

## CML Operations HSE Plan - Significant Hazards

A hazard is any actual or potential cause of harm. Where possible, elimination of the hazards should be considered. Where elimination is not reasonably practicable, the risk will be controlled in accordance with the hierarchy of hazard controls (refer to below table). In some cases, a combination of two or more controls may be implemented to reduce risks to an acceptable level

Effectiveness	Priority	Method	Examples of Hazard Controls
Most effective control	1st	Elimination	<i>Elimination of hazard</i>
	2nd	Substitution	<i>Less hazardous substance, material or system of work</i>
	3rd	Isolation	<i>Enclose noisy equipment</i>
	4th	Engineering Controls	<i>Mechanical handling device, machine guarding</i>
	5th	Administrative Controls	<i>Training, safe work practices, safety signs</i>
	6th	Personal Protective Equipment	<i>Safety glasses, ear plugs, safety boots</i>

The key hazards and risks for site work must be identified and assessed and tabulated based on the following Risk Ranking Criteria

Probability	<u>Very Likely (4)</u>	4	8	12	16
	<u>Likely (3)</u>	3	6	9	12
	<u>Unlikely (2)</u>	2	4	6	8
	<u>Very Unlikely (1)</u>	1	2	3	4
		VERY LOW (first aid needed) 1	LOW (minor injury/illness) 2	MEDIUM (long term illness or serious injury) 3	HIGH (fatality) 4
		Severity			

High	
Medium	
Low	

## CML Operations HSE Plan - Significant Hazards

A significant hazard is one that may cause:

- Serious harm - see definitions in schedule 1 of the HSE Act. This includes death and many occupational illnesses and injuries that may be sustained in a place of work; or
- Harm - the severity of which may depend on how often or how long a person is exposed to the hazard - such as noise induced hearing loss, or
- Harm that cannot be detected until a significant time after exposure. This includes long-latency diseases caused by exposure to hazardous substances - such as asbestosis, neurotoxicity, and other diseases of occupation.

Where a 'significant hazard' is identified, the Act requires an employer to:

- ELIMINATE the hazard from the workplace

- If elimination is not practicable or is incomplete, take all practicable steps to ISOLATE the hazard (e.g. guarding)

- If it is impracticable to eliminate or isolate the hazard completely, MINIMISE the likelihood that the hazard will harm employee (e.g. protective clothing and equipment) and MONITOR the effectiveness of this control (e.g. health screening)

If it is not practicable to eliminate, isolate or minimise a significant hazard, and serious harm is likely, the situation is unacceptable and the work cannot continue.

RISK TITLE	DESCRIPTION	CONTROLS (Isolate, Eliminate, Minimise)	MINIMUM COMPETANCY
Battery charging	Electrocution and explosion from hydrogen gas. Acid burns.	<b>Isolate:</b> Ensure adequate ventilation and separate from other ignition sources. Use a designated charging area. Always wear eye protection and avoid flame and sparks near battery and fuel. Fit isolation switch if appropriate. Follow manufacturers specifications.	Trained in use of workshop equipment
Chainsaw - general use	Handling sharp object. Handling fuel. Carrying sharp object. Fitting/adjusting chain, sharpening chain. Fueling/refueling. Starting motor. Loss of balance. Kickback/traction/recoil. Dangerous trees. Concealed wire rope and metal objects. Vibration. Inadequate protection or entanglement causing injury. Fire or accident. Noise. Physical harm due to equipment failure	<b>Eliminate/Isolate/Minimise:</b> Refer to Chainsaw DOL publications ( <a href="#">The Ministry of Business, Innovation and Employment</a> ). Correct fueling procedures, stop motor, no smoking, use funnel where possible. Restart saw 3m from fuelling area. Drop starting of saw prohibited. Decompression switch fitted where possible. Approved fuel containers can be carried while using chainsaw. Before working check all safety features on saw. Safety clothing to standard. Long hair to be tied up. Wear fitted hi-visibility vest. Minimum 3m operating distance from others. Ensure minimum of 2 person team. Signs and sentries as required in public use areas. Adequate communications on site.	First aid trained to unit standards 6400, 6401, and 6402. Base chainsaw unit standards of 6916 and 6917 required, plus regular assessment as suggested by DOL. At least one member of the team should hold unit standard 43 (maintain a chainsaw)

