

CCM CONSTRUCTION LTD. SAFETY MANUAL  
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## **SAFETY POLICY STATEMENT**

We all want to have a safe and healthy workplace. To ensure this, we need everyone's participation.

The management of CCM Construction Ltd. is committed to providing safe and healthy working conditions, and to promoting positive attitudes toward safety and health within the organization.

Management is responsible for providing a safe work site and for establishing and maintaining adequate standards of maintenance of site 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 workplace and in compliance with the Occupational Health and Safety Act of Alberta.

Superintendents/Foremen are responsible for ensuring that workers are properly instructed to do their work safely; for enforcing safe work procedures and regulations; and for correcting all unsafe activities.

All workers and subcontractors are required to work safely, to know and follow all rules and safe work procedures.

Everyone is expected to correct or report unsafe conditions and activities, and to work cooperatively toward the prevention of accidents.

\_\_\_\_\_  
Josh Hall,  
President

\_\_\_\_\_  
Date

## **SECTION 1: SAFETY RESPONSIBILITIES**

### **MANAGEMENT/PROJECT MANAGER RESPONSIBILITIES**

The Management of CCM Construction Ltd. shall ensure the development of, communication of, and supervision of the Safety Program. Management will supply the support structures (safety policies and procedures, education and training, safety equipment, etc.) necessary for the program to be effective and inclusive. They will exhibit due diligence and leadership and show commitment to a safe and healthy workplace. Their responsibilities include, but are not limited to, the following:

- Reviewing the regular inspection reports to ensure the health and safety of the employees and the workplace meet the standards established by the Workers' Compensation Board Regulations and the CCM Construction Ltd. Health and Safety Program.
- Reviewing first aid reports, safety meeting reports, and minutes of the Occupational Health and Safety Committee. Addressing the health and safety issues that are reported. Using the information generated to assess the effectiveness of current safety strategies.
- Providing education and training opportunities to ensure that all employees are well versed in health and safety requirements and are able to perform their tasks in a safe manner. Monitoring employee performance to ensure that proper supervision is being provided.
- Conducting or arranging for pre-job assessment hazards, safety auditing and testing on a regular basis including a thorough annual review. Implementing the necessary changes to deficiencies in health and safety requirements that are noted in the audit and test reports.
- Collating and reviewing all safety records and statistics and effectively communicate trends or significant deviations from the norm, to the superintendent, foreman, and the safety committee for corrective action.
- Issuing personal protective equipment, safety literature, and other health and safety related materials.
- Reviewing sub-contractors Health and Safety Programs and coordinating sub-contractors' and their employees' safety practices so they meet those established by CCM Construction Ltd.
- Supplying the necessary First Aid facilities and personnel as required by the provincial occupational health and safety legislation.
- Reviewing the provincial occupational health and safety regulations once per month to make sure all changes to the guidelines and regulations are followed.
- Conforming to the Health and Safety Program and setting a good example.

## **SECTION 1: SAFETY RESPONSIBILITIES**

### **SUPERINTENDENT/SUPERVISOR RESPONSIBILITIES**

The Superintendent/Supervisor is the person responsible to move the application of the program from the office to the field. In some cases this will be done by the Project manager but the responsibilities will be the same. This person shall ensure that safety procedures are applied in an effective manner and that all employees are conforming to established rules and regulations. The responsibilities will include, but not be limited to, the following:

- Initiate a Pre-Job Hazard Assessment prior to work start and determine all site specific Safe Work Procedures.
- Develop and implement Job Safety Analyses for each task conducted by CCM on-site. Maintain copies of all sub-contractor completed Job Safety Analysis records.
- Ensure the Site Specific Emergency Response Plan and Procedures are established and posted on bulletin boards and communicated to employees.
- Ensure the anti-harassment policy is posted on bulletin boards and is communicated to and understood by employees.
- Ensure all foremen, employees, equipment operators and sub-contractors have access to the job site plans and that utility layouts are completed and readily available.
- Initiate regular site inspections, accident and incident investigations. Review all reports generated and ensure the required corrective action is taken (site inspections reports, toolbox meetings, site safety meetings, safety committee meetings, etc.).
- Oversee Foremen for conformity with their roles of worker supervision and workplace safety. Ensure the Foremen are taking immediate action to correct deficiencies in workplace safety, non-compliance with rules and regulations, and contravention of safe work procedures.
- Notify the Safety Rep of all new hires so they can provide new employee orientation.
- Coordinate the role of the Safety Rep with the Foreman and Employees.
- Coordinate the safety performance of all sub-trades, inspectors, and other persons involved in the work process at the site.
- Keep a record of instruction, training, and corrective measures taken on the forms provided.
- Ensure that all accidents requiring medical aid are investigated, recorded and that corrective action is taken.
- Review all accident reports for underlying causes and monitor WCB claims for legitimacy and accuracy.
- Establish and maintain contact with absent employees on a WCB claim to facilitate their return to work.
- Conform to the Health and Safety Program and set a good example.

## **SECTION 1: SAFETY RESPONSIBILITIES**

### **SITE SAFETY REPRESENTATIVE RESPONSIBILITIES**

The Site Safety Rep shall be responsible for the coordination and communication of the safety program and safety initiatives between employees, supervision, and management. He will be actively involved in all aspects of the safety function for the company. His responsibilities will include, but not be limited to, the following:

- Provide the required New Employee Orientation, including instructions, general site rules, emergency response plan details and a general safety induction prior to starting work on site. Forward copies (by fax) of all Employee Orientation, TD1's and Subcontractor safety forms to the office.
- Provide all sub-contractor employee Orientation
- Set-up and maintain sub-contractor Daily Sign-In Sheet. Ensure that any employees, either of sub-contractors or of CCM, who missed the last safety meeting go through the meeting minutes and are brought up-to-date on the state of current hazards.
- Provide all inspector and Professional Orientation.
- Initiate regular safety meetings (toolbox meetings, site safety meetings, safety committee meetings, etc.), take minutes of meetings and post in Trailer. Review all reports generated and ensure the required corrective action is taken.
  - \* Develop safety topics relevant to the workplace for inclusion in toolbox talks and safety meetings.
  - \* Monitor and follow-up on corrective action recommendations resulting from inspections, investigations, and safety committee reports.
- Communicate with Management, Supervisors, and Employees to identify safety objectives and requirements.
- Establish schedules for training and education, inspections and monitoring, safety meetings, and the review of safety performance.
- Conduct accident and incident investigations to ensure objectivity and thoroughness.
- Inspect the workplace for safety deficiencies on an ongoing basis. Notify the appropriate person of any deficiencies and provide guidance for corrective action.
- Monitor the WHMIS procedures and ensure employees are informed and the MSDS are current.
- Review, on a continuous basis, the performance of the safety program and make recommendations on changes and improvements, should they be required.
- Coordinate site safety programs with the Superintendent, Foremen, and Sub-contractors, ensuring all the company standards are met.
- Report to and represent the company during site inspections by the WCB and other regulatory agencies.
- Conform to the Health and Safety Program and set a good example.

## **SECTION 1: SAFETY RESPONSIBILITIES**

### **FOREMAN RESPONSIBILITIES**

The Foreman is responsible for ensuring the effective application of safety policies and procedures in the workplace; promoting safety awareness in the employees; and demonstrating through day-to-day attitudes and actions, that safe work performance is a top priority. Foreman responsibilities shall include, but not be limited to, the following:

- Establish and communicate required Safe Work Practices to employees and ensure employee competency.
- Monitor and enforce compliance with health and safety rules and other regulations.
- Inspect the workplace on an ongoing basis for unsafe work practices and conditions. Ensure that action is taken immediately to correct any deficiencies.
- Ensure that the necessary discipline and documentation to rectify unsafe work practices and conditions are completed. Provide and document meaningful and timely safety talks with employees.
- Recognize and document, publicly if practical, good safety performance by employees.
- Provide and maintain safety equipment and protective devices for employees, as required.
- Develop and administer an effective program of good housekeeping.
- Develop and practice good communication skills with all employees to ensure they are physically and mentally capable of performing their work safely. Communicate on a regular basis with the safety committee for input and/or recommendations.
- Organize the work process to eliminate potential hazards and ensure safe work practices.
- Respond to all employee concerns, complaints, and inquiries in a prompt and open manner.
- On the job training – Monitor new employees to establish knowledge and awareness of safety. (Pay close attention to young employees and new apprentices.) Provide on-the-job training where required.
- Observe workers, work practices and site operation and correct when necessary.
- Conform to the Health and Safety Program and set a good example.

## **SECTION 1: SAFETY RESPONSIBILITIES**

### **EMPLOYEE RESPONSIBILITIES**

CCM Construction Ltd. is committed to providing a safe work environment but to be effective, employees must assume a certain degree of responsibility. Each employee shall take reasonable care to protect their health and safety and that of their fellow employees who may be affected by their actions. Employee responsibility will include, but not be limited to, the following:

- Know and comply with all safety rules and regulations. Be accountable for unsafe work practices and procedures.
- Adhere to specific Safe Work Procedures and comply with those procedures.
- Aid in the development of task specific Job Safety Analyses for all tasks performed on-site.
- Operate equipment only when authorized to do so and after ensuring appropriate safety devices are in place.
- Wear and maintain Personal Protective Equipment as required and use all appropriate safety devices.
- Ask questions when situations arise where the proper safety equipment or safety rules are not understood.
- Practice “good housekeeping” in the workplace at all times.
- Immediately report unsafe conditions and work practices to the Foreman, the Safety Rep, or the Superintendent.
- Promptly report all accidents and injuries, no matter how minor, and obtaining the necessary medical attention.
- Co-operate in accident and incident investigations to assist in determining the cause(s) and to prevent recurrence.
- Handle controlled products in accordance with WHMIS and TDG regulations.
- Report to work physically and mentally fit, free from the influence of alcohol and drugs. Inform the Supervisor of any over-the-counter or prescribed medications being taken, which may have adverse side effects.
- Attend all safety meetings or toolbox talks as required. Communicate and suggest improvements to the health and safety environment of the workplace to ensure that safety is at a maximum.
- Conform to the Health and Safety Program and set a good example.

## SECTION 1: SAFETY RESPONSIBILITIES

### INSPECTOR AND PROFESSIONAL RESPONSIBILITIES

CCM Construction Ltd. recognizes the legislative requirements of inspections and professional oversight but we must ensure that those performing these services know and conform to the Health and Safety Policy. We require all Inspectors (Federal, Provincial, and Municipal) and Professionals (Engineers, Architects, etc.) to perform their duties in compliance with all health and safety rules as well as provincial occupational health and safety regulations. Their responsibility will include, but not be limited to, the following:

- Report to the Superintendent before entering the workplace.
- Ensure they wear all required Personal Protective Equipment. If site specific PPE is required (reflective vest, floatation vest, etc.), obtain this PPE from the Superintendent.
- Document and communicate any deficiencies in health and safety that arise from their inspections. Report their findings to the Superintendent or Safety Rep as soon as practical.
- Ensure that all professional drawings, designs, or specifications for temporary structures, forms, scaffolds, and erection procedures conform to the relevant provincial occupational health and safety regulations and CCM Construction Ltd. policies.
- Attend Safety Committee meetings where inspection procedures are to be discussed.
- Conform to the Health and Safety Program and set a good example.

**Note to Superintendents/Safety Rep's:** There is a lot of reluctance on the part of many employers to establish firm rules and apply them to the myriad of Professionals and especially to Inspectors. Remember that we are responsible for the actions of everyone at our workplace. The best way to prevent this from becoming a problem is to supply the relevant rules and regulations, for our workplace, to the appropriate professionals and inspectors prior to their commencing the work. Discuss any potential problems with the person in charge and have them communicate the rules to their employees. If any problems arise that could put us in contravention of any rule or regulation, communicate this to the local provincial occupational health and safety officer (i.e. WCB Officer) and ask for their assistance.

There is always the possibility that the fair application of the rules and regulations to these groups may appear to create problems, but if we are pro-active and communicate our safety policies prior to work commencing, they should be minimal. If problems do arise, ensure that we document and report them to the appropriate authority.



## **SECTION 2: HAZARD ASSESSMENT AND CONTROL**

### **HAZARD ASSESSMENT POLICY**

CCM will utilize a hazard assessment program to ensure work activities are completed in a safe manner and that all potential health and safety hazards are identified and controlled prior to work commencing.

The Site Superintendent and/or the Site Safety Representative will complete a detailed Hazard Assessment (form on page 12) with the assistance of workers prior to the commencement of all new projects, as job processes and conditions change and on a regular basis throughout the duration of the project.

All corrective actions shall be implemented in a timely manner, recorded, and kept on file.

Findings of the Hazard Assessments will be communicated to all employees and sub-contractors at the Tool Box Meetings and posted in the CCM trailer.

### **Hazard Control**

When a hazardous condition is identified, corrective actions will be promptly implemented in a timely manner according to the hazard. The following list highlights preferred methods of control in descending order:

- 1) Elimination: Remove the hazard or hazardous situation whenever reasonably practicable
- 2) Substitution: Substitute the hazardous product or element with a less hazardous one
- 3) Engineering: Implement engineering designs and controls measures whenever reasonably practicable
- 4) Administrative: Implement safe work policies, procedures and practices to ensure the hazardous element is controlled adequately
- 5) Personal Protective Equipment (PPE): Implement adequate PPE to ensure the hazardous does not affect the exposed workers.

## SECTION 2: HAZARD ASSESSMENT AND CONTROL

### Critical Tasks

It is CCM's policy to conduct Hazard Assessments and Job Safety Analyses (JSA) (See Section 4 for JSA forms) for all critical tasks.

A Critical Task is one that may include the following factors:

- Jobs with high frequency of accidents or near misses which pose a significant threat to health and safety;
- Jobs that have the potential to produce fatalities, disabling injuries, illnesses or environmental harm;
- Newly established jobs whose hazards may not be evident because of lack of experience;
- Jobs that are to be performed in hazardous and/or unfamiliar environments i.e. confined spaces, restricted access, excavations, heavy equipment, elevated work surfaces, unfamiliar work site.

Example critical tasks include, but are not limited to, the following:

- Confined Space Entry
- Working at Heights requiring Fall Protection
- Excavation activities
- Work involving high-voltage electrical hazards
- Working over water
- Working with hazardous materials (Asbestos, Crystalline Silica, explosives, etc.)
- Working with or around large heavy machinery and equipment (cranes)
- Large material lifting tasks (Panel Tilt-ups, etc.)

It is the Project Managers and Site Superintendent's responsibility to ensure the required inspections and forms have been completed, all provincial legislation and code of practice requirements are adhered to and legislation is readily available for consultation during Critical Task activities.

## SECTION 2: HAZARD ASSESSMENT AND CONTROL

### PRE-JOB HAZARD ASSESSMENT SAFETY PLANNING PROCEDURE

A pre-job start-up meeting is an important chance for the people in charge of a project to sit down and plan procedures, facilities, timelines, etc. including reviewing the health & safety program to be in effect.

Pre Job planning and Site Planning: documented reviews of all the following:

1. Hazard assessments, particularly for jobs or areas that tend to involve frequent and/or severe injuries, and for jobs that are new to the worksite, recently changed, or seldom performed.
2. Timing and frequency of on-site inspections, by who and type of inspection.
3. Special safety risks due to specialized equipment, environmental or weather conditions, site conditions and so on.
4. Special safety items that must be installed or purchased in advance due to specialty item availability.
5. A list of special equipment needed to ensure safety on all tasks, including PPE for all workers, and an inventory of its availability for all workers who will need it. Methods and or checklists of methods of tracking safety equipment are available from CCM.
6. First-aid procedures to follow and to use. Names of Company supplied first aid personnel or first aid to be used, local doctors, hospitals etc.
7. Security measures including site methods of public, worker, property, equipment and tool protection.
8. Accident reporting procedures. Procedures for accident reporting are enclosed in this OH&S manual. Forms are available from company safety offices.
9. Additional worker site-specific training, orientation required (including WHMIS, crane / forklift licenses, etc.). When requesting workers ensure any documentation of trade that may be required accompanied worker to site.

\*\* Site Hazard Assessments and work procedures should be done as a team. \*\*

## HAZARD ASSESSMENT INSTRUCTIONS

### Hazard Assessments

A Hazard Assessment must be completed PRIOR to new project work start by CCM and all sub-contractors, monthly, and whenever site conditions change significantly. Hazard assessments will be reviewed and updated as necessary at every Tool Box meeting throughout the project.

A Hazard Assessment is a *careful analysis* of all potential hazards associated with the entire jobsite and is one area where a “team” effort is needed. You will fill in the tasks to be completed along with the priority ranking, hazards and plans to eliminate.

### Hazard Priority Ranking

The first ranking estimates the severity of the problem if the potential accident were to occur:

- 1) Imminent Danger (causing deaths, occupational illness, loss of facilities)
- 2) Serious (severe injury, serious illness, property and equipment damage)
- 3) Minor (non-serious injury, illness, or damage)
- 4) Negligible / O.K. (minor injury, requiring first aid or less)
- 5) Not Applicable

For each hazard:

- Identify appropriate corrective action and
- Set a specific date for its completion.
- Whenever possible, identify and correct the cause as well as the specific problem.
- Hazard assessment ‘MUST’ be reviewed during all safety meetings

<b>HAZARD ASSESSMENT FORM</b>			
<b>Project:</b>		<b>Date:</b>	<b>Job Number:</b>
<b>Location:</b>		<b>Time:</b>	<b>Supervisor:</b>
<input type="checkbox"/> <b>Pre-Job Hazard Assessment</b>		<input type="checkbox"/> <b>Monthly Assessment</b>	<input type="checkbox"/> <b>New Change/Conditions</b>
<b>Assessment by:</b>			
<b>Hazard Priority (Status) #1 Imminent Danger #2 Serious #3 Minor #4 O.K. #5 (N/A)</b>			
<b>Item#</b>	<b>Identified Hazards (Activities and/or Conditions)</b>	<b>*Status</b>	<b>Safety Hazard and Location</b>
1	Housekeeping, Slip, Trip or Fall Hazards		
2	Material or Equipment Storage and Handling		
3	Hazardous Materials or Chemicals		
4	Excavations, Sloping, Shoring, Erosion		
5	Excavation access and egress		
6	Confined Space Entry		
7	Confined Space Testing and Safety Watch person Required?		
8	Lock Out		
9	Traffic Control, Flashers, Barricades, Flagging Tape		
10	Protection to the Public		
11	Overhead Hazards and or Power Poles		
12	Underground Hazards		
13	Flammables		
14	Chemical or Gas Release		
15	Work at Heights		
16	High Risk Positioning		
17	Scaffolds/Ladders		
18	Hoisting/Lifting		
19	Cables/Slings/Lifting Chains		
20	Noise		
21	Equipment Condition		
22	Electrical or Site Wiring		
23	Portable Generators		
24	Fuel Storage / Refuelling - nearby water?		
25	P.P.E. Basic or Specialized		
26	Respiratory Protection		
27	Weather Conditions		
28	Night Work		
29	Asbestos / Hazardous Materials		
30	Entry Permits / Indoctrinations		
31	Concrete work / pour or pump		
32	Community Impact		
33	Other:		
34	Other:		



## SECTION 3: SAFE WORK PRACTICES

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**SECTION 3: SAFE WORK PRACTICES**

**SAFE WORK PRACTICES ANNUAL REVIEW**

Safe Work Practices	Development				Review				Review			
	Date			By Whom	Date			By Whom	Date			By Whom
	M	D	Y	Initials	M	D	Y	Initials	M	D	Y	Initials
FIRE EXTINGUISHERS	02	09	09	ML								
FIRE PREPAREDNESS	02	09	09	ML								
CHAINSAWS	02	09	09	ML								
ELECTRICAL SAFE WORK PRACTICE	02	09	09	ML								
Low Voltage Electrical Safe Work Practice				ML								
High Voltage Electrical Safe Work Practice	02	09	09	ML								
EXCAVATING & TRENCHING SAFE WORK PRACTICE	02	09	09	ML								
EXCAVATIONS NEAR UNDERGROUND UTILITIES	02	09	09	ML								
HAND TOOLS SAFE WORK PRACTICE				ML								
LIMB & BODY PROTECTION SAFE WORK PRACTICE	02	09	09	ML								
MANUAL LIFTING & CARRYING SAFE WORK PRACTICE	02	09	09	ML								
MOBILE EQUIPMENT SAFEWORK PRACTICE	02	09	09	ML								
PAINTING SAFE WORK PRACTICE	02	09	09	ML								
POWER TOOLS SAFE WORK PRACTICE	02	09	09	ML								
RIGGING AND LIFTING SAFE WORK PRACTICE	02	09	09	ML								
SCAFFOLDS & WORK PLATFORMS SAFE WORK PRACTICE	02	09	09	ML								
PORTABLE LADDERS SAFE WORK PRACTICE	02	09	09	ML								
Welding Safety	02	09	09	ML								
Machinery Safety	02	09	09	ML								
HOUSEKEEPING	02	09	09	ML								
Violence in the Workplace	02	09	09	ML								
Working Alone	02	09	09	ML								
Asbestos Management	02	09	09	ML								
Concrete Foundations and Formwork	02	09	09	ML								



## SECTION 3: SAFE WORK PRACTICES

### FIRE EXTINGUISHER SAFE WORK PRACTICE

#### **Purpose:**

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

#### **Guidelines:**

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

#### **Types of Fires**

**Class A:** These fires consist of wood, paper, rags, rubbish and other ordinary combustible materials.

##### **Recommended Extinguishers**

Water from a hose, pump-type water can, pressurized extinguisher, or soda acid extinguishers.

##### **Fighting the Fire**

Soak the fire completely — even the smoking embers.

**Class B:** Flammable liquids oil and grease.

##### **Recommended Extinguishers**

ABC units, dry chemical, foam and carbon dioxide extinguishers.

##### **Fighting the Fire**

Start at the base of the fire and use a swinging motion from left to right, always keeping the fire in front of you.

**Class C:** Electrical equipment.

##### **Recommended Extinguishers**

Carbon dioxide and dry chemical (ABC units) extinguishers.

##### **Fighting the Fire**

Use short bursts on the fire. When the electrical current is shut off on a Class C fire, it can become a Class A fire if the materials around the electrical fire are ignited.

The various types of extinguishers purchased, used, and tested must be in accordance with the recognized standards.

## SECTION 3: SAFE WORK PRACTICES

### FIRE PREPAREDNESS SAFE WORK PRACTICE

The risk and cost of fire on a construction project can be extremely high in economic and human terms. Accordingly, the following Fire Protection Plan is established.

- Before work is performed, the supervisor must check for fire hazards. Some of the most common hazards are wooden forms, scaffolding, scrap lumber, straw packing, paper wrapping, inflammable liquids and oily rags.
- Contractor's buildings and sheds must be kept clean and orderly. Metal waste or garbage receptacles must be provided. Sheds should be located at least 50' from the main building and 30' from each other.
- All heating equipment must be checked on a regular basis, particularly where exposure to high winds may cause the extinguishing of pilot lights and subsequent explosion if they are re-ignited. Walls and roofs must be insulated at stove and pipe locations. Where tarpaulins are used to enclose an area, they should be securely fastened to avoid coming in contact with heaters.
- Gasoline, 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 rules enforced. Gasoline and other inflammables must be transported in closed approved containers (safety cans).
- Oxygen and acetylene tanks must not be stored near oil dumps, gasoline, or near any source of heat, and must be stored in an upright position secured by chains.
- Caution must be exercised when welding or burning near rubbish, tarpaulins, oil, or grease in older buildings and in confined wall and ceiling section. Adequate fire fighting equipment must be located at the site before any work is started where this type of hazard exists. Burning and welding sparks because more Contractors fires than any other ignition taken.
- All fire prevention regulations established by owners or general contractors, particularly NO SMOKING, must be observed.
- Foremen must report immediately, to the superintendent, fire damage occurring on their project, whether or not their company is involved.
- Keep all approaches or access to fire hoses, extinguishers and sprinkler valves clear of obstructions at all times.
- Watch for fire hazards. Know the locations and operations of the fire extinguishers in your area. Check with your supervisor if in doubt. Report any extinguishers that are partly empty or otherwise inoperative.

## SECTION 3: SAFE WORK PRACTICES

### CHAINSAW SAFE WORK PRACTICE

**Purpose:**

The purpose of this Safe Work Practice is to protect the Health and Safety of all our employees. Supervisors will ensure that all employees are trained and follow this Safe Work Practice as a term and condition of employment.

- Workers must be trained in safe use of chain saws.
- Hand and arm protection will be worn when necessary.
- Workers working with chainsaws must wear effective leg protective devices.
- Adequate eye and face protection must be used when chainsaws are being used.
- Use as per manufacturer's safe job procedures.
- The proper personal protective equipment to be worn is set out in the manufacturer user guide.
- Ensure that the chain brake is functioning properly and adequately stops the chain.
- The chain must be sharp, have the correct tension and be adequately lubricated.
- Fuelling must be done in a well-ventilated area and not while the saw is running or hot.
- An approved safety container must be used to contain the fuel used along with a proper spout or funnel for pouring.
- When carrying/transporting a chain saw the bar guard must be in place, the chain bar must be toward the back and the motor must be shut off.

## **SECTION 3: SAFE WORK PRACTICES**

### **ELECTRICAL SAFE WORK PRACTICE**

#### **Purpose:**

The purpose of this Safe Work Practice is to protect the Health and Safety of all our employees. Supervisors will ensure that all employees are trained and follow this Safe Work Practice as a term and condition of employment.

- Only authorized personnel may do electrical work of any kind.
- No worker will operate or use any equipment in a manner that endangers them self or other workers. Only persons properly trained and authorized by our foreman will operate any equipment or machinery.
- Any unsafe conditions or equipment must be rectified and/or reported to the foreman immediately, and any employees who may become involved must be warned.

## SECTION 3: SAFE WORK PRACTICES

### LOW VOLTAGE ELECTRICAL SAFE WORK PRACTICE

Site Superintendent/Sub-contractor supervisors are responsible to facilitate and/or provide proper instruction to their workers on protection requirements and training, as well as conduct a hazard assessment and Job Safety Analysis prior to conducting work activities.

#### **Disconnection and lockout**

- Low voltage electrical equipment (from 31 to 750 volts) must be completely disconnected and locked out as required by this Regulation before starting work on it.
- If it is not practicable to completely disconnect low voltage electrical equipment, work must be performed by qualified and authorized workers and in accordance with written safe work procedures which
  - (a) Require the use of appropriate electrical protective equipment, including rubber gloves and cover up, and other necessary live line tools,
  - (b) Provide that, if practicable, uncontrolled liquid is not permitted close to any worker working on the equipment, and
  - (c) If applicable, control the use of metal ladders, wooden ladders with wire reinforced side rails, metal scaffolds or metal work platforms.
- Work must not be done on energized parts of electrical equipment associated with lighting circuits operating at more than 250 volts-to-ground without the prior written permission of the respective provincial board.

#### **Warning signs**

- Before completing installation and after energizing low voltage electrical equipment, conspicuous signs visible to workers must be placed close to the equipment stating "Danger, Energized Equipment".

