

**Biological Hazards, Mould and Cytotoxic Substances**

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 HIGH	3 HIGH	4 ACUTE	4 ACUTE	4 ACUTE			<b>Elimination</b> Remove the hazard.	
LIKELY	2 MODERATE	3 HIGH	3 HIGH	4 ACUTE	4 ACUTE	4A ACUTE	DO NOT PROCEED	<b>Substitution</b> Replace the hazard.	
POSSIBLE	1 LOW	2 MODERATE	3 HIGH	4 ACUTE	4 ACUTE	3H HIGH	Review before work starts.	Isolation Isolate People from the hazard	
UNLIKELY	1 LOW	1 LOW	2 MODERATE	3 HIGH	4 ACUTE	2M MODERATE	Ensure control measures in place.	<b>Engineering</b> Isolate the hazard	
RARE	1 LOW	1 LOW	2 MODERATE	3 HIGH	3 HIGH	1L LOW	Monitor and keep records.	<b>Administrative</b> Change	
								<b>PPE</b>	

  

Risk Rating & Required Action:	
<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.
<b>3H</b>	Review and approve additional controls before task starts. Senior supervisor sign-off needed.
<b>2M</b>	Ensure all nominated controls are in place and effective. Proceed with caution; monitor conditions.
<b>1L</b>	Proceed, following standard operating procedures. Monitor and keep records.

  

Consequence Scale:			
Consequence	People (injury/illness)	Project / Assets	Compliance / Reputation
<b>Catastrophic</b>	Fatality or permanent total disability	project shutdown	Significant regulator intervention; criminal prosecution
<b>Major</b>	Serious injury/illness (hospital > 5 days)	critical delay	Improvement notice; major media coverage
<b>Moderate</b>	Medical-treatment injury; lost-time > 1 day	moderate delay	Minor breach; adverse client comment
<b>Minor</b>	First-aid only, no lost time	negligible delay	Isolated non-conformance
<b>Insignificant</b>	No injury	no schedule impact	Deviation caught and corrected on site

  

**Notes on Hierarchy of Controls:**  
Remember to apply controls in the preferred order shown by the coloured pyramid:

1. **Eliminate**
2. **Substitute**
3. **Isolate**
4. **Engineering**
5. **Administrative**
6. **PPE**

Always document **why** a lower-order control is accepted if elimination or substitution is not reasonably practicable.

