration number of vehicletyre size and pressure				
		be recorded (appropriate to the sprayer/application	gear selected				
		equipment being used)	engine speed				
			vehicle forward speed			Ш	
		SPRAYERS ONLY	application volume				
			 nozzle restrictor fitted (if applicable) air pressure 				
			liquid pressure				
			flow rate				
			air outlet angle (air assisted boom sprayer) nozzle angle (air assisted boom sprayer)				
			 nozzle angle (air assisted boom sprayer) fan setting (air assisted boom sprayer) 				
		SLUG PELLET APPLICATOR ONLY	applicator settings (slug pellet applicator)product being used (slug pellet/granule applicator)				
		SLUG PELLET/GRANULE APPLICATOR ONLY	spreading width (slug pellet/granule applicator)				
		I Elonion one	Met ✓ Not Met X				

CRITERIA	ASSESSMENT	ASSESSOR	ASSESSMENT		AND		
NUMBER	CRITERIA Calculate the quantities of	GUIDANCE SPRAYERS/WICK	ACTIVITIES To include:	Α	В	С	D
Unit 053 4.5	pesticide and water required for a specified area	APPLICATORS Candidate to calculate quantities required for both a specified area and full tank	amount of water required for specified area amount/weight of pesticide required for specified area				
		specified area and full tank	amount of water required for a full tank				
			 amount of pesticide required for full tank Met ✓ Not Met X 				
	Measure or weigh the	ALL MACHINES	To include:			H	H
Unit 053 5.1	required quantities of pesticide and water and add to the	SPRAYERS/WICK	accurate measurement of pesticide (all machines) To include:				
011	sprayer/application equipment	APPLICATORS Candidate to measure/weigh and add quantities required	correct selection and use of PPE (as required by the product label and/or COSHH Assessment) suitable site selected				
		for the area specified in 4.5	fill by usual on-site method, following approved procedures				
			clean water supply				
			accurate measurement of water				
			correct filling procedure use of filling device if fitted				
			avoidance of spillage				
			observance of pesticide manufacturers instructions for mixing and agitation				
		WICK APPLICATORS ONLY	priming of wicks (wick applicators)				
			adjustment of flow rate for wicks (wick applicators)				
		SLUG PELLET/GRANULE APPLICATORS ONLY	accurate filling of hopper (slug pellet/granule applicator)				
			Met ✓ Not Met X	Ш	Ш	Ш	Ш
Unit 053	Demonstrate safe and accurate application procedures	ALL MACHINES Candidate to describe one possible methods of marking	May include any of the following: tramlines crop rows				
5.2		out the site to achieve accurate application	blob markers				
		adoctrate application	marker poles				
			marker dyes				
			use of GPS				
		ALL MACHINES Candidate to explain the	Explanation to include:		_		_
		appropriate procedure to	 select and use appropriate PPE avoid contact with contaminated crop 				
		follow when the sprayer/application	mark the spot at which the sprayer/application				
		equipment needs refilling part	equipment emptied				
		way through an application (if applicable)	refill sprayer/application equipment				
		(177 - 122 - 17	 continue with application by restarting the appropriate point 				
		SLUG PELLET/GRANULE APPLICATORS ONLY	use of wheel marks (slug pellet/granule applicators)				
		SPRAYERS ONLY	Explanation to include:				
		Candidate to explain the appropriate procedure to follow when a nozzle restrictor or nozzle becomes blocked during an application (if applicable)	clean or replace nozzle restrictor or nozzle as appropriate				
		AIR ASSISTED SPRAYERS	• stop; or				
Continued		ONLY Candidate to state what to do if the air assistance system fails (if applicable)	continue to spray in a mode suitable to weather conditions				

