SAFETY. MATTERS. EVERYWHERE.

EXTREME COLD INDUSTRIES WHS COMPLIANCE PACK

Meeting Safety Standards across Australia and New Zealand

Your guide to safer, smarter workplaces.

A WHS Compliance Pack is your guide to:

- Identifying and managing workplace hazards
- Meeting legal health and safety obligations
- Developing clear safety procedures
- Training and protecting your team
- Reducing risks and liability



Stay compliant. Stay protected.

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COL112025 - COLD STRESS MANAGEMENT POLICY

Policy Statement: Our business is committed to protecting all workers from cold-related risks including hypothermia, frostbite, and decreased performance in extreme cold environments.

Preventative measures, safe work practices, and employee training will be implemented to minimise exposure and ensure compliance with WHS legislation. This includes:

- Engineering Controls providing heated shelters, wind barriers, and ensuring all vehicles and equipment are winterised to perform safely in extreme cold.
- Administrative Controls scheduling shorter shifts in sub-zero conditions, implementing work/rest cycles, and rotating tasks to reduce prolonged exposure to cold environments.
- Personal Protective Equipment (PPE) issuing insulated, waterproof, and high-visibility clothing, gloves, boots, and face protection appropriate for the severity of the cold.
- Health Monitoring conducting regular checks on workers for signs of cold stress, frostbite, and hypothermia, with immediate intervention protocols in place.
- Emergency Preparedness maintaining accessible emergency response kits, blankets, first aid equipment, and clear evacuation procedures tailored to cold weather hazards.
- Training and Awareness ensuring all employees are trained to recognise the early symptoms of cold stress, understand safe work procedures, and know how to respond to emergencies.

These measures form a comprehensive approach that reduces risks, promotes a culture of safety, and ensures full compliance with WHS obligations in cold environments.

Compliance Clause - Cold Environment Work

This policy is designed to meet our legal obligations under Australia's Work Health and Safety (WHS) laws (including the OHS Act 2004 and OHS Regulations 2017 in Victoria), New Zealand's Health and Safety at Work Act 2015 and General Risk and Workplace Management Regulations 2016, and recognised international standards such as the ILO Occupational Safety and Health guidelines, applicable in Pacific nations including the Cook Islands. Preventative measures, safe work practices, and employee training are implemented to minimise exposure to cold-related hazards. These include engineering and administrative controls, provision of suitable PPE, health monitoring, and emergency preparedness. Together, these measures demonstrate compliance with relevant legislation, support international best practice, and ensure a safe and healthy working environment for all employees in cold conditions.

COL122025 - FROSTBITE & HYPOTHERMIA PREVENTION GUIDELINES

Purpose: To guide employees and supervisors in recognising, preventing, and managing cold-related medical conditions.

Businesses Commonly Affected

Commercial fishing and aquaculture in icy waters.

Mining and drilling operations in alpine or polar regions.

Construction and infrastructure works in snow and ice-prone areas.

Transport and logistics, including truck drivers, freight operators, and dock workers.

Agriculture and forestry in cold or mountainous climates.

Signs of Frostbite

- 1. Numbness or tingling in the skin, especially fingers, toes, nose, and ears.
- 2. Pale, waxy, or hard skin that may turn bluish or black in severe cases.
- 3. Blisters or swelling on affected areas after rewarming.

Signs of Hypothermia

- 1. Persistent shivering, progressing to stiffness when severe.
- 2. Slurred speech, confusion, or poor coordination.
- 3. Fatigue, drowsiness, or unusual behaviour.
- 4. Slow breathing or heart rate in advanced stages.

Prevention

- 1. Wear insulated, waterproof clothing, gloves, and boots designed for sub-zero conditions.
- 2. Use layered clothing systems that allow moisture to escape while retaining heat.
- 3. Take regular warm-up breaks in heated shelters.
- 4. Rotate shifts so no worker is exposed to prolonged cold periods.
- 5. Keep clothing and gloves dry—replace wet gear immediately.

First Aid Response

- 1. Move the worker into a warm, dry environment as quickly as possible.
- 2. Remove wet or icy clothing and replace with warm, dry layers.
- 3. Wrap the worker in an emergency thermal blanket to slow heat loss and stabilise body temperature.
- 4. Warm affected body parts gradually (e.g., warm water immersion or body heat).
- 5. Provide warm, non-alcoholic, non-caffeinated fluids if the worker is conscious.
- 6. Monitor breathing and circulation continuously.
- 7. Call emergency services immediately if symptoms are severe.

