

Navigation And Control Room Operations 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 HIGH | 3 HIGH | 4 ACUTE | 4 ACUTE | 4 ACUTE | | | Elimination Remove the hazard. |
| LIKELY | 2 MODERATE | 3 HIGH | 3 HIGH | 4 ACUTE | 4 ACUTE | 4A ACUTE | DO NOT PROCEED | Substitution 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. | Engineering Isolate the hazard |
| RARE | 1 LOW | 1 LOW | 2 MODERATE | 3 HIGH | 3 HIGH | 1L LOW | Monitor and keep records. | Administrative Change PPE |

Risk Rating & Required Action:

| | |
|-----------|---|
| 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. |
| 3H | Review and approve additional controls before task starts. Senior supervisor sign-off needed. |
| 2M | Ensure all nominated controls are in place and effective. Proceed with caution; monitor conditions. |
| 1L | Proceed, following standard operating procedures. Monitor and keep records. |

Consequence Scale:

| 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 |

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. Preparation | Slips, Trips, Falls, Manual Handling | 3H | <ul style="list-style-type: none"> - Ensure all walking paths are clear from obstructions. - Use proper lifting techniques and aids. - Wear appropriate footwear. - Provide training for manual handling tasks. - Conduct regular inspections to identify hazards. - Install warning signs for uneven surfaces. - Encourage reporting of potential hazards. - Maintain control room cleanliness. - Use ergonomic tools for tasks. - Ensure good lighting conditions. | 1L |
| 2. System Checks | Electrical Shock, Equipment Malfunction | 3H | <ul style="list-style-type: none"> - Ensure equipment is tested regularly and tagged. - Use properly grounded electrical systems. - Provide PPE such as gloves and insulated tools. - Conduct detailed checks by qualified personnel. - Use surge protectors. - Have emergency procedures in place. - Regularly update equipment firmware. - Implement scheduled maintenance. - Isolate electrical systems when not in use. - Train staff in electrical safety. | 1L |
| 3. Monitoring Operations | Fatigue, Ergonomic Stress | 3H | <ul style="list-style-type: none"> - Implement shift rotation to manage fatigue. - Use ergonomic chairs and desks. - Conduct regular breaks. - Ensure proper monitor positioning. - Monitor noise levels within acceptable limits. - Provide eye strain reducing equipment. - Offer ergonomic training programs. - Encourage stretching exercises at work. | 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"> - Implement a schedule for workstation assessments. - Ensure adequate hydration facilities. | |
| 4. Communication | Miscommunication, Technical Failure | 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. Navigation Monitoring | Incorrect Data Interpretation, Technological Failure | 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> <p>[REDACTED]</p> | 2M |
| 6. Emergency Response | Panic, Equipment Failure | 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> | 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 |
| | | | | |
| 7. Data Management | Data Loss, Cybersecurity Threats | 4A | | 2M |
| 8. Maintenance Scheduling | Overlooked Procedures, Resource Misallocation | 3H | | 1L |
| 9. Equipment Handling | Mechanical Injuries, Equipment Damage | 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. Software Operations | System Errors, User Errors | 3H | | 1L |
| 11. Quality Assurance | Non-compliance, Ineffective Procedures | 3H | | 1L |
| 12. Reporting and Documentation | Data Inaccuracy, Unreported Issues | 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. Training and Development | Skill Gaps, Inappropriate Training Methods | 3H | | 1L |
| 14. Shift Handover | Knowledge Gaps, Communication Breakdowns | 3H | | 1L |
| 15. Access Control | Unauthorised Access, Security Breaches | 4A | | 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 |
| | | | | |
| 16. Resource Allocation | Underutilisation of Resources, Resource Conflicts | 3H | | 1L |
| 17. Incident Management | Delayed Response, Incomplete Reporting | 4A | | 2M |
| 18. Environmental Controls | Pollution Emission, Waste Mismanagement | 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 |
| | | | | |
| 19. Stakeholder Engagement | Misaligned Expectations, Poor Relationship Management | 3H | | 1L |
| 20. Continuous Improvement | Resistance to Change, Stagnation | 3H | | 1L |
| | | | | |
| | | | | |

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.