McDonald Bros Construction Health & Safety Policy

February 2019 revision

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SAFETY POLICY STATEMENT

McDonald Bros Construction (MBC) is committed to ensuring a safe and healthy construction environment for all involved in our projects. Our policy is designed to eliminate personal injuries, occupational illnesses, and property and equipment damage. Responsibility for the quality of our health and safety program lies with each person within the Company. This is accomplished by ensuring that proper work procedures, policies and rules are developed, regularly upgraded as changes are made by legislation and work methods are improved. It is the Worker's right to work in a safe environment.

Management and Supervisors shall ensure that employees are properly trained and aware of work procedures, hazards and regulations. It is also the responsibility of the supervisor to observe, enforce and follow up that each employee is adhering to the edicts of this training. For this purpose, all employees must read and sign our Safety Policy.

All Managers, Supervisors, Employees and Subcontractors shall abide by the Occupational Health and Safety Act and applicable Regulations as well as MBC's Health and Safety Policy.

It is through vigilance and cooperation of all our staff and subcontractors that we will provide a safe environment on all of our projects and endeavors.

Paul McDonald
President

February 2019

Responsibilities	
President & Senior Management	➢ Ensure a Health and Safety Policy is prepared and it is reviewed on an annual basis. ➢ Ensure the Policy in posted in a conspicuous place. ➢ Ensure a program to implement our Policy is developed; ensure training is conducted with all employees to ensure they are made aware of our policy requirements. ➢ Ensure that the workforce understands their health and safety responsibilities. ➢ Be aware of the applicable legislation and ensure compliance. ➢ Ensure information sessions are conducted (safety talks, staff meetings, tailgate meetings). ➢ Ensure that every project is reviewed and adequate planning is conducted to provide a safe and healthy workplace. ➢ Respond appropriately to reports of problems and to JHSC / Representative recommendations. ➢ Ensure incident investigations are conducted and that all required corrective measures are implemented. ➢ Ensure the substandard acts or conditions are corrected. ➢ Ensure employee safety observations are performed. ➢ Ensure PM and Superintendent's inspection reports are reviewed. ➢ Ensure that authority and responsibility appropriately delegated. ➢ Establish a system to review the health and safety program. Ensure it is up to date. ➢ Conduct employee training including supervisor competency. ➢ Be visibly committed to making health and safety work; lead by example.
Managers & Coordinators	➢ Ensure that equipment, materials and protective devices are provided and maintained in good condition. ➢ Ensure a Site-specific Hazard Analysis is conducted , documented and the information conveyed to all workers on site. (Site Specific Safety Plan - SSSP) ➢ Ensure the workforce is trained to safely complete the work and deal with hazards. Ensure the training is current and regularly reviewed. ➢ Ensure procedures and practices are established so workers can carry out safe and healthy work. ➢ Review supervisor's toolbox talks. ➢ Review accident/incident reports; ensure corrective actions are implemented. ➢ Conduct a formal inspection of their projects regularly. ➢ Hold supervisors accountable for the authority and responsibility delegated to them and hold workers accountable for their responsibilities. ➢ Be visibly committed to making health and safety work; lead by example.
Superintendents	➢ Shall be responsible to ensure that the safety program is administered on site. ➢ Make available all necessary personal protective equipment, job safety materials, and first aid equipment for company employees. ➢ Ensure that workers use or wear the equipment, protective devices or clothing that the company requires to be used or worn and that it is in good condition. ➢ Instruct all sub-contractors that safe practices are to be followed and safe conditions maintained throughout the job. a. Workers are not to take chances. b. Foremen are to instruct workers in proper job procedures. ➢ Ensure that all sub-trade foremen are trained in, and understand this health & safety

	policy. ➢ Require all sub-contractors to adhere to all safety regulations and program requirements. ➢ Encourage all personnel and others to adhere to all safety regulations. a. Document violations and corrective actions. b. Report violations to proper company representatives. ➢ Conduct incident investigations. ➢ Review all accidents and near miss incidents with Foremen, Supervisors, and JHSC. Ensure the required corrective action is taken immediately. ➢ Have available, current copies of all Safety Regulations. ➢ Ensure a competent Safety Representative is elected if required, with authority, to monitor the safety on their project. ➢ Be familiar with the laws pertaining to safety and their basic requirements. ➢ Perform or ensure a competent person conducts on your behalf a workplace inspection on a weekly basis. ➢ Conduct information sessions (safety talks, staff meetings, weekly tailgate meetings). ➢ Conduct employee training; this includes equipment and PPE. ➢ Correct substandard acts or conditions. ➢ Commend employee health and safety performance. ➢ Perform employee safety observations and correct sub-standards actions and behaviors.
Workers	➢ Work according to good safety practices as posted, instructed, and discussed. ➢ Refrain from any unsafe acts that might endanger himself, or his fellow workers. ➢ Use all personal protective equipment and safety devices provided for their protection. ➢ Report any unsafe condition or act to their Supervisor immediately. ➢ Assume their share of responsibility for thoughtless or deliberate acts that cause danger to himself or his fellow workers. ➢ Maintain a clean and orderly workspace.
Furthermore, no worker shall	✓ Remove or make ineffective any protective device required by the regulations or by his or her employer, without providing an adequate temporary protective device and when the need for removing or making ineffective the protective device has ceased, the protective device shall be replaced immediately. ✓ Use or operate any equipment, machine, device or thing or work in a manner that may endanger himself, herself or any other worker. ✓ Engage in any prank, contest feat of strength, unnecessary running or rough and boisterous conduct.
Worker's Rights	All workers have the following 3 rights; 1. **The right to refuse any unsafe work**; report the issue to your supervisor or safety representative to initiate corrective action. Laurin will investigate following the MoL guidelines. 2. **The right to participate** in a health and safety program, JHSC, and 3. **The Right to Know** about hazards in the workplace.
Subcontractors	

Purpose	➢ The purpose of this policy is to establish minimum guidelines for Subcontractors in order to help provide and maintain a safe work environment for all employees. ➢ MBC is committed to the protection of its employees, the environment and its physical assets. We will continue to maintain a safe work environment in order to prevent occupational injuries and illnesses. ➢ All employees, Subcontractors and their employees are responsible for complying with the requirements of the Occupational Health and Safety Act and its related regulations.
Definitions	
Approved Subcontractor	A Subcontractor who has signed and returned all required documents as per this policy.
Delivery Persons	A person who is on company property to either receive or drop off product. This person does not actually load or unload the product.
Standards/ procedures	➢ Once a Subcontractor has been initially approved to do the work, the Coordinator shall ensure that the Contractor has executed a Subcontractor Health and Safety Responsibility Agreement. If not the Coordinator must prepare the agreement for the Subcontractor. ➢ The Coordinator shall ensure the Subcontractor's legal name and the authorized signing officer's title is correct on the Subcontractor Health and Safety Responsibility Agreement. ➢ If the Coordinator and the signing officer is not the same person, then the Coordinator shall forward the Subcontractor Health and Safety Responsibility Agreement to the company's signing officer for a signature. ➢ The Coordinator shall forward 2 copies of the Subcontractor Health and Safety Responsibility Agreement to the contractor for signature. The contractor shall keep one copy for their records and forward the second copy back to the Coordinator. ➢ The Subcontractor must provide the Coordinator with an up-to-date liability insurance certificate, listing the company as a certificate holder. The Coordinator shall ensure that the Subcontractor has no less than $2 million per occurrence of public and property liability insurance. The Coordinator may approve some lesser amount at his/her discretion. ➢ The Subcontractor must submit an up-to-date WSIB Clearance Certificate. ➢ The Subcontractor shall complete and return the Safety Checklist. ➢ The Coordinator shall ensure that all required documentation is completed and returned before the commencement of work. ➢ A list of Approved Subcontractors shall be made available to all management staff. The list should be reviewed annually. ➢ The Subcontractor shall provide the Coordinator with all current SDS for the products they intend on bringing into the workplace. ➢ Delivery persons are not required to endorse a Subcontractor Health and Safety Responsibility Agreement. However, they shall not perform any services, other than delivery, while on company premises.
Subcontractor specific responsibilities	1. Ensure the health and safety of all workers. 2. Ensure qualified workers are provided to perform all work activities. 3. Provide SDS for all controlled products that are brought into the workplace. 4. Ensure that work performed is in accordance with all legislation.

	5. The Subcontractor will not use the company's equipment unless given specific permission to do so. 6. The Subcontractor must follow the worker rules and responsibilities as outlined in the accompanying document. 7. The Subcontractor will not interfere with this company's processes or worker activities unless directed to do so. 8. The Subcontractor must use the appropriate personal protective equipment (PPE). 9. All Subcontractors must follow the implemented emergency procedures. 10. All Subcontractors must maintain good housekeeping practices.
Training/ implementation	The Coordinator and / or Superintendent are responsible to ensure that the Subcontractor, their employees or their Subcontractors are trained

Purpose	Management needs to identify and eliminate workplace hazards. This includes knowing how to do a health and safety analysis, what to do after completion of the analysis, and how to implement and communicate safety information. The purpose of the hazard analysis is to ensure all employees are protected against health and safety hazards, and work in a healthy and safe environment. Results can include: ➢ Increased knowledge of the dangers inherent in the tasks of the employees. ➢ Enhanced safety awareness and improved safety dialogue and communication amongst employees. ➢ Improved risk management leading to increased accident prevention. ➢ Compliance with the Occupational Health and Safety Act. Recognizing and assessing hazards is the first step to controlling or eliminating risk. Methods of doing this include observation and reporting, inspection, task analysis, and trend identification. Factors that contribute to making a job hazardous are identified as the following: ➢ People (training) ➢ Equipment ➢ Materials ➢ Environment and ➢ Process (the way work is done) The degree of hazard or risk can be estimated using knowledge of potential for a major injury (severity) and knowledge of probability of occurrence (*i.e. an inexperienced worker or a new job*) **Note:** To comply with all requirements of this section ensure that the following steps are followed: ➢ Step 1: Identify hazards ➢ Step 2: Rate for loss potential ➢ Step 3: Develop control methods for those hazards that have major loss potential. The document must include: ▪ Safe Operating procedures ▪ Training key health and safety points (controls) to remember each step.
Management Responsibilities	Management must ensure they conduct, before a project begins, a site-specific hazard analysis. Information in the document must be site specific; tasks specific with the expected controls. Based on the analysis, a Site Specific Safety Plan (SSSP) will be generated and its content trained to all workers entering the project by way of an orientation session.
Supervisors	Every foreman must ensure all of his workers attend the site orientation session

(including Sub-Contractor) Responsibilities	before the start work on site for the first time. The foremen must, at the start of the shift, complete a Daily Pre-Task Briefing form and instruct their workers on the hazards and control requirements for that day's activities.
How to do a hazard assessment	1. ***Select a job or occupation or common hazard***. Ideally, you should start with an item that has been identified as a health and safety problem. For instance, jobs where accidents occur frequently or result in serious injuries should be a priority. Jobs in high hazard areas, such as where people work alone, where consequences of an accident are severe such as major injury or fatality, jobs where workers have voiced concerns or had work refusals or newly established jobs as due to lack of experience in these jobs, hazards may not be evident or anticipated. 2. ***Break each task down into steps***. Describe and list each step in sequence. 3. ***Identify the risk factors at each step***. Beside each task, write down the materials, equipment, processes and environment factors involved that could cause an accident or health effects. People factors may also be relevant. 4. ***Identify the hazards associated with each task/factor combination***. Systematically go through every risk factor for every task, and consider what specific hazards might be involved. Make a list of both health and safety hazards. 5. ***Assess the hazard***. Evaluate the degree of risk, which is the extent to which the hazard is likely to cause loss of life, permanent disability or serious injury as well as the probability of occurrence. When considering health hazards, you can consider the number of persons exposed and the duration of exposure. Where there is exposure to hazardous chemicals, biological or physical agents, you will need to include workplace and personal exposure monitoring to ensure that exposures do not exceed regulated or recommended limits. 6. ***Identify controls***. Identify procedures or modifications needed to eliminate or control the hazards. This may require changes to people factors, equipment, materials, procedures, tools, systems or processes. 7. ***Validate the analysis***. Implement the needed controls, and validate the analysis by observing the task in operation. Make sure that new hazards have not been introduced. Get feedback from the employees performing the job to see how the hazard controls work. 8. ***Evaluation.*** Assess the need to repeat the analysis. Continuous improvement should be implemented with Hazard Analysis reviewed if necessary. For example if injuries occur, the job changes in any way, or new equipment is instituted, then you should consider conducting a Hazard Analysis.
What do you	Once you have validated your hazard controls, you need to develop safe work

do once you have completed your Hazard Analysis?	procedures. These procedures must be communicated to all employees who are or will be performing the job or task.
Definitions	The following will list and define the types of hazards that should be reviewed and identified.
Health Hazards	A potential health hazard exists when a person comes in contact with any agent whose properties can cause harm to the body when excessive exposure takes place. A health hazard may result in an illness or a disease. An illness or disease is a specific malfunction of the body, or one of the systems or organs, which has a particular set of symptoms. Occupational illnesses are those caused by exposure to a hazard in the workplace.
There are four types of health hazards	
chemical agents	Health hazards can arise from exposure to a large variety of chemical substances. Their toxic properties can harm the body. Chemical hazards take the form of solids, liquids vapours, gases, dusts, fumes or mist. They can be inhaled, ingested or absorbed into the body.
physical agents	Physical agents are forms of energy that can harm the body when exposure takes place. They include mechanical energy which impacts on the body from noise and vibration. Other physical agents include hot and cold temperatures which can affect the body's normal internal temperature. Some forms of radiation may affect the body's cell. They may be a specific part of the production process or an unwanted byproduct. ***Exposure to excessive noise or vibration, extreme temperatures and radiation can lead to acute or chronic health effects***.
biological agents	Biological agents are living things or substances produced by living things that can cause illness or disease in humans. Biological agents may have many uses in the workplace, but some of them can be hazardous. They include bacteria, viruses, and fungi as well as larger organisms such as parasites and plants.
ergonomic hazards	The design and organization of work can potentially cause harm to the body by placing stresses and strains on the musculoskeletal system. The elements of work design include the design of the work station, tools and equipment, the physical environment and general work organization.
Safety Hazards	A safety hazard is something that has the potential to cause an injury. Occupational injuries are usually the result of accidents. An accident is an unplanned event that causes harm to people or damage to property. The harm or damage is usually immediately apparent.

	The factors that can contribute to cause an accident can be grouped into five categories
Human factor	The actions that people take, or do not take, greatly affect what happens in the workplace. This is true for both management and workers. Employers have the authority and responsibility to control the way work is done. The workers' role is to actually perform the work.
Material factor	Many of the materials involved in producing goods and services in the workplace, including waste products, involve safety hazards. These hazards include risks from explosions, fires and unexpected traumatic exposure to highly toxic substances, such as acids. Accidents can occur because a control over a known hazard is not in place, or fails, particularly while the material is being moved or handled.
Equipment factor	Equipment refers to the tools, machines, facilities, vehicles and other hardware used in the workplace. Equipment may be hazardous if a person is exposed to parts that move, spin, rotate or cut. Some equipment has the potential to release harmful physical agents such as heat, pressure, electricity or radiation. Equipment, if not properly maintained, is prone to failure which may cause an accident.
Environmental factor	The workplace environment is the place where people, material and equipment come together to get work done. There are many aspects of the environment that can affect or alter conditions adversely and contribute to safety hazards. Temperature, humidity, air quality, lighting quality, radiation, housekeeping and noise level are examples. These factors may be controlled individually. But controls must also be effective in situations where two or more environmental factors combine to create a hazard.
Process factor	A process is the sequence of actions used to transform materials and human skills into goods and services. It is the way work is designed. It includes the overall organization of the workplace as well as the individual work station. Process factors include byproducts such as heat, noise, dust, vapours and fumes that may be created by the production process
Specific Safety Hazards	The specific hazards found in workplaces are too numerous to be covered in detail, but a number of hazards are common to many workplaces. They include machine hazards, energy hazards, confined space hazards and material handling hazards.
Machine hazards	***GUARDS***: There are many different kinds of guards. They range from covers over pulleys and belts to barriers preventing worker's hands from coming near cutting or punching tools. ***MAINTENANCE***: Preventive maintenance is an organized program for preventing the gradual breakdown or sudden failure of machines and equipment. ***REPAIRS***: Repairs are required any time the machine fails to operate within the manufacturer's specifications.

Energy hazards	Workers can be seriously injured by the sudden movement of machine components, electrical shock or other releases of energy when they are adjusting or maintaining equipment. Energy sources include electricity, steam, heat, pneumatic or hydraulic pressure and gravity as well as mechanical and chemical energy. ***Equipment must be locked out or blocked during repair work to avoid injury to workers***
Confined Space hazards	Confined spaces are found in a wide variety of workplaces. Examples include storage tanks, vats, vaults, trenches, pipes, ducts, tunnels and walk-in refrigerators. There are many hazards associated with confined spaces. They can be divided into two major categories: *atmospheric hazards* and *physical hazards.* Rescue operations in confined space also involve a number of specific hazards.
Material handling hazards	Almost every workplace depends on the physical movement of material. In fact, virtually every workplace depends on a regular flow of supplies. Material handling is a major cause of injury. Injuries can result from manually lifting, moving and carrying objects. They also result from accidents involving mechanized material handling equipment, such as forklifts and conveyors. ***NOTE: DO NOT LIMIT THE HAZARD DEFINITIONS STRICTLY AS THOSE IN THIS PROGRAM. OTHERS DO EXIST THAT MAY NOT HAVE BEEN ADDED.***

Daily Pre-Job Briefing Form

Project		Project #		Date		Completed by	

Risk Assessment Chart

Severity	Remote	Unlikely (but possible)	Occasional (will occur sometimes)	Likely (will occur frequently)	Very Likely (continuously experienced)
Catastrophic (fatality)	Low	High	High	High	High
Serious (permanent Disability)	Low	Medium	High	High	High
Moderate (Temporary disablement)	Very Low	Very Low	Low	Medium	Medium
Minor (minor injury)	Very Low	Very Low	Very Low	Low	Medium
No known impact (no injury)	Very Low	Very Low	Very Low	Very Low	Very Low

Risk Tolerance	
High	Unacceptable Deficiency – Additional Control required
Medium	Undesirable Deficiency – Additional controls required
Low	Acceptable but improvements may be suggested
Very Low	Acceptable

Hazard Types	
A	**Actual**
P	**Potential**

Task / Hazards / Controls

Tasks	Hazards	Hazard Type	Risk Tolerance	Control Measures

Employee Confirmation

All crew members must understand and agree to the controls prior to commencing work. Signatures are required as acknowledgement of our shares responsibilities.
We are physically prepared and mentally focused to do our job safely.

Worker's Name – Print	Worker's Signature	Worker's Name – Print	Worker's Signature

Potential / Actual Hazards and Controls – References and Guide

Potential Hazards – examples, not a full list!

Health Hazards	Safety Hazards	Specific Safety Hazards
physical agents	**Human factor**	**Machine hazards**
Vibration Hazards	*Falls over 3m*	*Pinch Points*
Noise hazards	**Material factor**	Guards
Slips/Trips	*Elevated Loads*	**Energy hazards**
Eye Hazards	**Equipment factor**	*Thermal Burns*
chemical agents	*Heavy Equipment exposure*	*Overhead power lines*
Chemical Burns / Contact	*PEWP*	*Buried power lines*
Spills	**Environmental factor**	*Extension cords*
Fire/Explosion	*Heat/Cold Stress*	**Confined Space hazards**
biological agents	*Weather Conditions*	*Pressurised Systems*
Inhalation Hazards	*Water/Drowning Hazards*	**Material handling hazards**
ergonomic hazards	**Process factor**	*Overexertion*
	Trench / Excavations	*Cuts/Abrasion*
	Demolition	*Manual Lifting*
	Welding/Cutting	

Potential Control Measures

PPE	Fall Protection	Electrical	Fire Protection	Proper Equipment	Inspections
Head Protection	Harness/lanyard inspection	Lock-out/tag-out	Fire Extinguisher	Ladders – inspected	PEWP
Foot Protection	Adequate anchors	Grounded	Fire watch	Scaffolding	Forklifts
Eye Protection	Guardrail systems	GFCI	Non-Spark tools	Hand/power tools	PPE/Fall Protection
Respiratory Protection	Floor Covers	Power tool inspection	Grounding	PEWP	Scaffolding
Fall Protection	Fixed barricades	Extension Cord inspection		Material handling equipment	Cranes/rigging
Reflective Clothing	Warning systems			Operator qualification	Work Space
Hearing Protection	Rescue procedures				

First Aid	Confined Space	Heat/Cold Stress	Training	Permits	Vehicle /Traffic
First Aid kits	Isolation	Weather factors	Competent Person	Hot Work	Traffic Control Plan
Eye wash station	Air Monitoring	Work/Rest Regiment	WHMIS	Confined Space	Barricades
Trained workers	Trained Workers	Rest Area	Fall Protection	Lock-out/Tag-out	Signs
Hospital Route known	Permits	Liquids available	Confined Space	Energised Work	Vest/Garment
	Rescue Plan/Procedures	Monitoring	Equipment Operator		Emergency route
		Training	TQA		

Air Monitoring	Welding / Cutting	Demolition	Excavation/Trenches	Hazardous Substances	Occupational Hygiene
4-gas detectors	Cylinders secured	Pre-demolition survey	Sloping	Training	Awkward Position
Detector Tubes	Cylinders separated	Structure's condition	Shoring	Labels	Exposure to noise/vibration
Personal Sampling	Cylinders Capped	Isolate area/utilities	Trench Box	Storage	Potential to slips/trips
LEL/O2	Flash-back Arrestors	Designated Substances	Utilities Located	Proper Use	Poor Air quality
	Flame Retardant Clothing	Competent Person	Barricades	MSDS	Lifting, twisting, repetitive
	Eye/face protection		Competent Person		Lighting
			Daily Inspection		

Safe Job Procedure #1

PHASE / TASK	EXCAVATION & PILING		
Initial Date of Preparation	January, 2015	Revision Date	February, 2019

