■ **Description:**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **PCBU:** | ■ PBCU: Robertson's Remedial and Painting Pty Ltd 10/56 Buffalo Road, Gladesville NSW 2111 Phone: (02) 9181 3519 | ABN: 16 140 746 247 | | | | **Workplace location:** | **■ Site:** *[Insert Site Address Here]* |
| **Works Manager:** | ■ **Works Manager:** *[Insert Project Manager Here]* | | | | **Date SWMS provided to PC:** | **■ Date:** *[Insert Date Here]* |
| **Work activity:** | ■ **Description:** *[Insert Description Here]* | | | | **Principal Contractor (PC):** | **■ PC:**  Robertson's Remedial and Painting Pty Ltd |
| **High Risk Construction Work (HRCW):** | **[✓] Risk of a person falling more than 2 metres** | | *[ ]* Work on a telecommunication tower | | *[ ]* Demolition of load-bearing structure | |
| *[ ]* Likely to involve disturbing asbestos | | *[ ]* Temporary load-bearing support for structural alterations or repairs | | *[ ]* Work in or near a confined space | |
| *[ ]* Work in or near a shaft or trench deeper than 1.5 m or a tunnel | | *[ ]* Use of explosives | | *[ ]* Work on or near pressurised gas mains or piping | |
| *[ ]* Work on or near chemical, fuel or refrigerant lines | | *[ ]* Work on or near energised electrical installations or services | | [**✓**] Work in an area that may have a contaminated or flammable atmosphere | |
| *[ ]* Tilt-up or precast concrete elements | | *[ ]* Work on, in or adjacent to a road, railway, shipping lane or other traffic corridor in use by traffic other than pedestrians | | **[✓] Work in an area with movement of powered mobile plant** | |
| *[ ]* Work in areas with artificial extremes of temperature | | *[ ]* Work in or near water or other liquid that involves a risk of drowning | | *[ ]* Diving work | |
| **Person responsible for ensuring compliance with SWMS:** | | ■ **Supervisor** | | **Date SWMS received:** | ■ **Date:** *[Insert Date Here]* | |
| **What measures are in place to ensure compliance with the SWMS?** | | Toolbox meetings, SWMS sign off, job observations and supervision review. If issues with the SWMS or new hazards are identified, the supervisor must be notified. When changes are made to SWMS, it will be communicated to all workers. | | | | |
| **Person responsible for reviewing SWMS control measures:** | | ■ **Project Manager** | | **Date SWMS received by reviewer:** | ■ **Date:** *[Insert Date Here]* | |
| **How will the SWMS control measures be reviewed?** | | The control measures implemented will be reviewed and if necessary, revised annually or if work methods change, the control measures are not effective in controlling the risk, a new hazard/risk is identified or following an incident. The SWMS will be reviewed in consultation with workers and/or others who may be affected by the SWMS. Any changes to the SWMS will be communicated with workers at induction, daily pre-starts and toolbox talks. | | | | |
| **Reviewer’s signature:** | | ■ **Project Manager** | | **Review date:** | ■ **Date:** *[Insert Date Here]* | |
| This SWMS must be kept and be available for inspection until the high-risk construction work to which this SWMS relates is completed. If the SWMS is revised, all versions should be kept. If a notifiable incident occurs in relation to the high-risk construction work in this SWMS, the SWMS must be kept for at least 2 years from the date of the notifiable incident. | | | | | | |

| **Task** | | **Hazard** | **Risk (Pre)** | **Control** | **Risk (Post)** | **Responsibility** | **Code** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Site Induction, Daily Sign-In and SWMS Induction** | | Workers commencing without site awareness. SWMS controls not understood or verified before commencing work. Unauthorised workers accessing site. | **Low (1)** | **SYS (Low -1): Controls in placeAdmin:** Daily-Sign-In and critical control confirmation completed by all workers **—** Recorded in Breadcrumb  **Admin:** Site induction completed by all workers on first day **—** Recorded in Breadcrumb  **Admin:** SWMS (site specific) induction completed signed-in by all workers including membership in PM’s WhatsApp work group **—** Recorded in Breadcrumb **Admin:** Toolbox talk conducted weekly **—** Covers tasks, hazards, controls, weather, site changes **—** Recorded in Breadcrumb **Admin:** All workers hold Construction Induction Card (White Card) **—** Recorded in Breadcrumb  **PPE:** Minimum PPE required to enter site steel capped footwear and long sleeves.  **STOP WORK if:** Worker cannot produce White Card **—** Worker not site and SWMS inducted **—** Worker unfamiliar with **Emergency Response see below.** | **Low (1)** | Supervisor | **SYS-L1** |
| **Emergency Response** | | Medical emergency on site. Fire or chemical spill. Worker incapacitated at height (scaffold, EWP, rope access). Building evacuation required. Natural disaster (storm, flood, earthquake). | **High (9)** | **SYS (High-9): Controls in place**  **Site Emergency Plan:** Communicated at induction and toolbox talk after being updated. Emergency contacts displayed at site entry. Call 000 for any serious injury or emergency. Supervisor directs responders (site address available). always  **Assembly Point:** Identified and communicated at induction. Muster procedure: supervisor conducts headcount, confirms all workers accounted for  **WAH Rescue Plan:** documented and practised. Rescue equipment on site (rope rescue kit for rope access, EWP rescue procedure)  **Chemical Spill:** Spill response equipment must be available where **chemicals are decanted on site**; minimum capacity to manage 110% of the largest container in the area, with drains protected and waste contained for disposal **Fire:** Activate alarm, evacuate, call 000. Do not fight fire beyond incipient stage. Fire extinguisher locations identified at induction  **Reporting: Incident reporting:** incidents, injuries, near-misses and hazards **—** Notify PM’s WhatsApp work group **—** Notifiable incidents reported to SafeWork NSW per WHS Act s38  **PPE:** First aid kit, fire extinguisher, spill kit **—** Locations confirmed at induction. Eye wash cup available on site if chemical products in use  **STOP WORK if:** Anyemergency **—** All work ceases until area declared safe by supervisor. **—** No restart without toolbox talks on incident and any changed controls | **Low (1)** | Supervisor / Worker / Sub-Contract Worker | **SYS-H9** |
