

Instructions: Complete the risk assessment according to the guide *Risk management for emergencies*.

Task	Working around plant and equipment – WHS
Context (including area/site)	Personnel may be required to work around plant and equipment on sites during emergencies.
Risk factors/causes	Workers unfamiliar with the working environment, poor site and personnel management and adverse environmental conditions may impact the safety of personnel and others.
Acceptable level of protection (ALOP)	Low
Specific risk	Personnel being injured during emergency operations working around plant and equipment.
Area(s) of impact	Human health, safety and well-being
Current risk treatments	<ol style="list-style-type: none"> 1. Elimination – remove any need for personnel to be in vicinity of the heavy machinery during activities where possible. 2. Location of personnel – all personnel (including farmers, managers, families and farm staff) are to be accounted for. 3. Location of machinery – working zones for machinery must be determined and clearly marked (eg hazard tape, safety cones, line marker, etc) with consideration given to location of overhead and underground services (eg electricity, gas, water, sewerage, communications), and the need for traffic management. 4. Location – a GPS must be available to give locations of operations if emergencies occur. Operators must be competent to use the GPS or be directed to area or operations by operators. 5. Entry point management – all entry/exit points must be clearly marked with warning signs and security to restrict access through those points. 6. Working on site – all workers must be fit to conduct their assigned task i.e. not affected by fatigue, dehydration, drugs/alcohol, personal issues that may impact on performance and safety. 7. Weather monitoring – the weather should be monitored (temperature, wind direction & speed, precipitation) throughout the operation. Changes to the predicted conditions may necessitate changes in the operation due to reduced visibility, traction and personnel comfort. 8. Induction – a condition of entry to the site for all personnel. Site induction must include explanation of hazards, the measures in place personnel must follow, and specific responsibilities of personnel. 9. Zoonotic disease – appropriate PPE and other restrictions /controls as required for the target pathogen and possible non-target pathogens for the equipment and personnel. 10. Training – all machinery operators must be licensed and experienced. 11. Maintenance – must meet regulatory requirements, be maintained, and have required warning features (eg reversing lights/sound and lights).

Task	Working around plant and equipment – WHS
	<p>12. Fire – risk of fire in/around machinery and areas of activity should be determined and minimized, eg access to fire extinguishers/hoses, notification of local emergency responders</p> <p>13. Communication – must be established between Command Point and operation area and must be tested during briefing. In areas where noise interferes with communication, hand signals should be established.</p> <p>14. First aid and response – qualified personnel and appropriate first aid equipment to be on site and available for immediate response. They should have direct contact with any personnel within the site.</p> <p>15. Ambulance – where the risk presented indicates an ambulance should be on stand-by at the site, an alternative/modified approach should be found for operation. Ambulance response and locations must be detailed in the medical plan.</p> <p>16. Working alone – personnel should work with other people when operating high risk equipment (eg high powered sprayers) or working in hazardous environments</p> <p>17. Hearing – use hearing protection devices (which can be disposable) when in the vicinity of loud machinery.</p> <p>18. Visibility – all personnel operating within machinery working zones must wear a reflective vest.</p> <p>19. Visibility at night and during the day in sheds (and other areas of low light) – area to be flood lit; reflective vests must be day/night; additional personal visibility aids should be considered (eg glow sticks), machinery to have working lights.</p> <p>20. Traction of personnel – suitable footwear must be worn to prevent slipping. If areas become too slippery then personnel must be prevented from entry (eg. hazard tape, barrier).</p> <p>21. Traction of equipment – machinery must be suitable for the environment in which it is operating. Wet/slippery conditions may require use of track wheel machines instead of rubber tyre wheels. Alternatively, road base may be laid however it is required to be removed at the completion of operations for site remediation.</p> <p>22. Working at heights – platforms may be required work around large trucks e.g. to cover trucks, disinfect loads or place absorbent material in truck beds. Alternatives must be considered before platforms are used, eg skips that can be accessed from the ground; trucks with covers that are operated from the ground; spray gear with long spray wands that have sufficient pressure to exceed truck sides. If platforms are used they must be solid and have railings to prevent falls. Harnesses may be required, depending on the height of the platform. Personnel working at heights must have completed relevant training.</p> <p>23. Crush – under no circumstances shall personnel enter the tray of the truck; climb under or on top of any machinery (except to operate the equipment). Loading and unloading protocols should be by machinery only. Front end loaders, excavators or equivalent need sufficient reach to exceed the truck sides.</p> <p>24. Chemicals – must have a current SDS available, must be read by users and appropriate PPE worn.</p> <p>25. Dust – handling of absorbent material (eg wood shavings, organic matter) and general environmental conditions may require the use of dust masks (P1). Dust masks are not to be rested on heads during breaks and should be changed frequently.</p>



