

CITY & GUILDS LEVEL 2 AWARD IN THE SAFE APPLICATION OF PESTICIDES USING BOAT MOUNTED EQUIPMENT (PA5) 601/5144/4



QUALIFICATION GUIDANCE

Independently Assessed

Essential Qualification Information

Not to be used by the Candidate during Assessment

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

Qualification Group No	0 2 1 6	Pesticides
Qualification Programme No	0 2 1 6 - 5 3	L2 Award in the Safe Application of Pesticides Using Boat Mounted Equipment (PA5)
Unit(s)	1 4 1	Operating Boat Mounted Sprayers fitted with Hydraulic Nozzles/Rotary Atomisers for Applying Pesticides to Water (PA5A) (K/505/7697)
	1 4 2	Operating Boat Mounted Granular Applicators for Applying Pesticides to Water (PA5B) (H/505/7701)
	1 4 3	Operating Boat Mounted Applicators for Applying Pesticides to Water (PA5P) (H/505/7715)
Guided Learning Hours (GLH)		54
Total Qualification Time (TQT)		60
Recommended Assessment Duration		1.5 – 3 hours per Candidate
Pre-Requisite Units	1 0 1	Principles of Safe Handling and Application of Pesticides (PA1)

Version and date	Change detail	Section
1.1 November 2017	Added TQT details Deleted QCF / Learning Time	Qualification at a glance, Structure Throughout
1.2 April 2022	GLH and TQT clarified and highlighted City & Guilds address updates	Qualification at a glance Pg 4

City & Guilds Level 2 Award in the Safe Application of Pesticides Using Boat Mounted Equipment (PA5) Qualification Guidance

Introduction

The scheme will be administered by City & Guilds

City & Guilds will:

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

The Qualification

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

Training

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

Total Qualification Time

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

Access to Assessment

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

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

The assessment is divided in to **three** optional units:

Unit 141 – PA5A	(Optional)	(Credit Value 3)	(Print pages 5 – 11 plus 23)
Outcome 1.	Know the legislative and safety regulations relating to application equipment	(Criteria 1.1 – 1.2)	
Outcome 2.	Be able to assess the environmental factors relating to mixing and application	(Criteria 2.1 – 2.2)	
Outcome 3.	Be able to read and interpret product information	(Criteria 3.1 – 3.2)	
Outcome 4.	Be able to prepare and calibrate the applicator	(Criteria 4.1 – 4.5)	
Outcome 5.	Be able to operate the application equipment	(Criteria 5.1 – 5.4)	
Outcome 6.	Know how to carry out post-operational procedures	(Criteria 6.1 – 6.3)	
Unit 142 – PA5B	(Optional)	(Credit Value 3)	(Print pages 12 – 16 plus 23)
Outcome 1.	Know the legislative and safety regulations relating to application equipment	(Criteria 1.1 – 1.2)	
Outcome 2.	Be able to assess the environmental factors relating to mixing and application	(Criteria 2.1 – 2.2)	
Outcome 3.	Be able to read and interpret product information	(Criteria 3.1 – 3.2)	
Outcome 4.	Be able to prepare and calibrate the applicator	(Criteria 4.1 – 4.5)	
Outcome 5.	Be able to operate the application equipment	(Criteria 5.1 – 5.4)	
Outcome 6.	Know how to carry out post-operational procedures	(Criteria 6.1 – 6.3)	
Unit 143 – PA5P	(Optional)	(Credit Value 3)	(Print pages 17 – 23)
Outcome 1.	Know the legislative and safety regulations relating to application equipment	(Criteria 1.1 – 1.2)	
Outcome 2.	Be able to assess the environmental factors relating to mixing and application	(Criteria 2.1 – 2.2)	
Outcome 3.	Be able to read and interpret product information	(Criteria 3.1 – 3.2)	
Outcome 4.	Be able to prepare and calibrate the applicator	(Criteria 4.1 – 4.5)	
Outcome 5.	Be able to operate the application equipment	(Criteria 5.1 – 5.4)	
Outcome 6.	Know how to carry out post-operational procedures	(Criteria 6.1 – 6.3)	

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

There are no endorsements for this Award.

Quality Assurance

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

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

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

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

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

Performance Evaluation

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

M = Met Meets or exceeds the assessment criteria by displaying a level of practical performance and/or underpinning knowledge. If the Criterion has been MET, a tick is to be put in the box provided in the bottom right-hand column of each section.

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

Appeals and Equal Opportunities

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

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

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

Validation of Equipment

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

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

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

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

Safe Practice

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

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

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

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

Before any assessments take place, Assessor & Candidate should be aware of any local or national issues to prevent breach of security, safety and any cross contamination or damage to the local environment.

Information

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

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

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

Assessment Guidance for the Assessor

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

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

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

Assessment Guidance for the Candidate

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

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

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

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

The Qualification Guidance contains criteria relating to:

- Observation of practical performance
- Assessment of underpinning knowledge

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Unit 141 - Operating Boat Mounted Sprayers Fitted With Hydraulic Nozzles/Rotary Atomisers for Applying Pesticides to Water (PA5A)