CRITERIA NUMBER	ASSESSMENT CRITERIA	ASSESSOR GUIDANCE	ASSESSMENT ACTIVITIES	C.	AND B	IDA1	TE D
Cont		SPRAYERS ONLY Candidate to apply pesticide	To include: ensure boom is level or aligned to the target				
Unit 053		to treat a specified area appropriate the candidates	ensure unit is aligned to target (air assisted broadcast sprayers)				
5.2		normal work situation and sufficient enough to	correct boom height according to target and type				
		demonstrate safe and accurate application	of nozzle correct angle of boom (variable geometry				
		procedures	sprayers) correct angle of unit (air assisted sprayers)				
			correct volume air controls (air assisted sprayers)				
			correct forward speed and pressure for site conditions				
		ALL MACHINES	operate controls to start and finish applying				
			 accurately at the beginning and end of each bout accurate matching of bouts / use of driving aids 				
			coping with obstacles				
			 all of specified area treated, minimising overlaps and misses 				
			awareness of changes in wind speed and direction				
		WICK APPLICATIORS ONLY	wick in contact with target (wick applicators)				
		SLUG PELLET APPLICATORS ONLY	correct height and angle of applicator (slug pellet applicators)				
		SLUG PELLET/GRANULE APPLICATORS ONLY	maintenance of 'no spread zone' (slug pellet/granule applicators)				
			Met ✓ Not Met X				
Unit 053 5.3	Carry out all activities protecting human health and the environment	ALL MACHINES Note to the Assessor: Assessor to be satisfied that the candidate has carried out all activities protecting human health and the	To include: prevention of personal injury and contamination through correct selection and use of PPE (as required by the product label and/or COSHH assessment)				
		environment throughout the assessment	 prevention of public / bystander contamination safe filling procedure 				
		doodomon	avoidance of off-target application				
			avoidance of overdosing crop/target Met ✓ Not Met X				
Livit 050	Complete a treatment	ALL MACHINES	Completion of the treatment record must be:				H
Unit 053	record	Candidate is required to complete a treatment record.	AccurateLegible (if handwritten)				
5.4		Note to the Assessor: The treatment record must be approved by the Assessor	Met ✓ Not Met X				
Unit 053 6.1	Explain how to manage surplus pesticide and dispose of waste materials arising from pesticide application	ALL MACHINES Candidate to explain method of managing with surplus concentrate pesticide	May include: return to temporary mobile store return to fixed store Containers:				
	арриосион		 triple rinsed placed in secure storage until disposal returned to supplier collected by licensed waste disposal contractor 				
		Candidate to explain method of dealing with waste containers and packaging	Packaging: thoroughly emptied placed in secure storage until disposal				
		Candidate to explain one	collected by licensed waste disposal contractor May include:				
		methods of managing with surplus dilute pesticide	 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 licensed waste disposal contractor				
			Met ✓ Not Met X			Ш	Ш

CRITERIA	ASSESSMENT	ASSESSOR	ASSESSMENT	С	AND	IDA [*]	ΓΕ
NUMBER	CRITERIA	GUIDANCE	ACTIVITIES	Α	В	С	D
Unit 053	Explain how to clean and decontaminate the sprayer/application	ALL MACHINES Candidate to explain three factors need to be considered	May include: • select and use appropriate PPE				
6.2	equipment and, if applicable, the prime mover	when cleaning and decontaminating the sprayer/application equipment/ and, if applicable, the prime mover	 appropriate site thorough washing with water and suitable additive (if applicable/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				
		SLUG PELLET APPLICATORS ONLY	 safe disposal of pellets/contaminated soil arising from cleaning operation (slug pellet applicators) 				
		GRANULE APPLICATORS ONLY	 safe disposal of granules/contaminated soil arising from cleaning operation (granule applicators) 				
			Met ✓ Not Met X				
Unit 053 6.3	Describe the storage requirements for the sprayer/application equipment	ALL MACHINES Candidate to describe two factors to consider prior to storing the sprayer/application	May include: ensure the applicator is clean and dry inspect for wear and damage replace any worn or damaged parts				
		equipment	 ensure system is drained and any valves left in appropriate positions lubricate as required store undercover and out of direct sunlight store in a secure area 				
		SPRAYERS ONLY	if appropriate, draw antifreeze through the system, particularly the pump Met ✓ Not Met X				

