



**DEMOLITION LTD**  
CONSTRUCTION • DEMOLITION • RECYCLING

# Policies & Procedures

## Health & Safety

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## Section 1: COMPANY HEALTH & SAFETY POLICY STATEMENT

### 1.1 SAFETY POLICY

We all want to have a safe and healthy workplace. To ensure this, management needs everybody's participation. Management of CDR Demolition is committed to providing safe and healthy working conditions, and to promoting positive attitudes towards safety and health within the organization for all our employees, contractors, subcontractors and their employees. CDR Demolition can accomplish this by ensuring the implementation of written instructions identified as Systems, Procedures and Practices.

Management is responsible for providing a safe workplace and for establishing and maintaining adequate standards of maintenance of the workplace and equipment to ensure that physical and health hazards are guarded against or eliminated, and for developing work procedures conducive to a safe and healthy work environment.

Supervisors are responsible for the health and safety of all workers under the direct supervision, ensuring that workers are properly instructed, made aware of all known or reasonably foreseeable hazards and that they comply with all safe work procedures and regulations to do their work safely; for enforcing safe work procedures and regulations; for correcting all unsafe activities.

Workers are required to work safely, to know and follow all rules, safe work procedures and regulations and to actively participate in making their work environment safe, healthy and productive while also being aware of other persons who may be affected by their acts or omissions.

Everyone is expected to correct and/or report all unsafe conditions and activities to management, supervisors or the safety representative, and to work cooperatively toward the prevention of accidents to create and maintain

a healthy and injury free workplace.

It will be the duty and obligation of EVERY EMPLOYEE to follow safe work procedures, to observe all regulations concerning his or her work, and to cooperate in attaining the objective of a safe and healthy workplace.

Our safety program includes a safety orientation for new employees, safety training, management and employees safety committees, an active self-inspection program, and personal protective equipment as some of the ways by which we will reduce work hazards.

Cooperate with the Joint Health and Safety Committee and safety representatives for the workplace.

## **1.2 POLICIES AND PROCEDURES**

The objective of CDR Demolition is to achieve profitable production and quality workmanship without injury to workers or damage to property and equipment. To achieve this objective, management will develop, implement and maintain a Health and Safety Program comprised of Safety Policies, General Safety Rules and Specific Job Safety Systems, Procedures, and Practices. This program will be reviewed annually.

The Safety Policies and Procedures Manual, will include, but not limited to, the following:

- Statements of accountability for the management, supervisors, and employees.
- New Employee Induction Program.
- General Safety Rules and Regulations.
- Specific Job Safety Procedures.
- Safety Training Requirements.
- Requirements for Communication Programs for Safety Education and Promotion.
- Safety Audit and Inspection Procedures.
- Accident Investigation and Reporting Procedures.
- WorkSafe BC reporting and Appeal Procedures.
- Procedures for Safety Committees
- Safety Legislation and Regulation
- Procedures for annual review of Health and Safety Program.

### **1.2(2) SUPERVISORS RESPONSIBILITIES**

All supervisors are directly responsible for workers under their direction. Management expects that every supervisor will uphold the following items and ensure that communication concerning the corporate safe attitude is made to every employee.

Supervisors will ensure that safety is treated equally to productivity or quality control. Supervisors are to analyze work activities with employees under their direction and develop standard procedures which include safe working practices. Supervisors are also responsible for instructing and enforcing the written safe working procedures.

Every supervisor will be held accountable for carrying out their duties. Workers when assigned the position of supervisor will be responsible for the following which will include but are not limited to the following:

- Shall be responsible for the implementation of our company Safety Program and will ensure the WorkSafe BC regulations and bylaws are understood and followed by all employees.

- Ensure safe work procedures are followed and develop standard operating procedures that include proper safety practices.
- Develop a clear understanding of safety responsibilities and specific duties for each worker.
- Instil, by action, example and training, a sincere safety attitude through all supervisory personnel and employees.
- Informs each employee of the hazards of the job, instructs them in safe work procedures, and follows up to ensure that each worker understands and utilizes safe work procedures.
- Ensure that required safety equipment and protective devices are provided and used.
- Ensuring "tool box/crew talks" are conducted and documented on a regular or as needed basis.
- Ensuring that only authorized, adequately trained workers operate machinery and equipment.
- Reporting, investigating and documenting all near miss incidents and/or accidents.
- Correcting unsafe conditions, acts and practices.
- Conducting informal inspections of tools and equipment to detect any defects and correcting them accordingly.
- Instilling health and safety awareness in the workers under your direction.
- Following up on all health & safety recommendations.
- Setting and leading by example!

### 1.2(3) EMPLOYEES RESPONSIBILITIES

CDR Demolition expects all employees, contractors, subcontractors and their employees to take an active part in our Occupational health & Safety Program. This can be accomplished by, but is not limited to the following:

Knowing the requirements of the Company Health & Safety Program and the WorkSafe regulations.

Follow safe work procedures and WorkSafe BC regulations and take an active part in protecting yourself and their fellow workers.

Reading and understanding the Company safety rules and safe work procedures. Complying with all site safety rules and written safe work procedures.

Clarifying those established safe work practices and procedures with your supervisor if you are unsure.

Report immediately any and all dangerous and hazardous conditions, practices or behaviours on the work site to your supervisor, foreman or the designated safety representative. Where able, correcting unsafe conditions as you come upon them, then immediately reporting them to your supervisor or designated safety representative.

- Report all injuries (even insignificant ones) that you sustain, to your supervisor as soon as possible and receive first aid or medical help without delay.
- If your injury on the job requires medical attention, you shall, following an 'injury, report any anticipated loss of working time to your supervisor as soon as possible.
- Use all protective clothing and equipment required by company policies and the WorkSafe BC regulations.
- Report all incidents and near misses to your supervisor, foreman or site safety representative.
- You must ensure you show up physically and mentally fit to perform your job. Be responsible and stay off work when your ability to work is impaired in any way. Inform your supervisor if you are taking any prescription drugs.
- Participate in all training and meetings as required by CDR Demolition
- Contribute to the company safety program by making health and safety suggestions.

- You have the right to refuse work that you feel may put your life or the lives of others (workers or public) in danger.

#### **1.2(4) SAFETY REPRESENTATIVES RESPONSIBILITIES**

Designated safety representatives shall be completely familiar with and understand the CDR Demolition Occupational Health & Safety Program and applicable Government regulations.

The designated safety representative shall assist in the ongoing safety efforts in the workplace through efforts in promoting safety amongst all employees and subcontractors. This basic responsibility includes, but is not limited to the following:

- Assist management in implementing, promoting and enforcing health and safety at all times.
- Advise employees on health and safety issues and concerns.
- Communicate employee suggestions and concerns to the supervisor and/or management.
- Provide and document general induction and safety orientations to employees and new workers.
- Report hazards. Real or unreal to the supervisor and/or management.
- Ensuring all workers receive a company orientation regarding rules, safe work procedures and the WorkSafe regulations. Ensuring their orientation is documented.
- Ensuring that workers have received general training regarding WHMIS as well as site specific instruction in safely storing, handling, using and disposing of WHMIS controlled products and ensuring that Material Safety Data Sheets (MSDS) are current, not more than 3 years old and are available on site.
- Ensuring all workers are adequately trained in fall protection procedures and the WorkSafe regulations.
- Ensuring that workers who wear respirators are fit tested and trained in the proper usage, care and maintenance of their respirators and that written safe work procedures are available for the job being performed. Training must be conducted annually. Ensure the training is documented and current.
- Ensuring all workers have documented training and operating certificates/licenses where applicable, i.e., hearing, WHMIS, fall protection, respiratory, mobile equipment, specialized equipment.
- Participate in accident/incident investigations.
- Conduct regular formal and documented workplace inspections as necessary.
- Maintaining and documenting regular safety meetings/crew talks.
- Assist in the development of health and safety rules and safe work practices and procedure.
- Participate in the General Contractors safety committee meetings.

#### **1.2(5) RESPONSIBILITIES OF CONTRACTORS AND SUBCONTRACTORS**

All contractors and their subcontractors working for CDR Demolition shall be made aware of our Occupational Health and Safety Program. It is the contractor/subcontractors responsibility to perform the job in compliance with our safety standards. The contractor/subcontractor is responsible for the compliance, of all the employees for whom he is primarily responsible, with all WorkSafe BC Occupational Health and Safety Regulations as well as all the other applicable Acts and Regulations.

Any infraction not immediately corrected as directed by CDR Demolition will result in the contractors and subcontractors being advised of the breach of contract and the action that will be taken as a result of the breach. It must be firmly established that all workers on the job, including all subcontractors' employees, are protected by our safety program.

#### ***INSTRUCTIONS TO CONTRACTORS AND SUBCONTRACTORS REGARDING CONTRACTS AND PURCHASE FORMS***

As a contractor/subcontractor, entering into a contract with CDR Demolition, you are agreeing that your company, management staff, supervisory staff and employees will comply with our Occupational Health and Safety Program as well as all applicable Acts and Regulations. This is binding while you are under our contract.

### ***INSTRUCTIONS TO CONTRACTORS AND SUBCONTRACTORS***

The following are some of but not all of the instructions or requirements:

- All contractors/subcontractors working on CDR Demolition projects shall verify and,
- Ensure that employee medical certification, if required to perform the job, is maintained;
- Conduct toolbox safety meetings as directed and submit minutes to the site superintendent;
- Conduct accident investigations and submit copies of investigation findings and recommendations;
- Ensure special work procedures (i.e. Fall Protection Plan, lockout, etc.) are submitted and followed;
- Ensure that a copy of your Fall Protection Program is submitted and when a fall hazard exists from a height of 25 feet or more, a Fall Protection Plan shall be implemented and submitted.
- Ensure copies of MSDS (Material Safety Data Sheets) for all WHMIS controlled products are on site and submitted to site superintendent or First Aid Attendant;
- When required, ensure an Occupational Health & Safety Manual for the contractor/subcontractor is submitted;
- Ensure that Workers Compensation Board coverage for workers is current.
- Ensure you provide your own first aid and first aid kit when working after normal working hours and weekends when not provided by CDR Demolition

### **1.3 MANAGEMENT MEETINGS**

It is recommended that a management Safety Committee meeting be held each month, more frequently or as required to effectively control safety within the company and shall be scheduled to permit review of the Safety Committee Minutes, Accident Reports and to initiate corrective action indicated. Minutes of these meetings will be kept on file at Head Office. Each meeting should include a review of the preceding meeting to ensure follow-up and continuity.

## **Section 2: WRITTEN & PRACTICAL SAFE WORK PROCEDURES**

### **2.1 POLICY**

- It is our company policy that written and practical instructions will be developed and maintained on an ongoing basis to eliminate or control the dangers likely to be encountered by our workers in the performance of their duties.
- These written instructions will be identified as Systems, Procedures and Practices. At the commencement of each work day the supervisor's basic responsibility will include, but is not limited to, and he/she shall ensure:
  - Identify specific hazards, document and file. If necessary post these hazards in a conspicuous location readily accessible to all workers. All workers shall be made aware of these hazards during orientation and/or safety meetings.
  - The safety rules and instructions provided in our Safety Program may not cover all the health and safety requirements employees will be expected to follow for each different situation. They are intended to remind employees of the more obvious conditions.

- Written instructions regarding specific real or potential hazards shall be maintained at the workplace available to workers. The WorkSafe BC Occupational Health and Safety Regulations shall also be available at each workplace.
- All workers are charged with the responsibility of following these written and practical instructions. Supervisors and/or designated personnel are to be held accountable for monitoring of the workplace to ensure that compliance is obtained.
- Generally, compliance will be obtained by mutual co-operation and by education of supervisors and workers in the "WHYS" of our safety rules and procedures.

## 2.2 TYPES OF SUPPLEMENTARY INSTRUCTION

- Supplementary instructions are expressed as rules and procedures (general and specific). They are developed from input supplied by workers, the Safety Committees and supervisors.
- A System is an ordered method or combination of specific events. I.e. a worker is faced with a task that will expose themselves to a fall hazard and decides the best fall protection system to implement.
- A Procedure means a step-by-step method to perform a task in a safe and productive manner. I.e. what equipment and materials are required to do the job, what are the hazards, and how to do the job safely.
- A Work Practice is a set of guidelines reviewed on how each CDR Demolition employee, contractor, subcontractor and their employees will perform their daily task. i.e. Workers creating waste that prevents safe access and creates a trip hazard will remove the waste when the work is completed before the worker leaves for the day.

## 2.3 SAFETY RULES

Rules are an integral part of the company safety program. When rules are implemented and maintained they will contribute to the overall success our safety program. '

In order to promote good accident prevention practices, the following safety rules have been developed. Following these safety rules will greatly reduce the possibility of accidents occurring.

Each worker is responsible for their actions and must be alert to the actions of others. The cooperation and support of all workers is essential to an effective Safety Program and each must do his/her part. These rules and requirements are for your benefit.

### 2.3(1) GENERAL SAFETY RULES

- No worker shall operate or use any equipment in a manner that endangers themselves or other workers. Only persons properly trained and authorized by their supervisor shall operate any equipment or machinery.
- Report any unsafe conditions or equipment to your supervisor or safety rep immediately and warn any employee who may become involved.
- The use of alcoholic beverages, drugs and their derivatives is strictly forbidden on the job. No person shall enter a worksite while his or her ability to work is impaired.
- Running, horseplay, scuffling, etc. is strictly forbidden and will not be tolerated in the workplace.
- Never distract the attention of a fellow worker while they are working.
- Wear appropriate clothing for the job that will be suitable for the hazards of the workplace and weather conditions. Shorts and tank tops shall not be worn on any jobsite.
- Rings, wrist watches, bracelets or dangling neckwear must not be worn in any situation where there is a hazard of them becoming caught in machinery or other objects.
- Safety headgear must be worn in any work area where there is a danger of head injury from falling, flying or thrown objects or other harmful contacts. The site supervisor may designate an exception to the safety

hat rule. Chin straps or other suitable means of retention must be used when workers are climbing or working from a height exceeding 10 feet, or are exposed to high winds or other conditions that may cause loss of headgear.

- Protective eye glasses, goggles or face shields must be worn for all operations where the eyes or face are exposed to flying objects, injurious light, chemicals or intense heat.
- Appropriate hand protection must be worn when handling material with sharp edges or rough or abrasive surfaces.
- CSA approved safety footwear, consisting of a 6" work boot, of substantial leather or rubber construction, with steel plate and safety toes shall be worn by all workers while on site and while walking through the site. NO RUNNING SHOES will be worn or allowed on site.
- Respiratory protection shall be worn by all workers where needed. Control access to contaminated areas by scheduling work when other workers are away from the area, or by isolating the work area and posting warning signs on access routes.
- Guardrails must be installed and maintained wherever there is a hazard of falling from 10 feet or more above grade. Where guardrails cannot be installed practically, a safety control zone using barricade tape can be implemented to warn and restrict access to the fall hazard area. A full body harness with lifeline must be used where the absence of guardrails exist.
- Safety lines with harness must be worn where a fall from 10 feet or more may occur or where a fall from a lesser height may result in an unusual risk of injury. Workers while working on roofs with a slope ratio of 8 vertical to 12 horizontal shall also be equipped with lifeline and harness.
- Keep your work area clean and tidy at all times. A daily clean-up is usually necessary. Clear and unobstructed access must be maintained to all work areas.
- Hoses, cables, ropes, wires, etc. must be laid out safely or stored when not in use so as to prevent tripping hazards.
- Protruding nails are to be removed or bent over.
- Hazardous materials must be identified, stored and handled in accordance with the Workplace Hazardous Materials Information System (WHMIS) regulations.
- Do not clean or adjust equipment or machinery while it is running or in motion when there is danger or contact with moving parts.
- Never leave a machine running while it is unattended except for stationary equipment compressors, etc., or where special conditions prevail and precautions taken.
- Only authorized personnel may do electrical work of any kind.
- Do not allow combustible materials to accumulate on the job site. Good housekeeping is the best method of preventing fires.
- Never smoke in a "NO SMOKING" area.
- Gasoline powered motors must be stopped before refuelling and the "NO SMOKING" rule observed.
- Gasoline, oil, grease and other flammable liquids are to be stored clear of the work area and "NO SMOKING" signs are to be prominently displayed in the storage area.
- Fire extinguishers must be recharged immediately after use.
- No worker is to ride on the deck of a truck or in the back of a pickup truck unless the vehicle has been designed or modified for this purpose. All workers are to ride in the cabs of the vehicle.
- Examine all scaffolding material before using.
- Never jump from or onto staging or scaffolding.
- Never lean against guardrails or handrails.
- Do not leave guardrails, barriers, gates/chains opened or unsecured.
- Never leave loose materials or tools where there is a danger of them falling.
- Do not leave openings uncovered or unguarded mark covered openings with an "X" and "hole".
- Heed all safety guards, barriers, signs and tags and never remove or render inoperable, any safety devices or guards. Report any safety devices or guards that are not performing their intended function to your immediate supervisor for correction.

- Hearing protection devices (muffs and/or plugs) must be worn where there is excessive noise 85dB or greater daily average and/or where directed by your supervisor

Workers are to know and comply with the General Safety Rules. Failure to do so will result in disciplinary action up to and including termination of employment.

The designated supervisor of safety rep will ensure that safety headgear and footwear are worn by all employees on site.

A copy of the General Safety Rules will be reviewed with each worker prior to the commencement of work

## **2.4 JOB PROCEDURES**

To ensure an accident free environment, it is essential that a worker know and recognize the various aspects of his/her job that are critical to safe job performance. Accordingly, job safety procedures have been and will be developed and maintained as part of our Occupational Health and Safety Program.

These procedures shall be reviewed as part of our annual review of the Occupational Health and Safety Program, or more often as required by changes in equipment, tools or work processes.

Because of the diversity and complexity of the Construction Industry, A program of "general job procedures" as well as "specific job procedures" will be developed in order to provide both the general requirements of the work force and the specific requirements of Projects.

While care has been taken in the preparation of this manual, there are places where simplification or changes from the wording exist. In such cases, regulations and engineering data shall over-rule this manual.

## **2.5 GENERAL JOB PROCEDURES**

General Job Procedures are developed and included in this manual as part of our Safety Program. These procedures include, but are not limited to, the following;

- Concrete
- Fall Protection
- Guardrails
- Hand Tools
- Housekeeping
- Ladders
- Personal Protective Equipment
- Power Tools
- Respiratory
- Scaffolding

## **2.6 GUIDELINES FOR DEVELOPING WRITTEN SAFE WORK PROCEDURES**

To avoid the creation of hazardous situations, all employees are to receive appropriate education and training for performing their work safely. Training is essential to our company safety program and should include the use of safe work procedures.

The first step in developing safe work procedures is to select the jobs that require them. Some of the main considerations in selecting and determining priority jobs are, but not limited to:

- past job related losses (injuries, damage, production loss, public liability, fines, and assessments)
- probability of loss recurrence
- magnitude of the potential loss
- frequency of performing the job

Determining the jobs that require safe work procedures should be done jointly by the management and the relevant supervisor. The supervisor can then write the safe work procedure using the following guidelines.

Any job selected for a safe work procedure has to be broken down into a sequence of steps. The breakdown should include all the major steps that are critical to doing the job right and exclude those that would not cause problems if they were not emphasized. Most jobs will break into fewer than 15 steps. One of the easiest methods of identifying jobs steps is by observing someone doing the job.

- Select the most skilled and knowledgeable worker, or even better works
- Explain to the worker(s) what you are doing and why
- Record an initial breakdown while observing the job several times. Don't interrupt or intimidate the worker while doing this.
- Check the breakdown with the worker
- Record the basic steps of the job breakdown. Keep the steps down to five or six words each, beginning with action word such a lift, remove, push, start, set, etc.

Once the job has been broken down into a sequence of steps, you must identify the potential losses associated with each step, which could affect safety health, production or quality. (don't worry about solutions at this point)

- Observe the worker again to help identify potential downgrading incidents Observe the worker again to help identify potential downgrading incidents.

Some questions you may consider to help identify loss potential include:

- Are the right numbers of people present to do the job safely?
- Is there substantial idle time that could be used more gainfully?
- What actions or conditions could cause injury or illness?
- Are regulations being followed?
- Are the tools, equipment and materials suitable and adequately located for the job?
- Would other tools be more efficient?
- Are tools and equipment in good operating condition?
- Can better, safer or less expensive materials be used?
- Is material transported in the safest and most efficient way?
- Is there good housekeeping in the working and storage area?
- Are the materials, tools, equipment or workers in the work area unnecessary to or hinder the job?
- Should the work environment be altered to improve conditions?

Once you have noted the potential hazards associated with each step, discuss them with the worker(s) for their opinion.

You are now in a position to review the job efficiency and safety. Are there any steps which should be removed or added to increase the safety and decrease costs? Some questions that may apply to each step to assist in identifying deficiencies are:

- Why is it necessary
- What is its purpose

- Where should it be done
- When should it be done
- Who is most qualified to do it
- What is the most efficient and safest way of doing it
- What method could help control potential problems

Now that you have broken the job down into its most efficient and safe steps, you are ready to write the safe work procedures. This requires you to:

- Remove needless details
- Combine steps to improve their sequences
- Rearrange steps to improve their sequences
- Simplify all necessary steps

5. Write safe work procedure(s)

### **ALCOHOL and ILLEGAL DRUGS**

It is our company policy that alcohol and illegal drugs are prohibited in the workplace and neither are to be consumed or used during the workday.

All workers must show up fit and alert when arriving for work.

We have a zero tolerance for consumption of alcohol and/or illegal drugs in the workplace. If a worker is observed consuming and/or using illegal drugs, or there is any indication that an employee is under the influence of alcohol or drugs, that person will not be permitted to remain at work and may be suspended or have their employment terminated.

All workers who use medically prescribed drugs which may impair their performance or judgment must inform management, supervisors and the appropriate safety representative and provide to them the name of the prescribed drug.

### **ASSURED GROUNDING PROGRAM & GROUND FAULT CIRCUIT INTERRUPTORS**

An assured grounding program may be used as an alternative to using ground fault circuit interrupters (GFCI) to meet the requirements of Section 19.15 of the Work Safe BC Regulation.

A GFCI is a device that detects any leakage of current in an electrical circuit whenever the leakage current is greater than 5mA.

The purpose of an assured grounding program is to ensure that the black wires (hot), white wires (neutral), and in particular, green wires (ground) of extension cords are properly connected.

An assured grounding program contains four parts.

1. Worker training: Train workers to properly use extension cords and power tools.
2. Daily visual inspection: Check extension cords and power tools every day for damage. Damage must be repaired before the cord or tool is used.
3. Testing every three months: Test extension cords and power tools for circuit continuity and correct polarity before they are used for the first time following repairs and during the months of January, April, July and October.