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RISK TITLE	DESCRIPTION	CONTROLS (Isolate, Eliminate, Minimise)	MINIMUM COMPETANCY
Compressed air use	Air operated tools used to inflate, clean machinery, clear matter from benches and cut material.	<b>Minimise:</b> Tool connections and hoses to be checked before use. Appropriate earmuff (Class 5) use, and safety goggles to be worn when cleaning machinery, clearing matter from work areas and cutting materials. Air gun nozzles must never be placed against the skin or inserted in any body orifice. Compressor must be left to drain everynight with the outlet valve left open to drain condensate. All attachments operated by compressed air must be used in compliance with the manufacturers specifications.	Competent/trained person, and supervisor instruction
Confined space operation	Build up of carbon monoxide or production of toxic gas(es) fumes within confined space. Displacement of oxygen and build up of flammable and/or harmful fumes. Chemical reaction of organics/inorganic resulting in oxygen deficient atmosphere.	<b>Eliminate:</b> Refer to confined space SOP ( <a href="#">The Ministry of Business, Innovation and Employment</a> ). Use external expertise if at all possible. Work MUST be pre approved by General Manager.	Trained to is NZQA unit standard 18426 "Demonstrate knowledge of hazards associated with confined space"
Electrical work	Electrocution, Falls, cuts (broken tubes or light bulbs)	<b>Isolate:</b> Ensure plugs are not overloaded. Route all cables out of the way where they can't be tripped over. If not in use store in a safe place and replace any faulty or worn leads. Where leads have to cross areas in use protect them by a cover (or tape until a cover is purchased). Annual inspections of leads and regular inspection of other electrical items by approved electrician .	All electrical maintenance to be undertaken only by a registered electrician
Flammables use	Poison and fire	<b>Isolate:</b> Only change fuel outside and away from open flames. Never use fuels in a confined space. Wait for appliances to be cold before changing fuel canisters. With any fuel spills extinguish all flame, clean up and ventilate space until fumes clear. Accumulation of flammables could trigger HSNO requirements such as Test Location Certificate or Hazardous Atmosphere Zone, etc ( <a href="http://www.epa.govt.nz">see www.epa.govt.nz</a> ).	Approved Handler if amount held triggers this requirement, otherwise competent in use.

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Hand held power tool use and small plant(Water blaster, compressor, skill saw, drill etc.)	Loss of control over tool. Cutting its power cord. Electrocutation. Dust - eyes or mouth. Entanglement with moving parts. Noise. Cutting or stabbing. Ignition source created around dust production.	<b>Isolate/Minimise:</b> Regular inspections of power leads and tagged (refer Electrical Work), do not use cut or damaged leads wrapped with insulation tape. Spring loaded on/off switch. Safety goggles to be used at all times with tools such as sanders, drills, cutting blades, routers. Ensure appropriate ventilation. Where possible ensure power tools are equipped with dust collection bags. No loose clothes, long hair etc. Wear Class 4 hearing protection. Operative guards (ref OHS guidelines on guarding). Awareness of potential for dust combustion, avoid spark production. RCD's to be used as a minimum with all power tools. In wet conditions use isolating transformer with power tools.	Competent and/or appropriately trained.
Punt Use	Capsize, sinking, operator falling over board. Swept away by tide or winds	<b>Minimise:</b> Refer to <a href="http://www.maritimenz.govt.nz/Publications-and-forms/Recreational-boating/Safe-Boating-an-essential-guide-2011.pdf">http://www.maritimenz.govt.nz/Publications-and-forms/Recreational-boating/Safe-Boating-an-essential-guide-2011.pdf</a> Ensure staff are fully briefed and safety equipment including VHF radio is carried. CML Office to be notified and punt is not to leave Chaffers Marina. Use only in flat water conditions and ensure punt is tethered at all times	Demonstrate safe work skills and practice

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RISK TITLE	DESCRIPTION	CONTROLS (Isolate, Eliminate, Minimise)	MINIMUM COMPETANCY
Dingy Use	Outboard motor fails, drowning	<b>Isolate/Minimise:</b> All trips are logged as per CML Boat Intentions Form. Sea conditions and weather forecasts are to be checked before use and monitored regularly. Ensure full safety kit is on board, CML Office has been notified and life jackets are worn. Ensure motor has adequate fuel and spare fuel is carried in a approved container	Outside Chaffers Marina, operators must have MNZ 'Day Skipper' qualification or logged time indicating competency. Operators within Chaffers Marina must demonstrate safe work practices
Hazardous substance use	Spillage. Confined space. Absorption, inhalation or ingestion. Chemical reactions. Fire. Fumes.	<b>Isolate/Minimise:</b> Identify hazardous substance and apply controls as outlined in <a href="http://www.ermanz.govt.nz">www.ermanz.govt.nz</a> . Follow manufacturers instructions. No smoking or handling food while using chemicals, correct protective clothing for chemical being used, chemical first aid kit at store.	Approved Handler required for some classes of substance. Assessed as competent to use.

