



**Health & Safety Policy**

# Quality Mechanical Health & Safety Policy

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# Quality Mechanical Safety Policy

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We consider the health and safety of each of our employees to be of primary importance. Our objective is to conduct our business in the safest possible manner consistent with the Occupational Health & Safety Act (OHSA), applicable Regulations and good construction practices.

To enable us to keep our quality and production at the highest levels, we must ensure that the health and safety of our workforce is maintained at all times. As such it is the responsibility of all employees to adhere to the requirements of the OHSA, and all regulations made under the act.

Quality Mechanical is committed to provide a safe working environment for all employees by minimizing hazards in the workplace. It is therefore the responsibility of everyone to communicate health and safety issues immediately.

Your assistance and support are needed and expected to protect the health and safety of our workforce and our company.



*Roger Chartrand*

Roger Chartrand



*Andrew Chartrand*

Andrew Chartrand

Quality Mechanical

Updated On: January 9, 2013

# Responsibilities

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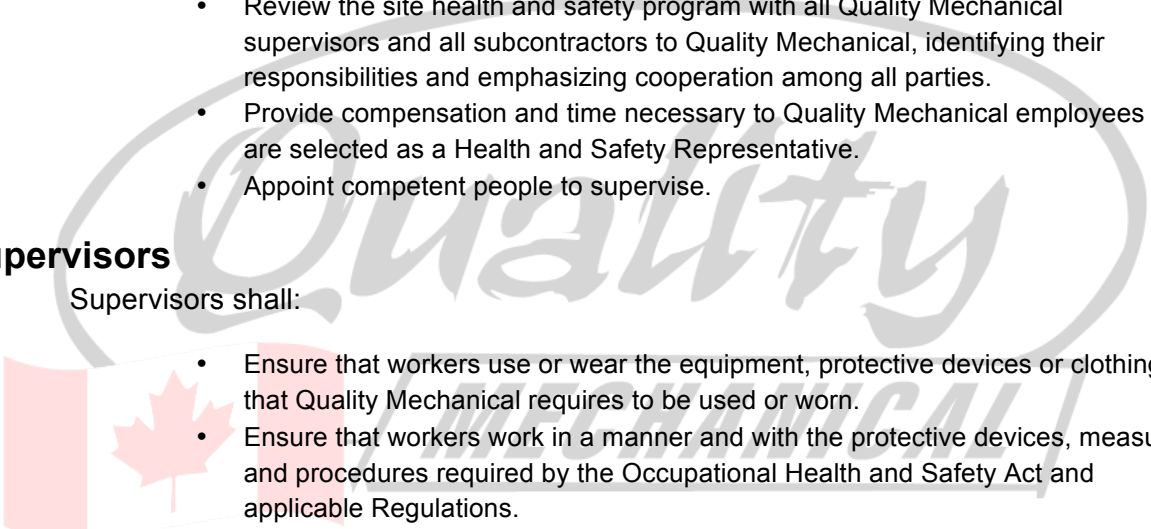
## Senior Management

Senior Management Shall:

- Ensure that equipment, materials, and protective devices are provided and maintained in good condition.
- Review annually Quality Mechanicals written health and safety policy.
- Provide the necessary resources to implement, support and enforce Quality Mechanical's health and safety policy and program within the company.
- Review all accident reports at least quarterly.
- Promote the exchange of health and safety information with outside groups as needed.
- Review site specific training plans for health and safety and ensure adequate measures are available.
- Review the site health and safety program with all Quality Mechanical supervisors and all subcontractors to Quality Mechanical, identifying their responsibilities and emphasizing cooperation among all parties.
- Provide compensation and time necessary to Quality Mechanical employees who are selected as a Health and Safety Representative.
- Appoint competent people to supervise.

## Supervisors

Supervisors shall:

- 
- Ensure that workers use or wear the equipment, protective devices or clothing that Quality Mechanical requires to be used or worn.
  - Ensure that workers work in a manner and with the protective devices, measures and procedures required by the Occupational Health and Safety Act and applicable Regulations.
  - Provide orientation to new crew members.
  - Conduct weekly safety talks.
  - Inspect safety equipment at least monthly.
  - Inspect tools and equipment at least monthly and ensure that they are properly maintained.
  - Review safety aspects of each task with workers.
  - Conduct accident investigations.
  - Report safety problems to Quality Mechanical's senior management.
  - Ensure housekeeping is done at least daily.
  - Review MSDS with workers before using hazardous materials.
  - Review Safety Minutes, MoL orders, and safety directives with crew.

## Employees

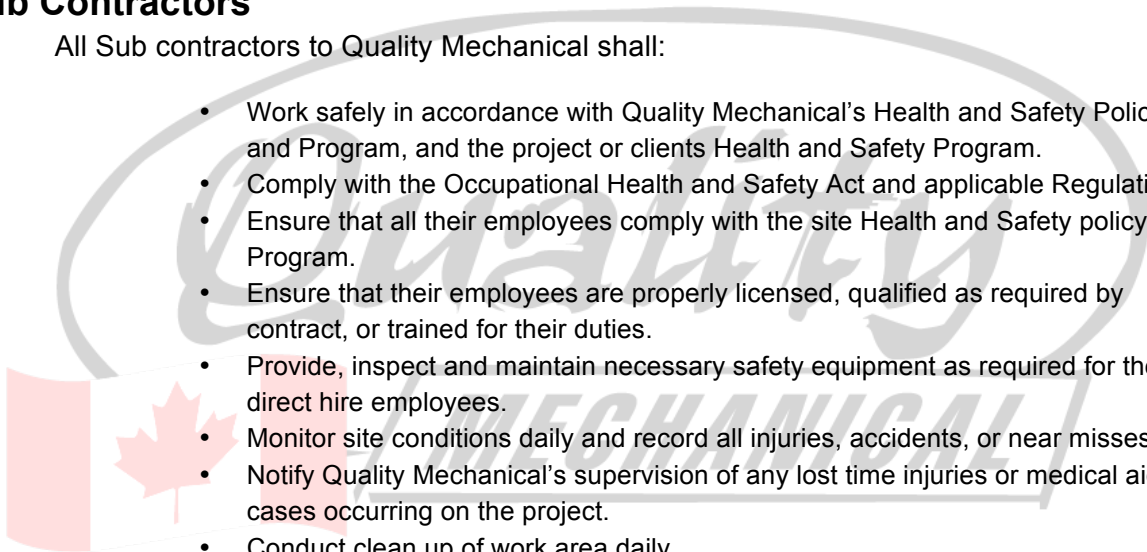
All employees shall:

- Work safely on accordance with Quality Mechanical's Health and Safety Policy and program, and with the clients Health and Safety program.
- Comply with the Occupational Health and Safety Act.
- Use or wear the equipment, protective devices or clothing that Quality Mechanical requires to be used or worn.
- Report hazards or unsafe conditions to their supervisor after taking appropriate immediate action.
- Report all Accidents, injuries and near misses to their supervisor.
- Clean up their own work area at least daily.
- Inspect personal protective equipment before each use and report defects or damage immediately to their supervisor.
- Tag any defective equipment as "out of service".

## Sub Contractors

All Sub contractors to Quality Mechanical shall:

- Work safely in accordance with Quality Mechanical's Health and Safety Policy and Program, and the project or clients Health and Safety Program.
- Comply with the Occupational Health and Safety Act and applicable Regulations.
- Ensure that all their employees comply with the site Health and Safety policy and Program.
- Ensure that their employees are properly licensed, qualified as required by contract, or trained for their duties.
- Provide, inspect and maintain necessary safety equipment as required for their direct hire employees.
- Monitor site conditions daily and record all injuries, accidents, or near misses.
- Notify Quality Mechanical's supervision of any lost time injuries or medical aid cases occurring on the project.
- Conduct clean up of work area daily.
  - NOTE: If waste and debris create a hazard and are not cleaned up in a reasonable time, they will be cleaned up by Quality Mechanical and the sub contractors expense.
- Conduct regular weekly toolbox talks in addition to specific training when required.
- Provide compensation for the time necessary to employees who are selected as a Health and Safety Representative.
- Provide and maintain an up to date clearance certificate from WSIB before commencing work.



# Discipline

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## Discipline Policy

- Addressing disciplinary issues can be a very sensitive and stressful process for most managers, supervisors, and employees. However, if disciplinary issues are avoided, or handled poorly, it can lead to serious consequences such as injury, property damage, or even fatality.

Quality Mechanical does not view discipline as punitive, but rather as a rules system that governs conduct and activities in order to eliminate unsafe circumstances.

- Quality Mechanical believes that education and training are the keys to establishing a proper disciplinary process that holds everyone accountable to our Health and Safety program, as well as applicable regulatory requirements.

## Disciplinary Program

- The main objective of our disciplinary program is to ensure that Quality Mechanical's safe work practises are taken seriously by all employees and are followed at all times.
- Where disciplinary action is deemed to be appropriate, it shall be conducted in a timely manner, and in private.
- Trying to correct unsafe behaviour by waiting only allows such behaviour to become more ingrained.

## Disciplinary Process

In order to ensure effectiveness and fairness of the program all of the following five steps must be addressed with equal importance.

1. Review of disciplinary policies and procedures by the Supervisor with the Employee.
2. Investigation of accusations and infractions involving Supervisor, Health and Safety Representative and if required a third party.
3. Determining and reviewing disciplinary action with Supervisor, Management, Employee and Health and Safety Representative.
4. Documenting disciplinary actions and program of enforcement by the Supervisor and Health and Safety Representative.
5. Conducting a disciplinary meeting with the employee that promotes safe work practices and compliance with regulatory requirements.

Discipline will be enforced as follows:

1. First infraction: Recorded verbal warning to be documented by the supervisor in the project log with signed acknowledgement by the employee.
2. Second infraction for the same offense: Written notice to the employee and removal from the worksite for no less than one day.
3. Third infraction for the same offense will result in permanent removal from the jobsite of the offending employee.

Repeated infractions for different offences may result in escalation.

Quality Mechanical reserves the right to permanently remove a person from the jobsite without warning who directly endangers the life of anyone on the jobsite.

### **Sub Contractor Discipline**

Quality Mechanical requires all personnel to comply with the Occupational Health and Safety Act and all applicable regulations. Sub contractors are also required as part of the sub-contractual agreement to comply with the Quality Mechanical Corporate Health and Safety Policy. As such, in the event that a sub contractor refuses or neglects to rectify a hazardous condition, practice or any other violation, Quality Mechanical shall exercise the right to take immediate steps to correct the unsafe condition at the expense of the responsible parties. Quality Mechanical may also remove from the jobsite any individual who continues to cause the unsafe condition to remain, or performs in a manner not consistent with the guidelines of the Act, its Regulations, or our Safety Policy.





# General Health and Safety Rules

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It is the Policy of Quality Mechanical to insist that all subcontractors, their employees, and our direct employees understand and strictly adhere to the provisions of the Occupational Health and Safety Act and all applicable regulations.

The duties, and responsibilities of the supervisor, employee and employer, legislated in the Occupational Health and Safety Act, are of paramount importance. Below are some of the most fundamental Safety Rules; know them and adhere to them. Your foreman or project manager will inform you of any additional safety rules and procedures as the need arises.

## Personal Protective Equipment (PPE)

### Head Protection

- C.S.A. approved class “E” hardhats must be worn at all times while you are on the project site

### Foot Protection

- C.S.A. approved footwear (“Green Patch”) with toe and sole protection must be worn at all times while you are on the project site

### Skin Protection

- Appropriate work clothing must be worn when handling and using tools and materials which may cause injuries to your skin. This includes sleeves, long pants and work gloves.

### Eye Protection

- Safety goggles or glasses must be worn at all times while on a project site. Furthermore face shields or goggles must be worn by workers, and must afford suitable eye and face protection when:
  - Welding, burning, or cutting with torches
  - Using abrasive wheels, portable grinders or files
  - Chipping concrete, stone or metal
  - Working with materials
  - Drilling or working under dusty conditions
  - Sand or water Blasting
  - Waterproofing
  - Working on energized switchboards
  - Using explosive actuated fastening or nailing tools
  - Working with compressed air or other gasses
  - When working near any of the operations listed above

## Other Personal Protective Equipment

- Other equipment such as safety belts, full body harnesses, respirators, reflective vests, flotation vests, ear protection devices, Electrical protection devices etc. must be worn when required by the Act, Regulations, or your foreman.

## Prohibitions

- For your protection DO NOT WEAR:
  - Loose clothing or cuffs
  - Greasy or oily clothing
  - Torn or ragged clothing
  - Jewellery of any type

## Drug use

### Non-prescription Drugs or Alcohol

- Non-prescription drugs or alcohol will not be allowed on the jobsite under any circumstances. Any employee found to be in possession of, or under the influence of, drugs or alcohol will not be allowed to work and is liable to be severely disciplined or terminated from employment.

### Prescription Drugs

- Quality Mechanical's Site foreman must be notified in writing if an employee is using a prescription that may affect the employee's ability to safely carry out a job function.

### Heavy Lifting

- Always seek assistance or use mechanical lifting devices when attempting to lift heavy material. Avoid awkward positions and always lift with your legs, not your back. Your back is very susceptible to injury especially in a bent position.

### Housekeeping

- Work areas must be kept clean and free of debris. Employees must clean their work area at least once a day.
- Tools must never be placed near edges or openings as these items may fall on someone working below. Keep all tools and materials at least 6 feet back from edges and openings.
- All Tools with moving parts must be properly guarded.

## **Fall Protection**

### **Guardrails or Coverings**

- Guardrails and coverings must not be removed.

### **Jumping**

- No person shall jump from one level to another. Anyone discovered jumping will be reprimanded and subject to immediate removal from the job site. Use proper means of access and egress at all times.

### **Fall Arrest**

- All employees working at heights must follow Occupational Health and Safety Act guidelines for fall arrest equipment.

### **Horseplay**

- Do not engage in any prank, contest, feat of strength, unnecessary running, or boisterous conduct.