Task Risk Assessment

Task	Working around plant and equipment – WHS					
	<p>26. Manual handling – should be eliminated where possible by the use of machinery. Where handling of infected material is unavoidable, PPE must be worn; correct lifting techniques must be employed and personal hygiene maintained by using hand/face wash facilities routinely.</p> <p>27. Head protection – where personnel must be in the vicinity of machinery that operates above head height, approved hard hats must be worn.</p> <p>28. Sun protection – sunscreen and wide brim hats must be worn by all personnel when working outdoors</p> <p>29. Face/eye protection – face protection must be worn where operating and within immediate vicinity of high pressure sprayers (eg gurney, fire hoses). Eye protection must be worn when using chemicals and cleaning equipment (eg scrubbing boots).</p>					
Current risk	Likelihood (A-E)	D (unlikely)	Consequence (1-5)	2 (minor)	Current risk (VH, H, M, L)	Low
Proposed risk treatment*						
Residual risk	Likelihood (A-E)	D (unlikely)	Consequence (1-5)	2 (minor)	Residual risk (VH, H, M, L)	Low
Comment*						
Conclusions	The overall risk level is low when personnel comply with procedures, directions by supervisors and wear appropriate PPE. Plant operators are required to be licenced and experienced.					
Recommendations	Accept the low risk for the task.					

*Mandatory requirement if assessed level of risk rating is VH (very high), H (high) or M (medium)

Name/s and role/s			Date	
Prepared by	Emergency Management Unit		Date completed	23 January 2018
Authorised by	State Emergency Coordinator		Date authorised	1 February 2018