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Battery charging	Electrocution and explosion from hydrogen gas. Acid burns.	<b>Isolate:</b> Ensure adequate ventilation and separate from other ignition sources. Use a designated charging area. Always wear eye protection and avoid flame and sparks near battery and fuel. Fit isolation switch if appropriate. Follow manufacturers specifications.	Trained in use of workshop equipment
Black Ice Car Parks	Hazard identified; black ice in car parks causing risk to pedestrians and vehicles	<b>Isolate:</b> Don't clear window screen of vehicles using water use scraper, place cones around effected areas and alert staff	Staff to be aware of the hazard
Car park use	Vehicles, slips, trips, and falls	<b>Isolate:</b> Have appropriate signs and eliminate slippery surfaces. Keep area tidy and free of junk. Ensure Grates are over holes eg. stormwater grates. Carry out regular checks for dangerous situations. Clean up leaks from rubbish truck immediately.	Competent Person

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Cleaning - buildings and toilets	Bacteria exposure. Concentrated chemicals. Slippery floors. Burns from hot water. Electric shock. Cleaning solution fumes. Overspray and/or spill of cleaning solutions	<b>Eliminate/Minimise:</b> Refer to appropriate MSDS. Wear appropriate protective clothing including waterproof gloves, eye protection and solid footwear. Bring and use antiseptic hand cleaner. Hands to be cleaned before eating, smoking etc. Clean and maintain equipment before returning to storage area. Turn mains off before cleaning switches or power points if using water around electrical equipment or wires. Ensure ventilation is adequate by leaving doors and windows open. Purchase user friendly cleaning products.	Trained in use
Chainsaw - general use	Handling sharp object. Handling fuel. Carrying sharp object. Fitting/adjusting chain, sharpening chain. Fueling/refueling. Starting motor. Loss of balance. Kickback/traction/recoil. Dangerous trees. Concealed wire rope and metal objects. Vibration. Inadequate protection or entanglement causing injury. Fire or accident. Noise. Physical harm due to equipment failure	<b>Eliminate/Isolate/Minimise:</b> Refer to Chainsaw DOL publications ( <a href="#">The Ministry of Business, Innovation and Employment</a> ). Correct fueling procedures, stop motor, no smoking, use funnel where possible. Restart saw 3m from fuelling area. Drop starting of saw prohibited. Decompression switch fitted where possible. Approved fuel containers can be carried while using chainsaw. Before working check all safety features on saw. Safety clothing to standard. Long hair to be tied up. Wear fitted hi-visibility vest. Minimum 3m operating distance from others. Ensure minimum of 2 person team. Signs and sentries as required in public use areas. Adequate communications on site.	First aid trained to unit standards 6400, 6401, and 6402. Base chainsaw unit standards of 6916 and 6917 required, plus regular assessment as suggested by DOL. At least one member of the team should hold unit standard 43 ( <a href="#">maintain a chainsaw</a> )

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Confined space operation	Build up of carbon monoxide or production of toxic gas(es) fumes within confined space. Displacement of oxygen and build up of flammable and/or harmful fumes. Chemical reaction of organics/inorganic resulting in oxygen deficient atmosphere.	<b>Eliminate:</b> Refer to confined space SOP ( <a href="#">The Ministry of Business, Innovation and Employment</a> ). Use external expertise if at all possible. Work MUST be pre approved by General Manager.	Trained to is <a href="#">NZQA unit standard 18426</a> "Demonstrate knowledge of hazards associated with confined space"