*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. WHS Governance, Policy and Legislative Compliance	<ul style="list-style-type: none"> <li>Absence of a documented WHS policy specific to biological hazards, mould and cytotoxic substances</li> <li>Failure to align business procedures with WHS Act 2011, WHS Regulations and relevant Codes of Practice (e.g. Hazardous Chemicals, Managing the Risk of Infection)</li> <li>Lack of clear roles, responsibilities and due diligence arrangements for officers in relation to biological and cytotoxic risks</li> <li>Inadequate consultation mechanisms with Health and Safety Representatives (HSRs) and workers on biological and cytotoxic risks</li> <li>No formal review cycle for WHS policies when standards or legislation change</li> <li>Insufficient integration of biological and cytotoxic substance risks into the overall WHS management system</li> </ul>	4A	<ul style="list-style-type: none"> <li>Develop, endorse and implement a WHS policy that explicitly covers biological hazards, mould, dust, allergens and cytotoxic substances in line with the WHS Act 2011</li> <li>Establish and document clear governance structures, including defined officer and management accountabilities for hazardous chemicals and biological risk management</li> <li>Integrate biological and cytotoxic substance risk management into the organisation's WHS management system (e.g. ISO 45001 integrated management network)</li> <li>Implement formal consultation processes (WHS committees, HSR forums, toolbox meetings) specifically including discussion of mould, dust, allergens and cytotoxic substances</li> <li>Make a legal register tracking applicable WHS legislation, codes of practice and standards relevant to biological hazards and cytotoxics, with assigned responsibility for monitoring updates</li> <li>Schedule annual reviews of WHS policies and procedures, or earlier following incidents, audits or regulatory change</li> <li>Ensure due diligence training for officers includes understanding of organisational risks related to infectious agents, mould, dust and cytotoxic substances</li> </ul>	3H
2. Risk Management Framework for Biological and Cytotoxic Hazards	<ul style="list-style-type: none"> <li>Lack of a systematic risk assessment process for biological agents, mould, dust and cytotoxic substances</li> <li>Inconsistent identification of tasks, locations and groups at elevated risk of allergen or carcinogen exposure</li> <li>No consideration of vulnerable worker groups (pregnant workers, immunocompromised, asthma or allergy sufferers)</li> <li>Poor integration of cytotoxic risk assessment with chemical, waste and manual handling assessments</li> <li>Failure to consider cumulative and chronic exposure risks (sensitisation, carcinogenicity, respiratory illness)</li> <li>Inadequate documentation and review of risk assessments leading to outdated controls</li> </ul>	4A	<ul style="list-style-type: none"> <li>Implement a formal risk management procedure for biological and hazardous chemicals aligned with the WHS Regulations (identify hazards, assess, control, review)</li> <li>Conduct baseline and task-specific risk assessments for areas and activities involving mould, dust, allergens and cytotoxic substances</li> <li>Include screening for vulnerable workers and implement additional controls or task restrictions where reasonably practicable</li> <li>Use a standardised risk matrix and templates that distinguish between acute, chronic and sensitisation risks</li> <li>Integrate cytotoxic substance risk assessments with related systems (e.g. sharps safety, waste disposal, spill response, manual handling plans)</li> <li>Establish a review schedule for all relevant risk assessments (at least annually or when significant change occurs or an incident is reported)</li> <li>Ensure risk assessments are accessible to workers and referenced in local procedures and induction materials</li> </ul>	2M

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3. Facility Design, Ventilation and Engineering Controls	<ul style="list-style-type: none"> <li>Inadequate ventilation and air exchange leading to accumulation of mould spores, dust and airborne allergens</li> <li>Insufficient segregation of cytotoxic preparation, administration and storage areas from general workspaces</li> <li>Lack of dedicated biological safety cabinets or cytotoxic drug safety cabinets where required</li> <li>Inappropriate airflows and pressure differentials resulting in contamination spread to clean areas</li> <li>Building design or maintenance issues that encourage water ingress and mould growth (roof leaks, condensation, poor drainage)</li> <li>Lack of local exhaust ventilation or HEPA filtration in high-risk areas</li> <li>Poorly designed storage areas that allow deterioration or breakage of cytotoxic containers</li> </ul>	4A	<ul style="list-style-type: none"> <li>Ensure facility design and modification projects incorporate WHS input on biological and cytotoxic hazards, including specific ventilation and containment requirements</li> <li>Install and maintain suitable ventilation systems (including HEPA filtration where required) in areas where dust, mould spores or cytotoxic substances may become airborne</li> <li>Provide appropriately certified cytotoxic drug safety cabinets and/or biological safety cabinets for preparation and manipulation of hazardous substances in line with relevant Australian Standards</li> <li>Implement engineering segregation of clean and contaminated areas, with appropriate air pressure management (e.g. negative pressure rooms where indicated)</li> <li>Include moisture control features (adequate drainage, waterproofing, insulation, humidity control) in building design and refurbishment to reduce mould growth potential</li> <li>Develop and implement a maintenance program for HVAC systems, including filter change schedules, validation testing and documented performance checks</li> <li>Design cytotoxic storage areas with spill containment (bunding), secure shelving and temperature control as specified by the manufacturer</li> <li> Undertake periodic independent verification of engineering controls (cabinet certification, airflow measurements) and rectify non-conformances</li> </ul>	2M
4. Building Maintenance, Water Intrusion and Mould Management	<ul style="list-style-type: none"> <li>Uncontrolled water leaks, condensation or flooding leading to mould growth in occupied areas</li> <li>Lack of a systematic inspection and maintenance regime for moisture-prone areas (roofs, basements, gutters, HVAC condensate pans)</li> <li>Inadequate response procedures for water damage incidents resulting in prolonged dampness</li> <li>Failure to identify and remediate hidden mould in ceiling cavities, wall linings or under floor coverings</li> <li>Use of inappropriate cleaning methods that aerosolise mould spores and dust</li> <li>No documented criteria for escalation, isolation of affected areas or engaging specialist remediation contractors</li> </ul>	4A	<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

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5. Hazardous Substance Procurement and Inventory Management	<ul style="list-style-type: none"> <li>• Procurement of cytotoxic, carcinogenic or highly allergenic substances without prior WHS review</li> <li>• Incomplete or inaccurate hazardous chemicals register, including cytotoxic agents and biological agents</li> <li>• Lack of current Safety Data Sheets (SDS) for cytotoxic and sensitising substances</li> <li>• Overstocking of cytotoxic and allergenic substances leading to degradation and increased waste</li> <li>• Purchasing of products that generate unnecessary dust or bioaerosols when safer alternatives exist</li> <li>• Failure to identify and label all cytotoxic preparations, waste and storage areas</li> </ul>	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
6. Storage, Handling Systems and Containment	<ul style="list-style-type: none"> <li>• Improper segregation of cytotoxic substances from other medications or chemicals</li> <li>• Inadequate storage conditions leading to container damage, leaks or generation of contaminated dust</li> <li>• Lack of systems for secure containment of cytotoxic liquids and contaminated sharps</li> <li>• Insufficient control of areas where dusty or mould-prone materials are stored (e.g. paper archives, soft furnishings)</li> <li>• Failure to control access to cytotoxic and high-risk biological storage areas</li> <li>• Inadequate systems for labelling partially used cytotoxic vials and prepared doses</li> </ul>	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. Air Quality, Housekeeping and Dust Control Systems	<ul style="list-style-type: none"> <li>Accumulation of dust containing mould spores, allergens and other biological contaminants on surfaces and in HVAC systems</li> <li>Cleaning practices that resuspend dust and mould into the breathing zone of workers and occupants</li> <li>Inadequate housekeeping schedules in areas where dust or mould can accumulate (storerooms, ceiling cavities, plant rooms)</li> <li>Use of vacuum cleaners without HEPA filtration in high-risk areas</li> <li>Failure to monitor indoor air quality when recurrent complaints or symptoms are reported</li> <li>Inadequate control of dust-generating maintenance or construction activities in occupied areas</li> </ul>	3H	[REDACTED]	2M
8. Training, Competency and Information for Workers	<ul style="list-style-type: none"> <li>Workers unaware of health risks associated with mould, dust, allergens and cytotoxic substances, including chronic and carcinogenic effects</li> <li>Insufficient training in safe handling systems, containment equipment use and spill management of cytotoxic substances</li> <li>Lack of competency assessment staff preparing, administering and disposing of cytotoxic agents</li> <li>Failure to inform workers with known allergies, asthma or immune conditions about potential workplace exposures and available controls</li> <li>Inadequate induction for contractors who may disturb mould, dust or cytotoxic residues during their work</li> <li>Training not refreshed regularly, leading to skill decay and complacency</li> </ul>	4A	[REDACTED]	2M
9. Personal Protective Equipment (PPE) Management System	<ul style="list-style-type: none"> <li>Reliance on PPE as the primary control rather than as a supplementary measure</li> </ul>	3H	[REDACTED]	1L