<table>
<tr><th colspan="2">Issues & Concerns</th><th>Risk Level</th><th>Expectations & Controls</th></tr>
<tr><td>1</td><td>Excavation Slopes/ shoring</td><td></td><td></td></tr>
<tr><td>1.1</td><td>Stability of walls and worker protection</td><td>A</td><td>✓ All excavations slopes, if any, will be maintained according to their soil type & corresponding requirements.
✓ If the slopes cannot be maintained; trench boxes must be provided; ensure a copy of the engineer’s drawing is provided to MBC.
<table>
<tr><th>Soil Type</th><th>Example</th><th>Slope requirements</th></tr>
<tr><td>1 (hard)</td><td>Consolidated clay, some glacial tills</td><td>Starting at 1.2m from the bottom of the trench; the slope is 1:1</td></tr>
<tr><td>2 (semi-hard)</td><td>A pick can be driven into it.
Silty clay and less dense tills</td><td>Starting at 1.2m from the bottom of the trench; the slope is 1:1</td></tr>
<tr><td>3 (loose)</td><td>Previously excavated material
or
Soil that is stiff to firm or compact to loose in consistency and has one or more of the following characteristics;
i. It exhibits signs of surface cracking.
ii. It exhibits signs of water seepage.
iii. If it is dry, it may run easily into a well-defined conical pile.
iv. It has a low degree of internal strength.</td><td>Starting the bottom of the trench; the slope is 1:1</td></tr>
<tr><td>4 (very loose)</td><td>Muskeg, silty clay, other organic deposits</td><td>Starting the bottom of the trench; the slope is 1:3</td></tr>
</table>
✓ All loose material which presents a hazard to any worker will be removed in a controlled manner.</td></tr>
<tr><td>1.2</td><td>Underground Services</td><td>A</td><td>✓ The contractor will ensure all underground services will be located and current locate sheets are provided to both MBC and the equipment operator.
✓ Extreme caution must be taken while working around known services.</td></tr>
<tr><td>2</td><td>Vehicles and Heavy Equipment</td><td></td><td></td></tr>
</table>

2.1	Dump Trucks	A	✓ Will be equipped with an operational audible backup alarm. ✓ Will be in proper working condition. ✓ Will be operated by a competent person. ✓ Will always be directed by a competent signal person while travelling in reverse.
2.2	Heavy Equipment	A	✓ Will be maintained in good condition. ✓ Will be operated by a competent person.
2.3	Interaction between equipment and persons	A	✓ Workers will avoid close interaction unless absolutely necessary. ✓ **Worker must never walk behind any equipment or in their blind spots.** ✓ Workers MUST make eye contact with the operator before approaching the equipment. ✓ **The operator must acknowledge your presence – never assume it is safe before-hand.**
3	**Signal Person**	A-B	✓ All persons will be qualified to perform the duties of a signal person. ✓ While directing public traffic, must be using a "STOP/SLOW" sign. ✓ Should a vehicle's position on the public road block a lane, then at least 2 workers will assist in directing traffic. ✓ Any worker performing the duties of a signal person will be wearing a 5-point tear-away reflective vest.
4	**Piling**		
4.1	Material Storage / handling	A-B	✓ All piles will be stored in a manner which does not pose a hazard to the workers. ✓ If required they will be blocked to ensure they cannot inadvertently roll. ✓ The piles will not be moved in a manner which would pose a threat to any worker; do not pass over any worker; do not place a worker in a pinch point position.
4.2	Crane	A	✓ Will be maintained in proper working condition at all times. ✓ All required inspections will be conducted by the operator; a copy of the monthly log will be provided to MBC. ✓ Will only be operated by a competent operator; a copy of the training certificate must be provided to MBC. ✓ Workers must ensure they do not walk in between the crane and the suspended pile.
4.3	Welding	B	✓ If the welding process can affect other workers or the public; welding screens may be required.

			✓ Ensure an adequate fire extinguisher is readily available.
5	**General Conditions**		
5.1	Access / Egress	B	✓ An access ramp or ladder will be provided to the workers. ✓ If the excavation's depth exceeds 8'; a barrier must be installed around it to protect the workers.
5.2	Personal Protective Equipment (PPE) **Mandatory**	A-B	✓ Hard Hats ✓ Work Boots ✓ Reflective Vests
5.3	Personal Protective Equipment (PPE) **As required - exposure**	A-B	✓ Hearing. ✓ Safety Glasses ✓ Work Gloves
5.4	Public Way Protection	B	✓ A sturdy 6' fence will be erected around the entire project. ✓ Unless authorised, workers must not modify it in any way.

Risk Levels	
Class "A" – major	High risk (immediately dangerous to life and health)
Class "B" – moderate	Medium risk (medium term potential for non-life threatening injury or illness)
Class "C" – minor	Low risk (long term potential for slight injury or illness)

Safe Work Procedure #2

PHASE / TASK	Formwork		
Initial Date of Preparation	January, 2015	Revision Date	February, 2019

	Issues & Concerns	Risk Level	Expectations & Controls
1	**Material Handling & Storage**		
1.1	Tower Crane	A	✓ All engineer drawings and final inspection report will be provided to MBC before using the system. ✓ Only a qualified worker is permitted to operate the crane; a copy of his/her qualifications is required. ✓ The crane will be maintained in proper working condition.
1.2	Hoisting and Rigging	A	✓ Only certified workers are permitted to connect any hoisting devices. Proof of training is required. ✓ All slings, chains will be maintained in good condition; defective equipment will be tagged and removed from site immediately.
1.3	Material Movement	A-B	✓ Ensure material is not hoisted over any worker; the crane operator will sound his horn when approaching any worker's position. ✓ Compressed gas cylinder will only be hoisted using approved cages or devices; never by their caps!
1.4	Material Storage	A-B	✓ All material will be stored in a manner which does not endanger any worker. ✓ Material will be stored in a manner which maintains proper access/egress to the site.
2	**Vehicles and Heavy Equipment** **Bobcats, shovels, PEWP**		
2.1	Delivery Vehicles	A-B	✓ Will be in proper working condition. ✓ Will be operated by a competent person. ✓ Will be directed by a competent signal person while travelling in reverse.
2.2	Heavy Equipment	A-B	✓ Will be maintained in good condition. ✓ Will be operated by a competent person. ✓ Will have all required inspections conducted daily or as required.
2.3	Interaction between equipment and persons	A	✓ Workers will avoid close interaction unless absolutely necessary.

			✓ **Worker must never walk behind any equipment or in their blind spots.** ✓ Workers MUST make eye contact with the operator before approaching the equipment. ✓ **The operator must acknowledge your presence – never assume it is safe beforehand.**
2.4	Signal Person	A-B	✓ All persons will be qualified to perform the duties of a signal person. ✓ While directing public traffic, must be using a "STOP/SLOW" sign. ✓ Should a vehicle's position on the public road block a lane, then at least 2 workers will assist in directing traffic. ✓ Any worker performing the duties of a signal person will be wearing a 5-point tear-away reflective vest.
3	**Rebar**		
3.1	Rebar Dowels	A-B	✓ All exposed rebar dowels (both vertical and horizontal) will be properly protected.
3.2	Installations stands	B	✓ Will be engineer designed. ✓ Will be used as directed by the engineer's design. ✓ A copy of the design will be provided to MBC for our records.
3.3	Saw and/or torch cutting	B	✓ Ensure no workers are exposed to the sparks prior to cutting. ✓ Ensure no flammable materials are exposed to the flying sparks.
4	**Formwork**		
4.1	Components	A-B	✓ Ensure all components are in good condition.
4.2	Openings	A	✓ Ensure all temporary and permanent openings are covered with suitable materials; secured and identified.
4.3	Stripping	A-B	✓ The area under the form or area being stripped will be cordoned off from the other trades. ✓ The material will be promptly cleaned up before the danger tape is removed.
4.4	Shoring	A-B	✓ Ensure engineered shoring designs / shop drawings are available and followed for formwork requiring an engineered design
5	**General Conditions**		
5.1	Fall Protection	A	✓ All workers will be trained in Working at Heights; proof must be readily available. ✓ All workers must properly use their fall protection system as required.

			✓ Written rescue procedures must be developed and implemented (trained). ✓ Workers will be removed from site immediately if a violation is observed.
5.2	Guardrails / Barriers	A-B	✓ A guardrail will be maintained along all work platforms and ramps which are at 8’ or higher. ✓ If a guardrail is not feasible, a barrier system will be installed no closer than 6.5’ away from exposed edge. ✓ ALL WORKERS AND TRADES WILL RESPECT THIS BARRIER SYSTEM!
5.3	Ladders	A	✓ All ladders will be in good condition; defective ladder will not be permitted on site. ✓ Only class 1 (or better) ladders will be permitted on site. ✓ Only 1 person at a time will be permitted to use a ladder at any given time – this includes access ladders. ***Having more than 1 worker on a ladder will exceed the ladder’s weight capacity and its integrity.***
5.4	Extension Cords & Electrical hazards	A-B	✓ All extension cords will be maintained improper working condition; this includes ground prongs and outer sheaths. ✓ All extension cords will be protected by a GFCI outlet. ✓ Know where the overhead power lines are at all times. **Nominal phase-to-phase voltage rating — Distance** 750 - 150,000 volts — 3 metres more than 150,000 to 250,000 volts — 4.5 metres more than 250,000 volts — 6 metres
5.5	Tools	A-B	✓ All tools will be in proper working condition. ✓ All guards will be installed and used. Workers must not remove, modify or alter any guard. ✓ All the power cords will be in proper condition.
5.6	Personal Protective Equipment (PPE) **Mandatory**	A-B	✓ Hard Hats ✓ Work Boots ✓ Reflective Vests
5.7	Personal Protective Equipment (PPE) **As required - exposure**	A-B	✓ Hearing Protection ✓ Safety Glasses ✓ Work Gloves ✓ Fall Protection

Risk Levels	
Class “A” – major	High risk (immediately dangerous to life and health)

Class “B” –moderate	Medium risk (medium term potential for non-life threatening injury or illness)
Class “C” – minor	Low risk (long term potential for slight injury or illness)

Safe Work Procedure #3

PHASE / TASK	Steel Erection		
Initial Date of Preparation	January, 2015	Revision Date	February, 2019

	Issues & Concerns	Risk Level	Expectations & Controls
1	**Equipment Mobilization**		
1.1	Traffic Control	A-B	✓ If the equipment and supporting vehicles are blocking the road; then adequate traffic control must be implemented. ✓ All persons conducting these tasks must be trained in their duties. ✓ Proper use of signs and communication must be used. ✓ Proper PPE must be worn such as hard hat, work boots and a 5-point tear-away reflective vest.
1.2	Unauthorised Persons	A-B	✓ The mobilization area should be cordoned to prevent any person from entering it.
2	**Equipment – General**		
2.1	Condition	A	✓ The crane and all of its components including chains and slings used in the hoisting operations must be in proper working condition. ✓ The crane's maintenance log will be completed and a copy submitted on a monthly basis to MBC.
2.2	Training	A-B	✓ A copy of the crane operator's certification will be submitted to MBC. ✓ Only trained workers are permitted to conduct hoisting and rigging operations. A copy of their qualifications will be submitted to MBC.
2.3	Proper Use	A	✓ The crane's hooks will be equipped with their safety latches at all times.
2.4	Slings	A	✓ Slings with excessive signs of wear and abrasion or tears must be taken out of service.
3	**Material Handling**		
3.1	Moving materials	A-B	✓ No material will be flown over any workers; the path of travel should be cordoned off from other trades. ✓ Depending on the weight of the material, if the building is occupied, staff may be required to vacate their work area during this time frame. ✓ Compressed gas cylinder will only be hoisted using approved cages or devices; never by their caps!
3.2	Signal Person	A-B	✓ A trained worker will direct the crane operator at

			all times when the operator's path of sight is obstructed. Communication can be verbal (radios) or by standard hand signals.
4	**Other Equipment –** PEWP / Forklifts		
4.1	General Requirements	A-B	✓ Will be maintained in good condition. ✓ Will be operated by a competent person. ✓ All daily circle checks will be performed as required by the OHSA & manufacturer. ✓ All required PPE (fall protection) must be used as required.
5	**Tools**		
5.1	General Requirements	A-B	✓ All tools will be maintained in proper working condition. ✓ All guards will be maintained while in use. ✓ Workers must wear all required PPE based on minimum standards and exposures.
6	**General Conditions**		
6.1	Access / Egress	B	✓ A clear path of travel will be maintained to work area at all time; do not store excessive amounts of debris or materials. ✓ Keep a clear path from the staircase to the road for emergency purposes. ✓ Do not use PEWP as means of access and egress. A ladder, ramp or staircase must be used.
6.2	Roof Work / Elevated Work – fall hazards	A	✓ All workers who are exposed to a fall must properly wear and use their fall protection systems. ✓ If no pre-construction anchor points are present; trades will be required to install CSA-approved fall protection anchor points. ✓ The trades will provide MBC with a copy of their fall protection rescue plan prior to using their system for the first time. ✓ All defective components must be replaced right away – DO NOT USE ANY DEFECTIVE COMPONENTS!
6.3	Scaffolding	A-B	✓ Scaffolding should be used when work cannot be performed of the ground or adequate work platforms. ✓ All scaffolding will be in proper working condition. ✓ Will be erected with all required components including; access ladders, guardrails, cross-braces, proper work platforms (minimum18" wide)
6.4	Ladders	A-B	✓ All ladders will be rated class-1 or better; all others will be removed. ✓ All defective ladders will be removed from site.

			✓ All workers are expected to properly use their ladders at all times.
6.5	Extension Cords – Electrical Hazards	A-B	✓ All extension cords must be in proper condition; including outer sheath and ground prongs. This session constitutes as a notice that all defective cords will be disconnected (if safe to do so) and cut. ✓ All extension cords will be GFI protected while being used in wet conditions or outside. ✓ Know where the overhead power lines are at all times. **Nominal phase-to-phase voltage rating — Distance** 750 - 150,000 volts — 3 metres more than 150,000 to 250,000 volts — 4.5 metres more than 250,000 volts — 6 metres
6.6	Personal Protective Equipment (PPE) **Mandatory**	A-B	✓ Hard Hats ✓ Work Boots ✓ Reflective vests
6.7	Personal Protective Equipment (PPE) **As required - exposure**	B	✓ Hearing. ✓ Safety Glasses ✓ Fall protection ✓ Work Gloves ✓ Respiratory

Risk Levels	
Class “A” – major	High risk (immediately dangerous to life and health)
Class “B” – moderate	Medium risk (medium term potential for non-life threatening injury or illness)
Class “C” – minor	Low risk (long term potential for slight injury or illness)

Purpose

Safe work practices are a series of specific steps that guide a worker through a task from start to finish in a chronological order. Safe work practices are designed to reduce the risk by minimizing exposure through education.

Procedures

The company has developed safe work practices for the following high-risk phases:

#1 – Excavations and piling
#2 – Formwork
#3 – Steel Erection

The above-mentioned procedures may be modified should additional hazards present themselves on a specific project.

Additional procedures will be developed, however most will be developed on a site-to-site basis. These may include the following;

1. Fall protection issues, including installing / removing guardrails.
2. Scaffold erection / dismantling
3. Lock-out / tag-out
4. Elevated Work Platforms.
5. Confined Spaces.

Electrical Hazards

As a company, we must never work on or in close proximity to any high voltage wires, corrective measures should be implemented prior to our involvement in these tasks. However, should work in these areas be required; the affected workers will receive the required awareness training.
Ensure only qualified electricians are performing any work on electrical components and that appropriate PPE is being used / worn for all electrical shock and arc flashes.
Never work on any machinery or tool unless it is locked-out and tagged-out.
Defective tools and equipment must be taken out of service. Ensure tools and equipment are not used in close proximity to live electrical installations.
Refer to the lock-out policy for details.

Extension cords / tools

1. Must be suitable for their task.
2. Must be maintained in proper condition, i.e. ground prongs, outer sheath.
3. Should be positioned in a manner which would minimize its exposure of being cut or pinched. Whenever possible the cords should be off the ground.
4. All cords and portable electrical equipment which are being outside and/or in wet conditions must always be protected by a GFI.

Panels

1. Must have a lockable panel door when live.
2. Warnings signs must be posted.
3. Restrict access to authorized persons.

Overhead and/or high Voltage power lines & equipment

1. Whenever work is to be performed under or around live overhead and/or high voltage power lines and equipment; a site-specific Hydro Safety Plan must be generated and implemented to ensure both direct and indirect electrical contacts are eliminated or controlled.

2. Always maintain the minimum distances away from the power lines. ***If these distances cannot be achieved / maintained then we cannot perform any work until the area has been made safe by qualified individuals – this may include locking-out the equipment.***

Nominal phase-to-phase voltage rating	Distance
750 - 150,000 volts	3 metres
more than 150,000 to 250,000 volts	4.5 metres
more than 250,000 volts	6 metres

Underground power lines

1. Ensure the sources are always located before digging.
2. Ensure warning signs are in place advising workers of their presence.

Lock-Out / Tag-out

Purpose

To ensure that all energy sources are isolated and effectively controlled prior

	to any work being done on or in close proximity to machinery or equipment.
Scope	Applies to all workers involved in managing, administering or completing work on energized equipment. Applies to all energy sources: kinetic, chemical, thermal, electrical, radiation, gravitational, potential. Applies to all locations; shop and sites as well as all contractors working in these locations.
DEFINITIONS	
Assigned lock	This is a lock for which the worker personally controls the key.
Clear	The process of ensuring that no-one is near the system before it is checked to ensure that all energy is out.
Lock	Lock is the use of locks to positively secure the control device(s) used to control the hazardous energy or other hazard.
Tag	Tag is the use of a “DANGER” tag to warn people that the equipment or process was/is lockout of service. It indicates the reason and the name of the person in charge.
Try	The process of trying out the equipment by pushing its start button to ensure that all sources of energy has been lockout. This is the process of verifying that all areas of the process or equipment are secured before work is done on it.
Release	The process of releasing the equipment for the work to be done on it. This means that all is safe to release the system to work on.
Person in charge of the work	Individual responsible to ensure that the work is done according to the procedure and safely. This individual can also be the person carrying out the actual work. This individual is not necessarily a supervisor.
Lockout	Means to physically neutralize all energies in a piece of equipment before beginning any maintenance or repair work. Lockouts generally involve: ➢ Stopping all energy flows (for example, by turning off switches or valves on supply lines). ➢ Locking switches and valves. ➢ Securing (blocking) the machine, device or power transmission line in a de-energized state (for example, by applying blocks or blanks, or bleeding hydraulic or pneumatic pressure from the lines).
Isolating Energy Sources	This means stopping and securing the machinery, equipment, process or system to protect workers from danger. Such stopping and securing must eliminate or control the danger to the safety and health of workers from

	unexpected start-up of machinery, equipment, process or system, or the release of hazardous energy or substances.
Energy Isolating Device	This is a device that physically prevents the transmission or release of an energy source to machinery or equipment (the main power source). Typical energy-isolating devices include switches, circuit breakers and valves. Stop buttons on control circuits and programmable logic controllers (PLCs) ***cannot*** be used as energy-isolating devices.
Energy Source	Includes but is not limited to electrical, mechanical, radiation, process liquids, steam, air, water, oil, hydraulic, vapour and naturally occurring sources.
Chemical Energy	Chemical energy refers to the energy that can be released by a chemical reaction. Hazardous chemical energy can be released with flammable, combustible and corrosive substances.
Electrical Energy	Conductors, motors and generators are sources of electrical energy. Both low-voltage and high-voltage equipment and conductors can injure or kill workers. Maintenance work on lighting systems or electrical panels, for example, requires lock-out.
Gravitational Energy	A naturally occurring energy which draws any/all objects towards the centre of the earth.
Kinetic Energy	The energy of moving equipment or moving materials.
Thermal Energy	Thermal Energy is the energy in heat, which is found in steam, hot water, fire, gases and liquefied gases.
Radiation Energy	Radiation energy includes non-ionizing and ionizing radiation.
Potential Energy	Potential energy is the energy is suspended, elevated or coiled materials.
RESPONSIBILITIES	
Safety Coordinator	Evaluate the procedure for its effectiveness and reviews this procedure every year or as required.
Supervisor	Ensure that all potential hazards are evaluated, the necessary precautions taken, and that personnel assigned to isolate energy sources are properly trained prior to any work being done on machinery, equipment or process. Provide personal locks to the employees. Must implement written procedures where required; ➢ Administer this procedure on the projects.