4. Color coding: Tag tested extension cords and power tools with colored bands about 10 centimeters from the male plug (see color chart below).

This information was derived from the WorkSafe bulletin GFCIs and Assured Grounding Program.

#### Testing

1. The continuity and polarity testing of all extension cords and portable power equipment will be a test every three months and upon being put into service by the safety coordinator or other trained individual,
2. Extension cords and power equipment cords will be visually inspected for cut or abraded insulation or damaged plugs. Damaged equipment and cords will be taken out of service.
3. Wiring on extension cords will be tested by using a circuit tester.
4. All testing equipment will be kept in the safety office and can be accessed from the safety coordinator.
5. Equipment and extension cords that have passed inspection will be color coded for easy identification. Color coding will be done by the use of colored tape at the male end of the receptacles. The following colors are standard for all worksite using an Assured Grounding Program in BC.

Red January, February, March

White April, May, June

Blue July, August, September

Green October, November, December

#### Extension cord testing procedure (circuit tester)

1. Always test on a known live circuit to assure the unit is in operating condition. Plug tester into receptacle, the two outside lights should light up, if so, the unit is working properly and you can begin testing extension cords.
2. Plug extension cord into electrical outlet.
3. Plug tester into extension cord receptacle. If the two outside lights light up, the extension cord is O.K. and can be color coded.
4. If a combination of other lights light up on the tester, mark extension cord with the test result (noted on tester) and remove from service.

#### Portable electrical equipment

- All portable electrical equipment used on our project sites will be doubled insulated.

#### Damaged equipment

- All damaged equipment must be taken out of service and repaired before being put back into service.
- Damaged extension cords or power cords must not be spliced. The cords can either be shortened or replaced.

#### Use of un-coded equipment

All portable electrical equipment used on our project sites that do not display a valid Assured Grounding Program Color Band must be fitted with a Ground Fault Circuit Interrupter or plugged into a gen set with a built in Ground Fault Circuit Interrupter before using the equipment outdoors or in any wet, damp location.

#### ASBESTOS

If a worker is or may be exposed to potentially harmful levels of asbestos, the employer must develop and implement an exposure control plan meeting the requirements of Section 6.2 thru 6.32 and that it is administered by a properly trained person.

It is the employer's responsibility to ensure that workers who are at risk of exposure are adequately instructed and trained in:

- the hazards of asbestos
- the means of identifying asbestos-containing material at the worksite
- the work procedures to be followed
- the correct use of the required PPE, and of the required engineering controls
- the purpose and significance of any required health monitoring
- means for decontamination of workers
- removal of asbestos waste and clean-up of asbestos waste material.

The hazards that are attributed to asbestos exposure are "asbestosis" a chronic lung disease resulting from prolonged exposure, "lung cancer" and "mesothelioma" a rare but very malignant form of cancer affecting the lining of the lungs and abdominal cavity.

Identifying asbestos shall be identified by signs, labels or when these are not practicable, other effective means.

The work procedures will be determined by the risk factors for removal of the asbestos e.g., low-risk, moderate-risk or high-risk. They shall cover, the monitoring of airborne levels, ensure that windows, doorways and all other openings are adequately secured to prevent the release of fibres into other work areas, the use of glove bags, ventilation with the exception of the glove bag the effectiveness of HEP A filters to be used for ventilation and vacuum's and the handling and disposal of asbestos waste and other materials contaminated with asbestos, including disposable protective clothing and clean-up equipment, that such materials are placed in sealed containers which are labeled as containing asbestos.

The personal protective equipment used will be that which is adequate for the anticipated level of exposure e.g., double respirator with HEP A filters, protective clothing which is made of material resistant to penetration of/by asbestos fibres, fits snugly at the neck, wrists and ankles, and as necessary to protect against the risk, covers the head and feet as well as the body.

## **CHAINSAW OPERATIONS**

All chainsaw operators are encouraged to receive training in the safe handling of saws and the use of proper cutting methods before attempting any cutting tasks. Some of these are:

- Use safe methods of starting, holding, carrying and storing the saw as directed by the manufacturer.
- Avoid kickback situations. Do not stand directly behind saw while cutting.
- Do not operate saw if it is backfiring.
- Carry the saw with the bar guard to the rear and ensure the motor is shut off'.
- Keep both hands on the saw while it is cutting.
- Do not operate the saw above waist height.
- Ensure safe footing.
- Ensure the chain has the correct tension, is sharp and is adequately lubricated.
- Ensure the chain brake is functioning properly and that it adequately stops the chain.
- Fuel saw in a well-ventilated area. Do not fuel while hot or running

## CLOTHING and PROTECTIVE EQUIPMENT

When operating a chainsaw, the proper protective equipment must be worn as per the manufacturer's recommendations and WorkSafe BC regulations. Wear clothing that protects from scrapes and scratches and allows freedom of movement. A long-sleeved shirt together with comfortable, loose fitting trousers and good quality safety boots with steel toes that also provide ankle support and have a non-slip sole are recommended.

When workers are using a chainsaw for steady and/or long durations or where a risk of leg injury may exist, protective leg chaps shall be worn.

Required personal protective equipment:

- Face shield/safety glasses
- Hard hat
- Ear muffs/plugs
- Gloves
- Chaps (legs)

## CIRCULAR SAW Safe Work Procedures:

The following are some of, but not necessarily all the procedures to follow when using a circular saw. If unsure ask your supervisor.

- Wear proper eye protection and hearing protection, and when required for dust, wear a dust mask.
- Select and use the proper sharp blade designed for the work to be done.
- Ensure the power supply is disconnected before changing blades or making saw adjustments.
- Hold the saw securely with both hands when ripping.
- When ripping, make sure the wood is held securely in position. Use a wedge to keep the stock from closing and causing the saw to bind.
- Before cutting check the wood for obstructions which could cause the saw to kickback.
- Allow the saw to attain full power before starting your cut.
- Make sure all cords are clear of the cutting area before starting the cut.
- Disconnect the electrical cord before adjusting or changing the blade.
- Keep the saw blade guard in good working order.
- Ensure the retracting guard has returned to its proper position before setting the saw down.
- Do not fix or hold the retractable blade guard in the open position.
- Avoid twisting the saw while cutting to change direction or saw alignment unless the blade is designed for this purpose.
- Do not use a saw that vibrates or is defective in any way. Discard any blade that has developed a crack from the eye or the collar and where the blade has developed a crack from its outer diameter whose length is more than 1/20 the diameter of the saw blade.
- Inspect for cracked blades and/or broken teeth. Replace when the blade is cracked.
- Do not carry the saw with your finger or hand on the trigger switch.
- Keep the saw blade guard and motor clean and free of sawdust.
- Where harmful vapours or dusts are created, appropriate respiratory protection must be worn.

## COMPRESSED AIR/COMPRESSORS

Management or designated supervisors shall ensure workers are adequately trained in safe work and operating procedures as per the manufacturer's instructions for compressors and the air line hoses. Regarding cleaning with compressed air, workers shall be aware of the WorkSafe BC Regulations, "cleaning with compressed air."

Compressors, airline hoses and their connections/couplings shall be inspected prior to use, looking for bulges, cuts and other damage. Ensure damaged hoses are identified, removed and replaced.

If clothing is to be cleaned before leaving the work area, suitable cleaning equipment must be used. Although it is not recommended compressed air is used to clean workers clothing, if it is, see the following. Where compressed air is to be used for cleaning worker's clothing the worker must ensure;

- a specially designated area is used and appropriate eye and respiratory equipment is worn.
- the air supply pressure is limited to a pressure of 70 kPa gauge (10 psig) or safety nozzles that have the same pressure limiting effect are used.

Ensure that when cleaning tools, equipment or removing dust chips, or other substances that there is no danger of injury to other workers from the jet, or from the material it expels or propels and an injury or health hazard or other cause is likely to result.

The following are some but not all the rules, procedures to follow when working with compressed air.

- 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 appropriate personal protective equipment for the job being performed, such as eye, face and hearing.
- A proper pressure regulator and relief device must be in the system to ensure the correct/desired pressures are maintained
- Maintain the equipment as per manufacturer requirements.

Warning; compressed air can cause serious injury and death.

## COMPRESSED GAS CYLINDERS

***Cylinders must, at all times, be secured to prevent them from falling over.***

***Cylinders must not be allowed to drop or bump together during transport.***

***Cylinders must not be hoisted by slings or magnets.***

- Cylinders must, where practicable, be kept on end. As a general rule, if the cylinders are carried in a horizontal position for a period of time, then keep them vertical for the same length of time prior to use. Cylinders must stand in a vertical position for at least one hour minimum prior to use.
- Sparks, molten metal, electric current or flames must not be allowed to come in contact with cylinders or their attachments. Cylinders must not be placed near excessive heat.
- Oxygen cylinders, hoses and their fittings must be free of grease, oil and debris, if allowed to build up, a fire may start by spontaneous combustion. Oxygen must never be used as a substitute for compressed air. Valves must be closed and the lines emptied when the cylinders are empty or not in use. Valves must include provisions for flashback arresters on both rubber hose gas lines.
- Empty cylinders must have the pressure regulator removed, the valve closed tightly, the protecting cap put on (unless integral guards are provided), be identified as being "empty" and must be stored separately from other compressed gas cylinders.

Start Up:

1. Secure cylinders in the upright position, usually to pit ladder. Remove caps.
2. "Crack" (open) cylinder valves to clear dust and water, point away from yourself.
3. Visually check torch apparatus; hoses, regulators, torch and torch tip (replace, clean if necessary).

4. Attach regulators to cylinders. Turn regulator valve out (counter clockwise) on the regulators to close them.
5. Slowly open the Oxygen cylinder valve, when maximum pressure is reached and the needle stops; turn the valve all the way open. Repeat for the Acetylene, however when the needle stops open the valve only 1/2 turn further. During this step ensure that working pressure gauges remain "0". If cylinder gauges are less than 15 lbs. psi do not use, as working pressure cannot be maintained and flame is no longer consistent. Also to prevent possible fire or explosion, write MT (empty) on cylinder or tag.
6. Set working pressure (low pressure gauges). Acetylene first, no more than (1) turn. Oxygen second. The following working pressures are set for a #1 tip: Acetylene 5 lbs. psi, (never exceed 15 lbs. psi, watch the gauge closely) oxygen 40 lbs. psi.
7. Test for leaks. After apparatus is pressurized up to torch valves (keep closed) close the cylinder valves and observe the high pressure gauge, a leak will be indicated by a drop in pressure. A pungent odour from leaking acetylene can also be an indication of a leak. Repair leak or send back to shop with tag. Return cylinder valves to their original position and continue to step 8.
8. Open torch valves to purge lines. Turn regulator valves counter-clockwise to close regulator valves. Repeat steps 5 & 6 than proceed to step 8.
9. To purge the torch and hoses open each torch valve for 5 -10 seconds and close.
10. Open Acetylene torch valve, 1/4 turn and ignite with striker, flame should be yellow-red.
11. Gradually open Oxygen torch valve until desired flame is obtained. Flame should change from yellow-red to blue and a light green inner cone forms and as more oxygen is added. Cone also becomes white and rounder/smooth.

#### Stopping Work:

1. Close the Acetylene torch Valve. Close the oxygen torch valve.
2. Close the Acetylene cylinder valve. Open the Acetylene torch valve to release all the pressure, close the valve. Turn out (counter-clockwise) the valve of Acetylene regulator.
3. Close the Oxygen cylinder valve. Open the Oxygen torch valve to release all pressure, close the valve. Turn out (counter-clockwise) the valve of Oxygen regulator.
4. Disconnect the regulators from the cylinders.
5. Put the caps back on the cylinders and store in the upright position, store away from heat, oil, grease, solvents, etc.

#### CONFINED SPACES

A confined space is any space (open or closed-topped) that has limited entry and exit openings, insufficient ventilation, contains or may potentially contain a hazardous atmosphere (toxic, flammable, corrosive, irritating or asphyxiating) and is not intended for continuous worker occupancy.

The procedures will relate to the possible confined spaces to be encountered on a construction site. Deep manholes, below-grade pump stations, sumps, catch basins, sewage lift-stations in use and the reconstruction of existing manholes. Other examples include; tanks, silos, tunnels, storage bins, pipelines and underground utility vaults.

#### Confined space identification

Warning signs at entrance points to confined spaces are a means of preventing inadvertent entry and may be required when:

- The entrance to a confined space is easily accessible to workers not authorized for entry.
- The confined space is likely to contain a harmful atmosphere or other danger.

Warning signs must be understandable to any workers who are not literate in English and will communicate:

- The danger
- Prohibition of entry without authorization.
- The need for special precautions.

The following procedures are essential to ensure a safe environment for the workers entering confined spaces. Refer also to WorkSafe BC Regulations part 9 "Confined Spaces".

#### ***WRITTEN PROCEDURES:***

These procedures apply to all persons involved in confined space work. Workers shall not enter into a confined space until:

- Appropriate tests by qualified personnel have been made to determine the nature of the existing atmosphere inside for the oxygen level and for the possibility of harmful gases. A written report, recording the results and the time of testing must be recorded. Monitoring and recording of the results will take place immediately before first entry, after any interruptions in the work (20 minutes or more) and at intervals while work continues. "If a harmful atmosphere is detected, no work shall take place inside until all the procedures have been taken to provide a safe work environment for the worker(s)".
- Written work procedures, based on the work to be performed, have been established. All workers are aware of the emergency procedures and when required, an evacuation plan must be established.
- Where tests indicate unsafe conditions, the confined space must be ventilated, purged or both and retested to ensure that the unsafe conditions have been removed before workers enter.
- A worker entering a high risk confined space shall be in constant communication (visual & voice) with a person stationed at the entrance to the confined space. If the worker becomes downed, "Do not attempt a rescue without proper protective equipment, procedures and assistance."
- Where a worker is to enter a confined space that is not absolutely safe, the worker will wear the proper HEPA filter or air supplied respirator, appropriate protective clothing and equipment. Where flammable or explosive gases or liquids are present, all sources of ignition must be eliminated or controlled.
- During jack hammering wear ear muffs "class "A" standard for high noise levels" and protective impact eye wear.
- A winch positioned over the entry, with a life line connected at all times to the D rings of the workers safety harness.
- A portable blower will be used to provide continuous ventilation by supplying clear air into the bottom of the manhole, chamber or pipe. The intake for the blower must be kept clear of any motor exhaust.
- If no permanent ladder or rungs are already in place, then a temporary ladder of appropriate length must be provided for access and must not interfere with the life line of the winch used for rescue.

The confined space entry decision tree can be used to determine the use of controls which are required to be in place.

#### ***Supervisors' responsibility***

The supervisor is responsible for ensuring that the workers follow all safe work procedures. Atmospheric testing must be completed by a qualified person. The test equipment must be calibrated prior to use and checked after test measurements have been taken. The equipment shall be used in accordance with the manufacturer's recommendations. Based on the test results, correct safety measures shall be implemented.

#### ***TRAINING:***

Training shall be given to all persons who will prepare confined spaces for entry, conduct atmospheric testing, perform entry work, or those assigned for stand-by or rescue duty.

Training of employees must be provided when:

- Employees have not previously done confined space work.
- New types of confined spaces have been added to the operation.
- New types of job procedures or equipment are to be used in confined spaces.
- Previously trained employees are no longer competent.

Retraining may be necessary when confined spaces are entered infrequently.

Employees who successfully complete the training program should be able to:

1. Identify and describe the types of confined spaces that will be encountered and the major dangers therein.
2. Identify warning properties of toxic air contaminants and symptoms of excessive exposure to them.
3. Describe and apply written instructions, including entry permits when used.
4. Conduct and interpret the results of atmospheric testing.
5. Implement and maintain isolation measures.
6. Set-up and ensure proper operation of mechanical ventilation systems.
7. Use personal protective equipment and be capable of recognizing defects.
8. Communicate with stand-by or rescue personnel including the use or signal codes.
9. Describe and apply emergency exit and rescue procedures.

Records of all training relating to confined spaces must be maintained.

#### **PERSONAL PROTECTIVE EQUIPMENT:**

All workers who could be exposed to danger in or around confined spaces are provided with and wear appropriate personal protective equipment.

##### **A. General requirements**

- All equipment be used and maintained in accordance with the manufacturer's instructions.
- Procedures concerning the use, limitations and maintenance of equipment must be established and workers trained in those procedures.
- Where practical, equipment should be assigned to individual workers for their exclusive use.
- Equipment must be inspected regularly and kept in good working order.

##### **B. Non respiratory equipment**

Head, eye, face, hand, foot, and body protective equipment must be selected and maintained in accordance with applicable regulations and CSA standards

##### **C. Respiratory equipment**

Equipment must be approved by an agency acceptable to the WorkSafe BC (e.g. NIOSH) and be selected, used and maintained in accordance with regulations and CSA standards.

##### **D. Safety Harnesses and lifeline**

Every worker who enters a confined space in which either:

- A harmful atmosphere could affect escape without assistance or where,
- The worker may become entrapped by materials,

Must wear a safety harness attached to a lifeline which will permit effective rescue.

**ISOLATION and LOCKOUT:**

Before a worker enters a confined space it must be isolated from sources of danger and energized systems locked out.

A. Controls of dangerous goods

The transfer of dangerous materials into the confined space can be prevented as follows:

Design of piping system Control measures

Pipes with flanged joints            Disconnect at flanged joint and install blank or blind.

Pipes with threaded joints        Disconnect and seal with threaded plug or cap.

Pipes with double block and bleed valves; only for materials which are solid at 20 degrees Celsius and one atmospheric pressure. Close both valves and lock; open valve and lock; open valve and lock.

All welded piping system or continuous system, Implement written work procedures to ensure procedures to ensure protection equivalent to blanks or blinds.

B. Control of energized equipment

All mechanical equipment in the confined space must be disconnected from the power source at the disconnect box and controls locked out.

**ATMOSPHERIC TESTING:**

Only a qualified worker may test the atmosphere in confined spaces.

- The test equipment must meet the needs of the confined space and the hazards which may be associated with entry.
- Instruments must be calibrated to a standard prior to use to ensure its proper operation.
- Maintenance shall be carried out on all test equipment to ensure that it is operating correctly.
- Testing personnel must follow safe working procedures when testing confined spaces.

Atmospheric testing must be conducted:

- During line disconnect or other line isolation procedures if an unprotected worker may be exposed to a hazardous atmosphere.
- Prior to initial entry into the confined space, both before and after procedures such as cleaning, purging and ventilation.
- During work inside space, at intervals that ensure the continuous safety of entry workers.

Before entry into a confined space, tests must be conducted to determine:

- Oxygen level.
- Explosive conditions.
- Nature and quantity of hazardous airborne contaminants which can reasonably be expected to exist in the confined space.

Tests should be conducted:

- When making the first approach to the confined space, test around and at the opening.
- At locations where transfer pipes lead to confined spaces.
- Around irregular features in the confined space or other locations which can trap air.
- At locations where workers perform work which produces contaminants.
- At all levels inside the confined space, especially where contaminants are likely to accumulate.

Test results must be recorded and readily available to the workers involved and upon, to request, to offer of WorkSafe BC.

Unprotected workers MUST be prohibited from entry when:

- The oxygen level is below 18%
- The concentration of hazardous substances is above limits as in schedule A of the WorkSafe BC Regulations.

#### ***CLEANING AND PURGING:***

Cleaning and purging are preparation procedures often carried out prior to worker entry. Ventilation will usually be required either during these procedures.

##### **A. Cleaning**

Procedures include steam or water cleaning, neutralization, descaling and special solvent application. Special precautions are required during these procedures.

##### **B. Purging**

Purging is the displacement of dangerous atmosphere in a confined space by fluid such as water or a non-flammable gas, usually nitrogen or carbon dioxide.

#### ***VENTILATION:***

Mechanical ventilation (The use of air movers such as fans or ventures combined with a means of directing air) will be necessary whatever it is reasonably practicable to control an atmosphere against oxygen deficiency or build-up of toxic air contaminants.

Ventilation systems shall be turned on prior to entry into the confined space.

##### **A. General ventilation**

Air is blown into or drawn out of the space by a system of air movers through flexible ductwork. Air blown into the space creates a positive pressure in it; suction from the space, negative pressure.

Problems to avoid:

- The ventilation system does not move enough air to ensure a safe atmosphere.
- The movement of air in the confined space does not scour the entire atmosphere.
- The ventilation system creates a hazardous atmosphere.

##### **B. Local exhaust ventilation**

A supplementary type of ventilation which can be useful when a point source of contaminant is found inside the confined space. When ventilators are used, it shall be appropriate to control the hazards of the space and maintain levels of air contaminants below their permissible concentration (as per WorkSafe BC)

The ventilator intake must be positioned so as to be clear of vehicle exhausts or other sources of pollutants and placed upwind of the confined space entrance when used to force air into the confined space.

#### ***VISIBILITY AND LIGHTING:***

Visibility can be improved by lighting, the use of light colored or reflective garments and by ventilation. All lighting equipment must be in good repair and, where flammable materials are present, explosion-proof. Area lighting need not be provided if work is of short duration and all entry workers are provided with and wear electric cap lamps or equivalent.

Emergency lighting such as flashlights or battery-operated area units must be provided to permit workers to locate exits and escapes.

#### ***EMERGENCY PROCEDURES:***

Rescue plans must be in place before every controlled space entry.

Evacuation of the confined space will occur:

- In the event of a failure of the ventilating system.
- If any unusual odour, taste or irritation is noticed.
- When so directed by the stand-by worker.

A. Stand-by worker and other rescue personnel

With confined spaces where a worker can become entrapped or a harmful atmosphere could affect the ability of the worker to escape, a stand-by worker, equipped for and capable of effective rescue, must be stationed immediately outside the confined space.

B. Rescue equipment

Each worker who enters a confined space, in which there is a danger of entrapment or an atmosphere which could affect the ability of the worker to escape without assistance, must wear a safety harness attached to a lifeline. Lifting assist devices may also be required.

C. Procedures to protect rescue personnel

Four practices to protect rescue personnel are:

1. Rescue from the outside.
2. Enter to rescue only after help arrives.
3. Enter only with a safety harness and life-line.
4. If a harmful atmosphere is possible, assume it is IDLH (immediately dangerous to life or health) and enter only with a self-contained breathing apparatus.

#### **CONCRETE**

Workers working with concrete must be trained in the safe work procedures and the proper (PPE) personal protective equipment requirements and their use, dependent on the nature of the work being performed.