COL132025 – PERSONAL PROTECTIVE EQUIPMENT (PPE) FOR COLD ENVIRONMENTS

Introduction

Working in extreme cold conditions requires specialised protective clothing and equipment to prevent frostbite, hypothermia, and reduced work performance. Personal Protective Equipment (PPE) acts as the last line of defence after engineering and administrative controls, ensuring workers can perform their tasks safely and comfortably. All PPE must be appropriate for the environment, fit correctly, and be maintained in good condition.

Activity: PPE Inspection Drill

- Select one item of PPE from the table (e.g., gloves or goggles).
- Inspect it for signs of wear, damage, or missing parts.
- Record your findings on a maintenance log or checklist.
- Discuss with a partner how failing to maintain this item could increase the risk of frostbite, slips, or other injuries during work.

This activity helps workers practise identifying issues with their gear before starting a shift, reinforcing the importance of PPE in preventing cold-related injuries.

Item	Purpose	Maintenace Check	
Thermal insulated clothing (jackets, pants)	Provides warmth and reduces heat loss from the body.	Inspect daily for tears, wetness, and insulation damage.	
Waterproof gloves & footwear	Protects hands and feet from moisture, frostbite, and slipping hazards.	Check for leaks, cracks, and ensure waterproofing is intact.	
Balaclavas, face shields, neck warmers	Shields exposed skin from frostbite and wind chill.	Wash regularly and replace if fabric becomes worn.	
Safety goggles	Prevents frost injuries, windburn, and snow glare.	Ensure lenses are clear and straps remain secure.	
High-visibility over-garments	Improves worker visibility in low-light, fog, or snow conditions.	Confirm reflective strips are intact and garments remain bright.	
Battery-heated PPE (e.g. gloves, vests)	Provides additional warmth in extreme sub-zero conditions.	Charge batteries fully and inspect wiring before each use.	

COL142025 - COLD WEATHER WORK PROCEDURES

Conduct Pre-Start Cold Hazard Briefing

- Supervisors must hold a toolbox talk before each shift to discuss expected weather conditions, identify cold-related risks, and outline the controls in place.
- Workers should be reminded of the symptoms of frostbite and hypothermia, and the importance of reporting any signs immediately.

Limit Time in Extreme Cold - Rotate Tasks

- High-risk activities should be broken into shorter periods to reduce continuous exposure.
- Rotate staff between outdoor cold-exposed roles and warmer sheltered tasks where possible.
- Encourage buddy systems so workers monitor each other for signs of cold stress.

Use Warming Stations at Regular Intervals

- Designated heated shelters, vehicles, or rest areas must be available within safe walking distance of the worksite.
- Break schedules should include warm-up periods every 1-2 hours, depending on the severity of the cold.
- Workers must have access to hot drinks and the option to change into dry clothing if needed.

Prohibit Working Alone in Extreme Cold

- Lone work is strictly prohibited in sub-zero or high-wind chill conditions.
- All employees must maintain visual or radio contact with co-workers.
- Emergency communication devices (e.g., two-way radios, satellite phones) must be functional at all times.

Document Exposure Times and Check Worker Health Status

- Supervisors should maintain a log of worker exposure times, including breaks and rotations.
- Health checks should be carried out at the start, during, and end of shifts to detect early signs of cold stress.
- Any incident or health concern must be recorded on the Cold Environment Incident & Corrective Action Form (COL202025).

COL152025 - EMERGENCY RESPONSE PLAN - EXTREME COLD

In Case of a Cold Weather Emergency

Designated	Muster Point:	

- All workers must proceed immediately to the designated muster point when an emergency is declared.
- Muster point signage must be visible and well-lit, with clear pathways free from snow, ice, and other hazards.
- Supervisors are responsible for conducting headcounts and confirming all personnel are accounted for.

Emergency Contact Numbers: ______

- Post emergency contact numbers in common areas, vehicles, and shelters.
- Ensure workers are aware of local emergency services, site managers, and utility providers to call in case of power failure, frostbite, or equipment malfunction.

Onsite First Aid Officer: ______

- A qualified First Aid Officer must be available at all times during site operations.
- The officer is responsible for administering treatment for frostbite, hypothermia, or other cold-related conditions until medical professionals arrive.
- First aid kits must be stocked with thermal blankets, warming packs, and supplies appropriate for cold exposure.

Emergency Shelters & Equipment

- Emergency blankets and heating equipment are stored in designated shelters located within 100 metres of active worksites.
- Shelters must have adequate ventilation, be free of flammable materials near heaters, and undergo regular safety checks.
- Workers should be trained in the safe use of portable heaters and emergency blankets to prevent further injury.

Evacuation Routes

- Evacuation routes must remain clear of snow, ice, and obstructions at all times.
- Salt, sand, or other anti-slip materials should be applied regularly during extreme weather.
- Lighting along evacuation pathways must be functional to allow safe evacuation during low-visibility conditions

Incident Reporting

- All incidents, near misses, or cold-weather-related injuries must be reported immediately using COL202025 - Cold Environment Incident & Corrective Action Form.
- Reports should include time, location, weather conditions, and any corrective measures taken to prevent recurrence.
- Management must review incident reports and update emergency response procedures as necessary.

Additional Safety Measures

- Conduct regular cold-weather emergency drills to ensure all workers understand procedures.
- Assign supervisors to monitor worker condition and exposure time during extreme cold.
- Ensure communication systems (radios, phones) remain operational despite low temperatures.

COL162025 – COLD ENVIRONMENT RISK ASSESSMENT FORM

Cold Weather Risk Assessment

(Risk Factors to Consider)

Temperature Levels:

- Below 5°C: Mild risk, potential for discomfort, reduced dexterity, and early-stage cold stress.
- Below -10°C: Significant risk of frostbite and hypothermia without protective controls.
- Wind Chill Effect: Air movement can increase heat loss, making conditions feel up to 10-15°C colder than actual temperature. Always assess combined wind chill and temperature readings.

Wet Conditions (Snow, Ice, Sleet, Rain):

- Water and moisture greatly increase the risk of heat loss, frostbite, and hypothermia.
- Wet surfaces cause slips, trips, and falls; machinery and vehicles may lose traction.
- PPE and clothing must remain dry—wet clothing loses up to 90% of its insulating value.

Duration of Exposure:

- Short exposure (<30 minutes) generally manageable with proper PPE and warming breaks.
- Moderate exposure (30-90 minutes) requires active monitoring, rotation of tasks, and planned shelter breaks.
- Extended exposure (>90 minutes) presents high risk without heated shelters and may be prohibited under company policy.

PPE Availability & Compliance:

- Thermal insulated clothing, gloves, waterproof footwear, and face protection must be worn.
- Battery-heated PPE may be required for extreme cold (< -10°C with wind chill).
- Supervisors must verify compliance before work begins; non-compliance constitutes a reportable hazard.

Heating & Shelter Adequacy:

- Heated shelters must be located within 100m of work zones and remain accessible.
- Portable heaters must be inspected, tagged, and safely ventilated.
- Extra blankets, hot drinks, and emergency supplies must be available at all times.

Risk Rating Matrix

- □ **Low Risk Temperature above 5°C**, minimal wind chill, dry conditions, short exposure, PPE fully compliant, and shelters available.
- □ **Medium Risk Temperature between 0°C and -10°C**, moderate wind chill, presence of ice/snow, medium exposure time, and limited shelter/heating access.
- □ **High Risk Temperature below** -**10°C** and/or severe wind chill, wet or icy conditions, extended exposure times, or inadequate PPE/shelter provisions. Work must not proceed until adequate controls are implemented.

COL172025 - HEATING & SHELTER REQUIREMENTS

Heated shelters must be positioned within 100 metres of all cold-exposed worksites to allow workers quick access to warmth. These shelters must provide adequate ventilation to prevent carbon monoxide build-up, especially where portable heaters are in use. All heaters and electrical equipment are to be regularly inspected, tested, and tagged to ensure they meet compliance requirements.

In addition to physical infrastructure, employers must supply hot drinks, nourishing food, and scheduled rest periods in warm areas to maintain worker health and productivity. Extra blankets and emergency thermal supplies should be readily available, ensuring rapid response to sudden temperature drops or emergencies. These provisions not only protect workers but also help maintain operational efficiency in harsh weather conditions.

In New Zealand, these practices align with the Health and Safety at Work Act 2015 (HSWA), which places a duty on Persons Conducting a Business or Undertaking (PCBUs) to ensure, so far as is reasonably practicable, the health and safety of workers. Under HSWA, providing safe systems of work includes managing risks from cold stress and extreme weather. The Health and Safety at Work (General Risk and Workplace Management) Regulations 2016 also reinforce the obligation to provide adequate facilities and first aid arrangements. By maintaining heated shelters, safe rest areas, and emergency equipment, businesses demonstrate compliance with these legal duties and uphold a strong standard of worker care.

For example, in commercial fishing, crews often spend long hours in freezing winds and wet conditions. Providing heated spaces and protective clothing not only reduces the risk of frostbite and hypothermia but also keeps workers alert, lowering the chance of accidents on deck. While some operators may see investment in heating, PPE, and emergency supplies as an extra cost, it actually saves money long term by reducing lost time injuries, medical expenses, and downtime caused by worker fatigue or illness. Protecting staff ultimately protects productivity and profitability.

COL182025 - VEHICLE & EQUIPMENT COLD WEATHER INSPECTION LOG

Daily Weather Vehicle & Inspection Check
Date:
Supervisor:
Employee Name:
Weather Conditions (tick all that apply)
□ Clear
□ Rain
□ Fog
□ Ice/Frost
□ Storm/Lightning
□ Extreme Heat
Vehicle Inspection Checklist
□ Antifreeze / Coolant level checked
□ Battery tested (cold-crank / charge holding)
□ Windscreens & mirrors clear (ice, snow, dust)
☐ Tyres checked (tread, grip, pressure)
□ Heater / Defrost or A/C systems operational
□ Lights & Emergency beacons tested
□ Brakes, steering, horn tested
□ Fluids topped up (oil, coolant, washer fluid)
□ Windscreen wipers operational
□ Emergency kit stocked (blankets, water, first aid, high-vis vest)
Activity: Morning Circle & Vehicle Walk-Around
□ Attended 5-minute weather briefing
□ Discussed forecast & hazards (fog, storms, icy roads, extreme heat)
□ Completed vehicle walk-around inspection
□ Reported any defects immediately
Extra Safety Note
□ Road surface condition reported during first 10 minutes of travel
Corrective Actions (if required)
□ Repairs / Maintenance requested
□ Vehicle removed from service
□ Spare vehicle allocated
Employee Signature:
Supervisor Signature:
Date/Time:

Tip: Always start inspections before engines are warmed up—this ensures accurate checks for batteries, antifreeze, and frost build-up.

COL192025 – EMPLOYEE COLD WEATHER TRAINING RECORD

EMPLOYEE NAME:
DATE OF TRAINING:

TOPICS COVERED

- 1. Recognising Frostbite & Hypothermia
- 2. Learn the signs of numb fingers, pale skin, shivering, and confusion so you can act early and avoid serious injury.
- 3. Using and Looking After PPE
- 4. Correct use of jackets, gloves, boots, and face gear. Keep gear clean and dry—wet or damaged gear won't protect you properly.
- 5. Work and Rest Breaks
- 6. Follow the schedule for warming up indoors, rotating tasks, and drinking warm fluids to stay safe and alert.
- 7. Emergency Response and Reporting
- 8. Know who to call, where the muster point is, and how to fill out the incident form if something happens.
- 9. Vehicles and Equipment in the Cold
- 10. How to check antifreeze, batteries, tyres, and heaters so machinery doesn't fail in freezing conditions.

TRAINER SIGNATURE:	
EMPLOYEE SIGNATURE: .	

COL202025 – COLD ENVIRONMENT INCIDENT & CORRECTIVE ACTION FORM

INCIDENT DETAILS

Date/Time: ______Location: ______

Employee(s) Involved:Description of Incident:
IMMEDIATE RESPONSE ACTIONS
 □ First aid administered onsite □ Emergency services contacted □ Worker evacuated to medical facility □ Worksite secured to prevent further harm □ Shelter and heating made available immediately
CORRECTIVE ACTIONS TAKEN
□ PPE replaced/updated (e.g., insulated gloves, boots, thermal clothing) □ Work procedures revised to address hazard □ Shelter/Heating improved or relocated closer to work area □ Task rotation implemented to reduce exposure time □ Additional training/toolbox talk conducted with workers □ Risk assessment reviewed and updated □ Follow-Up Requirements □ Incident investigation completed □ Incident reviewed by WHS Officer/Manager □ Preventative measures added to Cold Weather Work Procedures (COL142025) □ Worker(s) cleared to return to duties by medical professional
Supervisor Signature: Date: