

# City & Guilds Level 2 Award in The Safe Application of Pesticide Mists, Fogs or Smokes (PA9) (0216-57)

Version 1.1 (February 2025)

**Assessment Pack – Candidate Version** 

Version and date	Change detail	Section
1.0 February 2024	First version	All
1.1 February 2025	Updated Unit Numbers Formatting	Throughout

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## Introduction

This assessment relates to the unit in the Qualification handbook. The assessment can be achieved at pass only. If any task is not yet met the candidate is unsuccessful.

This assessment is for the following units and learning outcomes:

**Unit 257** Applying pesticide mists, less than 100 microns VMD indoors covering the following learning outcomes:

- 1. Know the legislative and safety regulations relating to applicator use
- 2. Be able to assess the environmental factors relating to mixing and application
- 3. Be able to read and interpret product information
- 4. Be able to prepare and calibrate the applicator
- 5. Be able to operate the applicator
- 6. Know how to carry out post-operational procedures

**Unit 258** Applying pesticide mists, less than 100 microns VMD outdoors covering the following learning outcomes:

- 1. Know the legislative and safety regulations relating to applicator use
- 2. Be able to assess the environmental factors relating to mixing and application
- 3. Be able to read and interpret product information
- 4. Be able to prepare and calibrate the applicator
- 5. Be able to operate the applicator
- 6. Know how to carry out post-operational procedures

**Unit 259** Applying pesticide fogs, less than 100 microns VMD indoors covering the following learning outcomes:

- 1. Know the legislative and safety regulations relating to applicator use
- 2. Be able to assess the environmental factors relating to mixing and application
- 3. Be able to read and interpret product information
- 4. Be able to prepare and calibrate the applicator
- 5. Be able to operate the applicator
- 6. Know how to carry out post-operational procedures

**Unit 260** Applying pesticide smokes indoors covering the following learning outcomes:

- 1. Know the legislative and safety regulations relating to applicator use
- 2. Be able to assess the environmental factors relating to mixing and application
- 3. Be able to read and interpret product information
- 4. Be able to prepare and calibrate the applicator
- 5. Be able to carry out operational procedures safely
- 6. Know how to carry out post-operational procedures

General guidance on the requirements for assessment can be found in the Assessor Guidance General guidance on the requirements for assessment can be found in the Assessor Guidance document available on the City & Guilds web site www.nptc.org.uk

The assessor must complete the Practical Table mark sheet for each candidate which should be kept by the assessor for a minimum period of twelve months.

### **Assessment Time**

The expected assessment time for this qualification is 1.5 - 3 hours.

## 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)

This is not an open book assessment, however additional technical information may be sought from the relevant manufacturer's operator manuals or any other appropriate training or safety publication.

# Practical observation descriptor table

Unit 257 Applying pesticide mists, less than 100 microns VMD indoors

Activi	ty number and description from	Assessment criteria
	check list	Marinelanda
1.1	Describe the legal requirements relating to applying pesticides using misting equipment indoors	<ul> <li>May include:</li> <li>all required guards are in place and equipment complies with legal requirements</li> <li>comply with all relevant road traffic regulations when operating or transporting on the public highway</li> <li>comply with The Plant Protection Products (Sustainable Use) Regulations 2012</li> <li>the operator must hold the appropriate certification for the equipment they are using</li> </ul>
1.2	Describe how to apply pesticides safely using misting equipment following industry best practice	<ul> <li>May include:</li> <li>comply with relevant Pesticide Codes of Practice</li> <li>adopt industry best practice</li> <li>be aware of any safety implications imposed by Risk/COSHH Assessment and comply with the requirements</li> <li>be aware of the increased risk of applying pesticides in a confined area</li> </ul>
2.1	Identify risks to the environment	May include:  • water course  • drains  • boreholes  • wildlife  • non-targets  • sensitive crops/areas  • housing  • public/bystanders/co-workers  • other risks specific to the site
2.2	Explain how to minimise risks to the environment	Explanation to include the following points:  use of an appropriate pesticide  careful timing of application  check and maintain application rate  close ventilation system  seal the building  display warning signs  integrity of the structure  inform neighbours before application  Check and comment on wind speed:  use of anemometer at suitable height or visible signs  wind direction  effect of wind suction