Workers will be WHMIS trained to identify hazardous materials, safe handling procedures, the health risks, the proper PPE to be worn and the emergency procedures if contaminated. This will be done through the Workplace Hazardous Material Information System (WHMIS).

#### Concrete placement:

Concrete is corrosive and toxic. Workers who will be exposed to the hazards of mixing or placing concrete must wear the proper protective equipment to avoid the potential health effects; acute (short term) or chronic (long term) associated with exposure to concrete. Protective equipment worn will be for; face/eyes, hands and respiratory when required.

During the pour, all workers required to be underneath formwork shall only be under those areas where concrete has not been placed. If any worker observes any weakness, distortion or undue settlement of the formwork, the placing of concrete will immediately be stopped and the appropriate supervisory personnel shall be notified.

Where there is a safety concern of the formwork, the formwork designer shall be notified and he/she will inspect the formwork and false work to ensure conformity with the design and advice on any repairs needed.

The pour won't resume until all necessary repairs are made and the formwork designer gives the okay.

#### Concrete damp proofing:

When damp proofing concrete, proper personal protective equipment will be worn e.g., gloves, face/eyes and respirator equipped with proper filters.

Where there is insufficient air circulation, a means for circulating the contaminated air must be implemented.

#### Concrete chipping:

When performing minor chipping operations workers are to wear a minimum 1; 2 mask respirator with HEP A P-100 filters, eye protection and hearing protection.

When performing major chipping operations; plumbing, gas, electrical services, post-tensioning cables, etc., within the concrete slab, must be located prior to disturbing the integrity of the existing concrete.

#### Concrete grinding:

Grinding on concrete produces a dust containing free silica (also known as quartz). Workers repeatedly exposed to high levels of quartz dust can develop silicosis, a lung disease.

Grinding equipment not fitted with effective dust controls causes levels of airborne quartz dust, especially in enclosed areas such as stairwells, parkades and machine rooms.

#### ***To ensure worker health: Implement a Silica Exposure Control Plan***

Provide dust controls on the grinder wherever feasible; for example, fit an exhaust system onto the grinder to remove the dust as it is generated. Workers must wear at least an Y2 mask respirator with HEP A P-100 filters.

When grinders are not fitted with dust controls, operators may be required to wear full face piece cartridge respirators when grinding in open areas, or supplied air respirators when working in enclosed spaces.

Control access to contaminated areas by scheduling work when other workers are away from the area, or by isolating the work area and posting warning signs on access routes.

## DISCIPLINARY MEASURES

Management will demonstrate due diligence regarding safety as per WorkSafe BC expectations and expects your cooperation and compliance regarding our company Health and Safety Program and its policy and procedures as well as the WorkSafe BC regulations.

It is your responsibility to adhere to the safe work practices and procedures to help maintain a healthy and safe work environment for yourself and co-workers. If you have any concerns regarding the health and safety of a work process or other safety issue, talk to your immediate supervisor.

Disregard or negligence of these rules and regulations, depending on the nature and severity of the violation, will determine the result of disciplinary action to be taken. "The employee may be suspended without pay or their employment terminated without prior verbal or written notice".

The following is a guideline for suggested disciplinary action:

### FIRST OFFENCE:

Verbal warning for a violation of any WorkSafe BC regulation, company safety rule or procedure.

- The violation is to be discussed with the worker and their supervisor to implement corrective action.

### SECOND OFFENCE:

Written warning for a repeat violation of any WorkSafe regulation, company safety rule or procedure.

- The written warning is to be presented to the offending worker.
- A copy is to be forwarded to the workers supervisor
- A copy is to be forwarded to the workers employer for review and follow-up.

### THIRD OFFENCE:

Written warning for a repeat violation of any WorkSafe BC regulation, company safety rule or procedure.

- The written warning is to be presented to the offending worker.
- The worker and/or their immediate supervisor given suspension without pay.
- A copy is to be forwarded to the workers employer for review and follow-up.

### FOURTH OFFENCE:

Written report for repeated violation of any WorkSafe BC regulation, company safety rule or procedure.

- The written report is to be presented to the offending worker.
- The written report forwarded to the workers employer
- The worker and or their immediate supervisor employment terminated.

***NOTE: All written violation notices are to be forwarded to Head Office for review.***

## ELECTRICAL SAFETY

- All temporary wiring must be installed and maintained in accordance with applicable codes.

- Where possible, electrical cords must be covered or elevated. They must be kept clear of locations where they may be subjected to damage or present tripping hazards.
- Splices in electrical cords must retain the mechanical and electrical strength of the original.
- Portable electrical equipment including temporary lighting, must be protected by an approved G.F.C.I. (ground fault circuit interrupters) of the class A type installed at the receptacle or on the circuit at the electrical panel.
- Energized wiring in junction boxes, circuit breaker panels, etc. must be protected from accidental contact whenever it is left unattended.
- Temporary lighting lamps that are broken or burned out must be replaced as soon as possible. Bulbs must not be removed from other areas to provide lighting.
- Cords shall be 3 prongs or double insulated. "DO NOT" stand in water. Where plugs connect, don't let them lay in puddles while using tools. Cover water/puddles with plywood or planking.
- UNDER NO CIRCUMSTANCES WILL WORKERS WORK, MATERIALS BE STACKED, SCAFFOLDS BE ERECTED, OR TOOLS AND EQUIPMENT BE OPERATED IN PROXIMITY TO ENERGIZED IDGH VOLTAGE POWERLINES WITHIN THE LIMITS OF APPROACH SPECIFIED IN THE FOLLOWING TABLE.
- Sufficient distance shall be added to the specified distance to prevent unplanned or accidental movements bringing the worker, tools, equipment or material within the specified distance. The specified distance used, applies to all parts of equipment, including booms, hoisting cables and any part of the load being raised. Distances shall be increased to provide for any change in boom angle, swing of the hoisting cable and the load while it is being raised, lowered or moved laterally, to ensure that safe distance is maintained at all times.

Operators shall give consideration to the probability of hazard from switching surges, altitude, humidity, line configuration, etc. Table 19-1 General limits of approach (VOLTAGE /MINIMUM DISTANCE)

Phase to Phase	Metres	Feet
Over 750v to 75kV	3	10
Over 75kV to 250 kV	4.5	15
Over 250kV to 550kV	6	20

- When high voltage power lines are to be encountered within a work area, alert the appropriate supervisor. The supervisor will ascertain the voltage and the minimum distance required and will have a WorkSafe BC Form 30M33 (Assurance in Writing) completed. The Form 30M33 must be at the work site not at Head Office or anywhere else.
- Workers shall, before commencing work near energized equipment and/or power lines, check with the proper supervisory personnel or B.C. Hydro to confirm the voltage and if it is safe to work near the electrical hazard and what are the safety precautions, procedures and the safe working distance you must maintain to safely perform your work duties while working with mobile equipment, power tools, scaffolding etc. Have a Tool Box Talk and document and file it.
- Record and keep on file the name(s) of the person(s) who gives you the authorization to perform your work duties. These procedures may prevent fines or criminal charges against you in the event of an accident or during a regular site inspection by the WorkSafe BC officer who witnesses a violation of the regulation 19.12(IX2X3) and 19.24 (IX2).
- If the minimum distance in table 19-1: of the WorkSafe BC Regulations cannot be maintained an assurance in writing will be available and posted and the power lines will be visually identified and guarded as per regulation 19.25(3X6).
- Where un-insulated, parts are not guarded or low voltage equipment has been energized conspicuous signs visible to the workers must be placed close to the equipment stating "danger, energized equipment" 19.11 (1) "entry only to qualified or authorized personnel" 19.12(3)

## POWER LINE CONTACT

The following procedures shall be followed if any mobile equipment comes into contact with overhead power lines:

When the equipment is still in contact with the lines the operator shall;

- If able try to move equipment away from the power lines. If the machine breaks contact with the power lines move the machine to the safe distance of a minimum of 30 feet from the contact point
- If unable to move machine, remain in the machine until being notified by B.C. Hydro crews that the power has been disconnected and that it is safe to do so.
- Only if your life is in imminent danger due to fire, should you attempt to exit from the machine.

If you must jump from the machine it is imperative to your life that you do so without touching any part of the machine and you must land on the ground with your feet together. Do not touch the ground with your hands, walk or run. Maintain contact with your feet and shuffle your feet ensuring your toes does not pass your heels.

- Shuffle your feet or hop with your feet together to the recommended safe distance of at least 30 feet.
- If someone tries to assist you, inform them of the power line contact and ensure they maintain the safe distance of 30 feet.
- Inform workers to notify the appropriate supervisory personnel.
- Workers and others in the vicinity must move away immediately to a safe distance of at least 30 feet or more if possible (30 feet is the absolute minimum distance) from the machine, and any downed power lines.
- Inform Head Office of overhead power line contacts and B.C. Hydro Emergency Service.

## ELEVATING PLATFORMS

Scissor, boom and giraffe lift operators must follow all applicable Vehicles and Mobile Equipment safety rules. In addition, the following are some of but not all of the rules that apply specifically to their operation. Refer to the manufacturer's instructions and WorkSafe BC regulations as they apply;

- Equipment must be used and maintained in accordance with the manufacturer's instructions and the applicable WorkSafe BC regulations.
- Guardrails and safety chains must be in place.
- Toe boards must be in place.
- Safety belts or harnesses and life lines must be in place and used when applicable.
- If a unit is fitted with outriggers, they must be used. Carrier vehicles of elevated work platforms must be immobilized against inadvertent motion.
- Scissor lifts must be guarded where there is a possibility of workers inadvertently coming into contact with any hazardous moving parts of the lifting mechanism.
- All vehicle-mounted giraffes or self-propelled boom-supported elevated work platforms must be subject to non-destructive testing as per the WorkSafe BC regulations.
- Every elevating work platform must be fitted with a warning system for forward, reverse, up and down motions.
- Every elevating work platform must be provided with an emergency stop button on the platform and an emergency lowering device.
- All self-propelled elevating work platforms (except truck-mounted platforms) must be fitted with tilt angle indicators or warning devices as described in the WorkSafe BC regulations.

## DO

- HAVE proper training before operating controls on a job.
- TOW only vehicles that are designed specifically for that use.
- WEAR a safety harness with a lanyard that is fixed to a platform anchor point.
- MAINTAIN three –point contact (one band and two feet, or two bands and one foot) when getting on or off the platform.
- LOOK in direction of travel and ensure that path is firm and level and free of any hazards. When operating indoors, ensure there is adequate lighting, walk the direction of travel before operating looking for floor openings and other hazards that may cause the platform to tip.
- MAINTAIN firm footing on the platform.
- MEASURE the distance from the extreme outside dimension of the work platform and equipment, the safety lines, cables, materials or tools handled to the nearest energized component. When the minimum distance cannot be maintained, stop all work and contact the authority controlling the electrical system for advice.

### **EMERGENCY PROCEDURES**

An emergency plan must be developed for each worksite. The plan must include; the care, reporting and corrective follow-up of all injuries and serious accidents. The plan must be developed at the time the job is being set-up.

The plan must be made to all company supervisory staff and workers, and enforced.

The plan must take the following items into consideration: All employees must be safety orientated by the supervisor, first aid attendant or the designated safety representative to be made aware of a list of personnel responsible in emergency situations and how to contact them, contact phone numbers for emergency support services, the locations of the first aid room, fire extinguishers, phone location(s), the evacuation plan and the emergency procedures to be followed in the event of accident/incident. i.e., (know the signals and procedures for summoning first aid and emergency evacuation).

The means for summoning first aid, evacuation as well as an all-clear signal may be by using an air horn with the signal determined by the appropriate safety representative.

In the event of a fire or the need for evacuation arises, the supervisor or alternate must be notified immediately.

The supervisor/alternate will then organize all workers to meet at the pre-determined marshalling/muster area and ensure that all workers are present and accounted for. DO NOT GO HOME. If necessary, the supervisor/alternate will phone 911, the fire department and assist them with the necessary information. In all cases, fires must be reported to management.

If you witness an accident, take the appropriate steps to aid the injured worker. Do not move the injured worker unless their life is in immediate danger. "WARNING, be aware of any hazards at the accident scene. Do not become a victim yourself."

Emergency procedures for helping a worker who has had an accident that requires medical aid is to phone 911, providing them with the necessary information:

- Description of the accident and the nature of the injury if known.
- Notify if you want the ambulance, fire department or the police.
- Give cellular phone number if applicable.
- Give municipality, address and location.

- Notify management.
- Have designated person(s) meet the emergency response team at the front gate and direct them as necessary, to the accident scene.
- All workers shall report all injuries (even insignificant ones) to the First Aid Attendant and your supervisor.
- When necessary (death, structural failure/collapse, major toxic release) as per WorkSafe BC regulations, phone and inform the board. Phone 604-276-3100, if after hours (4:30pm and weekends) 604-273-7711.

## **NATURAL DISASTERS**

Management is responsible for seeing that an emergency program is implemented regarding natural disasters. The emergency program will cover:

- A before assessment of the workplace to safeguard against hazards to avoid injuries and minimize damage.
- Worker training for safety procedures covering the do's and don'ts during a natural disaster and the use of emergency equipment (fire extinguishers).
- Emergency kit containing, but not limited to; battery radio, crescent wrench, bottled water, battery flashlight.
- A list of where emergency supplies and equipment are stored.
- Planning and practicing emergency evacuation (practiced annually). Document the annual drill.
- Recommend that workers who are on regular medication and whose life would be at risk without it that they should be prepared and have at the workplace, enough medication to last for at least three days.
- An after assessment of the workplace, checking for injuries and inspection of utilities. Designated workers will be trained to know how to shut off the utilities.

Management will delegate personnel who will be responsible for co-coordinating, developing, and implementing the program and delegating tasks to workers, should a disaster occur.

In the event that a significant disaster affects the environment, the resulting damage may overwhelm the ability of building inspectors and professional engineers to quickly determine whether structures are safe to return to work. As a result no work shall commence until formal inspections have been taken determining the condition of the workplace.

Know what to do during a disaster:

### ***EARTHQUAKE***

During:

- If you are in the building, stay there and take cover beneath sturdy/heavy furniture or in doorways. If you can't get under something strong, flatten yourself against an interior wall, and protect your head and neck. Stay away from glass windows. If you are outside go to an open area. Move away from buildings or structures that could collapse. Stay away from overhead power lines and downed electrical wires.
- Don't ignite candles, matches or lighters. Use a battery flashlight.

After:

- Assess situation, Check for injuries, provide emergency help, if qualified give first aid, remain calm.
- Inspect gas, water and electric lines. If in doubt, shut off mains. If there is a gas leak, open windows or doors and leave the building and report to the authorities. (Don't shut off the gas unless there is a leak or fire. If the gas is turned off, don't turn it on again -that must be done by a qualified technician).
- Consult the radio or television for emergency information.

- Stay out of damaged buildings.
- Make phone calls only for life threatening emergencies. Don't overload the phones needlessly.

**SEVERE LIGHTNING STORM:****Inside:**

- If you are in the building, stay inside. Stay away from windows, doors radiators, metal pipes or other electrical charge conductors. Unplug office equipment, radios, and appliances. Don't use the phone or other electrical equipment.

**Outside:**

- Seek shelter in a building. If you are caught in the open, crouch down with your feet close together and your head down (the leap-frog position). Don't lie flat -by minimizing your contact with the ground you reduce the risk of being electrocuted by a ground charge. Keep away from telephone and power lines, fences, trees and hilltops. Get off mobile equipment.

**GASLINE BREAKAGE/ LEAK**

In the event of a gas line breakage/leak the following procedures must be followed by the supervisor or appropriate safety personnel.

- Remove all personnel from the immediate vicinity of the break and evacuate nearby residents if necessary.
- Do not attempt to stop the gas leak.
- Notify B.C. Gas emergency service at 1-800-663-9911.
- Notify Head Office that they may notify the Company Safety Representative, who will visit the site and prepare an Accident Investigation Report.

**EMERGENCY PHONE NUMBERS** (check phone numbers regularly to ensure they are current)

Ambulance – Fire – Police	911
BC Hydro	1-888-769-3766
Terasen Gas	1-800-663-9911
Earthquake – Flood – Toxic Spills	1-800-3456
WorkSafe BC: Mon-Fri 8:00am-4:30pm	604-276-3100
After hours and weekends	604-273-7711

NOTE: "DO NOT PHONE" B.C. HYDRO, WORKSAFE BC OR THE EMERGENCY PREPAREDNESS CENTRE UNLESS DIRECTED TO DO SO.

**ENVIRONMENTAL SPILL AND WASTE MANAGEMENT**

The proper safeguard of our environment is important to our organization. While doing our work, we shall consider the appropriate protection of humans, animals, plant life, air, water, and soil. The following are some of but may not be all of the procedures to be taken to protect the environment.

- We expect all personnel to do their best to prevent harm to the environment.
- We shall use, store, and dispose of products in such a manner that will provide appropriate protection to the environment.
- Management will develop and enforce good environmental standards in accordance with relevant legislation.
- Workers will be kept informed on how to do their jobs in such a manner as to cause minimum environmental harm and waste of materials.

- Where possible, we shall recycle and promote the use of recycled products.
- A spill response kit shall be contained at all our work sites where required.
- Oil and chemical spills must be identified prior to containment and clean-up and workers must ensure they are wearing the appropriate personal protective equipment before taking further action.
- The leak or source of the spill if it can be done must be stopped quickly and safely. Quick response time to the discovery of the spill can minimize the hazardous effects at a later time.
- If it can be done safely, contain the source of the spill. Block all sewers and water courses.
- Report the spill immediately to the appropriate supervisory personnel and head office. All spills of 22 gallons (100 litres) of flammable/combustible (Class 3) liquids must be immediately reported to the Provincial Emergency Response Program. (1-800-663-3456).
- For smaller spills, do not use combustible materials such as sawdust to absorb and clean-up spill. Use appropriate absorbents or other equipment that is safe and explosion proof so as to not cause a fire or explosion.
- Where you feel that the spill represents an imminent safety hazard for your safety and health, fire or the spill is beyond your ability to control, contact 911 immediately. Do not take actions that could put yourself, co-workers or the public at risk.

***Land Spill:***

- Eliminate source of ignition and keep general public a safe distance away. Prevent additional discharge of material, if possible to do so without hazard.

***Water Spill:***

- Eliminate sources of ignition. Where and when required warn occupants and shipping in surrounding and downwind areas of fire and explosion hazard and request all to stay clear.
- Remove from surface by skimming or using suitable absorbents. If permitted by local authorities and environmental agencies, sinking and/or suitable dispersants may be used in unconfined waters.

***SPILL CONTINGENCY PLAN - WHAT TO DO IN THE EVENT OF A SPILL*****STEP #1 - CONTAIN THE SPILL**

The method of containing a spill will depend on the size and type of material that has been spilled. There are countless methods to contain a spilled material on a construction site, ranging from absorbent pads for a smaller spill to earth berms constructed by heavy earth moving equipment for large spills. Any spill, regardless of the size of the spill or the type of material spilled, will have to be contained, cleaned up and the disposed of in a manner that is accepted to the Project Owner, the Environment Monitor and ultimately any Government Agency.

**STEP #2 - REFER TO THE SPILLED PROJECT'S MSDS**

MSDS (Material Safety Data Sheets) will contain vital information regarding the materials properties, hazards, first aid measures, handling and storage requirements and personal protective equipment that is required. The

MSDS may also give some information on what to do in the event of a spill. The MSDS for all materials on the jobsite are located in the WHMIS book which is located in each site office.

**STEP #3 - CONTACT THE APPROPRIATE AUTHORITIES**

In the event of a spill, the appropriate authorities should be contacted. The following information should be provided when reporting a spill:

- Exact location of the spill.
- The type of material spilled.
- The estimated quantity of material spilled.
- A brief description of the site and if the spill is contained

The authorities will advise on the next action that must be taken. Depending on the volume of the spill, the location and type of material spilled, directions for the next course of action could take some time. It is very important to wait for this direction by these authorities. Please wait until you have been given authorization to proceed with any subsequent action. In the meantime, photographs should be taken of the contained spill and any soil or watercourse that may have been contaminated.

#### STEP #4 -SPILL CLEAN UP AND DISPOSAL

Once the spill has been contained and any danger to workers has been mitigated, the authorities will advise on a clean-up and disposal procedure that will have to be followed. Depending of the severity and the type of material that was spilled, certain Government Agencies or other Authorities may be on hand to supervise and direct the clean-up effort.

#### EXCAVATIONS

- Excavation work must be carried out in accordance with the specifications and requirements of a registered professional engineer, where improvements or adjacent structures could endanger workers and the excavation is subject to vibration or hydrostatic pressure.
- Before beginning to excavate, locate and identify all utility services, electrical, gas, water, telephone, and sewers in the area. Any hazards to workers must be eliminated or controlled.
- Probing with metal rods or pointed tools to locate underground gas or electrical facilities is prohibited.
- Trees, utility poles, rocks or similar objects near the edge of an excavation must be removed or secured to prevent accidents and injuries to workers. Where there is work to be done close to a utility, conformity with applicable provincial and federal regulations must be undertaken.
- No workers shall enter any excavation over 4 feet in depth unless the sides of the excavation are sloped to a safe angle. In no case shall the slope be steeper than 3 horizontal to 4 vertical or unless the sides have been supported by shoring and bracing or manufactured trench boxes and shoring cages. Care must be taken to ensure over width excavation at bottom to facilitate minor sloughing.
- Where workers are required to work in an excavation greater than 4 feet in depth a ladder will be provided in the immediate area of work for access and egress. The ladder must extend from the bottom of the excavation to at least 3 feet above ground level. Walkways for access to a bulk excavation must be at least 500 mm (20 in.) wide, and have handrails and guardrails where required by the occupational health & safety regulations.
- An excavation greater than 6 metres (20 feet) in depth or adjacent to existing structures required an excavation plan prepared by a Registered Professional Engineer. A copy of the plan contacting subsurface conditions expected and detailing the shoring or sloping requirements shall be kept at the work site.
- Workers shall wear high visibility vests while working in excavation where mobile equipment is operating.
- Workers shall not put themselves at risk by entering un-shored or properly excavated areas. If unsure if it is safe to enter the excavation, phone your employers to get confirmation. "Do not enter excavation if threatened with dismissal. You have the right to refuse.
- Shoring uprights must extend from at least 12 inches above ground level to within 2 feet from the bottom of the trench.

- The work procedures for installation or removal of shoring must ensure that workers are not exposed to undue risk. In general, shoring must be installed from the top down and removed in reverse order. Manufactured or prefabricated support systems or shoring cages must be designed and certified by a professional engineer. This certification must show for what soil types and depths the shoring system may be used and be kept on site during use of the system.