Unit 054	1 — <i>1</i>	Application of P	esticides using o	the	r Specific Equi	pment or Method	ls on	ow	n L	and	i		
Candidate	Α	Name:		Da	te:	Start Time:	Dura	Ouration:					
Candidate	В	Name:		Date:		Start Time:	Dura						
Candidate	С	Name:		Da	te:	Start Time:	Dura	atior	1:				
Candidate	D	Name:		Da	te:	Start Time:	Dura	atior	1:				
CRITERIA NUMBER		ASSESSMENT CRITERIA	ASSESSOR GUIDANCE			SSESSMENT ACTIVITIES		C	AND B	IDAT C	ΓE		
Unit 054	requ	cribe the legal uirements relating to lying pesticides using	ALL EQUIPMENT Candidate to describe one legal obligation in terms of		, ,	ent Pesticides Code of Pra	ctice						
1.1		er specific equipment or hods on own land	the requirements on the operator		(Sustainable Useensuring that the	Plant Protection Products e) Regulations (2012) e equipment is in good cond							
					and all required the operators ma	guards are in place as state anual	ed in						
			FOGGING AND MISTING EQUIPMENT ONLY (and if appropriate, smokes)		In addition to include: HSE Approved C	addition to include: HSE Approved Code of Practice on Fumigation							
			BOAT MOUNTED EQUIPMENT ONLY		 In addition to include: ensure product is approved for aquatic use seek Environment Agency approval 								
			• seek Environment Age		mcAgency approval Met√ Not	Met X							
Unit 054		cribe how to apply ticides safely using	ALL EQUIPMENT Candidate to describe on	е	May include: • comply with indu	stry codes of best practice			П	П			
1.2	othe equ follo	er specific ipment/methods wing industry best ctice	operator safety regulation terms of using other specif equipment		 be aware of any 	safety implications impose sessment and comply with	d by						
	piac	3.00	BOAT MOUNTED EQUIPMENT ONLY Candidate to describe two	0		of contamination downstrea sensitive sites and livestor							
			operator safety requiremer when using boat mounted equipment	nts	work in an upstre	eam direction (if applicable) ring/rescue devices							
					be aware of any	safety implications							
			Candidate to state one fac which may affect the speed the boat		May include:wind speedwater flowweed obstruction	า							
			FOGGING AND MISTING EQUIPMENT ONLY (and appropriate smokes) Candidate to state one		In addition to include: fire burns from hot e								
			potential risk using pyrotechnic devises or hot fogging machines										
			Candidate to state two factors that may influence CIPC application		For the store may incl	terns enclosures							

