

**NPTC LEVEL 2 AWARD IN THE SAFE
USE OF PESTICIDES (QCF)**

**MODULE PA4S
PESTICIDE SLUG PELLET APPLICATOR**

ASSESSMENT SCHEDULE

Module PA 4S PESTICIDE SLUG PELLET APPLICATOR

Mounted or Trailed (excluding pedestrian controlled machines or hand held equipment).

Candidates undertaking assessment will need to complete all assessment activities appropriate to the applicator they use. Assessors will conduct the assessment in the context of the equipment available and intended for use during the assessment.

There are a number of methods of calibration for a slug pellet applicator and candidates may use any method provided that it produces the correct end result.

Objective - Candidates will be able to:-

1. Prepare a pesticide slug pellet applicator for work, calibrate and operate it to ensure correct application rate without risk to themselves, other people and the environment.
2. Use the information detailed on product labels to determine the approved uses for the product and its potential hazards to human safety, non-target areas and the environment in general.
3. Carry out daily and routine maintenance of the applicator.
4. Carry out the correct procedure for clearing personal protective equipment and application equipment which may have been contaminated with pesticide.

There are a number of methods of calibration candidates may use provided that it produces the correct end result.

Qualification and Credit Framework (QCF) – credit value

PA4S has a credit value of 2 credits on the QCF

Safe Practice

Operating the prime mover and/or the equipment in such a way as to put the candidate, assessor, equipment or the environment at risk will cause the candidate to be declared not yet competent.

All equipment must be of the standard required under current Health & Safety legislation.

Candidates must wear personal protective equipment (PPE) appropriate to the risk whenever carrying out work on the applicator e.g. checking metering devices.

Contaminated PPE should never be taken into an enclosed cab.

In addition, before entering a cab, any PPE not required by legislation (other than coveralls and wellington boots) should be removed and placed in a suitable tractor locker or enclosed container outside the cab.

Candidates must be especially careful to avoid personal contamination when operating uncabbed or partially cabbed prime movers and be aware of the effect that changing circumstances have on the stability of the equipment.

Pre-requisites

The foundation unit (PA1) is required by candidates before being assessed for this application unit.

Validation of Equipment

Any type of full width broadcast or placement pesticide slug pellet applicator eg. Spinning disc, pendulum or pneumatic type.

Operator's instruction book and calibration charts/calculators should be available for use by the candidate throughout the assessment. Any other relevant literature may also be used.

The assessment should be conducted in the context of the work situation.

Candidates who undertake this assessment and are judged 'competent' 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.

Site

Work site with area to allow calibration and an area where field operation can be undertaken.

Special Note The PA4S award applies **only** to the application of slug pellets.

Suggested facilities and equipment required to run the assessment:

Slug pellet applicator and additional equipment appropriate to the candidate.
First Aid kit which complies with the Health & Safety (First Aid) Regulations 1981
Prime mover matched to slug pellet applicator.
Instruction books for prime mover and slug pellet applicator.
Washing facilities.
Personal Protective Equipment to comply with pesticide label/COSHH risk assessment
Tape measure/Measuring wheel to measure 100m run.
Wind speed gauge.
Suitable tools.
Appropriate containers with pesticide or simulated pesticide slug pellets.
Clean product labels or label duplicates appropriate to the candidate.
Containers for collecting product during any static calibration.
Accurate scales.
Field markers.
Site for practical work.
Pocket calculator.

Tyre pressure gauge.
Suitable lubricants.
Appropriate site for cleaning applicator.
Appropriate Treatment Record Sheets.