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

CRITERIA NUMBER	ASSESSMENT CRITERIA	ASSESSOR GUIDANCE	ASSESSMENT ACTIVITIES	CANDIDATE			
				A	B	C	D
Unit 141 1.1	Describe the legal requirements relating to applying pesticides using boat mounted sprayers	<p>Define the term "to or near water". Candidate to state three examples</p> <p>Candidate to describe two legal requirements relating to operating boat mounted sprayers</p> <p>Candidate to describe two legal requirements relating to applying pesticides using boat mounted sprayers</p>	<p>May include:</p> <ul style="list-style-type: none"> any areas, which include drainage channels, streams, rivers, ponds, lakes, reservoirs, canals and dry ditches and the banks or areas immediately adjacent all required guards are in place and equipment complies with legal requirements comply with The Plant Protection Products (Sustainable Use) Regulations 2012 the operator must hold the appropriate certification for the equipment they are using <p>Both required:</p> <ul style="list-style-type: none"> ensure the pesticide has aquatic approval seek environmental agency approval <p style="text-align: right;">Met ✓ Not Met X</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unit 141 1.2	Describe how to apply pesticides safely using boat mounted sprayers following industry best practice	<p>Describe three operator safety requirements in terms of using boat mounted sprayers</p> <p>State two factors which may affect the speed of the boat</p>	<p>May include:</p> <ul style="list-style-type: none"> extra person present at all times comply with relevant codes of practice availability of life ring/rescue devices personal flotation device be aware of any safety implications imposed by COSHH/Risk Assessment and comply with the requirements <p>May include:</p> <ul style="list-style-type: none"> wind speed water flow weed obstruction <p style="text-align: right;">Met ✓ Not Met X</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unit 141 2.1	Identify risks to the aquatic environment	Candidate to identify all relevant environmental factors for the application site	<p>May include:</p> <ul style="list-style-type: none"> wildlife non-target plants hedgerows housing public access sensitive crops/areas water courses boreholes livestock drinking points recreational use water extraction points de-oxygenation of water removal of fish cover removal of bank side wildlife habitat removal of bank side vegetation leading to bank erosion other risks specific to the site <p style="text-align: right;">Met ✓ Not Met X</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

CRITERIA NUMBER	ASSESSMENT CRITERIA	ASSESSOR GUIDANCE	ASSESSMENT ACTIVITIES	CANDIDATE			
				A	B	C	D
Unit 141 2.2	Explain how to minimise risks to the environment	<p>Candidate to explain how to minimise the risks identified in 2.1</p> <p>Candidate to check and comment on wind speed and direction</p> <p>Candidate to state the reason for minimising spray drift</p> <p>Candidate to state four factors that affect spray drift</p>	<p>May include:</p> <ul style="list-style-type: none"> work in an upstream direction (if applicable) treat the permitted area only check weather suitability before treatment check downstream uses before treatment inform neighbours/downstream users before application use an appropriate pesticide (minimal environmental impact) careful timing of treatment check and maintain application rate avoid spray drift exclude livestock erect warning signs <p>To include:</p> <ul style="list-style-type: none"> use of anemometer or visible signs at suitable height wind direction <p>To include:</p> <ul style="list-style-type: none"> avoidance of contamination to people and the environment, including the aquatic environment <p>May include:</p> <ul style="list-style-type: none"> nozzle type nozzle size pressure boat forward speed direction of spraying boom/nozzle height defective equipment <p style="text-align: right;">Met ✓ Not Met X</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unit 141 3.1 Unit 141 3.2	Read product information Interpret product information	<p>The candidate is required to read and interpret the information on a product label and provide relevant information as requested by the Assessor</p> <p>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</p> <p>Note to the Candidate (Assessor also to note): It is acceptable for key information on the label to be highlighted for use during the assessment</p>	<p>May include the following:</p> <ul style="list-style-type: none"> product name active substance(s) (ingredient(s)) <p>Important information:</p> <ul style="list-style-type: none"> field of use (aquatic) target maximum individual dose maximum total dose maximum number of treatments <p>Specific product precautions/warnings</p> <p>operator protection</p> <p>environmental protection</p> <p>restrictions on use</p> <p>Crop specific information:</p> <ul style="list-style-type: none"> target dose rate water volume timing <p>Mixing and spraying:</p> <ul style="list-style-type: none"> filling reduced volume applications (if applicable) recommended nozzles recommended pressure spray quality <ul style="list-style-type: none"> additional label information <p style="text-align: right;">Met ✓ Not Met X</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

CRITERIA NUMBER	ASSESSMENT CRITERIA	ASSESSOR GUIDANCE	ASSESSMENT ACTIVITIES	CANDIDATE			
				A	B	C	D
Unit 141 4.1	Identify sprayer components and controls	Candidate to identify all components and controls relating to the applicator being used for the assessment Identify and explain the use of two types of nozzle, one of which could be that intended for use	May include: <ul style="list-style-type: none"> tank filters pump pressure gauge pulsation damper filling control and devices agitation control pressure or volume regulator/pressure relief valve on/off control boom isolators tank wash system valve positions boom pressure compensation other items specific to the applicator To include: <ul style="list-style-type: none"> flat fan – general purpose air inclusion – reduces drift <p style="text-align: right;">Met ✓ Not Met X</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unit 141 4.2	Carry out pre use checks to the boat	Candidate to carry out all pre-use checks relevant to the boat being used for the assessment	May include: <ul style="list-style-type: none"> suitable for the situation accessibility of boat controls accessibility of sprayer controls even loading outboard motor applicator power source presence of personal flotation device no equipment on operator's back when operating from the boat <p style="text-align: right;">Met ✓ Not Met X</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unit 141 4.3	Carry out pre-use and operational checks to the sprayer	Candidate to carry out all pre-use and operational checks to the sprayer/applicator Check security of attachment of applicator mechanisms Check for mechanical defects Check that the applicator is lubricated correctly Check boom settings, suspension and break-back devices Remove, clean and refit a filter Remove, clean/replace and refit a nozzle/restrictor	May include: <ul style="list-style-type: none"> fasteners tight straps inspected and adjusted if necessary seized, worn or damaged controls/components atomiser drives/electrical connectors identification of lubrication points visual inspection of lubrication points visual inspection of levels boom suspension operational break-back efficiency height adjustment Candidate to: <ul style="list-style-type: none"> remove and clean using appropriate method contain spillage check for defects, replace if damaged refit Candidate to: <ul style="list-style-type: none"> remove and clean using appropriate method contain spillage check for defects replace if worn/damaged refit 	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Continued				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