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	<ul style="list-style-type: none"> <li>Inappropriate selection of PPE for cytotoxic handling or mould remediation tasks (e.g. inadequate gloves or respiratory protection)</li> <li>Lack of fit testing and user training for tight-fitting respiratory protective equipment</li> <li>No systems for cleaning, storage and replacement of reusable PPE, leading to contamination and secondary exposure</li> <li>Workers with facial hair or medical conditions unable to achieve adequate respirator fit without alternative controls</li> <li>Absence of clear PPE requirements in local procedures for tasks with biological or cytotoxic exposure risk</li> </ul>		[REDACTED]	
10. Health Monitoring, Incident Reporting and Medical Management	<ul style="list-style-type: none"> <li>Failure to identify early signs of sensitisation, allergic reactions or respiratory illness due to dust, mould or allergens</li> <li>No health monitoring program for workers with significant cytotoxic exposure potential, where required by regulations or guidance</li> <li>Under-reporting of minor exposures, spills or health complaints related to biological and cytotoxic hazards</li> <li>Lack of access to occupational health advice regarding workers with existing allergies, asthma or immunocompromise</li> <li>Inadequate follow-up and investigation of reported symptoms, leading to repeated exposures</li> <li>No systems for emergency medical response to acute exposures (e.g. cytotoxic splash, severe allergic reaction)</li> </ul>	3H	[REDACTED]	2M
11. Cytotoxic Preparation, Transport and Waste Management Systems	<ul style="list-style-type: none"> <li>System failures leading to leaks, spills or aerosol generation during cytotoxic preparation or transfer</li> </ul>	4A	[REDACTED]	2M

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	<ul style="list-style-type: none"> <li>Inadequate systems for transport of cytotoxic substances within the facility (e.g. open trays, unsecured containers)</li> <li>Improper segregation and labelling of cytotoxic waste leading to inadvertent exposure of cleaners or waste contractors</li> <li>Use of general waste streams for cytotoxic-contaminated materials, linen or sharps</li> <li>Lack of documented procedures for cytotoxic spill response and decontamination</li> <li>Inconsistent use of closed-system transfer devices where indicated</li> </ul>		[REDACTED]	
12. Contractor, Visitor and Third-Party Management	<ul style="list-style-type: none"> <li>Contractors disturbing mould or dust during works without appropriate controls or awareness</li> <li>Cleaning or maintenance contractors inadequately trained in handling cytotoxic residues, contaminated linen or biological waste</li> <li>Visitors and non-routine workers entering areas with elevated levels of or cytotoxic risk without engineering or controls</li> <li>Inconsistent requirements for contractor WHS documentation related to biological and cytotoxic hazards</li> <li>Poor coordination between host employer and contractors regarding isolation of affected areas during remediation or construction</li> </ul>	3H	[REDACTED]	2M
13. Emergency Preparedness, Spill Response and Decontamination	<ul style="list-style-type: none"> <li>Lack of coordinated emergency plans for significant mould contamination, dust release or cytotoxic spills</li> <li>Workers unaware of procedures for isolating affected areas and notifying key personnel</li> </ul>	3H	[REDACTED]	1L

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	<ul style="list-style-type: none"> <li>Inadequate availability or maintenance of spill response and decontamination equipment</li> <li>Failure to consider cross-contamination risks during evacuation or emergency response</li> <li>No predefined criteria for engaging external hazardous materials or environmental hygiene specialists</li> </ul>		[REDACTED]	
14. Consultation, Communication and Worker Engagement	<ul style="list-style-type: none"> <li>Workers not consulted on practical issues with existing controls for dust, mould and cytotoxic substances</li> <li>Inadequate communication of monitoring results, incident learnings and changes to procedures</li> <li>Rumours or misinformation about health effects causing anxiety or under-reporting</li> <li>Failure to capture feedback from workers with allergies or other sensitivities about their exposure experiences</li> </ul>	3M	[REDACTED]	1L
15. Auditing, Monitoring and Continuous Improvement	<ul style="list-style-type: none"> <li>Lack of systematic verification that control measures for biological, mould, dust and cytotoxic hazards are implemented and effective</li> <li>Failure to use data from incidents, health monitoring, complaints and inspections to improve systems</li> <li>Outdated procedures and risk assessments remaining in use due to absent review processes</li> </ul>	3H	[REDACTED]	1L

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	<ul style="list-style-type: none"> <li>No performance indicators specific to biological and cytotoxic risk management</li> </ul>		<div style="background-color: black; width: 100%; height: 15px; margin-bottom: 5px;"></div> <div style="background-color: black; width: 100%; height: 15px; margin-bottom: 5px;"></div> <div style="background-color: black; width: 100%; height: 15px;"></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 FOR 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 2025  
 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) Regulation 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>

**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>

**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

**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.