

Commercial Kitchen Cooking Appliances and Thermal 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 | | | 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. Governance, WHS Duties and Consultation | <ul style="list-style-type: none"> Lack of formal WHS governance for commercial kitchen appliances leading to ad-hoc decision-making Inadequate understanding of PCBU and officer due diligence obligations under WHS Act 2011 Insufficient consultation with workers and students about thermal and fire risks in kitchen environments Failure to allocate clear responsibilities for appliance safety, inspection and incident follow-up No formal process to review new or modified appliances (e.g. new pizza oven, deep fryer, pressure cooker) before use | 4A | <ul style="list-style-type: none"> Establish and document a WHS governance framework for commercial kitchen operations aligned with the WHS Act 2011 and relevant WHS Regulations Define and document roles, responsibilities and accountabilities for principals, heads of department, teachers, facilities managers and contractors in relation to appliance and thermal safety Implement a structured WHS consultation process with staff and, where relevant, student representatives, including regular safety meetings specifically addressing kitchen risks Ensure officers exercise due diligence by receiving periodic reports on appliance condition, incidents, near misses and compliance status Introduce a formal change-management and approval process for procurement, installation or modification of ovens, fryers, pressure cookers and related systems, including WHS review prior to use | 2M |
| 2. Appliance Selection, Design and Procurement | <ul style="list-style-type: none"> Procurement of ovens, deep fryers or pressure cookers without adequate safety features (e.g. no automatic shut-off, poor temperature controls) Use of non-commercial or domestic grade appliances in schools where Economics settings where duty cycle exceeds design intent Inadequate guarding of surfaces and exposed heating elements on baker's ovens and pizza ovens Appliances lacking Australian certification or not compliant with relevant Australian Standards and gas/electrical codes Selection of deep fryers or pressure cookers that are difficult to clean, encouraging unsafe workarounds | 4A | <ul style="list-style-type: none"> Develop and enforce a kitchen appliance procurement policy specifying compliance with relevant Australian Standards, gas and electrical codes and WHS requirements Specify minimum safety features for all new appliances, such as over-temperature cut-out, automatic shut-off, lockable lids for pressure cookers, splash guards for deep fryers and insulated door handles for ovens Require that all commercial ovens, pizza ovens and baker's ovens include adequate thermal insulation and cool-touch external surfaces where reasonably practicable Mandate supplier provision of technical data, user manuals, safety instructions and maintenance schedules as part of the purchasing process Include end-user (teacher/worker) input into procurement decisions to ensure appliances are suitable, ergonomically appropriate and cleanable without excessive thermal exposure | 2M |
| 3. Installation, Commissioning and Utilities Integration | <ul style="list-style-type: none"> Incorrect installation of gas or electric ovens and deep fryers leading to fire, explosion or electrocution risk Inadequate ventilation or exhaust systems for flame cooking (e.g. sauce preparation with open flames, pizza) | 4A | <ul style="list-style-type: none"> Require installation and commissioning of all gas, electric and steam appliances by licensed tradespeople with documented certificates of compliance Ensure kitchen layout and design are reviewed by a competent person to allow safe circulation, separation of hot zones and adequate space for handling boiling water, hot oil and large trays | 2M |

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| | <ul style="list-style-type: none"> ovens) causing heat build-up and exposure to combustion products • Improper location of appliances resulting in congestion around hot surfaces and boiling liquids • Absence of isolation valves or lockable electrical isolators for maintenance and emergency situations • Failure to verify safety interlocks, pressure relief valves and emergency shut-off systems during commissioning | | <ul style="list-style-type: none"> • Install compliant mechanical ventilation, extraction hoods and make-up air systems sized for all ovens, pizza ovens, baker's ovens and open-flame cooking areas • Provide clearly labelled and accessible gas shut-off valves and lockable electrical isolators for all major appliances, with isolation points mapped and signposted • Implement a commissioning checklist that verifies correct function of temperature controls, pressure relief devices, automatic shut-off features and emergency stops before appliances are signed into service | |
| 4. Thermal Hazard Management (Hot Surfaces, Hot Liquids and Steam) | <ul style="list-style-type: none"> • Uncontrolled exposure to hot oven doors, racks and trays during commercial oven, baker's oven and pizza oven operation • Handling and transferring of boiling water, sauces and hot liquids without engineered aids, increasing scald risk • Exposure to hot oil in deep fryers during frying and while cleaning out fryers • Release of steam from pans and pressure cookers when doors or lids are opened, causing facial and hand burns • Lack of systematic control of temperature limits for cooking activities in Home Economics classes | 4A | <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> | 2M |
| 5. Fire and Explosion Risk Management | <ul style="list-style-type: none"> • Accumulation of flammable vapours and oils around deep fryers and flame cooking stations • Uncontrolled ignition sources near hot oil or alcohol-based sauces used in flambé or flame cooking • Overheating of oil in deep fryers due to failed thermostats or inappropriate oil levels • Gas leaks from pizza ovens, baker's ovens or stovetops associated with poor maintenance or installation defects | 4A | <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> | 2M |