| **Residents and Public Interface** Manage interaction with public and building residents in active work zones. Applicable to all strata and occupied buildings. | | Falling objects striking residents or public. Paint overspray or dust reaching occupied areas. Noise and access disruption to residents. Unauthorised entry to work zones. | **Medium (3)** | **SYS (Medium-3): Controls in placeEngineering:** Physical barriers (barricades, mesh, hoarding) around all work zones accessible to residents or public **—** Drop zones below all elevated work barricaded to full fall-line of debris **—** **OPTIONAL considerations**: noise mats repositioned progressively during demolition and silica air monitoring deployed if residents report odour or visible dust **Admin:** Residents notified, via third party, minimum 48 hours before work commences **—** Written notice specifying dates, times, and nature of work **Admin:** Work hours comply with council DA conditions and strata by-laws and. No work outside approved hours without written approval **Admin:** Signage at building entry and work zones **—** 'CONSTRUCTION WORK IN PROGRESS', contact details, and exclusion zone warnings **STOP WORK if:** Resident or member of public enters exclusion zone **—** Barricade displaced or removed **—** Complaint of health effect from dust, fumes, or noise | **Low (1)** | Supervisor / Worker / Sub-Contract Worker | **SYS-M3** |
| **High Access — Ladder Use (Short-Duration Only)** Use ladders for exterior tasks **only where EWP/scaffold/rope access is not reasonably practicable**. Extension ladder for access/short tasks; platform ladder for longer duration light work; A-frame for very short tasks (**≤10 minutes**). | | Fall from ladder (overreach/loss of balance). Ladder slip (incorrect setup/unstable ground). Dropped tools/objects onto persons below. | **High (6)** | **WAH (High-6) CCVS HOLD POINTS:**  **HOLD POINT — Do not commence until:**   1. **Elimination/Substitution confirmed:** EWP/scaffold (or other higher order control) considered first. Ladder use justified as **short-duration** and **low-risk** only 2. **Correct ladder selected & compliant:** Industrial rated ladder to **AS/NZS 1892**, correct duty rating, inspected and **fit for purpose** (no defects) 3. **Extension ladder:** set at **4:1** angle, firm level base, top supported/secured where practicable, extends **≥1 m** above landing point if used for access 4. **A-frame/platform:** fully opened, spreaders locked, used on stable level ground 5. **Drop zone controls:** Area below controlled (spotter or barricade/delineation). Tools to be **secured** (tool lanyards/pouches) where there is a drop risk   **Engineering:**   * Industrial-rated ladder AS/NZS 1892, correct angle (4:1 extension), non-slip feet, secured where possible. A-frame fully opened and locked.   **Admin:**   * Working at Heights Risk Assessment (WAH\_RA) completed before each ladder use **—** Confirms ladder is only practicable method for this task. Three points of contact always. No top two rungs. No overreaching. Spotter or delineate area below.   **PPE:**   * Steel capped footwear, cut-resistant gloves as required, eye protection as required and tool lanyards where applicable   **STOP WORK if:**   * Ladder damaged/defective **—** Footing unstable/uneven **—** Inadequate control of area below **—** Unsafe weather/wind **—** Electrical hazards not controlled **—** Task exceeds short-duration/changes in scope | **Low (2)** | Supervisor / Worker | **WAH-H6** |
| **Scaffold — Erect, Use, and Dismantle** All scaffold erection, modification, and dismantling. Includes mobile scaffolds, fixed scaffolds, and cantilever platforms used for painting and remedial access. | | Fall from height during erection, use, or dismantling. Scaffold collapse from inadequate design, overloading, or ground failure. Falling objects from scaffold platform. Workers below struck by components during erection/dismantle. | **High (6)** | **WAH (High-6) CCVS HOLD POINTS:**  **HOLD POINT — Do not commence until:**   1. Appropriate SafeWork NSW HRW scaffolding licence sighted/recorded prior to erection/modification/dismantle 2. **Status tagging:** Green “SAFE TO USE” tag at each access point before use, if incomplete/under alteration then Red “DO NOT USE/INCOMPLETE” tag 3. **Design/engineering:** erected to AS/NZS 1576; any scaffold >4 m or non-standard (cantilever/complex/public interface/unusual loads) requires engineer design/verification sighted on site 4. **Exclusion zone:** barricade full drop zone/fall-line below during erection/dismantle and overhead work; no persons/public inside 5. **Electrical clearance:** overhead/adjacent electrical hazards identified; exclusion distances/isolations implemented before erection/use   **Engineering:**   * Full perimeter guardrails (top/mid) and toe boards; brick guards where materials stored; debris mesh/shade cloth where adjacent to public/occupied areas * Sole/base plates on all standards; ground bearing confirmed * **Mobile scaffolds:** castor locks on; outriggers as per manufacturer; do not move with persons/materials on platform * **Access/egress:** compliant ladder/stair access, ladder secured; no climbing braces; gates where required   **Admin:**   * Competent person inspection before first use, after modification/impact, and ≤30-day intervals, plus after severe weather (>60 km/h) * Load rating displayed and not exceeded; no stockpiling beyond immediate need; components not thrown **—** Controlled lowering/handling   **PPE:**   * Steel capped footwear, hard hat, long sleeves, cut-resistant gloves, harness/ lanyard for scaffolders during erection/dismantle as per their method/SOP   **STOP WORK if:**   * tag missing/expired/red **—** Guardrails/toe boards incomplete **—** Settlement/subsidence **—** Unapproved modification **—** Overload electrical clearance not maintained. | **Low (2)** | Scaffold Contractor / Supervisor | **WAH-H6** |
| **Industrial Rope Access — Rope Setup and Rigging (NSW)**  Rig working and safety lines to verified roof anchors for external remedial/painting works. IRATA/SPRAT team minimum 2 with certified Lead Technician on site. | | Fall from height (fatal); anchor failure (unverified/expired/unsuitable); rope abrasion/cut on edges; dropped objects to residents/public below; entanglement. | **High (6)** | **WAH (High-6) CCVS HOLD POINTS: HOLD POINT - Work must not commence until:**   1. **Rope Technician** retain min. level certification with IRATA/SPRAT – recorded in Breadcrumb 2. **Lead Technician** retain min. level certification with IRATA/SPRAT for rescue – recorded in Breadcrumb 3. **Anchor verification:** Each anchor to be used is **current, certified and suitable** for rope access and direction of loading. Tag/record sighted by Lead Tech. If absent/expired/unverified/unsuitable **—** escalate to PM’s WhatsApp work group 4. **Two-rope system:** Working line and safety line independently anchored; full rig buddy-checked