Reasons for minimising off target application:		Neasons for minimising on larger application.
Read product information Interpret product information Interpret product information Interpret product information  7		
Read product information Interpret product information  Interpret product information  Interpret product information  Interpret product information  Important information:  I		
Interpret product information  • product name • active substance(s) (ingredient(s)) Important information: • field of use • crop/target • maximum individual dose • maximum total dose • maximum number of treatments • specific product precautions/warnings • reduced volume applications (if applicable) • operator protection • restrictions on use Target specific information: • crop/target • dose rate • water volume • timing Mixing and spraying: • filling • recommended nozzle/diffuser • recommended pressure • additional label information • compatibility  Carry out pre use checks to the applicator  - compatibility  May include: • guards • tank • lid • hoses • connections • seals • on/off control • delivery tubes		
active substance(s) (ingredient(s)) Important information:  • field of use • crop/target • maximum individual dose • maximum total dose • maximum number of treatments • specific product precautions/warnings • reduced volume applications (if applicable) • operator protection • environmental protection • environmental protection • restrictions on use Target specific information: • crop/target • dose rate • water volume • timing Mixing and spraying: • filling • recommended nozzle/diffuser • recommended pressure • additional label information • compatibility  Carry out pre use checks to the applicator  Ay include:  applicator components to be inspected for serviceability and contamination that may include:  applicator components to be inspected for serviceability and contamination that may include:  applicator components  applicator components  additional label information  compatibility  Ay include:  applicator components to be inspected for serviceability and contamination that may include:  applicator components  applicator components  compatibility  Agains  Ay include:  applicator components  applicator components  compatibility  Agains  Again		
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field of use		
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maximum individual dose     maximum total dose     maximum number of treatments     specific product precautions/warnings     reduced volume applications (if applicable)     operator protection     environmental protection     restrictions on use     Target specific information:         crop/target     dose rate     water volume     timing     Mixing and spraying:     ifilling     recommended nozzle/diffuser     recommended pressure     additional label information     compatibility  Carry out pre use checks to the applicator  Carry out pre use checks     to the applicator  Carry out pre use checks     to the applicator  Carry out pre use checks     to the applicator  Carry out pre use checks     to the applicator  Applicator components to be inspected for serviceability and contamination that may include:         guards         tank         ilid         hoses         connections         seals         con/off control     delivery tubes		field of use
maximum total dose     maximum number of treatments     specific product precautions/warnings     reduced volume applications (if applicable)     operator protection     environmental protection     restrictions on use     Target specific information:         crop/target     dose rate     water volume     timing     Mixing and spraying:         filling         recommended nozzle/diffuser         recommended pressure         additional label information         compatibility      Carry out pre use checks     to the applicator  Carry out pre use checks     to the applicator  Carry out pre use checks     to the applicator  Gary out pre use checks     to the applicator  Carry out pre use checks     to the applicator  May include:     applicator components to be inspected for serviceability and contamination that may include:         include:         iguards         tank         ilid         hoses         connections         seals         on/off control         delivery tubes		crop/target
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maximum number of treatments     specific product precautions/warnings     reduced volume applications (if applicable)     operator protection     environmental protection     restrictions on use     Target specific information:         crop/target     dose rate     water volume     timing     Mixing and spraying:     filling     recommended nozzle/diffuser     recommended pressure     additional label information     compatibility  Carry out pre use checks     to the applicator  Applicator components to be inspected for serviceability and contamination that may include:		maximum total dose
Specific product precautions/warnings     reduced volume applications (if applicable)     operator protection     environmental protection     restrictions on use     Target specific information:     crop/target     dose rate     water volume     timing     Mixing and spraying:     filling     recommended nozzle/diffuser     recommended pressure     additional label information     compatibility      May include:     applicator  Carry out pre use checks     to the applicator  All id     hoses     connections     seals     on/off control     delivery tubes		
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• restrictions on use Target specific information: • crop/target • dose rate • water volume • timing Mixing and spraying: • filling • recommended nozzle/diffuser • recommended pressure • additional label information • compatibility  Carry out pre use checks to the applicator  May include: applicator components to be inspected for serviceability and contamination that may include: • guards • tank • lid • hoses • connections • seals • on/off control • delivery tubes	3.1	l · · · · · · · · · · · · · · · · · · ·
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water volume     timing     Mixing and spraying:     filling     recommended nozzle/diffuser     recommended pressure     additional label information     compatibility  Carry out pre use checks to the applicator  May include:     applicator components to be inspected for serviceability and contamination that may include:     guards     tank     ild     hoses     connections     seals     on/off control     delivery tubes		
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Mixing and spraying:  • filling  • recommended nozzle/diffuser  • recommended pressure  • additional label information  • compatibility  Carry out pre use checks to the applicator  May include:  applicator components to be inspected for serviceability and contamination that may include:  • guards  • tank  • lid  • hoses  • connections  • seals  • on/off control  • delivery tubes		
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<ul> <li>compatibility</li> <li>Carry out pre use checks to the applicator</li> <li>applicator components to be inspected for serviceability and contamination that may include:         <ul> <li>guards</li> <li>tank</li> <li>lid</li> <li>hoses</li> <li>connections</li> <li>seals</li> <li>on/off control</li> <li>delivery tubes</li> </ul> </li> </ul>		recommended pressure
Carry out pre use checks to the applicator  May include: applicator components to be inspected for serviceability and contamination that may include:  guards tank lid hoses connections seals on/off control delivery tubes		additional label information
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serviceability and contamination that may include:  uguards tank lid hoses connections seals on/off control delivery tubes	Carry out pre use checks	May include:
include:  undering guards undering tank unde	to the applicator	
<ul> <li>guards</li> <li>tank</li> <li>lid</li> <li>hoses</li> <li>connections</li> <li>seals</li> <li>on/off control</li> <li>delivery tubes</li> </ul>		serviceability and contamination that may
<ul> <li>tank</li> <li>lid</li> <li>hoses</li> <li>connections</li> <li>seals</li> <li>on/off control</li> <li>delivery tubes</li> </ul>		include:
<ul> <li>lid</li> <li>hoses</li> <li>connections</li> <li>seals</li> <li>on/off control</li> <li>delivery tubes</li> </ul>		• guards
<ul> <li>hoses</li> <li>connections</li> <li>seals</li> <li>on/off control</li> <li>delivery tubes</li> </ul>		• tank
<ul> <li>connections</li> <li>seals</li> <li>on/off control</li> <li>delivery tubes</li> </ul>		• lid
<ul><li>seals</li><li>on/off control</li><li>delivery tubes</li></ul>		• hoses
<ul><li>• on/off control</li><li>• delivery tubes</li></ul>		<ul> <li>connections</li> </ul>
• delivery tubes		• seals
· · · · · · · · · · · · · · · · · · ·		on/off control
	4.1	delivery tubes
• straps		· ·
pump (visual assessment only)		
• power source		·
• anti-vibration mounts		
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		
Adjust settings appropriate to the May include:		
4.2 application requirements engine settings	4.2 application requirements	engine settings
		appropriate nozzle/diffuser/baffle