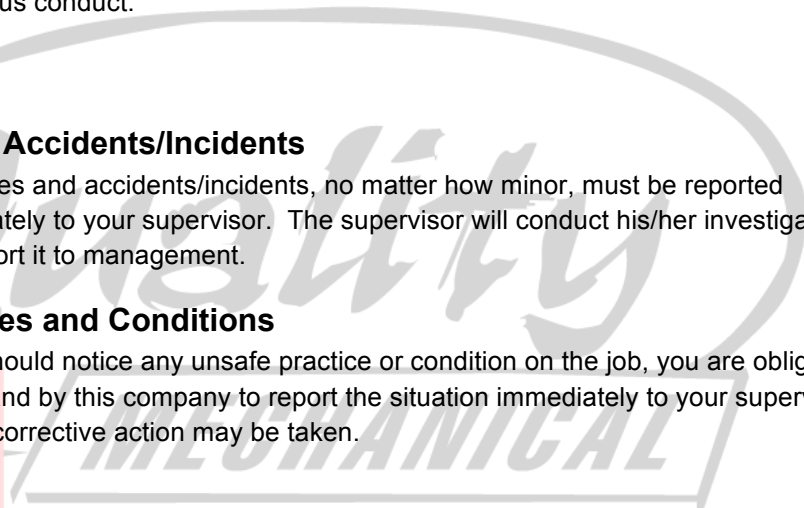
## **Accident Reporting**

### **Reporting of Injuries and Accidents/Incidents**

- All injuries and accidents/incidents, no matter how minor, must be reported immediately to your supervisor. The supervisor will conduct his/her investigation and report it to management.

### **Reporting Unsafe Practises and Conditions**

- If you should notice any unsafe practice or condition on the job, you are obligated by law and by this company to report the situation immediately to your supervisor so that corrective action may be taken.



# Safe Practices and Procedures

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## Personal Protective Equipment (PPE)

The following will be observed and practiced by the company and employees when the company undertakes any job or contract.

- All employees, guests and visitors will wear CSA-approved safety glasses, CSA Grade 1 safety boots, long trousers, long-sleeve shirts, CSA-approved hard hats, and any other specialty PPE required for the job site.
- All PPE used by this company will be within the requirements of Occupational Health and Safety legislation.
- All PPE used by this company will be maintained in accordance with manufacturer's instructions and requirements.
- Company-issued PPE will be inspected at the time of issue and before each use by the employee.
- All PPE that is damaged, or in need of service or repair will be removed from service immediately.
- All PPE that has been removed from service will be tagged "OUT OF SERVICE." Any PPE tagged "OUT OF SERVICE" will not be returned to service until repaired and inspected by a qualified person.
- The company will maintain appropriate inspection and service logs for specialty PPE.
- No piece of PPE will be modified or changed contrary to manufacturer's instructions or specifications or Occupational Health and Safety legislation.

## Hearing Protection

### Hearing Loss

- Hearing loss – any reduction in the normal ability to hear is referred to as a loss of hearing. A hearing loss can be either temporary or permanent.
- With a temporary hearing loss, normal hearing will usually return after a rest period away from all sources of intense or loud noise. The recovery period may be minutes, hours, a day or perhaps even longer. Temporary hearing loss occurs when hair cells in the inner ear have been bent by vibrations and need time to bounce back.
- Permanent hearing loss is the result of hair cell or nerve destruction within the inner ear. Once these important parts of the hearing process are destroyed, they can never be restored or regenerated. The resulting permanent hearing loss, also referred to as permanent threshold shift (PTS), can range from slight impairment to nearly total deafness.
- Whenever possible engineering solutions should be used. PPE should be a last resort.
- Noise surveys should be performed on job sites to identify high noise areas.

## Hearing Loss Factors

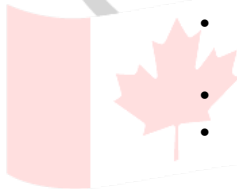
- Type of noise (Continuous, intermittent, impact, high or low frequency).
- Intensity of noise
- Duration of exposure
- Type of noise environment (Character of surroundings – for example, enclosed, open, reflective surfaces.)
- Source distance(s)
- Worker's position
- Worker's age
- Individual susceptibility (Sensitivity difference, physical impairments).
- Worker's present health (Whether a worker has any detectable losses or ear diseases.)
- Home and leisure activities (Exposures to noise other than occupational, such as hunting, skeet shooting, earphone music, snowmobiling, etc).

## Training

All workers who wear Hearing Protection Devices (HPDs) must be trained to fit, use, and maintain the protectors properly. Workers must be instructed in the proper fitting of HPDs as recommended by the manufacturer. Training should include a demonstration. Workers should then practice using the HPDs under close supervision. Checks are needed to ensure the best possible protection.

Workers should understand the following:

- that there is risk of hearing loss increases if HPDs are not worn in noisy environments (eight-hour exposure of 85 dBA).
- that wearing HPDs is required in all situations where noise exposure may damage hearing.
- that to be effective an HPD must not be removed even for short periods.
- that various HPDs are available to accommodate differences in ear canal size, jaw size, head size and shape, comfort level, compatibility with other forms of PPE, etc.
- that proper fit is essential to achieve maximum protection.



## Choosing the Correct Hearing Protection

Use the following table to identify proper hearing protectors based on noise.  
(Classes are based on CSA classification)

MAXIMUM NOISE LEVEL (dBA)	RECOMMENDED CLASS OF HEARING PROTECTOR
Less than 85 dbA	No protection required
Up to 89 dBA	Class C
Up to 95 dBA	Class B
Up to 105 dBA	Class A
Up to 110 dBA	Class A plug + Class A or Class B muff
More than 110 dBA	Class A plug + Class A or Class B muff and limited exposure

Use the following table to compare typical construction noise levels with the work you are performing. Note: If more than one activity is being performed near the same location the noise levels will increase. Chose your protection based on the highest noise levels.

* EQUIPMENT	NOISE LEVEL (DBA) AT OPERATOR'S POSITION
Cranes	78 – 103
Backhoes	85 – 104
Loaders	77 – 106
Dozers	86 – 106
Scrapers	97 – 112
Trenchers	95 – 99
+ Pile drivers	119 – 125
Compactors	90 – 112
+ Explosive-actuated tools	120 – 140
Grinders	106 – 110
Chainsaws	100 – 115
Concrete saw	97 – 103
Sand blasting nozzle	111 – 117
Jackhammers	100 – 115
Compressors	85 – 104

## Respiratory Protection

A wide variety of equipment can be used to protect workers from respiratory hazards. Devices range from simple, inexpensive dust masks to sophisticated self-contained breathing apparatus. Choosing the proper respiratory protection is key to protecting yourself from hazardous gases, vapours, fumes, mists and dusts.

Respiratory protective equipment can prevent illness, disease, and death from breathing hazards. However, the equipment must be properly selected, fitted, worn, and maintained to ensure maximum protection.

## Respirator Selection

In order to select the proper respirator for a particular job, it is necessary to know and understand:

- the characteristics of the contaminant(s),
- the anticipated exposure conditions,
- the performance limitations of the equipment,
- Any legislation that applies.

Refer to the Material Safety Data Sheet (MSDS) or Sheets if more than one product is being used. The MSDS will identify any respiratory protection required and should specify the type of respirator to be worn.

An assessment should be made to ensure that workers who are called upon to use respirators are medically fit to do so.

It is also important to realize that facial hair and deep facial scars can interfere with the seal between the respirator and face. Respirators should only be selected by someone who understands all of these factors.

If there is any doubt about the correct type of protection for a specific material and operation, consult the manufacturer of the product, a supplier or manufacturer of respirators, or the CSAO.

## Fit Testing

Before each use, you must perform a Positive and Negative pressure test. This applies to respirators only. If the required protection is a filtering half face piece (dust mask) then follow manufacturer's instructions.

### Negative Pressure Test

The wearer puts on the respirator and adjusts it so that it feels relatively comfortable. Then the air inlets are blocked off with the hands or a plastic cover, and the wearer inhales gently. If the respirator is properly fitted, it should collapse slightly and not permit any air into the face piece. If leakage is detected, the mask should be readjusted and the test repeated until the fit is satisfactory.

### Positive Pressure Test

The wearer puts on the respirator and adjusts it so that it feels relatively comfortable. Then the exhaust port of the respirator is covered and the wearer tries to exhale gently. The face piece should puff away from the wearer, but no leakage should occur.

### General Instructions:

- Filters should be changed as follows:
  - Dust/mist/fume filters should be changed when there is noticeable resistance to normal breathing.
  - Chemical cartridge respirators should be changed when the gas or vapour can be tasted or smelled.
  - Any filter should be changed at the interval specified by the manufacturer or when damaged in any way.
- Inhalation and exhalation valves should be checked before the respirator is used.
- Damaged face piece, straps, filters, valves, or other parts should be replaced with "original equipment" parts.
- Face pieces should be washed with mild soapy water as often as necessary to keep them clean and wearable.
- Respirators should be assigned to the exclusive use of individual workers.
- Where a respirator must be assigned to more than one worker, it should be disinfected after each use. (Check with the manufacturer regarding acceptable sanitizers/disinfectants.)
- Check all supply hoses, valves, and regulators on supplied-air respirators as specified by the manufacturer.
- SCBA units and high-pressure cylinders of compressed breathing air should be used and maintained in accordance with current Canadian Standards Association Z180.1 Compressed Breathing Air and Systems, and Z94.4 Selection, Care and Use of Respirators.
- Compressors and filtration systems used with supplied-air respirators must be maintained in accordance with the manufacturers' recommendations.



## Dust

### What are the hazards?

There are two kinds of hazardous dust common in construction. These include:

- fibrous dust from insulation materials (such as asbestos, mineral wool, and glass fibre) and
- non-fibrous silica dust from sandblasting, concrete cutting, or rock drilling

### Where does construction dust come from?

Dusts are particles which are usually many times larger than fume particles. Dusts are generated by crushing, grinding, sanding, or cutting and by work such as demolition.

### Preventative Measures

Ventilation:

- Natural dilution ventilation — welding outside in a light breeze or inside with doors and windows open provides large volumes of fresh air which should disperse airborne contaminants sufficiently in most cases. However, it is important for the welder to stay to one side of the plume.
- Mechanical dilution ventilation – Fans such as roof exhaust fans and wall fans force outside air into and out of the building. General mechanical ventilation in most cases will deflect the plume out of the welder's breathing zone.
- Local exhaust ventilation – Consists of an exhaust fan, air cleaner, and ducted system dedicated to removing airborne contaminants at the source and exhausting them outdoors. Local exhaust ventilation is preferred over dilution ventilation because it is better able to prevent airborne contaminants from entering the welder's breathing zone.

Respiratory Protection:

- See the Respirator Protection section of this program for guidelines on selecting respiratory protection.

If you are in doubt about choosing the correct Respiratory protection or if you are not sure to the source of the dust stop work and advise your supervisor.

## Heat and Cold Stress

### Heat Stress

Heat stress takes place when your body's cooling system is overwhelmed. It can happen when heat combines with other factors such as:

- hard physical work
- fatigue (not enough sleep)
- dehydration (loss of fluids)
- certain medical conditions.
- Heat stress can lead to illness or even death.

### Employers' legal requirements

Employers have a duty under Section 25 (2) (h) of the *Occupational Health and Safety Act* to take every precaution reasonable in the circumstances to protect the worker. This includes developing policies and procedures for hot environments.

### Heat stress Conditions

- Heat rash: itchy red skin.
- Heat cramps: painful muscle cramps.
- Heat exhaustion: high body temperature; weakness or feeling faint; headache, confusion or irrational behaviour; nausea or vomiting.
- Heat stroke: no sweating (hot, dry skin), high body temperature, confusion, or convulsions. Get immediate medical help.

### Follow these procedures when working in hot, humid conditions

- Increase the frequency and length of rest breaks.
- To stay hydrated drink some cool water at least every ½ hour
- Caution workers about working in direct sunlight.
- Observe co-workers for signs of heat stress.
- Employees must wear light summer clothing to allow air to move freely and sweat to evaporate. Shirts are to be worn at all times.

### Cold Stress

- When you're cold, blood vessels in your skin, arms, and legs constrict, decreasing the blood flow to your extremities. This helps your critical organs stay warm, but your extremities are at risk for frostbite.
- Frostbite means that your flesh freezes. Blood vessels are damaged and the reduced blood flow can lead to gangrene.
- The first sign of frostbite is skin that looks waxy and feels numb. Once tissues become hard, it's a severe medical emergency.
- Wind chill accelerates heat loss—sometimes to a dramatic extent. For example, when the air temperature is  $-30^{\circ}\text{C}$ , with no wind, there is little danger of skin freezing with 16 km/h wind (a flag will be fully extended), your skin can freeze in

about a minute with 32 km/h wind (capable of blowing snow), your skin can freeze in 30 seconds.

- When your core temperature drops, you're at risk for hypothermia. Early signs of hypothermia are shivering, blue lips and fingers, and poor coordination. Soon your breathing and heart rate slow down, and you become disoriented and confused. Hypothermia requires medical help.

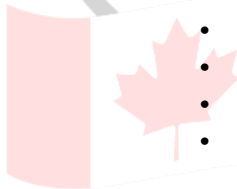
### **What you can do to prevent cold stress**

- Wear several layers of clothing rather than one thick layer.
- Wear gloves if the temperature is below 16°C for sedentary work, below 4°C for light work, and below -7°C for moderate work.
- Take warm, high-calorie drinks and food.
- If your clothing gets wet at 2°C or less, change into dry clothes immediately to prevent hypothermia.
- If you feel hot, open your jacket but keep your hat and gloves on.

### **Hot Work**

Work involving welding, cutting and burning can create fires and breathing hazards for workers on any part of the job. The following should be considered prior to the start of work.