#### **Working close to energized equipment**

- Uninsulated, energized parts of low voltage electrical equipment must be guarded by approved cabinets or enclosures unless the energized parts are in a suitable room or similar enclosed area that is only accessible to qualified and authorized persons.
- Each entrance to a room and other guarded location containing uninsulated and exposed, energized parts must be marked with a conspicuous warning sign limiting entry to qualified and authorized persons.
- If uninsulated energized parts are not guarded with approved cabinets or enclosures
  - (a) Suitable barriers or covers must be provided if a worker unfamiliar with the hazards is working within 1 m (3.3 ft) of the uninsulated, energized parts, or
  - (b) The worker must be informed of the potential hazards, and provided with and follow appropriate written safe work procedures.

## SECTION 3: SAFE WORK PRACTICES

### HIGH VOLTAGE ELECTRICAL SAFE WORK PRACTICE

Site Superintendent/Sub-contractor supervisors are responsible to facilitate and/or provide proper instruction to their workers on protection requirements and training, as well as conduct a hazard assessment and Job Safety Analysis prior to conducting work activities. High Voltage is found in part 17 of the Alberta OH&S code.

- Only trained and qualified employees or sub-contractors are permitted to work with High voltage electrical equipment (> 750 volts) must, if practicable, be completely isolated, grounded, and locked out as required by this Regulation before starting work on it.
- If it is not practicable to completely isolate high voltage electrical equipment,
  - (a) Written safe work procedures acceptable to the provincial OH&S Board must be followed,
  - (b) Two or more qualified and authorized persons must be present while the work is being done, unless the procedures being followed under paragraph (a) specifically permit the work to be done by one person,
  - (c) Appropriate electrical protective equipment, including rubber blankets, hoses, hoods, gloves and live line tools must be selected, used, stored, tested, and maintained in accordance with a standard acceptable to the Board, and
  - (d) The use of metal ladders, wire reinforced side rail wooden ladders, metal scaffolds or metal work platforms must be in accordance with the procedures established under paragraph (a).
- CCM Management, Project Manager and Site Superintendent must ensure that at least the minimum applicable distance specified in Table 19-1 (taken from BC OH&S Regulation Part 10) is maintained between exposed, energized high voltage electrical equipment and conductors and any worker, work, tool, machine, equipment or material, unless otherwise permitted by provincial regulations.
- The Project Manager/Site Superintendent must accurately determine the voltage of any energized electrical equipment or conductor and the minimum distance from it required by Table 19-1.

Table 19-1: General limits of approach

Voltage	Minimum distance	
	Metres	Feet
Over 750 V to 75 kV	3	10
Over 75 kV to 250 kV	4.5	15
Over 250 kV to 550 kV	6	20

## SECTION 3: SAFE WORK PRACTICES

### EXCAVATING & TRENCHING SAFE WORK PRACTICE

#### **Purpose:**

The purpose of this Safe Work Practice is to protect the Health and Safety of all our employees. Supervisors will ensure that all employees are trained and follow this Safe Work Practice as a term and condition of employment. Excavating & Trenching is under part 32 of the Alberta OH&S code.

- No worker shall enter any trench or excavation until the walls have been adequately cut back or temporary protective structures have been installed unless Trench or excavation is shallower than the legal minimums and the soil is stable.
- All gas, electrical, steam and other services shall be located, identified, protected, and/or shut off and disconnected prior to any excavation work. Underground utilities will be accurately determined, and any danger to the workers from the services must be controlled.
- Provide ladders in immediate area for access/egress.
- Wherever possible, areas immediately adjacent to excavations shall be kept clear of any accumulation of excavated materials. If such materials must remain at the site, such accumulation will not be closer than four feet from the excavation edge, and sloped as per compensation regulations.
- P.P.E. as required by site.
- Supervisors are responsible to facilitate and/or provide proper instruction to their workers on protection requirements and to pre-plan trench/excavation soil condition.
- Supervisors are responsible to ensure fences, guards or similar barricades sufficient to prevent persons from falling into excavation shall be kept in place at all times except where they will interfere with work being done. The excavation shall be clearly illuminated to prevent injuries.
- All excavations deeper than four feet must have at least one ladder access. Such ladder extending from the trench bottom to a minimum of three (3) feet above ground level.
- Prior to commencement of any excavation ensure that all underground and/or overhead lines being crossed have been identified, exposed and well marked/flagged.
- Control traffic near roads or busy access ways.
- Use of traffic controllers/flag persons when required.
- Set up – removal and maintenance of barricades and signs.

## SECTION 3: SAFE WORK PRACTICES

### EXCAVATIONS NEAR UNDERGROUND UTILITIES

#### **Purpose:**

The purpose of this Safe Work Practice is to protect the Health and Safety of all our employees. Supervisors will ensure that all employees are trained and follow this Safe Work Practice as a term and condition of employment.

- Always request underground locations before you dig. Even if you are sure there are no lines in the area, call to confirm it.
- Hand locating must be performed when working within 600 mm of buried utility lines or greater as requested by the utility owner.
- If a utility line is struck, stop work immediately and act to ensure the risks to people and property are kept to a minimum. (This may mean isolating the area from persons and equipment until the authorities arrive.)
- Have the utility company notified.
- If the damage has the potential of being serious, contact OH & S officers or other authorities as required.
- Verify the damaged area by taking pictures, notes (i.e. elevations, etc.) and forward accident report to company safety officer as soon as possible.



## SECTION 3: SAFE WORK PRACTICES

### HAND TOOLS SAFE WORK PRACTICE

**Purpose:**

The purpose of this Safe Work Practice is to protect the Health and Safety of all our employees. Supervisors will ensure that all employees are trained and follow this Safe Work Practice as a term and condition of employment.

- Hand tools to be used and maintained in compliance with manufacturer's guidelines.
- Supervisors are responsible for ensuring adequate tools are available and that tools are maintained in good working condition as per manufacturer's recommendations.
- Supervisors are responsible for ensuring workers are adequately trained in the use and care of all hand tools they may use. Supervisors are responsible to facilitate and/or provide proper instruction to their workers on protection requirements and training. Workers are responsible to ensure the tools and equipment being used is in good condition, and maintained as per manufacturer's recommendations.
- Workers are responsible to ensure they are adequately trained / instructed in proper use of tools and equipment they may use.
- Electrical tools must have 3 wire (grounding) cord and plug, excluding double insulated tools.
- Grinder discs, buffers and stones to be used only for designed application and at rated speed.
- Stationary grinders must have properly adjusted tool rests and stones to be properly dressed.
- Angle grinders to have Original Equipment Manufacturer (O.E.M.) guard.
- On/off switches must be functional and positioned so Operator has access.
- Accessories can only be used that are designed for use with the tools specified.
- Saw blades must be designed for the product being cut and at the rated speed, O.E.M. guards must be in place and functional.
- Chisels, punches, hammer, wrenches, etc. to have all burrs ground from striking area.
- Chisels, punches, screwdrivers, etc. - tips properly dressed.
- Cracked and/or splintered handles to be replaced.
- All tools must be cleaned after use and repairs made before being properly stored.
- Tools to be used for designed purpose only.
- Qualified personnel must perform repairs to tools.

## SECTION 3: SAFE WORK PRACTICES

### LIMB & BODY PROTECTION SAFE WORK PRACTICE

#### **Purpose:**

The purpose of this Safe Work Practice is to protect the Health and Safety of all our employees. Supervisors will ensure that all employees are trained and follow this Safe Work Practice as a term and condition of employment.

- If there is a danger of injury, contamination or infection to a worker's hands, arms, legs, or torso, the worker must wear properly fitting protective equipment appropriate to the work being done and the hazards involved.

#### **Cleaning or replacement**

- If a glove, apron, or other protective equipment used to protect the skin against contact with a hazardous substance is rendered ineffective due to contamination with the substance; the protective equipment must be promptly replaced with clean or decontaminated equipment to maintain the required protection.

#### **Leg Protection**

- Leg protective devices must be worn by a worker operating a chain saw if there is a danger of leg injury.
- Leg protective devices must meet manufacturer's requirements.
- Every leg protective device must have a label permanently affixed to the outer surface of the device indicating the standard it meets.
- The requirement to wear leg protective devices does not apply to a firefighter using a chain saw at the scene of a structural fire.

## SECTION 3: SAFE WORK PRACTICES

### MANUAL LIFTING & CARRYING SAFE WORK PRACTICE

**Purpose:**

The purpose of this Safe Work Practice is to protect the Health and Safety of all our employees. Supervisors will ensure that all employees are trained and follow this Safe Work Practice as a term and condition of employment.

- Do know your physical limitations
- Do know the weight of the object before lifting or carrying
- Do not stand on anything other than approved ladder
- Do inspect route for tripping hazards before carrying objects
- Do seek assistance when object is heavy or awkward
- Do use mechanical lift or carrying device when possible
- Do use proper lifting technique.
- Do not lift or carry any controlled product before reviewing MSDS
- Do use gloves when lifting or carrying objects that can cause injury

## SECTION 3: SAFE WORK PRACTICES

### MOBILE EQUIPMENT SAFEWORK PRACTICE

#### **Purpose:**

The purpose of this Safe Work Practice is to protect the Health and Safety of all our employees. Supervisors will ensure that all employees are trained and follow this Safe Work Practice as a term and condition of employment. Mobile Equipment is found under part 19 of the Alberta OH&S code.

- Operators of mobile equipment are directly responsible for the safe operation of that equipment. They must maintain full control of the equipment at all times and will comply with gross vehicle weight / ensure the vehicle is not overloaded.
- Operators of mobile equipment should be familiar with the WCB regulations with regard to working in proximity of overhead power lines.
- 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 and property from possible injury or damage.
- When a swinging load creates a hazard, moving cab or counterweight, or any other moving part of mobile equipment, no worker will remain within range of the hazard, and the operator must not move the equipment while workers are exposed to the hazard.
- Operators must examine their equipment before initial daily preparation and as required, and report defects, deficiencies or unsafe conditions to a foreman,
- Equipment logbooks must be completed before each use, or daily as required.
- The wearing of seat belts in all vehicle and equipment, where they are provided is mandatory whenever the vehicle or equipment is in operation.
- Equipment in use must meet applicable manufacturer's standards for operational controls and safety features.
- Equipment must meet designed specs, for its proposed job.
- Supervisors are responsible for the selection and designation of proposed work.
- Foremen or supervisors are responsible to ensure the daily equipment inspection sheets are being completed
- A worker must not operate any mobile equipment unless he:
  - Possesses necessary licenses and/or certificates;
  - Has received adequate instruction and demonstrated to a foreman / instructor he is able to operate the equipment;
  - Is familiar with operating / instructions.
  - Is authorized to operate the equipment and familiar with OH&S Legislation for safe operation of mobile equipment.

## SECTION 3: SAFE WORK PRACTICES

### PAINTING SAFE WORK PRACTICE

**Purpose:**

The purpose of this Safe Work Practice is to protect the Health and Safety of all our employees. Supervisors will ensure that all employees are trained and follow this Safe Work Practice as a term and condition of employment.

- Paint products must be labeled as per legislation
- MSDS must be on site for all paint products being used
- Paint and paint products must be applied as per manufacture's recommendations
- Only workers trained in use of paint products being used and equipment used to apply products shall handle paint or paint products.
- Manufactures recommendation for application, equipment and methods
- A work area or enclosure where hazardous materials are handled or used must be posted with suitable signs or placards warning workers of the hazards within the identified restricted access area and stating the precautions for entry into the area.
- All painting shall be done in accordance will all legislation regarding handling of hazardous chemicals.
- All painting materials will be stored and used as per the manufactures instructions.
- All painting products will be accompanied with all required MSDS information
- All workers must use and wear all respiratory equipment as required.
- An employer must ensure that a less hazardous substance or work process is substituted for a higher hazard substance or process, whenever practicable.
- The employer must ensure that a substitute for a paint containing toxic heavy metal components is used if an alternative product exists.
- Supervisor must ensure all required PPE is available to workers involved in painting.
- Each worker who is or may be exposed to an airborne contaminant must wear approved respiratory protection for the type of paint or material being used.

Workers must use PPE as recommended by manufacturer of products and or Supervisors recommendations.

## SECTION 3: SAFE WORK PRACTICES

### POWER TOOLS SAFE WORK PRACTICE

#### **Purpose:**

The purpose of this Safe Work Practice is to protect the Health and Safety of all our employees. Supervisors will ensure that all employees are trained and follow this Safe Work Practice as a term and condition of employment.

- Power tools and hand tools to be used and maintained in compliance with manufacturer's guidelines.
- Only qualified or specially trained workers, may alter, repair with electrical equipment or electrical tools.
- Supervisors are responsible to facilitate and/or provide proper instruction to their workers on protection requirements and training
- Review the project and prepare a list of required tools.
- Supervisors are responsible for ensuring adequate tools are available and that tools are maintained in good working condition as per manufactures recommendations.
- Review of the project and prepare a list of required tools.
- No worker will use any power tool, or similar type of equipment, unless they are familiar with the use and operation of the equipment or has received specific instruction in its use and operation.
- When power tools are left unattended, the sources of power should be turned off
- When power tools are left unattended, the sources of power should be turned off.
- Grinding on the side of a grinding wheel is prohibited, unless the wheel is designed and set up for such work.
- Approved portable electric tools that require a ground wire will be properly maintained and the ground wire will be left connected.
- Small parts must be clamped in a vice or to a large piece of material before attempting to drill them.
- Before using an electric drill, the power cord must be checked for breaks or tears in the insulation. Defective drills must be returned to the shops for repairs.
- Plug ends of electric drills must be capped and have the grounding prong intact.
- Chuck keys must not be taped to a drill's electric cord, as electrocution might occur when insulation has worn through

## SECTION 3: SAFE WORK PRACTICES

### RIGGING AND LIFTING SAFE WORK PRACTICE

#### **Purpose:**

The purpose of this Safe Work Practice is to protect the Health and Safety of all our employees. Supervisors will ensure that all employees are trained and follow this Safe Work Practice as a term and condition of employment.

- The standard code of signals will be used for all operations.
- All load hooks must have a safety latch.
- All shackle pins, heel pins, must be secured against dislodgement.
- The pin in a screw pin type shackle must be wired or secured against rotation when used in applications that may cause the pin to loosen.
- Use tag lines to control the leads.
- Ensure you are *fully trained* in rigging procedures.
- Be conversant with hand signals.
- Be aware of pinch points.
- Ensure you are in view of operator.
- Utilize a tag line.
- Ensure load is centred.
- Never stand under a load.
- Ensure wire chokers, slings and other equipment is in good condition.
- Be aware of the direction of the swing and roll of load.
- Each rigger must be in the clear before he / she gives an "all ready" to the signalman. When you have positioned the sling or choker, release it before you give the "All ready" signal

## SECTION 3: SAFE WORK PRACTICES

### SCAFFOLDS & WORK PLATFORMS SAFE WORK PRACTICE

The purpose of this Safe Work Practice is to protect the Health and Safety of all our employees. Supervisors will ensure that all employees are trained and follow this Safe Work Practice as a term and condition of employment. Scaffolds & Work Platforms are found in part 23 of the Alberta OH&S code.

- Pre-job use inspection and daily inspection to ensure scaffolding and materials meet all applicable regulations.
- Ensure workers erecting scaffolding or work platforms are adequately trained or instructed in erection methods.
- Erection of scaffolding in accordance OH&S legislation and manufacturer's recommendations.
- Scaffolding must always be placed on solid footing. No barrels, blocks or boxes are to be used as supports for scaffolding.
- Any scaffold system having a height exceeding three times its minimum base dimensions must be secured to the structure, or by other appropriate means, to ensure the stability.
- Scaffolds with work platforms 3 meters (10 ft) or more above floor level must have guardrails and intermediate rails.
- Toe-boards must be installed on all open sides of a scaffold to prevent tools, materials or equipment from falling off the scaffold.
- Examine each scaffold plank before use. Use only the grade of lumber specified by the WCB Regulations. If this grade is not available, use good quality-sawn planks 2 in. x 10 in., or manufactured laminated wood and metal planks designed for use in scaffolds.
- The height of any freestanding tower or rolling scaffold must not exceed three times its minimum base dimension, unless the scaffold is securely tied or guyed to prevent overturning.
- Where outriggers are fitted to increase the minimum base dimension, they must be installed on both sides of the scaffold structure.
- The wheels of a rolling scaffold must be locked when workers are required to work on scaffolds at heights in excess of 3 meters (10 ft.) above floor level.
- No worker will remain on a rolling scaffold while it is being moved.
- Access to the platform must be by means of a fixed vertical ladder or other properly designed access.
- Rolling scaffolds must have horizontal cross braces



## SECTION 3: SAFE WORK PRACTICES

### PORTABLE LADDERS SAFE WORK PRACTICE

**Purpose:**

The purpose of this Safe Work Practice is to protect the Health and Safety of all our employees. Supervisors will ensure that all employees are trained and follow this Safe Work Practice as a term and condition of employment.

- Do inspect ladder before using
- Do not paint wooden Ladders
- Do place ladder on a level and firm location
- Do tie off ladder
- Do place ladder at proper angle
- Do maintain 3 point contact with ladder at all times
- Do not carry material on ladder
- Do not use the top 2 rungs of any ladder
- Do follow manufactures specifications

## SECTION 3: SAFE WORK PRACTICES

### WELDING SAFETY

Site Superintendent/Sub-contractor supervisors are responsible to facilitate and/or provide proper instruction to their workers on protection requirements and training, as well as conduct a hazard assessment and Job Safety Analysis prior to conducting work activities.

### WORKER RESPONSIBILITY

- Welders shall check their equipment at frequent and regular intervals for defects, particularly for defective cables in wet areas.
- Welders shall wear fire retardant clothing, leather gloves, leather arm protectors, aprons, respiratory, eye and face protection appropriate to the task being performed.
- Ensure buffing and grinding operators wear face shields, safety glasses, and hearing protection.
- Ensure full and empty cylinders be kept separate and identified.
- Ensure cylinders are secured and in upright position.
- Ensure flammable materials are kept out of weld areas.
- Avoid watching arc without proper eye protection.
- Ensure grinders and buffers have proper guards installed as per manufacturer specifications.
- When welding or grinding use portable grinding / welding shields around the area where work is being done.
- Have welding cables off the ground and up in walk areas.
- No contact lenses when welding. Use CSA approved safety eye wear.
- All gas cylinders are to be stored in the racks provided or secured in an upright position to prevent accidental tipping. All cylinders must be clearly identified as to contents.
- All gas cylinders for mobile equipment and for welding shall be shut off at the tank valve at the end of the work shift. Welding hoses shall be drained prior to being secured at the end of shift.
- Flash curtains will be used at all times to prevent exposing other employees to any flashes created by the welding process. Ventilation systems will be used to avoid the buildup and exposure to any harmful by-products of the welding process.

## SECTION 3: SAFE WORK PRACTICES

### MACHINERY SAFETY

Site Superintendent/Sub-contractor supervisors are responsible to facilitate and/or provide proper instruction to their workers on protection requirements and training, as well as conduct a hazard assessment and Job Safety Analysis prior to conducting work activities.

- Any employee operating mobile equipment which has Roll Over Protection (ROPS) shall wear a seat belt.
- Do not wear loose or torn clothing which could get caught in operating machinery. Also, do not wear rings, wrist watches, bracelets, or dangling neckwear which could get caught in machinery and cause serious injury. Long hair and beards should be restrained to prevent entanglement.
- Mobile equipment shall be operated according to established speed and load limits. All operators will use the appropriate signals to warn employees of their presence. Employees will give way to mobile equipment and will avoid placing themselves between or under material loads being carried by the mobile equipment.
- No equipment or machinery shall be left running while attended with the exception of stationary equipment (welders, compressors, etc) or where special conditions exist and the necessary safety precautions have been taken.
- No repairs or remedial work shall be done to machinery or equipment unless proper lockout procedures have taken place or where such remedial work falls within established practice and proper safety precautions are in place.

## **SECTION 3: SAFE WORK PRACTICES**

### **HOUSEKEEPING**

1. Construction sites must be kept clean and orderly
2. Work area must be kept clean and free from obstructions. Tools, loose objects, oil and any other materials left lying around are a hazard
3. Work area must be cleaned at the end of every shift and at the completion of the job
4. Spills of any controlled product must be cleaned up as directed by the Material Safety Data Sheet (MSDS)
5. Workers must keep work sites, vehicles, office and shop areas clean by depositing garbage in designated containers
6. Materials, tools and equipment must not be stored in stairways, hallways and in a area that is used for egress/access
7. All material must be properly stacked and secured to prevent moving

## SECTION 3: SAFE WORK PRACTICES

### VIOLENCE IN THE WORKPLACE

- It is CCM's intent to protect the Health and Safety of all our employees and sub-contractors.
- During site orientations Site Superintendents/Supervisors will ensure that all employees and sub-contractors are aware that violence during both regular and irregular work shifts is not tolerated and disciplinary action will be implemented on those who exhibit aggressive and violent behavior on-site.
- Employees and sub-contractors are required to report any act of violence as soon as it occurs and complete an Incident and Investigation Report.
- During the regular hazard assessments conducted on-site, the potential for violence in the workplace will be evaluated and will include the following items where appropriate:
  - The nature and interactions between workers and the public
  - Providing security or regulatory enforcement services
  - Civil disobedience or labour disputes
  - The attributes of workers
  - Training and experience
  - Personality, culture and attitude
  - The nature of your work environment
  - Work location
  - Number of workers
  - Workplace layout
  - Lighting and security provisions
  - Hours of operation
  - Past history of incidents in your workplace and in similar operations
  - Number or frequency of incidents
  - Type and severity of incidents
  - Time and location of incidents
  - Job classification
  - Attributes of both worker and client
  - Nature of interaction between the worker and client

## SECTION 3: SAFE WORK PRACTICES

### WORKING ALONE

- CCM defines "to work alone " as to work in circumstances where assistance would not be readily available to the worker
  - a) In case of an emergency, or
  - b) In case the worker is injured or in ill health.
  
- Prior to assigning an employee or sub-contractor to work alone on-site after hours, CCM will review the most recent hazard assessment with the worker and implement measures to eliminate or minimize any hazards identified.
  
- CCM will develop and implement a written procedure for checking the well-being of a worker assigned to work alone which includes the following:
  - a) The appropriate time interval between checks and the procedure to follow in case the worker cannot be contacted, including provisions for emergency rescue.
  - b) The person designated to establish contact with the worker at predetermined intervals (results must be recorded).
  - c) Shift estimated end time.
  
- The worker is to check-in with the designated contact person at the end of the shift. The designated contact person is to contact the worker if they fail to check-in at the required time.

## SECTION 3: SAFE WORK PRACTICES

### ASBESTOS MANAGEMENT

- Prior to conducting any renovation or maintenance work on buildings that have the potential to have asbestos containing materials, the Project Manager will review the work site to assess the likelihood of asbestos containing materials being present and being disturbed and take the appropriate action to ensure that no asbestos fibres are released.
- Asbestos containing material locations will be identified and tagged accordingly on the actual materials and on site drawings.
- An Asbestos Exposure Control Plan will be implemented and maintained throughout the project. Trained professionals may be required to provide testing and consulting services.
- The Project Manager will ensure that safe work practices will be used in accordance with the provincial regulations and that work is only carried out by suitably trained and qualified personnel.

#### **Asbestos Exposure Control Plan (AECP)**

The maintenance of a safe environment for building occupants, CCM employees, sub-contractors and the general public depends on the establishment of an effective program.

The program requires the following actions:

- A comprehensive building survey of suspected asbestos containing materials.
- Suitably identify and label all asbestos containing materials.
- Remove or repair materials which have become damaged, are in poor condition or which will be disturbed by building renovations.
- The development and implementation of procedures for employees and sub-contractors whose work activities involve asbestos containing material removal which may require the assignment of an experienced asbestos removal contractor to supervise.
- Provision of appropriate training and personal protective equipment and appropriate equipment to workers who may come into contact with asbestos containing materials.
- Provision for re-inspection and re-evaluation of all asbestos containing materials on a regular, scheduled basis.

The Site Superintendent, employees and sub-contractors shall:

- Be made aware of the presence and location of all the asbestos containing materials, the AECP and the tagging and identification system.
- Not be permitted to disturb any asbestos containing materials.
- Be trained in the safe handling of asbestos, if required. All work activities relating to asbestos containing materials will only proceed after being authorized by the AECP Manager.
- Only carry out renovation, routine maintenance or service work, which is likely to disturb asbestos containing materials, after the work has been quantified and authorized by the Site Superintendent or professional asbestos consultant/contractor.
- Immediately inform the Site Superintendent if damage or disturbance of asbestos containing materials occurs during the course of their work.

## **SECTION 3: SAFE WORK PRACTICES**

### **CONCRETE FOUNDATIONS AND FORMWORK**

Site Superintendent/Sub-contractor supervisors are responsible to facilitate the following:

- Provide proper instruction to their workers on protection requirements and training,
- Conduct a hazard assessment and Job Safety Analysis prior to conducting work activities.
- Ensure concrete foundations are completed as per approved specifications.
- Ensure all permits, inspections and excavation requirements are adhered to (See Excavation and Trenching Safe Work Practices, Section 3, page 23).
- Ensure barricades and warning signs are in place.
- Ensure Rebar Protection is in place (end caps).
- Ensure excavation is of proper design.
- Ensure the concrete forms are secured from movement.
- Ensure you are conversant with concrete pour procedures.
- Ensure you are visible to the concrete pump operator.
- Ensure equipment is in good working order.



## **SECTION 4: SAFE WORK PROCEDURE AND JOB SAFETY ANALYSIS POLICY**

It is CCM's intention to ensure the safety of all its employees, sub-contractors, clients and the general public. In doing so it is imperative all employees and sub-contractors are competent, trained and understands the risks inherent to their job tasks. Basic Safe Work Procedures are provided in this section for the general tasks involved in construction and are to be followed by all site workers and visitors and will be review on an annual basis.

As tasks involved in the day to day activities on site change continuously and are performed by different parties CCM has implemented a Job Safety Analysis (JSA) procedure to ensure understanding of how to complete required tasks safely. JSA forms are to be created for each job task by the employee and sub-contractors for all tasks being conducted on a day-to-day basis.

JSA forms will be provided to CCM employees and all sub-contractors and are to be completed and handed-in to CCM PRIOR to work start.

For all CRITICAL TASKS a JSA AND a Hazard Assessment will be created and provided to CCM PRIOR to work start.

Example critical tasks include, but are not limited to, the following: (see list on page 46)

- Confined Space Entry
- Working at Heights requiring Fall Protection
- Excavation activities
- Work involving high-voltage electrical hazards
- Working over water
- Working with hazardous materials (Asbestos, Crystalline Silica, explosives, etc.)
- Working with or around large heavy machinery and equipment (cranes)
- Large material lifting tasks (Panel Tilt-ups, etc.)

The Safe Work Procedures provided and any resulting JSA's are only guidelines and do not replace Industry Standards and/or Codes of Practice. All employees and sub-contractors are responsible to ensure they are compliant with Occupational Health and Safety Legislation and Industry Code of Practice.

## JOB SAFETY ANALYSIS

### Job Safety Analysis (JSA) Instructions

A JSA is one area where a “team” effort is needed. The CCM Employee is to produce the JSA with the Safety Rep; sub-contractor foremen can complete the JSA with their employees and give to CCM’s Safety Representative.