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Construction Work	Handling treated timber - splinters, breathing dust	<b>Isolate/Minimise:</b> Site to be signposted and marked off. Appropriate PPE to be worn. Staff to be fully briefed before entering site and only authorised personnel to be on site. Identify and control all hazards. Attach tools to structure by means of thin cord and clip to avoid reaching for falling tools. Staff to use correct lifting technique and gloves when handling green freshly treated timber.	Appropriately trained
Electrical work	Electrocution, Falls, cuts (broken tubes or light bulbs)	<b>Isolate:</b> Ensure plugs are not overloaded. Route all cables out of the way where they can't be tripped over. If not in use store in a safe place and replace any faulty or worn leads. Where leads have to cross areas in use protect them by a cover (or tape until a cover is purchased). Annual inspections of leads and regular inspection of other electrical items by approved electrician .	All electrical maintenance to be undertaken only by a registered electrician
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Sun	Excessive exposure to sun leading to sunburn or skin cancer.	<b>Minimise:</b> Protect yourself from excessive sunlight exposure by wearing a hat and covering or applying sunscreen with high SPF factor to exposed skin areas at regular intervals.	Competent and/or appropriately trained.
Extreme Weather Conditions	Hypothermia Sunstroke and Dehydration	<b>Minimise:</b> Adequate clothing to protect against wet and cold must be carried and avoid excessive periods in open areas.	Competent and/or appropriately trained.
Environmental	Pollution	<b>Isolate/Minimise:</b> Care is to be taken to minimise all spills and/or discharges. All fuel spills to be immediately cleaned up and spills in water to be reported to GM	Competent and/or appropriately trained.
Rainfall	Heavy rain will create slip hazards on decks, piers and roading areas.	<b>Minimise:</b> Care to be taken, especially on polished concrete and timber surfaces. Smooth soled shoes should be avoided and use styairs with handrails where available.	All users are required to take care when at Chaffers Marina or the surrounding Clyde Quay Area.

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Hand held power tool use and small plant(Water blaster, compressor, skill saw, drill etc.)	Loss of control over tool. Cutting its power cord. Electrocution. Dust - eyes or mouth. Entanglement with moving parts. Noise. Cutting or stabbing. Ignition source created around dust production.	<b>Isolate/Minimise:</b> Regular inspections of power leads and tagged (refer Electrical Work), do not use cut or damaged leads wrapped with insulation tape. Spring loaded on/off switch. Safety goggles to be used at all times with tools such as sanders, drills, cutting blades, routers. Ensure appropriate ventilation. Where possible ensure power tools are equipped with dust collection bags. No loose clothes, long hair etc. Wear Class 4 hearing protection. Operative guards ( <a href="#">ref OHS guidelines on guarding</a> ). Awareness of potential for dust combustion, avoid spark production. RCD's to be used as a minimum with all power tools. In wet conditions use isolating transformer with power tools.	Competent and/or appropriately trained.
Hand tool use	Use of variety of hand tools including manual/electric screwdrivers. hammer, grubber etc. Heavy objects. Flying objects. Extended use (loss of control). Sharp blades/objects. Impacts, entanglement. Public access.	<b>Eliminate/Minimise:</b> Recommended relevant PPE includes gloves, safety boots, overalls, leg protection (for grubber) protective glasses if considered necessary by supervisor. Be aware of the location of others and work at least 3 metres apart. Correct sharpening procedure used and tools maintained regularly. Where necessary, warning signs in area of operations where public have access.	Competent in use - You are deemed competent when you have (a) completed the required training for the task or use of equipment, or (b) have been assessed as competent by your supervisor

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Boat/Punt launching and retrieving from the boat ramp or wharves	Crushed by boat/punt between wharves or trailer. Falling of wharves or boat/punt or slipping	<b>Minimise:</b> If a trailer or vehicle is being used it must be fit for purpose (warranted and registered). Staff wear life jackets, non-slip footwear and wet weather gear	Person in charge is clearly identified
Boat/Punt operational condition	Boat/Punt unsafe due to hull condition, lack of maintenance or repair/replacement of known significant defect or deficiency	<b>Minimise:</b> Boat/Punt remain in full 'fit for purpose' condition as inspected and approved at annual survey	Defects to be recorded and given to General manager Intention forms to be filled out prior to use
Punt use	Capsize, sinking, operator falling over board. Swept away by tide or winds	<b>Minimise:</b> Refer to <a href="http://www.maritimenz.govt.nz/Publications-and-forms/Recreational-boating/Safe-Boating-an-essential-guide-2011.pdf">http://www.maritimenz.govt.nz/Publications-and-forms/Recreational-boating/Safe-Boating-an-essential-guide-2011.pdf</a> Ensure staff are fully briefed and safety equipment including VHF radio is carried. CML Officel to be notified and punt is not to leave Chaffers Marina. Use only in flat water conditions and ensure punt is tethered at all times	Demonstrate safe work skills and practice