low speed recirculation fans

operation of control systems

inverters

even distribution

Continued

CRITERIA NUMBER	ASSESSMENT CRITERIA	ASSESSOR GUIDANCE	ASSESSMENT ACTIVITIES	C.	AND B	IDA ⁻	TE D
Cont		Candidate to state two factors that may influence	For the crop, it may include:		_		
		CIPC application	dry tuber surfacesminimal signs of sprouting				
Unit 054			even crop temperature				
1.2			proposed end use				
			previous treatments (quantities and timing)				
			clearance intervals before consumption				
			maximum residue levels				
		MOBILE SEED	In addition to include:				
		TREATMENT ONLY Candidate to state two	accessibility to site				
		factors relating to selecting	 suitable ground conditions machine level 				
		an appropriate site for mobile seed treating equipment					
	Identify risks to the	ALL EQUIPMENT	Met ✓ Not Met X May include the following:	Ш	Ш	Ш	Ш
Unit 054	environment	Candidate to identify all	wildlife				
2.1		relevant risks to the environment	non-target plants				
2.1		environment	• hedgerows				
			• housing				
			• public access				
			sensitive crops/areaswater courses				
			boreholes				
			• drains				
			livestock drinking points				
			recreational use				
			water extraction points				
			 temperature other risks specific to the site 				
			other risks specific to the site				
		BOAT MOUNTED EQUIPMENT ONLY	In addition to include:	_	_	l _	
		Candidate to identify two	de-oxygenation of water removal of fish cover				
		relevant environmental factors relating to the aquatic	removal of lish cover removal of bankside wildlife habitat				
		environment	removal of bankside vegetation leading to bank				
			erosion				
			Met ✓ Not Met X				
Unit 054	Explain how to minimise risks to the environment	ALL EQUIPMENT Candidate to explain how to	May include the following:]]]	
	nisks to the environment	minimise the risks identified	 use of an appropriate pesticide careful timing of application 				
2.2		in 2.1	check and maintain application rate				
			avoid spray drift (if applicable)				
			observe buffer zones (if applicable)				
			erect warning signs				
			 operate within any temperature parameters (if applicable) 				
			 notify neighbours before application (if applicable) 				
		Candidate to check and comment on wind speed and	 use of anemometer at suitable height or visible signs 				
		direction (if applicable)	 wind direction (if applicable) 				
		Candidate to state the	Statement to include:				
		reason for minimising off	 awareness of the possible effects of drift to crops, 				
		target application and spray drift (if applicable)	people, wildlife, water and the wider environment				
		((if applicable)				
		SPRAYERS ONLY	In addition to include:				
		Candidate to state five factors that may affect spray	wind speed and direction				
		drift (if applicable)	nozzle type and sizepressure				
			forward speed				
			nozzle height				
Continued			defective equipment				

CRITERIA NUMBER	ASSESSMENT CRITERIA	ASSESSOR GUIDANCE	ASSESSMENT ACTIVITIES	C.	AND B	IDAT	TE D
Cont Unit 054 2.2		BOAT MOUNTED EQUIPMENT ONLY Candidate to explain how to minimise the risks identified in 2.1	In addition to include: treat a suitable proportion of the affected area check weather suitability before treatment check downstream uses before treatment use an appropriate pesticide careful timing of treatment check and maintain application rate avoid spray drift exclude livestock erect warning signs				
		FOGGING AND MISTING EQUIPMENT ONLY (and if appropriate smokes) Candidate to state one reason why building security and integrity is important	In addition to include: unauthorised access prevented free from damage so that no leaks occur ventilation closed				
		Candidate to state one factor that may influence CIPC application	May include: ■ seed crops in adjacent stores ■ seed tubers Met ✓ Not Met X				
	Read product information	ALL EQUIPMENT	Met ✓ Not Met X The following to be tested:			\vdash	Ш
3.1 Unit 054	Interpret product information	Note to the Assessor: Label must be approved or if necessary supplied by the Assessor and appropriate to the candidate's normal work situation	 product name active substance(s) (ingredient(s)) 				
3.2		The candidate is required to read the label and provide the information requested by the Assessor	Important information: field of use crop/target maximum individual dose maximum total dose maximum number of treatments				
			 specific product precautions/warnings operator protection environmental protection restrictions on use 				
			Crop specific information:				
			Mixing and application: filling reduced volume applications (if applicable) recommended nozzles recommended pressure spray quality				
			additional label information: compatibility				
		BOAT MOUNTED EQUIPMENT ONLY	In addition must include: approval for use in the aquatic environment accurate measurement of water flow				
		FOGGING AND BATCH DIPPING ONLY	In addition to include: temperature requirements (if applicable)				
Continued		FOGGING AND MISTING EQUIPMENT ONLY (and if appropriate, smokes)	In addition may include: Workplace Exposure Limits (WELs) (if applicable) ventilation precautions/interval (if applicable)				