before loading 5. **Edge management:** Rope protection fitted at all contact points (including sharp edges) and checked before first descent and after any change 6. **Dropped object prevention:** Tools and equipment tethered/secondary retained; no loose items; use closed bags and controlled handling at edges 7. **Exclusion zone:** Establish and barricade a drop zone covering the full fall-line/impact area (minimum 3 m only as a baseline; extend as required). No persons permitted within the zone during rigging/descent 8. **Rescue readiness:** Rescue plan/method confirmed; rescue kit available and set up; prompt rescue capability in place before first descent 9. **Communications:** Primary comms confirmed and tested (radio/phone) 10. **Daily inspections:** Ropes/gear inspected daily; defects recorded; damaged items tagged out and removed   **Admin:**   * Subcontractors must submit a register and supporting records of their equipment prior to its use * Powered ascender and descender listed on plant and equipment register to confirm in service with OEM requirements   **PPE:**   * Full body harness (rope access rated), helmet with chin strap, cut-resistant gloves, steel capped safety footwear, and any additional PPE required by the task as identified in this SWMS (e.g., eye protection/face shield, hearing protection (>85 dB), respiratory protection, cut-resistant gloves, hi-vis, sunscreen).   **STOP WORK if:**   * Anchor uncertainty **—** rope/edge damage, comms failure **—** exclusion zone breach **—** rescue not ready **—** electrical storms **—** heavy rain affecting edges **—** wind/gusts above site limit (e.g., >40 km/h or as assessed by Lead Tech) | **Low (2)** | Lead Technician | **IRA-H6** |
| **EWP Operation — Boom and Scissor Lift** Operation of elevated work platforms (EWP) for painting and remedial access. Includes boom lifts, scissor lifts, and truck-mounted EWP. | | Fall from EWP platform. EWP tip-over from ground failure, uneven ground, overloading or exceeding operating envelope. Collision with pedestrians, vehicles, overhead structures, powerlines, or building elements. Crushing **—** Worker trapped between platform and structure. | **High (6)** | **WAH (High-6) CCVS HOLD POINTS: HOLD POINT — Work must not commence until:**   1. Operator SafeWork NSW HRCL (WP class) recorded/verified in Breadcrumb 2. All workers in basket WAH trained/competent in RIIWHS204E Work Safely at Heights. SOA recorded/verified in Breadcrumb 3. EWP pre-start inspection completed and recorded **—** No defects 4. EWP set up on firm, level hardstand 5. Overhead clearances measured and confirmed safe **—** Minimum 3mt exclusion from overhead powerlines 6. Harness inspected **—** Lanyard clipped to manufacturer basket anchor point (gate closed, double-action snap hook). 7. **Exclusion zone to overhead powerlines:** minimum 3 mt (≤132 kV), 6 mt (132–330 kV), 8 mt (330–500 kV), unless the electricity network specifies greater; use a trained spotter and physical controls to prevent encroachment   **Engineering:**   * Platform guardrails and mid-rails intact. Gate/chain secured during operation. No climbing on guardrails or standing on mid-rails. * Exclusion zone at ground level around EWP **—** Barricaded to prevent pedestrians and vehicles from entering swing/travel radius and drop zone.   **Admin:**   * Spotter for all travel movements in congested areas or where visibility limited. * Radio or verbal communication maintained between operator and ground crew. * Daily weather check **—** Wind limits per manufacturer's specification (typically 40 km/h for boom, 45 km/h for scissor). Platform lowered in gusty conditions * EWP listed on plant and equipment register to confirm in service with OEM requirements   **PPE:**   * Full-body harness with lanyard clipped to EWP anchor point, steel capped footwear   **STOP WORK if:**   * EWP defect detected **—** Ground conditions deteriorate **—** Wind exceeds manufacturer's limit **—** Harness not connected**—** Exclusion zone breach, or spotter unavailable near public areas | **Low (2)** | Supervisor / Worker / Sub-Contract Worker | **WAH-H6** |
| **Airless Spray Unit Setup and Operation**  *[Setup, operation, and maintenance of high-pressure airless spray equipment including pump unit, hoses, guns, and tips. Covers pressure testing, tip selection, and safe operating procedures.]* | | * High-pressure injection injury (skin penetration) * Hose failure/whip * Electrical hazard from pump motor * Noise exposure * Tip blockage and uncontrolled release | **High (6)** | **PRE (High-6) CCVS HOLD POINTS:**  **HOLD POINT — Do not commence until:**   1. **Operator competency confirmed:** trained in airless spray equipment operation **—** Manufacturer training or demonstrated competence sighted 2. **Equipment pre-start completed:** pump, hoses, fittings, tip guard, trigger lock, pressure relief all inspected and serviceable 3. Maximum operating pressure confirmed and not exceeded **—** Pressure gauge functional and visible to operator 4. Injection injury first aid procedure briefed to all crew **—** Nearest hospital with hand surgery capability identified   **Engineering:**   * Tip guard fitted at all times **—** Never removed during operation. Trigger lock engaged when not actively spraying. Pressure relief valve functional. Hose whip checks fitted to all high-pressure connections. Earthing/grounding strap connected to prevent static discharge **—** Critical with solvent-based products.   **Admin:**   * Exclusion zone around spray unit **—** Minimum 3m from pump and hose connections. Pressure bleed-down procedure followed before any tip change, filter clean, or maintenance. Never point gun at any person. Two-person operation when spraying at height.   **PPE:**   * Leather gloves when handling hoses and connections. Eye protection. Hearing protection (>85 dB, Class 5). Steel capped footwear. P2 respirator minimum **—** Upgrade to half-face with OV/P3 cartridge for solvent-based products.   **STOP WORK if:**   * Hose damage, kink, or abrasion detected **—** Pressure gauge not functioning **—** Tip guard missing or damaged **—** Any injection injury (treat as medical emergency **—** Do not wait for symptoms) **—** Earthing strap disconnected with solvent-based products **—** Operator not trained. | **Low (2)** | Supervisor / Worker | **PRE-H6** |
| **Spray Application — Exterior (Open Air)**  *[Airless spray application of paints, primers, sealers, and texture coatings to exterior surfaces in open-air conditions. Includes overspray management and environmental controls. Electrostatic spray application is excluded from this SWMS* ***—*** *Requires separate risk assessment and equipment-specific controls.]* | | * Overspray drift to adjacent properties, vehicles, and persons * Paint mist inhalation * Slip hazard from overspray on walkways * Wind-driven spray * Working at height | **Medium (4)** | **PRE (Medium-4): Controls in place.**  **Engineering: Overspray containment:** scaffold shrink-wrap, drop sheets, and masking to all adjacent surfaces, windows, vehicles, and property. Surface preparation completed and accepted before spraying **—** Clean, dry, free of contaminants. Wind breaks where practicable. Spray tip selected for minimum overspray **—** Correct fan width and orifice size for product. Tip condition checked **—** Replace when worn (indicated by distorted fan pattern or increased overspray).  **Admin:** Wind speed monitored **—** No spraying above 15 km/h or per product data sheet limit, whichever is lower. Application temperature and humidity within product data sheet limits **—** Check before each spray session. Recoat windows observed per product TDS. DFT (dry film thickness) checked with calibrated gauge at frequency specified by coating specification. Adjacent property and vehicle owners notified 48 hours before spraying. Spotter positioned to warn of pedestrians and wind changes. Overspray inspection after each spray session **—** Immediate clean-up of any overspray. Spray-specific emergency procedures briefed: (a) skin injection injury **—** Do not apply pressure, do not wait for symptoms, transport to hospital with hand/microsurgery capability immediately; (b) solvent fire **—** CO2 or dry chemical extinguisher only, no water on solvent fire, evacuate if not immediately controlled.  **PPE:** Half-face respirator with P2/OV cartridge. Eye protection or goggles. Disposable spray suit or coveralls. Nitrile gloves. Head cover.  **STOP WORK if:** Wind exceeds limit **—** Overspray escaping containment **—** Adjacent property complaint **—** Rain during application **—** Pedestrians entering spray zone **—** Containment failure **—** Suspected skin injection injury (treat as medical emergency **—** Do not wait for symptoms, transport to hospital with hand surgery capability immediately). | **Low (2)** | Supervisor / Worker / Sub-Contract Worker | **PRE-M4** |
| **Spray Application — Interior (Enclosed/Confined)**  *[Airless spray application inside buildings, enclosed plant rooms, stairwells, basements, and areas with limited natural ventilation. Includes mandatory ventilation and atmospheric monitoring requirements. Electrostatic spray application is excluded from this SWMS* ***—*** *Requires separate risk assessment and equipment-specific controls.]* | | * Solvent vapour accumulation **—** Explosive atmosphere risk with solvent-based products * Paint mist inhalation in enclosed space * Reduced visibility * Oxygen depletion in confined areas * Ignition sources | **High (6)** | **HAZ (High-6) CCVS HOLD POINTS:**  **HOLD POINT — Do not commence until:**   1. **Ventilation assessment completed:** mechanical ventilation sized for room volume and product vapour generation rate **—** Minimum 20 air changes per hour for active spray zones (AS 1668.2). Ventilation design documented 2. Atmospheric monitoring in place if solvent-based products used **—** LEL monitor calibrated and alarming at 10% LEL 3. **All ignition sources eliminated:** no hot work, no unsealed electrical, no mobile phones in spray zone if solvent-based 4. Emergency egress routes clear and marked **—** Minimum two exits from spray area where practicable 5. Confined space assessment completed per WHS Regulation Part 4.3 for any area with restricted entry/exit (fewer than 2 standard exits, or exit requires climbing/crawling/travel >10m). If confined space: entry permit, standby person, and atmospheric monitoring required before spraying commences   **Engineering:**   * Mechanical exhaust ventilation running before, during, and 30 minutes after spraying. Fresh air intake positioned to create cross-flow ventilation **—** Extraction discharges externally, no recirculation. Explosion-proof electrical fittings in spray zone if solvent-based products. LEL monitor with audible alarm at 10% LEL **—** Calibrated for primary solvent in product SDS. Continuous LEL monitoring during active spraying and for 30 minutes after last spray pass.   **Admin:**   * Water-based products preferred over solvent-based for interior work. Application temperature and humidity within product data sheet limits. Recoat windows observed per product TDS. DFT checked with calibrated gauge per coating specification. Spray schedule coordinated to minimise exposure duration. Buddy system **—** No solo interior spraying.   **PPE:**   * Full-face respirator with combination OV/P3 cartridge for solvent-based. Half-face with P2/OV for water-based. Disposable spray suit. Nitrile gloves. Eye protection under full-face respirator.   **STOP WORK if:**   * LEL alarm activates **—** Ventilation fails or reduces **—** Any worker reports dizziness, nausea, or irritation **—** Visibility drops below 3m **—** Ignition source identified in spray zone **—** Single exit only and no buddy available **—** Area determined to be confined space and no confined space entry permit in force. | **Low (2)** | Supervisor / Worker | **HAZ-H6** |
| **Isocyanate / 2-Pack Coating Application**  *[Spray application of isocyanate-containing products (2-pack polyurethane, 2K epoxy-urethane, isocyanate hardeners) and anti-graffiti coatings. Includes mandatory health surveillance, supplied-air respiratory protection, and continuous air monitoring.]* | | * Respiratory sensitisation from isocyanate inhalation **—** Occupational asthma, irreversible airway damage * Skin sensitisation * Exothermic reaction during mixing * Vapour accumulation in enclosed spaces | **High (6)** | **HAZ (High-6) CCVS HOLD POINTS:**  **HOLD POINT — Do not commence until:**   1. Product SDS reviewed **—** Isocyanate component identified (HDI, MDI, TDI, or polymeric isocyanate). Isocyanate-specific controls activated 2. Workers confirmed medically fit for isocyanate exposure **—** Pre-employment respiratory assessment (spirometry/lung function) completed. No worker with known respiratory sensitisation to isocyanates permitted in spray zone 3. **Supplied-air respiratory protection confirmed:** positive-pressure airline system or PAPR with combination OV/P3. Half-face cartridge respirator is NOT adequate for spray application of isocyanates 4. Continuous isocyanate air monitoring arranged **—** Colorimetric tubes or real-time monitor. National WES: 0.02 mg/m³ (8hr TWA) for monomeric HDI, 0.07 mg/m³ for polymeric HDI   **Engineering:**   * Supplied-air respirator (positive-pressure airline) for all workers in spray zone. Local exhaust ventilation or spray booth with external discharge **—** No recirculation. Mixing of 2-pack components in ventilated area with spill containment. Isocyanate-specific spill kit available.   **Admin:**   * Health surveillance program per WHS Regulation Schedule 14: baseline spirometry before first exposure, annual review by medical practitioner. Health surveillance records retained for 30 years minimum. Air monitoring results recorded and communicated to workers **—** Any exceedance triggers immediate work cessation and control review. Product-specific application windows (temperature, humidity, pot life) checked before mixing.   **PPE:**   * Supplied-air respirator (positive-pressure airline or PAPR with OV/P3). Disposable Type 5/6 coveralls **—** Removed before leaving spray zone. Nitrile chemical-resistant gloves. Eye protection or full-face supplied-air hood. Steel capped footwear.   **STOP WORK if:**   * Any respiratory symptoms in spray zone (wheeze, chest tightness, cough, shortness of breath) **—** Treat as sensitisation event, remove worker, seek medical assessment. Air monitoring exceeds WES **—** Supplied-air system fault **—** Ventilation fails **—** Product mixed outside pot life **—** Worker without medical fitness clearance **—** SDS not available for product. | **Low (2)** | Supervisor / Worker | **HAZ-H6** |
| **Overspray and Environmental Protection**  *[Protection of adjacent properties, vehicles, landscaping, waterways, and stormwater systems from paint overspray, wash-water, and waste materials during spray painting operations.]* | | * Environmental contamination of stormwater and waterways * Property damage from overspray * Paint waste and wash-water disposal * Community complaint | **Medium (3)** | **ENV (Medium-3): Controls in place.**  **Engineering:** Stormwater drains bunded and covered within 10m of spray zone. Wash-water captured in containment **—** No discharge to stormwater. Drop sheets and masking on all adjacent surfaces. Scaffold shrink-wrap where exterior spraying from scaffold.  **Admin:** Environmental management plan reviewed **—** Stormwater protection, waste disposal, noise management. Paint waste and wash-water disposed of as trade waste **—** Not to sewer or stormwater. Adjacent property register maintained **—** Pre/post condition photos. Resident/tenant notification 48 hours before spray operations.  **PPE:** As per spray application task requirements.  **STOP WORK if:** Overspray escapes containment **—** Paint or wash-water enters stormwater **—** Community complaint not resolved **—** Containment fails **—** Wind exceeds spray limit. | **Low (1)** | Supervisor / Worker / Sub-Contract Worker | **ENV-M3** |
| **Spray Equipment Cleaning and Solvent Use**  *[Flushing, cleaning, and maintenance of airless spray equipment including pumps, hoses, guns, filters, and tips. Use of thinners, solvents, and cleaning agents.]* | | * Solvent vapour inhalation * Skin contact with solvents and uncured coatings * High-pressure fluid during flush cycle * Solvent waste disposal * Fire risk from solvent-soaked rags | **Medium (4)** | **HAZ (Medium-4): Controls in place.**  **Engineering:** Cleaning in well-ventilated area only **—** Outdoors preferred. Solvent waste captured in sealed metal containers **—** Not poured to drain. Pressure bled down before disassembly. Solvent-soaked rags in self-closing metal bin **—** Removed from site daily.  **Admin:** SDS for all solvents and thinners reviewed. Minimum solvent quantity used **—** Water flush first where possible with water-based products. Solvent waste disposal via licensed contractor. No smoking or ignition sources within 5m of cleaning area. Solvent fire emergency: CO2 or dry chemical extinguisher only **—** No water. Fire extinguisher within 5m of cleaning area. Solvent splash to eyes: flush with water for 20 minutes, seek medical attention.  **PPE:** Nitrile chemical-resistant gloves. P2 respirator with organic vapour cartridge. Eye protection. Disposable coveralls if splash risk.  **STOP WORK if:** Solvent spill not contained **—** Ventilation inadequate **—** Ignition source near cleaning area **—** Solvent waste container full or unsealed. | **Low (2)** | Supervisor / Worker / Sub-Contract Worker | **HAZ-M4** |
| **Hazardous Chemicals — Paints, Solvents, and Coatings** Storage, handling, mixing, and application of all paints, primers, sealers, solvents, curing compounds, and chemical products used in cleaning, painting and remedial works. | | Inhalation of VOCs, solvent vapours, and chemical fumes. Skin and eye contact with paints, solvents, and epoxies. Allergic sensitisation from isocyanates (Polyurethane Sealants). Fire or explosion from flammable solvents. Environmental contamination from spills. | **Medium (4)** | **HAZ (Medium-4): Controls in place.Engineering:** No solvent-based application in unventilated areas **—** **Chemical storage:** flammable liquids separated from ignition sources, direct sun, and incompatible materials **—** Quantities kept to daily need only on scaffold **—** Spill response equipment must be available where chemicals are decanted on site; minimum capacity to manage 110% of the largest container in the area, with drains protected and waste contained for disposal. **Admin: SDS for every product on site** **—** Current version (within 5 years). Workers briefed on product hazards, PPE requirements, and first aid before first use of each product **—** Hazardous Substance Register maintained **—** Separate SWMS required if spray-applying isocyanate products (2-pack systems).**PPE:** Chemical-resistant gloves (nitrile minimum), eye protection or goggles (splash risk), P2 respirator with organic vapour cartridge (solvent-based products), long sleeves and coveralls as required by SDS. **STOP WORK if:** SDS not available for product in use **—** Ventilation inadequate (fumes detectable at breathing zone) **—** Chemical spill not contained **—** Worker reports symptoms of chemical exposure (headache, nausea, dizziness, skin irritation) **—** **In the event of suspected exposure, call the Poisons Information Centre on 131126** | **Low (2)** | Supervisor / Worker / Sub-Contract Worker | **HAZ-M4** |
