

# **City & Guilds Level 2 Award in The Safe Application of Pesticides Using Pedestrian Hand Held Equipment (PA6) (0216-54)**

**Version 1.3 (February 2025)**

## **Qualification Handbook**

## Qualification at a glance

|                                       |                                                                                                                                                                                                                                                                                                                                                                           |
|---------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Subject area</b>                   | Pesticides and Pest Control                                                                                                                                                                                                                                                                                                                                               |
| <b>City &amp; Guilds number</b>       | 0216-54                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Age group approved</b>             | 16+                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Entry requirements</b>             | Candidate must meet minimum age requirements                                                                                                                                                                                                                                                                                                                              |
| <b>Assessment</b>                     | <p>To gain this qualification, candidates must successfully achieve the following:</p> <ul style="list-style-type: none"> <li>• E-volve based multiple choice examination to be conducted in a suitably controlled and invigilated environment</li> <li>• one to one practical assessment with oral questioning by an NPTC City &amp; Guilds approved assessor</li> </ul> |
| <b>Grading</b>                        | Pass only                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Approvals</b>                      | Full centre approval<br>Qualification approval                                                                                                                                                                                                                                                                                                                            |
| <b>Support materials</b>              | Qualification Handbook.<br>Assessment materials (approved assessment Centers only).                                                                                                                                                                                                                                                                                       |
| <b>Registration and certification</b> | Consult the Walled Garden/Online Catalogue for last Registration and Certification dates.                                                                                                                                                                                                                                                                                 |

| Title and level                                                                                              | City & Guilds qualification number | Regulatory reference number | GLH | TQT |
|--------------------------------------------------------------------------------------------------------------|------------------------------------|-----------------------------|-----|-----|
| City & Guilds Level 2 Award in The Safe Application of Pesticides Using Pedestrian Hand Held Equipment (PA6) | 0216-54                            | 601/5145/6                  | 54  | 60  |

| Version and date  | Change detail                                                  | Section                         |
|-------------------|----------------------------------------------------------------|---------------------------------|
| 1.0 February 2024 | Initial version                                                | All                             |
| 1.1 August 2024   | Update of Quality Assurance Statement<br>Changes to Formatting | 3. Centre Requirements<br>All   |
| 1.2 October 2024  | Unit Numbers amended                                           | All                             |
| 1.3 February 2025 | Inclusion & diversity and Sustainability sections added        | 4. Delivering the qualification |

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# 1 Introduction

This document tells you what you need to do to deliver the **City & Guilds Level 2 Award in The Safe Application of Pesticides Using Pedestrian Hand Held Equipment (PA6) (0216-54)**

| Area                                                     | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|----------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Who is the qualification for?                            | <p>Type of Learner: If your job involves applying pesticides in a commercial role then you are legally required by the Plant Protection Products (Sustainable Use) Regulations (2012) to take this qualification.</p> <p>Qualification Overview: This qualification is designed specifically for those who wish to apply pesticides using various types of handheld applicators.</p> <p>What you need to do: Candidates to undertake an oral and practical assessment</p> |
| What does the qualification cover?                       | <p>This qualification covers the requirements for the safe application of pesticides using pedestrian handheld equipment.</p> <p>Please refer to the Qualification Handbook for more detail.</p>                                                                                                                                                                                                                                                                          |
| What opportunities for progression are there?            | <p>Recommended progression onto 0216-63 – City &amp; Guilds Level 3 Award in Responsible Pesticide Management.</p> <p>Once a candidate has successfully completed this qualification, they are able to legally apply pesticides using the methods and equipment identified within this qualification.</p>                                                                                                                                                                 |
| Who did we develop the qualification with?               | <p>Developed with the Health and Safety Executive, Chemical Regulation Division, Voluntary Initiative and practicing industry stakeholders, DEFRA, Environment Agency.</p>                                                                                                                                                                                                                                                                                                |
| Is it part of an apprenticeship framework or initiative? | No                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |

## **Assessment Guidance for the Candidate**

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

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

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

## 2 Qualification Structure

To achieve the **City & Guilds Level 2 Award in The Safe Application of Pesticides Using Pedestrian Hand Held Equipment (PA6) (0216-54)** learners must achieve:

| City & Guilds unit number | Unit title | GLH |
|---------------------------|------------|-----|
|---------------------------|------------|-----|

**Unit from 0216-49 City & Guilds NPTC Level 2 Principles of Safe Handling and Application of Pesticides (PA1):**

Learners must have achieved **this** mandatory unit prior:

|     |                                                                 |    |
|-----|-----------------------------------------------------------------|----|
| 101 | Principles of Safe Handling and Application of Pesticides (PA1) | 26 |
|-----|-----------------------------------------------------------------|----|

**Optional units:**

Learners must achieve **one** of the following **seven** units from the optional units.

|     |                                                                                                                                          |    |
|-----|------------------------------------------------------------------------------------------------------------------------------------------|----|
| 265 | Operating pedestrian handheld applicators fitted with hydraulic nozzles or rotary atomisers to apply pesticides to land (PA6A)           | 54 |
| 266 | Operating pedestrian handheld applicators fitted with hydraulic nozzles or rotary atomisers to apply pesticides to or near water (PA6AW) | 54 |
| 267 | Operating pedestrian handheld applicators to apply pesticide pellets or granules to land (PA6G)                                          | 54 |
| 268 | Operating pedestrian handheld applicators to apply pesticide pellets or granules to or near water (PA6GW)                                | 54 |
| 269 | Installing pesticide plugs in tree stumps (PA6PP)                                                                                        | 54 |
| 270 | Operating handheld pesticide injection equipment (PA6INJ)                                                                                | 54 |
| 271 | Operating other handheld applicators requiring minimal calibration (PA6MC)                                                               | 54 |

## Total Qualification Time (TQT)

Total Qualification Time (TQT) is the number of notional hours which represents an estimate of the total amount of time that could reasonably be expected for a learner to demonstrate the achievement of the level of attainment necessary for the award of a qualification.

TQT consists of the following two elements:

- 1) the number of hours that an awarding organisation has assigned to a qualification for guided learning
- 2) an estimate of the number of hours a learner will reasonably be likely to spend in preparation, study or any other form of participation in education or training, including assessment, which takes place as directed by – but, unlike guided learning, not under the immediate guidance or supervision of – a lecturer, supervisor, tutor or other appropriate provider of education or training.

| Title and level                                                                                              | GLH | TQT |
|--------------------------------------------------------------------------------------------------------------|-----|-----|
| City & Guilds Level 2 Award in The Safe Application of Pesticides Using Pedestrian Hand Held Equipment (PA6) | 54  | 60  |

## 3 Centre requirements

### Approval

#### Full approval

To offer this qualification, new centres will need to gain both centre and qualification approval. Please refer to the document **Centre Approval process: Quality Standards** for further information. Please email [qasupport@cityandguilds.com](mailto:qasupport@cityandguilds.com) for further information on the approval process.

#### Centre staffing

Staff delivering these qualifications must be able to demonstrate that they meet the following requirements:

- be technically competent in the areas in which they are delivering
- be able to deliver across the breadth and depth of the content of the qualification being taught
- have recent relevant teaching and assessment experience in the specific area they will be teaching, or be working towards this
- demonstrate continuing CPD.

Centre staff should familiarise themselves with the structure, content and assessment requirements of the qualification before delivering a course programme.

### Physical resources

Centres must be able to demonstrate that they have access to the equipment and technical resources required to deliver this qualification and its assessments.

### Guidance for the Invigilator

The Invigilator for this qualifications E-volve examination work on behalf of the registered centre. Therefore, the relevant JCQ guidelines must be adhered to.

### Assessment Guidance for the Assessor

Staff assessing these qualifications must be approved Certificate of Competence City & Guilds NPTC Assessors and must be independent and cannot have been involved with the training of the Candidate. This qualification can only be assessed by an Assessor who is suitably qualified and meets the requirements of the awarding body.

Certificate of Competence City & Guilds NPTC Assessors must meet the following requirements:

- show competence and provide evidence of industry expertise in the qualification/s they wish to assess

- hold the qualification as a candidate and have been technically evaluated as an Assessor
- be up to date with their verification and relevant first aid
- demonstrate continuing technically relevant CPD Compliance with these requirements is a pre-requisite for Assessors remaining on the list of approved Assessors.

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 laid down. The overall aim of verification is to establish a system of quality assurance that is acceptable in terms of both credibility and cost effectiveness and approved Assessors will be subject to a regular visit by the Verifier at a time when assessments are being undertaken.

A selection of assessment reports completed by the Assessor will be evaluated by a City & Guilds approved Quality Consultant.

## **Safe Practice**

Appropriate PPE must be worn at all times All equipment must be operated in such a way that the Candidate, Assessor, other persons, animals or other equipment are not endangered.

If these conditions are not observed this will result in the Candidate not meeting the required standard.