	➢ Verifies that the procedure is in use.
Worker	It is the responsibility of the workers assigned to isolate the energy sources to adhere to all the requirements in this procedure. All workers who work on machinery or equipment requiring lockout are responsible for: ➢ Locking out the energy-isolating devices or placing a personal lock on the key-securing system in a group lockout procedure. ➢ Removing their personal locks on the completion of their work. ➢ Keeping control of the keys to personal locks throughout the duration of the work.
PROCEDURES	Sample procedures for isolation and control of energy sources include: ➢ Responsibility ➢ Training requirements ➢ Isolation Procedures for all Energy Sources ➢ Isolation of Electrical Energy Sources ➢ Isolation for Line-breaking ➢ Isolation of Hydraulic or Pneumatic Systems. ➢ Isolation of Confined Spaces
Isolation procedures for all energy sources	Isolation of energy sources takes place before starting work on any machinery, equipment or process. Isolation of energy sources is a five-step process: Lock, Tag, Clear, Try and Release
Lock	➢ The person in charge of the work will notify all effected personnel of the extent and duration of the shutdown of the machinery, equipment or process. ➢ The person in charge of the work will ensure that all machinery, equipment or process are shut down, locked and tagged. ➢ Each individual working on or near the equipment must be in place their assigned lock and tag at the lockout point(s). A lockout scissor clip may be required.
Tag	➢ A tag must be securely attached to each lock. ➢ The tag used must be made of non-conductive material with the words “DO NOT OPERATE” written on it, the name of the worker and the date of the lockout
Clear	➢ The person in charge of the work will clear the machinery, equipment or process of any hazards or people
Try	➢ Once the person in charge of the work is assured that all sources of energy are locked-out and tagged and all is clear, he/she will try to

	activate the equipment: 1. Make certain everyone stands clear, then have the equipment controls (push buttons, switches, etc.) operated to ensure the machinery or equipment or process will not activate; and 2. Ensure the machinery, equipment, process controls are returned to the off or neutral position immediately after the test; and 3. Relieve or restrain any residual or stored energy; and 4. Ground electrical energy stored in capacitors; and 5. Test with appropriate test equipment and visually check to determine energy sources have been neutralized.
Release	If it is assessed that everything is properly lockout, the person in charge will release the equipment for work to be done. Equipment removed from service because of safety concerns must be locked, tagged, cleared and tried by the person in charge of the work to ensure it cannot be used. The individual worker's lock and tag must remain on any system that was rendered inoperable until such time that; 1. They complete the repair of the system and it is safe to operate or 2. They turn over the responsibility for the system to another person, and the lock and tag of the individual accepting the responsibility is properly affixed to the equipment. Workers coming on shift must place their personal locks on all the lockout points before the workers going off shift removed their locks. Alternatively, the supervisor may lock the lock-out points before workers going off shift remove their locks to ensure continuity of the lock-out until workers coming on shift can apply their personal locks.
Locks can only be removed by the owners	If an employee fails to remove a lock and tag and leaves the site, and can be reached, he may authorize the foreman to cut off the lock. If the employee cannot be reached, the foreman, after checking the equipment can be operated safely may authorize the removal of the lock and tag. A written record of such removal must be kept on file. The employee is to be contacted regarding his lock being removed at the earliest opportunity to ensure that he does not return to work on the equipment and not realize that his lock has been removed and the equipment may be energized.
Completion Of Maintenance	Upon completion of the maintenance /repairs, the person in charge of the work will make a final inspection to ensure that all repairs are completed; all guards have been replaced. All personnel are informed prior to the equipment being re-energized. The locks are removed in reverse sequence (the last person to put on the lock will

	be the first to remove it and the first person to put on the lock will be the last to removed it) and the equipment brought on line by the person in charge of the work.
Equipment Requiring Specific Handling	Some equipment may require a specific "isolation" procedure to ensure all source of energy are de-energized. The foreman will ensure that they (equipment and machinery) are identified and an appropriate specific isolation procedure is in place and followed.
Multiple Person Lock-Out	Each person working on the machinery, equipment or process is responsible for locking out the energy-isolating devices. Multiple locks can be applied with scissor adapters. The first worker who applies the lock (must be an authorized company employee) must make sure the lockout is effective and the equipment will not start. When each worker has finished maintenance, the worker removes only his or her own personal lock. The worker who removes the last lock (who is the worker who applied the lock first) should check that all workers are in the clear and that the equipment can be safely restarted.
Multi-Point Lock-Out	To effectively lockout the equipment with multiple energy sources, lockout several energy-isolating devices. Some equipment, machinery or process may require specific lockout procedures in order to identify all the lockout points.
Isolation of Electrical Energy Sources	Electricity is the most common energy source that needs to be locked out. For plugged in type of equipment, a personal lock is not necessary if the person doing the work keeps the plug in view and under control while working on the equipment. If the worker must leave the equipment, then a lock is required. Before doing any work, the worker must ensure that all moving parts have stopped and are secured. For hard-wire equipment, the equipment or machine will need to be shut off making sure that all moving parts have come to a complete stop. ***Isolation by means of start/stop buttons or other control switch or Programmable Logistic Controls (PLC) is not acceptable.*** ***Pay particular attention to ensure all multiple power sources are identified and included in isolations.*** Isolation of lighting circuits in fused panels can be achieved by removing the fuse and locking and tagging the lighting panel door closed. It is mandatory that a qualified Electrician remove the fuses additionally isolating the systems. Following isolation, the systems are to be locked and tagged.

When operating a power disconnect switch, employees must look away from the box, stand to one side of the switch box, on the side of the handle, and using their left hand, open or close the switch.

Communication

The employer must arrange for all workers to be trained in isolation procedures by using the isolation cards. – ***refer to addendum***
Job requirements are communicated to each worker.
Persons who have placed tags on equipment are asked to remove their tags upon confirmation the work is complete.
Prior to the equipment being re-energized, all workers at the work location are informed prior to the start-up.
The worker and the supervisor communicate regarding work demands and equipment status.

Confined Space

Definitions

confined space

A **confined space** is defined as a place:

a) That is not both designed and constructed for **continuous human occupancy,**
and
b) Where **atmospheric hazards** may occur because of its construction, location, or contents, or because of work that is done in it.

Both criteria have to be met before a space is defined as a confined space.

hazardous atmosphere

A **hazardous atmosphere** is one which contains any of the following:

- An accumulation of flammable, combustible, or explosive agents
- Less than 19.5% or more than 23% oxygen, or
- An accumulation of atmospheric contaminants that could result in ***acute*** (short term) health effects which
  a) Pose an immediate threat to life, or
  b) Interfere with a person's ability to escape unaided from a confined space.

Introduction

Before letting a worker enter a confined space, a written confined space program must be developed, to meet the requirements of Regulation 632/05.

Confined Space Program

Among the first requirements in developing a confined space program is the need to assess which workers will be entering the confined space and therefore which workers will need a copy of the confined space program.

A copy of the program must also be provided to the constructor of the project.

In turn, the constructer must provide a copy of the program to the projects joint health and safety committee or health and safety representative, if any.

If workers from more than one employer will be entering the confined space, the constructor must prepare a **confined space coordination program**. This coordination document ensures that the various employers perform their duties in a way that protects the health and safety of all workers entering the confined space. A copy of the confined space coordination program document must be provided to each employer who is performing the work in the confined space and to the project's joint health and safety committee or the health and safety representative.

The confined space program can apply to one or more confined spaces. Program elements must include:

- ✓ A method of recognizing each confined space
- ✓ A method for assessing the hazards to which workers may be exposed
- ✓ A method for developing plans for controlling the hazards
- ✓ A method for training workers
- ✓ An entry permit system setting out measures and procedures to be followed when working in a confined space.

Plan for Controlling Hazards

Once the hazards have been identified in the assessment, a competent person must develop a plan to eliminate or control the hazards.

The primary objective of the plan is to eliminate the hazard before entry. If this is not possible, then controls, measures, and procedures must be put in place to ensure that workers are not in danger.

The Plan is the program element with the most regulatory requirements attached to it. The regulation outlines 11 mandatory requirements that must be contained in the plan:

1. Duties of workers
2. Coordination document (prepared by the constructor) If workers of more than one contractor enter the same confined space.
3. On-Site rescues procedures
4. Rescue equipment (inspected by a competent worker) and methods of communication
5. Protective clothing and protective equipment
6. Isolation of energy and control of material movement
7. Attendants
8. Adequate means of access and egress (entry and exit)
9. Atmospheric testing (conducted by a competent worker)
10. Adequate procedure for working in a the presence of explosive or flammable substances

	11. Ventilation and purging.
Overview	1. Before work begins, notify local utility or Ontario Hydro for work on electrical vaults. 2. Before work begins, identify confined space locations and work areas on site plan, and identify confined space work procedures required. 3. Unless otherwise notified take responsibility for any confined space equipment and training for their employees. 4. Before work begins, obtain “Safe Work Permit” and follow confined space work procedures appropriate for the jobsite. 5. Before work begins, provide necessary ventilation, breathing apparatus, safety staff, and rescue equipment. 6. Before work begins, provide confined spaces training and conduct or arrange for gas testing and monitoring of the confined space atmosphere. 7. Test respiratory and rescue equipment before use.
General Hazards	Entry into and work in a confined space poses health and safety problems which may include: ⇨ Presence or possible build-up of a hazardous atmosphere ⇨ Unexpected movement of equipment or materials ⇨ Engulfment ⇨ Explosive, toxic or oxygen deficient atmosphere Work within a confined space must be carefully defined and planned ahead of the entry in order to identify all possible hazards and take appropriate preventive action.
Responsibilities	Where confined space work is to be performed, it is the responsibility of senior project personnel to ensure work to be performed has been adequately identified, planned and that all safety requirements have been implemented prior to work commencing. The responsibility for safety, both at the time of entry and during the entire operation rests with the immediate supervisor. This includes action to continue with the implementation and administration of a safe work plan, ensuring the plan is adhered to and taking all necessary actions to eliminate or control the actual or potential hazards present.
Employee Training / Instruction	In addition to the supervisor training outlined in MBC’s H&S program, all supervisors or workers regularly involved in confined space entry shall receive competency training in confined spaces via an accredited organization, or through a program that has been recognized and accepted by MBC’s management.

Pre – Job Instruction

The work to be performed shall be under the direction of a competent person thoroughly familiar with the hazards that may be encountered and has received all necessary training.

All workers connected with the performance of the work in the confined space shall before entering, be present at a job meeting to be trained on the hazards they may encounter, how the job will proceed, the precautions required and rescue methods needed in an emergency.

Personal Protective Equipment

Appropriate PPE e.g. clothing, gloves, boots, eye, face and respiratory apparatus shall be worn to meet the requirements of the job.

Confined Space Entry Procedure

The following steps shall be used each and every time a confined space is entered by a worker. Where a client has specific confined space procedures for specific operations they will be followed so long as they offer equal or better protection

Safety Planning / Hazard Assessment

When an MBC employee must enter a confined space, we as the employer shall appoint a competent person to:

Carry out a job hazard analysis (if one has not been completed) of the physical and chemical hazards to which the worker is likely to be exposed both upon entry and during work activities.
Specify the necessary tests to determine whether the worker would likely be exposed to any identified hazards

Job Safety Analysis

To prepare a safe work plan for the work to be performed, outline all actual and/or potential hazards and the controls used to reduce/eliminate them. Use the MBC pre-job hazard analysis requirements.

Hazards to consider include:

Oxygen enrichment or deficiency	Flammable gas, dust, vapour
Combustible dust	Other hazardous atmospheres
Harmful substances	Hazardous energy, equipment
Engulfment, and/or entrapment	Other hazardous conditions

The procedure must also take the following controls into consideration:

Isolation, lockout, tagging of hazards	Controls of ignition sources
Movement of material	Ventilation and purging
Lighting	Alarms and communication methods
Means of access and egress	Personal protective equipment
Atmospheric testing requirements/frequency	Emergency equipment
Emergency response procedures	Warning signs/barricades
Training requirements	Additional safety procedures

Energy and Equipment Lockout

The supervisor must arrange for the confined space to be checked to ensure that all blinding, blanking or other effective methods are used to prevent contaminants from entering the confined space.

Where purging is necessary to prevent the development of a hazardous atmosphere in the confined space, water and fresh clean air may be used. When this is completed then a further test shall be done to verify the atmospheric content prior to entry.

Before entry all power driven internal equipment and power sources shall be de-energized and locked out to ensure they cannot be operated.

Ensure adequate lighting and that power sources are intrinsically safe.

Ventilation

Where possible, clean-out doors or any other openings shall be positively locked open and the confined space thoroughly ventilated by a positive method of mechanical ventilation to introduce large quantities of fresh air.

Ensure the air introduced into the confined space is not accidentally contaminated with harmful substances before it enters the confined space.

Continuous ventilation with mechanical ventilation equipment shall be done where necessary to provide secondary protection in the event the work in progress produces contamination, heat or toxic fumes.

Appoint Attendant / Set Up Communications

Ensure that a person performing the Attendant duties is aware of their responsibilities

The Attendant is positioned at the confined space entrance and is equipped with the confined space procedure, permit, communications equipment and emergency equipment.

The Attendant must be capable of rescuing if required (without actual entry)

	and must be able to communicate constantly with the workers inside either visually or by radio. The Attendant does not leave the post unless relieved by a qualified person. The supervisor must be notified by the Attendant of any dangerous situations that they become aware of. The Attendant will have basic first aid and CPR training, or be able to immediately contact someone in the vicinity who does.
Sign In / Sign Out	It is the Attendant's responsibility to maintain a log system in the immediate area of the confined space. Workers entering the confined space must sign in and out and record the time of entry.
Communications	The supervisor must ensure that an adequate communications system is in place and/or visual contact can be maintained between the guard and the workers in the confined space.
Confined Space Permits	The supervisor will be responsible to ensure that all notifications and permits at the work site have been completed prior to entry. Ensure a written confined space work permit is completed and signed by a competent person and include as a minimum all of the following information: The length of time for which the permit is valid (12 hour maximum) 1. The identity of each worker entering the confined space 2. The activity to be performed by the workers 3. The location of the confined space 4. The results of the atmospheric testing of the confined space both at the time the permit was issued and more often as required 5. The applicable precautions to protect the workers outlined in the plan **Refer to Appendix for Permit Form**
Atmospheric Testing	Prior to any entry being made, portable instrumentation for sampling of oxygen concentrations, explosive concentrations and potential airborne contaminants in the confined space shall be used by a competent person to determine atmospheric conditions. When a job is stopped for any reason and workers have to re-enter after a prolonged work break, then testing shall be done again before entry if work permits are still in place.
Safe Work Practices for Confined Space Entry	Where work is to be carried out in a confined space the following will be considered when completing the Job Safety Analysis / Procedure:
Types of Confined Spaces	Type 1 – safe atmosphere provided (no immediate atmospheric hazard) Type 2 – hazardous atmosphere which can be made safe to enter Type 3 – potentially explosive atmosphere

	Type 4 – hazardous / unknown atmosphere on a continuous basis
Type 1 Entry – No Immediate Atmospheric Hazard	No MBC employee will be present in a confined space unless: 1. There is a means of exit from the parts of the confined space that are accessible to workers. 2. All mechanical equipment in the confined space is disconnected from its power source and locked out. 3. All pipes and other supply lines into the confined space whose contents are likely to create a hazard are blanked off. 4. An attendant is stationed outside the confined space. 5. An emergency rescue procedure has been established. The supervisor or competent designate shall test no less than once per shift and evaluate the confined space before a worker enters it to determine whether it is free of hazard to a worker while the worker is present in it and as often as necessary to ensure that it remains free of hazards.
Type 2 Entry – Atmospheric Hazard May Be Present	No MBC employee will be present in a confined space in which there is likely to be hazardous gas, vapours, dust, mist, smoke, fume or an oxygen content of less than 19.5% or more than 23% unless this section is complied with in addition to the requirements from Type 1 Entry. The confined space will be purged and ventilated to provide an atmosphere that does not endanger workers, and measures necessary to maintain the atmosphere shall be taken. When a worker is present in the confined space, a guard (attendant) shall be stationed outside it. An emergency rescue procedure has been established. If the guard stationed outside the space is not adequately trained in CPR, a worker who is trained shall be readily available.
Type 3 Entry – Explosive Atmosphere May Be Present	No MBC employee will be present in a confined space that contains or is likely to contain explosive or flammable gas, dust, mist or vapours unless this section is complied with in addition to all requirements for Type 1 and Type 2 Entry. A worker may engage in cleaning or inspection activities that do not create a source of ignition in a confined space in which the concentration of explosive or flammable gas or vapours is not likely to exceed 50% of the lower explosive limit of the gas or vapours. A worker may engage in cold work (work that doesn't generate heat or sparks) in a confined space in which the concentration of explosive or

	flammable gas or vapour is not likely to exceed 10% of the lower explosive limit of the gas or vapour.
Type 4 Entry – Atmosphere May Be Immediately Dangerous To Health and Life	A worker may be present in a confined space that is not purged and ventilated, or in a space which cannot be made adequately safe through ventilation if the following is done in addition to the requirements of Type 1, 2 and/or 3 Entries. A worker in a confined space shall use suitable protective breathing apparatus and a full body harness securely attached to a rope whose free end is attached outside the confined space and is being held by a guard/attendant outside the space. The guard/attendant will be provided with an alarm. A direct means of visual contact and communication between the worker in the confined space and the worker outside it will be provided. A worker trained in CPR and able to perform rescue operations will be readily available outside the confined space while the worker is inside it. A local emergency response team should also be notified. Entry into a Type 4 space requires written approval of management.
Job Completion	At the end of the job, a thorough check shall be made by the supervisor to ensure that no tools, equipment or possibly workers have been left behind. Double check and ensure that all personnel are accounted for before leaving the confined space. Return the work permit to the responsible supervisor for finalization and to ensure that any locks etc. belonging to the crew are removed.
Documentation	All confined space documentation must be maintained at the MBC's office for a period of no less than 2 years upon the completion of the job.
Ladders	
General Requirements	➢ Inspect the ladder for any obvious defects and damage. This can include but is not limited to the following: Broken rungs, Damaged side rails, Anti-slip feet, Support braces ➢ Report to your supervisor any defects or observed damages. ➢ Remove the ladder from service – tag it and identify the concern. ➢ If a worker is exposed to a fall hazard as defined under the construction they must eliminate the hazard or control it. Fall protection may be required under many circumstances. ➢ Look at your work environment – avoid all overhead power lines. ➢ Ensure all ladders are a Class 1 or better; ***Class 2 and 3 ladders are not permitted on site.***

Step-ladders	➢ Must only be used as a last resort, only if a more suitable work platform is not feasible. ➢ Must only be used for 30 minutes. ➢ Open the step ladder fully and lock the braces. ➢ While working on the step ladder ensure that you do not stand on the very top of any step-ladder. It is highly suggested that workers use the 2nd last step in order to provide adequate support by using their knees and not just their shins. ➢ Always maintain the belt buckle rule and ensure that workers do not step outside the side rails therefore ensuring the stability of the ladder.
Extension ladders / Access ladders	➢ Ensure the ladder is adequate for its purpose – is it long enough to be safely used? ➢ Ensure the ladder surpasses the top landing by 3'. ➢ It must be secured to ensure stability. ➢ Ensure the angle of the ladder is between 3:1 or 4:1 (every 3 meters high it must be 1 meter out).
Vertical Access ladders	➢ If the vertical access ladder extends 5m or greater it must have a protective cage staring at 2.2m; otherwise it cannot be used.
Guardrails / Floor Covers	
Guardrail System	A worker at risk of falling more than 2.4 metres (8 feet) must be protected by a guardrail system. In many cases, guardrails are the most reliable and convenient means of fall protection. They are required under the following circumstances; ➢ a floor, including the floor of a mezzanine or balcony the surface of a bridge ➢ a roof while formwork is in place ➢ a scaffold platform or other work platform, runway, or ramp All guardrails must be properly built with suitable materials. The guardrail system must be comprised of a top rail; mid-rail and toe-board. If built out of wood, ensure the vertical supports are not greater than 8' apart. *Any areas where safety guardrails are required to be positioned at a distance greater than 1'-0" from on opening, signs will be posted indicating that Fall Arrest procedures are mandatory when working in the area between the guardrail and the opening.*
Floor Covers	All floor openings which present both a tripping and fall hazard must be adequately protected.

	The floor cover must meet the following criteria: 1. Material being used must be suitable and capable of supporting any load it may be subjected to. 2. Must be secured to prevent any movement. 3. Must indicate it is a floor cover – signage required. "DANGER – HOLE" **Remember – all workers who are installing and/or removing a floor cover or guardrail must be wearing fall protection until the cover or guardrail is secured.**
Trenches and Excavations	➢ Before starting any excavation ensure service locates are conducted and a copy of locates are provided to the equipment operator. ➢ Ensure adequate means of access and egress is provided and used; this would include a ladder, ramp or staircase. ➢ Ensure the slopes are adequate ➢ Watch for stress cracks in the soil; they could be an early indicator that it is not stable. ➢ Do not store any material at the edge of the excavation. ➢ All support systems must be engineer designed and approved before being used. ➢ Ensure no heavy equipment can affect the excavation by weight or simple vibrations. ➢ Ensure no material is stored within 1m of the edge. ➢ If a trench box or shoring is to be used, it must; ✓ be adequate for it purpose, ✓ be properly installed ✓ a copy of the engineering documents must be submitted to MBC ✓ Adequate access must be provided. ➢ If the excavation is 8’ or greater, a barrier shall be installed around its perimeter.

Soil Type	Example	Slope requirements
1 (hard)	Consolidated clay, some glacial tills	Starting at 1.2m from the bottom of the trench; the slope is 1:1
2 (semi-hard)	A pick can be driven into it. Silty clay and less dense tills	Starting at 1.2m from the bottom of the trench; the slope is 1:1
3 (loose)	Previously excavated material. Sand, granular material, wet clay	Starting the bottom of the trench; the slope is 1:1
3	Previously excavated material or Soil that is stiff to firm or compact to loose in consistency and has one or more of the following characteristics; i. It exhibits signs of surface cracking. ii. It exhibits signs of water seepage. iii. If it is dry, it may run easily into a well-defined conical pile. iv. It has a low degree of internal strength.	Starting the bottom of the trench; the slope is 1:1
4 (very loose)	Muskeg, silty clay, other organic deposits	Starting the bottom of the trench; the slope is 1:3

NOTE: All persons who are in charge of an excavation are deemed responsible under the Criminal Code of Canada {s.263(2)(3)}

Indoor Air Quality

Ensure local exhaust ventilation (hood enclosures, ducts, exhaust fan) and general ventilation meets the appropriate standards. Our safety consultant is to determine if fumes pose a problem and to recommend appropriate action. Solutions will be site specific. Masks (PPE) may be required for certain time durations.

Lighting

Proper lighting for tasks is essential on job sites. Extra attention should be given to stairwells to make sure they are well illuminated and kept as free of debris as possible. Bare bulbs must be protected with a safety cage. Subcontractors must ensure they provide their workers with adequate task lights.

Site Traffic and

All construction traffic shall enter a site as indicated. The maximum speed

Parking	limit on a site is 20 km/hour unless otherwise posted. Where possible, the traffic will be planned in a continuous route reducing the need for vehicles to back up. If available, a designated parking area will be assigned for workers, visitors, etc. Under no circumstances should vehicles be left parked or unattended in the area designated for construction vehicles and deliveries. The construction vehicle access must be made easily accessible for the use of emergency vehicles if the need should arise. A site specific traffic control plan will be developed as required and will be incorporated in the site's safety plan. All workers must be trained in their traffic control duties.
Alcoholic Beverages and Drugs	No alcoholic beverages or drugs are allowed on the site, nor will any worker under the influence of such substances be permitted access to the site. Ensure all trades are aware of the client's drug/alcohol policy if it is more stringent than ours.
Prescription Medication	Anyone under medical care which requires medication that may impair their ability to perform the work safely must inform their supervisor.
Smoking	The smoking policy of the owner/client will be followed, however, in the case of new construction where the owner/client does not have a policy in place; smoking will not be permitted once the building is enclosed as defined. There will be no smoking in general meeting or enclosed work areas such as site trailers, or enclosed buildings. Signs should be posted.
Housekeeping	Clean work and storage areas result in better accident prevention. Dispose of trash and scrap in designated containers. Daily cleanup is a minimum requirement. Waste material and debris must not be allowed to build up in areas of entry or exit. Waste material should not be thrown from one level to another, but be carried down, lowered in containers or placed in a disposal chute. Tools and equipment should be stored in an orderly manner and in their proper place as not to block or cause tripping hazards on roadways, walkways, stairs, entrances, exits, etc. Round items must be blocked to prevent them from rolling. Loose items must not be stacked higher than two metres.