**A JSA must be completed for every task. They are specific to the work site, i.e. “Demolition activities in the north warehouse”, “Pulling electrical wire into ceiling space above service centre”.**

A JSA is a careful analysis of the potential hazards associated with a particular task. The assessment breaks down the task into separate steps, examining each one for ways in which a worker could be hurt or property could be damaged.

**BEGIN BY *LOOKING CAREFULLY* AT HOW THE EQUIPMENT IS DESIGNED (FOR EXAMPLE, WILL THERE BE SPECIAL PROBLEMS IN HOT OR COLD WEATHER, OR FOR OPERATORS WHO ARE ESPECIALLY TALL OR SHORT?). \*\* YOU MUST KNOW WHAT YOU ARE LOOKING AT OR FOR. - ASK!**

1. If possible *observe someone doing the job as they normally would*. List each of the basic steps involved in the task; list what might go wrong-causing injury or property damage-at each step. *Think about* as many aspects of the job as possible: mechanics, power generation, weather influenced, temperatures, pressures hi / low, leaks, explosives, noise, direction of movement, impacts, pinch points, stability of equipment, and so on. **\*\* ASK THE OPERATORS and ACCEPT THE RESPONSE IN GOOD FAITH.**
2. For each potential problem, *write down what should be done to prevent a problem from occurring* or to minimize the damage if the problem does occur. Indicate what the operator should do-things to look for, positions to take, movements to make, and so on-as well as equipment maintenance and repair or housekeeping in the area. *Give very specific instructions*, listing what to do and how to do it, rather than general statements like “use caution” or “beware”. State precisely what to be aware of.
3. *Check the lists with someone who has done the task many times*, to be sure that all steps are included and all potential hazards identified. **\*\* FOLLOW THE FORMS AND CHECK OFF ALL HAZARDS.**
4. *Follow-up on the hazard assessment* to see that corrective actions are taken by those involved in the task.





*Assignment Form cont'd*

Person (s)

Duties

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Person (s)

Duties

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Person (s)

Duties

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Person (s)

Duties

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## **SECTION 4: SAFE WORK PROCEDURE AND JOB SAFETY ANALYSIS**

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**SECTION 4: SAFE WORK PROCEDURES AND JOB SAFETY ANALYSIS**

**SAFE WORK PROCEDURE ANNUAL REVIEW**

Safe Work Procedures	Development				Review				Review			
	Date			By Whom	Date			By whom	Date			By Whom
	M	D	Y		M	D	Y		M	D	Y	
First Aid Code of Practice	02	09	09									
Confined Space Entry Code of Practice	02	09	09									
Fall Protection Code of Practice	02	09	09									
Silica Sand Exposure Control	02	09	09									
Respiratory Protection Code of Practice	02	09	09									
Tilt-Up Panel Erection	02	09	09									
Hazardous Materials and Substances (WHMIS)	02	09	09									
Equipment Lock-Out	02	09	09									
Overhead Power Lines	02	09	09									
Re-fuelling	02	09	09									
Traffic Control	02	09	09									
Spill Prevention and Response	02	09	09									

## **SECTION 4: SAFE WORK PROCEDURES – FIRST AID CODE OF PRACTICE**

### **FIRST AID CODE OF PRACTICE**

#### **POLICY**

CCM Construction shall be responsible to ensure that First Aid services are supplied and maintained for employees. This service shall include Certified First Aid Attendants and equipment in accordance with provincial occupational health and safety requirements and legislation. First aid can be found in part 11 of the Alberta OH&S code. A Table of First Aid requirements can be found on page 50.

#### **FIRST AID ATTENDANTS**

The company will have a designated First Aid Attendant in the workplace for each shift. The Attendants for each project will be posted in the job-site trailer.

The company shall maintain a list of alternate attendants and qualified First Aiders in the First Aid room. These individuals will be used to cover the absence of the designated attendant or to assist during major accidents.

#### **FIRST AID FACILITIES**

CCM Construction shall provide first aid services, supplies, and facilities in accordance with the provincial occupational health and safety requirements and legislation. The facility and equipment shall be clearly identified and reserved for the treatment of injured employees. All employees shall have access as required

Any work site, which requires specialized equipment for the rescue or transport of injured employees, will have such equipment clearly identified and properly stored, to prevent damage or deterioration. Clear access to this equipment will be maintained and a regular inspection program will be established to check for deficiencies.

#### **EVACUATION OF INJURED WORKERS**

CCM Construction shall post a map route to the nearest hospital and emergency phone numbers in a prominent location in the site trailer.

#### **PROCEDURES**

To summon first aid: 3 short blasts on a truck or air horn will notify the first aid attendant.

Any employee who sustains an injury or illness that is, or may be, work related shall report to the First Aid Attendant for treatment as soon as possible.

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 Book. Each record must be signed and dated by the First Aid Attendant.



## **SECTION 4: SAFE WORK PROCEDURES – FIRST AID CODE OF PRACTICE**

The First Aid statistics shall be reviewed on a monthly basis by the Safety Committee to determine trends and recommend corrective action.

**Note:** Employees are reminded that all work-related injuries, no matter how minor, are to be reported to the supervisor as soon as possible.

### **REPORTS AND DOCUMENTATION**

If an employee suffers a minor injury, which requires First Aid, the following will apply:

- Report to First Aid Attendant
- Complete treatment and document in treatment record book
- Notify supervisor and initiate investigation

If an employee suffers a serious injury and is unable to continue work, the following will apply:

- Report injury to First Aid Attendant
- Ensure employee receives proper treatment
- Document in treatment record book
- Notify supervisor and initiate investigation
- Complete required WCB forms

If an employee suffers a serious injury and will not return to work the next day or for a period of time, the following will apply:

- Report injury to First Aid Attendant
- Ensure employee receives proper treatment
- Document in treatment record book
- Notify supervisor and initiate investigation
- Complete required WCB forms

### **TRAINING**

- Level 1 First Aid training for any employee, upon prior approval, and Level 3 First Aid Training for the designated First Aid Attendant(s).

## SECTION 4: SAFE WORK PROCEDURES – FIRST AID CODE OF PRACTICE

### Summary of First Aid Requirements

First Aid Requirements for high hazard work in Alberta. Construction is considered a high hazard industry.

Number of workers	Close work site (up to 20 minutes)	Distant work site (20 – 40 minutes)	Isolated work site (more than 20 minutes)
1	Type P First Aid Kit	Type P First Aid Kit	Type P First Aid Kit
2 – 4	1 Emergency First Aider No.1 First Aid Kit	1 Standard First Aider No.2 First Aid Kit 3 Blankets	1 Standard First Aider No.2 First Aid Kit 3 Blankets
5 – 9	1 Emergency First Aider 1 Standard First Aider No.2 First aid kit	2 Standard First Aiders No. 2 First aid kit 3 blankets	2 Standard First Aiders No. 2 First aid kit 3 blankets
10 – 19	1 Emergency First Aider 1 Standard First Aider No.2 First aid kit 3 blankets	2 Standard First Aiders No. 2 First aid kit 3 blankets Stretcher, splints	2 Standard First Aiders No. 2 First aid kit 3 blankets Stretcher, splints
20 – 49	2 Emergency first aiders 1 Standard first aider No. 2 First aid kit 3 blankets	3 Standard first aiders No. 3 first aid kit 3 blankets Stretcher splints	3 Standard first aiders No. 3 first aid kit 3 blankets Stretcher splints

## SECTION 4: SAFE JOB PROCEDURE – CONFINED SPACE ENTRY

### CONFINED SPACE ENTRY CODE OF PRACTICE

This policy and procedure is established to ensure CCM employees and sub-contractors are adequately protected while working in confined spaces. If *CCM employees* are required to enter a confined space while contracted by a client who has an existing confined space entry procedure, the procedure of that client will be followed. This policy and procedure is for low and moderate hazard atmosphere confined spaces. **Under no situation should CCM employees enter and work in high hazard atmosphere confined spaces.**

This confined space entry program is written to safely address commonly encountered aspects of confined space entry and to provide guidance on meeting general provincial Health and Safety Legislation. It is stressed that precise safe work requirements for confined space entry will vary with federal or provincial jurisdiction and from one situation to the next. Confined Spaces can be found part 5 of Alberta OH&S code.

### RESPONSIBILITIES

- CCM shall ensure that potential confined spaces are identified and that all confined space hazards are eliminated or minimized and that work is performed in a safe manner. CCM Management will also review this procedure on an annual basis to ensure it is up to date and accurate.
- Project Managers, Site Superintendents and/or Sub-Contractor Supervisors must ensure that a JSA and Hazard Assessment Form are completed with employees, that pre-entry testing and inspection is conducted based on written procedures, precautions identified in this procedure are followed, and only authorized workers enter a confined space.
- Each person who is assigned duties and responsibilities related to entry into a confined space must be adequately trained in the hazards of the space and precautions outlined in written work procedures to properly perform their work.

### DEFINITIONS

These definitions are taken from Part 9 –Confined Space – Occupational Health and Safety Regulations, WCB, BC.

- Confined Space – means an area, other than an underground working, that (a) is enclosed or partially enclosed, (b) is not designed or intended for continuous human occupancy, (c) has limited or restricted means for entry or exit that may complicate the provision of first aid, evacuation, rescue or other emergency response service, and (d) is large enough and so configured that a worker could enter to perform assigned work.
- Low hazard atmosphere – means an atmosphere which is shown by pre-entry testing or otherwise known to contain clean respirable air immediately prior to entry to a confined space and which is not likely to change during the work activity, as determined by a qualified person after consideration of the design, construction and

## SECTION 4: SAFE JOB PROCEDURE – CONFINED SPACE ENTRY

use of the confined space, the work activities to be performed, and all engineering controls required.

- Moderate hazard atmosphere – means an atmosphere that is not clean respirable air but is not likely to impair the ability of the worker to escape unaided from a confined space, in the event of a failure of the ventilation system or respirator.
- High hazard atmosphere – means an atmosphere that may expose a worker to risk of death, incapacitation, injury, acute illness or otherwise impair the ability of the worker to escape unaided from a confined space, in the event of a failure of the ventilation system or respirator.
- Clean Respirable Air – When used to describe the atmosphere inside a confined space, means an atmosphere which is equivalent to clean, outdoor air and which contains...(a) about 20.9 % oxygen by volume, (b) no measurable flammable gas or vapour as determined using a combustible gas measuring instrument, and (c) no air contaminant in concentrations exceeding either 10% of its applicable exposure limit or an acceptable ambient air standard, whichever is greater.

### CONFINED SPACE ENTRY – WORK PROCEDURES

Where reasonable practicable, CCM will use an alternate means to perform work that will not require a worker to enter a hazardous confined space.

- **JSA and Risk Assessment** – Before work begins in a confined space, the site superintendent/sub-contractor supervisor will complete and review a JSA and Risk Assessment with all employees involved in the project. The potential hazards in the confined space must be reviewed. This could include atmospheric contaminants, poor lighting, electrical hazards, mechanical hazards, and slip/trip/fall hazards.
- **Pre-entry testing and testing during work activities** - Before entry into confined spaces with a low/moderate hazard atmosphere, the space must be tested for oxygen content and flammable concentration using an atmosphere testing device, commonly known as a 4gas monitor. Instrument must contain sensors for oxygen, lower explosive limit (LEL) CO, and hydrogen sulfide. **All gas testing records must be posted at the entrance to the space. Completed records should be filed as part of the project close-out. Continuous testing should be completed by utilizing a multi-gas testing device during the entire period of work, wherever possible. If not possible, then testing must be completed upon exiting and re-entering the space.**

**Oxygen Content** - oxygen concentration must be maintained between 19.5% and 23% by volume. Normal oxygen concentration in air is approximately 21% by volume in air with nitrogen comprising almost the remaining 79%.

**Flammable Gases/Vapours** - know the gas/vapour present. The LEL are different for each gas/vapour. A concentration above the LEL is explosive.

## SECTION 4: SAFE JOB PROCEDURE – CONFINED SPACE ENTRY

- Flammable gas/vapour levels must be kept at or below 20% of the LEL. If levels get above 20%, then work will cease, workers inside the space will immediately vacate and notify project manager. Work shall not commence in the space until flammable levels are below 20% of the LEL.
- **Personal Protective Equipment (PPE)** - The working conditions within the confined space will dictate the requirements for personal protective equipment. As requirements will vary widely, it is best to refer to applicable MSDS's of any chemicals used for appropriate PPE (e.g. gloves, monogoggles).
- Tasks would continue to utilize appropriate PPE for working in non-confined spaces (i.e. asbestos removal). However, consideration should be given to potential build-up of contaminants such as welding fume or solvent vapours. Site Superintendents/Sub-Contractor Supervisor may consider the use of local exhaust ventilation to extract the contaminant at the source.
- If respirators are intended to be used, it is very important that the right respirator for the job be selected. The CCM Respiratory Protection Program should be followed.
- **Man Watch** – If CCM employees are required to enter a confined space a man watch is required to be at the entrance of the confined space and be able to communicate with the worker inside the confined space.
- **Emergency Procedures and Equipment**

**Access and Egress** - The opening of a confined space must be large enough to permit the entry and exit of employees wearing the required PPE and the space must be kept free of obstructions. Doors and latches must be secured in the open position and locked so that they cannot accidentally be closed and trap a worker inside the space. All ladders, scaffolds, etc. necessary to gain access/egress to the work area must be secured.

No entry is allowed if a possibility of a cave-in or shifting material/equipment exists where a worker could be buried or trapped.

**Rescue** - If rescue is necessary (worker injury), workers outside of the space will first summon help (phone 911 if life-threatening, project manager if not life threatening), then will attempt a physical rescue only if the cause of the injury is known and conditions in the space will not affect those entering the space (for example; worker fell and broke leg). No one will enter the space until a nearby worker has arrived at the entrance to the space to assist. If, at any time, a worker in the space is unconscious for no recognized reason, no one will enter the space until emergency crews arrive.

### **Training**

All CCM staff working in confined spaces will be required to have completed confined space training (recommended 1 day course), respirator training and fit testing, calibration, use and limitations of the gas tester and use of personal protective equipment.



**CONFINED SPACE ENTRY CHECKLIST**

Date: \_\_\_\_\_ Job #: \_\_\_\_\_ Project: \_\_\_\_\_

Prepared by: \_\_\_\_\_

**EQUIPMENT REQUIRED:**

- Multi-gas tester (4gas Monitor)
- Means of communication to worker(s) inside of space
- Means of communication in case of emergency
- Confined Space Entry Log Sheet
- Personal Protective Equipment (appropriate for task performed)
- Fire Extinguishing Equipment (on site)

**PROCEDURE:**

- Review work to be carried out with supervisor and scope of work involved. Review procedure.
- Equipment calibration prior to entry.
- Trained on equipment use.
- Thorough gas testing inside space.
- Oxygen concentration (within 19.5%-23%).
- Flammable concentrations below 20 % of LEL.  
No flammable concentrations during hot work.
- Other hazards possible? Measure?
- Confined Space Entry Log Sheet completed?
- Review incident Close-out with Supervisor?
- Continuous testing?

## **SECTION 4: SAFE JOB PROCEDURE – FALL PROTECTION CODE OF PRACTICE**

### **FALL PROTECTION CODE OF PRACTICE**

The purpose of this program is to ensure that ALL employees and sub-contractors of CCM Construction are provided with the information, procedures and training for personal safety and conduct to be used for the duration of their employment.

#### Policy Statement:

CCM Construction has established a 100% FALL PROTECTION GOAL. 100% Fall Protection means NO EXPOSURE to any elevated fall hazard is permitted without protection. It means CONTINUOUS PROTECTION.

Exposure will be prevented by:

- a) Establishing walls, floors and/or guardrails
- b) Using work platforms and/or aerial lifts
- c) Restricting the travel of workers
- d) Use of Person Fall Protection Systems

No one will be required or allowed at any time to expose themselves to a potential fall to a lower elevation without some form of required protection. If this is not followed to the letter, then the job will not be performed.

Any person in the employment of CCM Construction, including management, supervisors or workers or any sub-contractor who violates the Fall Protection Program requirements will be subject to disciplinary action.

#### Responsibilities:

Management will actively participate in the support of the 100% Fall Protection Program. Management will display their interest at every opportunity. Management will establish initial and periodic training for all levels of personnel. Management will provide approved equipment suitable for the work being performed.

Supervisors will develop and implement a written Fall Protection Work Plan including each area of the work place where the employees/sub-contractors is assigned, where a fall hazard of 10 feet (3 meters) or more exists or where there exists a high risk of injury from a lower height. Supervisors will ensure that all equipment supplied to or used by employees or sub-contractors is suitable for the work being performed and is used and maintained in accordance with manufacturer's instructions and the provisions of the Fall Protection Program. Supervisors will ensure that all workers and sub-contractors have been trained in the recognition of fall hazards and the required Fall Protection equipment and procedures to be used. Supervisors shall ensure that all workers required to work at heights are both physically and emotionally fit to undertake the work.



## **SECTION 4: SAFE JOB PROCEDURE – FALL PROTECTION CODE OF PRACTICE**

Workers will observe the requirements of the 100% Fall Protection Program with NO EXCEPTIONS. Workers will participate in all training programs and safety meetings. Workers will be responsible for all Fall Protection equipment assigned to or used by them. Workers will not undertake any work for which they have not been trained and authorized to do.

Training of Workers:

Prior to working at elevations greater than 10 feet (3 m) or where there exists a high risk of injury from a lower height, every employee and sub-contractor of CCM Construction must successfully complete a training course on the Fall Protection Program. Successful workers will have their training recorded.

Definitions:

**Fall Arrest System:** means a system that will stop a workers fall before the worker hits the surface below.

**Fall Protection System:** means the use of any of the following components to protect workers from falls:

- a) Guardrails
- b) Safety belts or full body harness with their related equipment
- c) Life-lines and anchors
- d) Safety nets
- e) Control Zones
- f) Safety monitors
- g) Other procedures acceptable to the Board

**Fall Restraint System:** means the use of a work positioning system to prevent workers from falling from the position in which they are working, or the use of a travel restriction system such as guardrails or personal fall protection system to prevent workers from traveling to an edge from which they could fall.

**Flat Roof Slope:** means a roof having a slope ratio of less than 4 vertical to 12 horizontal.

**Low Slope Roof:** means a roof having a slope ratio of between 4-8 vertical to 12 horizontal.

**Steep Slope Roof:** means a roof having a slope ratio of greater than 8 vertical to 12 horizontal.

## **SECTION 4: SAFE JOB PROCEDURE – FALL PROTECTION CODE OF PRACTICE**

### Fall Protection Systems:

#### 1) Guardrails

Wherever possible, workers working in excess of 10 feet (3 m) or where there exists a high risk of injury from a lower height, will be protected by the installation of guardrails or barriers on all open sides of structures, stagings, scaffolds, holes, etc. Guardrails shall consist of a top rail approximately 42” above the floor or platform level and a mid-rail centered at approximately half the height of the top rail. Where tools and/or equipment can fall through the guardrail, a toe-board shall also be installed. (Refer to WCB Regulation 4.55 for specific guardrail details)

If it is necessary to temporarily remove the guardrail to perform work, workers shall be protected from falling using other Fall Protection Systems. Once the required work is performed the guardrail shall immediately be replaced.

#### 2) Fall Restraint System

Where it is impracticable to install guardrails or barriers workers working in excess of 10 feet (3 m) or where there exists a high risk of injury from a lower height, shall be protected from falling by use of a Fall Restraint System. The Fall Restraint System shall consist of the following elements:

- a) a full body harness/ belt
- b) life-line
- c) rope grab

CCM Construction will supply all workers required to wear a Fall Restraint System all the above hardware and will ensure that it is inspected and properly maintained prior to issue. Each worker will be required to use the above equipment in accordance with the manufacturer’s instructions, their training and the following procedures and practices:

- a) Prior to undertaking work requiring the use of a Fall Restraint System each worker will successfully complete a Fall Protection training course.
- b) Prior to work each worker will be fit tested with the full body harness to ensure a proper fit. Each worker shall only use the full body harness assigned to him/her.
- c) Prior to each shift, the Fall Protection System components will be inspected for damage and any necessary repairs will be undertaken prior to use.
- d) Means of providing an anchor point which provides 800 pound safe working load will be provided.
- e) Wherever possible, adequate alternate anchor points shall be provided by securing the lifeline to a permanent structure component by way of a supplied wire rope sling and Carabiner.
- f) Lifelines shall reach within 10 feet of the ground or landing below.
- g) On roof slopes of 8 vertical to 12 horizontal or greater toe holds will be provided.

## **SECTION 4: SAFE JOB PROCEDURE – FALL PROTECTION CODE OF PRACTICE**

### **3) Fall Arrest System**

Where it is impractical to protect workers working in excess of 10 feet (3 m) or where there exists a high risk of injury from a lower height, with guardrails, barriers or a Fall Restraint System will be provided. In such cases the supervisor will develop a site specific Fall Protection Plan which will specify the following:

- a) the fall hazard expected in each area
- b) the fall protection method to be used in each area
- c) the anchor point(s) to be established (5000 pounds)
- d) the correct method to assemble, maintain, inspect, use and disassemble the fall protection system
- e) the worker training required for the work
- f) the rescue procedures from elevated work areas

A copy of the Fall Protection Plan will be left on site for review by workers.

### **4) Control Zones**

Where it is impractical to protect workers working in excess of 10 feet (3 m) or where there exists a high risk of injury from a lower height, with guardrails, barriers, a Fall Restrain System, or a Fall Arrest System a Control Zone System will be provided, providing:

- a) The working surface does not have a slope in excess of 4 vertical to 12 horizontal.
- b) Work is not taking place on a skeletal structure
- c) Work does not include scaffold erection or removal
- d) A Safety Monitor is provided for all workers working within the Control Zone

The Control Zone must be at least 2 metres (6-1/2 feet) wide from the edge of the structure, hole, etc. The Control Zone must be physically marked with stanchions and rope flagging. The height of the flagging must be maintained at no more than 45” and no less than 40”.

The duty of the Safety Monitor is to ensure the work activity in the control zone is performed in accordance with the Fall Protection Plan and in a manner that minimizes the potential for a worker to fall. A Safety Monitor must:

- a) Be experienced in the work overseen and trained in the role of the Safety Monitor.
- b) Be present within sight and sound at all times when a worker is in the Control Zone.
- c) Have completed authority over the work as it relates to the prevention of falls
- d) Engage in no other duties while acting as the Safety Monitor
- e) Be located so as to have a clear view of the work
- f) Be able to have normal voice communication with the workers being protected
- g) Be instantly distinguishable from other workers
- h) Monitor a maximum of 8 workers

## **FALL PROTECTION SAFETY MONITOR'S DUTIES AND RESPONSIBILITIES**

The duty of the Safety Monitor is to ensure the work activity in the Control Zone is performed in accordance with the Fall Protection Plan and in a manner that minimizes the potential for a worker to fall.

Safety Monitor must:

- a) be experienced in the work overseen and trained in the role of the Safety Monitor
- b) be present at all times when a worker is in the Control Zone
- c) have complete authority over the work as it relates to the prevention falls
- d) engage in no other duties while active as the Safety Monitor
- e) be located so as to have a clear view of the work
- f) be able to have normal voice communication with the workers being protected
- g) wear a Hi-V vest at all times
- h) ensure that only workers directly required for the work at hand may be inside the Control Zone
- i) watch over no more than 8 workers
- j) All workers performing work in the Control Zone must know the Safety Monitor by name. The Safety Monitor must know all workers being watched by name.

\_\_\_\_\_  
Employee

\_\_\_\_\_  
Date

\_\_\_\_\_  
Safety Rep or Superintendent

**FALL PROTECTION INSTRUCTION RECORD**

Name \_\_\_\_\_

Project: \_\_\_\_\_

Task: \_\_\_\_\_

Methods:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Training done by: \_\_\_\_\_

Signature: \_\_\_\_\_ (Trainer)

Signature: \_\_\_\_\_ (Employee)

Date: \_\_\_\_\_



**FALL PROTECTION PLANS**

**FALL PROTECTION WORK PLAN**

Date: \_\_\_\_\_ Start Time: \_\_\_\_\_ Completion time: \_\_\_\_\_

Location: \_\_\_\_\_

Area: \_\_\_\_\_

Supervisor: \_\_\_\_\_

Describe work activities:

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Identify fall hazards:

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Identify fall protection equipment / system to be used: check boxes.

<input type="checkbox"/>	Permanent guardrails	<input type="checkbox"/>	Full body harness & lanyard (restraint)
<input type="checkbox"/>	Temporary guardrail system	<input type="checkbox"/>	Full body harness, lanyard, shock absorber
<input type="checkbox"/>	Single pole scaffold	<input type="checkbox"/>	Restraint anchor point[ s ] [800 Ibs
<input type="checkbox"/>	Frame scaffold	<input type="checkbox"/>	Arrest anchor point[s] [5000 Ibs
<input type="checkbox"/>	Boom / bucket lift	<input type="checkbox"/>	Vertical life line system / fall arrest
<input type="checkbox"/>	Scissor / elevated platform	<input type="checkbox"/>	Horizontal life line system/fall arrest
<input type="checkbox"/>	Swing stage / suspended platform	<input type="checkbox"/>	Control zone / warning line
<input type="checkbox"/>	Crane / man basket	<input type="checkbox"/>	
<input type="checkbox"/>	Safety nets	<input type="checkbox"/>	

Work procedure: (specify). Other equipment or system: (specify).

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## FALL PROTECTION PLANS

### Fall Protection Work Plan Contd.

List persons authorized to work under this plan:

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This fall protection plan **MUST** be explained to/reviewed with, all persons working on this job.

Describe procedures for assembly, maintenance, use of, and inspection, take down of fall protection system or equipment:

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Outline rescue operations:

Who will provide rescue services? \_\_\_\_\_

Emergency contact information: \_\_\_\_\_ Written agreement: yes / no

Anchor points available for rescue? \_\_\_\_\_ Engineered anchor points needed? \_\_\_\_\_

Describe rescue plan / procedure:

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Diagram of work area:

Written by: \_\_\_\_\_ Date: \_\_\_\_\_

Authorized by: \_\_\_\_\_ Date: \_\_\_\_\_



## **SECTION 4: SAFE JOB PROCEDURE – CRYSTALLINE SILICA EXPOSURE**

### **CRYSTALLINE SILICA EXPOSURE CONTROL PLAN**

Crystalline Silica is basically rock dust. It occurs in construction in very common activities such as:

- sandblasting
- concrete drilling
- jack hammering
- mixing dry grout with water for masonry and tile work
- scabbling concrete floors
- demolition
- concrete & stone cutting (incl hardiboard & similar products), chipping, grinding, sawing

Although silica occurs naturally (in sand and rocks) it is only a hazard when the microscopic particles are inhaled, then it can cause nonreversible and potentially fatal damage to the lungs in a disease called Silicosis. The purpose of this plan is to prevent exposure to the dust since it can cause silicosis and is a carcinogen as well.