- Excavation material must be kept back a minimum distance of 2 feet from the edge of the trench.
- Water must be allowed to accumulate in excavations where it may affect excavations.

#### General Sloping or Shoring Requirements

- Minimum sloping or shoring requirements and maximum spacing of timbers must be as per WorkSafe BC regulations. Variations from these regulations or alternate designs must be in accordance with written instructions from a professional engineer.
- Excavation support systems must be installed as soon as possible after excavation to minimize soil movement. The support system must be installed firmly in contact with the excavation walls. Any voids or spaces between the shoring system and excavation walls must be backfilled or blocked.
- Shoring uprights must extend at least 300mm (1 foot) above the top of trench walls (except where road plates are being used). Uprights must go as close to the bottom of the trench as permitted by the material being installed in the trench, but in no case more than 600mm (2 feet) from the bottom. Uprights must not be inclined outward more than 15 degrees from vertical when viewed along the trench.
- Sawn lumber used for shoring and timbering must be a minimum of No. 2 or better, Hemlock-Fir.
- Steel trench jacks may be substituted for timber struts as followed;

Normal Strut	Normal Pipe Size (Inches)	Size (Inches)
4x4	1.5	Standard
4 x 6, 6x6	2	Standard
6 x 8, 8x8	3	Standard

Hydraulic or pneumatic jacks must have devices which maintain the jack at the installed length in the event of loss of internal pressure.

- A combination of sloping and shoring may be used.
- Excavation slopes or supporting systems must be inspected daily or more frequently if required and must be maintained effective.

#### FALL PREVENTION POLICY

It is the policy of CDR Demolition that all employees, contractors, subcontractors and their employees who work at heights of 10 feet and over be protected from the hazard of falling. A site specific fall protection plan shall be developed and implemented whenever a fall hazard of 25 feet or more exists, or whenever work procedures such as the safety monitor system is chosen as a means of preventing a fall. The intent of this work plan is to:

- Assist the workers in identifying the fall hazards before work at height commences.
- Assist in selecting the fall protection system(s) appropriate to the work, so as to provide a safe environment for the workers at risk.
- Identify the assembly, maintenance and inspection procedures of the fall protection system,
- Provide the training and rescue of the workers who will use the fall protection system.

Repetition of the task(s) to be performed shall be considered. This type of thorough analysis must be done before site specific fall protection measures can be defined.

This site specific work plan is intended to be used in conjunction with our company Fall Protection Program, which contains all necessary information on fall protection systems deemed acceptable, including information on installation, use, limitations, inspection and maintenance of such systems and equipment.

It is the responsibility of all supervisors to ensure a site specific fall protection plan is developed as required ensuring:

- All workers are instructed in the contents of the plan that prior to permitting workers to enter into areas where a fall hazard existed, workers understand and follow directions.
- Safe work procedures as set out by the plan are understood and adhered to and; inspect fall protection devices and systems ensuring their adequacy.

Any person in the employment of CDR Demolition, including managers, supervisors or workers, who violate any company safety policy or directive is subject to disciplinary action up to and including dismissal.

### ***FALL PREVENTION (GENERAL REQUIREMENTS) POLICY***

All workers must implement fall protection when working at heights of 10 feet or more, or where a fall of less than 10 feet may result in an unusual risk of injury.

Management: It is management's responsibility to ensure all workers are adequately trained regarding fall prevention.

Supervisors: Must ensure all workers under their direction are adequately trained and monitored regularly to ensure fall protection is implemented and maintained.

Workers: All workers are to know and understand the safe work practices and procedures with regards to fall protection and its limitations and maintenance requirements in accordance with WorkSafe BC regulations. This will be reviewed:

- During induction/orientation
- During tool box talks
- As required

Training: The training provided will include:

- Information about our company policy, rules, procedures and WorkSafe regulations.
- Instruction in adequate anchor points and the proper methods for securing and connecting lanyards/lifelines.
- Instruction on how to inspect and maintain the fall protection equipment.
- Imposed disciplinary procedures for failure to use fall protection equipment when necessary.

Worker Responsibility:

- Workers are responsible to take reasonable care to protect you own safety and health and that of other workers.
- Use the required and appropriate protective equipment
- Follow the work procedures for fall restraint and fall arrest.
- Permanent horizontal lifelines for fall arrest must be engineer certified.
- Temporary horizontal lifelines must meet the requirements of the WorkSafe BC regulations.

### ***FALL PROTECTION***

Proving due diligence with regards to the health and safety of our workers is a high priority for use within CDR Demolition This portion of our fall protection program is designed to not only serve as a guideline to this accomplishment, but also state our commitment in this regard.

Management understands due diligence to be the judgment, care and determination that not only us as employers provide, but also that of all our supervisors.

Therefore, all of our management, as well as our supervisors, shall take all responsible precautions to prevent injuries or accidents in our places of work. Many things are outlined in provided legislation, but we feel that it's the added "little" things that often make a large difference.

In order to accomplish this, we will implement a system that through following this program as required we can identify hazards and properly and promptly correct them so as to prevent these accidents or injuries from happening.

Due diligence will be established in this program by, but not limited to the following:

- Having and following written practices, policies and procedures regarding occupational health and safety.
- Ensuring that regular inspections are completed in order to identify these hazards for prompt changes to unsafe conditions. Providing employees with this information to enable them to work safely.
- Providing training and education to our employees as well as any contractors of our firm so that they understand and carry out their work activities according to our policies, practices and procedures.
- Providing our supervisors with training to ensure they are competent as defined in legislation.
- Monitoring the workplace to ensure all workers are following this fall protection policy as well as other required policies.
- Recording disciplinary measures for breach of safety requirements.
- Employees shall have the responsibility to ensure reasonable care of not only themselves, but also their co-workers. The way they will accomplish this will be by following the requirements of his program and complying with other regulations.
- CDR Demolition shall have an accident investigation and reporting system in place. "Near misses" shall be reported by employees and shall be investigated. These things only improve policies such as this one and will assist in our company practicing due diligence.
- All these steps must be documented to serve two (2) important purposes: (a) It will give our company a history of how the actual company occupational health and safety program is progressing. (b) It will provide us with up-to-date information that can be used as a legal defense to any charges in case of an accident despite our due diligence efforts.

### Training

All workers employed directly or indirectly by CDR Demolition shall be properly instructed in the contents of this fall protection program before partaking in any duties on work sites that involve using a fall protection system.

Workers must be familiar with basic procedures of fall protection, how to care for personal fall protection equipment, how to properly wear the equipment, when to use it, when not to use it and. what to do in the event that something fails.

Workers must take responsibility to request further assistance with regards to needing equipment supplied, repaired or replaced.

CDR Demolition shall enforce and closely monitor this portion of this fall protection program in order to endeavour to prove due diligence and continue to provide a safe workplace for all of their employees and contractors.

Management will ensure that all employees and contractors are trained and educated in the fall protection procedures provided through this program because it is our company policy. T

#### Determining a Fall Protection System

Because there are so many variations of projects that must be done in our industry, we need to determine beforehand exactly what procedures must be followed to ensure a safe and successful work process

Supervisors will coordinate with workers under their direction, what system is needed, procedures as to how work will be developed with the system, monitoring it and supporting any extended need required by the workers using the system.

When determining the system to be used, the following must be assessed;

- Specific work area(s): A fall protection system must be in place before work begins.
- Description of Task(s): Identify the work to be performed.
- Fall hazard(s): Identify all fall hazards prior to commencement of work.
- Assembly/disassembly procedures: What are the anchoring systems to be used?
- Inspection: An inspection of all fall protection system components must be conducted prior to commencement of work.
- Rescue: Procedures must be identified to rescue a worker arrested in a fall.

#### INSPECTION OF EQUIPMENT

##### Full Body Harnesses

It is the policy of CDR Demolition to incorporate the use of full body harnesses for all fall arrest activities and all employees are required to use a full body harness on all sites. All harnesses used by our employees shall conform to CSA Standards. Therefore all body harnesses must have:

- adjusting thigh straps
- waist strap or chest strap or both;
- sliding D-ring midway up the back;
- strap across the buttocks.

All belts and straps must be secured firmly. Leg straps should allow comfortable movement but be snug and evenly adjusted. The ends of the straps or belts must be secured by keepers or tucked into the harness. All harnesses used for all arresting application must have a back mounted D-ring located between the shoulder blades. All harnesses must be inspected daily, prior to use. Full body harnesses come in small, medium, large, and extra-large. Full body harnesses are also available to fit female workers.

Buckle: Inspect for loose, distorted or broken grommets. DO NOT cut or punch additional holes in waist strap loops. CHECK for tom or elongated holes which could cause the buckle to slip. CHECK the attachment of buckles and D-rings to webbing for excess wear. INSPECT the buckle for distortion and sharp edges. Carefully check corners and attachment points of the center bar. They should overlap the buckle frame and move back and forth in their sockets. The roller must turn freely on the frame. CHECK that rivets are tight and cannot be moved.

INSPECT for pitted or cracked rivets which indicate chemical corrosion. Hardware (Forged Steel Snaps, D-Rings)

INSPECT hardware for cracks or other defects. Replace harnesses if the D-ring is not at a 90 degree angle and does not move vertically independent of the body pad or D-saddle. INSPECT tool loops and belt sewing for broken or stretched loops. CHECK bag rings and knife snaps to see that they are secure and working properly. Check tool loop rivets. Check for thread separation or rotting, both inside and outside the body pad belt.

INSPECT snaps for hood and eye distortions, cracks, corrosion, or pitted surfaces. The keeper (latch) should be seated into the snap nose without binding and should not be distorted or obstructed. The keeper spring should exert sufficient force to close the keeper firmly.

Labels: They should be secure and easy to read.

### Webbing

Inspect the entire surface of webbing for damage. WATCH for frayed edges, broken fibres, pulled stitches, cuts or chemical damage. Broken webbing strands generally appear as tufts on the webbing surface. Sewn terminations should be secure, complete, and visibly undamaged.

### Anchorage

Fall prevention equipment is only as effective as its anchorage. Anchorage must be substantial to withstand excessive force. In general, vertical lifeline anchors and lanyard attachment points should have an ultimate strength of 5000 lbs. (22kN) in any direction and shall never permit a free fall of more than 4 feet. Each site is different. Specific anchorage points must be identified in the site-specific written Fall Protection Plan.

NOTE: DO NOT anchor to stand pipes, scupper drain covers, pipes less than 10 inches in diameter, handrails, roof hatches, fixed ladders or stairs, vent pipes, small air conditioning condensers, shoring jacks, formwork, old masonry, or light structural parapets.

### Anchor Straps

- Anchor straps must be installed according to the manufacturer's requirements.
- On concrete high-rises, straps must be a 15M (minimum) size reinforcing steel bar for cast in place straps, or 25M (minimum) size stub for unsupported dowel anchorage.
- On wood frame construction, the manufacturer's requirements for web overlap; nailing patterns and minimum timber size for anchorage must be followed. CHECK for frayed webbing or any other damage before, reusing wood-frame anchor straps.
- All anchor straps are to be installed correctly by the site safety coordinator or any other trained worker. Always check the installation of the anchor straps prior to using to ensure they are installed correctly.
- All anchor straps must be installed a minimum of 6.5 feet (2 meters) horizontally from the edges of the floors they hang above and should be spaced so as to avoid and swing fall hazards exceeding angles more than 22 degrees.

### Lifelines

All lifelines must be inspected prior to use. Any lifeline that is found to be defective or has been subjected to service loading shall immediately be removed from service and not used again for worker safeguard. Lifelines should be inspected for damage due to abrasion and chafing.

NOTE: Ultraviolet light from the sun will eventually deteriorate polypropylene ropes, although most are now manufactured with some UV protection.

#### Vertical Lifelines

Vertical Lifelines should be 5/8 inch diameter rope made of polypropylene, polyester or other fibers of equal elasticity, durability and resistance to abrasion and have a breaking strength of 6000 lbs. (26.7kN) Wire rope lifelines should be used only where flame or heat would damage fibre rope. When lifelines pass over sharp edges, softeners must be used. Lifelines must be long enough to reach the ground (or safe landing level) and must be knotted at its end to prevent the rope grab or hitch from sliding off the end of the rope.

Only one worker may be attached to a Lifeline and each Lifeline must have a separate anchor. A lifeline must not exceed 300 feet in length or be attached to the same anchor as outrigger beam tie-backs.

NOTE: Always check for obstructions below your working area to ensure your potential fall path is clear. Work directly under the anchorage point at all times as swing falls can result in serious injury or death.

#### Horizontal Lifelines

Horizontal Lifeline systems should be designed by a professional engineer. Design requires knowledge of fall arrest loads, anchorage requirements, and the importance of control points.

#### Lifeline Rope Grabs

- All rope grabs placed into service by CDR Demolition must be certified as meeting CSA Standards. The following items should form part of rope grab inspections:
- Snap hooks and locking snap hooks should function smoothly and not be bent or wobbly. Check that the spring closes the keeper (latch) securely against the snap nose. Locking snap hooks should hold the keeper in its closed position.
- INSPECT snap hooks, locking snap hooks and eyes for cracks, sharp edges, corroded or pitted surfaces, or distortion.
- Check Rope grab for dirt and other contaminants on the interior of the locking mechanism and clean before use.
- Check that the spliced eye termination has five full tucks and no loose ends.

#### Lanyards

All lanyards used by CDR Demolition employees must be constructed from either 5/8 inch diameter nylon rope or nylon webbing straps, and must bear the CSA label.

#### Lanyards:

- All lanyards and connecting linkages shall be inspected for defects prior to use.
- Always check the lanyard snap hook connections visually to ensure proper engagement. Do not rely on hearing an audible snap.
- Equipment must be removed from service when any questionable signs of wear or damage are found.

#### Rope Lanyards:

- Thimbles on rope lanyards should not be distorted or have sharp edges. They should be held securely by the rope splice.
- Discard a knotted rope lanyard. Rotate the rope lanyard and inspect from end to end for fuzzy, worn, broken or cut fibres.

#### Web Lanyards:

- Examine webbing thoroughly from end to end.
- Pay close attention to stitching and rivets, particularly at hardware attachment points.
- Look for bent, cracked or broken rivets on web lanyards.
- Look for swelling, discoloration, cracks or charring from chemicals or heat damage, or other signs of deterioration or wear.

#### Length:

- The length and anchorage of lanyards must limit a potential fall to no more than 4 feet and at all times, an attempt should be made to keep lanyards as short as possible to minimize fall distance.
- Lanyards shall not be shortened by tying them in knots. Two lanyards may not be joined together to obtain the length required.

#### Shock Absorbers:

- Typically fall-arrest loads can range from 200 to 2200 lbs. depending on body weight. Shock absorbers can reduce these loads as much as 50%.
- All shock absorbers used by CDR Demolition employees shall conform to CSA Standards.

#### Snap Hooks:

- Only double locking or similar type snap hooks that effectively eliminate the hazard of rolling out shall be used by all CDR Demolition employees.

## **FIRE PREVENTION/PROTECTION**

The risk and cost of fire can be extremely high in economic and human terms. Accordingly, the following rules and procedures are established but are not limited to the following:

- The best means of fighting fires is to prevent them. All employees are responsible for doing everything they can to prevent fires. If you observe a potential fire hazard, please report it to the appropriate supervisor so that the hazard can be eliminated or fire protection equipment can be issued and maintained at the hazard location.
- Before work is performed, supervisory personnel and employees must check for fire hazards. If there is any doubt regarding hazards, contact your supervisor. Some of the more common hazards are paper, scrap lumber, aluminum shavings, flammable liquids and oily or chemical soiled rags.
- CO<sub>2</sub>, foam or dry chemical type fire extinguishers must be available and be strategically located where the risk of fire exists, particularly near fuel storage and refuelling locations and storage buildings. Workers should be aware of the locations and types of fire extinguishers in your work area. Extinguishers must be recharged immediately after use. Regular periodic inspection and service of extinguishers must be carried out.
- Gasoline, propane, oil, grease and other flammable fluids must be stored in safe locations, clear of work areas and not in any buildings or locations where workers are likely to gather. NO SMOKING signs must be prominently placed in such storage areas and the NO SMOKING rules enforced. Gasoline and other flammables must be transported in appropriate safety containers (Safety Cans) and must be closed.
- All fire prevention regulations established by management must be observed. The NO SMOKING rules and postings must be observed. Smoking is permitted only in designated smoking areas.

- Worker(s) assigned to firefighting duties must be trained in firefighting procedures. Be aware of the locations of fire extinguishers in your work area. If a fire occurs, try to extinguish it, if necessary summon the assistance of fellow workers. If there is any indication that the fire will not be contained and extinguished quickly and simply, then an alarm must be raised and evacuation procedures implemented.
- Fire equipment must always be accessible and in good working condition. Tampering with fire protection equipment is a serious offense and is prohibited and may result in immediate dismissal
- Housekeeping must be maintained and ensure aisles, passageways, doorways and stairways are kept clear and unobstructed.
- Flammable and combustible materials must be clearly identified and stored in proper containers and sheds. Storage sheds should be located a safe distance away from the main building.

#### HOW TO USE A PORTABLE FIRE EXTINGUISHER

PULL the pin.

AIM extinguisher nozzle at the base of the flame.

SQUEEZE the trigger while holding the extinguisher upright.

SWEEP the extinguisher from side to side, covering the area of the flame.

REMEMBER: If your path of escape is threatened, if the extinguisher agent runs out or you are no longer able to safely fight the fires ... RAISE THE ALARM AND LEAVE THE AREA IMMEDIATELY.

#### FLAMMABLE LIQUIDS

Volatile or flammable materials must not be carried on a vehicle transporting workers unless such materials are carried.

- In an isolated compartment accessible-only from the outside, or
- In an inside compartment separated from all persons by a firewall,
- Flammable liquids must be stored in designated storage areas, away from heat, spark, flames, the direct rays of the sun, and in a location where flammable vapours are not permitted to be exposed to open flame.

Containers when not in use must be kept tightly closed to prevent hazardous vapour loss.

- When flammable liquids must be used or stored inside buildings, approved safety containers must be used.
- Flammable products shall be labeled and identified of their hazards.
- Keep fuel off clothing and promptly remove clothing that has been soaked with a flammable liquid.
- The fuel tanks of mobile equipment must not be filled;
  - while the engine is running
  - while anyone is smoking in or around the vehicle
  - while there is any known spark or flame in the immediate area
  - while a cellular phone is on or in use.

#### FORKLIFTS

Forklift and zoom boom forklift operators must follow all applicable Vehicle and Mobile Equipment safety rules. In addition the following are some of, but not all of the rules that apply specifically to forklift operation:

- Materials and equipment must be loaded on the forklift in a manner that prevents any movement of the load which could create a hazard to workers.
- All loads which could be subject to shifting during transportation must be restrained if such shifting would result in the forklift becoming unstable.

- Carry loads as low as possible.
- Do not drive with arms, head or legs outside the confines of the forklift.
- Any operator who cannot clearly see the load or off-load points and the full path of travel must use a signal person; refer to WorkSafe BC Regulation, Obstructed Vision for more information.
- Sound horn and slow down when approaching pedestrians, ramps and other forklifts or vehicles.
- Forklifts must be refuelled outside. Forklifts must be turned off when fuelling.
- Forklifts used in enclosed spaces must be shut down when not in use, to minimize emissions in the work area.
- Do not exceed the load capacity of the forklift.
- When shutting a forklift down; level and lower the forks, apply the parking brake and put the controls in neutral.
- Do not elevate anyone on the forklifts unless they are in an engineered box/cage that is secure to the forklift and fall protection is implemented.
- All operators must wear their seat belts where their forklifts are fitted with them whenever the equipment is in operation.
- When off-loading materials the operator must remain in the cab at the controls. If the load is supported on a floor, slab, deck, etc. The operator may leave the controls provided the forklift has shut down. "Do not leave the forklift while the load is suspended and un-supported".

### **GRINDERS (portable)**

- Proper use, maintenance and storage of abrasive wheels must be maintained.
- Workers must be familiar with the grinder operation and the safe work procedures before operating.
- Ensure grinder guard is in place.
- Wear appropriate safety equipment such as eye goggles, face shield, gloves, hearing and footwear.
- Never exceed the maximum wheel speed. Check the wheel for its speed rating and compare with the grinders speed.
- Check wheels for cracks and defects. Check to ensure the mounting flanges are clean and the mounting blotters are used. Do not over tighten the mounting nut.
- Before grinding, run newly mounted wheels at operating speed, checking for vibrations
- Use grinders only for jobs they are assigned for. Do not use for cutting!
- Do not use grinders near flammable materials.
- If a spark guard is installed, adjust it to the correct place.

### **GUARDRAILS**

The following are some of but not all of the safe work procedures to be followed for implementing guardrails and their use. Refer to the WorkSafe BC regulations for more information as required.

- Guardrails must be installed wherever there is a hazard of falling 1.2 metres (4 feet) or more from a permanent level or 3 metres (10 feet) or more from temporary and permanent levels.
- Guardrails must have top rails, midrails and toe boards that meet WorkSafe BC requirements. Wire ropes/cables used as an alternative to rails must also meet WorkSafe BC requirements.
- Where it is impracticable to use fall restraint devices such as guardrails, other fall restraint or fall arrest devices must be used, i.e., (harness with a lifeline).
- Where guardrails must be removed for work to proceed, permission to remove them must be obtained from the worksite supervisor or company safety representative. When fall prevention devices are temporarily removed, workers must be protected by other fall restraint or fall arrest devices.

- Guardrails and barricades that have been temporarily removed must be replaced at the earliest opportunity when work is completed if the fall hazard still remains. Implement a control zone with warning tape if it is not practicable to replace the guardrails when going on a break.
- When workers are elevated above the floor and the effective height of the guardrails is thus reduced to less than 42 inches, additional guardrails or other means of fall prevention must be used.
- For more site and work specific guardrail information, refer to the WorkSafe BC Regulations, (#4.55 - #4.63).