Equipment including Powered Elevated Work Platforms / forklifts / etc.	↳ Management will keep a list of all equipment in use. ↳ All equipment brought onto the site for use on the project, must be in good working order, and is properly maintained; this includes the ROPS. ↳ Understand and follow the manufacturer's inspection and preventive maintenance schedules. The inspections and maintenance logs will be kept on the equipment. ↳ Ensure its load rated capacity is clearly identified, known to the operator and never exceeded. ↳ Only personnel trained and skilled in the operation of the equipment shall operate it. Certification of training is required. ↳ Where required, ensure documented, daily inspections are conducted by a competent operator. Defective equipment must be taken out of service until repairs have been completed. ↳ Always operate or use any equipment in a safe manner – this includes maintaining all guards; never endanger yourself or anyone else. ↳ Always wear your seatbelt!! ↳ Never clean, lubricate or adjust any equipment or machinery while it is running or in motion. ↳ Always remove the key or ensure the equipment cannot be used by unauthorized persons. ↳ Never leave a machine running while it is unattended except for stationary equipment (such as compressors, generators) or where special conditions prevail and precautions are implemented. ↳ Never jump off or onto a vehicle, a piece of equipment, trailer or scaffold; always use 3-point contact. ↳ If your path of travel is obstructed; you must use a trained spotter to direct you. Ensure they are placed in a clear line of sight and they use standard, known, hand signals. ↳ If you lose sight of the spotter – STOP! Until you regain a visual with them.
Materials	All materials for use on the project, whether temporary or permanent, must be suitable for the intended use and be safely installed in accordance with manufacturer's instructions. All materials delivered to the project must be accompanied by a copy of the applicable WHMIS Safety Data Sheet (SDS) when delivered. The copy shall be placed in the WHMIS binder in the site office.
Propane Equipment	Propane cylinders should be stored upright and secured from movement. Storage cylinder shall not be stored inside a building. Training and certification is required by those handling propane.
Welding and Cutting Equipment	Oxygen and acetylene bottles must, at all times, be stored in an upright position, secured to a stable support and not be left free standing. The

	cylinder caps must be replaced and hand tightened when regulators have been disconnected. When operating any welding or cutting equipment, a fully charged fire extinguisher must be in the immediate work area. Protect any flammable or other material from damage due to welding or cutting operations. Ensure all other persons are protected from the welding arc. This includes workers and the public.
Hot Work Procedure **Definition**	Any process that may generate an uncontrolled spark or flame that could be a danger to a workplace. Hot work is required for any temporary operation involving open flamed or producing heat and/ or sparks. This includes, but is not limited to: brazing, cutting, grinding, soldering, thawing pipe, torch applied roofing, and welding.
Fire/ Explosion	There is always a threat of a fire or explosion occurring when performing hot work. This results from either chemicals reacting with one another to form explosive or flammable mixtures or sparks from cutting and grinding.
Personal Protective Equipment	➢ Hard Hat ➢ Safety footwear ➢ Respirator ➢ Welding helmets and shield ➢ Welding screens ➢ Hearing protection (ear plugs) ➢ Fire proof clothing ➢ Leather gloves ➢ Leather apron ➢ Leather chaps
Personnel required	➢ Trained staff ➢ Trained First Aid Provider
Additional requirements	➢ The area in which the hot work is being completed must be cleared of combustibles, screened off with the proper welding screens, and provided with suitable fire extinguishers. ➢ Hose and cables must be protected against damage ➢ Never feed oxygen from the cylinder into a confined area ➢ Protect cylinders, hoses, legs, and feet when flame welding ➢ Put stub ends of welding rods in a suitable refuse container ➢ Never allow oil or grease to come into contact with oxygen or oxy-acetylene equipment or a hose ➢ Always remove an oxy-acetylene torch from a confined space when the

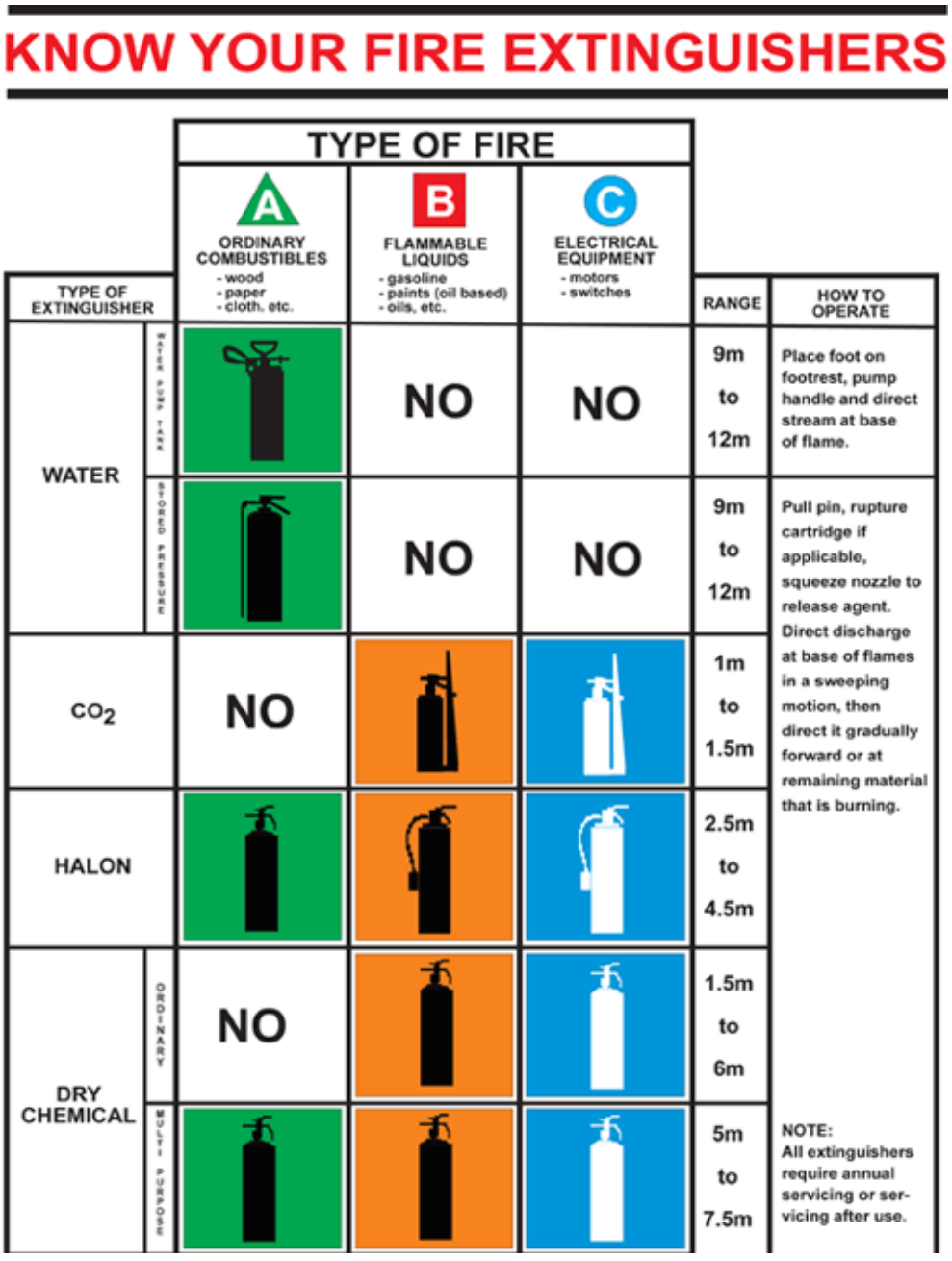
	torch is not is use
Fire Watch	➢ A fire watch will be provided by the contractor during the task and for 60 minutes after work, including any coffee and lunch breaks. ➢ A fire watch is supplied with the suitable extinguishers. ➢ A fire watch is trained in use of this equipment and in sounding the alarm ➢ A fire watch may be required for adjoining areas above and below
Training / Awareness	The Superintendent and contractor staff will be trained in both the technical and safety aspects of their work. The training will include but not limited to: ➢ Hazard identification ➢ Safe welding, brazing, and cutting procedures ➢ Fire and safety precautions ➢ Control methods ➢ Proper use and maintenance of the welding equipment ➢ Proper use and maintenance of the personal protective equipment ➢ Proper use and completion of the hot work permit
Material Handling / Lifting	➢ Where it is practical and available, heavy lifts should be done with mechanical lifting devices. ➢ When manual handling is required, dollies, trucks and similar devices should be used where practical. ➢ Workers should know their physical limitations and the approximate weight of materials they are trying to lift. Workers should be encouraged to get help when a lifting task may be more than they can safely handle. ➢ The right way to lift is the easiest and safest. Take a firm grip; secure a good footing; place the feet a comfortable distance apart; bend the knees; keep the back straight and lift with the leg muscles. ➢ Use gloves as required when handling sharp, rough, heavy or hot materials. ➢ NEVER carry a load so large that it obstructs vision or too heavy that it cannot be safely lifted without assistance.
Compressed Air	➢ Never use compressed air to clean yourself off. ➢ Never point the compressed air at anyone else while in use. ➢ Workers are required to wear hearing and eye protection while operating an air compressor for cleaning purposes.
Hoisting & Rigging	➢ All workers who are required to perform any rigging activities must be competent to do so. This includes the use of any sling, choker and/or chain. ➢ The competent rigger will follow all guidelines he/she learnt during the training. ➢ All hooks, chains, slings and chokers must be inspected for any defects;

	defective material must not be used and should be discarded. ➢ All hooks, chains, slings and chokers must be suitable for the task being performed. ➢ Always keep clear of suspended or swinging loads. ➢ Ensure there are no loose materials or tools riding on the load when it's hoisted. ➢ Keep your hands and fingers away from all potential pinch points. ➢ When storing material, ensure it does not pose a hazard to any worker.
Cranes	➢ No worker shall operate a crane or similar hoisting device that is capable of raising, lowering or moving material that weighs more than 7,260 kg unless the worker is certified as a hoisting engineer under the Trades Qualification and Apprenticeship Act. ➢ All equipment will be inspected daily before each use. ➢ No materials shall be lifted above any worker at any time. ➢ Where required the contractor will supply MBC with the engineering documents for the specific unit in use on the project.
Tools	
General requirements	➢ Every worker is responsible for using their tools in a correct manner. Workers must NEVER remove, alter or render ineffective any safe guard. ➢ Always disconnect your tool before performing any maintenance. ➢ Workers must be familiar with their tools prior to using them; this can be achieved through a tailgate meeting conducted by his/her supervisor.

Chainsaws	➢ Chainsaws can be very dangerous and must only be used by a worker who has received formal training in its safe operation. ➢ Workers using chainsaws must wear appropriate personal protective equipment including gloves, eye protection, face protection and hearing protection. ➢ Always follow the manufacturer's recommendations when operating a chainsaw. ➢ Chainsaws must be held firmly when starting and held firmly with both hands while in use. ➢ Chainsaws shall be equipped with chains that minimize kickback (e.g. safety tip, low kick reduced kickback bar) and be provided with a device that stops the chain in the event of kickback (chain brake).
Explosive Actuated Fastening Tools	➢ Only those trained to operate explosive actuated tools properly and safely will use them. ➢ Workers must carry proof of training with them when using explosive actuated tools. ➢ Workers using explosive actuated tools must wear impact-resistance eye-protection. ➢ Hearing protection must be worn when workers are using explosive actuated tools to fire into steel or in a confined space. ➢ Misfired shots must be stored in a water-filled container and removed from site. ➢ All other shots must be stored in a lockable box until they are ready for immediate use.
Scaffolding	➢ All components of a scaffold must be in good conditions. Any defective pieces must be removed immediately. ➢ Engineering documents are required for the following; ✓ Any standard scaffold which exceeds 50' in height. ✓ Any tube & clamp scaffold which exceeds 30' in height. ➢ Ensure the erection is performed under the guidance of a competent person. This individual must sign-off on the system prior to using it. ➢ Ensure all work platforms located 8' or higher are protected by an adequate guardrail. ➢ Ensure means of access and egress is provided to the work platforms above 9'. This includes an extension ladder or staircase. ➢ Any system exceeding the 3:1 (height: width) ration must be equipped with stabilizing outriggers.
Working from Suspended Work Platforms (Swing Stages)	Fall protection is required when working from a suspended work platform. The suspended work platform must be designed, installed, modified and inspected by a competent person before the system is used.

Fire Prevention Measures

- Combustible material must not be located close to open-flame construction heaters.
- Workers must ensure they have a suitable fire extinguisher in close proximity to where they are conducting open-flame activities.
- Worker will be trained in the proper use of the fire extinguisher.
- In certain cases a fire watch may be required up to 1 hour after the work.



KNOW YOUR FIRE EXTINGUISHERS

TYPE OF EXTINGUISHER		TYPE OF FIRE A – ORDINARY COMBUSTIBLES (wood, paper, cloth, etc.)	TYPE OF FIRE B – FLAMMABLE LIQUIDS (gasoline, paints (oil based), oils, etc.)	TYPE OF FIRE C – ELECTRICAL EQUIPMENT (motors, switches)	RANGE	HOW TO OPERATE
WATER	WATER CHEMICAL TANK		NO	NO	9m to 12m	Place foot on footrest, pump handle and direct stream at base of flame.
	STORED PRESSURE		NO	NO	9m to 12m	Pull pin, rupture cartridge if applicable, squeeze nozzle to release agent. Direct discharge at base of flames in a sweeping motion, then direct it gradually forward or at remaining material that is burning.
CO_2		NO			1m to 1.5m	
HALON					2.5m to 4.5m	
DRY CHEMICAL	ORDINARY	NO			1.5m to 6m	
	MULTI PURPOSE				5m to 7.5m	NOTE: All extinguishers require annual servicing or servicing after use.

Work Refusal

The OHSA states

"A worker may refuse to work or do particular work where he or she has reason to believe that,

(a) Any equipment, machine, device or thing the worker is to use or operate is likely to endanger himself, herself or another worker;

(b) The physical condition of the workplace or the part thereof in which he or she works or is to work is likely to endanger himself or herself; or

(c) Workplace violence is likely to endanger himself, or

(d) Any equipment, machine, device or thing he or she is to use or operate or the physical condition of the workplace or the part thereof in which he or she works or is to work is in contravention of this Act or the regulations and such contravention is likely to endanger himself, herself or another worker.

Report of refusal to work

Upon refusing to work or do particular work, the worker shall promptly report the circumstances of the refusal to the worker's employer or supervisor

Refusal to work following the investigation

Where, following the investigation or any steps taken to deal with the circumstances that caused the worker to refuse to work or do particular work, the worker has reasonable grounds to believe that,

(a) The equipment, machine, device or thing that was the cause of the refusal to work or do particular work continues to be likely to endanger himself, herself or another worker;

(b) The physical condition of the workplace or the part thereof in which he or she works continues to be likely to endanger himself or herself; or

(c) Workplace violence is likely to endanger himself, or

(d) Any equipment, machine, device or thing he or she is to use or operate or the physical condition of the workplace or the part thereof in which he or she works or is to work is in contravention of this Act or the regulations and such contravention continues to be likely to endanger himself, herself or another worker, *the worker may refuse to work or do the particular work and the employer or the worker or a person on behalf of the employer or worker shall cause an inspector to be notified thereof*.

Investigation by MoL inspector

An inspector shall investigate the refusal to work in consultation with the employer or a person representing the employer, the worker, and if there is such, the person mentioned above.

Decision of the inspector

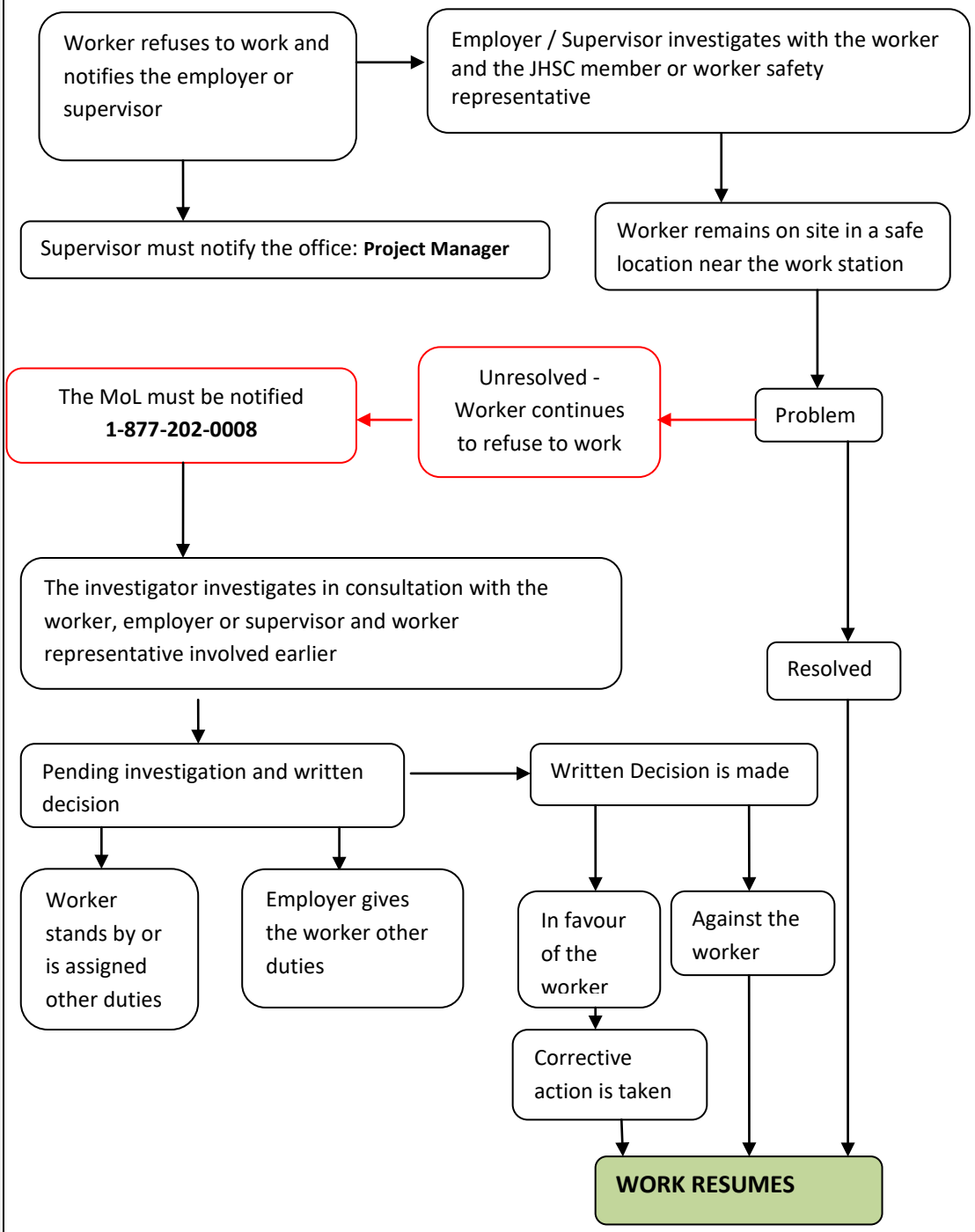
The inspector shall, following the investigation referred to in this section, decide whether the machine, device, thing or the workplace or part thereof is likely to endanger the worker or another person.

The inspector shall give his or her decision, in writing, as soon as is practicable, to the employer, the worker, and if there is such, the person mentioned above.

Worker to remain at a safe place pending decision	Pending the investigation and decision of the inspector, the worker shall remain at a safe place near his or her work station during the worker's normal working hours unless the employer, subject to the provisions of a collective agreement, if any, **(a)** Assign the worker reasonable alternative work during such hours; or **(b)** where an assignment of reasonable alternative work is not practicable, gives other directions to the worker
Duties to advise other workers	Pending the investigation and decision of the inspector, no worker shall be assigned to use or operate the equipment, machine, device or thing or to work in the workplace or in the part of the workplace being investigated unless, in the presence of a person described in section, the worker has been advised of the other worker's refusal and of his or her reasons for the refusal. The person referred to above must be, **(a)** A committee member who represents workers, and, if possible, who is a certified member; **(b)** A health and safety representative; or **(c)** A worker who because of his or her knowledge, experience and training is selected by the trade union that represents the worker or, if there is no trade union, by the workers to represent them.
Entitlement to be paid	A person shall be deemed to be at work and the person's employer shall pay him or her, **(a)** For the time spent by the person carrying out the duties under this section; and **(b)** For time spent by the person carrying out the duties of the investigation.

Corporate Chart

These first steps are considered the Internal Responsibility System (IRS) and is / should be considered the optimum way of resolving the issues



Working Alone

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

- Making a splice or connection in a space that has only enough room for one worker.
- Installing a ceramic tile floor in a washroom.
- Servicing a roof-mounted air-handling unit.
- Cleaning up scrap and debris when work is done for the day.

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

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

Planning

- Inspect the jobsite for real and potential hazards and take whatever steps are required to ensure the work is performed safely.
- If any personal protective equipment or clothing is required in addition to hard hat and safety boots, it must be used.
- In some situations like confined spaces, regulations under the *Occupational Health and Safety Act* prohibit entry or work without another person standing by outside the area.

Communication

- Communication is crucial in accounting for personnel working alone. A system must be established where, at regular intervals, someone checks on the worker or the worker reports to a designated person.
- Where hazard exposure is high, intervals should be kept short.
- Means of communicating between worker and outside contact must be predetermined and understood by both parties.
- Cellular phones or two-way radios can also provide effective communication. Test the units on-site to ensure that reception is reliable.
- One option is having a person working alone phone an answering service at regular intervals. If the worker fails to report at one of the designated times, the answering service phones the employer, who goes to the project, or sends someone there, to check on the worker.

Responsibilities

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

safely. The supervisor must also ensure that:

- A method of checking in with the worker has been established.
- Check-in intervals are clearly understood.
- The designated contact person is aware of the work schedule.
- Any communication equipment used is in good working order.
- No obstructions or interference may block phone or radio communications.