There are four main types of Silica dust, two of which are worse than the other two, but since we would never have any way of knowing what kind is in the concrete, we have to presume we are dealing with the worst. The allowable exposure level (EL) in an 8 hour time period is miniscule (.025mg/m<sup>3</sup>).

#### **What to do about it**

There are 3 levels of exposure Types 1, 2 and 3 (see Table 1 following pg 64). Fill out a Hazard Assessment sheet for every silica dust generating task and follow the procedures. Use the Silica Exposure Flowchart, Table 2, to help you. If a respirator is necessary, make sure it fits properly (see the Respiratory Protection Code of Practice for how to fit and care for respirators).

The main elements of handling silica containing dust are as follows:

1. Reduce or eliminate exposure – use wet method if possible, vacuum at source with a HEPA filter when you can't use a wet method. If it isn't possible to contain at source a respirator will be required.
2. Contain the hazard – separate the work area exposed to the silica-containing dust from the rest of the work areas. Move other workers from the path of dust generating activities. If they are in contact with the dust, they will need respirators too.
3. Practice good hygiene – don't smoke, eat, drink or chew in contaminated areas. Provide coveralls to workers exposed to the dust if we can't vacuum at source and clean-up facilities. If we are working at a high exposure level, coveralls must be washed & a proper wet clean-up area must be provided.

## SECTION 4: SAFE JOB PROCEDURE – CRYSTALLINE SILICA EXPOSURE

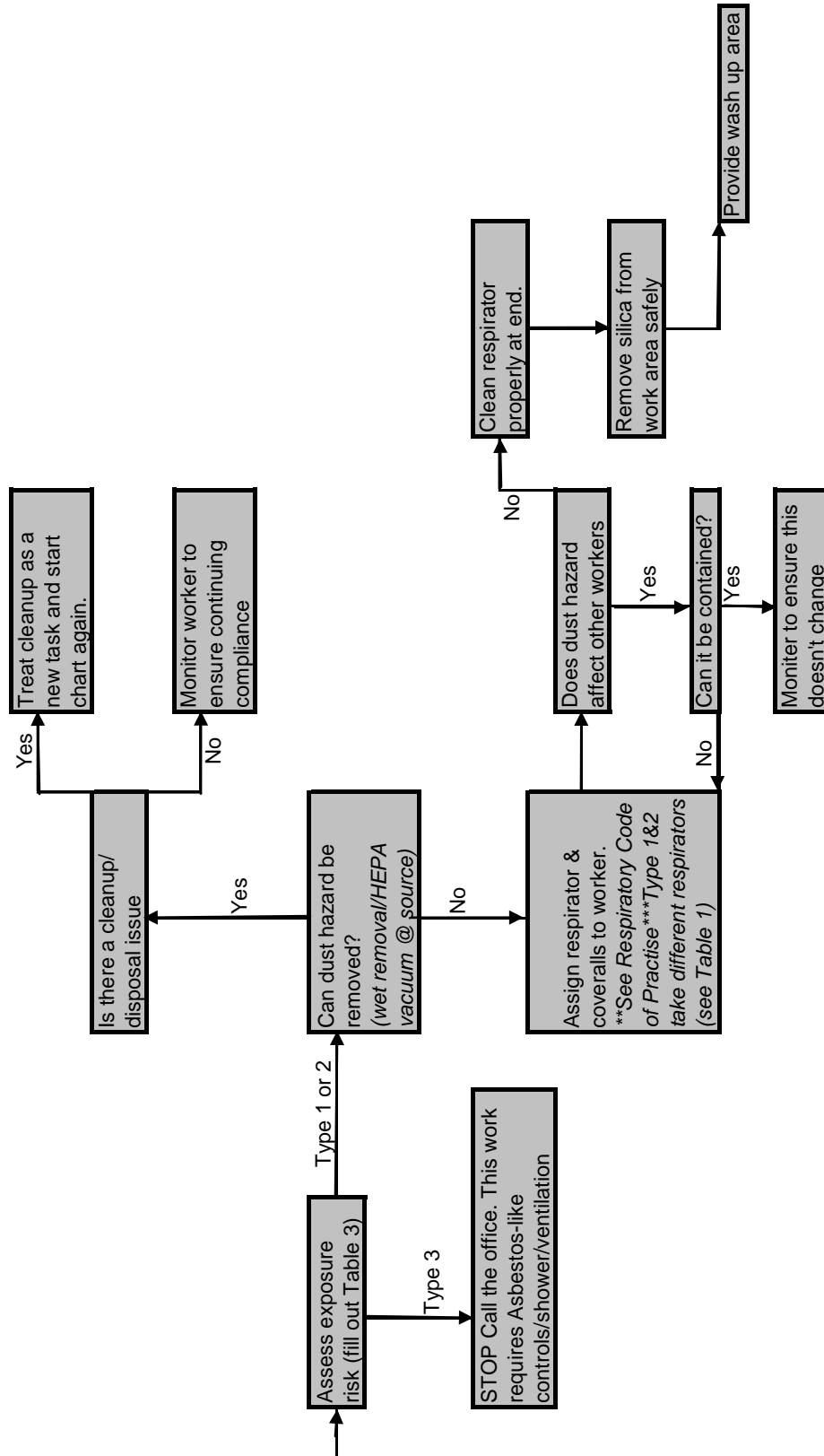
Section 4, Table 1: Respirator Requirements

Operations	Required Respirator
<p><b>Type 1</b>                      (&gt; 0.05 to 0.50 mg/m<sup>3</sup> of silica in the form cristobalite and tridymite)                      (&gt; 0.10 to 1.0 mg/m<sup>3</sup> of silica in the form of quartz and tripoli)</p>	<p><b>NIOSH APF = 10</b></p>
<ul style="list-style-type: none"> <li>• The drilling of holes in concrete or rock that is not part of a tunneling operation or road construction</li> <li>• Milling of asphalt from concrete highway pavement</li> <li>• Charging mixers and hoppers with silica sand (sand consisting of at least 95 per cent silica) or silica flour (finely ground sand consisting of at least 95 per cent silica).</li> <li>• Any other operation at a project that requires the handling of silica – containing material in a way that may result in a worker being exposed to airborne silica.</li> <li>• Entry into a dry mortar removal or abrasive blasting area while airborne dust is visible for less than 15 minutes for inspection and/or sampling.</li> <li>• Working within 25 meters of an area where compressed air is being used to remove silica-containing dust outdoors.</li> </ul>	<p>Half-mask particulate respirator with N-, R-, or P-series filter and 95, 99 or 100 per cent efficiency.</p>
<p><b>Type 2</b>                      (&gt; 0.50 to 2.5 mg/m<sup>3</sup> of silica in the form of cristobalite and tridymite)                      (&gt; 1.0 to 5.0 mg/m<sup>3</sup> of silica in the form of quartz and tripoli)</p>	<p><b>NIOSH APF = 50</b></p>
<ul style="list-style-type: none"> <li>• Removal of silica containing refractory materials with a jackhammer.</li> <li>• The drilling of holes in concrete or rock that is part of a tunneling operation or road construction.</li> <li>• The use of a power tool to cut, grind, or polish concrete, masonry, terrazzo or refractory materials.</li> <li>• The use of a power tool to remove silica-containing materials.</li> <li>• The use of a power tool indoors to chip or break and remove concrete, masonry, stone, terrazzo or refractory materials.</li> <li>• Tunneling (operation of the tunnel boring machine, tunnel drilling, tunnel mesh installation).</li> <li>• Tuckpointing and surface grinding.</li> <li>• Dry method dust clean-up from abrasive blasting operations.</li> <li>• Dry mortar removal with an electric or pneumatic cutting device.</li> <li>• The use of compressed air outdoors for removing silica dust.</li> <li>• Entry into area where abrasive blasting is being carried out for more than 15 minutes.</li> </ul>	<p>Full-face piece air-purifying respirator with any 100-series particulate filter.</p> <p>Tight-fitting powered air-purifying respirator with any 100-series particulate filter.</p> <p>Full-facepiece supplied-air respirator operated in demand mode.</p> <p>Half-mask or full-facepiece supplies air respirator operated in continuous-flow mode.</p>
<p><b>Type 3</b>                      (&gt; 2.5 mg/m<sup>3</sup> of silica in the form of cristobalite and tridymite)                      (&gt; 5.0 mg/m<sup>3</sup> of silica in the form of quartz and tripoli)</p>	<p><b>NIOSH APF = 1000</b></p>
<ul style="list-style-type: none"> <li>• Abrasive blasting with an abrasive that contains ≥ 1 per cent silica</li> <li>• Abrasive blasting of a material that contains ≥ 1 per cent silica</li> </ul> <p><i>*NIOSH APF = National Institute of Occupational Safety and Health Assigned Protection Factor.</i>  <i>Note: It is recommended that compressed air that is used to supply supplied air respirators meet the breathing air purity requirements of CSA Standard Z180.1-00. Where an oil-lubricated compressor is used to supply breathing air, a continuous carbon monoxide monitor/alarm should be provided.</i></p>	<p>Type CE abrasive-blast supplied air respirator operated in a positive-pressure mode with a tight-fitting half-mask facepiece.</p> <p>Type CE abrasive-blast supplied air respirator operated in a pressure-demand or positive pressure mode with a tight-fitting full-facepiece.</p>

SECTION 4: SAFE JOB PROCEDURE – CRYSTALLINE SILICA EXPOSURE

Table 2

Silica Exposure Flowchart



## **SECTION 4: SAFE JOB PROCEDURE – CRYSTALLINE SILICA EXPOSURE**

### **Finally**

Cleaning the filters and disposing of the dust are potentially hazardous tasks as well. Treat the clean-up as any other silica dust generating task. Provide water and personal towels for any worker exposed to silica dust.

### **Health Monitoring**

Silicosis can develop almost entirely without symptoms or with symptoms including shortness of breath with exercise, wheezing or sputum that causes coughing. Some versions of silicosis can develop quite rapidly and not all individuals will react to the same exposure in the same way. Any worker who is continually exposed to silica dust or who has been exposed to high levels in the past should visit his MD every other year and advise the doctor that he has been exposed to crystalline silica.

## **SECTION 4: SAFE WORK PROCEDURES - RESPIRATORY PROTECTION CODE OF PRACTICE**

### **RESPIRATORY PROTECTION CODE OF PRACTICE**

This program is developed to ensure all CCM employees and sub-contractors are protected from respiratory hazards and that they understand selection, care, and maintenance of respiratory protection.

- CCM Project Managers and Site Superintendents have the following responsibilities:
  - Ensure appropriate respiratory protective equipment is available and used on site;
  - Provide adequate training on the selection, use, maintenance and limitations of respiratory protection to employees and sub-contractors;
  - Ensure fit-testing and inspection of respiratory protection equipment occurs on a regular basis; and
  - Document fit test records and submit for filing to CCM Management.
  
- CCM employees and sub-contractors who are required to wear respiratory protection have the following responsibilities:
  - Know and understand use and limitations of respiratory protection equipment;
  - Know and understand care and maintenance of respiratory protection equipment in accordance with program;
  - Be clean shaven; and
  - Wear respiratory equipment as required.

### **SELECTION OF RESPIRATORY PROTECTIVE EQUIPMENT**

There are three general classes of respiratory protective equipment.

- i) Air Purifying Respirators**
- ii) Supplied Air Respirators**
- iii) Self Contained Breathing Apparatus (SCBA)**

Consult CSA Standard Z94.4-02, Selection, Care and use of Respirators to ensure the appropriate respirator and cartridge type is selected for the type of contaminant and the work tasks being conducted.

## SECTION 4: SAFE WORK PROCEDURES - RESPIRATORY PROTECTION CODE OF PRACTICE

### FIT TESTING

Where respirators are required for the type of work being conducted on-site, CCM employees and sub-contractors are required to complete fit testing on an annual basis and all forms are to be kept on file in the local office.

### HOW TO PERFORM A FIT TEST

Whenever a new respirator is issued to an employee, a fit test must be done to ensure that the seal between the respirator and the wearer's face is effective.

1. The trainer initially discusses the purpose and importance of respirator fit with the wearer. A respirator is selected and the wearer puts it on. Initial selection is based on comfort to the wearer, other respirators already in use within the department, availability or replacements parts, etc.
2. The wearer completes the positive and negative pressure tests.
3. Once a good, comfortable fit is achieved, the irritant smoke should then be used to confirm proper fit. Break the ends off a smoke tube and attach it to the aspirator bulb. By gently squeezing the bulb, irritant smoke will be released. When the smoke is no longer needed the tube must be removed from the bulb and sealed with the rubber caps provided.
4. Instruct the wearer to keep his or her eyes closed, or wear the goggles provided.
5. Introduce a small amount of smoke around the entire sealing edge of the respirator while the wearer moves their head from side to side and up and down. Ensure you effectively test the areas under the chin and below the eyes at the sides of the nose.
6. ***Ask the wear to talk in a loud voice as you continue to release the smoke. Words that flex the facial muscles such as: rainbow, raindrop, horizon, watermelon, window, enemy, ice cream, etc. should be spoken.***
7. If the fit is good, the wearer will not be irritated by the smoke at all. If the irritant is noticed, the respirator can be re-adjusted on the face and the head straps tightened or loosened. The smoke test should then be administered again to recheck the fit.
8. If a proper fit cannot be achieved with the respirator first selected, a new size, brand or model should be tried.
9. This procedure is repeated until a respirator that provides a sound and comfortable fit is selected.
10. The wearer's name and the information on the tag attached to the respirator selected should be recorded. The respirator can then be ordered from the appropriate outlet and assigned to the individual to ensure ample supplies BEFORE there is a need.

## **SECTION 4: SAFE WORK PROCEDURES - RESPIRATORY PROTECTION CODE OF PRACTICE**

### **RECORD KEEPING**

CCM shall maintain a permanent record of individuals who are fit tested and issued with respiratory protection is maintained.

### **INSPECTION, CLEANING, MAINTENANCE AND STORAGE**

Regular cleaning and inspection of dual cartridge respirators is extremely important.

Respirators must be cleaned and inspected by routine users daily, and before and after each use by occasional users. If different persons share respirators, they need to be sanitized between uses.

#### **Inspection**

- Prior to cleaning a respirator, each part of the respirator should be inspected. If defects are found, the defective parts must be replaced before the respirator is used.
- Check the face-piece for cuts, tears, holes, melting, stiffening or deterioration. If the unit is damaged, it must be replaced.
- Inspect the elastic head straps for breaks, frays, tears or loss of elasticity.
- By removing the cartridges, the cartridge sockets can be inspected. Pay special attention to the rubber gaskets located at the bottom.
- Again, look for cracks or flaws which may contribute to an ineffective seal.
- Next, remove the cover on the exhalation valve. Examine the rubber valve carefully to ensure it seats properly and has not become brittle. Examine the edge of the valve for dirt which may interfere with a proper seal, and look for holes or cracks. The exhalation valve is a critical component of the respirator.
- If there is any doubt in its ability to function properly, it must be replaced. The valve cover is also important and must not be damaged or fit too loosely.
- Finally, examine the inside of the face-piece and the inhalation valves. Look for dust or dirt accumulation that could interfere with the valve and check for tears or cuts to the flaps. The inhalation valve should be soft and pliable.

## SECTION 4: SAFE WORK PROCEDURES - RESPIRATORY PROTECTION CODE OF PRACTICE

### Cleaning

- Following inspection, the respirator parts should be washed in warm water with a mild detergent (e.g. dishwashing detergent), or a commercially available cleaner and disinfectant.
- Do not use strong detergents, nor water or household cleaners or solvents because they may deteriorate the rubber parts. A stiff bristly brush (not wire) can be used to remove dirt if necessary.
- The respirator should then be rinsed thoroughly in clean, warm water. The importance of thorough rinsing cannot be over-emphasized because detergents or cleaners that dry on the face-piece may later cause skin irritation.
- Next, the respirator can be hand-dried with a clean, lint-free cloth or air-dried and then reassembled. The respirator should be tested to ensure all parts work properly before it is used.

### Storage

- Respirators should be stored in a clean location, preferably in a plastic bag in a locker or on a shelf. They should be stored away from sunlight, solvents and other chemicals, extreme cold or heat and excessive moisture.
- Do not leave the respirator out on a bench or hanging on a nail in the shop where it can gather dust and dirt, or be damaged or abused.

### Maintenance

- All respirator manufacturers suggest regular maintenance and part replacement. Respirators should be maintained and inspected routinely in accordance with the instructions provided with each respirator.
- It is important to note that only approved replacement parts can be used. **DO NOT** mix and match parts from one respirator brand or model to another, and never build makeshift parts for respirators.



<b>RESPIRATORY PROTECTION FIT TEST FORM</b>					
<b>EMPLOYEE INFORMATION</b>					
<b>Name:</b>		<b>Title:</b>			
<b>RESPIRATOR PARAMETERS</b>					
Does the employee have any conditions that may affect the respirator fit?					<input type="checkbox"/> YES <input type="checkbox"/> NO
Conditions that may affect respirator fit: <ul style="list-style-type: none"> <li>• Glasses</li> <li>• Facial Hair</li> <li>• Facial Scars</li> <li>• Asthma or Other Medical Condition(s)</li> <li>• Other:</li> </ul>					<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> YES <input type="checkbox"/> NO
Has the employee correctly performed both positive and negative fit checks?					<input type="checkbox"/> YES <input type="checkbox"/> NO
Has the employee been properly instructed in the selection, use, care and maintenance of the respirator(s)?					<input type="checkbox"/> YES <input type="checkbox"/> NO
<b>FIT TESTING</b>					
TYPE	MANUFACTURER	MODEL #	SIZE	TEST	PASS/FAIL
<input type="checkbox"/> Dust Mask <input type="checkbox"/> ½ Mask <input type="checkbox"/> Full-face <input type="checkbox"/> Full-face PAPR <input type="checkbox"/> Other:				<input type="checkbox"/> Bitter # of Squeezes: <input style="width: 40px; height: 20px;" type="text"/>	<input type="checkbox"/> PASS <input type="checkbox"/> FAIL
				<input type="checkbox"/> Sweet # of Squeezes: <input style="width: 40px; height: 20px;" type="text"/>	<input type="checkbox"/> PASS <input type="checkbox"/> FAIL
				<input type="checkbox"/> Irritant Smoke	<input type="checkbox"/> PASS <input type="checkbox"/> FAIL
<input type="checkbox"/> Dust Mask <input type="checkbox"/> ½ Mask <input type="checkbox"/> Full-face <input type="checkbox"/> Full-face PAPR <input type="checkbox"/> Other:				<input type="checkbox"/> Bitter # of Squeezes: <input style="width: 40px; height: 20px;" type="text"/>	<input type="checkbox"/> PASS <input type="checkbox"/> FAIL
				<input type="checkbox"/> Sweet # of Squeezes: <input style="width: 40px; height: 20px;" type="text"/>	<input type="checkbox"/> PASS <input type="checkbox"/> FAIL
				<input type="checkbox"/> Irritant Smoke	<input type="checkbox"/> PASS <input type="checkbox"/> FAIL
<b>COMMENTS</b>					
<b>VALIDATION</b>					
<b>Instructor's Signature:</b>				<b>Employee Signature:</b>	

**NOTE: This fit test is valid for only ONE (1) year from the date of the test for the respective respirators tested.**

**TILT-UP / PRE-CAST WORK PROCEDURES - SAFETY AGENDA  
(Uni-Lift 360, Ring-Lift, Easy-Lift and Uni-Lift)**

1. Date: \_\_\_\_\_  
Site: \_\_\_\_\_
2. Contractor: \_\_\_\_\_  
Superintendent: \_\_\_\_\_ Foreman: \_\_\_\_\_
3. Lift Supervisor: \_\_\_\_\_
4. Crane Company: \_\_\_\_\_ Tel: \_\_\_\_\_
5. Panel Book Engineering Company: \_\_\_\_\_  
Tel: \_\_\_\_\_ Contact: \_\_\_\_\_  
Inspections: \_\_\_\_\_ Date: \_\_\_\_\_
6. Accessories supplied by: \_\_\_\_\_  
Contact: \_\_\_\_\_ Tel: \_\_\_\_\_
7. All Tilt-up/pre-cast operation to be supervised by \_\_\_\_\_ of \_\_\_\_\_  
\_\_\_\_\_. This person supervises the lifting and placement of all panels.
8. Only crew (workers) directly involved in the rigging and lifting of panels are allowed with 10 ft (3 meters) of the panel being lifted. The WILL be enforced. Proper safety gear is mandatory as dictated by the contractor and WCB. You want to have the lift supervisor wear the safety vest only, as he can be identified by the crane operator. The brace and lifting hardware can entangle with safety vests.
9. All rigging required for the elevating of panels must be checked for wear or damage; any evidence of same should be advised immediately to the lift supervisor. The spreader bar and the lift hardware shall be checked for their safe working load and not over loaded. Be sure the spreader bar is marked with its proper safe working load. Advise the lift supervisor of any cracks in the panel. During the lifts, advise the lift supervisor if the spreader bar is compromising the boom, or other panels. Be sure the center of gravity is square towards the direction of the pull both vertically and laterally.  
**IF YOU HEAR ANY CRACKING – STOP!** Walking of panels is only permitted with a crawler.
10. Check alignment of lift inserts, wall brace inserts and cables. Be sure they do not interfere with a clean release of the ground release bales. Check with the crane company as to suicide lifts of panels. This could result in an increase in the safety factor from 2.5 to 4/1 – more inserts.

## TILT-UP/PRE-CAST WORK PROCEDURES

11. Check all braces for proper bolt connections and make sure that all pipes and telescoping braces are engage with a through bolt. When placing your wall brace inserts and lift insert, check to see if the positioning of these inserts interferes with the proper ground release of the clutches. Be sure that all braces are bolted and impacted to 150 – 175 foot pounds. Before lifting, check to see that all braces are attached to the brace inserts. Avoid picking up braces, prior to the tensioning of cables until the panel releases. The only time braces should be elevated, is to avoid “WEDGING” onto adjacent panels or structures. If you have moved a brace more than 10 degrees, assume that the bold has loosened. Take the time and impact the bolt to obtain the proper foot pounds.

12. **UNDER NO CIRCUMSTANCES**, should workers tie or wrap rope around their hands or bodies to aid in the lifting of braces. Never place braces between your legs, Hold braces off to the side of your body on a side that doesn't impeded or obstruct your exit route. Never drop a brace on the floor once the panel has been elevated. The brace can jamb into the concrete slab and shear off the wall brace bolt. When the panel breaks free from the casting slab or stacked panels, expect the panel to spring up. On stacked panels, be sure to use blocking and support the low end of the stacked panels with 2x8 etc., so that the top panel does not drop when it releases. A panel may move laterally, as it centers itself on the rigging. **NEVER COMPROMISE YOUR SAFETY**, by being between a panel being lifted and a structure or other stacked panels, walls, existing tilt-up panels, equipment or the crane. Be mindful of lifting hardware, panels, tools, power cords, panel debris. Keep your work area clean. Remove all reveals, wire, nails, etc. as you lift.

13. To straighten the rigging, the lift supervise must stop the crane from any and all movement. When the crane is taking up the slack in the rigging, workers on the panels may hold the slings in alignment by holding onto the block frame, the turnbuckle of the lifting clutch. Have the crane operator tension the cables slightly, than make your adjustments. If necessary, rotate the clutches square to the top of the panel by using your hammer, burke bar, etc. **NEVER HOLD ONTO TWISTED CABLES**.

14. Attach the Lift Bales (Clutches) to the panel points by inserting hook or shackle pin away from the panel face. A properly installed bale will result in the release lever facing the top of the panel with the tab release showing green. Always check that the clutch is engaged. Ensure the lift bales and cables are installed and aligned properly. To aid in the lifting of panels mark all bales with either colored paint or colored surveyors tape. A visual example will be demonstrated at time of lift. Place clutches into clean voids. Vacuum or blow out the voids. Check to see if the Uni-360 clutches engage and release from the void area prior to starting lifting of panels. If the clutches are difficult to remove, check for concrete paste and proper depth and excessive pitch of the insert. If the insert head is more than 6% of true vertical and you are having a difficult time engaging and removing the clutch, check with your panel book design engineer, and consider the use of the emergency lift plate. Concrete residue must be removed from the void and panel face prior to lifting. **BE SURE TO CHECK TO SEE IF ALL CLUTCHES ARE ENGAGED AND THE BRACES ARE BOLTED DOWN PRIOR TO LIFTING PANELS**.

15. Under NO circumstances should anyone “RIDE” a panel after tensioning of the cables or the release of the panel from the casting slab. NEVER GO UNDER A PANEL DURING ANY PORTION OF THE LIFT SEQUENCE TO REMOVE REVEALS OR FORMING DEBRIS. Strip the panel’s edge forms prior to the lift to avoid debris around the lift area. Removal of panel chamfer around the outside of the panel face can be accomplished after the panel has released from the casting slab.

16. Place Steel Wedges used to aid in the release of the panels, 2 -3 ft from the top corner of the panel to eliminate damaging a corner. Wedges when hit with a sledge hammer may fly along the casting bed or stacked panels when it releases. PROPERLY PLACED BOND-BREAKERS normally result in very little use of wedges. Keep your work area clean and remove any excess water and bond-breaker. Bond-breaker surfaces when wet result in a slippery surface. If a worker has to go up a ladder, be sure that the bottom of the ladder is secured. Ladders have been known to slip on bond-breakers, ice etc. DO NOT STAND ON THE PANEL WHEN THE CABLES ARE BEING TENSIONED. KEEP BOTH FEET ON THE CASTING SLAB, BED OR GROUND WHEN HITTING THE WEDGES OR OPERATING JACKS.

17. To avoid hitting the previous lifted panels and possibly spalling a corner, cut ¾” x 4” x 12” long plywood shims to act as separation units when placing tilt-up panels. These plywood shims will also set your gap and provide a normal caulking dimension of ¾”. Never place your hands under or between panels to repair shim packs or to guide the panels. Place all shim packs onto their proper locations (2 per panel – approx 2’ from the corners) and bind the packs with rubber bands or tape after laser leveling etc. Once the pack has been properly located, spray the concrete and pack with inverted paint to mark its location. If the shim pack is displaced, it can be easily relocated if the impression is on the curb. If there are openings (windows) in the panel, these will fill up with rainwater and debris. If the panel is near the edge of the slab or building, once lift starts the water will wash the shim pack when the panel releases.

18. UNDER NO CIRCUMSTANCES SHOULD WORKERS BE ON THE LEEWARD SIDE OF A LEANING PANEL. IF ADJUSTMENTS ARE REQUIRED, PLACE THE PANEL, TANG BOLTS AND BRACES, THEN LIFT THE PANEL SLIGHTLY TO MAKE YOUR FINAL ADJUSTMENTS.

19. WHEN PLACING PANELS ONTO A FOUNDATION WALL, BE VERY CAREFUL. RESTRAIN THE PANEL WITH STEEL “H” CLIPS, STEEL PLATES OR HEAVY THROUGH BOLTS AND TIMBERS TO HOLD THE PANEL FROM PIVOTING. BE VERY CAREFUL IF THE PANEL HAS TO BE ELEVATED AND REPLACES ONTO A FOUNDATION WALL. BE SURE THE FULL LENGTH OF PANEL IS BEARING ONTO THE FOUNDATION WALL. STEEL ALIGNMENT PLATES CAN BE RENTED AND PLACED WITH TANG BOLTS/TANGS.