## HAND TOOLS

The following are some of, but not all the rules for using hand tools:

- Do not use tools for jobs they are not intended for. If a tool is defective, Don't use it!
- Do not apply excessive pressure on tools.
- Carry sharp tools in a heavy belt or apron rather than pockets, and hang tools at you sides, not behind your back.
- Carry tools in a manner that does not interfere with using both hands when climbing a ladder of structure.
- Maintain tools carefully, keep them clean and dry, and store them properly after use.
- Inspect tools for defects prior to use. Replace cracked and broken handles on files, hammers, sledges and screwdrivers. Redress burred or mushroomed heads of tools such as chisels.
- Exercise extreme caution when using tools near live electrical circuits. Does not use cushion grip handles as replacement for insulated handles.
- Pull on wrenches and pliers. Never push unless you are using an open hand.
- Face adjustable wrenches forward, and turn wrench so pressure is against permanent jaw.
- Do not increase leverage by adding sleeves to increase tool length.
- Do not cut or chip towards yourself when using cutting tools or chisels.
- Do not use one hammer to strike another.
- Do not re-dress, grind, weld or heat-treat hammer heads.
- Do not use a dull chisel. Re-dress heat-treated tools with a whetstone rather than a grinder.
- Do not use defective tools. Remove them from service and have them repaired or discarded.
- Air, gasoline or electric power tools, require skill and the operators complete attention even when they are in good condition. Don't use power tools when they are defective in any way.

Watch for problems like:

- broken or inoperative guards;
- insufficient or improper grounding due to damage on double insulated tools;
- no ground wire (on plug) or cords of standard tools;
- the on/off switch not in good working order;
- tool blade is cracked; and
- the wrong grinder wheel is being used, or the guard has been wedged back on a power saw.

## HEAT STRESS

The human body reacts in several different ways to high temperature situations. Every worker who may be exposed to heat stress should know how to recognize the symptoms and be able to administer the appropriate first aid to himself or to another worker.

Heat Fatigue; A discomfort in heat which results in emotional or psychological changes.

Symptoms: Weariness, irritability heat First Aid Measures: None necessary unless other illness is present  
 Loss of skill for fine or precision work, decrease ability to concentrate Rest breaks and acclimatization  
 Prickly Heat: Rupture of blocked sweat glands in humid heat on continuously wet skin.  
 Seen during sweating on skin covered by clothing Move to cool place  
 Painful, itching, red rash Apply calamine lotion or cool wet clothes

Heat Syncope (Heat Collapse): Pooling of blood in dilated blood vessels of skin and legs. Often occurs after exercise.

Fainting while standing in a hot environment Move to a cool place and lay down  
 Recovery should be fast and complete - Refer to a doctor

Heat Cramps: Loss of salt from the body through sweating, often caused by heavy sweating and

Painful spasms or arms and legs or abdominal muscles during or after work Move to cool place  
 Give salted fluids by mouth - If severe, see a doctor

Heat Exhaustion: Water and salt loss from excessive sweating by sustained sweating in heat.

Headaches, nausea, dizziness Move to cool place and remove tight fitting clothes  
 Cool body with cool, moist clothes - Refer to a doctor

#### **HOUSEKEEPING** "Good housekeeping involves everyone in the workplace"

Employees are responsible for the maintenance of good housekeeping in all work areas. Poor housekeeping is a proven factor in many industrial accidents and injuries.

In order to maintain good housekeeping practices, the following rules have been established, but are not limited to;

- Workers must keep their work area clean and tidy at all times. A daily clean-up is mandatory and frequent clean-up during the day is generally required as necessary.
- Keep all stairways, ladder landings, ramps, scaffolds, platforms, walkways and work areas free from loose materials and debris. This also includes electrical cables and air/water hoses.
- In walkways, any protruding objects shall be removed or guarded to protect workers from the hazard.
- Materials, tools and equipment must not be stored in stairways, corridors, catwalks, ramps, or doorways.
- Toxic, flammable or corrosive materials must be stored and if spilled, cleaned up immediately using the method described in the appropriate Material Safety Data Sheet (MSDS).
- Materials not in use must be stored neatly out of the way and should only be brought to the site as required, thus reducing the clutter and possibility of theft.
- All materials must be stacked or stored in a manner that permits safe access and egress to and from the work area.
- Workers must help to keep the work site clean by depositing refuse in designated containers.
- Snow and ice on walkways is to be removed or treated so as to eliminate the slipping hazard.
- All employees shall use the sanitary facilities provided on site. Anyone caught urinating in the work area will be disciplined subject to dismissal from the site.
- When toilets are provided for convenience. Help to keep them clean and sanitary.
- Keep lunch and change rooms clean and sanitary. Do not let soiled clothes, food scraps or food containers accumulate. Place all waste products in appropriate trash containers.

#### **IMPAIRMENT**

All employees must show up for work fit and alert. If there is any indication that any worker is unfit to perform their duties in any capacity the following rules will apply.

All supervisory personnel are responsible and will be held accountable for taking immediate and appropriate action should they become aware that either alcoholic beverages or illegal drugs are stored or consumed within the confines of the workplace, company property or in company vehicles. If the supervisor has reasonable and probable cause to believe that alcoholic beverages or illegal drugs are possessed or stored on or in company property, they must notify Head Office.

- Any worker deemed unfit to perform their assigned duties safely, by reason of influence of illegal drugs or alcohol, will be subject to disciplinary action resulting in immediate suspension
- Workers must inform their immediate supervisor prior to using prescription medications which impair their ability to do their job safely. Each medication container must be prescribed in the employees name and each prescription must be no older than one year from the date of issue. Any employee under medical care must discuss the potential side effects of the medication with their physician and with their supervisor and/or workplace medical personnel prior to performing any work. Workers deemed unfit to perform assigned duties safely, by reason of influence of medication, may be subject to reassignment to a less hazardous job.
- Consumption of alcoholic beverages or illegal drugs in the workplace or while operating any company vehicles is prohibited and will result in immediate suspension.
- Where it becomes apparent that an employees' substance abuse is influencing their work performance, the employee will be approached by their supervisor, confronted with the issue, suspended for the remainder of the work day and may be given an opportunity to voluntarily seek assistance. If problem continues to persist, the employee will be suspended.

## INSPECTIONS

Management shall ensure that regular inspections and monitoring of the workplace is undertaken in order to eliminate or effectively control all dangers to employees.

Inspection of all mechanical equipment shall be the responsibility of appointed personnel and shall include a written, planned preventative maintenance program to ensure inspections and maintenance are carried out on all tools, equipment and machinery as required by applicable standards of the manufacturers, CSA Standards or WorkSafe BC.

Inspections of work processes, work practices and procedures in the workplace shall be the responsibility of Management, Supervisors or designated personnel, who will look for and record unsafe conditions and improper procedures, and have these attended to without delay. A copy of this inspection record shall be made available to all employees.

If at all possible, a situation in the workplace where an employee has to work alone must be avoided. If circumstances are such that this is unavoidable, the proper supervisory personnel will monitor all workers under their direction at frequent intervals to ensure their well-being and that they are carrying out their duties safely as per the safe work procedures and the WorkSafe BC regulations.

## LADDERS

Extension ladders are used mainly for access but at times are used to perform work. The work being performed should be for short duration's of not more than 15 minutes. When workers find themselves in a situation where they will be working from extension ladders and a fall of 10 feet or more exists and they are unable to maintain

3 point contact (one hand and both feet for stability) with the ladder to perform their job, fall prevention procedures must be implemented (harness with lifeline/lanyard).

- Ladders must be used in accordance with the manufacturer's instructions and WorkSafe BC regulations.
- Ladders must be inspected for defects prior to use. Ladders with broken rungs, split rails, and worn or broken safety feet, frayed or damaged ropes must be taken out of service and reported to the appropriate supervisor.
- Ladders must be placed at least Y4 of their length away from the base of the structure they are leaned against or otherwise secured against movement. Ladder feet must be placed on a firm service.
- Use ladders of sufficient length. Adding makeshift extensions is prohibited.
- Working from the top two rungs or steps of a ladder is prohibited unless permitted by the ladder manufacturer's specifications.
- Ladders used for ascending or descending from one level to another must extend at least 3 feet above the upper landing except where there is restricted clearance and the ladder is adequately secured.
- Metal ladders or wire re-enforced wooden ladders must not be used near energized electrical equipment unless permitted by manufacturers' specifications.
- Ladder used in corridors, stairwells or aisles must be barricaded.
- Ladders used in locations where they may be struck by workers or equipment in the area must have a watcher stationed at the bottom. Ladders must not be left standing in such a location when not in use.
- Ladders must be secured to prevent movement.
- Doorways must be blocked, locked or guarded while ladders are used in front of them.
- Workers must use suitable hoisting equipment to lift or lower heavy or bulky items.
- Do not over-reach while working from a ladder.
- Do not use ladders in a horizontal position as components of runways or scaffold unless they are part of an engineered or pre-manufactured system.
- Ladders are to be used by one person at a time.
- Workers performing work 10 feet or more above grade for long duration's must wear a harness with lanyard and/or lifeline.
- Extended extension ladders must be lowered to their original closed position before moving.

"Be aware of overhead high voltage power lines when moving or setting up ladders."

### ***LADDER (safe work procedures)***

Ladders are used mainly for access but at times are used to perform work. The work being performed should be for short duration's of not more than 15 minutes. When workers find themselves in a situation where they will be working from a ladder and a fall of 10 feet or more exists and they cannot maintain three point contacts with the ladder to perform their job, the following safe work procedures will apply:

If suitable anchor point (5000 lbs.) exists for a lifeline;

- Access safely as possible to secure lifeline.
- Where necessary set up ladder and secure it against displacement.
- If the ladder needs to be secured at the top, worker will wear their full body harness, secure themselves to lifeline then access the ladder to safely secure it against displacement.
- Workers shall remain secured to their lifeline in fall protection for the duration of the job.

If no anchor point exists for a lifeline;

- Where necessary set up and secure ladder against displacement.
- Wear full body harness with lanyard.

- Access ladder and when in position to perform work, position and anchor lanyard to the centre of the ladder securing yourself in “fall restraint” (not fall arrest). Workers shall ensure the lanyard secures them, keeping them centered on the ladder so as to prevent their belt buckle (rule of thumb) from extending beyond the ladder side rails.

### LIFTING SLINGS

The following are some of the rules for using lifting slings but are not limited to:

- Slings must be used, handled and stored in a manner that ensures they will not be damaged.
- The load capacity for slings must be identifiable on the sling.
- Loads must not exceed their maximum allowable load capacity.
- Frayed or damaged slings as per the WorkSafe BC regulations must be removed from service.
- Safety latches must be installed on all wire sling hooks.

### LOCKOUT/TAG OUT

In order to ensure that the operation and maintenance of electrical equipment and machinery is conducted safely, the following Lockout Safety Rules and Procedures must be adhered to:

- Understand the equipment and be aware of its potential hazards. If you require more information talk to your appropriate supervisor.
- A proper lockout device must be used when performing maintenance or repair work on electric, air, hydraulic, pneumatic, gravity driven equipment. All must be locked and tagged in accordance with the applicable safety regulations.
- Installation, maintenance and repair work on machinery, equipment or hazardous energy sources must not be performed unless there is no hazard to workers while doing the work.
- Where it is essential that machinery or equipment remain in operation, only those parts of the machine or equipment that must remain in operation may be operating. All other parts, which can present a hazard, must be locked-out. Employees working on locked out equipment, shall place their personal lock on the power source.
- Work other than that which is essential to have machinery or equipment remain in operation must not begin until all isolating devices have been secured in the "off" or "stop" position by the use of locks.
- The first worker applying a lock in the lockout procedure must ensure that the locked-out machinery or equipment cannot be operated and has been tagged with a written warning stating:
  - "Danger -Do Not Operate -this energy source has been locked-out and may only be unlocked by the person whose name appears on this tag. Name. ●●●● Date ... "If more than one worker is assigned to a task, each worker must place his/her own lock and tag on the isolating devices.
- Installation, maintenance and repair work on machinery and equipment must not begin until all parts, extensions and attachments have been secured against inadvertent movement and stored energy has been released.
- Any lock used in lockout procedures must be marked to identify the worker whose lock it is and be operable only by that worker's key. On completion of the work, workers must remove their personal lock. The last worker to remove his/her lock is responsible for the safe start-up of the equipment.
- Lockout locks must be removed only by the person identified on the lock. Master keys must only be used to remove lockout locks in emergencies and only under the guidance of a supervisor. A report must be completed and submitted to the appropriate personnel. The report should indicate the date, location, supervisor and a brief description of the circumstances of the emergency. In the event that the work is not completed before the shift ends, workers coming on shift must place their own locks on all isolating devices before the workers coming off shift remove their locks. Alternatively a supervisor may lock out the machinery or equipment during shift changes to allow workers going off shift to remove their locks. Accidents and fatalities that could have been prevented by a proper lockout can be traced to one or more of the following causes:

## COMMON PITFALLS IN LOCK-OUT SYSTEMS

- The Lock-out procedure is not enforced and supervised.
- Failure to disconnect from the power sources.
- Failure of workers to stop equipment and lockout.
- Accidental restarting of machinery
- Locking one lock through another.
- Leaving key in lock.
- Asking others to lock-out for you. Failure to identify ownership of lock.
- Failure to verify that equipment is inoperative.
- Pulling fuses and not locking out.
- Failure to identify, and lock out all switches, valves and disconnects to the the equipment.
- Assuming equipment is inoperable.
- Failure to relieve or control stored energy (e.g. raised loads).
- Failure to clear work area before reactivating equipment.

Hazardous energy is not restricted to electricity. It includes Hydraulic, pneumatic, gravity driven machinery and pressurized liquids and gases. Whenever you are going to perform work on any equipment, where an unexpected start-up or release of stored energy could cause injury you must perform lock out procedures.

The following rules must be observed. They will not only control the hazards energy, but will also save lives as well.

- Inform your supervisor and others in the affected area, who, when and where lockout is going to occur.
- Identify the energy that powers the system you are about to shut down (electrical, hydraulic, pneumatic). Is there more than one type of energy source involved? Identify the hazards and how they should be controlled. Ask your supervisor if you are unsure or have any questions.
- Shut down the equipment using the normal stopping procedure for the equipment you are servicing, installing or repairing. It could simply be putting a switch in the "off" position, pressing a button or removing a plug. You may need to follow a more complex operation dictated by the manufacturer's instructions or the owner of the equipment.
- Isolate the equipment. This step goes beyond simply turning the power off. It involves carefully isolating the system from every energy source feeding it. Close valves, throw main disconnects, throw circuit breakers. Disconnect or cap any auxiliary power sources such as secondary electrical, steam, hydraulic or pneumatic systems. NEVER isolate equipment by simply pulling fuses, disconnect the source instead.
- Attach a lock and tag to the energy isolating device(s) to prevent someone from restoring the flow of energy. Do this to all disconnected switches, valves and other energy-isolating devices. Tags provide extra protection and vital information about who is doing the work and when it is being done.
- Even though hazardous energy is locked and tagged out, you must control the stored energy. Relieve, disconnect or restrain any residual hazardous energy that could be present. Check that all moving parts have stopped turning. Relieve trapped pressure. Blank pipe flanges. Install ground wires to discharge electrical capacitors. Block or support elevated equipment.
- Don't take anything for granted. Double check your steps, confirming isolation of the equipment and that you have in fact shut down the equipment, applied the lock(s) and tag(s) and controlled any stored energy. Warn others affected by the lockout and make sure everyone is in the clear of the lockout area. Test to make sure the right system has been locked out and cannot be operated. Press all start buttons or other activating controls, then return them to the "off" position. This will prevent the equipment starting by itself when energy is restored. Be sure to verify isolation when the equipment has been left unattended and periodically until service or maintenance is complete.

- When you have completed the work, be sure the equipment is operationally intact and those tools and other items are cleared. Inform all affected employees that locks and tags will soon be removed. Remove locks and tags (each worker removes their own). Follow required steps to reactivate the equipment.

## **MACHINE GUARDS**

Employees, who are responsible for placing equipment into service, are also responsible to ensure that equipment guards are in place. If, due to damage or deterioration, the original guard provided on a piece of equipment cannot be put in place, employees should use a temporary method, offering equal or better protection, as approved by WorkSafe BC.

No employee shall impair, remove or render ineffective, any safeguards provided for the protection of themselves, or other workers.

## **MANCHECKS**

If at all possible, a situation in the workplace where an employee has to work alone must be avoided. If circumstances are such that this is unavoidable, the designated supervisory personnel shall ensure that check-ups or means of communication are made on the employee at frequent intervals depending on the risk of the work being performed.

## **MANUAL HANDLING/LIFTING**

To help prevent overexertion/lifting accidents it is recommended you stay in shape with regular exercise. If you have been sitting or standing in one place for a long period of time and need to move a heavy object, it is important to warm up and/or stretch before extending yourself.

- Know your limits. Do not attempt to lift an object of any sort that is obviously too heavy for one. Use lift equipment or get help when appropriate.
- Do not attempt to lift an object of any sort that is obviously too heavy for one. Get help!
- Do not attempt to lift or move objects that are obviously too bulky for one or which require getting into an awkward position. Get help!
- Bend your knees and keep your back as nearly upright as possible.
- Use your leg muscles instead of back or stomach muscles to lift.
- Keep the load close to the centre of your body.
- Lift gradually, smoothly, and without jerking.
- Avoid twisting your back while lifting, pivot with your feet.
- Ensure you have a firm grip on the object before lifting. Ensure your hands and body are in the clear.
- Watch out for slivers, nails and sharp ends when landing objects. If possible, these should be removed from the object.
- Ensure you have a clear view of your route when carrying materials.

## **MOBILE EQUIPMENT OPERATION**

Employees must not operate any mobile equipment unless they;

- possess the necessary license and/or certificates, and;
- have received adequate instruction and demonstrated to a supervisor or instructor that they are able to operate the equipment, and;
- are familiar with operating instructions pertaining to the equipment, and;
- have been authorized to operate the equipment, and;

-are familiar with WorkSafe BC regulations regarding the safe operation of mobile equipment.

The following are some, but not all the safety rules, regulations and procedures to be followed:

- Operators of mobile equipment are directly responsible for the safe operation of that equipment. They shall maintain full control of the equipment at all times and all laws and regulations regarding the operation of the equipment. Operators must comply with recommended gross vehicle weight and ensure that the vehicle is not overloaded.
- Operators of mobile equipment should be familiar with the WorkSafe BC regulations with regard to Working in Proximity of Overhead Power Lines. When applicable management or designated supervisors will be responsible for obtaining and completing FORM 30M33 when required by the regulation.
- Where vision is obstructed, mobile equipment operators must not move the equipment until suitable precautions have been taken to protect themselves and any other person or property from possible injury or damage.
- Operators must examine their equipment before initial daily operation and thereafter, as required and report defects, deficiencies or unsafe conditions to appropriate supervisory personnel. During your inspection ensure the bucket pins are completely in place on all excavators.

Mobile equipment MUST NOT BE refuelled with gasoline, propane, natural gas or other vaporizing fuels while; - the engine is running, or

- anyone is smoking in or about the vehicle, or
- there is a known source of ignition present in the immediate area

- Guardrails, toe boards and safety chains must be in place.
- Safety harnesses and lanyards/lifelines for fall arrest must be in place and used where applicable.
- Wearing of seatbelts in all vehicles and equipment where they are provided is mandatory whenever the vehicle or machinery is in motion.
- When a hazard is created by a swinging load, moving cab or counterweight or any other moving part of the mobile equipment, no worker shall remain within range of the hazard, and the operator must not move the equipment while workers are exposed to the hazard.
- All workers working around mobile equipment shall wear high visibility vests so that they are more visible to the mobile operator.

Mobile Equipment Operating continued:

- If the unit is fitted with outriggers, it must be equipped with notices indicating the circumstances under which the outriggers must be used.
- Every elevating work platform must be fitted with a warning system consisting of an intermittent horn or flashing light which is automatically activated during any motion of the work platform.
- Every elevating work platform must be provided with an emergency stop button on the platform and an emergency lowering control.
- All self-propelled elevating work platforms must be fitted with tilt angle indicators or warning devices as described in the WorkSafe BC regulations.
- Workers must not be transported on an elevating work platform, except where minor adjusting movements are made.
- Operating and maintenance manuals must be available at the workplace. If they are not available the mobile equipment shall not be used until the manuals are obtained or, that a certified engineer has checked the equipment and in writing has certified that the equipment is in safe working order.
- No employee shall remain in the cab of any vehicle while loads are elevated over the cab, unless overhead guards are installed to prevent injury to the employee.
- When an employee is required to work beneath elevated parts of mobile equipment, the parts shall be blocked, or otherwise secured to prevent possible injury to the worker.

- When materials and equipment are being transported, they must be loaded and secured to prevent any movement of the load which could create a hazard to workers.
- Effective means of load restraint must be provided to protect the crew of a vehicle transporting a load which might otherwise shift.
- The operator of mobile equipment is the only worker allowed to ride the equipment, unless provisions such as seatbelts and other facilities have been provided and used by other workers. Workers must not stand or sit on the side or the tailgate of any moving equipment.

### **OBSTRUCTED VISION**

When a vehicle or equipment operator's vision is obstructed, the unit should not be moved until suitable precautions have been taken to protect the operator, other workers or the public from possible injury. Precautions must include but not be limited to the following:

- Inspection, on foot, of the area into which the equipment will be moved, or
- Direction by a signal person stationed in a safe position in continuous view of the operator and having an unobstructed view of the area into which the equipment will move, or
- Direction by traffic control or warning system, and
- When reversing, the repeated sounding of an audible warning device while the equipment is in motion.

Note: A signal person may also be used in congested work areas and/or where there are excessive noise levels where an audible warning device may not be heard.

### **PERSONAL PROTECTIVE EQUIPMENT**

Management not only encourages, but also considers it a condition of employment that each employee, at every level, uses the appropriate Personal Protective Equipment to ensure every possible means is taken to do his/her job safely.

Safety equipment provided for the protection of our employees by the company must be used on every appropriate occasion. Personal Protective Equipment that becomes inoperable or damaged in any way must be returned for repair or replacement.

The following are some of, but are not limited to the personal protection devices to be worn or employed on our projects as required by the WorkSafe BC regulations.

- CSA-approved hard hats with properly adjusted suspensions must be worn by all personnel, including subcontractors and visitors.
- Workers must wear non-conductive hard hats when exposed to electrical hazards.
- Workers wearing contact lenses must inform the proper supervisor so that lenses can be removed in case of an accident. Workers must not wear contact lenses where gases, vapours, flying objects, dust or other materials are present that may harm the eyes or be absorbed by the lenses.
- Workers must wear appropriate eye protection when exposed to eye hazards.
- Workers must wear appropriate eyewear over non-safety prescription glasses where an eye hazard exists.
- Workers must wear protective equipment when handling materials likely to puncture, abrade, or irritate hands and arms, unless the use of this equipment introduces equal or greater hazards.
- All personnel must wear CSA-approved "GRADE 1" above the ankle footwear that provides toe, shank protection and protection from ankle abrasion. Laced foot wear must have the laces tied to prevent tripping.