- Always ensure that adequate ventilation is supplied since hazardous fumes can be created during welding, cutting or burning
- Where other workers may be exposed to the hazards they must be alerted and protected by use of screens
- Never start work without authorization
- Always have proper firefighting equipment on hand before starting
- Check the work area for combustible materials and flammable vapours
- A welder should never work alone. A fire and spark watch should be maintained
- Protect cables and hoses from slag and sparks
- Never weld or cut lines, drums, or tanks that have been in service without making sure that all have been purged or other necessary precautions are in place
- Never enter, weld or cut in a confined space without proper air quality testing and a qualified safety lockout in place
- When working overhead, use fire resistant materials such as blankets and tarps to control or contain slag and sparks
- Cutting and welding must NOT be performed where sparks and slag will fall on cylinders. Move all cylinders away to one side.
- Open all cylinder valves slowly. The wrench used for opening the cylinder valves should remain on the valve spindle.



## Ventilation

Some of the metal melted at high temperatures during welding vaporizes. The metal vapour then oxidizes to form metal oxide. When this vapour cools, suspended solid particles called fume particles are produced. Welding fumes consist primarily of suspended metal particles invisible to the eye. If inhaled these particles may reach deep into the lungs and cause damage to lung tissue and in some cases may enter the bloodstream and damage other parts of the body. Several Gasses and vapours may be produced by welding. If inhaled these gasses and vapours can produce a variety of respiratory effects including:

- Inflammation of the lungs
- Pulmonary edema (fluid accumulation in the lungs)
- Emphysema (loss of elasticity in the lungs)
- Chronic bronchitis
- Asphyxiation

Respiratory protection will not be required for most welding operations as long as proper ventilation is provided. However when ventilation is not adequate, or when the welding process creates toxic fumes (for example stainless steel or beryllium) a proper respirator must be worn.

Proper ventilation includes:

- Natural Dilution ventilation – Welding outside in a light breeze or indoors with doors and windows open is adequate for most welding as long as the welder stays to one side of the plume.
- Mechanical dilution ventilation – Fans that force outside air into the and out of the building. General mechanical ventilation in most cases will deflect the plume out of the welders breathing zone.
- Local exhaust ventilation – Consists of an exhaust fan, air cleaner, and ducted system dedicated to removing airborne contaminants at the source and exhausting them outdoors. Local exhaust ventilation is preferred over dilution ventilation because it is better able to prevent airborne contaminants from entering the welders breathing zone.

## Gas Cylinders

- When not in use Gas cylinders must be stored outdoors in locked designated areas.
- Different gasses should be stored separately and isolated from other flammables.
- Keep full cylinders separated from empty cylinders.
- Cylinders are to be stored in a valve capped, secured upright position.
- A crane or hoist must not be used to transport a cylinder
- Cylinders must be adequately secured when taken to a work area
- Always use proper fitting wrenches when connecting cylinders, never use vice grips or pipe wrenches.
- Check valves for leaks using a soapy liquid around the valve connection.

- No one shall use a compressed air or gas to blow dust from their clothes and no one shall blow compressed air or gas at any other worker.

## Propane torches

- When using a torch, employees must wear eye protection and approved hand protection.
- Prior to use ensure that all torching equipment is in good working order and the cylinder valves are clean. Check that fittings, hoses and heads are secure.
- DO NOT USE any equipment found to be defective.
- Use soapy water to check for connection leaks.
- Only use a spark lighter or electronic starter to light a torch.
- Protect the propane hose from damage by:
  - Keeping the torch flame away from the hose
  - Keeping the hose free of kinks
  - Not running over the hose with equipment
  - Not using the hose to lift the cylinder.
- A torch flame can be difficult to see in daylight, be aware of and keep away from the flame.
- NEVER LEAVE AN OPERATING FLAME UNATTENDED
- Other than the operator, all workers should maintain a minimum distance of 1 metre from the torch.
- Set torch units into support leg position when not in use.
- To shut off the torch, close the cylinder valve first to allow gas to burn out, then close the torch valve.
- At the end of the day, disconnect hoses and store properly.

## Portable Arc Welders

- Portable Arc Welders are never to be operated indoors.
- Be sure the machine is firmly attached to the transporting unit
- Check all fluid levels to be sure they are at acceptable operating levels.
- When fuelling do not "top off" the fuel tank. Gasoline expands as the outside temperature rises, and may result in seepage and start a fire.
- Do not fuel the machine while it is running.
- Be sure the radiator and fuel caps are in proper working order and are securely attached,
- Do a circle check looking for damage or obvious leaks before each use.
- Any repairs should be done by a qualified mechanic.
- Make sure all cables are tightly would when transporting
- Ensure all side covers are kept closed to prevent the machine from damage from external sources and/or weather, as well as to protect the operator and other workers from the moving parts of the machine.

## Grinding

- Always be sure to wear proper PPE when grinding. This includes goggles or a face shield and approved hearing protection.
- Check the tool rest for the correct distance from the abrasive wheel – 1/8" or 3mm

- Replace the grindstone when adjustment of the rest cannot provide proper clearance
- If the wheel has been abused and ground to an angle or grooved, reface the wheel with an appropriate surfacing tool, or replace the wheel.
- Each time a grinding wheel is replaced, check the maximum approved speed against the shaft rotation speed of the machine to ensure the safe speed is not exceeded.
- A grinding wheel is not to be operated beyond the manufacturers recommendations
- The flanges supporting the grinding wheel should be a maximum of 1/3 the diameter of the wheel, and must fit the shaft rotating speed according to the manufacturers recommendation.
- Bench grinders are designed for peripheral grinding, to not grind on the side of the wheel.
- Do not stand directly in front of the grinding wheel when it is first started.
- Do not use grinders near flammable materials

## Propane

Since propane is heavier than air and invisible, it is of special concern when it is used on the jobsite. All installations and use of this product must comply with the legislation set out for its safe use.

- Suppliers delivering the product or setting up the equipment must be trained in the safe handling of the material.
- Nylon slings must be used in a “choker” fashion when loading, off-loading or lifting propane tanks.
- “Lifting lugs” provided on tanks are not to be used. Slings are to be wrapped around the shell of the tank.
- Tank valves and regulators are to be removed from the tank prior to moving.
- Crane hooks shall be equipped with a “safety latch”.
- All trucks, cranes or equipment used to handle propane tanks must be equipped with a fire extinguisher appropriate for the size and type of tank.
- Except in an emergency, any movement or repositioning of tanks shall be performed by a competent worker.
- Tanks are not to be heated to increase flow.
- When in use, propane bottles are to be securely held in an upright position. Tanks are not to be hooked up and used without proper regulators

## Hazardous Materials

### Transporting Flammable Liquids

- Gasoline and other highly flammable liquids must not be carried in the passenger compartment of a vehicle.
- Gasoline and other highly flammable liquids must be transported and stored in approved containers bearing the CSA or ULC label.
- Ensure that the containers are not damaged and that caps or fittings are properly secured after filling.

- Flammable liquids must be transported in an upright position, braced or otherwise secured to prevent overturning.
- When transporting gasoline or other flammable liquids in a van, place the containers in the rear of the van with adequate ventilation. Remove the containers from the van immediately upon arrival at the destination.
- Provide a 5BC fire extinguisher in the driver's compartment when gasoline or other flammable liquids are transported in a van.
- Do not use gasoline as a cleaner.
- Gasoline engines should be shut off and allowed to cool before refuelling.

## Propane

- Unless designed for horizontal use, propane cylinders must be kept in an upright position.
- Propane cylinders must be stored in a well-ventilated area away from heat sources, outdoors and above grade.
- Only approved hoses and fittings must be used to connect a cylinder to tools and equipment.
- When not in use, propane cylinders and hose-connected devices must not be left in trenches or other low-lying areas. Propane is heavier than air and can settle in dangerous concentrations at the bottom of trenches, manholes, vaults, basements, sumps and other below-grade areas.
- Never look for leaks in a propane cylinder or hose with a flame. Use soapy water.

## Oxygen & Acetylene

- Leather gauntlet gloves and goggles with No. 4 or 5 lens shade must be worn by workers using an oxyacetylene cutting torch. No.4 or 5 lenses do not remove arc-welding rays.
- Oxygen and acetylene cylinders must be secured in an upright position at all times during storage, use and transportation.
- Cylinders should be stored in a well-ventilated area, outside with overhead protection from the weather.
- Protective caps must be in place when the cylinders are not in use or when they are being moved.
- Type BC fire extinguishers must be available whenever oxyacetylene cutting is being done.
- Cylinders must not be placed where they may become part of an electric circuit or be inadvertently struck by a welding rod.
- Cylinders must be hoisted in properly rigged racks or baskets to keep them secure and upright.
- Workers using oxyacetylene must not carry butane lighters.
- Oxygen or acetylene torches must not be used to blow dust from work surfaces, clothing or skin.
- Do not move cylinders without first closing the valves.
- Do not use regulators, hoses or torches unless they are working properly.
- Use only a spark lighter to ignite torches. Never use matches or a cigarette lighter.

- A leaking gas cylinder must be shut off and removed to an outdoor location away from ignition sources and marked to be readily identifiable. The supplier should be notified about the defective cylinder.
- Keep acetylene cylinders away from heat source. The surrounding temperature must be kept below 54 C (130 F).
- Empty cylinders must be stored separately from full cylinders. Store acetylene cylinders separately from oxygen cylinders.
- Cylinders must not be placed where materials or equipment can strike, fall on or knock them over.
- Supply hoses must be protected from traffic.

## Fire and Fire Extinguishers

Good housekeeping is essential in the prevention of fires. Fires can start anywhere and at any time. This is why it is important to know the type of fire extinguisher to use and how to use it.

Always keep fire extinguishers visible with easy access. Fire extinguishers have to be properly maintained and inspected at least monthly. Where temperature is a factor, ensure that care is taken in selecting the right extinguisher.

Workers must receive training before using fire extinguishing equipment.

### Types of Fires

1. Class A: Wood, paper, rags, rubbish and other ordinary combustible materials.
  - Recommended Extinguishers: Water from a hose, pump type water can, pressurized extinguisher, or soda acid.
  - Fighting the Fire: Soak the fire completely – even the smoking embers.
2. Class B: Flammable liquids, oil and grease.
  - Recommended Extinguishers: ABC units, dry chemical, foam and carbon dioxide.
  - Fighting the Fire: Start at the base of the fire and use a swinging motion from side to side, always keeping the fire in front of you.
3. Class C: Electrical equipment.
  - Recommended extinguishers: Carbon dioxide and dry chemical (ABC units).
  - Fighting the Fire: Use short bursts on the fire. When the electrical current is shut off on a Class C fire, it can become a Class A fire if materials around the electrical fire are ignited.

## Solvents and Flammable Liquids

Cleaning solvents are used in day-to-day construction work to clean tools and equipment. Special care must be taken to protect the worker from hazards which may be created from the use of these liquids. Wherever possible, solvents should be non-flammable and nontoxic.



The foreman must be aware of all solvents/flammables that are used on the job, and be sure that all workers who use these materials have been instructed in their proper use and any hazard they pose. The following practices will apply when solvents/flammables are used:

- Use non-flammable solvents for general cleaning.
- When flammable liquids are used, make sure that no hot work is permitted in the area.
- Store flammables and solvents in special storage areas.
- Check toxic hazards of all solvents before use (MSDS).
- Provide adequate ventilation where all solvents and flammables are being used.
- Use goggles or face shields to protect the face and eyes from splashes or sprays.
- Use rubber gloves to protect the hands.
- Wear protective clothing to prevent contamination of worker's clothes.
- When breathing hazards exist, use the appropriate respiratory protection.
- Never leave solvents in open tubs or vats. Return them to storage drums or tanks.
- Ensure that proper containers are used for transportation, storage and the field use of solvents/flammables.
- Where solvents are controlled products, ensure that all employees using or in the vicinity of use or storage are trained in the Workplace Hazardous Materials Information System (WHMIS).
- Ensure all WHMIS requirements are being met.

## Compressed Air

Air powered tools in construction range from stapling guns to jack hammers. If not treated with respect, these tools can become a detriment rather than a benefit.

- Compressed air must not be used to blow debris or to clear dirt from any worker's clothes.
- Ensure that the air pressure has been turned off and the line pressure relieved before disconnecting the hose or changing tools.
- All hose connectors must be of the quick disconnect pressure release type with a "safety chain/cable".
- Wear personal protective equipment such as eye protection and face shields. Restrict access to the area or ensure other workers in the area are aware of hazards.
- Hoses must be checked on a regular basis for cuts, bulges, or other damage. Ensure that defective hoses are repaired or replaced.
- A proper pressure regulator and relief device must be in the system to ensure that correct pressures are maintained.
- The proper air supply hoses must be used for the tool/equipment being used.
- The equipment must be properly maintained according to the manufacturer's requirements.

## Explosive/Powder Actuated Fastening Tools

There are a number of tools that utilize an explosive charge in use throughout the construction industry. The manufacturers of these devices provide detailed instructions regarding their use and maintenance. These instructions, along with specific legislation shall be closely adhered to at all times.

The following general recommendations apply to all explosive/powder actuated tools.

- Only properly trained and qualified personnel are to use this type of tool.
- The tool must be CSA-approved for “Explosive Actuated Fastening Tools”.
- The tool should be loaded just prior to use with the correct charge for the job anticipated. Tools should never be loaded and left alone or moved to an alternate work site after being loaded.
- The tool should never be pointed at anyone, whether loaded or unloaded. Hands should be kept clear of the muzzle at all times.
- Explosive/powder actuated tools should always be stored in their proper lock boxes.
- Explosive/powder actuated tools must never be used in an explosive atmosphere.
- When used, the tool must be held firmly and at right angles to the surface being driven into.
- Eye protection must be worn by the operator.
- Where there is a danger of spilling, full face protection must be worn.
- Appropriate hearing protection is to be worn.
- To prevent free-flying studs, ensure that the material being driven into will not allow the stud to pass through it (glass block, hollow tile etc.).
- Manufacturer’s recommendations should be consulted and followed whenever there is a doubt about the material being driven into, maintenance procedures, or determining the charge to be used.
- Always be aware of other workers. Where a hazard to other workers is created by this operation, properly sign and barricade the area.