20. Before commencing any of the lifts ensure that the power cords are long enough and not going to interfere with your crews’ safe movement. Watch out for the lift clutches and their alignment with the braces and the clutch ropes getting “jammed” between the panel

and the footing. Adjust and color mark the bales or ropes so they are used and identifiable for us in the same lift voids. Do not allow excessive rope to impede your movements and speed of placing panels safely.

21. Be sure that 1” rebar is placed onto the footing or step footings to guide the panel into position. If you are placing panels into voids, place rebar guides or block in the area to guide the panel into proper placement. **1” REBAR (2 PER PANEL) SHOULD BE PLACED AT 80 DEGREES TO PREVENT THE PANEL FROM KICKING OUT OR ROTATING.** When placing panels on a flat surface, place rebar dowels on both sides of the panel to prevent panel rotation. If the panels are being placed on shim packs, place rebar dowels on both sides of the panel or an alternate system is to place rebar dowels within the thickness of panel.

22. After the panel is elevated and plumb on the curb, square and mark the brace shoes, and commence drilling of the holes. These holes will be (4 ½” or 7” deep) governed by the tang bolt supplied. Drill using a ¾” drill bit, not 20 mm. Be sure the tang is facing the head of the tang bolt. **TAKE A PAIR OF PLIERS AND PLACE THE TANG ON THE BOLT MAKING SURE THE FLAT TANG FACES THE HEAD. TURN THE PLIERS ¼ - ½ TURN AND THIS WILL PREVENT THE TANG FROM FALLING OFF DURING THE IMPACT WITH HAMMER OR SLEDGE HAMMER. SEAT THE TANG BOLT AND PLACE WITH A ¾” IMPACT TOOL.** Preference is for a ¾” drive over a ½” drive. Wall brace bolts should be placed and torque to 150 – 175 foot pounds. Torque all tang bolts to 200 foot pounds with a torque wrench. **NEVER STACK WASHERS ON THE TANG BOLTS, IF YOU HIT REBAR, LOSE A T-13 TANG, OR BOTTOM OUT BY NOT DRILLING DEEP ENOUGH, START OVER BY REVERSING THE TANG BOLT OUT.**

23. When disengaging the lift clutches start from the bottom and work your way up the panel face. While working up the panel face, have the crane operator raise the spreader bar and keep the bales from rotating. This process will adjust the cable length, speed up the process and eliminate the possibility of the rigging and lifting bales from falling and impacting the floor or workers. **NEVER LET GO OF THE ROPES ONCE THE BALES HAVE DISENGAGED. EQUALIZE THE CABLE AND MOVE TO THE NEXT PANEL. IF A BALE ROTATES AND IS DIFFICULT TO REMOVE, HAVE THE CRANE OPERATOR RAISE THE SPREADER BAR, THIS WILL RESOLVE THE PROBLEM BY ALIGNING THE BALE VERTICALLY. START REMOVING CLUTCHES AS SOON AS THE TENSION STARTS TO RELEASE AND DO NOT ALLOW THE BALE TO ROTATE. FOREIGN OBJECTS IN THE VOID AREA USUALLY CAUSE THE BALE TO JAMB.**

24. When installing braces be sure the adjustment pin is at the bottom of the brace and the fixed end is on the panel face (brace insert). When placing the braces be sure that the adjustment pin has at least 9” – 12” of rod showing for proper negative and positive adjustment. Final adjustment can be made using a pipe wrench or #5 rebar placed into the adjustment holes near the bottom of the brace. After the final adjustments are made remove the pipe wrench or rebar. Leaving the rebar in the brace is dangerous and it is

## TILT-UP/PRE-CAST WORK PROCEDURES

best to colour code this with bright safety paint. When there are multiple braces on a panel, adjust all the braces at the same time. Adjusting one brace at a time places excessive stress points on the braces and bolts. The maximum brace skew is 10 degrees and at least 12 inches of space between the edge of concrete, control joints and other tang bolts. **BE SURE THE INNER AND OUTER PIPES ON TELESCOPING BRACED ARE ENGAGED BY THE THROUGH BOLT AND ATTACHED TO THE WALL BRACE INSERT WITH A BOLT. BE SURE TO SUPPORT BRACES THAT ARE CANTILEVERING OR HAVE A CHANCE OF DENTING OR FRACTURING UNDER THEIR OWN WEIGHT.** Always 2 braces minimum per panel.

25. Never lean a panel against a previously braced panel. Do not lay panels down once they have been lifted without prior consent of the lift engineer. The 2.5-1 S.F. is based on a one-time lift placement situation. If you have to store a panel to allow a crane to remove from the site, place the panel away from the work area vertically and secure all sides with rebar dowels. Place 2 dowels on the long side and 1 on the thickness side. For temporary placement brace panels as shown on the lift drawings. This is a difficult situation, as panel lay-out, crane placement, movement and finally building envelope may dictate panel placement. **CHECK WITH ENGINEER.**

26. All panels are designed to accommodate a certain number of braces, subsequent removal by other construction forces is prohibited. Braces should only be removed when authorized by the engineer, this is normally done when the embedded steel is welded and the steel decking is properly welded to the steel support system and providing a diaphragm resistance to structural and live loads imposed on the structure. **NEVER REMOVE BRACES WITHOUT THE PRIOR CONSENT OF THE LIFT DESIGN ENGINEER (INSPECTION). TRADES REMOVING TANG BOLTS AND BRACES AND REPLACING A TANG BOLT WITH A DRILL-IN ANCHOR DOES NOT PROVIDE THE SAME PULL-OUT LOADS AS A TANG BOLT.**

This is dangerous work, keep your head up, be alert and watch for danger to yourself and your fellow workers. “Don’t Day Dream” and if you are tired, advise your lift supervisor and change your job duties. Always maintain and escape route that includes for the short possible distance traveled.

Safety first - Think and work safely!

CCM Construction Ltd  
Items required on site – Tilt-Panel Lift Day

1. Eight man crew – briefed by safety meeting
2. Crane and required rigging
3. Stamped engineers drawings
4. Burke hardware – Clutches
  - Panel wedges
  - Emergency lifts
  - Braces
  - Coil bolts
5. Two expansion ladders
6. Wrecking bars and burke bars
7. Rope
8. Quick bolts
9. Hilti drills – 3
10. Hilti bits for quick bolts
11. Wrenches for quick bolts and coil bolts
12. Necessary small tools and extension cords
13. Generator and back-up
14. Welder
15. Fire extinguisher
16. All panels laid out and clearly marked
17. Shim packs shot in level
18. Three sledge hammers
19. Braces on upper panels
20. All braces pre checked for length
21. Bulkheads stripped where possible
22. Proper access for crane and approved
23. Slab cleaned off everything unnecessary

## **SECTION 4: SAFE JOB PROCEDURE – HAZARDOUS MATERIALS AND SUBSTANCES**

### **HAZARDOUS MATERIALS AND SUBSTANCES (WHMIS)**

#### **WHMIS POLICY**

CCM Construction Ltd. will comply with the Hazardous Products Act, which regulates all controlled products. The company will ensure that all controlled products used in the manufacturing processes have the correct labels and symbols, Material Safety Data Sheet (MSDS), and information and training is available to employees.

#### **MANAGEMENT**

The Management is committed to the application of the WHMIS Policy in order that all employees receive the fullest knowledge and protection in handling controlled products that may be harmful to their health. Our responsibilities shall include, but not be limited to, the following:

- Identification of controlled products
- Proper labeling and symbols
- Material Safety Data Sheet (MSDS)
- Controlled products inventory
- Education and Training
- Proper storage facilities
- Required engineering controls
- Safety systems and devices
- Personal Protective Equipment

#### **SUPERVISORS**

The Supervisors will monitor the day to day use of controlled products. They will ensure that employees are wearing the appropriate personal protective equipment, using the product in accordance with directions, checking the storage and usage conditions, regular inventory of controlled products, etc. Their responsibilities will include the education and training of new employees about the controlled products at the CCM Construction site, as well as any remedial training to improve employee awareness. Supervisors will check the MSDS's on a frequent basis and advise the Office Coordinator when an up-date is needed.



## **SECTION 4: SAFE JOB PROCEDURE – HAZARDOUS MATERIALS AND SUBSTANCES**

### **EMPLOYEES**

All employees shall follow the established procedures for the use, handling, and storage of the controlled products at the workplace. They will wear the recommended personal protective equipment and use the product according to directions and for the purposes stated. Their responsibility shall include using the labels and MSDS's to remain informed of correct procedures for the use, handling, and storage of the controlled product, and they will be familiar with the steps to be taken in the event of a spill or an exposure.

### **SUB-CONTRACTORS**

Every Sub-Contractor shall provide a list of controlled products that they will be bringing into the workplace. They will be responsible for correct labeling, the providing of a MSDS, and the education and training of their employees in the proper usage of the product. The Sub-Contractor will ensure the proper storage of the controlled products when not in use and will remove them from the workplace when the work is complete. An inventory will be documented and provided to the Superintendent or the Safety Professional.

The Sub-Contractor shall erect barricades, warning signs, or control entry to areas where controlled products are being used and exposure to other workers may be hazardous. They shall supply all Personal Protective Equipment or safety devices to ensure that their employees are protected.

### **TRANSPORTATION OF DANGEROUS GOODS POLICY (TDG)**

CCM Construction shall require any employee who transports or acts as a warehouse person with respect to TDG regulations to have the correct certification. The company will supply the proper placards and documentation as required by the regulations.

Sub-Contractors will be required to comply with all TDG regulations.

### **CONTROLLED PRODUCT STORAGE**

CCM Construction shall provide proper storage facilities for all controlled products in an area where they will not pose a hazard to employees, the public, or the environment. The company will supply appropriate working containers to be used when the original shipping container for the controlled product is not suitable for the work process. The Supervisor, the Employee, and the Sub-Contractor will ensure that all controlled products decanted to working containers have a workplace label meeting the requirements of the legislation.



## **SECTION 4: SAFE JOB PROCEDURE – EQUIPMENT LOCK-OUT PROCEDURE**

### **EQUIPMENT LOCKOUT PROCEDURE**

1. The employee will identify the equipment that is to be locked out.
2. The employee will determine which energy source will need to be isolated and locked out. After the source has been located, the worker will cut power to the equipment to be worked on. The worker will then check to see if the equipment can start or operate.
3. The employee will place a locking device in such a manner as to prevent the equipment from being energized. This lock shall be individual to the worker and only that worker shall have the key to remove the locking device.
4. After the lock is in place, the worker will check that the equipment cannot be operated.
5. The worker shall complete the necessary work on the equipment.
6. Upon completion of the work, the employee shall remove the locking device and re-energize the equipment.
7. At such time as more than one employee is to work on the equipment, each worker shall place a lock on the equipment. Each locking device shall be placed in a manner to prevent the re-energizing of the equipment should one of the locks be removed.
8. Locking devices shall remain in place until all work is complete and it is safe to re-energize. If two shifts are to work on the same equipment, the incoming shift must put their locks in place before the outgoing shift removes theirs. Should this not be practical, the foreman shall put a lock in place to cover the shift change.
9. In the event a lock remains in place and the worker cannot be located to remove it, the foreman may do so using the master or spare key. The following rules for this procedure shall apply:
10. The foreman shall maintain a written record of the reasons for the lock removal and their attempts to locate the worker who placed the lock.
11. The foreman must ensure that no worker will be endangered by the lock removal and that the equipment is safe to operate. The worker shall also receive timely notification that the lock has been removed.
12. All locks and locking devices shall be provided by the employer. Each employee shall have a key to their lock only. The foreman shall have a spare key or master for all locks to be used only when necessary and fully documented.

## **SECTION 4: SAFE JOB PROCEDURE – WORKING NEAR HIGH VOLTAGE POWERLINES**

### **WORKING NEAR HIGH VOLTAGE OVERHEAD POWER LINES**

Please review and adhere to the following procedure when planning and performing work near overhead power lines:

1. Before work begins, examine the work area to establish that the safe limits of approach distances to overhead power lines contained in Table 1 can be maintained.
2. Contact the operator of the power line to determine the operating voltage of the line and confirm the safe approach distance.
3. Do not allow equipment or objects to approach the overhead power line closer than the safe limit of approach specified.
4. If work is being carried out near the safe limit of approach, assign a worker to act as an observer to ensure that the required distance is maintained.
5. Request assistance from the power line operator if the work must be performed at a distance that is less than those specified in Table 1.
6. Do not place materials under or adjacent to the overhead power line if it reduces the clearance above ground required by OH & S regulations. Contact the power line operator for assistance to determine the required clearance between the power line and the ground.
7. Do not allow excavations to reduce the support required for power poles. Contact the power line operator to determine support required. Request locations in case of grounding grids buried at the base of power poles.
8. Where travel by heavy equipment and or deliveries are required to travel under an overhead power line, a hard barrier must be installed to comply with clearance requirements.
9. Warning signage must be installed to identify high voltage levels and clearance requirements.

**SECTION 4: SAFE JOB PROCEDURE – WORKING NEAR HIGH VOLTAGE  
POWERLINES**

**TABLE 1**

SAFE LIMIT OF APPROACH DISTANCES FROM OVERHEAD POWER LINES  
FOR PERSONS AND EQUIPMENT

<b>Operating Voltage of Overhead Power Line Between Conductors</b>	<b>Safe Limit of Approach Distance for Persons and Equipment</b>
0 – 750 V Insulated or Polyethylene Covered Conductors (1)	300 mm
Above 750 V Insulated Conductors (1) (2)	1.0 m
0 – 40 kV	3.0 m
69 kV, 72 kV	3.5 m
138 kV, 144 kV	4.0 m
230 kV, 240 kV	5.0 m
500 kV	7.0 m

- NOTES:**
- (1) Conductors must be insulated or covered throughout their entire length to comply with these groups.
  - (2) Conductors must be manufactured to rated and tested insulation levels.

## **SECTION 4: SAFE JOB PROCEDURE – RE-FUELLING PROCEDURE**

### **RE-FUELLING PROCEDURE**

#### **Fuelling Areas**

Fuelling or servicing of any mobile Contractors equipment or vehicle within 100 m of a watercourse shall be prohibited unless site-specific conditions allow for complete containment of fuel losses. Trucks and other machinery shall be fuelled in an area of significant clay till or on a concrete surface.

#### **Fuelling Fire Code**

Fuel dispensing shall be in compliance with the local Fire Code Regulations.

#### **Fuel Loss Containment**

CCM and associated companies shall be responsible for ensuring complete containment of all fuel losses, regardless of how small, experienced during fuelling or servicing of equipment.

#### **Fuel Containers**

Fuel supply containers shall be sealed, self-contained units with tight-fitting fuel dispensing connections.

### **FUEL TANK SPILL CONTAINMENT SPECIFICATIONS**

The following dimensions can be applied to either berm or catch basin Contractors. Where possible the berm must be constructed of impervious soils, and the top must be 3 foot wide. It is also recommended that the interior of the basin be lined with a tarp or plastic, etc.

Containment volume (must equal) = 120% of tank capacity.

## **SECTION 4: SAFE JOB PROCEDURE –TRAFFIC CONTROL PROCEDURE**

### **TRAFFIC CONTROL PROCEDURE**

CCM Construction Ltd. shall maintain strict adherence to vehicular/visitor entry protocol with regards to all its construction sites as a method of securing maximum safety precautions for all employees.

#### **Access and Egress to Site**

Roads entering and leaving the site will be duly posted with CCM Construction Ltd. vehicle warning signs. Drivers of all vehicles assigned to all projects will obey posted speed and precautionary instructions.

#### **Vehicle Entry Permits**

Other than construction vehicles and equipment required for the construction work, all other vehicles should obtain a Vehicle Entry Permit according to the client's protocol or from the OML Construction

#### **Visitors to the Site**

Shall first obtain permission from either the Client Representative (where applicable) or CCM Construction Ltd. Site Superintendent before entering the site itself. All visitors will wear the required P.P.E.

#### **Flag Persons**

Appropriate measures for regulating traffic, using qualified Flag Persons, will be instituted when necessary.

## **SECTION 4: SAFE JOB PROCEDURE –SPILL RESPONSE**

### **CHEMICAL SPILL CONTROL, CLEAN UP AND WASTE DISPOSAL**

Awareness is the first step of the preventive process. Potential problems and hazards must be recognized; following which any required corrective measures should be immediately implemented. Extra precaution must be exercised in hazardous areas to reduce the possibility of accident or mishap. Preventive measures to achieve the objective of an injury and pollution free operation include:

- Sound standards, clearly defined and disciplined operating procedures
- Introductory and ongoing training of employees.
- Adequate equipment and facilities.
- Regular maintenance programs and annual reviews of this manual.

#### **Spill Prevention**

To minimize the effect of an accidental spill the following key points must be following:

- Portable fuel tanks must be sited away from watercourses, and positioned safely and securely to prevent any possibility of rollover or external damage.
- A containment berm around the tank or a depression where equipment is fuelled must be constructed to contain 120% of tank capacity. If possible the berm or depression should be of impervious material.
- All shut-off valves on fuel tanks must be closed on completion of equipment fuelling.
- All used toxic or hazardous waste containers must be removed from the work site and disposed of as per Provincial Waste Management Act.
- Immediate control action must be initiated on all spills as indicated on the action steps page.

Where required, Spill Kits will be available at the Site Trailer. Spill Kits will include the following:

- Polyurethane double-booms
- Absorbent polyurethane pads
- Bagged Kitty Litter
- Garbage bags
- Clean waste drums and labels
- Protective suits, gloves and goggles



## SECTION 4: SAFE JOB PROCEDURE –SPILL RESPONSE

### PROCEDURE:

- **STOP THE PRODUCT FLOW:** - Use common sense. Act quickly, but ensure personal safety first.
- **USE PROTECTIVE CLOTHING** - Shut off pumps, close valves, etc.
- **PREVENT FIRE:** - Shut off motors, electrical circuits, naked lights, etc., in case the spilled product is flammable.
- **EXTINGUISH ANY FLAME**
- **WARN PEOPLE IN IMMEDIATE AREA:** - Evacuate, if necessary. Enforce no smoking.
- **CONTAIN THE SPILL:** - Block off drains, culverts, ditches, and small streams. Surround product with available material
- **NOTIFY CCM Construction OFFICE:** - As soon as possible. If unable to contact personnel or office, notify local police authorities (See phone numbers attached)
- **CCM Construction WILL NOTIFY APPLICABLE GOVERNMENT AGENCIES AS PER STANDARD OPERATING PROCEDURE FOR REPORTABLE INCIDENTS:** - Ministry of Transport, Department of Fisheries and Oceans, Waste Management Branch, Environmental Protection Service, Provincial Emergency Program (above) and if applicable, Municipal authorities. Ministry of Health has to be involved for spills around community water intakes.
- **OBTAIN REQUIRED ASSISTANCE** from: - Company and/or contractor personnel. Fire Department, Police Department, Municipal or Public Works Department (if applicable.)

The Material Safety Data Sheet (MSDS) for the chemical or product in question should be consulted if spill clean up and disposal are necessary. If chemicals on site are deemed hazardous, ensure an appropriate spill kit is readily available.

## **SECTION 5: CCM GENERAL SAFETY RULES**

1. All workers will follow the General Safety Rules and give every aid to the safe operation of the work site.
2. Every employee shall report for work free from physical or mental impairment that could endanger themselves or others.
3. All workers are to report any unsafe working conditions that they may encounter. All hazardous areas are to be clearly marked to alert all workers of the danger.
4. Ignorance of the General Safety Rules is no excuse for violating them.
5. Any worker who is unsure of the safe working procedures for a particular job, ask your supervisor.
6. No worker shall have alcohol or illegal drugs at work, or work at any CCM Construction work site while intoxicated. Any violation of this rule may result in the firing or the termination of contract with that worker.
7. Firearms and other weapons are not permitted at any CCM Construction work site at any time.
8. No employee shall engage in any improper activity or behavior, which could cause or constitute a danger to themselves or other workers. This includes running, horseplay, fighting, etc.
9. All accidents and injuries are to be reported to the Site Safety Officer and the Site Superintendent immediately. Every incident that has the potential to cause damage or injury shall be reported. All accidents and injuries shall be investigated. Failure to report accidents, injuries, or incidents may result in corrective action being taken up to and including termination (See Section 11 – Incident Reporting and Investigation).
10. All workers are to conduct themselves with a concern for safety at all times.
11. Personal Safety equipment is to be worn at all times by all workers on any CCM Construction work site (See Section 6 – Personal Protective Equipment).
12. All equipment will be routinely inspected by employees before its use to ensure it is in proper working order. Do not use any defective equipment. Report the equipment to the Site Superintendent immediately (See Section 7 – Preventative Maintenance and Inspection).

## SECTION 5: GENERAL RULES

13. Workers may only operate equipment they are authorized to use.
14. All equipment shall be operated in a safe manner on CCM work sites. Care shall be taken to avoid hazardous areas and ensure the safety of other workers in the area. Only authorized personnel shall operate mobile equipment, specialized machinery or power hand tools. No employee shall work with or repair any equipment or machinery unless they are qualified or have received the necessary training to perform the work safely.
15. While equipment is in operation, workers near the equipment shall ensure that they work at a safe distance from the equipment (within range of moving load/part).
16. All workers will be provided a Safety Manual, which they must read.
17. All working areas shall be kept free from all unnecessary debris and waste material. Good housekeeping is to be maintained on the job site at all times. Everyone shall assist with the cleanup of the workplace as directed to avoid the hazardous accumulation of refuse or waste material.
18. Workers are expected to attend safety meetings on a regular basis.
19. Any violation of the General Safety Rules may result in a disciplinary letter from CCM Construction to the employee. Repeated violations may result in the dismissal of the employee.
20. Animals on the loose are not permitted on any CCM Construction work site.
21. Any employee required to work at a height of three (3) metres or more (or high risk of injury from a lower height) shall wear the appropriate fall protection equipment and follow the specific fall protection plan for that workplace as detailed in Section 4 – Fall Protection Code of Practice).
22. Employees shall identify, handle, and store hazardous materials in accordance with the Hazardous Products Regulations (WHMIS). Any employee who is required to handle products that fall under the Transport of Dangerous Goods (TDG) legislation shall have the necessary certification. (See Section 4 – Hazardous Materials and Substances)
23. In the event first aid is required, the First Aid Attendant has the complete authority of the treatment of the injured worker until responsibility for treatment is accepted by a person with a higher equivalency of first aid certification.
24. Notify the Superintendent in the event of a fire extinguisher being discharged, accidental or otherwise. Fire extinguishers must be recharged immediately after they are used.

## **SECTION 5: GENERAL RULES**

25. Employees shall observe all safety guards, barriers, signs, and markings. No employee shall remove a safety device or render it inoperable, unless the hazard has been eliminated.
26. No employee shall work alone unless a regular method of periodic checks is established. The method of checking shall be clearly understood by the employee, the person doing the checking and approved by the Site Superintendent in writing (See Section 3 – Working Alone Safe Work Practice).
27. Employees shall be aware of all emergency signals and evacuation procedures.
28. All rigging will be done by an employee who is certified in rigging procedures and regulations.
29. Any scaffolding must conform to provincial occupational health and safety regulations as to the method of construction and quality of material.
30. CCM Construction has a 0 tolerance policy for harassment and violence. See Appendix D for our complete anti-harassment policy.

### **DISCIPLINARY ACTION POLICY**

It is CCM Construction’s philosophy that all employees are to be trained in proper safety procedures and employees are expected to follow and adhere to all aspects of the Safety Program. The close observance of all Federal, provincial, state, local and client rules and regulations will be monitored at all times.

If there is an infraction of these rules, regulations or the CCM Construction Safety Program, the following disciplinary action will be taken:

#### **I                    Minor Infraction**

Definition: Any infraction of government, corporate, or client rules that does not have the potential to cause serious damage or injury.

1 <sup>st</sup> offense	verbal warning
2 <sup>nd</sup> offense	written warning
3 <sup>rd</sup> offense	time off without pay / termination
4 <sup>th</sup> offense	termination

#### **II                    Major Infraction**

Definition: Any infraction of government, corporate, or client rules or legislation that does have the potential to cause serious damage or injury.

1 <sup>st</sup> offense	time off without pay / termination
2 <sup>nd</sup> offense	termination

SECTION 5: GENERAL RULES



\_\_\_\_\_  
Date

**Safety Infraction by Employee**

- 2<sup>nd</sup> Offense Warning       3<sup>rd</sup> Offense Warning       4<sup>th</sup> Offense Warning

You, \_\_\_\_\_, failed to observe the following safety rules:  
Employee Name

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

- This is the second safety violation.  
 This is the third safety violation: suspension without pay. Duration: \_\_\_\_\_  
 This is the third safety violation: termination.  
 This is the fourth safety violation: mandatory termination.

\_\_\_\_\_  
Employee Name

\_\_\_\_\_  
Employee Signature

\_\_\_\_\_  
Safety Representative Name

\_\_\_\_\_  
Safety Representative Signature

\_\_\_\_\_  
Superintendent/Foreman Name

\_\_\_\_\_  
Superintendent/Foreman Signature

## SECTION 6: PERSONAL PROTECTIVE EQUIPMENT

It is the policy of this company to have all employees use the proper PPE as follows:

1. All employees shall wear protective footwear which meets provincial occupational health and safety (Alberta and Saskatchewan: Occupational Health and Safety Act, BC: Workers Compensation Act) and Canadian Standards Association (CSA) requirements.
2. All employees shall wear protective headgear which meets provincial occupational health and safety and Canadian Standards Association (CSA) requirements.
3. All employees shall wear approved hearing protection in posted areas. Everyone is encouraged to use hearing protection at all times. Ear protection is available from the Superintendent or the Safety Rep.
4. All employees shall wear approved eye protection, appropriate to the task being performed, in posted areas. Everyone is encouraged to use the eye protection at all times. Protective eyewear is available from the Superintendent or the Safety Rep.
5. Every employee shall wear respiratory protection in posted areas or when required by the work process. Dust masks and respirators are available from the Superintendent or the Safety Rep.
6. Employees shall wear hand protection where required by the work process. Specific protection for work processes involving the use of controlled products, or agreed upon by the company, will be available through the Superintendent or the Safety Rep.
7. All employees shall wear reflective vest or clothing where required. The vests are available through the Superintendent or the Safety Rep (e. g. working around machines).
8. Any employee required to work on, over, or near the water shall wear the appropriate floatation vest or clothing. This safety equipment will be supplied by the Supervisor or Safety Rep when needed.
9. Employees shall wear clothing appropriate to the job or work process to protect themselves from hazards to which they may be exposed (eg. heat, cold).
10. Any employee required to use a chainsaw shall wear protective face shields and chainsaw pants available through the Superintendent or the Safety Rep.

All PPE used by this company shall conform to provincial occupational health and safety and Canadian Standards Association (CSA) requirements. The company shall supply all other required specialty PPE. The company and employees shall maintain all specialty PPE according to manufacturer's instructions.

