

## Chemicals Handling And Use Risk Assessment

|                   |        |        |
|-------------------|--------|--------|
| Business Name:    | ABN:   |        |
| Business Address: |        |        |
| Contact Person:   | Phone: | Email: |

### THIS RISK ASSESSMENT IS APPROVED BY THE PCBU ON THIS PROJECT

Under the Work Health and Safety Regulation (WHS Regulation), a person conducting a business or undertaking (PCBU) is required to ensure that a RISK ASSESSMENT is prepared before the proposed work starts.

|            |        |       |
|------------|--------|-------|
| Full Name: |        |       |
| Signature: | Title: | Date: |

### CLIENT OR PRINCIPAL CONTRACTOR DETAILS

|   |                |
|---|----------------|
| Client:   | SCOPE OF WORKS |
| Project Name:                                     |                |
| Project Address:                                  |                |
| Project Manager:                                  |                |
| Contact Phone:                                    |                |
| Date Risk Assessment supplied to Project Manager: |                |

| RISK MATRIX   |   |               |                    |            |  |                |                                   |  |  |
|---|---|---------------|--------------------|------------|--|----------------|-----------------------------------|--|--|
| LIKELIHOOD  | INSIGNIFICANT                               | MINOR         | MODERATE           | MAJOR      | CATASTROPHIC   | SCORE          | ACTION                            | HIERARCHY OF CONTROLS  |  |
| ALMOST CERTAIN  | 3<br>HIGH                                   | 3<br>HIGH     | 4<br>ACUTE         | 4<br>ACUTE | 4<br>ACUTE   |                |                                   | <b>Elimination</b><br>Remove the hazard.   |  |
| LIKELY  | 2<br>MODERATE                               | 3<br>HIGH     | 3<br>HIGH          | 4<br>ACUTE | 4<br>ACUTE   | 4A<br>ACUTE    | DO NOT PROCEED                    | <b>Substitution</b><br>Replace the hazard.   |  |
| POSSIBLE  | 1<br>LOW                                    | 2<br>MODERATE | 3<br>HIGH          | 4<br>ACUTE | 4<br>ACUTE   | 3H<br>HIGH     | Review before work starts.        | Isolation<br>Isolate People from the hazard  |  |
| UNLIKELY  | 1<br>LOW                                    | 1<br>LOW      | 2<br>MODERATE      | 3<br>HIGH  | 4<br>ACUTE   | 2M<br>MODERATE | Ensure control measures in place. | <b>Engineering</b><br>Isolate the hazard   |  |
| RARE  | 1<br>LOW                                    | 1<br>LOW      | 2<br>MODERATE      | 3<br>HIGH  | 3<br>HIGH  | 1L<br>LOW      | Monitor and keep records.         | <b>Administrative</b><br>Change  |  |
|   |   |               |                    |            |  |                |                                   | <b>PPE</b>   |  |
| <b>Risk Rating &amp; Required Action:</b>   |   |               |                    |            |  |                |                                   | <b>Notes on Hierarchy of Controls:</b>   |  |
| <b>4A</b> Stop work. The risk is intolerable. Eliminate the hazard or redesign the activity before proceeding. A Safe Work Method Statement (SWMS) or higher-level authorisation is required. |   |               |                    |            |  |                |                                   | Remember to apply controls in the preferred order shown by the coloured pyramid:   |  |
| <b>3H</b> Review and approve additional controls before the task starts. Senior supervisor sign-off needed.   |   |               |                    |            |  |                |                                   | 1. <b>Eliminate</b>  |  |
| <b>2M</b> Ensure all nominated controls are in place and effective. Proceed with caution; monitor conditions.   |   |               |                    |            |  |                |                                   | 2. Substitute  |  |
| <b>1L</b> Proceed, following standard operating procedures. Monitor and keep records.   |   |               |                    |            |  |                |                                   | 3. Isolate   |  |
|   |   |               |                    |            |  |                |                                   | 4. Engineering   |  |
|   |   |               |                    |            |  |                |                                   | 5. Administrative  |  |
|   |   |               |                    |            |  |                |                                   | 6. PPE   |  |
| <b>Consequence Scale:</b>   |   |               |                    |            |  |                |                                   | Always document <b>why</b> a lower-order control is accepted if elimination or substitution is not reasonably practicable. |  |
| Consequence   | People (injury/illness)                     |               | Project / Assets   |            | Compliance / Reputation                                  |                |                                   |  |  |
| Catastrophic  | Fatality or permanent total disability      |               | project shutdown   |            | Significant regulator intervention; criminal prosecution |                |                                   |  |  |
| Major   | Serious injury/illness (hospital > 5 days)  |               | critical delay     |            | Improvement notice; major media coverage                 |                |                                   |  |  |
| Moderate  | Medical-treatment injury; lost-time > 1 day |               | moderate delay     |            | Minor breach; adverse client comment                     |                |                                   |  |  |
| Minor   | First-aid only, no lost time                |               | negligible delay   |            | Isolated non-conformance                                 |                |                                   |  |  |
| Insignificant   | No injury                                   |               | no schedule impact |            | Deviation caught and corrected on site                   |                |                                   |  |  |
|   |   |               |                    |            |  |                |                                   | <i>aligned with Safe Work Australia's Managing the risk of fatigue at work (2023) and ISO 45001:2018 clauses 6–8.</i>      |  |