Assessment Activity	Assessment Criteria
5. Read and interpret product label (as supplied or approved by the Assessor)	<ul style="list-style-type: none"> - Field of use - Hazard symbol - Active ingredient - PPE requirements - Product being used - Specific product precautions - Appropriate for type of applicator - Dose rate - Maximum number of treatments - Timing - 'No Spread' zone - Baiting recommendations - Additional label information - Restrictions on use
6 Part fill Applicator	<ul style="list-style-type: none"> - Suitable site selected - Fill by usual on-site method following approved safe procedures - Manual handling considerations - Optimum positioning for efficiency - Security of pesticide on site - Safe storage of empty containers - Facility for dealing with/containing spillage
Calibrate the Applicator	
7. Select and calculate speed (if applicable) Calculate required output	<ul style="list-style-type: none"> - Trial run on typical ground to establish acceptable slug pellet applicator performance - Accurate measurement of 100 m - Time in seconds to cover 100 m using gear and rpm established - Correct use of formula
8. Set applicator to achieve required application rate Carry out check of application rate Adjust applicator to achieve the correct application rate	<ul style="list-style-type: none"> - Use of manufacturers handbook/application charts - Safe procedures followed - NB Method used will depend on type of machine, calibration method chosen and recommendations given in manufacturers operators handbook - Run applicator for specific period of time or distance - Accurate weighing of output - Compare with target rates - Repeat until target rate achieved - Care to avoid moving parts - Use of manufacturers handbook
9. Demonstrate knowledge of factors affecting uniformity of spread.	<ul style="list-style-type: none"> - Applicator levelled according to manufacturer's recommendations - Applicator at correct height - Correct settings of spreading mechanism (aperture, bias etc) - Bulk density of pellets - Relative humidity considerations - Factors affecting distribution pattern <ul style="list-style-type: none"> • Wind • Slope • Forward speed
10. Assess the applicator for uniformity of spread	<ul style="list-style-type: none"> - Visual assessment of uniformity of spread using any appropriate and safe method -
11. Demonstrate knowledge of calibration data to be recorded	<ul style="list-style-type: none"> - Applicator settings used - Product used for calibration - Application rate achieved - Spreading width - Registration no. of prime mover - Vehicle gear selected - Engine speed (rpm) - Vehicle forward speed - Vehicle wheel sizes and tyre pressures

Assessment Activity	Assessment Criteria
Site Work	
12. Carry out an environmental risk assessment of the application site	<p>May include:</p> <ul style="list-style-type: none"> - Ground conditions - Adjacent water courses - 'No spread' zones - Field drains - Wildlife - Public access - Hedgerows - Housing - Factors particular to the site <ul style="list-style-type: none"> - Check and maintain application rate - Erect warning signs - Other environmental margins - Warn neighbours - Use an appropriate pesticide - Adopt stewardship recommendations relating to individual/maximum doses of active ingredient - Careful timing of application - Comply with environmental assessment <ul style="list-style-type: none"> - Wind speed gauge at suitable height or visible signs - Wind direction <ul style="list-style-type: none"> - Awareness of likely effects and implications of product entering watercourses - Possible effects on wildlife/domestic pets - Effect of wind speed and direction - Effect of direction of travel - Maintaining accuracy of application - Avoid contamination of 'no spread zone', hedgerows/other field margins & water courses.
13. Calculate, weigh and add slug pellets to the hopper.	<ul style="list-style-type: none"> - Ensure approved techniques are followed with due regard to safe practice as determined by label/COSHH assessment. - Determine size of area to be treated - Correct application rate - Calculation of total product required - Accurate weighing of slug pellets
14. Demonstrate knowledge of accurate application procedures on site	<p>Methods of marking may include:</p> <ul style="list-style-type: none"> - Tramlines - Row crops. - Blob markers - Marker poles <ul style="list-style-type: none"> - Carefully avoid contact with the contaminated area, - Mark the spot at which the hopper emptied, either by a marker in a row or tramline or by turning 90 degrees, as long as the wheelings are clearly visible. - Continue applying by accurately matching at the appropriate point
15. Apply slug pellets to a given area in a safe and appropriate manner	<ul style="list-style-type: none"> - Avoid operator contact - Operate controls to start and finish applying accurately at beginning and end of each bout - Maintain correct forward speed - Accurate matching of bouts/use of driving aids - Awareness of techniques to counteract unbalanced applicator performance - Correct height of applicator - Coping with obstacles e.g. electricity poles - All area treated, minimising overlaps or misses. - Awareness of changes in wind speed and direction. - Maintenance of 'no spread zone'

Assessment Activity	Assessment Criteria
Post Operation	
<p>16. Demonstrate knowledge of:</p> <p>a) cleaning and decontamination of the applicator</p> <p>b) the procedure prior to any repair or replacement of parts</p> <p>c) preparation of applicator for storage</p>	<ul style="list-style-type: none"> - Select appropriate site - Follow manufacturer's cleaning procedures - Risk of contamination - Containment/disposal of pellets or contaminated soil arising from cleaning operation - Frequency of cleaning - Select an appropriate containment site and possible containers for contaminated material. - Ensure that the applicator is made safe (engine stopped, supports if appropriate). - Ensure that section to be repaired/replaced is safely isolated - Applicator decontaminated - Refer to manufacturer's handbook for guidance - Ensure applicator is clean and decontaminated - Carry out lubrication procedures - Danger of personal contamination - Store under cover and out of direct sunlight - Store in a secure area
<p>17. Complete treatment record</p>	<ul style="list-style-type: none"> - Appropriate record completed - Accurate recording of information