CRITERIA NUMBER	ASSESSMENT CRITERIA	ASSESSOR GUIDANCE	ASSESSMENT ACTIVITIES	C.	AND B	IDA1	ΓE
	ORTERIA	SEED TREATMENT	in addition may include:				
Cont		EQUIPMENT ONLY	appropriate for the type of equipment				
Unit 054			appropriate for crop/variety				
3.1			Met ✓ Not Met X		Ш	Ш	Ш
Unit 054							
2.2							
3.2	Identify the components	ALL EQUIPMENT AS	May include:				
Unit 054	and controls on the	APPLICABLE	• on/off control				
4.1	equipment	Candidate to identify all components and controls	• pump				
		relevant to the equipment being used	pulsation damperfilling controls and devises				
		being used	agitation control				
			pressure/volume control				
			regulator				
			pressure relief valve				
			pressure gaugeboom isolators				
			• tank				
			tank wash system				
			• lid				
			filtersnozzles				
			• hoses				
			• valves				
			• connections				
			sealsmetering devices				
			mechanical/electrical controls				
			programming controls				
			warning lights				
			test mode operation				
			• conveyors				
		NOZZLES AS APPLICABLE Candidate to idenify and	Types of nozzles and their uses may include: • flat fan - standard boom nozzle,				
		state the use of one type of	 air inclusion - medium/coarse spray, low-drift, 				
		nozzle fitted to the equipment	LERAP 2/3 star rating				
			cone - good coverage for fungicides and insecticides				
		SEED TREATMENT EQUIPMENT ONLY	May include: • function of controls				
		Candidate to state function of controls, operation of	mixer incorporation system				
		incorporation system and	Met ✓ Not Met X				
		how to change a pesticide container (if appropriate)					
	Carry out pre use checks	Candidate to check the prime	May include:			<u> </u>	
Unit 054	to the prime mover (if	mover for safe operation (if applicable)	integrity of power source				
4.2	applicable)	аррисавіе)	fluid levels				
			fail-safe systems				
		BOAT MOUNTED EQUIPMENT ONLY	In addition may include:				_
		Candidate to carry out all	suitable boat for the situationaccessibility of boat controls				
		appropriate pre use checks to the boat	accessibility of sprayer controls				
			even loading				
			 safe, secure mooring when transferring pesticides and equipment 				
			Met ✓ Not Met X				
			Wet ₹ Not Met X	Ш		ഥ	Ш

CRITERIA NUMBER	ASSESSMENT CRITERIA	ASSESSOR GUIDANCE	ASSESSMENT ACTIVITIES	C.	AND B	IDA ⁻	TE D
Unit 054	Carry out pre-use checks to the application	ALL EQUIPMENT Candidate to check the	May include: seized, worn or damaged controls/components				
4.2	equipment	application equipment for	metering & delivery systems				
4.3		safe operation	drive systems				
			condition & tension of belts				
			security of attachment to prime mover				
			lubrication of components				
			checking for leaks under pressure				
			 any problems identified to be rectified if within operators level of responsibility and ability 				
		SPRAYERS ONLY Candidate to check and	In addition may include:				
		comment on the condition	boom suspension operational break-back devices operating correctly (if				
		and function of the boom	applicable)				
			height adjustment operational				
		Candidate to remove, clean	To the first				
		and refit a filter	To include: removal and cleaned appropriately				
			 contained spillage 				
			check for defects				
			refit/replace as applicable				
		Candidate to remove, clean	To include:				
		and refit a nozzle	removal and cleaned appropriately				
			contained spillage				
			check for defects				
			refit/replace if worn or damaged				
		Candidate to part fill the	May include:				
		applicator and test	suitable site selected				
			fill by usual on-site method, following approved				
			procedures clean water supply				
			use higher than normal operating pressure				
			visual check of all nozzles/atomisers for correct				
			spray patterns, absence of blockages, streaking,				
			pulsing and correct alignment				
			replace defective nozzles/atomisers/discs				
			lids and sealspipe work and connections				
			control valves				
			• filters				
			pressure gauge				
			diaphragm check valves				
		CONTINUOUS PROCESS	In addition may include:				
		VIA A CONVEYOR ONLY	preparing area, clearance of floor space				
			material feed system operating correctly				
			Met ✓ Not Met X				
	Calibrate the application	ALL EQUIPMENT	May include:	<u> </u>			<u> </u>
Unit 054	equipment and record relevant data	The candidate is required to	accurate measurements				
4.4	i GiGVaiit Uala	calibrate the application equipment	accurate timings				
			accurate calculations				
		Note to the Assessor: Any appropriate method of calibration may be used	correct use of formulae				
		Candidate to record relevant	Calibration data may include:				
		calibration data	equipment settings used				
			 product used for calibration 				
Continued			application rate achieved				