		flow rate setting
	Calibrate the applicator and	To include:
	record relevant data	safe procedure
		accurate measurement
		accurate result
		Calibration data
4.3		applicator used
		flow rate setting
		walking speed/application time
		nozzle/diffuser/baffle
		water volume
		dose rate
	Measure the area/volume to be	To include:
4.4	treated	accurate measurement of dimensions
		safe procedures
4.5	Calculate the area or volume to	To include:
4.5	be treated	accurate calculations
	Calculate the quantities of	To include:
	pesticide and water required, if	amount of pesticide required for specified
4.6	appropriate	area/volume
4.0		<ul> <li>amount of water required for specified</li> </ul>
		area/volume
		amount of pesticide required for full tank
	Measure the required quantities	To include:
	and add to the applicator, or	correct selection and use of PPE/RPE(as
	attach pesticide container	required by the product label, COSHH/Risk
		Assessment)
		suitable site selected    Suitable site selected
E 4		fill following product recommendations and     approved procedures
5.1		<ul><li>approved procedures</li><li>correct use of water supply</li></ul>
		<ul> <li>accurate measurement of pesticide</li> </ul>
		accurate measurement of water
		avoidance of spillage
		or
		attach pesticide container
	Demonstrate safe and	To include:
	accurate application procedures	treatment area/volume clearly identified
		walking speed maintained
		accurate switch on/off points
- 0		accurate matching of bouts
5.2		obstacles dealt with correctly (if applicable)
		walking direction
		avoidance of off target contamination
		awareness of changing weather conditions
		and appropriate action taken (if applicable)
	Carry out all activities protecting	To include:
	human health and the	<ul> <li>prevention of personal injury and</li> </ul>
	environment	contamination through correct selection
5.3		and use of PPE/RPE (as required by the
		product label and/or COSHH/Risk
		Assessment)
		safe exit route identified and used