CRITERIA NUMBER	ASSESSMENT CRITERIA	ASSESSOR GUIDANCE	ASSESSMENT ACTIVITIES	CANDIDATE			
				A	B	C	D
Cont... Unit 141 4.3		<p>Explain how to use the control panel to ensure that the applicator is functioning correctly (if applicable)</p> <p>Part fill applicator</p> <p>Check applicator for leaks and correct spray patterns</p> <p>State one suitable action in the event of the control panel failing (if applicable)</p>	<p>May include:</p> <ul style="list-style-type: none"> • functions of control panel • recognition of malfunctions before and during operation • check accuracy of base settings • switch to manual/test mode where applicable <p>To include:</p> <ul style="list-style-type: none"> • suitable site selected • safe, secure mooring when transferring pesticides • fill by usual on-site method, following approved procedures • clean water supply <p>May include:</p> <ul style="list-style-type: none"> • use higher than normal operating pressure • visual check of all nozzles/atomisers for correct spray patterns, absence of blockages, streaking, pulsing • correct alignment • replace defective nozzles/atomisers/discs • lids and seals • pipe work and connections • control valves • filters • pressure gauge • diaphragm check valves <p>May include:</p> <ul style="list-style-type: none"> • stop pesticide application • manual operation of controls if possible <p style="text-align: right;">Met ✓ Not Met X</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unit 141 4.4	Calibrate the sprayer and record relevant data	<p>Candidate is required to calibrate the applicator and record relevant data</p> <p>Select and record boat forward speed</p> <p>Calculate required output/volume rate</p> <p>Select appropriate nozzle/atomiser using manufacturers literature (if available)</p> <p>Set operating pressure/disc speed</p> <p>Check nozzle/atomiser outputs</p>	<p>Calibration may include the following:</p> <ul style="list-style-type: none"> • direction of travel (upstream or downstream) • suitable boat forward speed for target • appropriate engine speed established • accurate measurement of distance • accurate measurement of time taken to cover distance • correct use of formula to establish forward speed • correct use of formula • use of manufacturers operators handbook • use of nozzle/atomiser manufacturers literature • confirm requirements of product label • pressure as determined by nozzle chart • disc speed as determined by manufacturers literature • pressurise/purge appropriate to the system • use a measuring jug check to check output from at least one nozzle/atomiser per boom section (minimum of three per applicator) • compare with target output • vary pressure to make small adjustments • change nozzles/atomisers if required • Or any other acceptable method 	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Continued				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

CRITERIA NUMBER	ASSESSMENT CRITERIA	ASSESSOR GUIDANCE	ASSESSMENT ACTIVITIES	CANDIDATE			
				A	B	C	D
Cont... Unit 141 4.4		State four pieces of calibration data that should be recorded	May include: <ul style="list-style-type: none"> boat identification boat engine speed sprayer engine speed boat forward speed application volume nozzle/restrictor/disc fitted pressure/disc speed flow rate <p style="text-align: right;">Met ✓ Not Met X</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unit 141 4.5	Calculate the quantities of pesticide and water required for a specified area	Candidate to calculate quantities required for both a specified area and full tank area	To include: <ul style="list-style-type: none"> amount of water required for specified area amount of pesticide required for specified area amount of pesticide required for full tank <p style="text-align: right;">Met ✓ Not Met X</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unit 141 5.1	Measure the required quantities and add to the applicator	Candidate to measure and add quantities required for the area specified in 4.5	To include: <ul style="list-style-type: none"> safe, secure mooring when transferring pesticides and equipment correct selection and use of PPE (as required by the product label and/or COSHH/Risk Assessment) suitable site selected fill by usual on-site method, following approved procedures clean water supply accurate measurement of water accurate measurement of pesticide correct filling procedure use of filling device if fitted avoidance of spillage observance of pesticide manufacturers instructions for mixing and agitation <p style="text-align: right;">Met ✓ Not Met X</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unit 141 5.2	Demonstrate safe and accurate application procedures	Candidate to describe two possible methods of marking out the site to achieve accurate application Candidate to explain the appropriate procedure to follow when the applicator needs refilling part way through an application Candidate to explain the appropriate procedure to follow when a nozzle/restrictor becomes blocked during an application Treat a specified area appropriate to the candidates normal work situation and sufficient to demonstrate safe and accurate application procedures	May include: <ul style="list-style-type: none"> marker poles blob markers buoys GPS Explanation to include: <ul style="list-style-type: none"> mark the spot at which the applicator emptied refill applicator continue spraying by accurately matching at the appropriate point Explanation to include: <ul style="list-style-type: none"> mark the spot select and use appropriate PPE clean or replace nozzle/restrictor as appropriate To include: <ul style="list-style-type: none"> ensure boom is level or aligned to the target correct boom/nozzle height according to target operate controls to start and finish applying accurately at the beginning and end of each bout correct forward speed and pressure for site conditions accurate matching of bouts/use of marking aids coping with obstacles all of specified area treated, minimising overlaps and misses awareness of changes in wind speed and direction <p style="text-align: right;">Met ✓ Not Met X</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

