

Winter Sports Safety

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, Legal Compliance & Consultation	<ul style="list-style-type: none"> <li>Lack of clear WHS governance structure for winter sports and snow operations</li> <li>Non-compliance with WHS Act 2011, WHS Regulations and relevant Australian Standards</li> <li>Inadequate consultation mechanisms with workers, HSRs and contractors about winter-specific risks</li> <li>Failure to integrate winter sports and snow operations into the PCBU's overall WHS management system</li> <li>Insufficient resourcing and budget allocation for winter sports and snow-making/grooming risk controls</li> <li>Poor change management when introducing new winter sports activities, plant or technology</li> </ul>	4A	<ul style="list-style-type: none"> <li>Establish and document a WHS governance framework specific to winter sports and snow operations, including defined PCBU, officer and worker roles in line with WHS Act 2011</li> <li>Conduct a legislative compliance review for winter sports, plant operation and remote/harsh environment work, and maintain a compliance register reviewed annually</li> <li>Implement a formal consultation procedure that mandates engagement with workers, health and safety representatives and contractors prior to season opening and before significant changes to snow-making or grooming systems</li> <li>Integrate winter sports and snow operations into the organisation's WHS management system (policies, procedures, risk registers, audit schedules, incident reporting and investigation processes)</li> <li>Allocate dedicated WHS budget and clear accountabilities for winter sports and snow operations (training, PPE, equipment upgrades, weather monitoring, communications and emergency response)</li> <li>Implement a documented change management procedure requiring risk assessment, consultation and approval for new winter sports activities, new grooming plant, modified snow-making systems or changes to slope layout</li> </ul>	3H
2. Strategic Winter Operations Planning & Risk Management	<ul style="list-style-type: none"> <li>Absence of an integrated winter operations risk register for all winter sports, snow-making and grooming activities</li> <li>Inadequate pre-season planning for peak crowds, severe weather and resource constraints</li> <li>Failure to consider cumulative risks from multiple simultaneous activities (public skiing, night skiing, grooming, snow-making, events)</li> <li>Poor coordination between departments (ski patrol, grooming, snow-making, lifts, events, maintenance, security)</li> <li>Lack of clear seasonal objectives and performance indicators for WHS outcomes</li> </ul>	4A	<ul style="list-style-type: none"> <li>Develop and maintain a comprehensive winter operations risk register capturing system-level hazards for public winter sports, snow-making and grooming operations with assigned risk owners</li> <li>Conduct structured pre-season risk workshops involving key stakeholders (management, patrol, grooming, snow-making, lifts, maintenance and worker representatives)</li> <li>Implement an integrated winter operations plan that sequences grooming, snow-making and public access timeframes, including lock-out periods for plant operation</li> <li>Embed multi-department coordination meetings (daily during high season) to review weather forecasts, slope conditions, equipment status, staffing levels and planned activities</li> <li>Define measurable WHS performance indicators for winter operations (injury rates, near misses, plant collision incidents, avalanche trigger events, environmental exposure events) and review them monthly</li> <li>Use a formal risk assessment methodology and enterprise risk rating matrix aligned with organisational and WHS legislative requirements</li> </ul>	3H
3. Terrain Design, Slope Management & Crowd Segregation	<ul style="list-style-type: none"> <li>Poorly designed or signposted runs leading to collisions, loss of control and injuries</li> </ul>	4A	<ul style="list-style-type: none"> <li>Develop engineering and planning standards for run grading, slope width, gradient and hazard protection in line with industry best practice and relevant standards</li> <li>Implement a terrain zoning and segregation policy that designates and enforces separate areas for different winter sports and user competence levels</li> </ul>	2M

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	<ul style="list-style-type: none"> <li>Inadequate segregation of beginners, advanced users, tobogganers and non-participants</li> <li>Insufficient design controls around high-risk areas (lift unload zones, terrain parks, intersections, blind corners)</li> <li>Inadequate systems for slope capacity management leading to overcrowding</li> <li>Lack of systematic review of incident data to inform changes to slope design and signage</li> </ul>		<ul style="list-style-type: none"> <li>Install and maintain a standardised system of signage, fencing, netting and physical barriers for high-risk locations and ensure they are documented in a slope infrastructure register</li> <li>Use a capacity planning system (e.g. maximum users per slope based on lift capacity and terrain size) and introduce controls such as timed access, ticket limits or run closures during congestion</li> <li>Establish a formal slope inspection and hazard reporting procedure, including daily documented inspections and rapid escalation for corrective action</li> <li>Create a seasonal review process where incident and near-miss data is analysed to adjust slope design, signage placement and crowd segregation controls</li> </ul>	
4. Snow-Making Systems, Water & Power Infrastructure	<ul style="list-style-type: none"> <li>Design or installation deficiencies in snow-making plant, pipework, pumps and electrical systems</li> <li>Inadequate preventative maintenance program for high-pressure water lines and hydrants</li> <li>Uncontrolled ice build-up from snow guns creating slip, trip and collision hazards</li> <li>Failure of isolation and lockout system during maintenance, leading to high-pressure or electrical exposure</li> <li>Inadequate spill and water management causing erosion and environmental hazards impacting slope safety</li> <li>Lack of redundancy or contingency planning for critical snow-making infrastructure failures</li> </ul>	4	<p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p>	2M
5. Snow Grooming Fleet Management & Plant Safety Systems	<ul style="list-style-type: none"> <li>Use of grooming plant (e.g. snowcats) without adequate safety specifications or guarding</li> <li>Inadequate maintenance and inspection regimes for grooming machines and attachments (blades, winches, tillers)</li> <li>Failure of braking, steering, ROPS/FOPS, lighting or communication systems on plant</li> </ul>	4A	<p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p>	2M

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	<ul style="list-style-type: none"> <li>• Unmanaged plant movements in low visibility, steep terrain or close proximity to public areas</li> <li>• Lack of standardised fit-out for emergency equipment and communication devices on grooming plant</li> </ul>		[REDACTED]	
6. Operator Competency, Licensing & Training Systems	<ul style="list-style-type: none"> <li>• Inadequate competency verification for snow groomer and snow-making operators</li> <li>• Lack of structured induction and refresher training specific to winter and alpine conditions</li> <li>• Insufficient supervision or mentoring for new or seasonal workers operating high-risk plant</li> <li>• No formal process to recognise prior learning or to manage language and literacy barriers</li> <li>• Failure to maintain training records, licences and competency assessments</li> </ul>	4A	[REDACTED]	2M
7. Seasonal Workforce Management, Fatigue & Rostering	<ul style="list-style-type: none"> <li>• Extended shifts and night work for grooming and snow-making operators leading to fatigue-related incidents</li> <li>• Compressed seasonal work demands causing inadequate breaks and recovery time</li> <li>• Poor rostering practices that do not consider travel times, secondary employment or on-call duties</li> <li>• Inadequate systems to monitor and manage fatigue indicators and self-reporting</li> <li>• Insufficient accommodation quality or heating, impacting rest and recovery</li> </ul>	4A	[REDACTED]	2M

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			[REDACTED]	
8. Extreme Weather, Avalanche Control & Environmental Monitoring	<ul style="list-style-type: none"> <li>• Inadequate systems to monitor and respond to extreme weather (blizzards, high winds, ice, low visibility)</li> <li>• Lack of formal avalanche risk assessment and control program where relevant</li> <li>• Failure to close or restrict access to slopes and terrain parks during dangerous conditions</li> <li>• Insufficient integration of meteorological and snowpack data into operational decisions</li> <li>• Poor communication of changing environmental conditions to staff, contractors and patrons</li> </ul>	4A	[REDACTED]	2M
9. Public Interface, Education & Behaviour Management	<ul style="list-style-type: none"> <li>• Inadequate public information about alpine risks, safe riding behaviour and resort rules</li> <li>• Poorly managed interface between operational plant (lifts, snowmobiles) and movements of the public</li> <li>• Ineffective enforcement of speed limits, slow zones, no-go areas and helmet policies</li> <li>• Lack of structured approach to managing high-risk behaviours (intoxication, off-piste access, night sledding)</li> <li>• Insufficient feedback channels for patrons to report hazards or incidents</li> </ul>	4A	[REDACTED]	2M
10. Remote Area Access, Communications & Emergency Response	<ul style="list-style-type: none"> <li>• Insufficient communication coverage on slopes and remote work areas for grooming and snow-making crews</li> </ul>	4A	[REDACTED]	2M

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	<ul style="list-style-type: none"> <li>• Delayed emergency response due to unclear procedures, poor coordination or lack of resources</li> <li>• Inadequate rescue and evacuation planning for severe weather or night operations</li> <li>• Lack of integration between ski patrol, emergency services and site management</li> <li>• Failure to test emergency plans and communication systems under realistic winter conditions</li> </ul>		[REDACTED]	
11. Health Monitoring, Cold Stress & PPE Management	<ul style="list-style-type: none"> <li>• Unmanaged risk of cold stress, hypothermia, frostbite and weather-related illness for workers</li> <li>• Inadequate systems to ensure provision, fit and maintenance of appropriate PPE and clothing</li> <li>• Lack of health monitoring for workers exposed to prolonged cold, vibration and noise from grooming plants</li> <li>• Insufficient procedures for hydration, nutrition and warm-up/rest breaks in low temperatures</li> <li>• Failure to consider pre-existing medical conditions aggravated by cold or altitude</li> </ul>	3H	[REDACTED]	2M
12. Contractor, Supplier & Event Management	<ul style="list-style-type: none"> <li>• Inconsistent WHS standards among contractors involved in snow-making, grooming support, equipment hire or event operations</li> <li>• Lack of clarity regarding PCBU obligations and shared duties under the WHS Act 2011</li> </ul>	4A	[REDACTED]	2M

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	<ul style="list-style-type: none"> <li>• Insufficient vetting of contractor competency, plant safety and insurances</li> <li>• Poor integration of event-specific risks (competitions, night events, freestyle parks) into site-wide controls</li> <li>• Inadequate oversight of third-party equipment set-ups, temporary structures and electrical systems on snow</li> </ul>		[REDACTED]	
13. Asset Integrity, Inspections & Maintenance Systems	<ul style="list-style-type: none"> <li>• Systemic failure to identify and rectify deteriorating infrastructure (lifts interfaces, barriers, fencing, lighting, walkways)</li> <li>• Reactive rather than preventative maintenance for winter-specific assets</li> <li>• Inconsistent inspection standards between departments and shifts</li> <li>• Inadequate documentation and follow-up of defects impacting winter sports safety</li> <li>• Uncontrolled modifications to plant &amp; infrastructure without engineering review</li> </ul>		[REDACTED]	2M
14. Incident Reporting, Investigation & Continuous Improvement	<ul style="list-style-type: none"> <li>• Under-reporting of incidents, near misses and minor injuries in winter sports and snow operations</li> <li>• Superficial investigations that do not identify root causes and systemic issues</li> <li>• Failure to share lessons learned across departments and seasons</li> <li>• Lack of integration between incident data, risk registers and operational planning</li> </ul>	3H	[REDACTED]	1L

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	<ul style="list-style-type: none"> <li>Inadequate processes to notify regulators where required under WHS legislation</li> </ul>			

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.