Wood Staining French Polishing Varnishing

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:

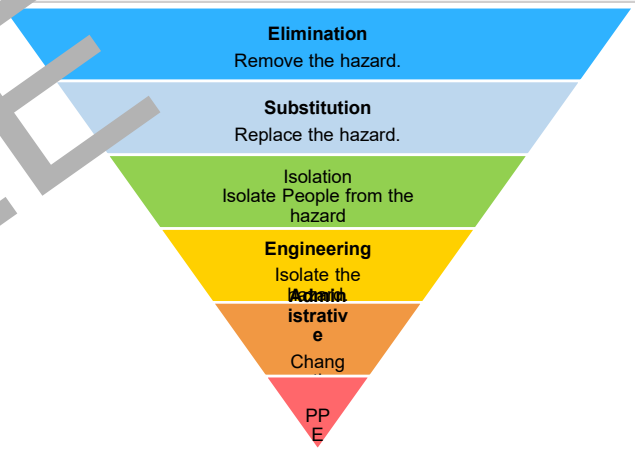
CLIENT OR PRINCIPAL CONTRACTOR DETAILS

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 ace 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. WHS Governance, Roles and Consultation	• Absence of a documented WHS management plan specific to wood staining, polishing and varnishing activities • Unclear WHS roles, responsibilities and accountabilities for supervisors, leading hands and workers • Inadequate worker consultation mechanisms regarding new products, processes or changes in work methods • Failure to integrate WHS Act 2011 due diligence requirements into senior management decision-making • Lack of worker participation in risk assessment and review of controls for chemical finishing tasks • Poor communication between management, contractors and labour hire workers regarding WHS expectations	4A	• Develop and implement a site-specific WHS management plan covering all timber finishing activities including bleaching, staining, sealing, French polishing, lacquering, oiling and varnishing, aligned with WHS Act 2011 and WHS Regulations • Define and document WHS roles, responsibilities and delegations for officers, PCBUs, supervisors and workers within position descriptions and organisational charts • Establish a formal WHS consultation process (e.g. HSRs, WHS Committee, toolbox talks) that includes scheduled consultation on changes to chemicals, equipment or work methods in the finishing area • Ensure officers meet WHS Act 2011 due diligence obligations via regular WHS performance reporting, risk register reviews and documented board/leadership WHS agenda items • Maintain a current risk register for wood staining and finishing, with periodic review (at least annually or after any incident, near miss or process change) • Ensure all contractors and labour hire personnel receive the same WHS induction, policies and consultation opportunities as direct employees, with records maintained	3H
2. Hazardous Chemicals and SDS Management	• Lack of up-to-date Safety Data Sheets (SDS) for bleaches, stains, lacquers, oils, varnishes, solvents and preservatives • Use of decanted unlabelled containers for stains, thinners and cleaning solvents • Inadequate chemical risk assessments for substances containing volatile organic compounds (VOCs), flammable liquids, corrosives or sensitising agents • Failure to manage substitution or elimination options for highly hazardous products (e.g. high VOC lacquers, strong oxidising bleaches, toxic preservatives) • Poor segregation of incompatible chemicals (oxidisers, acids, solvents) increasing risk of reaction or fire	4A	• Implement a hazardous chemicals management procedure consistent with WHS Regulations and relevant Codes of Practice, covering procurement, storage, use and disposal of all finishing products • Maintain a current SDS register (hard copy or electronic) readily accessible in the work area for all bleaches, stains, lacquers, polishes, oils, varnishes, wood preservatives and associated solvents • Ensure all decanted containers are clearly labelled with product name, hazards and key controls in accordance with Globally Harmonised System (GHS) and workplace labelling requirements • Conduct and document hazardous chemical risk assessments for each product or product group (e.g. timber bleach systems, solvent-based stains, two-pack lacquers, oil finishes) and integrate controls into procedures and training • Implement a procurement policy that prefers lower-toxicity, low-VOC, water-based or less hazardous alternatives where reasonably practicable, with formal review of substitution opportunities • Design and maintain chemical storage with appropriate segregation of incompatible classes, bunding, ventilation, flame-resistant cabinets for flammables and clearly displayed signage • Implement an inventory control system with maximum storage quantities, stock rotation and regular audits of chemical holdings	2M