CRITERIA NUMBER	ASSESSMENT CRITERIA	ASSESSOR GUIDANCE	ASSESSMENT ACTIVITIES	CANDIDATE			
				A	B	C	D
Unit 141 5.3	Carry out all activities protecting human health and the environment	Note to the Assessor: Assessor to be satisfied that the candidate has carried out all activities protecting human health and the environment	To include: <ul style="list-style-type: none"> prevention of personal injury and contamination through correct selection and use of PPE (as required by the product information, COSHH/Risk Assessment) prevention of public/bystander contamination safe filling procedure avoidance of spray drift avoidance of off target application/contamination avoidance of over dosing/under dosing target/plant material minimising the impact on the aquatic environment <p style="text-align: right;">Met ✓ Not Met X</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unit 141 5.4	Complete a treatment record	Candidate is required to complete a treatment record Note to the Assessor: The treatment record must be approved by the Assessor (or supplied by the Assessor if necessary)	Completion of the treatment record must be: <ul style="list-style-type: none"> accurate legible (if handwritten) <p style="text-align: right;">Met ✓ Not Met X</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unit 141 6.1	Explain how to manage surplus pesticide and waste material	Candidate to explain one method of dealing with surplus concentrate pesticide Candidate to explain two methods of dealing with waste containers or packaging Candidate to explain two methods of dealing with surplus dilute pesticide	May include: <ul style="list-style-type: none"> return to temporary mobile store return to fixed store containers: <ul style="list-style-type: none"> triple rinsed placed in secure storage until disposal returned to supplier collected by licensed waste contractor packaging: <ul style="list-style-type: none"> thoroughly emptied placed in secure storage until disposal collected by a licensed waste disposal contractor May include: <ul style="list-style-type: none"> back on to site as long as it is below the maximum dose rate use on another approved target treated by specialist treatment facility on site (e.g. a lined bio bed) collected by a licensed waste disposal contractor <p style="text-align: right;">Met ✓ Not Met X</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unit 141 6.2	Explain how to clean and decontaminate the sprayer and the boat	Candidate to explain four factors that need to be considered when cleaning and decontaminating the sprayer and the boat	May include: <ul style="list-style-type: none"> select and use appropriate PPE appropriate site thorough washing with water and suitable cleaning agent (if recommended/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 appropriate bio-security measures implemented safe disposal of contaminated washings when cleaning, ensure covers when under repair safe procedures followed <p style="text-align: right;">Met ✓ Not Met X</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

CRITERIA NUMBER	ASSESSMENT CRITERIA	ASSESSOR GUIDANCE	ASSESSMENT ACTIVITIES	CANDIDATE			
				A	B	C	D
Unit 141 6.3	Describe the storage requirements for the sprayer	Candidate to describe three factors to consider prior to storing the applicator	May include: <ul style="list-style-type: none"> • ensure the applicator is clean and dry • inspect for wear and damage • replace any worn or damaged parts • controls left in appropriate positions • frost protection measures implemented • lubricate as required • store undercover and out of direct sunlight • store in a secure area <p style="text-align: right;">Met ✓ Not Met</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Unit 142 - Operating Boat Mounted Granular Applicators for Applying Pesticides to Water (PA5B)

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

CRITERIA NUMBER	ASSESSMENT CRITERIA	ASSESSOR GUIDANCE	ASSESSMENT ACTIVITIES	CANDIDATE			
				A	B	C	D
Unit 142 1.1	Describe the legal requirements relating to applying pesticides using boat mounted granular applicators	<p>Define the term "to or near water". Candidate to state three examples</p> <p>Candidate to describe two legal requirements relating to operating boat mounted granular applicators</p> <p>Candidate to describe two legal requirements relating to applying pesticides using boat mounted granular applicators</p>	<p>May include:</p> <ul style="list-style-type: none"> any areas, which include drainage channels, streams, rivers, ponds, lakes, reservoirs, canals and dry ditches and the banks or areas immediately adjacent all required guards are in place and equipment complies with legal requirements comply with The Plant Protection Products (Sustainable Use) Regulations 2012 the operator must hold the appropriate certification for the equipment they are using <p>Both required:</p> <ul style="list-style-type: none"> ensure the pesticide has aquatic approval seek environmental agency approval <p style="text-align: right;">Met ✓ Not Met X</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unit 142 1.2	Describe how to apply pesticides safely using boat mounted granular applicators following industry best practice	<p>Describe three operator safety requirements in terms of using boat mounted granular applicators</p> <p>State two factors which may affect the speed of the boat</p>	<p>May include:</p> <ul style="list-style-type: none"> extra person present at all times comply with relevant codes of practice availability of life ring/rescue devices personal flotation device be aware of any safety implications imposed by COSHH/Risk Assessment and comply with the requirements <p>May include:</p> <ul style="list-style-type: none"> wind speed water flow weed obstruction <p style="text-align: right;">Met ✓ Not Met X</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unit 142 2.1	Identify risks to the aquatic environment	Candidate to identify all relevant environmental factors for the application site	<p>May include:</p> <ul style="list-style-type: none"> wildlife non-target plants hedgerows housing public access sensitive crops/areas water courses boreholes livestock drinking points recreational use water extraction points de-oxygenation of water removal of fish cover removal of bank side wildlife habitat removal of bank side vegetation leading to bank erosion other risks specific to the site <p style="text-align: right;">Met ✓ Not Met X</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

