Contractor Hazard Identification and Control Guide

This table is provided as a guide only and is not intended to be an exhaustive list of hazards and risk controls.

Hazard	Possible Cause	Suggested Risk Control Measure
Exposure to Asbestos Containing Materials (ACM)	• Accidental disturbance or removal of ACM.	• **Asbestos Containing Materials are to be removed outside school hours. No DET employees, students or visitors are to be on site.** • Contact the Asbestos Reinstatement and Preventative Maintenance Call Centre for support and advice • Division 5 Asbestos Audit has been conducted and the report is readily accessible • An Asbestos Register is available • School Asbestos Management Plan has been developed and implemented • Buildings where ACM has been identified have been labelled and label inspected • Division 6 Asbestos Audit Report conducted prior to works being carried out • All contractors report to front office and are inducted • Area of disturbance or removal has been cordoned off to prevent access and exposure • A Class 'A' removalist has been engaged to conduct removal works • An occupational Hygienist has been engaged to conduct atmospheric monitoring and has completed the asbestos removal completion form in consultation with Workplace Manager • Clearance certificate is provided and retained by workplace • The Asbestos Removal Control Plan has been completed by the removalist • Weather conditions have been considered • Timeframes for works have been specified and communicated to all employees and school community
Lack of oxygen	• Enter into a confined space	• **No DET employee is to enter a confined space** • Isolate and lock out water / steam systems • Isolate and lock out mains gas / gas systems • Isolate and lock out hydraulic / electrical equipment • Isolate and lock out mechanical / electrical drives • Isolate and lock out flammable and combustible

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		materials
		• Breathing apparatus is worn
		• Eye protection is worn
		• Hand protection is worn
		• Hearing protection is worn
		• Safety helmet is worn
		• Slip resistant footwear is worn
		• Harness is worn
		• Communication equipment is available and is in good working order
		• A safety observer has been established
		• O2 / Flammable gas monitor to be worn at all times
		• Emergency lifesaving apparatus (ELSA -15 minutes) and other emergency rescue equipment
		• Respiratory protection
		• Atmosphere has been tested for:
		  ○ Oxygen %
		  ○ Flammable gases
		  ○ Toxic gases
		• Permit to Work for confined space entry has been completed and is displayed
		• Barricades are positioned around work area
		• Adequate lighting is available
		• First Aid trained personnel is available to assist, if required

Traffic hazards	• Working in close proximity to roads • Vehicles including trucks entering, exiting or moving on site	• Eliminate the need for vehicles to enter school grounds • Mark pathways, parking bays, install physical barriers and speed humps • No entry to grounds during times of high pedestrian traffic i.e. school drop off/ pick up times or class breaks • If vehicles must enter the grounds during these times ensure it is not during times of peak pedestrian times (e.g. recess or lunch) • Use of witches hats or temporary barriers to cordon off sections of road • Closure of road • Speed restriction and safety signs displayed and enforced • All contractors / delivery personnel report to

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		front office prior to driving on site • Site specific Traffic Management Plan • Personal Protective Equipment (e.g. high visibility vest)
Manual handling	• Handling of large items • Use of heavy hand held tools e.g. jack hammer • Handling of heavy objects	• Re-design task • Use of lifting aids (e.g. trolley, hoist) • Break up the load • Requirements for two person lifts or team lifting • Plan the transfer including checking to ensure a clear pathway and correct manual handling techniques are used (e.g. bending knees) • Personal Protective Equipment (e.g. gloves and enclosed footwear) • Safe Work Procedures are available
Contact with heat / radiation	• Use of Welder / Soldering Iron • Use of Angle Grinder • Fire in the workplace • Exposure to sun	• Eliminate ignition sources from flammable atmospheres • Isolate and tag-out Pipes / valves • Isolate and tag-out Electrical outlets / appliances • Isolate and tag-out Tanks / vessels • Isolate fuel sources (e.g. flammable or combustible chemicals) • Use spark / flash screens when required • Remove flammable materials or store correctly • Enforce a spotter/fire watch during hot work • Provide personal protective equipment/clothing and training • Work area is barricaded and signage is posted • Water pump / fire brigade on standby • Provide fire fighting equipment • Reduce sun exposure time in the middle of the day • Provide sunscreen • Provide shade structures • Time frame for work to be carried out has been agreed to by Workplace Manager and contractor and communicated to employees and community, where required • Weather conditions have been considered including fire bans and wind direction

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Contact with electricity	• Faulty electric leads and tools • No earth leakage detectors • Electric leads on ground • Electrical leads in damp areas • Electric leads tied to metal rails • Items of plant not isolated • Contact with underground or overhead cables	• Electrical work only conducted by A Grade licenced electrician • Isolate and lock out mains electricity / electrical equipment, where required • Disconnect batteries and capacitators • Isolate and lock out tanks/ vessels, where required • Tools and leads used by contractors are inspected every 3 months by company as per testing and tagging requirements • Use of portable residual current devices • Residual current devices in all circuits • Residual current devices tested monthly • Electrical leads kept elevated and clear of work areas • All electric leads kept dry and off the ground • All electric leads are kept insulated • Lock-out and equipment tag procedure • Location of services to be established • Establish safe clearance distances • Weather conditions have been considered • Time frame for work to be carried out has been agreed to by Workplace Manager and contractor and has been communicated to employees and community, where required • Certificate of Electrical Capacity provided for any relevant changes or upgrades
Exposure to noise	• Plant and equipment not silenced • Not wearing appropriate protection • Excessive exposure time to noisy areas	• Select equipment with consideration of lowest practicable dBA level • Isolate noisy area as far as reasonably practicable, e.g. close doors, erect screens • Fit noise suppression to noisy plant and equipment • All personnel to wear appropriate PPE (hearing protectors) • Regulate employee and students exposure to noise • Conduct very noisy procedures out of schools hours or away from classroom where practicable
Contact with high pressure	• Burst air lines • Hoses becoming uncoupled	• Air hoses in good condition and regularly inspected • All hose couplings fitted with pins or chains • Cylinders stored upright and secured