## **Validation of Equipment**

Any item(s) equipment used for the assessment must comply with current legal requirements.

Additional information may be sought from the relevant manufacturer's instruction book, operators' manual, product label/database or any other Government/Government Agency publication.

## **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, 5-6 Giltspur Street, London, EC1A 9DE, UK 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.

## Quality assurance

Approved centres must have effective quality assurance systems to ensure optimum delivery and assessment of qualifications. Quality assurance includes initial centre approval, qualification approval and the centre's own internal procedures for monitoring quality. Centres are responsible for internal quality assurance and City & Guilds is responsible for external quality assurance. All external quality assurance processes reflect the minimum requirements for verified and moderated assessments, as detailed in the Centre Assessment Standards Scrutiny (CASS), section H2 of Ofqual's General Conditions. For more information on both CASS and City & Guilds Quality Assurance processes visit: the **What is CASS?** and **Quality Assurance Standards** documents on the City & Guilds website.

Standards and rigorous quality assurance are maintained by the use of:

- Internal quality assurance
- City & Guilds external quality assurance.

In order to carry out the quality assurance role, Internal Quality Assurers must:

- have appropriate teaching and vocational knowledge and expertise
- have experience in quality management/internal quality assurance
- hold or be working towards an appropriate teaching/training/assessing qualification
- be familiar with the occupation and technical content covered within the qualification.

External quality assurance for the qualification will be provided by City & Guilds EQA process. EQAs are appointed by City & Guilds to approve centres, and to monitor the assessment and internal quality assurance carried out by centres. External quality assurance is carried out to ensure that assessment is valid and reliable, and that there is good assessment practice in centres.

The role of the EQA is to:

- provide advice and support to centre staff
- ensure the quality and consistency of assessments and marking/grading within and between centres by the use of systematic sampling
- provide feedback to centres and to City & Guilds.

## Learner entry requirements

Candidates must meet minimum age requirements.

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.

## Age restrictions

This qualification is approved for learners aged 16 or above.

## Access arrangements and reasonable adjustments

Access arrangements are adjustments that allow candidates with disabilities, special educational needs, and temporary injuries to access the assessment and demonstrate their skills and knowledge without changing the demands of the assessment. These arrangements must be made before assessment takes place.

The Equality Act 2010 requires City & Guilds to make reasonable adjustments where a disabled person would be at a substantial disadvantage in undertaking an assessment.

It is the responsibility of the centre to ensure at the start of a programme of learning that candidates will be able to access the requirements of the qualification.

Please refer to the JCQ access arrangements and reasonable adjustments and Access arrangements - when and how applications need to be made to City & Guilds for more information. Both are available on the City & Guilds website:

**<http://www.cityandguilds.com/delivering-our-qualifications/centre-development/centre-document-library/policies-and-procedures/access-arrangements-reasonable-adjustments>**

## 4 Delivering the qualification

### Initial assessment and induction

An initial assessment of each learner should be made before the start of their programme to identify:

- if the learner has any specific training needs
- support and guidance they may need when working towards their qualification.
- any units they have already completed or credit they have accumulated which is relevant to the qualification
- the appropriate type and level of qualification.

We recommend that centres provide an induction programme, so the learner fully understands the requirements of the qualification, their responsibilities as a learner and the responsibilities of the centre. This information can be recorded on a learning contract.

### Inclusion and diversity

City & Guilds is committed to improving inclusion and diversity within the way we work and how we deliver our purpose which is to help people and organisations develop the skills they need for growth.

More information and guidance to support centres in supporting inclusion and diversity through the delivery of City & Guilds qualifications can be found here:

**Inclusion and diversity | City & Guilds ([cityandguilds.com](https://www.cityandguilds.com))**

### Sustainability

City & Guilds are committed to net zero. Our ambition is to reduce our carbon emissions by at least 50% before 2030 and develop environmentally responsible operations to achieve net zero by 2040 or sooner if we can. City & Guilds is committed to supporting qualifications that support our customers to consider sustainability and their environmental footprint.

More information and guidance to support centres in developing sustainable practices through the delivery of City & Guilds qualifications can be found here:

**Our Pathway to Net Zero | City & Guilds ([cityandguilds.com](https://www.cityandguilds.com))**

Centres should consider their own carbon footprint when delivering this qualification and consider reasonable and practical ways of delivering this qualification with sustainability in mind. This could include:

- reviewing purchasing and procurement processes (such as buying in bulk to reduce the amount of travel time and energy, considering and investing in the use of components that can be reused, instead of the use of disposable or single use consumables)
- reusing components wherever possible
- waste procedures (ensuring that waste is minimised, recycling of components is in place wherever possible)
- minimising water use and considering options for reuse/salvage as part of plumbing activities wherever possible.

## Support materials

The following resources are available for this qualification:

| Description                                   | How to access                                        |
|-----------------------------------------------|------------------------------------------------------|
| Candidate Handbook                            | <a href="http://www.nptc.org.uk">www.nptc.org.uk</a> |
| Assessment Pack (available only to assessors) | <a href="http://www.nptc.org.uk">www.nptc.org.uk</a> |

## 5 Assessment

### Assessment of the qualification

| Assessment types |                                                                                                                                          |                                                                                                               |                                                      |
|------------------|------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|------------------------------------------------------|
| Unit             | Title                                                                                                                                    | Assessment method                                                                                             | Where to obtain assessment materials                 |
| 265              | Operating pedestrian handheld applicators fitted with hydraulic nozzles or rotary atomisers to apply pesticides to land (PA6A)           | Practical observations with oral questioning.<br><br>Centres may use the materials provided by City & Guilds. | <a href="http://www.nptc.org.uk">www.nptc.org.uk</a> |
| 266              | Operating pedestrian handheld applicators fitted with hydraulic nozzles or rotary atomisers to apply pesticides to or near water (PA6AW) | Practical observations with oral questioning.<br><br>Centres may use the materials provided by City & Guilds. | <a href="http://www.nptc.org.uk">www.nptc.org.uk</a> |
| 267              | Operating pedestrian handheld applicators to apply pesticide pellets or granules to land (PA6G)                                          | Practical observations with oral questioning.<br><br>Centres may use the materials provided by City & Guilds. | <a href="http://www.nptc.org.uk">www.nptc.org.uk</a> |
| 268              | Operating pedestrian handheld applicators to apply pesticide pellets or granules to or near water (PA6GW)                                | Practical observations with oral questioning.<br><br>Centres may use the materials provided by City & Guilds. | <a href="http://www.nptc.org.uk">www.nptc.org.uk</a> |

|     |                                                                            |                                                                                                           |                                                             |
|-----|----------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|-------------------------------------------------------------|
| 269 | Installing pesticide plugs in tree stumps (PA6PP)                          | Practical observations with oral questioning.<br>Centres may use the materials provided by City & Guilds. | <b><a href="http://www.nptc.org.uk">www.nptc.org.uk</a></b> |
| 270 | Operating handheld pesticide injection equipment (PA6INJ)                  | Practical observations with oral questioning.<br>Centres may use the materials provided by City & Guilds. | <b><a href="http://www.nptc.org.uk">www.nptc.org.uk</a></b> |
| 271 | Operating other handheld applicators requiring minimal calibration (PA6MC) | Practical observations with oral questioning.<br>Centres may use the materials provided by City & Guilds. | <b><a href="http://www.nptc.org.uk">www.nptc.org.uk</a></b> |

## Assessment strategy

City & Guilds has written the practical observations with oral questioning for each optional unit to use with this qualification; live assessment materials can be downloaded by the assessor via the Assessment Pack from the NPTC website.

## Time constraints

The following must be applied to the assessment of this qualification:

- Candidates must finish their assessment within 24 months of date of initial registration.
- Assessments should take no longer than 1.5 – 3 hours.
- Qualification registration is valid for two years.

### 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) |

## 6 Units

### Structure of the units

These units each have the following:

- City & Guilds reference number
- title
- level
- Guided Learning Hours (GLH)
- unit aim
- assessment type
- learning outcomes, which are comprised of a number of assessment criteria.

### Guidance for delivery of the units

This qualification comprises a number of **units**. A unit describes what is expected of a competent person in particular aspects of their job.

Each **unit** is divided into **learning outcomes** which describe in further detail the skills and knowledge that a candidate should possess.

Each **learning outcome** has a set of **assessment criteria** (performance and knowledge and understanding) which specify the desired criteria that must be satisfied before an individual can be said to have performed to the agreed standard.