CRITERIA NUMBER	ASSESSMENT CRITERIA	ASSESSOR GUIDANCE	ASSESSMENT ACTIVITIES	CANDIDATE			
				A	B	C	D
Unit 142 2.2	Explain how to minimise risks to the environment	<p>Candidate to explain how to minimise the risks identified in 2.1</p> <p>Candidate to check and comment on wind speed and direction</p> <p>Candidate to state five factors that may affect uniformity of spread from the applicator</p>	<p>May include:</p> <ul style="list-style-type: none"> work in an upstream direction (if applicable) treat the permitted area only check weather suitability before treatment check downstream uses before treatment inform neighbours/downstream users before application use an appropriate pesticide (minimal environmental impact) careful timing of treatment check and maintain application rate avoid spray drift exclude livestock erect warning signs <p>To include:</p> <ul style="list-style-type: none"> use of anemometer or visible signs at suitable height wind direction <p>May include:</p> <ul style="list-style-type: none"> applicator levelled according to manufacturer's recommendations applicator at correct height correct settings of spreading mechanism consistency of disc speed size/density of granules wind boat forward speed <p style="text-align: right;">Met ✓ Not Met X</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unit 142 3.1 3.2	Read product information Interpret product information	<p>The candidate is required to read and interpret the information on a product label and provide relevant information as requested by the Assessor</p> <p>Note to the Assessor: A product label is required. It is expected that the candidate will provide the product label</p> <p>The label provided must be for a currently approved product and appropriate to the candidates normal work situation</p> <p>Note to the Candidate (Assessor also to note): It is acceptable for key information on the label to be highlighted for use during the assessment</p>	<p>May include the following:</p> <ul style="list-style-type: none"> product name active substance(s) (ingredient(s)) <p>Important information:</p> <ul style="list-style-type: none"> field of use (aquatic) target maximum individual dose maximum total dose maximum number of treatments specific product precautions/warnings operator protection environmental protection restrictions on use <p>Crop specific information:</p> <ul style="list-style-type: none"> target dose rate timing filling recommendations additional label information <p style="text-align: right;">Met ✓ Not Met X</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unit 142 4.1	Identify applicator components and controls	Candidate to identify all components and controls relating to the applicator being used for the assessment	<p>May include:</p> <ul style="list-style-type: none"> on/off control metering mechanism bias mechanism hopper lid emptying outlet/mechanism agitator disc speed control spread width limiter other controls specific to the applicator <p style="text-align: right;">Met ✓ Not Met X</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

CRITERIA NUMBER	ASSESSMENT CRITERIA	ASSESSOR GUIDANCE	ASSESSMENT ACTIVITIES	CANDIDATE			
				A	B	C	D
Unit 142 4.2	Carry out pre use checks to the boat	Candidate to carry out all pre-use checks relevant to the boat being used for the assessment	<p>May include:</p> <ul style="list-style-type: none"> suitable for the situation accessibility of boat controls accessibility of applicator controls even loading outboard motor applicator power source presence of personal flotation device <p style="text-align: right;">Met ✓ Not Met X</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unit 142 4.3	Carry out pre-use and operational checks to the applicator	<p>Candidate to carry out all pre-use and operational checks to the applicator</p> <p>Check security of attachment of applicator mechanisms</p> <p>Check for mechanical defects</p> <p>Check that the applicator is lubricated correctly</p> <p>Explain how to use the control panel to ensure that the applicator is functioning correctly (if applicable)</p> <p>Part fill applicator</p> <p>State one suitable action in the event of the control panel failing</p>	<p>May include:</p> <ul style="list-style-type: none"> fasteners tight straps inspected and adjusted if necessary seized, worn or damaged controls/components electrical connectors identification of lubrication points visual inspection of lubrication points visual inspection of levels any problems identified to be rectified if within operators level of responsibility and ability <p>May include:</p> <ul style="list-style-type: none"> functions of control panel recognition of malfunctions before and during operation check accuracy of base settings switch to manual/test mode where applicable <p>To include:</p> <ul style="list-style-type: none"> suitable site selected safe, secure mooring when transferring pesticides fill by usual on-site method, following approved procedures <p>May include:</p> <ul style="list-style-type: none"> stop pesticide application manual operation of controls if possible <p style="text-align: right;">Met ✓ Not Met X</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unit 142 4.4	Calibrate the applicator and record relevant data	<p>Candidate is required to calibrate the applicator and record relevant data</p> <p>Select and record boat forward speed</p> <p>Calculate required output</p> <p>Set applicator to achieve required application rate</p> <p>Carry out check of application rate and adjust applicator to achieve the correct application rate</p>	<p>May include:</p> <ul style="list-style-type: none"> direction of travel (upstream or downstream) suitable boat forward speed for target appropriate engine speed established accurate measurement of distance accurate measurement of time taken to cover distance correct use of formula to establish forward speed use of manufacturers handbook/application charts correct use of formula use of manufacturers handbook/application charts follow recommendations given in manufacturers operator handbook run applicator for specific period of time or distance care to avoid moving parts collect product distributed (if applicable) accurate weighing of output compare with target rates (check product label) repeat until target rates achieved 	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Continued							