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	• Using compressed air to clean clothing • Improper handling of gas cylinders Pressure gauges	• All pressure gauges inspected regularly for defects • Review relevant Material Safety Data Sheet
Contact with chemicals	• Incorrect handling procedures Lack of information • Not wearing appropriate PPE • Incorrect storage • Elevated exposure levels	• Material Safety Data Sheet (MSDS) is readily available • Review MSDS and assess risks in consultation with contractor • All personnel provided with appropriate PPE • Hazardous substances stored and labelled correctly • Provide mechanical ventilation and extraction • Provision of spill kits or equipment to contain accidental spill
Struck against	• Protruding objects in access routes • Not wearing appropriate PPE • Personnel running in the workplace	• Protruding objects are removed, marked or protected • Provide appropriate PPE (hard hat, safety boots)
Struck by object	• Objects falling from work platforms • Debris from grinding operations • Wind-blown particles	• All work platforms fitted with toe-boards • Isolate area where there is a potential for persons of objects to fall and injure persons. • Hand tools and materials are secured / tethered • All personnel wear appropriate PPE (hard hats) • Shield grinding operations • Consider weather conditions e.g. forecast including wind conditions and fire bans

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Potential to fall two metres or more	• No handrails • Working outside handrails • Floor penetrations not covered • Ladders not secured • Trench has not been supported or secured	• Work from ground so far a reasonably practicable. • Use of passive fall prevention devices e.g. scissor lift by a licenced contractor • All work platforms have secure handrails • Persons wear full fall arrest type harness secured to anchorage points or static lines • Persons working at height and using fall arrest systems have been properly trained • All work platforms, scaffolds are fitted with toe boards • Barricade area below to prevent access to work area • Secure the construction site • Bench or shore the trench • Installation of support systems to brace the trench • Use of trench covers to secure trench when unattended • All ladders secured to prevent movement • All ladders have a load rating of 120kg, are industrial rated and comply with Australian Standards • Ladders to extend at least 1 metre above upper landing or roof • All ladders are inspected for damage • Spotter is positioned at bottom of ladder • Roof condition is assessed prior to accessing • Signage is available indicating works are being carried out • Personal Protective Equipment is worn at all times • Loose objects are secured • Rescue from height procedures are in place

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Slips, trips and falls on same level	• Access routes obstructed by materials/objects • Leads and hoses across access routes • Slippery surfaces • Safety footwear not appropriate • Poor visibility	• All access routes kept clear of materials and debris • All leads kept clear of ground or covered • All surfaces used for access kept dry and in good condition • Wear appropriate Personal Protective Equipment e.g. enclosed footwear • Provide adequate lighting
Caught between	• Operating plant • Moving plant • Moving loads • Loads tipping or swinging • Materials being positioned	• Guarding of rotating plant and hand tools • Safe work procedures to be followed • Provide roll over cage protection • Pre-start daily safety inspection • Personnel kept clear when operating plant • Fit reverse alarms to plant and check operation (including vehicles) • All personnel kept clear during crane operations • Load slings properly secured • Safe Work Procedures (SWP) for moving heavy loads • Use of a spotter when reversing
Overstress of lifting equipment	• Safe Working Loads (SWL) exceeded during lifting operations • Sprains and strains	• Compliance with SWL and radius charts on cranes • All lifting gear is inspected regularly and records maintained • All personnel trained in manual handling techniques • Regular testing of structural integrity of load bearing components and records maintained
Ergonomic hazards	• Poor work posture • Use of excessive force • Repetitive movements	• Work station design and set-up to conform with ergonomic standards • Seating design and set-up to conform with ergonomic standards • Provide adequate task lighting • Provide mechanical aids • Modify workplace design • Modify task requirements • Job rotation

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Biological hazards	• Needle stick injury • Potential exposure to HIV, hepatitis • Potential exposure to Legionella bacteria	• Provide appropriate biological waste disposal containers • PPE is available and used (e.g. eye protection, masks, gowns/overalls and gloves • Implement infection control procedures • DET workplace to provide Cooling Tower Risk Management Plan to contractor • Cooling tower to be audited by a certified auditor
Emergency management/ evacuation	• Inadequate access/egress routes • No exit signage • Blocked access ways • Inoperable emergency equipment	• Access/egress routes are communicated and signed • Ensure access ways are clear • Follow emergency evacuation procedures/plans • Provide appropriate signage • Location of fire equipment is communicated
Explosives	• Trenching • Stump removal • Firework display	• Works are conducted outside of workplace operating hours • Access is restricted and monitored during works to licenced pyrotechnicians • Contractor must have an Explosives Licence or Pyrotechnicians Licence • Explosives or fireworks are not stored on site • Personal Protective Equipment is worn • The contractor and public to be at a safe distance or are provided with a blasting shelter • Notification to all necessary agencies (police and fire authority etc.) • A blast management plan is developed in accordance with AS 2187.2: Explosives – Storage and use • Safe Work Method Statement is provided