## Chain Saws

Chain saws are used for various types of work. Before attempting to operate one, you should be aware of the following:

- The operator should be trained by a qualified trainer in the care, use and maintenance of the piece of equipment being operated.
- The personal protective equipment should be in good condition and donned before operating. This PPE should include, but not be limited to:
  - Hardhat
  - Gloves
  - Face shield

- Ballistic leggings
- Protective footwear
- Other PPE deemed appropriate to the work
- The chain saw should be inspected according to manufacturers' specifications prior to use.
- Defective equipment should be tagged "out-of-service".
- Maintain safe work limits to co-workers and/or equipment.
- Practice good housekeeping techniques.

## Power Tools

- Read all manuals carefully to learn your tool's applications, limitations, and hazards
- Ground your tool unless it is double insulated
- Do not use a power tool in rain, damp or wet locations or in the presence of explosive atmospheres
- Remove materials or debris that may be ignited by sparks
- Keep your work area clean and well lit
- Do not wear loose clothing or jewellery
- Wear protective hair covering to contain long hair, which may be caught in moving parts
- Wear proper gloves and insulated non skid footwear when outdoors
- Keep hands and gloves away from moving parts
- Wear safety goggles or glasses with side shields that comply with current safety standards
- Hearing protection is a must during extended use of a power tool
- Wear a dust mask during dusty operations
- Wear other PPE as required
- Keep a fire extinguisher nearby
- All bystanders must be kept at a safe distance from the work area to protect themselves and the operator
- Provide barriers or shields as necessary to protect others in the work area from sparks and debris
- Secure work with a clamp, vice or other practical means of holding work, tools should be held with both hands to ensure total control of the tool.
- Do not use a tool or attachment to do a job for which it is not recommended. DO NOT ALTER TOOLS
- Non recommended accessories may be hazardous and shall not be used. Install and maintain accessories as per tool instructions.
- Don not defeat a guard or other safety device when installing and accessory or attachment.
- Inspect guards and other parts before use. Check for mis-alignment, binding of moving parts, improper mounting, broken parts, and any other conditions that may affect operation
- If abnormal noise or vibration occurs the tool must be turned off immediately and the problem corrected before further use of the tool.
- Check that all adjusting keys and wrenches are removed from the tool before the power is turned on.

- Prevent body contact with grounded surfaces such as pipes.
- When making blind or plunge cuts always check the area for hidden wires or pipes
- Hold your tool by insulated, non-metal grasping surfaces
- Use a ground fault circuit interceptor (GFCI) to reduce shock hazards
- Do not force a tool to perform at a rate other than what it was designed for. Excessive force causes operator fatigue, increased wear and reduced control.
- Keep hands away from all cutting edges and moving parts
- Never carry a tool by its cord, or unplug it by yanking the cord from the outlet. Pull the plug rather than the cord to reduce the risk of damage
- Keep cords away from heat, oil, sharp objects, cutting edges and moving parts.
- Do not overreach. Maintain proper footing and balance at all times. Use extra care when using tools on ladders, roofs, scaffolds etc.
- Do not use a tool when you are tired, distracted, or under the influence of drugs, alcohol or any medication which decreases control.
- Unplug a tool when it is not in use, before changing accessories or performing recommended maintenance
- Maintain tools. Keep handles dry, clean and free from oil and grease. Keep cutting edges sharp and clean. Follow instructions for lubricating and changing accessories
- Periodically inspect tool cords and extension cords for damage
- When power tools are not in use store them in the proper storage cases. If equipment does not have a proper storage case, store it in an on-site job box with lock, or return it to the storage crib at the shop
- Report any damaged tools immediately so a replacement or repair can take place. Tag the damaged tools with "DO NOT USE"
- Maintain labels and nameplates
- Watch what you are doing and use common sense.

## Hand Tools

- Defective hand tools can cause serious injuries. If a tool is defective in some way DO NOT USE IT.
- Be aware of problems such as:
  - Chisels and wedges with mushroomed heads
  - Split or cracked handles
  - Chipped or broken drill bits
  - Wrenches with worn out jaws
  - Tools which are not complete, such as files without handles.
- To ensure safe use of tools remember:
  - Never use a defective tool
  - Double check all tools prior to use
  - Ensure defective tools are repaired

## Electrical Safety

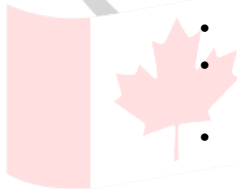
Accidental contact with electrical components can have deadly consequences. All work with electrical systems must be performed by employees who are properly trained in safe procedures for that job. Always refer to the

manufacturers recommended operating practices prior to using a new electrical appliance, tool or piece of equipment. Use the following general guidelines to reduce the risk of personal injury.

- All electrical tools and appliances will be double insulated or have a three prong plug and be designed for the intended use.
- Only qualified and authorized electricians are allowed to service or repair electrical appliances, tools and equipment.
- Prior to operating electrical power tools and equipment, ensure that you are working on a dry surface
- Tools with damaged cords, grounds and housing units are to be tagged “out of service” and sent for repair.
- Missing or damaged ground plugs of any appliance, tool or piece of equipment are to be repaired prior to use.
- Always stand to the side of a service box when resetting a breaker
- All electrical tools must be CSA approved
- Disconnect power tools from power source before making adjustments. Defective equipment needs to be tagged “out of service” and removed
- Tools with electrical arcing brushes should be removed if you feel any tingling during use.
- When performing work on electrical sources only non-conducting tools should be used.
- Flammable materials should never be stored near electrical equipment

### **Extension Cords**

- All portable extension cords must be of the outdoor type rated for 300 volts, and have an insulating ground conductor
- All extension cords will be CSA approved and inspected before each use
- Defective cords must not be used. They must be tagged “out of service” and removed from the worksite to be either destroyed or repaired.
- Extension cords must be protected during use to prevent damage from sharp edges, movement of materials and flame cutting.
- All cord-connected devices must be connected to a ground-fault circuit interrupter when such devices are used outdoors or in wet locations.



## Tagging and Lockout

- Review all drawings of the system to be de-energized and de-activated to determine the switches, power sources, controls, interlocks, and other such devices necessary to isolate the system. Confirm with the client/owner where required
- All apparatus capable of being electrically energized or dynamically activated must be de-energized or de-activated by locking out, physically disconnecting or otherwise rendering the apparatus inoperable.
- Test the system with a CSA-certified potential test indicator to ensure that all components are de-energized and de-activated, including interlocking or dependent systems which could feed into the system being isolated, either mechanically or electrically. Potential test indicators should not be used beyond the voltage limits for which they are rated.
- Observe the following safeguards for locking out and tagging
  - After a circuit has been de-energized, locked by the person in charge, workers must be protected by personally placing their own safety lock on the disconnect switch. The worker must retain the key for this lock while the lock is in place.
  - Where several workers or trades are working on the circuit, provision must be made through the use of a lockout bar. This arrangement can be accommodated by placing a lockout bar in the final hole of the previous bar.
  - In accordance with section 190 (6)3 of the current Regulations for Construction Projects (O.Reg. 213/91), each worker must attach to their lock a durable tag filled out with the following information
    - Reason the equipment was disconnected
    - Name of the person responsible for the disconnection
    - Date of disconnection
  - The de-energized electrical system must be discharged by short circuit and phase to ground. A temporary ground cable must be attached to the system and remain in place until work is completed.
- Supervisors must keep a record of the devices opened, locked out, or otherwise rendered inoperable so that all of these devices can be reactivated once work is complete
- Place signs on the system indicating that it is not to be energized or operated and that guards, locks, temporary ground cables, chains, tags and other safeguards are not to be tampered with or removed until work is complete.
- Workers testing electrical equipment must:
  - Remove all watches, rings, neck chains or other current conducting jewellery
  - Wear electrical shock resistant footwear; and
  - Wear safety glasses with side shields.



## Buried Utilities

There is more to safe excavation than simply calling before you dig. That's only the first step in safeguarding underground utilities from damage and construction workers from harm.

Before you dig phone Ontario One Call at 1-800-400-2255. The operator will tell you which utilities will be contacted in your work area. Allow time for the utilities to schedule and perform the locates.

You can also look for posted signs identifying buried utilities. Look for evidence of unmarked utilities. Maintenance holes, catch basins, pedestals, junction boxes, water and gas meters, valve chambers, conduit affixed to wood poles, test posts, sunken ground -- these may indicate the presence of underground structures.

Don't start excavating until locates are completed. To start without locates is negligent and almost impossible to defend if something goes wrong.

Locates are available for genuine emergencies. But failing to plan ahead or failing to allow time for utilities to do their job isn't a valid reason for an emergency locate.

Many utilities have out-sourced their locating service to contractors who mark buried services in the work area with paint, stakes, or flags and then leave.

Utilities are identified by an international colour code. Some excavators rely on this code alone; others require direct contact with the utility to confirm locates. The stake-out report given to an excavator should be legible, clearly understood, and signed by both parties. The report may include special instructions such as "Erect a snow fence at this point" or "Hand dig to expose utility." Excavators should comply fully with these instructions.

### Excavate with Caution

The surest, safest way to confirm the location of any buried structure is to expose it by hand excavation. This means excavation by shovel alone, not picks or spud bars. New technology now allows for vacuum excavation as well.

Most utilities prohibit mechanical excavation within one meter on either side of painted marks. Some utilities are less specific. Confirm the location of all utilities before bringing in heavy equipment.

Stake-out marks are eventually destroyed by excavation. To protect against possible damage claims, it is recommended that the excavators photograph or videotape the staked-out site before digging.

If the stake-out report requires a utility inspector on site during excavation, make sure the inspector is there before you start digging. Ensure that all of the inspector's instructions are carried out during excavation.

## A word of caution

There's always the possibility that utilities have been staked out inaccurately or not at all. Utility locators are sometimes confused by contradictory signals in urban settings where tramp iron, abandoned services, changes in elevation, parallel fences, and overhead wires may interfere with detection equipment. Information on utility depth is especially unreliable.

Keep an eye out for evidence of previous excavation. Virgin ground is usually harder than disturbed ground. Soft ground may indicate a utility trench, backfill material, and buried services

## Trenching and Excavations

- All earth trenches more than 1.2 metres (4 feet) deep that a worker is required to enter must be shored with timbers or a pre-fabricated trench box or supported by an approved support system in accordance with the current REGULATIONS FOR CONSTRUCTION PROJECTS, or be cut with embankment slopes of 1 to 1 (45 degrees).
- Ladders must be used for getting into or out of a shored trench and be placed so that a worker is protected at all times when using the ladder.
- Work must not be performed in a trench unless another worker is working above ground in close proximity to the trench or to a means of access to it
- Buried services such as gas lines, water lines, sewers and electrical services must be located and marked before excavation starts.
- When timber shoring is used it must be installed progressively as the trench is being excavated.
- Excavations which workers are required to enter must be kept reasonably free of water
- Tools, equipment and excavated soil must be kept at least 1 metre (3 feet) from the edge of the excavation or trench.

## Confined Space

### General Hazards

Entry into and work in a confined space poses health and safety problems which may include:

- Presence or possible build up of a hazardous atmosphere
- Unexpected movement of equipment or materials
- Engulfment
- Explosive, toxic or oxygen deficient atmosphere

Work within a confined space must be carefully defined and planned ahead of the entry in order to identify all possible hazards and take appropriate preventative action.



## Responsibilities

Where confined space work is to be performed, it is the responsibility of management and supervisors to adequately identify and plan all safety requirements to be implemented prior to work commencing.

The immediate supervisor is responsible for planning the safety of the entire operation. This includes any actions required before, during or after the operation to control the actual or potential hazards present.

## Employee Training and Instruction

Any employee involved in a confined space entry must be trained in confined space entry procedures by an accredited organization. Quality Mechanical must have a copy of this certification on file.

## Pre-Job Instruction

Any work to be performed in a confined space shall be under the direction of a competent person familiar with the hazards that may be present and has received proper training.

All workers involved in a confined space entry shall be present at a pre entry job meeting to be trained in the specific hazards that may be encountered, how the job will proceed, specific precautions required and the rescue methods to be used in case of emergency.

## Personal Protective Equipment

Appropriate PPE including clothing, gloves, boots, helmets, eye, face and respiratory apparatus shall be worn that meet the requirements of the job.

## Confined Space Entry Procedure

The following steps shall be used whenever a confined space is entered by an employee. If a client has a specific confined space procedure it is to be followed so long as it offers equal or better protection.

1. A competent person must carry out a job hazard analysis to determine what hazards may be present both upon entry and during work including:
  - a. Oxygen enrichment or deficiency
  - b. Combustible dust
  - c. Harmful substances
  - d. Engulfment or entrapment
  - e. Flammable gas, dust or vapour
  - f. Other hazardous atmospheres
  - g. Hazardous energy, equipment
  - h. Other hazardous conditions
2. Prepare a safe work plan outlining potential hazards and how to control them including procedures for:
  - a. Isolation, lockout, tagging of hazards
  - b. Movement of material

- c. Lighting
  - d. Means of access and egress
  - e. Atmospheric testing requirements
  - f. Emergency response procedures including location and availability of emergency rescue personnel and equipment.
  - g. Training Requirements
  - h. Controls for ignition sources
  - i. Ventilation and purging
  - j. Alarms and communication methods
  - k. PPE
  - l. Emergency equipment
  - m. Warning signs and barricades
  - n. Additional safety procedures
3. Appoint a Safety Guard (Attendant)
- a. Ensure that the guard is aware of their responsibilities
  - b. Ensure the guard is positioned at the confined space entrance and is aware of the emergency procedures, equipped with the permit, and emergency equipment.
  - c. Is capable of performing the emergency procedures
  - d. Does not leave their post unless relieved by a qualified person.
  - e. The guard must immediately notify the supervisor of any dangerous situation that they become aware of
  - f. The guard must have or be able to immediately be able to contact a person with basic first aid certification.
  - g. Maintain a log of entry and exits from the confined space including time of entry or exit.