CRITERIA NUMBER	ASSESSMENT CRITERIA	ASSESSOR GUIDANCE	ASSESSMENT ACTIVITIES	CANDIDATE			
				A	B	C	D
Cont... Unit 142 4.4		Candidate to state four items of data that should be recorded for future reference	May include: <ul style="list-style-type: none"> applicator settings granule used for calibration application rate achieved spreading width engine speed boat forward speed <p style="text-align: right;">Met ✓ Not Met X</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unit 142 4.5	Calculate the quantities of pesticide required for a specified area/volume	Candidate to calculate the quantity of granules required for a specified area or volume	To include: <ul style="list-style-type: none"> the correct amount required for the specified area or volume <p style="text-align: right;">Met ✓ Not Met X</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unit 142 5.1	Measure the required quantities and add to the applicator	Candidate to measure and add quantities required for the area/volume specified in 4.5	To include: <ul style="list-style-type: none"> safe, secure mooring when transferring pesticides and equipment correct selection and use of PPE/RPE (as required by the product label and/or COSHH/Risk Assessment) suitable site selected fill by usual on-site method, following approved procedures accurate measurement of pesticide correct filling procedure avoidance of spillage <p style="text-align: right;">Met ✓ Not Met X</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unit 142 5.2	Demonstrate safe and accurate application procedures	Candidate to describe two possible methods of marking out the site to achieve accurate application Candidate to explain the appropriate procedure to follow when the applicator needs refilling part way through an application Treat a specified area appropriate to the candidates normal work situation and sufficient to demonstrate safe and accurate application procedures	May include: <ul style="list-style-type: none"> marker poles blob markers buoys GPS Explanation to include: <ul style="list-style-type: none"> mark the spot at which the applicator emptied refill applicator continue applying by accurately matching at the appropriate point To include: <ul style="list-style-type: none"> ensure applicator is level applicator set at the correct height operate controls to start and finish applying accurately at beginning and end of each bout maintain correct boat forward speed accurate matching of bouts awareness of techniques to counteract unbalanced applicator performance coping with obstacles correct application rate check uniformity of spread all areas treated, minimising overlaps or misses awareness of changes in wind speed and direction <p style="text-align: right;">Met ✓ Not Met X</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unit 142 5.3	Carry out all activities protecting human health and the environment	Note to the Assessor: Assessor to be satisfied that the candidate has carried out all activities protecting human health and the environment	To include: <ul style="list-style-type: none"> prevention of personal injury and contamination through correct selection and use of PPE/RPE (as required by the product information, COSHH/Risk Assessment) prevention of public/bystander contamination safe filling procedure avoidance of off target application/contamination avoidance of over dosing/under dosing target/plant material minimising the impact on the aquatic environment <p style="text-align: right;">Met ✓ Not Met X</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

CRITERIA NUMBER	ASSESSMENT CRITERIA	ASSESSOR GUIDANCE	ASSESSMENT ACTIVITIES	CANDIDATE			
				A	B	C	D
Unit 142 5.4	Complete a treatment record	Candidate is required to complete a treatment record Note to the Assessor: The treatment record must be approved by the Assessor (or supplied by the Assessor if necessary)	Completion of the treatment record must be: <ul style="list-style-type: none"> accurate legible (if handwritten) <p style="text-align: right;">Met ✓ Not Met X</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unit 142 6.1	Explain how to manage surplus pesticide and waste material	Candidate to state three factors to consider when recovering surplus granules from the applicator Candidate to state one method of storing surplus granules Candidate to state two methods of dealing with waste packaging	May include: <ul style="list-style-type: none"> avoid personal contamination select appropriate PPE/RPE ensure that the applicator is made safe (engine stopped, power isolated) select appropriate site appropriate container used correct product information attached May include: <ul style="list-style-type: none"> return to temporary mobile store return to fixed storage facility May include: <ul style="list-style-type: none"> packaging thoroughly emptied placed in secure storage until disposal collection via a licensed waste disposal contractor <p style="text-align: right;">Met ✓ Not Met X</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unit 142 6.2	Explain how to clean and decontaminate the applicator and the boat	Candidate to explain four factors that need to be considered when cleaning and decontaminating the applicator and the boat	May include: <ul style="list-style-type: none"> danger of personal contamination select appropriate PPE select an appropriate containment site appropriate containers for contaminated material follow manufacturers cleaning procedure ensure that the applicator is made safe (engine stopped, power isolated) suitable containment/disposal of granules or contaminated arisings from cleaning operation appropriate bio-security measures implemented when the applicator should be cleaned, ensure covers when under repair <p style="text-align: right;">Met ✓ Not Met X</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unit 142 6.3	Describe the storage requirements for the applicator	Candidate to describe three factors to consider prior to storing the applicator	May include: <ul style="list-style-type: none"> refer to manufacturers handbook ensure applicator is clean and decontaminated inspect for wear and damage replace any worn or damaged parts carry out lubrication procedures store under cover and out of direct sunlight store in a secure area <p style="text-align: right;">Met ✓ Not Met X</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Unit 143 - Operating Boat Mounted Applicators for Applying Piscicides to Water (PA5P)

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

CRITERIA NUMBER	ASSESSMENT CRITERIA	ASSESSOR GUIDANCE	ASSESSMENT ACTIVITIES	CANDIDATE			
				A	B	C	D
Unit 143 1.1	Describe the legal requirements relating to applying piscicides using boat mounted applicators	<p>Define the term "to or near water". Candidate to state three examples</p> <p>Candidate to describe two legal requirements relating to operating boat mounted applicators</p> <p>Candidate to describe two legal requirements relating to applying piscicides using boat mounted applicators</p>	<p>May include:</p> <ul style="list-style-type: none"> • any areas, which include drainage channels, streams, rivers, ponds, lakes, reservoirs, canals and dry ditches and the banks or areas immediately adjacent • all required guards are in place and equipment complies with legal requirements • comply with The Plant Protection Products (Sustainable Use) Regulations 2012 • the operator must hold the appropriate certification for the equipment they are using <p>Both required:</p> <ul style="list-style-type: none"> • ensure the piscicide has aquatic approval • seek environmental agency approval <p style="text-align: right;">Met ✓ Not Met X</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unit 143 1.2	Describe how to apply piscicides safely using boat mounted applicators following industry best practice	<p>Describe three operator safety requirements in terms of using boat mounted applicators</p> <p>State two factors which may affect the speed of the boat</p>	<p>May include:</p> <ul style="list-style-type: none"> • extra person present at all times • comply with relevant codes of practice • availability of life ring/rescue devices • personal flotation device • be aware of any safety implications imposed by COSHH/Risk Assessment and comply with the requirements <p>May include:</p> <ul style="list-style-type: none"> • wind speed • water flow • weed obstruction <p style="text-align: right;">Met ✓ Not Met X</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unit 143 2.1	Identify risks to the aquatic environment	Candidate to identify all relevant environmental factors for the application site	<p>May include:</p> <ul style="list-style-type: none"> • wildlife • housing • public access • water courses • boreholes • livestock drinking points • recreational use • water extraction points • de-oxygenation of water • other risks specific to the site <p style="text-align: right;">Met ✓ Not Met X</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