5.4	Complete a treatment record  Explain how to manage surplus pesticide and dispose of waste materials	<ul> <li>prevention of public / bystander contamination</li> <li>safe filling procedure</li> <li>avoidance of off target contamination</li> <li>avoidance of overdosing crop/target/plant material</li> <li>Completion of the treatment record must be:         <ul> <li>accurate</li> <li>legible (if handwritten)</li> </ul> </li> <li>Surplus concentrate pesticide</li> <li>return to temporary mobile store</li> <li>return to fixed store</li> <li>Containers:         <ul> <li>triple rinsed</li> <li>secure storage until disposal</li> <li>return to supplier</li> <li>collected by a licensed waste disposal contractor</li> </ul> </li> <li>Packaging:         <ul> <li>thoroughly emptied</li> <li>secure storage until disposal</li> <li>collected by a licensed waste disposal contractor</li> </ul> </li> <li>Surplus dilute pesticide</li> <li>back on to site as long as it is below the maximum dose rate</li> <li>use on another approved crop/target/plant material</li> </ul>
		<ul> <li>treated by specialist treatment facility on site (e.g. a lined bio bed)</li> <li>collected by a licensed waste disposal contractor</li> </ul>
6.2	Explain how to clean and decontaminate the applicator	<ul> <li>May include:</li> <li>appropriate site</li> <li>thorough washing with water and suitable additive if recommended</li> <li>internal and external surfaces</li> <li>safe disposal of tank washings by approved methods</li> <li>thorough flushing of systems</li> <li>when cleaning should take place</li> <li>safe procedures followed</li> </ul>
6.3	Describe the storage requirements for the applicator	May include:      ensure the applicator is clean and dry     inspect for wear and damage     replace any worn or damaged parts     ensure system is drained and any valves left in appropriate positions     frost protection measures implemented     lubricate as required     store undercover and out of direct sunlight     store in a secure area
6.4	Explain the procedures to make the area safe for re- entry	May include:  • ventilate area prior to re-entry

re-entry interval
<ul> <li>removal of warning signs</li> </ul>
decontamination of non-target areas
withholding period before sale or
consumption
manufacturers procedures followed

Unit 258 Applying pesticide mists, less than 100 microns VMD outdoors

Activit	ty number and description from check list	Assessment criteria
1.1	Describe the legal requirements relating to applying pesticides using misting equipment outdoors	<ul> <li>May include:</li> <li>all required guards are in place and equipment complies with legal requirements</li> <li>comply with all relevant road traffic regulations when operating or transporting on the public highway</li> <li>comply with The Plant Protection Products (Sustainable Use) Regulations 2012</li> <li>the operator must hold the appropriate certification for the equipment they are using</li> </ul>
1.2	Describe how to apply pesticides safely using misting equipment following industry best practice	May include:  comply with relevant Pesticide Codes of Practice  adopt industry best practice  be aware of any safety implications imposed by Risk/COSHH Assessment and comply with the requirements  be aware of the increased risk of applying pesticides as a mist in an outdoor environment
2.1	Identify risks to the environment	May include:  • water courses  • drains  • boreholes  • wildlife  • non-targets  • sensitive crops/areas  • housing  • public/bystanders/co-workers  • other risks specific to the site
2.2	Explain how to minimise risks to the environment	Explanation to include the following points:  use of an appropriate pesticide  careful timing of application  check and maintain application rate  display warning signs  inform neighbours before application  Check and comment on wind speed  use of anemometer at suitable height or visible signs  wind direction  Reasons for minimising off target application:  avoidance of contamination to people and the environment
3.1 - 3.2	Read product information Interpret product information	The following to be provided if applicable:  • product name  • active substance(s) (ingredient(s)) Important information:  • field of use

		crop/target     maximum individual dose
		maximum total dose
		maximum number of treatments
		specific product precautions/warnings
		reduced volume applications (if applicable)
		operator protection
		environmental protection
		restrictions on use
		Target specific information:
		crop/target
		dose rate
		water volume
		timing
		Mixing and spraying:
		filling
		recommended nozzle/diffuser
		recommended pressure
		additional label information
		compatibility
	Carry out pre use checks to the	May include:
	applicator	applicator components to be inspected for
		serviceability and contamination that may
		include:
		• guards
		• tank
		• lid
		• hoses
		• connections
		• seals
		on/off control
4.1		delivery tubes
		straps
		pump (visual assessment only)
		<ul><li>power source</li><li>anti-vibration mounts</li></ul>
		Part fill applicator:
		applicator checked for leaks
		<ul> <li>applicator checked for leaks</li> <li>any problems identified to be rectified if</li> </ul>
		within operators' level of responsibility and
		ability
		condition confirmed as suitable for
		operation
	Adjust settings appropriate to the	May include:
	application requirements	engine settings
4.2	, , ,	appropriate nozzle/diffuser/baffle
		flow rate setting
	Calibrate the applicator	To include:
	and record relevant data	safe procedure
	1-1-1-1	accurate measurement
4.3		accurate result
		Calibration data
		applicator used
		flow rate setting
		- now rate country