## Permits

The supervisor shall ensure all permits for the job site have been completed upon entry. The permit shall be signed and posted with the following information

- The length of time for which the permit is valid
- The identity of each worker allowed to enter the confined space
- The activities to be performed
- The location of the confined space
- The results of any testing done on the confined space
- Applicable precautions outlined in the entry plan

## Atmospheric Testing

Prior to any entry being made sampling for oxygen and explosive concentrations, and potential airborne contaminants in the confined space shall be performed by a competent person. If a job is stopped for a prolonged period then testing shall be done again before re entry if work permits are still in place. No Employee may enter a confined space until explosive atmospheres are reduced to no more than 10% of the Lower Explosive Limit for such chemicals (5% if Hot work is involved).

## Types of Confined Spaces

- Type 1 - Safe atmosphere provided, no immediate atmospheric hazard
- Type 2 – Hazardous atmosphere which can be made safe to enter
- Type 3 – Potentially explosive atmosphere
- Type 4 – Hazardous/unknown atmosphere on a continuous basis

## Entry Restrictions

### Type 1:

No Quality Mechanical employee will be present unless:

- There is a means of exit from the parts of the confined space that are accessible by workers
- All mechanical equipment in the confined space is disconnected from its power source and locked out
- All pipes and other supply lines into the confined space whose contents are likely to cause a hazard are blanked off
- A competent guard is stationed outside the confined space
- An emergency rescue procedure is in place

The supervisor shall at least once per shift evaluate the confined space to ensure further precautions are not required.

### Type 2

No Quality Mechanical employee shall be present in a type 2 atmosphere. In addition to the restrictions in a type 1 confined space:

- Before entry the atmosphere must be purged and ventilated to provide an atmosphere that does not endanger workers
- Measures necessary to maintain this atmosphere are taken

### Type 3

No Quality Mechanical employee shall be present in a type 3 atmosphere unless:

- All conditions for a Type 1 and Type 2 entry are present
- A worker may engage in cleaning or inspection activities that do not create a source of ignition in a confined space in which the concentration of explosive or flammable gas or vapour is not likely to exceed 50% of the lower explosive limit of the gas or vapour
- A worker may engage in cold work (that does not generate heat or sparks) in a confined space in which the explosive or flammable vapour is not likely to exceed 10% of the lower explosive limit of the gas or vapour.

## **Type 4**

No Quality Mechanical employee shall be present in a Type 4 atmosphere

unless:

- All conditions of a Type 1, Type 2, and Type 3 atmosphere are met
- Suitable protective breathing apparatus and full body harness securely attached to a rope whose free end is securely attached outside the confined space and is being held by a guard equipped with an alarm.
- A direct visual contact and communication is maintained between the worker and the guard
- The guard or a nearby worker is adequately trained in first aid and a local emergency response team is notified of the entry
- Written approval by management is provided.

### **Job completion**

Upon Job completion a thorough check of the confined space shall be made by the supervisor to ensure that no tools, equipment, or possibly workers have been left behind. Double check that all employees have been accounted for before leaving the confined space. The supervisor must remove the work permit and ensure that any locks etc. belonging to the crew are removed.

### **Documentation**

All confined space documentation is to be stored for no less than 2 years after project completion.

### **Confined Space Monitors**

Confined space monitors are to be kept at the Quality Mechanical shop. These Monitors are available upon request by supervisors.

### **Access and Egress**

- All areas of access and egress must be adequately lit.
- If material may fall on a worker, overhead protection shall be provided.
- Access and egress from a work area located above or below ground level shall be by stairs, runway, ramp or ladder
- Areas of access and egress shall be kept clear of snow, ice or other slippery material.
- Areas of access and egress shall be treated with sand or similar material when necessary to ensure firm footing.
- Every shaft shall have a means of access and egress by stairway, ladder, or ladder way for its full depth during construction and when completed.
- A cage or car on a hoist used for transporting workers in a shaft:
  - Shall be at least 1.8 meters high
  - Shall be solidly enclosed, except for openings for access and egress
  - Shall have a maximum of two openings for access and egress
  - Shall have a gate at each opening for access and egress
  - Shall have a protective cover suitable to protect passengers from falling objects.

## Fall protection

Before commencing work when fall protection is required a fall arrest rescue plan must be developed.

### Working from Scaffolds

- Scaffold platforms must be fully planked.
- Guardrails consisting of a top rail, mid-rail and toe board are required whenever the working platform is 2.5 metres (8 feet) or more above floor level.
- Wheels and casters must be locked when personnel are working on the scaffold.
- If the scaffold is more than 2.5 metres (8 feet) high, it must not be moved with personnel on it unless:
  - they wear full body harness with lanyard and shock absorber tied off to an independent fixed support and
  - the floor is firm and level.

### Working from Ladders

- A worker must wear a full body harness with lanyard and shock absorber tied off to either an independent fixed support or a lifeline whenever the worker is:
  - 3 metres (10 feet) or more above the floor, or
  - above operating machinery, or
  - above hazardous substances or objects.

### Working from Swing Stages

- A worker must wear a full body harness with lanyard and shock absorber tied off to:
  - an independent lifeline, if the swing stage has only two independent suspension lines, or
  - the swing stage, if it has four independent suspension lines (two at each end).

### Working Beside Unprotected Openings and Edges

- A worker must wear a full body harness with lanyard and shock absorber tied off to an independent fixed support whenever the worker is more than 3 metres (10 feet) above the next level or whenever the worker is above operating machinery, hazardous substances or objects regardless of the possible fall height.

### Full Body Harnesses, Lanyards, and Shock Absorbers

- All full body harnesses, lanyards, and shock absorbers must be CSA-certified. Look for the CSA label.
- Full body harnesses must be snug-fitting and worn with all hardware and straps intact and properly fastened.

- Lanyards must be 16 millimetre (5/8") diameter nylon or equivalent.
- Lanyards must be equipped with a shock absorber.
- All Harnesses, Lanyards and shock absorbers must be inspected before each use.
- Defective equipment must be tagged "Out of Service"

## Lifelines

All lifelines must be:

- 16 millimetre (5/8") diameter polypropylene or equivalent
  - used by only one worker at a time
  - free from any danger of chafing
  - free of cuts, abrasions and other defects
  - long enough to reach the ground or knotted at the end to prevent the lanyard from running off the lifeline
  - secured to a solid object

## Rope Grabbing Devices

- To attach the lanyard of a full body harness to a lifeline, use a mechanical rope grab that has been CSA-certified. Look for the CSA certification stamp.

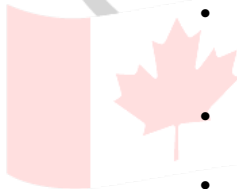
## Ladders

- All portable ladders must be equipped with non slip bases.
- Ladders must be set up on a firm, level surface. If the base is to rest on soft, uncompacted or rough soil a mud sill shall be used
- Straight ladders will be tied off or otherwise secured to prevent movement. If this is not possible, one worker shall hold the base of the ladder while it is being used
- When a task must be done while standing on an extension ladder, the length of the ladder shall be such that no worker stands on a rung higher than the fourth from the top.
- When climbing up or down workers must always face the ladder
- Unless suitable barricades have been erected, or other adequate protection provided, ladders must not be set up in passageways, doorways, driveways or other locations where they can be struck or bumped by persons or vehicles
- Ladders must not be erected on boxes, carts, tables, scaffold platforms, elevating work platforms or on vehicles.
- Straight ladders must be set up on an angle such that horizontal distance between the top support and the base is not less than one-quarter or greater than one third of the vertical distance between these points.
- Metal ladders or ladders with wire reinforcing must not be used in the proximity of energized electrical conductors.
- Wooden ladders must be unpainted or finished with a clear non-conductive wood preservative
- All ladders erected between levels must be securely fastened, extend 90 centimetres (3 feet) above the top landing and afford clear access at top and bottom.

- Ladders with weakened, broken, or bent side rails, broken, damaged, or missing non-slip bases, or otherwise defective must be tagged “not in service” and removed from the jobsite.
- Ladders must not be used horizontally as substitutes for scaffold planks, runways, or any other service for which they are not designed
- Workers on a ladder must not straddle the space between the ladder and another object.
- Three points of contact must always be maintained when climbing up or down a ladder.
- Load limits are never to be exceeded.

## Scaffolding

- The erection and dismantling of scaffolds must be carried out under the supervision of a competent worker who is knowledgeable and experienced in such operations.
- Workers erecting and dismantling a scaffold more than 2.4 metres (8 feet) high must be tied off with a full body harness and lanyard equipped with a shock absorber.
- Scaffolds must be erected with all braces, pins, screw jacks, base plates, and other fittings installed, as required by the manufacturer.
- Scaffolds must be adequately braced horizontally and vertically.
- Scaffolds must be equipped with guardrails consisting of a top rail, mid-rail and toe board.
- Scaffold platforms must be at least 46 centimetres (18 inches) wide and if they are over 2.4 metres (8 feet) high they must be planked across their full width.
- Scaffolds must be tied in to a building at vertical intervals not exceeding three times the least lateral dimension, including the dimension of any outrigger stabilizing devices.
- Where scaffolds cannot be tied in to a building, guy lines adequately secured should be used to provide stability.
- Scaffold frames must be properly pinned together where scaffolds are two frames or more in height or where they are used as rolling scaffold towers.
- Scaffolds must be erected, used and maintained in a reasonably plumb condition.
- Scaffold planks must be securely fastened to prevent them from sliding.
- Scaffold planks must be installed so that they overhang by at least 15 centimetres (6 inches) but no more than 30 centimetres (12 inches).
- Scaffold planks must be:
  1. of good quality,
  2. free of defects, such as loose knots, splits or rot,
  3. rough sawn, measuring 48mm X 248mm (1 7/8 " X 9-3/4") in cross section, and
  4. No. 1 spruce or better.
- Scaffolds must be equipped with a proper ladder for access. Vertical ladders must be equipped with 15 centimetre (6 inch) stand-off brackets



- and a ladder climbing fall protection device or safety cage when they are more than 3 metres (10 feet) high.
- Frame scaffolds over 15 metres (50 feet) high and tube-and-clamp scaffolds over 10 metres (30 feet) high must be designed by a professional engineer and constructed in accordance with the design.
  - Remove ice, snow, oil, grease and other slippery material from the platform, and apply sand to the surface.
  - Wheels or casters on rolling scaffolds must be equipped with braking devices and securely pinned to the scaffold frame.

## Wood Scaffolds

The construction of wood scaffolds is closely regulated by legislation. Materials and material dimensions are specified in detail in the *Regulations for Construction Projects*.

Construction of scaffolds can vary greatly as to use, shape, location and the type of job to be done. Consequently, they sometimes are built in a haphazard manner. To avoid this, the following safe work practices are a minimum requirement.

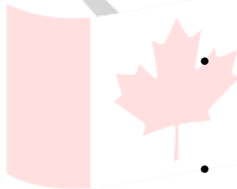
- The construction, alteration, design and removal of wood scaffolds are to be done by competent workers.
- The material used to construct these scaffolds should be sound, close grained and finished on all four sides.
- The scaffold must be capable of supporting four (4) times the load that might be imposed on it.
- All component parts should be tight together and properly fixed to each other.
- Proper guardrail must be set in place (top rail, intermediate rail, toe board).
- The scaffold work platforms shall extend for the full width of the scaffolding.
- When used as a scaffold work platform, planks shall be secured from movement by the use of cleats or by being wired in place.
- Safe access and egress is to be provided to all work platforms by the use of ladders.
- Scaffold work platforms shall not span more than 2.1 metres.

## Elevating Work Platforms

- In accordance with the current Regulations for Construction Projects, a worker who operates an elevating work platform shall, before using it for the first time, be given oral and written instruction on the operation of the elevating device. An elevating work platform shall only be operated by a worker who has been instructed in:
  - operating the machine;
  - the daily inspections and maintenance required by the manufacturer;
  - the types of working surface on which the machine is designed to be used;
  - the maximum rated working load;
  - special conditions or limitations of the machine;



- the significance of alarms; and
  - the location of emergency controls
- An elevating work platform which is not working properly or which has sustained damage to critical components must not be used until repaired by a qualified mechanic.
- In the raised position, an elevating work platform shall only be used on surfaces specified by the manufacturer.
- An elevating work platform must not be driven in a raised position close to holes, depressions, trenches or similar hazards.
- An elevating work platform must not bear more than its rated working load and, where possible, the loads shall be distributed over the platform.
- When elevating work platforms are used to lift materials, care must be taken to ensure that the materials are firmly secured to the platform.
- Do not place makeshift platforms, such as boxes, or proper access equipment, such as ladders and scaffolds, on an elevating work platform to gain access to areas above.
- Overhanging loads must not be lifted on an elevating work platform.
- An elevating work platform or any other part of an EWP device must not be moved closer than 3 metres (10 feet) to overhead power lines, unless the device is equipped for live electrical line work and the workers on the platform are qualified for such work.
- An elevating work platform must not be used for pulling, pushing or dragging materials.
- The platform of an elevating work platform must not be extended by using cantilevered planks or similar platform materials. Only manufacturers' platform extension devices shall be used.
- Planks or similar platform materials must not be used to bridge a gap between an elevating work platform and other work areas.
- Workers must always maintain 3-point contact (one hand and two feet or two hands and one foot) when getting on or off the platform of an elevating work platform.
- For all types of off-slab devices, the terrain on which the device is placed or over which it will travel must be firm enough to support the device and its rated working load.
- An elevating work platform must not be used under high wind conditions. This is especially important for smaller scissor lifts and boom-type devices.
- When the elevating work platform is not being used, turn off the power system to prevent exhaust fumes from accumulating in an enclosed work area.
- Elevating work platforms used on ramps or on sloping or uneven surfaces must be designed for such use and properly secured against horizontal and vertical movement.
- All work platforms are to be inspected before each use.
- All employees operating work platforms must be trained in the proper use of such a platform.