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RISK TITLE	DESCRIPTION	CONTROLS (Isolate, Eliminate, Minimise)	MINIMUM COMPETANCY
Dingy Use	Outboard motor fails, drowning	<b>Minimise:</b> All trips are logged as per CML Boat Intentions Form. Sea conditions and weather forecasts are to be checked before use and monitored regularly. Ensure full safety kit is on board, CML Office has been notified and life jackets are worn. Ensure motor has adequate fuel and spare fuel is carried in a approved container	Outside Chaffers Marina, operators must have MNZ 'Day Skipper' qualification or logged time indicating competency. Operators within Chaffers must demonstrate safe work practices
Man overboard	Drowning	<b>Minimise:</b> All trips are logged as per CML Boat Intentions Form. Sea conditions and weather forecasts are to be checked before use and monitored regularly. Ensure full safety kit is on board, Harbour Control has been notified and life jackets are worn. Ensure motor has adequate fuel and spare fuel is carried in a approved container	Outside Chaffers Marina, operators must have MNZ 'Day Skipper' qualification or logged time indicating competency. Operators within Chaffers Marina must demonstrate safe work practices
Boat Fire	Burns/fatality	<b>Minimise:</b> Identify and eliminate any ignition source of flammable liquids being carried. Fire extinguisher to be carried	Operator is trained in fire prevention and suppression

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RISK TITLE	DESCRIPTION	CONTROLS (Isolate, Eliminate, Minimise)	MINIMUM COMPETANCY
Boat/Punt collision	Impact injuries/drowning	<b>Minimise:</b> Keep a proper lookout at all times. All movements within Chaffers Marina as per directions from person incharge.	Outside Chaffers Marina, operators must have MNZ 'Day Skipper' qualification or logged time indicating competency. Operators within Chaffers Marina must demonstrate safe work practices
Boat mechanical breakdown at sea	Engine stops or fails to restart at sea. Out of fuel. Loss of propeller. Striking of rocks, man over board, hypothermia, drowning	<b>Minimise:</b> Outboard motor to be serviced regularly, know accurate fuel consumption and know how to target common faults	Call Beacon Hill to notify of problem. Outside Chaffers Marina, operators must have MNZ 'Day Skipper' qualification or logged time indicating competency. Operators within Chaffers Marina must demonstrate safe work practices
Boat/Punt running aground or sinking	Boat/Punt run aground, strike rocks or debris at speed resulting in serious injury, hypothermia or death	<b>Minimise:</b> Operators are practised and competent in all forms of navigation appropriate to their area of operation. Take care not to get caught between boat/punt and shore/objects during groundings or impacts	Call Beacon Hill to notify of problem. Outside Chaffers Marina, operators must have MNZ 'Day Skipper' qualification or logged time indicating competency. Operators within Chaffers Marina must demonstrate safe work practices

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RISK TITLE	DESCRIPTION	CONTROLS (Isolate, Eliminate, Minimise)	MINIMUM COMPETANCY
Hazardous substance storage	Lifting heavy weights. Spillage. Absorption, inhalation or ingestion. High shelves / confined space. Chemical reactions. Fire. Fumes.	<b>Isolate:</b> Store in DG Store. - Segregation of packages of hazardous substances. All containers clearly and appropriately labelled. Never store even a small amount of hazardous substance in a food or drink container. Follow storage clean up procedure as shown on spill chart in poison store & use spill response kit. No smoking, 4.5kg Dry Powder extinguisher at the store (entrance). Adequately ventilated building. Mixing chemical outside of store. Accumulation of various Classes of chemicals may trigger requirements such as Test Location Certificate or Hazardous Atmosphere Zone. Refer to hazardous substances internet site <a href="http://www.epa.govt.nz">www.epa.govt.nz</a>	Approved Handler required for some substances (see also <a href="#">The Ministry of Business, Innovation and Employment</a> )
Hazardous substance use	Spillage. Confined space. Absorption, inhalation or ingestion. Chemical reactions. Fire. Fumes.	<b>Isolate/Minimise:</b> Identify hazardous substance and apply controls as outlined in <a href="http://www.epa.govt.nz">www.epa.govt.nz</a> . Follow manufacturers instructions. No smoking or handling food while using chemicals, correct protective clothing for chemical being used, chemical first aid kit at store.	Approved Handler required for some classes of substance. Assessed as competent to use.