## Unit 265

### Operating pedestrian handheld applicators fitted with hydraulic nozzles or rotary atomisers to apply pesticides to land (PA6A)

|                         |                                                                                                                            |
|-------------------------|----------------------------------------------------------------------------------------------------------------------------|
| <b>Level:</b>           | 2                                                                                                                          |
| <b>GLH:</b>             | 54                                                                                                                         |
| <b>Assessment type:</b> | Practical activities with oral assessment                                                                                  |
| <b>Aim:</b>             | The aim of this unit is for the candidate to safely apply pesticides using handheld hydraulic nozzles or rotary atomisers. |

### Learning outcomes

The learner will:

- LO1 Know the legislative and safety regulations relating to applicator use (**Criteria 1.1 – 1.2**)
- LO2 Be able to assess the environmental factors relating to mixing and application (**Criteria 2.1 – 2.2**)
- LO3 Be able to read and interpret product information (**Criteria 3.1 – 3.2**)
- LO4 Be able to prepare and calibrate a hand held pedestrian applicator (**Criteria 4.1 – 4.6**)
- LO5 Be able to operate the application equipment (**Criteria 5.1 – 5.4**)
- LO6 Know how to carry out post-operational procedures (**Criteria 6.1 – 6.3**)

### Assessment criteria

The learner can:

- AC1.1 Describe the legal requirements relating to applying pesticides using handheld pedestrian equipment
- AC1.2 Describe how to apply pesticides safely using handheld pedestrian equipment following industry best practice

#### Topic 1.1

Legal requirements:

- 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.

## Topic 1.2

Industry best practice regulation:

- comply with Pesticides Codes of Practice
- adopt industry best practice
- be aware of any safety implications imposed by risk/COSHH assessment and comply with the requirements.

Overall treatment includes:

- consistent walking speed
- regular pumping to maintain constant pressure
- consistent nozzle height
- accurate on/off points
- matching of bouts
- avoidance of off target application.

Spot treatment includes:

- use of a suitable nozzle
- maintaining a suitable height
- timed treatment
- avoidance of under/overdosing
- avoidance of off target application.

## Assessment criteria

The learner can:

AC2.1 Identify risks to the environment

AC2.2 Explain how to minimise risks to the environment

## Topic 2.1

Risks to the environment:

- ground conditions
- water courses
- drains
- boreholes
- environmental margins/strips/areas
- wildlife
- non-target plants
- sensitive crops/areas
- hedgerows
- housing
- public access
- other risks particular to the site.

## Topic 2.2

Explanation may include the following points:

- check and maintain application rate
- avoid spray drift
- avoid off target application
- observe buffer zones
- inform neighbours
- erect warning signs
- use an appropriate pesticide (minimal environmental impact)
- appropriate timing of application.

Reasons for minimising spray drift:

- avoidance of contamination to people and the environment, including the aquatic environment.

Check and comment on wind speed:

- use of anemometer at suitable height or visual signs
- wind direction.

Factors that affect spray drift:

- weather conditions
- direction of spraying
- nozzle type and size
- pressure
- walking speed
- nozzle height
- rotary atomiser speed
- defective equipment.

## Assessment criteria

The learner can:

AC3.1 Read product information

AC3.2 Interpret product information

### Topic 3.1-3.2

Product information:

- product name
- active substance(s) (ingredient(s)).

Important product 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:

- crop/target
- dose rate
- water volume
- timing.

Mixing and spraying:

- filling
- reduced volume applications (if applicable)
- recommended nozzles
- recommended pressure
- spray quality
- additional label information
- compatibility.

## Assessment criteria

The learner can:

AC4.1 Carry out pre use checks to the sprayer/applicator

AC4.2 Identify suitable operating pressure and select nozzles according to application requirements

AC4.3 Calibrate the sprayer/applicator and record relevant data

AC4.4 Measure the area to be treated

AC4.5 Calculate the area to be treated

AC4.6 Calculate the quantities of pesticide and water required if applicable

### Topic 4.1

Pre use checks to the sprayer/applicator:

- sprayer/applicator de-pressurised.

Sprayer/applicator components to be inspected for serviceability and contamination:

- tank
- lid
- filters
- hoses
- connections
- seals
- on/off control
- lance
- straps
- pump, visual assessment only
- batteries (if applicable)
- engine (if applicable).

Part fill applicator and check for satisfactory operation:

- sprayer/applicator checked for leaks under pressure
- any problems identified to be rectified if within operators' level of responsibility and ability
- condition confirmed as suitable for operation.

## **Topic 4.2**

Identify and explain the use of nozzles:

- deflector - medium/coarse spray quality. Generally used to apply herbicides
- 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. General purpose
- hollow cone - fine spray quality. Generally used for insecticide and fungicide treatment.

Fit required nozzle and select pressure:

- suitable nozzle selected
- nozzle fitted correctly
- correct pressure selected.

Check nozzle condition and spray pattern:

- nozzle undamaged
- correct spray pattern for nozzle.

## **Topic 4.3**

Calibration:

- calculation of water volume rate
- check water volume rate against product information recommendations

Calibration data:

- applicator used
- walking speed
- nozzle(s) fitted (spray width if appropriate)
- pressure setting
- flow rate.

## **Topic 4.4**

Measure the area to be treated:

- accurate measurement of dimensions.

## **Topic 4.5**

Calculate the area to be treated:

- accurate calculation of area.

## Topic 4.6

Calculating quantities of pesticide and water required:

- amount of water required for specified area
- amount of pesticide required for specified area
- amount of pesticide required for full tank.

## Assessment criteria

The learner can:

AC5.1 Measure the required quantities and add to the sprayer/applicator, or attach pesticide container

AC5.2 Demonstrate safe and accurate application procedures

AC5.3 Carry out all activities protecting human health and the environment

AC5.4 Complete a treatment record

## Topic 5.1

Measuring the required quantities and adding to the sprayer/applicator:

- correct selection and use of PPE (as required by the product label and/or COSHH assessment)
- observance of pesticide manufacturer's instructions for mixing sequence and agitation (or other recommended method)
- suitable site selected
- clean water supply
- accurate measurement of water
- accurate measurement of pesticide
- avoidance of spillage or
- attach a pesticide container
- return to secure storage.

## Topic 5.2

Methods to achieve safe and accurate application:

- treatment area clearly identified
- walking speed maintained
- accurate switching 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/contamination.

## Topic 5.3

Activities protecting human health and the environment:

- prevention of personal injury and 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 spray drift

- avoidance of off target application/contamination
- avoidance of overdosing/under dosing crop/target/plant material.

#### Topic 5.4

Completion of the treatment record must be:

- accurate
- legible (if handwritten).

### Assessment criteria

The learner can:

AC6.1 Explain how to manage surplus pesticide and dispose of waste material

AC6.2 Explain how to clean and decontaminate the sprayer/applicator

AC6.3 Describe the storage requirements for the sprayer/applicator

#### Topic 6.1

Surplus concentrate pesticide:

- to temporary mobile store
- return to fixed store.

Containers:

- triple rinsed
- placed in secure storage until disposal
- returned to supplier
- collected by a licensed waste disposal contractor.

Packaging:

- thoroughly emptied
- placed in secure storage until disposal
- collected by a licensed waste disposal contractor.

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 (eg a lined bio bed)
- collected by a licensed waste disposal contractor.

#### Topic 6.2

Cleaning and decontaminating the sprayer/applicator:

- select and use appropriate PPE
- appropriate site
- thorough washing with water and suitable cleaning agent (if recommended/required)
- internal and external surfaces
- care to ensure contamination 'hot spots' are clean
- thorough flushing of system
- safe disposal of contaminated washings
- when cleaning should take place

- safe procedures followed.

### **Topic 6.3**

Storage requirements for the sprayer/applicator:

- ensure the applicator is clean and dry
- inspect for wear and damage
- replace any worn or damaged parts
- frost protection measures implemented
- lubricate as required
- store undercover and out of direct sunlight
- store in a secure area.

## Unit 266

### Operating pedestrian handheld applicators fitted with hydraulic nozzles or rotary atomisers to apply pesticides to or near water (PA6AW)

|                         |                                                                                                                                         |
|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| <b>Level:</b>           | 2                                                                                                                                       |
| <b>GLH:</b>             | 54                                                                                                                                      |
| <b>Assessment type:</b> | Practical activities with oral assessment                                                                                               |
| <b>Aim:</b>             | The aim of this unit is for the candidate to safely operate hydraulic nozzles or rotary atomisers to apply pesticides on or near water. |

### Learning outcomes

The learner will:

- LO1 Know the legislative and safety regulations relating to applicator use (**Criteria 1.1 – 1.2**)
- LO2 Be able to assess the environmental factors relating to mixing and application (**Criteria 2.1 – 2.2**)
- LO3 Be able to read and interpret product information (**Criteria 3.1 – 3.2**)
- LO4 Be able to prepare and calibrate a handheld pedestrian applicator (**Criteria 4.1 – 4.6**)
- LO5 Be able to operate the application equipment (**Criteria 5.1 – 5.4**)
- LO6 How to carry out post-operational procedures (**Criteria 6.1 – 6.3**)

### Assessment criteria

The learner can:

AC1.1 Describe the legal requirements relating to applying pesticides to or near water using handheld pedestrian equipment

AC1.2 Describe how to apply pesticides safely to or near water using handheld pedestrian equipment following industry best practice

#### Topic 1.1

Legal requirements:

- 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.

