



NPTC

Registered Charity No. 1096429

NATIONAL AGRICULTURAL CENTRE, STONELEIGH PARK, WARWICKSHIRE CV8 2LG
Tel: 024 7685 7300 Fax: 024 7669 6128 Email: information@nptc.org.uk

0213
CERTIFICATE OF COMPETENCE

in the

SAFE USE PESTICIDES

QUALIFICATION HANDBOOK

FOREWORD

The Control of Pesticides Regulations 1986 (as amended 1997), requires anyone who uses Pesticides (approved for use in Agriculture, Horticulture and Forestry) in the course of business or employment to have received adequate instruction and guidance in the safe, efficient and humane use of such pesticides and to be competent in the duties to be undertaken.

This requirement applies to all such use of pesticides and application methods irrespective of whether a Certificate of Competence is required.

The consent to the use of pesticides given by Ministers on the 6th October 1986 under the Control of Pesticides Regulations 1986 (as amended), impose responsibilities on all those who use pesticides. Special conditions apply to those who use pesticides approved for use for the purpose of agriculture, horticulture or forestry, whenever they are used. Certain of these users must have obtained a Certificate of Competence recognised by the Ministers. Ministers have recognised the NPTC Certificate of Competence and certificates issued in partnership with SSTS, DARD and States of Jersey.

CONTENTS

SCHEME REGULATIONS Introduction

The Certificate of Competence
Instruction
Access to Assessment
Verification

CANDIDATE INFORMATION

PA1 FOUNDATION UNIT

All candidates will be required to successfully complete the Foundation Unit prior to attempting any other unit.

Candidates to select application unit(s) in which they wish to be assessed.

PA2 BOOM SPRAYER – MOUNTED, TRAILED or SELF-PROPELLED

(excluding pedestrian controlled machines)

Either A Hydraulic nozzle type or Rotary atomiser type – boom
or C Twin fluid nozzle type – boom
or D Electro-statically charged
or E Horizontal boom type fitted with downward air assistance
or F Frame or boom type Wick Applicator
or AR Vehicle Mounted Kerb Sprayers – hydraulic nozzle / rotary atomiser type
or ST Spray Trains – Hydraulic nozzle and/or rotary atomiser types

PA3 BROADCAST or BOOM SPRAYER MOUNTED or TRAILED with or without air assistance

(excluding pedestrian controlled machines or hand held equipment)

Either PA3A Broadcast Sprayer with Air Assistance
or PA3B Boom Sprayer with Air Assistance
or PA3C Boom Sprayer without Air Assistance

PA4 PESTICIDE GRANULE APPLICATOR – MOUNTED OR TRAILED

(excluding pedestrian controlled machines or hand held equipment)

PA5 BOAT MOUNTED APPLICATORS

Either A Boom type – hydraulic nozzle or rotary atomiser
or B Granule applicator

PA6 HAND HELD APPLICATORS

(including pedestrian controlled machines but **excluding** misters and foggers).

Either A Hydraulic nozzle or rotary atomiser type
or AW Applications in or near water using hydraulic or rotary atomiser type
or C Granule Applicator
or CW Applications in or near water using granule applicators
or D Other hand held applicators (requiring minimal calibration)

PA7 AERIAL APPLICATION - Pilots

PA8 MIXER / LOADER

PA9 FOGGING, MISTING AND SMOKES (including formaldehyde)

PA10 BATCH DIPPING

PA11 SEED TREATING EQUIPMENT

PA12 APPLICATION OF PESTICIDES TO MATERIAL AS A CONTINUOUS PROCESS VIA CONVEYOR, ROLLER TABLES AND OTHER MOVING EQUIPMENT

PA13 SUB SURFACE LIQUID PESTICIDE APPLICATORS

NPTC

0213
CERTIFICATE OF COMPETENCE
in the
SAFE USE PESTICIDES

Scheme Regulations

Introduction

The scheme will be administered by NPTC.

NPTC will:

- publish - scheme regulations
 - assessment schedule
 - assessment material
- appoint Assessment Centres to co-ordinate and administer the scheme
- set standards for the training of Verifiers and Assessors
- recruit, train and deploy Verifiers
- manage verification
- issue certificates to successful Candidates

The Certificate of Competence / ID Card

A Certificate of Competence / ID Card will be awarded to candidates who achieve the required level of competence in the unit(s) to which their certificate relates.

