

Storing Harmful Liquids Risk Assessment

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

THIS RISK ASSESSMENT IS APPROVED BY THE PCBU ON THE 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 HIGH | 3 HIGH | 4 ACUTE | 4 ACUTE | 4 ACUTE | 4A ACUTE | DO NOT PROCEED | Elimination Remove the hazard. | |
| LIKELY | 2 MODERATE | 3 HIGH | 3 HIGH | 4 ACUTE | 4 ACUTE | | | Substitution Replace the hazard. | |
| POSSIBLE | 1 LOW | 2 MODERATE | 3 HIGH | 4 ACUTE | 4 ACUTE | | | Isolation Isolate People from the hazard | |
| UNLIKELY | 1 LOW | 1 LOW | 2 MODERATE | 3 HIGH | 4 ACUTE | | | Engineering Isolate the hazard | |
| RARE | 1 LOW | 1 LOW | 2 MODERATE | 3 HIGH | 3 HIGH | | | Administrative Change | |
| | | | | | | 1L LOW | Monitor and keep records. | PPE | |
| Risk Rating & Required Action: | | | | | | | | Notes on Hierarchy of Controls: | |
| 4A 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: | |
| 3H Review and approve additional controls before task starts. Senior supervisor sign-off needed. | | | | | | | | 1. Eliminate | |
| 2M Ensure all nominated controls are in place and effective. Proceed with caution; monitor conditions. | | | | | | | | 2. Substitute | |
| 1L Proceed, following standard operating procedures. Monitor and keep records. | | | | | | | | 3. Isolate | |
| | | | | | | | | 4. Engineering | |
| | | | | | | | | 5. Administrative | |
| | | | | | | | | 6. PPE | |
| Consequence Scale: | | | | | | | | Always document why 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 | | | | |
| | | | | | | | | aligned with Safe Work Australia's Managing the risk of fatigue at work (2023) and ISO 45001:2018 clauses 6–8. | |

| 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 exposure, spillages | 3H | <ul style="list-style-type: none"> - Conduct risk assessment before handling - Require personnel training on chemical safety procedures - Read Safety Data Sheets (SDS) for all substances - Perform routine equipment checks prior to use - Establish designated storage areas for hazardous materials - Ensure adequate ventilation in storage areas - Prepare spill containment kits and train employees in usage - Maintain up-to-date inventory of all chemicals - Use warning signs to identify hazardous areas - Limit access to authorized personnel only | 2M |
| 2. Delivery and Receipt | incorrect labelling, container damage | 3H | <ul style="list-style-type: none"> - Check labels and documentation upon receipt - Verify integrity of containers before acceptance - Designate a safe area for delivery and inspection processes - Train delivery personnel on correct handling procedures - Report discrepancies to supplier immediately - Provide PPE to workers during inspection and handling - Keep aisles clear to facilitate safe delivery and inspection - Install appropriate lighting in delivery area - Secure delivery zone to prevent unauthorized access - Regularly review delivery procedures for compliance | 2M |
| 3. Storage | leakage, chemical reactions | 3H | <ul style="list-style-type: none"> - Store chemicals according to SDS guidelines - Implement secondary containment for all liquid chemicals - Segregate incompatible chemicals to prevent reactions - Use corrosion-resistant shelving and containers - Install ventilation systems to disperse fumes - Ensure storage areas are dry and temperature-controlled - Conduct regular integrity inspections of containers - Label storage shelves clearly with chemical names | 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 |
| | | | <ul style="list-style-type: none"> - Develop emergency response plans for storage incidents - Use non-slip mats in storage areas | |
| 4. Handling | exposure to skin or eyes, inhalation of fumes | 3H | <ul style="list-style-type: none"> - Wear appropriate PPE (gloves, goggles, respirator) - Work in a well-ventilated area - Avoid direct contact with the substance - Use proper handling techniques - Store containers properly - Label containers clearly - Keep containers closed when not in use - Clean up spills immediately - Dispose of waste properly - Train employees on safe handling - Post warning signs - Use secondary containment - Avoid eating, drinking, or smoking - Wash hands after handling - Use spill kits - Have first aid available - Keep fire extinguishers nearby - Follow MSDS instructions - Use proper lifting techniques - Avoid breathing vapors - Use appropriate tools - Keep work area tidy - Use proper storage practices - Avoid contact with skin - Use eye protection - Avoid contact with eyes - Use respiratory protection - Avoid contact with clothing - Use proper disposal methods - Keep containers away from heat - Use proper labeling - Avoid contact with children - Use proper storage location - Avoid contact with pets - Use proper disposal location - Keep containers away from food - Use proper labeling - Avoid contact with children - Use proper storage location - Avoid contact with pets - Use proper disposal location - Keep containers away from food - Use proper labeling - Avoid contact with children - Use proper storage location - Avoid contact with pets - Use proper disposal location | 2M |
| 5. Disposal | environmental contamination, exposure to toxins | 3H | <ul style="list-style-type: none"> - Follow local, state, and federal regulations - Use licensed disposal services - Label waste properly - Store waste in appropriate containers - Keep waste containers closed - Clean up spills immediately - Dispose of waste in designated areas - Train employees on safe disposal - Post warning signs - Use secondary containment - Avoid eating, drinking, or smoking - Wash hands after handling - Use spill kits - Have first aid available - Keep fire extinguishers nearby - Follow MSDS instructions - Use proper lifting techniques - Avoid breathing vapors - Use appropriate tools - Keep work area tidy - Use proper storage practices - Avoid contact with skin - Use eye protection - Avoid contact with eyes - Use respiratory protection - Avoid contact with clothing - Use proper disposal methods - Keep containers away from heat - Use proper labeling - Avoid contact with children - Use proper storage location - Avoid contact with pets - Use proper disposal location - Keep containers away from food - Use proper labeling - Avoid contact with children - Use proper storage location - Avoid contact with pets - Use proper disposal location | 2M |
| 6. Emergency Response | chemical burns, asphyxiation | 4A | <ul style="list-style-type: none"> - Evacuate the area - Call emergency services - Provide first aid - Use spill kits - Have fire extinguishers nearby - Follow MSDS instructions - Use proper lifting techniques - Avoid breathing vapors - Use appropriate tools - Keep work area tidy - Use proper storage practices - Avoid contact with skin - Use eye protection - Avoid contact with eyes - Use respiratory protection - Avoid contact with clothing - Use proper disposal methods - Keep containers away from heat - Use proper labeling - Avoid contact with children - Use proper storage location - Avoid contact with pets - Use proper disposal location - Keep containers away from food - Use proper labeling - Avoid contact with children - Use proper storage location - Avoid contact with pets - Use proper disposal location | 3H |

| 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 |
| | | | | |
| 7. Training and Competency | lack of awareness, improper handling | 3H | | 1L |
| 8. Maintenance of Equipment | equipment failure, equipment leakage | 3H | | 2M |
| 9. Personal Protective Equipment (PPE) | inadequate protection, PPE failure | 3H | | 1L |

| 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. Monitoring and Review | non-compliance, outdated procedures | 3H | | 1L |
| 11. Signage and Labelling | misidentification, incorrect storage | 3H | | 1L |
| 12. Communication | miscommunication, uninformed staff | 3H | | 1L |

| 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 |
| | | | | |
| 13. Incident Reporting | unreported incidents, delayed response | 3H | | 1L |
| 14. Housekeeping | slips and trips, cluttered work areas | 2M | | 1L |
| 15. Health Surveillance | long-term health effects, unidentified exposures | 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 |
| | | | <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.