CRITERIA	ASSESSMENT	ASSESSOR	ASSESSMENT		AND		
NUMBER	CRITERIA	GUIDANCE	ACTIVITIES	Α	В	С	D
Cont		ALL TYPES OF SPRAYERS, INCLUDING BOAT	In addition may include:				
33.11.11		MOUNTED	 suitable forward speed for target appropriate engine speed established (if 				
Unit 054		Select and calculate forward	 appropriate engine speed established (if applicable) 				
		speed	accurate measurement of distance				
4.4			accurate measurement of time taken to cover		_		
			distance				
			correct use of formula to establish forward speed				
			correct use of formula				
		Calculate required	May include:				
		output/volume rate	use of manufacturers operators handbook				
			use of nozzle/atomiser manufacturers literature				
			confirm requirements of product label				
			, .				
		Select appropriate nozzle	pressure as determined by nozzle chart				
		using manufacturers literature (if available) and set	pressurise/purge appropriate to the system				
		pressure/disc speed					
		Set operating pressure	use a measuring jug to check output from at least				
			one nozzle/atomiser per boom section				
		Check nozzle/atomiser	compare with target output				
		outputs	vary pressure to make small adjustments				
			change nozzles/atomisers if required				
			or any other acceptable method				
					_		
		State four pieces of	boat Identification				
		calibration data that should be recorded	boat engine speed				
		be recorded	sprayer engine speed				
			boat forward speed				
			application volume				
			nozzle/restrictor/disc fitted				
			pressure/disc speed				
			flow rate				
			Met ✓ Not Met X				
	Measure the	ALL EQUIPMENT	To include:				
	area to be treated (if	Candidate to measure the	accurate measurements				
4.5	applicable)	area or volume of material to be treated, which should be	Met ✓ Not Met X				
4.5		typical of the candidate's	met / Not met X	Г			
		normal work. (The Assessor					
		may assist under direction of the candidate)					
	Calculate the erec or	ALL EQUIPMENT	To include:				
	Calculate the area or volume to be treated	Candidate to calculate the	To include: accurate calculations				
		area or volume of material to	accurate salesians.is				
4.6		be treated	Met ✓ Not Met X	Ш	Ш	Ш	Ш
	Calculate the quantities of	ALL EQUIPMENT	May include:				
	pesticide and water	Candidate to calculate	amount of water required for specified area				
	required for a specified area or volume	quantities required to treat the area or volume of	amount of pesticide required for specified area				
4.7	a. Ja or Tolullio	material in 4.6	la addition to include:				
			In addition to include:	_		_	
		CONTINUOUS PROCESS VIA A CONVEYOR ONLY	running time on full tank				
		VIA A CONVETOR UNLT	Met ✓ Not Met X				