Assessment will be available in the units identified in the Qualification Structure

Instruction

Attendance at a course of instruction is not a pre-requisite for an application for an assessment but potential candidates are strongly advised to ensure that they are up to the standards that will be expected of them when they are assessed. Candidates are, however reminded of their legal obligation to be trained under the Control of Pesticides Regulations 1986 (as amended).

NPTC does **not** hold a register of instructors; however instruction will normally be available from recognised training providers and/or centres of further or higher education active in the areas covered by this certificate. Further information on training may be obtained from Assessment Centres.

Access to Assessment

Assessment Centres will be responsible for arranging assessment on behalf of a candidate. Assessment may only be carried out by an Assessor approved by NPTC for that unit. Under no circumstances can either instructors involved in the preparation of the candidate, or the candidate's work place supervisors, or anyone else who might have a vested interest in the outcome, carry out the assessment.

Assessment

Assessment is a process by which it is confirmed that the candidate is competent in the units within the qualification to which the assessment relates. It is a process of collecting evidence about his/her capabilities and judging whether that evidence is sufficient to attribute competence.

The candidate must be registered through an NPTC approved Assessment Centre for this qualification prior to assessment.

PA1 (Foundation Unit) will be assessed through multiple choice questions using a computer based assessment. For more information please visit www.city-and-guilds.co.uk/gola. All application units will be assessed by one-to-one practical skills observation and oral questioning. The result of the assessment will be recorded on the assessment report form.

The schedule of assessment contains the criteria relating to:

- Observation of practical performance
- Assessment of knowledge and understanding

Performance Evaluation

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

- 4 = Meets or exceeds the assessment criteria by displaying a level of practical performance and/or underpinning knowledge, with no 'minor' or 'critical' faults. (Competent).
- 3 = Meets the requirements of the assessment criteria for both the practical performance and the underpinning knowledge, with some 'minor' faults but no 'critical' faults. (Competent).
- 2 = Does not fully satisfy the requirements of the assessment criteria, being unable to perform the practical task satisfactorily or being deficient in underpinning knowledge leading to the recording of minor faults. (Not yet competent).
- 1 = Does not fully satisfy the requirements of the assessment criteria, being unable to perform the practical task satisfactorily or safely or being deficient in underpinning knowledge leading to the recording of a critical fault. (Not yet competent).

Verification

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 that NPTC 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.

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

A selection of assessment reports completed by the assessor will also be evaluated by NPTC.

Compliance with the verification requirements is a pre-requisite for assessors remaining on NPTC's list of approved assessors.

CANDIDATE INFORMATION

1. Recognition towards Category Based Craft Status
This qualification in the relevant units is recognised in the Agricultural Wages Order, in the NPTC Category Based Schedules as an optional activity towards a Craft Certificate.
2. The minimum age for assessment is 16 years. There is no upper age limit.
3. Failure to attend the assessment without prior notice will normally result in the forfeit of the assessment fee.
4. Personal Protective Equipment suitable for the assessment must be used.

STANDARDS

1. Candidates will be assessed on a competent/not yet competent basis. Competent candidates will not be graded.
2. PA1 (Foundation Unit) will be assessed by multiple choice questions using a computer based (GOLA) assessment.
3. For the application units (PA2 to PA13), whilst there is no written element of the assessment, Assessors may ask questions provided that such questions are of a practical nature and related to the assessment activities and criteria concerned.

Questions must not be used as a substitute for performing a practical part of the assessment.

4. All assessments must be conducted with due regard to legal requirements and safety regulations. Any breach of safety regulations will result in termination of the assessment. In the event of failure to observe reasonable safety precautions that may lead to damage or injury to persons, stock or equipment, the Assessor may, at his/her discretion, stop the assessment and declare the candidate not yet competent.
5. The correct facilities may be provided by the Assessment Centre (at cost); Assessors and candidates have the right to refuse machinery/equipment which is not suitable or does not comply with safety regulations.

Candidates who provide their own equipment/facilities, do so on the understanding that if it is not of the required standard, the assessment will be abandoned and they will forfeit their assessment entry fee.

6. Assessors may, at their discretion, stop the assessment and declare those candidates not yet competent who exhibit such a degree of incompetence, in any part of the assessment that would indicate their inability to operate the machine or perform the range of skills that the passing of the assessment would imply.

7. Assessment Interpretation (Application Units)

The Pesticides Application Units must be applied by Assessors as they relate to the normal work place practice of the candidate.