## Tools, Equipment and Vehicles Maintenance Program

It is Quality Mechanical's policy to ensure that all tools, equipment and vehicles are well maintained in order to reduce the risk of accidents or injuries.

- Only properly trained workers are to use tools, equipment and vehicles.
- Inspect all tools, equipment and vehicles before using.
- For vehicles, inspection will consist of doing a circle check.
- If applicable, maintenance schedules for all tools, equipment and vehicles are to be respected.
- Each jobsite supervisor is to conduct a monthly inspection of all tools, equipment and vehicles on the site. This inspection is recorded using the monthly Inspection Checklist.
- If at any time a worker judges that a tool, equipment or vehicle is unsafe for use, they are to properly tag the item and inform the supervisor immediately.
- Tools, equipment or vehicles that are tagged unsafe shall be either repaired or replaced. Head office shall be informed.

## Vehicle Safety

All employees who operate Quality Mechanical vehicles must hold a valid driver's license applicable to the type of vehicle in operation as a condition of employment. Employees must:

- Check vehicle fluid levels, running gear, and electrical components prior to use.
- Operate at or below posted speed limits and at a speed that is appropriate for road conditions
- Check behind a vehicle when reversing
- Ensure that all loads are properly secured
- Ensure vehicles are kept clean
- Treat the public in a courteous manner at all times
- Always wear your seatbelt when the unit is in motion
- Obey the highway traffic act at all times
- The smoke free Ontario Act specifically bans smoking in enclosed work areas and specifically references work vehicles. Therefore smoking is not allowed in company vehicles.

Employees must NOT:

- Use company vehicles for personal business unless given written permission
- Operate a defective vehicle. Report any problems to Quality Mechanical to be repaired.
- Offer rides to anyone other than Quality Mechanical employees unless directed to.
- Allow passenger to ride in the back of a pick-up, or any unit that is not equipped with approved seats and restraint devices.
- Leave the vehicle running while unattended

Serious violations of the highway traffic act such as careless driving may result in immediate termination. Operators are responsible for any fines levied by a peace officer.

## Traffic Protection

Any time that vehicles and mobile equipment are in use employees must:

- Wear a florescent traffic vest at all times.
- Ensure the operator can see you.

## Vehicle Safety

In order to ensure the safe movement of vehicles, machines and equipment in accordance with the regulations for construction projects the following procedures must be followed:

- The supervisor shall ensure that all workers and sub contractors are informed of this policy before moving vehicles, machines and equipment, and that all workers and sub contractors follow the procedure.
- When using vehicles, machines or equipment near energized overhead electrical conductors, no part shall be brought closer than:
  - a. 3 metres when the voltage rating is more than 750 but less than 150,000 volts
  - b. 4.5 metres when the voltage rating is more than 150,001 but less than 250,000 volts
  - c. 6 metres when the voltage rating is more than 250,000 volts.
- Operators of vehicles, machines, and equipment shall be assisted by signallers if the operator's view of the intended path of travel is obstructed and/or a person could be endangered by the vehicle, machine or equipment and its load.
- A competent worker shall be designated as a signaller. Both the operator and signaller shall jointly establish the procedures by which the signaller assists the operator and both will follow those procedures. A loud signalling device should be used to indicate stop and go.
- The signaller should walk with the vehicle, machine, or equipment in a manner that gives the signaller an unobstructed view of the intended path of travel and in full view of the operator.
- If an electrical hazard is present, the signaller must station themselves in such a way that they have an unobstructed view of the equipment and the hazard. The signaller must also be in clear view of the operator. The signaller shall warn the operator in any part of the equipment or load may approach the limits listed above.
- If it is possible that a part of the equipment or load may encroach upon the electrical hazard as listed above a legible sign that is visible to the operator and warns of the hazard shall be posted at the operators station.
- Cell phones are never to be used while the vehicle is in motion.

## Traffic Control

In any case where traffic must be stopped in order for work to proceed a signalperson equipped with a “STOP” paddle must follow this procedure:

- Walk to a point that the first lane of traffic (the one closest to the curb) can see you, but you are not directly in the line of traffic.
- Display the “STOP” paddle and your raised free hand
- Repeat this process until all lanes have stopped
- Once all lanes are stopped maintain the “STOP” paddle in a visible position to all traffic, and maintain eye contact with the lead vehicles
- Allow work to proceed
- When the work is complete, release traffic one lane at a time until you have moved back to the side of the road
- Do not wave your “STOP” paddle

## Material Handling

### Manual

- Size up the load before any manual lift is attempted, if you think you need help ask for it.
- Get good clear footing on a suitable surface.
- Bend your knees, and get a good grip on the object.
- Keeping your back straight lift with your legs keeping the object as close as possible to your body.
- Keep your balance and do not twist or turn your back while lifting.
- When putting the object down do not bend at the waist. Keep your back straight and bend at the knees, keeping the object as close to your body as possible until it is placed in a secure position.

### Forklifts

- Only employees with a valid forklift licence may operate a forklift.
- Never exceed the load rating
- Inspect all components prior to use
- Keep forks and speed low at all times
- When parked always place forks on the ground
- Drive in reverse when moving bulky items to avoid blind spots
- Ensure forks are fully seated and square when lifting
- Do not move damaged or improperly loaded pallets
- Do not carry passengers
- Never leave an elevated load unattended
- Use the seat belt

## Hoisting

- Ensure the lifting equipment is able to safely handle the load
- Estimate the center of gravity, the lifting equipment should be placed directly over the center of gravity
- Select appropriate slings for the task, and never exceed working load limits, always ensure the sling is of appropriate length, it should not be knotted or twisted.
- Never use bolts or nuts on a chain sling
- Under no circumstances is anyone to ride on a lifting hook or a load
- All employees are to stand clear of any load being lifted.
- Ensure all safety latches and hooks are in proper condition
- Ensure a signaller is identified
- Ensure tag lines are used to control loads.
- When landing a load lower it gently and make sure it is stable before slackening the sling.

## Housekeeping

Good housekeeping must be practised at all times. Tripping hazards and slippery conditions must be eliminated. The workplace must be kept clear of any obstructions, be well lit and properly ventilated.

- Scraps must be removed to a disposal bin or designated disposal area.
- Nails or sharp objects protruding from surfaces must be removed
- Daily job site cleanup is required and individual cleanup duties should be assigned to all workers.
- All materials should be segregated by type and size. These materials then should be stacked into neat piles.
- Materials must be stored away from power lines, and in such a way as to avoid tipping and spilling hazards.
- Bagged or sacked materials shall be stacked or piled no more than ten high and should be cross piled on skids so that material will not fall, roll, overturn or break.
- Barrels may be stacked upright with platforms or planks between layers and should be stacked no higher than the mechanical equipment can safely reach.
- Skids of materials should be stockpiled in such a manner as to prevent tipping or collapsing
- Employees should not climb on stacked materials
- Stockpiles must never obstruct any entrance, exit, or safety equipment
- Proper tools should be used to break any bands around materials and extreme caution should be used when removing such materials
- Signs must be posted to warn employees of hazardous areas.

## Hygiene Facilities

### Drinking Water

- A reasonable supply of potable drinking water shall be kept readily accessible at a project for the use of workers.
- Drinking water shall be supplied from a piping system or from a clean, covered container with a drain faucet
- Workers shall be given a sanitary means of drinking the drinking water, without having to share a drinking cup.

### Toilet Facilities

- Toilet facilities shall be provided in sufficient quantities and in the locations as outlined in regulation 213/91, Regulations for Construction Projects. The facilities shall be in place before the start of the project. The facilities shall be reasonably accessible to all workers on the project.
- The facilities shall be serviced, cleaned and sanitized as frequently as necessary to maintain them in a clean and sanitary condition. Records of servicing must be available at the project.
- For work of shorter duration, facilities that are not under the constructor's control may be used only if you have received permission from the facilities' owner for workers to use the facilities.
- The facility shall be kept in good repair at all times.
- Each single-toilet facility shall be provided with its own clean-up facility.

### Clean-up Facilities

- If it is not reasonably possible to have a wash basin with running water at a clean-up facility, hand cleanser that can be used without water shall be provided instead.
- Workers who handle or use corrosive, poisonous or other substances likely to endanger their health shall be provided with washing facilities with clean water, soap and individual towels.

## Chemical, Biological and Designated Substances

Under no circumstances are employees to handle a designated substance without proper training and PPE for that substance. Proper eyewash areas will be provided at all jobsites. If a designated substance is known to exist in a jobsite it will be prominently marked so that untrained employees may avoid it. If one of the following are encountered employees are to stop work immediately and report the discovery to their supervisor.

- Acrylonitrile - An industrial chemical.
- Asbestos -any of a number of naturally occurring minerals.
- Arsenic – A naturally occurring element that may be present in brass fittings
- Benzene – A Hydrocarbon molecule often found in crude oil.
- Coke Oven Emissions – Emissions from an oven designed to burn coke – a type of coal, often a blast furnace.
- Ethylene oxide – Used in the production of ethanol.
- Isocyanates – Used in the manufacturer of pesticides.
- Lead – Heavy, toxic element often used in batteries.
- Mercury – Heavy, toxic element.
- Silica – Often found in sand and quartz
- Vinyl Chloride – A chemical used in the production of PVC, once it is converted to PVC it is not dangerous.

If any harmful substances are encountered it must be verified that the concentration does not exceed established occupational exposure limits.

### Asbestos

Asbestos is a naturally occurring material once widely used in construction. Its strength, ability to withstand high temperatures, and resistance to many chemicals made it useful in many applications. However when asbestos is inhaled, it can be harmful and lead to the following diseases:

- Asbestosis
- Lung Cancer
- Mesothelioma (cancer of the lining of the chest or abdomen)

Asbestos can be found in many places, most commonly:

- Sprayed-on fireproofing
- Pipe and boiler insulation
- Loose fill insulation
- Asbestos cement products
- Acoustical plaster
- Acoustical tiles
- Vinyl asbestos
- Gaskets

- Roofing felts
- Asphalt/Asbestos limpet spray
- Drywall joint-filing compound
- Coatings and mastics

## Handling Procedure

Prior to commencing work in any area supervisors should request a copy of the owners asbestos report. This report must verify that there were no more than 0.1 fibers per cubic centimetre of air over an 8 hour time period. If there is asbestos in the area and it needs to be removed to allow work to proceed, ask the owner to remove it. Work is not to be performed until a written notice from the owner is received declaring in writing that the asbestos has been removed and it is safe to commence work. If there is asbestos present in the work area and its presence does not impact on the work all employees must be informed of its location and what not to disturb.

All employees must bear in mind the possible presence of asbestos. If you are working in an area known to contain asbestos, contact your supervisor to determine its location in areas you may be working in. If there is any doubt about pipe or duct insulation, textured ceilings, vinyl asbestos floor tile, flooring sheet goods, wall cladding or underground piping, especially in older facilities do not commence work and notify your supervisor. If you are to work in a area with known asbestos concentrations above 0.1 f/cc ensure you are wearing proper protective equipment including respiratory protection.

**UNDER NO CIRCUMSTANCE IS ANY QUALITY MECHANICAL EMPLOYEE TO DISTURB OR REMOVE ASBESTOS CONTAINING MATERIAL. IF YOU ARE INSTRUCTED TO DO SO STOP WORK AND CONTACT YOUR FOREMAN. ASBESTOS SHOULD ONLY BE TOUCHED BY THOSE QUALIFIED TO DO SO.**

If an employee is exposed to Asbestos the employee must undergo a health assessment by a qualified health professional to test for exposure levels.



## Purchasing

### Consideration

Health and Safety consideration is to be given when purchases could impact on any of the following elements:

- workers and visitors;
- compliance to the Occupational Health and Safety Act and regulations;
- manual material handling;
- ergonomics;
- noise;
- vibration;
- waste management;
- Environment
- infection control;
- confined spaces;
- maintenance service;
- training requirements.

### Responsibilities

- Review applicable regulations and standards, when necessary, to ensure all health, safety and ergonomics requirements are addressed before the purchase;
- Identify any potential health and safety concerns that may be associated with the products or services;
- Consult with the health and Safety Representative or Joint Health and Safety Committee before when necessary before purchasing;
- Arrange for field testing of products by the end-users in advance of purchase, and whenever possible and as appropriate, in consultation with the health and Safety Representative or Joint Health and Safety Committee;
- If purchasing any hazardous materials, give consideration to safer, more environmentally friendly products. Ensure Material safety data sheets are provided with the first shipment;
- As needed, provide safe-work procedures and product-specific training to employees/end users.

## Cell Phone Policy

### Rules For Drivers

In accordance with the Highway Traffic act, when you are on duty and driving, you may not use a wireless communication device of any type. This includes not only cell phones, but also mobile phones, text pagers, two-way radios, and other wireless communication devices.

## Scope.

The ban on the use of wireless communication devices above applies:

- To all vehicles operated by workers while on duty, whether owned by the company or the individual worker;
- To all wireless devices, whether owned by the company or by the worker; and
- To all conversations, whether personal or business-related.

## Hands-Free Devices

As an exception to this policy, workers may use cell phones and other wireless devices to conduct conversations when they drive as long as they use headsets and other hands-free devices. However, workers are strongly encouraged to keep calls as brief as possible and to pull off the roadways when conversations become technical or emotional in nature.

## Handling Calls While Driving.

**Incoming Calls:** Make sure your phone has caller ID and/or voice mail. If the phone rings, don't answer it unless and until you pull over in a safe spot (or let a passenger or voicemail answer the call). If it's urgent, you may accept or return the call, provided that you remain parked off the roadway. You may not resume driving until your conversation ends.