<ul> <li>walking speed/application time</li> <li>nozzle/diffuser/baffle</li> <li>water volume</li> <li>dose rate</li> <li>To include:         <ul> <li>accurate measurement of dimensions</li> <li>safe procedures</li> </ul> </li> <li>Calculate the area or volume to be treated</li> <li>accurate calculations</li> </ul>
<ul> <li>water volume</li> <li>dose rate</li> <li>Measure the area/volume to be treated</li> <li>accurate measurement of dimensions</li> <li>safe procedures</li> <li>Calculate the area or volume to</li> <li>To include:</li> <li>To include:</li> </ul>
<ul> <li>dose rate</li> <li>Measure the area/volume to be treated</li> <li>4.4 To include:         <ul> <li>accurate measurement of dimensions</li> <li>safe procedures</li> </ul> </li> <li>Calculate the area or volume to</li> <li>To include:</li> </ul>
Measure the area/volume to be treated  To include:  accurate measurement of dimensions safe procedures  Calculate the area or volume to  To include:  To include:
<ul> <li>4.4 treated</li> <li>accurate measurement of dimensions</li> <li>safe procedures</li> <li>Calculate the area or volume to</li> <li>To include:</li> </ul>
safe procedures  Calculate the area or volume to  To include:
Calculate the area or volume to To include:
4.5
a contact caronations
Calculate the quantities of To include:
pesticide and water required, if  • amount of pesticide required for specified
appropriate area/volume
amount of water required for specified
area/volume
amount of pesticide required for full tank
Measure the required quantities To include:
and add to the applicator, or • correct selection and use of PPE/RPE(as
attach pesticide container required by the product label, COSHH/Risk
Assessment)
suitable site selected
fill following product recommendations and
5.1 approved procedures
correct use of water supply
accurate measurement of pesticide
accurate measurement of water     avaidance of chillenge
avoidance of spillage     or
or  • attach pesticide container
Demonstrate safe and To include:
accurate application procedures  • treatment area/volume clearly identified
walking speed maintained
accurate switch on/off points
accurate matching of houts
<ul> <li>5.2</li> <li>obstacles dealt with correctly (if applicable)</li> </ul>
walking direction
avoidance of off target contamination
awareness of changing weather conditions
and appropriate action taken (if applicable)
Carry out all activities protecting To include:
human health and the • prevention of personal injury and
environment contamination through correct selection
and use of PPE/RPE (as required by the
product label and/or COSHH/Risk Assessment)
prevention of public/bystander
contamination
safe filling procedure
avoidance of off target contamination
avoidance of overdosing crop/target/plant
material
Complete a treatment record Completion of the treatment record must be:
• accurate
legible (if handwritten)

6.1	Explain how to manage surplus pesticide and dispose of waste materials	<ul> <li>Surplus concentrate pesticide</li> <li>return to temporary mobile store</li> <li>return to fixed store</li> <li>Containers:</li> <li>triple rinsed</li> <li>secure storage until disposal</li> <li>return to supplier</li> <li>collected by a licensed waste disposal contractor</li> <li>Packaging:</li> <li>thoroughly emptied</li> <li>secure storage until disposal</li> <li>collected by a licensed waste disposal contractor</li> <li>Surplus dilute pesticide</li> <li>back on to site as long as it is below the maximum dose rate</li> <li>use on another approved crop/target/plant material</li> <li>treated by specialist treatment facility on site (e.g. a lined bio bed)</li> <li>collected by a licensed waste disposal contractor</li> </ul>
6.2	Explain how to clean and decontaminate the applicator	May include:     appropriate site     thorough washing with water and suitable additive if recommended     internal and external surfaces     safe disposal of tank washings by approved methods     thorough flushing of systems     when cleaning should take place     safe procedures followed
6.3	Describe the storage requirements for the applicator	May include:      ensure the applicator is clean and dry     inspect for wear and damage     replace any worn or damaged parts     ensure system is drained and any valves left in appropriate positions     frost protection measures implemented     lubricate as required     store undercover and out of direct sunlight     store in a secure area