The candidates will only be expected to use the range of equipment and pesticides with which they are familiar.

Assessors are to apply the assessment activities and criteria within each Application Unit as they relate to the machine or method that the candidate has opted to use at the time.

8. The Standard required to be declared Competent (Application Units)

The standard for the Pesticides Application Units will be as follows:

“The standard expected of an individual to apply pesticides safely, efficiently, humanely and competently for the duties they will be called upon to perform.

Any action taken by the candidate during the assessment which endangers the candidate, any bystander, the equipment or the environment will cause the candidate to be declared not yet competent.

Any action taken by a candidate during the assessment that results in a liquid that has been used in an operation connected with the preparation, calibration, application, maintenance or cleaning of any part of the equipment, being deliberately discharged to any area or drain that has not been designated for such purpose will cause the candidate to be declared not yet competent.

Failure to accurately calibrate the application equipment will cause the candidate to be declared not yet competent.

9. Re-take procedures

If candidates are assessed as “not yet competent” they can register again through their assessment centre to take the unit(s) assessment. They must retake all of any unit they were not yet competent in.

Additional Information

- Appropriate Manufacturer’s Operators Instruction book(s)
- Health and Safety Executive leaflets
- Training guides
- Defra leaflets and Codes of Practice
- AFAG Guides
- Forestry Commission Publications
- BCPC Using Pesticides
- CPA Guides
- Other relevant literature

AWARD OF CERTIFICATE OF COMPETENCE

Certificate	QUALIFICATION STRUCTURE		
1	FOUNDATION MODULE The successful completion of this module will be a condition of entry to any other module identified in this schedule.		
Certificate	Col. 1 TEST MODULE	Col.2 QUALIFICATIONS In addition to the module identified in column 1, the certificate holder is also qualified in respect of:	Col. 3 EQUIPMENT / INDIVIDUAL INCLUDED in this test module.
2A	BOOM SPRAYER – Boom type Hydraulic Nozzle and/or Boom type Rotary Atomiser	PA 2F, 2AR, 8 and any other mounted or trailed method not specified in this schedule.	Any mounted or trailed ground crop sprayer of the type specified in column 1.
2C	BOOM SPRAYER – Boom type Twin Fluid Nozzle	PA 2F, 8 and any other mounted or trailed method not specified in this schedule.	Any mounted or trailed ground crop sprayer of the type specified in column 1.
2D	BOOM SPRAYER – Electro-statically charged	PA 2F, 8 and any other mounted or trailed method not specified in this schedule.	Any mounted or trailed ground crop sprayer of the type specified in column 1.
2E	BOOM SPRAYER – Boom type fitted with downward air assistance	PA 2A, 2F, 8 and any other mounted or trailed method not specified in this schedule.	Any mounted or trailed ground crop sprayer of the type specified in column 1, where the boom geometry is in the horizontal mode.
2F	WICK APPLICATOR – Boom or Frame type	Test Module only.	Any mounted or trailed wick applicator of the type specified in column 1. Direct contact applicators.
2AR	VEHICLE MOUNTED KERB SPRAYER – Hydraulic Nozzle type and/or Rotary Atomiser type	Test Module only.	Any vehicle mounted Kerb sprayer of the type specified in column 1.
2ST	SPRAY TRAINS Hydraulic Nozzle and Rotary Atomiser types	Test Module only.	Any vehicle running on permanent way (railway track) of the type specified in column 1.