- Hearing protection (muffs or plugs) must be used in locations where there are intermittent or continuous high noise levels.
- Workers must use additional protective equipment such as fall-arresting equipment and respiratory protection, etc., as the work requires it. This equipment must be properly maintained and inspected as to the manufacturer's suggestions and procedures.
- High visibility clothing/vests must be worn when working in and around the vicinity of mobile equipment, under overhead cranes and when directing traffic.
- Where clothing may come into contact with moving parts of equipment, tools or machinery, the clothing must not be torn, ragged or loose and pants must not have cuffs.
- Workers must wear clothing that provides ample protection from weather and other hazards.

### **HARDHATS**

- Hard hats must be worn by employees in work areas where there is a potential hazard to the head from falling, flying, thrown objects or other harmful contacts.
- Hardhats must be worn by all employees who enter designated hardhat areas.
- Hard hats must be replaced as per the manufacturer's recommendation.
- Hardhats will be secured by a chin strap or other effective means of retention when workers are climbing or working at a height exceeding 10 feet or are exposed to high winds or any conditions which may cause loss of the head gear.

### **EYE PROTECTION**

- All employees must wear appropriate eye protection devices when doing any work which might cause foreign particles to enter the eyes (e.g. grinding, chipping, welding, cutting).
- Safety goggles, by themselves, do not provide adequate protection against chemical splashes and must be worn along with a face shield in areas where a chemical splash might occur.
- Face shields are designed to protect the eyes and face from heavy impact, flying particles and, when used with goggles, from chemical splashes.

### **HEARING PROTECTION**

- Employees subjected to excessive noise levels shall be provided with and shall wear hearing protection devices in accordance with the standards set out by the WorkSafe BC Occupational Health and Safety Regulations.
- Employees who are exposed to noise levels in excess of the WorkSafe BC allowable limits for noise must receive an annual hearing test provided by the company.

### **RESPIRATORY PROTECTION**

- Employees exposed to high concentrations of dust, vapours, gases, noxious or toxic fumes, paint fumes, or an oxygen deficient atmosphere must wear respiratory protection devices appropriate to the material to which they may be exposed.
- Workers who will be wearing respirators must be trained in proper respiratory usage. The training will cover fit testing so as to select and provide the correct size to ensure a proper fit and seal is acquired, cleaning and maintenance and the proper filter and or cartridge selection for the hazards of the work and when to change them.
- Workers must be clean shaven so a proper fitting and seal is acquired. "Workers will not wear their respirator unless they are clean shaven". Fit testing results must be documented and kept on file and updated annually. Respirators must be kept sanitary and stored appropriately.

**HAND PROTECTION**

Employees handling materials likely to cut, puncture, abrade, burn or irritate hands or arms must wear gloves or other devices designed to protect the hands and arms from such injury.

**PNEUMATIC NAILING and STAPLING EQUIPMENT Safe Work Procedures:**

- Tools must be used and maintained as to their manufacturer's instructions.
- Do not bypass or remove manufacture-installed safety devices.
- Permit only trained and experienced workers to operate pneumatic nailing and stapling tools.
- Wear proper eye and hearing protection.
- Inspect tools before connecting to their power supply:
  - check the safety mechanisms.
  - ensure that screws and cylinder caps are securely tightened.
  - make sure the air pressure is as specified by the manufacturer of the tool.
- Check that the tool is properly connected to the air supply and is in working order before using. • Ensure the safety mechanism is working.
- Always handle the tool as if it contains nails or staples.
- Never point a stapler or nailer at yourself or others.
- Disconnect the tool from the air supply and exhaust all air from the tool by squeezing the trigger when:
  - not in use,
  - cleaning or adjusting,
  - clearing a blockage
- Do not squeeze the trigger unless the nosepiece of the tool is directed at a safe work surface
- Do not carry or load with your finger on the trigger/switch
- Ensure the tool is maintained in safe operating condition
- When the tool is not working properly and safely, remove from service and have it repaired
- Do not tape the trigger/switch in the on position.

"ALWAYS HANDLE THE TOOL AS IF IT CONTAINS FASTENERS"

**PNEUMATIC and POWER TOOLS**

- Only authorized, experienced and trained workers may use pneumatic tools and equipment.
- Inspect the tool before connecting to the air supply.
- Ensure screws and caps are securely tightened.
- Check hoses for cuts or bulged, and replace if defective.
- Pneumatic tools used for nailing must be held against the work surface before pulling the trigger.
- Safety features must not be disengaged or overridden.
- The air supply must be disconnected prior to making adjustments or repairs to the tool.
- Do not use compressed air to blow debris or clean dust from clothes.
- Never exceed the manufacturer-specified air pressure for tools, hoses or fittings.
- Do not lay hoses across access and egress routes.
- Never point the tool towards yourself or others.

**POWER TOOLS**

- Keep power cords clear of tools during use.
- Inspect tools, power cords and electrical fittings for damage prior to each use. Repair or replace damaged equipment.

- Do not carry tools by the power cord.
- Wear safety glasses, goggles, or face shields when using power tools for cutting, sanding, grinding and similar operations.
- Do not wear gloves, loose clothing or jewellery while using revolving power tools.
- Switch tools off before connecting them to a power supply.
- Do not use electric tools in wet or damp locations unless the tool is connected to a Ground Fault Circuit Interrupter (GFCI)
- Ensure tools are properly grounded (three prong plug) or are double insulated
- Suspend power cords over aisles or work area when possible to avert tripping hazards.

#### POWDER ACTUATED TOOLS (PATs)

- Before using PATs you must be trained in the specific make and model of the tool.
- Operators must be familiar with applicable WorkSafe BC regulations.
- Workers must wear safety glasses or goggles and hearing protection when using PATs.
- Workers must not use PATs in explosive or flammable atmospheres.
- Repair of PATs by unqualified persons is not permitted. Always hold tool perpendicular to the work surface when operating it.

#### REFUSAL of UNSAFE WORK

- No worker must carry out or cause to be carried out any work process, or operate or cause to be operated any tool, appliance or equipment that would create an undue hazard to the workers' health or safety or to the health or safety of any other worker. (Undue hazard means: a danger that is not normal for that occupation, or a danger under which a person engaged in that occupation would not normally carry out the work.)
- Workers will not be disciplined for exercising this right
- Workers who exercise this right to refuse unsafe work must immediately report the problem to their supervisor and/or company safety coordinator.
- The supervisor must investigate and either correct the problem or inform the worker that the report is invalid.
- If there is no resolution at this point, the supervisor must reinvestigate in the presence of the worker or their selected alternate.
- If there is no resolution at this point, the supervisor and the worker or the worker's representative must notify WorkSafe BC which will then investigate. WorkSafe BC will issue orders if deemed necessary.
- Workers may be temporarily assigned to alternative work at no loss in pay until the matter is resolved.

#### RIGGING and HOISTING

- Rigging and slinging work may only be done by or under the supervision of qualified and authorized persons. Ensure the rigger is properly identified and understands techniques of proper signalling.
- The operator must remain at the controls of a crane as long as there is a load on the hook.
- Before lifting a load, position the tip of the crane directly over the load.
- Never ride on the hook, ball rigging or load.
- The weight of the load must be determined prior to lifting to select the proper ropes, chains, slings and fittings. The load imposed on the lifting material must NEVER exceed the manufacturer's recommended safe working load. Safe working load must be determined by a professional engineer if a manufacturer's specification is not available, or there are signs of stress or damage, or an officer of the board determines it necessary.
- Cable clips, shackle pins, heel pins, wedge sockets anchors, sheaves and slings must be visually inspected for cuts, nicks, bent links, bent hooks, etc., prior to use. They are to be installed and used as per WorkSafe BC regulations and manufacturers recommendations. Ensure all pins are secured against dislodgment.
- Ensure the safety latches on hooks are in good working condition

- Do not use open hooks.
- Do not hoist with C-clamps, use special lifting clamps.
- Sharp edges and points of the material being rigged must be protected to prevent damage to the choker.
- Softeners must be used to prevent slippage and material damage.
- Under certain circumstances tag lines must be used to control loads when hoisting and rigging loads.
- When landing loads ensure all loads are stable before slackening the sling or chains.
- Material or equipment rigging must not be rigged from unsound structural points.
- Slings must be used, handled and stored in a manner that ensures they will not be damaged.
- Operators should avoid where practicable, swinging loads over workers.
- Workers should be alert to overhead loads and try to avoid being under them.
- Never leave a load suspended when the hoist or crane is unattended.
- Workers, except in emergency situations are not permitted to ride the load or hook.
- Booms should never be subjected to side loads.

Watch for and maintain the safe working distance of overhead high voltage power lines.

### **RESPIRATORY PROTECTION PROGRAM**

Protecting workers from hazardous substances can be accomplished in a variety of ways:

- substituting a safer substance,
- engineering controls (i.e. ventilation systems),
- administrative controls (i.e. scheduling or worker rotation), and
- personal protective equipment (i.e. gloves and respirators).

Personal protective equipment is generally considered by WorkSafe BC to represent the last line of defense and will only be utilized after considering and discarding the practicality of the other methods.

### ***MANAGEMENT RESPONSIBILITY***

Management is responsible for administering the Respiratory Protection Program. Specific duties include:

- consulting with outside sources to maintain a current, practical program;
- ensuring the preparation and implementation of written procedures for the Respiratory Protection Program; and
- ensuring that supervisory personnel are provided with a copy of this document;
- instructing supervisory personnel to keep a copy of this document available for all employees required to wear respirators;
- ensuring that all persons are made aware of their responsibilities, as defined in this document; and evaluating the effectiveness of this program annually.

### ***EMPLOYEE RESPONSIBILITY***

Employees are responsible for:

- using the respirator provided in accordance with the most current instructions and training received;
- taking all reasonable precautions to prevent damage to the respirator; and
- reporting any respirator malfunction or damage to the immediate supervisor or person in charge.

### **HAZARD IDENTIFICATION**

Respiratory hazards at the work site must be identified and evaluated to determine where personal protection is required and which type is appropriate.

An L.D.L.H. (Immediately Dangerous to Life & Health) situation is extremely hazardous and must be evaluated by a competent person. Do not attempt to determine the hazard level or protection required on your own. Assume that each of the following are L.D.L.H. environments:

- oxygen deficiency
- a confined space
- contaminants at or above explosive limit; and
- firefighting situations

Changes in process operation, air movement, and temperature must be considered as factors in hazard evaluation.

## RESPIRATOR SELECTION

Respirators protect against different hazards, at varying levels and with assorted limitations. Use only the appropriate NIOSH and MSHA approved respirators. In most circumstances the nature of the work performed may only require only one type of respirator, the Air Purifying Respirator

## USING A RESPIRATOR

Evaluate the following before choosing a respirator:

- the nature of the hazard;
- who can wear a respirator;
- the respirator approval and limitations; and what is happening in the surrounding area?

Once the hazard is identified and evaluated a decision can be made on which of the following three major respirator types is required.

### Air purifying Respirators

These include mechanical filter respirators, chemical cartridge respirators and gas masks. Each type is designed for a specific purpose and should be used for that purpose only. These respirators filter the air but do not supply it -ensure the oxygen level in the work area is greater than 19.5%. Select the required filter designed for the hazard and check its protection capabilities. Certain substances lack adequate warning properties or cannot be filtered from the air with this type of respirator.

### Supplied Air Respirators

These provide a remote source of breathing air from a compressor or cylinder and connect to the user by means of an air line. Compressed breathing air must meet the purity requirements of CS A Standard Z180.1, Compressed Breathing Air. This respirator allows work in environments where air purifying respirators are inadequate but does not include I.D.L.H. conditions as an air line could kink or break.

### Self-Contained Breathing Apparatus

These provide breathing air from a cylinder worn on the back. It protects from toxic hazards and oxygen deficiency. The SCBA limitations include the cylinder weight which add stress to the wearer and the protection time, which is limited by the amount of air stored in the cylinder.

For protection against asbestos, respirators should be selected in accordance with the WorkSafe BC "Safe Handling of Asbestos" manual.

**DAILY CHECK** Workers must inspect their own masks on a daily basis for correct operation and fit as follows:

- Half Mask: Inspect mask to ensure all valves are in place, correct filters are attached and there are no damaged parts. Don mask and adjust straps. Block off filter inlets with, hands, breathe in and ensure the mask collapses.

### RESPIRATOR FACIAL FIT

The degree of protection provided by a respirator requiring a close facial seal depends on several factors including:

- the effectiveness of the seal to the facial skin;
- the effectiveness and capacity of the air-purifying filter or air-supplying equipment;
- the inward leakage through respirator compounds.

An acceptable fit test determines the ability of each respirator wearer to obtain a satisfactory fit. A fit test must not be used to evaluate the air-purifying components in a respirator.

The efficiency and capacity of respirators is determined by the manufacturer and their instructions must be followed. Under no circumstances shall a person wear a respirator for which a satisfactory facial fit has not been obtained.

### FIT TEST PROCEDURE

- All respirators must be qualitatively fit tested when first issued to workers. Half masks require fit testing at least weekly thereafter or when requested by the wearer. Other respirator types should remain in the worker's possession for the duration of the project. If a new respirator is assigned, workers must be fit tested again.
- Attach cartridge filters.
- Ensure that worker is able to detect the banana oil odour without a mask on, failure to be able to detect the banana smell voids a fit-test and an irritant smoke tube must be used instead. Check worker sensitivity to a small amount of smoke from its test tube.
- Instruct worker to put mask on and conduct the Daily Check as previously indicated.
- Once the daily check has been completed, instruct worker to breathe normally and close eyes. Wave the banana oil ampule or irritant smoke tube slowly around the entire perimeter of the face seal area and at the filters of the mask.
- While continuing to apply banana oil or smoke, instruct worker to take regular deep breaths, breathe normally while turning head from side to side and up and down and have them talk.
- Record fit test results. Keep fit test results on file at the work site and head office.

### TRAINING

The following persons require training to ensure the proper use of respirators:

- the respirator wearer;
- the supervisor of persons wearing respirators;
- the person issuing respirators;
- the person performing fit tests and;
- the person maintaining and repairing respirators.

Training records will be retained for the employee's duration of employment plus two years. Every person required to use a respirator must be retrained at least annually; and more frequently in special circumstances. The training of every person required to wear respirators will consist of:

- the nature, extent and effects of respiratory hazards to which the person may be exposed;
- an explanation of the operation, limitations and capabilities of the selected respirator; instruction in procedures for inspection, donning, removal, checking the fit and seals;
- an explanation of the procedure for maintenance and storage of the respirator,
- recognition of malfunction of the respirator.
- supervisor training will include respirator selection, fit, and inspection and monitoring of use.

### **MAINTENANCE, CLEANING & STORAGE**

Respirators require regular maintenance to retain their original effectiveness. An acceptable program of care and maintenance includes:

- inspection, testing and repair;
- cleaning and sanitizing; appropriate storage and;
- record keeping of fit test results.

Respirator users must inspect their respirators before and after each use and ensure that they are properly cleaned and sanitized after each use. Respirators stored for emergency and rescue use must be inspected monthly.

On work sites where employees are responsible for the maintenance of individually assigned respirators, they must be thoroughly trained in cleaning and sanitizing procedures and appropriate cleaning and sanitizing materials must be available.

After being cleaned and sanitized each respirator must be inspected and tested to determine if it is in proper working condition prior to using. Remove from service respirators that are defective in any capacity and identify so by tagging them "out of service". Repair and dispose of as soon as possible.

An acceptable respirator includes a check for:

- tightness of connections;
- condition of component parts i.e., face-piece, harness/harness assemblies, valves, filters;
- connecting tubes, cartridges;
- shelf-life dates of filters;
- proper functioning of regulators and.
- pliability and deterioration of rubber or elastomeric parts

A record of respirator inspections will be maintained including information on:

- date of use and date of inspection;
- physical condition and repairs made;
- cleaning and sanitizing and;
- tests or remedial action taken.

Where inspections indicate that repairs or overhaul are required, follow the manufacturer's instructions. Only properly trained personnel may repair and test respirators, using original manufacturer's replacement parts and repair procedures.

Store respirators in a manner which protects them from distortion, dust, ozone, sunlight, heat, extreme cold, excessive moisture, vermin, damaging chemicals or any other potential hazard.

## HEALTH SURVEILLANCE

Where there is doubt about the fitness or ability of an employee to wear a respirator, instruct the employee to seek medical advice from a physician who is knowledgeable about the work. The physician will be requested to inform management about the fitness or ability of the employee to wear a respirator.

## PROGRAM EVALUATION

The effectiveness of the Respiratory Protection Program will be periodically evaluated by management to ensure that wearers are being provided with adequate protection. If any corrective actions are required, they will be taken immediately, including the reporting of all pertinent data. This evaluation will be conducted at least annually, or more often as required.

Wearer acceptance of a respirator is an important matter to consider when evaluating the effectiveness of the Respiratory Protection Program. Supervisory personnel will consult respirator wearers periodically about the following factors:

- comfort and restriction of movement;
- breathing resistance;
- fatigue;
- interference with vision or communication
- interference with job performance and;
- confidence in the respirator's effectiveness.

Supervisory personnel will also review the Respiratory Protection Program frequently to ensure:

- correct types of respirators are selected, issued and used;
- wearers are adequately trained and wear respirators correctly;
- respirators are adequately inspected, maintained and properly stored.

### GUIDELINES FOR RESPIRATOR USE

- Ensure that the face is clean shaven where the face-piece seals to the skin.
- Ensure that respirators which require an effective face seal to perform effectively are not worn if this seal cannot be achieved and maintained.
- Ensure that corrective lenses do not interfere with the face-piece seal.
- Do not wear contact lenses while wearing a respirator.
- Ensure that no covering passes between the sealing surface of the respirator face-piece and the face.
- Ensure that other personal protective equipment does not interfere with the face-piece seal.
- Inspect the respirator for proper operating condition prior to each use.
- Check the face-piece seal immediately after donning a respirator.

High and low air temperature environments can affect respirator performance and the safety and health of the user. Ensure strict adherence to good maintenance, repair, training and fit test and use procedures while working in extreme temperatures:

Monitor the use of respirators to ensure that:

- the correct type is being used;
- they are being worn properly;

- they are in good working order and;
- problems are documented.

Where appropriate, develop specific written work procedures to address emergency and rescue situations.

## SCAFFOLDING

The following are some common sense rules designed to promote safety in the use of scaffolding. These rules do not claim to be all-inclusive or to replace other additional safety and precautionary measures. If you are unsure of any safe work procedures or proper erection standards consult with the supplier or other qualified personnel.

- Workers should be properly trained or instructed before they use equipment.
- Access to scaffolding must be by use of a ladder if the scaffolding is not a ladder climbing system. Ladders must be secured to prevent displacement. Secure ladders at the top and bottom.
- Check to make sure all braces and connectors are in place. Do not climb cross braces. For access onto the scaffolding, use a fixed or portable ladder, frames designed to be climbed or access steps.
- Check for guardrails on sides and ends. If guardrails are missing, and a fall of 10 feet or more exists workers must wear a harness with lifeline. Workers must be secured against falling before entering and exiting the fall hazard area
- If guardrails need to be removed to perform your work activity, you must replace the guardrails after work is completed if the fall hazard still exists.
- Check base of scaffolding, are verticals resting on adequate sills or foundations? Use base plates. Scaffolds must be erected plumb and level.
- Use adjusting screw jacks instead of blocking to adjust to uneven grade conditions.

Are scaffolds tied into the building structure when necessary to prevent inadvertent displacement?

- Scaffolding having a height of 3 times its minimum base dimension must be secured to the structure and/or be equipped with outriggers to ensure stability of the scaffold. Thereafter additional ties must be placed at vertical intervals not exceeding 6 meters or 20 feet. Longitudinal ties must be placed at every third bay or 6.4 meters (21 feet), whichever is less, and at each end of the scaffold.
- Regulations require that sawn wood scaffold planks for a maximum span of 10 feet be not less than 2in. x 10in. in nominal lumber graded "Select Structural-Scaffold Plank". Where 2in. x 10in. nominal lumber graded "No. 2 and better -Joists and Planks" are used they must be doubled up one atop the other. See WorkSafe BC Regulations Section 13.
- Work platforms must provide a work surface of a minimum width of 20 in. and must not leave an opening of more than 10in. between the front and rear vertical supports or the rear guardrail. Scaffold planks must extend not less than 6 in. or more than 12 in. beyond their supporting member and where necessary be fitted with cleats or be secured by other means to prevent their displacement.
- Do not throw or drop objects from the scaffold. If you must drop waste, rope or barricade off your work area below to warn workers of a potential hazard. Be aware of windy conditions that could carry waste materials. Use a hand line/rope to raise and lower tools and materials.
- Distribute material loads as evenly as possible rather than concentrating them in one area.
- Do not use ladders or other devices on top of scaffolds to increase the working height.
- Power lines near scaffolds are dangerous, use caution and consult with the power company for advice.
- Do not erect scaffolding within the limits of approach! Maintain a minimum distance of 10 feet. If unsure of the required limits of approach distances, confirm with the local power authority. Refer to Table 19 of the

WorkSafe BC regulations or under Electrical Safety in the Company Safety Manual.

For rolling scaffolds these additional rules apply:

- Do not ride rolling scaffolds
- Secure or remove all material and equipment from scaffold before moving.
- Caster brakes must be applied at all times when scaffolds are not being moved.
- Casters with plain stems shall be attached to the panel or adjustment screw by pins or other suitable means.
- Do not attempt to move scaffold without sufficient help; watch out for holes, slopes, debris and overhead obstructions
- Do not extend adjusting screws more than is recommended by your supplier.

All scaffolding shall be used and installed in accordance with the manufacturers recommended procedures. Accessories should not be altered in the field. Scaffolds, frames and their components, manufactured by different companies should not be intermixed.

Scaffolding must be erected, altered and dismantled by, or under the direct supervision of qualified or trained workers.

When in the field, if workers have any concerns of the safety of the scaffolding in any way, inform your supervisor and/or the appropriate safety personnel to inspect the scaffolding.

"Do not access scaffolding until all corrections are made and clearance is given to do so."

## TOOL BOX TALKS

These are very important to any long term, ongoing training and instruction program, for everyone in our organization.

All supervisors/foremen are required to conduct Tool Box Safety Meetings. These meetings will include information such as;

- On-the-job concerns
- Future projects and/or tasks
- Information gathered from inspections, investigations and observation
- Hazardous materials in the workplace
- Include: A lesson plan in writing, which outlines the problem you wish to address
- Note aids and illustrations or examples that you have, make your point clear
- Set time aside for discussion, to increase understanding and find solutions to problems

After your presentation:

- Write up your Safety Meeting Report Form, and attach it to your lesson plan.
- Send these forms to the head office, completed, with additional suggestions that may have been made by employees.