CRITERIA NUMBER	ASSESSMENT CRITERIA	ASSESSOR GUIDANCE	ASSESSMENT ACTIVITIES	C A	AND B	IDA [*]	TE
11 11 054	Measure the required	ALL EQUIPMENT	To include all of the following:				
Unit 054 5.1	quantities and add to the applicator, or attach pesticide container	Candidate to measure and add quantities required for the area or volume of material specified, attach	 correct selection and use of PPE (as required by the product label, COSHH and Risk Assessment) suitable site selected 				
		pesticide container, or insert induction lance	 fill following product recommendations and approved procedures correct use of clean water supply (if applicable) 				
			accurate measurement of water (if applicable)				
			accurate measurement of pesticide				
			correct filling procedure				
			 use of filling device (if fitted) avoidance of spillage or 				
			prepare and attach pesticide container				
			Met ✓ Not Met X				
Unit 054	Demonstrate safe and accurate application procedures	ALL EQUIPMENT The candidate is required to treat the area or volume of	May include: treatment area or volume to be treated clearly identified				
5.2		material specified in 4.6	 constant speed or flow of material is maintained 				
		demonstrating safe and accurate application	accurate switch on/off points				
		procedures	accurate matching of bouts (if applicable)				
			obstacles dealt with correctly (if applicable)				
			 area treated minimising overlaps and misses (if applicable) awareness of changing climatic conditions and 				
		SDD AVEDS ONLY	appropriate action taken (if applicable)				
		SPRAYERS ONLY Candidate to demonstrate	To include: • ensure boom is level or aligned to the target				
		correct operation	correct boom height according to target and type				
			of nozzle awareness of changes in wind speed and				
			direction				
		BOAT MOUNTED EQUIPMENT ONLY	To include:				
		Candidate to carry out all	extra person present at all times				
		activities safely	 use of life jacket obligatory when near or on water no equipment on operator's back when operating from the boat 				
		FOGGING AND MISTING EQUIPMENT (and if	May include: • post signs at suitable locations for an adequate				
		appropriate, smokes) Candidate to state two	period				
		considerations before	secure doors clear obstructions				
		application	ensure that all non targets are protected or				
			removed ensure escape route is clear				
		Candidate to state	May include:				
		importance of direction of travel when carrying out application	direction of travel will always be to planned exit (indoors)				
			working upwind, at 90° to prevailing wind direction				
		Candidate to state two factors after application	May include: • ventilate are prior to entry				
			• remove warning signs				
			remove spent containers/devises (smokes only)				
		BATCH DIPPING ONLY Candidate requires to state	May include:	_	_		_
		three factors when carrying	 safe lifting/loading avoid splashing/ contamination 				
		out the dipping process	correct immersion depth and time				
			maintain correct temperature (if appropriate)				
			correct top up procedure, maintaining concentration				
			safe unloading				
			correct draining time				
Continued			suitable storage site used				

CRITERIA NUMBER	ASSESSMENT CRITERIA	ASSESSOR GUIDANCE	ASSESSMENT ACTIVITIES	C.	AND B	IDA ⁻	TE D
		SEED TREATMENT	Must include:			_	
Cont Unit 054		Candidate to state how accuracy of dosage is ensured before application	 test run to prove correct dose viscosity of material being applied has not been affected by changes in temperature 				
5.2		commences Candidate to correctly monitor seed treatment and	May include:				
		ensure that end product is	identify reasons why treatment may be incorrect				
		labelled	visual inspection of treated seed				
			safe handling of treated seed				
		Candidate to state three	correct labelling May include:				
		factors to consider when	new container prepared				
		changing either pesticide containers or pesticide	purge pipe work				
			correct changeover technique used				
			system priming				
			correct technique used for decanting nearly empty				
			containers				
			any spillage contained				
		CONTINUOUS PROCESS VIA A CONVEYOR ONLY	May include: safe lifting/loading				
		The candidate is required to	continuous flow of material				
		state three factors to be considered for the entire	even distribution of pesticide on the material				
		process	maintain temperature (if appropriate)				
			safe unloading				
			correct labelling of treated material				
			correct draining time				
			suitable storage site used				
			Met ✓ Not Met X				
	Carry out all activities	ALL EQUIPMENT	To include:				Ľ
Unit 054 5.3	protecting human health and the environment	Note to the Assessor: The Assessor to be satisfied that the candidate has carried out all activities protecting human health and that of the environment	 prevention of personal injury and contamination through correct selection and use of PPE/RPE (as required by the product information, COSHH and Risk Assessment) prevention of public/bystander contamination safe filling procedure avoidance of off-target application avoidance of overdosing crop/target/plant material 				
		ALL EQUIPMENT	May include:				
		Candidate to state one action to take in the event of a malfunction	 stop pesticide application convert to manual operation (if possible) check output is correct 				
			Met ✓ Not Met X				
11 2 054	Complete a treatment	ALL EQUIPMENT	Completion of the treatment record must be:				
Unit 054	record	The candidate is required to complete a treatment record	accurate legible (if handwritten)				
5.4		Note to the Assessment the	,				
		Note to the Assessor: the treatment record must be approved or if necessary supplied by the Assessor	Met ✓ Not Met X				
U-2: 05:	Explain how to manage	ALL EQUIPMENT	Explanation may include;				
Unit 054 6.1	surplus pesticide and dispose of waste material	Candidate to explain one method of managing surplus concentrate pesticide	return to temporary mobile storereturn to fixed store				
		Candidate to explain one	Containers:				
		method of dealing with waste	triple rinsed (if applicable)				
		packaging	placed in secure storage until disposal				
			returned to supplier				
			collected by licensed waste disposal contractor				
			Packaging:				
			thoroughly emptied				
Continued			placed in secure storage until disposal				
Continued			collected by licensed waste disposal contractor				
Continued			collected by licensed waste disposal contractor				