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RISK TITLE	DESCRIPTION	CONTROLS (Isolate, Eliminate, Minimise)	MINIMUM COMPETANCY
Hazardous substance transport	Lifting heavy weights. Spillage, vehicle accident or breakdown. Chemical reactions. Fire. Fumes.	<b>Isolate/Minimise:</b> Refer to substance specific SOP for rules on transport. For land transport see Land Transport Rule 45/001 <a href="http://www.landtransport.govt.nz/rules/dangerous-goods-2005.html">www.landtransport.govt.nz/rules/dangerous-goods-2005.html</a> . Carry a suitable fire extinguisher in vehicle. Have written emergency procedure covering all hazardous substances on the vehicle readily accessible at all times.	Approved Handler required for some substances. Dangerous Goods License required if over trigger levels- check <a href="#">Land Transport Rule 45001/1</a> . Drivers or operators to demonstrate familiarity with the dangers of the substances carried, procedures for their safe loading, handling and storage on the vehicle and the emergency procedures.
Heat gun use	Inhalation of fumes when paint heated by heat gun. Fire or burns from operating heat gun.	<b>Isolate/Minimise:</b> Use in well ventilated areas. Wear appropriate safety equipment (overalls, leather gloves and face mask). Fire extinguisher to be nearby.	Competent person



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RISK TITLE	DESCRIPTION	CONTROLS (Isolate, Eliminate, Minimise)	MINIMUM COMPETANCY
Ladder use	Fall	<p><b>Minimise:</b> Ladder to be in sound condition, appropriately rated for the job (<a href="#">AS/NZS 1892 or 3609</a>), used in accordance with the manufacturers instructions and for the purpose intended. Ladder to have adjustable feet if being used on uneven terrain. Used at the correct angle (1:4) to the structure and secured to the structure where possible.</p> <p>Ladder is secure and either tied off or footed. The work does not require the operator to over reach or go beyond the top rungs of the ladder and is of short duration - fall restraint is not necessary. At all remote sites another person must be present to provide assistance.</p> <p>Roof ladders should generally be used on roof pitches of 10 degrees or more.</p> <p>See work at height procedures DOL guide <a href="https://www.worksafe.govt.nz/topic-and-industry/working-at-height/working-at-height-in-nz/">https://www.worksafe.govt.nz/topic-and-industry/working-at-height/working-at-height-in-nz/</a></p> <p>If fall restraint is considered an option then it is likely that a ladder is not the most suitable piece of equipment for the job.</p>	Competent person
Landscaping/ Planting work	Cuts or punctures from branches and thorns, Straining back.	<p><b>Minimise:</b> Take it slowly, loosen dirt rather than try to remove large clumps at once. Periodic (15mins) back stretches, take frequent breaks. Lift with legs as much as possible. Use two people or more if very heavy root ball.</p>	Competent person

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Legionnaires disease (Potting Mix)	Legionnaires disease	<b>Isolate/Minimise:</b> Avoid opening bags in enclosed areas. Avoid inhaling the mix, dust and mists or vapor from the bag by wearing dust mask when opening bags and mixing. Always wear gloves when gardening or using the product. Ensure plant ball/potting mix is damp before handling for planting. Wash hands thoroughly after gardening or use of this product. See also <a href="#">The Ministry of Business, Innovation and Employment</a>	Competent person
Manual handling	Sprains and strains. Crushing. Slips, twisting, compression.	<b>Minimise:</b> Minimise the need for lifting heavy loads by choice of equipment, position of equipment. Reinforce the need for good lifting techniques. Back exercises / warm up. Stress the need for people to take care and appropriate amount of time while carrying out tasks. Wear safety boots and helmets if under overhead loads. Make sure staff are suited to the tasks and do not have serious disabilities. Make sure that Item are stored securely and will not fall.	None.
Money handling and valuables	Confrontation in the act of theft	<b>Minimise:</b> Ensure procedure is in place for handling cash and any other valuables on site. If large sums of money then consider security pick up of funds. Have locked storage for any attractive valuables. Do not resist in event of robbery, do not make eye contact or stare. Follow emergency procedures.	Trained in confrontations