Unit 259 Applying pesticide fogs, less than 100 microns VMD indoors

Activi	ty number and description from	Assessment criteria
	check list Describe the legal requirements	May include:
1.1	relating to applying pesticides using fogging equipment indoors	<ul> <li>all required guards are in place and equipment complies with legal requirements</li> <li>comply with all relevant road traffic regulations when operating or transporting on the public highway</li> <li>comply with The Plant Protection Products (Sustainable Use) Regulations 2012</li> <li>the operator must hold the appropriate certification for the equipment they are using</li> </ul>
	Describe how to apply pesticides safely using fogging equipment following industry best practice	May include: <ul> <li>comply with relevant Pesticide Codes of Practice</li> </ul>
1.2		<ul> <li>adopt industry best practice</li> <li>be aware of any safety implications imposed by Risk/COSHH Assessment and comply with the requirements</li> <li>be aware of the increased risk of applying pesticides in a confined area</li> <li>awareness of potential fire hazards</li> </ul>
2.1	Identify risks to the environment	May include:  • water courses  • drains  • boreholes  • wildlife  • non-targets  • sensitive crops/areas  • housing  • public/bystanders/co-workers  • other risks specific to the site
2.2	Explain how to minimise risks to the environment	Explanation to include the following points:  use of an appropriate pesticide  careful timing of application  check and maintain application rate  identify safe exit route  close ventilation system  seal the building  display warning signs  integrity of the structure  inform neighbours before application  Check and comment on wind speed  use of anemometer at suitable height or visible signs  wind direction  effect of wind suction  Reasons for minimising off target application:

		avoidance of contamination to people and
		the environment
	Read product information	The following to be provided if applicable:
	Interpret product information	• product name
	Interpret product information	active substance(s) (ingredient(s))
		Important information:
		• field of use
		crop/target
		maximum individual dose
		maximum total dose
		maximum number of treatments
3.1		specific product precautions/warnings
-		reduced volume applications (if applicable)
3.2		operator protection
		environmental protection
		restrictions on use
		Target specific information:
		crop/target
		dose rate
		water volume
		• timing
		additional label information
		compatibility
	Carry out pre use checks to the	May include:
	applicator	applicator components to be inspected for
		serviceability and contamination that may
		include:
		read instructions
		identify components including
		safety devices <ul><li>condition of power source</li></ul>
		re-fuelling procedure
4.1		security of packaging/canisters
7.1		<ul> <li>contamination safety status</li> </ul>
		remedial action if appropriate
		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
	Adjust settings appropriate to the	May include:
4.2	application requirements	engine/power source settings
		flow rate setting
	Calibrate the applicator and	To include:
	record relevant data	safe procedure
		accurate measurement
		accurate result
4.3		Calibration data
		applicator used
		flow rate setting
		walking speed/application time
		water volume

		•	dose rate
	Measure the area/volume to be		include:
4.4	treated	•	accurate measurement of dimensions
		•	safe procedures
4.5	Calculate the weight, area or	То	include:
4.5	volume to be treated	•	accurate calculations
	Calculate the quantities of	То	include:
	pesticide and water required, if	•	amount of pesticide required for specified
4.6	appropriate		weight/area/volume
		•	amount of water required for specified
		_	weight/area/volume
	Measure the required quantities	• To	amount of pesticide required for full tank include:
	and add to the applicator, or	•	correct selection and use of PPE/RPE(as
	attach pesticide container		required by the product label, COSHH/Risk
			Assessment)
		•	suitable site selected
		•	fill following product recommendations and
5.1			approved procedures
		•	correct use of water supply
		•	accurate measurement of pesticide
		•	accurate measurement of water
		•	avoidance of spillage
			or attach poeticide centainer
	Demonstrate safe and accurate	• To	attach pesticide container include:
	application procedures	•	treatment area/volume/weight clearly
			identified
		•	walking speed maintained
		•	accurate switch on/off points
5.2		•	accurate matching of bouts
		•	obstacles dealt with correctly (if applicable)
		•	walking direction
		•	avoidance of off target contamination
		•	awareness of changing weather conditions
	Carry out all activities protecting	Τo	and appropriate action taken (if applicable) include:
	human health and the	•	prevention of personal injury and
	environment		contamination through correct selection
			and use of PPE/RPE (as required by the
			product label and/or COSHH/Risk
			Assessment)
5.3		•	safe exit route identified and used
		•	prevention of public / bystander
		•	contamination safe filling procedure
			avoidance of off target contamination
			avoidance of overdosing crop/target/plant
			material
	Complete a treatment record	Со	mpletion of the treatment record must be:
5.4		•	accurate
		•	legible (if handwritten)