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	• Lack of inventory control leading to overstocking of flammable or hazardous products beyond safe storage design			
3. Ventilation, Fume Extraction and Air Quality	• Inadequate general ventilation in finishing rooms leading to accumulation of solvent vapours and VOCs • Lack of local exhaust ventilation (LEV) at staining, spraying, French polishing and varnishing stations • Poorly maintained extraction systems causing reduced capture efficiency and exposure to hazardous mists and vapours • Recirculation of contaminated air back into the workspace without effective filtration • Inadequate monitoring of air quality leading to undetected exceedance of exposure standards • Build-up of flammable vapours in enclosed spraying or drying areas increasing fire or explosion risk	4A	• Design workspaces such as spraying boo staining es and polishing areas with adequate mechanical ventilation to meet relevant Austra n S ndards and exposure standards for airborne contaminants • Install local exhaust ventilati at key emission p ts (e spray booths, polishing benches, staining baths, bleaching areas) with ca e hoods designe process geometry • Implement a pr ntative ainte ce progra for ventilation and extraction systems, including fan performance ecks, filter r placeme duct aning and airflow verification • Ensur spray oths an xtraction s ms are designed and certified for flammable vapours, including intrins y safe ntin and electrical components where required • Proh t r irculati of contaminated air from spray areas unless effective filtration and compliance with relevan sta ards is monstrated and documented Implem nt pe dic air monitoring (personal and static) for relevant solvents and isocyanates (if present), w resu reve d by competent persons and corrective actions initiated where necessary Estab dministrative controls such as limiting simultaneous high-emission activities, scheduling ntilated drying times, and prohibiting blocking or altering ventilation systems	2M
4. Fire, Explosion and Ignition Source Control	• Storage and use of f mable and combustible liquids uch as thinners, solvent-based sta , lacquers a varnishes • Formation of explosive vapour-air mixtures in spray booths and encl d workspaces • Ignition from electrical equipment, power tools, static electricity, open flames or hot surfaces • Improper storage or disposal of solvent-soaked rags leading to self-heating and spontaneous combustion • Inadequate separation between finishing areas and ignition sources such as welding or grinding activities • Lack of emergency response planning for chemical and fire incidents in the finishing area	4A	[redacted]	2M

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			[redacted]	
5. Chemical Exposure, Health Monitoring and Hygiene	• Inhalation of solvent vapours, lacquers, bleaches, preservatives and stain mists exceeding occupational exposure standards • Dermal exposure to irritant or sensitising chemicals used for bleaching, staining, sealing and preserving timber • Chronic health effects from repeated exposure to hazardous constituents (e.g. certain biocides, formaldehyde, isocyanates if present in coatings) • Lack of health monitoring for workers using hazardous chemicals requiring statutory surveillance • Inadequate handwashing and hygiene facilities leading to ingestion or dermal absorption of chemicals • Failure to consider vulnerable workers (e.g. pre-existing respirat[redacted]onditions, sensitisation history) [redacted]ask allocation	4A	[redacted]	2M
6. Plant, Equipment and Maintenance Systems	• Use of poorly ma[redacted]ained spray [redacted]ns, pumps, compresso[redacted]and [redacted]shing machines leading to l[redacted]ks, bursts or uncontrolled releases • Failure of extraction fan[redacted]fil[redacted]and ducting due to lack of scheduled inspection and maintenance • Uncontrolled modification of equipment (e.g. removal of guards, bypassing interlocks on spray booths or drying ovens) • Lack of formal commissioning and verification of new or modified plant used for bleaching, staining, sealing or varnishing • Inadequate lockout/tagout procedures during maintenance of pumps, mixers or powered polishing equipment	3H	[redacted]	2M

