



Australian Cotton Industry's

Pesticide Application Management Plan (PAMP)

| Farm Name: | |
|----------------------|-------------------------|
| Grower Name: | |
| Company Name: | |
| Date PAMP Developed: | |
| Copies Supplied to: | Farm workers |
| | Consultant |
| | Ground spray contractor |
| | Aerial applicator |
| | |
| | |
| | |

Notes:

- This document should only be used as a **guide** as each farming operation may have individual considerations.
- This document should be reviewed and completed annually.
- The word 'Pesticides' refers to all products used on cotton crops herbicides, insecticides, defoliants.
- The Spray Record Template in Appendix 1 should be completed for every spray application.





1.1 FARM MAPS

Recommended list of details to be included on the farm map/s:

| | Yes | No |
|--|-----|----|
| North orientation arrow | | |
| Accurate scale to identify distances from sensitive areas for Mandatory No-Spray Zone (refer to the label definitions) and other buffer zone distances | | |
| Location of the property boundaries | | |
| Crop area clearly marked with field names and area (Ha) | | |
| On-farm and neighbouring houses and buildings | | |
| Neighbouring agricultural areas identified (e.g., crops, grazing, bees, dairy, tree crops) | | |
| On-farm and neighbouring sensitive areas such as natural resources including riparian vegetation, native vegetation, rivers, creeks, and wetlands | | |
| Distances from sensitive areas clearly indicated on maps to determine position of Mandatory No-Spray Zones (as required on some approved product labels) | | |
| Aircraft and spray rig hazards – power lines, antennas, towers, trees, irrigation equipment | | |
| Location of weather station/s and windsocks | | |
| Public roads, stock routes, railway lines and school bus routes and times | | |
| Chemical and fuel storage areas | | |
| Location of bee hives and neighbouring designated "bee sites" if applicable. Bee sites should be communicated when planning a spray application. Check for the presence of commercial apiary activity or visit the Bee Connected – www.beeconnected.org.au (see Appendix 3 – Neighbours, Sensitive Areas, and Notification - Template) | | |
| Contact details (phone & UHF) for the farm or relevant workers on farm map or attached to farm map (e.g. Accessible) | | |





1.2 RECORD KEEPING - CRITICAL POINTS

This list is intended strictly as a **GUIDE ONLY** and is based on NSW and Qld legislative requirements.

- Individual product labels or APVMA permit conditions may contain additional record keeping requirements.
- Records must be kept for a minimum period of 3 years NSW and 2 years QLD
- Records must be made at the time of the application and within 24 hours after the application
- In NSW (*Pesticide Act 1999*) and QLD (*Chemical Usage Control Act 1998*). All users of pesticides must only use the pesticide for the purpose described on the label and all instructions on the label must be followed.

| Pesticide application records MUST contain the following for NSW & QLD: | Yes | No |
|---|-----|----|
| Name, address and contact telephone number of the applicator and the employer or owner if an employee or contractor is the applicator | | |
| In QLD for aerial distribution (ACDC Act) - the name of the pilot and registration mark of the aircraft * Note: aerial operator record keeping requirement | | |
| In QLD for ground application - the name of the licensed commercial operator carrying out or supervising the application. * Note: Commercial operator record keeping requirement | | |
| Location of the treated land so it can be clearly identified - Address of the property - Field identification - Order of fields treatment | | |
| Date and time of the application (including start and finish times for each field) | | |
| Description of the crop or situation treated (e.g., cotton, fallow, channels) | | |
| Pest /weeds/disease treated (list main pests targeted) | | |
| Details to identify the pesticide used: - Full product name (e.g., manufacturer, active ingredient) Note: Different manufacturers can have significant variations for the same active ingredient – ensure the correct label is recorded) - APVMA Number and/or Permit Number - Batch numbers where appropriate | | |
| Rate of application, quantity applied, and the total quantity applied per field or job | | |
| The water rate used | | |
| Details of all products added to the spray mix, wetting agents, diluents, buffers | | |