CRITERIA NUMBER	ASSESSMENT CRITERIA	ASSESSOR GUIDANCE	ASSESSMENT ACTIVITIES	CANDIDATE			
				A	B	C	D
Unit 143 2.2	Explain how to minimise risks to the environment	Candidate to explain how to minimise the risks identified in 2.1 Candidate to check and comment on wind speed and direction	May include: <ul style="list-style-type: none"> work in an upstream direction (if applicable) treat the permitted area only check weather suitability before treatment check downstream uses before treatment inform neighbours/downstream users before application use an appropriate piscicide (minimal environmental impact) careful timing of treatment check and maintain application rate exclude livestock erect warning signs To include: <ul style="list-style-type: none"> use of anemometer or visible signs at suitable height wind direction <p style="text-align: right;">Met ✓ Not Met X</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unit 143 3.1 3.2	Read product information Interpret product information	The candidate is required to read and interpret the information on a product label and provide relevant information as requested by the Assessor Note to the Assessor: A product label is required. It is expected that the candidate will provide the product label. 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 for key information on the label to be highlighted for use during the assessment	May include the following: <ul style="list-style-type: none"> product name active substance(s) (ingredient(s)) Important information: <ul style="list-style-type: none"> field of use (aquatic) 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: <ul style="list-style-type: none"> target dose rate water volume timing Mixing and spraying: <ul style="list-style-type: none"> filling recommended pressure additional label information <p style="text-align: right;">Met ✓ Not Met X</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unit 143 4.1	Identify applicator components and controls	Candidate to identify all components and controls relating to the applicator being used for the assessment	May include: <ul style="list-style-type: none"> tank filters pump pressure gauge filling control and devices agitation control pressure or volume regulator/pressure relief valve on/off control boom isolators tank wash system valve positions boom pressure compensation distribution outlet other items specific to the applicator <p style="text-align: right;">Met ✓ Not Met X</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

CRITERIA NUMBER	ASSESSMENT CRITERIA	ASSESSOR GUIDANCE	ASSESSMENT ACTIVITIES	CANDIDATE			
				A	B	C	D
Unit 143 4.2	Carry out pre use checks to the boat	Candidate to carry out all pre-use checks relevant to the boat being used for the assessment	<p>May include:</p> <ul style="list-style-type: none"> suitable for the situation accessibility of boat controls accessibility of applicator controls even loading outboard motor applicator power source presence of personal flotation device no equipment on operator's back when operating from the boat <p style="text-align: right;">Met ✓ Not Met X</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unit 143 4.3	Carry out pre-use and operational checks to the applicator	<p>Candidate to carry out all pre-use and operational checks to the applicator/applicator</p> <p>Check security of attachment of applicator mechanisms</p> <p>Check for mechanical defects</p> <p>Check that the applicator is lubricated correctly</p> <p>Check boom settings, suspension and break-back devices</p> <p>Remove, clean and refit a filter</p> <p>Explain how to use the control panel to ensure that the applicator is functioning correctly (if applicable)</p> <p>Part fill applicator</p> <p>Check applicator for leaks</p> <p>State one suitable action in the event of the control panel failing</p>	<p>May include:</p> <ul style="list-style-type: none"> fasteners tight straps inspected and adjusted if necessary seized, worn or damaged controls/components atomiser drives/electrical connectors identification of lubrication points visual inspection of lubrication points visual inspection of levels boom suspension operational break-back efficiency height adjustment <p>Candidate to:</p> <ul style="list-style-type: none"> remove and clean using appropriate method contain spillage check for defects, replace if damaged refit <p>May include:</p> <ul style="list-style-type: none"> functions of control panel recognition of malfunctions before and during operation check accuracy of base settings switch to manual/test mode where applicable <p>To include:</p> <ul style="list-style-type: none"> suitable site selected safe secure mooring when transferring piscicides fill by usual on-site method, following approved procedures clean water supply <p>May include:</p> <ul style="list-style-type: none"> use higher than normal operating pressure lids and seals pipe work and connections control valves filters pressure gauge <p>May include:</p> <ul style="list-style-type: none"> stop piscicide application manual operation of controls if possible <p style="text-align: right;">Met ✓ Not Met X</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