Certificate	QUALIFICATION STRUCTURE		
3A	BROADCAST SPRAYER WITH AIR ASSISTANCE – Mounted or Trailed	PA 8	Any mounted or trailed broadcast sprayer of the type specified in column 1.with air assistance.
3B	VARIABLE GEOMETRY BOOM SPRAYER WITH AIR ASSISTANCE – Mounted or Trailed	PA 2A, 2E, 2F, 3A, 3C, 8 or any mounted or trailed method not specified in this schedule	Any mounted or trailed variable geometry sprayer of the type specified in column 1, where the boom geometry may be varied between a horizontal and vertical plane <u>with</u> air assistance
3C	VARIABLE GEOMETRY BOOM SPRAYER WITHOUT AIR ASSISTANCE – Mounted or Trailed	PA 2A, 2F, 8 or any mounted or trailed method not specified in this schedule	Any mounted or trailed variable geometry sprayer of the type specified in column 1, where the boom geometry may be varied between a horizontal and vertical plane <u>without</u> air assistance.
4	GRANULE APPLICATOR – Mounted or Trailed	PA6C.	Any full width (e.g. spinning disc, pendulum, pneumatic) or placement type mounted or trailed pesticide granule applicator. Any mounted or trailed direct injection equipment.
5A	BOAT MOUNTED APPLICATOR Hydraulic Nozzle Boom	PA 5B, 5C, and any other boat mounted applicator not specified in this schedule.	Any boat mounted sprayer of the type specified in column 1.
5B	BOAT MOUNTED APPLICATOR Granule Applicator	PA 6C, 6CW.	Any boat mounted pesticide granule applicator of the type specified in column 1.
6A	HAND HELD APPLICATORS Hydraulic Nozzle and/or Rotary Atomiser Types	PA 6C, 6D, and any other hand held applicator of similar type not specified in this schedule.	Any hand held and /or pedestrian controlled sprayer of the type specified in column 1.
6AW	HAND HELD APPLICATORS Application to water using Hydraulic Nozzle or Rotary atomiser type sprayers	PA6A, 6C, 6CW, 6D, and any other hand held applicator of similar type not specified in this schedule.	Any hand held and/or pedestrian controlled sprayer of the type specified in column 1.

Certificate	QUALIFICATION STRUCTURE		
6C	HAND HELD APPLICATORS Granule Applicator	PA 6D and any other hand held applicators of similar type not specified in this schedule.	Any hand held and/or pedestrian controlled pesticide granule applicator of the type specified in column 1.
6CW	HAND HELD APPLICATORS Application to water using granule applicators	PA 6C, 6D and any other hand held applicators of similar type not specified in this schedule.	Any hand held and/or pedestrian controlled pesticide granule applicator of the type specified in column 1.
6D	HAND HELD APPLICATORS Hand Held Applicators requiring minimal calibration	Test module only, and any other hand held applicators of similar type.	Any hand held and/or pedestrian controlled pesticide application equipment including wick applicators, drench guns, rollers, watering cans, aerosols, direct injection equipment, pepper pots and brushes.
7	AERIAL APPLICATION Pilot	Test module only.	Pilots and any fixed wing aircraft and/or helicopter.
8	MIXER/LOADER	Test module only.	Any individual acting as a mixer/loader.
9	FOGGING, MISTING AND SMOKES	Test module only.	Any hand held and/or pedestrian controlled pesticide application equipment designed to produce a fog, mist or smoke.
10	BATCH DIPPING	Test module only.	Any equipment designed for the purpose of applying pesticides by immersion.
11	SEED TREATING EQUIPMENT Mobile and Static Equipment	Test module only.	Any equipment designed to apply pesticides to cereal grains, pulses and other seeds and which is mounted on a mobile vehicle or is in a fixed static position.
12	APPLICATION OF PESTICIDES TO MATERIAL AS A CONTINUOUS PROCESS VIA CONVEYORS, ROLLER TABLES AND OTHER MOVING EQUIPMENT	Test module only.	Any equipment designed to apply pesticides as a continuous process to materials being transported on a moving conveyor, roller table or other moving equipment.
13	SUB SURFACE LIQUID PESTICIDE APPLICATOR	Test module only	Any mounted or trailed sub surface liquid applicator of the type specified in column 1.

GLOSSARY OF TERMS

The following terms are included to enable the users of this publication to determine which **operators certificate of competence** is required according to the equipment / method that they intend to use; they may be used in the text of this schedule in varying combinations.

Having identified the type of pesticide application equipment / method being used, reference should then be made to the Award of Certificate of Competence – Qualifications Structure.

This will determine which module within the pesticide application assessment they will need to complete in order to obtain a Certificate of Competence which is valid for the equipment which they use and / or the circumstances in which it is used.

It is produced for guidance purposes only and does not purport to establish any legally binding definition of any pesticide application equipment or practice.

FIELD

Field constitutes any site where possible application is being undertaken.

PRIME MOVER

Prime Mover constitutes any self propelled vehicle carriage operated by a person who rides in or on the vehicle.

SPRAYERS

Sprayers constitutes any equipment used to apply sprays having droplets within a maximum and minimum size range described by the British Crop Protection council nozzle classification scheme categories Coarse, Medium and Fine.

MOUNTED EQUIPMENT

Mounted Equipment constitutes any pesticide application equipment mounted on, attached to or which forms a permanent part of the prime mover.