| **Surface Preparation — Non-Silica-Lead** Hand and powered surface preparation where silica-bearing dust is not generated. Includes scraping, sanding of previously painted surfaces, light abrasion of metal, and cleaning prior to coating. | | Dust inhalation from dry sanding painted surfaces. Flying debris and paint chips at face and eye level. Chemical exposure from cleaning agents, sugar soap, and fillers. Electric shock from 240V tools in wet or damp conditions. | **Medium (4)** | **PRE (Medium-4): Controls in place.**  **Engineering:** Use HEPA vacuum fitted to any powered sanders **—** Drop sheets to protect surfaces and contain debris **—** RCD protection for all 240V tools/leads (test & tag in date) **—** Battery tools preferred in damp/wet areas  **Admin:** SDS reviewed for all chemical paint removers and cleaning agents **—** On site before use. Workers briefed on SDS hazards and first aid  **PPE:** P2 respirator (minimum), steel capped footwear, eye protection, hearing protection (>85 dB), cut-resistant gloves or nitrile gloves, long sleeves.  **STOP WORK if:** Lead paint or suspected or detected **—** Dust extraction fails on powered sander **—** SDS not available for chemical product brought onto site | **Low (2)** | Supervisor / Worker / Sub-Contract Worker | **PRE-M4** |
| **Lead Paint Assessment and 6-Step Encapsulation** Assessment of painted surfaces for lead content and encapsulation by overcoating. Applies to all pre-1970 buildings and any surface where lead is suspected. Note: lead paint removal (scraping, stripping, abrasive blasting) requires standalone SWMS | | Lead dust and particle inhalation **—** Lead poisoning (cumulative, irreversible neurological and organ damage). Ingestion via hand-to-mouth transfer. Environmental contamination from disturbed lead paint. Incorrect assessment leading to uncontrolled exposure. | **High (6)** | **HAZ (High-6) CCVS HOLD POINTS: HOLD POINT — Work must not commence until:**   1. **1-TEST** completed and confirms lead presence. **2-PLAN**: Controlled exclusion zone maintained. Full PPE (coveralls, cut-resistant gloves, P2 respirator). **3-PROTECT:** 200μm plastic containment (line floors, protect soil, seal openings. **4-CONTAIN:** NO dry sand, Peel Away® paste or wet only. **5-CLEAN:** H-Class HEPA vacuum. **6-DISPOSE:** Double 200μm thick bag and label "LEAD WASTE". No eating/drinking/smoking in work area   **Engineering:**   * **Encapsulation:** apply approved encapsulant or overcoat system directly over stable lead paint **—** No abrasion of lead layer. If lead paint is flaking or unstable, isolate area and escalate   **Admin:**   * Workers trained in lead-safe work practices (AS 4361.2) and training recorded * Supervisor to verify controls and housekeeping; maintain exclusion zone and hygiene controls   **PPE:**   * P2 (minimum) respirator (upgrade to P3 for higher dust risk), nitrile gloves, eye protection, disposable coveralls where direct contact/contamination risk exist   **STOP WORK if:**   * While your P2 respirator and PPE provide a strong barrier, monitor the team for these early "red flags" of lead exposure: Unusual fatigue or irritability, abdominal pain or metallic taste in the mouth or headaches or loss of appetite | **Low (2)** | Supervisor / Worker / Sub-Contract Worker | **HAZ-H6** |
| **Manual Handling** Lifting, carrying, pushing, and pulling of materials, tools, and equipment. Includes paint drums, scaffold components, ladders, and sheet materials. | | Musculoskeletal injury from lifting, awkward postures, or repetitive tasks. Crush injury from dropped loads. Strain from carrying materials on stairs or uneven surfaces. | **Medium (3)** | **PRE (Medium-3): Controls in place.**  **Engineering:** Mechanical aids first **—** Trolleys and powered scaffold-mounted materials winch/hoist >20 kg or repetitive carries **—** Paint in manageable container sizes (≤20L preferred) **—** Team lifts for awkward or heavy items minimum 2 persons for 20L drums on stairs or pass between scaffold decks  **Admin:** Pre-task assessment of manual handling risks **—** Route, load weight, distance, stairs, and obstacles **—** Plan delivery to minimise carry distances **—** Powered scaffold-mounted materials winch/hoist on plant and equipment register to confirm in service with OEM requirements  **PPE:** Steel capped footwear, cut-resistant gloves, long sleeves  **STOP WORK if:** Worker reports pain or strain **—** Access route obstructed **—** Powered scaffold-mounted materials winch/hoist SWL unknown, damaged rope/hook, bracket movement, exclusion zone breach, electrical fault/RCD trip and unsafe wind conditions | **Low (1)** | Worker / Sub-Contract Worker | **PRE-M3** |
| **Housekeeping and Waste Management** Ongoing site cleanliness, waste segregation, and material storage throughout all painting and remedial activities. | | Slip, trip, and fall from debris, spills, or cluttered work areas. Environmental contamination from paint waste, solvents, or chemical residue. Fire from accumulated waste or flammable materials. | **Low (2)** | **PRE (Low-2): Controls in place.**  **Engineering: Never block fire exits or fire escape corridor and stairwells** **—** Designated waste bins **—** General waste, recyclable, and hazardous (paint, solvent, chemical containers)  **Admin:** Clean-as-you-go policy **—** Each work area cleared of debris and waste at end of each task and end of day **—** Paint and solvent waste disposed complies with EPA requirements **—** Not poured into stormwater, drains, or ground.  **PPE:** Steel capped footwear, nitrile gloves for handling paint waste and chemical containers  **STOP WORK if:** Fire risk from accumulated flammable waste **—** Work area too cluttered to maintain safe access/egress | **Low (1)** | Worker / Sub-Contract Worker | **PRE-L2** |
| **Hot and Dangerous Weather** Work in high temperatures, direct sun, rain, wind, and electrical storms. Applicable to all outdoor tasks. | | Heat stress, heat stroke, and dehydration. Slip hazard from wet surfaces. Wind dislodging materials or affecting scaffold stability. Lightning strike. UV exposure. | **Medium (3)** | **SYS (Medium-3): Controls in place.Engineering:** Cool drinking water available within 50m of all work positions **Admin:** Monitor Bureau of Meteorology forecasts daily. Adjust work schedule in extreme heat **—** **Wind triggers**: >40 km/h suspend all elevated work (scaffold, EWP, fall restraint, rope access) >60 km/h **—** Suspend all outdoor work and secure materials **—** **Lightning:** if thunder heard or lightning seen **—** Cease all outdoor work immediately. Do not resume until 30 minutes after last observed lightning/thunder **PPE:** Long sleeves (UPF-rated), broad-brim hard hat or sun brim attachment, sunscreen SPF 50+, eye protection with UV protection **STOP WORK if:** Worker shows signs of heat stress **—** Wind exceeds trigger thresholds **—** Lightning within 10 km **—** Rain making surfaces unsafe for elevated work | **Low (2)** | Supervisor / Worker / Sub-Contract Worker | **SYS-M3** |

| **SWMS Amendments (more space at the end of this document)** | | | | | |