Remember

- Keep to your subject
- Have a written lesson plan
- Ensure that the talk generates solutions
- Make it informative and interesting

Gather your information from all sources, don't limit yourself. When you pass this information on to the crew, it decreases the likelihood of the incident occurring or repeating itself. Let's learn from the mistakes of others! By doing this we will be less likely to make those same mistakes ourselves.

The talks should involve all tradesmen under the supervisors or foreman's direct control. These meetings will be held regularly once each week. If new operations, procedures, etc. arise additional meetings should be held. The meetings should be conducted by the supervisor or foreman and the minutes of each meeting must be kept on file. A copy will be forwarded to the Project Superintendent.

## TRAFFIC CONTROL

Firms providing professional traffic control services may employ other procedures provided they are deemed acceptable to WorkSafe BC or other governing agencies.

- Traffic control persons must remain at their point of duty until work is completed or they are relieved.
- "Traffic Control Person Ahead" signs must be posted in advance of the traffic control person's station.
- Only properly trained traffic supervisors and flag persons shall control our road and highway worksites.
- Wherever unregulated movement of vehicular traffic creates a hazard to workers, appropriate traffic control measures must be implemented.
- The appropriateness of measures can be determined monitoring effectiveness. Effective traffic control measures for your work location can include patrol vehicles, traffic lights, signs, barricades, cones, detours and flag persons.

Traffic control procedures and equipment must be in conformity with applicable authorities:

- Public highways -Ministry of Transportation and Highways; Highway Engineering Branch
- Municipal areas -Applicable Municipal Authorities
- Other -Workers' Compensation Board O/ B.C.

Do not assume drivers and pedestrians will see or recognize the workers or hazards in a work zone. Remember that the visibility of workers/hazards can be greatly diminished in darkness and/or poor weather conditions.

Traffic Control Persons must be provided with and use:

- a Stop/Slow paddle;
- a high visibility (red, orange or other acceptable color) vest, jacket or poncho fitted with at least one white reflectorized stripe;
- a hard hat preferably with strips of reflective tape;
- reflective wrist and ankle bands
- a means of communication between Traffic Control Persons when two or more Traffic Control Persons are on a team and are not visible to each other.
- during hours of darkness or obscured visibility, Traffic Control Persons must be provided with and use: A reflective Stop/Slow paddle and a flashlight fitted with a red signalling beacon.
- a Traffic Control Person's paddle must only be displayed in a static manner and should never be used to wave traffic on.
- when work is not in progress or devices are no longer needed, remove, cover or fold them.
- flag persons must, when dealing with the public, be courteous, patient and perform their job effectively.

## VEHICLE BREAKDOWNS AND ACCIDENTS

If a company vehicle breaks down, operators must get the vehicle off and away from the traveled portion of the road if possible. If they can't, then they must:

- Activate vehicle emergency flashers.
- If visibility is poor because of fog, rain, hill, curve, dusk, etc., set out flares or flashers supplied with the vehicle.
- Set flares or flashers 30 meters (100 feet) behind and 30 meters (100 feet) in front of the vehicle. (Do not set out flares if you are well off the road).

All breakdowns must be immediately reported to Head Office. All accidents must be reported in accordance with the Accident and Injury Reporting procedure found in this Safety Program. Give all the details possible, such as width of roads, length of skids, presence of traffic signs, vision obstructions names and addresses of persons involved and witnesses. In case of an accident the operator must:

- Pull off the road, if possible, to avoid obstructing traffic
- Place warning reflectors on the road as necessary.
- Render first aid to any person who may be injured.
- Report the accident to the appropriate personnel as soon as possible.
- Refrain from entering into any argument or dispute with the driver of the other vehicle, pedestrians or bystanders
- "Make no admission of liability or offer any settlement of claims"
- Record license plate numbers and driver's license numbers of any other involved persons.

Report the accident to the necessary authorities or make arrangements with head office to make the report.

### **WELDING, CUTTING and BURNING**

Work involving welding, cutting and burning can increase the fire and respiratory hazard in any job and the following should be considered.

- Only authorized and qualified persons are permitted to use ox-acetylene fired devices.
- Inspect equipment prior to use. Inform your supervisor if the equipment requires repair or removal from service.
- Remove or protect combustible materials from the sparks and heat created by the welding operation.
- Always ensure that adequate ventilation is supplied and/or respiratory protection equipment is used since hazardous gases and metal fumes can be created during welding tasks.
- Where adjacent workers may be exposed to the hazards created by welding, cutting or burning, they must be alerted and/or protected by non-combustible screens or wear appropriate eye protection.
- Always have fire fighting or prevention equipment on hand or nearby, ready for use when welding, cutting or burning. Use a Class ABC fire extinguisher of adequate size.
- Remove or protect combustible materials and possible flammable vapours prior to commencing work.
- If combustibles hazards cannot be removed, a fire or spark watch must be maintained.
- Always wear suitable personal protective equipment such as aprons, gloves and eye protection when welding, cutting or burning to protect against sparks, debris and ultraviolet rays.
- Never weld, cut or do other hot work to lines, drums, tanks, etc. that have been in service without ensuring that all precautions have been carried out and permits obtained.
- Never enter, weld or cut in a confined space without proper gas tests being done and the required safety monitor stationed.
- Reverse gas flow (check) valves and flash back arrestors must be used in all oxy-fuel systems.
- Welding, cutting and burning must not be performed where sparks and cutting slag will fall on the cylinders. Where possible move all cylinders to one side or protect them with coverings.
- When working overhead, use fire resistant materials (blankets/tarps) to control or contain slag/sparks.

- Open all cylinder valves slowly. The wrench used for opening the cylinders valves should always be kept on the valve spindle when the cylinder is in use.
- Spread coiled welding cables out.
- Attaché the ground lead securely to the work.
- Never coil welding cables around your body when welding.
- Contact lenses should never be worn near welding operations.
- Close all cylinder valves when work is finished.

## **WORKPLACE CONDUCT**

It is our company policy to ensure the safety of our employees, contractors, subcontractors and the general public by ensuring they are not violated, harassed or injured through improper conduct.

Management when necessary will develop policies and procedures for workers to follow so as to control or minimize the risk of worker to worker violence and harassment through improper conduct.

Workers will be disciplined accordingly with regards to the violation of these policies and procedures.

Disciplinary action will be determined depending on the nature and severity of the violation.

Knowingly or intentionally engaging in hazardous behaviour is forbidden and will result in disciplinary action.

Worker conduct that is forbidden which may result in disciplinary action are but not limited to:

- engaging in horseplay
- worker to worker violence
- harassment
- practical joking
- unnecessary running or jumping

## **Section 3: TRAINING OF WORKERS & SUPERVISORS**

### **3.1 POLICY**

Management feels training and education of workers is one of the most essential components of any successful Health & Safety Program. In order to provide this essential training, our supervisors must possess the knowledge and skill level required to present toolbox meetings, instruct workers in safe work procedures, and monitor ongoing requirements for health and safety instruction. To ensure all workers are up to date in their training, attendance at all relevant training sessions as determined by management is mandatory.

It is our company policy that supervisors and workers are provided training and periodic retraining to ensure awareness of potential hazards in the workplace.

WORKERS will receive appropriate training and instruction to avoid and lessen hazardous situations. Supervisors are responsible to ensure that all new or transferred employees start out with proper training.

SUPERVISORS will be provided ongoing training in safety and health as it applies to their workplace.

### 3.2 NEW WORKER ORIENTATION

It is our aim that all workers be properly trained and receives an adequate orientation of the policies and procedures in place within the company.

It is critical that a worker who is entering a new work area "learns safety" prior to commencing work, in order to develop the safe work practices and attitudes necessary to protect himself/herself and other workers from injury within that work environment.

Accordingly, all new workers will be given a safety induction orientation, prior to starting work, which includes, but is not limited to, the following:

- An overview of our company health & safety program manual, and requirements.
- Safe work practices and procedures (general & specific)
- WorkSafe BC regulations
- Personal protective equipment
- Identification of hazards in the workplace
- Procedure for reporting accidents, incidents and hazards
- Review of employee responsibilities
- Worker orientations

Training will be provided by:

- Employee orientation programs
- On the job training programs
- Outside organizations i.e. Safety Consultants, WorkSafe BC, BCIT, St. Johns Ambulance, etc.
- Video training programs i.e. WHMIS, fall prevention, respiratory, due diligence, etc.

Training will be provided for new workers so that those individuals are given the opportunity to gain related experience.

Where new equipment or technology is introduced into the workplace, on the job training programs will be set up to train individuals affected. This safety training shall be documented and the worker shall sign all required forms acknowledging that he/she has received this induction training.

### 3.3 WORKER TRAINING

CDR Demolition training programs will ensure employee training in all areas where required.

The training and verification of each worker, with regard to his/her ability to do the job safely is most important to management. As outlined in the General Safety Rules, no employee shall operate any equipment if he/she has not been trained to do so. The supervisor shall ensure that each new worker can perform his/her duties safely and efficiently.

- Good safety performance is achieved, in large part, through initial and ongoing training and education which develops safety skills and promotes safety awareness.
- Accordingly; General safety awareness training will be provided to all workers whenever the need for such training is required.

- WHMIS, respiratory, fall protection training, where applicable shall be provided to all workers employed within the company. The effectiveness of this training, as well as any upgrading of this training shall be done on an annual basis or more often as required.
- Training in safe work practices and procedures will be provided for individuals as necessary.
- Training allows the individuals the opportunity to gain job related experience and perform the job adequately and safely and with minimal supervision.
- Where new equipment or technology is introduced in the workplace, on the job training will be provided to train those individuals affected.

### **3.4 SUPERVISOR TRAINING**

Supervisors are vital links in the implementation and overall success of our Health & Safety Program.

They are largely responsible for the day to day operation of the program. It is imperative that supervisors be continually informed of the latest developments applicable to their work as well as the methods available in conveying this information to the workplace.

Therefore, a guideline for training to be provided to supervisors will include, but is not limited to the following:

- Training in Accident Investigation techniques as well as developing corrective measures.
- Training and education in WHMIS, including the use of MSDS' and Supplier Label's as well as the use of the company's workplace labeling system.
- Knowing the rules and regulations of the workplace, WorkSafe BC and other regulatory agencies.

All training records will be kept on file with Management.

### **3.5 FOLLOW-UP PROCEDURES**

Supervisors, designated personnel and/or the designated safety representative shall monitor employee performance to ensure that safe work practices are being followed.

It shall be their responsibility to record these observations and correct practices as required.

It shall be the supervisor's responsibility to monitor these records and review results with the appropriate management personnel on a regular basis.

## **Section 4: SUPERVISION OF WORKERS**

### **4.1 RESPONSIBILITY**

It is the responsibility of supervisors employed within our company to ensure that work is planned and carried out in accordance with safe procedures.

Accident prevention is largely dependent upon the supervisor's ability to supervise workers, communicate and enforce safety, and instruct and motivate workers to work safely. We will ensure that supervisors are instructed in and are aware of their health and safety responsibilities and are held accountable for running a safe and healthy workplace.

### **4.2 SUPERVISOR SKILLS**

Through skill, understanding, commitment and communication, supervisors working for the company can and will have a beneficial influence on the workers under their supervision.

Supervisors must set a good example for those working under their supervision. It is imperative that supervisory staff behave in a manner that workers can imitate and model their own behaviour upon.

Responding to praise is a natural reaction for most people. Therefore, rewarding a worker for a job safely done is one of the best methods of ensuring that he/she will continue to work in a safer manner.

Identification: Supervisors must be able to clearly identify the unsafe or incorrect actions or processes within the workplace.

Restate: If a worker gives excuses or argues after being instructed in safe procedures, the supervisor must restate his/her position.

Inform: Instruct all workers in the correct method that should be used to do a work process.

Check: Make sure the worker understands what you want done and how you want it done.

Emphasize: If necessary have workers demonstrate that they indeed do understand. It is the worker's safety and welfare you are concerned about as he/she is important to you and the company.

CDR Demolition will ensure that supervisory staffs have demonstrated abilities in:

- Effective communication
- Leadership
- Problem solving
- Compatibility with company philosophy

#### **4.3 SUPERVISORS ACCOUNTABILITY**

Supervisors play a key role in a Health and Safety Program. The amount of time and effort put into accident awareness training and prevention will be a major determining factor whether or not a good prevention performance record is established.

Supervisor health and safety responsibilities and training shall include instruction in but not be limited to:

- Worker orientation, instructing workers in safe practices and methods at the time workers are given assignments and as work progresses.
- Providing safety talks Hazard recognition and control ensuring regular safety inspections are taking place and all deficiencies addressed are corrected.
- Actively participating in accident/incident investigations and ensuring all injuries are reported and documented
- Actively supporting the safety committee in their ongoing endeavours. Attending and participating in safety meetings are required
- Enforcing established safety policies, rules and job procedures when required.
- Ensuring that all equipment, tools, and apparatus used by workers are in good repair and in proper working order.
- Supplying all required personal protective equipment and enforcing the use of this equipment as required and instruction in the use and care for this equipment.

Setting and leading a good example for all workers.

## **Section 5: REGULAR INSPECTIONS & MONITORING**

### **5.1 WORKPLACE MONITORING**

Management is responsible for the overall operation of the program.

Supervisors are responsible for continuously monitoring the workplace and the activities within to ensure that their subordinates are working safely and in a safe work environment.

Workers must be constantly on guard against hazards, whether real or potential, and report them immediately to their supervisor. Hazards include unsafe or incorrect actions or work processes, defective or un-maintained equipment, or the unsafe activities of fellow workers.

### **5.2 POLICY**

The purpose of this policy is to control losses through the identification of unsafe conditions and work practices by means of safety inspections and audits during working hours as a major means of accident prevention. Accordingly, management will maintain a comprehensive program of safety inspections at all facilities and workplaces.

#### **5.2(1) CONSTRUCTION SITES**

Supervisors and/or designated personnel will conduct a workplace safety inspection upon arriving at the workplace to identify any hazards that may exist, although safety monitoring of both the workplace and workers will be ongoing. The results of the inspection shall be documented and filed. Corrective action shall be undertaken to eliminate or minimize the hazard with and a copy is to be forwarded to management at head office.

Management will conduct an annual safety inspection and audit or more often as required.

#### **5.2(2) INSPECTION PROCESS**

Supervisors and/or other designated personnel responsible for inspections will perform planned inspections as well as informal inspections as part of their regular activities, observing the safe work practices and procedures of workers, touring the area thoroughly, observing the physical condition of work areas, equipment and any hazardous materials.

Planned inspections involve a systematic tour of the work areas looking for all hazards and sub-standard conditions. These inspections will be conducted when first arriving at the work site and will be ongoing until the work has been completed. These inspections will be conducted by the supervisor, workers or appointed representative, and where practicable a worker representative.

Special inspections usually involve a specific location or piece of equipment in follow-up to an accident, incident or mechanical breakdown and are generally done by the most qualified person(s).

Pre-Inspection

- Review previous inspection reports, if any, for the area to be inspected.
- Develop a checklist of commonly reported hazards.
- Identify specific equipment, machinery, jobs, etc. associated with accident trends or loss potential.

#### During Inspection

- Take copies of previous inspection reports along and note whether the hazards listed were corrected as required.
- Use your eyes, ears and other senses to identify actual or potential problems as you go about your other daily activities. Record hazards identified and any others reported by workers.
- Look for off-the-floor and out-of-the-way items. Look for things that you think would be missed in the daily activities and inspections,
- Systematically cover the whole area and pay particular attention to specific equipment, machinery, jobs, etc. that have been associated with accident trends or severe loss potential.
- When unsafe conditions requiring immediate attention are found, corrective action must be undertaken without delay, as specified in the WorkSafe BC regulations. Defective tools, equipment and machinery must be removed from service until the defect has been corrected. All unsafe conditions and defective items must be recorded describing the items and their locations clearly.
- Classify items according to their potential for injury or damage. This will lead to a systematic approach toward corrective action and follow-up.
- Look for root causes of sub-standard conditions, practices and procedures, not just the symptoms.

#### Post Inspection

- Complete a standard Inspection Report Form.
- Copy all items from previous reports that have not been remedied, noting initial detection date.
- Ensure all sections of the Inspection Report Form are complete and legible.
- Keep copies on file at the workplace/worksites for reference and for WorkSafe BC access.
- Forward a copy of the Inspection Report to the office.

All deficiencies whether real or suspected, will be recorded on the Inspection Report Form. Deficiencies should be recorded as they are discovered and not left to memory. Unsafe conditions which are an "imminent hazard" must be reported to the supervisor IMMEDIATELY. Unsafe conditions that do not need immediate attention but should be addressed as soon as possible can be reported to the supervisor.

## Section 6: HAZARDOUS MATERIALS & SUBSTANCES

### 6.1 HAZMAT POLICY

It is our company policy to promote and sustain the efficient application of a program for WHMIS to ensure that workers receive the fullest knowledge and protection in the handling of products which could be harmful to their health.

Pursuant to the attainment of this goal, responsibilities for administration of the WHMIS program shall include, but not be limited to, the following;

Management will ensure that all controlled products entering the workplace will have proper labels and identifying symbols attached to each container and that MSDS are available and circulated to the proper personnel. Management will also ensure that adequate information and training is provided for all personnel.

Management will also act as WHMIS Coordinator.

The duties of the coordinator will include the compiling of a list of hazardous products, requesting MSDS sheets and labels for controlled products, keeping MSDS sheets current and available at all workplaces, ensuring that adequate training is given to all workers and conducting an annual audit of the WHMIS program.

Supervisors will ensure that workers, who handle, store, or use controlled products, are properly trained to identify labels and understand risk phrases, be able to understand applicable sections of MSDS Be trained in emergency procedures which might occur and generally understand problems associated with the handling of controlled products. Supervisors will also ensure that all controlled products received in the workplace are correctly labeled and that current MSDS are available for these products.

Supervisors will ensure that all controlled products entering the jobsite have current Material Safety Data Sheets (MSOS) available. Copies of Material Safety Data Sheets (MSDS) will be provided to the First Aid Attendant prior to any controlled products being used in the workplace.

Workers will follow all the established procedures for the use, storage, and handling of controlled products which include, when required, wearing of proper Personal Protective Equipment.

Current copies of all MSOS will be given to the First Aid Attendant, who will be fully aware of the emergency treatment of workers who have been exposed to excessive amounts of a controlled product. It is recommended that MSOS be compiled alphabetically in a binder, have the product name, first aid measures and the preparation date hi-lighted for easy access to minimize any delay in first aid treatment.

Cooperation is needed from all levels of the work force to ensure that our workers receive the necessary information and equipment required to fulfill our goal. Strict compliance with the WHMIS regulations WILL ensure that workers have the fullest protection when handling products which endanger their health, now or at a later time in their life.

## **6.2 EMPLOYER RESPONSIBILITIES - MSDS**

- Obtain up-to-date supplier MSDS before product is used or handled.
- Ensure that supplier MSDS is not more than 3 years old.

Update MSDS:

- within 90 days of receiving new information about product
- at least every 3 years.

Make sure MSDS are "Readily Available" to:

- all workers who work "with or in proximity to" controlled products.
- OHS committee or worker health and safety personnel.

Ensure workers are informed regarding:

- the content required on MSDS
- the purpose and significance of the information.

### 6.3 EMPLOYER RESPONSIBILITIES -WHMIS LABELS

- Ensure that all workers who work with or in proximity to controlled products are instructed in the content, purpose and significance of supplier and workplace labels, and other identifiers.
- Ensure that a controlled product or the container of a controlled product has the proper label applied to the item at the time of entry into the workplace.
- Ensure that no controlled product is used or handled in the workplace without the proper label.
- Take measures to ensure that supplier labels are not removed, defaced or altered in the workplace.
- Develop and apply a workplace label to controlled products or containers of controlled products where; the employer produces a controlled product in the workplace, an existing supplier label becomes illegible or is accidentally removed and replacement supplier label is not available.
- Provide and apply other means of identification, which need not be workplace labels, but which clearly identify contents for any hazardous products which is; a hazardous waste produced in the workplace contained in a transfer system or reaction vessel tank car or truck, or similar conveyance.
- Provide and place a placard which need not to be a label, but which discloses the information required for a workplace label and is of a size and in such location that placard information is conspicuous and which clearly identifies controlled products; not in a container or in a container intended for sale to be labeled at a later time.

### 6.4 WORKER RESPONSIBILITIES -WHMIS LABELS

Know and understand:

- The content required on supplier labels and workplace labels, including the requirements for information on the availability of MSDS (Material Safety Data Sheets).
- The significance of information on labels and other means of identification for worker health and safety.
- Resulting procedures for the safe use, storage, handling and disposal of controlled products as well as procedures to be followed where fugitive emissions are present or in an emergency which involves controlled products.
- Handle controlled products in accordance with label and identifier alerts.
- Follow employer directives to avoid removing, defacing or altering labels.
- Inform employees of the presence of illegible labels and other means of identification or those which have been accidentally removed.
- Harmful substances must be disposed of using the method described in the Material Data Sheet (MSDS) for the substance.
- Spilled toxic, flammable or corrosive materials must be cleaned up immediately using the method described in the appropriate Material Data Sheet (MSDS).

## Section 7: MONITORING OF WORKPLACE EXPOSURES

### 7.1 POLICY

Management is committed to the health and safety of our employees, we will ensure where applicable, that environmental monitoring (noise or airborne concentrations of contaminants) will occur in all our workplaces. There will be procedures in place to recognize, evaluate and control hazardous exposures.

## 7.2 RECOGNITION

Persons monitoring must be able to recognize hazards in;

- waste products
- maintenance operations storage practices
- work process that involves noise, hazardous materials and hazardous ergonomics.

## 7.3 EVALUATION

After hazards have been recognized, there must be monitoring to verify that WorkSafe BC standards are not exceeded and that proper procedures and protective equipment are in place and in use.

## 7.4 CONTROL

In order to complete the process, there must be effective control of the hazard;

- good housekeeping, cleanliness of the workplace and the disposal of waste.
- keep an adequate supply of required personal protective equipment at the workplace.
- education and training procedures designed to alert workers in the methods and equipment for controlling hazards.

## 7.5 PROGRAMS AND PROCEDURES

### 7.5(1) HEARING TESTING PROGRAM

A major long term problem in the construction industry is hearing loss.

The role of the company in this respect is to:

- identify noise hazards.
- communicate hazard information to employees.
- ensure that protection against the hazard is provided.
- provide annual hearing tests to those employees who are regularly exposed to excessive noise levels.