| | Yes | No |
|---|-----|----|
| Description of the equipment used for example: | | |
| - Type (trailing boom, self-propelled, truck mounted) | | |
| - Width of boom | | |
| - Type of rate controller (manual/automatic) | | |
| - Operating pressure used | | |
| - Nozzle type/orifice size | | |
| - Spray Quality use e.g. F,M,C,VC,XC,UC - droplet size used | | |
| - Any other requirements as per label instructions (some labels are specific) | | |
| Date and time of application (including start and finish) | | |
| Weather conditions are measured at the site of application and start, during and finish | | |
| of the application *Note – For aerial applications this requires someone on farm during the | | |
| application | | |
| - Wind speed | | |
| - Wind direction | | |
| - Temperature | | |
| - Relative Humidity | | |
| Changes to weather conditions during the application are recorded e.g. wind strength | | |
| increases or surface temperature inversions | | |
| If the application was stopped, was the reason recorded | | |





1.3 WEATHER MONITORING AND WEATHER PARAMETERS

List the optimum spray conditions that your enterprise aims to adopt and communicate to staff who supervise or conduct spray application or spray contractors (Note: Check product labels for specific weather requirements):

| DADAMETER | RANGE / OPTIMAL CONDITION | | Connections | |
|-------------------------------|---------------------------|------------|---|--|
| PARAMETER | DAYTIME | NIGHT TIME | COMMENTS | |
| Wind speed | | | Example: Daytime minimum of 3 km/h once the sun is up and approximately 20 degrees above the horizon. At night, wind speed must remain above 11 km/h for the entire period between sunset & sunrise. | |
| Wind direction | | | Monitor every load during the day and more frequently during night spraying. | |
| Temperature | Max temp: | Max temp: | List products that have a maximum temperature requirement on their label. | |
| Humidity (or Delta Limits) | | | Delta T for coarse droplets or larger should be assessed at the target as well as in the air | |

^{*}Use Appendix 2 – Detailed Weather Conditions for Spraying - a template to record weather parameters for each field.

2.1 PRE-SEASON COMMUNICATION - WORKERS

| | Yes | No |
|---|-----|----|
| Workers are informed of fields to be treated with pesticides during the season | | |
| Workers are informed of crop re-entry periods into sprayed field | | |
| Details of sprayed fields and re-entry periods are clearly displayed at a central location | | |
| Safety Data Sheets (SDS) are available to workers for all chemical products used on farm | | |
| Personal protective equipment (PPE) is available and used as described on the label for mixing, loading, and applying chemicals | | |





2.2 Pre-season Communication - Consultants

| Name of | | | |
|---|---|-----|----|
| consultant: | | | |
| Company Name: | | | |
| Phone: | | | |
| Email/Fax: | | | |
| UHF: | | | |
| Date of discussion: | | | |
| Signed: (optional) | | | |
| | | | |
| | | Yes | No |
| A pre-season discussion | on is held with consultant and documented | | |
| Consultant provided v | vith a current farm map and contact details for the season | | |
| In accordance Adherence to i Strategy, Herb Management S Product select | Il spray recommendations in writing to the grower including: with label requirements – Withholding periods, permits ndustry strategies – Insecticide Resistance Management icide Resistance Management Strategy, Bt Resistance Strategy ion decision based on farms sensitive areas/ hazards and educts are given | | |
| _ | eeds to be clearly defined and documented: lecision on whether the application is to be made and product | | |
| Who orders the applic | ation? Name: | | |
| What is the procedure | if a spray application is delayed? | | |
| How will your consulto | ant be notified on completion of a spray job? | | |
| How will crop re-entry | requirements be managed? | | |
| | vww.satacrop.com.au and BeeConnected prior to making spray | | |
| recommendations | | | |
| | provided with a list of neighbour notification requirements and | | |
| sensitive areas/hazaro | | | |
| | hbours, Sensitive Areas, and Notification - Template. | | |
| _ | n arrangements between grower and consultant for the | | |
| • | followed for all pesticide applications | | |
| Consultants are invite | d to attend pre-season meeting with neighbours | | |





| Consultants are invited to participate in an Area Wide Management Group | |
|---|--|
| If identified, consultant is notified of neighbouring properties intended uses of high- risk chemicals | |
| A copy of the PAMP has been given to the consultant | |

2.3 Pre-season Communication – Neighbours

Neighbour Contact Checklist – Appendix 3 is a template to record your neighbours, sensitive areas and notification requirements and ensure the information is communicated to appropriate staff, consultant, ground, and aerial applicators.

| | Yes | No |
|---|-----|----|
| Has a pre-season discussion been made with all neighbours? | | |
| Have you made a record of neighbour pre-season communication? | | |
| Appendix 3 Neighbours, sensitive areas, and notification requirements – Template will | | |
| allow you to record your contact with neighbours. | | |
| Is there a nominated contact person and contact details for you and the neighbour | | |
| including a backup contact? | | |
| Have you identified the neighbours' sensitive areas, hazards and recorded the | | |
| information? E.g., bee hives, stock routes, farmhouses/building, cropping/grazing, native | | |
| vegetation | | |
| See Appendix 3 Neighbours, Sensitive Areas and Notification Template or farm map with | | |
| sensitive areas identified | | |
| Have you exchanged current farm maps with your neighbours? | | |
| | | |
| Have you discussed intended cropping program and potential spray application for the | Ш | |
| season (herbicides/insecticides/ defoliants) and methods of application? | | |
| Have you discussed weather conditions (wind speed, direction, temperature) under | Ш | |
| which an application will or will not proceed? | | |
| Is notification of sprays required for neighbours? | | |
| Check products to see if notification of neighbours is a label requirement. | | |
| See Appendix 3 - Neighbours, Sensitive areas and Notification Template | | |
| Is there an agreed procedure for handling complaints? Refer to section 3.0 Compliant | | |
| Handling template in PAMP | | |
| Were the previous season arrangements reviewed to ensure both parties are satisfied | | |
| with communication? | | |
| A copy of the PAMP has been provided to the neighbours where requested | | |
| | | |





2.4 Pre-season Communications – Aerial Applicators

| Name of aerial | | | | |
|--|----------------------------------|---------------------------|-----|----|
| applicator: | T | | | |
| Aerial applicator's Phone / UHF: | | | | |
| Aerial applicator's Email: | | | | |
| AAAA accredited ☐ Yes ☐ No | AAAA accreditation number: | | | |
| Date of discussion: Signed: (optional) | | | | |
| | | | Yes | No |
| A pre-season discussion has beer | n held with your aerial applicat | or and documented | | |
| Aerial applicator is provided with | a current farm map and farm | contact details | | |
| All pesticide spray recommendat | ions are provided in writing to | the aerial applicator | | |
| Action for in-season needs to be How will spray orders be sent to d | | | | |
| Who is responsible for ordering the | he sprays? Name: | | | |
| Who is responsible for monitoring Name: | g and recording weather condi | tions during application? | | |
| Who makes the final decision to s How is this communicated? (e.g., | | | | |
| A written job completion is provid | ded by the aerial operator | | | |
| Aerial applicator has been provid and sensitive areas/hazards. Appendix 3 – Neighbours, Sensitive | · · | · | | |
| Aerial applicator is provided with pesticides to each field. Appendix 2 - Detailed Weather Co. | a copy of the farms weather | parameters for applying | | |
| Aerial applicator has been advise properties | | | | |
| Agreed communication arrangen followed in-season for all pesticic | de applications | | | |
| Aerial applicator has been provid zones where required on pesticion | | on mandatory no spray | | |
| A copy of the PAMP has been pro | ovided to aerial applicator | | | |





2.5 Pre- season Communication – Ground Rig Contractors and Owners

| Do you intend to use a ground | l rig contra | actor this season | | | |
|--|--------------|----------------------|--|--------------|--------|
| | | | If no, g | o to section | 1 2.5B |
| .5A COMMUNICATIONS – G | ROUND F | RIG CONTRACTORS | | | |
| Name of ground | | | | | |
| applicator: | | | | | |
| Ground applicator's Phone | / Fax / | | | | |
| Email address/ UHF: | | | | | |
| Accredited ☐ Yes ☐ No | | litation er/type: | | | |
| | | | | Yes | No |
| A pre-season discussion has | been he | ld with your ground | rig applicator and documente | ed 🗆 | |
| Ground rig applicator is pro | vided wit | h a current farm ma | p and farm contact details | | |
| All pesticide spray recomme applicator | endations | are provided in writ | ting to the ground rig | | |
| Action for in-season needs How will spray orders be sea | | • | rumented: e.g., written job order, emailed | d) | |
| Who is responsible for order | ring the s | prays? Name: | | | |
| Who is responsible for moni | itoring an | d recording weather | conditions during application | 1? □ | |
| Who makes the final decision How is this communicated? | - | | me: | | |
| A written job completion is p | provided | by the ground rig ap | plicator | | |
| Ground rig applicator has be requirements and sensitive Appendix 3 – Neighbours, Se | areas/ha | zards. | | | |
| Ground rig applicator is pro- applying pesticides to each Appendix 2 - Detailed Weat | field. | | · | | |
| Ground rig applicator has be neighbouring properties | | | • | | |
| Agreed communication arra followed in-season for all pe | | | ig applicator and grower were | e 🗆 | |
| Ground rig applicator has be spray zones where required | - | • | nformation on mandatory no | | |
| A copy of the PAMP has bee | en provid | ed to ground rig app | licator | | |





2.5B COMMUNICATIONS - GROUND RIG OWNERS

| Farm worl | kers who will be undertaking ground rig spraying: | | | |
|------------|--|--------|---------|----|
| | Accredite | ed 🗆 | Yes 🗆 N | lo |
| Name(s): | Accredite | ed 🗆 | Yes 🗆 N | lo |
| | Accredite | ed 🗆 | Yes □ N | lo |
| | | | Yes | No |
| A pre-seas | son discussion has been held with workers conducting ground rig applicati | ons | | |
| All ground | rig applications are made as per label instructions | | | |
| Workers a | re provided with current farm map outlining sensitive areas (neighbours, | | | |
| houses, na | ative vegetation, bee hives) and hazards | | | |
| | ave been provided with a list of neighbour notification requirements and | | | |
| | areas/hazards (Appendix 3) | | | |
| | re provided with a copy of the farms weather parameters for applying | | | |
| 1 - | to each field. Appendix 2 – Detailed Weather Conditions for Spraying – | | | |
| template. | | | | |
| | cts that require the weather to be measured at the site of application, the | ere is | | Ш |
| | method and equipment is provided | | | |
| | nave been provided with adequate information about mandatory buffer zo | ones | | |
| | uired on pesticide labels | _ | | |
| | nave been advised of the location of any beehives on yours or neighbourin | g | | |
| properties | ommendations are provided in writing to the workers conducting applicat | ions | | |
| | | 10115 | | |
| • | d application records are supplied in writing to the grower after the | | | |
| completio | | in | | |
| _ | mmunication arrangements between workers and grower were followed all applications | 111- | | |
| | the PAMP has been provided to the workers conducting spray application | S | | |





3.0 COMPLAINT HANDLING

The following information may be useful in handling complaints about chemical applications. This is a guide only.

| If a complaint is received during an application: | Yes | No |
|---|-----|----|
| Suspend operation and discuss the reason for concern | | |
| Resume operation if agreed between the grower, complainant, and applicator. All parties must be confident that the operation is occurring within agreed parameters for application | | |
| Cancel operation if no agreement can be reached | | |
| Where agreement cannot be reach, an independent party should be contacted to mediate and assist in resolving issues/conflict | | |
| | | T |
| If a complaint is received after an application has occurred: | Yes | No |
| Discuss reason for concern with complainant. If required, refer to weather monitoring records and procedures (e.g., someone on site monitoring conditions) in an attempt to determine whether an adverse impact may have occurred | | |
| Attempt to identify any actions that can be taken in the future to alleviate the complainant's issue(s) if warranted and practical | | |
| Grower to discuss the matter with operator | | |
| If a complaint is received by the operator, the grower of concern should be notified | | |
| Complaints received by the pesticide regulators will be referred to the grower and operator for resolution | | |
| Appropriate authorities to be notified immediately of unresolved complaints are: Cotton | | |