| --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Risk Level** | **Description of consequence or impact** | **Consequence** | **Likelihood/Probability** | | |
| **Unlikely (1)** | **Possible (2)** | **Almost Certain (3)** |
| **High**  Level of harm | Actual/Potential fatality, disability or irreversible damage. Major structural failure/damage. Off-site environmental discharge/release not contained and significant long-term environmental harm. | **Major (3)** | **Medium (3)** | **High (6)** | **High (9)** |
| **Medium**  Level of harm | Actual/Potential temporary disability, MTI or LTI. Structural failure/damage, >1-day outage. On-site environmental discharge/release contained, minor remediation, short-term environmental harm. | **Moderate (2)** | **Low (2)** | **Medium (4)** | **High (6)** |
| **Low**  Level of harm | Incident that has the potential to cause persons to require first aid. Environmental discharge/release immediately contained, minor level clean-up with no short-term environmental harm. | **Minor (1)** | **Low (1)** | **Low (2)** | **Medium (3)** |
| **Level** | **Likelihood/Probability** | | | | |
| Almost Certain | Occurs frequently; >66% chance of occurring | | | | |
| Possible | Could happen occasionally; >33% but <66% chance of occurring | | | | |
| Unlikely | May occur only in exceptional circumstances; <33% chance of occurring | | | | |
| **Class/Ranking** | **Description/Requirements** | | | | |
| High 6, 9 | Stop immediately. Implement controls. Controls recorded on a SWMS. | | | | |
| Medium 3, 4 | Planned control. Controls recorded on a SWMS. | | | | |
| Low 1, 2 | Managed via routine procedure. | | | | |

**Under WHS Act s18, “reasonably practicable” requires consideration of likelihood of risk, degree of harm, what the person knows about the hazard, availability and suitability of controls, cost vs risk. If you cannot show how that decision was made, the action becomes harder to defend after an incident.**

|  |  |
| --- | --- |
| **Relevant legislation:** | WHS Act 2011 (NSW), WHS Regulation 2017 (NSW), applicable NSW Codes of Practice, AS/NZS 2311 (Painting of Buildings), AS/NZS 1576 (Scaffolding), AS/NZS 1891 (Industrial Fall-Arrest Systems), AS 4361.2 (Guide to Lead Paint Management), AS 1940 (Storage and Handling of Flammable and Combustible Liquids), SafeWork NSW Construction Work Code of Practice, Managing the Risk of Falls at Workplaces Code of Practice, Managing Risks of Hazardous Chemicals in the Workplace Code of Practice. |
| **Frequency of review and site inspections:** | **This SWMS will be reviewed:** before work commences on each new site, when site conditions change materially, after any incident, near-miss, or hazard report, at minimum 12-monthly, when legislation or codes of practice change, when new work methods, products, or equipment are introduced. |

|  |  |
| --- | --- |
| **PPE required:** | Steel capped footwear (AS/NZS 2210.3) • High-vis vest (AS/NZS 4602) or long sleeves • Eye protection (AS/NZS 1337.1) • P2respirator (AS/NZS 1716) **—** Mandatory for silica, spray painting, lead, and solvent-based products • Hearing protection (AS/NZS 1270) **—** Mandatory >85 dB • Chemical-resistant gloves (nitrile minimum) • Full-body harness (AS/NZS 1891.1) **—** For all work at height without guardrails • Sun protection **—** Long sleeves, sunscreen SPF 50+, UV safety glasses • Hard hat (AS/NZS 1801) worn during scaffold erection and dismantling. |
| **List the permits, certificates, SafeWork NSW Approvals, required to complete the work:** | Scaffold licence (basic or advanced as required). EWP licence (WP class). Working at Heights training (current within 2 years). Confined Space entry permit (if applicable). Hot Works permit (if applicable). |
| **List of the training required by workers to commence the work:** | Construction Industry Induction Card (White Card) and SWMS induction. Product-specific SDS briefing. Working at Heights (for any elevated work). EWP operation (for EWP use). Scaffold user awareness (for scaffold use). Lead-safe work practices AS 4361.2 (if lead paint present). Silica awareness training (if silica tasks). First aid (minimum 1 per site). |
| **List the qualifications of workers doing the work:** | Trade certificate or demonstrated competence in painting and surface preparation. Scaffolding licence (basic/advanced) for scaffold erection. EWP licence (WP class) for EWP operation. IRATA/ARAA certification for rope access (if applicable). |
| **List of plant and equipment that will be used on site:** | Scaffold (mobile and fixed). EWP **—** Boom lift, scissor lift. Pressure washer. Airless spray unit. Power tools **—** Angle grinder, rotary hammer, orbital sander, oscillating tool. Extension leads and portable RCDs. Ladders (A-frame, extension). Trolleys and material hoists. |
| **List maintenance checks for plant and equipment:** | All plant and equipment maintained per OEM’s schedule. Test-tag on all 240V tools and leads **—** 3-monthly per AS/NZS 3012. Scaffold inspection per AS/NZS 1576. EWP pre-start daily. Harness inspection 6-monthly. Fire extinguisher serviced 6-monthly. |
| **Hazardous substances:** | Chemical register maintained **—** All paints, primers, sealers, solvents, sealants, and chemical products listed with current SDS (within 5 years). SDS available on site always. Flammable liquids stored in compliant cabinet per AS 1940. |
| **Working at Heights Risk Assessment (if applicable)** | **Fall prevention hierarchy applied:** eliminate > isolate > minimise. Guardrails preferred. Fall restraint before fall arrest. Rescue plan documented for all harness work. Working at Heights licence/training verified before elevated work commences. |

| **WORKER INDUCTION SIGNOFF** | | | |
| --- | --- | --- | --- |
| **Date:** | **Name:** | **Signature:** | *I confirm I have read and understood this SWMS. I will verify that critical controls are in place prior to commencing high-risk tasks and will suspend work if controls are not established.* |
| **Date:** | **Name:** | **Signature:** | *I confirm I have read and understood this SWMS. I will verify that critical controls are in place prior to commencing high-risk tasks and will suspend work if controls are not established.* |
| **Date:** | **Name:** | **Signature:** | *I confirm I have read and understood this SWMS. I will verify that critical controls are in place prior to commencing high-risk tasks and will suspend work if controls are not established.* |
| **Date:** | **Name:** | **Signature:** | *I confirm I have read and understood this SWMS. I will verify that critical controls are in place prior to commencing high-risk tasks and will suspend work if controls are not established.* |