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Office environment	Stress from fellow employees. Smoking by other staff. Trips, and falls from untidy workspace. Falls, cuts from unsafe furniture.	<b>Minimise:</b> Proper induction of staff with details on non harassment and CML Personal Respect Policy. Maintain office atmosphere where issues can be raised. Ensure all staff know the process for raising issues. Refer to CML harassment procedures .Carry out regular check of the office environment for unsafe situations, and remedy as soon as possible.	All staff to be briefed annually on the CML Personal Respect Policy, Smoke free Policy and Drug/Alcohol policies
Painting work	Electrocution from faulty electrical leads or cables. Lead poisoning from inhalation or ingestion of lead dust particles. Eye injury from paint flakes, paint splashes. Build up of flammable or explosive fumes.	<b>Isolate/Minimise:</b> Staff to use masks and wear protective clothing and eye protection. Ensure hands and face washed thoroughly before smoking or handling food. Signs to advise public of hazardous area during operation. Thorough clean up following paint stripping. Staff to use correct painting and wash up procedures to minimise paint splashes. Ensure electrical testing of leads and equipment occurs on regular basis (refer Electrical Safety Guidelines, <a href="#">The Ministry of Business, Innovation and Employment</a> ). Repair faulty equipment and isolate any power sources. 2 person work teams where appropriate due to work at height, using heat guns, fume toxicity (eg. closed or poorly ventilated situations), otherwise 1 person can be used. Prior to stripping and painting assessment to be made as to presence of lead based paint. Ensure adequate ventilation where possible.	In house instruction prior to any novice carrying out painting or painting preparation. Assessment by competent operator.

## CML Operations HSE Plan - Hazards

RISK TITLE	DESCRIPTION	CONTROLS (Isolate, Eliminate, Minimise)	MINIMUM COMPETANCY
Public encounters	Engaging angry or emotional public	<b>Minimise:</b> If encountering angry or disturbed persons in isolated situations avoid aggravating the person. Remove yourself from the situation as soon as possible and contact the General Manager for backup support if necessary.	Competent person
Road work - working on/near	Other vehicles colliding with parked vehicle. Vehicle becoming stuck or going over bank. Being struck by vehicle. Moving plant and machinery, power tools, stores of materials	<b>Isolate:</b> Refer to the NZTA Code of Practice <a href="http://www.nzta.govt.nz">www.nzta.govt.nz</a> . All road work must comply with code of practice for temporary traffic management and an approved traffic management plan for the area. Hi vis vest must be worn and cones should be put on the road to warn motorists.	Training must be to the minimum standards outlined in the Transit NZ COP.
Rubbish handling	Sharp objects. Heavy bags.	<b>Isolate/Minimise:</b> Handle carefully - use gloves if necessary. Identify object before grasping, handle bags of rubbish with caution, treat any cuts with antiseptic, however minor, immediately. Dislodge any stuck rubbish with an implement (do not use hands). Medical treatment should be sought for any wounds related to hypodermic needles. Retain any needle for a doctor to examine if an accident does occur. Good lifting techniques. Wash hands after handling rubbish.	Competent person
Rubbish skip use	Fire. Cuts/Infection. Light bulbs, spray cans etc. may explode if burnt causing lacerations, eye injuries	<b>Isolate/Minimise:</b> No hot ashes or flammable liquids, no linseed oil soaked rags. Follow fire procedures. All bulky items placed beside skip bins. Gloves and overalls to be worn.	Competent person

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Scaling operations	Flying debris - cuts/impacts/eye damage. OOS - back strain/vibration/circulation. Noise. Falling over. Public. Discs/ breaking/ coming off /entanglement.	<b>Isolate/Minimise:</b> Protective footwear/equipment (safety boots, chaps, hard hat/visors or safety glasses, gloves, high vis vest, class 4 hearing protection). Signs warning public of machine use to be placed either side of work area.	Trained and competent in use
Sewage work	Improper disposal, infectious diseases and/or allergies.	<b>Isolate/Minimise:</b> Wear protective clothing, gloves, and face mask when required. At the end of the task staff to clean and maintain equipment before returning items to racks, bins and shelves. Wear appropriate safety clothing and equipment (throwaway overalls, safety boots, rubber gloves, face mask, goggles, hard hat, ear muffs). Ensure any skin abrasions are covered. Vaccinations for Hep A & B offered to any personnel likely to be involved. Lock pumps and hoses away from public where practicable. Erect appropriate barrier or closure tape to keep public from work site. Tanks must have correct labeling – ‘infectious substance’. Practice high hygiene standards.	Ensure people handling sewerage are restricted to a small well-trained specialist group. TWINRIX combination vaccine used to prevent hepatitis A and hepatitis B infection required for staff where applicable.