| JOB STEP            | POTENTIAL HAZARDS                        | IR           | CONTROL MEASURES  | RR            |
|---------------------|--|--------------|---|---------------|
| SPECIFIC WORK STEPS | HAZARDS THAT MAY ARISE                   | INITIAL RISK | SPECIFIC MEASURES TO BE PUT IN PLACE TO ELIMINATE OR CONTROL THE RISKS  | RESIDUAL RISK |
| 1. Preparation      | chemical spill, inhalation of fumes      | 3H           | <ul style="list-style-type: none"> <li>- Ensure all personnel involved are trained in chemical handling procedures</li> <li>- Verify all necessary PPE is available and in good condition</li> <li>- Review the Safety Data Sheets (SDS) for each chemical</li> <li>- Ensure ventilation systems are operational to manage fume exposure</li> <li>- Secure lids on chemical containers when not in use</li> <li>- Confirm spill kits are complete and easily accessible</li> <li>- Restrict access to the area for authorised personnel only</li> <li>- Conduct a pre-use inspection of equipment to ensure functionality</li> <li>- Perform risk assessments specific to the task at hand</li> <li>- Establish emergency response procedures and communicate them clearly</li> </ul> | 2M            |
| 2. Transportation   | container rupture, slip and fall hazards | 3H           | <ul style="list-style-type: none"> <li>- Use appropriate carts/trolleys designed for chemical transport</li> <li>- Ensure all containers are correctly sealed and labelled</li> <li>- Assign adequately trained personnel for transportation duties</li> <li>- Maintain clear and unobstructed pathways for transportation</li> <li>- Implement two-person lift rules for heavier loads</li> <li>- Use spill containment pallets during transport</li> <li>- Conduct regular inspections of transport equipment</li> <li>- Implement protocols for dealing with spills during transport</li> <li>- Establish safe holding areas</li> <li>- Develop and communicate emergency procedures for transportation incidents</li> </ul>   | 2M            |
| 3. Storage          | chemical reactivity, fume emission       | 3H           | <ul style="list-style-type: none"> <li>- Store chemicals in accordance with manufacturer instructions</li> <li>- Segregate incompatible chemicals to prevent reactions</li> <li>- Ensure storage areas have adequate ventilation</li> <li>- Implement regular inventory checks to manage stock levels</li> <li>- Label all storage areas clearly with hazard information</li> <li>- Use bunding to contain potential leaks</li> <li>- Train workers on proper storage techniques</li> <li>- Monitor temperature and humidity levels in storage areas</li> </ul>   | 2M            |

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|                     |  |              | <ul style="list-style-type: none"> <li>- Keep MSDS/SDS accessible near storage areas</li> <li>- Ensure storage racks and shelving are robust and in good condition</li> </ul>                         |               |
| 4. Dispensing       | chemical spills, exposure to fumes       | 3H           | <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> | 2M            |
| 5. Mixing           | chemical reaction heat generation        | 3H           | <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p>                   | 2M            |
| 6. Application      | overexposure to chemicals, slip and fall | 3H           | <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p>   | 2M            |

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|                            |  |              |  |               |
| 7. Waste Management        | chemical leaks, environmental pollution  | 3H           |  | 2M            |
| 8. Maintenance             | equipment failure, exposure to chemicals | 3H           |  | 2M            |
| 9. Inspection and Auditing | non-compliance, poor safety practices    | 3H           |  | 2M            |

| JOB STEP                 | POTENTIAL HAZARDS                                 | IR           | CONTROL MEASURES   | RR            |
|--------------------------|---|--------------|--|---------------|
| SPECIFIC WORK STEPS      | HAZARDS THAT MAY ARISE                            | INITIAL RISK | SPECIFIC MEASURES TO BE PUT IN PLACE TO ELIMINATE OR CONTROL THE RISKS | RESIDUAL RISK |
|                          |   |              |  |               |
| 10. Decontamination      | residual chemical presence, surface contamination | 3H           |  | 2M            |
| 11. Emergency Procedures | uncontrolled chemical release, injury             | 3H           |  | 2M            |
| 12. Training             | lack of awareness, improper handling              | 3H           |  | 2M            |