TRAILED EQUIPMENT

Trailed Equipment constitutes any pesticide application equipment which is trailed behind the prime mover.

MICRO-PROCESSOR CONTROL SYSTEMS

Computer control systems may include automatic, semi-automatic and electromechanical control systems.

GROUND CROP SPRAYERS

Ground Crop Sprayers constitute any equipment of the spray boom type which apply pesticide via a boom operating in an horizontal plane.

BROADCAST SPRAYERS

Broadcast Air Assisted Sprayers constitute any equipment which broadcasts spray droplets by means of an uncontained air stream produced by fan assistance and which carry outwards and upwards from the source of the spray.

VARIABLE GEOMETRY SPRAYERS

Variable Geometry Sprayers constitute any equipment of the spray bar type which applies pesticide via a boom, the geometry of which may be varied between a horizontal and vertical plane and set in accordance with the spray target.

HYDRAULIC NOZZLE

A device wherein pressurised liquid is the primary source of energy utilised to produce a spray.

ROTARY ATOMISER

A device wherein a rotating solid surface (e.g. cup, disc, wheel or cage) is the primary source of energy utilised to produce a spray.

TWIN-FLUID NOZZLE

A device wherein the movement of gas or vapour is the primary source of energy utilised to produce a spray.

ELECTROSTATICALLY CHARGED

Material to which an electrostatic charge has been intentionally added.

AIR ASSISTANCE

Air assistance constitutes the use of a fan to carry spray droplets to their intended target.

DOWNWARD AIR ASSISTANCE

Downward Air Assistance involves the use of an enclosed fan generated air stream to assist penetration of the crop canopy.

GRANULE APPLICATORS

Granule Applicators constitute any full width broadcast or placement type equipment which applies pesticide in granule or powder form.

BOAT MOUNTED APPLICATORS

Boat Mounted Applicators constitute any equipment which applies pesticide and is mounted on, or attached to or forms a permanent part of any boat.

HAND HELD APPLICATORS

Hand held applicators constitute any equipment either wholly carried by a person or where the pesticide delivery nozzle or outlet is supported directly by the operator.

PEDESTRIAN CONTROLLED EQUIPMENT

Pedestrian controlled equipment constitutes any equipment which is supported by a mechanical form of carriage controlled by a person who cannot ride in or on the equipment carriage.

VEHICLE MOUNTED KERB SPRAYERS

Vehicle Mounted kerb sprayers constitute any equipment which is mounted on, fixed to or forms part of any vehicle for the purpose of allowing the application of pesticides to road side kerbs.

SPRAY TRAINS

Spray Trains constitute any vehicle running on permanent way and to which any equipment which applies pesticide to the track, trackside and / or adjacent areas is mounted, attached, or where such equipment forms a permanent part of the vehicle.

WICK APPLICATORS

Wick Applicators constitute any equipment which applies pesticides via an impregnated wick or similar device.

AERIAL APPLICATION

Aerial application constitutes the application of pesticides from aircraft (either fixed wing or helicopters) in flight.

MIXER/LOADER

Mixer/loader includes any individual who is involved in the mixing and/or the loading of pesticides into the tank or hopper of any pesticide application equipment.

MISTS AND FOGS

Mists and Fogs (including smokes) are particulate clouds having particles of a size range less than 100 microns Volume Median Diameter.

DIPPING

Dipping involves the immersion of material to be treated, or part thereof in a pesticide solution.

SEED TREATING EQUIPMENT

Seed Treating Equipment constitutes any equipment, either mobile or static which applies pesticides to cereal grains, pulses and other small seeds.

APPLICATION OF PESTICIDES AS A CONTINUOUS PROCESS VIA CONVEYORS, ROLLER TABLES AND OTHER MOVING EQUIPMENT.

Application of pesticides as a continuous process constitutes the application of pesticide using equipment which is mounted on, attached to or forms a permanent part of a treatment system.

PERSONAL PROTECTIVE EQUIPMENT

Personal protective equipment means all equipment (including clothing affording protection against weather) which is intended to be worn by or held by a person at work and which protects him against one or more risks to his health or safety, and any addition or accessory designed to meet the objective.

SUB SURFACE LIQUID APPLICATORS

Any type of machine (excluding pedestrian controlled) designed to apply liquid pesticide below surface level.

IF IN DOUBT ABOUT THE TYPE OF EQUIPMENT THAT IS BEING USED, YOU ARE ADVISED TO SEEK THE ADVICE OF THE SUPPLIER.