Use of Cell Phones

Purpose

The purpose of this policy is to protect your safety by banning you from using cell phones and other wireless devices when driving that may cause distractions that prevent you from concentrating 100% on the safe operation of the vehicle and may lead to accidents.

Rules For Drivers

Ban on Wireless Communication Devices

When you are on duty and driving, you may not use any wireless hand held communication device. This includes not only cell phones, but also mobile phones, text pagers, two-way radios, GPS and other wireless hand held devices.

Hands-Free Devices

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

Handling Calls While Driving

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

Outgoing Calls: You may not make outgoing calls unless using voice automation while driving.

Rules For Site Workers

Ban on Calling Workers Who Are Driving

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

Procedures for Calling Workers Who Might Be Driving

If you do not know if the worker is driving and the matter is urgent, you may place the call at the worker's cell phone but must immediately ask the person if he or she is driving. If the worker is in fact driving, hang up after telling the worker to call you back when he/she pulls over or gets out of the vehicle.

Procedures for

If you receive a call from workers who are on their cell phone or other

Receiving Calls from Workers Who May Be Driving	wireless device, ask them if they are driving. If they are, tell them to pull over and call you back. Hang up the phone as quickly as possible.
All Workers	
Effect of Policy	Violations of the foregoing rules will be considered a serious offence and may result in the imposition of discipline up to and including termination.
Reminder	The use of cell phones and other wireless devices while driving leads to distractions that can result in traffic accidents. So, while we cannot force you to adhere to these rules when you are not on duty, we strongly urge you to do so for your own safety and well-being and that of family, friends and third parties on the roadways.
Progressive Disciplinary Procedures	Any worker not utilizing proper safety judgment, conduct or is in violation of the Occupational Health and Safety Act and Regulations for Construction Projects or Laurin's safety policy will receive; 1. A written instruction/infraction notice from MBC's site superintendent or safety consultant. A copy will be retained by MBC with another copy given to the workers foreman or supervisor for corrective measures. 2. On receipt of a second notice, the violator will receive a written warning and may be suspended from the site for 1-3 working days. 3. If a third notice is issued to the same worker, the individual will be removed from the site and not be permitted back. ***Note: if the offence is serious in nature, the employee may be removed immediately upon approval from upper management.*** The subcontractor shall replace any of their workers removed from the site due to safety reasons so as not to delay any portion of the project. Any worker caught willfully damaging any property will be permanently removed from the site.

It is MBC's policy to control all hazards on a project using engineering, administration or behavioural controls. Despite being the last resort of protection (a control at the worker) on construction projects, personal protective equipment (PPE) can be of vital importance. Many hazards that exist on construction projects require the use of PPE to limit exposure. In many cases, PPE is to be used as a backup system to controls that limit exposure at the source, rather than at the worker.

MBC will endeavour to ensure that consideration is given to engineering and administrative controls, as well as the use of proper PPE on each project. Furthermore, project personnel will ensure that all controls, including PPE, are properly used.

In order to ensure that workers are protected from hazards where possible, it is policy that all personnel on a MBC project wear the appropriate PPE required by the construction regulations at all times. This regularly includes the following equipment that meets or exceeds current CSA standards: head protection, foot protection, eye protection, hearing protection, fall arrest protection, and other applicable equipment, where appropriate.

Workers must ensure the select the appropriate PPE for their exposure/needs; they must inspect it daily; use it as required by the manufacturer and replaced any defective component immediately.
Workers will be trained on the inspection, selection, use and limitations of all their PPE.

Responsibilities

Employer

1. Ensure all required PPE is provided for all workers. (*some PPE is workers responsibility, example boots/shoes*)
2. Ensure supplies are replenished as required; i.e. hearing protection

Supervisor

1. Ensure PPE is worn by all workers whenever necessary.
2. Ensure PPE is used properly whenever necessary by all workers on a project.
3. Ensure PPE is stored, cleaned and maintained properly.
4. Familiarize project personnel with all hazards to which they may not be aware.
5. Review PPE compliance problems and requirements in safety meetings with all workers.
6. Train all workers on the proper selection, inspection, care and use of all PPE.

Worker

1. Wear / use all PPE required by the Act, regulation and/or employer.
2. Participate in PPE training when applicable (respirators, hearing, fall protection, etc).

3. Be informed of all hazards and potential hazards on a project.
4. Bring all uncontrolled or new hazards to the attention of the health and safety representative, project supervisor and other workers on the project.
5. Never remove or make ineffective any protective device required by the regulations or by the employer.

Clothing

For individual personal protection, the following items should not be worn:

- loose clothing
- greasy or oily clothing, gloves or boots
- torn or ragged clothing
- finger rings, neck chains etc. and other jewelry that may become entangled in equipment

T-Shirts and long pants shall be worn at all times in the interest of safety (UV rays)

Hard Hats

Required at all times while on a construction project

Adequate protection can only be provided if the hard hat in maintained properly and worn according to the following guidelines.

- Adjust the hard hat to fit securely.
- To avoid damage or weakening, do not paint, drill holes or sit on the hard hat.
- Inspect the shell and suspension before each use. If the shell is cracked, dented or penetrated, ***discard it***. If the suspension is torn or broken, replace damaged parts with identical parts from the original manufacturer.
- Discard a hard hat after it has received any severe blow that may substantially reduce protection.
- Do not wear any baseball-style hats under the hard hats.

Safety Footwear

Required at all times while on a construction project

The Construction regulations dictate that all persons on a construction site must be wearing appropriate CSA approved foot protection. They can vary from full boots, rubber boots to running shoe style. Workers must look at all hazards they are or may be exposed to and make the appropriate selection.

Remember, to avoid ankle injuries all boots must be properly laced at all times!

Hearing Protection

The company will make every attempt to eliminate or isolate any excessive noise by implementing engineering controls. However this may not always be feasible; anyone exposed to excessive noise levels both acute and long term shall wear suitable hearing protection as required in the governing legislation.

In order for us to quantify the actual levels our workers will be / are exposed to, noise measurements will be taken for the tasks being performed and corrective action implemented.

Should any worker have a concern regarding a specific work area or task which may have excessive noise (both acute and chronic); we will conduct a noise survey before any work begins or continues.

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

Eye Protection

It is recommended that eye protection be worn at all times while on the construction site, however, it is the responsibility and a requirement of the worker to wear suitable eye protection when exposed to activities such as drilling, cutting, chipping, welding, grinding or any other activity which has potential to cause an eye injury.

The Subcontractor shall make suitable eye protection available to their employees.

Reflective Vests

The workers must wear a five-point tear-away reflective vest or garment (T-shirt, sweaters, etc) at all times while on site. The system's reflectivity must be adequate to ensure the worker's safety is maintained.

Fall Protection

A worker must wear a full body harness, with a shock-absorbing lanyard tied off to either a fixed support or a lifeline connected to a fixed support whenever the worker may be exposed to the following hazards:

(a) 3 metres or more above the floor.
(b) Above operating machinery, or
(c) Above hazardous substances or objects.
(d) Could fall into water or another liquid.
(e) Could fall more than 1.2 metres if the area is used for a wheelbarrow or a similar device.
(f) Could fall through an opening in a work surface.

Arrested fall – rescue requirements

- Every **employer** is required to develop and train their workers as to what procedures are to be followed if a worker's fall is arrested. These procedures must be developed and implemented before any work starts.
- All of the subcontractor's procedures and proof of training should be inserted

as part of these procedures.

- The superintendent must receive a copy of all the procedures since more often than not, he/she will and should be involved in all events.

Refer to the Appendix for our procedures.

Hand / skin protection

Exposed hands and skin are susceptible to physical or chemical hazards for construction materials or processes. Personal hand/skin protection is often the only practical means of preventing injury from;

- sharp or jagged edges on materials or tools
- corrosive or toxic chemicals
- radiation from heat or ultraviolet light; workers should wear sunscreen to assist them in their UV protection.

Employees are required to wear pants and T-shirts (as a minimum) at all times while on site.

Respiratory protection

Construction personnel are often required to work in dusts, fumes, mists and other airborne hazards.
In selecting respiratory protection against such hazards, it is important to know

- how to recognize the specific hazard
- the difference between respirators
- how to ensure that the respirator works and fits properly

Hazards may include

- gases such as carbon monoxide
- vapours released by solvents
- fumes from welding activities
- mists from spray painting
- dust from grinding or chipping.

Respirator and cartridge selection will be based on:

- The characteristics of the contaminants
  - Grey – dust, mist and fumes
  - Purple – dusts, mists, fumes, radio nuclides, lead and asbestos
  - Black – organic vapours
  - White – acids
  - Green – basics such as ammonia
  - Yellow – organic and acids
  - Olive green – Defender (black, white, green)
- The anticipated exposure conditions
- The performance limitations of the equipment
- Any substance exposure legislation that applies

Preventive Maintenance for company vehicles	
	All company vehicles must be on the master preventative maintenance inventory list. Preventive maintenance will be conducted as per manufacturer's specifications. The standards which will be followed will be those outlined in the manufacturer's preventive maintenance program in the owner's manual. The maintenance chart in the booklet will be used for recording all maintenance. All maintenance will be conducted at the local dealership as a recognized, qualified facility. It is the responsibility of the Manager to review the company's preventive maintenance program on an annual basis. This allows for an opportunity for program improvements. Recommendations which are discovered as a result of the annual review, or throughout the year, will be documented and submitted to senior management. The Manager will follow-up on the corrective actions on a pre-determined time frame (to be determined on a case by case basis) to insure the corrective actions have been completed.
Filling System	The company will establish a filling system to maintain the maintenance records.
Records	Maintenance Recording Form Maintenance Schedule Matrix
Preventive Maintenance for tools & equipment	
Inspections	All tools and equipment will be inspected on a daily basis. Workers must follow the manufacturer specifications for circle checks on equipment such as scissor-lift; forklifts; etc All tools will be used according to the manufacturer's specification; this includes all guards; power cords; casings; etc.
Reporting	These inspections will be documented and all defects will be reports to the

defects	supervisor or employer. Do not use any defective equipment or tools which are missing their guards.
Maintenance	***Do not perform any maintenance on equipment if you are not qualified***. Follow the company's guidelines for locking out all energy sources prior to commencing any maintenance work.

Orientation Training	
All employees, regardless of the level in the organization, must receive health and safety orientation, this applies to	➢ Newly hired employees ➢ Employees returning from an extended absence ➢ Employees hired on a contract basis ➢ Student employees **Orientation on health and safety must be completed before workers begin their first day.**
The following persons carry out orientation	➢ Health and Safety Coordinator ➢ Supervisor, including office manager

Components of training will include	➢ Health and safety policy
	➢ Employee responsibilities and rules
	➢ Standards and procedures for
	  ↳ Reporting injury and illness
	  ↳ Reporting hazards
	  ↳ Emergency plan
	  ↳ Early and safe return to work
	  ↳ Occupational Health and Safety Act including Right as a worker
	  ↳ Joint health and safety committee
	  ↳ Specific responsibilities for level of authority

Record of training	All training will be recorded on the Orientation checklist. Training records will be kept in the training records file.
Training- Promotion / Transfer	
Promotion / transfer orientation is required for employees who have been	➢ Promoted from worker to a supervisory position, or ➢ Transferred from one job to another (regardless of time in position) ➢ MBC employee who will be acting as a Temporary Site Supervisor for a defined time period. **Training must be completed within the first week of employment in the new position.**
Training requirements include	➢ Review of operation instructions for equipment / process ➢ Identification of hazards and controls ➢ Review of any safe operating procedures

The following person carry out Training	The supervisor will ensure the training is conducted.
Record of training	All training will be recorded on the Orientation checklist. Training records will be kept in the employee personnel file.
Training – pre-job Instruction	Employees will receive training for his / her assigned activities. This should include job tasks, processes, and equipment.
Training requirements include	➢ Review of operating instructions for equipment / process ➢ Identification of hazards and controls ➢ Review of any safe operating procedures Training must be completed before the work activity is performed.
The following person carry out Training	The immediate supervisor will conduct training.
Evaluation	Should any situation occur then the employees must stop their work activities and notify their supervisor. Corrective actions will then be taken to eliminate or control the exposure.
Record of training	All training will be recorded on the pre-job briefing form. Training records will be kept in the project's file.
Training Needs Review	
Objective	Train all staff in all legislative requirements stipulated by the various Acts and regulations.
Training Methods	MBC will use an outside source to provide the generic training such as WHMIS, Working at Heights, Worker / Supervisor Awareness, etc. Supervisor will train the workers working under their authority on the specific products, procedures which are or may be used.
Time Table	The generic training will be conducted on a regular basis (as needed) for existing employees and as part of the new employee hire process (if the worker does not have proof of a current course). The specific training will be conducted as required: new product, new task, etc.
Details of Training	To be conducted at the end of the training program using the participant

Requirements	evaluation form.
	This program will be reviewed annually to ensure its effectiveness.
	
	To ensure full compliance, MBC will ensure that proof of training is provided and made available for the following;
	
	Applicable legislation – this includes:
	
	➢ MoL's Worker / Supervisor Awareness Training
	  ↳ Worker's right to refuse
	  ↳ Worker's right to participate
	  ↳ Worker's right to know
	➢ Roles & Responsibilities
	➢ Health and Safety Policy
	➢ Early and Safe Return to Work obligations
	➢ Working at Heights
	➢ Equipment-specific training (such as scissor-lifts; forklifts)
	➢ Workplace Hazardous Material Information System (WHMIS)
	  ↳ WHMIS training for employees is comprised of:
	  ⇨ Generic, and
	  ⇨ Product-specific
	➢ Designated Substances
	  ↳ MBC employees are not usually subjected to a large amount of designated substances. However under certain construction conditions there may be a potential for exposure to the following:
	  ⇨ Asbestos (old pipe insulation, some tiles)
	  ⇨ Lead (old paints)
	  ⇨ Silica (drywall, masonry)
	➢ Material Handling
	  ↳ Training for employees on :
	  ⇨ Manual Lifting techniques
	  ⇨ Use of mechanical lifting devices.

Evaluation of Training	As the employer, we must be able to demonstrate that an evaluation of any training has taken place. The supervisor must complete a tailgate meeting form as part of the training process.
Tailgate Meetings	The supervisor will ensure they conduct weekly, documented tailgate meetings. The form must contain the site; date; topic and those in attendance.

Purpose	This procedure provides a format for ensuring workplace inspections is conducted and consistent.
Scope	This standard applies to all areas of the workplace.
Definition	Inspector refers to Management, Supervisor, workers, operators of equipment or machinery and members of the Joint Health & Safety committee and / or worker representatives. It does NOT refer to a MOL inspector.
Standards & procedures Inspectors will use the following tools to conduct appropriate inspections	a) Walkthrough Inspection Instructions, b) Inspection Checklist, c) Inspection Worksheet, d) Previous inspection report(s), e) Incident /injury reports to review if corrective action, if needed, has been taken. Establish an annual document schedule for workplace inspections. Any hazards or unsafe conditions observed while conduction the inspection are corrected, immediately, if possible. This includes notifying the manager of the area where the hazard was identified and recording the notification on the inspection Worksheet. As best practice, a minimum of 2 employee contacts or activities will be conducted during each workplace inspection. Those conducting the inspection must sign the original completed inspection worksheet. Completed inspection reports and posted on the health and safety board within one week after completion.
After the inspection	➢ The Inspectors will forward the original, completed worksheet and checklist, to the Senior Management within one week of the date of inspection. ➢ The Senior Management will in turn review and, forward copies to each appropriate manager(s) to action the identified items. ➢ The Inspector establishes a timeframe to correct hazards subject to review by Senior Management. ➢ Each manager, by forwarding an updated Monthly Inspection Worksheet, notifies the Senior Management of action taken to resolve the identified hazard and the date of the resolution. ➢ The manager will report the status of required action at the manager's meeting the month following the inspection. ➢ Senior Management receives a copy of the updated Worksheet. ➢ Any action points still outstanding at the manager's meeting require an action plan with a proposed date for resolution. ➢ If a new hazard is created, it must be rated and recommendation for corrective action developed including assigned timeframes, documentation (who, what, when) and a follow-up documented report. ➢ Specific inspection schedule with dates and participants must be documented.

Roles and responsibilities	
Executive Manager	Conduct and record semi-annual workplace inspections. Review all other workplace inspections
Senior Manager	Conduct and record quarterly workplace inspections of their assigned work areas. Review all workplace inspections conducted by supervisors and JHSC Worker Members/Worker H&S Representative
Project Supervisors	Conduct weekly inspections of the entire project. Forward the inspections to management for review and comments.
JHSC and/or Worker Rep	Conduct and record monthly workplace inspections of all projects sites and office. Forward inspections to management for review and response if applicable.
Operator	Conduct and record daily pre-shift inspections of all equipment or machinery used. Forward all relevant documentation to appropriate management.
Communication	
Written	Introduced at Orientation All inspection reports will be posted on the relevant safety boards for the worker's knowledge and awareness. Reviewed annually with all employees Health & Safety manual
Training	All Executive Managers, Managers, Supervisors, JHSC Members and/or Health and Safety Representative will attend Workplace Inspection training within three months of assuming their position. This can be completed internally. Directors and Managers ensure all employees asked to conduct inspections receive training regarding "how to conduct an inspection" prior to their first inspection
Evaluation	Management evaluated the compliance and effectiveness of this procedure at least annually and then reflects results through a performance measure.

Injury / Illness Incident Reporting

Purpose	To outline the requirements, methods of reporting all occupational injuries and illnesses
Scope	The following categories of incidents, injuries and illnesses will be reported, regardless of the nature or severity of the event; ➢ fatality ➢ critical injury ➢ lost time injury ➢ health care ➢ first aid ➢ property damage ➢ near miss ➢ fire ➢ environmental release ➢ occupational illness
Definitions	
Injury	An event that results in physical harm to an employee.
Illness	A deviation from the normal, healthy state of the body.
	The following categories of injury/ incidents may produce a loss to people, equipment, material, and environment. Immediate investigation of the following is required
Fatality	An injury that results in the loss of life.
Critical Injury	As defined in Regulation 834/90, under the *Occupational Health and Safety Act* of Ontario "For the purposes of the Act and the Regulations, "critical injury" means an injury of a serious nature that, (a) place life in jeopardy; (b) produces unconsciousness; (c) results in substantial loss of blood; (d) involves the fracture of a leg or arm but not a finger or toe; (e) involves the amputation of a leg, arm, hand or foot but not a finger or toe; (f) consists of burns to a major portion of the body; or (g) causes the loss of sight in an eye."
First Aid	Includes but is not limited to: cleaning minor cuts, scrapes or scratches, treating a minor burn, applying bandages and/ or dressings, cold compress, cold packs, ice bag, splint, changing a bandage or a dressing after a follow-up observation visit and any follow-up for observation purposes only.
Health Care	An injury which results in attention received from a recognized health care provider but which does not result in time away from scheduled work nor a wage loss.
Near Miss	An event which under different circumstances could have resulted in physical harm to an individual or damage to the environment, equipment, property and/ or material.
Lost time	A work related injury that results in the injured employee missing scheduled time from

	work resulting in a wage loss.
Property Damage	An event where contact is made between two objects resulting in alteration to one or both of the objects.
Occupational Illness	A condition that results from exposure in a workplace to a physical, chemical or biological agent to the extent that normal physiological mechanisms are affected and the health of the worker is impaired.
Environmental Release	An accidental discharge or a physical, biological, or chemical substance into the workplace and/or community
Fire/ Explosion	An event where undesired combustion occurs.
Violence & Harassment	Any act of physical aggression towards someone else. Any verbal or written statements which are intended to attack a person Refer to segment for clear definitions
Roles and Responsibilities	
Manager/ Supervisor	The supervisor, upon being notified of the injury, illness or event shall: ✓ Promptly ensure that first aid is administered; ✓ Ensure the worker is given subsequent medical treatment if necessary; and that such treatment is recorded; ✓ Additional rescue/response teams are notified as required. ✓ Ensure that the investigation report form is promptly completed and submitted. The supervisor is responsible for notifying the appropriate company personnel. This should be done at the first opportune moment.
Workers	A worker who sustains an injury or becomes ill as a result of workplace conditions or work activity must report the injury or illness to a supervisor or manager immediately. If, because of the nature of the injury or illness, an employee is unable to report, it is the responsibility of another worker, who happens upon the incapacitated worker, to promptly report the event to a supervisor.
First Aid Provider	Upon being informed of an injury or ill worker, a qualified first aid provider will go to the first aid station and administer appropriate treatment. All such treatment or advice given must be recorded in the first aid log. As necessary, the first aid provider will assist in ensuring that an injured worker receives subsequent medical attention.
Investigation Requirements	
Media Spokesperson	Make no comments to the media. Refer all inquiries to MBC's Head Office.
Notification	**Notify Head Office immediately and contact our Safety Consultant immediately**. They will determine the time frame, if any, to notify the MoL, WSIB or other authorities.

	Refer to the chart located in Appendix
Communication	The results and the injury/ incidents, including corrective measures, will be communicated to the employees in a number of ways: ➢ Minutes of the health & safety committee meetings ➢ Supervisors holding safety talks with employees ➢ Through posting on safety bulletin boards ➢ Testimonial by the involved employees
	The joint health & safety committee or worker safety representative will assist in all areas with remedial actions and recommendations.
Roles & Responsibilities	
Manager / Supervisor	➢ The responsible supervisor investigates the injury/ incident and completes the investigation within 24 hours of the injury / incident. ➢ In the case of personal injury the supervisor ensures the injured employee(s) receives appropriate healthcare. ➢ The supervisor contacts a worker representative from the joint health and safety (JHSC) designated to investigate the injury / incident, to assist in the investigation. ➢ The supervisor must notify the appropriate company person as soon as possible.
Note	The supervisors are also responsible for securing the scene of the injury / incident.
Worker designate of the Joint Health and Safety Committee	➢ The Worker Representative selected by the worker members of the health and safety committee, investigates all injures/incidents. ➢ The worker representative must be involved in the investigation of a fatality or critical injury. ➢ The worker representative and the supervisor together conduct the investigation and assist in completing the report. Both the supervisor and the worker representative sign the injury/incident investigation report. ➢ Where required by legislation the worker representative submits a copy of the injury/incident investigation to the appropriate authority. ➢ Joint Health and Safety Representatives ensure checklist and investigation reports are completed and signed by the appropriate worker and management representative of the Joint Health and Safety Committee.
Investigator Responsibilities	
Collect Information	➢ Interview workers involved, ➢ Interview witnesses separately. Witnesses must be separated to ensure they do not talk amongst themselves and obscure their own account of the event. ➢ Interview outside experts if applicable (i.e. suppliers, equipment designers, etc) ➢ Ensure the interviews are conducted as soon as reasonably possible, ➢ The interviews should be conducted in a quiet place, one on one, ➢ The interview must be documented.
Scene Assessment	➢ Make observations, on-site assessment of the scene (site, equipment, materials), ➢ Use photographs /sketches /drawings etc.
Identify Contributing Factors	➢ Factors to consider are people, equipment, material, environment, and process.