---

Project Manager, print name and sign

---

Date

## SECTION 6: PERSONAL PROTECTIVE EQUIPMENT

### Selection, use and maintenance

Personal protective equipment must:

- Be selected and used in accordance with the manufacturer's instructions and recognized standards, and provide effective protection,
- Not in itself create a hazard to the wearer,
- Be compatible, so that one item of personal protective equipment does not make
- Another item ineffective, and
- Is maintained in good working order and in a sanitary condition.

### Head Gear

SAFETY HEADGEAR MUST MEET THE REQUIREMENTS OF:

- a) *CSA Standard, Industrial Protective Headwear,*
- b) *ANSI Standard, American National Standard for Personnel Protection - Protective Headgear for Industrial Workers Requirements,*
2. If a worker may be exposed to an electrical hazard the safety headgear must have an appropriate non-conductive rating.
3. Chin straps or other effective means of retention must be used on safety headgear when workers are climbing or working from a height exceeding 3 m (10 ft), or are exposed to high winds or other conditions that may cause loss of the headgear.
4. Damaged headgear or headgear with missing, mismatched, or modified components must be removed from service.

### Footwear

A WORKER'S FOOTWEAR MUST BE OF A DESIGN, CONSTRUCTION AND MATERIAL APPROPRIATE TO THE PROTECTION REQUIRED.

1. To determine appropriate protection under subsection (1) the following factors must be considered: slipping, uneven terrain, abrasion, ankle protection and foot support, crushing potential, temperature extremes, corrosive substances, puncture hazards, electrical shock and any other recognizable hazard.
2. If a determination has been made that safety protective footwear is required to have toe protection, metatarsal protection, puncture resistant soles, dielectric protection or any combination of these, the footwear must meet the requirements of
  - a) *CSA Standard CAN/CSA, Protective Footwear, or*

## SECTION 6: PERSONAL PROTECTIVE EQUIPMENT

b) (b) *ANSI Standard*,

3. A worker must wear the appropriate footwear and ensure that it is in a condition to provide the required protection.
4. If it is not practicable for workers in the performing arts to wear safety footwear meeting the requirements of subsection (3) other effective measures must be taken for protection from injury.

### **Slippery surfaces**

1. If a workplace has slippery surfaces, appropriate non-slip footwear must be worn.
2. Caulked or other equally effective footwear must be worn by workers who are required to walk on logs, poles, pilings or other round timbers.

### **Eye and Face Protection**

1. *A worker must wear properly fitting safety eyewear* appropriate to the conditions of the workplace if handling or exposed to materials, which are likely to injure or irritate the eyes.
2. Properly fitting safety eyewear appropriate to the conditions of the workplace must be worn if a worker, or
  - a) Has 20/200 or less vision in either eye, or is blind in either eye, or
  - b) Is working on or testing electrical equipment energized at a potential greater than 30 volts

### **Prescription safety eyewear**

1. Prescription safety eyewear must meet the requirements of *CSA Standard CAN/CSA-, Industrial Eye and Face Protectors*, or other standard acceptable to the Legislation.
2. Prescription glass lenses must not be used if there is danger of impact unless they are worn behind impact rated goggles or other eye protection acceptable to the Legislation.
3. If the use of polycarbonate or plastic prescription lenses is impracticable, due to the conditions of the workplace, and there is no danger of impact, workers may use prescription lenses made of treated safety glass meeting the requirements of *ANSI Standard, Practice for Occupational and Educational Eye and Face Protection*, or other standard acceptable to the Legislation.



## SECTION 6: PERSONAL PROTECTIVE EQUIPMENT

### **Side-shields**

Safety eyewear must be fitted with side-shields when necessary for the safety of a worker.

### **Face protection**

1. If there is a risk of face injury, suitable face protection must be worn.
2. Face protectors and non-prescription safety eyewear must meet the requirements of
  - a) *CSA Standard CAN/CSA, Industrial Eye and Face Protectors,*
  - b) *ANSI Standard, Practice for Occupational and Educational Eye and Face Protection,* or
  - c) Other standard acceptable to the Legislation.

### **Contact lenses**

Adequate precautions must be taken if a hazardous substance or condition may adversely affect a worker wearing contact lenses.

### **Hearing Protection**

#### **When required**

If it is not practicable to reduce noise levels to or below the exposure limits, IDL Projects Inc. will:

- a) Reduce noise exposure to the lowest level practicable,
- b) Provide and maintain hearing protection to the affected workers, and
- c) Ensure that the hearing protection is worn effectively.

### **Selection and maintenance**

If hearing protection is required, IDL Projects Inc. and associated companies will provide and maintain the hearing protection to workers, in accordance with *Standard, Hearing Protectors and its appendix,* or other standard acceptable to the Legislation.

**Note:** The selection criteria in *CSA Standard* include daily noise exposure of the worker, worker hearing ability, communication demands on the worker, and use of other personal protective equipment, temperature and climate, and physical constraints of the worker or work activity. See for requirements on protective equipment other than hearing protection.

## SECTION 6: PERSONAL PROTECTIVE EQUIPMENT

### **Hi-Visibility Vests and Distinguishing Apparel**

1. A worker directing traffic must wear
  - a) High visibility apparel meeting the Type 1 or Type 2, *High Visibility Garment* or other standard acceptable to the Legislation, and
  - b) Wrist bands fitted with a minimum 5 cm (2 in) wide fluorescent retro reflective strip about their entire circumference, except that wrist bands are not required for workers who direct traffic on an emergency or a temporary basis and not as part of their normal duties.
2. A worker exposed to the hazards of vehicles traveling at speeds in excess of 30 km/h (20 mph) must wear high visibility apparel meeting the Type 1 or Type 2 criteria of the standard referenced in subsection (1), or other standard acceptable to the Legislation.

A worker whose duties on the work site result in exposure to the hazards of mobile equipment must wear high visibility apparel meeting at least the Type 3 criteria of the standard referenced in subsection (1), or other standard acceptable to the Legislation.

**Respiratory Protection** – See **Respiratory Protection Code of Practice (Section 4 – Safe Work Procedures)**

## SECTION 7: PREVENTATIVE MAINTENANCE AND WORKPLACE INSPECTIONS



### PREVENTATIVE MAINTENANCE POLICY

It is CCM Construction's policy that all tools and equipment shall be properly maintained and operated so as to reduce risk of injuries to employees or damage to property as per the Alberta and Saskatchewan Occupational Health and Safety Act or the BC Workers Compensation Act (as appropriate).

The Site Superintendent shall ensure that qualified personnel according to established schedules carry out all preventive maintenance and that records are maintained.

All employees shall regularly check all tools and equipment that they are working with, and shall take out of service any tools or equipment that poses a hazard due to a need for repair.

---

Name and Signature

---

Date

### INSPECTION POLICY

The prevention of accidents and injuries can best be achieved by regular Safety Inspections, which identify unsafe conditions and work practices. Our objective is to examine all aspects of the company operation and take the corrective action necessary to rectify the deficiencies that are discovered.

---

Name and Signature

---

Date

### WORKPLACE INSPECTIONS

The Project Manager and/or Site Superintendent shall undertake a complete inspection of the workplace on a minimum monthly basis. The inspection shall cover the entire workplace and all operations that are contained therein as per the Alberta or Saskatchewan Occupational Health and Safety Act or the BC Workers Compensation Act (as appropriate).

Any deficiencies noted during the inspection should be referred to the Site Superintendents/Sub-Contractor Supervisor for that area for immediate correction. The deficiency should be categorized as to the hazard rating and a completion date assigned. A follow-up check should be planned at this time. The hazard classes are as follows:

- **Imminent Danger** - A condition or practice with the potential for permanent disability, loss of life or body part, and/or extensive loss of structure, equipment, or material.

## SECTION 7: PREVENTATIVE MAINTENANCE AND WORKPLACE INSPECTIONS



- Serious - A condition or practice with the potential of serious injury or illness (resulting in temporary disability) or property damage that is disruptive.
- Minor - A condition or practice with potential for minor (non-disabling) injury or illness or non-disruptive property damage.
- All deficiencies will be corrected in order of their severity.

In the instance that there is an Accident Investigation or Near-Miss Investigation, the Project Manager shall go over expectations with the Site Safety Representative prior to the investigation and he shall also go over the results and any recommendations with both the Site Safety Representative and the Superintendent.

## SECTION 7: PREVENTATIVE MAINTENANCE AND WORKPLACE INSPECTIONS

### WORK STATION INSPECTIONS

All employees shall complete an inspection of their immediate working area and tools/equipment prior to the start of their shift. This will include checking the operation of all machinery, personal protective equipment and other safety devices, as well as housekeeping, etc. Any deficiencies will be documented and corrected before to commencing work or if no immediate danger is posed, as soon as practical.

At a minimum, the following list of equipment and tools shall be inspected and maintained on a monthly basis or as required:

1. Scaffolds and ladders
2. PPE – Respirators, glasses, Fall Protection
3. Hoisting and rigging
4. Hand and power tools
5. Site fencing
6. Hoarding
7. Heating equipment
8. Excavations – barricades, slopes, signage, etc.
9. Lighting requirements
10. Electrical wiring and cords
11. Explosive actuated tools
12. Fire Protection equipment - Fire Extinguishers, sprinklers, alarms, etc.
13. First Aid Kit and equipment
14. Elevators, escalators, man lifts
15. Ventilation systems
16. Chemical storage
17. Warning signs, labels
18. MSDS's
19. Mobile Powered Equipment – Forklifts, Bobcats, Cranes, etc.
20. Generators



## SECTION 7: PREVENTATIVE MAINTENANCE AND WORKPLACE INSPECTIONS

### **MOBILE EQUIPMENT INSPECTIONS**

Operators of mobile equipment should make a complete check of their equipment prior to the start of shift and as often thereafter as they feel necessary. No employee, asked to operate a piece of equipment, should commence work without a check of that equipment.

All deficiencies should be reported to the Supervisor immediately. Any equipment that poses an imminent danger to the operator or other employees shall be locked out until the problem is corrected.

Logbooks are required in BC and Alberta but if no provincial legislation requirements exist for a logbook, the employer may require that an equipment inspection report be submitted on a daily basis. A sample of the type of report that can be used is shown on the following page.

**MOBILE EQUIPMENT REPORT**

**EQUIPMENT NAME / NUMBER:** \_\_\_\_\_

EQUIPMENT PART / FUNCTION	Pass	Fail	EQUIPMENT PART / FUNCTION	Pass	Fail
Engine Oil			Horns and Signals		
Hydraulic Oil			Forks and Masts		
Other Fluids			Chain Drives		
Belts and Hoses			Seats and Belts		
Tires			Steering and Controls		
Lights			Muffler and Exhaust		
Body			Brakes		
R.O.P.S.			Emergency Equipment		
Mirrors			Operations		
Gauges and Indicators					

**COMMENTS:** \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**OPERATOR:** \_\_\_\_\_

**DATE:** \_\_\_\_\_







**FORMWORK INSPECTION CERTIFICATE (ABOVE 3M IN HEIGHT ONLY)**  
B.C. WCB OH&S Regulation 34.28(19)

Date of Inspection: \_\_\_\_\_ Time: \_\_\_\_\_

Contractor: \_\_\_\_\_ Telephone #: \_\_\_\_\_

Project and  
Location \_\_\_\_\_

Site Telephone \_\_\_\_\_ Superintendent \_\_\_\_\_

Falsework/Formwork Area  
Inspected \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Latest F/W Erection  
Drawing \_\_\_\_\_  
\_\_\_\_\_

Reshore Plans Applicable According to  
Design \_\_\_\_\_  
\_\_\_\_\_

Remarks (Not to be used as a Deficiency  
List) \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Scheduled Date of Concrete  
Placement \_\_\_\_\_

**CERTIFICATION**

This is to certify that in accordance with B.C. O.H. & S. Reg. 34.28(19), the above noted formwork and reshores have been inspected and found to be substantially in accordance with the latest approved erection drawings and all supplementary information and are ready for placement of concrete.

Inspected and Approved by

\_\_\_\_\_ (Signature)

\_\_\_\_\_ (Date)      Seal/Stamp

NOTE: If concrete placement is postponed beyond the original scheduled date, the certifying engineer must be notified and the certificate revalidated.

## Contractor’s Twice Weekly Safety Compliance Checklist

Inspection checklists to be completed and filed by Contractor twice a week. Copies to be faxed or emailed to CCM’s office.

Project Name:  
 Safety Representative:  
 Sub-contractors Onsite:

Site Supervisor:  
 Contractor Name:  
 Inspection Date:

Items to be considered during inspection														
#	Item Checked	✓	✘	N/A	#	Item Checked	✓	✘	N/A	#	Item Checked	✓	✘	N/A
<b>1.0</b>	<b>Posted Documentation</b>				<b>6.0</b>	<b>Fire</b>				11.2	Safely Used			
1.1	Inspection Reports				6.1	Extinguishers present and appropriate				11.3	Explosive actuated tools inactive			
1.2	OHS Act and Regulations				6.2	Extinguishers inspected monthly				<b>12.0</b>	<b>Contaminants</b>			
1.3	“Contractor” Contracting Corp. H&S Policy				6.3	Sprinkler system installed				12.1	Dusts			
1.4	Emergency Response Procedures				6.4	Fire suppression available				12.2	Gases			
1.5	Emergency phone numbers				6.5	Equipment accessible				12.3	Fumes			
1.6	Meeting minutes				<b>7.0</b>	<b>Equipment</b>				12.4	Liquids			
<b>2.0</b>	<b>First Aid</b>				7.1	Manuals available				12.5	Bulk solids			
2.1	Supplies available				7.2	Equipment inspected before use				<b>13.0</b>	<b>Physical Hazards</b>			
2.2	Incident report forms onsite				7.3	Exposed parts guarded				13.1	Noise			
<b>3.0</b>	<b>Personal Protective Equipment</b>				7.4	Equipment in good condition				13.2	Radiation			
3.1	Hard hats at all times				<b>8.0</b>	<b>Storage</b>				13.3	Electrical			
3.2	Steel toe shoes at all times				8.1	Material away from hazards				<b>14.0</b>	<b>Other</b>			

3.3	Safety glasses at all times			8.2	Safe stacking practices			14.1	Crane, hoisting and rigging		
3.4	High visibility clothing at all times			8.3	Material unlikely to fall			14.2	Work at heights		
3.5	Skin protection, if applicable			8.4	Compressed gases secured			14.3	Platforms/equipment inspected before use		
3.6	Hearing protection, if applicable			8.5	Flammables/combustible separate			14.4	Platform/equipment in good condition		
3.7	Fall arrest for work at heights			<b>9.0</b>	<b>Toxics</b>			14.5	Excavations		
3.8	Respirator, if applicable			9.1	Corrosives handled appropriately			14.6	Drinking fountains available		
<b>4.0</b>	<b>Housekeeping</b>			9.2	Flammables free from ignition source			14.7	Washrooms available		
4.1	No slip/trip/fall hazards			<b>10.0</b>	<b>Confined spaces</b>			<b>15.0</b>	<b>Other:</b>		
4.2	Area cleaned following work			10.1	Entry permit available			15.1	Other:		
4.3	Floors/surfaces free of obstructions			10.2	Inspection prior to entry			15.2	Other:		
<b>5.0</b>	<b>Facilities</b>			10.3	Emergency plan			15.3	Other:		
5.1	Lighting adequate			10.4	Adequate ventilation			15.4	Other:		
5.2	Ventilation adequate			10.5	Adequate monitoring			15.5	Other:		
5.3	Shower station available			<b>11.0</b>	<b>Tools</b>			15.6	Other:		
5.4	Eyewash station available			11.1	Inspected prior to use			15.7	Other:		

**If item identified as “x” above, complete the following table:**

Item No.	Observations	Corrective Action Taken



## SECTION 8: TRAINING AND ORIENTATIONS

### SAFETY TRAINING POLICY

Education and training are a vital component of accident prevention, legislation (Alberta and Saskatchewan Occupational Health and Safety Act, BC Workers Compensation Act) and our safety program. We will do all that is reasonably practicable to ensure all employees are competent for the task assigned. All training will be recorded and kept on file for future reference and organization of refresher training.

***EMPLOYEES must participate and apply the training received.***

- ***DO NOT attempt a job that you are not competent with or can not do safely***
- ***ASK YOUR SUPERVISOR***

At minimum, all employees will receive, and participate fully, in:

- Safety orientations for newly-hired personnel;
- Job-specific training;
- Safety training for management;
- Task-specific training and participate in **safety meetings**;
- Specialized safety and related training; and
- Refresher and update training.

All training will be documented and a copy retained on file. (See Appendix A – Training Matrix)

---

Name and Signature of Project Manager

---

Date

Example job-specific and specialized training includes:

- Superintendents, Foremen, and members of the Safety Committee with specialized training (Accident Investigation, Accident Costing, Safety Committee Responsibilities, etc.) whenever the need for such training exists.
- Level 1 First Aid training for any employee, upon prior approval, and Level 3 First Aid Training for the designated First Aid Attendant(s).
- WHMIS courses (as required) to ensure that all employees maintain the knowledge and skill levels to work effectively with hazardous materials that they may come in contact with during normal course of their employment.
- Training of all employees in the proper usage and the correct fitting of respirators and/or self-contained breathing apparatus (SCBA).

## **SECTION 8: TRAINING AND ORIENTATIONS**

- The company encourages employees to attend seminars, symposiums, and extension training and will support participation that is deemed necessary and beneficial to the Health and Safety Program.



## **SECTION 8: TRAINING AND ORIENTATIONS**

### **NEW EMPLOYEE ORIENTATION POLICY**

CCM Construction requires all employees entering our work force to know and understand their responsibilities for health and safety prior to commencing employment. We believe it is critical that each and every individual “learns safety” in order to develop the safe work practices and attitudes necessary to protect themselves and their fellow employees from injury within the work environment. Every new employee, and those returning after a lengthy absence, will be given a safety orientation conducted by the job Site Superintendent that includes, but is not limited to, the following:

- Introduction of the company Occupational Health and Safety Policy. Location of the Health and Safety Manual for easy reference.
- Review of general safety rules and regulations.
- Accessing and review of Specific Safe Work Procedures.
- Review of employee responsibilities and methods of accountability.
- Location of First Aid facilities and introduction to First Aid Attendant and Safety Rep.
- Reporting of accidents and injuries and participation in subsequent investigations.
- Orientation to company requirements under the Workplace Hazardous Materials Information System (WHMIS). Location of working and storage areas of any products covered by this legislation.
- Requirements for personal protective equipment and other safety devices.
- Coverage of the employee involvement in regular safety meetings, workplace inspections, workplace housekeeping and hazard reporting.
- Review of emergency procedures and evacuation procedures. Location of fire extinguishers and other emergency equipment.
- Completion of a written test to check the employee understands the safety orientation material.

\*\*\* The completed “Employee Orientation” and “Safety Quiz’s” are to be kept in the job site manual and be available for review by the Project Manager. They are to be conducted prior to the first paycheque being issued.

**SECTION 8: TRAINING AND ORIENTATIONS**

**NEW EMPLOYEE ORIENTATION CHECKLIST**

Name: \_\_\_\_\_ Hire Date: \_\_\_\_\_

Date: \_\_\_\_\_

Topics Covered: Company Safety Policy \_\_\_\_\_

General Safety Rules \_\_\_\_\_

Employee's Responsibilities \_\_\_\_\_

**Personal Protection Equipment**

Employee Provided:

CCM Provided (when required)

Hard Hat \_\_\_\_\_

Safety Glasses \_\_\_\_\_

Gloves \_\_\_\_\_

Hearing Protection \_\_\_\_\_

Safety Boots \_\_\_\_\_

Respiratory Protection \_\_\_\_\_

Clothes for heat/cold \_\_\_\_\_

Safety Belts/Lifelines \_\_\_\_\_

Fire Retardant Clothing \_\_\_\_\_

Reflective Vests \_\_\_\_\_

other (task specific) protective clothing \_\_\_\_\_

**Safe Work Practices:**

**Safe Work Procedures:**

Ladders \_\_\_\_\_

First Aid \_\_\_\_\_

Vehicles \_\_\_\_\_

(location of facilities, calling attendant)

Excavation \_\_\_\_\_

Fall Protection \_\_\_\_\_

Scaffolding \_\_\_\_\_

Crystalline Silica Hazards \_\_\_\_\_

Power Tools \_\_\_\_\_

WHMIS \_\_\_\_\_

Housekeeping \_\_\_\_\_

(training and location of information)

High Voltage \_\_\_\_\_

Lockout System \_\_\_\_\_

Emergency Numbers/Procedures \_\_\_\_\_ Reporting Accidents \_\_\_\_\_

Safety and Tool Box Meetings \_\_\_\_\_ Reporting unsafe acts/conditions \_\_\_\_\_

Fire Extinguisher locations \_\_\_\_\_ Safety Quiz \_\_\_\_\_

Hazard Assessments/Job Safety Analysis \_\_\_\_\_

1. Do you have A valid First Aid Ticket Y / N

If Yes: Certificate # \_\_\_\_\_ Level 1, 2, 3(circle) Expiry date: \_\_\_\_\_

2. Do you have WHMIS Training Y / N

3. Do you have a power actuated Tool Certificate Y / N

4. Do you have a Hearing Test Card Y / N

5. Do you know how to use a fire extinguisher? Y / N

6. Do you understand working safely is a condition of employment? Y / N

7. Do you understand CCM Construction's Safety Program? Y / N

8. Do you understand that you have the right and responsibility to refuse unsafe work? Y/N

9. I have been given Fall Protection Plan training Y / N

10. Do you understand what to do prior to starting a New Task Y / N

Employee Signature \_\_\_\_\_ Date \_\_\_\_\_

Superintendent/Safety Rep \_\_\_\_\_

## SECTION 8: TRAINING AND ORIENTATIONS

### EMPLOYEE RESPONSIBILITIES

CCM Construction Ltd. is committed to providing a safe work environment but to be effective, employees must assume a certain degree of responsibility. Each employee shall take reasonable care to protect their health and safety and that of their fellow employees who may be affected by their actions. Employee responsibility will include, but not be limited to, the following:

- Know and comply with all safety rules and regulations. Be accountable for unsafe work practices and procedures.
- Adhere to specific Safe Work Procedures and comply with those procedures.
- Aid in the development of task specific Job Safety Analysis's for all tasks performed on-site.
- Operate equipment only when authorized to do so and after ensuring appropriate safety devices are in place.
- Wear and maintain Personal Protective Equipment as required and use all appropriate safety devices.
- Ask questions when situations arise where the proper safety equipment or safety rules are not understood.
- Practice "good housekeeping" in the workplace at all times.
- Immediate reporting of unsafe conditions and work practices to the Foreman, the Safety Rep, or the Superintendent.
- Prompt reporting of all accidents and injuries, no matter how minor, and obtaining the necessary medical attention.
- Co-operate in accident and incident investigations to assist in determining the cause(s) and to prevent recurrence.
- Handle controlled products in accordance with WHMIS and TDG regulations.
- Report to work physically and mentally fit, free from the influence of alcohol and drugs. Inform the Supervisor of any over-the-counter or prescribed medications being taken, which may have adverse side effects.
- Attend all safety meetings or toolbox talks as required. Communicate and suggest improvements to the health and safety environment of the workplace to ensure that safety is at a maximum.

Employee Signature \_\_\_\_\_ Date\_\_\_\_\_

Superintendent/Safety Rep\_\_\_\_\_

## SECTION 8: TRAINING AND ORIENTATIONS

### NEW EMPLOYEE ORIENTATION SAFETY QUIZ

Name: \_\_\_\_\_ Date: \_\_\_\_\_

#### True or False

Circle T or F

1. It's ok to wear a hat under your hard hat. T F
2. You don't have to go to a safety meeting if you don't want to. T F
3. Its ok to leave your work area messy if you have to leave it for a while T F
4. It is necessary to assess all possible dangers before beginning any work. T F
5. Horseplay is ok on the jobsite as long as no one gets hurt. T F
6. You should report all accidents, even small ones, to the First Aid Attendant. T F

#### MUTLIPL CHOICE

Circle the correct answer. Choose only ONE answer.

7. If you are taking over the counter medicine or a prescription drug, you should:
  - a) Tell you partner to wake you if you dose off.
  - b) Inform the First Aid Attendant of your use and of any limitations that exist because of that use.
  - c) Not inform the First Aid Attendant of your use, if you don't think it will have any effect on your work.
  - d) Not take the medication while you are working.
8. If you have removed a guardrail, coverplate or barricade but have to leave the area for a few minutes:
  - a) Its okay to leave for a few minutes as long as you're coming right back.
  - b) You must replace what you have removed.
  - c) You have to place a sign up warning people.
  - d) You can leave it as long as you tell your supervisor first.
9. If your partner asks you to move a piece of equipment, can you do it?

## SECTION 8: TRAINING AND ORIENTATIONS

- a) Yes, if you have the correct certification to operate the equipment.
- b) Yes, if you know how to move it.
- c) Yes, if the safety monitor is present to make sure you do the job safely.
- d) Yes, if you've done it before.

### SHORT ANSWER

10. Who is authorized to use an explosive activated tool? \_\_\_\_\_  
\_\_\_\_\_
11. Name the CCM Construction First Aid Attendant(s) on site: \_\_\_\_\_  
\_\_\_\_\_
12. Where is the first aid station on site? \_\_\_\_\_
13. What is the site address and phone number? \_\_\_\_\_  
\_\_\_\_\_
14. What is the correct procedure to summon the First Aid Attendant in case of an accident?  
\_\_\_\_\_
15. What should you do if your partner is involved in an accident on the site?  
\_\_\_\_\_
16. Where the nearest hospital to the site? \_\_\_\_\_

## **SECTION 8: TRAINING AND ORIENTATIONS**

### **ORIENTATION QUIZ ANSWER KEY** **DO NOT PROVIDE TO EMPLOYEE**

#### **True or False**

- 1.) False
- 2.) False
- 3.) False
- 4.) True
- 5.) False
- 6.) True

#### **MULTIPLE CHOICE**

- 7.) B
- 8.) B
- 9.) A

#### **SHORT ANSWER**

- 10.) Anyone with a WCB approved certificate.
- 11.) (Answer is site specific)
- 12.) (Answer is site specific)
- 13.) (Answer is site specific)
- 14.) 3 short blasts on an air horn or car horn.
- 15.) Tell the First Aid Attendant immediately.
- 16.) (Answer is site specific)

## EQUIPMENT OPERATOR'S ORIENTATION

### EQUIPMENT OPERATORS' RESPONSIBILITIES

All personnel who operate any equipment on any CCM Jobsite must comply with the following regulations:

- Review the Site Plan PRIOR to commencing any work and note all underground, surface or above-surface obstacles such as electrical, gas, water and telephone lines in the vicinity of the area where the equipment is going to be used.
- Review provincial utility layouts (BC Hydro, BC Gas, Centra Gas, ATCO Gas, Fortis etc.) PRIOR to commencing any work.
- Walk the area with the Project Superintendent where equipment is intended to be used and familiarize with existing conditions and the above mentioned plans and layouts in the field in person.
- Complete and sign the "Equipment Operator's Orientation" form (following page) and submit it to the Project Superintendent prior to commencement of any work involving equipment.
- ***Conform to the Health and Safety Program and set a good example.***

Equipment Operator: \_\_\_\_\_ Date: \_\_\_\_\_

## EQUIPMENT OPERATOR'S ORIENTATION

LOCATION: \_\_\_\_\_ DATE: \_\_\_\_\_

EMPLOYEE: \_\_\_\_\_

COMPANY: \_\_\_\_\_

\*to be filled out by each operator PRIOR to commencing any work

THE PURPOSE OF THIS ORIENTATION IS TO FAMILIARIZE EACH EQUIPMENT OPERATOR WITH THE POTENTIAL BURIED HAZARDS ON THIS JOBSITE.