**Outgoing Calls:** You may not make outgoing calls while driving. If you want to place a call, pull over in a safe spot first.

## Rules For Site Workers

If you know that a worker is driving, do not call him or her on the cell phone or other wireless device.

## Working Alone

In construction there are situations where personnel sometimes work alone. Examples include

- staying late to complete a job that must be done before the next day's work
- making a splice or connection in a space that has only enough room for one worker
- servicing a roof-mounted air-handling unit
- Cleaning up scrap and debris when work is done for the day.

It may involve work done by the only employee of a contractor on a jobsite or work done by a worker who is not directly supervised. Working alone may also involve working beyond the visual or audible range of any other individual for more than a few minutes at a time or working where the worker cannot be readily heard or seen in the event of an accident.

The greatest risk in working alone is that no one is available to help a worker who may be injured, trapped, or unconscious. Even if co-workers realize that someone is missing, it may be difficult to locate an incapacitated worker. In addition, studies have shown that personnel working alone are more likely to take risks by cutting corners or not following established procedures.

## Planning

- Inspect the jobsite for real and potential hazards and taking whatever steps are required to safeguard workers.
- If any personal protective equipment or clothing is required in addition to hard hat and safety boots, it should be provided, along with instruction in its proper use.
- All safety and work-related procedures should be reviewed with workers to ensure that each procedure is clearly understood. The procedures should also be spelled out in the company's health and safety policy.
- In some situations like confined spaces, regulations under the Occupational Health and Safety Act prohibit entry or work without another person standing by outside the area.

## Communication

- Communication is crucial in accounting for personnel working alone. A system must be established where, at regular intervals, someone checks on the worker or the worker reports to a designated person.
- Where hazard exposure is high, intervals should be kept short.
- Means of communicating between worker and outside contact must be predetermined and understood by both parties.
- If a site telephone is involved, it must be clearly identified, conveniently located, and working properly. The number of the individual to be contacted must be clearly posted near or on the phone.
- Cellular phones or two-way radios can also provide effective communication. Test the units on-site to ensure that reception is reliable.

## Responsibilities

The supervisor shall ensure that any worker working alone is aware of real and potential hazards in the area. The worker should be trained in hazard recognition and in the procedures and equipment required to do the job safely. The supervisor must also ensure that:

- a method of checking in with the worker has been established
- check-in intervals are clearly understood
- the designated contact person is aware of the work schedule
- any communication equipment used is in good working order

No obstructions or interference may block phone or radio communications.

## Early and Safe Return to Work

A program that promotes Early and Safe Return to Work (ESRTW) for workers who have been injured is an important part of a comprehensive Health and Safety Program. Although it is clearly preferable to have no injuries and therefore no need for ESRTW, a program that maintains contact with injured workers, their health care provider(s) and the WSIB can provide a number of benefits to both the worker and the employer.

Key provisions of an effective ESRTW program include:

- Maintaining contact with injured workers and their health care provider to determine when they may be able to return to work.
- Offering modified work that allows workers to stay employed.
- Using the WSIB's Functional Abilities Form to assess the limitations workers may have and using that information to provide work that is within the worker's capabilities.
- Maintaining contact and working with the WSIB account manager or claims adjudicator to bring injured workers back to work.
- Ensuring that workers are aware of the company's ESRTW program so that in the event that they are injured, they know that modified work is available.

Communication is important. Workers benefit when they know the company is interested in their well-being. Health care providers may not understand the work that is available, so it is important to advise them of the kinds of work that your company has available for injured workers. WSIB account managers and claims adjudicators can be helpful in dealing with many different aspects of disability management.

In the event that one of our employees is injured, Quality Mechanical will work with the worker, his/her health care provider and the WSIB to see that the employee is returned to work as soon as is reasonably possible.

All employees will be advised at the time of hire that we will attempt to provide modified work that allows employees to safely remain at work until they are able to resume normal duties. The work offered must be safe for the worker to perform with his/her injury.

In the event of an injury that results in medical treatment, a management representative will accompany the injured worker to the hospital and will speak with the treating physician to assess the opportunities for the worker's return to work. In cases where the worker has sought medical treatment after work, Quality Mechanical will contact the treating physician to advise him/her that modified work is available for the injured worker.

Where an employee is disabled and off work due to an injury, Quality Mechanical will:

- Contact him/her by telephone at least once every week to maintain contact and assess when he/she may be able to return to either modified work or regular duties.
- Write or phone the worker's health care provider to advise him/her that modified work can be made available to the worker and to assess the kind of modification that the health care provider may recommend or require.
- In the case of disabilities lasting more than [number] weeks, the health care provider will be sent a Functional Abilities Form when it is appropriate, given the nature of the injury and the worker's response to treatment.
- The status of disability cases will be reviewed with the appropriate WSIB account manager/claims adjudicator at least monthly.

## **Substance Abuse Control**

It is the policy of Quality Mechanical to recognize and assist any employee in dealing with substance abuse. Quality Mechanical recognizes the inherent dangers to other workers who have to work with a worker who is impaired through substance abuse, as well as the personal problems associated with the substance abuser.

Any worker suspected of being impaired will not be allowed to continue working. The site supervisor will discuss the situation with the worker safety representative and site foreman if a sub-contractors' worker is involved. If the employee is deemed unfit for work, the employee will be taken home.

The Substance Abuse Control Policy applies to all of Quality Mechanical's employees including sub-contractors' employees. Quality Mechanical will not condone the following behaviour by any worker.

- Use or consumption of any form of alcohol or any prohibited substance on a construction project at any time.
- Sale, purchase, transfer, offering, use or possession of alcohol on company property or at a site where [ABC Construction] is engaged.
- A worker will not arrive or be at work while under the influence of alcohol or prohibited substances.

These employees will be made to understand that Quality Mechanical management cannot allow them to continue working until they seek attention and treatment to eliminate their dependence or practice of substance abuse. The worker will be suspended from working until his/her treatment is completed and his/her reliance to the substance(s) is over.

All supervisors/foremen will be instructed to recognize the problems of substance abuse and the seriousness of its effects on the safety of the worker and his/her co-workers.

# Violence and Harassment Policy

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Quality Mechanical is committed to a working environment that is free of harassment and that ensures that each individual has the right to be treated in a manner that fosters respect and dignity. This commitment requires that all staff actively demonstrate at all times a respect for others and an appreciation of differences. Any complaint of harassment in the workplace will be taken seriously. Employees will be made aware of this policy via delivery of the safety program. The safety Program is reviewed at the beginning of each year. Quality Mechanical will conduct a risk assessment of the workplace in order to evaluate the risk level of violence occurring. All incidents of violence or harassment must be reported immediately.

## Definition of Harassment

The Ontario Human Rights Code (the Code) sets out provisions regarding every person's right to freedom from harassment.

Harassment is defined in the Code as engaging in a course of vexatious comment or conduct (e.g. unwanted, offensive, intimidating, hostile or inappropriate), related to one or more of the prohibited grounds, that is known or ought reasonably to be known to be unwelcome. Harassment is unlawful when it relates to "a person's race, creed, colour, religion, age, sex or sexual orientation, marital or family status, citizenship, ethnic origin, ancestry, place of origin or handicap", as set out in the Code.

## Forms Of Harassment

Harassment can manifest itself in many ways. Examples of behaviour which constitute harassment include, but are not limited to:

- inappropriate remarks, jokes, insults or innuendoes pertaining to any of the prohibited grounds;
- gestures, display of offensive materials or graffiti;
- threats; verbal, or physical assault;
- exclusion related to the prohibited grounds.

Conduct or comments which constitute harassment can be oral, physical, visual or written, including electronic media.

## Sexual Harassment

Sexual harassment can take many forms and is addressed separately from other harassment in the Human Rights Code. Sexual harassment can be one or a series of incidents involving unwelcome sexual advances, requests for sexual favours, or other verbal or physical conduct that is either sexual or homophobic in nature:

- when such conduct might reasonably be expected to cause insecurity, discomfort, offence or humiliation to another person or group;
- when submission to or rejection of such conduct is used as a basis for any employment decision; or
- when such conduct has the purpose or the effect of interfering with a person's work performance or creating an intimidating or offensive environment.

Examples of behaviour which constitute sexual harassment include, but are not limited to:

- sexist jokes causing embarrassment;
- the display of sexually offensive material;
- use of words, descriptive phrases or remarks, which demean a person because of that person's gender or that insult one gender or sexual preference group;
- persistent unwanted contact or attention.

## Responsibilities

Anyone in a managerial or supervisory position is viewed as part of the “directing mind” of the organization. Responsibilities include:

- ensuring that this policy is implemented by creating and maintaining a work environment that is free of harassment
- setting an example by treating others with respect and dignity
- ensuring their staff are aware of their rights and responsibilities
- determining and implementing the appropriate corrective action in substantiated cases

As an employee, you should make every effort to stop harassment at the source, and if this fails or is not possible, to bring it to the attention of your supervisor or the President and CEO. In this situation, you should also keep a record of dates, times, the nature of the behaviour and witnesses if possible.

# Procedures For Responding To Harassment

## Option A: Informal Consultation And Counselling

### Employee Guidance

In most cases, the informal approach is recommended as a first step, unless the severity of the situation warrants a formal complaint. Informal steps are as follows:

### Tell The Offender To Stop

You should not ignore the incident in the hope that it will not recur. If possible, tell the offender orally or in writing that the behaviour is offensive and that you wish it to stop.

### Seek Advice/Support

If you feel intimidated by the offender or a direct reply does not resolve the situation, seek counsel and advice from your supervisor as soon as possible.

### Tell The Supervisor

In some situations, objecting to offensive behaviour may be difficult or the objection may be ignored. You are encouraged to report the alleged offence to your immediate supervisor and discuss a plan of action. If the concern is reported to a supervisor, the supervisor is responsible to ensure that appropriate action is taken.

### Keep a Record

Make a note of the incident, including dates, times and witnesses. Keep copies of any letters or other materials sent by the alleged harasser.

## Option B: Formal Complaints

Although the informal approach of Option A is encouraged and will often resolve an issue, you may prefer to file a formal complaint and it is completely within your rights to do so. In this case, the President and CEO will need to be advised. The matter will be treated with the utmost care and respect, and appropriate resources, (which could include a qualified, objective, and knowledgeable external advisor) will be sought to support the process. If investigation is chosen, you will be asked to submit, along with any relevant documentation, a written record which includes: a brief description of the allegation/incident, the name of the person who allegedly committed the offence, date(s) listed chronologically, location at which the offence occurred, name(s) of any witnesses, date of the complaint, signature of the complainant and the remedy sought.



## **Investigation And Review Procedures**

A formal complaint will be promptly investigated with a view to resolving the issue as satisfactorily as possible. Quality Mechanical also has an obligation to be fair to the person named in allegations to permit that person to hear and respond to the complaint. An external Harassment Advisor who is trained and experienced in this area will be utilized as appropriate.

## **Conclusions And Actions**

Once a comprehensive and objective review of the situation has been undertaken and recommendations are made, the President and CEO will ensure that appropriate steps are taken, and if the complaint is substantiated this can include remedial discipline, suspension, or dismissal, of the offender(s). The CEO will discuss with the offender the action to be taken, and a written summary of the meeting will be sent to the individual and placed in his/her file. The CEO will advise the complainant and the alleged offender of the outcome.



# Emergency Procedures

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Emergency procedures should be established for collapses of structures, fire, explosions, critical injury, and toxic spill or release.

Slow response, lack of resources, or absence of trained personnel can lead to chaos in an emergency. To minimize losses, especially fatalities and injuries, personnel must know their responsibilities, know the procedures to follow, and be able to communicate in an emergency.

As each job site has different issues and hazards it is important to develop emergency plans for each site. Follow these steps for developing the plan for emergency procedures:

- List possible areas where emergencies such as fire, explosion, structural collapse, or chemical spills may occur.
- For each type of hazard, identify the possible results – fatalities, injuries, structural or environmental damage
- Determine the required response, such as rescue, fire fighting, or evacuation. The response plan must include step-by-step procedures and control measures for each type of emergency.
- Determine what resources, including rescue equipment and medical supplies, should be on hand to deal with specific emergencies.
- Determine the training required for effective response to emergencies



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# First Aid and Medical Services

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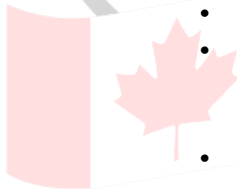
In an emergency situation competent first aid can mean the difference between and injury and a fatality. As such Quality Mechanical recognizes the importance of having trained first aiders on site and available to any person injured on the job.

## Requirements

- All Jobsites with more than 5 but fewer than 15 workers must have at least one first aid kit on site that meets with WSIB Regulation 1101 section 9.
- All jobsites with more than 15 workers must have at least one first aid kit that meets with WSIB regulation 1101 section 10.
- All supervisors must have completed a St. John Ambulance Standard First aid course and must also have CPR certification. Copies of these certifications must be posted at the first aid station.
- A registered first aider must be on site at all times. This first aider must be available to render assistance at all times.
- All job sites must have a copy of WSIB form 82 displayed at the first aid station.
- First aid kits must be kept within quick and easy access to employees.
- All incidents requiring first aid must be logged with materials used
- All first aid kits must be inspected for contents at least once per week

## Procedures

- If an injury occurs first aid must be administered and a supervisor notified immediately.
- The supervisor will ensure that a first aid incident report is completed.
- If required the supervisor will arrange transportation for an injured worker to a hospital, doctor's office or worker's home. The preferred method of transportation is via ambulance to a hospital.
- Any employee who is injured to the head must see a physician and provide a note before returning to work.
- A supervisor may require an employee to provide a note from a physician before being allowed to return to work



# Employee Orientation

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Proper orientation of employees new to the job site is essential. All employees must be made aware of potential hazards, and safety precautions to be used on the site.