Both required:

- ensure the pesticide has aquatic approval
- seek environmental agency approval.

## Topic 1.2

Industry best practice:

- comply with Pesticide Codes of Practice
- adopt industry best practice
- be aware of any safety implications imposed by risk/COSHH assessment and comply with the requirements.

Overall treatment:

- consistent walking speed
- regular pumping to maintain constant pressure
- consistent nozzle height
- accurate on/off points
- matching of bouts
- avoidance of off target application.

Spot treatment:

- use of a suitable nozzle
- maintaining a suitable height
- timed treatment
- avoidance of under/overdosing
- avoidance of off target application.

The term on or near water may include the following:

- wet or dry ditches
- drainage channels
- streams
- rivers
- canals
- ponds
- lakes/lochs
- reservoirs
- and areas immediately adjacent.

Operator safety considerations:

- check bank stability before applying
- availability of a second person on site
- availability of life ring/rescue devices.

## Assessment criteria

The learner can:

AC2.1 Identify risks to the aquatic environment

AC2.2 Explain how to minimize risks to the environment

## Topic 2.1

Risks to the aquatic environment:

- ground conditions
- wildlife
- non-target plants
- environmental margins/strips/areas
- hedgerows
- housing
- public access
- sensitive crops/areas
- water courses
- boreholes
- livestock drinking points
- recreational use of water body/course
- water extraction points
- de-oxygenation of water
- removal of fish cover
- removal of bankside wildlife habitat
- removal of bankside vegetation leading to bank erosion
- other risks specific to the site.

## Topic 2.2

Explanation may include the following points:

- work in an upstream direction
- check weather suitability before treatment
- check downstream uses before treatment
- seek environmental agency approval
- use of an appropriate pesticide (minimal environmental impact)
- appropriate timing of treatment.

Reasons for minimizing spray drift:

- check and maintain application rate
- avoid spray drift
- avoid off target application
- exclude livestock
- erect warning signs
- inform neighbours.

Check and comment on wind speed

- use of anemometer at suitable height or visual signs
- wind direction.

Reasons for minimising spray drift:

- avoidance of contamination to people and the environment, including the aquatic environment.

Factors that affect spray drift:

- weather conditions
- direction of spraying

- nozzle type and size
- pressure
- walking speed
- nozzle height
- rotary atomiser speed
- defective equipment.

## Assessment criteria

The learner can:

AC3.1 Read product information

AC3.2 Interpret product information

### Topic 3.1-3.2

Product information:

- product name
- active substance(s) (ingredient(s)).

Important product 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:

- target
- dose rate
- water volume
- timing.

Mixing and spraying:

- filling
- reduced volume applications (if applicable)
- recommended nozzles
- recommended pressure
- spray quality
- additional label information
- compatibility.

## Assessment criteria

The learner can:

AC4.1 Carry out pre use checks to the sprayer/applicator

AC4.2 Identify suitable operating pressure and select nozzles according to application requirements

AC4.3 Calibrate the sprayer/applicator and record relevant data

AC4.4 Measure the area to be treated

AC4.5 Calculate the area to be treated

AC 4.6 Calculate the quantities of pesticide and water required, if applicable

### Topic 4.1

Pre use checks to the sprayer/applicator:

- sprayer/applicator de-pressurised.

Sprayer/applicator components to be inspected for serviceability and contamination:

- tank
- lid
- filters
- hoses
- connections
- seals
- on/off control
- lance
- straps
- pump, visual assessment only
- batteries (if applicable)
- engine (if applicable).

Part fill applicator and check for satisfactory operation:

- sprayer/applicator checked for leaks under pressure
- any problems identified to be rectified if within operators' level of responsibility and ability
- condition confirmed as suitable for operation.

### Topic 4.2

Identify and explain the use of nozzles:

- deflector - medium/coarse spray quality. Generally used to apply herbicides
- 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. General purpose.

Fit the required nozzle and select pressure:

- suitable nozzle selected
- nozzle fitted correctly
- correct pressure selected.

Check nozzle condition and spray pattern:

- nozzle undamaged
- correct spray pattern for nozzle.

### Topic 4.3

Calibration:

- calculation of water volume rate
- check water volume rate against product information recommendations.

Calibration data:

- applicator used
- walking speed
- nozzle(s) fitted (swath width if appropriate)
- pressure setting.

### Topic 4.4

Measuring the area to be treated:

- accurate measurement of dimensions.

### Topic 4.5

Calculating the area to be treated:

- accurate calculation of area.

### Topic 4.6

Calculating the quantities of pesticide and water required:

- amount of water required for specified area
- amount of pesticide required for specified area
- amount of pesticide required for full tank.

## Assessment criteria

The learner can:

AC5.1 Measure the required quantities and add to the applicator, or attach pesticide container

AC5.2 Demonstrate safe and accurate application procedures

AC5.3 Carry out all activities protecting human health and the environment

AC5.4 Complete a treatment record

### Topic 5.1

Measuring the required quantities and add to the applicator, or attach pesticide container:

- correct selection and use of PPE (as required by the product label and/or COSHH assessment)
- observance of pesticide manufacturer's instructions for mixing sequence and agitation (or other recommended method)
- suitable site selected
- clean water supply
- accurate measurement of water

- accurate measurement of pesticide
- avoidance of spillage or
- attach a pesticide container.

## Topic 5.2

Safe and accurate application procedures:

- bankside safety implemented
- treatment area clearly identified
- walking speed maintained
- accurate switching 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/contamination.

## Topic 5.3

Activities protecting human health and the environment:

- prevention of personal injury and 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 spray drift
- avoidance of off target application/contamination
- avoidance of overdosing/under dosing crop/target/plant material
- minimising the impact on the aquatic environment.

## Topic 5.4

Completion of the treatment record must be:

- accurate
- legible (if handwritten).

## Assessment criteria

The learner can:

AC6.1 Explain how to manage surplus pesticide and dispose of waste material

AC6.2 Explain how to clean and decontaminate the sprayer/applicator

AC6.3 Describe the storage requirements for the sprayer/applicator

## Topic 6.1

Surplus concentrate pesticide:

- return to temporary mobile store
- return to fixed store.

Containers:

- triple rinsed

- placed in secure storage until disposal
- returned to supplier
- collected by a licensed waste disposal contractor.

#### Packaging:

- thoroughly emptied
- placed in secure storage until disposal
- collected by a licensed waste disposal contractor.

#### 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 (eg a lined bio bed)
- collected by a licensed waste disposal contractor.

### Topic 6.2

#### Cleaning and decontaminating the sprayer/applicator:

- select and use appropriate PPE
- appropriate site
- thorough washing with water and suitable cleaning agent (if recommended/required)
- internal and external surfaces
- care to ensure contamination 'hot spots' are clean
- thorough flushing of system
- safe disposal of contaminated washings
- when cleaning should take place
- safe procedures followed.

### Topic 6.3

#### Storage requirements for the sprayer/applicator:

- ensure the applicator is clean and dry
- inspect for wear and damage
- replace any worn or damaged parts
- frost protection measures implemented
- lubricate as required
- store undercover and out of direct sunlight
- store in a secure area.

## Unit 267

## Operating pedestrian handheld applicators to apply pesticide pellets or granules to land (PA6G)

|                         |                                                                                                                                                              |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Level:</b>           | 2                                                                                                                                                            |
| <b>GLH:</b>             | 54                                                                                                                                                           |
| <b>Assessment type:</b> | Practical activities with oral assessment                                                                                                                    |
| <b>Aim:</b>             | The aim of this unit is for the candidate to demonstrate how to safely operate handheld applicators in order to apply pesticide pellets or granules to land. |

### Learning outcomes

The learner will:

- LO1 Know the legislative and safety regulations relating to applicator use (**Criteria 1.1 – 1.2**)
- LO2 Be able to assess the environmental factors relating to the application site (**Criteria 2.1 – 2.2**)
- LO3 Be able to read and interpret product information (**Criteria 3.1 – 3.2**)
- LO4 Be able to prepare and calibrate a handheld pedestrian applicator (**Criteria 4.1 – 4.6**)
- LO5 Be able to operate the applicator (**Criteria 5.1 – 5.4**)
- LO6 Know how to carry out post-operational procedures (**Criteria 6.1 – 6.3**)

### Assessment criteria

The learner can:

- AC1.1 Outline the legal requirements relating to applying pesticide pellets/granules using pedestrian handheld applicators
- AC1.2 Describe how to apply pesticide pellets/granules using pedestrian handheld applicators following industry best practice

#### Topic 1.1

Legal requirements:

- 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.