Acting within the program, it is the responsibility of all supervisors to identify noise hazards and take action to control the problem. Examples of noise hazards in the workplace but are not limited to are:

- cutting with power saws
- drilling and grinding
- running mobile and/or heavy equipment
- using air compressors

In order to meet the minimum requirements of the WorkSafe BC Regulations, we will ensure that;

- Employees who are routinely exposed to excessive noise levels will be provided with proper hearing protection.
- All workers shall receive annual hearing tests by a WorkSafe BC approved audio metric service.

Noise hazards shall be communicated to all workers through the use of WorkSafe BC stickers and posters, awareness campaigns and through employee induction.

PROLONGED EXPOSURE TO 85 DECIBELS (dB) OF SOUND HAS BEEN PROVEN TO CAUSE PERMANENT HEARING LOSS, "WEAR YOUR HEARING PROTECTION".

## 7.6 AIRBORNE CONTAMINANTS

Workplace activities can expose workers to a variety of airborne contaminants in the form of dusts, fumes, vapours, and gases. Overexposure to these contaminants can cause a number of health concerns. Air sampling or testing for specific products may have to be done to determine the exposure levels within the workplace.

If contaminant levels exceed 50% of the substance's exposure limit then the employer must implement an exposure control plan as specified in OH&S Regulation, Part 5.54. The level of contaminants must be reduced through the use of product substitution, engineering controls such as ventilation, or administrative controls such as worker rotation. Personal protective equipment must only be used if engineering or administrative controls are not practicable.

## 7.7 ALLERGIES AND SENSITIZATION

Some employees may be allergic to or have become sensitized to materials they are exposed to on the job. Other employees may have sensitized reaction to various glues, paints, epoxies or hardeners.

CDR Demolition employees, contractors and their subcontractors will follow Safe Work Practices, provide appropriate Personal Protective Equipment and will train workers that are exposed to any products, whether they are Controlled Products or consumer products, in accordance with the available knowledge of the hazards present in the products.

Any employee that has an allergy or sensitization to a product or material, and cannot be adequately protected by Personal Protective Equipment, will not be assigned to work with or around the product or material. Any employee that reports symptoms that he/she believes are related to products or materials on the job will be asked to see their family physician.

In cases where employees have industrial diseases that are irritated or worsened by the workplace environment, CDR Demolition will consult with the WorkSafe BC to determine a course of action in the employee's best interest.

## 7.8 OTHER EXPOSURES

Other exposures that should be considered and evaluated are temperature extremes, vibration and radiation. Further information and regulatory requirements are found in OH&S Regulation, Part 7.

# Section 8: MEDICAL EXAMINATION & HEALTH MONITORING

## 8.1 PURPOSE

The purpose of medical monitoring within CDR Demolition and on all their projects is to:

- Assist in maintaining medical fitness of our workers.
- Assist in identifying working conditions likely to cause occupational disease.

- To comply with the requirements of regulations, agreements and for any job where such examinations and monitoring is mandatory.

## 8.2 PROGRAM REQUIREMENTS

A health monitoring program is in place to establish when workers are or may be:

- Exposed to noise which is equal to, or exceeds the 8 hour exposure limit at 85 dBA.
- Exposed to silica dust, which has been proven to cause the respiratory disease Silicosis.
- Exposed to other conditions, such as heat or humidity, which are likely to have caused adverse health effects such as heat stress.
- Exposed to controlled contaminants (WHMIS), which are likely to have immediate or long term health effects.
- Exposed to tobacco smoke, which has been proven to cause respiratory disease and cancer.
- To control the exposure and minimize the risk of illness the health monitoring program will.
- provide all workers with the appropriate personal protective equipment.
- monitor and ensure that the indoor work environment is adequately maintained as far as is practicable.
- To control exposure to tobacco smoke, smoking will be restricted to designated smoking areas.

## 8.3 ADMINISTRATION

- Workers are to comply with reasonable requirements of a medical program.
- Workers are to be advised of personal precautions and necessary protective measures by supervisors.

## Section 9: FIRST AID SERVICES & EQUIPMENT

### 9.1 FIRST AID

Management has the responsibility for ensuring that appropriate first aid is provided and first aid services, supplies and equipment are provided and maintained for workers as per WorkSafe BC regulations. Management will provide first aid supplies and services at all our workplaces when applicable.

Any worker sustaining an injury or illness that is, or may be, job related, regardless of seriousness, shall report it to the First Aid Attendant immediately or as soon as possible for treatment and/or recording. A WorkSafe BC Form 7 A must be completed by any worker injured on the job that requires medical aid. Submit the WorkSafe BC Form 7A to the head office and/or appropriate personnel as soon as possible.

The First Aid Attendant will be in complete charge of all first aid treatment of injured workers until medical aid is available. Supervisory personnel will not attempt to over-rule the attendant's decisions relating to first aid or emergency transportation.

The First Aid Attendant shall ensure that a record of every injury or illness which requires: first aid treatment is kept in the Accident Record Treatment Book.

The First Aid Treatment Book shall be kept for three years and shall be monitored by management, periodically to determine trends and recommend corrective actions,

First Aid statistics shall be reviewed by management to determine trends and recommend corrective action.

To help ensure that appropriate first aid and medical treatment is provided as well as to ensure that workers are assigned to work activities compatible with their health:

- Workers will be instructed in how to summon first aid and report injuries.
- Workers will be encouraged to take first aid training.
- Workers may be required to complete a medical questionnaire at the time of hire.

**NOTE:** Workers are reminded that all work related injuries, no matter how minor, are to be immediately reported to the First Aid Attendant and as soon as possible to their supervisor.

## 9.2 ACCIDENT & INJURY REPORTING

All work-related accidents, injuries and diseases must be reported to the appropriate supervisory personnel as well as your employer. Failure to report the injury or diseases will result in delays in processing your claim.

If an injury occurs when no supervisory personnel are present, contact your employer to report the accident in addition to reporting to the worksite First Aid Attendant, injuries will be entered into the Treatment Record Book and lost time injuries will be recorded on the WorkSafe BC forms 7 & 7 A.

All reports must be made before the end of the shift if possible. Reports must be made to WorkSafe BC within 3 days of the injury occurrence.

If necessary, you may report directly to a doctor but must subsequently, at the earliest opportunity, provide your employer with information regarding:

- cause and type of injury or disease
- reasons for going directly to doctor
- date and time of visit
- doctor's directions

All accidents involving damage to equipment or property must be reported to the appropriate supervisory personnel. If no supervisory personnel are available, the damage must be reported to employers head office as soon as possible.

If requested by WorkSafe BC a Worker's Report of Injury or Industrial Disease to Employer (WorkSafe BC Form 6A) must be completed by injured workers and submitted to your employers head office as soon as possible. Near misses which could have resulted in serious injury or property damage must be reported to the appropriate supervisory personnel.

### **ACCIDENT LOCATION PRESERVATION**

WorkSafe BC regulations require that in the event of:

- death/serious risk of death
- major structural failure
- major release of toxic substance
- blasting or diving accident

"Nothing must be removed from or changed at the accident scene before a WorkSafe BC representative has given clearance to do so, unless it is necessary to facilitate rescue operations or to prevent further injury."

## Section 10: INVESTIGATION OF ACCIDENTS & INCIDENTS

### 10.1 POLICY

Employees are required to immediately report all accidents that result in injury or property damage and all incidents (close calls) to their supervisor.

The supervisor is to at their earliest opportunity report any accident to management and forward a completed Accident Investigation Report as soon as possible. Recommend within 24 hours.

An accident involving a fatality or potential for a fatality is to be reported to management immediately. This should be followed within 24 hours by a written accident investigation report. In addition:

- Arrangements shall be made with the company legal firm to have a representative present at the Coroner's Inquest.
- CDR Demolition will be represented, at the Coroner's Inquest, by the manager or their designate.

The investigation is to attempt to find unsafe conditions, acts or procedures and determine the root cause(s) of the occurrence that may have been a contributing factor. Investigations will be initiated at the earliest practical opportunity. Investigators will generally be conducted by a team of one supervisor, one worker and the company safety representative who will:

- identify the cause of the accident or incident,
- identify the corrective action required to eliminate the cause,
- establish when the corrective action will be taken and by whom.

An Investigation Report will be completed and submitted to head office and, where required by regulation, to the nearest WorkSafe BC office.

The Safety Committee, where applicable, will be involved in the investigation of accidents and will recommend corrective actions to prevent recurrence.

### 10.2 ACCIDENT/INCIDENT INVESTIGATION

Pre-Investigation:

Gather and review any written information pertaining to the accident or incident and where applicable the activities that were underway. This may include witness statements, first aid notes, operating manuals, written safe work procedures, etc.

- Have an investigation kit including materials and equipment that may be needed to aid in the investigation (e.g. camera, report forms, measuring tape, pad and pencil).
- Review personnel files of those involved as well as those of the supervisor.
- Review workplace accident record.

Investigation:

Three stages of an accident/incident should be considered:

**1. Pre-accident stage** - the factors that permitted the sequence of events leading to the accident. These may include:

- employer characteristics (e.g.: type of work areas, size, safety program, supervision, equipment maintenance, previous accident record, etc.),
- employee (all those involved, including injured person) characteristics (e.g.: age, sex, occupation, health, experience, training, previous accident record, etc.).
- written safe job procedures availability
- personal protective equipment (e.g.: fall protection, hardhats, knee pads) availability

**2. Accident stage** - the immediate factors in the accident. These may include:

- what the worker(s) was doing (e.g.: task, specific activity, posture, location, etc.),
- materials, tools, equipment and machinery directly involved (e.g. type, brand, size, guarding, condition, etc.).

**3. Post-accident stage:**

- Visit the accident location. Make yourself thoroughly familiar with the area, machinery and equipment involved.
- Review the Accident and Incident Investigation Form for information required to be obtained.
- Gather necessary data: notes, photos, measurements, drawings, witness names, etc.
- Interview witnesses and other persons who have details about the accident. Interviews require you to be fair and open minded; look for facts not someone to blame for the accident.

Post-accident stage continued;

During the interview you should:

- Put the individual at ease.
- Keep the interview private.
- Advise the individual of the purpose of the interview, e.g. get the facts, not to place blame.
- Obtain the individual's version of how and why the accident occurred. Don't look for confirmation of your own opinion and never argue with the interviewee. Ask questions that require more than a yes or no answer.
- Repeat the individual's story back once you have heard it. This is a good time to make notes.
- Attempt to clear up inconsistencies in facts that may become evident. Do not make assumptions, and use diplomacy and consideration to determine what occurred.
- Ask for suggestions for corrective action.
- Let the individual know by what date the report will be completed.
- End the interview by thanking the person.

Post-Investigation:

- Review and analyze the information gathered.
- Complete the investigation report and forward it to head office.

**IMPORTANT REMINDER:** Where applicable, the accident scene must remain untouched. Nothing must be removed or changed until a WorkSafe BC officer has given clearance to do so, unless it is necessary to facilitate rescue operations or to prevent further failures or injuries.

## Section 11: JOINT OCCUPATIONAL HEALTH & SAFETY PROGRAM

### 11.1 POLICY

A Health & Safety Committee will be maintained as required by the WorkSafe BC Regulations. When the company is not required to have a Health and Safety Committee, but is involved in a project where a Safety Committee exists; the company shall actively participate in the Site Safety Committee.

The Safety Committee will be established in accordance with the Workers Compensation Act and shall have representation from management, employees and where applicable, from each subcontractor with a normal site work force of five or more persons. The Site Supervisor, First Aid Attendant or company safety representative shall be the employer's representative on such committees.

### 11.2 PURPOSE AND OBJECTIVE

Management is committed to reviewing and evaluating recommendations arising from the various safety meetings and cooperating with practical suggestions. The company will support the operation of the meetings whose purpose and objective of the Health and Safety Committee will include, but not be limited to, the following;

- to convene regular monthly meetings for the purpose of reviewing occupational accidents and diseases, their action or required as a result of investigations or inspections and to review other matters pertinent to industrial health and safety;
- to ensure that the policies contained in this Health and Safety Program are being adhered to by the employer and the workers, provided that recommendations for corrective action will be channelled through the appropriate levels of supervision,
- to consider recommendations from workers with respect to occupational safety and health matters, and where necessary, to advise the employer of an unsafe working condition and! or recommend means by which any unsafe work practice can be alleviated or eliminated,
- to recommend, to the employer, new safety practices and changes to safety practices and general policy with respect to occupational health and safety, to promote safety awareness and activities within the work force.

#### CONDUCTING THE MEETING

- At the first meeting, members should elect 2 co-chairs and develop the committee's Terms of Reference. Members may choose to adopt the terms of reference provided.
- Members should prepare for a meeting by being aware of and prepared for what is on the agenda.
- Committee meetings should work by consensus to develop solutions rather than deciding matters by majority vote.
- Committee meetings are not required to follow rules to the letter regarding rules with motions, amendments and votes on each motion. Keep it simple.
- Meetings should start on time, without waiting for late arrivals.
- Meetings should close on a positive note.

The procedure followed in a meeting is generally as follows:

- an agenda item is presented
- a discussion follows to ensure all members understand the issue
- members discuss solutions in an effort to find the best

- the chair states the consensus of the committee, and summarizes any major recommendations, decisions and assignments.

#### PURPOSE

Assist in the establishment, promotion and maintenance of healthy and safe work conditions and attitudes.

- Promote and maintain programs for employee health and safety education.
- Assist in inspections and investigations.
- Evaluate and respond to worker complaints or concerns on health and safety matters.
- Ensure that adequate records relating to accidents, injuries, near misses, illnesses and health and safety hazards are maintained and monitored.
- Review all WorkSafe BC and employer reports concerning the health and safety of workers.

#### 11.3 MEMBERSHIP

The committee will be comprised of equal numbers of representatives from labour and management. Each committee member will have an alternate appointed to serve in his/her absence. Membership will:

- Have a minimum of four regular members, employed full-time, chosen by and representing the workers and the employers.
- The committee will decide on the number of members (a quorum), that must be present to constitute a valid committee meeting.
- Have management representatives not exceeding the number of worker representatives.
- Decide whether to use member substitutes and whether to grant them the full rights and authority of the members they replace.
- Elect a chair and a secretary from its members.
- The committee should decide on the term length for the position prior to election.

#### 11.4 EXECUTIVE

##### CO-CHAIRS:

The executive must have 2 co-chairs; they will be elected by majority vote with one selected by the worker representatives and the other selected by the employer representatives. This position is responsible for running the committee meetings

##### SECRETARY:

The secretary will be elected by a majority vote. This position is responsible for taking minutes of the meeting and preparing and distributing agendas, minutes and the annual report based on the results of the meeting under the direction of the chair.

Where practicable, the secretary can be either a worker member or employer representative.

#### 11.5 COMMITTEE GUIDELINES

##### CO-CHAIRS:

- preside over the meetings
- plan the meeting topics, and give the plan to the secretary for preparation of an agenda.
- control the direction of the meeting not the discussion.

- work to obtain agreement in order to bring issues to a conclusion.
- ensure that every item on the agenda receives attention.
- Conclusion should be reached on every item with a positive decision. This may mean referring a matter for further study.
- review and approve the minutes of the meeting.
- invite specialists or resource persons as required.
- keep the meeting on track by cutting off irrelevant talk so that the agenda can be completed and the meeting adjourned on a positive and constructive note.
- if a discussion is not getting anywhere, the chair may cut it off and move to the next item, postponing the discussion to the next meeting.

#### SECRETARY:

- scheduling meetings, notifying members at least one week prior to meeting
- preparing meeting agendas.
- compiling materials for meeting discussion.
- preparing minutes.
- preparing an annual report
- maintaining all pertinent records
- assist chair as required
- after approval, distribute and post minutes

#### MEMBERSHIP:

- review minutes and agenda
- participate in discussions and try to keep to the issues without side-tracking
- listen to other people's point of view
- submit items for agenda
- promote safety in their day to day work activities
- be involved in inspections
- be involved in accident, incident and complaint investigations
- be involved in corrective action follow-up

Committee members should not always wait for the monthly safety meeting to address health and safety issues nor should safety-related problems and complaints wait for resolutions at the meetings. Safety should be on-going throughout the work day.

### 11.6 STANDARD

The meeting should be standardized in an order such as following:

- date and time of commencement
- role call (record members present and absent as well as guests)
- revision (if necessary) and adoption of previous meeting minutes
- discussion of old business
- discussion of worker concerns, complaints and suggestions
- review of recent accidents, investigations and corrective actions
- review reports on special assignments
- review on inspections (in house of by WorkSafe BC), with recommendations
- training and education of committee members
- discussion of new business

- adjournment
- secretary's signature

## **Section 12: RECORDS and STATISTICS**

### **12.1 POLICY**

Records and statistics, pertinent to safety shall be compiled and retained by the company. These records and statistics shall be used to identify and monitor problem areas, review the effectiveness of our Health & Safety

Program and provide data to the supervisors to assist them in their endeavours of providing a safe and healthy work place.

Records of accidents, accident reports, site inspections and minutes of the Safety Committee Meetings shall be submitted to head office for review and circulation. A copy of each shall be available upon request by WorkSafe BC officers.

### **12.2 RECORDS 12.2(1) INSPECTIONS of VEHICLES and MACHINERY**

Where applicable, records shall be kept on the maintenance and repair of each unit. Maintenance and repair records shall be kept on the file. Such records shall be readily available upon request to WorkSafe BC Officers.

### **12.2(2) INVESTIGATIONS of ACCIDENTS**

Reports of accidents and near miss incidents involving the company shall be documented and kept on file at the site office and made available as per the WorkSafe BC Regulations.

### **12.2(3) SAFETY COMMITTEE**

When required by the company, Minutes of Safety Meetings shall be recorded and kept on file at the site office and made available as per the WorkSafe BC Regulations.

### **12.2(4) ACCIDENT REPORT FORMS (61717A)**

Accident Report Forms shall be completed and filed in accordance with the WorkSafe BC Regulations.

### **12.2(5) TOOL BOX MEETINGS**

Tool box safety meetings must be recorded and copies kept on file and available upon request by WorkSafe BC Officers.

### **12.2(6) INSPECTION RECORDS**

Inspection Reports shall be completed for all inspections and a copy kept on file.

### **12.2(7) FIRST AID RECORD BOOKS**

When applicable, a company First Aid Treatment Record Book shall be maintained and kept on file. Each record of entry shall be signed by the First Aid Attendant or the person rendering first aid and where possible, the worker receiving the treatment.

First Aid Record Books shall be kept on file for 3 years.

#### **12.2(8) WORKSAFE BC INSPECTION REPORTS**

WorkSafe BC reports will be kept on file and used when auditing our Health and Safety Program.

#### **12.2(9) HEARING TEST RECORDS**

Records of hearing test results will be filed for future reference.

#### **12.2(10) MATERIAL SAFETY DATA SHEETS (MSDS)**

Material Safety Data Sheets will be kept on file and reviewed annually to make sure they are current.

#### **12.2(11) ACCIDENT STATISTICS**

Accident statistics will be counted and recorded to monitor accident and incident trends.

#### **12.2(12) MEDICAL CERTIFICATION/EXAMINATIONS/ TESTING**

When required, medical certification, examinations, and testing will be maintained by management or supervisors and kept on file with results issued to the appropriate personnel and upon request, be available to WorkSafe BC for review. Copies will be kept with the employees personnel file.

#### **12.2(13) RESPIRATOR FIT TEST RECORDS**

Annual respirator training and fit testing will be performed and the results of the training will be documented, filed and be available upon request by the WorkSafe BC inspectors.

#### **12.2(14) TRAINING RECORDS**

Training records must be maintained and kept in the personnel files for review by the WorkSafe BC Officer.

### **12.3 REVIEW OF STATISTICS**

Records and statistics shall be reviewed by management and, where necessary, action will be taken to correct safety problems identified during a review.

## **Section 13: MUSCULOSKELETAL INJURY (MSD)**

### **13.1 POLICY**

As we are committed to the health and safety of our employees it is our policy to ensure that the risk factors of MSI are identified all that the risks are assessed and eliminated or minimized as far as is practicable.

Supervisors and workers will receive training and periodic retraining (as needed) to identify and ensure awareness of the risks and contributing factors associated with MSI!

### 13.2 RECOGNITION

Workers must be able to recognize and assess the risk of MSI which include, but are not limited to:  
The physical demands of work activities,

- force required
- repetition
- duration
- work postures

Layout of the workplace or workstation,

- working heights
- floor surfaces
- reaching
- seating
- load condition and weight distribution
- size and shape

Characteristics of objects handled,

- Characteristics of the organization of work,
- work-recovery cycles
- task variability
- work rate
- Environmental conditions

### 13.3 EVALUATION

When the MSI risks have been recognized and assessed, the company will eliminate or as far as is practicable minimize the risks. After the risks have been eliminated or minimized there will be regular monitoring of the workplace and workers to ensure the risks are controlled. The inspection reports Will be recorded and filed and be reviewed at least annually.

### 13.4 CONTROL

In order to effectively control the MSI risks the company will ensure:

- review of past accident and incidents to identify the causes and contributing factors and assess and correct them as soon as practicable to prevent recurrence.
- regular ongoing monitoring of the workplace and workers are maintained.
- worker education and training is provided and maintained.
- investigations of injuries are investigated, assessed and the causes of the injury are corrected as soon as possible to prevent recurrence.

### 13.5 TRAINING

CDR Demolition as part of the health and safety of our employees will ensure adequate training is provided for the supervisors and workers. The training and verification of each worker will be documented and kept on file. Supervisors will ensure that each worker and new worker is adequately trained and performs their duties safely and without risk.

Good safety performance is achieved, in large part, through initial and ongoing training and education which develops safety skills and promotes safety awareness.

Accordingly; General safety awareness training will be provided to all workers whenever the need for such training is required.

MSI/Ergonomics training, where applicable shall be provided to all workers employed within the company. The effectiveness of this training, as well as any upgrading of this training shall be done annually or more often as required. This training will ensure that workers are:

- educated in risk identification related to their work
- able to recognize the early signs and symptoms of MSI
- trained in the work procedures
- where applicable, to properly use personal protective equipment

## **Section 14: REVIEW OF HEALTH & SAFETY PROGRAM**

### **14.1 PROGRAM REVIEW POLICY**

Management will monitor the company health and safety program on an ongoing basis and will ensure the program is reviewed and evaluated annually; The evaluation will be undertaken by qualified personnel to ensure the program is being utilized and is effective. The review will examine all the elements of the program to ensure that the program continues to meet the WorkSafe BC requirements.

The annual review will have a written report with unbiased evaluations and upon completion of the written report the company will:

- Develop an action plan to implement recommended revisions.
- Monitor the implementation of the action plan.