## Responsibilities

### Senior Management

Senior Management shall:

- Prepare a corporate “Orientation Checklist” for new employees that must be signed by the employee for every new job site the employee works on.
- Provide orientation to subcontractors
- Ensure that new employees and subcontractors receive a copy of the Health and Safety Policy and Site Emergency Plan

### Supervisor

Supervisors shall:

- Review the corporate “Orientation Checklist” with each new member of the work crew and return a signed copy to Quality Mechanical’s office for records

### Subcontractor

Subcontractors shall:

- Provide site orientation to their direct-hire employees and sub-trades under their direction
- Forward signed copies of completed “Orientation Checklists” to Quality Mechanical for records



# Employee Training

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Quality Mechanical will provide safety and related training that is necessary to minimize losses of human and physical resources of the company. Employees will participate in this training as needed.

Supervisors shall be trained in:

- Standard First Aid
- CPR
- WHMIS
- Fall Arrest
- Confined Space
- Accident investigation
- Hazard Assessment

Supervisors must complete the following courses from the Infrastructure Health & Safety Association:

- Construction Health and Safety-Basic
- Basics of supervising

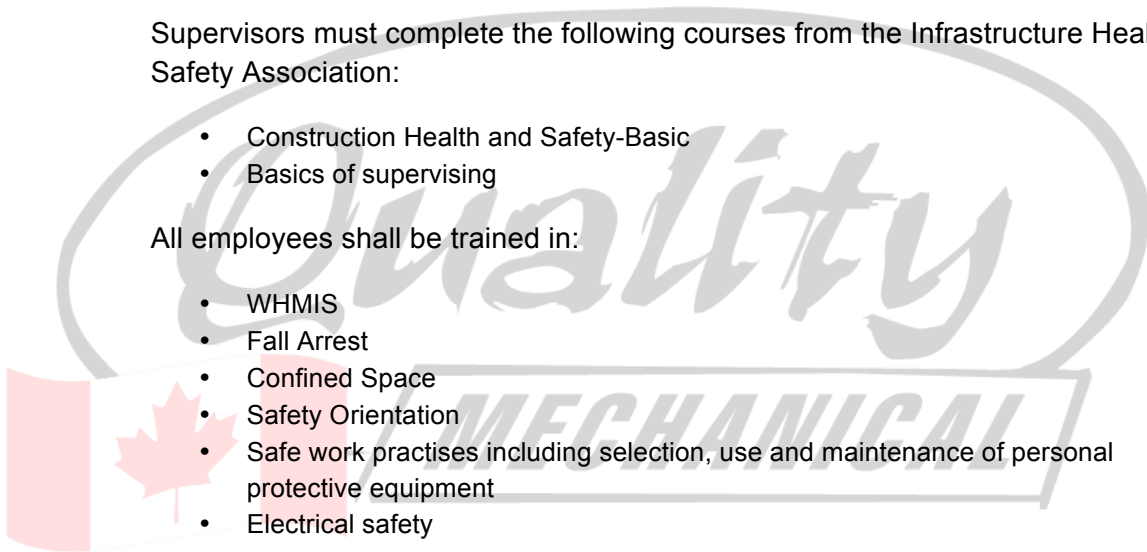
All employees shall be trained in:

- WHMIS
- Fall Arrest
- Confined Space
- Safety Orientation
- Safe work practises including selection, use and maintenance of personal protective equipment
- Electrical safety

Employee health and Safety Representatives must also complete the following Course offered by the Infrastructure Health & Safety Association

- Construction Health and Safety Rep

Additional site specific safety training may be required as needed.



# Accident/Incident Investigation

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All accidents and incidents on the job site must be fully investigated by Quality Mechanical to determine the cause and what corrective actions need to be implemented to avoid further incidents.

## Investigation Policy

Quality Mechanical will fully investigate all accidents or incidents that:

- Result in Injuries requiring medical aid.
- Cause property damage or interrupt operation with potential loss.
- Could have the potential to result in the above conditions.
- By regulation must be reported to MOL, WSIB, or other agencies.

## Responsibilities

All employees of Quality Mechanical are required to:

- Report all incidents/accidents to their supervisor.

Supervisors of Quality Mechanical are required to:

- Conduct initial investigations of incidents or accidents and report their findings to management.

Managers of Quality Mechanical shall:

- Determine the need for, and carry out detailed investigations of accidents and incidents.
- Determine causes and corrective actions for accidents and incidents
- Ensure such actions are implemented



# Inspection Standards

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Quality Mechanical will conduct monthly documented workplace inspections for the purpose of identifying and correcting unsafe conditions and behaviour. The inspections will cover premises, job sites, buildings, temporary structures, excavations, tools and equipment, machinery and work methods and practices. The sites safety inspection form is to be used as a guideline since specific sites may have unique situations and potential hazards that may not be covered on a general list.

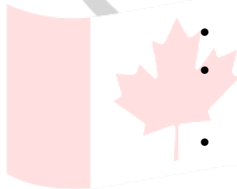
## Monthly Inspections

Planned inspections will occur monthly on project sites and at company premises. Supervisors representing the general contractor and or sub contractors and the health and safety representative will be involved in workplace inspections.

All health and safety inspection reports must be reviewed with employees during safety talks and with management at management meetings. All completed health and safety inspection reports will be evaluated and monitored by project management and the health and safety representative, and will be filed with health and safety documentation for the project.

## Inspection Procedure

- Review any previous inspection records and note any commonly reported hazards
- Familiarize yourself with the type of workplace and the unique hazards
- Use your eyes, ears, and other senses to identify actual or potential problems as you go about your inspection. Record hazards on the Site Safety Inspection form
- When unsafe conditions are noted requiring immediate action take steps to correct the situation
- Look for basic causes of sub-standard conditions, practices and procedures
- Produce a copy of the inspection report for
  - The Health and Safety Representative
  - The Job Site
  - Management
  - Health and Safety records
  - Anyone else who may require one
- Review the items with the Health and Safety Representative and Management



## Follow-Up Actions

When unsafe conditions, practices and procedures are noted:

- Take action immediately to rectify the problem if possible.
  - Place warning signs and barricades to keep workers away, use verbal warnings in applicable
  - Notify management to correct the conditions, record what you do on the inspection form.
  - Record and complete the Health and Safety Inspection Form and file it with Safety documentation
- When a worker is noted taking unsafe action advise as follows:
  - Inform them of the unsafe action or situation
  - Discuss the situation with them
  - Advise them on how to correct the situation
  - Re-visit the area later in the inspection to ensure the safe practise is being followed
  - Inform the supervisor so they can follow up.

## Weekly Inspections

The Health and Safety representative should inspect the job site weekly using the following procedure:

1. Review previous inspection reports and note commonly reported hazards
2. Use your eyes, ears and other senses to identify actual or perceived hazards and record them on your inspection form
3. When unsafe conditions are noted requiring immediate actions correct the situation immediately
4. Look for basic causes of sub-standard practices and procedures.
5. Produce a copy of your inspection report for the Supervisor

## Follow-up Actions for Health and Safety Representatives

Where unsafe conditions and practises are noted:

- Take immediate action to rectify the condition by placing warning signs and barricades to keep other workers away, use verbal warnings if applicable
- Notify Supervisors immediately to rectify conditions.
- Record and your actions on your inspection form

When a worker is noted performing an unsafe act advise as follows:

- Inform them of the unsafe condition
- Advise them on how to correct the situation
- Inform the Supervisor of actions taken



# Hazard Assessment

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## Purpose

The purpose of our Job Hazard Analysis is to identify, control or eliminate potential or actual dangers in a job or task.

Factors to be considered in assigning a priority for analysis of jobs include:

- Accident frequency and severity: jobs where accidents occur frequently or where they occur infrequently but result in disabling injuries
- Potential for severe injuries or illnesses: the consequences of an accident, hazardous condition, or exposure to harmful substances are potentially severe
- Newly established jobs: due to lack of experience in these jobs, hazards may not be evident or anticipated
- Modified jobs: new hazards may be associated with changes in job procedures
- Infrequently performed jobs: workers may be at greater risk when undertaking non-routine jobs, and a Job Hazard Analysis provides means of reviewing hazards

Quality Mechanical management and supervision is responsible for ensuring all work is safely planned; the Job Hazard Analysis will assist in determining firstly, what are the steps in the job; secondly, what are the potential hazards in the job; and finally, what are the protective measures for the safety of our worker(s) assigned to do the non-routine work.

## Procedure for Completing a Job Hazard Analysis

### Breakdown of Job Steps

- Job or task identified for analysis by supervisor
- Supervisor overseeing the job breaks job into steps (with assistance from crew members, h & s rep etc)
- A job step is defined as a segment of the operation necessary to advance the work
- Keep the steps in the correct sequence

## Identify Actual/Potential Hazards (refer to checklist)

Once the basic steps have been recorded, potential hazards must be identified at each step. This is based on observation of the job, knowledge of accident and injury causes, and personal experience. To identify potential hazards, the supervisor may use questions such as these (this is not a complete list):

- Can any body part get caught in or between objects?
- Do tools, machines or equipment present any hazards?
- Can the worker make harmful contact with objects?
- Can the worker slip, trip or fall?
- Can the worker suffer strain from lifting, pushing or pulling?
- Is the worker exposed to extreme heat or cold?
- Is excessive noise or vibration a problem?
- Is there a danger from falling objects?
- Is lighting a problem?
- Can weather conditions affect safety?
- Is harmful radiation a possibility?
- Can contact be made with hot, toxic or caustic substances?
- Are there dusts, fumes, mists or vapours in the air?

## Preventative Measures/Controls

The final stage in a Job Hazard Analysis is to determine ways to eliminate or control the hazards identified.

## Eliminate the Hazard

This is the most effective measure, some examples are:

- Choose a different process
- Modify an existing process
- Substitute with less hazardous substance
- Improve environment (ventilation)
- Modify or change equipment or tools

## Contain the Hazard

If the hazard cannot be eliminated, contact might be prevented by using enclosures, machine guards, worker booths or similar devices.

## Revise Work Procedure

Consideration might be given to modifying steps that are hazardous, changing the sequence of steps or adding additional steps (such as locking out energy sources)

## **Reduce the Exposure**

These measures are the least effective and should only be used if no other solutions are possible. One way to minimizing exposure is to reduce the number of times the hazard is encountered.

## **Communication of Job Hazard Analysis to Workers**

When the Job Hazard Analysis is completed, the results must be communicated to all workers who are, or who will be, performing the job. The job hazard analysis must be discussed by the employees performing the job to ensure that all the basic steps have been noted, are in the correct order, have suitable controls and be documented and signed by the worker and supervisor. Supervisors will ensure that workers are following the appropriate control procedures.



# Health and Safety Representative

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At a project or other workplace where no Joint Health and Safety Committee is required under the Occupational Health and Safety Act and where the number of employees regularly exceeds five, Quality Mechanical requires employees to select a Health and Safety Representative from among the non supervisory employees.

- Be selected by non management employees from non management employees.
- Have completed the Infrastructure Health & Safety Associations Health and Safety Representative course.
  - If the Representative has not completed this course they must complete it within 2 weeks of being elected (This course is available via correspondence)
- Complete a weekly site inspection.
- Represent employee safety concerns on the project to supervisors and management as required.
- Must help the Supervisor to investigate critical injuries including fatal accidents on the job site.
- Has the right to any documentation requested about machinery and equipment on the job site.
- Is entitled to present recommendations to management that must be answered in writing by management within 21 days.
- Must help Management in its yearly review of the Health and Safety Program.

## Joint Health and Safety Committee

If any job lasting more than three months has more than 20 regular employees a Joint Health and Safety Committee (JHSC) must be formed. This committee must be composed of at least one representative from management and at least one representative from non-management employees. The committee should be composed of a minimum of one non-management employee representative for every 20 employees on the job. There may never be more management representatives on a JHSC than employee representative. In addition jobsites with Designated substances may require formation of a JHSC regardless of size or length of the project.

The JHSC must:

- Be composed of at least one management representative.
- Be composed of at least one non-employee representative.
- At least one management representative and one non management representative are to be elected as co-chairs of the committee.
- At least one management and one non-management employee must be certified members of the JHSC.
  - Certification is obtained through the Infrastructure Health and Safety Association and is composed of the following courses:

- Construction Health and Safety Rep
- Sector-Specific – Construction
- Simulated Hazard Analysis – Construction
- Meet at least quarterly.
- An agenda for quarterly meetings must be circulated at least 1 week prior to the meeting to allow members to review topics of discussion.
- Produce minutes of the meeting that are to be distributed to management and employees.
- Maintain a Health and Safety Board with:
  - A copy of the Occupational Health and Safety Act with Regulations (Green Book)
  - A list of emergency numbers
  - Names and work locations of all members
  - A copy of the Quality Mechanical Health and Safety Policy
  - Minutes from the last JHSC meeting
  - WSIB Form 82
- Review weekly and monthly inspection reports during meetings.
- Review accident and Incident reports during meetings.
- Make recommendations to management that must be responded to in writing within 21 days.



# WHMIS

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## Training

All Quality Mechanical employees will receive WHMIS training as required under current legislation. A record of this training must be maintained for all employees. Original supplier labels must be legible on all containers, if such a label is missing or is illegible a workplace label must be placed upon the container.

## Material Safety Data Sheets

### Quality Mechanical Management must:

- Review in conjunction with the supervisor all Quality Mechanical supplied material to ensure accuracy and completeness
- Obtain MSDS on any product brought onto the jobsite by subcontractors
- Co-operate with the General Contractor in setting up a general MSDS file for the project
- Ensure Foreman has updated MSDS file on site
- Ensure proper labelling as required, including transfer containers.

### Quality Mechanical Supervisors must:

- Ensure that MSDS for controlled products used on the site are in a site file that is accessible to all workers
- Review Quality Mechanical supplied materials and obtain MSDS as required
- Make available upon request all MSDS to employees
- Ensure that proper personal protective equipment is available on site.



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