## Topic 1.2

Industry best practice:

- comply with Pesticide Codes of Practice
- adopt industry best practice
- be aware of any safety implications imposed by risk/COSHH assessment and comply with the requirements.

Overall treatment includes:

- consistent walking speed
- accurate switching on/off points
- matching of bouts
- avoidance of off target application.

Spot treatment:

- maintaining a suitable applicator height
- avoidance of under/overdosing
- avoidance of off target application.

## Assessment criteria

The learner can:

AC2.1 Identify risks to the environment

AC2.2 Explain how to minimize risks to the environment

## Topic 2.1

Risks to the environment:

- ground conditions
- water courses
- drains
- boreholes
- environmental margins/strips/areas
- wildlife
- non-target plants
- sensitive crops/areas
- hedgerows
- housing
- public access
- other risks particular to the site.

## Topic 2.2

Explanation may include the following points:

- check and maintain application rate
- avoid off target application
- observe buffer zones
- inform neighbours
- erect warning signs
- use an appropriate pesticide (minimal environmental impact)

- appropriate timing of application.

Reasons for minimising off target application:

- avoidance of contamination to people and the environment.

Check and comment on wind speed:

- use of an anemometer at suitable height or visual signs
- wind direction.

Factors that affect uniformity of spread:

- weather conditions
- direction of spreading
- pellet/granule density and size
- applicator height
- applicator set level
- defective equipment.

## Assessment criteria

The learner can:

AC3.1 Read product information

AC3.2 Interpret product information

### Topic 3.1-3.2

Product information:

- product name
- active substance(s) (ingredient(s)).

Important product 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:

- crop/target
- dose rate
- timing
- additional label information.

## Assessment criteria

The learner can:

AC4.1 Carry out pre-use checks to the applicator

AC4.2 Identify settings and adjustments

AC4.3 Calibrate the applicator and record relevant data

AC4.4 Measure the area to be treated

AC4.5 Calculate the area to be treated

AC4.6 Calculate the quantities of pesticide required

### Topic 4.1

Pre-use checks to the applicator:

- hopper
- lid
- agitator
- metering device
- spinning disc condition
- on/off control
- straps or harness (if applicable)
- wheels and tyres (if applicable).

### Topic 4.2

Settings and adjustments:

- height adjustment
- spread width adjustment
- disc speed adjustment
- metering device.

### Topic 4.3

Calibration:

- calculation of walking speed
- measure spread width
- calculate application rate
- check rate against product information recommendations.

Calibration data:

- walking speed
- applicator used
- height setting
- spread width
- metering device setting
- pellet/granule used.

### Topic 4.4

Measuring the area to be treated:

- accurate measurement of dimensions.

### Topic 4.5

Calculating the area to be treated:

- accurate calculation of area.

### Topic 4.6

Calculating the quantities of pesticide required:

- amount of pesticide required for specified area.

## Assessment criteria

The learner can:

AC5.1 Measure/weigh the required quantities and add to the applicator

AC5.2 Demonstrate safe and accurate application procedures

AC5.3 Carry out all activities protecting human health and the environment

AC5.4 Complete a treatment record

### Topic 5.1

Measuring/weighing the required quantities and add to the applicator:

- correct selection and use of PPE/RPE (as required by the product label, COSHH and risk assessment)
- suitable site selected
- add product following product recommendations and approved procedures
- accurate measurement of pesticide product
- avoidance of spillage.

### Topic 5.2

Safe and accurate application procedures:

- treatment area clearly identified
- walking speed maintained
- accurate switching 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/contamination.

### Topic 5.3

Activities protecting human health and the environment:

- 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
- avoidance of overdosing/under dosing crop/target/plant material.

## Topic 5.4

Completion of the treatment record must be:

- accurate
- legible (if handwritten).

## Assessment criteria

The learner can:

AC6.1 State how to recover and store surplus pellets/granules and how to dispose of waste material

AC6.2 Explain how to clean and decontaminate the applicator

AC6.3 Describe the storage requirements for the applicator

## Topic 6.1

Surplus pesticide pellets/granules:

- careful return to packaging
- return to temporary mobile store
- return to fixed store.

Packaging:

- thoroughly emptied
- placed in secure storage until disposal
- collected by licensed waste disposal contractor.

## Topic 6.2

Cleaning and decontaminating the applicator:

- select and use correct PPE
- selection of an appropriate site for cleaning the applicator
- clean the applicator following product information and manufacturer's recommendations
- safe disposal of contaminated waste in an appropriate manner following good practice
- safe procedures followed.

## Topic 6.3

Storage requirements for the applicator:

- ensure the applicator is clean
- inspect for wear or damage
- replace any worn or damaged parts
- lubricate if required
- store in a secure area
- store under cover and out of direct sunlight.

## Unit 268

## Operating pedestrian handheld applicators to apply pesticide pellets or granules to or near water (PA6GW)

|                         |                                                                                                                                                    |
|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Level:</b>           | 2                                                                                                                                                  |
| <b>GLH:</b>             | 54                                                                                                                                                 |
| <b>Assessment type:</b> | Practical activities with oral assessment                                                                                                          |
| <b>Aim:</b>             | The aim of this unit is for the candidate to safely operate handheld applicators in order to apply pesticide pellets or granules to or near water. |

### Learning outcomes

The learner will:

- LO1 Know the legislative and safety regulations relating to applicator use (**Criteria 1.1 – 1.2**)
- LO2 Be able to assess the environmental factors relating to the application site (**Criteria 2.1 – 2.2**)
- LO3 Be able to read and interpret product information (**Criteria 3.1 – 3.2**)
- LO4 Be able to prepare and calibrate a handheld pedestrian applicator (**Criteria 4.1 – 4.6**)
- LO5 Be able to operate the applicator (**Criteria 5.1 – 5.4**)
- LO6 Know how to carry out post-operational procedures (**Criteria 6.1 – 6.3**)

### Assessment criteria

The learner can:

- AC1.1 Describe the legal requirements relating to applying pesticide pellets/granules to or near water using pedestrian handheld applicators
- AC1.2 Describe how to apply pesticide pellets/granules to or near water using pedestrian handheld applicators following industry best practice

#### Topic 1.1

Legal requirements:

- 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.

Both required:

- ensure the pesticide has aquatic approval
- seek environmental agency approval.

## Topic 1.2

Industry best practice:

- comply with Pesticide Codes of Practice
- adopt industry best practice
- be aware of any safety implications imposed by risk/COSHH assessment and comply with the requirements.

Overall treatment:

- consistent walking speed
- accurate switching on/off points
- matching of bouts
- avoidance of off target application.

Spot treatment:

- maintaining a suitable applicator height
- avoidance of under/overdosing
- avoidance of off target application.

The term on or near water may include the following:

- wet or dry ditches
- drainage channels
- streams
- rivers
- canals
- ponds
- lakes/lochs
- reservoirs
- and areas immediately adjacent.

Operator safety considerations:

- check bank stability before applying
- availability of a second person on site
- availability of life ring/rescue devices.

## Assessment criteria

The learner can:

AC2.1 Identify risks to the aquatic environment

AC2.2 Explain how to minimise risks to the environment

## Topic 2.1

Risks to the aquatic environment:

- ground conditions
- wildlife
- non-target plants
- environmental margins/strips/areas
- hedgerows
- housing
- public access
- sensitive crops/areas
- water courses
- boreholes
- livestock drinking points
- recreational use of water body/course
- water extraction points
- de-oxygenation of water
- removal of fish cover
- removal of bankside wildlife habitat
- removal of bankside vegetation leading to bank erosion
- other risks specific to the site.

## Topic 2.2

Explanation may include the following points:

- work in an upstream direction
- check weather suitability before treatment
- check downstream uses before treatment
- seek environmental agency approval
- use of an appropriate pesticide (minimal environmental impact)
- appropriate timing of treatment
- check and maintain application rate
- avoid off-target application
- exclude livestock
- erect warning signs
- inform neighbours.

Reasons for minimising off target application:

- avoidance of contamination to people and the environment.

Check and comment on wind speed:

- use of an anemometer at suitable height or visual signs
- wind direction.

Factors that affect uniformity of spread:

- weather conditions
- direction of spreading
- pellet/granule density and size
- applicator height
- applicator set level
- defective equipment.

## Assessment criteria

The learner can:

AC3.1 Read product information

AC3.2 Interpret product information

### Topic 3.1-3.2

Product information:

- product name
- active substance(s) (ingredient(s)).

Important product information:

- field of use (aquatic approval)
- 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:

- target
- dose rate
- timing
- additional label information.

## Assessment criteria

The learner can:

AC4.1 Carry out pre use checks to the applicator

AC4.2 Identify settings and adjustments

AC4.3 Calibrate the applicator and record relevant data

AC4.4 Measure the area to be treated

AC4.5 Calculate the area to be treated

AC4.6 Calculate the quantities of pesticide required

### Topic 4.1

Pre use checks to the applicator:

- hopper
- lid
- agitator
- metering device
- spinning disc condition
- on/off control
- straps or harness (if applicable)

- wheels and tyres (if applicable).