CRITERIA	ASSESSMENT	ASSESSOR	ASSESSMENT	C	AND	IDA	ΓΕ
NUMBER	CRITERIA	GUIDANCE	ACTIVITIES	Α	В	С	D
Cont Unit 054		Candidate to explain two methods of managing surplus dilute pesticides	Explanation may include: back on to target as long as it is below the maximum dose rate (if applicable) use on another approved crop/target (if				
			 use on another approved crop/target (if applicable) 				
6.1			 treated by specialist treatment facility on site (e.g. a lined bio bed) 				
			collected by licensed waste disposal contractor				
		BATCH DIPPING ONLY Candidate requires to state how to dispose of accumulated sludge from tank	appropriate method stated Met ✓ Not Met X				
Umit 054	Explain how to clean and	ALL EQUIPMENT	May include:				
Unit 054	decontaminate the application equipment	Candidate to explain four factors need to be considered	select and use correct PPE				
6.2	арриоаном очанрином	when cleaning the application equipment and prime mover	selection of an appropriate site for cleaning the application equipment				
		(if applicable)	internal and external surfaces				
			use of an in built system (if applicable) trials sizes the applicator fallowing product.				
			triple rinse the applicator following product information recommendations (if applicable)				
			thorough flushing of system				
			safe disposal of contaminated washings in an appropriate manner following good practice				
			 safe procedures followed contaminated cleanings suitably packaged and 				
			labelled ready for disposal				
			frequency of cleaning stated				
			Met ✓ Not Met X				
	Describe the storage	ALL EQUIPMENT	May include:				
Unit 054	requirements for the application equipment	Candidate to describe three factors to consider when	de-pressurisation (if applicable)				
6.3	application equipment	storing other specific	ensure the application equipment is clean and dry				
		equipment	inspect for wear or damage				
			repair or notify supervisor if not within operators level of responsibility and ability				
			lubricate if required				
			 use of anti-freeze for frost protection (if applicable) 				
			 nozzles and filters removed prior to freezing conditions (if applicable) 				
			store in a secure area				
			isolation of any electrical controls				
			store under cover and out of direct sunlight				
			Met ✓ Not Met X				

Summary of Assessme	nt (The l	Assessor i	s to com	plete the	e followina	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: D			
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 observed an assessment process taking place and I am satisfied that the assessment was conducted in line with the qualification requirements and that the judgement of the Assessor was appropriate.			
I ob	I observed an assessment process taking place. The following were noted as areas of concern.			
Signed: Date:				