CRITERIA NUMBER	ASSESSMENT CRITERIA	ASSESSOR GUIDANCE	ASSESSMENT ACTIVITIES	CANDIDATE			
				A	B	C	D
Unit 143 4.4	Calibrate the applicator and record relevant data	<p>Candidate is required to calibrate the applicator and record relevant data</p> <p>Select and record boat forward speed</p> <p>Calculate required output/volume rate</p> <p>Set operating pressure</p> <p>Check distribution outlet outputs</p> <p>State four pieces of calibration data that should be recorded</p>	<p>Calibration may include the following:</p> <ul style="list-style-type: none"> direction of travel (upstream or downstream) suitable boat forward speed for target appropriate engine speed established accurate measurement of distance accurate measurement of time taken to cover distance correct use of formula to establish forward speed correct use of formula pressure as determined by manufacturers literature pressurise/purge appropriate to the system measure output compare with target output vary pressure to make small adjustments or any other acceptable method <p>May include:</p> <ul style="list-style-type: none"> boat identification boat engine speed applicator engine speed boat forward speed application volume pressure flow rate <p style="text-align: right;">Met ✓ Not Met X</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unit 143 4.5	Calculate the quantities of piscicide and water required for a specified area	Candidate to calculate quantities required for both a specified area and full tank area	<p>To include:</p> <ul style="list-style-type: none"> amount of water required for specified area/volume amount of piscicide required for specified area/volume amount of piscicide required for full tank <p style="text-align: right;">Met ✓ Not Met X</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unit 143 5.1	Measure the required quantities and add to the applicator	Candidate to measure and add quantities required for the area specified in 4.5	<p>To include:</p> <ul style="list-style-type: none"> safe, secure mooring when transferring piscicides and equipment correct selection and use of PPE/RPE (as required by the product label and/or COSHH/Risk Assessment) suitable site selected fill by usual on-site method, following approved procedures clean water supply accurate measurement of water accurate measurement of piscicide correct filling procedure use of filling device if fitted avoidance of spillage observance of piscicide manufacturer's instructions for mixing and agitation <p style="text-align: right;">Met ✓ Not Met X</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unit 143 5.2 Continued	Demonstrate safe and accurate application procedures	<p>Candidate to describe two possible methods of marking out the site to achieve accurate application</p> <p>Candidate to explain the appropriate procedure to follow when the applicator needs refilling part way through an application</p>	<p>May include:</p> <ul style="list-style-type: none"> marker poles blob markers buoys GPS <p>Explanation to include:</p> <ul style="list-style-type: none"> mark the spot at which the applicator emptied refill applicator continue spraying by accurately matching at the appropriate point 	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

CRITERIA NUMBER	ASSESSMENT CRITERIA	ASSESSOR GUIDANCE	ASSESSMENT ACTIVITIES	CANDIDATE			
				A	B	C	D
Cont... Unit 143 5.2		Treat a specified area appropriate to the candidates normal work situation and sufficient to demonstrate safe and accurate application procedures	To include: <ul style="list-style-type: none"> operate controls to start and finish applying accurately at the beginning and end of each bout correct forward speed and pressure for site conditions accurate matching of bouts/use of marking aids coping with obstacles all of specified area treated awareness of changes in wind speed and direction <p style="text-align: right;">Met ✓ Not Met X</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unit 143 5.3	Carry out all activities protecting human health and the environment	Note to the Assessor: Assessor to be satisfied that the candidate has carried out all activities protecting human health and the environment	To include: <ul style="list-style-type: none"> prevention of personal injury and contamination through correct selection and use of PPE (as required by the product information, COSHH/Risk Assessment) prevention of public/bystander contamination safe filling procedure avoidance of off target application/contamination avoidance of over dosing/under dosing target minimising the impact on the aquatic environment <p style="text-align: right;">Met ✓ Not Met X</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unit 143 5.4	Complete a treatment record	Candidate is required to complete a treatment record Note to the Assessor: The treatment record must be approved by the Assessor (or supplied by the Assessor if necessary)	Completion of the treatment record must be: <ul style="list-style-type: none"> accurate legible (if handwritten) <p style="text-align: right;">Met ✓ Not Met X</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unit 143 6.1	Explain how to manage surplus piscicide and waste material	Candidate to explain one method of dealing with surplus concentrate piscicide Candidate to explain two methods of dealing with waste containers or packaging Candidate to explain one method of dealing with surplus dilute piscicide	May include: <ul style="list-style-type: none"> return to temporary mobile store return to fixed store containers: <ul style="list-style-type: none"> triple rinsed placed in secure storage until disposal returned to supplier collected by licensed waste contractor packaging: <ul style="list-style-type: none"> thoroughly emptied placed in secure storage until disposal collected by a licensed waste disposal contractor May include: <ul style="list-style-type: none"> back on to site as long as it is below the maximum dose rate collected by a licensed waste disposal contractor <p style="text-align: right;">Met ✓ Not Met X</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unit 143 6.2	Explain how to clean and decontaminate the applicator and the boat	Candidate to explain four factors need to be considered when cleaning and decontaminating the applicator and the boat	May include: <ul style="list-style-type: none"> select and use appropriate PPE appropriate site thorough washing with water and suitable cleaning agent (if recommended/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 appropriate bio-security measures implemented safe disposal of contaminated washings when cleaning should take place safe procedures followed <p style="text-align: right;">Met ✓ Not Met X</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

CRITERIA NUMBER	ASSESSMENT CRITERIA	ASSESSOR GUIDANCE	ASSESSMENT ACTIVITIES	CANDIDATE			
				A	B	C	D
Unit 143 6.3	Describe the storage requirements for the applicator	Candidate to describe three factors to consider prior to storing the applicator	May include: <ul style="list-style-type: none"> • ensure the applicator is clean and dry • inspect for wear and damage • replace any worn or damaged parts • controls left in appropriate positions • frost protection measures implemented • lubricate as required • store undercover and out of direct sunlight • store in a secure area <p style="text-align: right;">Met ✓ Not Met X</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Summary of Assessment (The Assessor is to complete the following as appropriate)

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

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

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

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

For use by Internal Verifier ONLY if the assessment process was internally verified
(Internal Verifier to complete ONE of the boxes below)

I observed an assessment process taking place and I am satisfied that the assessment was conducted in line with the qualification requirements.	Tick <input checked="" type="checkbox"/> <input type="checkbox"/>
I observed an assessment process taking place. The following were noted as areas of concern.	Tick <input checked="" type="checkbox"/> <input type="checkbox"/>
Signed:	
Date:	