Write Report	➢ Use the injury investigation report form to identify contributing factors through a review of items such as maintenance records, job layout, training records, time of day, length of service in this – work area, etc. Consideration is given to lack of safety enforcement and / or the need for safety equipment. ➢ The standard investigation reporting system (form) must capture all the requirements contained in the investigation procedure.
Recommendations for corrective action	➢ Responsibilities must be assigned. ➢ Recommendations are documented on a standard form. ➢ The recommendations must focus on corrective actions(s) to all the contributing factors identified.
Recommendations are acted upon	➢ Responsibility must be assigned. ➢ The actions must be recorded on a company standard form, it must include: 1. what has been done and why, 2. who has completed the actions, and 3. when the actions were completed
Training	All supervisors, managers, and JHSC will be trained in injury / incident investigation procedures. JHSC members and all supervisors / managers who are required to conduct investigations will receive formal investigation training. This training will occur within the first month of appointment to the JHSC or as a supervisor / manager.
Report Form	Refer to Appendix for the ***Investigation Report and Witness Statement Forms***

Policy Statement	MBC is committed to having an emergency plan in place for each workplace location, including the office, to assist workers to adequately respond to any emergency situation. **NOTE**: Emergency Evacuation Plans are unique for every location, whether it is a jobsite or office building.
Objective	The objectives of Emergency Planning are: 1. To prevent death, injury and illnesses. 2. To reduce damage to buildings and equipment. 3. To accelerate the resumption of normal operations.
Planning the Emergency Program	If the project is located within a building or facility which has an existing emergency and evacuation plan, the supervisor must learn it and establish only those procedures necessary to complement the established Emergency Plan for the project site.
Emergency Response	1. Who will respond to emergency by; - Fight fire, clean chemical spill, shut down operations, electrical, gas or water. - Phone emergency services (police, fire, ambulance) - Provide first aid. - Head count evacuated employees. - Contact media, government services. 2. Emergency Preparedness by; - Ensuring emergency equipment is maintained and in good working order. - Provide drills and on-going training.
Emergency Equipment On Site	1. First Aid kit – refer to section 16 for specific sizes as required under the WSIA 2. Stretcher 3. Blanket 4. Emergency Signalling Device such as air horns 5. Emergency Phone Number Contact List
Locations of Fire Extinguishers	
Office	Various locations
Sites	Will vary depending on project's size, work being performed. At the very least 1 for every 300m^2. Trades who are performing open-flame activities must have their own suitable

extinguisher readily available.

Locations of first aid kits

Office: In the kitchen area with the list (certificates) of the trained workers.

Sites: 1 per site (usually located in site office) with the list (certificates) of the trained workers

Emergency Evacuation – site (gas leaks – fires)

When an emergency or uncontrollable hazard exists that requires evacuation the following procedures apply.

A Site Specific Safety Plan will be developed and implemented for each project prior to starting the job.

1. Vacate the immediate area of the emergency or hazard.
2. Sound the air horn (1) long blasts.
3. Contact the Site Superintendent, (or designate) to report incident.
4. Site Superintendent or designated person to call 911
5. Vacate the site through the designated egress and meet at the designated muster area. Evacuation Plan indicating emergency exits is posted on the job site.
6. Assemble in the designated area, DO NOT LEAVE until authorised by the site Superintendent.
7. Each foreman is to account for all members of their onsite crew and report findings to the Superintendent.
8. Render first aid to anyone who needs it.
9. A designated person will meet the emergency services and advise them of any potential hazards such as compressed gas storage and any missing workers.

THE AIR HORN IS LOCATED ON THE NOTICE BOARD.

EMERGENCY PHONE NUMBERS ARE POSTED ON THE NOTICE BOARD.

FLOOR PLAN AND EVACUATION PLAN ARE POSTED ON THE NOTICE BOARD.

Emergency Evacuation - office (fires)

When an emergency or uncontrollable hazard exists that requires evacuation the following procedures apply.

1. Vacate the immediate area of the emergency or hazard.
2. Begin yelling for assistance or FIRE-FIRE-FIRE!
3. Designated person to call 911
4. If the emergency can/will affect the adjoining businesses; a designated person must immediately go and advise them to vacate.
5. Vacate the office through the designated egress and meet at the designated muster area. Evacuation Plan indicating emergency exits is posted in the kitchen
6. Assemble in the designated area, DO NOT LEAVE until authorised by the office manager. NEVER GO BACK INTO THE BUILDING TO LOOK FOR ANOTHER WORKER!
7. A designated person will meet the emergency services upon their arrival and advise them of any missing person.

EMERGENCY PHONE NUMBERS ARE POSTED IN THE KITCHEN.

FLOOR PLAN AND EVACUATION PLAN ARE POSTED THROUGHOUT THE OFFICE.

Civil Emergency

In the event that a civil emergency occurs and, as a workplace, we are directed by the governing authorities (police, etc) to take action to protect ourselves; the following guidelines must be adhered too.

1. **Depending on the severity, we may be directed to completely evacuate the area**.
   - ⇨ Upon being notified, the site supervisor will activate the emergency evacuation air horn.
   - ⇨ Workers must stop their activities and lock up their tools (if possible- time sensitive)
   - ⇨ Equipment operators must lock their equipment and take the keys with them. This will prevent the equipment from being used by unauthorized persons.
   - ⇨ Workers will be directed as to a designated meeting area in order to conduct a head count.
   - ⇨ The Site Superintendent will be the last to leave and will ensure the gate is locked.
   - ⇨ Workers can only return once directed by the civil authorities.

2. **If the project is directed to go on lock-down**.
   - ⇨ The Site Superintendent will ensure the gate(s) is locked and

	depending on the progress of the project; will direct the workers to a safe area in the building or in the site trailer. ⇨ All equipment will be locked – take the keys with you. ⇨ Whenever possible the building's access points will be locked / secured. ⇨ When / if safe to do so, a head count will be conducted. This can be done by use of cell phones. 3. **In all cases; always adhere to the directives of the authorities**. 4. **Report any suspicious individuals around / in the workplace**. 5. **Never try to apprehend an individual unless you are threatened or in imminent danger**.
Training & drills	All supervisors and workers must receive training / awareness on the procedures. Workers who are or may be required to use a fire extinguisher will receive adequate training in their use. The office will go through an evacuation drill at least annually to determine its effectiveness and improve these procedures if required. The drill findings will be documented and reviewed by management and the JHSC

Emergency Numbers

Services	Emergency	Non-Emergency
POLICE	911	613-236-1222
AMBULANCE	911	613- 580-4771
FIRE	911	
WATER	311	613-560-6089
EMERGENCY GAS	1-866-763-5427	
ENVIRONMENTAL SPILLS	613-580-2400	
MINISTRY OF LABOUR 347 Preston Street, Tower III, 4th Floor Ottawa ON K1S 3J4 Fax: 613-727-2900	1-877-202-0008	613-228-8050
POISON INFORMATION	1-800-267-1373	

CALL BEFORE YOU DIG	
Ontario One Call Utility - Bell & Gas	1-800-400-2255
Hydro Ottawa	1-800-400-2255
Jordan Taylor, Safety Consultant	613-866-0018
James Taylor, Safety Consultant	613-797-3032

CONSIGNES EN CAS D'INCENDIE SI VOUS DÉCOUVREZ UN INCENDIE	FIRE ORDERS IF YOU DISCOVER A FIRE
• AVERTISSEZ LES PERSONNES À PROXIMITÉ (FEU - FEU - FEU). • QUITTEZ LA ZONE DANGEREUSE. • DÉCLENCHEZ L'ALARME. • FERMEZ TOUTES LES PORTES DERRIÈRE VOUS EN SORTANT. • APPELEZ LE SERVICE D'INCENDIE À PARTIR D'UN LIEU SÛR. PRÉCISEZ LE NOM ET L'ADRESSE DE L'IMMEUBLE, AINSI QUE LE LIEU ET LA NATURE DE L'INCENDIE. COMPOSEZ LE 9-1-1. • COMBATTEZ L'INCENDIE SEULEMENT SI CELA NE POSE AUCUN RISQUE ET SI L'INCENDIE NE SE TROUVE PAS ENTRE VOUS ET LA SORTIE.	• WARN PERSONS NEARBY (FIRE - FIRE - FIRE). • LEAVE THE AREA OF DANGER. • SOUND THE ALARM. • CLOSE ALL DOORS IN YOUR PATH OF EXIT. • PHONE THE FIRE DEPARTMENT FROM A SAFE LOCATION GIVING THE NAME AND ADDRESS OF THE BUILDING, AND THE LOCATION AND NATURE OF THE FIRE. CALL 911. • FIGHT THE FIRE ONLY IF IT IS SAFE TO DO SO AND IF THE FIRE IS NOT BETWEEN YOU AND THE EXIT.
AVERTISSEMENT • S'IL Y A DE LA FUMÉE DANS LE CORRIDOR OU DANS LA CAGE D'ESCALIER, EMPRUNTEZ UNE AUTRE SORTIE. IL SERAIT PLUS SÛRE DE DEMEURER DANS VOTRE SECTEUR.	**CAUTION** • IF YOU ENCOUNTER SMOKE IN THE CORRIDOR OR IN THE STAIRWELL, USE AN ALTERNATE EXIT. IT MAY BE SAFER TO STAY IN YOUR AREA.
RESTEZ CALME	**REMAIN CALM**

Review of Health and Safety Trends	Senior Management will review MBC's safety trends on a monthly basis. Management will review the patterns and take corrective action. The Health and Safety Co-ordinator in conjunction with the Joint Health and Safety Committee will prepare the trends review.
The following documentation will be reviewed when developing the Safety Trends Review	➢ Injury/illness causes ➢ Workplace inspections ➢ Injury/Incident investigations ➢ Hazard Reports ➢ Work Refusal reports ➢ Health and Safety recommendations from the Joint Health and Safety Committee ➢ WSIB injury/illness summary.
The Health and Safety Co-ordinator will create the summary of	➢ all injuries; including first aid ➢ infractions ➢ near misses, and ➢ reviewing patterns of occurrence
The report will take into considerations	➢ by shift ➢ injury type ➢ time of day ➢ type of equipment.
Suggested categories for the Trends Review are	➢ The number of work accident fatalities, ➢ The number of lost workdays, ➢ The number of non-fatal cases that required medical aid without lost workdays, ➢ The incidence of occupational illnesses.
Trends review process The annual review will be completed using the following process	
Step 1	Health and Safety Consultant will collect the data required to develop the Trends report.
Step 2	Work with the designated JHSC member to review the data and develop the Trends report for management review. **Report contents may include the following**: ➢ Table of contents ➢ Summary ➢ Recommendations for management review ➢ Graphs depicting the trends and findings ➢ Tables representing the data used to create the graphs
Step 3	Submit the Trends reports to management within 1week after the month's end.
Step 4	Management will review the Trends report at the next management meeting and

	make reply in writing to the JHSC regarding any corrective action to be taken.
Step 5	Health and Safety Co-ordinator will present management's response to the JHSC within 21 days of management's response.
Step 6	Health and Safety Co-ordinator will monitor the completion of the corrective action.
Records	All Trends review will be filed with the management minutes and a copy with the JHSC minutes.
Trends review (hazards) Data to be reviewed	➢ Injury/illness causes ➢ Workplace inspections ➢ Injury/incident investigations ➢ Hazard reports ➢ Health and safety recommendations from the Joint Health and Safety Committee ➢ WSIB injury/illness summary ➢ First Aid reports

General Requirements

The purpose of this section is to ensure we are complying with all the requirements set out under the pertinent Acts and regulations governing our standard activities.

Standard Posted Materials

It is the responsibility of the supervisor to ensure the following health and safety material will be posted and/or available in the workplace. It must be kept current!

The Joint Health and Safety Committee (JHSC) members conducting monthly inspections will check the health and safety board for compliance.

Requirements & Locations

Item	Date of Issue & location
Occupational Health and Safety Act	Most current –lunch room & site offices
- Industrial regulations	Most current – kitchen
- Construction regulation	Most current – sites
WHMIS regulation	Most current – lunch room & site offices
Material Safety Data Sheets (MSDS)	Within the past 3 years – lunch room & site offices
Designated Substance Report (DSR)	Most current – sites
Ministry of Labour - information sheets ➢ Guide to the OHSA ➢ Guide to JHSC ➢ Guidelines for the Safe operation of equipment ➢ Hazard Alert Sheets	As released
Form 82 – In case of injury poster	Lunch room & site offices.
Worker's Rights poster	Lunch room & site offices.
First Aid regulation	With the first aid kits.
Emergency Numbers	lunch room & site offices
Reports ➢ JHSC minutes ➢ Ministry of Labour compliance orders ➢ Injury/Incident summary ➢ Inspection reports	lunch room & site offices
Emergency Plan	lunch room & site offices

References

In developing the company standards, references were used from the following;

- Ontario's Occupational Health and Safety Act
- Workplace Safety and Insurance Act
- Construction regulations
- WHMIS regulations
- Industrial regulations
- Asbestos regulations
- Designated Substances regulation
- Various CSA standards
- Industry standards

Workplace Hazardous Material Information System (W.H.M.I.S.)

MBC strives to maintain a safe workplace, consistent with this; ALL workers must obtain their WHMIS certification.
The new standards are now being implemented in the industry; they are known as the Globally Harmonized System (GHS) and will be gradually incorporate into our program.

Description

There are four main areas of the WHMIS system as follows:

- Hazard Symbols and pictograms
- Warning labels on containers of hazardous materials.
- Material Safety Data Sheets (MSDS) or Safety Data Sheets (SDS)
- Worker Education and Training.

Responsibilities

Management

- ✓ Ensure that containers of hazardous materials have labels on them.
- ✓ Ensuring that labels are not removed; defaced or altered while there is product in the container or package.
- ✓ Ensure that employees are trained and understand their WHMIS responsibilities.
- ✓ Ensure that MSDS's are available in the workplace for all controlled substances present.
- ✓ Ensure that the MSDS's are current. Issued within three years of the last publication date.
- ✓ Ensure that workers are familiar with the content of MSDS for a product they are about to use.
- ✓ Ensure that an MSDS is provided to a physician or nurse on request for diagnosis and or treatment in an emergency.

Workers

- ⇨ Workers must report to their manager, supervisor / lead hand, when labels on containers and or packaging are unreadable, have been removed or altered.
- ⇨ Workers must participate in WHMIS training and understand the system.
- ⇨ Workers must consult the MSDS for risks, hazards and personal protection identified for the product they are about handle.
- ⇨ Ensure that he/she knows that an MSDS exists at the workplace and where it is kept.
- ⇨ To read and understand the MSDS before using a controlled product for the first time.

Symbols / Pictograms

WHMIS 1988			WHMIS 2015	
Class	**Description**	**Symbol**	**Pictogram**	**Description**
A	Compressed Gas			Gas under Pressure
B	Flammable & Combustible Material			Flammable
C	Oxidizing Material			Oxidizing
D1	Poisonous & Infectious Material Causing Immediate & Serious Toxic Effects			Acute Toxicity – fatal or toxic
D2	Poisonous & Infectious Material Causing Other Toxic Effects			Carcinogen Teratogen Mutagen
				Acute Toxicity – irritation, sensitization
D3	Poisonous & Infectious Material Bio-Hazardous Infectious Material			No change
E	Corrosive Material			Corrosive
F	Dangerously Reactive Material			Self-Reactive Substances

Training	Ensure the workers receive regular recertification. Furthermore, workers must receive product-specific training – the supervisor must review the MSDS with the workers prior to using the product for the first time. Ensure this secondary training is documented.
MSDS / SDS	An inventory review will be conducted on a regular basis to ensure we know what products we have. We will ensure all Material Safety Data Sheets (MSDS) remain valid; they are only current for 3 years. A copy of our MSDS for the products must be provided to the Constructor for their information.
Labels	A **"Supplier Label"** is generally affixed to the container or packaging of the controlled product and includes information such as the product name, the hazard symbol(s) identifying hazards associated to the product, risk phrases, precautionary measures, First Aid measures and reference to a Material Safety Data Sheet. A **"Workplace Label"** is a label placed on the container of decanted material by the manager or worker to identify the contents thereof. The "Workplace Label" must contain such information as the product name, safe handling instructions and reference to a Material Safety Sheet. When a supplier label is missing from or becomes illegible on a shipping container or package a workplace label should be drafted and affixed to it.
Adverse Weather	Extreme weather throughout the year such as thunderstorms, wind shears, high heat; extreme cold, freezing rain, etc. affect every aspect of construction safety. These conditions can affect workers at height, elevated equipment, material movement and even general working/walking conditions. If any of these conditions are forecasted or occurring, the site supervisor shall ensure all affected trades are made aware of certain restrictions and in some circumstances stop the work completely. ***For heat/cold guidelines refer to the chart in Appendix***.
Heat/Cold Stress	

Heat Stress

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

- Hard physical work
- Fatigue (not enough sleep)
- Dehydration (loss of fluids)
- Certain medical conditions.

Heat stress can lead to illness or even death.

Heat stress symptoms

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

Follow these procedures when working in hot, humid conditions

1) Increase the frequency and length of rest breaks.
2) Drink plenty of fluids, preferably cool drinking water**,** a cup every 1/2 hour is recommended.
3) Additional caution should be taken when working in direct sunlight.
4) Familiarize yourself with the signs and symptoms of heat stress. Start a "buddy system" because it's unlikely people will notice their own symptoms.
5) Wear light summer clothing to allow air to move freely and sweat to evaporate. Shirts must be worn for protection from direct sunlight.

Cold Stress

When you're cold, blood vessels in your skin, arms, and legs constrict, decreasing the blood flow to your extremities. This helps your critical organs stay warm, but your extremities are at risk for frostbite.

Frostbite means that your flesh freezes. Blood vessels are damaged and the reduced blood flow can lead to gangrene.

The first sign of frostbite is skin that looks waxy and feels numb. Once tissues become hard, it's a severe medical emergency.

Wind chill accelerates heat loss - sometimes to a dramatic extent. For example, when the air temperature is –30°C,

- With no wind, there is little danger of skin freezing
- With 16 km/h wind (a flag will be fully extended), your skin can freeze in about a minute
- With 32 km/h wind (capable of blowing snow), your skin can freeze in 30 seconds.

	When your core temperature drops, you're at risk for hypothermia. Early signs of hypothermia are shivering, blue lips and fingers, and poor coordination. Soon your breathing and heart rate slow down, and you become disoriented and confused. Hypothermia requires medical help
What you can do to prevent cold stress	1. Wear several layers of clothing rather than one thick layer. 2. Wear gloves if the temperature is below 16°C for sedentary work, below 4°C for light work, and below –7°C for moderate work. 3. Take warm, high-calorie drinks and food. 4. If your clothing gets wet at 2°C or less, change into dry clothes immediately to prevent hypothermia. 5. If you feel hot, open your jacket but keep your hat and gloves on. 6. When necessary take rest breaks in a heated shelter.
Hygiene Requirements	
Drinking Water	A reasonable supply of potable drinking water shall be kept readily accessible at a project for the use of workers. Drinking water shall be supplied from a piping system or from a clean, covered container with a drain faucet or bottled water.
Toilet Facilities	Toilet facilities shall be provided in sufficient quantities and in the locations as outlined in regulation 213/91, Regulations for Construction Projects. The facilities shall be in place before the start of the project. The facilities shall be reasonably accessible to all workers on the project. For work of shorter duration, facilities that are not under the constructor's control may be used only if you have received permission from the facilities' owner for workers to use the facilities.
Clean-up Facilities	Workers who handle or use corrosive, poisonous or other substances likely to endanger their health shall be provided with washing facilities with clean water, soap and individual towels.
Noise Hazards	The company will make every attempt to eliminate or isolate any excessive noise by implementing engineering controls. However this may not always be feasible; anyone exposed to excessive noise levels both acute and long term shall wear suitable hearing protection as required in the governing legislation. In order for us to quantify the actual levels our workers will be / are exposed to, noise measurements will be taken for the tasks being performed and corrective action implemented. Should any worker have a concern regarding a specific work area or task which may have excessive noise (both acute and chronic); we will conduct a noise survey before any work begins or continues.

Recommended Class of Hearing Protector

Table 1

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

Use Table 2 to compare typical construction noise levels with the work you are performing. Note: Chose your protection based on the highest noise levels if multiple noise sources are present.

Typical Noise Level Measurements for Construction

Table 2

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

* Generally, newer equipment is quieter than older equipment. (For noise levels of specific equipment, contact the Construction Safety Association of Ontario.)

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

Biological Hazards

Biological hazards are disease-causing organisms and substances produced by organisms. Examples of organisms that are biohazards include salmonella bacteria and the Ebola virus. Examples of substances that are biohazards include droppings from rats that have the Hanta virus and blood from humans that have hepatitis C. Workers on construction sites may be exposed to a variety of biohazards. These may include exposure to materials that can cause serious illness and affect the worker's health in the long-term. The following information draws your attention to some of these potential hazards.

Synthetic Mineral Fibres (SMF)

SMF are generally a series of products made from fiberglass, rockwool and ceramic. These fibrous products are widely used in buildings for thermal insulation and sound protection.

Due to the similarity in the fibers and their uses, there were concerns that SMF may have similar health effects to that from asbestos. However, a number of international studies show that SMF are less hazardous than asbestos. Larger fibers can cause irritation of the skin, eyes, nose and throat while there is a possible risk of lung cancer from some SMF, for example fiberglass.

In good working conditions with adequate protection to the workers, the health risk from exposure to SMF dust is very low. Suitable respirators and protective clothing must be provided by the employer and worn by all workers exposed to SMF.

