

Welding On Oil-Contaminated Materials 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 | oil contamination, slippery surfaces | 3H | <ul style="list-style-type: none"> - Conduct a thorough survey to identify oil-contaminated components. - Ensure all workers are trained in hazard identification and preparation procedures. - Use absorbent materials to clean excess oil on surfaces prior to welding. - Display appropriate signage indicating areas of contamination. - Verify all cleaning equipment is available and functional. - Provide proper PPE, including gloves, goggles, and footwear with anti-slip soles. - Establish clear communication between team members regarding contaminated materials. - Assign a competent person to oversee preparation activities. - Ensure lighting is adequate throughout the work area. - Establish a work area perimeter to limit access. | 2M |
| 2. Equipment Setup | incorrect equipment setup, electrical hazards | 3H | <ul style="list-style-type: none"> - Verify all welding equipment is appropriate for the task and in good repair. - Ensure electrical supplies comply with AS/NZS standards. - Perform regular maintenance checks on welding machines. - Position equipment on stable, non-contaminated surfaces. - Use circuit breakers and RCDs for additional electrical protection. - Provide training on equipment setup procedures to staff. - Identify and mitigate any existing electrical hazards before starting. - Ensure that all cables and wires are free from oil contact. - Keep a fire extinguisher nearby rated for electrical and chemical fires. - Use insulated tools to minimise the risk of electrical contact. | 2M |
| 3. Site Inspection | hidden oil pools, unsafe conditions | 3H | <ul style="list-style-type: none"> - Conduct a detailed inspection of the site noting oil pools and accumulation. - Document findings and communicate risks to all personnel. - Engage a competent person to reassess the site periodically during operations. - Use oil-absorbent mats for smaller hidden oil patches. - Ensure all inspection tools are available and functional before starting. - Use checklist to ensure all areas have been inspected. - Identify and clear any tripping or slip hazards, including tools and debris. - Confirm signage is properly placed and visible. | 2M |

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| | | | <ul style="list-style-type: none"> - Segregate unaffected areas to prevent further contamination. - Ensure emergency exits are clear and accessible. | |
| 4. Ventilation Setup | fume inhalation, poor air circulation | 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. PPE Allocation | inadequate protection, poor equipment condition | 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> | 2M |
| 6. Area Isolation | unauthorised access, interference during operations | 2M | <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> | 1L |

| JOB STEP | POTENTIAL HAZARDS | IR | CONTROL MEASURES | RR |
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| | | | | |
| 7. Hazard Communication | incorrect hazard information, lack of hazard awareness | 3H | | 2M |
| 8. Fire Safety Planning | fire outbreak, flammable materials | 4A | | 2M |
| 9. Grounding and Bonding | electrical shorts, static discharge | 3H | | 2M |

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| | | | | |
| 10. Welding Operations | burns from hot surfaces, fume exposure | 3H | | 2M |
| 11. Post-Weld Inspection | surface contamination, hidden defects | 2M | | 1L |
| 12. Cleanup | pollution, residue exposure | 2M | | 1L |

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| | | | | |
| 13. Equipment Shutdown | electrical hazards, equipment malfunction | 3H | | 2M |
| 14. Waste Disposal | improper disposal, environmental contamination | 3H | | 2M |
| 15. Decontamination | residual oil, cross-contamination | 3H | | 2M |

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| | | | | |
| 16. Documentation | incorrect data entry, loss of records | 2M | | 1L |
| 17. Review | inadequate risk control, oversights in assessments | 3H | | 2M |

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| | | | | |

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.