1. THIS IS TO VERIFY THAT I HAVE GONE OVER THE SITE PLAN SHOWING THE KNOWN LOCATIONS OF BURIED UTILITIES ON THIS JOBSITE. I HAVE REVIEWED THE ELECTRIC AND GAS UTILITY COMPANY UNDERGROUND LAYOUTS. IN ADDITION I HAVE WALKED IN THE AREA I AM TO BE DIGGING TODAY WITH THE PROJECT SUPERINTENDENT AND ORIENTED THESE PLANS TO THE CONDITIONS EXISTING IN THE FIELD.

SIGNED BY: \_\_\_\_\_

ACCOMPANIED BY: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

\_\_\_\_\_  
(print name)

**\*if after doing the above analysis, it turns out the digging will occur near buried electrical or gas lines, fill out the following as well:**

2. THIS IS TO VERIFY THAT I AM AWARE THAT I AM DIGGING IN THE VICINITY OF BURIED ELECTRICAL AND/OR GAS LINES AND THAT I HAVE GONE OVER THE APPROPRIATE SAFETY PROCEDURES WITH CCM CONSTRUCTION'S SITE SAFETY REPRESENTATIVE (INCLUDING HAND DIGGING IF NECESSARY).

SIGNED BY: \_\_\_\_\_

ACCOMPANIED BY: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

\_\_\_\_\_  
(print name)



## CONSULTANT AND VISITOR SAFETY ORIENTATION

**Name:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**Project:** \_\_\_\_\_

### Topics Covered:

Company Safety Policy \_\_\_\_\_

#### Safe Work Practices

General Safety Rules \_\_\_\_\_

Reporting unsafe acts/conditions \_\_\_\_\_

First Aid (facilities & attendants) \_\_\_\_\_

Emergency Numbers/Procedures \_\_\_\_\_

Fire extinguisher \_\_\_\_\_

#### Personal Protective Equipment

Hard Hat \_\_\_\_\_

Safety Boots \_\_\_\_\_

Clothes for heat/cold \_\_\_\_\_

#### CCM Provided (when required)

Hearing protection \_\_\_\_\_

Reflective Vest \_\_\_\_\_

Hazards on Site Today (areas of higher concern or special precautions)

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Consultant's Signature \_\_\_\_\_

Date: \_\_\_\_\_

Superintendent/Safety Rep \_\_\_\_\_

## **SECTION 9: SUB-CONTRACTOR MANAGEMENT AND RESPONSIBILITIES**

It is CCM's policy to ensure all sub-contractor's working for CCM have a Health and Safety Program that equals or exceeds that of CCM Construction Ltd.

The Sub-Contractor shall be aware of the CCM Construction Ltd. Program and perform all work in compliance with provincial occupational health and safety legislation and standards. They are responsible for the compliance of their employees with all company rules and legislated regulations. Sub-Contractor responsibility will include, but not be limited to, the following:

- Provide proof of registration and current good standing with the WCB to CCM Management prior to work commencement.
- Provide CCM Management with a copy of current Health and Safety Program and Safe Work Practices for review PRIOR to work commencement.
- Develop and provide CCM with a copy of task specific Job Safety Analyses for all tasks performed on-site.
- Participate in pre-contract safety meetings and workplace safety orientation programs for Sub-Contractors.
- Ensure all their employees have current hearing tests, WHMIS training, and professional certifications (if required).
- Ensure site crew attends CCM's 'Tool box' safety meetings, which will be held bi-weekly or more often as required by job conditions. If for some reason, no one is on the jobsite for CCM's meeting, each crew member will go through the minutes of the last one with the superintendent before re-commencing work on site.
- Provide all required Personal Protective Equipment and safety devices for their employees.
- Provide site specific Safe Work Procedures and Emergency Procedures as required.
- Provide proper labeling and MSDS for all controlled products that they bring to the workplace and provide copies to the Superintendent or Safety Rep.
- Conduct accident and incident investigations for any situation involving their employees and submit a copy of their investigation and recommendations to the CCM Construction Ltd.

## **SECTION 9: SUB-CONTRACTOR MANAGEMENT AND RESPONSIBILITIES**

- Notify CCM Construction Ltd. of any special hazardous procedures and ensure the work area is cordoned off to prevent incidental exposure to those hazards.
- Complete daily inspection and maintenance logs for any equipment being used and have copies of this log readily available. A copy of this form can be found in Section 7 – Preventative Maintenance and Workplace Inspections.

### **SUBCONTRACTOR FAILURE TO COMPLY**

Subcontractors must comply with all Occupational Health and Safety Legislation and requirements and follow CCM Construction's Safety Procedures. Failure to do so will result in the following:

1. Written notice of failure to comply
2. Second notice and stop work order until compliance is met
3. Termination of contract

Sub-contractor Supervisor: \_\_\_\_\_ Date: \_\_\_\_\_

**SUB-CONTRACTOR RECORD OF INSTRUCTION, TRAINING AND SUPERVISION**

All sub-contractors shall receive an orientation prior to working on site.

Sub-Contractor \_\_\_\_\_ Name: \_\_\_\_\_

Employee \_\_\_\_\_ Signature \_\_\_\_\_

Sub's Safety Rep \_\_\_\_\_ Phone # \_\_\_\_\_

Orientation topics covered: (circle yes/no)

- Hand-Out Received Yes  No  Date \_\_\_\_\_
- Responsibilities (Signed) Yes  No  Date \_\_\_\_\_
- General rules and PPE discussed Yes  No  Date \_\_\_\_\_
- Workers have all required PPE Yes  No  Date \_\_\_\_\_
- Site High Voltage Review Yes  No  Date \_\_\_\_\_
- General lock-out system review Yes  No  Date \_\_\_\_\_
- Locks issued Yes  No  Date \_\_\_\_\_
- Fall protection (plan given to CCM Super) Yes  No  Date \_\_\_\_\_
- WHMIS discussed Yes  No  Date \_\_\_\_\_
- Crystalline Silica Control discussed Yes  No  Date \_\_\_\_\_
- Reporting unsafe conditions Yes  No  Date \_\_\_\_\_
- Excavations Yes  No  Date \_\_\_\_\_
- MSDS Form Received Yes  No  Date \_\_\_\_\_
- First Aid discussed Yes  No  Date \_\_\_\_\_
- Reporting injuries Yes  No  Date \_\_\_\_\_

Other topics covered: \_\_\_\_\_  
 \_\_\_\_\_

Comments: \_\_\_\_\_  
 CCM Safety Rep: \_\_\_\_\_ Date: \_\_\_\_\_





## **SECTION 10: SAFETY MEETINGS AND COMMITTEES**

### **SAFETY MEETINGS AND TOOL BOX MEETINGS**

Supervisors will conduct regular meeting for the purposes of discussing safety with all employees. CCM Construction will hold Safety Meetings for all job site employees on a weekly basis, Wednesdays at 10:15 AM. Safety Committee meetings shall be considered in lieu of regular meetings. On complex work sites the CCM employees will participate in (in-house) bi-weekly Tool Box Meetings which will take place on Wednesday morning at the start of shift.

The Safety Rep will conduct the meeting and discussions will include safety implications of the work assignments. Minutes and attendance will be taken and forwarded to the Safety Committee and to the safety manual

Safety Meetings or Tool Box Meetings shall include:

- A safety topic related to the work site or work process
- Overview of hazard assessments and Job Safety Analysis's
- Deficiencies noted during inspections
- Open discussion of safety concerns

### **OCCUPATIONAL HEALTH AND SAFETY COMMITTEE**

The Management of CCM Construction shall maintain an Occupational Health and Safety Committee as required by WCB Regulations. Our intent is to meet the regulatory obligations and to provide an objective forum for input into our Safety Program.

The Committee shall consist of CCM's Site Superintendent, our Safety Rep and the Safety Rep for each sub-trade.

The Safety Committee shall meet when it is established, hold monthly meetings for the first 3 months, and quarterly meetings indefinitely. The Committee shall record minutes of the meetings and the minutes shall be distributed as follows:

- Safety Manual
- Committee Members
- Employee Bulletin Boards

The purpose of the Safety Committee shall include, but not be limited to, the following:

- The establishment and promotion of health and safety programs in the workplace and the provision of education and training in these programs for the information of employees

## **SECTION 10: SAFETY MEETINGS AND COMMITTEES**

- Identification of health and safety hazards and the development of corrective measures.
- The regular review of the company's safety performance.
- Communication of company safety concerns to the employees and communication of employee safety concerns to the company.
- Participation in regular inspections of the workplace, accident investigations, safety audits, and other initiatives to improve the health and safety of the workplace.

### **COMMITTEE MEMBERS**

- Attend all committee meetings
- Participate in inspections and investigations, as required
- Contribute ideas and suggestions to improve health and safety
- Participate in all aspects of review of Safety Program



**SAFETY MEETING MINUTES FORM**

**SAFETY MEETING: DATE:** \_\_\_\_\_ **TIME:** \_\_\_\_\_

**AGENDA**

**JOBSITE:** \_\_\_\_\_

- (1) REVIEW OF PREVIOUS MEETING \_\_\_\_\_
- (2) REVIEW OF INSPECTIONS/INCIDENTS \_\_\_\_\_
- (3) REVIEW OF RECENT HAZARD ASSESSMENTS \_\_\_\_\_  
 AND JOB SAFETY ANALYSIS \_\_\_\_\_
- (3) CURRENT TOPIC DISCUSSION \_\_\_\_\_
- (4) EMPLOYEE INPUT \_\_\_\_\_
- (5) DATE/TIME/TOPIC NEXT MEETING \_\_\_\_\_

**ATTENDANCE: (Have each attendee print & sign in ink)**

**COMPANY:**

(1) _____	_____
(2) _____	_____
(3) _____	_____
(4) _____	_____
(5) _____	_____
(6) _____	_____
(7) _____	_____
(8) _____	_____
(9) _____	_____
(10) _____	_____

**TOPIC OF REVIEW:**

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**EMPLOYEE INPUT:**

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**ACTION(S) TO BE TAKEN:**

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

NEXT MEETING: DATE: \_\_\_\_\_ TIME: \_\_\_\_\_

TOPIC NEXT MEETING \_\_\_\_\_

\_\_\_\_\_  
 \_\_\_\_\_

\_\_\_\_\_  
 SUPERVISOR SIGNATURE



## SECTION 11: INCIDENT REPORTING AND INVESTIGATION

Incident prevention requires the discovery, and the correction, of the root causes. In order for this to happen, all incidents must be reported so they can be investigated. Therefore, it is CCM's policy that employees and sub-contractors report all incidents as soon as they occur, including near misses, to the site superintendent or respective supervisor.

Provincial legislation requires that every employer shall inform the respective Occupational Health and Safety authorities (WCB, Workplace Health and Safety) immediately of the occurrence of any incidents which:

1. Result in a death;
2. Cause a worker to be admitted to hospital for more than two days;
3. Involve an unplanned or uncontrolled explosion, fire or flood that causes or has the potential to cause a serious injury;
4. Involve the collapse or upset of a crane, derrick or hoist;
5. Involve the collapse or failure of any component of a building or structure necessary for the structural integrity of the building or structure;
6. Involved the major release of a toxic or hazardous substance, or
7. Blasting accident required to be reported by regulation Part 21 or a diving accident required to be reported by regulation Part 24 (BC Specific).
8. Involve illegal harassment or violence as explained in Appendix D

BC WCB Occupational Health and Safety Reporting: 1-888-621-7233  
Alberta Workplace Health and Safety Contact Centre: 1-866-415-8690  
Saskatchewan Occupational Health and Safety Reporting: 1-800-667-5023

In addition, CCM Construction requires the following accidents to be reported:

- Any accident or incident that results in an injury to an employee, or has the potential to injure an employee.
- All accidents that involve the spill of any controlled product of 10 liters or more.
- All accidents that involve an inter-action between an employee and any mobile equipment.
- Any accident that results in damage to equipment or property over \$250.00.

The failure to report accidents or incidents meeting the guidelines listed above will result in the employee facing corrective action at the suspension or discharge level, dependant on the circumstances.

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Printed Name and Signature of Project Manager

---

Date

## **SECTION 11: INCIDENT REPORTING AND INVESTIGATION**

### **INCIDENT INVESTIGATION POLICY**

CCM Construction shall investigate all accidents and incidents. When an accident or incident report is received the Superintendent or the Safety Rep will determine if the investigation is to be simple or complex and then carry out the investigation.

#### ***A. Simple Investigation:***

Simple investigations of accidents and incidents will be done in the following cases:

- Damage was less than \$1,500.00.
- Injuries involving simple first aid (cuts, bruises, etc.).
- No damage or injury reported.
- No WCB claim submitted.

A simple investigation will examine the incident to look for the following:

- Nature of the accident or incident and a description of the events
- Were there any injuries and the nature of the treatment?
- What equipment and structures were involved?
- Was the employee involved trained?
- Were there safe work procedures and were they adequate?
- Were there safeguards and were they adequate?
- Were there witnesses and what did they see?
- What were the basic and contributory causes?
- What corrective measures are to be taken?

The simple investigation will be conducted by the Safety Rep. The investigation will be done immediately and a report sent to the Superintendent and the office.

#### ***B. Complex Investigation:***

Complex investigations will be done in the following cases:

- Damage was more than \$1,500.00.
- Injury involved medical aid or lost time.
- Accident involved mobile equipment or company vehicles.
- Accidents requiring reporting by provincial legislation

A complex investigation will involve all the elements of the simple investigation, and include the following:

- A detailed examination of the work area or process with photographs and diagrams. If Necessary the area will be isolated until the investigation is completed.
- Medical reports on the nature of the injuries received.
- Professional reports on the nature of the damage to equipment, structures, and materials.
- Witness interviews with detailed reports.

The Safety Rep, the Supervisor, members of the Safety Committee, and at least one Employee will conduct the complex investigation. The investigation will be done immediately and a report sent to the Management who will forward to WCB/Workplace Health and Safety if required.

## **SECTION 11: INCIDENT REPORTING AND INVESTIGATION**

### **Procedure for Incident Investigation**

- 1) Get the facts – Go through all items on the “Accident Investigation Checklist – Appendix B”.
- 2) Use the “Accident Investigation Guide – Appendix B” to draw conclusions based on the facts. Answer the questions “Who, Where, What, Why and How.”
- 3) Record your summary of facts, conclusions and recommendations on “Incident Report and Investigation” in this section.

Discuss the investigation with office personnel and at the next safety meeting.

**INCIDENT REPORT & INVESTIGATION REPORT**

**Incident number:** \_\_\_\_\_ **Report Date** \_\_\_\_\_

**Location of incident:** \_\_\_\_\_

**Date of incident:** \_\_\_\_\_ **Time:** \_\_\_\_\_ am/pm

**Type of incident:**

Near miss	<input type="checkbox"/>	First Aid	<input type="checkbox"/>	Medical Aid	<input type="checkbox"/>	Lost Time Injury	<input type="checkbox"/>
Fatality	<input type="checkbox"/>	Fire or Explosion	<input type="checkbox"/>	Spill or Release	<input type="checkbox"/>	Security (theft/trespassing)	<input type="checkbox"/>
Property or Equipment Damage	<input type="checkbox"/>	Vehicle Accident	<input type="checkbox"/>	Violence/Harassment	<input type="checkbox"/>		<input type="checkbox"/>

If lost time was recorded or Medical Aid administered, check that applicable OH&S and/or WorkSafeBC forms have been submitted

**Severity/Potential Severity of Incident:**

- Minor (first aid injury, less than 1 day downtime, small release/spill <4 litres, precautionary evacuation)
- Serious (medical aid, lost time injury 1-10 days downtime, small to moderate release/spill <100m<sup>3</sup>, small to medium controlled fire)
- Major (serious; life threatening, major damage > \$100M, 10 to 90+ days downtime, large release/spill >100m<sup>3</sup>, uncontrolled fire)

**Date incident reported:** \_\_\_\_\_ **Time:** \_\_\_\_\_ am/pm

**Reported to:** \_\_\_\_\_

**Attending Doctor and/or Medical Facility: (if applicable)** \_\_\_\_\_

**Witnesses:** \_\_\_\_\_

**Companies involved (if applicable):** \_\_\_\_\_

**Description (brief description of injury/damage sustained and how it occurred – use extra pages if required)**

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Incident Report and Investigation Cont.

**Contributing factors or cause(s):**

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**Root cause of contributing factor or cause(s):**

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**Rate of Probability of its recurrence:** Frequent  Occasional  Rare

Reason for Rating:

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What actions have or will be taken to prevent recurrence?

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Investigation by (name and title): \_\_\_\_\_ Date: \_\_\_\_\_

Follow up review by (name and title): \_\_\_\_\_ Date: \_\_\_\_\_

File Closed by (name and title): \_\_\_\_\_ Date: \_\_\_\_\_

Required actions determined and assigned.

Discussed at Staff Meeting & provided to H&S Committee for distribution and filing.

# Incident Record

Please include near misses and property damage incidents. This record is to be kept on file in the site trailer.

Jobsite: \_\_\_\_\_

Superintendent: \_\_\_\_\_

Date of Incident	Employee Name	Severity & Probability	Description of Incident	Corrective Action Taken



## **SECTION 12: EMERGENCY PREPAREDNESS POLICY**

On each job site the Project Manager, Site Superintendent and/or the Site Safety Rep. will develop a Site Specific Emergency Response Plan which includes local emergency contact numbers, the nearest hospital facilities, evacuation routes and emergency response procedures based on the specific site hazards and the Pre-Job Hazard Assessment.

Emergency Response Procedures are site and task specific and must be reviewed and revised prior to conducting high hazard work, i.e. confined space entry, working at heights, working around excavations, etc. The Emergency Response Procedures provided in the Site Specific Emergency Response Plan are outlines only.

All employees and sub-contractors are to be aware of the action required, but should follow the instructions set by the site superintendent and their supervisors.

Emergency Response Procedures will be outlined in all orientations and training provided to all designated emergency response personnel (First Aid Attendants, Man-Watches, etc.)

Emergency Response Procedures will be tested at least once during specific jobs and deficiencies will be corrected as required.

The Site Superintendent and Project Manager will determine the required emergency response equipment and type and number of fire extinguishers for each job site and ensure they are maintained and inspected monthly during the Workplace Inspection.

**SITE SPECIFIC EMERGENCY RESPONSE PLAN**

<b>SITE SPECIFIC EMERGENCY RESPONSE PLAN</b>			
<b>PROJECT NAME:</b>			
<b>PROJECT LOCATION/ADDRESS:</b>			
<b>SITE MUSTER POINT LOCATION:</b>			
<b>SITE PHONE NUMBER:</b>			
<b>EMERGENCY CONTACTS</b>	<b>NAME</b>	<b>PHONE NUMBER</b>	
<b>SITE SUPERVISOR(S):</b>			
<b>SITE SAFETY REPRESENTATIVE:</b>			
<b>NEAREST HOSPITAL/ADDRESS:</b>			
<b>AMBULANCE:</b>			
<b>AIR AMBULANCE (STARS):</b>			
<b>POLICE:</b>			
<b>FIRE DEPARTMENT:</b>			
<b>POISON CONTROL:</b>	AB – Poison Control Centre BC – Drug and Poison Information Centre SK – Poison Centre	1-800-332-1414 1-800-567-8911 1-866-454-1212	
<b>REGULATORY- LABOUR: (OCCUPATIONAL HEALTH &amp; SAFETY, WCB)</b>	AB – Workplace Health and Safety BC – WCB SK – WorkSafe Other:	1-866-415-8690 1-888-621-7233 1-800-667-7590	
<b>REGULATORY –ENVIRONMENT (REPORTABLE SPILL):</b>	AB – Alberta Environment BC - Provincial Emergency Program (PEP) SK - SaskSpills Other:	1-800-222-6514 1-800-663-3456 1-800-667-7525	
<b>GAS UTILITIES:</b>			
<b>WATER UTILITIES:</b>			
<b>ELECTRICAL UTILITIES:</b>			
<b>ELECTRICAL CONTRACTOR:</b>			
<b>MECHANICAL CONTRACTOR:</b>			
<b>LINE LOCATORS:</b>	AB First Call BC One Call SK First Call Other:	1-800-242-3447 1-800-474-6886 1-866-828-4888	
<b>First Aid /Emergency Response Attendant(s):</b>	<b>Name</b>	<b>Contact #</b>	<b>Training</b>

**SITE SPECIFIC EMERGENCY RESPONSE PLAN**

<b>Workers Trained in the Use of Emergency Equipment:</b>	1)	
	2)	
	3)	
	4)	
<b>Emergency Response Training Requirements:</b>	<b>Type of Training</b>	<b>Frequency</b>
	Level 2 First Aid	Every 3 years
	Site and Safety Orientation	On-going
	Fire Extinguisher Training	At orientation
<b>First Aid Kit and Equipment Location(s):</b>	Level 3 First Aid Kit and Medical supplies: CCM Trailer	
	Fire Extinguishers: 2 ABC 20 lb. extinguishers in CCM trailer	
	Fire Sprinklers and Hoses:	
<b>Material Safety Data Sheet Location:</b>	CCM Trailer	
<b>Alarm and Emergency Communication Requirements:</b>	All designated first aid and rescue attendants to have cell phones. Numbers listed above. <b>3 horn blasts = Medical Aid</b> <b>6 horn blasts = Evacuation</b>	
<b>Fire Protection Requirements:</b>	Fire Extinguishers kept in trailer and on-site. All sub-contractors should have readily available fire extinguishers.	
<b>Potential Emergencies (based on Pre-Job Hazard Assessment)</b>	Fire	Gas/water leak
	Confined space/restricted access rescue	Excavation rescue
	Power-line/utility line hit	Hazardous spill
	Fall from heights	Powered Mobile Equipment/Vehicle Accident
	Electrical Incident	
<i>*All emergencies are to follow the emergency contact and emergency response procedures outlined below.</i>		

**SITE SPECIFIC EMERGENCY RESPONSE PLAN**

<p><b>EMERGENCY RESPONSE PROCEDURE</b></p>	<ol style="list-style-type: none"> <li>1. As soon as the incident is noticed, STOP the work.</li> <li>2. Sound alarm or initiate evacuation order. (Medical Aid - Three short horn blasts, Evacuation – Six long horn blasts on first aid horn)</li> <li>3. Notify appropriate emergency services (911) if required and the Superintendent.</li> <li>4. Evacuate the building or work site. If it is safe to do so remove injured from danger if necessary and attend to them, otherwise wait for emergency workers. Take all possible safety precautions including the use of protective equipment as required.</li> <li>5. All employees will assemble in the designated area and will remain there until ordered to move by the Superintendent or the emergency services. Foreman of each trade to count employees and immediately notify appropriate authorities of any missing personnel.</li> <li>6. Some employee may elect to use emergency equipment to control and/or extinguish flames, spill, etc. but at no time is any employee to remain in the building or work site, if further exposure shall increase the risk hazard to the employees.</li> <li>7. No employee shall enter the workplace until a return to the building or work site has been authorized by the Superintendent and the emergency services.</li> <li>8. Cordon off the incident area.</li> <li>9. Advise governmental agencies as per regulation (WCB, OH&amp;S, WHS)</li> <li>10. Ensure site is safe prior to resuming work.</li> <li>11. Perform a thorough incident investigation as soon as possible.</li> <li>12. Produce incident report and forward to required parties (WCB, OH&amp;S, WHS, etc.)</li> <li>13. Review incident findings with workers during next safety meeting.</li> </ol>
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**SITE SPECIFIC EMERGENCY RESPONSE PLAN**

<p><b>EMERGENCY RESPONSE FOR GAS/POWER UTILITY LINE HIT</b></p>	<ol style="list-style-type: none"> <li>1. Walk away from hole/area.</li> <li>2. Turn off all ignition sources.</li> <li>3. Evacuate immediate area and meet at the designated muster point.</li> <li>4. Notify 911, Site Superintendent and appropriate utility company.</li> <li>5. Turn off / remove all potential ignition sources in next closest areas, building heaters, thermostats, best to hit main breaker for building if applicable.</li> <li>6. Proceed with Emergency Response Plan.</li> </ol>
<p><b>EMERGENCY RESPONSE PROCEDURES FOR CONFINED SPACE/RESTRICTED ACCESS RESCUE</b></p> <p>Required Emergency Rescue Equipment: Man-lift, Access Tools, Fire Extinguisher, Stretcher, Restraints, PPE as required according to the safe work procedure, Entry Permit and/or pre-job hazard assessment</p>	<ol style="list-style-type: none"> <li>1. In the event the attendant cannot make contact with entrant or suspects an incident has occurred, the attendant shall immediately notify 911 if injuries are suspected to be life threatening.</li> <li>2. Notify the Site Superintendent.</li> <li>3. If adequately trained and it is safe to do so remove injured from danger by using required rescue equipment and attend to them, otherwise wait for emergency workers. Take all possible safety precautions including the use of protective equipment as required.</li> <li>4. Proceed with Emergency Response Plan.</li> </ol>
<p><b>EMERGENCY RESPONSE FOR ROOF/WORK AT HEIGHTS EVACUATION</b></p> <p>Required Emergency Rescue Equipment: PPE, Fall Protection, Scaffolding, Man-lifts, Stretcher, Restrains as required according to the safe work procedure and pre-job hazard assessment.</p>	<ol style="list-style-type: none"> <li>1. Notify 911 if incident is life threatening and Site Superintendent immediately.</li> <li>2. If adequately trained and it is safe to do so remove injured from danger by using required rescue equipment and attend to them, otherwise wait for emergency workers. Take all possible safety precautions including the use of protective equipment as required.</li> <li>3. Prep injured worker for transport by stretcher or backer board by qualified first aid attendant.</li> <li>4. Lower injured worker by ropes attached to stretcher as directed by First Aid Attendant following all appropriate safety procedures for tie offs. Ensure the safety of both the injured and non-injured workers.</li> <li>5. Proceed with Emergency Response Plan</li> </ol>

**SITE SPECIFIC EMERGENCY RESPONSE PLAN**  
***EMERGENCY SITE EVACUATION MAP***  
**POST IN JOBSITE TRAILER**  
**WORKSITE DIAGRAM**

**ROUTE TO NEAREST HOSPITAL**

**Map MUST contain the following:**  
Assembly point clearly marked

Exits clearly marked  
Location of nearest telephone outside  
the workplace

Evacuation routes clearly marked  
First Aid Kit and Fire Extinguisher  
locations

# Fire Response Plan

In addition to the Emergency Response Plan, CCM has a specific procedure for dealing with fires. To minimize risk, all types of fires should be reported to the local fire department by calling 911. If there is a building fire, all occupants are to be evacuated as per the Emergency Response plan. Fire extinguishers are located on all CCM projects, in the site trailer, and at the first aid stations in the building.

All CCM employees are expected to be aware of the fire emergency plan and take immediate action according the following procedure.

## 1. Get Prepared

Employees should be aware of the location of fire extinguishers on site as well as exit locations, and fire alarm locations. If you do not know how to use a fire extinguisher, you can ask for instructions or take fire extinguisher training so that you are properly prepared in case of a fire.

## 2. If You Discover a Fire – Initiate the Emergency Response Plan

If you see a fire, or smell smoke and suspect a fire, pull a fire alarm. In the circumstance that there is no fire alarm available, and assuming that it is safe to do so, begin the evacuation procedure by blowing the on-site air horn for 6 long blasts.

If using the air horn would put you in danger, alert nearby employees to the danger vocally and use the air horn at the site trailer to begin the evacuation. The site superintendent should be notified of a fire as soon as possible.

## 3. Contact Authorities

After escaping to a safe location, dial 911 and give the operator the important information:

Your name, phone number, and location. Describe the fire in detail, include the materials on fire if known (ex. Gasoline fire, electrical fire, wood fire, etc.) If access to the jobsite is not obvious, describe where the fire truck should enter the jobsite. Inform them if there are any injuries or if you suspect there might be trapped personnel. Do not hang up until the operator is satisfied with given information.

## 4. Fire extinguisher use

Fire extinguisher use is entirely optional. ONLY attempt to combat a fire if :

- You feel confident and trained to fight a fire.
- The fire is reasonably small. If the fire does not go out or spreads, leave immediately.
- You are not putting yourself at risk by doing so.

Using a fire extinguisher (P.A.S.S.) :

- **P**ull the safety pin at the top of the extinguisher
- **A**im the nozzle at the base of the flames
- **S**queeze the handle
- **S**weep from side to side at the base of the fire until it is out.

Extinguisher Types

- Type A (Green Triangle) – Used to combat paper and wood fires
- Type B (Red Square) – Used for flammable liquids such as oil
- Type C (Blue circle) – used for electrical fires involving wires or appliances.



## **SECTION 13: WORKER HEALTH MONITORING**

### **MONITORING OF WORKPLACE EXPOSURES**

Management shall monitor workers for the following agents to ensure exposures are maintained at or below permissible concentrations:

- Chemical agents, for example: asbestos and concrete dusts
- Physical agents, for example: noise
- Biological agents, for example: urine and blood specimens

### **MEDICAL EXAMINATION AND HEALTH MONITORING**

Management will implement a noise control and hearing conservation program when workers' exposure meets or exceeds the criteria of the regulations as required according to provincial Health and Safety legislation For example: hearing tests for all workers exposed to more than 85 dBA of noise for 8 hours or to noise with a peak level of 135 dBA.

#### **HEARING CONSERVATION PROGRAM:**

The management shall ensure that:

- a) Hearing protection devices are available for all workers
- b) Noise hazard signs are posted in areas which require hearing protection
- c) Hearing protection is used by all persons entering noise hazard areas.
- d) Annual hearing tests are conducted

#### **HEALTH MONITORING:**

CCM Construction shall establish health monitoring programs whenever exposure to hazardous products or carcinogens presents the potential for long term health effects. This will include exposure to asbestos, isocyanates, lead, cadmium, arsenic, mercury, or other hazards.

Each health program will be developed for the related exposure and may include periodic medical exams, x-rays, blood tests, lung function tests, etc. Medical practitioners or certified laboratories will do all testing.

#### **HEARING LOSS POLICY:**

In order to meet the minimum requirements of the Workers' Compensation Board Industrial Health and Safety Regulations, the company will ensure that:

- Engineered solutions shall be used to reduce noise exposure, where possible

## SECTION 13: WORKER HEALTH MONITORING

- Employees who are routinely exposed to excessive noise levels will be provided with appropriate hearing protection:
  - Class A foam ear plugs.
  - Class A ear muff (upon request).
- Hearing tests will be provided annually as required by the provincial occupational health and safety regulations.
- Hearing test records will be reviewed to determine if additional monitoring is required.

The Noise Regulations require that a worker not be exposed to noise levels above 85 dBA daily or 135 dBA peak sound. When exposed to noise which exceeds either level an effective noise control and hearing conservation program must be developed.

Examples of noise levels associated with construction are:

Crane Operator	82-99 dB
Drilling	99-103 dB
Welding	84-97 dB
Air Arc Cutting	120 dB
Pneumatic Drill	100 dB

### WORKPLACE EXPOSURES

The company shall ensure that any products or processes that may be included at the workplace are examined for potential hazards to employees. Should a hazard be identified, CCM Construction will attempt to find a substitute that does not pose a danger, or will engineer a system that protects the employee from the hazard.

If the company is unable to eliminate the hazard through administration or engineering, the employees will be provided with the appropriate safe work procedures, personal protective equipment, and safety devices. A monitoring system will be established to check the employees on a regular basis and a procedure for exposure levels developed

## **SECTION 14: SAFETY STATISTICS AND RECORDS**

Management shall review Statistics and Records as an aid in identifying trends, unusual conditions and problem areas.

The information gathered shall include, but not be limited to, the following:

- Accident Investigation Reports
- Workplace Inspection Reports
- Material Safety Data Sheets (MSDS)
- Hearing Test Records
- Safety Meetings
- Safety Committee Minutes
- WCB Inspection and Compliance Reports
- WCB Claims Cost Statements
- Engineering Reports

The Company, the Safety Committee, and the Employees shall use all information gathered or developed from these sources for the express purpose of monitoring and improving the Health and Safety Program

**JOBSITE SAFETY STATISTICS**

Safety Statistics for: \_\_\_\_\_  
 Jobsite Location

Superintendent: \_\_\_\_\_

Project Start/End: \_\_\_\_\_  
 mm/dd/yyyy – mm/dd/yyyy

1. Number of Workers Hired: \_\_\_\_\_  
 Number completed Orientation: \_\_\_\_\_

2. Number of Tool Box Meetings Scheduled: \_\_\_\_\_  
 Number Conducted: \_\_\_\_\_  
 Percentage Compliance: \_\_\_\_\_

3. Number of Internal Inspections Scheduled: \_\_\_\_\_  
 Number Completed: \_\_\_\_\_  
 Total Unsafe Acts/Conditions Identified: \_\_\_\_\_  
 Number Corrected: \_\_\_\_\_  
 Number Outstanding: \_\_\_\_\_

4. Number of Incidents \_\_\_\_\_  
 Damage Only: \_\_\_\_\_  
 Injury Only: \_\_\_\_\_  
 Injury and Damage: \_\_\_\_\_  
 Severe: \_\_\_\_\_  
 Near Miss: \_\_\_\_\_

Number of Investigations  
 Completed: \_\_\_\_\_  
 Outstanding: \_\_\_\_\_

Number of Recommendations Made:  
 Completed: \_\_\_\_\_  
 Outstanding: \_\_\_\_\_

Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

\_\_\_\_\_  
 Sign

10/05/2010  
 \_\_\_\_\_  
 Date

**SAFETY STATISTICS RECORD**

Safety Statistics for the Period Ending: \_\_\_\_\_  
 Month/Year

<input type="checkbox"/> Monthly	<input type="checkbox"/> Quarterly	<input type="checkbox"/> Yearly
1. Number of Workers Hired:		_____
Number completed Orientation:		_____
2. Number of Tool Box Meetings Scheduled:		_____
Number Conducted:		_____
Percentage Compliance:		_____
3. Number of Internal Inspections Scheduled:		_____
Number Completed:		_____
Total Unsafe Acts/Conditions Identified:		_____
Number Corrected:		_____
Number Outstanding:		_____
4. Number of Incidents		_____
Damage Only:		_____
Injury Only:		_____
Injury and Damage:		_____
Severe:		_____
Near Miss:		_____
Number of Investigations		
Completed:		_____
Outstanding:		_____
Number of Recommendations Made:		_____
Completed:		_____
Outstanding:		_____

Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

\_\_\_\_\_  
 Sign

\_\_\_\_\_  
 Date



## **SECTION 15: SAFETY PROGRAM REVIEW AND AUDITING**

### **POLICY**

CCM Construction Ltd shall review and make program adjustments on an ongoing basis. The improvements will be the result of input from the Management, the Safety Committee, the Employees, the Workers' Compensation Board, etc. Changes in work processes or the products used will be included in the program, if there is a change in the effect of the process or product on the health and safety of any employee.

### **PROCEDURES**

The introduction of a new work process or a new product (with potential health and safety hazards) shall result in a review by the Management and the Safety Committee to ensure all health and safety safeguards are in place. Any significant change in the effects (or potential effects) on employees' health and safety will be encompassed in the program to ensure that employees have access to that information.

Any major reduction of the effectiveness of the current Health and Safety Program will be immediately addressed by means of a full audit. The audit will identify the source of the problem(s) and will be modified to include corrective measures for the elimination of said problem(s).

### **PROGRAM AUDIT**

The Health and Safety Program shall be audited and evaluated annually, in April. The purpose of the audit is to ensure the program is being utilized and is effective; to investigate the safety activities and performance during the previous year within the context of the Program Manual; to set measurable objectives, and to outline specific safety activities, focal points and revisions to procedures for the coming year.

### **SAFETY MANUAL REVISION FORM**

The safety manual revision form will be used when updates, changes and deletions are made to the safety manual. Please note the changes and add/remove them to the site safety manual. In the circumstance where a page is added making subsequent page numbering incorrect, this will be noted on the safety manual revision form and ignored until the safety manual is re-issued.

## SAFETY MANUAL REVISION FORM

Attention: \_\_\_\_\_ Jobsite: \_\_\_\_\_ Date: \_\_\_\_\_

Review Period: \_\_\_\_\_ Province: \_\_\_\_\_

Original Page #	Changed/Added/Removed C/A/R	Reason/Comments
_____	_____	_____
_____	_____	_____
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For each page added/removed, please note the page number displacement below:

Pages displaced + / - \_\_\_\_\_ page(s), from page # \_\_\_\_\_  
Please Circle

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Pages displaced + / - \_\_\_\_\_ page(s), from page # \_\_\_\_\_  
Please Circle

Reviewed By: \_\_\_\_\_

Signature: \_\_\_\_\_



**CCM Construction Safety Manual Quarterly Review**

CCM safety manual must be reviewed and signed off by principal once each quarter. A copy of the log is to be kept in the safety manual on **all** jobsites.

**Year:** \_\_\_\_\_

First Quarter (January – March):

Date Reviewed: \_\_\_\_\_

Signature: \_\_\_\_\_

Second Quarter (April – June):

Date Reviewed: \_\_\_\_\_

Signature: \_\_\_\_\_

Third Quarter (July – September):

Date Reviewed: \_\_\_\_\_

Signature: \_\_\_\_\_

Fourth Quarter (October – December):

Date Reviewed: \_\_\_\_\_

Signature: \_\_\_\_\_

**Year:** \_\_\_\_\_

First Quarter (January – March):

Date Reviewed: \_\_\_\_\_

Signature: \_\_\_\_\_

Second Quarter (April – June):

Date Reviewed: \_\_\_\_\_

Signature: \_\_\_\_\_

Third Quarter (July – September):

Date Reviewed: \_\_\_\_\_

Signature: \_\_\_\_\_

Fourth Quarter (October – December):

Date Reviewed: \_\_\_\_\_

Signature: \_\_\_\_\_

**Year:** \_\_\_\_\_

First Quarter (January – March):

Date Reviewed: \_\_\_\_\_

Signature: \_\_\_\_\_

Second Quarter (April – June):

Date Reviewed: \_\_\_\_\_

Signature: \_\_\_\_\_

Third Quarter (July – September):

Date Reviewed: \_\_\_\_\_

Signature: \_\_\_\_\_

Fourth Quarter (October – December):

Date Reviewed: \_\_\_\_\_

Signature: \_\_\_\_\_

## ANNUAL REVIEW OF SAFETY PROGRAM

Safe Work Practices	Review				Review			
	Date			By Whom	Date			By Whom
	M	D	Y	Initials	M	D	Y	Initials
<b>Section 1:</b> Safety Responsibilities								
<b>Section 2:</b> Hazard Assessment and Control								
<b>Section 3:</b> Safe Work Practices								
<b>Section 4:</b> Safe Work Procedure and Job Safety Analysis Policy								
<b>Section 5:</b> CCM General Safety Rules								
<b>Section 6:</b> Personal Protective Equipment								
<b>Section 7:</b> Preventative Maintenance and Workplace Inspections								
<b>Section 8:</b> Training and Orientations								
<b>Section 9:</b> Sub-contractor Management and Responsibilities								
<b>Section 10:</b> Safety Meetings and Committees								
<b>Section 11:</b> Incident Reporting and Investigation								
<b>Section 12:</b> Emergency Preparedness Policy								
<b>Section 13:</b> Worker Health Monitoring								
<b>Section 14:</b> Safety Statistics and Records								
<b>Section 15:</b> Safety Program Review and Auditing								
<b>Section 16:</b> Modified Work/Early Return to Work and Claims Management								
<b>Appendix A:</b> Training Matrix								
<b>Appendix B:</b> Accident Investigation								

## **SECTION 16: MODIFIED WORK/EARLY RETURN TO WORK AND CLAIMS MANAGEMENT**

CCM Construction Ltd. will implement Early Return To Work - Modified Duty procedures which will allow employees who become injured or ill to return to work as soon as reasonably possible. It is recognized that returning to the work environment as soon as possible after an on-the-job injury or illness occurs has positive impact upon the healing process and is in the best interests of the employee and employer alike. Adopting a comprehensive ERTW-Modified Duty program will effectively manage worker's compensation costs throughout the company and safeguard its most valuable resources: the skills, knowledge, and experience of our employees.

Employees must report all work-place injuries and work-related illnesses to their supervisor the same day of the accident or as soon as it is suspected that an illness is work related. Employees are required to advise their treating physician or other medical care provider that CCM Construction Ltd. provides Early Return to Work and/or Modified Duty opportunities.

Although there may be some variability, on a site-by-site basis, in how Early Return to Work and Modified Job opportunities are developed, the end result shall be consistent throughout CCM Construction Ltd. that every effort shall be made to provide these opportunities to employees. CCM Construction Ltd. Management will initiate and maintain a process, which incorporates input from throughout our company to develop, implement and periodically review the ERTW-Modified Duty program.

The cooperation of individual supervisors plays a most significant part in the success of the ERTW-Modified Duty program. Supervisors shall identify and provide Early Return to Work and/or Modified Job opportunities for injured or ill employees whenever possible.

### **CLAIMS MANAGEMENT POLICY**

CCM Construction is committed to providing a safe and healthy work environment, and to providing positive attitudes within the organization.

#### **Procedure**

Although we do not want to see a lost time accident involving any of our projects, it's possible that they may occur. In this event we will go through the following steps to ensure a speedy return to work. The steps are as follows:

1. First aid/Hospital
2. Follow up with employee's health and Doctors instructions as to time off.
3. Employee may report back to work at earliest date recommended by Doctor. (Physicians Information Form) See if there is alternative work the employee can do. Example: machine operator, desk work, first aid.
4. Notify office to continue payment for an 8 hour day.

## PHYSICIANS INFORMATION FORM

Date: \_\_\_\_\_

Dear Doctor:

Re: \_\_\_\_\_

We at CCM Construction have developed a modified work program. The purpose of this program is to have injured employees return to work in the shortest possible time without compromising the employee's safety and well-being.

In order to accomplish the program effectively, we ask you to complete this Physicians Information Form in order to give the employee modified work duties as set out by restrictions you may indicate.

The following is a classification of modified work duties. We ask that you please review these classifications and inform us if the employee would be safely able to manage one of them.

Thank you for your cooperation and assistance in helping us to rehabilitate our employees.

Sincerely,

\_\_\_\_\_  
Safety Coordinator

- SEDENTARY:**        -Lifting 10 lbs. Maximum  
                          -Occasional lifting and/or carrying  
                          -Primarily sitting with occasional walking/standing  
                          (ie. Office work)
- LIGHT:**            -Lifting 20 lbs. Maximum  
                          -Frequent lifting and/or carrying up to 10 lbs.  
                          -May require walking/standing to a significant degree  
                          -May involve sitting with pushing/pulling or arm and/or leg  
                          controls  
                          (ie. Machine operator)
- MEDIUM:**        -Lifting 50 lbs Maximum  
                          -Frequent lifting and/or carrying up to 20 lbs.  
                          -May involve sitting with pushing/pulling or arm and/or leg  
                          controls
- HEAVY:**            -Lifting 100lbs. Maximum  
                          -Frequent lifting and/or carrying up to 50 lbs.
- VERY HEAVY:**    -Occasional lifting in excess of 100 lbs.  
                          -Frequent lifting and/or carrying in excess of 50 lbs.

**EFFECTIVE DISABILITY MANAGEMENT TREATMENT FORMS**

**NOTE: Employee is to return this form to the Safety Coordinator immediately after physician visit.**

Employee Name: \_\_\_\_\_ Date: \_\_\_\_\_

Job Description: \_\_\_\_\_

Is the employee fit for regular duties? \_\_\_\_\_ YES \_\_\_\_\_ NO  
If not, can the employee perform alternate duties? \_\_\_\_\_ YES \_\_\_\_\_ NO

Current Work Capacity and Comments:

Sedentary: \_\_\_\_\_

Light: \_\_\_\_\_

Medium: \_\_\_\_\_

Heavy: \_\_\_\_\_

Very Heavy: \_\_\_\_\_

Are there any further specific physical restrictions or recommendations?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Will a further medical review be required? \_\_\_\_\_ YES \_\_\_\_\_ NO

When? \_\_\_\_\_

\_\_\_\_\_  
M.D. (Please Print)

\_\_\_\_\_  
M.D. (Please sign)

I hereby authorize any physician or hospital to release medical information on myself pertaining to the above injury for the purpose of deciding if modified duties may be performed.

Employee Signature: \_\_\_\_\_

**TRAINING RECORD**

Appendix A

CCM Construction Ltd		Course # & Date/Time Completed									
		1	2	3	4	5	6	7	8	9	10
1.	Employee Name: Date of Hire: Trade/Occupation:										
2.	Employee Name: Date of Hire: Trade/Occupation:										
3.	Employee Name: Date of Hire: Trade/Occupation:										
4.	Employee Name: Date of Hire: Trade/Occupation:										
Course #		Expiry Date					Comments:				
1.	BC First Aid	2 Years									
2.	AB Standard First Aid	3 Years									
3.	WHMIS	Ongoing									
4.	ACSA COR Auditor	3 Years									
5.	CSTS	3 Years									
6.	Orientation	Ongoing									
7.	WHMIS Train the Trainer	3 Years									
8.	Leadership in Safety Excellence	Ongoing									
9.	Fall Arrest	Ongoing									
10.	Respirator Fit Testing	Yearly									
11.											

**APPENDIX B: ACCIDENT INVESTIGATION**  
**ACCIDENT INVESTIGATION GUIDE**

Regulation requires “looking into” all facts involved in the accident. You must determine:

**Use these skills to determine the answers to the questions.**

Who	-	inspection/observation
Where	-	inquiry and discussion
What	accomplished by	- knowledge of operations
When	-	knowledge of safe procedures
Why	-	hazard recognition
How		

Since every accident follows a sequence, it is important to determine each step of the sequence:

**Specific questions to ask yourself to help answer the questions.**

PEOPLE	CAUSE	ACCIDENT, INJURY OR DAMAGE
Was the person involved:	1. What conditions of the plant equipment, machinery, tools, etc. contributed to the accident?	Describe the accident and injury to
1. Trained in safe working methods?	2. What employee actions contributed to the accident?	1. Identify the accident causes
2. Aware of the consequences of his actions?	(Note: both #1 and #2 are usually involved.)	2. Develop statistics that patterns, trends or accidents of a repeat nature
3. Capable of performing his job?		3. Decide if the corrective action taken is effective or if it is still needed
a.) Were there physical limitations?		
b.) Were there external limitations?		
4. Aware of proper methods, consequences, and limitations and still took short cuts?		

**Conclusion --- Recommendation** **It is imperative that you don't stop at this point.**

Corrective action is vital if similar accidents are to be prevented. After the cause is identified, select a corrective action.

- Your recommendation involve the correction of an unsafe condition?
- Corrective action involve additional education or specific training of employees?
- Your recommendation involve different personnel selection and orientation?
- Your recommendation involve increased monitoring or supervision on your part?

Remember: Proper corrective action may involve a variation or combination of each step.

**STEPS IN ACCOMPLISHING YOUR CORRECTIVE SUGGESTIONS:**

- Select the person, department or function that will best apply your suggestions and recommendations.
- Set dates
- Follow up

Remember: By removing the cause, you reduce the possibility of similar accidents recurring.

ALL INFORMATION ON LIST TO BE ACCOUNTED FOR IN REPORT

**ACCIDENT INVESTIGATION CHECK-LIST**

---

**NOTIFICATION**

- Agency
- Time and date of accident
- Time and date of notification
- Time and date of arrival on site

**SCENE**

- Diagram
- Photos
- Measurements

**WORKER**

- Name
- Age
- Home address & phone number
- Occupation
- Experience
- Training this job
- Familiarity with equipment
- How supervised
- Personal protective gear
- Personal problems on/off job
- Mental/physical disabilities
- Nature of injuries

**SUPERVISION**

- Name
- Age
- Experience as a supervisor
- Experience in job worker was doing
- Personal knowledge of worker
- Method of supervision
- Knowledge of WCB Regulations
- His opinion of how accident happened
- His opinion of how accident could be prevented
- Supervisor's instruction from management

**FIRST AID**

- Were services available
- Was treatment given
- Name of First Aid Attendant

**OTHER PARTY**

- Instructions
- Experience in industry
- Experience in job at time of accident
- Supervision
- Training
- Knowledge of WCB Regulations
- Familiarity with equipment used at time of accident

**EQUIPMENT AND SITE**

- General condition
- Make, serial and model number
- Manufacturer's information
- Maintenance information and records
- Suitability and adequacy of equipment
- Layout of operation

**ENVIRONMENT AND SITE**

- General condition
- Lighting
- Ventilation
- Wind
- Temperature
- Weather conditions
- Terrain
- Noise

**PERSONS WITH INFORMATION**

- Name
- Work and residence address
- Recollection of accident
- Hearsay (scuttle)

**EMPLOYER**

- Name and address of Head Office
- Address of office where worker records are held
- Condition of firm Safety Program



ACCIDENT INVESTIGATION ATTACHED DOCUMENTATION  
(Please check off)

- Training and discipline records
- First Aid and medical reports
- Witness statements
- Photographs and diagrams
- Damage assessments
- Safe work procedures
- Inspection reports

**INVESTIGATED BY:** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**DATE:** \_\_\_\_\_

**TIME:** \_\_\_\_\_

**SIGNATURE:** \_\_\_\_\_

## Anti-Harassment and Violence Policy

### Our Commitment

At CCM Construction Ltd., we are committed to providing a safe and respectful work environment for all staff and customers. No one, whether a manager, an employee, a contractor, or a member of the public, has to put up with harassment at CCM Construction, for any reason, at any time. And no one has the right to harass anyone else, at work or in any situation related to employment. This policy is one step toward ensuring that our workplace is a comfortable place for all of us.

### Harassment is against the law

The *Canadian Human Rights Act* and the *Canada Labour Code* protect us from harassment. The Criminal Code protects us from physical and sexual assault. You have a right to live and work without being harassed, and if you are harassed, you can do something about it.

### Employees' responsibilities

All employees have the responsibility to treat each other with respect, and to speak up if they or someone else is being harassed. All employees have a responsibility to report harassment to the appropriate person. All employees are responsible for respecting the confidentiality of anyone involved in a harassment complaint.

### Managers' responsibilities

Each manager and supervisor is responsible for fostering a safe working environment, free of harassment. Managers must set an example for appropriate workplace behaviour, and must deal with situations of harassment immediately upon becoming aware of them, whether or not there has been a complaint. Courts may impose penalties on the employer and the manager, even if neither of them was actually involved in or aware of the harassment, but should have known about it. A manager that didn't do anything to prevent harassment or to mitigate its effects may find her or himself facing financial and legal consequences.

### CCM Construction's responsibilities

As an employer, CCM Construction also has a responsibility to be aware of what is happening in the workplace. All incidents of harassment will be treated seriously. I undertake to act on all complaints and to ensure that they are resolved quickly, confidentially, and fairly. I will discipline anyone who has harassed a person or group of people or who retaliates in any way against anyone who has complained of harassment, given evidence in harassment investigation, or been found guilty of harassment. I will discipline managers who do not act properly to end harassment.

---

Bridget Cassidy, Director

---

Date

## INFORMATION FOR VICTIMS

### What is harassment?

Harassment is any behavior that demeans, humiliates, or embarrasses a person, and that a reasonable person should have known would be unwelcome. It includes actions, comments, or displays. It may be a single incident or continue over time.

Some examples of harassment include:

- unwelcome remarks, slurs, jokes, taunts, or suggestions about a person's body, clothing, race, national or ethnic origin, colour, religion, age, sex, marital status, family status, physical or mental disability, sexual orientation, pardoned conviction, or other personal characteristics;
- written or verbal abuse or threats
- practical jokes that embarrass or insult someone
- unwelcome physical contact, such as patting, touching, pinching, hitting
- patronizing or condescending behaviour
- humiliating an employee in front of co-workers
- vandalism of personal property
- physical or sexual assault

The *Canadian Human Rights Act* protects employees and customers from harassment that is related to their race, national or ethnic origin, colour, religion, age, sex, marital status, family status, disability, pardoned conviction, or sexual orientation.

Disrespectful behaviour, known as "personal" harassment, is also covered in this policy. While it also involves unwelcome behaviour that demeans or embarrasses an employee, this behaviour is not based on one of the protected grounds named above. Harassment can take place between co-workers, between a manager and employee, between people of the opposite sex or of the same sex, between an employee and a client, or between an employee and a job applicant.

### **What isn't harassment?**

Consensual banter or romantic relationships, where the people involved agree with what's happening, are not harassment. Appropriate performance reviews, counseling, or discipline by a supervisor or manager are not harassment.

### **Where harassment happens**

Work-related harassment can take place in the workplace itself, or outside of the workplace in a situation that is in some way connected to work.

## **COMPLAINT PROCEDURES**

### **Speak up**

If you believe you are being harassed, speak up right away. If possible, tell the person that you are not comfortable with their behaviour, and want it to stop. Usually, that will be all you need to do. You can speak to them directly, or write them a letter (date it and keep a copy). In addition, tell someone you trust what is going on.

### **Keep Notes**

Record all unwelcome or harassing behaviour. Write down what has happened, when, where, how often, who else was present, and how you felt about it. Write down every instance of harassment.

## **Report it**

If the harassing behaviour occurs again, or if you are unable to deal directly with the person harassing you, report it to the person designated to receive complaints. At CCM Construction, the designated anti-harassment person is Bridget Cassidy. If that person is involved in the complaint, please see Mr Josh Hall, Director, CCM Construction Ltd. Personally. If for some reason you are unable to report harassment to someone at CCM Construction Ltd., you might be able to go to the police (for a case of sexual or physical assault). You may also go directly to the Canadian Human Rights Commission.