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|                     |   |              |  |               |
| 13. PPE Management  | ineffective PPE, incorrect use              | 3H           |  | 2M            |
| 14. Air Monitoring  | toxic fumes, exceeding safe exposure levels | 3H           |  | 2M            |
| 15. Record Keeping  | inaccurate data, loss of documentation      | 3H           |  | 2M            |

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|                     |                        |              | <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> |               |
|                     |                        |              |   |               |

SAMPLE



## EMERGENCY RESPONSE – CALL 000 FOR EMERGENCIES

Ensure to have an Emergency Management Plan in place as well as adequate numbers of trained first aid staff with easy access to fully stocked first aid kits, rescue equipment, material safety data sheets, adequate access to emergency communication equipment and fire-fighting equipment suitable for all classes of fire and ignition sources.

## LEGISLATIVE REFERENCES

RELEVANT LEGISLATION AND CODES OF PRACTICE. DELETE THE LEGISLATIVE REFERENCES IF ANY STATE THAT ARE NOT APPLICABLE

### Queensland & Australian Capital Territory

Work Health and Safety Act 2011

Work Health and Safety Regulations 2011

Legislation QLD: <https://www.worksafe.qld.gov.au/laws-and-compliance/work-health-and-safety-laws>

Codes of Practice QLD: <https://www.worksafe.qld.gov.au/laws-and-compliance/codes-of-practice>

Legislation ACT: <https://www.worksafe.act.gov.au/laws-and-compliance/acts-and-regulations>

Codes of Practice ACT: <https://www.worksafe.act.gov.au/laws-and-compliance/codes-of-practice>

### Victoria

Occupational Health and Safety Act 2004

Occupational Health and Safety Regulations 2017

Legislation VIC: <https://www.worksafe.vic.gov.au/occupational-health-and-safety-act-and-regulations>

Codes of Practice VIC: <https://www.worksafe.vic.gov.au/compliance-codes-and-codes-practice>

### New South Wales

Work Health and Safety Act 2011

Work Health and Safety Regulations 2017

Legislation NSW: <https://www.safework.nsw.gov.au/legal-obligations/legislation>

Codes of Practice NSW: <https://www.safework.nsw.gov.au/resource-library/list-codes-of-practice>

### Western Australia

Work Health and Safety Act 2020

Work Health and Safety Regulations 2022

Legislation Western Australia: <https://www.commerce.wa.gov.au/worksafe/legislation>

Codes of Practice WA: <https://www.commerce.wa.gov.au/worksafe/codes-practice>

### Northern Territory

Work Health and Safety (National Uniform Legislation) Act 2011

Work Health and Safety (National Uniform Legislation) Regulations 2011

Legislation NT: <https://worksafe.nt.gov.au/laws-and-compliance/workplace-safety-laws>

Codes of Practice NT: <https://worksafe.nt.gov.au/laws-and-compliance/codes-of-practice>

### Safe Work Australia Links

Law and Regulation (All States): <https://www.safeworkaustralia.gov.au/law-and-regulation>

Model Codes of Practice: <https://www.safeworkaustralia.gov.au/resources-publications/model-codes-of-practice>

### Model Codes of Practice

- Managing noise and preventing hearing loss at work
- Confined spaces
- Labelling of workplace hazardous chemicals
- Managing risks of hazardous chemicals in the workplace
- Welding processes
- First aid in the workplace
- Managing the risk of falls at workplaces
- Hazardous manual tasks
- Managing the risk of falls in housing construction
- Managing electrical risks in the workplace
- Demolition work
- Excavation work
- Work health and safety consultation, cooperation and coordination
- Managing the work environment and facilities
- How to manage work health and safety risks
- Managing risks of plant in the workplace
- Construction work

### South Australia

Work Health and Safety Act 2012 (SA)

Work Health and Safety Regulations 2012 (SA)

Legislation for SA: <https://www.safework.sa.gov.au/resources/legislation>

Codes of Practice for SA: <https://www.safework.sa.gov.au/workplaces/codes-of-practice#COPs>

### Tasmania

Work Health and Safety Act 2012

Work Health and Safety (Transitional and Consequential Provisions) Act 2012

Work Health and Safety Regulations 2012

Work Health and Safety (Transitional) Regulations 2012

Legislation for TAS: <https://worksafe.tas.gov.au/topics/laws-and-compliance/acts-and-regulations>

Codes of Practice for TAS: <https://worksafe.tas.gov.au/topics/laws-and-compliance/codes-of-practice>

Details of permits, licenses or access required by regulatory bodies (add or delete as required):

- Permits from local council
- Authorisation to commence work
- Any required documents.