## Topic 4.2

Settings and adjustments:

- height adjustment
- spread width adjustment
- disc speed adjustment
- metering device.

## Topic 4.3

Calibration:

- measure spread width
- calculate application rate
- check rate against product information recommendations.

Calibration data:

- walking speed
- applicator used
- height setting
- spread width
- metering device setting
- pellet/granule used.

## Topic 4.4

Measuring the area to be treated:

- accurate measurement of dimensions.

## Topic 4.5

Calculating the area to be treated:

- accurate calculation of area.

## Topic 4.6

Calculating the quantities of pesticide required:

- amount of pesticide required for specified area.

## Assessment criteria

The learner can:

AC5.1 Measure/weigh the required quantities and add to the applicator

AC5.2 Demonstrate safe and accurate application procedures

AC5.3 Carry out all activities protecting human health and the environment

AC5.4 Complete a treatment record

### Topic 5.1

Measuring/weighing the required quantities and adding to the applicator:

- correct selection and use of PPE/RPE (as required by the product label, COSHH and risk assessment)
- suitable site selected
- add product following product recommendations and approved procedures
- accurate measurement of pesticide product
- avoidance of spillage.

### Topic 5.2

Safe and accurate application procedures:

- bankside safety implemented
- treatment area clearly identified
- walking speed maintained
- accurate switching 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/contamination.

### Topic 5.3

Activities protecting human health and the environment:

- 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
- avoidance of overdosing/under dosing target
- minimising the impact on the aquatic environment.

### Topic 5.4

Completion of the treatment record must be:

- accurate
- legible (if handwritten).

## Assessment criteria

The learner can:

AC6.1 State how to recover and store surplus pellets/granules and how to dispose of waste material

AC6.2 Explain how to clean and decontaminate the applicator

AC6.3 Describe the storage requirements for the applicator

## **Topic 6.1**

Surplus pesticide pellets/granules:

- careful return to packaging
- return to temporary mobile store
- return to fixed store.

Packaging:

- thoroughly emptied
- placed in secure storage until disposal
- collected by a licensed waste disposal contractor.

## **Topic 6.2**

Cleaning and decontaminating the applicator:

- select and use correct PPE/RPE
- selection of an appropriate site for cleaning the applicator
- clean the applicator following product information and manufacturer recommendations
- safe disposal of contaminated waste in an appropriate manner following good practice
- safe procedures followed.

## **Topic 6.3**

Storage requirements for the applicator:

- ensure the applicator is clean
- inspect for wear or damage
- repair or notify supervisor if not within operators' level of responsibility and ability
- lubricate if required
- store in a secure area
- store under cover and out of direct sunlight.

## Unit 269

## Installing pesticide plugs in tree stumps (PA6PP)

|                         |                                                                                                          |
|-------------------------|----------------------------------------------------------------------------------------------------------|
| <b>Level:</b>           | 2                                                                                                        |
| <b>GLH:</b>             | 54                                                                                                       |
| <b>Assessment type:</b> | Practical activities with oral assessment                                                                |
| <b>Aim:</b>             | The aim of this unit is for the candidate to be able to insert pesticide plugs into the stumps of trees. |

### Learning outcomes

The learner will:

- LO1 Know the legislative and safety regulations relating to pesticide plug installation **(Criteria 1.1 – 1.2)**
- LO2 Be able to assess the environmental factors relating to the installation site **(Criteria 2.1 – 2.2)**
- LO3 Be able to read and interpret product information **(Criteria 3.1 – 3.2)**
- LO4 Be able to prepare pesticide plug application equipment and calculate numbers of plugs required **(Criteria 4.1 – 4.3)**
- LO5 Be able to install pesticide plugs **(Criteria 5.1 – 5.3)**
- LO6 Know how to carry out post-operational procedures **(Criteria 6.1 – 6.3)**

### Assessment criteria

The learner can:

AC1.1 Describe the legal requirements relating to installing pesticide plugs

AC1.2 Describe how to install pesticide plugs safely following industry best practice

#### Topic 1.1

Legal requirements:

- 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.

Both required:

- ensure the pesticide has aquatic approval
- seek environmental agency approval.

## Topic 1.2

Industry best practice:

- comply with Pesticide Codes of Practice
- adopt industry best practice
- be aware of any safety implications imposed by risk/COSHH assessment and comply with the requirements.

The term on or near water may include the following:

- wet or dry ditches
- drainage channels
- streams
- rivers
- canals
- ponds
- lakes/lochs
- reservoirs
- and areas immediately adjacent.

On or near water safety considerations:

- check bank stability before applying
- availability of a second person on site
- availability of life ring/rescue devices.

## Assessment criteria

The learner can:

AC2.1 Identify risks to the environment from installing pesticide plugs

AC2.2 Explain how to minimize risks to the environment

## Topic 2.1

Risks to the environment:

- water courses
- Tree Preservation Orders
- conservation areas
- wildlife
- non-target species
- leaving hazardous standing dead wood
- housing
- public access.

Risks to aquatic environment:

- livestock drinking points
- recreational use of water body/course
- water extraction points
- de-oxygenation of water
- removal of fish cover
- removal of bankside wildlife habitat
- removal of bankside vegetation leading to bank erosion

- other risks specific to the site.

## Topic 2.2

Explanation may include the following points:

- permission sought from appropriate regulatory body (if required)
- use an appropriate pesticide
- careful timing of application
- check and maintain application rate
- work in an upstream direction
- check weather suitability before treatment
- check downstream uses before treatment
- seek environmental agency approval
- exclude livestock.

## Assessment criteria

The learner can:

AC3.1 Read product information

AC3.2 Interpret product information

### Topic 3.1-3.2

Product information:

- product name
- active substance(s) (ingredient(s)).

Important information:

- field of use
- crop/situation
- maximum individual dose
- maximum total dose.

May include the following:

- specific product precautions/warnings
- operator protection
- environmental protection
- restrictions on use.

Crop specific information:

- target
- dose rate
- timing
- additional label information.

## Assessment criteria

The learner can:

AC4.1 Carry out pre use checks to the application equipment

AC4.2 Measure the diameter of the tree or stump to be treated

## AC4.3 Calculate the number of plugs required

### Topic 4.1

Pre use checks to the application equipment:

- all required guards are in place and in good condition as stated in the operator's manual (if applicable)
- battery sufficiently charged (if applicable)
- adequate fuel (if applicable)
- air filter clean and in good condition (if applicable)
- cooling fins clean/vents clean and clear (if applicable)
- drill bit securely fitted in chuck
- depth gauge secure and set correctly
- hammer head securely fitted to shaft (if applicable)
- any other checks specific to the equipment used.

### Topic 4.2

Measuring the diameter of the tree or stump to be treated:

- accurate measurement
- accurate calculation (if required).

### Topic 4.3

Calculating the number of plugs required:

- accurate calculations.

## Assessment criteria

The learner can:

AC5.1 Demonstrate safe and accurate installation procedures

AC5.2 Carry out all activities protecting human health and the environment

AC5.3 Complete a treatment record

### Topic 5.1

Safe and accurate installation procedures:

- correct selection and use of PPE (as required by the product label, COSHH/risk assessment)
- plugs installed at correct spacing
- plugs installed into the correct part of the stump/tree
- plugs installed to the correct depth.

### Topic 5.2

Activities protecting human health and the environment:

- 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 installation procedure
- avoidance of non-target species application

- avoidance of overdosing/under dosing.

### Topic 5.3

Completion of the treatment record must be:

- accurate
- legible (if handwritten).

## Assessment criteria

The learner can:

AC6.1 State how to deal with unused pesticide plugs and packaging

AC6.2 State how to clean application equipment

AC6.3 State how to store application equipment

### Topic 6.1

Unused pesticide plugs and packaging:

- careful return to packaging
- return to temporary mobile store
- return to fixed store
- packaging thoroughly emptied
- placed in secure storage until disposal
- collected by licence waste disposal contractor.

### Topic 6.2

Cleaning application equipment:

- select and use correct PPE
- selection of an appropriate site for cleaning the applicator
- clean the applicator following product information and manufacturer's recommendations
- safe disposal of contaminated waste in an appropriate manner following good practice
- safe procedures followed.

### Topic 6.3

Storing application equipment:

- ensure the applicator is clean
- inspect for wear or damage
- replace any worn or damaged parts
- lubricate if required
- store in a secure area.