| **Date:** | **Name:** | **Signature:** | *I confirm I have read and understood this SWMS. I will verify that critical controls are in place prior to commencing high-risk tasks and will suspend work if controls are not established.* |
| **Date:** | **Name:** | **Signature:** | *I confirm I have read and understood this SWMS. I will verify that critical controls are in place prior to commencing high-risk tasks and will suspend work if controls are not established.* |
| **Date:** | **Name:** | **Signature:** | *I confirm I have read and understood this SWMS. I will verify that critical controls are in place prior to commencing high-risk tasks and will suspend work if controls are not established.* |
| **Date:** | **Name:** | **Signature:** | *I confirm I have read and understood this SWMS. I will verify that critical controls are in place prior to commencing high-risk tasks and will suspend work if controls are not established.* |
| **Date:** | **Name:** | **Signature:** | *I confirm I have read and understood this SWMS. I will verify that critical controls are in place prior to commencing high-risk tasks and will suspend work if controls are not established.* |
| **Date:** | **Name:** | **Signature:** | *I confirm I have read and understood this SWMS. I will verify that critical controls are in place prior to commencing high-risk tasks and will suspend work if controls are not established.* |
| **Date:** | **Name:** | **Signature:** | *I confirm I have read and understood this SWMS. I will verify that critical controls are in place prior to commencing high-risk tasks and will suspend work if controls are not established.* |
| **Date:** | **Name:** | **Signature:** | *I confirm I have read and understood this SWMS. I will verify that critical controls are in place prior to commencing high-risk tasks and will suspend work if controls are not established.* |
| **Date:** | **Name:** | **Signature:** | *I confirm I have read and understood this SWMS. I will verify that critical controls are in place prior to commencing high-risk tasks and will suspend work if controls are not established.* |
| **Date:** | **Name:** | **Signature:** | *I confirm I have read and understood this SWMS. I will verify that critical controls are in place prior to commencing high-risk tasks and will suspend work if controls are not established.* |
| **Date:** | **Name:** | **Signature:** | *I confirm I have read and understood this SWMS. I will verify that critical controls are in place prior to commencing high-risk tasks and will suspend work if controls are not established.* |
| **Date:** | **Name:** | **Signature:** | *I confirm I have read and understood this SWMS. I will verify that critical controls are in place prior to commencing high-risk tasks and will suspend work if controls are not established.* |
| **Date:** | **Name:** | **Signature:** | *I confirm I have read and understood this SWMS. I will verify that critical controls are in place prior to commencing high-risk tasks and will suspend work if controls are not established.* |
| **Date:** | **Name:** | **Signature:** | *I confirm I have read and understood this SWMS. I will verify that critical controls are in place prior to commencing high-risk tasks and will suspend work if controls are not established.* |
| **Date:** | **Name:** | **Signature:** | *I confirm I have read and understood this SWMS. I will verify that critical controls are in place prior to commencing high-risk tasks and will suspend work if controls are not established.* |
| **Date:** | **Name:** | **Signature:** | *I confirm I have read and understood this SWMS. I will verify that critical controls are in place prior to commencing high-risk tasks and will suspend work if controls are not established.* |
| **Date:** | **Name:** | **Signature:** | *I confirm I have read and understood this SWMS. I will verify that critical controls are in place prior to commencing high-risk tasks and will suspend work if controls are not established.* |
| **Date:** | **Name:** | **Signature:** | *I confirm I have read and understood this SWMS. I will verify that critical controls are in place prior to commencing high-risk tasks and will suspend work if controls are not established.* |
| **Date:** | **Name:** | **Signature:** | *I confirm I have read and understood this SWMS. I will verify that critical controls are in place prior to commencing high-risk tasks and will suspend work if controls are not established.* |
| **Date:** | **Name:** | **Signature:** | *I confirm I have read and understood this SWMS. I will verify that critical controls are in place prior to commencing high-risk tasks and will suspend work if controls are not established.* |
| **Date:** | **Name:** | **Signature:** | *I confirm I have read and understood this SWMS. I will verify that critical controls are in place prior to commencing high-risk tasks and will suspend work if controls are not established.* |
| **Date:** | **Name:** | **Signature:** | *I confirm I have read and understood this SWMS. I will verify that critical controls are in place prior to commencing high-risk tasks and will suspend work if controls are not established.* |
| **Date:** | **Name:** | **Signature:** | *I confirm I have read and understood this SWMS. I will verify that critical controls are in place prior to commencing high-risk tasks and will suspend work if controls are not established.* |
| **Date:** | **Name:** | **Signature:** | *I confirm I have read and understood this SWMS. I will verify that critical controls are in place prior to commencing high-risk tasks and will suspend work if controls are not established.* |
| **Date:** | **Name:** | **Signature:** | *I confirm I have read and understood this SWMS. I will verify that critical controls are in place prior to commencing high-risk tasks and will suspend work if controls are not established.* |
| **Date:** | **Name:** | **Signature:** | *I confirm I have read and understood this SWMS. I will verify that critical controls are in place prior to commencing high-risk tasks and will suspend work if controls are not established.* |
| **Date:** | **Name:** | **Signature:** | *I confirm I have read and understood this SWMS. I will verify that critical controls are in place prior to commencing high-risk tasks and will suspend work if controls are not established.* |
| **Date:** | **Name:** | **Signature:** | *I confirm I have read and understood this SWMS. I will verify that critical controls are in place prior to commencing high-risk tasks and will suspend work if controls are not established.* |

| **SWMS Amendments** | | | | | |
| --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |