**Safe Operating Procedures**

**SOP 06 – Spraying Pesticides**

**Boom Spray/Backpacks/Hand Spraying**

**DO NOT proceed in this operation unless appropriately instructed in its safe use and operation and permission to operate has been given.**

### COMPULSORY PPE

- Foot Protection must be worn
- Hand Protection must be worn
- Protective clothing must be worn
- Eye protection must be worn

### AS NEEDED PPE

- Respirator must be worn
- Face shield must be worn in this area
- Apron must be worn

### PRE-OPERATIONAL SAFETY CHECKS

1. Identify spray job and equipment required.
2. Make sure you have all PPE on hand.
3. Ensure that all guards on the boom spray are fitted, secure and functional.
4. Ensure that the hitch points, securing pinions and safety chains are in sound condition and connected.
5. Ensure that hydraulic rams, hoses and couplings are in sound condition and not leaking.
6. Check tractor hitch and frame for cracks.
7. Check all hoses and nozzles for leaks before any start up.
8. Make sure all electrical plugs to rig are clean.
9. Faulty equipment must not be used. Report and repair faulty machinery before use.
10. NEVER CHANGE NOZZLES FROM THOSE FITTED TO RIG WITHOUT PERMISSION.
11. Check First Aid kit and eye wash is present and complete.

### OPERATIONAL SAFETY CHECKS

**Boom Sprayers**

1. Ensure all required PPE required on the pesticide label is worn while handling, mixing and applying pesticides.
2. Clean up work loading area after each fill.
3. Travel to the field at a speed no more than safe travel permits. Do not exceed 15 km per hour at any time on farm.
4. DO NOT EXCEED 40 km per hour with the boom folded and rig empty on a sealed road.

This SOP should be used in conjunction with relevant machinery manuals and manufacturer recommendations.
5. Once at field check the weather and fill out SPRAY LOG. If good spraying conditions proceed, if in doubt ask supervisor.

6. Regularly check, maintain and record spray boom pressures.

7. Only spray if wind is between 3-20 km per hour.

8. Do not spray with temperature over 35°C for glyphosate and 28°C for LVE hormone pesticides. Delta T should be maintained between 2°C – 10°C.

9. Always maintain a boom height of preferably 50 cm above the ground or plant canopy at all times.

10. Make sure and DO NOT SPRAY if there are livestock in the field that you are about to spray (report if there are and do not spray until they are moved).

11. SPRAY all the edges of the field FIRST and be fully aware of the paddock and terrain so there are NO MISSED AREAS.

12. Maintain spray buffers surrounding the field just in case weather changes while spraying.

13. Spray field keeping in mind all environmental factors around you. Spray at a speed that is safe for the rig and operator but do not exceed 25 km per hour spraying in field.

14. IF YOU CAN’T SPRAY AN AREA YOU MUST REPORT IT IMMEDIATELY

15. DO NOT spray outside of recommended spray pressures or rates

16. KEEP WEATHER SPRAY DATA LOG EVERY HOUR

17. At end of day rinse out the spray rig, tanks and DCI pumps.

18. Make sure all nozzles are cleaned regularly and filters cleaned daily

19. Make sure you clean your PPE at the end of day

20. Ensure that no person or equipment is endangered when operating the equipment.

21. Ensure at hand over, that the next operator is fully informed of the status of the machine and job.

22. ONLY USE spray nozzles, droplet size and minimum water volumes as stated on pesticide chemical labels.

### Hand Sprayers

1. Leaking equipment wets operator back, buttocks and legs. Hot working conditions increases operator absorption. Incorrect use of handpiece can cause spraying onto feet and legs leading to a high skin absorption rate.

2. Spraying above shoulder height may cause the operator to be covered by blow back of mist leading to skin exposure plus mist inhaled.

3. Feet and legs can be sprayed by mist deflected from plants and the ground. If the pressure is too high, a fine mist will be produced and can blow back on operator.

4. Absorption is via skin and inhalation.

### HOUSEKEEPING

1. Clean away any foreign material, debris from the engine and transmission.

2. Clean tractor and spray rig with power washer to remove spray residues.

3. Park the tractor on level ground with park brake on and remove the key.

4. Service the tractor and spray rig as per manufacturers recommended maintenance schedule

### OTHERS

**Relevant Australian Standards** – Managing Risks of Hazardous Chemicals in the Workplace Code of Practice

**Chemicals and relevant Safety Data Sheet** - can be obtained by UNE subscription to Chemwatch

**License Required** – Chemical User Training AQF Level 3 or equivalent

**Chemical Waste Removal** – Contact FMS for next removal date and requirements

### SPECIAL NOTE

NO PERSONNEL ARE TO USE THIS EQUIPMENT PRIOR TO OBTAINING:

This SOP should be used in conjunction with relevant machinery manuals and manufacturer recommendations.

<table>
<thead>
<tr>
<th>Procedure Reference</th>
<th>Version</th>
<th>Effective Date</th>
<th>Review Date</th>
<th>Page Number</th>
<th>Date Printed</th>
</tr>
</thead>
<tbody>
<tr>
<td>WHS SOP 6</td>
<td>1.0</td>
<td>29/03/2018</td>
<td>29/03/2021</td>
<td>2</td>
<td>24/04/2018</td>
</tr>
</tbody>
</table>
Safe Operating Procedures

- COMPETANCY IN THE CORRECT USE OF THE EQUIPMENT
- READING AND FULLY UNDERSTANDING THE OPERATOR’S MANUAL
- READING THE STANDARD OPERATING PROCEDURE
- UNDERGOING THOROUGH PRACTICAL TRAINING WHILE PROPERLY SUPERVISED
- SUPERVISOR TO ENSURE SOP IS SIGNED OFF

Employee Name: ____________________________________________________________

Employee Signature: ___________________________ Date: ________________

Supervisor Name: _________________________________________________________

Supervisor Signature: ___________________________ Date: ________________

This SOP should be used in conjunction with relevant machinery manuals and manufacturer recommendations.

<table>
<thead>
<tr>
<th>Procedure Reference</th>
<th>Version</th>
<th>Effective Date</th>
<th>Review Date</th>
<th>Page Number</th>
<th>Date Printed</th>
</tr>
</thead>
<tbody>
<tr>
<td>WHS SOP 6</td>
<td>1.0</td>
<td>29/03/2018</td>
<td>29/03/2021</td>
<td>3</td>
<td>24/04/2018</td>
</tr>
</tbody>
</table>