Custom Wood and Wood Dust

Construction workers doing flooring and wall paneling handle large amounts of particleboard or fiberboard. These custom woods contain formaldehyde, which is a chemical that can possibly cause cancer in humans. Machining operations such as sawing, drilling and sanding can generate large amounts of airborne wood dust with this hidden hazard. Inhaling formaldehyde can cause burning sensations in the eyes, nose and throat and a range of other symptoms if higher levels are in the air.

Large wood dust particles can be trapped easily in the nasal passage and are known to cause nasal cancer among woodworkers. Inhaling wood dust also causes chronic lung disease by reducing lung function. Many types of wood (such as oak, western red cedar, blackwood) are known as the cause of occupational asthma, while allergic diseases may be caused by handling and working with timber contaminated with fungi (moulds).

An efficient dust extraction system should be in place to control wood dust. Suitable personal protection (dust masks, eye protection) must be worn when machining wood. In addition, the work area must be cleaned up every day and the wood dust safely removed. When working with custom wood, make sure that the work area is well ventilated so that any exposure to formaldehyde is minimized.

Solvents	Chemicals that are commonly known as solvents may be used in a number of jobs in the construction site. Solvents are widely used in degreasing, cleaning and painting and are found in glues, paints and varnishes. Solvents are easily evaporated. Exposure to the vapor or liquid form can have both short and long-term effects on the worker's health. The health effects will largely depend on the chemicals in the solvent and the amount of exposure to it. Exposure to solvents is mainly through breathing but they can also be absorbed through the skin. Short-term exposure to solvents will cause headaches, nausea, drowsiness and dermatitis (skin problems). If repeatedly exposed to a solvent, a worker may develop long-term damage to the kidneys, liver and skin. Personality changes, sleep disorders, short-term memory loss and dementia can also occur from solvent exposure and these toxic effects on the nervous system are a great concern. Anyone working with these hazardous substances and provide them with information on the chemicals (MSDS, etc). Under the NSW OHS Regulation 2001, any health risks to the workers should be adequately assessed and controlled
Sewage Spills	Sewage spills have posed serious health risks to workers at a number of construction sites. Contact with raw sewage or with sewage-contaminated areas can risk exposure to Hepatitis A and infectious bacteria such as Giardia. Workers undertaking activities such as plumbing are particularly at risk from these biological hazards. Hepatitis A is spread by sewage contaminated food and water, or by its contact with open sores or cuts. Infection occurs about 3-4 weeks later. Symptoms of hepatitis A are fever, headache, nausea, pain in the abdomen, dark urine and jaundice. The disease can be more severe in older patients. If there is concern of exposure to contaminated sewage (particularly if ingested), the worker should be immediately inoculated against the virus. A medical practitioner will advise on appropriate measures. In case of a sewage spill, the area should be vacated immediately. An approved contractor should clean up the contaminated area as soon as possible.
Prevention of hepatitis A infection	A safe, effective vaccine is available to protect against hepatitis A. Workers with an increased chance of being infected with hepatitis A virus at work should be vaccinated against the disease. There is a limited possibility of immunization-related reactions and workers should ask the doctor about possible risks from

	vaccine. Employers have responsibilities under the Occupational Health and Safety legislation to provide a safe system of work for all employees. The employer should ensure that suitable controls are in place to prevent potential exposure to sewage-contaminated material in construction sites. Vaccination of at risk workers is one way to approach this potential hazard.
Bird Excrement	***Cryptococcus neoformans*** is a species of fungi, which is often present on the excrement of pigeons. It may remain alive for months in dried bird faeces, and therefore is a common inhabitant of soil contaminated by bird excrement. ***Cryptococcus*** infection usually occurs in the lung. In some instances, exposure to the fungi may result in pneumonia like symptoms, and a form of meningitis, although this is quite rare. Workers exposed to bird excrement should be adequately protected by appropriate respiratory equipment such as a P2 half facemask with a suitable filter. A long sleeved shirt, trousers, gloves and fully enclosed shoes should also be worn if working in contaminated areas.
West Nile Virus (WNV)	The West Nile virus (WNV) is most often spread to humans from the bite of an infected mosquito. Most human infections with WNV (about 80%) cause no symptoms, and about 20% cause flu-like symptoms, including fever, fatigue, headache, and muscle or joint pain. Less than 1% of humans infected with WNV become severely ill. Severe symptoms include high fever, stiff neck, disorientation, tremors, muscle weakness, and paralysis. Severely affected persons may develop encephalitis (inflammation of the brain) or meningitis (inflammation of the membranes of the brain or spinal cord). Severe cases may be fatal. People of all ages and conditions may be affected. However, those who are above age 50 or who have had an organ transplant are at increased risk of severe illness. To reduce the risk of contracting WNV, wear protective clothing (long-sleeved shirts, long pants, and socks) and repellents to use on skin and clothing: ➢ Use repellents containing DEET (more than 20% DEET for longer protection), picaridin, or oil of lemon eucalyptus on both skin and clothing. ➢ Use permethrin on clothing only. ➢ Eliminate as many sources of standing water from the worksite as possible to decrease mosquito populations. ➢ Turnover, cover, store, or remove equipment such as tarps, buckets, barrels, wheelbarrows, and containers to prevent standing water. Avoid handling dead animals when possible. If you must handle them, take the following precautions: ➢ Use tools such as shovels to avoid direct contact with the animals.

	➢ Wear medical examination gloves that provide a protective barrier between your skin and blood or other body fluids: ➢ Wear two pairs of gloves if one pair alone might tear. ➢ Discard both inner and outer gloves immediately after use.
Biological Hazards That May Be in Sewage Or Wastewater	Sewage and wastewater contain bacteria, funguses, parasites, and viruses that can cause intestinal, lung, and other infections. If equipment, work practices, and personal protective equipment (PPE) don't protect you from swallowing these agents, you can get sick. **Bacteria** may cause diarrhea, fever, cramps, and sometimes vomiting, headache, weakness, or loss of appetite. These are some bacteria and diseases they cause: E-coli, shigellosis, typhoid fever, salmonella, and cholera.
Funguses	➢ Aspergillus and other funguses often grow in compost. These can lead to allergic symptoms (such as runny nose) and sometimes can lead to lung infection or make asthma worse. If you have other health problems, you may be more likely to get sick from aspergillus.
Parasites	➢ Cryptosporidium and giardia lamblia may cause diarrhea and stomach cramps, and even nausea or a slight fever. • Roundworm (ascariasis). Most people have no symptoms. With a lot of roundworms, you may cough and have trouble breathing or you may have pain in your belly and blocked intestines.
Viruses	➢ Hepatitis A causes liver disease. You may feel tired, pain in your belly, nauseous off and on; you may have jaundice (yellow skin) or diarrhea or not be hungry. The CDC says sewage workers are not at more risk of hepatitis A infection than other workers. If a lot of people in the community have hepatitis A, your risk may be higher than usual.
Blood-born viruses	Are hazards mainly to workers in health care facilities, Hepatitis B and HIV are Blood-born ➢ **Hepatitis B** causes liver disease. You may feel tired, have jaundice (yellow skin), pain in your belly, feel nauseous off and on, throw up, or not be hungry. The disease has not been linked to exposure to sewage. ➢ **Human immunodeficiency virus** (HIV) causes AIDS. There are no known cases of wastewater workers getting HIV from their jobs and the risk is virtually nonexistent.
Protecting the Worker	For work around sewage or wastewater, engineering controls and work practices are the best ways to protect workers from exposures to disease. When engineering controls are not possible use personal protective equipment (PPE). For some jobs and around some hazards, respiratory protection is required.

	➢ Training and education about the hazards of wastewater and sewage ➢ A place onsite with clean water for washing your hands ➢ A place to wash and clean up after work ➢ The right PPE, such as gloves, goggles, a face shield, water-resistant suit, or respirator – depending on the job ➢ Clean areas set aside for eating and smoking Cleaning facilities or services for clothing and equipment. (If clothing is badly soiled, change out of it. Keep equipment clean to limit your exposures to the disease-causing agents.)
What you can do	➢ Most important: **Wash your hands well with clean water and soap before you eat or smoke and after work.** ➢ **Do not touch your nose, mouth, eyes, or ears with your hands, unless you have just washed. Most of the time, people get these diseases when they have germs on their hands and they touch their mouth or nose or eyes.** ➢ Keep your fingernails short; use a stiff soapy brush to clean under your nails. ➢ Wear waterproof gloves when you clean pumps or screens and when you handle wastewater, sludge, or grit. ➢ Always wear gloves when your hands are chapped or burned or you have a rash or a cut. ➢ Shower and change out of your work clothes before you leave work. ➢ Do not keep your soiled work clothes with your other clothes. ➢ Report any injury or illness you think you got from work right away. **If you do get sick, be sure to tell your doctor you work in a sewage or wastewater treatment plant.** That information will help the doctor know what to look for.
Lyme Disease	Lyme disease is an infection caused by the corkscrew-shaped bacteria, *Borrelia burgdorferi*. In Ontario, these bacteria are spread by the bite of blacklegged ticks (formerly called deer ticks). The blacklegged tick can be found sporadically throughout the province. The number of ticks capable of spreading Lyme disease in Ottawa is low, but researchers believe the number could increase as climate changes bring milder winters.
What are moulds?	Moulds are microorganisms that produce thousands of tiny particles called spores as part of their reproductive cycle. Mould colonies are usually visible as colourful, woolly growths. They can be virtually any colour – red, blue, brown, green, white, or black. When disturbed by air movement or handling, moulds release their spores into

	the air. Given the right environmental conditions, these spores can go on to form other mould colonies.
Where are moulds found?	Moulds can be found almost anywhere outdoors and indoors. Indoor moulds usually originate from outside sources such as soil and vegetation. Moulds love dark, moist environments and can grow at room temperature on various construction materials including wallpaper, particleboard, ceiling tiles, drywall, and plywood. Construction workers can be exposed to toxic spores when working on buildings with some sort of water damage from flooding, plumbing leaks, or leaks in the structure itself.
Why are moulds of concern?	In buildings with water damage or ongoing moisture problems, certain types of "water-loving" moulds may reproduce to higher than normal levels and potentially cause adverse health effects. *Stachybotrys chartarum* (formerly known as *Stachybotrys atra*) is of particular concern because it can be found in large colonies and can cause adverse health effects. *Stachybotrys* has gained special attention because it has been discovered in portable classrooms with ongoing moisture problems. It appears as small black patches and grows well on water-soaked cellulose material such as wallpaper, ceiling tiles, drywall, and insulation containing paper. In addition to Stachybotrys, construction personnel working in water-damaged buildings may be exposed to other types of toxic moulds such as *Fusarium, Aspergillus,* and *Penicillium*.
What health effects can moulds cause?	Air movement and the handling of contaminated material can release toxic spores into the atmosphere. These spores cause adverse health effects by producing toxic substances known as mycotoxins. Once released, toxic spores must come into contact with the skin or be inhaled before symptoms can develop. Not all exposed construction workers will develop symptoms. ➢ Exposure to toxic moulds may irritate skin, eyes, nose, and throat, resulting in allergy-like symptoms such as difficulty in breathing, runny nose, and watery eyes. ➢ Other symptoms such as fatigue and headache have also been reported. ➢ Workers who are allergic to moulds could experience asthmatic attacks. ➢ Workers exposed to Stachybotrys have also experienced burning in the nose, nose bleeds, severe coughing, and impairment of the immune system. *Stachybotrys* does not cause infection and is not spread from person to person. ➢ People with weakened immune systems are particularly susceptible to mould-related illness and should not work in mould-contaminated areas.
How are moulds identified?	Owners of buildings that may be mould-contaminated should conduct, at their own expense, an assessment to determine whether or not the buildings are indeed contaminated. The assessment should include building inspection and analysis of bulk samples. Mould on visible surfaces may be just the tip of the iceberg. Since they thrive in dark, moist environments, moulds may be hidden from view. Thorough inspections of water-damaged areas must be conducted. This involves looking into wall cavities, behind drywall, under carpets, and

	above ceiling tiles. Not all mounds are toxic. The type of mould identified and the extent of the contamination will determine the precautions to be taken. Bulk sampling and laboratory analysis are used to document the type of mould growing on surfaces. The procedure involves scraping surface material into a sealable plastic bag and sending it by overnight delivery to an accredited laboratory. The chosen laboratory should have a competent mycologist (a person that studies moulds) who can analyze the sample and determine whether the mould is likely to pose a health risk. Based on the presence of visible mould, evidence of water damage, and symptoms that are consistent with allergic or toxic response to mould, it may be justified to skip bulk sampling and go straight to remediation (removal). The person taking bulk samples or performing inspections must be suitably protected and must be careful not to unduly disturb the mould.
How can moulds be safely removed?	Toxic moulds must be removed. However, special control measures must first be implemented to prevent worker exposure and the spread of moulds from the construction area to adjacent areas. This is especially true for Stachybotrys because of its potentially severe health effects. The extent of contamination governs what remediation measures need to be taken in order to prevent the spread of toxic moulds. Note: The cause of moisture problems should be corrected before any mould remediation takes place. A follow-up inspection should be conducted 3–6 months after remediation to ensure that the mould has not returned.
PPE (Personal Protective Equipment)	Use professional judgment to determine PPE for each situation, particularly as the size of the remediation site and the potential for exposure and health effects increase. Be prepared to raise PPE requirements if contamination is more extensive than expected. Minimum – Gloves, N-95 respirator, goggles/eye protection. Limited – Gloves, N-95 respirator or half-face respirator with HEPA filter, disposable overalls, goggles/eye protection. Full – Gloves, disposable full-body clothing, head gear, foot coverings, full-face respirator with HEPA filter.
Containment	Use professional judgment to determine containment for each situation, particularly as the size of the remediation site, and the potential for exposure and health effects, increase. None Required, or Limited – From floor to ceiling, enclose affected area in polyethylene sheeting with slit entry and covering flap. Maintain area under negative pressure with HEPA-filtered fan. Block supply and return air vents in containment area. Full – Use two layers of fire-retardant polyethylene sheeting with one airlock chamber. Maintain area under negative pressure with HEPA-filtered fan

exhausted outside of building. Block supply and return air vents in containment area.

Designated Substances

Workers must be properly trained in the handling and/or disposal of designated substances such as asbestos and PCB's, if workers could possibly come into contact with such substances on the site.

There are several regulations which govern the exposure to designated substances; should any worker have or suspect they may be exposed, they must refer to the specific, following regulations.

WHMIS – regulation 860
Asbestos – regulation 278/05 - Workers must report to their supervisor if they believe they have encountered or uncovered asbestos containing materials; they must not disturb the asbestos and contain the area.
Designated Substances – regulation 490/09
Includes: Acrylonitrile; Arsenic; Asbestos; Benzene; Coke Oven Emissions; Isocyanates; Lead; Mercury; Silica & Vinyl Chloride

Environmental Spill Procedure

Assess

Review site conditions, i.e. identify spill material, identify responsible individuals, determine likelihood and extent of contravention, and impact on the work site.

All spills which cause or are likely to cause an adverse effect on the natural environment must be reported. Reportable spills are those which cause any of the following adverse effects:

- ✓ Impairment to the natural quality of air, land or water.
- ✓ Adverse health effects.
- ✓ Injury or damage to property and/or animal life, and/or plant life.
- ✓ Interference with the conduct of business or the enjoyment of property.

Exceptions

Any spill less than 100 litres of vehicle operating fuels, lubricants, and vehicle coolants, where the liquids have not entered or are not likely to enter any surface water or well, do not require formal reporting. However, they should be recorded.

Report

Spills must be reported by the person or persons causing the spill, to:

1) The jurisdiction in authority.
2) The Owner or person in control of the spilled material.

Contain

Safely, and as best possible, contain the spill. Straw bales stockpiled on site are effective for liquid containment. Prohibit migration of spills into site drainage systems and adjacent property. Assess workers' safety and initiate action

	accordingly.
Review	The Owner or persons in control of the spilled material is required to contain, clean up and dispose of the material in a timely matter, to the satisfaction of the Ministry. The Ministry will assist the discharger to determine proper clean-up procedures and suitable disposal procedures at approved sites. Review the spill reporting and clean-up requirements and ensure procedures have been followed. Record all related activities.
Confined Space	Refer to section 6.

First Aid Requirements

Purpose

The purpose of this program is to ensure that all employees are continuously trained and protected in the event of an injury which requires first aid or medical aid. The workers must be trained to make the determination of the severity of the situation.

Responsibilities

Management

- Ensure that an adequate amount of workers received and maintain, on a regular basis, updated training by a recognized agency. This means that at least 1 worker per shift and/or crew.
- Ensure that first aid supplies are available and adequately stocked to comply with regulatory requirements.
- Ensure that all required posters and forms are available and/or posted.

Workers

- Actively participate in the training process, both initial and updates.
- Provide/receive adequate first aid when required.
- Monitor and inspect the first aid kits at least quarterly.
- Advise the office when additional supplies are required or have been picked up.

First Aid Kits

First Aid kits and supplies requirements are controlled under Regulation 1101 of the W.S.I.Act. They are separated into separate categories depending on the size of workforce on any given project or office. The following are the groupings;

- 0 - 5 workers,
- 6 - 15 workers,
- 16 – 200 workers, and
- over 200 workers.

Refer to Appendix for the appropriate requirement list.

Training & Certification

All workers who are or may be required to render first aid to another worker must ensure that their training is current, usually within 3 years for first aid and 1 year for CPR.
A copy of the Certificate will be posted with the first aid kit.

Treatment Records

A treatment form shall be maintained with the first aid kit and shall be completed for all incidents requiring treatment. ***Refer to Appendix*** for a copy of this form.

Transportation

MBC will provide transportation to the hospital, doctor's office or worker's home when necessary, following and injury or illness.

The preferred method of transportation if required is an ambulance.

Should this method of transportation not be appropriate then the company will call for a taxi. The injured worker will be accompanied by the first aid attendant or designated person.

Should the employee refuse the transportation, the company will attempt to	➢ Identify any other transportation methods that the worker would prefer. ➢ Reiterate the importance of accepting the transportation to the hospital, doctor's office or worker's home. ➢ Call 911 and get the ambulance attendant to administer medical attention on site. ➢ The worker will not be allowed to continue work until medical clearance is provided.
Responsibilities of the individual travelling with the injured worker	➢ Continue to administer first aid, if required. ➢ Maintain contact with the company – provide updates when the worker has reached their destination. ➢ Return to the company to provide additional follow-up and complete the injury / incident documentation. ➢ Additional duties may be added on each individual circumstance.

Health & Safety Representatives and JHSC Committees	All subcontractors shall ensure (as required by governing legislation) that all worker health and safety representatives be available to attend safety meetings and inspections as required.
Health and Safety Representatives	It will be the responsibility of the owner or management of all subcontractors employed on a MBC site to ensure that a fair and democratic election is held amongst their employees to select a worker health and safety representative. MBC's Project Superintendent and/or Project Manager will ensure that a fair and democratic election be held among the subcontractors worker health and safety representatives to select a minimum of two worker health and safety representatives for the project and will also ensure that the names of these individuals are posted in a location available to all persons on site. (These health and safety representatives will be required to participate and form part of the Joint Health and Safety Committee as required by the governing legislation.)
Replacement Process of a Worker Representative	Should an elected representative not be able to continue the previous election results (not more than 1 year old) will be used to select the person receiving the next amount of votes.
Submission of Recommendations	
Why	A function of the Worker Representative is to make recommendations to the employer and the worker for the improvement of the health and safety of the workers
Who can submit	The Worker Representative will submit their recommendations on the company recommendation form within 3 days of the hazard identification.
Who is it submitted to	The employer (Paul McDonald – office) site Superintendent - field
What can be submitted	Any health and safety recommendation to rectify a situation that may be a source of danger or hazard to a worker(s).
When	As soon as the source of danger or hazard is identified this must be within 3 working days.
How	In writing on the company's recommendation form.
Joint Health and Safety Committee (JHSC)	A Joint Health and Safety Committee (JHSC) will be established on a project as required by the Occupational Health and Safety Act and governing legislation. A JHSC is required at a project where work is expected to last more than three months, and at which twenty or more workers are regularly employed. MBC's Safety Coordinator and or the project Superintendent will represent management on the committee along with the elected worker health and safety representatives. As the number of workers increases, an agreement by the members of the JHSC may allow for possible additional members to be selected from the subcontractor's workers safety representatives and be appointed to the JHSC. (At no time shall the number of management members be allowed to increase above the number of worker members.)

	Times, dates and location for JHSC meetings, as well as the names of the current members of the committee, will be made available to anyone and will be posted in the site office. Workers should familiarize themselves with the person(s) representing them and should assist him/her in bringing safety concerns forward to be dealt with. If YOU see an unsafe situation, do not wait for a meeting to raise the issue. If possible, correct it yourself immediately and notify your supervisor. Otherwise, immediately notify your supervisor, the project superintendent and/or your health and safety representative.
Selection process for the Joint Health and Safety Committee	
Worker Member	Will be elected by their peers. Individuals can volunteer or be nominated. An election will be held to select the appropriate number of worker members. This applies to both the office and projects.
Management Member	The president and/or project Superintendent will select the management members. The same process as above will be used for both the worker and management members when selecting alternates.
Worker Certified Member	The workers will decide who will become the certified worker member.
Management Certified Member	The management members on the JHSC will decide who will become the certified management member.
Replacement Process of Certified Members	The same process as above will be used to replace the certified member.
Selection of Worker Co-Chair	The worker members on the JHSC will decide who will become the worker co-chair.
Selection of the Management Co-Chair	The management members on the JHSC will decide who will become the management co-chair.
If the company is having difficulty selecting JHSC members, management will	➢ Make additional efforts to promote the benefits of becoming a JHSC member. ➢ Educate and train the workers in health and safety. ➢ Provide information to workers on the roles and responsibilities of the JHSC.
	If the project's workers exceed 50; at least one worker member and one management member will be certified as per the Occupational Health and Safety Act.
Submission of Recommendations	
Why	A function of the Joint Health and Safety Committee is to make recommendations to the employer and the worker for the improvement of the health and safety of the workers.

Who can submit	The JHSC.
Who is it submitted to	The employer (management) / project management
What can be submitted	Any health and safety recommendation to rectify a situation that may be a source of danger or hazard to a worker(s).
When	As soon as the source of danger or hazard is identified.
How	In writing on the company's recommendation form.
Employers Response to Joint Health and Safety Committees Recommendations	Senior Management of MBC will respond with a written response to the Joint Health and Safety Committee within 21 days of receiving a recommendation. The management written response will be completed using the "Management response to JHSC recommendations" form. The original will be sent to the Worker Co-chair, copies to the Management Co-chair, the Health and Safety Coordinator, and attached to the next management minutes. If management decides against acting on the Joint Health and Safety Committee recommendation, reason must be given in writing on the "Management response to JHSC recommendations" form.
Documentation	The original forms received from and sent to the JHSC will be kept with the Worker Co-chair. Copies will be sent to the Management Co-chair, health & Safety Coordinator, and attached to the next scheduled management minutes.
Records	The original copies will be kept in accordance with the Records Management policy.

Policy Statement

The management of MBC believes in the prevention of violence and promotes a violence-free workplace. MBC is committed to providing a safe and respectful work environment for all staff and clients. Any act of violence committed by or against any member of our workplace, clients, contractors, suppliers or member of the public, is unacceptable conduct that will not be tolerated. This policy applies to all activities that occur while on MBC premises or while engaging in MBC business, activities, or social events.

Acts of violence can take the form of physical contact, but not always. Acts of violence may occur as a single event or may involve a continuing series of incidents. Violence or abuse in any form erodes the mutual trust and confidence that are essential to MBC's operational effectiveness.

_____

Paul McDonald
President

Purpose

The Purpose of the policy is to ensure that:

a) Individuals are aware of and understand that acts of workplace violence are considered a serious offence for which necessary disciplinary action will be imposed;
b) Those subjected to acts of workplace violence are encouraged to access any assistance they may require in order to pursue a complaint; and
c) Individuals are advised of available recourse if they are subjected to, or become aware of, situations involving workplace violence.

Definitions

workplace violence

(a) the exercise of physical force by a person against a worker, in a workplace, that causes or could cause physical injury to the worker,
(b) an attempt to exercise physical force against a worker, in a workplace, that could cause physical injury to the worker,
(c) a statement or behaviour that it is reasonable for a worker to interpret as a threat to exercise physical force against the worker, in a workplace, that could cause physical injury to the worker.

Examples of workplace violence include, but are not limited to:

a) Threatening behaviour such as shaking fists, destroying property or throwing objects;
b) Verbal or written threats that express an intent to inflict harm;
c) Physical attacks; and
d) Any other act that would arouse fear in a reasonable person in the circumstances.

Workplace Harassment

1. Engaging in a course of vexatious comment or conduct against a worker in a workplace that is known or ought reasonably to be known to be unwelcome.
2. Engaging in a course of vexatious comment or conduct against a worker in a workplace because of sex, sexual orientation, gender identity or gender expression, where the course of comment or conduct is known or ought reasonably to be known to be unwelcome; or
3. Making a sexual solicitation or advance where the person making the solicitation or advance is in a position to confer, grant or deny a benefit or advancement to the worker and the person knows or ought reasonably to know that the solicitation or advance is unwelcome.
4. Engaging in a course of vexatious comment or conduct against a worker in a workplace because of sex, sexual orientation, gender identity or gender expression, where the course of comment or conduct is known or ought reasonably to be known to be unwelcome; or
5. Making a sexual solicitation or advance where the person making the solicitation or advance is in a position to confer, grant or deny a benefit or advancement to the worker and the person knows or ought reasonably to

know that the solicitation or advance is unwelcome.

Harassment includes, but is not limited to, the following:

- Verbal conduct such as derogatory jokes or comments, slurs or any unwanted sexual advances, invitations or comments;
- Visual conduct such as the posting, display or electronic messaging of derogatory and/or sexually oriented posters, pictures, photography, illustrations or gestures;
- Threats and demands to submit to various acts or activities not associated with one's regular duties and responsibilities of employment;
- Retaliation for having reported or warned of an instance of harassment and/or discrimination; and
- Ethnic or racial slurs, jokes and other verbal or physical conduct, whether verbal or written, relating to a person's race, religion, colour, age, sex, national origin, disability or any other protected basis under applicable federal, provincial and local law.

Harassment in the workplace can take many forms. It can be overt or subtle, direct or indirect (e.g. where a hostile feeling/environment is created without any direct attacks being made on a person). Harassment can be verbal, nonverbal and/or physical.

Some forms of verbal harassment include, but are not limited to:

- Sexual or suggestive remarks
- Making fun of someone
- Imitating someone's accent
- Propositions (sexual invitations)
- Spreading rumors
- Obscene telephone calls/unsolicited letters, faxes or e-mail messages
- Repeated unwelcome invitations
- Offensive jokes
- Suggestive jokes, leers or whistling
- Repeated questions about personal life
- The use of language that is not suitable in the workplace
- Name-calling

Some forms of non-verbal harassment include, but are not limited to:

- Putting sexually suggestive, offensive, degrading or insulting material on walls, computer screen savers, in emails, etc.
- Unwelcome practical jokes
- Displaying or circulating racist or sexist cartoons or literature
- Mimicking someone with a disability
- Following someone home from work without their consent
- Offensive hand or body gestures

- Unnecessarily leaning over someone

Responsibilities

Employer

- ✓ Conduct a hazard assessment.
- ✓ Provide the results to the JHSC and/or safety representative.
- ✓ Train our employees.
- ✓ Provide sufficient information to protect our workers; this includes personal information, related to a risk of workplace violence from a person with a history of violent behaviour if,
  - **(a)** the worker can be expected to encounter that person in the course of his or her work; and
  - **(b)** the risk of workplace violence is likely to expose the worker to physical injury.
- ✓ Limit on disclosure
  The company or our supervisors shall only disclose the personal information in the circumstances described than is reasonably necessary to protect the worker from physical injury.
- ✓ Shall investigate and correct all violent and/or harassing situations
- ✓ Act respectfully towards other individuals while at work and participating in any work-related activity;
- ✓ Take every precaution reasonable in the circumstances for the protection of a worker
- ✓ Develop workplace arrangements that minimize the risk of workplace violence;
- ✓ Promote a non-violent workplace;
- ✓ Ensure your own immediate physical safety if an incident of workplace violence occurs, then report criminal behavior to the appropriate law enforcement agency; and
- ✓ Ensure the security and safety of all parties involved during an investigation of an incident of workplace violence.
- ✓ Review the policy on an annual basis to ensure its effectiveness.

Supervisors

- ✓ Be responsible and accountable for the safety and wellbeing of their workers.
- ✓ Advise their crew of the presence of a condition or person which may/could potentially result in a violent outcome.
- ✓ Ensure all workers, in particular those that are known to be potentially violent, that any outbursts or acts of violence will have them immediately removed from site and potentially dismissed.

Workers

- ✓ All workers must report all incidents of violence and harassment. Use the company's Observed Hazard Form for this purpose.
- ✓ All workers must refrain from acting in a violent or harassing manner.
- ✓ To act respectfully towards other individuals while at work and participating in any work-related activity;
- ✓ To ensure your own immediate physical safety in the event of workplace violence, then to report the incident to the police or a member of

	management as the situation warrants; and ✓ To cooperate with any efforts to investigate and resolve matters arising under this policy.
Hazard Assessments	Employers/Supervisors must include violence as part of their standard site hazard assessment. You should look for situations such as: ❖ When are people at risk? ↳ Enforcing safety requirements, removing workers from site, stopping them from working in a certain manner. ↳ Working in a small area with several trades, lack of respect for other trades materials, tools or work requirements. ↳ Working with individuals who may/do have a "short fuse" and violent tendencies. As per all other site hazards addressed, control measures must be implemented to control these potentially hazardous conditions. This may be accomplished with a strict schedule or clearly defined parameters or scope of work for that particular day or space.
Worker's Rights	1. All workers now have the right under section 43 to refuse to work with a person or in a situation if they believe the person or the situation truly poses a threat to them. A worker who acts maliciously in their work refusal may be subject to disciplinary action – ***be responsible in your actions and claims***! 2. Should the worker choose to contact an outside source to launch a complaint / investigation they can contact James Taylor (613-797-3032) from Corporate Compliance Consulting Inc. (a third party) who will investigate impartially and provide a documented report including recommendations for improvement / changes. 3. All work refusals must/will be investigated internally and the Ministry of Labour if the situation is not resolved.
Joint Health and Safety Committee Responsibilities	✓ Ensure a violence hazard assessment is completed and reviewed as required; ✓ Put forth to senior management recommendations for activities and methods for addressing violence hazards; and ✓ Report on the evaluation of this standard on an annual basis.
What to do if Workplace Violence Occurs	a) Any employee who is a victim of or witness to an act of physical violence shall take all reasonable steps to remove themselves from the threat of violence. This may include, but is not limited to, calling a manager, or 911. b) An employee who is the victim of an act of violence, physical or nonphysical, should, where reasonably possible, let their objections to the bahaviour be known to the alleged offender, directly or with the assistance of Management. c) An employee should report any incident of physical violence to management. d) An employee who is victim of non-physical violence remains uncomfortable

	with their situation after having made the offender aware of his/her objection to the offender's behaviour and/or if such offending behaviour persists, the employee should report his/her situation to Senior Management. e) The employee should make written note of the incident, including the nature of the behaviour, dates, times, witnesses and provide a copy to management.
Domestic Abuse	Should the company or supervisor become aware of a domestic abuse situation and an actual hazard exists that the violence could ripple into the workplace we will take measures to protect the affected worker. Steps and preventive measures will be reviewed and implemented as needed. In instances where management becomes aware of domestic violence circumstances in which potential violence hazards may be introduced in the workplace, it/they will investigate each circumstance on a case-by-case basis and identify reasonable precautions that can be taken to protect the victim of abuse and those within the organization who could also be at risk.
Corrective Action and Discipline	No employee, or any other individual affiliated with this organization shall subject any other person to workplace violence or allow or create conditions that support workplace violence. An employee of the organization that subjects another employee, client, or business associate of the organization to workplace violence may be subject to disciplinary action commensurate to the incident, up to and including dismissal. When management receives a report or a complaint of workplace violence, it shall be reported to senior management whereby senior management shall conduct an investigation into the matter: Both the victim and the alleged offender will be interviewed as will any individuals who can provide relevant information. All information will be kept strictly confidential, with the exception of the alleged offender being informed of the allegations regarding his/her behavior. If an investigation reveals evidence to support the complaint/concern of workplace violence, senior management will initiate an appropriate response, in alignment with its disciplinary practices and policies. If it is determined that it is appropriate to impose disciplinary sanctions the following conditions should be considered: a) The impact of the incident on the complainant; b) The nature of the incident; c) The degree of aggressiveness and physical contact; d) The period of time and frequency of the incidents. The following corrective actions may be considered depending on the particular incident and the factors in the previous paragraph: a) Apology; b) Training;

c) Referral to an assistance program;
d) Report to a professional body;
e) Suspension
f) Discharge; and / or
g) Legal action.

Please be aware that if as a result of an investigation it is determined that a complainant knowingly made a false accusation or made a complaint in a malicious manner, the complainant will be subject to appropriate sanctions, including the possibility of termination.

Policy statement

We, at MBC, are committed, through a formal rehabilitation program, to rehabilitating our employees who have been injured on the job. We will make every reasonable effort to provide suitable employment to any employee unable to perform his or her duties as a result of a work-related injury and illnesses.

Objective

The Early and Safe Return to Work (ESRW) is a means of accommodating an employee's temporary or permanent work restrictions. It is designed primarily to assist injured employees to make a safe and speedy return to their regular duties. It is usually a temporary measure that is to bridge the gap between injury and return to regular duties.

Definition

ESRW is any job, task or function or combination thereof that an employee may safely perform without risk to themselves or others. The work must be of value and productive, and not interfere with the normal operation of the department.

There are 2 classifications of modified work

1. temporary (0-6 months)
2. permanent (over 6 months)

Wages

An employee under the modified work program (either temporary or permanent) will continue to receive 100% salary from the Company.

Roles and Responsibilities

Management

1. To provide a fair and consistent rehabilitation policy for injured employees on or off the job or disabled due to illness or injury.
2. To provide a meaningful employment for temporarily disabled employees and promote modified duty.
3. To facilitate communication between the department, the employee and the treating agency of the employee.
4. To assist in the modification of the workplace.
5. To explain the objectives and requirements.

Program Manager

1. To determine in consultation with the manager or designate, if the position can be modified.
2. To monitor the progress of the employee's modified duties through regularly scheduled meetings with the employee and supervisor. Ensure medical follow-up is obtained at a schedule defined by the employer. The schedule of the meetings can be decided on a case by case approach.
3. To liaise with the employees treating agency and WSIB when required.
4. Meet with the employee and establish written goals and objectives. These will be established and agreed upon by the employee, department, and the employer.
5. To develop in consultation with the employees treating agency, the employee and the immediate supervisor a modified duty program.
6. Determine and maintain medical monitoring and treatment with the use of the

	Functional Abilities Form. The frequency of medical contacts can be determined on a case by case basis.
Immediate Supervisor	1. To advise the employee of the availability of the ESRW and provide the required forms. 2. To assist in the creation of, and support the employee's ESRW program. 3. To maintain communication with the employee on ESRW and monitor the progress and the effectiveness, on an individual case by case basis. 4. To inform other employees in the department of program goals. 5. To communicate and assist in the evaluation of the program's effectiveness, regular meetings are to be scheduled with the employee. 6. Communicate with the injured worker; document the communication on the Contact Log. This communication is to be on a regular basis, at least once a week or as frequent as may be required. This will be determined on a case by case basis. 7. To schedule bi-weekly meetings with the worker.
Employee	1. To maintain regular contact with the supervisor. 2. To take an active role in developing their ESRW program. 3. To communicate any concerns to their immediate supervisor any concerns or problems. 4. To obtain the necessary forms from the treating agencies as may be required by the employer. The employee may be responsible for the initial cost of any forms that are required. 5. To ensure other scheduled rehabilitation activities such as physical therapy or doctor's appointments are continued while on modified duty. These appointments are to be arranged whenever possible during non-work hours. 6. To co-operate with all request for documentation as required by the WSIB and the Employer.
Health Care Providers	1. To provide up to date medical information. 2. Fill in the forms as requested. 3. Act as a resource.
Procedures	1. Where an employee has a work-related injury requiring medical attention, the accompanying first aider will provide an Application for ESRW form and letter to the doctor, which is to be completed by the treating physician. 2. It is each employee's responsibility to ensure that the Application for ESRW form is returned to his/her Supervisor within 24 hours. 3. The Program Manager, in conjunction with the Supervisor, will review the form and determine if the medical restrictions (if any) can be accommodated within the employee's regular job duties. If not, the supervisor will make every reasonable effort to offer modified work first within the department or if necessary, in another department within the Company.

4. The Supervisor will meet with the injured employee to discuss the available modified work. Where both parties agree, the employee will start ESRW immediately after the signing of the ESRW Contract.
   Where no agreement can be reached between the Supervisor and the employee, the Program Manager will contact the WSIB and discuss the available ESRW.
   An employee on a modified work program will follow all standard and established Company work procedures.
   The Company reserves the right to arrange a Second Party Medical Assessment by a physician of the Company's choice.

5. The Supervisor is responsible for the ongoing monitoring of an employee who is performing modified work to ensure:

   a) The modified work continues to be suitable and is acceptable to the employee, the physician and the WSIB Adjudicator - no duties are assigned outside of existing medical restrictions.
   b) Additional duties are added as the employee is capable to ultimately meet the objective of a return to regular duties.
   c) Regular follow-up with the treating physician and WSIB Adjudicator is maintained.

6. Once the employee demonstrates the capability of resuming regular pre-accident duties, clearance must be obtained from either the treating physician via a Functional Abilities Form (FAF) or the WSIB.

7. In a case of permanent impairment, the Supervisor, Program Manager and Management will meet with the employee, and if necessary, the Safety Representative, to consider what additional measures are necessary for the placement of that employee.

Early & Safe Return-to-Work		**Modified Work Job Offer and Limitations**	
Worker		Date	
Program Manager		Wages ($/hr)	
Job Title		Normal Weekly Hours	
Proposed Duration			

As part of our Early & Safe Return-to-Work Program, we are endeavoring to locate modified employment for W.S.I.B. injured workers

Basic job description	

Physical job analysis

	n/a	1	2	3	4		n/a	1	2	3	4
Bending at the waist						Lifting from the ground					
Stooping						Lifting from a bench					
Kneeling						Lifting over shoulder					
Crouching						Lifting over head					
Crawling						Carrying					
Walking on level surfaces						Pushing					
Walking on rough ground						Pulling					
Walking up/down stairs						Driving					
Climbing up/down ladders											
Sitting on chair											
Sitting on bench											
Sitting on vehicle seat											

SCALE
1 – NO TO MINIMUM. EXERTION
2 – MINIMUM TO MILD EXERTION
3 – MILD TO MEDIUM EXERTION
4 – MEDIUM TO HEAVY EXERTION

TO BE COMPLETED BY THE TREATING PHYSICIAN

I recommend ❑ don't recommend ❑ this modified position for the above-mentioned W.S.I.B. injured worker.

***NOTE TO THE TREATING PHYSICIAN:** If the above position is unsuitable, please indicate the duties, which require modifications.

_____ _____
Treating Physician's Signature **Date**

Employee and Management acceptance of the Early & Safe Return-to-Work and its limitations

Employee		Date	
Program Manager		Date	
Witness		Date	

SUPERVISOR'S WEEKLY REPORT					
Date					
Employee's Name					
Supervisor					
ESRW Job Title					
Proposed Time Frame					
Grade Scale					
1. Poor	2. Needs improvement	3. Competent / good	4. Above average	5.Outstanding	
Quality Of Work		**Quantity Of Work**		**Absenteeism / Punctual**	
Attitude To Fellow Members		**Attitude To Supervisor**			
Supervisor's Signature					
Manager's Signature					
Employee's Signature					
Witness' Signature					
Comments					

Contact Log – Return-to-Work

Employee Name	Phone #
Supervisor/Manager	Phone #
WSIB Claim Adjudicator	Phone #
Treating Physician	Phone #

Return-to-Work Date	Review Date	
	Target End Date	

WSIB Claim Number	

It is the supervisor's responsibility to ensure this form is kept up-to-date and in the Claims Management file established for the injured worker.

Date of Contact	Person Contacted	Contents of Conversation

Continuous Improvement Plan	
Objectives	To ensure the company's health and safety performance is reviewed on an annual basis and corrective action is implemented, if required, to address short-falls in the program.
Target Dates	Beginning of 2nd quarter of each year
Schedule of Review	Once per quarter
Responsibilities	➢ The company will develop the written program. ➢ Joint Health and Safety Committee (JHSC) to develop the health and safety component of the orientation. ➢ Manager to review and implement the orientation program. ➢ Supervisors to administer the program.
Resources	**People**: as mentioned above **Time**: Development and training time **Budget**: TBD
Senior Management Involvement	Review, approve, and sign off.
Distribution of progress reports	Reports to be distributed to senior management after each review meeting. To be posted on the employee notice board.
Celebration of Successes	Example: Pizza lunch
Review of Health and Safety Trends	Senior Management will review MBC's safety trends on an annual basis. Management will review the patterns and take corrective action. The Health and Safety Co-ordinator in conjunction with the Joint Health and Safety Committee will prepare the trends review. The following documentation will be reviewed when developing the Safety Trends Review: ➢ Injury/illness causes ➢ Workplace inspections ➢ Injury/Incident investigations ➢ Hazard Reports ➢ Work Refusal reports ➢ Health and Safety recommendations from the Joint Health and Safety Committee

	➢ WSIB injury/illness summary. The Health and Safety Co-ordinator will create the summary of all injuries, near misses, and reviewing patterns of occurrence. The report will take into considerations: by shift, injury type, time of day, type of equipment.
Suggested categories for the Trends Review are	➢ The number of work accident fatalities, ➢ The number of lost workdays, ➢ The number of non-fatal cases that required medical aid without lost workdays and first aid injuries. ➢ The incidence of occupational illnesses.
Trends Review Process	The annual review will be completed using the following process
Step 1	Health and Safety Consultant will collect the data required to develop the Trends report.
Step 2	Work with the designated JHSC member to review the data and develop the Trends report for management review **Report contents**: ➢ Table of contents ➢ Summary ➢ Recommendations for management review ➢ Graphs depicting the trends and findings ➢ Tables representing the data used to create the graphs
Step 3	Submit the Trends reports to management by January 15th of each year.
Step 4	Management will review the Trends report at the February management meeting and make reply in writing to the JHSC regarding any corrective action to be taken.
Step 5	Health and Safety Co-ordinator will present management's response to the JHSC within 21 days of management's response.
Step 6	Health and Safety Co-ordinator will monitor the completion of the corrective action.
Records	All Trends review will be filed with the management minutes and a copy with the JHSC minutes.
Trends Review (Hazards)	
Year Reviewed	previous

Data reviewed	➢ Injury/illness causes ➢ Workplace inspections ➢ Injury/incident investigations ➢ Hazard reports ➢ Health and safety recommendations from the Joint Health and Safety Committee ➢ WSIB injury/illness summary
Results of review	The areas that have had the largest occurrences of injuries and near misses should be in order of highest to lowest:
Employers Response to Joint Health and Safety Committees Recommendations	Senior Management of MBC will respond with a written response to the Joint Health and Safety Committee within 21 days of receiving a recommendation. If management decides against acting on the Joint Health and Safety Committee recommendation, reason must be given in writing
Communication Program On and Off the Job Communication	It is the responsibility of the Health and Safety Co-ordinator, the Joint Health and Safety Committee, Management and Supervisors to communicate health and safety information. The following are a variety of methods that could be used to communicate health and safety information/materials: ✓ Meetings ✓ Training sessions ✓ Electronic messages ✓ Company communications ✓ Payroll inserts ✓ Safety talks ✓ Poster program ✓ Toolbox talks ✓ Bulletin boards ✓ Senior management communication meetings
Frequency of Communication	Communication of health and safety information is done on an ongoing basis. At a minimum communication of health and safety information must be done bi-monthly via a mass Memo in worker's pay cheques. Different venues for communication may require different recording systems, example: sign in sheet.

Off the job health and safety topics could include:

- Vehicle safety
- Personal health and safety
- Health and safety at home
- Recreational health and safety
- Leisure health and safety