## Unit 270

## Operating handheld pesticide injection equipment (PA6INJ)

|                         |                                                                                                     |
|-------------------------|-----------------------------------------------------------------------------------------------------|
| <b>Level:</b>           | 2                                                                                                   |
| <b>GLH:</b>             | 54                                                                                                  |
| <b>Assessment type:</b> | Practical activities with oral assessment                                                           |
| <b>Aim:</b>             | The aim of this unit is for the candidate to safely operate handheld pesticide injection equipment. |

### Learning outcomes

The learner will:

- LO1 Know the legislative and safety regulations relating to pesticide injection equipment **(Criteria 1.1 – 1.2)**
- LO2 Be able to assess the environmental factors relating to the site **(Criteria 2.1 – 2.2)**
- LO3 Be able to read and interpret product information **(Criteria 3.1 – 3.2)**
- LO4 Be able to prepare and calibrate the pesticide injection equipment **(Criteria 4.1 – 4.4)**
- LO5 Be able to inject pesticide **(Criteria 5.1 – 5.4)**
- LO6 Know how to carry out post-operational procedures **(Criteria 6.1 – 6.3)**

### Assessment criteria

The learner can:

- AC1.1 Describe the legal requirements relating to applying pesticides using injection equipment
- AC1.2 Describe how to inject pesticides safely following industry best practice

#### Topic 1.1

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.

Both required:

- ensure the pesticide has aquatic approval
- seek environmental agency approval.

## Topic 1.2

Industry best practice:

- comply with Pesticide Codes of Practice
- adopt industry best practice
- be aware of any safety implications imposed by risk/COSHH assessment and comply with the requirements.

Injecting the target:

- injection site on plant/target
- growth stage
- time of year
- marking system to avoid misses/overdosing.

The term on or near water may include the following:

- wet or dry ditches
- drainage channels
- streams
- rivers
- canals
- ponds
- lakes/lochs
- reservoirs and areas immediately adjacent.

On or near water operator safety considerations:

- check bank stability before applying
- availability of a second person on site
- availability of life ring/rescue devices.

## Assessment criteria

The learner can:

AC2.1 Identify risks to the environment

AC2.2 Explain how to minimise risks to the environment

## Topic 2.1

Risks to the environment:

- water courses
- drains
- boreholes
- environmental margins/strips/areas
- wildlife
- non-target plants
- conservation areas
- leaving hazardous standing dead wood
- sensitive crops/areas
- hedgerows
- housing
- public access.

Risks to aquatic environment:

- livestock drinking points
- recreational use of water body/course
- water extraction points
- de-oxygenation of water
- removal of fish cover
- removal of bankside wildlife habitat
- removal of bankside vegetation leading to bank erosion
- other risks particular to the site.

## Topic 2.2

Explanation may include the following points:

- suitable mixing/filling site chosen
- permission sought from appropriate regulatory body (if required)
- use an appropriate pesticide (minimal environmental impact)
- careful timing of application
- check and maintain application rate
- erect warning signs
- notify neighbours before application
- work in an upstream direction
- check weather suitability before treatment
- check downstream uses before treatment
- seek environmental agency approval
- exclude livestock.

## Assessment criteria

The learner can:

AC3.1 Read product information

AC3.2 Interpret product information

### Topic 3.1-3.2

Product information:

- product name
- active substance(s) (ingredient(s)).

Important product information:

- field of use
- target
- maximum individual dose
- maximum total dose.

May include the following:

- specific product precautions/warnings
- operator protection
- environmental protection
- restrictions on use.

Crop specific information:

- target
- dose rate
- dilution rate if applicable
- timing.

Mixing and spraying:

- filling
- additional label information.

## **Assessment criteria**

The learner can:

AC4.1 Identify and select equipment according to application requirements

AC4.2 Carry out pre use checks to the applicator

AC4.3 Calibrate the applicator

AC4.4 Calculate quantities required

### **Topic 4.1**

Application requirements:

- long needle for initial treatment or thicker stems
- short needle for repeat treatment or thinner stems.

### **Topic 4.2**

Pre use checks to the applicator:

- tank/bottle/container
- lid
- filters
- hoses
- connections
- seals
- on/off control
- straps.

To include:

- applicator checked for leaks
- any problems identified to be rectified if within operators' level of responsibility and ability
- condition confirmed as suitable for operation.

Fit the required needle for use:

- suitable needle selected
- needle fitted correctly
- needle undamaged.

### Topic 4.3

Calibration:

- delivery rate checked against applicator setting and required volume.

Calibration data:

- applicator used
- needle fitted
- applicator setting
- pesticide used.

### Topic 4.4

Calculating quantities required:

- amount of water required for specified targets
- amount of pesticide required for specified targets
- amount of pesticide required for full tank/bottle/container.

## Assessment criteria

The learner can:

AC5.1 Measure the pesticide, mix with water and fill the applicator and/or attach pesticide container

AC5.2 Demonstrate safe and accurate injection procedures

AC5.3 Carry out all activities protecting human health and the environment

AC5.4 Complete a treatment record

### Topic 5.1

Measuring the required quantities of pesticides and fill applicator and/or attach pesticide container:

- correct selection and use of PPE (as required by the product information and/or COSHH assessment)
- suitable site selected
- observance of pesticide manufacturer's instructions for mixing
- correct use of water supply
- accurate measurement of water
- accurate measurement of pesticide
- avoidance of spillage

and/or

- attach pesticide container.

### Topic 5.2

Safe and accurate injection procedures:

- targets clearly identified
- targets treated avoiding misses and overdosing
- awareness of changing weather conditions and appropriate action taken (if applicable).

### Topic 5.3

Activities protecting human health and the environment:

- 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 overdosing/under dosing target/plant material.

### Topic 5.4

Completion of the treatment record must be:

- accurate
- legible (if handwritten).

## Assessment criteria

The learner can:

AC6.1 Explain how to manage surplus pesticide and dispose of waste material

AC6.2 Explain how to clean the injection equipment

AC6.3 Explain how to store the injection equipment

### Topic 6.1

Surplus concentrate pesticide:

- return to temporary mobile store
- return to fixed store.

Containers:

- triple rinsed if applicable
- placed in secure storage until disposal
- returned to supplier
- collected by a licensed waste disposal contractor
- packaging thoroughly emptied
- placed in secure storage until disposal.

Surplus dilute pesticides:

- use on another approved target
- treated by specialist treatment facility on site (eg a lined bio bed)
- collected by a licensed waste disposal contractor.

### Topic 6.2

Cleaning the injection equipment:

- select and use correct PPE
- selection of an appropriate site for cleaning the 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.

### **Topic 6.3**

Storage requirements for the injection equipment:

- ensure the injection equipment is clean and dry
- inspect for wear or damage
- repair or notify supervisor if not within operators' level of responsibility and ability
- lubricate if required
- needle covered/removed to protect operator
- store in a secure area
- store under cover and out of direct sunlight.

## Unit 271

## Operating handheld applicators requiring minimal calibration (PA6MC)

|                         |                                                                                                                           |
|-------------------------|---------------------------------------------------------------------------------------------------------------------------|
| <b>Level:</b>           | 2                                                                                                                         |
| <b>GLH:</b>             | 54                                                                                                                        |
| <b>Assessment type:</b> | Practical activities with oral assessment                                                                                 |
| <b>Aim:</b>             | The aim of this unit is for the candidate to safely operate handheld pesticide applicators that need minimal calibration. |

### Learning outcomes

The learner will:

- LO1 Know the legislative and safety regulations relating to applicator use (**Criteria 1.1 – 1.2**)
- LO2 Be able to assess the environmental factors relating to the site (**Criteria 2.1 – 2.2**)
- LO3 Be able to read and interpret product information (**Criteria 3.1 – 3.2**)
- LO4 Be able to prepare and calibrate a handheld applicator (**Criteria 4.1 – 4.5**)
- LO5 Be able to operate the application equipment (**Criteria 5.1 – 5.4**)
- LO6 Know how to carry out post-operational procedures (**Criteria 6.1 – 6.3**)

### Assessment criteria

The learner can:

- AC1.1 Describe the legal requirements relating to applying pesticides using handheld equipment
- AC1.2 Describe how to apply pesticides safely using handheld equipment following industry best practice

#### Topic 1.1

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.

Both required:

- ensure the pesticide has aquatic approval

- seek environmental agency approval.

## Topic 1.2

Industry best practice:

- comply with Pesticide Codes of Practice
- adopt industry best practice
- be aware of any safety implications imposed by risk/COSHH assessment and comply with the requirements.

Overall treatment:

- consistent walking speed
- regular pumping to maintain constant pressure
- consistent nozzle height
- accurate on/off points
- matching of bouts
- avoidance of off target application.

Spot treatment:

- use of a suitable nozzle
- maintaining a suitable height
- timed treatment
- avoidance of under/overdosing
- avoidance of off target application.

The term on or near water may include the following:

- wet or dry ditches
- drainage channels
- streams
- rivers
- canals
- ponds
- lakes/lochs
- reservoirs
- and areas immediately adjacent.

