# Diesel Fume Exposure Risk Assessment

| | | |
|---|---|---|
| Business Name: | ABN: | |
| Business Address: | | |
| Contact Person: | Phone: | Email: |

## THIS RISK ASSESSMENT IS APPROVED BY THE PCBU OF THE 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: |

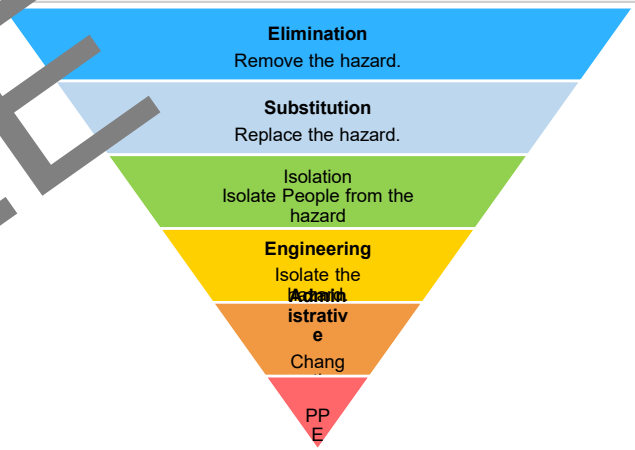
## CLIENT OR PRINCIPAL CONTRACTOR DETAILS

| | |
|---|---|
| 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 |
|---|---|---|---|---|---|---|---|
| ALMOST CERTAIN | 3 HIGH | 3 HIGH | 4 ACUTE | 4 ACUTE | 4 ACUTE | | |
| LIKELY | 2 MODERATE | 3 HIGH | 3 HIGH | 4 ACUTE | 4 ACUTE | 4A ACUTE | DO NOT PROCEED |
| POSSIBLE | 1 LOW | 2 MODERATE | 3 HIGH | 4 ACUTE | 4 ACUTE | 3H HIGH | Rev before work |
| UNLIKELY | 1 LOW | 1 LOW | 2 MODERATE | 3 HIGH | 4 ACU | 2M MO RATE | Ensure control measures in place. |
| RARE | 1 LOW | 1 LOW | 2 MODERATE | 3 HIGH | 3 H | 1L LOW | Monitor and keep records. |

HIERARCHY OF CONTROLS






### Risk Rating & Required Action:

| | |
|---|---|
| **4A** | Stop work. The risk is intolerable. E inate the hazar redesign the activity before proceeding. A Safe Work Method Statement (SWMS) or hi er-level authorisati is required. |
| **3H** | Review and approve additional c rols b ask arts. Senior supervisor sign-off needed. |
| **2M** | Ensure all nominated controls are in place and effe ive. 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 | Inadequate PPE, Lack of training | 3H | Provide sufficient training for diesel fume awareness<br>Ensure all workers have access to appropriate PPE<br>Conduct regular safety meetings to update workers on best practices<br>Develop a safety plan specific to diesel fume exposure<br>Display clear signage in areas where diesel fumes are present<br>Regularly review and update risk assessments and safety plans<br>Engage a qualified HSE consultant to assess diesel fume risks<br>Keep emergency contact list updated and visible<br>Ensure all equipment is maintained and working properly<br>Implement a reporting system for any concerns regarding diesel fume exposure | 2M |
| 2. Fuel Transfer | Spills, Fume release | 3H | Conduct regular inspections of fuel tanks and transfer equipment<br>Ensure spill kits are readily available and accessible<br>Place drip trays beneath fuel transfer areas to catch spills<br>Implement proper grounding techniques to prevent static buildup<br>Train workers on proper transfer procedures to minimise spills<br>Establish emergency procedures for spills and fume releases<br>Utilise mechanical transfer systems to reduce human error<br>Install adequate ventilation systems in fuel transfer areas<br>Regularly monitor air quality during fuel transfer operations<br>Ensure proper sealing of all hose and pipe fittings | 1L |
| 3. Equipment Operation | Exhaust exposure, Mechanical failure | 4A | Ensure regular maintenance of all equipment to prevent failures<br>Add exhaust ventilation systems close to work areas<br>Install catalytic converters on diesel engines where applicable<br>Schedule regular air quality testing<br>Rotate personnel to limit individual exposure times<br>Provide workers with portable PPE when working in high fume areas<br>Use only equipment that meets Australian emissions standards<br>Conduct pre-start equipment inspections to identify issues | 2M |

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|---|---|---|---|---|
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| | | | Establish a maintenance log to track all equipment service<br>Train operators on the impact of exhaust exposure and mitigation | |
| 4. Ventilation Management | Inadequate ventilation, Concentrated fume pockets | 4A | [redacted] | 1L |
| 5. Work Area Monitoring | Accumulation of fu[illegible]s, Undetected leaks | 3H | [redacted] | 1L |
| 6. Personal Protective Equipment (PPE) Use | Improper use, Inadequate protection | 3H | [redacted] | 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 |
| | | | [redacted] | |
| 7. Emergency Planning | Delayed response, Incorrect procedures | 4A | [redacted] | 2M |
| 8. Worker Health Surveillance | Health deteriorati Undete conditions | 3H | [redacted] | 1L |
| 9. Training and Competency | Inadequate knowledge, Skill deficiency | 3H | [redacted] | 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 |
| | | | [redacted] | |
| 10. Maintenance and Inspection | Equipment malfunction, Safety bypasses | 4A | [redacted] | 2M |
| 11. Environmental Controls | Poor environmental management, Regulatory non-compliance | 3H | [redacted] | 2M |
| 12. Contractor and Visitor Management | Uninformed visitors, Non-compliance | 3H | [redacted] | 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 |
| | | | [redacted] | |
| 13. Signage and Communication | Incorrect information, Lack of awareness | 3H | [redacted] | 2M |
| 14. Incident Investigation | Repeat incidents, Poor investigation | 3H | [redacted] | 1L |
| 15. Routine Policy Review | Outdated procedures, Non-compliance | 2M | [redacted] | 1L |

| JOB STEP | POTENTIAL HAZARDS | IR | CONTROL MEASURES | RR |
|---|---|---|---|---|
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| | | | [redacted] | |
| 16. Community Relations | Community complaints, Negative perceptions | 2M | [redacted] | 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 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

**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-of-codes-of-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/forms-and-resources/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

**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.

**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

**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

**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