	Evaloin how to manage ouralus	Curnlus concentrate poeticide
	Explain how to manage surplus	Surplus concentrate pesticide
	pesticide and dispose of waste materials	return to temporary mobile store      return to fine distance.
	Illateriais	return to fixed store  Containers.
		Containers:
		triple rinsed
		secure storage until disposal
		return to supplier
		collected by licensed waste disposal
		contractor
		Packaging:
0.4		thoroughly emptied
6.1		secure storage until disposal
		collected by 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/plant
		material
		treated by specialist treatment facility on  its (a median delibert)
		site (e.g. a lined bio bed)
		collected by a licensed waste disposal
	Cyplain boyy to aloon and	contractor
	Explain how to clean and	May include:
	decontaminate the applicator	appropriate site
		thorough washing with water and suitable additive if recommended
		internal and external surfaces
6.2		
		<ul> <li>safe disposal of tank washings by approved methods</li> </ul>
		0
		<ul> <li>thorough flushing of systems</li> <li>when cleaning should take place</li> </ul>
		safe procedures followed
	Describe the storage	May include:
	requirements for the applicator	ensure the applicator is clean and dry
		<ul> <li>Inspect for wear and damage</li> <li>replace any worn or damaged parts</li> </ul>
6.3		
		left in appropriate positions
		<ul><li>frost protection measures implemented</li><li>lubricate as required</li></ul>
		store undercover and out of direct sunlight
		J
	Explain the procedures to make	store in a secure area  May include:
	Explain the procedures to make the area safe for re-entry	May include:
	i ilo alea sale loi le-ellily	ventilate area prior to re-entry     re-entry interval
		re-entry interval     removed of warning signs.
6.4		removal of warning signs     decentering in the part areas
		decontamination of non-target areas     withholding period before sale or
		withholding period before sale or
		consumption
		manufacturers procedures followed

# Unit 260 Applying pesticide smokes indoors

Activity check li	number and description from	Assessment criteria
1.1	Describe the legal requirements relating to applying pesticides using smokes indoors	<ul> <li>May include:         <ul> <li>equipment complies with legal requirements</li> </ul> </li> <li>comply with The Plant Protection Products (Sustainable Use) Regulations 2012</li> <li>the operator must hold the appropriate certification for the equipment they are using</li> </ul>
1.2	Describe how to apply pesticides safely using smokes following industry best practice	<ul> <li>May include:</li> <li>comply with relevant Pesticide Codes of Practice</li> <li>adopt industry best practice</li> <li>be aware of any safety implications imposed by Risk/COSHH Assessment and comply with the requirements</li> <li>be aware of the increased risk of applying pesticides in a confined area</li> </ul>
2.1	Identify risks to the environment	May include:  • water courses  • drains  • boreholes  • wildlife  • non-targets  • sensitive crops/areas  • housing  • public/bystanders/co-workers  • other risks specific to the site
2.2	Explain how to minimise risks to the environment	Explanation to include the following points:  use of an appropriate pesticide  careful timing of application  check and maintain application rate  close ventilation system  seal the building  display warning signs  integrity of the structure  inform neighbours before application  Check and comment on wind speed  use of anemometer at suitable height or visible signs  wind direction  effect of wind suction  Reasons for minimising off target application:  avoidance of contamination to people and the environment
3.1 3.2	Read product information Interpret product information	The following to be provided if applicable:  • product name  • active substance(s) (ingredient(s)) Important information:  • field of use

		crop/target
		maximum individual dose
		maximum total dose
		maximum number of treatments
		specific product precautions/warnings
		operator protection
		environmental protection
		restrictions on use
		Target specific information:
		crop/target
		dose rate
		timing
		additional label information
		compatibility
4.1	Calculate volume to be treated	accurate calculations
	Calculate the quantity of smoke	accurate calculations
4.2	generators or weight of pesticide	
	product required	
	Measure out the required	To include:
	quantities and position the smoke	correct quantities
5.1	generators or pesticide product	accurate placement
		following label instructions
		following risk assessment
	Demonstrate safe and	To include:
	accurate operational procedures	appropriate PPE/RPE
5.2		
		safe system for the release of the pesticide
		product
		safe exit route established
	Carry out all activities protecting	To include:
	human health and the	prevention of personal injury and
	environment	contamination through correct selection
		and use of PPE/RPE (as required by the
		product label and/or COSHH/Risk
		Assessment)
5.3		safe exit route identified and used
		prevention of public / bystander
		contamination
		safe filling procedure
		avoidance of off target contamination
		avoidance of overdosing crop/target/plant
		material
	Complete a treatment record	Completion of the treatment record must be:
5.4	,	accurate
		legible (if handwritten)
	Explain how to manage	Surplus concentrate pesticide
	surplus pesticide and dispose of	return to temporary mobile store
	waste materials	
	waste materials	return to fixed store Containers:
6.1		
		secure storage until disposal
		return to supplier
		collected by a licensed waste disposal
		contractor

		Packaging:
6.2	Explain the procedures to make the area safe for re-entry	May include:  • ventilate area prior to re-entry  • re-entry interval  • removal of warning signs  • decontamination of non-target areas  • withholding period before sale or consumption  • manufacturers procedures followed

# Appendix 1 Practical table

## Unit 257 Applying pesticide mists, less than 100 microns VMD indoors

Activity number and description	Achieved
1.1 Describe the legal requirements relating to applying pesticides using misting equipment indoors	
1.2 Describe how to apply pesticides safely using misting equipment following industry best practice	
2.1 Identify risks to the environment	
2.2 Explain how to minimise risks to the environment	
3.1 Read product information	
3.2 Interpret product information	
4.1 Carry out pre use checks to the applicator	
4.2 Adjust settings appropriate to the application requirements	
4.3 Calibrate the applicator and record relevant data	
4.4 Measure the area/volume to be treated	
4.5 Calculate the area or volume to be treated	
4.6 Calculate the quantities of pesticide and water required, if appropriate	
5.1 Measure the required quantities and add to the applicator, or attach pesticide container	
5.2 Demonstrate safe and accurate application procedures	
5.3 Carry out all activities protecting human health and the environment	
5.4 Complete a treatment record	
6.1 Explain how to manage surplus pesticide and dispose of waste materials	
6.2 Explain how to clean and decontaminate the applicator	
6.3 Describe the storage requirements for the applicator	
6.4 Explain the procedures to make the area safe for re- entry	

## Unit 258 Applying pesticide mists, less than 100 microns VMD outdoors

Activity number and description	Achieved
1.1 Describe the legal requirements relating to applying pesticides using misting equipment outdoors	
1.2 Describe how to apply pesticides safely using misting equipment following industry best practice	
2.1 Identify risks to the environment	
2.2 Explain how to minimise risks to the environment	
3.1 Read product information	
3.2 Interpret product information	
4.1 Carry out pre use checks to the applicator	
4.2 Adjust settings appropriate to the application requirements	
4.3 Calibrate the applicator and record relevant data	
4.4 Measure the area/volume to be treated	
4.5 Calculate the area or volume to be treated	
4.6 Calculate the quantities of pesticide and water required, if appropriate	
5.1 Measure the required quantities and add to the applicator, or attach pesticide container	
5.2 Demonstrate safe and accurate application procedures	
5.3 Carry out all activities protecting human health and the environment	
5.4 Complete a treatment record	
6.1 Explain how to manage surplus pesticide and dispose of waste materials	
6.2 Explain how to clean and decontaminate the applicator	
6.3 Describe the storage requirements for the applicator	

## Unit 259 Applying pesticide fogs, less than 100 microns VMD indoors

Activity number and description	Achieved
1.1 Describe the legal requirements relating to applying pesticides using fogging equipment indoors	
1.2 Describe how to apply pesticides safely using fogging equipment following industry best practice	
2.1 Identify risks to the environment	
2.2 Explain how to minimise risks to the environment	
3.1 Read product information	
3.2 Interpret product information	
4.1 Carry out pre use checks to the applicator	
4.2 Adjust settings appropriate to the application requirements	
4.3 Calibrate the applicator and record relevant data	
4.4 Measure the area/volume to be treated	
4.5 Calculate the weight, area or volume to be treated	
4.6 Calculate the quantities of pesticide and water required, if appropriate	
5.1 Measure the required quantities and add to the applicator, or attach pesticide container	
5.2 Demonstrate safe and accurate application procedures	
5.3 Carry out all activities protecting human health and the environment	
5.4 Complete a treatment record	
6.1 Explain how to manage surplus pesticide and dispose of waste materials	
6.2 Explain how to clean and decontaminate the applicator	
6.3 Describe the storage requirements for the applicator	
6.4 Explain the procedures to make the area safe for re- entry	

## **Unit 260 Applying pesticide smokes indoors**

Activity number and description	Achieved
1.1 Describe the legal requirements relating to applying pesticides using smokes indoors	
1.2 Describe how to apply pesticides safely using smokes following industry best practice	
2.1 Identify risks to the environment	
2.2 Explain how to minimise risks to the environment	
3.1 Read product information	
3.2 Interpret product information	
4.1 Calculate volume to be treated	
4.2 Calculate the quantity of smoke generators or weight of pesticide product required	
5.1 Measure out the required quantities and position the smoke generators or pesticide product	
5.2 Demonstrate safe and accurate operational procedures	
5.3 Carry out all activities protecting human health and the environment	
5.4 Complete a treatment record	
6.1 Explain how to manage surplus pesticide and dispose of waste materials	
6.2 Explain the procedures to make the area safe for re-entry	

## Sources of general information

The following documents contain essential information for centres delivering City & Guilds qualifications. To download the documents and to find other useful documents, go to **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

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.

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

#### City & Guilds

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