

Technical Evaluation Record V3 Jan22



QUALIFICATION:	Pesticides - PA2E Boom Sprayer Fitted with Downward Air Assistance	Qualification Code:	0216-50 (Ind)			
		Units:	113			
Assessor Name:		Technical Verifier Name:				
Assessor No: NEW? DOB:		Technical Verifier No:				
Assessor Email:		Start Time:				
Invoice To: (Include Centre name if applicable)		End Time:				
CRITERIA: (Please refer to the following pages and current Qualification Guidance)		PERFORMANCE EVALUATION (Circle):			JUSTIFICATION:	
M/C test paper to check PA1 knowledge and specific industry best practice <i>(new assessors only)</i>	1		4	5	5 = Pass with 20/20 4 = Pass with 18/20 or 19/20 1 = Fail	
Knowledge of H&S regulations and industry best practice. Carry out SSRA, COSHH and environmental assessment	1	2	3	4	5	
Knowledge of range of applicators (including pump types, liquid/air flow, controls, components, induction systems)	1	2	3	4	5	
Knowledge of machine preparation and safe driving considerations	1	2	3	4	5	
Knowledge of operator protection, sealed cab/open platform and PPE requirements and standards	1	2	3	4	5	
Knowledge of a range of nozzles appropriate to applicator and relevant nozzle chart interpretation	1	2	3	4	5	
Knowledge of downward air assistance components, their use and settings for application	1	2	3	4	5	
Interpretation of two appropriate product labels	1	2	3	4	5	
Calibrate the applicator (without use of calibration sheet/aids).	1	2	3	4	5	
Complete calibration test paper	1		4	5	5 = Pass with 100% 4 = Pass with <100% 1 = Fail	
Knowledge of drift reduction methods	1	2	3	4	5	
Measure, mix and fill applicator. Carry out an application. Knowledge of site marking options	1	2	3	4	5	
Knowledge of cleaning/decontamination/disposals. Complete a treatment record.	1	2	3	4	5	
Assessment techniques <i>(new assessors only)</i>	1	2	3	4	5	
PERFORMANCE EVALUATION COLUMN TOTALS:					= TOTAL SCORE:	
Result of Technical Evaluation (tick):	MET	TOTAL SCORE REQUIRED TO ACHIEVE ASSESSOR STATUS:				56
	NOT MET	(NB. ACHIEVED IN PERFORMANCE EVALUATION COLUMNS 4 & 5 ONLY) <i>If an existing PA Assessor then please adjust total score required to 48</i>				
ACTION PLAN FOR ASSESSOR:						
<i>Please continue on reverse if necessary</i>						
ASSESSOR COMMENTS:						
<i>Please continue on reverse if necessary</i>						
TECHNICAL VERIFIER SIGNATURE:		COST:		DATE:		
		£200 Half Day £300 Full Day				
ASSESSOR SIGNATURE:						

TECHNICAL EVALUATION RECORD

0216-50 Level 2 Award in the Safe Application of Pesticides Using Self Propelled, Mounted, Trailed Horizontal Boom Sprayers (PA2)

Unit 113 Operating Mounted, Trailed and Self Propelled Downward Air Assisted Horizontal Boom Sprayers (PA2E)

M/C test paper to check PA1 knowledge and specific industry best practice

- Minimum score of 18/20 achieved.
(Please note: this paper only needs to be completed by new PA assessors).

Knowledge of H&S regulations and industry best practice

Key principles and practical relevance:

- Health and Safety at Work etc. Act 1974 (HASAWA)
- Management of Health and Safety at Work Regulations 1999 (MHSWR)
- Provision and Use of Work Equipment Regulations 1998 (PUWER)
- Personal Protective Equipment at Work Regulations 1992 (PPE Regs)
- Control Of Substances Hazardous to Health Regulations (COSHH)
- The Health and Safety (First Aid) Regulations 1992
- Reporting of Injuries Diseases Dangerous Occurrence Regulations (RIDDOR)
- Wildlife and Countryside Act 1981
- Countryside and Rights of Way Act 2000

- Sustainable Use (PPP) regulations
- Pesticides Code of Practice
- 2 sources of industry best practice
- Operator certification
- Risk assessments
- Condition and guarding of equipment

Carry out COSHH assessment

- Using template provided or an approved template

Carry out SSRA

- Assessor to complete a Site Specific Risk Assessment, using provided template.
- Header and footer.
- Hazards and controls relative to site, task and equipment.

Carry out environmental assessment

- Environmental risks to site identified
- Methods to minimise risks explained.
- Additional risks not identified on site, (that may occur in typical assessment situations) to be discussed.

Knowledge of a range of applicators (including pump types, liquid/air flow, controls, components, induction systems)

Applicable to equipment used for the TE and questioning to cover knowledge of variations:

- Operating controls
- Applicator components
- Common pump types
- Liquid flow
- Air flow
- Operating differences between fixed forward speed and variable forward speed (rate controller) applicators

Knowledge of machine preparation and safe driving considerations

- Pre-use checks to prime mover
- Compatibility and security
- Safe driving
- Contact with obstacles (e.g. overhead power lines)

Knowledge of operator protection, sealed cab/open platform and PPE requirements and standards

- Operator protection – sealed cab
- Operator protection – open cab/canopy/platform
- CE and EN markings-relevance
- Coverall specifications -Type4/5/6
- Glove specification
- Face shield
- Boot specification
- RPE – types and reasons

Knowledge of a range of nozzles appropriate to applicator and relevant nozzle chart interpretation

- Flat fan
- Hollow cone
- Air inclusion
- TV to explain the 'rule of 4' in relation to calculating nozzle output (if unknown)
(Please note: Assessor to identify nozzle, explain when it would be used and interpret the markings. Additional detail can be obtained / interpreted from an appropriate nozzle chart.

Knowledge of downward air assistance components, their use and settings for application

- Air bag/sleeve and outlet components
- Air keeps the bag/sleeve inflated over its entire length
- Increasing air volume may improve penetration of the spray into the crop and/or lead to excessive drift
- Inclining nozzle/air outlet forward will open the crop canopy and counteract the effect on the spray created by the forward speed of the sprayer and counteract the effect on the spray created by a head wind
- Inclining nozzle/air outlet rearward will open the crop canopy and counteract the effect on the spray created by a tail wind

Interpretation of two appropriate product labels

- Product label 1
- Product label 2

Calibrate the applicator (without use of calibration sheet/aids).

- Calibration method (carried out):
 - Application volume
 - Amount of water for area
 - Amount of pesticide for area
 - Amount of pesticide for full tank

Complete calibration test paper

- Calibration test paper successfully completed
Note to TV: The assessor is expected to complete all the calibration test paper exercises. A marking sheet range has been produced to allow for variations in methods used and rounding up/down.

Knowledge of drift reduction methods

- Weather conditions
- Direction of spraying
- Nozzle type and size
- Air Pressure
- Liquid pressure
- Nozzle/outlet angle
- Forward speed
- Boom height

Carry out measuring and mixing.

- Suitable site selected.
- Correct PPE used
- Safe use of water supply
- Accurate measurement of water (allowing for pesticide volume) and pesticide.
- Read a range of different measuring vessels (to be read in millilitres and litres)
 - Large jug (water)
 - Small jug (chemical)
 - Cylinder
 - Knowledge of how to accurately measure powders/granules
- Correct cleaning procedure of pesticide measuring vessel.
- Avoidance of spillage. Drip tray used.

Carry out an application. Knowledge of site marking options

- Site marking options (to ensure accurate application)
- Safe and accurate application carried out
- Procedure for blocked nozzle during application
- Procedure for refilling during application

Knowledge of cleaning/decontamination/disposals

- Surplus dilute, disposal
- Washing procedure explained
- Washings, disposal
- Empty container/packaging, washing, storage and disposal (Crop Protection Association Best Practice Guide 'Container Cleaning' 2012)

Complete a treatment record

- Treatment record correctly completed

Assessment techniques

- Clear and concise questions/instructions
- Question/instruction relative to unit.

(Please note: this section only needs to be completed by new PA assessors).

Note: *If an existing PA assessor is adding this as a new unit, the M/C test paper and assessment technique sections do not need to be completed.*

Total score required (on front sheet) can be adjusted to 48.

The calibration test paper must be completed by all potential assessors.