Table 1 - Consequence description for areas of impact

	Animal health & welfare Plant health	Health & safety	Environment & heritage	Governance & compliance	Industry & customer experience	Stakeholder trust / confidence	Service delivery	Value & benefits	Financial
5. Extreme	Significant animal illness/injuries/deaths in multiple regions. Widespread animal welfare issues. Considerable plant damage/loss across multiple regions .	Multiple fatalities and/or >20 major injuries/permanent disabilities/chronic disease.	Irreversible large-scale environmental impact with loss of valued ecosystems .	Prosecution leading to imprisonment of executive(s). Significant prosecution/litigation. Loss of operating licence .	Extensive shutdowns or extended disruptions with economy-wide and national effects. Structural change or long-term industry impact.	Outrage – Material change to public perception of the organisation. Confidence and trust are severely damaged, possible irreparably, and full recovery both questionable and costly.	Catastrophic event with potential to lead to the collapse of the organisation.	Failure to realise benefits of enterprise-wide operations or public announced portion/milestone significantly missed or final completion date significantly missed on critical path project.	>\$50m OR >25% of budget
4. Major	Considerable animal illness/injuries/deaths on multiple properties across a region . Animal welfare impacted across multiple regions. Considerable plant damage/loss on multiple properties across a region.	Kill or disable Single fatality and/or 10-20 major injuries/permanent disabilities/chronic diseases.	Long-term environmental impairment in neighbouring or valued ecosystems. Extensive remediation required.	Substantial breach resulting in prosecution, fines and/or litigation. Licence or accreditation restricted or conditions affecting ability to operate.	Short duration shutdowns or substantial disruptions affecting multiple industries with state or sector-wide cascading effects.	Displeasure – Extended negative state/national media coverage. Confidence and trust are damaged but recoverable at considerable cost, time and staff effort.	Severe event which requires extensive management effort but can be survived.	Significant delays with initiative which impacts across divisions and/or significant decrease in benefits realised or public announced portion/milestone missed or final completion date missed on critical path project.	>\$5m - ≤\$50m OR 25% of budget
3. Moderate	Some animal illness/injuries/deaths on multiple properties across a region . Animal welfare impacts across a region. Some plant damage/loss on multiple properties across a region.	Serious injury 1-10 major injuries requiring hospitalisation and numerous days lost or medium-term occupational illness.	Impacts external ecosystems and considerable remediation is required.	Breach resulting in enforcement action and/or prohibition notices. Substantial fine and no disruption to services.	Significant disruptions affecting operations of one industry sector or region with state-wide effects on one or more other regions or sectors.	Concern – Short-term negative state/national media coverage. Confidence and trust are diminished but are recoverable with time, staff effort and additional funding.	Significant event which can be absorbed, but substantial management effort is required.	Significant delays with initiative and/or major decrease in benefits realised or public announced portion/milestone missed or final completion date missed with demonstrable mitigating external circumstances.	>\$500k - ≤\$5m OR 10% of budget
2. Minor	Limited animal illness/injuries &/or deaths on single enterprise. Limited plant damage/loss on single enterprise .	Loss-time injury Single recoverable lost time injury or illness, alternate/restricted duties injury, or short-term occupational illness.	Short-term and/or well-contained environmental effects. Minor remedial actions probably required.	Significant non-compliance . Subject to comment and monitoring from applicable regulator. Small fine and no disruption to services.	Serious disruptions affecting operation of one industry sector or region .	Disappointment – Extended negative local/state media coverage. Confidence and trust dented but are quickly recoverable at modest cost within existing budget and resources.	Minor event , the impact of which can be absorbed but much broader management effort is required.	Severe delays with initiative and/or moderate decrease in benefits realised or completion date missed for non-critical path project.	\$50k - ≤\$500k OR 5% of budget
1. Insignificant	Isolated impact on animals and/or plants on a single enterprise .	Medical treatment only Illness or minor injuries requiring medical treatment.	Change from normal conditions within environmental regulatory limits & environmental effects are within site boundaries.	Minor non-compliance with legal and/or regulatory requirement or duty. Investigation and/or report to authority.	Minor disruptions affecting several industries or regions.	Unease – Series of negative articles in local/state media. Confidence remains with some minor loss of goodwill or trust. Recoverable with little effort or cost. Some continuing scrutiny/attention.	An event, the impact of which can be absorbed but some additional management effort is required.	Minor delay with initiative and/or a minor decrease in the benefits realised or minor delay on the project or another project, with no public implications.	≤\$50k OR 1% of budget

Table 2 - Risk rating with likelihood definition

		Likelihood					
		E. Rare	D. Unlikely	C. Possible	B. Likely	A. Almost certain	
		Would only occur under exceptional circumstances (e.g. once every 100 to 1000 years)	Could occur only in unusual circumstances (e.g. once every 10 to 100 years)	Could occur, but more than likely will not (e.g. once every 1 to 10 years)	Will probably occur (e.g. 2 - 10 times/year; could occur on a monthly/quarterly basis)	Expected to occur in most circumstances (e.g. >10 times per year; could occur on a daily/weekly basis)	
Consequence	5. Extreme	Refer to Table 1	Medium	High	High	Very high	Very high
	4. Major		Low	Medium	High	High	Very high
	3. Moderate		Low	Medium	Medium	High	High
	2. Minor		Low	Low	Medium	Medium	Medium
	1. Insignificant		Low	Low	Low	Low	Medium

Table 3 - General risk tolerance, management guide and approval

Risk rating	Basic tolerance	Management	Approval – Non response	Approval – Responses
Very High	Generally intolerable	Urgent attention. Must obtain Secretary/Director General approval for risks and their treatments	Secretary/Director General	Executive Emergency Management Committee
High	Undesirable	Intervention required. Approval of the risks, their treatments and acceptable management actions. To be escalate to Secretary/Director General as appropriate.	Deputy Director General	Executive Emergency Management Committee
Medium	Tolerable	Active management. Review risks and treatments, and approve acceptable management actions.	Director	Incident Controller (Local or State)
Low	Broadly acceptable	Ongoing monitoring. Managed through routine operations by the risk owner. Review/monitor risks and their treatments for effectiveness, reliability and any changes in the likelihood and consequences.	Director or delegate	Incident Controller, Function Officers, Operations Managers or Officers-in-Charge (OIC's)