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	• Inappropriate selection of equipment for flammable, corrosive or high-pressure applications		[redacted]	
7. Safe Work Procedures and Work Method Systems	• Absence of documented procedures for key finishing processes such as bleaching, staining, sealing, French polishing, oil application and varnishing • Inconsistent work practices between shifts leading to uncontrolled variation in risk controls • Reliance on informal knowledge transfer instead of structured training and documented instructions • Failure to integrate risk control measures from risk assessments and SDS into daily work methods • Inadequate procedures for batch mixing, colour matching and handling concentrated chemicals • Lack of clear guidance for abnormal conditions, start-up, shutdown and cleaning of application equipment	3H	[redacted]	2M
8. Training, Competency and Supervision	• Workers perform[redacted] bleaching, staining [redacted] without formal training in hazards and controls • Supervisors lacking WHS competency to monitor compliance with chemical handling and ventilation requirements • Inadequate understanding of SDS information, labelling, and emergency response instructions • Insufficient competency checks for use of spray equipment, extraction systems and colour mixing tools • Language, literacy or numeracy barriers preventing workers from understanding procedures and labels	3H	[redacted]	2M

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	• Lack of refresher training resulting in gradual erosion of safe practices		[redacted]	
9. Storage, Handling, Transport and Waste Management	• Improper storage of bleaches, preservatives, stains and varnishes causing leaks, spills or chemical reactions • Manual handling of heavy or awkward chemical containers leading to musculoskeletal injuries • Uncontrolled transfer of chemicals between containers resulting in splashes, overflows or vapour release • Inadequate management of waste coatings, solvents, used brushes and contaminated absorbents • Failure to classify, label and store waste as hazardous where required under environmental and WHS legislation • Transport of flammable [illegible]azardous finishing products wit[illegible] the site without segregation or spill [illegible]eparedness	3H	[redacted]	2M
10. Ergonomics, Manual Tasks and Work Organisation	• Repetitive moven[illegible]ciated [illegible]h brushing, French polishing and hand application of oils and sealers leadi[illegible] to musculoskeletal disorders • Awkward postures when reaching over large panels, furniture or joinery items for staining and varnishing • Manual lifting and repositioning of heavy or bulky timber components through finishing, drying and rework stages • Poor work organisation causing extended static standing, rushing, or insufficient micro-breaks • Inadequate work height and layout of benches, racks and drying areas increasing strain	3H	[redacted]	2M

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	• Insufficient staffing or time allowances for large or intricate finishing jobs leading to fatigue		[redacted]	
11. Environmental Conditions, Housekeeping and Facility Layout	• Inadequate control of dust and offcuts from upstream woodworking processes contaminating finishing areas • Poor housekeeping leading to slips, trips and falls from spills, offcuts, hoses and equipment • Inappropriate layout causing cross-contamination between sanding/dust-generating activities and wet finishing operations • Uncontrolled temperature and humidity affecting drying, potentially leading to rework and rushed unsafe practices • Blocked access to emergency exits, firefighting equipment, eye wash stations or spill kits • Insufficient lighting in staining, colour matching and inspection areas leading to errors and rework	3H	[redacted]	2M
12. Contractor, Supplier and Labour Hire Management	• Contractors cond[illegible] French polishing or [illegible] finishing areas without alignment to [illegible] WHS standards • Labour hire workers unfamiliar with site-specific chemical hazards and controls • Suppliers providing substitute products without adequate WHS information or risk assessment • Inadequate monitoring of contractor compliance with ventilation, PPE and fire safety requirements • Failure to coordinate overlapping works (e.g. hot works near flammable finishing operations) between different PCBUs	3H	[redacted]	2M

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13. Emergency Preparedness, First Aid and Incident Management	• Delayed or inappropriate response to chemical splashes, inhalation incidents or fires in finishing areas • Lack of accessible and appropriate first aid equipment for eye, skin and inhalation exposures • Inadequate training for workers and supervisors in emergency procedures specific to chemical and fire hazards • Failure to investigate and learn from near misses, spills, overexposures or small fires • Poor communication with emergency services about on-site chemicals and layout during a serious incident	3H	[redacted]	2M
14. PPE Program and Fit-for-Purpose Selection	• Over-reliance on PPE instead of higher order controls for chemical and vapour exposure • Incorrect selection of gloves, respiratory protection, eye and protection for specific [redacted], solvents and preservatives • Poor fit, maintenance and storage of respiratory protective equipment (RPE) leading to ineffective protection • Inconsistent PPE use due to discomfort, inadequate training or poor supervision • Lack of formal process for assessing when PPE is required versus when engineering or substitution controls can be implemented	3H	[redacted]	2M

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 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-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