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| | <ul style="list-style-type: none"> Inadequate fire suppression systems and fire-fighting equipment for commercial kitchens | | [REDACTED] | |
| 6. Ventilation, Indoor Air Quality and Heat Stress | <ul style="list-style-type: none"> Inadequate extraction leading to build-up of cooking fumes, combustion products and steam from ovens and flame cooking Excessive ambient temperature in kitchen and Home Economics classrooms due to poor heat removal from baker's ovens, pizza ovens and multiple appliances Heat stress and dehydration in staff or students during prolonged cooking sessions Condensation on floors and surfaces, creating secondary slip hazards Noise and vibration from ventilation systems impacting communication and hazard awareness | 3H | [REDACTED] | 1L |
| 7. Safe Systems of Work, Procedures and Permits | <ul style="list-style-type: none"> Absence of formal safe operating procedures (SOPs) for commercial ovens, deep fryers, baker's ovens, pizza ovens and pressure cookers Inconsistent practices between staff and classes, leading to confusion and unsafe shortcuts High-risk tasks (e.g. cleaning out deep fryers, handling hot oil, fireproofed sauce preparation) undertaken without structured risk controls Lack of restriction or permit-like controls for unusual or demonstration activities with elevated fire or burn potential Failure to embed procedural controls into lesson planning for Home Economics classes | 3H | [REDACTED] | 1L |
| 8. Training, Competency and Supervision (Including Students) | <ul style="list-style-type: none"> Teachers, support staff or students operating ovens, deep fryers or pressure cookers without adequate competency | 4A | [REDACTED] | 2M |

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| | <ul style="list-style-type: none"> Lack of specific instruction on thermal hazards associated with hot oil, boiling water and steam release Inadequate supervision ratios during Home Economics classes involving hot appliances Failure to verify understanding of emergency response procedures for burns, fires and equipment malfunctions Overestimation of student capability and underestimation of risk due to informal training approaches | | [REDACTED] | |
| 9. Maintenance, Inspection and Testing of Appliances | <ul style="list-style-type: none"> Failure of thermostats, pressure relief valves or safety interlocks due to lack of preventive maintenance Degraded oven door seals or fryer components leading to heat escape, oil leaks and increased burn risk Build-up of carbon, food residues and fat in ovens and fryers contributing to fire risk Use of faulty or non-compliant appliances due to absence of systematic inspection and tagging Unplanned downtime or emergency failures during student classes, leading to uncontrolled responses | 4A | [REDACTED] | 2M |
| 10. Cleaning, Servicing and Waste Management Systems | <ul style="list-style-type: none"> Exposure to hot oil and steam during cleaning out deep fryers and immediately post-cooking Uncontrolled manual handling of heavy, unstable containers of used oil or boiling water to disposal points Use of incompatible cleaning chemicals on hot surfaces leading to fumes or chemical burns Oil spills and food residues on floors causing slips while staff or students are carrying hot items Inadequate systems for storage and collection of waste cooking oil | 3H | [REDACTED] | 1L |

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| 11. Emergency Preparedness, Response and First Aid | <ul style="list-style-type: none"> • Delayed or ineffective response to burns, scalds or oil fires due to lack of planning and practice • Unclear evacuation and muster procedures for kitchen fire or equipment failure events • Inadequate first aid facilities for treating thermal burns in a timely manner • Lack of coordination with external emergency services for high-risk appliances such as gas ovens and pressure cookers • Failure to capture and address lessons learned from previous incidents and near misses | 3H | [REDACTED] | 1L |
| 12. Student and Visitor Access Control | <ul style="list-style-type: none"> • Unrestricted student or visitor movement through hot zones around ovens, deep fryers and boiling water stations • Lack of delineation between demonstration areas and operational equipment • Students inadvertently contacting hot surfaces or pulling over containers of hot oil or water • Inadequate orientation or relief teachers, contractors or visitors working near kitchen appliances • Uncontrolled after-hours or unsupervised access to commercial cooking appliances | 3H | [REDACTED] | 1L |
| 13. Ergonomics and Manual Handling with Hot Loads | <ul style="list-style-type: none"> • Manual handling of heavy, awkward oven trays, baking sheets and pizza stones at high temperatures • Carrying large pots of boiling water or sauce over distances due to poor layout or lack of trolleys • Repetitive reaching into deep ovens or across hot surfaces leading to contact burns and musculoskeletal strain | 3H | [REDACTED] | 1L |

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| | <ul style="list-style-type: none"> • Handling of pressure cooker lids and inner pots without designed aids • Inadequate allowance in timetabling for safe set-up and pack-down, encouraging rushing with hot items | | [REDACTED] | |
| 14. PPE, Signage and Safety Communication Systems | <ul style="list-style-type: none"> • Reliance on PPE as the primary control without underlying system controls for thermal and fire risks • Inconsistent provision or use of appropriate heat-resistant protective equipment • Lack of clear signage regarding hot surfaces, hot oil and steam release zones • Poor communication of appliance status (e.g. recently switched off but still hot) leading to inadvertent contact • Inadequate language or literacy-appropriate materials for younger students or non-English speakers | 2M | [REDACTED] | 1L |
| 15. Risk Review, Monitoring and Continuous Improvement | <ul style="list-style-type: none"> • Stagnant risk controls that do not keep pace with changes in equipment, curriculum, technology or workforce • Under-reporting of near misses involving hot oil, boiling water or oven contact burns • Lack of performance indicators for kitchen safety (e.g. incident rates, inspection findings, maintenance compliance) • Inadequate review of compliance with WHS Act 2011 duties in relation to commercial kitchen environments • Failure to incorporate feedback from teachers, students and maintenance staff into system improvements | 3H | [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>

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.