On or near water operator safety considerations:

- check bank stability before applying
- availability of a second person on site
- availability of life ring/rescue devices.

## Assessment criteria

The learner can:

AC2.1 Identify risks to the environment

AC2.2 Explain how to minimize risks to the environment

## Topic 2.1

Risks to the environment:

- ground conditions
- water courses
- drains
- boreholes
- environmental margins/strips/areas
- wildlife
- non-targets
- sensitive crops/areas
- hedgerows
- housing
- public access.

Risks to the aquatic environment:

- livestock drinking points
- recreational use of water body/course
- water extraction points
- de-oxygenation of water
- removal of fish cover
- removal of bankside wildlife habitat
- removal of bankside vegetation leading to bank erosion
- other risks specific to the site.

## Topic 2.2

Explanation may include the following points:

- use of an appropriate pesticide (minimal environmental impact)
- careful timing of application
- check and maintain application rate
- avoid spray drift
- avoid off target application
- observe buffer zones
- erect warning signs
- notify neighbours before application
- work in an upstream direction
- check weather suitability before treatment
- check downstream uses before treatment
- seek environmental agency approval
- exclude livestock.

Check and comment on wind speed:

- use of anemometer at suitable height or visible signs
- wind direction.

Reasons for minimising spray drift:

- avoidance of contamination to people and the environment.

Factors that affect spray drift:

- weather conditions
- direction of spraying
- nozzle type and size (if applicable)

- pressure (if applicable)
- disc type
- disc speed
- nozzle/disc height
- forward speed
- defective equipment.

Factors affecting off target application:

- wick too low
- wick over saturated and dripping.

## Assessment criteria

The learner can:

AC3.1 Read product information

AC3.2 Interpret product information

### Topic 3.1-3.2

Product information:

- product name
- active substance(s) (ingredient(s)).

Important product information:

- field of use
- crop/target
- maximum individual dose
- maximum total dose
- maximum number of treatments.

May include the following:

- specific product precautions/warnings
- operator protection
- environmental protection
- restrictions on use.

Crop specific information:

- crop/target
- dose rate
- water volume
- timing.

Mixing and spraying:

- filling
- recommended nozzles
- recommended pressure
- spray quality
- additional label information
- compatibility.

## Assessment criteria

The learner can:

AC4.1 Carry out pre use checks to the applicator

AC4.2 Identify any controls or components applicable to the applicator

AC4.3 Calibrate the applicator and record relevant data

AC4.4 Measure and calculate the area/target to be treated

AC4.5 Calculate the quantities of pesticide and water required, if applicable

### Topic 4.1

Pre use checks to the applicator:

- sprayer/applicator de-pressurized.

Sprayer/applicator components to be inspected for serviceability and contamination:

- tank/container
- wick
- lid
- filters
- hoses
- connections
- seals
- on/off control
- lance
- straps
- bristles
- pump (if accessible)
- batteries (if applicable)
- engine (if applicable).

Part fill applicator and check for satisfactory operation:

- applicator checked for leaks under pressure
- any problems identified to be rectified if within operators' level of responsibility and ability
- condition confirmed as suitable for operation.

### Topic 4.2

Controls or components applicable to the applicator:

- tank
- pump
- on/off
- filters
- nozzle(s)/disc(s)/distribution system
- other components/controls specific to the applicator.

### Topic 4.3

Calibration:

- calculation of water volume rate
- check water volume rate against product information recommendations

- flow rate adjusted to distribution system.

Calibration data:

- applicator used
- walking speed
- nozzle(s) fitted (swath width if appropriate)
- disc(s) fitted (swath width if appropriate)
- pressure setting
- wick priming time.

#### Topic 4.4

Measuring the area/target to be treated:

- accurate calculation of area/target.

#### Topic 4.5

Calculating quantities of pesticide and water required:

- amount of water required for specified area
- amount of pesticide required for specified area
- amount of pesticide required for full tank/container.

### Assessment criteria

The learner can:

AC5.1 Measure the required quantities and add to the applicator, or attach pesticide container

AC5.2 Demonstrate safe and accurate application procedures

AC5.3 Carry out all activities protecting human health and the environment

AC5.4 Complete a treatment record

#### Topic 5.1

Measure the required quantities and add to the applicator, or attach pesticide container:

- correct selection and use of PPE (as required by the product label, COSHH/risk assessment)
- suitable site selected
- observance of pesticide manufacturer's instructions for mixing
- correct use of water supply
- accurate measurement of water
- accurate measurement of pesticide
- avoidance of spillage

or

- attach pesticide container.

#### Topic 5.2

Safe and accurate application procedures:

- treatment area/target clearly identified
- walking speed maintained
- accurate switch on/off points

- accurate matching of bouts
- obstacles dealt with correctly (if applicable)
- walking direction
- area treated minimising overlaps and misses
- awareness of changing weather conditions and appropriate action taken (if applicable).

### Topic 5.3

Activities protecting human health and the environment:

- 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
- avoidance of overdosing/under dosing crop/target/plant material.

### Topic 5.4

Completion of the treatment record must be:

- accurate
- legible (if handwritten).

## Assessment criteria

The learner can:

AC6.1 Explain how to manage surplus pesticide and dispose of waste material

AC6.2 Explain how to clean and decontaminate the applicator

AC6.3 Describe the storage requirements for the applicator

### Topic 6.1

Surplus concentrate pesticide:

- return to temporary mobile store
- return to fixed store.

Containers:

- triple rinsed
- placed in secure storage until disposal
- returned to supplier
- collected by licensed waste contractor.

Packaging:

- thoroughly emptied
- placed in secure storage until disposal
- collected by licensed waste disposal contractor.

Surplus dilute pesticide:

- back on to area/target as long as it is below the maximum dose rate
- use on another approved area/target

- treated by specialist treatment facility on site (eg a lined bio bed)
- collected by a licensed waste disposal contractor.

## **Topic 6.2**

Cleaning and decontaminating the applicator:

- select and use correct PPE
- selection of an appropriate site for cleaning the applicator
- triple rinse the applicator following product information recommendations
- through flushing of system
- safe disposal of contaminated washings in an appropriate manner following good practice
- safe procedures followed.

## **Topic 6.3**

Storage requirements for the applicator:

- de-pressurization
- ensure the sprayer/applicator is clean and dry
- inspect for wear or damage
- replace any worn or damaged parts
- lubricate if required
- frost protection measures implemented
- store securely
- store under cover and out of direct sunlight.

# Supporting Information

## Evidence requirements

E-volve based multiple choice examination by an NPTC City & Guilds approved assessor to be conducted in a suitably controlled and invigilated environment

## Unit guidance

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

## 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.

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.

## Suggested learning resources:

Code of Practice for Using Plant Protection Products.

This is available from <https://www.hse.gov.uk/>

## Appendix 1 Sources of general information

The following documents contain essential information for centres delivering City & Guilds qualifications. They should be referred to in conjunction with this handbook. To download the documents and to find other useful documents, go to **[www.cityandguilds.com](http://www.cityandguilds.com)** or click on the links below:

### **Centre handbook: quality assurance standards**

This document is for all approved centres and provides guidance to support their delivery of our qualifications. It includes information on:

- centre quality assurance criteria and monitoring activities
- administration and assessment systems
- centre-facing support teams at City & Guilds/ILM
- centre quality assurance roles and responsibilities.

The Centre Handbook should be used to ensure compliance with the terms and conditions of the centre contract.

### **Centre assessment: quality assurance standards**

This document sets out the minimum common quality assurance requirements for our regulated and non-regulated qualifications that feature centre-assessed components. Specific guidance will also be included in relevant qualification handbooks and/or assessment documentation.

It incorporates our expectations for centre internal quality assurance and the external quality assurance methods we use to ensure that assessment standards are met and upheld. It also details the range of sanctions that may be put in place when centres do not comply with our requirements or actions that will be taken to align centre marking/assessment to required standards. Additionally, it provides detailed guidance on the secure and valid administration of centre assessments.

### **Access arrangements: When and how applications need to be made to City & Guilds**

provides full details of the arrangements that may be made to facilitate access to assessments and qualifications for candidates who are eligible for adjustments in assessment.

The **Centre document library** also contains useful information on such things as:

- conducting examinations
- registering learners
- appeals and malpractice.

### **Useful contacts**

Please visit the Contact us section of the City & Guilds website, **Contact us**

## About City & Guilds

City & Guilds is the global skills partner, empowering people, organisations and economies to develop the skills they need for growth. With almost 150 years of trusted expertise, we support people into work, help them develop on the job and move into the next job.

We work with Governments, employers, training providers, colleges and industry stakeholders to design and deliver high-quality training, qualifications, assessments and credentials that lead to meaningful career progression. We understand the life changing link between skills development, social mobility and success. Our solutions span critical sectors including construction, engineering, transport, energy and electrical, serving over 1 million learners annually.

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