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The Facilities	Lifting, moving or carrying loads. Injury from filing cabinets and tilting drawer cabinets. Falling objects from height while stored. Environmental conditions. Infectious disease. Security, working outside core hours. Inadequate lighting. Earthquake, fire. Slippery floors/sprains, falling objects or loose carpet and steps. Electrocution/tripping - extension cords.	<b>Isolate/Eliminate/Minimise:</b> Supply adequate lights, especially in stairways. Emergency Procedures in place and known awareness of potential hazards of stored items. Ensure all floors are slip free, entrance ways and stairways are clear/unobstructed. Only essential material/items to be stored near workplace in a tidy unobstructive manner. Any spillages promptly cleaned up. Use carrying device (e.g. Porter's trolley), use proper lifting techniques, request assistance. Storage areas to be kept clean/clear. No smoking. Items above head height to be suitably restrained. Ensure step ladders are used to remove any gear stored at height. Cabinets to be restrained to meet seismic restraint requirements. Lighting, heating, ventilation systems to be regularly checked to standards. First aid cabinets to be held on each floor of office building and supplies regularly replenished. Secure temporary electrical cables to floor using duck tape. Do not use electrical cables of appliances with wet hands. Report any faulty electrical equipment to building manager. General Manager to arrange regular electrical inspections of equipment.	Staff need to be aware of hazards and trained in the use of office equipment, including computers and other items of equipment in the Facilities. All staff and visitors need to understand the relevant emergency procedures for the building in which they are located.
Trailer use	Serious harm from loss of traction/ maneuverability if load too heavy or coupling coming loose. Sprains, strains, crushing while loading.	<b>Eliminate:</b> Ensure tow ball connections are consistent. Trailers not to be overloaded. When loading, if possible use concrete ramp or bank to reduce angle of ramps. Ramps to be of sufficient length to avoid steep angle from ground to trailer, offload onto upslope wherever possible. Ensure 'R' clips are inspected. Passengers must not be carried on trailers.	Competent person

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Vehicle use - general	Lose control of vehicle. Collision with another vehicle, fallen trees/ landslip debris. Driving into water at speed, aqua-planing, brake failure. Vehicle sliding. Fatigue. Goods moving inside the vehicle causing injury.	<b>Minimise:</b> Drive to conditions within speed limits. Refer to road condition reports if in doubt. Notify intentions and schedule times as appropriate. Plan trip to limit fatigue.	Appropriately licensed. Recommended Advanced Driver Training (anti skid training).
Visitors in the vicinity	Falls, tool injury, other bodily injury.	<b>Minimise/Isolate:</b> Appropriate signs displayed to warn visitors of serious hazards and non-access areas. Staff to take appropriate action in the event of visitors entering limited access areas.	Appropriately trained
Water and sewage infrastructure work	Chemical reaction of organics/inorganic resulting in oxygen deficient atmosphere	<b>Minimise/Isolate:</b> Consider other work methods, use appropriately trained contractors. Refer to Confined Space guidelines <a href="#">The Ministry of Business, Innovation and Employment</a>	Competent in the work. If not then the person must be directly supervised by someone who is

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Weed spraying operation/ Glyphosate (Roundup) use	Wind - drift skin and eye contact. Ingestion/absorption of poisons. Manual handling. Trip, slip or fall. Public exposure to chemical. Fumes. Spillage - contact.	<b>Minimise/Isolate:</b> Use must comply with <a href="#">NZS 8409 for Management of Agrichemicals</a> . Wear appropriate protective clothing and equipment including respirator, mask, eye protection and water proof gloves. Warning signs located at either side of work area. Mix in open area. Chemicals to be decanted in storage containment area into labeled containers. Secure load, only specified containers and tanks and seal containers. All equipment to be cleaned at site (triple rinsed) and rinse water to be sprayed onto target area. Protective clothing to be rinsed in yard away from waterways/drains. Regular reinforcement of hygiene requirements by supervisor, wash hands before eating etc, wash/clean spray vehicle seat covers at end of programme.	Approved Handler, or under the supervision of an Approved Handler
Working from height	Fall from scaffolding, ladders or slippery surface causing harm.	<b>Minimise/Isolate:</b> Staff to follow Department of Labour Working at Height procedures, see internet site <a href="#">The Ministry of Business, Innovation and Employment</a>	Staff must be trained to the standards described in the relevant DOL guidelines.
Wasp, bee, insect stings	Allergic reaction, anaphylactic shock etc.	<b>Isolate:</b> Staff to use insect repellent. Specific prescribed anti-histamines to be carried by any individuals with a known history of allergic reaction. Staff to notify supervisor of allergies	Staff trained in use of Anakits and Epipens.
Noise	All noise levels that exceed 85 dBA, no matter what the source!	<b>Minimise:</b> Take practicable steps to reduce noise levels by either: Replacing old noisy equipment Enclosing or isolating noisy machines in a separate room (eg photocopiers) Placing padding under office equipment Using sound absorbing partitions and/or ceiling tiles.	Wear ear muffs when necessary