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APPENDIX 1: PESTICIDE APPLICATION SPRAY RECORD - TEMPLATE - NSW

| Location, Applica | iioi, Daic | or Appr | ication | | | | | | | |
|---|--------------|-----------|--------------|----------------------------|-----------------------------|--------|------------------|------------|-------------------|--------------|
| Property/Holding: (residential address) | | | | | | | | | | Date: |
| Applicator's Full Name: | | | | Owner (if not applicator): | | | | | | |
| Address: | | | | Address: | | | | | | |
| Phone: | | | | | | | Phone: | | | |
| Mobile: | Fax: | | Email: | | Mobile: Fax: Emai | | | | Email: | |
| Sensitive Areas (included) | N Trantad | | fers): | | Comments | (inclu | ding risk co | ntrol meas | sures for sensiti | ve areas): |
| Host/Pest | | | In 11 1 4 | | | |) 1 CD 1 | 1 1 0 | | |
| Paddock Number/Na | me: | | Paddock A | Area: | | (| Order of Pad | docks Spra | ayed: | |
| Crop/Situation: | | | | | Type of An | imals | : | | | |
| Crop/Pasture Variety | : | | | | Age/Growt | h Stag | ge: | | | |
| Growth Stage: | | | | | Mob/Paddock/Shed: | | | | | |
| Pest/Disease/Weed: | | | | | Animals — Number Treated: | | | | | |
| | | | | | Pest Densit | y/Inci | dence: Hea | vy D | ſedium L | ight |
| | | | | | | | | | | |
| Application Data | | | | | 1 | | | I | | |
| Full Label Product 1 | Name: | I | | | Rate/Dose: Water Rate L/ha: | | | | | |
| Permit No.: | | Expiry I | Date: | | Additives/Wetters: | | | | | |
| Total L or kg: WHP: | | | ESI*: | | Date | | itable for Sale: | | | |
| Equipment Type: | | 1 | | Nozzle T | | | | | | |
| Date Last Calibrated | d: | Wa | er Quality (| pH or des | scription): | | | | | |
| Weather Showers Over Rainfall (24 hours b Before: | reast | | oud C | lear Sky [| m | Af | ter: | mm | | |
| Time (show time | Tempe | rature °C | | lative | Wind S | Speed | | Direct | | Variability |
| in this column) | | | Humie | dity (%) | | | | | (e | .g. gusting) |
| Start | | | | | | | | | | |
| | | | | | | | | | | |
| Finish | | | | | | | | | | |
| Comments: | | | | | | | | | | |
| Comments. | | | | | | | | | | |

^{*} When using herbicides in mixtures with fungicides and insecticides, an ESI may apply to the non-herbicide component of the mixture.





APPENDIX 1: PESTICIDE APPLICATION SPRAY RECORD - TEMPLATE - QLD

Section 1 – Full Name and Contact Details

| a. The person who used the product. | | | |
|---|---|--|---------------------|
| First Name: | Last Name: | | |
| Street Address: | | | |
| Suburb/Town: | State: | Postcode: | |
| Phone: () | Mobile: | | |
| b. The owner or occupier of the land on which the pro- If the same as above, please tick the box or com- First Name: Street Address: | | ow. | |
| Suburb/Town: | State: | Postcode: | |
| Phone: () | Mobile: | Fostcode. | |
| c. Anyone who was responsible for organising, overse above, please specify a. or b. or complete the First Name: | eeing, or directly su | pervising the chemical use. If the sam | e as either a. or b |
| Street Address: | | | |
| Suburb/Town: | State: | Postcode: | |
| Phone: () | Mobile: | ' | |
| Section 2 – Qualifications for the chemical Qualifications of anyone responsible for organising or directly supervising the chemical use Section 3 – Details of Products Used | | ons of the User | |
| a. Registered Trade Name | b. Name of | Manufacturer | |
| c. Registration Number and Label Number as assigned APVMA Approval No.: | d by the APVMA | | |
| d. Name of Active Constituent | e. A | mount of Active Constituent | |
| f. Details specified in product label instructions or po | ermit conditions. | | |
| Section 4 – Exact Details of Land Treated Notice, with a farm map detailing the corresponding parexact location of the land treated. It is sufficient to attain names or numbers below). Paddock Name or Number used to describe the | addock names or nuach a copy of the rat | mbers. GPS coordinates may be used es notice and record below the corresp | in recording the |
| Paddock Name or Number used to describe the exact land being treated | | nators of the land being treated ficient to describe the area) | |
| Distance from nearest town: | Direction from n | earest town: | |





Section 5 – Equipment and methods used to apply the chemical **Application Method** ☐ Aerial application ☐ Boom sprayer ☐ Low volume pressurised backpack ☐ A hose and handgun pump powered spray unit ☐ Low volume pressurised Hand sprayer **Nozzle Information** Name of Nozzle: Droplet Size **Nozzle Type** Exit Orifice Type ☐ Fine (F) ☐ Air Induction ☐ Single ☐ Air Induction – Anvil ☐ Medium (M) ☐ Twin ■ Anvil ☐ Coarse (C) ☐ Flat Fan ☐ Very Coarse (VC) ☐ Hollow Cone ☐ Extremely Coarse (XC) ☐ Ultra Coarse (UC) ☐ Pre-orifice flat fan Section 6 – Date or Dates of the Chemical Application Section 7 - Weather Conditions (any changes in wind speed and wind direction during the distribution must be recorded including the time of change). Time of Wind Wind Temp Relative Cloud Amount Changes in Observation °C Max Humidity Direction conditions Speed Cover of Rain % (ml) Before: During: After: **Section 8 - Application Details** L/ha Rate of Application kg/ha or Reason for application: Type of Crop Treated: or Situation of use: (e.g., roadside) Section 9 - Additional Requirements for Distribution Contractor Licence Holders Registration mark of aircraft: VH-Name of pilot: Total area covered by the chemical application: Diluent or additives added to spray mixture. Description of any dilutant e.g., water or additive Amount of any dilutant (e.g., water) or additive added added to spray mix (e.g. wetting agents, spreaders) to spray mix (e.g. wetting agents, spreaders) Section 10 – Declaration

Date:



Full Name: Signature:

I certify that all the information contained in this record is true and correct.



APPENDIX 2: DETAILED WEATHER CONDITIONS FOR SPRAYING

This information should be provided to all people who will be applying pesticides on your farm

| Area to be treated | Specific wind directions or conditions |
|--------------------|--|
| Example: Field 4 | no spraying when wind is from N or NE due to neighbour's grazing country |
| | |
| | |
| | |
| | |
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APPENDIX 3: NEIGHBOURS, SENSITIVE AREAS, AND NOTIFICATION TEMPLATE

| Neighbour | DATE OF DISCUSSION | PROPERTY | CONTACT DETAILS (ON FARM) | AREAS/FIELDS THAT TRIGGER NOTIFICATION FOR THIS NEIGHBOUR | PRODUCTS NOTIFICATION REQUIRED FOR (CHECK LABEL REQUIREMENTS FOR SPECIFIC PRODUCTS) | METHOD OF NOTIFICATION REQUIRED (PHONE, FAX, TEXT, EMAIL, ETC.) | SENSITIVE ARES (POTENTIAL HAZARDS) |
|-------------------------|-----------------------|---------------|--------------------------------------|---|--|---|------------------------------------|
| (Example) John Smith | 03/03/2016 | Rolling Downs | Bill Brown (manager) 0408 101 202 | Fields A & B – wind from the north | All herbicides | Text | Remnant vegetation |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

^{*}Sensitive Areas may include - on-farm and neighbouring water courses, riparian areas, wetlands, bodies of water, drainage lines, floodway's, areas of remnant or native vegetation and cropping/grazing areas, bee hives, schools, orchards, crops that the product is not registered for use on, etc.

But Practice D